PhotoImpact

VERSION 3·0

User Guide

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Welcome to PhotoImpact

Congratulations on purchasing Ulead PhotoImpact 3.0, the standard in imaging for Microsoft Office users. This next generation image editing software mixes 32-bit power for Windows 95 with unmatched ease-of-use. Using its Microsoft Office-style interface and Guided Workflow™ tools, you'll glide easily from scanning to image enhancement to placement in your document or presentation. Auto-processing tools let you straighten, crop and adjust your scanned images, while the EasyPalette will allow you to visually "Pick & Apply™" a wide range of effects, styles, textures and gradients. Free distortion of text, extensive object and layer control and a variety image retouching tools are just a few of the other features that make this the perfect complement to any desktop. When words alone won't suffice, Ulead PhotoImpact is the key to achieving your business goals.

Introduction at a glance

Start

User Guide Wizard

To learn about PhotoImpact as quickly and easily as possible, use the following user guide wizard. This will help you better locate information which is important to you, as well as relevant to the way you work.

I never read manuals

Go to:

The on-line help. It's there, always at hand and with quick access. It gives you the information you want when you want it. Also, learn the quick keys, such as the command short cut and hot keys, as these can help speed up the way you work, particularly if you are comfortable using both your mouse and keyboard at the same time.

I have used Ulead programs before

Go to:

What's new, p.10. Here you will find information about the new additions to this version. Once familiar, you can go straight to the program and start working on your own documents. If you need some help in understanding tools and commands, use the on-line help. It's also a good idea to take a look at the tutorials, both on-line and within this guide, to get a better feel for the new enhancements.

I am a first time user

Go to:

What's new, p.10. This will give you an overview of PhotoImpact and what it can do for you. Once finished, try out the tutorials. These take you through some of the more common procedures for the PhotoImpact and Album programs. You can also try out the PhotoImpact interactive tutorial (on the PhotoImpact CD). This shows you both basic and advanced techniques, allowing you to interact with the program, and to learn – not just by viewing, but also by doing.

I am an office user

Go to:

Chapter 8, Album: Getting started, p.173. This shows you how you can integrate all your work via the Album program. Once finished, try out the tutorial "Using Album with other programs" p.69. This provides an example of using Album to embed files into a Microsoft Word document.

Installation

The PhotoImpact installation program runs from within Windows and contains complete instructions on the installation process.

To install PhotoImpact:

1. Read the license agreement that comes with the PhotoImpact package. (The license agreement is important as it contains various legal requirements that you need to be aware of.) If you agree to abide by it, continue with the installation.

   Note: *Please take a moment to fill out the Registration card during installation. Becoming a registered user entitles you to product update and upgrade information, as well as technical support.*

2. Turn on your computer and wait for Windows to open.

3. Insert the PhotoImpact CD into your CD drive. Windows should detect the CD and then automatically run the installation program. If the automatic detection feature is turned off, use Windows Explorer to run the INSTALL.EXE program directly from your CD-ROM drive.

   Follow the installation program instructions. While the program is installing files, the installation window displays information about PhotoImpact and the progress of the installation.

   Note: *To move between entry boxes in the installation program, use your mouse or press Tab (not Enter).*

Installing the Acrobat reader

An electronic copy of this user guide is also available in the Adobe Acrobat format (PDF). To view this, first run theREADER.EXE file (found with the PhotoImpact program files) and follow the installation instructions. After successfully installing the Reader program, use the File: Open command to open the file USRGUIDE.PDF (found on the PhotoImpact CD). You can then view the user guide on-line.

Running the programs

To run the PhotoImpact programs, click on the appropriate command in the Start: Programs: Ulead PhotoImpact 3•0 submenu. (This submenu may differ depending on the choices you made during installation). When you are already working in any of the programs, the easiest method to run another PhotoImpact program is by using the Switch menu, located on the right of the menu bar.

If you are new to using Windows 95, try creating shortcuts to the PhotoImpact programs, done by dragging each program's EXE file from Windows Explorer (for example, IEDIT3.EXE) and dropping it onto your desktop. A shortcut is automatically created and appears on your desktop. To run the program, you simply need to double-click on the shortcut.

Running the Ulead Quick Access

After installing PhotoImpact, you will notice an extra command in the Start: Programs: Ulead PhotoImpact 3•0 submenu called Ulead Quick Access. Quick Access is designed to give you one click access to all your PhotoImpact programs. Choosing this command instantly loads Quick Access onto your Windows taskbar. Clicking on its button displays a pop-up menu of all the PhotoImpact program commands. Choosing a command then runs that program. Quick Access also improves loading time performance whenever you run a PhotoImpact program and enables PhotoImpact CD Browser's plug-and-play capability.

Note: *Place Quick Access in your Windows StartUp group to automatically load Quick Access whenever you run Windows. (Go, Start: Settings: Taskbar and use the Start Menu Programs tab.)*

What's new in version 3•0

There have been several significant upgrades and additions to this version of PhotoImpact, the most notable being a name change. PhotoImpact is in fact the latest version of our award winning program, ImagePals. When ImagePals debuted in 1992, it was hailed as defining a new class of imaging software, "graphics management", and has since then consistently held onto the top spot.

With this release, ImagePals has been totally revamped to make it both Microsoft Windows 95 and Microsoft Office compatible, as well as to make full use of the new 32-bit operating environment. Because of this, we felt it appropriate to signal the change with not just a new version number, but a new name. A name that reinforces our commitment to offering innovative imaging solutions – with impact.

PhotoImpact

PhotoImpact is a native Windows 95 program that pioneers a whole new approach to image editing. Now, professional results are only a mouse click away, bringing new productivity to novices and seasoned users alike. Simply scan in the images you need, Pick & Apply™ the effects you want, and place the finished artwork in your document or presentation. No complex features or unremovable changes; just intuitive imaging power for all your business needs. The following section lists some of the product's key features:

Object-based editing now means that whenever you move a selection, paste an image, or perform a transformation, you automatically create an object. Objects can be freely moved and manipulated without fear of affecting other objects or the original image. Powerful merge control and object preferences mean you can fine tune how objects in an image interact, such as controlling the transparency of one or applying shadows to another.

Styles take the guesswork out of image editing by providing predefined enhancements, or styles, that you drag-and-drop onto an image. The image then adopts that style's characteristics, such as a sunset or a particular hue. You can even create your own, so if you like a particular image's look, you can automatically transfer that look to another image. It's no harder than going to a hair salon, choosing the hair style you want from a catalog and voila, your stylist does the rest for you.

99 levels of undo and redo give you greater freedom to experiment with your images, safe in the knowledge that you can return to any stage of your editing.

Vector-based editing allows you to convert a raster image into a vector image, or to create a vector graphic from scratch. You can then edit that graphic and once finished, convert it back into an object or selection.

Path-based text editing uses bezier curve technology to allow you to freely distort text in an infinite number of ways. As objects, you can also return to any text you have applied and correct spelling mistakes, or even change it completely.

Auto-processing makes adjusting acquired images easier than ever before. Now you can automatically straighten an image, remove moire patterns, control brightness and contrast, and even crop; simply select the operations you want performed and click OK- PhotoImpact does the rest for you.

Magic textures allow you to create an infinite number of natural and obscure textures to use with your images. Perfect for filling areas of an image that look flat or need an added sense of depth.

Natural painting tools are a welcome addition to PhotoImpact and allow you to paint in the style of natural elements, such as charcoal, chalk and crayon.

Mask painting allows you to use a paintbrush to create and edit selections, providing even greater control and flexibility over existing selection tools.

Usability enhancements are also a significant improvement over previous versions, with the interface more intuitive and functional than ever before. Now toolbars are floatable, and when in full screen mode, you can edit your image free from the restraints of the program window. Tooltips make identifying tools and screen elements easier, and a new Attribute toolbar brings features previously buried in menus to the surface for one click access.

Album

Album is the major supporting act to PhotoImpact. Just as powerful in its own way, Album helps keep your system in order, making sure your images and other files don't overrun your hard disk and that you can always find exactly what you want. The following section lists some of the product's key features:

OLE 2 support means Album is now more tightly integrated with other PhotoImpact and office programs. For example, you will see the Album icon in other office programs such as Microsoft Word and Powerpoint; and you can even activate PhotoImpact from an object within a container program such as Word, and then edit the object directly in Word's workspace.

User definable fields now means that whenever you create an album,
you are creating a database complete with fields, or categories that you define.
No longer are you restricted to just subject and description information,
now you can arrange information under your own headings, such as sports,
date, age and marital status. An essential tool for anyone needing to reference
diverse and comprehensive information such as employee or customer records.

e-Mail support means you can now send your files over the "net", direct from Album. You can also send your files by fax using the Windows MAPI service.

Folder monitoring allows Album to check your system for any changes to the number of files in a folder and updates albums accordingly.

Compact mode is a new feature that provides you with access to Album, while at the same time revealing background programs. In compact mode, all Album windows are removed from view, leaving only the active album, thereby allowing you to quickly and easily drag-and-drop thumbnails within and between programs. This is great for incorporating your work into other programs such as Microsoft Word, Powerpoint and Excel.

Supporting utilities

PhotoImpact 3.0 comes with four utilities that complete the entire package: Screen Capture, Viewer, CD Browser and Explorer. Screen Capture allows you to take any screen component and convert it into an image. This can be an icon, a program window, text in a Word document or even another image. Viewer is useful for seeing image files in full view, without having to first open them in their parent program, while CD Browser allows you to view any photo stored on a Kodak Photo CD. The Explorer utility is a new addition to this version and allows you to visually check on the files in your system. If Explorer comes across any compatible image and graphic formats, it displays their contents as small thumbnails, just like Album, while using the familiar tree directory structure found in Windows Explorer. The Explorer is great for when you have no time to insert thumbnails into an album or wish to quickly view the contents of a directory.

Note: *For a full description of each of these programs, view their respective on-line Helps.*

Creating a travel brochure

The following tutorials show you how to use PhotoImpact's powerful tools and features to put together several images for inclusion into a travel brochure for a fictitious travel agency, Worldwide Travel. Once completed, you will then learn how to incorporate your images into a Microsoft Word document.

This tutorial gets you started with PhotoImpact, taking you through the basics of image editing and introduces you to some of the more common commands and tools you will use, such as auto-processing and the selection tools.

Tutorial contents at a glance

Before you begin

The image below shows you the type of brochure you are going to create using PhotoImpact and a document created in Microsoft Word. Each image in the brochure is labelled numerically. You can follow the tutorial in the ordered sequence, or jump to the page that discusses the image you have particular interest in.

Image 1 works on:

• Opening
• Resizing
• Saving

Image 6 works on:

• Mask Brush
• Colorizing

Image 2 works on:

• Basic selection tools
• Drag and drop
• Borders

Image 5 works on:

• Auto-Processing
• Cloning
• Merging objects
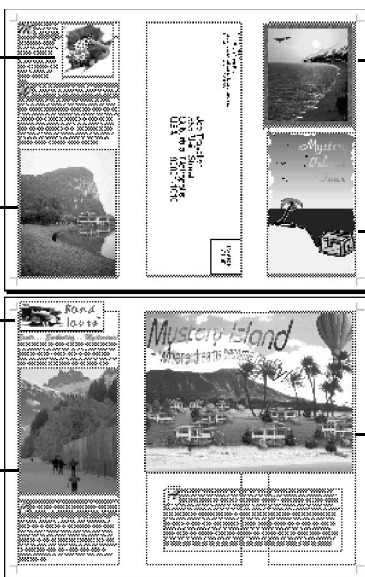
Image 4 works on:

• Cropping
• Composition
• Styles
• Texture Frames

Image 3 works on:

• Painting
• Advanced selection tools
• Fills
• Objects

Image 7 works on:

• Stitching
• Edge blending
• Object resize
• Object rotation
• Stamp cloning
• Text effects

Preparing the first image

The first image that you will look at is an image of a flower that needs to be resized and then saved. All the images that you will be working on for the brochure, including the flower, are stored in the SAMPLES\TUTORIAL folder on your PhotoImpact CD-ROM. Also, while you are working through this tutorial it is assumed that you have PhotoImpact open and active on your PC.

To resize an image:

1. Click the Open button on the Standard toolbar. The Open dialog box appears.

2. Select the SAMPLES\TUTORIAL folder on your PhotoImpact CD-ROM and double-click on the file labelled FLOWER. An image of a flower should now appear in the PhotoImpact workspace.
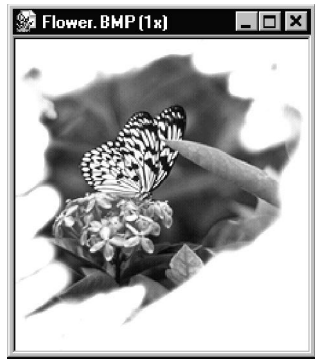
You will notice that the image is quite large, and obviously too large for the brochure. To resize it, we need to change its resolution. Resolution works by controlling the spacing of pixels in an image. For example, increasing the resolution places pixels closer together, therefore decreasing an image's size. Decreasing the resolution works in the opposite manner, as it increases the spacing between pixels, therefore increasing an image's size.

3. Click on the Unit button on the right side of the Status bar and choose "CM" to select centimeters as the unit of measure.

4. Choose "Resolution" from the Format menu. The Resolution dialog box opens.

   The picture placeholder for the flower in the travel brochure is approximately 4 by 4 cm. You need to change the image's resolution so that it corresponds to that size. Presently the image is about 5 by 6 cm. To determine the proper resolution use the following formula:

   New Resolution = Old Resolution x (Old Dimension/New Dimension).

5. By plugging the values into the above formula a value of 53 pixels/cm is the appropriate resolution for the flower image.

   Enter 53 in the User defined entry box.

6. Click OK. The image is now resized according to the specified dimensions. (You will not see any changes until you place the image into our Word document at the end of these tutorials.)

   Now that the image is properly sized it can be saved for later placement into the brochure.

To save an image:

1. Click the Save button on the Standard toolbar. The Save As dialog box opens.

2. In the File name entry box enter the name FLOWER. (It is a good idea to create a folder labeled tutorial on your hard disk so you can group all your images in the one place.)

3. Click Save. The image is then saved to disk.

Before starting work on the next image, close the present image by clicking the ▣ on the upper right corner of the image window.

Preparing the second image

The next image that you will prepare is the company logo for the brochure. In composing the logo you will first create a new image and use the selection tools to grab parts of two other images and bring them together in the new image. Finally you will create a border around the logo.

To create an image:

1. Click the New button on the Standard toolbar. The New dialog box opens.

2. Check the User defined option in the Image size group box and enter a width of 6.5 cm and a height of 2.3 cm.

3. In the Resolution group select Pixels/Cm in the right entry box and enter 55 in the left entry box. This will ensure that the image appears at the proper size in the brochure.

4. Click OK. A new image window appears in the workspace filled with the current background color.

Selecting part of the image

The next thing to do is to add some data to the empty image that you have just created. There are two images to add; the first contains text and the second is a picture of a fish. Together, these image elements form the logo on the brochure. To add the text to the logo you will use the Standard selection tool.

To create a selection using the Standard selection tool:

1. Open the image labeled COMPNAME in the SAMPLES\TUTORIAL folder on the PhotoImpact CD-ROM.

2. Click the Standard selection tool on the Tool panel. The Attribute toolbar changes to show all the Standard selection tool attributes.

Before commencing, go to the Attribute toolbar and make sure that the Rectangle option is selected in theShape combo box, that theFixed size check box is not checked, and that the Draw from Center command in the Options menu is not selected. With this configuration the Standard selection tool allows you to freely select any rectangular area in an image.

3. Click your mouse over the upper left corner of the company name and drag to the lower-right corner beneath the name, ensuring that the company name appears within the selection marquee. Releasing your mouse creates a selection area.
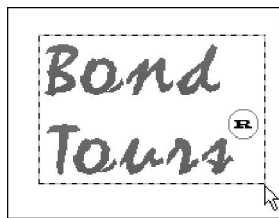
Performing a drag-and-drop operation

Now that you have selected the company name, you need to drag the name onto the logo image.

To drag-and-drop from one image to another:

1. Make sure a selection tool is active (a selection tool button is depressed).

2. Drag the company name selection area from its image window onto the right side of the logo image window. Releasing your mouse drops the name into the image.
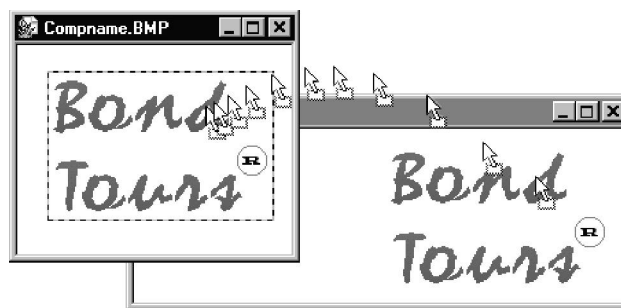
Using the Magic Wand to select part of an image

After placing the company name, the next thing to do is to select the fish and then add it to the logo image. The fish however, contains areas of white in the background which we do not want to include in the selection. You could trace around these white areas, but this can be a time consuming process. A better method is to use the Magic Wand selection tool which works by selecting colors in an image.

To use the Magic Wand selection tool:

1. Open the image FISH in the SAMPLES\TUTORIAL folder on the PhotoImpact CD-ROM.

2. Click the Magic Wand tool on the Tool panel. The Attribute toolbar changes to show all the Magic Wand tool attributes.

   Before commencing, go to the Attribute toolbar and enter a value of 0 in the Color Similarity entry box. A value of 0 means that the Magic Wand will select all colors that are exactly the same as the color you click on. Increasing the similarity allows you to select a greater range of colors.

3. Move to the image and click on any area of the white background. All the white surrounding the fish is now selected.

   Right now the background is selected, but we want to select the fish, not the background. This can be done easily by simply inverting the selection.

5. Click your right mouse button over the image, the Select pop-up menu appears, and choose "Invert". The selection area is then inverted to now select the fish.
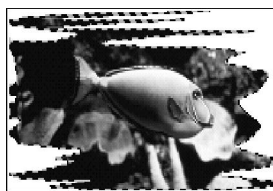
Now that the fish is selected, drag it onto the left-side of the logo image's window using the same procedure as described for moving the company name. After dragging, the fish is converted into an object and floats above the base image.
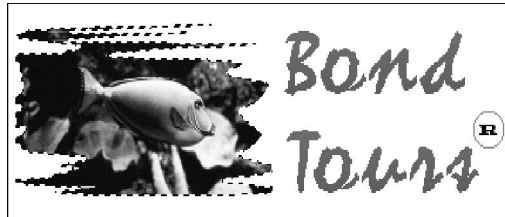
Blending an object's edges

After dragging the fish onto the logo image, you may find that the edges of the fish appear rough or jagged. This often occurs when you select an object and place it into a new image or change its position in its original image. To better blend these edges into the background image, you need to edit the object's properties.

To blend an object's edges:

1. Double-click on the fish to open the Properties dialog box.

2. Check the Edge blending option and enter a value of 10 in the entry box. This will blend the edges of the fish with the background over a distance of 10 pixels.

3. Click OK. The fish's edges are now blended into the background making the fish appear as it were originally part of the logo image.
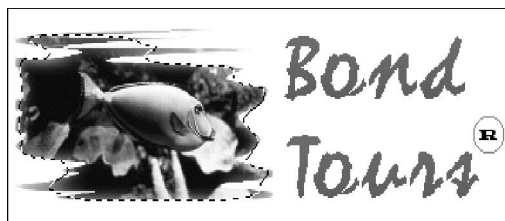
Creating a border

The last step in putting this image together is to add a black border around the image. Before beginning, make sure that neither of the objects in the image are selected by clicking on the base image.

To add a border:

1. Click on the base image to select it and click the Standard selection tool on the Tool panel.

2. Move your mouse over the image and click your right mouse button. The Select pop-up menu appears.

3. Choose "Select All". The entire image is now selected.

4. Access the Select pop-up menu again and this time choose "Border". The Border dialog box opens.

5. In the Border width entry box, type in 6, and click OK. A new 6 pixel wide selection area is created over the original selection

   Now add some color to this selection to create a border.

6. Move to the Color panel and click your right mouse button over the background color square, the Color Picker menu appears, and select black from one of the color squares. The Color Picker menu closes and the color black now appears as the background color.

7. Press the Delete key. The selection area is now filled with black, creating a border around the image.

Merging objects

The logo is finished, however, before it can be placed into the brochure you will need to merge all the objects onto the base image. These objects were created when you filled the border and dragged the fish and company name onto the image. (Once an object is merged, you cannot edit it independently from the base image.)

To merge objects onto the base image:

1. Click on an object to select it, and then click your right mouse button. The Object pop-up menu appears.

2. Choose "Merge All". All of the objects in the image are now merged onto the base image.

After the objects have been merged the logo is complete and ready to be saved for later placement into the brochure. Click the Save button on the Standard toolbar and save the image as COMPANY LOGO. Finally, close the image by clicking the ☒ on the upper right corner of the image window.

Preparing the third image

In this lesson you are going to work more with selection areas and make use of the fill tool as well as the paintbrush. The image that you are going to work on begins as a simple drawing but through modification and some creativity on your part ends up a colorful collage.

Painting on an image

The first thing that you are going to do is open the image of a treasure chest and palm tree and paint a line on it. The line is being added to help define a shoreline to separate the sand form the water that you are going to add later to the image.

To paint a line on an image:

1. Open the image in the SAMPLES\TUTORIAL folder on the PhotoImpact CD-ROM labeled CHEST.
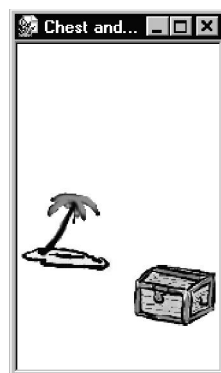
2. Click the blue triangle in the lower right corner of the Paint button on the Tool panel, a drawer of painting tools opens, and click on the Paintbrush tool. The Attribute toolbar changes to show all the Paintbrush tool attributes.

   Before commencing, go to the Attribute toolbar and make sure that the Brush Size is set to 4, the Transparency is at 0, the Spacing is 10, the Soft Edge is 0, the Merge Factor is set to Always, and that the drawing mode is set to Freehand. With this configuration you can freely paint a curved black line with sharply defined edges.

3. Drag your mouse from the left side of the image to the edge of Palm Tree island. When you release your mouse, the line is filled with the current background color. Now draw a line from the right edge of Palm Tree island to the lower left side of the treasure chest. Finally, draw a line from the lower right side of the treasure chest to the right edge of the image. Your image should look something like this:
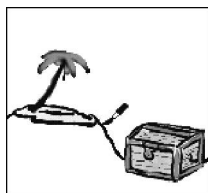
Erasing portions of an image

Now that you have created a line separating the upper and lower portions of the image, you need to erase the lower edge of palm tree island so as to better blend the island into the shore. To do this you will use the Eraser tool.

To erase portions of an image:

1. Click the blue triangle in the lower right corner of the Eraser button, a drawer of eraser tools opens, and click the Standard Eraser tool. The Attribute toolbar changes to show all the Standard Eraser tool attributes.

   Before commencing, go to the Attribute toolbar and make sure that the Brush Size is set to 4 and then click on the color square with your right mouse button and select white to be the eraser color.

2. Drag over the lower edge of the palm tree island. The area that the eraser passes over becomes white.

   Note: *If you erase too much of the island, click the Undo button on the Standard toolbar.*
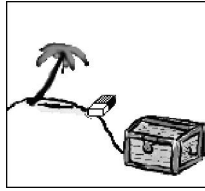
Filling areas of an image

Now that you have created a shoreline you can fill the shore with the sand from the around the palm tree. You do this by selecting the shore region and filling it with the sand color. In this section you will also be adding water to the image.

To fill part of the image with sand:

1. Select the Magic Wand tool, and, with a Color Similarity of 1, click over the shore region to select it.

2. Select the Eyedropper tool and move it over the sand surrounding the palm tree. Click your left mouse button to select the sand color as the background color.

3. Choose "Fill" from the Edit menu. The Fill dialog box opens.

4. Choose the Selected Color option and click OK. The shore region is now filled with the sand color.
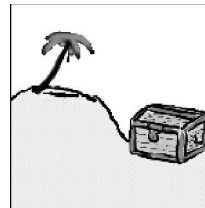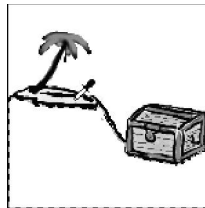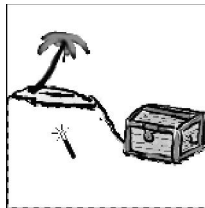
Now you will water to the image by also using the Fill tool. This will be a bit more involved than the previous fill procedure and will involve modifying the size of a selection area.

To fill part of the image with water:

1. With the Magic Wand tool selected, move over the white region above the shore and click. This selects the entire upper portion of the image.

   You do not want to fill the entire area with water, only a small portion around Palm Tree island. You therefore need to subtract from the selection those areas you don't want to affect.

2. Switch to the Standard selection tool, ensuring that the Rectangle option is selected in the Shape combo box, the Fixed Size check box is not checked, and that the Draw from Center command in the Options button menu is not selected.

3. Carefully position your mouse on the upper left portion of the image and, holding down the "S" key, drag across the image and down to about the bottom edge of the palm tree fronds. Releasing your mouse now removes that area from your selection.

4. Switch to the Bucket Fill tool and click your right mouse button over the color square on the Attribute toolbar. From the Color Picker menu, select a deep blue for the water.

5. Return to the image and click over the selected region. The selection is now filled with blue.
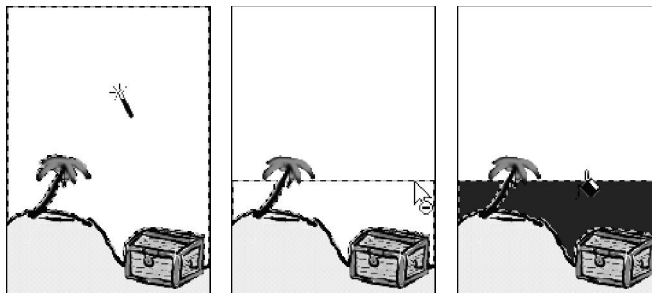
Performing a gradient fill

Now that you have created the shore and water portions of the image, it is time to add the sky. You do this by using a Gradient Fill tool. The gradient fill tools enable you to fill a region of an image with a smooth gradation of color, from one color (the start) to another (the end).

To perform a gradient fill:

1. Click on the base image to select it, and using the Magic Wand tool, select the remaining white region above the ocean.

2. Click the blue triangle in the lower right corner of the Fill button, a drawer of fill tools opens, and click on the Linear Gradient Fill tool. The Attribute toolbar changes to show all the Linear Gradient fill tool attributes.

3. Choose the starting and ending colors by clicking your right mouse button over the appropriate color squares on the Attribute toolbar. Choose a light blue for the starting color and a dark blue for the ending color.

4. Now drag your mouse over the selection area, moving upwards from the bottom to the top. Notice that a line appears indicating the extent of the linear fill. Releasing your mouse fills the selection area with a color gradient from light to dark blue. (If you are not happy with your colors, you can change them on the Attribute toolbar and try again.)
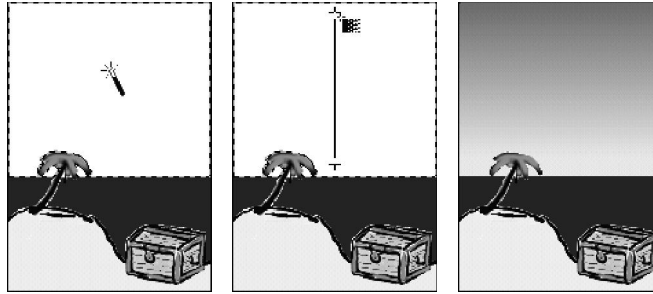
The image is nearly finished, except that the sky looks a bit empty. To remedy this you are going to add a few ocean birds by using the Paintbrush tool.

To paint some birds:

1. Click the blue triangle in the lower right corner of the Paint button, a drawer of fill tools opens, and click on the Paintbrush tool.

2. In the Attribute toolbar, set theBrush Size to 1 pixel.

3. Position your mouse over the sky and start dragging to paint a bird.

4. Repeat step 3 to paint more birds.
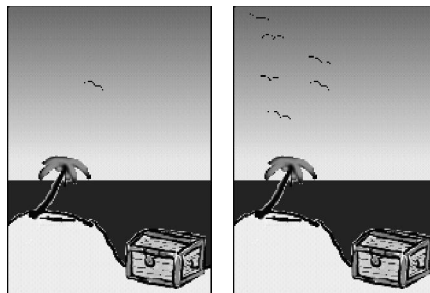
Adding a title

The image is shaping up quite nicely. Now you need to add the brochure title to the image. The title is stored in another image file labelled TITLE. In the following procedure you will use the Magic Wand and the Similar command together to select the title text.

To add the brochure title to the image:

1. Open the image file labeled TITLE in the SAMPLES\TUTORIAL folder on the PhotoImpact CD-ROM.

2. Select the title by clicking the Magic Wand tool on a portion of the title text. This selects only a small segment of the text.

   You could continue working in this way, slowly adding to the selection, or you can use a much quicker method with the Similar command.

3. Click your right mouse button over the image, the Select pop-up menu appears, and choose "Similar". The Similar dialog box opens.

4. Uncheck the Expand for current selection check box.

   This allows the Similar command to expand the selected area to all regions of the image that share a similar color range.

5. Click OK. Now all the text in the title is selected.

   On its own, however, the text looks a little plain. To spice it up a bit, you can apply a gradient fill.

6. Switch to the Elliptical Gradient Fill tool and change the starting and ending colors to a red and yellow.

7. Drag your mouse over the selection area, moving from the center outwards. Notice that a line appears indicating the extent of the elliptical gradient. Releasing your mouse fills the text.

8. Now click on a selection tool, select the image, and drag the title onto the upper right portion of the CHEST image.

Creating a ragged edge

To give the image a more stylized look, you can make the edges of the image appear ragged as well as give it a shadow to indicate some depth.

To create ragged edges:

1. Select the Paintbrush tool on the Tool panel and set the Brush Size to 10 on the Attribute toolbar.

2. Click on the white color cache square to select it as the foreground color.

3. Keeping the same stroke direction, drag your mouse in short strokes across the edges of the image, starting at the top left corner and going clockwise.

4. Switch to the Magic Wand tool and select the white region around the image that you have just created.

5. Click your right mouse button and choose "Invert" from the Select pop-up menu. This deselects the white area and selects the rest of the image.

6. Access the Select pop-up menu again and choose "Convert to Object". The image is now converted into an object.

7. Access the pop-up menu again (this time it is the Object pop-up menu) and choose "Add Shadow". The Add Shadow dialog box opens.

8. Set the shadow direction to be to the right and below the image and enter 1 in both the X and Y offset entry boxes to set the shadow depth. Also set the Edge Blending option to 1 to make the shadow appear more diffuse.

9. Click OK. The shadow is applied to the image.

   Now the image is finished and can be saved for later placement into the brochure. Click the Save button and save the image with the name TREASURE CHEST ON BEACH. (Before saving, make sure all objects have been merged onto the base image.) Finally, close the image.
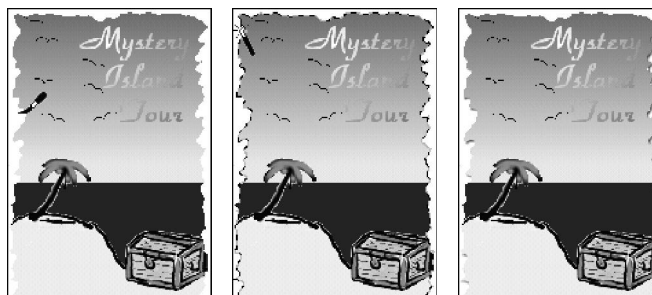
Preparing the fourth image

Working on the treasure chest image gave you some familiarity with selection tools, objects, fills and painting. Here you are going to work on separate image portions and then bring them together into a single composite image. This section teaches you how to apply styles, use the quick color controls, and add a frame to an image. Also, in the course of this lesson you will be refining many of the techniques that you learned with the previous images.

Cropping an image

The first part of this image is a sunset and ocean scene. However, the image is far too big for the brochure, so you will need to crop it down to the proper size by using the Standard selection tool and the Crop command.

To crop an image:

1. Open the image file labeled SUNSET in the SAMPLES\TUTORIAL folder on the PhotoImpact CD-ROM.

2. Click the Unit button near the lower right corner of the status bar and choose "Cm" from the pop-up menu. This sets the measurement unit to centimeters.

3. Click the Unit button again and this time choose "Ruler". This displays a ruler down the left and across the top of the image.
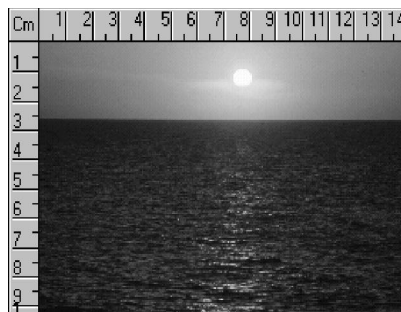
4. Select the Standard selection tool and make sure its shape is set to rectangle on the Attribute toolbar.

5. Move your mouse to the 7 cm mark on the horizontal ruler and 1 cm mark on the vertical ruler and drag to the 13.5 cm mark on the horizontal ruler and 8 cm mark on the vertical ruler. As you drag, a rectangular selection marquee is created defining which areas are included in the selection.

> **Note:** *For a better view, you can press the "+" key to zoom in on the image. This also increases the spacing on the ruler and makes it easier to specify the proper dimensions.*
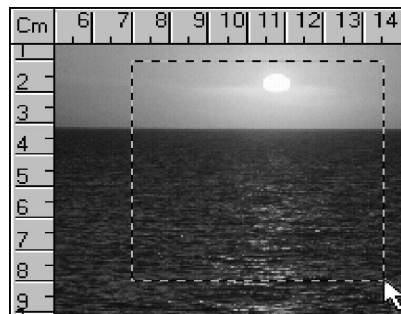
6. Choose "Crop" from the Edit menu. This discards anything outside of the selection area, retaining only the image data within the selection.

Using the Color Balance

The image is now the right size, however the water is a bit too dark and not blue enough. You can use the Color Balance feature to quickly correct this color problem.

To balance the colors in an image:

1. Select the water by using the Magic Wand.

   The easiest way to do this is to select the sky first and then invert the selection. Use a color similarity of 16 and, withSelect by: Area chosen in the Attribute toolbar, drag your mouse around the sky near the edges. Releasing your mouse selects the area.

2. Click your right mouse button and choose "Invert" from the Select pop-up menu. The sky is now deselected and the water selected.

3. Click the Color Balance button on the Standard toolbar. The Color Balance dialog box opens displaying different thumbnail representations of how the water appears with different color balance settings. (The center thumbnail represents your image.)

4. Click on the left middle thumbnail and notice how all the thumbnails become a stronger blue. Keep clicking the thumbnails until the center thumbnail has the type of blue that you are satisfied with.
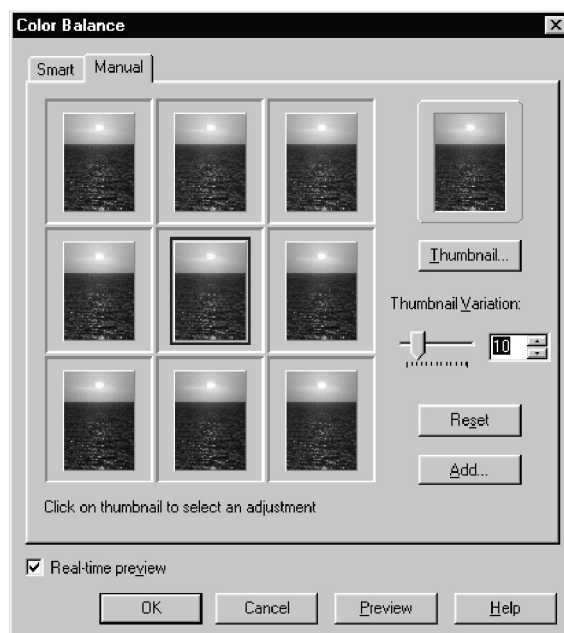
5. Click OK. The water in the image is now balanced according to your selection in the Color Balance dialog box.

Balancing the color converts the selected water into an object. To merge the water back onto the base image, choose "Merge" from the Object pop-up menu.

Applying a style to an image

The next thing that you will do is to add a snow-capped mountain to the sunset image and then alter the "look" of the mountain so that it fits better into the image.

To add the mountain to the image:

1. Open the image file labeled MOUNTAIN in the SAMPLES\TUTORIAL folder on the PhotoImpact CD-ROM.

2. Use the Magic Wand tool with a color similarity of 32 to select the mountain by first clicking on the yellow area above the mountain and then inverting the selection area.
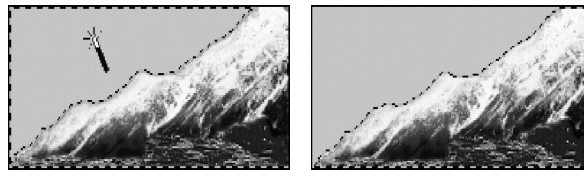
3. Drag the mountain to the upper right portion of the sunset image and drop the mountain so that its right edge is aligned to the right edge of the sunset image and its bottom edge is positioned just below the boundary line between the sky and the ocean.

You may notice that the mountain does not "look" right. Its lighting does not match the sunset. PhotoImpact provides a wide range of styles that are specifically designed for this kind of problem.

To apply a style to the mountain:

1. Open the EasyPalette by clicking the EasyPalette button on the Standard toolbar. The EasyPalette appears displaying the thumbnails of the most recently selected gallery.

2. Choose the Style Gallery from theGalleries combo box. Thumbnails of different styles appear in the palette window.

3. Scroll through the style thumbnails until you find the "Sky- Sunshine to Sunset" style, and then drag it onto the mountain. The "look" of the mountain then takes on a sunset style.
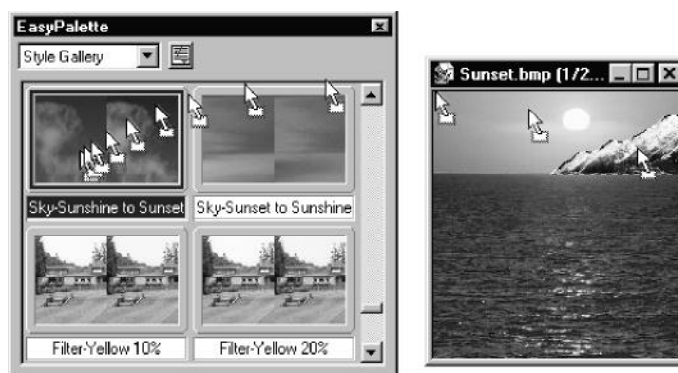
Transforming an image

The next step is to add an airplane to the image. The airplane is too large for the image and so it will need to be resized before it can be added to the image. The angle of the airplane also needs to be changed. To do this, you will use the Transform tool.

To add an airplane to the image:

1. Open the image file labeledPLANE in the SAMPLES\TUTORIAL folder on the PhotoImpact CD-ROM.

2. To select the airplane use the Magic Wand tool, with a color similarity of 128, and click over the airplane to select it.

3. Now drag the airplane onto the upper left portion of the sunset image.

The plane blends in well with the background sky, however the airplane is too large and needs to be flying more horizontally for this image. To resize the airplane and bring it to the horizontal you can use the Transform tool.

To resize the airplane with the Transform tool:

1. Click the Transform tool on the Tool panel.

2. Click the Resize button on the Attribute toolbar, six control points appear around the edges of the plane selection area, and drag on one of the corner control points to about a third of the way to the center of the airplane. Releasing your mouse then resizes the plane. (Holding down the Shift key as you drag keeps the aspect ratio of the selection.)
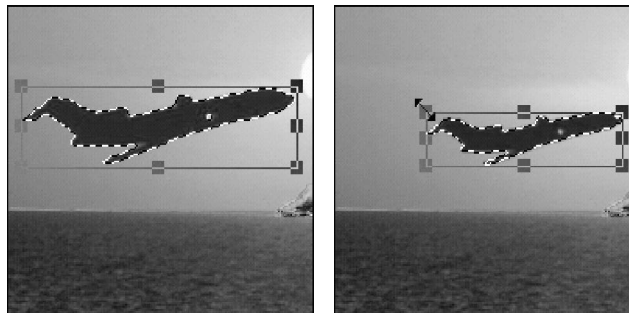
To rotate the airplane:

1. Make sure the Transform tool on the Tool panel is still selected.

2. Click the Rotate Freely button on the Attribute toolbar, four control points appear at the corners of the plane selection area, and drag on a control point to rotate the selection area. Keep dragging until the plane appears to fly horizontally. Releasing your mouse then rotates the selection accordingly.

> **Note:** *If you rotated the selection area too little or too much, you can easily drag on a control point to correct the rotation.*
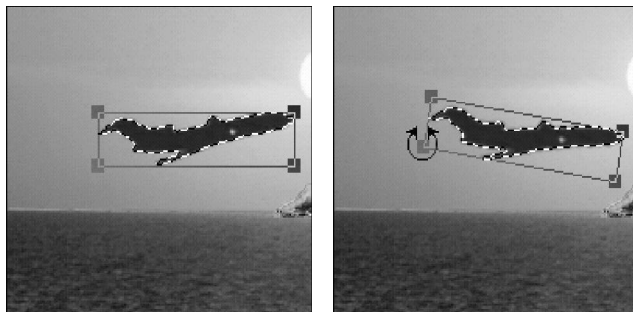
Making freehand selections

The next thing to do is add a beach to the image. For this you will use the Lasso tool to make a freehand selection of a beach in another image and then copy that to our current image.

To freehand select the beach:

1. Open the image file labeled BEACH in the SAMPLES\TUTORIAL folder on the PhotoImpact CD-ROM.

2. Click the Lasso selection tool on the Tool panel and ensure that Snap to Edges option on the Attribute toolbar is not selected . This will give you greater freedom to move the Lasso tool.

3. Carefully drag your mouse over the shoreline, starting around the middle, and then work your way downward to the point where the shoreline meets the edge of the image. Continue dragging across the base of the image and upward just before the buildings begin. Finish the dragging by moving back across the image just under the hotels that are above the shoreline to the point where you began. Double-clicking your mouse then selects the area.

Notes:

- *If you make a mistake, press the Esc key to start again, or press the Backspace key to undo your last movement.*

- *If you do not wish to select the beach, you can open the file labeled* BEACHMSK *in the* SAMPLES\TUTORIAL *folder on the PhotoImpact CD-ROM. The beach in this image is an object that can be dragged onto the sunset image.*

After selecting the beach you need to prepare it to be dragged onto the sunset image by creating a surf-like effect for the beach. To do this, first make sure that the background color is set to white.

Preparing the image:

1. Drag the selected beach off the image and drop it onto the workspace. This creates a new image of the selected beach area surrounded by the current background color, (which should be white).
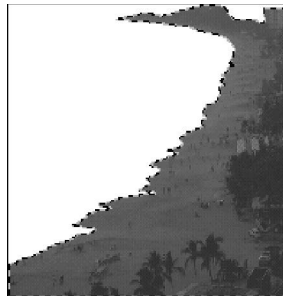
2. Click the right mouse button over the beach and choose "Merge" from the Object pop-up menu to paste the beach onto the background.

3. Click the Magic Wand tool on the Tool panel, and, with a Color Similarity of 150, select the beach. This gives the beach a slightly white edge. You will use this later to create a surf-like effect between the water and the beach.

4. Drag the beach selection onto theSUNSET image and drop it on the lower right corner so that the left tip of the beach lies on top of the right tip of the mountain.

Changing an object's layering

You may notice that the beach appears to overlap part of the mountain. PhotoImpact provides the Layer Manager allowing you to control the layer of an object so that it can appear either above or below other objects that it overlaps. Each object in an image is displayed in the Layer Manager as a separate thumbnail. By dragging a thumbnail you change the layer that it occupies. For example, dragging a thumbnail to the left or upward moves the object to a higher layer, displacing all objects previously above it downward one layer, and allows that object to cover up any object that it overlaps on a lower layer.

To bring the mountain on top of the beach:

1. Open the EasyPalette by clicking the EasyPalette button on the Standard toolbar.

2. Click the Galleries combo box and select the Layer Manager.

3. Drag the Mountain thumbnail to a position to the left of the beach thumbnail. This causes the mountain to cover the part of the beach that it overlaps.
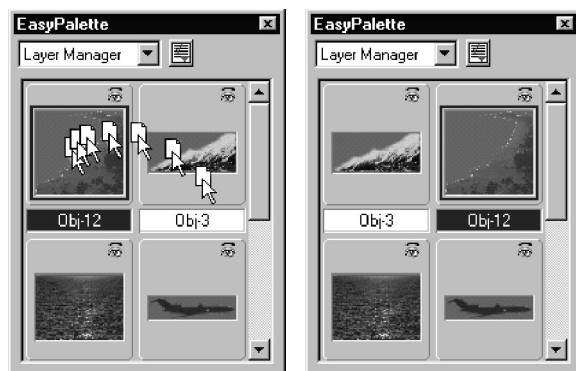
Using the quick color controls

Now that the beach is properly positioned on the image you can modify the beach's appearance so that it does not look so dark. One fast way to do this is to use the quick color controls located at the bottom of the Color panel.

To use the quick color controls:

1. Click the beach to select it.

2. Click on the right Brightness control to increase the brightness of the beach. As you click, the brightness of the selection area is automatically

increased. You may want to click on this control a few times to make the beach sufficiently bright.

3. Click on the right Contrast control to increase the contrast of the beach area. Details on the beach are a bit indistinct, but after a few clicks it will appear much more detailed.

4. Experiment with the Red, Green, and Blue color controls to make the beach area appear a little more yellow.
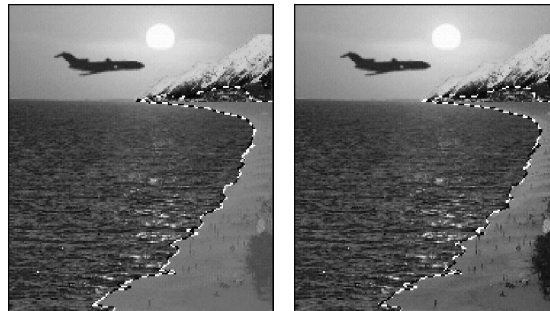
Applying a soft edge

Currently when you look at your image you will find the edges of the beach, especially at the shoreline, a bit harsh. You can soften these by using the Edge blending option in the Object Properties dialog box.

To apply a soft edge to the beach:

1. Select the beach object and the double-click. The Object properties dialog box opens.

2. Enter 10 in the Edge Blending entry box.

3. Click OK. The beach area edges now blend more smoothly into the surrounding ocean and land areas.

4. Click your right mouse button over the beach area and choose "Merge All" to merge all the objects onto the base image.
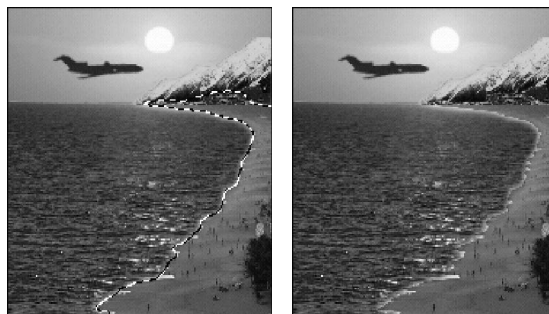
Adding a frame and shadow

The image is nearly done. To finish up you only need to add a frame and shadow.

To add a frame and shadow:

1. Click the Frame button on the Standard toolbar. The Frame & Shadow dialog box opens.

2. In the Frame group box, select the Magic Texture option and click the Library button, choosing Options. This opens the Magic Texture dialog box displaying a number of different texture styles.

3. Click on a thumbnail until you find a texture that you think best suits your image.

4. Click OK. The Magic Textures dialog box closes and the selected texture now appears as a small thumbnail next to the Magic Texture option.

5. In the Shadow group box, click the fourth shadow direction option, and enter 16 in the X and Y offset entry boxes to control the depth of the shadow.

6. Uncheck the Canvas check box to disable the canvas option and leave the region around the frame and shadow blank.

7. Click OK. The frame and shadow are applied to the image.

Finally, click the Save button on the Standard toolbar and save the image as FRONT COVER PHOTO.

For more information:

Finishing the travel brochure

In this tutorial you are going to use advanced PhotoImpact tools to perform more challenging image editing on certain images for the travel brochure. You will use tools to clone images, do gradient fills, create soft edges, colorize an image, and perform other advanced operations as well.
At the end of this tutorial you will use drag and drop operations to place the images into a travel brochure created in Microsoft Word and then print the brochure.

Preparing the fifth image

In this image you are going to use PhotoImpact's Auto-Process commands to quickly correct several problems in an image that you may often face when using scanned photos.

To Auto-Process an image:

1. Open the image labeled SKIING in the SAMPLES\TUTORIAL folder on the PhotoImpact CD.
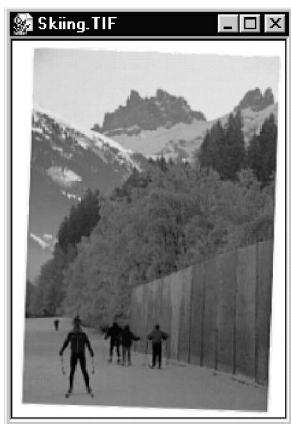
2. Click on the Auto-Process button on the Standard toolbar. The Auto-Process dialog box opens.

3. Click on the Auto-Straighten, Auto-Crop, Auto Focus, Auto-Brightness, and Auto-Contrast buttons and notice how each affects the preview.

4. Click OK to apply the auto-processes in the order they were chosen.
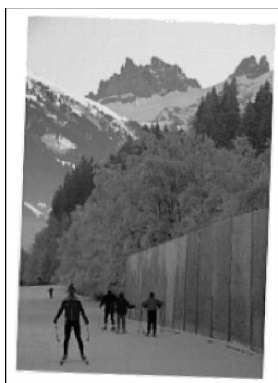
Original image

Straightened and cropped
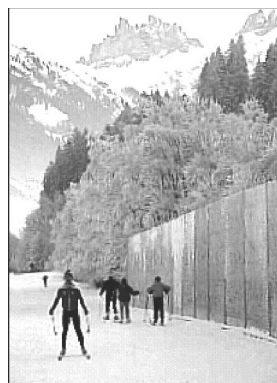
Focused, brightened and contrasted

The image is still too large for the brochure. To resize the image without affecting the number of pixels, use the Resolution command in the Format menu and select a new resolution of 31 pixels/cm. This will make the image appear about half its original size when incorporated into the brochure.

Cloning an image

You can use the Clone Tool to paint image data from one location onto another location in the same image or another image. In this image you are going to clone some snow onto the image of the red skier in the foreground and cause him to disappear, and then add more skiers to replace him.

To erase part of an image with the clone tool:

1. First, zoom in on the red skier so that it fills up about one third of the window.

2. Click the blue triangle in the lower right corner of the Clone button on the Tool panel, a drawer of clone tools opens, and click on the Image Clone tool.

   Before cloning, you need to set the cloning attributes which are displayed on the Attribute toolbar.

3. Enter 12 in the Brush Size entry box and select Always as the Merge option. Also, click on the Options button to ensure that the drawing mode is set to Freehand.

4. Click your mouse, while holding down the Shift key, on the snow to the left of the red skier. This selects the snow as the clone material.

5. Drag your mouse over the red skier. The skier is now replaced by the snow. If you inadvertently clone the wrong material, use the Undo command in the Edit menu, or select a smaller brush size.
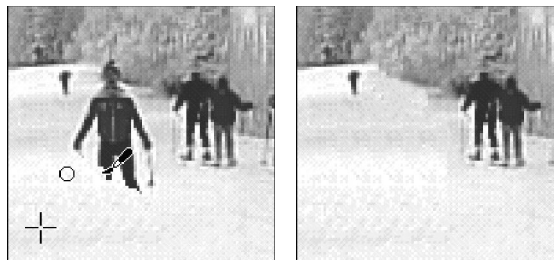
To add part of an image using the Object Clone tool:

1. Click the small triangle on the lower right corner of the Clone tool on the Tool panel and select the Object Clone tool.

2. Click the Open button on the Attribute toolbar and select the file labeled SKIERS in the SAMPLES\TUTORIAL folder on the PhotoImpact CD.

3. Move the cursor over the image and click wherever you would like a skier to be placed. Continue clicking to add more skiers.

4. Make the closest skiers larger and the farthest skiers smaller by clicking the Transform tool on the Tool panel, clicking the Resize button on the Attribute toolbar, and dragging each skiers' control points appropriately.
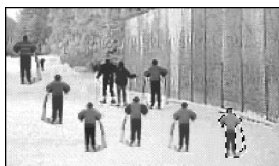
All that is left to do now is to merge the objects and save the image for placement into the travel brochure. Click your right mouse button on any object and choose "Merge All" in the Object pop-up menu. Now click the Save button to save the image asSNOW SKIERS in the TUTORIAL folder.

Preparing the sixth image

In this image you will use the paint tool to colorize a Grayscale image and the Mask Brush tool to carefully select areas within the image to apply paint.

Converting an image's data type

Before you can colorize a Grayscale image, it must be converted from a Grayscale data type to True Color.

To convert from Grayscale to True Color:

1. Open the image file labeledPARK in the SAMPLES\TUTORIAL folder on the PhotoImpact CD. A Grayscale image of a park scene appears. Notice that the color palette and cache colors in the Color panel appear only as shades of gray. This indicates that the data type does not support color.
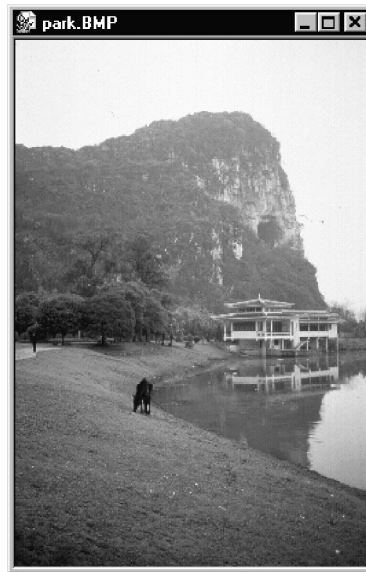
2. Click the Data Type button on the right corner of the Status Bar. Choose "True Color" in the pop-up menu to convert the image from Grayscale to True Color. Notice that the Color panel now appears full of color.

Using the Mask Brush to select an area of an image

Before colorizing the image you need to use the Mask Brush to select different portions of the image. The Mask Brush is useful here because you can use a soft edge to make the selection edges blend into the surrounding image.

Using the Mask Brush to select an area:

1. Click the Mask Brush tool on the Tool panel. The image appears covered by a colored mask. This mask indicates unselected areas. As areas become selected they are cleared of the mask.

2. Enter a brush size of 12 and a soft edge of 20 on the Attribute toolbar.

> **Note:** *You may wish to zoom in on the grass area to define a more accurate selection area.*

3. Drag over the grass to removed the mask. If you accidently remove too much of the mask, replace it by clicking your right mouse button as you drag over the unwanted area.

Colorizing a portion of the image

Now you can color the grass green with the Paintbrush tool using a merge factor that paints only hue and saturation preserving the texture of the image.

To colorize the grass:

1. Select the Paintbrush tool button on the Tool panel, and set the Brush Size to 30, the Transparency to 35, and the Merge to Hue and Saturation.

2. Click your right mouse button over a color cache square and choose "Ulead Color Picker" from the Color Picker pop-up menu.

3. In the RGB entry boxes, enter color values of 72, 135, and 0 for red, green, and blue, respectively. Click OK to accept the color values.

4. Select the newly modified cache color square and drag over the entire grass selection area in one continuous stroke.

   Note: *If you release your mouse button and start painting again, overlapping paint will build up making that part of the grass greener than the rest.*
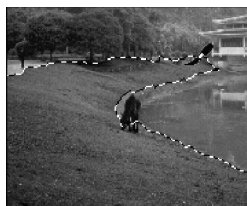
Now colorize the trees beneath the mountain by using a similar procedure.

To colorize the trees:

1. Carefully select the tree area with the Mask Brush using a Brush Size of 6.

2. Click the Paintbrush tool and set its Transparency to 75%. Use the Ulead Color Picker to specify a color with red, green, and blue color values of 0, 105, and 70, respectively and then paint the trees dark green.

In much the same way, colorize the mountain area above the trees. This is a bit trickier as the white portion of the mountain face needs to remain white.

To colorize the mountain:

1. Carefully select the entire mountain area with the Mask Brush using a Brush Size of 20 and a Soft Edge of 30.

2. Reduce the Brush Size to 15 and, with your right mouse button click quickly over the white areas of the mountain face to replace the mask.

   This quick clicking partially selects the white areas, allowing some paint to be applied, but not so much as to destroy the colorization effect.

   Note: *You may want to zoom in on the white areas when replacing the tint.*

3. Set the Paintbrush Transparency to 65%, and use the Ulead Color Picker to specify RGB values of 0, 66, and 105, respectively.

4. Paint the mountain area with a bluish-green color.
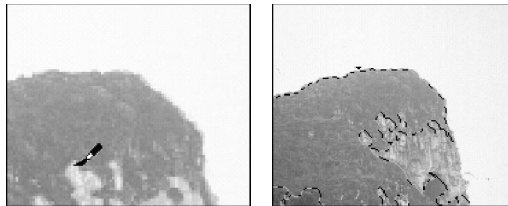
Use the Mask Brush to select the soil between the grass and the water.

To colorize the soil:

1. Carefully select the area of soil between the grass and the water with the Mask Brush. Specify a Brush Size of 6 and a Soft Edge of 10.

2. Set the Paintbrush Transparency to 80%, and use the Ulead Color Picker to specify RGB values of 125, 58, and 0, respectively.

3. Paint over the soil area with a brown color.
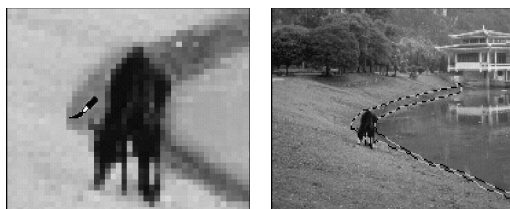
Now add some blue to the sky. You can use the Magic Wand to do this because the colors are so dissimilar between the mountain and the sky.

To colorize the sky:

1. Click the Magic Wand button on the Tool panel.

2. Set the Color Similarity to 32 and check the Sample by Line option.

3. Drag over the sky area from left to right to select the sky.

4. Click on the Paintbrush button and set its Transparency to 80%. Use the Ulead Color Picker to specify RGB values of 0, 255, and 255, respectively.

5. Paint over the sky area with a light blue color.
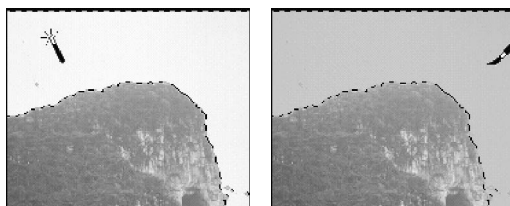
Now click the Save button on the Standard toolbar and save the image as COLORIZED PARK in the TUTORIAL folder.

Preparing the seventh image

The last image is a large photograph that was scanned in two pieces with a hand-held scanner. PhotoImpact makes putting these pieces together easy with its Stitch feature.

To stitch two image together:

1. Open the files labeled RESORT1 and RESORT2 in the TUTORIAL folder and click on Resort1 to make it active.

2. Choose the Stitch command in the Edit menu. The Stitch dialog box opens displaying "Resort1" in its display window.

3. Choose "Resort2" in the Stitch with combo box. Notice that Resort1 is to the left of Resort2.

4. Click your mouse on the left most palm tree in RESORT2 and drag the palm tree near the palm tree in RESORT1. Release the mouse button and the Stitch function takes over to precisely stitch the two images into one.

Now that the image is in one piece, you can add a beach to the foreground.

Adding a beach to the foreground:

1. Open the file labeled STRIP in the SAMPLES\TUTORIAL folder on the PhotoImpact CD.
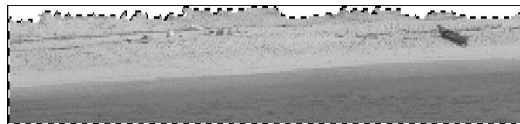
2. Click on the beach and drag onto the resort image as shown below.

3. The beach looks a little dim. To brighten, it click the brightness control on the Color panel a few times.

Note: *Make sure the beach is selected when modifying the brightness.*

4. The edge between the beach and the grass looks too sharp. Double-click on the beach to open the Object properties dialog box, enter a value of 10 in the Edge blending entry box and click OK. The dialog box closes and the edges of the beach are softened onto the grass.
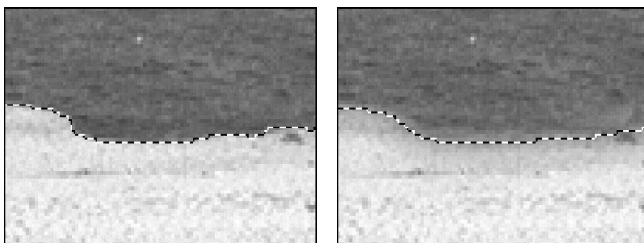
Now that the shoreline has been added, you are going to add in the resort bungalows.

Adding in bungalows:

1. Open the file labeled BUNGALOW in the SAMPLES\TUTORIAL folder on the PhotoImpact CD.

2. Click on the bungalow and drag it onto the grass near the beach.
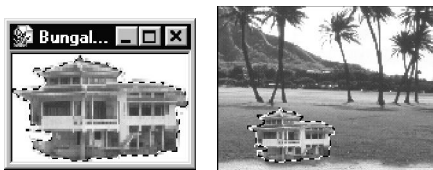
3. Now make copies of the bungalow by clicking your right mouse button on the bungalow and choosing "Duplicate" in the Object pop-up menu. Drag the bungalow copies around to fill the grassy area.

4. To help the bungalows look different and add perspective, click the Transform tool on the Tool Panel and then click the Resize button on the Attribute toolbar. Control points appear around the selected bungalow. Drag a corner control point inward to make the selected bungalow smaller.

    To flip a bungalow horizontally, click the Rotate button on the Attribute toolbar and choose "Flip Horizontally" in the menu that appears.

> **Note**: *To transform more than one bungalow switch to a selection tool, select another bungalow and then switch back to the Transform tool.*
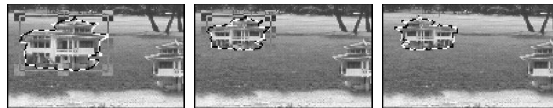
Now use the Object Clone tool to add some trees around the bungalows.

Adding foliage with the Object Clone tool:

1. Click the blue triangle in the lower right corner of the Clone button on the Tool panel and select the Object Clone tool in the drawer that appears.

2. Click the Open button on the Attribute toolbar and select the file labeled TREES in the SAMPLES\TUTORIAL folder on the PhotoImpact CD.

3. A crosshair appears over the resort image. Click the crosshair to add trees.
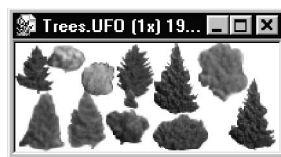
After adding the bungalows and foliage, these objects need some shading to help them fit into the image properly. To do this quickly, first group all the objects and then apply a shadow to them.

To apply a shadow to all the bungalows and foliage:

1. Open the EasyPalette and click the Galleries combo box to choose the Layer Manager. Thumbnails of all the objects appear.

2. Click the first foliage thumbnail, scroll the Layer Manager window down to the last bungalow thumbnail and hold the Shift key as you click the last bungalow. All the foliage and bungalows are now selected.
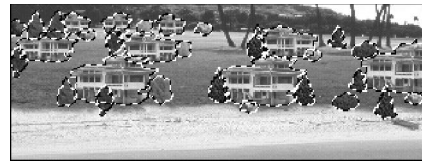
3. Click the Menu Commands button to the right of the Galleries combo box and choose "Group" in the menu that appears. All the selected objects are now grouped together and can be acted upon collectively.

4. Click your right mouse button on a selected thumbnail and choose "Add Shadow" in the menu that appears. The Add Shadow dialog box opens.

5. Choose the lower left corner for the shadow direction and enter an X offset of 1 and a Y offset of 3 to control the shadow depth. Click OK. The shadows are applied to all the selected thumbnails.
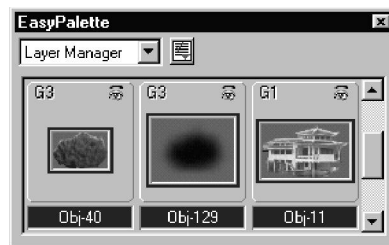
Next, you will add a balloon to the upper right corner to hide the branches that drop onto the image from above.

Adding a balloon:

1. Open the image labeled BALLOON in the SAMPLES\TUTORIAL folder on the PhotoImpact CD.

2. Select the balloon and drop it onto the upper right corner of the resort.

Now add some curved text to the image with the Text tool.

Adding in text effects using the Text tool:

1. Click the Text tool on the Tool panel.

2. Click the cursor over the image and type "Mystery Island" in the text entry box that appears. Make sure that the Font, Size, and Style on the Attribute toolbar are set to your preference. (The example uses a Bahamas font, size of 54 with an italic style). Click OK in the Text entry box and the text appears over the image.

3. Click the cursor just under the newly displayed text and type "- where dreams become reality!" in the Text entry box and click OK. Make sure the font size is small enough to allow the text to fit across the image.

4. Click the Mode combo box on the Attribute toolbar and choose Path. This displays the text as a path with control points that allow you to change the text shape. Move the cursor over a control point on the Mystery Island text, notice that the cursor becomes a crosshair, and drag a control point to change the shape and curvature of the text.
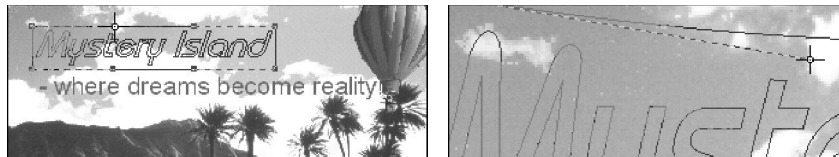
5. Drag different control points over the two text blocks to shape them in much the same manner as in the images below.

6. Now that the text is shaped properly, click the Mode combo box and choose "Object." This fills the text and converts it into an object. To give it some life, you are next going to fill it with a magic gradient.

7. Click on a Selection tool in the Tool Panel and move the cursor over the unselected text block (one text block is already be selected). Press the Ctrl key as you click on the unselected text. Both should now be selected.

8. Open the EasyPalette and choose Gradient Gallery in the Galleries combo box. Select a gradient of choice and drag it onto the image to fill the text.
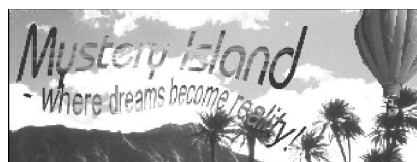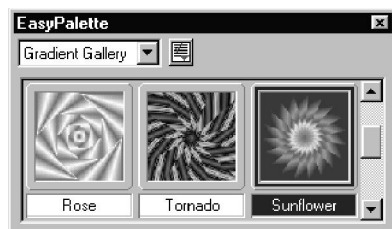
Finally, merge objects and save the image as RESORT in the TUTORIAL folder.

For more information, see:

Putting the images into the brochure

Now that the images have been completed, you need to add them to the travel brochure. The brochure is comprised of two letter-sized pages divided into three columns, allowing the document to be printed on both sides of one sheet and folded in thirds to make the brochure. The brochure also includes several empty gray boxes, to help identify where each image is to be placed.

To open the brochure:

1. With PhotoImpact open, start Microsoft Word and open the file labeled BROCHURE in the SAMPLES\TUTORIAL folder on the PhotoImpact CD. The brochure opens displaying pre-written text and picture placeholders.
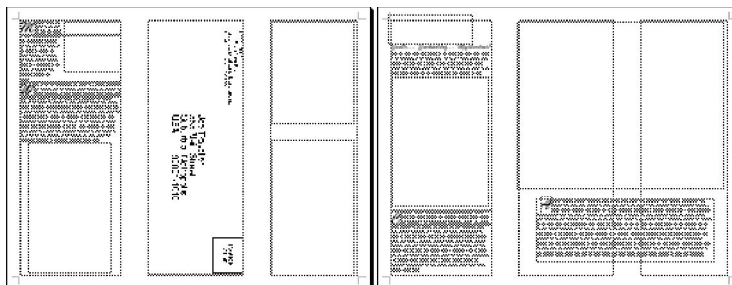
2. Tile PhotoImpact and Word so that you can see both the placeholder (the first gray box on the upper left corner of page 1, column 1) and the PhotoImpact workspace.

To drag-and-drop the flower image:

1. All the edited images should be in a folder on your hard disk labeled Tutorial. Click the Open button on the Standard toolbar and select the image labeled FLOWER in that TUTORIAL folder.

2. Click your right mouse button on the flower and choose "All."

3. Drag the image onto the placeholder on the top right corner of the first column of page 1.
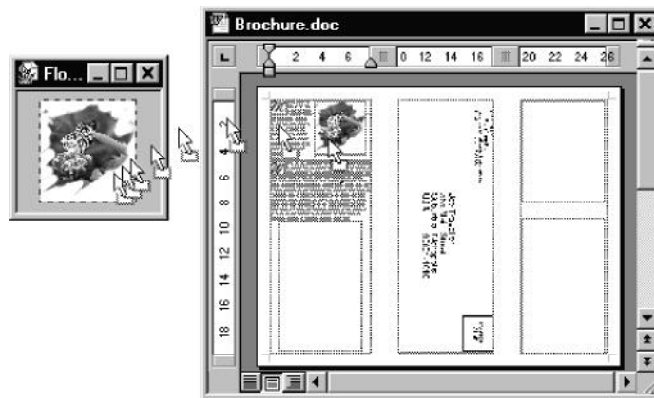
Now, repeat this procedure to place the Company Logo into the brochure. Just open the image COMPANY LOGO, select the entire image, drag it from PhotoImpact, and drop it onto the placeholder on the top left corner of the first column of page two.
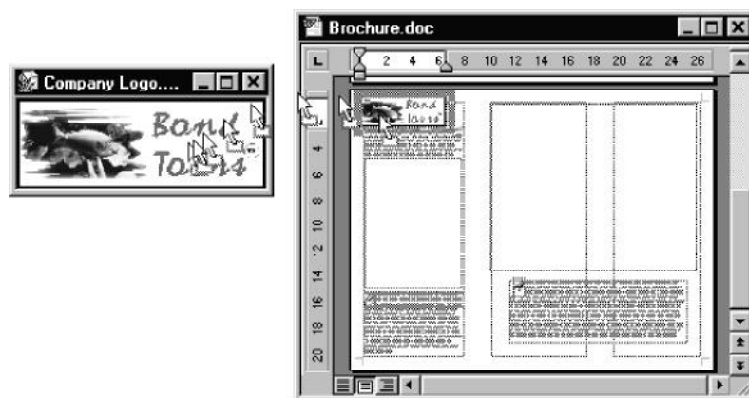
Next, open the image TREASURE CHEST ON BEACH and drag it onto the lower placeholder in the third column on the first page.
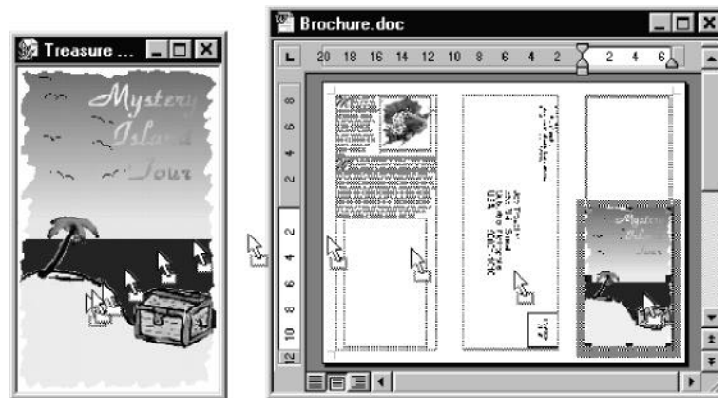
Now, place FRONT COVER PHOTO onto the placeholder on the upper portion of the third column on the first page.
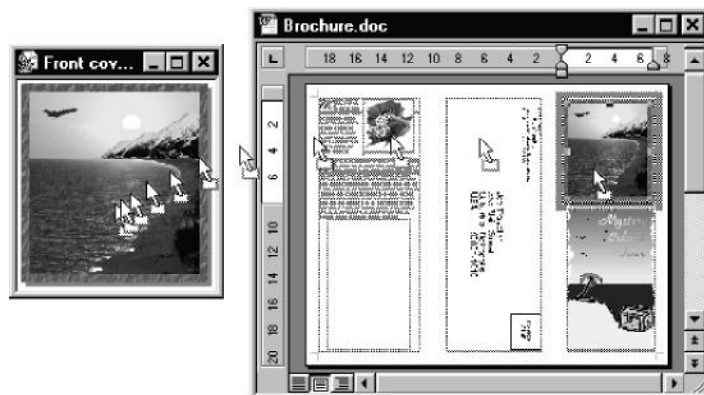
The next image to place is the one labeled SNOW SKIERS. Drag it onto the brochure placeholder located on the lower portion of the first column on the first page of the brochure.
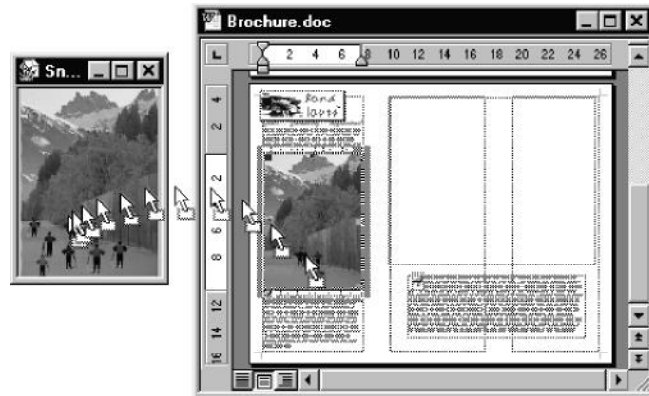
Next, open the image labeled COLORIZED PARK and drag it onto the placeholder in the middle of the first column of page two of the brochure.
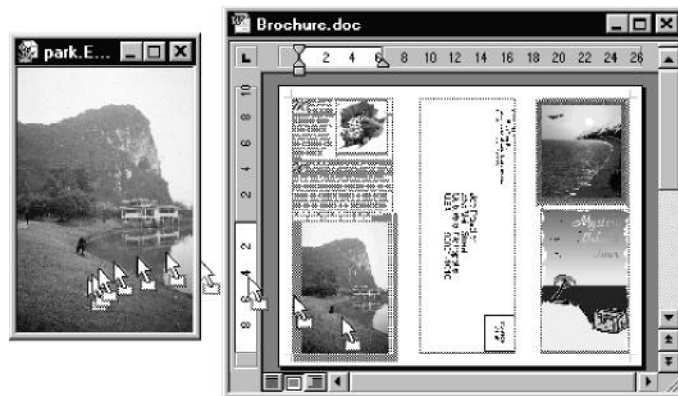
The last image that you need to place is largest one and labeled RESORT. Drag it onto the placeholder on the upper half of the second and third column of page two of the brochure.
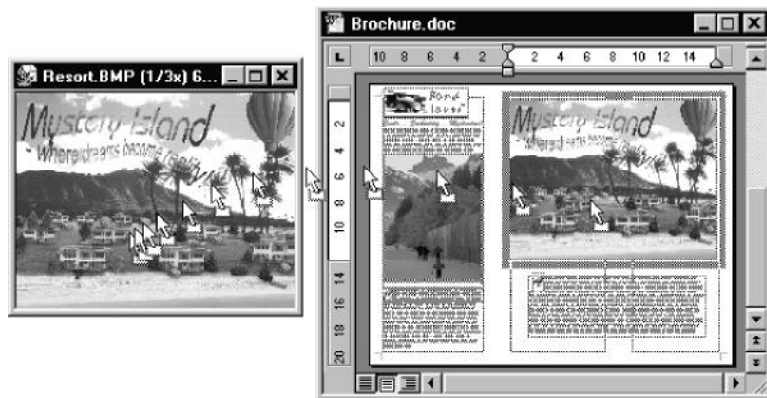
With all of the images placed, the brochure is ready to be printed out and folded. Load letter-sized paper into your printer and choose the Print command in Word's File menu. In the Print range group select Current page to print out only the first page. After printing, turn the page over and print the second page of the brochure on the back of the first page. This may take a few practice runs to get the proper orientation if you are unsure how your printer handles paper.

To fold the brochure, lay the brochure with the second page face up on a flat surface. Carefully fold the right third of the page over the center third and then fold the left third over the center third. You should finish with the front cover of the brochure facing upwards.

Album

This tutorial introduces you to the Album program and takes you step by step through the process of working with albums and manipulating thumbnails. You will begin by learning how to create an employee database for a fictitious company, Worldwide Travel, creating your own customized fields and performing both simple and complex searches. You will also learn how to use Album as an OLE server, incorporating your work into a Microsoft Word document.

Cataloging your files

The first thing you will want to do in Album is to catalog some of the files on your system as thumbnails in an album. This is the most basic task in Album, and one that you will repeat many times.

To create a new album

1. Click the New button on the Standard toolbar or choose "New" [CTRL+N] from the File menu. The New dialog box opens displaying a number of templates.
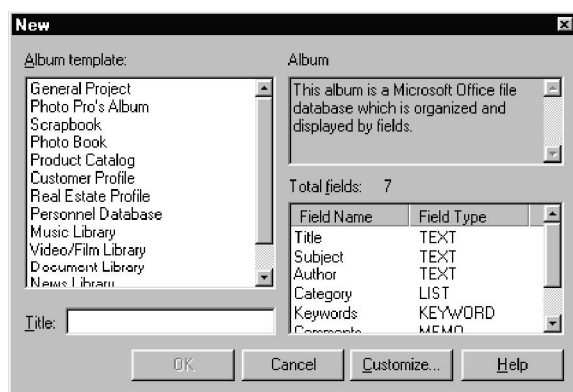
Templates are predefined examples of what you can use an album for. Each template has a list of fields associated with it. These fields may or may not be relevant to your work at hand but being fully customizable, you can easily edit them to better suit your needs. (Editing templates is explained more fully on p.196.)

2. From the Album template list box, select General Purpose (if it is not already selected).

3. In the Title entry box, enter a title of your choice and then click OK. The album is created and you are prompted to start inserting thumbnails.

   When you insert thumbnails, you need to specify the files you want to be collected into the album. You can do this by selecting individual files or all the files contained within a folder.

4. Click on the Files tab (if it is not already selected) and locate the folder containing the files you want to catalog. (To insert an entire folder of files, click on the Folder tab.)

5. Drag your mouse over the files you want to insert in the File name list box. (If inserting a folder, select the folder from the Folder list box.)

   To select additional files, hold down the Ctrl key and click on a filename. To select a range of files, click on the first filename in the range, and then with the Shift key held down, click on the last filename in the range.

6. Click Insert. The selected files are now inserted into the album.

   You may need to wait a few moments for the files to be inserted. After the insertion process has finished, you will see thumbnails of each of the files displayed in the album. The appearance of each thumbnail may differ depending on the type of file inserted.

For more information, see:

Creating a database

From the previous lesson you learned how easy it is to create albums and catalog files. Albums, however, can do much more than simply keep track of your files. They can also be fully-fledged databases that allow you to append all sorts of information to thumbnails using fields, all of which are customizable and can be searched on or printed out as a reference.

To create an employee database:

In this example you are going to learn how to create an employee database. The thumbnails in this album will be the pictures of the employees, and the fields will contain information about each employee.

1. Open the New dialog box by clicking the New button on the Standard toolbar or by choosing "New" [CTRL+N] from the File menu. The New dialog box opens.

2. From the Album template list box, select Personnel File. The Total fields list box changes to display the fields associated with this template.

3. In the Title entry box, enter "Employee". This will be the name for the database that appears in the album's title bar.

   Having selected an album template and named the album, you are now ready to insert thumbnails. However, before you do this, you will first need to edit the fields in the template so that they better suit your needs.

To add and remove fields

Fields are powerful, yet very easy to manage, and can be as simple or complex as you make them. Essential to fields is the field type which defines the type of data a field can accept. For example, a field whose field type is Number, can only accept numeric data.

1. From within the New dialog box, click on the Customize button. The New dialog box opens with three tabs: General, Field, and Advanced. ("Employee" should automatically be placed in the Title entry box here if you entered it earlier. If you did not enter it earlier for whatever reason, please enter it now.)
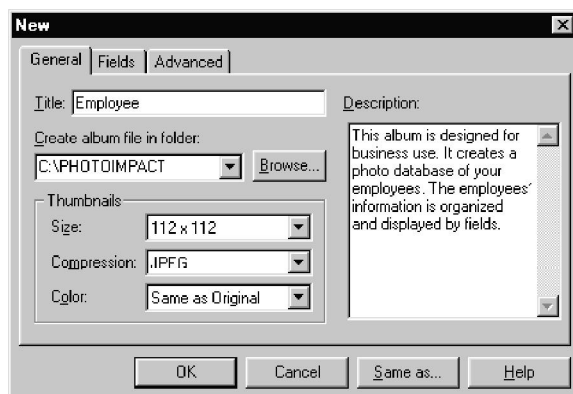
2. To modify the fields of the template, click on the Fields tab. All the fields currently associated with the personnel database now appear in the Total fields list box.

   In this example, we want to remove the fields, Previous Employer, Last Year's Salary, Date Resigned/Discharged, Reason Resigned/Discharged, Performance Review Date, and Keyword.

3. Select Previous Employer in the Total fields list box, (you may have to scroll to locate it), and then click Remove. The field Previous Employer is now removed. Next, try and remove the other fields you don't want by repeating this procedure. (You can of course choose to remove other fields depending on the type of database you want to create.)

   Now that you have removed all unnecessary fields, you'll need to add one new field, Age, to your employee database.

4. In the Field name entry box, type "Age" and select Number from the Field type combo box. (This identifies the field "Age" as one that will contain numeric data.)

5. Click Add. The field, Age, is added to the bottom of the Total fields list box.

To edit a list type field

List type fields are different from other field types in that the data for them must come from a predefined list of values. Furthermore, all thumbnails can only be assigned one value.

1. Select Department in the Total fields list box (you may have to scroll to locate it) and then click Edit List. The Edit List dialog box opens displaying existing values.

   For your company, Worldwide Travel, there are only four departments, Sales, Marketing, Publication, and Accounting. This means that you need to remove the values Personnel, Product Team and R&D from the current value list, and then add Sales and Publication.
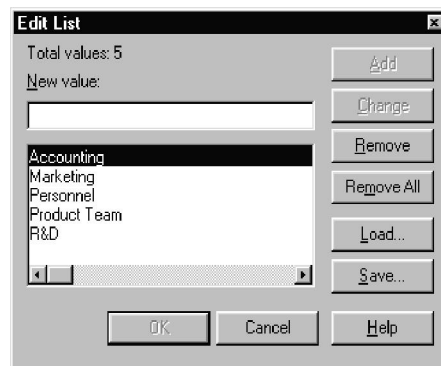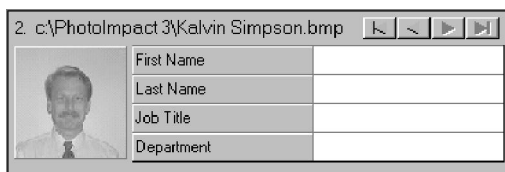
2. Click on the value Personnel and then click Remove. The value Personnel should now be removed from the current value list. Now, do the same for the values, Product Team and R&D.

3. In the New value entry box, type in "Sales" and click Add. Sales now appears in the list box. Repeat the same procedure to add the value, Publication. Once finished, the list should now contain four values: Accounting, Marketing, Publication and Sales.

4. Click OK. The Edit List dialog box closes and you are returned to the New dialog box. To begin inserting thumbnails, click OK again; your Personnel album is created and you are prompted to start inserting thumbnails. (For more on inserting files, refer to number 4 in the lesson "To create a new album" p.60.) To use the sample files provided, choose the SAMPLES\TUTORIAL folder on the PhotoImpact CD-ROM and select the files ALBTUT1 to ALBTUT10.

To enter field information:

Now that you have created an album database, the first thing you will want to do is enter information into the fields of the album. Before you start, make sure that your employee database album is active by clicking on its title bar. (To use the sample employee database provided, open the file, EMPDB in the SAMPLES\TUTORIAL folder on the PhotoImpact CD-ROM.)

1. Click the Data Entry Mode button on the Standard toolbar, or choose "Data Entry" from the View: Mode submenu. The current album view changes to show the data entry view.

The order of the fields is determined at the time the album was first created. This order may not always be the most convenient for viewing or entering data. To change this order, you need to drag the fields to new positions.

2. Click on the field, Job Title, and drop it on top of any field at the bottom of the album window. This moves the field Job Title down to the position where you dropped it. Next, try moving the other fields around until the first six appear in the order shown below.

3. Now that the fields are in the correct order, you can go ahead and enter the personnel information into the appropriate fields. To enter information, simply click in the appropriate field and begin typing. (To move to the next thumbnail, click on the forward button at the top of the album.)

If you try typing inside a List type field, a dialog box opens displaying all the values available in that list. For example, if you try and type inside the Gender field, a dialog box opens with the two values, Female and Male. Selecting a value and clicking OK then places that value into the Gender field.

LAST NAME	FIRST NAME	DEPARTMENT	GENDER	DATE OF BIRTH	AGE
Quick	Felicia	Sales	Female	11/30/39	55
Alvaro	Vanessa	Accounting	Female	04/26/57	38
Hawkins	David	Publication	Male	07/13/61	34
Delisle	Patricia	Accounting	Female	03/01/70	25
Simpson	Kalvin	Marketing	Male	01/16/52	43
Webber	Erica	Marketing	Female	12/29/33	61
Jones	Robert	Sales	Male	05/15/37	58
Williams	Joseph	Publication	Male	10/16/65	30
Young	Leith	Accounting	Female	03/14/74	21
Schulte	Curtis	Marketing	Male	09/23/41	54

Note: *If you are entering a lot of information, you may find it easier to first use a word processor to enter all your information and then import it into an album, see p.205. This way you can spell check your work first.*

For more information, see:

Searching

Once you have your employee database set up and all the employee information entered, you can then locate specific persons or groups. For the employee database that you have just created, this is not a tough task. However, if you have several hundred employees to keep track of and need to be able to provide their information upon request, this may not be so simple.

To performing a search with the search toolbar:

The manager of Worldwide Travel wants to review the records of all employees between the ages of 55 and 65 for consideration of a special bonus scheme. (To use the sample employee database provided, open the file EMPDB in the SAMPLES\TUTORIAL folder on the PhotoImpact CD-ROM.)

1. In the Search toolbar, click the Search type combo box (first on the left), and select Age.

2. Move to the Search operator combo box and select Within. This confines the search to only look for people whose age lies within the Age range specified in the neighboring entry boxes.

3. Type in 55 in the first entry box and 65 in the second entry box.

4. Click on the Perform search button on the Search toolbar. The search begins, and the thumbnails of Felicia Quick, Erica Webber and Robert Jones should now be displayed.

To performing a complex search:

For more complex searches, such as those that require more than one criteria, you will need to use the Search command in the Thumbnail menu.
For example, you have been asked to find all female employees who are in the Sales, Accounting, or Publication departments, and have first names that contain either "fbi" or "cia".

1. Choose "Search" [CTRL+F] from the Thumbnail menu. The Search dialog box opens.

2. In the Search criteria group box, select "Gender" from the Search type combo box.

3. Select Contains in the Search operator combo box, if it is not already selected, and then enter Female in the Query entry box.

4. To add the criteria to the Search criteria window, click Add. (Do not click OK yet: you will be adding to this criteria.) The criteria should now appear in the Search criteria window.

Next, you need to locate all employees in the Sales, Accounting and Publication departments. Since there are only four departments in total (Marketing being the other), it is easier to say that you want all employees who are not in the Marketing department.

5. Select Department from the Search type combo box, and leave the search operator as Contains. In the Query entry box, type in "Marketing" and check the Not and the And logical operators. (Not tells the search to skip Marketing, while And places the criteria with the existing criteria in the search window.)

6. Click Add. The new criteria is added after the previous criteria in the Search criteria window.

    Now, for the final part of this search, you need to find all employees with first names that contain "fbi" or "cia".

7. Select First Name from the Search type combo box, (leave Contains as the search operator), and click on the Edit Criteria button. The Edit Criteria dialog box opens.

8. Enter "fbi" into the Search criteria entry box and then select Or from the Operators combo box. The operator Or is placed is placed in the Search criteria entry box. Now repeat this same procedure, except this time type in "cia" after the Or operator in the Search criteria entry box.

9. Click OK. The Edit Criteria dialog box closes and you return to the Search dialog box. To add this criteria to the Search criteria window, click Add.

    The Search criteria window now has the three criteria which you want to perform your search on.

10. Click OK. The Search dialog box closes and the thumbnails of all the employees that meet the search criteria are displayed. If you did everything correctly, you should have the thumbnails for Felicia Quick and Patricia Delisle displayed in your album.

For more information, see:

Working with marks

In Album, fields are not the only way to label thumbnails. You can also label thumbnails with marks. Unlike fields, marks are visual, that is they work on the surface rather than behind it. This is especially useful when you want to scroll through the thumbnails quickly and locate certain thumbnails without having to select each thumbnail to see the field data associated with it.

To demonstrate how to assign marks, let's return to our employee database example. Using marks, you will indicate which staff members in the database are salaried, or contract. (You will need to use the mark panel to assign marks. If the mark panel is not open, click your right mouse button anywhere on a toolbar and choose the Mark Panel command.)

To label thumbnails with marks:

Before assigning marks, it is a good idea to first give them a label or description. This makes it easier to remember what distinguishes one mark from another. (To use the sample employee database provided, open the file, EMPDB in the SAMPLES\TUTORIAL folder on the PhotoImpact CD-ROM.)

1. Double-click on any letter in the Mark panel. The Edit Marks dialog box opens.

2. Select the letter "A" from the Marks list box. (This will be used to identify the thumbnails of salaried employees.) In the Mark name entry box, type in "salaried" as the description.

3. Select the letter "C" and then type in "contract" in the Mark name entry box. (This will be used to identify the thumbnails of contract employees.)

4. Click OK. The Edit Marks dialog box closes and you are returned to the Album workspace and the descriptions salaried and contract appear next to their respective marks in the mark panel.

To assign marks to thumbnails:

1. Click on the letter "A" in the Mark panel and then click the Assign Marks button.

2. Move your pointer onto the album, notice that the pointer changes to a mark pointer, and place the pointer on a thumbnail and click once. The letter "A" is immediately shown next to the index number on the thumbnail slide. (You can now try and mark several other thumbnails.) To assign the mark, "C", click on the letter in the Mark panel and repeat this procedure. If you have made a mistake or wish to try again, you can remove the mark by clicking on the thumbnail again.

3. Once you have finished assigning marks, click the Stop button on the Mark panel.

To search for a marked thumbnail:

After marking thumbnails, you may find it necessary to search for them. Apart from browsing through the album, you can use the Mark panel's built-in search features.

1. Click on the letter "A", and with the Ctrl key held down, click on "C". The letters "A" and "C" are now selected.

2. Click the View Mark button on the Mark panel and choose Or from the menu. This immediately displays all the thumbnails with either "A" or "C" as marks. (Choosing And searches for all thumbnails which have both "A" and "C".)

For more information, see:

Using Album with other programs

This lesson provides an example of how you can use Album so that it fits hand in glove with your other office suite programs. For example, you need to introduce all the members of the Accounting department at Worldwide Travel in a newsletter that's coming out the end of this month. Using Album's search facilities, you should be able to easily locate these staff. (If you have trouble doing this, refer to the lesson on using the Search toolbar, p.66)

To place thumbnails into Microsoft Word:

If your search was successful, the thumbnails Vanessa Alvaro, Patricia Delisle and LeithYoung should appear in the employee album. (To use the sample employee database provided, open the file, EMPDB in the SAMPLES\TUTORIAL folder on the PhotoImpact CD-ROM.) The next step is to drag these thumbnails from the album to the Microsoft Word document containing the newsletter. (If you have Microsoft Word, run Word, and open the sample file, NEWSLETT, in the SAMPLES\TUTORIAL folder on the PhotoImpact CD-ROM.)

1. Click the Compact Mode button on the status bar or choose "Compact Mode" from the View menu. The program window disappears from view, leaving only the active album and toolbars visible.

   It is much easier to move thumbnails between programs using compact mode, as you can better see the target program or programs. (You can still access all of Album's menu commands by clicking the Display Menu button.)

2. Drag the thumbnail for Vanessa Alvaro to the word document and drop it into the box labelled "Employee 1". The photo should now appear in the newsletter document. Now, do the same for Patricia Delisle and Leith Young.

   Congratulations, you have now finished your newsletter!
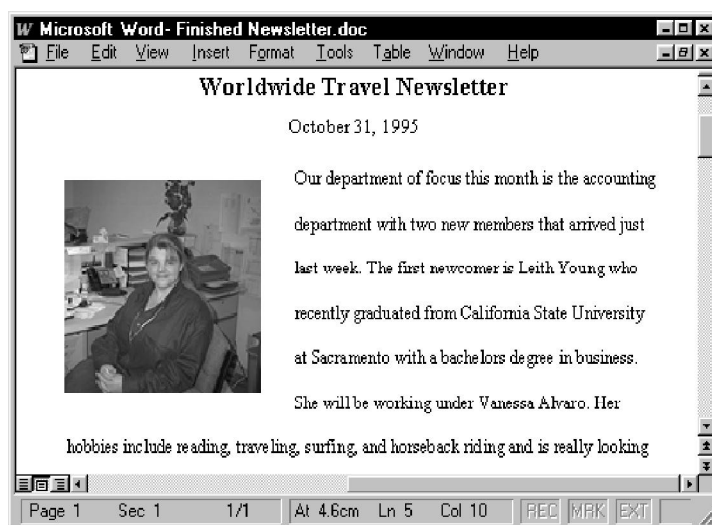
For more information, see:

PhotoImpact fundamentals

This chapter and the next describe the basic commands and features you will use most often in PhotoImpact. As such, both chapters do not go into advanced image editing or enhancement techniques, but do give you the information you need to understand the fundamentals of PhotoImpact.

This chapter begins with a discussion of the PhotoImpact preferences and then examines common file operations such as opening and saving a file, recovering from mistakes, and printing out your images.

Customizing the way you work

One of the first commands in PhotoImpact that you will want to get familiar with is the Preferences command in the File menu. This allows you to customize the way PhotoImpact looks, as well as operates, so that it better suits your work habits. When you choose the Preferences command, a dialog box opens allowing you to set various options specific to PhotoImpact as well as those common to its supporting programs.

PREFERENCES DIALOG BOX: PHOTOIMPACT TAB
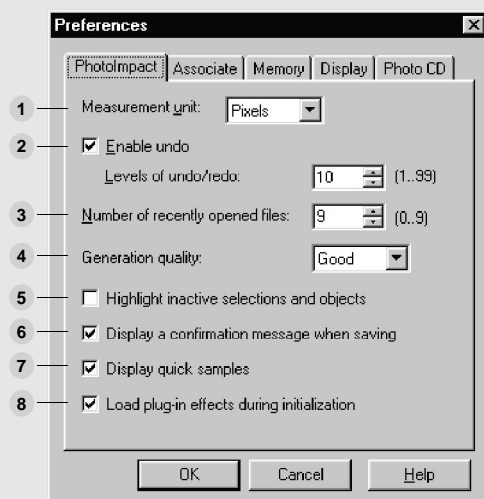
The PhotoImpact tab allows you to modify the way the program operates. You can, for example, set the measurement unit to inches instead of pixels, give yourself more levels of undo, perform enhancements at higher quality levels, and automatically load external plug-in effects.

1 **Measurement unit** can be in pixels, inches, or centimeters. All image size information and ruler measurements are based on this setting. (This can also be changed by clicking the Measurement Unit button on the Status bar.)

2 **Enable undo** allows you to take advantage of the multiple undo/redo feature in PhotoImpact and to set the number of undo levels that you wish to make available (up to 99 levels). As PhotoImpact allocates more memory for each level of undo/redo, you may find that too high a level adversely affects performance. In such cases, try setting the level of undo/redo to a lower value, such as 3 or 4. You can, of course, disable Undo, but this means that any editing done to an image is final.

3 **Number of recently opened files** specifies the number of files listed at the bottom of the File menu (up to 9). By clicking on a name from the list you immediately reopen that file in the workspace.

4 **Generation quality** allows you to set the quality of any effects and filters. A higher quality results in better image reproduction but may take longer to calculate.

5 **Highlight inactive selections and objects** displays, or hides, a dark border around objects and selections that are not active. Check this option if you have trouble keeping track of objects in an image.

6 **Display a confirmation message when saving** displays, or hides, a confirmation message whenever you save a file containing objects to a non-UFO format, or for when saving a file to a format that involves a compression scheme where image data is lost, such as JPEG.

7 **Display quick samples** allows you to display, or hide, the sample thumbnails that appear whenever you open an enhancement or effect dialog box.

8 **Load plug-in effects during initialization** automatically adds any plug-in filters installed on your system to the Effect menu each time you run PhotoImpact.

PREFERENCES DIALOG BOX: ASSOCIATE TAB
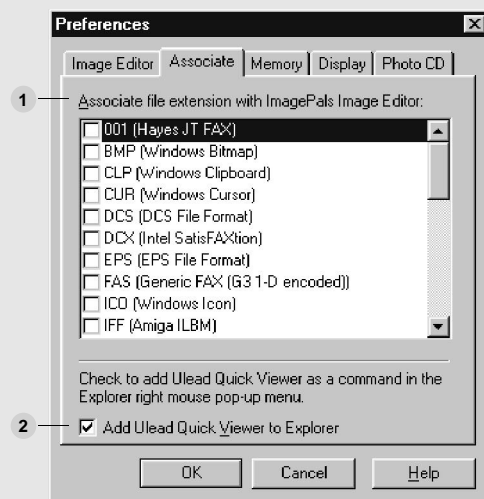
The Associate tab allows you to determine which file format is associated, or linked, to PhotoImpact. For example, you can specify that all BMP files be associated to PhotoImpact. The next time you double-click on a BMP file in Windows Explorer, it will open up in PhotoImpact, irrespective of which imaging program it may have originally been created in.

1 **Associate file extension with PhotoImpact** list box displays all the file formats supported by PhotoImpact. To associate a file format to PhotoImpact, click on the checkbox of the appropriate format's file extension.

2 **Add Ulead Quick Viewer to Explorer** allows you to add the Viewer command to the right mouse button pop-up menu of Windows Explorer. The next time you display this menu, choose the Viewer command to run the Viewer utility of PhotoImpact for quickly viewing image files.

Common preferences options

Each program in the PhotoImpact package has a Preferences dialog box that shares the following tabs: Memory, Display, and Photo CD. Changes you make to any option in these tabs are reflected in all the programs, irrespective of which program you change them in. For example, if you calibrate your monitor in PhotoImpact, all other programs will have the same calibration.

Note: *The Album Preferences command has a submenu of two commands, Album and General. Album opens a dialog box just for Album program related features, whereas General opens a dialog box of all the shared features.*

PREFERENCES DIALOG BOX: MEMORY TAB
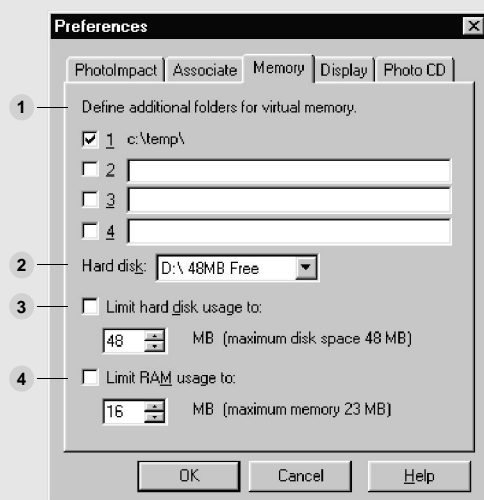
The Memory tab gives you the opportunity to specify folders that provide additional working space when working with files. You can also determine how much space is allocated on the hard disk for virtual memory as well as how much space is allocated in RAM for use by all Ulead programs.

1 **Define additional folders for virtual memory** allows you to specify the folder used by the PhotoImpact programs as additional working space. For example, when you don't have enough RAM, the PhotoImpact programs can use extra memory from the hard disk (virtual memory) as temporary RAM. The first folder shown in the Memory tab is the TEMP folder defined by the SET TEMP statement in your AUTOEXEC.BAT file. If you have more than one drive on your system, you can specify more than one temporary folder in the available entry boxes. If not, leave the entry boxes empty.

2 **Hard disk** indicates the space available on your hard disk. (The folder specified in the *Define additional folders for virtual memory* section must be located on this hard disk.)

3 **Limit hard disk usage to** allows you to specify how much memory you want to allocate to the PhotoImpact programs for use as virtual memory. If you want to run other programs in the background, then choose about ½ the maximum amount. To use PhotoImpact defaults, leave this option unchecked.

4 **Limit RAM usage to** allows you to specify how much memory you want to allocate to the PhotoImpact programs for use in RAM. If you want to run other programs in the background, then choose about ½ the maximum amount. To use PhotoImpact defaults, leave this option unchecked.

PREFERENCES DIALOG BOX: DISPLAY TAB
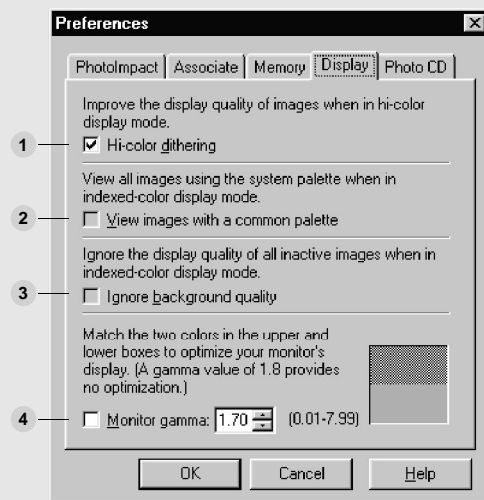
The Display tab allows you to modify the way images are displayed as well as calibrate (adjust) your monitor. You should calibrate your monitor whenever you change monitor, display adapters or the environment in which you work, (as lighting and temperature can also affect a monitor's performance).

1 **Hi-Color dithering** allows you to improve the display of True Color images when you are in Hi-Color display mode.

2 **View images with a common palette** displays all images using the system palette. This is only enabled when you are in 256-Color display mode and makes your work quicker as there is no need to repaint any of the images with a new palette. This option is particularly useful when preparing CD-ROM based titles and you need to see how images appear in 256-Color display modes.

3 **Ignore background quality** is enabled when in 256-Color display mode and improves performance by not repainting any background images when you change views. (Do not check this option if you need to identify background images.)

4 **Monitor gamma** allows you to calibrate your monitor for the optimum display of images. (For more information, see the procedure on the following page.)

To calibrate your display:

1. Choose "Preferences" from the File menu, the Preferences dialog box opens, and click on the Display tab.

   At the bottom of the tab are two grayscale squares. The top square is a chequered pattern of black and white pixels, which when viewed from a distance, give the feeling of 50% gray. The bottom square is 50% gray as your monitor currently shows it. In a well calibrated monitor, both of these squares should look approximately the same.

2. Examine the two color squares, and if the two squares look different, adjust the Monitor gamma spin box until the bottom square looks similar to the top square.

   The monitor gamma value can be any number from 0.01 to 7.99. If none of the squares exactly match, try and estimate the best match. In general, your value should fall within 0.8 – 2.4; if not, try adjusting the brightness and contrast controls on your monitor.

3. Click OK. The dialog box closes and your monitor is now optimized for displaying images in the PhotoImpact programs.

Note: *When using Capture to capture screen components to either the Capture or PhotoImpact workspace, you may find some difference between display color and captured color. If this occurs, uncheck the Monitor gamma option.*

PREFERENCES DIALOG BOX: PHOTO CD TAB
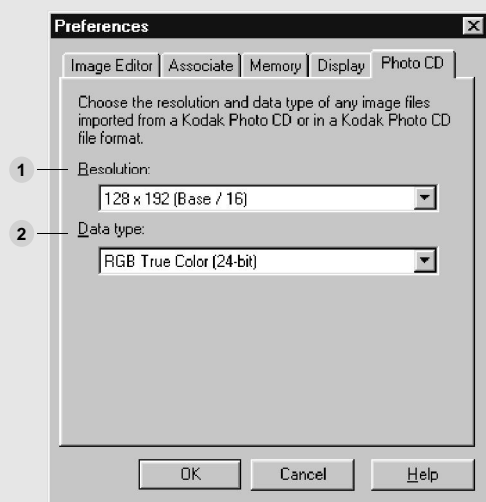
The Photo CD tab gives you the option of determining the resolution and data type of any image file imported from a Kodak Photo CD. These options can also be changed directly from the toolbar in the CD browser program.

1 **Resolution** allows you to specify the resolution for images opened from a Photo CD. It is important to remember, the higher the resolution, the larger the file size of the image.

2 **Data type** determines the respective data type for any images imported from a Photo CD. True Color provides the most colors, but also results in larger file sizes. Grayscale has the lowest file size, but the images contain no color. To retain some color but keep the file size down, choose one of the Indexed-Color options.

Working with image files

Before you get started with PhotoImpact, you need to bring an image into the PhotoImpact workspace. This can be done in a number of ways, the easiest being to click the Open button on the Standard toolbar.

Opening image files

After installation you will find a number of files in the SAMPLES\IMAGES folder inside your installation folder. To open these files, or other image and graphics files, click the Open button on the Standard toolbar or choose the Open command [CTRL+O] in the File menu. The Open dialog box appears displaying files in the current folder that correspond to the type shown in the Files of type combo box.

To open a file, select its filename and click OK. (Double-clicking on the filename also opens the file.) The dialog box closes and the file is opened in the PhotoImpact workspace. To open multiple files, use the Shift key in conjunction with your mouse to select a range of files or the Ctrl key to select, or deselect, individual files. Once selected click OK. The images open in individual windows in the program workspace.

Notes:

- *When you open a graphics file which does not contain bitmap data, it is converted into an image. (The data type of this image is the same as your current display mode.) You can then edit it in the same way as other images.*

- *You can also open the files you have most recently worked on by choosing their names from the list at the bottom of the File menu. (The number of files that appear here is controlled by the* Number of recently opened files *option in the Preferences dialog box, see p.72.)*

Creating new images

In many cases your images will have been obtained with an image input device such as a scanner or frame grabber, or you will have opened them from your hard disk or a CD-ROM. At other times you will want to start with a new, or "clean" image window for compiling elements of other images together or for using PhotoImpact's painting tools.

To create a new image:

1. Click the New button on the Standard toolbar, or choose "New" [CTRL+N] from the File menu. The New dialog box opens.
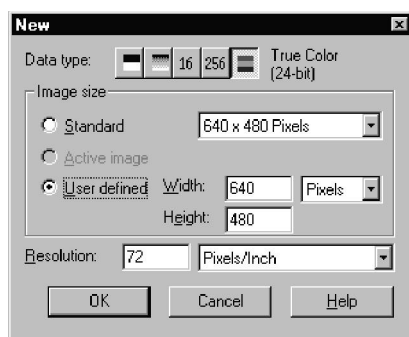
2. Click on one of the data type buttons to choose the data type of the new image.

   You can choose from Black& White, Grayscale, Indexed 16-Color, 256-Color, or True Color data types. (For more information on data types, see "Imaging essentials" in the on-line Help.)

3. Set the image dimensions in the Image size group box.

   Choose Standard if you want to use default image sizes or Active image to set the size to be the same as the currently active image (this option is disabled if there are no images open in the workspace). To define your own, choose User defined and enter in the dimensions of the image in the Width and Height entry boxes.

4. Enter a value for the image's resolution in the Resolution entry box and select either Pixels/Cm or Pixels/Inch in the combo box.

   If the Measurement unit option in the Preferences dialog box (see p.72) is in centimeters or inches, the resolution determines how many pixels are used to create the image: the higher the resolution, the greater the number of pixels and therefore the greater the amount of memory required to store

the image. When the Measurement unit is pixels, the resolution determines how large your image will be when printed. The higher the resolution, the smaller your image will print (the memory required to store the image, however, remains the same).

5. Click OK. The dialog box closes and the new image, filled with the background color, appears in an image window.

Applying the same command to multiple files

Because PhotoImpact allows you to work with multiple files, it is very easy to accumulate a large number of files in the workspace. Often you will want to remove these, save them, or perform the same command to a selected few. To help you do this, PhotoImpact provides a batch manager, accessed by double-clicking in the workspace or by choosing the Batch Manager command in the Window menu. Once invoked, the batch manager opens and displays the filenames and thumbnails of all the files present in the workspace as well as a combo box of commands that can be applied to them. To perform a batch operation, select the command and the files you want the operation to be performed on and click OK – the batch manager does the rest for you.

Duplicating images

As you work with an image you may find the need to make a copy of it. This can be useful as it allows you to continue editing the copy without the danger of losing work you have already done on the original. PhotoImpact offers you three different kinds of duplication. You can duplicate the entire image, including the base image and all objects, duplicate the base image alone, or duplicate the image with all objects merged onto the base image. (For a more thorough discussion of objects, see chapter 5, p.131.) Whenever you create a duplicate image, it opens in a new image window.

To create a duplicate image you can:

- Choose the desired duplication command from the Edit: Duplicate submenu.
- Choose the All command from the Edit: Select submenu to select the entire image and then drag the selection onto the workspace. (This works only if the image has no objects.)
- Drag an object from an image, or the Object Library, onto the workspace.
- Copy an image onto the clipboard and then use the As a New Image command in the Edit: Paste submenu.
- Using a selection tool, select part of an image and drag it onto the workspace.

Saving images

Because PhotoImpact is an object-based editing program, any work you have done that involves objects can be saved in a special Ulead File for Objects format (UFO). A UFO file consists of the original base image and any objects you may have created. (For more on objects, see chapter 5, p.131.) The advantage of a UFO file is that it allows you to open the file at a later date and still edit the objects and base image independently.

Note: *To save images for use in other image editing programs, you need to save the image in a file format other than UFO.*

To save an image in a non-UFO format, you must use the Save As command in the File menu. Any objects present are merged onto the base image. As such, it is important to remember that you cannot edit or recover any objects which have been saved in this way.

To save an image:

1. Click the Save button on the Standard toolbar, or choose the Save As command in the File menu. TheSave As dialog box opens.

2. In the Save in list box, select the folder you want to save the image to, and then select a format from theSave as type combo box.

   Choose "UFO" if you want to save any objects that are in the image. Choosing any other format merges objects onto the base image.

3. In the File name entry box type the name of your file. You do not need to enter the File extension.

   Note: *If you type in an extension, ensure that it is the same as the extension shown in the* Save as type *combo box. This is because PhotoImpact saves the file using the format specified here, regardless or what extension is typed in.*

4. Click Save. The image file is saved and the dialog box closes returning you to the workspace.

Sending Images by electronic mail

With the Send command in the File menu, you can send an image to anyone else connected to your PC through MS Exchange (Windows 95) or MS Mail (Windows NT). When you choose the Send command, the Send Mail dialog box opens allowing you to enter the subject and text of the message that you wish to send. To attach an image file to the message, check theImage file checkbox. To send the message, click OK; the Choose Profile dialog box opens, allowing you to select an information service to be used as the sending agent.

Using the Quick Command panel

PhotoImpact provides you with a fast way to access commonly used commands with the Quick Command panel. To display the Quick Command panel, check the Quick Command Panel option in the Toolbars & Panels dialog box, accessed by choosing the Toolbars & Panels command in the View menu.

The advantage of using the Quick Command panel over the menu bar is that you can customize the commands that appear there, as well as resize and position the panel so that it is always where you want it. By choosing the Layout Options command in the Quick Command panel's control menu, you can set the size of the custom and cache areas. The custom area is the top part of the panel and displays commands that you specify, whereas the cache area occupies the bottom part of the panel and displays your most recently used commands.

To specify which commands to display in the custom area, choose the Modify command in the Quick Command panel's control menu. This opens a dialog box allowing you to add or remove any command from the custom area as well as assign command names' aliases. For example, T&P can be used as an alias for the Toolbars & Panels command in the View menu. Used in this way, aliases help keep the Quick Command panel relatively narrow, taking up less space on the screen.

Recovering from mistakes

PhotoImpact remembers every action and command that you use when editing an image. This is very useful as you may sometimes wander down the wrong editing path and want to backtrack to the point where that path began. PhotoImpact makes this easy by giving you multiple levels of undo and redo. (To control the number of levels of undo or to disable the undo/redo feature, see the Preferences dialog box, p.72.)

Using Undo

If you change your mind about an action or series of actions that you have performed, click the Undo button on the Standard toolbar and the most recent action is reversed. To reverse more than one action, choose the Undo Before command [CTRL+Z] in the Edit menu. A submenu of the most recent actions appears with the most recent action at the top. Choose the action you wish to undo up to and the effect of the action, and all above it, are reversed. The image is then restored to its state prior to the application of those actions.

Using Redo

When you wish to reapply an action that has been undone, click the Redo button on the Standard toolbar and the action is reapplied. If you want to reapply a series of actions that have been undone, use the Redo To command [CTRL+Y] in the Edit menu. When you choose Redo To, a submenu of undone actions appears with the most recent one being on top. Select the undone action that you wish reapplied and all undone actions above that will be reapplied as well.

Clearing your undo/redo list

Repeated use of the Undo Before and Redo To commands can use up valuable system resources, as well as leave you with a mixture of desired and undesired actions applied to your image. For this reason PhotoImpact gives you the option of clearing the Undo Before and Redo To submenus with the Clear Undo/Redo History command in the Edit menu. When choosing this command all actions from the Undo Before and Redo To submenus are removed automatically. (Be careful when you use this command, as it cannot be undone.)

Restoring an image

When a series of undesirable changes have been made to an image that cannot be easily undone with the Undo Before command, you have the option of using the Restore command in the File menu. Restore cancels all changes made to the image since it was last saved. (This essentially closes the file and reopens it.) Before using this command, consider carefully because it cannot be undone. If in doubt, create a duplicate image before restoring so that you can compare the current stage of your work with the original.

Printing images

PhotoImpact provides extensive print options to give you full control over printing images. To print an image, click the Print button on the Standard toolbar, or choose the Print command[CTRL+P] in the File menu. The Print dialog box opens displaying various printing options. Basic printing options allow you to select which printer to print from, the number of copies to print, and where on the page to print the image.

Using Print Preview

PhotoImpact allows you to see what your printed image would look like before actually with the Print Preview button on the Standard toolbar or the Print Preview command in the File menu. When you activate Print Preview, PhotoImpact switches from normal editing mode to print preview mode.
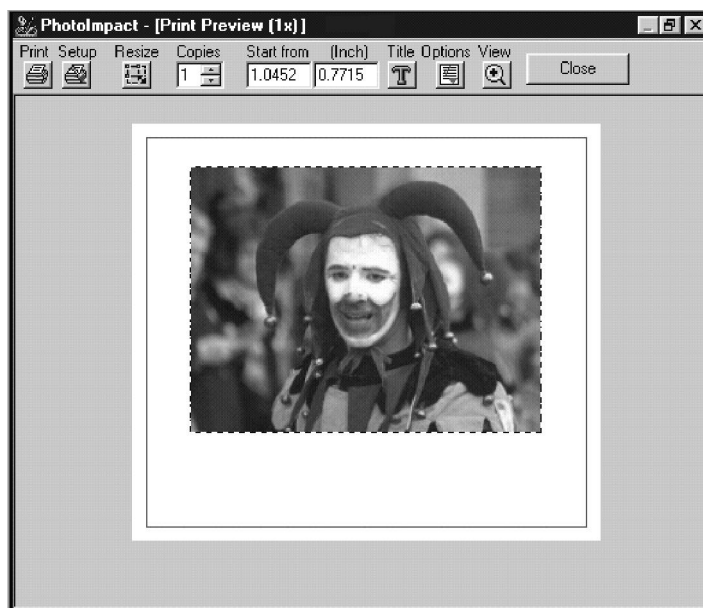
In print preview mode you can use the buttons across the top of the workspace to access basic printing and layout options. For example, click the View button to zoom in and out on the preview or to return to the default full page view. To position the image in the center of the page, choose the Center Horizontally and Center Vertically commands in the Options menu button or drag the image freely with your mouse. You can also resize the image by clicking the Resize button and then dragging the control points that appear on the image.

Calibrating your printer

All printers print images differently, for example, some consistently print shadowed areas too dark, or highlighted areas too light. PhotoImpact can easily compensate for this kind of printing problem through calibration.

To calibrate your printer:

1. Click the Print button on the Standard toolbar or choose "Print" CTRL+P from the File menu. The Print dialog box opens.

2. Click the Options button. The Options dialog box opens displaying a calibration curve as well as an extensive range of preset calibrations. (For more on modifying a calibration curve, see "Using the tone mapper" p.104.)
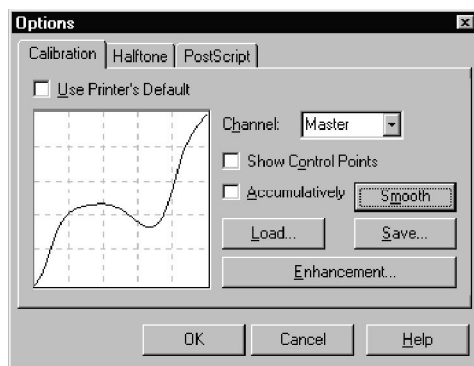
3. Uncheck the Use printer's default checkbox.

   The other options in the dialog box are now enabled allowing you to manually adjust the calibration curve.

4. Click the Enhancement button. A pop-up menu appears listing commands of the various enhancements you can apply to the calibration curve.

   Select an enhancement command that corrects one or more of your printer's problems. For example, if your printer makes midtones in an image too light, select the Darken Midtone commandIf no enhancement command can effectively correct your printing problems, you can manually adjust the calibration curve by dragging your mouse over the curve. After adjusting the calibration curve, save it by clicking the Save button. Whenever you print in the future, this calibration curve will be applied to the printed image resulting in a more consistent printout.

Working with halftones

Whenever you are printing, you will probably encounter halftoning. Halftoning is a process of creating a pattern of black and white dots to simulate shades of gray (for a black and white printer) or using cyan, magenta, yellow, and black dots to simulate shades of color (for a color printer). For everyday printing, check theUse printer's default checkbox in the Options dialog box (accessed from the Print dialog box). This leaves the halftoning to

the printer and should produce the quickest and most acceptable results. However, for customized results, you will need to uncheck the Use printer's default checkbox and modify the halftoning options.

Note: *The Halftone feature does not appear in the Options dialog box if your printer does not support custom halftoning.*

PRINT OPTIONS DIALOG BOX: HALFTONE TAB
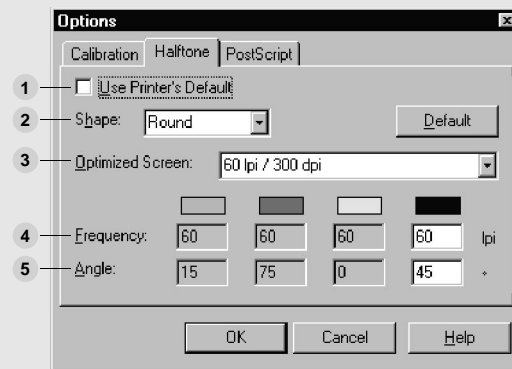
1 **Use Printer's Default** allows the printer to perform halftoning. By unchecking this option you can then modify the halftoning process yourself.

2 **Shape** determines the shape of the dots used to construct the halftone pattern. The shape that you choose depends on the image that you are printing and the type of effect that you wish to produce. Normally, you would choose a shape that produces the least discernible dithering pattern, such as oval. However, if you wish to give your image a more textured look then select another shape, such as diamond.

3 **Optimized screen** allows you to select from preset halftone screen settings that your printer driver provides, or to select your own halftone frequency and angle settings.

4 **Frequency** controls the distance between halftone dot centers, measured in lines per inch, or lpi. A high frequency value results in smaller dots (because the lines are closer together) and a low frequency value results in bigger dots (because the lines are further apart). For printers with a 300 dpi resolution, a frequency of 53 lpi is considered near optimum. For higher resolution printers, use a frequency between 90 and 200 lpi.

5 **Angle** determines the angle of the halftone screen as it is applied to the image. For grayscale images, 45° is considered to be the optimal angle, however if your image has strong visual elements at or near 45° you may want to try other angles.

Working with PostScript printers

If your Printer supports PostScript, PhotoImpact allows you to specify various PostScript settings to produce the best looking print output possible. Through the PostScript feature in the Options dialog box, accessed from the Print dialog box, you can take advantage of PostScript Level II features, such as setting the image quality and compression level.

PRINT OPTIONS DIALOG BOX: POSTSCRIPT TAB
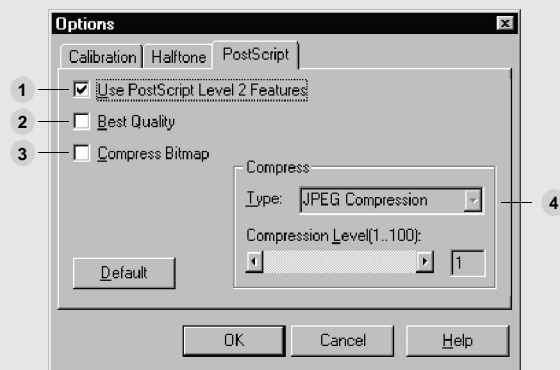
1 Use PostScript level 2 features allows PhotoImpact to take advantage of PostScript level 2 commands. Left unchecked, PhotoImpact uses standard level 1 commands. (Check with your printer to see what level it supports.)

2 Best quality sends more information to the printer for the best quality image output. (Checking this option does result in slower printing times.)

3 Compress bitmap sends any images to the printer in a compressed format. This does speed up printing, but may degrade the quality of the image output.

4 Compress allows you to choose the type of compression scheme to use when you have cheked the Compress bitmap option.

Mastering the basics

The previous chapter introduced you to some of the fundamental concepts and behavior of PhotoImpact. This chapter takes you to the next step, explaining basic image editing operations such as copying and pasting image data, using the Auto-Process feature, controlling the view of your images, and using OLE 2 to perform drag and drop operations and "in-place" editing.

Chapter contents at a glance

Using the clipboard

Many commands in PhotoImpact make use of the clipboard. The clipboard is a temporary storage area for any type of information. This may be an image, text or even sound; but the clipboard can only hold one piece of information at a time. When you place something onto the clipboard, existing clipboard data is overwritten: irrespective of whether you placed new data onto the clipboard from another program or from PhotoImpact.

Performing a cut and copy operation

The most common methods of placing data onto the clipboard are clicking the Cut [CTRL+X] and Copy [CTRL+C] buttons on the Standard toolbar, or choosing their respective commands from the Edit menu. Copy places a duplicate of a selected area or object onto the clipboard whereas Cut deletes the selected area or object and places it onto the clipboard. (If cutting a selected area, the image is filled with the current background color.) When there is no selection area, both Cut and Copy are applied to the entire image.

Performing a paste operation

After cutting or copying image data, you can then paste it from the clipboard onto an image by clicking the Paste button on the Standard toolbar or choosing one of the five paste commands from the Edit: Paste submenu. (The Into Selection and Fit Into Selection commands are disabled when there is no current selection. All paste commands are disabled if the clipboard is empty or the content of the clipboard is from another, incompatible program.) Whenever you paste data into an image, it becomes an object and floats above the base image and any other objects.

Notes:

• *PhotoImpact allows you to paste image data onto any image, regardless of data type. If pasting onto an image of a different data type, the pasted data is converted. At times this may cause an extreme change in color; for example, pasting a True Color image into an Indexed 16-Color image.*

• *When pasting an image, it is placed pixel-on-pixel. If your source and target images are at different zoom levels, the clipboard image may appear to be enlarged or reduced after pasting.*

Pasting images as objects

The standard paste command in PhotoImpact is the As an Object command [CTRL+V], which can also be accessed from the Standard toolbar by clicking the Paste button. When you paste an image as an object, the image is pasted at the top left corner of the current view. (For a thorough discussion of objects and working with them, see chapter 5, p.131.)

Pasting images into a selection area

Use the Into Selection command when you want to paste a clipboard image into a selection area. This command is useful when you want to fill a selection area with image data.

To paste clipboard data into a selection:

1. Select an area on the image where you want to paste the clipboard image into.

2. Choose "Into Selection" from the Edit: Paste submenu. The clipboard image then appears inside the selection area.

   Notice how the top left corner of the clipboard image remains connected to your mouse. This allows you to move your mouse while at the same time reposition the clipboard image anywhere within the selection area.

   Note: Pressing the Esc key before you have finished the pasting operation automatically removes the clipboard image.

3. Move your mouse around to position the clipboard image in the selection area as desired.

4. Click your mouse. The clipboard image is then anchored in the selection area as an object.

   Note: *If the pasted image is smaller than the selection area, it is placed at the top left corner of the selection. The remaining areas of the image are left unaffected.*

Pasting images to fit into a selection area

Use the Fit Into Selection command when you want to paste the clipboard image inside a selection area so that the entire image fills the selection. Depending on the size of the clipboard image, this can degrade the image as it may have to be expanded or compressed to fit the selection area.

Original selection   *Pasting into the selection*   *Pasting to fit into the selection*

Pasting images into a new image window

If you want to paste a selection into its own image window, use the As a New Image command. This command is useful when you want to save an object, or selection area, as its own image, or have copied an image from another program and want to place it in its own window. (You can also accomplish this by dragging an object from an existing image onto the workspace.)

Pasting images beneath the mouse pointer

The Under Pointer command allows you to place the clipboard image onto the base image wherever you click your mouse. When you choose this command, the top left corner of the clipboard image remains connected to your mouse. This allows you to move your mouse while at the same time reposition the clipboard image anywhere within the image. Clicking your mouse anchors the image in place as an object.

The Clipboard submenu

To help you work with the clipboard, PhotoImpact provides the following commands in the Edit: Clipboard submenu:

Load brings image files and previously saved clipboard images onto the clipboard. This command is similar to the Open command, but rather than opening a file and placing it into a new image window, Load places the file onto the clipboard.

Save saves an image from the clipboard to a file. After saving, you can open this image as you do any other images or bring it back onto the clipboard with the Load command.

Display shows the current clipboard image in a Windows clipboard viewer. To close the clipboard viewer, press any key or click your mouse.

Automatically enhancing an image

Whether you are learning image editing for the first time, or you just don't have time for more involved image enhancement, PhotoImpact provides the Auto-Process commands for automatic and intelligent control over most areas of your image's appearance. When you use Auto-Process, PhotoImpact examines an image or object and applies any necessary modifications to make that image look better. For example, images that have been scanned can often benefit from simple image processing techniques to correct bad cropping, poor brightness and contrast, wrong color balance, and other easy-to-fix image problems.

To use Auto-Process:

1. Click the Auto-Process button on the Standard toolbar, or choose "Batch" from the Format: Auto-Process submenu. The Auto-Process dialog box opens containing seven auto-process options that you can apply to an image or object.
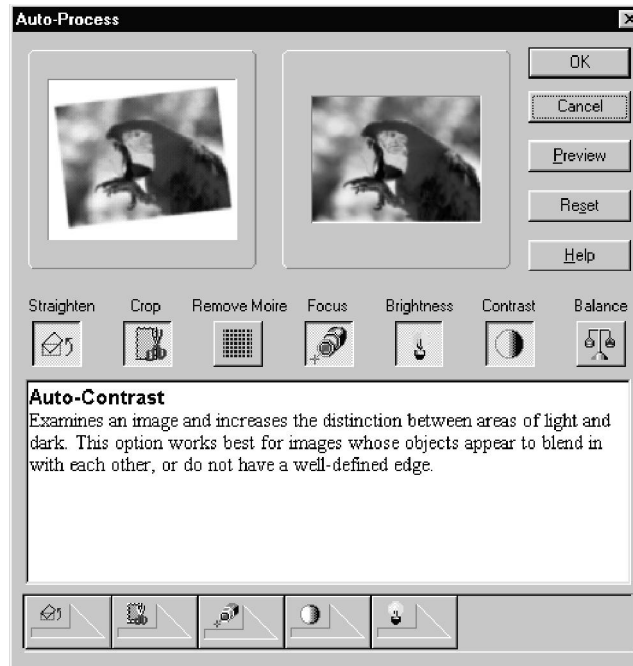
2. Click on the auto-process options that you wish to perform. The options appear on the process queue from left to right in the order selected, and the preview image changes accordingly to give you an idea of the resulting effect.

   The auto-process options are applied successively in the order of their selection. You can change their order by dragging them from one position to another. To remove an option, click on its button or drag it off the queue. To see more clearly how the options affect the image, click Preview. The auto-process options are applied to the image and the Auto-Process dialog box is replaced by a confirmation bar. The OK button accepts the modifications while Cancel rejects the modifications, closing the confirmation and returning you to the workspace. The Undo/Redo button allows you to better compare the before and after views of the modifications and Continue returns you to the Auto-Process dialog box, allowing you to further edit the selected options.

3. Click OK. The dialog box closes and the auto-process options are applied to the image.

Note: *Most of the options in the Auto-Process dialog box can be accessed independently by choosing their respective command in the Format: Auto-Process submenu.*

Controlling the view of an image

When you open an image in PhotoImpact, the pixels of the image are "mapped" onto your screen pixels. Controlling the mapping of these pixels determines the way you see images. For example, the actual view (1x) of an image is when one image pixel is mapped to one screen pixel.

Zooming on an image

When you edit an image, you may want to see part of it in greater detail or more of the image at a smaller size. You can do this in several ways: with the Zoom In and Zoom Out commands in the View menu, using the Zoom tool in the Tool panel, or by selecting a zoom magnification in the Zoom combo box on the Standard toolbar. In all, you can zoom in to an image by 16x or out to 1/16x.

The Zoom tool on the Tool panel provides an alternative to the Zoom In and Zoom Out commands and allows you to accurately zoom in on particular areas of an image. You can use the Zoom tool in a number of ways:

- Clicking your left mouse zooms in on the area under your mouse pointer.

- Holding down the Shift key and clicking the left mouse button zooms out from the image.

- Clicking the right mouse button returns the image to actual view (1x).

- Dragging your mouse creates a rectangular viewing marquee. When you release your mouse button, the image automatically zooms in on the area defined by the marquee. (If the viewing area is too large or the image is already at 16x magnification, the view will not be adjusted.)

Notes:
- *You can also press the "+" and "-" keys to zoom in and out on images, irrespective of the current tool selected.*
- *Pressing down the Z key while using another tool automatically switches that tool to the Zoom tool. Releasing the Z key then switches the tool back.*

Image at actual view (1x), enlarged to 3x, and reduced to ½x

Adding a view

After having zoomed in on an image it is easy to get lost in a sea of pixels. To help you keep the "big picture" in mind you can use the Add a View [CTRL+I] command in the View menu. The Add a View command creates a new window containing an additional view (at 1x) of the image you are working on. This new window is not just a duplicate of the original: it is actually a dynamic "mirror" of the original. That is to say, when you do any editing in either of the windows the changes are reflected in the other. Thus, you can edit fine detail at a higher magnification in one image window and at the same time see the overall effect of that editing in the other image window.

Editing an image (at 3x) with a view added

Using the Global Viewer

When an entire image cannot be displayed within its image window, you would normally have to use the scroll bars to locate hidden areas. The Global Viewer in PhotoImpact provides a better way by displaying a thumbnail view of the entire active image. This thumbnail image contains a floating frame that can be moved independently around the viewer. Moving the frame automatically repositions the current view of the active image. To access the Global Viewer, click on the box that appears at the intersection of the scroll bars at the lower right corner in an image window whenever the image is larger than its window. This displays the Global Viewer at the corner of the image window allowing you to change the view quickly and easily. When you release your mouse the Global Viewer disappears.

Using the Global Viewer to reposition the view of an image
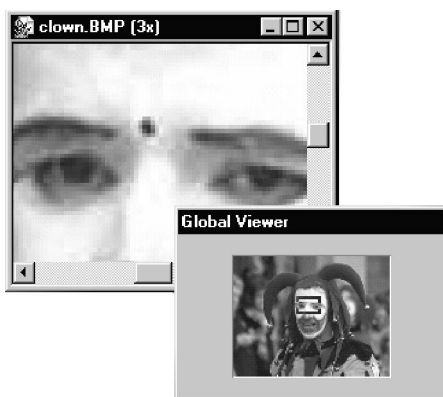
Fitting an image in its window

When you use the zoom commands, the image window does not change to fit the new image size. Therefore, after zooming in the entire image may not be displayed in its window and scroll bars appear along the window border. If you wish to display the complete image within its window choose an available zoom command from the View: Fit in Window by submenu. (The maximum zoom level available is determined by the size of the image and the resolution of your current display mode.)

Viewing images at full screen

To maximize the amount of space to work in you can choose to display PhotoImpact in full screen mode with the Full Screen command [CTRL+U] in the View menu. When you choose this command, the active image is displayed at the current zoom level occupying the entire screen; in its default mode the program window and all docked toolbars and panels are hidden, leaving only the image in view.

Full screen mode is very useful when you want to edit an image in as much space as possible without the distractions of the program window. Any floating toolbars or panels will remain visible in this mode allowing you to continue working on your image. (To return to normal screen mode press the Esc key.) If you prefer to have all the toolbars and panels present, choose the Remove Menu Bar command in the View menu. This removes the title and menu bars of the PhotoImpact screen only, leaving all other screen elements present. (You can still access menu commands by using their keyboard short cuts keys. To return to normal screen mode press the Esc key.)
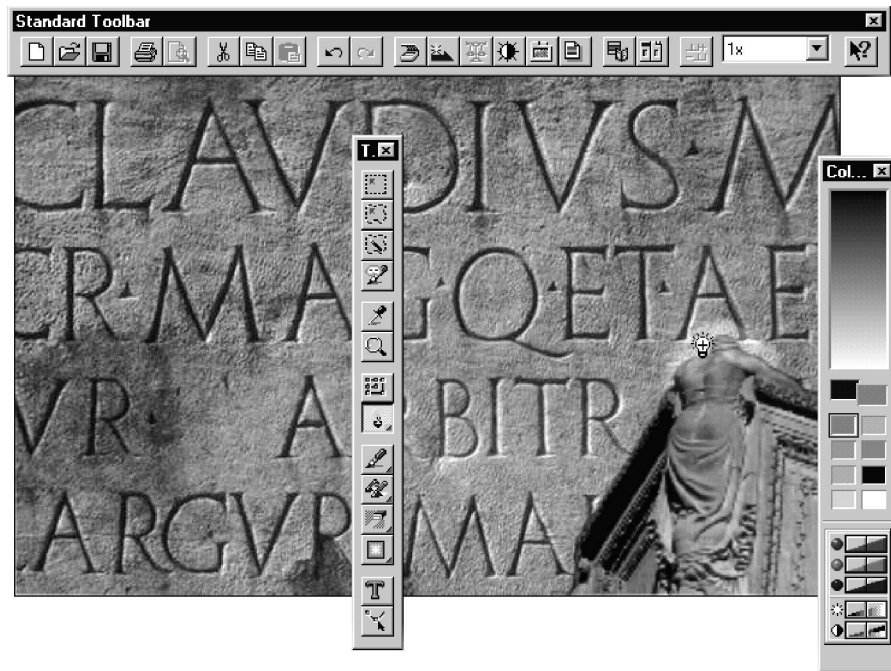
Performing OLE operations

PhotoImpact supports linking and embedding features that allow you to easily modify objects that have been embedded into other container programs. The following section describes the different ways to link and embed objects and how to edit them once they are in place.

To link an object from PhotoImpact:

1. Click the Copy button on the Standard toolbar, or choose "Copy" [CTRL+C] from the Edit menu to place the currently active image onto the clipboard.

2. Open or switch to the container program containing the document into which you want to place the object.

3. Choose the container program's Paste Special command. The Paste Special dialog box appears.

Note: *Some container programs have a Paste Link command. You can use this as an alternative to the Paste Special command.*

4. Select "Ulead PhotoImpact Image Object" from the As list box. (If the Paste Link option is not enabled then select another object format that is compatible with the container program.)

5. Click on the Paste Link radio button and then click OK. The dialog box closes and a representation of the object appears in the container program's active document.

Note: *Each container program may use a different Paste Special dialog box. If any of the above procedures do not conform to the container's dialog box, see the program's OLE documentation.*

To embed an object from within a container program:

1. Open or switch to the container program containing the document into which you want to place the object.

2. Choose "Object" from the Insert menu. The Object dialog box opens.

3. Click on the Create from File tab and enter the name and location of the object's source file.

4. Uncheck the Link to File option if it is checked and click OK. The object appears in the container program's active document.

Note: *You can also paste objects from PhotoImpact by drag-and-drop. Pressing the Ctrl key as you drop an object embeds it.*

In-place editing of embedded objects

You can edit an image embedded in a container document in-place by double-clicking on the embedded object. This displays PhotoImpact's toolbars and panels in the container's program window allowing you to edit the image from within the container program just as you would within PhotoImpact. Click anywhere off the embedded object to display the container's original toolbars.

Enhancing images

PhotoImpact includes a powerful arsenal of image enhancement tools that enable you to make images look their best. From fast on-screen dynamic color correction to convenient drag-and-drop image styling, PhotoImpact takes the guesswork out of image enhancement.

This chapter begins by examining when and why you might need to use color correction and discusses how PhotoImpact adjusts an image's color. It then takes a look at the Style Gallery, a resource library of predefined image styles that you can use to quickly change the "look" of an image and continues with a detailed explanation of PhotoImpact's other image enhancements, special effects and filters.

Understanding color correction

Color correction is a basic tool of image enhancement. By using the color correction tools in PhotoImpact you can, for example, remove the yellowish tint that makes a photograph look old, make dull colors stand out, or make a blue sky look bluer. This ability to correct color is particularly important when working with scanned images whose colors don't match their original source images.

What is color?

In image editing, it is easiest to refer to the colors in an image in terms of their hue, saturation, and brightness (HSB). Hue refers to color, saturation the intensity, or amount of color, and brightness to the amount of white or black that appears in a color. By manipulating these color values PhotoImpact is able, for example, to shift the hue of the image without affecting the saturation and brightness. In this way specific colors can be corrected without affecting other colors which need no correction.

Note: *For more about color and how it relates to images, see "Imaging concepts" in the on-line Help.*

Using the color correction commands

PhotoImpact provides several commands in the Format menu that offer a wide variety of control over color correction. In most instances these commands can be applied to selected areas, objects, or to entire images. However, some of the commands are not applicable to certain data types, or they cannot be applied to selected areas in certain data types.

The Format commands, from left: Brightness & Contrast, Color Balance, Hue & Saturation, Focus, Invert and Level

When you choose a color correction command, a dialog box opens displaying sample thumbnails of the currently active image, object, or selection area. Some commands display nine thumbnails and allow you to move through all possible settings by clicking on each thumbnail accordingly. Other enhancements display fewer thumbnails because there are fewer settings, or because the number of controls do not allow for such a thumbnail navigation scheme.

Notes:

- *When a color correction command is applied to a selection area, the selection is converted into an object.*
- *Some color correction dialog boxes include refinement settings within their main dialog box while others include an Options button for opening a separate dialog box of refinement settings. To jump directly to the options dialog box, check the* Don't show these quick samples next time *check box at the bottom of these dialog boxes. To get the quick samples back, check the* Display quick samples *option in the PhotoImpact tab of the Preferences dialog box, (see p.72).*

To adjust the brightness and contrast values in an image:

1. Click the Brightness & Contrast button on the Standard toolbar, or choose "Brightness & Contrast" [CTRL-B] from the Format menu. The Brightness & Contrast dialog box opens displaying nine thumbnails of the currently active image. The center thumbnail represents how the current settings affect the image and the surrounding thumbnails indicate slight variations of these settings.
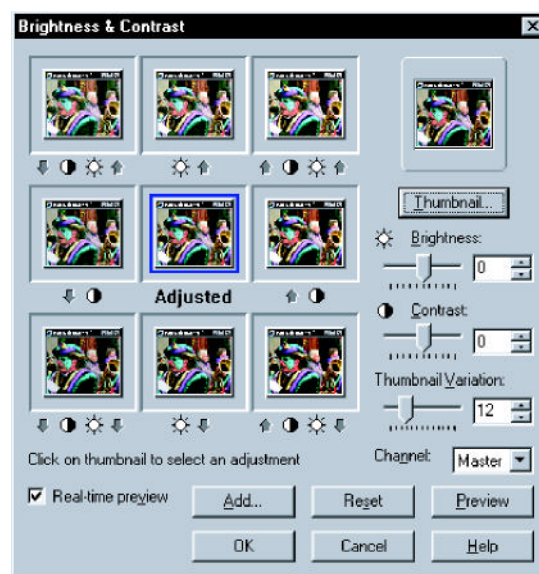
If you want to change which part of the image appears in the thumbnail, click the Thumbnail button. This opens the Thumbnail dialog box with three options that allow you to highlight a different portion of the thumbnail image. The first option uses the entire image as the thumbnail, the second uses a predefined area at 1x view (change its position by dragging on it in the sample thumbnail), and the third option allows you to define your own area to view by dragging your mouse over the sample thumbnail. When satisfied with the current view, click OK; the dialog box closes, you return to the Brightness& Contrst dialog box and each thumbnail is updated accordingly.

> **Note:** *Any changes you make are still applied to the entire image, selection or object, irrespective of the area displayed on the thumbnail.*

2. Click on what you consider to be the best looking thumbnail. The center thumbnail is then replaced with this thumbnail, and all the others are updated accordingly. (To change only the brightness or contrast value, you can drag their respective sliders.)

   If you check the Real-time preview checkbox, the changes are also reflected on the image. (Leaving this unchecked improves the speed with which the thumbnails are redrawn after each selection.)

> **Notes:**
> *   *The* Thumbnail Variation *slider controls the degree of variation between each thumbnail. Moving this to the right increases the variation, left decreases it, making the variations appear more subtle.*
> *   *To preview your changes, click Preview. The dialog box is replaced by a confirmation bar, allowing you to better see the active image. Click Continue to continue making adjustments, Undo/Redo to toggle between the original image and the changes and OK to accept the changes and close the confirmation bar.*

3. When you are satisfied with the appearance of the center thumbnail, click OK. The dialog box closes and the enhancement is applied to your image.

   If you want to save your adjustments for later use, click Add to place the adjustments in the My Gallery window of the EasyPalette. (You can give an explanation as its name, such as "Add highlights to dull images")
   The next time you want to use the same adjustment, simply drag-and-drop its respective thumbnail from the My Gallery window to an image.
   The adjustment is then automatically applied to the image.

To adjust the color balance of an image the "smart" way:

1. Click the Color Balance button on the Standard toolbar, or choose "Color Balance" [CTRL-L] from the Format menu. The Color Balance dialog box opens with two tabs: Smart and Manual.

   Manual has PhotoImpact balance the colors for you, while Smart allows you to perform your own balancing. (The behavior of the Manual tab is very similar to that discussed in the previous procedure about the Brightness & Contrast dialog box.)

2. Click on the Smart tab. A thumbnail appears containing a sample of the currently active image. (You can use the buttons at the bottom of the image to control the view. For example, repeatedly clicking on the Zoom in button, increases the magnification of the image.)

   The Smart tab works by balancing an image's color based on a neutral gray. Having selected an area on the image that should be neutral gray, all other colors are balanced in accordance with that color. (If your image has no noticeable gray areas, then it is best to use the Manual tab.) A good choice for a neutral gray color would be some feature in the image that would normally appear gray in a properly balanced image, such as a cement sidewalk, most rocks, tin cans, elephants and so on.

3. Click on an area of the image that should appear gray. If you have the Real-time preview option checked, the active image will be changed accordingly.

4. When you are satisfied with the changes, click OK. The dialog box closes and the adjustments are made to the image.

Note: *You can also use the Auto-Process: Batch command with the Balance option to quickly balance an image's color (see p.90).*

Styling an image

The Style feature of PhotoImpact is a unique way of producing excellent results with a minimum amount of effort. Styles work by providing predefined characteristics that you drag-and-drop onto an image. Once dropped, the image adopts that style's characteristics, such as a sunset or a particular hue. You can even create your own, so if you like a particular image's look you can automatically transfer that look to another image. It no harder than going to a hair salon, choosing the hair style you want from a catalog and having your stylist do the rest for you.

House-White

Red to Yellow

Red to Orange
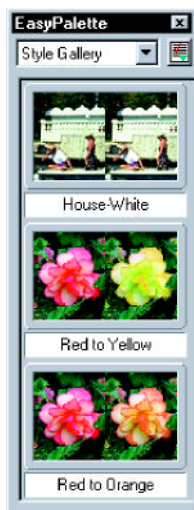
Using the Style Gallery

PhotoImpact makes it easy to apply styles to an image with the Style Gallery in the EasyPalette. To access the Style Gallery, click the EasyPalette button on the Standard toolbar, the EasyPalette opens, and choose the Style Gallery option from the Galleries combo box. The Style Gallery appears displaying thumbnails of predefined styles that can be applied to any image.

When you view a style, it appears as a split thumbnail: the left half represents an image with no style applied and the right half represents the same image with the style applied. It is important to note here that the style does not include the thumbnail image; the image is merely an example of the way that the style affects an image.

The styles available in the Style Gallery modify an image's attributes in different ways. Some styles, such as Blue Sky, affect only a single color in an image, leaving other colors unaffected. Other styles, such as Sunset and Sunrise add a particular color to the whole image. Still others, like Cloudy, affect the overall brightness or contrast in an image.

As you look through the different styles, note their names and thumbnails. They have been carefully designed to make specific changes to different types of images and named accordingly. Styles can be applied to any image, but applying them to images that do not contain the features referred to in the style name (or in the sample thumbnail) may produce unpredictable results. Therefore, to make grass appear greener, choose Green Grass, not Blue Sky.

Applying a style

To apply a style, drag the thumbnail of the desired style and drop it onto the image. The style is applied immediately and the image is redrawn showing the enhancement. (If the style is applied to a selection area, that area is converted into an object.) In general, you can increase the effect of the style on the image by dragging the style thumbnail onto the image as many times as necessary to produce the desired result.

Note: *You can also apply a style by double-clicking on its thumbnail, or by choosing the Apply command from the menu button on the EasyPalette.*

Cross-image styling

Once you begin to appreciate the power of styles, you will want to set up some of your styles. This can be done easily through the Style command in the Format menu. Choosing this command opens the Style dialog box which allows you to not only apply styles but also to take an image and then use that image as a reference from which to create a new style.

The Style dialog box has two tabs: Predefined and Custom. The Predefined tab contains a combo box of all the existing styles. To apply a style, simply select it from the combo box and click OK. To perform cross-image styling, click on the Custom tab. This displays the currently active image, a Load button from which to access the image file to be used as a reference, and a Model group box that allows you to choose which aspects of the loaded image you want to "cross-style". Which model you choose depends entirely on the image's color problem and which attribute of the reference file would best improve the image's appearance. The three model options are:

Intensity applies the brightness and contrast attributes of the reference file to the image. Choose Intensity when an image appears to be too bright or too dim, or when the colors look washed out.

Saturation applies the degree of color in the reference file to the image. Choose Saturation when an image appears to be pale or colorless.

Chrominance applies the hue, or color information, of the reference file to the image. Choose Chrominance to change the overall tone of an image.
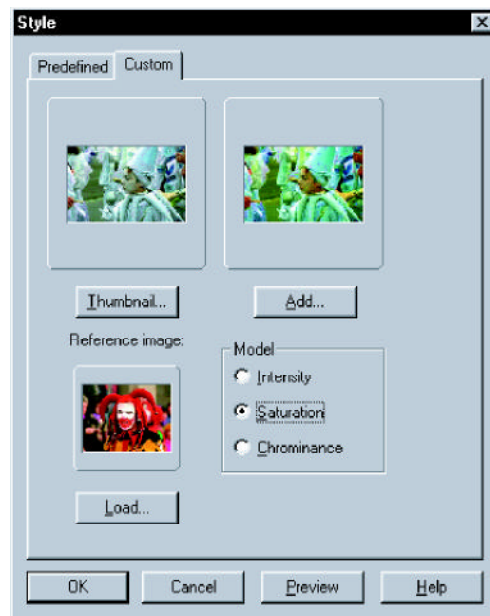
Understanding mapping curves

When an image is created, each pixel in that image has a set of values which make up its properties, such as color and brightness. The tone mapper feature in PhotoImpact changes, or remaps, these pixel values to enhance an image. Using a graph, the original pixel values are plotted along the x (horizontal) axis and the remapped pixel values along the y (vertical) axis. Unmodified, these input and output values are mapped one to one, or x=y. By changing the mapping, for example, increasing the value of y, you remap the original values of a pixel, and therefore introduce changes, such as increasing the brightness or hue of a pixel. This type of color correction is much more advanced and finer than those previously mentioned in this chapter.

Using the tone mapper

When you select the Tone Map command in the Format menu, a dialog box opens with two tabs: Map and Highlight Midtone Shadow. In both tabs, a graph appears representing the color values of the pixels in the active image. The horizontal (x) axis represents the input value, or original value from black at the left (0) to white at the right (255). The vertical (y) axis represents the output, or remapped value. For general purposes, use the Highlight Midtone Shadow tab. For much finer adjustments, use the Map tab.

TONE MAP DIALOG BOX – HIGHLIGHT MIDTONE SHADOW TAB
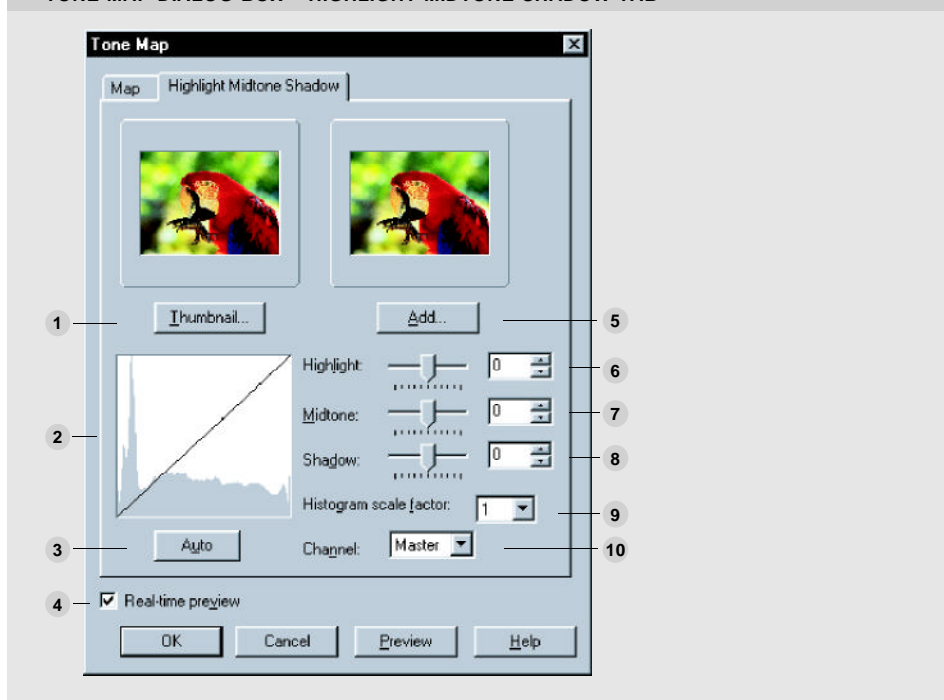
1 Thumbnail opens a dialog box allowing you to choose which area of the active image appears as the sample thumbnail.

2 Graph displays the number of pixels in an image with different values. Darker pixels appear on the left, while brighter pixels appear on the right.

3 Auto analyzes the image and redraws the mapping curve to spread the pixel values across the full range from black (x=0,) to white (x=255). This improves the contrast in an image and is recommended (for most images) before you start adjusting any color values.

4 Real-time preview updates the image as changes are made to the tone map. (Uncheck this option for faster response.)

5 Add opens a dialog box allowing you to save the current mapping curve to the My Gallery window in the EasyPalette.

6 Highlight allows you to control the brightness of pixels in an image. Moving the slider to the right increases the brightness, to the left decreases it.

7 Midtone allows you to adjust the midtone pixels without affecting the highlights and shadows too much. Moving the slider to the right increases these midtones, to the left decreases them.

8 Shadow allows you to control the amount of shading in an image. Moving the slider to the right increases the shadow, to the left decreases it.

9 Histogram scale factor allows you to expand the vertical scale of the histogram to show more detail, much like a zoom control.

10 Channel allows you to specify which color channel to adjust, such as red, green or blue. To adjust all channels together, select the Master option.

TONE MAP DIALOG BOX – MAP TAB
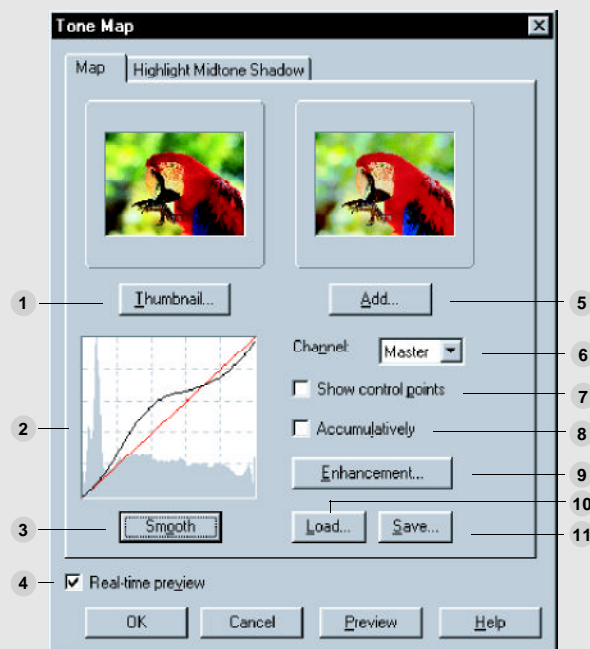
1 **Thumbnail** opens a dialog box allowing you to choose which area of the active image appears as the sample thumbnail.

2 **Graph** displays the number of pixels in an image with different values. Darker pixels appear on the left, while brighter pixels appear on the right. Dragging your mouse over the graph changes the mapping curve accordingly.

3 **Smooth** spreads changes to the mapping curve across more pixels, resulting in a less intense enhancement.

4 **Real-time preview** updates the image as changes are made to the tone map. (Uncheck this option for faster response.)

5 **Add** opens a dialog box allowing you to save the current mapping curve to the My Gallery window of the Easypalette.

6 **Channel** allows you to specify which color channel to adjust, such as red, green or blue. To adjust all channels together, select the Master option.

7 **Show control points** displays control points allowing you to make changes to the mapping curve more quickly and keeps these changes restricted to a particular area.

8 **Accumulatively** allows more than one enhancement function to be applied to the mapping curve in succession.

9 **Enhancement** opens a menu of enhancement commands that you can apply to the mapping curve. Use these commands if you are not sure which areas of the mapping curve you need to change.

10 **Load** allows you to apply a previously defined mapping curve to the graph.

11 **Save** allows you to save the current mapping curve to disk for later use.

Note: *This command is primarily aimed at calibrating your input and output devices. As such you will find that it is provided as an extension to both the input/scanning process as a post processing option (see p.163) and the printing process.*

Quick color correction

PhotoImpact provides a quick way for you to fix an image that has the wrong tint or looks too dark with the quick color controls which appear on the color panel. These on-screen adjustments work much like the controls on a television and allow you to adjust the brightness and contrast values of an image, as well as each individual color channel, for example, red, green or blue.

Notes:

- *The quick color controls do not work with Black & White images and provide only brightness and contrast control for Grayscale images.*
- *For Indexed-Color images the dynamic color controls work only over the base image, not objects or selections.*
- *When an adjustment is made to a selection area, the selection is converted into an object.*

Applying special effects and filters

PhotoImpact provides a full range of effects and filters that can be used to enhance images and create special effects. You can apply effects and filters in one of two ways, directly through drag-and-drop operations from the EasyPalette and indirectly by first configuring specific effect and filter options and then applying them to an image.

Notes:

- *Effects and filters can only be applied to True Color and Grayscale images.*
- *To improve the quality of effects and filters, set the* Generation quality *option in the Preferences dialog box (see p.72) to Best. If speed is more important than quality, then set the quality to Fair.*

Applying effects and filters to an image

The easiest and most convenient method for applying an effect or filter is to drag it from the EasyPalette and drop it directly onto an image, selection area, or object. To open the EasyPalette, click the EasyPalette button on the Standard toolbar and choose "Effect Gallery" from the Galleries combo box. The Effect Gallery displays all the effects and filters as thumbnails organized by category. The thumbnails represent how each effect or filter affects a sample image. You can browse through the different kinds of effect filters by clicking the tabs that appear across the top of the gallery. (To see how the effect or filter affects the currently active image, click on the Try! button.)

Notes:

- *When you drop an effect onto a selection area, that area is converted into an object.*
- *Each of the effects and filters can also be accessed by their corresponding commands in the Effect menu.*
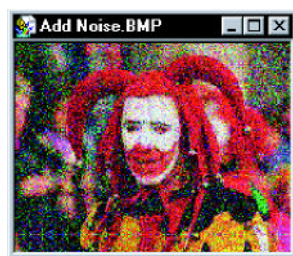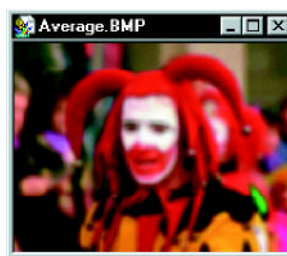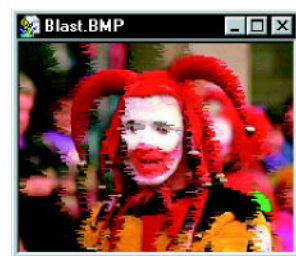
Add Noise   Average   Blast
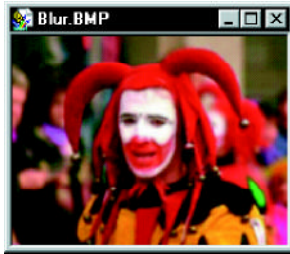
Blur

Charcoal

Colored Pen

Cool

Custom Filter

Custom Effect
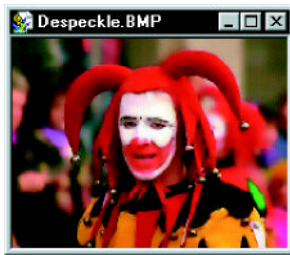
Despeckle

Emboss

Emphasize Edges

Facet
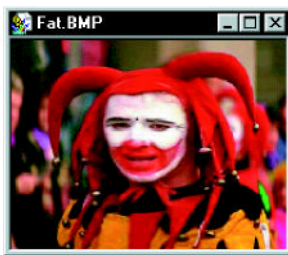
Fat

Find Edges
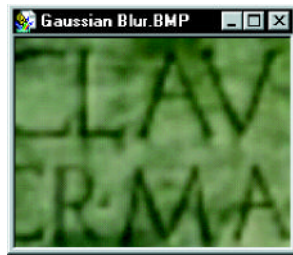
Gaussian Blur
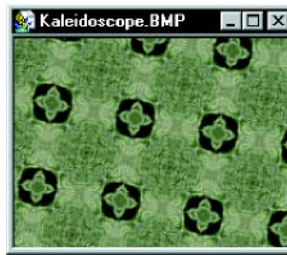
Kaleidoscope
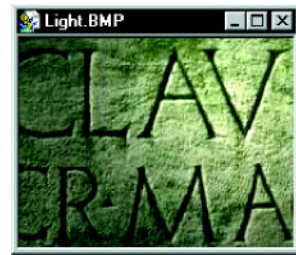
Light

Magic Gradient
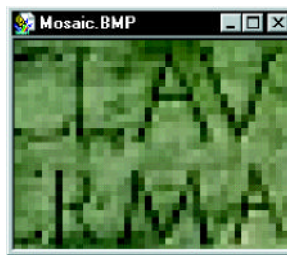
Mosaic
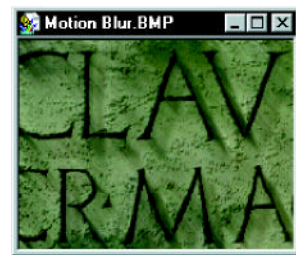
Motion Blur
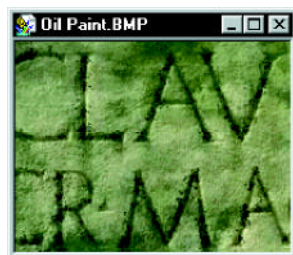
Oil Paint
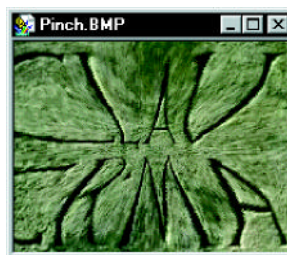
Pinch
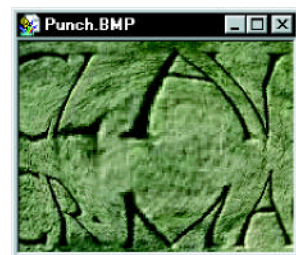
Punch
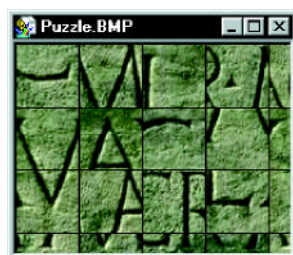
Puzzle
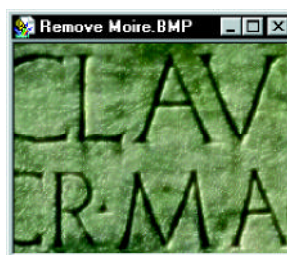
Remove Moire

Ripple

Sharpen

Sphere

Stagger

Thin

Tile
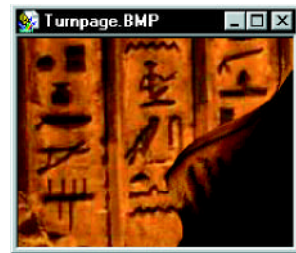
Turnpage

Unsharp Mask
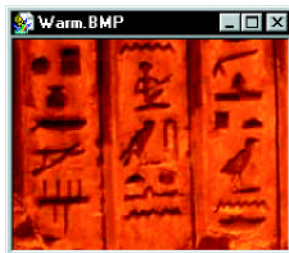
Warm

Warping

Watercolor

Whirlpool

Wind

Modifying an effect or filter

When you want to apply an effect or filter to an image but do not wish to use the default settings, you can modify it by either clicking the right mouse button over its thumbnail and choosing the Modify Properties and Apply command or by choosing its respective command directly from the Effect menu. Either action opens a dialog box displaying that effect or filter's settings as well as a preview thumbnail of how the effect or filter modifies the image and a reference thumbnail of the image for comparison. (For more information on how to adjust these settings, click the dialog box's Help button.)

Warping an image

Warping is a method of distorting an image using a grid (or mesh) based pattern. This grid is visible on a sample thumbnail that appears in the Warping dialog box, accessed by choosing the Warping command in the Effect menu. In this dialog box you can define the size of the grid squares and whether or not to show control points at grid intersections. To warp an image, simply drag on a grid intersection point. To see how the changes affect the image, press the Test button. This adjusts the preview thumbnail at the bottom of the dialog box.

Note: *You can only warp True Color and Grayscale images.*
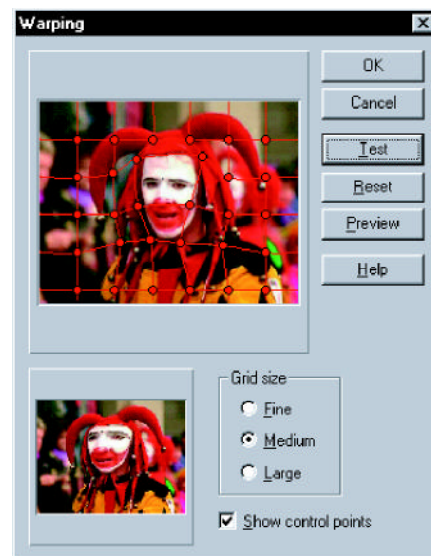
Creating your own effects

The Custom Effect command in the Effect menu works in much the same way as the Warping command, in that it distorts the pixel positions in an image. The difference however, is that the Warping feature allows you to manually distort a specific area of an image, whereas the Custom Effect distorts the pixels over an entire image, changing their x and y coordinates respectively.

To create your own custom effects:

1. Choose "Custom Effect" from the Effect menu. The Custom Effect dialog box opens.
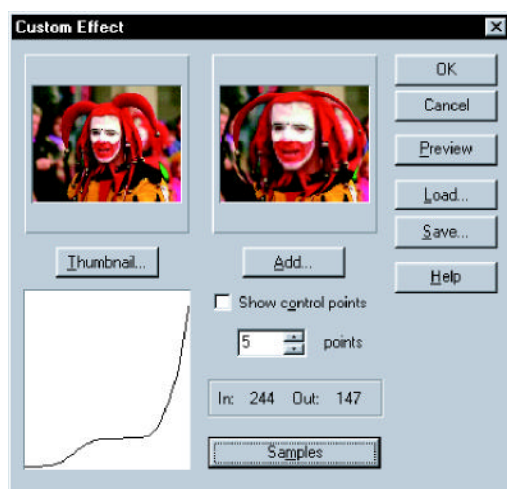
The graph displayed in this dialog box represents the physical placement of pixels in an image. In general, a steeper curve moves pixels in (pinching), while a shallow curve moves pixels out (punching).

2. Click the Samples button and choose one of the predefined mapping curves.

3. Drag your mouse over the mapping curve to change its shape. The change is immediately applied to the preview thumbnail.

   For better control, check theShow control points check box. This displays control points on the curve that you can adjust without affecting the neighboring ones. You can determine the number of control points that appear by entering a value in thepoints spin box.

4. To save the effect for future use, click the Add or Save button. Add saves the effect to the My Gallery window of the EasyPalette, whereas Save saves the effect to a file which you can then distribute to others.

5. Click OK to apply the mapping curve to the image.

Creating your own filter

Many of the filters provided by PhotoImpact work by regenerating a pixel value based on its original value and the value of its surrounding pixels. The Custom Filter feature allows you to create your own filters in a similar way using a 5 by 5 pixel matrix. After specifying values for the different cells of this matrix, that matrix can then be applied, pixel by pixel, to an image to produce a variety of special effects.

Note: *You can only create custom filters for use with True Color and Grayscale images.*

To create your own filter:

1. Choose "Custom Filter" from the Effect menu. The Custom Filter dialog box opens.

2. Click the Methods button and choose one of the predefined enhancements.

3. Enter values in the matrix cells.

   The cell in the middle of the matrix represents the pixel whose value is going to be regenerated. The surrounding cells represent the surrounding pixels and the values determine the relative weighting assigned to them when the matrix calculates a new value.

   Changing the Divided by value allows you to control the contrast of the custom filter and the Offset value controls the brightness of the custom filter by adding to or subtracting from the matrix the value entered. To convert the colors in the custom filter to their complimentary colors, check the Invert check box.

   Note: *To change values of the matrix back to their original state (a one in the center surrounded by zeros), click Reset.*

4. To save the effect for future use, click the Add or Save buttons. Add saves the effect to the My Gallery window of the EasyPalette, whereas Save saves the effect to a file which you can then distribute to others.

5. Click OK to apply the custom filter to the image.

Changing your wallpaper

Although not strictly an effect, the Windows Wallpaper command in the Format menu is a useful feature that allows you to make any image file the current Windows wallpaper. When you choose this command, a submenu appears allowing you to either tile the image or center it. Once chosen, the wallpaper is changed immediately. If you feel the image appears too big or too small, use the Dimensions command [CTRL+G] in the Format menu (see p.150) to resize the image accordingly.

Adjusting an image for video

The Adjust for NTSC and Adjust for PAL commands from the Video submenu in the Effect menu allow you to see an image as it would appear when viewed on an NTSC or PAL device. These commands adjust the colors in your image so that they can be displayed on a television. This is important because some colors, such as pure cyan, cannot be displayed on television.

Note: *Depending on the image and your current display mode, using this command may not produce any visible effect.*

Painting

PhotoImpact's painting tools enable you to easily "touch-up" and enhance any kind of image. The painting tools themselves present a variety of functions from the advanced retouch and clone tools to more common tools like the paintbrush, eraser and text tools. This chapter introduces these painting tools and begins by describing how to select and work with colors in PhotoImpact.

Working with colors

One of the most important aspects of painting is choosing the right color. PhotoImpact provides a number of ways to help you do this and gives you maximum freedom in your choice of how to display and select colors. The most obvious means of doing this is with the color panel.

Using the color panel

The color panel contains colors that you can apply to any given image. The way colors are displayed varies according to the type of image you are working on. For Grayscale images, the color panel displays shades of gray. Changing to an Indexed-Color image switches the color panel to display the 16 or 256 colors from the image's color table. For True Color images, a complete range of colors is displayed in individual cells or as a continuous spectrum.

Of the available colors in an image, two are active at any given time. These two colors, referred to as the foreground and background colors, are displayed in the color squares just below the color area on the color panel. The foreground color is in the front, slightly lower and to the right of the background color. Clicking the left mouse button on any of the colors displayed in the color panel selects the color as foreground, while clicking the right mouse button selects the color as background.
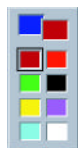
Using the color cache

The color cache displays eight color squares that you can easily select for use as the foreground color. The advantage of the color cache is that you can keep the eight most often used colors readily available for painting, much as an artist's color palette holds only those colors needed for his/her work. Clicking on a color square selects that color as the foreground color. To change a color in the color cache, click your right mouse button over a color square and choose a color from the Color Picker pop-up menu.

Selecting colors from the Color Picker pop-up menu

The Color Picker pop-up menu, displayed whenever you click your right mouse button over a color square, allows you to select a new color to replace the selected color square, or to choose from a range of Color Pickers. Each Color Picker provides a different method for selecting colors, each suitable for particular situations.

Using the Ulead Color Picker

Choosing the Ulead Color Picker command opens a dialog box showing a continuous color spectrum. The color spectrum displays hue, or color, from top to bottom and luminance, or the amount of brightness, from left to right. When you move your mouse over any colors, their respective RGB color values are displayed below the color spectrum and the color itself appears in the left color square. If you click and hold your mouse button down over a color, a saturation drawer appears allowing you to select a specific color. Releasing your mouse selects the color, displaying it in the right color square.
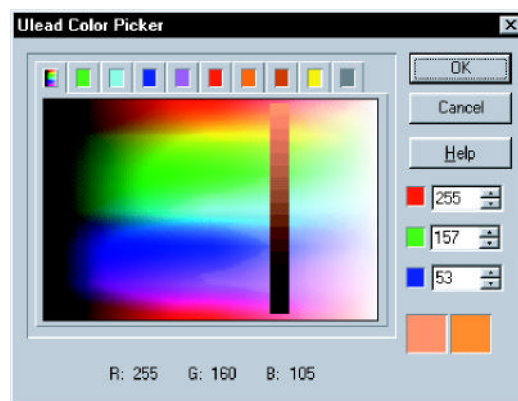
For a more precise color selection, you can choose your color by clicking one of the colored tabs above the color spectrum. This displays a whole range of colors similar to the color on the selected tab. From here you can select the exact color by clicking the mouse on the desired color cell and then clicking OK.

Note: *To select a particular color, use the RGB spin boxes to the right of the Color Picker window.*

Using the Windows Color Picker

When you select the Windows Color Picker, the standard Windows Color dialog box appears in which you can select a basic or custom color.

Using the Eyedropper as a Color Picker

Use the Eyedropper Color Picker when you want to select a color from an image itself. This works the same way as the Eyedropper tool (described on the following page), except that it allows you to use zoom tools to enlarge the currently active image, therefore increasing the precision of the Eyedropper's position. Also, if no color in the image is quite what you want, you can enter your own RGB values and see the result in the color square in the lower right corner.

Selecting colors with the Eyedropper tool

The Eyedropper tool is used to select a foreground or background color from colors in an image, the color panel, or the Attribute toolbar. (Whenever you move your mouse pointer over the color panel, it changes to the eyedropper tool, irrespective of your current tool selection.) The Attribute toolbar also displays the RGB and HSB values of the image beneath the Eyedropper tool. As you move the Eyedropper over the image, the values change reflecting the color changes of the pixel beneath the Eyedropper. Clicking the left mouse button selects the color under the pointer as foreground, while clicking the right mouse button selects the color as background. (To place the color in the color cache, select the color cache square to change before using the Eyedropper tool.)

Editing an indexed-color image's color table

Indexed-Color images are unique in that they are small in file size (compared to True Color images), yet offer a wide range of colors which can be arranged to make it appear as if they contain much more. This is done through the use of a color table which allocates a single color in either 16 or 256 discrete cells. You can view this color table by choosing the Color Table command in the Format menu. (This command is disabled when the active image is not Indexed-Color.)

*Color table of
an Indexed
256-Color
image (on the
left) and an
Indexed
16-Color image
(on the right)*
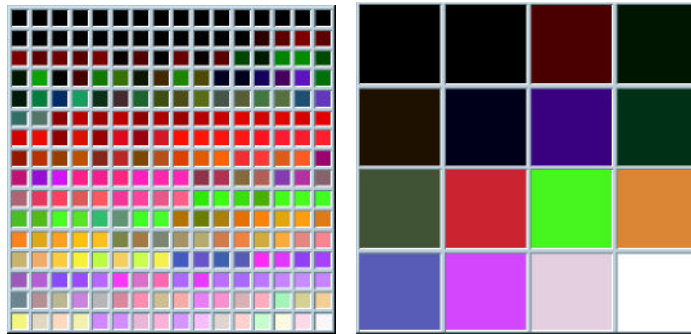
As each color is in its own cell, you can change it so as to affect the color composition of an image. For example, you can change all occurrences of white by simply changing the white color cell. To change a color, double-click on the cell, the Color dialog box opens, and choose a new color. Clicking OK replaces the old color with the new one and returns you to the Color table dialog box.

Loading and saving color tables

In PhotoImpact, you can save color tables and then load them into another compatible Indexed-Color image. This allows you to ensure that two or more images share the same color composition, which is particularly important if you are preparing images to be displayed in a 256-Color display mode, such as with CD titles. You can also load in color tables that allow you to colorize an image. For example, you can convert a grayscale image to Indexed 256-Color and then load a color table to give it a particular hue. (During the installation of PhotoImpact, you had the opportunity to install some predefined color tables for such purposes. Color tables appear with a PAL extension.)

Note: *You can only load color tables containing 16 colors into Indexed 16-Color images. Likewise, color tables containing 256 colors can only be loaded into Indexed 256-Color images.*
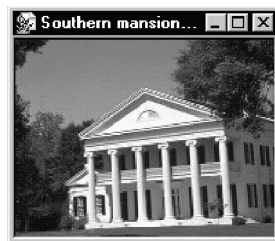
Original image   *Applying a gold palette*   *Applying a fire palette*
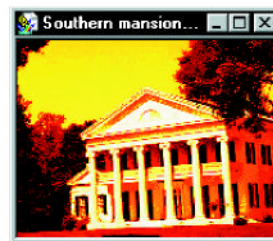
Using the painting tools

PhotoImpact comes equipped with an extensive assortment of painting tools that allow you to apply paint to an image by brush, airbrush, crayon, charcoal, chalk, and marker. To select a tool, click on the lower right corner of the Paint button on the tool panel, a drawer of painting tools opens, and select the painting tool you wish to use. The drawer closes and the attributes available for that tool appear in the Attribute toolbar.

To apply a painting tool, move your mouse to the point on the image where you want to start and click. The color displayed in the Attribute toolbar is then applied to the image. The effect of the tool continues for as long as you hold your mouse button down.

Note: *If you have created a selection area, the tools are only applied to the area within the selection. Using selection areas in this way allows you to restrict the parts of the image to which paint is applied, protecting the rest of the image from inadvertent changes.*
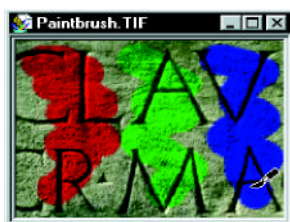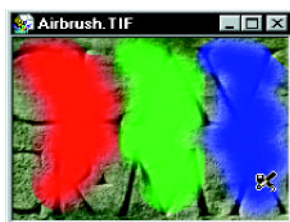
Paintbrush   *Airbrush*   *Crayon*
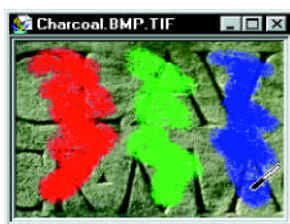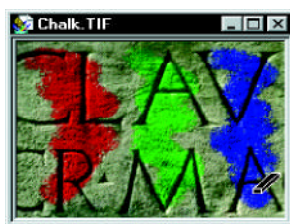
Charcoal   *Chalk*   *Marker Pen*

Working with paint tool attributes

When you select a painting tool, its various attributes appear along the Attribute toolbar. Many of these attributes are shared and work for all of the available paint tools. For example, the first options on the Attribute toolbar allow you to control the size, shape and color of a painting tool's brush.

In the Spacing spin box you can determine how close each drop of color is applied as a percentage to the current brush size. The higher the value, the farther away drops are applied. Likewise, a lower value applies color closer together. For example, a value of 100 places each drop of color next to each other, creating a dotted line effect, whereas a value of 300 places each drop of color at a distance 3 times the size of the brush.

Controlling the Merge factor

The Brush and Airbrush painting tools provide a merge attribute with options for controlling the way color is applied to an image when painting.
The following describes each of these options in greater detail:

Note: *The Merge option is available only if the active image is Grayscale or True Color.*

- Always replaces all parts of an image with the applied color.
- Hue & Saturation replaces the hue and saturation of pixels with those of the applied color, retaining their original brightness. If you convert a Grayscale image to True Color, you can use this option to colorize areas of the image.
- Hue Only changes the hue of pixels to the hue of the applied color. Use this to change the color of areas in images, for example, changing green eyes to blue.
- If Lighter repaints only the pixels in an image that are darker than the applied color. This is useful for when you are working in a light area of the image that has dark pixels that you wish to replace without affecting lighter ones.
- If Darker repaints only the pixels in an image that are lighter than the applied color. This is useful for when you are working in a dark area of the image that has light pixels that you wish to replace without affecting the darker ones.
- Pigment mixes the original color of the pixels with that of the applied color. Use this option when you want colors to mix as you paint.
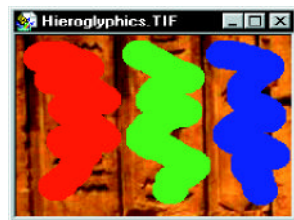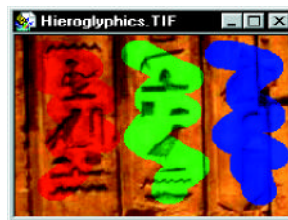
Always   *Hue & Saturation*   *Hue Only*
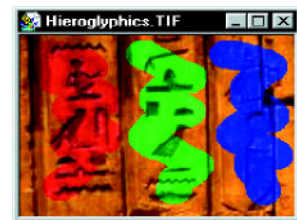
If Lighter   *If Darker*   *Pigment*

Specifying the painting mode

As you paint you can switch between three different painting modes,
Freehand, Straight Lines and Connected Lines, accessed through the Options
button on the Attribute toolbar. Freehand allows you to paint in an
irregularly shaped stroke while Straight Lines is for painting in straight lines.
To paint a straight line, first click on the point at which you want the line to
start and drag to the point where you want it to end and release the button.
(Pressing the Shift key constrains the line to an angle of 0, 45°, or 90°.)
If you want to paint a series of connected straight lines, then use the
Connected Lines mode. This mode functions much like the Straight Line
mode except that after a line is painted you can select a new line segment
and continue painting. Double-clicking then paints a straight line connecting
the end point to the starting point.

Saving a painting tool's attributes to the custom gallery

PhotoImpact provides a way for you to set up your own gallery of specially
configured painting tools. When you have modified the attributes of a paint
tool which you want to save for future use, click the Add button on the
Attribute toolbar. This opens the Add to Custom Gallery dialog box prompt-
ing you for a name for the tool. You should give the tool a name that reminds
you what the tool is and what it can be used for, for example, "eye pencil".
The tool attributes are then saved in the Tools tab of the My Gallery window
in the EasyPalette. To retrieve the tool, simply drag the thumbnail of the tool
from the EasyPalette onto the image. The Attribute toolbar changes
accordingly to reflect the new tool and its attributes.

Applying color to the edges of an object or selection

PhotoImpact makes it easy for you to outline objects or selections with the
Paint on Edges command in the Effect menu. (To enable this command you
must first have an active object or selection area and the current tool must be
a paint tool.) When you choose this command, the current foreground color
is applied to the border of the selected object or selection area according to

the current attributes of that tool. Half a stroke width of the paint, as determined by the brush size attribute, is applied inside the border area and half outside the border. This feature is particularly useful when you want to outline part of an image, such as highlighting the edges of a car with spray paint or creating a neon-like effect with text.

An example of painting on the edges
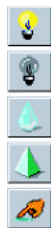
Retouching images

The retouching tools are not strictly painting tools in the sense that they do not "paint" over an image with a selected color. Instead they are used to enhance areas of an image by adjusting existing pixel colors. In all there are five retouching tools: Dodge, Burn, Blur, Sharpen, and Smudge. To select a tool, click on the lower right corner of the Retouch button on the Tool panel, a drawer of retouching tools opens and select the retouch tool you wish to use. The drawer closes and the attributes available for that tool appear in the Attribute toolbar.

When you apply a retouching tool to an area, the tool uses the shape and size of the current brush each time you click your mouse. To perform the effect over a larger area, drag your mouse. To reapply and increase the effect on a specific area, click repeatedly. (Smudging requires you to drag the tool, as it smudges color from one area into another.)

Note: *The retouching tools can only be applied to Grayscale and True Color images.*
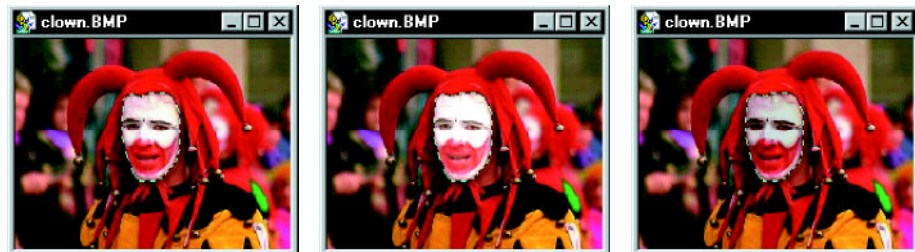
Original image   *Dodge*   *Burn*
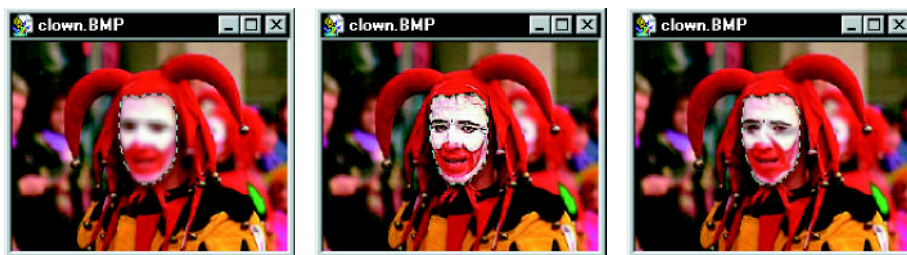
Blur   *Sharpen*   *Smudge*

The Level attribute

The retouching tools share many of the same attributes as the painting tools, as described earlier in this chapter. However, one attribute that all the retouching tools share in common, which is not shared with the painting tools, is the Level attribute. This sets the level of effect for each of the retouching tools. A higher level creates a more pronounced effect, while a lower level creates a less pronounced effect.

Erasing colors from an image

Often in your work you will want to replace certain colors in an image with another. For example, you may want to replace paint that has been applied in the wrong place or to change all the white pixels in an image to black. To do this, PhotoImpact provides the erasing tools. Clicking on the lower right corner of the Eraser button on the Tool panel opens a drawer of two erasing tools: Standard Eraser and Color Eraser. The Standard Eraser tool works by replacing the color of all the pixels that it passes over with the background color while the Color Eraser tool replaces a selected color with another, such as all white to black. If using the Color Eraser, you can select these colors with the From and To color squares on the Attribute toolbar. (Increasing the value in the Color similarity spin box allows you to erase colors similar to the color specified in the From color square.)

Note: *The erasing tools share the same brush size and shape attributes in common with the painting tools. For more information on these tool attributes see the section on the painting tools earlier in this chapter.*

Erasing all colors to orange (Standard Eraser), and erasing only green to orange (Color Eraser)
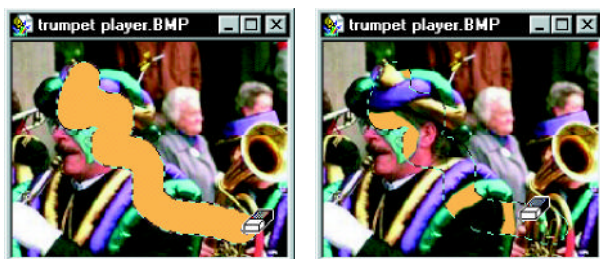
Cloning parts of an image

The cloning tools enable you to paint parts of an image or object with another part of the same image, or part of another image. The cloning tools consists of two tools: the Image Clone tool and the Object Clone tool. The Image Clone tool copies part of an image to another area in the same image or to another image of the same data type, such as painting one person's head onto another person's body. The Object Clone tool is used to paint objects from an image file onto an image as single stamped objects, or as a continuous stream of painted objects, such as trees in a forest.

Note: *You can only clone on Grayscale and True Color images.*

To use the Image Clone tool:

1. Click on the lower right corner of the Clone button on the Tool panel, a drawer of cloning tools opens, and select the Image Clone tool. The drawer closes and the attributes available for that tool appear in the Attribute toolbar.

2. Move to the image you want to clone and holding down the Shift key, click your mouse over the area you wish to clone. (This area is then marked with a cross-hair and your mouse pointer changes to the clone pointer.)

3. Move to the area on the image where you want the clone to appear and start dragging your mouse. The cross-hair changes to indicate the area you are cloning, and as you paint, you replace the area with whatever the cross-hair passes over. (The size and shape of the area painted are determined by the current tool size and shape settings in the Attribute toolbar.)

   After painting, the cross-hair's position is determined by the Clone Continuously command in the Options menu on the Attribute toolbar. With this command unchecked, the cross-hair returns to its original point, allowing you to clone the same area again. Checked, and the cross-hair remains where you left it, allowing you to take a rest while cloning a large area.

To use the Object Clone tool:

1. Click on the lower right corner of the Clone button on the Tool panel, a drawer of clone tools opens, and select the Object Clone tool. The drawer closes and the attributes available for that tool appear in the Attribute toolbar.

2. In the Attribute toolbar, click on the Open button. The Open dialog box appears.
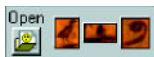
3. Select the file you want to clone. (If the image file has no objects, the base image is chosen as the cloned object.)

> **Note:** *For an idea of what you can clone, try loading in one of the UFO files provided in the SAMPLES folder under your PhotoImpact program folder.*

4. Choose either the Stamp or Trail command in the Options menu on the Attribute toolbar.

   Stamp allows you to clone the loaded objects one at a time, while Trail allows you to "spray" the active image with the loaded objects.

5. Choose either the Randomly or Sequentially commands in the Options menu on the Attribute toolbar.

   Randomly applies cloned objects in a random order while Sequentially applies them in the order that they appear in their image file.

6. Click your mouse over the area that you want to apply the cloned object to. Continue clicking over the image to apply additional cloned objects.

   If you are in Trail mode, drag your mouse over the image to "spray" the objects. The cloned objects appear at a specific distance from each other, determined by the Spacing entry box on the Attribute toolbar.
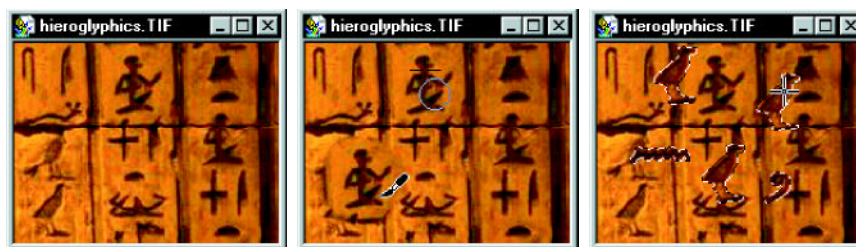
Original image   *Performing a standard clone*   *Performing an object clone*

Filling an area with color, textures and gradients

With PhotoImpact's fill options you can quickly fill any image, object, or selection area with a color, gradient, pattern, or texture of your choice. This is particularly useful when you want to create a background behind a person or image, or introduce special effects into an image. PhotoImpact provides three different methods for performing a fill operation: the Fill tool, the Texture and Gradient galleries in the EasyPalette, and the Fill command.

Using the filling tools

The fill tools in the Tool panel provides access to the Bucket, Linear, Rectangular, and Elliptical Gradient Fill tools. The Bucket Fill tool works by replacing any color you click on with the color shown in the Fill Color square on the Attribute toolbar. To increase the range of the fill, adjust the values in the Similarity spin box. The higher the value, the more colors filled. Use this tool to quickly replace a solid color, such as white to black (you do not need to create a selection area). The gradient fill tools fill an area with a smooth transition from one color to another, such as creating a sunset or framing a photograph.

Notes:
- *The Bucket Fill tool works with all data types, while the gradient fill tools only work with Grayscale or True Color images.*
- *If you don't select an object or make a selection area, the fill tool acts on the base image.*

To make a gradient fill:

1. Click on the lower right corner of the Fill button on the Tool panel, a drawer of fill tools opens, and select a gradient fill tool. The drawer closes and the attributes available for that tool appear in the Attribute toolbar.

2. Using the Fill Color color squares on the Attribute toolbar, select the starting and ending fill colors.

3. Move to the image where you want to apply the fill and click on the point at which you want the fill to start. Drag your mouse to the point where you want it to reach the end color and release. The fill is then applied between these two points. (Any area before the start point and after the end point is filled with the Start and End colors respectively.)

Note: *If you are using the rectangular and elliptical gradient tools, holding down the Shift key as you draw produces a square or circular fill respectively..*
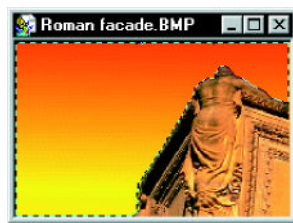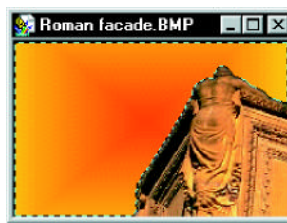
Linear fill	Rectangular fill	Elliptical fill

Performing drag-and-drop texture fills

PhotoImpact makes it easy to apply a full range of predefined and custom textures and color gradients to any image, object, or selection area through the Texture and Gradient galleries in the EasyPalette. When you access the Texture Gallery, you can view thumbnails of Magic, Natural, and User Defined Magic textures, accessed by clicking on their appropriate tabs. Magic textures are generated artificially, while the Natural textures represent real-world textures such as wood grain, stone, and fabric. The User Defined Magic textures are Magic textures that have had their settings modified and then saved through the Add button in the Magic Texture dialog box. To apply a texture or gradient fill, drag its thumbnail onto an image, object or selection area.

Notes:

- *You can modify a texture by clicking the right mouse button on a thumbnail and choosing the* Modify Properties and Apply *command in the Thumbnail pop-up menu that appears. This opens the Magic Texture dialog box which allows the texture setting to be modified to create new textures that can be added to the Magic Texture tab of the Texture window.*

- *When a texture fill is applied to a selection area, the base image within the selection area is filled with the texture.*

An example of some of the magic and natural textures available in PhotoImpact

Using the Fill command

The Fill command in the Edit menu provides greater control over the fill process and allows you to fill an image, object, or selection area with either a color, an image from the clipboard, or a texture. Through the Fill dialog box, which appears when the Fill command is chosen, you can control exactly how the fill takes place and what is used to fill the area.

Filling an area with a texture

The Magic texture and Natural texture options in the Fill dialog box allow you to fill an area with either an artificially generated or natural texture. You can choose either one by clicking the radio button next to either of the

displayed textures. To change the magic texture click on its Library button and choose from Standard, Custom, or Options. Standard opens a predefined library of magic textures to choose from. Custom opens a library of textures that have been modified, and Options opens the Magic Textures dialog box allowing you to modify a magic texture's attributes.
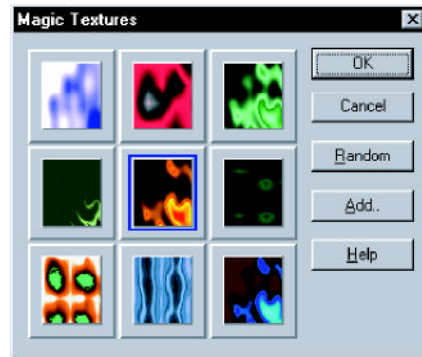
When modifying a magic texture you are presented with an array of thumbnails. The center thumbnail represents the current texture. To change this texture, click on any neighboring thumbnails. The thumbnail you select then replaces the center one and the others are redrawn accordingly. When you are satisfied with the modified texture, click OK; the dialog box closes and you return to the Fill dialog box.

To change the natural texture, click on its Library button to open a library displaying all the different natural textures available. You can choose from different wood grain, stone, metal, cloth, cloud, tree and other textures by clicking on the desired texture's thumbnail.

Using Clear and drag-and-drop to fill

One of the quickest ways to fill an image is to choose your fill color as the background color and then press the Delete key. This fills the image or selected area without the need to access the Fill dialog box.

If you wish to quickly use an existing image as the fill, you can drag it from one image (with the T key held down) and drop it onto another. This fills the image, object, or selection area with as many tiled copies as possible of the original image.

Adding text to an image

With the Text tool, PhotoImpact provides a powerful feature that allows you to add dynamic text to an image. Dynamic text is text that is created on a path which can be modified to distort the text to any shape and size desired. In addition to providing you full control over text shape, you also have full control over the font type and other text attributes.

Placing text

PhotoImpact makes it easy for you to place text on an image and manipulate that text to give it any shape, size, color, and appearance you want. To place text, select the Text tool on the Tool panel and then click on an image wherever you want the text to appear. The Text Entry Box opens allowing you to type in the text of your choice. (Press CTRL+M or CTRL+ENTER to advance to a new line.) Click Update to place the text onto the image. Because the text is dynamic, any changes you make to the text from the options on the Attribute toolbar will be automatically applied. Once you have the text the way you want it, click OK. The Text Entry Box closes and you are returned to the workspace.

Distorting text

To distort text, first select it with the Text (or Path) tool and then choose the Path option in the Mode combo box on the Attribute toolbar. When this mode is activated, a path is displayed around the text featuring control points and the text is outlined. By dragging on a control point, you can freely distort the shape of the text. When you drag a control point, handles extend from either side of it. Dragging on one of the handles allows you to apply a curve to the distortion, thereby creating a smoother edge. To see how the changes affect the actual text, choose the Object option from the Mode combo box. Choose the Selection option if you want to fill the text with a texture, or another image.

Note: *You can edit any path or text later by simply selecting it with the Text tool. (As long as it remains as an object and has not been moved from the active image.) However, after editing, any textures, gradients, or other fills will be lost.*

Using the path tool to distort text

Working with objects

So far this guide has introduced you to some of PhotoImpact's more basic image editing functions and enhancements as they apply to an entire image. This chapter shows you how to work with smaller portions of an image using selection areas and objects – the building blocks of image editing. Two powerful tools are also examined in detail: the Object Library and the Layer Manager, both of which work to help make your image editing easier and more productive than ever before.

Understanding objects & selections

PhotoImpact makes extensive use of objects and selections to give you the ability to modify all or portions of an image with ease. This section introduces these and then goes on to discuss each in greater detail.

• Selections are selected regions of an image containing image data. Selection areas are bordered by a black and blue dashed line (the selection marquee) and can be expanded to include multiple areas of an image. In general, actions performed on a selection area convert it into an object. (It is not possible, however, to create a selection area on an object.)

• Objects are selection areas that have been transformed in some way and "float" above the original (base) image. They are independent of the base image and are distinguished by an animated black and white dashed line when they are selected and by a dark border when not selected. (This border can be hidden by unchecking theHighlight inactive selections and objects option in the Preferences dialog box, see p.72) Each image can contain any number of objects, with each object occupying its own layer in an image. By managing these layers, you can move objects above or below one another.

An example of a selection (on the left) and objects (on the right)

Working with selection areas

In general, whenever you apply a command in PhotoImpact it is applied over an entire image. To restrict the command to a certain area of an image, you first need to create a selection area. PhotoImpact provides four selection tools that allow you to do just that, offering a wide range of options for creating both simple and more complex selection areas.

Note: *The selection tools only work on base images: you cannot create selection areas on objects.*

Selecting regularly shaped areas

The Shape tool allows you to select areas of an image based on a preset size and/or shape, such as a square, rectangle, circle, or an ellipse. To determine which shape, select one of the various shape tool options in the Shape combo box on the Attribute toolbar. To create a selection, drag your mouse over an image. If you want the selection to always appear at the same size, check the Fixed Size option and enter the appropriate values in the neighboring spin boxes. Now when you click on an image, a selection is made based on that size. Selecting a fixed size is useful when you are selecting identically sized image portions, such as personnel photos to be added to an employee database.

When you create a selection, it starts from where you first click your mouse. This is fine for most cases, but sometimes you may want it to start from the center, particularly if you are creating circular or square shapes. To do this, check the Draw From Center command in the Options menu on the Attribute toolbar. The next time you create a selection, it will start from the center and move out from each side as your drag your mouse.

Selecting irregularly shaped areas

The Lasso tool allows you to select an area of any shape you desire. This is especially useful for selecting difficult areas such as a person's head or objects with a number of different angles.

The Lasso tool operates in two ways as you create a selection area. Dragging your mouse allows you to draw precise curved segments, while clicking your mouse allows you to define straight line segments. By combining both drawing techniques you can quickly outline selection areas that contain both irregular and straight segments. When you have finished outlining the selection area, double-click and PhotoImpact automatically selects all image data within the bounds of the drawn selection area.

By checking the Snap to Edges option on the Attribute toolbar and then entering a value into the Sensitivity entry box (up to 10), PhotoImpact can help you quickly trace around irregularly shaped objects. The Sensitivity attribute works by specifying the range of contrast values that are used to define an object's edge, and Snap to Edges pulls the selection area to that edge as you draw. This works best when you are tracing a bright foreground object against a dull background. (If you find the selection "pulls" to include unwanted areas, then uncheck the Snap to Edges option or decrease the sensitivity.)

Note: *If you make a mistake while drawing a selection area or wish to start again, press the Esc key. Pressing the Backspace key takes you back one step.*

Selecting an area containing similar colors

The Magic Wand tool is used when you want to select specific colors in an image. When you click on an image, any colors that fall within the values specified in the Similarity entry box are included in the selection area. This is especially useful when the colors occupy a predominant part of the image, such as a solid color background.

When you use the Magic Wand tool, it operates in one of two modes, Line or Area. (You determine which with theSelect by: option on the Attribute toolbar.) In Line mode, dragging your mouse over an image creates a line that calculates the largest and smallest color values of the pixels under the line (any values entered in the Similarity spin box are also included). Releasing your mouse then creates the selection based on that range. Line mode is useful when creating selection areas around straight edges such as borders or frames.

Area mode works in much the same way, except that instead of taking the values of pixels under a line, it includes all pixels within a selected area. This mode works best for irregular areas containing similar colors such as backgrounds and gradients.
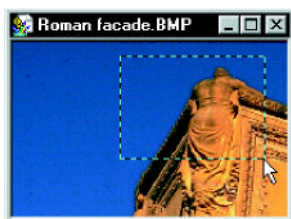
Standard selection	*Freehand selection*	*Magic Wand selection*

Determining color similarity

When using the Similarity entry box you type in a value that you feel closest reflects the range of colors you wish to select. To help determine the color similarity range, move the Magic Wand over target pixels in the image and notice the RGB and HSB color values displayed on the status bar. Below is a guideline on what to expect when choosing particular color ranges. (You can only select a color range between 0 and 255):

- A value of 0 selects neighboring pixels with exactly the same color value, such as all white.
- A value of 255 selects pixels of all colors – thereby selecting the entire image.

- A value of 50 selects neighboring pixels that have values which differ from the pixel you click on by 50. For example, if you click on a pixel with values R25, G60, B190, neighboring pixels with values between R0, G10, B140, and R75, G110, B240 will be selected.

Using the Mask Brush

The Mask Brush tool allows you to create selection areas by painting on a color mask that appears on an image whenever you choose the Mask Brush tool on the Tool panel. (This color is defined by the Mask color square on the Attribute toolbar.) Using the mask makes identifying areas easier as it creates a better contrast between the image and the selection area.

To use the Mask Brush tool, click or drag your mouse over the area of an image that you want to include in a selection area. The affected area of the mask is then removed, revealing the underlying image. If you reveal too much of the underlying image, select the Subtract option in the Mode combo box on the Attribute toolbar. The next time you use the Mask Brush, the mask is applied, rather than removed from the image. Once finished, changing to another tool removes the mask and converts any revealed areas into selections areas.

Notes:

- *To quickly switch modes, press the "A" key to remove portions of the overlay, "S" key to reapply them. Likewise, clicking your left mouse button removes an overlay, right mouse button reapplies it.*
- *If you use the Mask Brush on an image with an existing selection area, the selection appears as removed areas of the overlay.*

Understanding the Mask Brush attributes

As the Mask Brush tool is similar in function to a painting tool, it shares many of the painting tools attributes, such as brush shape and size. This can help you better define the areas to include in a selection area. For example, a square brush shape is ideal for tracing straight lines, and a circle brush for circular objects. You can also choose to paint in a straight line, freely or in straight line segments using the appropriate command in the Options menu on the Attribute toolbar. To smooth the edges of the Mask Brush, you can also specify a value in the Soft Edge spin box on the Attribute toolbar. After creating the selection area, any enhancement or paint you apply to the selection will blend along the edges with the underlying image.

As the Mask Brush adopts many of the attributes of a paint tool, you can use it in conjuction with a paint tool to perform certain special effects. For example, normally when you apply color to an image with a paint tool, it is automatically merged onto the image. Sometimes this may not be what you want, particularily if you want to move it at a later date. Using the Mask Brush you can first paint a selection, then convert the selection into an object, and then fill that selection with a color. This method works especially well if you want to apply a color to several objects, as a paint tool can only apply a color to a single object at a time.

Using a mask to "paint" a selection area

Moving a selection area marquee

Sometimes you will want to use a selection area itself without the image data it contains. For example, you may want to move a selection area to expose certain portions of an imag, or to protect other portions from any effects or changes you may make to the image.To do this, choose the Move Selection Marquee command in the Options menu on the Attribute toolbar. Now when you move a selection, only the marquee of the selection area moves, without any image data.

Preserving the base image

By default, whenever a selection area becomes an object the image beneath the object is preserved. This is helpful when you want to duplicate parts of an image or leave them unaffected by any actions you may perform. However, when you are working with objects against a solid background color you may find it more useful to have that option turned off. This is done by unchecking the Preserve Base Image command in the Options menu on the Attribute toolbar. After this, whenever a selection is moved, the area beneath the selection is filled with the current background color.

Note: *Pressing the Ctrl key as you move an object preserves the base image, irrespective of its current status.*

Original image   *Preserve base image off*   *Preserve base image on*

Creating smooth-edged selection areas

Sometimes a particular selection area you are working on may have too rough or too abrupt an edge and may not blend well with the surrounding image. To help such selection areas blend in better with the base image, choose the Anti-aliasing command in the Options menu on the Attribute toolbar. Anti-aliasing works by smoothing out selection area edges and is especially helpful inkeeping curved selections smooth. However, since Anti-aliasing modifies the edges of selection areas, the extent of the selection area may seem to have changed.

Softening a selection edge

To make the edge of a selection area appear diffused, creating a "halo" like effect, use the Soften command in the Edit: Select submenu. (This submenu can also be accessed by clicking your right mouse button over a selection area.) Soften is especially useful when you want to make an object appear to float above the base image. You can specify the edge width to soften (from 1 to 150 pixels) in the Soften dialog box that appears when you choose this command. After applying this command the selection area takes on a diffuse edge corresponding to the amount of softening.

Note: *If you do not have the Preserve Base Image command checked and you move the selection, you will notice the base image shows a corresponding diffuse-edged hole filled in with the background color where the selection area was created.*

Softening a selection area
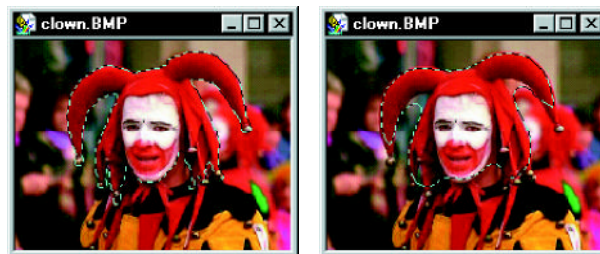
Selecting a border area

When you want to add a frame or border to part of an image, or draw a box or circle, choose the Border command in the Edit: Select submenu. (This submenu can also be accessed by clicking your right mouse button over a selection area.) The Border command allows you to include a border of pixels around the edge of the current selection area. You can specify the width of the border (from 1 to 64 pixels) in the Border dialog box that appears when you choose this command. (Half the specified width appears on the inside of the selection and half on the outside.) You can also set the border to have a soft edge causing the border edges to blend in with the surrounding image. After defining a border you can then "fill" it with a color or texture to create a frame, box or circle.
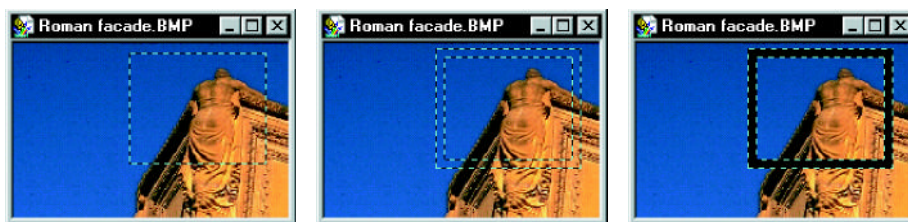
Original selection   *Applying a border*   *Filling the border*

Adding to or subtracting from a selection

PhotoImpact enables you to select multiple parts of an image at one time. You can, for example, use the Lasso tool to select a tree in an image and then go on to select other trees as well. In the same way, you can also exclude portions of existing selection areas. To select additional areas of an image or to extend an existing selection area, make your initial selection and then click the Mode combo box on the Attribute toolbar and choose Add (the pointer changes to display an addition sign) and select more of the image. If you wish to exclude an area from an already selected area, choose Subtract (the pointer changes to display a subtraction sign) and select the unwanted area – the selection is redrawn so that it no longer contains that area.

Notes:

- *You can also press the "A" key when using a selection tool to add to a selection area and press the "S" key to subtract from an area.*
- *If you do not already have a selection area, using Add or Subtract has no effect.*

Original selection   *Adding to the selection*   *Subtracting from the selection*

Expanding a selection area

In addition to changing the mode to select more of an image, you can also expand selection areas by using the Similar command in the Edit: Select submenu. (This submenu can also be accessed by clicking your right mouse button over a selection area.) Using this command you can select similar colors in an image, such as the blue sky in a city skyline, all occurrences of white in an image, or all the letters in a word. The Similar command is much like the Magic Wand tool (see p.134) except that it acts on already existing selection areas, either expanding the selection to include neighboring areas of similar pixels or similar pixels from the entire image.

Using Grayscale masks

PhotoImpact gives you the option of creating and editing grayscale masks that control not only the areas of an image that are selected, but also by how much. This means that when you use a paint tool or apply an effect to the masked area, they have only a partial effect on that area. A grayscale mask is especially useful when you want to create a fade between two images, where one gradually fades into or out of the other.

Creating a grayscale mask

Any Grayscale image can be used as a Grayscale mask. To convert a selection area into a Grayscale mask, drag the selection (with the M key held down) onto the workspace. The selection automatically opens as a grayscale image in its own image window. (If the selection is regular in shape it appears white. If it is irregular in shape, the area not selected is filled with black.)

Note: *You can also use the Load and Save Selection commands in the Edit: Select submenu to save and open Grayscale mask files. (This submenu can also be accessed by clicking your right mouse button over a selection area.)*

Editing a Grayscale mask

Because a grayscale mask is actually a Grayscale image, you can edit the mask with standard paint tools and enhancement commands. This enables you to alter areas of the mask to make them more or less transparent. As you edit remember:

• Black areas will not be selected.

• White areas will be selected.

• Gray areas will be partially selected: the closer to white the greater the effect; the closer to black the less the effect.

Original selection   *Grayscale mask*   *Edited Grayscale mask*

Using a Grayscale mask

Once you have created or edited a Grayscale mask, you can now use it in any other image. The easiest way to do this is to first save the mask in the Object Library as a selection (see p.146) and then drag it back onto the image you want to edit. Now whenever an effect, paint tool, or object is applied over the mask, its effect is directly related to the shade, or transparency, of the mask at that point.

Note: *When a mask containing gray shades is dragged onto an image, the selection border may not appear to accurately represent the mask. This is because the selection border only shows the edges of areas in the mask that go from a value less than 128 to a value greater than 128. If your mask is very dark, containing only gray values below 128, no selection border will be shown: if it is very light, containing only gray values greater than 128, the entire image will appear to be selected.*

Mask applied to original image as a selection   *Changing the hue*   *Copying the image to another*

Working with objects

Much of the power of PhotoImpact lies in its ability to create, manipulate, and transform objects. Objects are created whenever you move a selection, paste an image, or perform a transformation. Once created, objects float above the base image in independent layers, allowing you to freely move and manipulate them without fear of affecting other objects or the base image. When finished working with objects, you can then merge them back onto the base image.

Managing object layers

As easy as it is to create objects, the more objects you create in an image, the more important it is to keep track of those objects. To help you with object control, PhotoImpact provides the Layer Manager in the EasyPalette, accessed by clicking the EasyPalette button on the Standard toolbar and choosing Layer Manager from theGalleries combo box.

Whenever you view the Layer Manager, all objects present in the currently active image appear as thumbnails, each with a sequential creation number. An open eye icon on the thumbnail indicates that the object can be viewed. (To show or hide an object, open the Object Properties dialog box and check or uncheck the Show option.) By clicking on a thumbnail you select that object in the image. Once selected, the object appears with an animated marquee. (If the object is hidden behind other objects, only the animated marquee is displayed.)

Note: *You can make inactive objects (and selection areas) more noticeable by displaying them with darkened borders by checking the* Highlight inactive selections and objects *option in the Preferences dialog box (see p.72).*

An image with its objects displayed in the Layer Manager

Grouping and ungrouping objects

In the course of editing, you may find it convenient to group objects together so that you can move them as a unit or act on them collectively with a specific tool or effect. To do this, hold down the Ctrl key and click on the thumbnails of the objects you want to group in the Layer Manager. (Each selected thumbnail appears with a blue border and the corresponding objects in the image are selected.) Choosing "Group" from the Layer Manager button menu groups the selected objects together and the thumbnails on these objects are marked as G1, indicating that the thumbnails belongs to the first group (G2 appears for the second group, and so on).

Note: *You can also select objects to group directly from the image.*

After grouping objects together you may need to ungroup them to act on a specific object within that group. To do this, choose "Ungroup" from the Layer Manager button menu. All objects in that group are now ungrouped and can be acted upon separately.

Changing an object's layer in an image

When an object is created, by pasting or from drag-and-drop between images, it is automatically placed on the top layer of an image, covering the base image and any objects that may be present. (Converting a selection to an object places it on the lowest layer.) Once you have several objects, you will find the need to position them above or below the others. To do this, use the four arrow buttons that appear on the Attribute toolbar whenever an object is selected. From left to right, the four arrow buttons move an object up one level, down one level, to the top level, and to the bottom level.

Note: *You can also change an object's level by dragging its thumbnail in the Layer Manager to a different position relative to the other thumbnails. (The first thumbnail is on the top layer, while the last thumbnail is on the bottom layer.)*

An example of changing the layer of objects in an image

Setting an object's properties

PhotoImpact gives you control over all the objects in your image and how they appear. By specifying object properties you can make objects appear to blend in with other objects and the base image. To set an object's properties, double-click on the object or choose the Properties command in the Edit: Object submenu, (this submenu can also be accessed by clicking your right mouse button over an object).

OBJECT PROPERTIES DIALOG BOX

Object Properties

1 — Name: Obj-1
2 — Merge: Always
3 — Transparency: 0 %(0..99)
4 — ☐ Edge blending: 0 Pixels (0..150)
5 — ☐ Transparent color: ■
    Similarity: (0..255)
6 — ■ 0 ☐ 0 ■ 0
7 — ☑ Show

OK
Cancel
Preview
Help
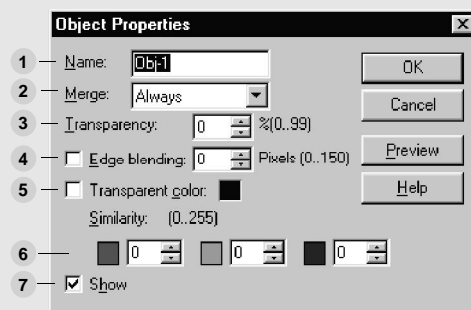
1 **Name** specifies the name of an object (up to 16 characters).

2 **Merge** sets the color factor for the object. You can choose from:
- Always displays the object as is.
- Hue & Saturation displays only the object's color and intensity values.
- Hue Only displays only the object's color information.
- If Lighter displays only the pixels in the object which are lighter than the underlying image or object.
- If Darker displays only the pixels in the object which are darker than the underlying image or object.

3 **Transparency** controls the object's degree of transparency. A value of 0 means the object is opaque whereas a value of 99 means the object is totally clear or transparent.

4 **Edge blending** determines how the object's edges blend with the base image or any underlying objects.

5 **Transparent color** sets which color in the object will be made transparent. For example, you can specify that the red color in an object be transparent, therefore allowing the base image or any underlying objects to show through.

6 **Similarity** allows you to determine a range of colors to be made transparent, based on the Transparent color. Use this if the color you want to make transparent does not appear as a soild color throughout the object. For example, it may consist of a range of reds rather than a single red.

7 **Show** controls whether or not the object appears in the image window. Objects that are not shown still appear as thumbnails in the Layer Manager window, and their properties can still be changed.

Adding shadows to an object

PhotoImpact provides a useful way to introduce depth to an image by applying a shadow to an object or group of objects. To add a shadow, choose the Add Shadow command in the Edit: Object submenu. (This submenu can also be accessed by clicking your right mouse button over an object in an image.) This opens the Add Shadow dialog box that allows you to control the direction, length, transparency, edge blending, and color of the shadow.

Whenever you create a shadow, it is an independent object that is grouped together with the object it was created from. In this way, whenever you move a shadowed object both the object and its shadow move together. (You can, if necessary, choose to ungroup shadowed objects with the Ungroup command in the Edit: Object submenu.)
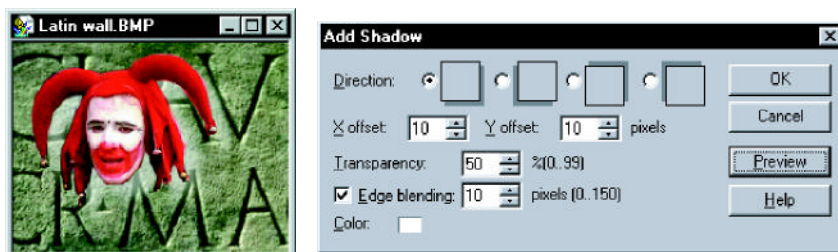
Appyling a shadow to an object

Sorting objects

When working with large numbers of objects in an image, you may find it helpful to use the sort commands to arrange the objects' thumbnails in the Layer Manager. This helps you to keep track of your objects, especially when there are many in an image. You can sort object thumbnails with the Sort by Depth, Sort by Name, and Sort by Group commands in the Layer Manager menu.

Sort by Depth arranges the thumbnails according to their level above the base image, with the highest level object displayed first. Since each object floats at a different level, this sorting option is useful for showing how objects are stacked.

Sort by Name arranges the thumbnails alphabetically by their name. This sorting option is useful when you want to find an object by its name. You can modify an object's name through the Properties dialog box accessed by double-clicking over an object.

Sort by Group arranges the thumbnails by the groups defined using the Group command. The thumbnails of the first defined group are displayed before the thumbnails of the second group, and the third, and so on. This sorting option is useful when you have several groups and want to select a specific group of objects to act on.

Copying and moving an object between images

PhotoImpact allows you to move objects between images and is quite useful when you have created an object in one image and want to use it in another image. To move objects between images, drag the object from the source image and drop it onto the destination image. The object is removed from the source image, and placed into the destination image. (If you want to copy an object, hold down the Ctrl key as you drop.)

Duplicating an object

To help speed up and simplify your work, PhotoImpact allows you to duplicate any object or group of objects that you have created. This is especially helpful when you have put the finishing touches on a specific object, or group, and you wish to use several copies of that object, or group, in your image.

To duplicate an object or group, first select it and then choose the Duplicate command in the Edit: Object submenu, (this submenu can also be accessed by clicking your right mouse button over an object). A copy of the object, or group, appears next to the original. You can then position and act on the duplicate as you wish.

Deleting an object

As you work with objects you may, for various reasons, end up creating more objects than you wish to have in your image. To delete an object, or group of objects choose the Delete command in the Edit: Object submenu. (This submenu can also be accessed by clicking your right mouse button on an object.) The object or group is deleted from the image window and their corresponding thumbnails disappear from the Layer Manager.

Retrieving an object's original appearance

When working with objects, you may find it desirable to revert back to the original form of an object. The object may have lost the "look" that you wanted, or you just wish to start over. In any case, PhotoImpact makes it easy for you to revert to an objects original appearance by choosing the Revert command in the Edit: Object submenu. (This submenu can also be accessed by clicking your right mouse button over an object.) When you choose the Revert command the object immediately reverts to the form it had when created.

Notes:
- *The Revert command should not be confused with the Restore command in the File menu which closes and then reopens the image file.*
- *The Revert command is disabled whenever the Preserve Base Image command is unchecked.*

Using the Object Library

As you create and edit images with PhotoImpact you will come across portions of an image or selection areas that you want to save for later use with other images. Normally, this means saving that portion of an image as a separate file and then opening it later. PhotoImpact provides a more convenient way to store images and selections with a unique and easy-to-use feature – the Object Library.

You can access the Object Library by clicking the EasyPalette button on the Standard toolbar. This opens the EasyPalette displaying the last opened gallery. Click on the Galleries combo box and choose Object Library to display the Object Library window, complete with thumbnails of any images and selections that have been stored there.

The object Library

Saving selections to the Object Library

You save a selection to the Object Library by dragging it from an image to a group tab in the Object Library window of the EasyPalette. (You can also choose the Copy Selection to Object Library command from the Edit: Select submenu.) The selection is then automatically saved as a file (in the folder specified at the time the group was created), and a thumbnail of the selection appears in the Object Library window.

Note: *If you have not yet created a group, PhotoImpact automatically opens the New Group dialog box allowing you to create a group to place the object.*

When you save an object, you have the option of saving it as a selection or an image. You choose which in the Object Library menu, accessed by clicking the menu button in the EasyPalette. (This menu can also be accessed by clicking your right mouse button over an object in the Object Library window.) For Grayscale images there is an additional option to save a selection area as an "image as selection". This converts a Grayscale image into a selection area and stores it (such as for use with gradient masks, see p.139.)

Note: *Holding down the M key as you drag an object into the Object Library automatically saves it as a selection.*

Saving selections to a file

Although the Object Library allows you to easily save selections, there may be times when you want to use a selection on another machine or save it to a secondary storage device. PhotoImpact provides a direct method of doing this with the Save Selection command in the Edit: Select submenu. (This submenu can also be accessed by clicking your right mouse button on a selection in an image.) This opens the Save Selection dialog box and allows you to save the current selection area as a Grayscale image in a file format of your choice.

Note: *In general, do not save masks in a format that involves "lossy" compression (like JPEG): these formats will change the mask.*

Creating Object Library groups

The Object Library is a very handy and useful place to store your images and selections. It can, however, quickly become cluttered with large numbers of selections and images. To better organize these selections and images you can place them into user-defined groups.

To create an Object Library group:

1. From inside the EasyPalette choose "Create Group" from the menu button. The Create Group dialog box opens displaying a text entry box for specifying a group name.

2. Type in a name for your group in the Name entry box. The name can be up to 16 characters long (do not type in an extension). If you want to change the path and folder where the group is saved, type in a new destination in the Folder entry box. (Group files are saved with the OPG file extension.)

3. Click OK. The dialog box closes and the newly created group appears in the Object Library window.

Importing Object Library groups

You can import Object Library groups from a network, shared hard drive, diskette, or other external source by choosing the Import Group command from the Object Library menu. (When you import a group, the group file and their contents remain in their original folders.) If you wish to share your own Object Library groups but want to make them read only, choose the command in the Object Library menu. Other users can still access your Object Library groups but cannot make any changes to your groups.

Deleting groups and objects

Having created a group, you can easily delete it and its associated files from disk by choosing the Delete Group command in the Object Library menu. To delete an object from a group, click on the object to select it and choose the Delete Object comand from the same menu.

Retrieving an image or selection

Just as you save images and selections by dragging them into the Object Library, you can retrieve them by dragging them from the Object Library into an image window or the workspace. Dragging an object to the workspace creates a new image window containing the image or selection as an object. (If you cannot drop an object onto an image, for example, it may be hidden, choose the Copy Object to Image command in the Object Library menu.)

If you drag an object back to the image that it originally came from, or another of equal size, the object is placed on the image in its original position. (If the destination image is a different size, the selection is placed at the position of your mouse.) This feature is especially helpful when you want to preserve the position of image elements in an image whose background needs changing. In this case you would select and drag each element into the Object Library, modify the background, and then drag each image element back onto the image. Each image element is repositioned automatically. This feature is also helpful when working with image and animation sequences for preserving the position of stationary objects across all the images in the sequence.

Notes:

- *When placing a selection that has been created from a Grayscale image into an Indexed-Color or Black & White image, the gray areas of the selection are converted to pure black or white.*
- *To load a previously saved selection (or any grayscale image) into the active image as a selection area, use the Load Selection command in the Edit: Select submenu. (This submenu can also be accessed by clicking your right mouse button over an object in an image.)*

Transforming images

This chapter deals with manipulating and transforming images. It begins by explaining how you can adjust an image's size by cropping, resampling, and modifying resolution, as well how to change the number of colors in an image. It also discusses the Transform tool which allows you to resize, flip, rotate, distort, and add perspective to portions of an image, and the Trace and Path tools that allow you to quickly outline and precisely modify the shape of a selected area.

Transforming images

Whatever your reasons for editing images, PhotoImpact provides you with the tools to manipulate an image to produce the "look" that you want. Whether you are preparing images for a publication and need to resize and crop them, preparing images for display and need to convert them, or just eager to use your creative talent to add some perspective to an image – PhotoImpact's transformation tools will more than satisfy your needs.

Cropping an image

Cropping is a way to trim the edges of an image and control the position and size of the subject in an image. This is particularly useful when you have images that are too large to be displayed and contain information around the edges that you wish to discard. To crop an image, select the area of the image you wish to retain and choose the Crop command [CTRL-R] in the Edit menu. The areas outside the selection area are discarded and only the area you selected is retained. (If you select an object and then choose the Crop command, the base image and all other objects are cropped leaving only the selected object.)

Notes:

- *If you select a non-rectangular area, the image is cropped to the smallest rectangle that can contain the selected area. Areas outside the selected area, but within the image frame, are filled with the current background color.*

- *When cropping the base image, any objects are discarded without merging.*

- *Use the Auto-Process Crop option to quickly crop an image bordered with surplus empty space, see "Automatically enhancing an image" p.90.)*
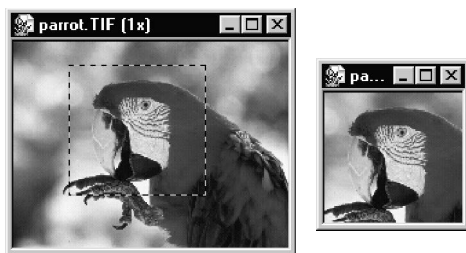
An example of cropping

Resizing images

You can resize an entire image in two ways: by changing its resolution and by resampling. Changing the resolution of an image adjusts its physical size without changing the actual image data and thereby retains original quality. Resampling an image adjusts the size by discarding data when you reduce an

image and adding new data when you enlarge one. Which method you choose depends on the quality you want and the target destination for the image.

Note: *For more on resolution and imaging basics , see "Imaging essentials" in the on-line Help.*

Changing an image's resolution

Resolution determines the physical size of an image by defining the size of its constituent pixels. As you change the resolution, you change the number of pixels that appear per unit area. For example, increasing the resolution places more pixels closer together, and thereby reduces the size of the image, while decreasing the resolution places pixels farther apart, thus making the image larger. In this way you can resize an image without actually changing the number of pixels the image contains, as such you are able to retain the original quality of the image. Additionally, because no pixels are added or lost, the size of the image file remains unchanged.

To change the resolution of an image:

1. Choose "Resolution" from the Format menu. The Resolution dialog box opens.

2. Decide on the resolution to use:Display, Printer, or User defined.

   Choose Display if you plan to show the image in a slide show or other on-screen presentation and Printer if you wish to print the image out on a black & white printer. When an image appears too large or too small in another program, such as Microsoft Word or PowerPoint, choose User defined and enter an appropriate resolution in the entry box.

3. Click OK. The dialog box closes and the resolution of the active image is changed.

   There is no change to the appearance of the image. Changes are only apparent when you print the image or place it into another program that reads the resolution.

Resampling an image

When you open images, their size on screen is determined by your screen resolution and the number of pixels they contain. The Dimensions command allows you to adjust the number of these pixels in an image. It is important to note however, that because resampling changes the number of pixels in an image, its file size is modified accordingly.

You will want to resample an image when:

- You are preparing images for display on your computer and wish to make them all display at the same size, for example, in a slide show.
- You are preparing images for a publication and you wish to make their file size smaller so that they take less time to import into, and print from, your DTP or word processing program.
- You wish to stretch or squash an image.

Converting images

When working with images, it is often necessary or useful to change the data type of an image, for example, from Grayscale to True Color. Your choice of data type directly relates to an image's file size and quality. For example, by converting to a data type that supports more colors, you can take advantage of the extra colors, but the image's file size will increase. To convert an image's data type, choose an appropriate command from the Format: Data Type submenu. (You can also access this menu by clicking on the Data Type button on the Status bar.) Some data types may not be available: these require an intermediate conversion to True Color. After choosing a data type, the conversion is immediate or an options dialog box appears.

Notes:

- *Conversions change the original image, unless you have the Create a New Image command checked in the Format: Data Type submenu.*
- *For more on color and imaging basics , see "Imaging essentials" in the on-line Help.*

GRAYSCALE TO BLACK AND WHITE DIALOG BOX
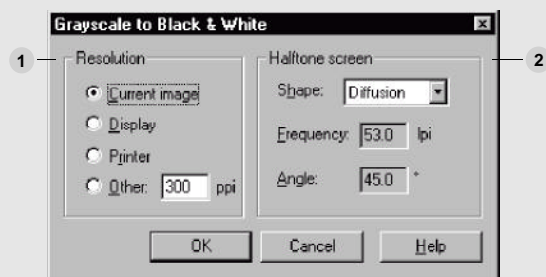
1 **Resolution** allows you to choose the resolution of the new image. You can choose the resolution to match that of the active image, printer, display or you can define your own. (If you select a high resolution, a very large file will be produced and the conversion may take a long time.)

2 **Halftone screen** allows you to specify your dithering method. Shape selects a pixel pattern to use for the dithering. (The *Diffusion* option generally results in the best conversion.) Frequency controls how many lines per inch appear for a particular shape that you are using to dither and Angle controls the angle that the shapes are placed at when dithering.

TRUE COLOR TO 16-COLOR DIALOG BOX
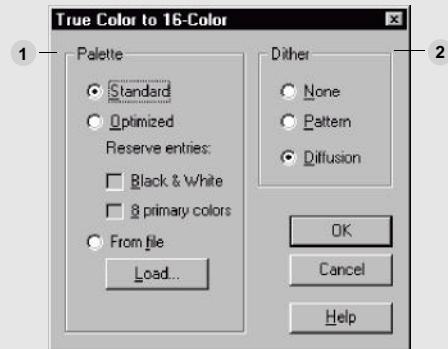
1 **Palette** allows you to select the colors to be included in the new image's color table. Standard uses the system's default 16-Color table, containing the 16 colors available on a standard VGA display. This option is most useful when you transfer images to other Windows programs or prepare them for use in a help file or a CD title.

The Optimized option creates a color table that is the closest representation of the colors used in the image. In most cases this option gives the best conversion. Reserve Entries allows you to reserve some entries in an optimized palette. For example, you may need black to add text later, but your image is largely green and blue. Selecting the Reserve entries Black & White option then creates a color table containing greens, blues, black and white. Checking the 8 primary colors option retains red, green, blue, cyan, magenta, yellow, black and white in the color table.

From File allows you to load an indexed 16-Color palette file, that was previously saved from another indexed 16-Color image file, and use that palette to map the colors of current image.

2 **Dither** allows you to choose a dither method. None maps each pixel in an image to the closest color in the palette. Pattern arranges pixels in square patterns to simulate more colors than are present in the palette and Diffusion uses a more random method to dither colors. (The Diffusion option generally results in the best conversion.)

TRUE COLOR TO 256-COLOR DIALOG BOX

1 **Palette** allows you to select the colors to be included in the new image's color table. Standard uses the system's default 256-Color table and gives the most balanced use of palette color. Use this option if you are preparing images which need to be displayed consistently on 256-Color display modes. The 3-3-2 (bits) option uses the system's color table based on a combination of eight (3-bits) reds, eight (3-bits) greens, and four (2-bits) blues, while 6-7-6 (levels) uses a color table that offers six levels (shades) of red, seven levels of green, and six levels of blue.

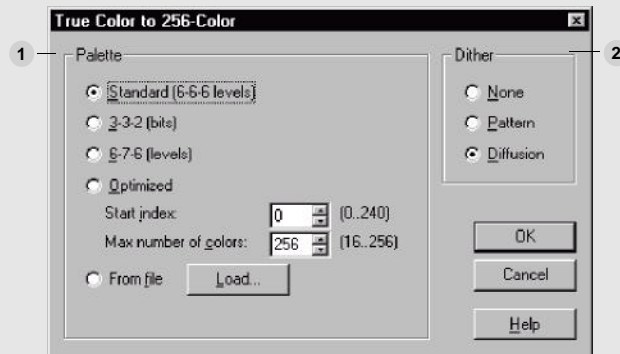Choosing Optimized creates a color table that matches the range of colors used in the image as closely as possible and as such normally produces the best results. You specify the color index value of the first color in the palette by entering a number in the Start index. (This is best determined by noting the color value of the most white color in an image and choosing that color index to be the first color in the palette.) You can also specify the range of color by entering a value in the Maximum number of colors entry box corresponding to the spread of color in your original image. The higher the value, the more colors created.

Choosing From file allows you to load an indexed 256-Color palette file that was previously saved from another Indexed 256-Color image, and uses that palette to map the colors of the current image.

2 **Dither** allows you to choose a dithering method. None maps each pixel in an image to the closest color in the palette. Pattern arranges pixels in square patterns to simulate more colors than are present in the palette and Diffusion uses a more random method to dither colors. (The Diffusion option generally results in the best conversion.)

Converting True Color images to CMYK

PhotoImpact gives you the ability to prepare color separations of your color images for full color commercial printing. PhotoImpact separates images into four Grayscale images, one for each color channel: cyan, magenta, yellow, and black (CMYK). If you output these images to film on a high resolution image setter, a commercial printer can then use the film to print a full color image.

When you convert a True Color image to CMYK, it is a good idea to save each image under a common name appended with the name of its CMYK color, for example, "sports car – cyan", "sports car – yellow", and so on. This ensures that each CMYK image can be correctly identified later on when the images are recombined together to form a True Color image.

Converting CMYK images to True Color

Not only does PhotoImpact enable you to convert a True Color image to CMYK, you can also recombine an image that has been separated into its CMYK colors. This is useful when the original True Color image is unavailable and you need to edit the image. However, this should be done only as a last resort, as the recombined image will not have the color range of the original.

Using the Transform tool

The Transform tool allows you to take an image, or part of it, and then manipulate it so that it changes shape. To perform a transformation, select an object, or the area on the image you want to transform and then click the Transform tool button on the Tool panel. Each of the possible transformation options appears as a button on the Attribute toolbar. (You can also access some of these transformations from the Edit: Rotate & Flip submenu.) On the following page are examples of what each of these options are and how to use them:

Notes:

- *Applying a transformation creates objects out of any selected areas.*
- *If you rotate or distort an image by anything other than 90º, 180º or 270º, extra space is introduced around the image. This space is filled with the background color if you do not have Preserve Base Image selected in the Options menu on the Attribute toolbar. (Objects are not affected in this way.)*

Original image   *Free resizing*   *Slanting*

Distorting   *Perspective*   *Rotating*

Flipping left   *Flipping horizontal*   *Flipping vertical*

Straightening images

The Rotate by Horizontal and Vertical Line options are useful when you have an image which is not quite straight. This is often the case when you input an image with a hand-held scanner. To horizontally straighten an image, click on the Rotate by Horizontal Line button and then drag a control point to one end of a stong horizontal feature, such as the edge of the image. Now drag the second control point to the other end of the feature, carefully aligning the control line along the feature.Double-clicking on any of the control points now rotates the image horizontally.

Note: *You can also use the AutoProcess Straighten command to quickly straighten an image. For more information, see "Automatically enhancing an image" p.90.*

An example of straightening an image
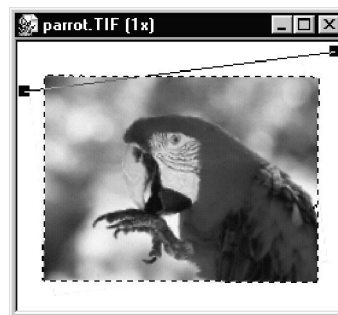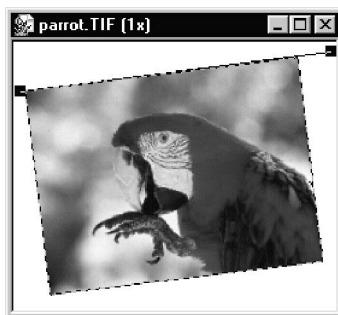
Working with paths

PhotoImpact makes it possible for you to convert objects and selection area marquees into paths. Paths are vector-based images, as opposed to bitmapped images, comprised of a collection of control points, bezier curves, and lines. Paths do not contain any image data, but they can be shaped with great precision to produce shapes with little or no discernible jaggedness. It is this smoothness that makes using paths a valuable tool when working with text and other shapes, such as corporate logos.

The Trace commands

The Edit: Trace submenu contains commands that can convert any base image, selection area or object into a path-based object. The Selection Marquee command converts a selection area into a path controlled by a number of control points and handles. The Image command works in much the same way as the Selection Marquee command except that the control points and handles are located on the edges of the selected image giving you greater control over the shape of the vector path.

Deciding which Trace command to use is entirely dependent on the image that you want to convert to a path. If the image is of similar brightness and contrast with the background, such as a person's face against a bright sky, it is better to first use a selection tool to carefully outline the person's face, and then choose the Selection Marquee command. In cases where the image data is easily distinguished from background pixels, such as with text on an image, you should use the Image command.

Note: *To improve the quality of paths, set the* Generation quality *option in the Preferences dialog box (see p.72) to Best. If speed is more important than quality, then set the quality to Fair.*

TRACE DIALOG BOX
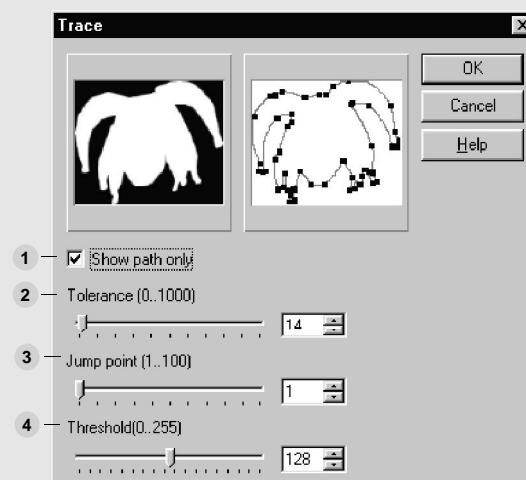
1 **Show path only** displays only the vector path in the preview thumbnail. The advantage of the Show path only view is that it displays the thumbnail more quickly and gives you a better idea of how the path is taking shape.

2 **Tolerance** sets the accuracy of the control points on the vector path. Move the slider to the right to set a high tolerance which results in fewer control points, and as such does not follow the boundaries of the selection area or image as accurately. For simple paths, such as a building or doorway, a high tolerance is no problem. However, for irregular shapes, such as a person or a car, specify a low tolerance.

3 **Jump point** determines the accuracy of the curves between the control points. Move the slider to the left to create a path that fits more closely with the selection area or image (the better the fit, the slower the conversion). Again, for simple paths, fewer jump points is no problem, but for irregular shapes, specify more jump points.

4 **Threshold** determines which pixels are included in the vector path. Move the slider to the left to decrease the number of pixels and to the right to increase the number of pixels. This option is similar to color similarity, allowing pixels of a specified color range to be included in the vector path. The higher the threshold, the larger, and possibly less accurate, the path will be.

The Path tool

Once you have created a path, you need to use the Path tool to modify it. (For modifying paths created with the Text tool, see "Placing text" p.130.) The Path tool operates in one of three modes: Object, Path and Selection. You determine which one by selecting it from the Mode combo box on the Attribute toolbar. In Path mode you can freely edit the path, distorting its shape and position. Object mode converts the path back to a raster-based object, filling it with the selected color on the Attribute toolbar; while Selection mode converts the path into a selection area, which you can then fill with a color, texture or even another image.

Changing the path shape

If you have created a path using one of the Trace commands, you cannot edit it immediately as it has yet to be mapped with control points. To do this, choose the Edit Existing Path command in the Edit menu on the Attribute toolbar. Now when you click on the path, control points appear at each corner. To modify the shape of the path, you need to change the position of these control points.

To move a control point, first click on it to make it active (the pointer changes to a crosshair pointer) and then drag it to a new position. When you select a control point, a handle appears connecting the control point to an additional two control points. These control points allow you to modify a path's curvature and can be easily adjusted by dragging them anywhere within the workspace. (If you click off the control point, the path is no longer

active. To change its curvature, you will then need to make the original control active again and then drag on a handle.)

Note: *You can make a control point by dragging your mouse over it.*
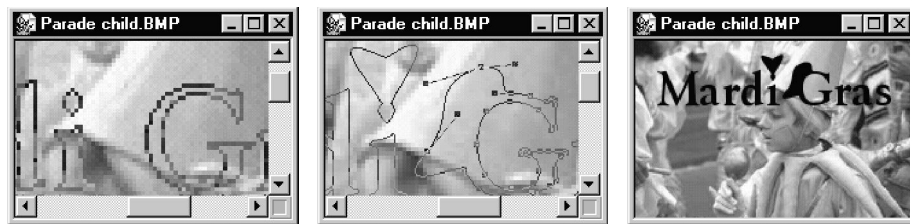
An example of distoring text using the path tool

When you change a handle, its behavior is determined by the Free edit option on the Attribute toolbar. Left unchecked, and the handles rotate together around the control point. Checked, you can move each handle's control point independently, allowing to apply more acute angles and curvatures.

Creating a new path

PhotoImpact also allows you to create new paths by choosing the New Path command in the Edit menu on the Attribute toolbar. Now, wherever you click your mouse on an image, control points appear, connected together by straight lines. Dragging your mouse curves the line around these points. To finish, or close a path, simply click on the first control point or double-click. A line is then drawn from the last control point to the first.

After creating a new path, you need to either convert it to an object or selection, or choose the Edit Existing Path command in the Edit menu on the Attribute toolbar. If you don't, each time you click your mouse, another control point will be placed on the image. To change the shape of the path, choose the Edit Existing Path command and then follow the procedures explained above.

Grouping and ungrouping paths

When you edit an existing path, such as text, the path is likely to be in a complex form containing many separately closed paths. You can edit these individually or as a group. To edit them as a group first select them, by dragging your mouse over them or using the Shift key in conjunction with your mouse, and choose the Group command in the Path menu. (Accessed by clicking your right mouse button over a path.) To ungroup a path, select it and then choose the Ungroup command from the same menu.
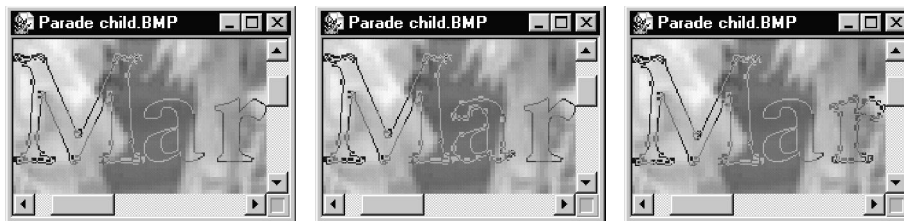
An example of selecting or grouping seperated paths

Filling a path

Whenever you convert a path into an object, the path is filled with the color specified in the color square on the Attribute toolbar. Using the Even-Odd fill option on the Attribute toolbar, you can determine how this fill takes place. For example, left unchecked, the fill occupies the entire interior of the path. This option is particularly useful when you wish to maintain a solid fill whenever paths overlap. Checked, and the fill occupies different regions of the path, in particular, regions where a path is folded over onto itself or contains multiple paths inside. This option is best for when you have a complex or irregular path whose overlapping portions you wish to keep free of paint.
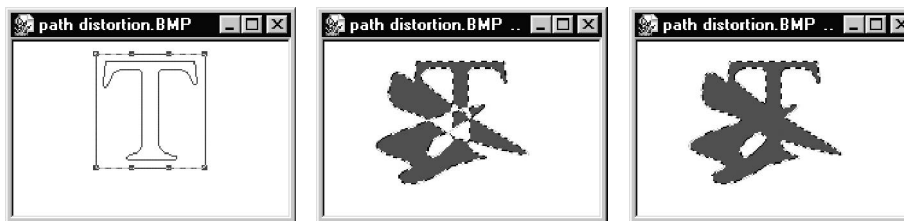
Original path   *Path with an Even-Odd fill*   *Path without an Even-Odd fill*

Acquiring images

PhotoImpact works with your camera, scanner, camcorder and VCR allowing you to acquire and edit all manner of electronic, photographic, and printed images. This chapter explains how to access and calibrate your acquiring device, obtain good input results, perform automatic post-processing and stitch together image strips to form a new image.

Chapter contents at a glance

Before you begin

PhotoImpact allows you to access images from a scanner or other input devices through a variety of software drivers. However, since each software driver works differently, many of the actual image acquisition options will differ with different input devices. For this reason, the full range of possible acquisition options are not discussed in this chapter. For information about such options and how they are implemented by an installed software driver, please refer to your image input device's software driver documentation and on-line help.

Acquiring images

PhotoImpact makes it possible for you to import images from any image input device that is TWAIN compliant. This capability allows you to acquire photographs, slides, and printed material, or capture frames from a camcorder, VCR, digital camera, or even your television, and then convert them into images that you can modify with PhotoImpact's powerful editing and enhancement tools. Later in this chapter you will find some tips on how best to get images into PhotoImpact, but first a discussion of TWAIN.

TWAIN

TWAIN is an industry standard for image input devices, drivers, and software applications that allows any TWAIN-compatible software application to acquire image data from any TWAIN-compatible device. By being TWAIN-compatible PhotoImpact can work with all TWAIN-compatible devices to give you access to all kinds of images.

If you have a TWAIN-compatible device you should follow its installation procedure. Once correctly installed, you will be able to use the device from PhotoImpact or any other application that supports TWAIN without worrying about compatibility problems.

Selecting an image source

Before acquiring an image you first need to select which device you want to acquire an image from. You might, for example, have a flatbed scanner, a digital camera, and a video capture device connected to your PC, and since each device may have its own TWAIN driver, you need to select between them. To do this, choose the Select Source command from the File: Acquire submenu. This opens the Select Source dialog box which displays a list of TWAIN devices on your system that you can choose from. Once selected, a TWAIN device becomes the source for image data whenever you select the Image command from the File: Acquire submenu and remains the source until another device is selected.

Note: *If you only have one TWAIN device connected to your PC, that device is automatically selected as the TWAIN source.*

Acquiring an image

After selecting your TWAIN source you can acquire an image by clicking the Acquire Image button on the Standard toolbar or by choosing the Image command in the File: Acquire submenu. This opens the Acquire Image dialog box which allows you to specify the destination, calibration, and post processing options for the acquired image. You can choose to set these options before acquiring an image or you can acquire an image directly by pressing the Acquire button in the Acquire Image dialog box. Doing so opens the TWAIN driver and displays a dialog box containing your device's imaging options. For more information on specific imaging options, see your image device's documentation or on-line help.

Note: *If you click the Acquire button and you do not have a TWAIN device installed, you will see an error message. If you do have a TWAIN device, but it is incorrectly installed, a dialog box appears containing configuration options.*
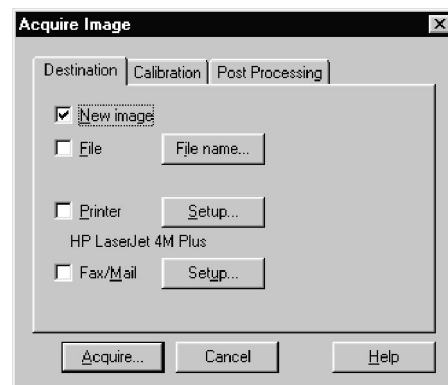
Setting the destination

The destination options in the Acquire Image dialog box allow you to send your imported images directly to any, or all, of the following destinations:

- New image opens an acquired image in its own image window in the PhotoImpact workspace.
- File stores an acquired image in the PhotoImpact workspace. Click the Filename button to specify the filename and location. Filenames must end with a number, allowing PhotoImpact to save multiple images by auto-numbering the files. This is especially useful when you want to store multiple pages of a document for optical character recognition (OCR) at a later time.

Note: *After entering a filename, it is displayed in the Acquire Image dialog box underneath the File destination option.*

- Printer sends an acquired image to be printed on your PC's default printer. This destination option makes it easy for you to turn your PC system into a high quality copy machine. Click the Setup button to specify the printer options.
- Fax/Mail sends an acquired image to either your PC's fax device or to your mail software. This option operates in the same manner as the Send command in the File menu and makes it easy to scan in handwritten text and images and send them off as a fax or as an e-mail attachment. Click on the Setup button to access the Send dialog box.

Note: *For more information on the Send Mail dialog box, see "Sending images by electronic mail" p.80.*

Calibrating your input device

The Calibration tab in the Acquire Image dialog box allows PhotoImpact to automatically adjust an image's tone as it is acquired. An extensive range of calibration schemes allow you to correct color problems that arise because of the different ways that your monitor, video display card, and input device handle colors. The calibration schemes include corrections for many common color problems as well as calibration schemes for many of the most popular scanner models.

To apply a calibration scheme to an acquired image, check the Apply calibration scheme checkbox and select a scheme from the Scheme list box. These schemes are actually tone maps created through the Tone Map dialog box (see p.104) and adjust different pixels of an image in different ways. If, for example, your scanner tends to wash out detail in highlighted areas and make shadowed areas appear too dark, you can create a tone map that darkens highlighted areas and lightens shadowed areas, and apply that tone map automatically every time you scan an image.

To add a calibration scheme:

1. Create a new tone map by using the Tone Map dialog box, accessed through the Tone Map command in the Format menu. (For more on creating tone maps, see "Using the tone mapper" p.104).
2. Save the tone map as a file with the MAP extension and close the Tone Map dialog box.
3. Open the Acquire Image dialog box and click the Add button in the Calibration tab.

4. Select the new tone MAP file and click OK. The new tone map is added as a calibration scheme which you can select from the Scheme list box.
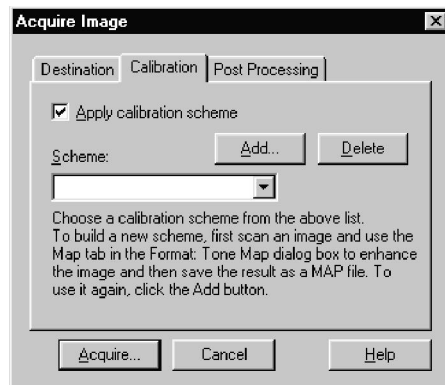
Post-processing options

The post-processing options in the Acquire Image dialog box allow you to automatically apply several basic but powerful enhancements to an acquired image automatically. These post-processing enhancements analyze and modify an acquired image to correct basic image problems, improving the image's appearance. The following post-processing options can be applied by selecting the appropriate checkbox.

- Auto-straighten straightens out an image that is acquired in a crooked, or skewed, manner.
- Auto-crop removes excess blank space in an image, cropping an image down to the smallest rectangle containing relevant image data.
- Auto-remove moire eliminates interference patterns and other scan artifacts from an image that has been half-toned, such as photographs in a magazine or book.
- Adjust brightness & contrast optimizes the brightness and contrast levels in an image by stretching pixel values across a full range of 256 levels.
- Add frame & shadow adds a frame, shadow, and canvas border to an image. Click the Settings button to specify the various framing options.

When the Image is acquired each of the selected post-process options are applied automatically before the image is displayed in the workspace.

Note: *For more information on the first four post-processing options, see "Automatically enhancing an image" p.90.*

Acquiring a good image

The best way to ensure that a finished image looks its best is to start with a good acquired image. The following tips are provided to help you get the best results quickly when acquiring an image.

- Limit your image size whenever possible.
  A small image requires much less hard disk space and processing time than a large image. Always note the scanned image size in KB. If the scanned image size approaches or is larger than your available disk space, adjust the scan size downward before scanning.

- Scan to the same color mode as your output device.
  OCR text: Black and white.
  Line art: Black and white
  Laser printer: Grayscale mode
  Monitor: 256/True Color (depending on your video driver)
  Post production: True Color

- Scan good quality images and text.
  When scanning images some information is invariably lost. If the output device does not match the resolution of the scanned image or if the output device cannot reproduce the color shading equivalent to that displayed by your monitor, further information will be lost. Scan quality can only be as good as the original image. Minimize these problems by avoiding scanning materials that are either extremely light or dark, damaged or unclear.

- Scan photographs instead of printed pictures.
  To help preserve accurate toning details, scan photographs instead of images that have been printed in magazines or books. Printed pictures have already been half-toned or dithered and are composed of tiny dots. Typical resolution for color typesetting is 180-400 dpi with a halftone frequency of 90 to 200 lpi, so when printed images are scanned in at a higher resolution no better quality is obtained. In fact, at too high of a resolution the scanner can see the individual color dots and may produce a moire pattern.

- Do not always select the highest resolution.
  High resolution images, especially 24-bit color images take enormous amounts of disk space. There is no benefit gained if your image is scanned at a resolution far higher than your intended output device is capable of producing. If you plan to display the image on a monitor you should select a 72 or 96 dpi resolution. However, if you wish to output to a color printer, you will want to scan the image in at between 150 and 300 dpi. (However, if you want to enlarge a small photo, try a higher resolution.)

- Experiment with different settings.
  Acquire images using different settings and then compare them on your screen to verify which one suits your particular printing or imaging requirements. You will find that PhotoImpact has many functions that allow you to manipulate the acquired image to get the best results.

Stitching images together

If your image input device cannot handle larger images in one pass, such as may happen when you are using a handheld scanner, PhotoImpact enables you to input an entire image by scanning in strips and then joining the resulting image pieces. In this situation, the ability to join images accurately and efficiently is essential. PhotoImpact provides both automatic and manual image stitching to aid you in reconstructing an image from multiple pieces with the Stitch command.

Choosing the Stitch command in the Edit menu allows you to stitch any image open in the workspace with the currently active image. This process involves choosing an image to join with the active image, floating that image into the proper position over the active image through an automatic or manual process, and then stitching together the images by combining the overlapping regions.

The way in which you use the Stitch tool to join image strips depends entirely on the condition of the images you have. Some images are well suited for automatic stitching and others may require manual adjustment. For this reason, Stitch provides multiple options and controls for both manual and automatic stitching, giving you pixel-level control for seamless joining of images. With the Stitch tool you can:

- Set auto-stitching parameters and make PhotoImpact automatically match and align the floating image over the active image.
- Drag the floating image until it matches up with the active image.
- Define a reference point in each image which PhotoImpact then uses to align the two images.
- Select "Auto fine tune" to help the images snap into the correct relative position and aid in manual stitching.
- Set the transparency of the floating image to aid manual stitching and to define how images are combined in the overlap area.

Notes:

- *You can only join images that share the same data type and are either Grayscale or True Color.*

- *The Stitch tool only works with base images, objects cannot be stitched. If you wish to stitch an object, it must first be merged onto the base image.*

THE STITCH DIALOG BOX
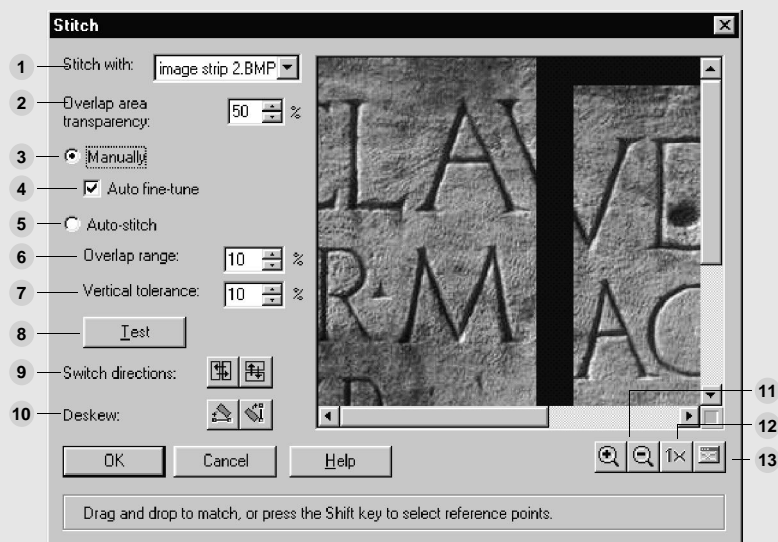
1 Stitch with enables you to select an image from any that are open in the PhotoImpact workspace. Click on the combo box to choose an image.

2 Overlap area transparency allows you to specify the transparency of the floating image. While you are placing the floating image, use a transparency of 50 to enable you to see both images equally. Before stitching, choose another transparency to define how the area of overlap appears after stitching. Selecting 0 causes the floating image to obscure the active image in the area of overlap, while a value of 99 causes the active image to obscure the floating image.

3 Manually allows you to position the floating image over the active image by dragging it with the mouse.

4 Auto fine-tune automatically fine-tunes the position of the floating image immediately after you have moved it by dragging or by defining matching points. To be successful the floating image must be placed fairly close to its final destination (within thirty pixels either way). This option usually achieves the best result with the least amount of effort.

5 Auto stitch sets the Stitch tool to automatically align the floating image over the active image based on the specified overlap and tolerance parameters. When this option is selected a horizontal or vertical line appears on the active image. This line represents the approximate position to which the floating image should overlap. This line is moved by adjusting the Overlap range spin box.

6 **Overlap range** specifies the amount of overlap in the images to be stitched. If the overlap is too small (less than thirty pixels), the chance of a successful match is greatly reduced.

7 **Horizontal/Vertical tolerance** allows you to provide for misalignment in the direction perpendicular to the stitching direction. The tolerance should be slightly greater than the distance the floating image needs to move (horizontally or vertically) to align with the active image.

8 **Test** automatically repositions the floating image to match the active image according to the overlap and tolerance parameters you have defined.

9 **Switch directions** allows you to specify which side of the floating and active images to stitch together. Clicking the left button swaps the images left and right. Clicking the right button swaps the images above and below.

10 **Deskew** allows you to rotate the floating image with respect to the active image. Click the left button to define a line to align the image horizontally, and click the right button to define a line to align the image vertically. This is useful when the image strips are not quite parallel to each other. (For more in*formation on deskewing an image, see "Automatically enhancing an image" p.90.)*

11 **Zoom In** and **Zoom Out** change the view of the images one step at a time. Use these commands if you want to view a magnified or reduced portion of the images to enable you to stitch more accurately.

12 **Actual view** returns the view of the images to the normal (1x) view where each image pixel is shown by one screen pixel. (If you are already at actual view, this command has no effect.)

13 **Fit in Window** displays the images at the maximum magnification that still allows the active image to fit within the display window.
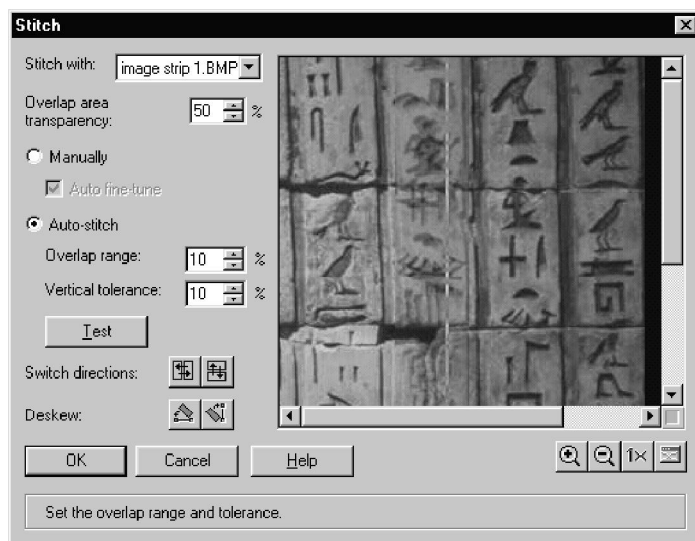
Automatic image stitching

The fastest and easiest way to stitch two image strips together is by using the Auto stitch option. This option works for a wide range of images and is especially useful for images that show a lot of detail and are fairly clear.

To stitch two images automatically:

1. Make one of the images you wish to join the active image.

2. Choose the Stitch command in the Edit menu. The Stitch dialog box appears.

3. In the Stitch with combo box, select the image you want to join to the active image. The image selected here appears as the floating image in the stitch window.

4. Use the Direction buttons to place the floating image in the correct position relative to the active image.

5. Check the Auto stitch option, and then enter values in theOverlap range and Vertical/Horizontal tolerance entry boxes according to the approximate percentage of overlap and vertical/horizontal misalignment that you feel is evident between the two images.

> **Note**: *Overlap range or Vertical/Horizontal tolerance values that are off by more than 50% of the image size prevent the Auto stitch option from properly joining image strips.*

6. Click the Test button to preview the auto stitched image.

7. Click OK. The Stitch dialog box closes and a window appears containing the newly stitched image.

Manual image stitching

You can use the manual stitching option to join images in unusual ways creating special effects. Such effects might include placing the same image against itself or joining a flipped version of an image to the original to create a mirrored effect. You might also use the manual stitching mode when your image details are unclear or somewhat blurred, or when you are joining images with small scale repeating patterns.

To stitch two images manually:

1. Follow steps 1 through 4 for automatic image stitching (see previous procedure).

2. Drag the floating image until you are satisfied with its position.
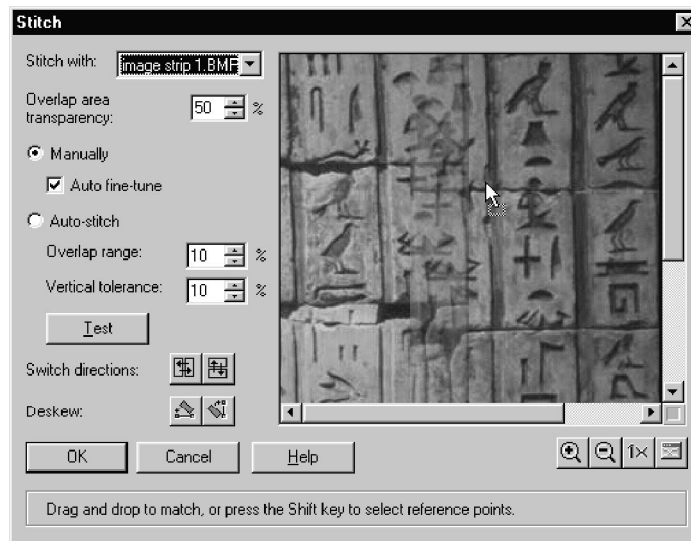
3. Click OK. The Stitch dialog box closes and a window appears containing the newly stitched image.

Note: *To improve the stitching accuracy, check* Auto fine tune *to allow PhotoImpact to automatically fine tune image alignment after you have placed the images in an approximately correct position.*

Stitching images by defining reference points

When you are stitching together images that have fine details in common, it is quite easy to join them by using a reference point. A reference point can be any small feature, or detail, that appears in the overlapping regions of both images. Once specified, PhotoImpact uses that reference point to stitch the images together.

To stitch two images by using a reference point:

1. Follow steps 1 through 4 for automatic image stitching (see previous procedure).

2. Define a reference point by holding down the Shift key and clicking on a small detail common to both images in the floating image.

3. Define a matching reference point by holding the down the Shift key and clicking on the corresponding detail in the active image. The Stitch dialog box closes and a window appears containing the newly stitched image.
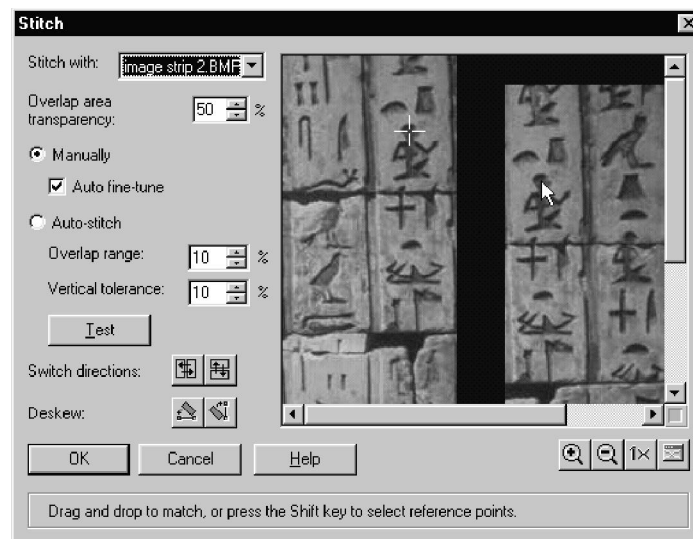
Album: getting started

Album is the program to use when it comes to viewing and managing the files on your system. When you place files into Album, they are represented as graphical thumbnails which allow you to see what a file is, therefore making it easier to locate files as well as better organize your work.

This chapter introduces the basics of Album, explaining how to create and maintain album files, access programs from the Tool panel, perform drag-and-drop operations, and use the Preferences commands to customize the way Album works with you and your Windows environment.

Customizing the way you work

An essential part of Album's management is that it allows you to control both the program and how it interacts with Windows. This is done with the two Preferences commands, PhotoImpact Album and General, found in the File menu. The PhotoImpact Album command allows you to define preferences for Album only, while the General command is for all PhotoImpact programs. (General preferences are discussed in "Common preferences options", p.74.) When you choose the Album command, the Album Preferences dialog box opens with three tabs: General, Font, and OLE Representation. These allow you to specify a variety of options such as checking links to source files, defining the way files behave as OLE objects and controlling the size and type of the fonts used in Album.

Note: *You can quickly access the Album Preferences dialog box by double-clicking on the status bar or pressing the F6 shortcut key.*

ALBUM PREFERENCES DIALOG BOX: GENERAL TAB
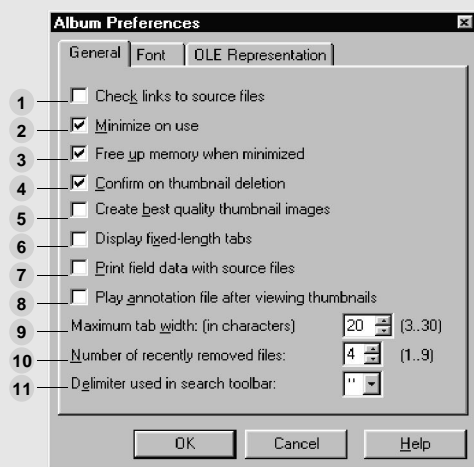
1 **Check links to source files** makes Album perform an automatic check between each thumbnail in an album and its source file. The check is done whenever a thumbnail is selected or the view in the album changes, such as from scrolling or performing a sort operation. Although this option does not require any extra memory, it may slow down processing time as you wait for Album to finish checking. Leave this option unchecked if you are certain files have not been modified, if it is not necessary to update existing thumbnails, or if you wish to scroll quickly through an album.

Note: *If, during a check, Album comes across any missing files, the index number of the appropriate thumbnail is grayed-out.*

2 **Minimize on use** minimizes Album as soon as you invoke another program from the Tool panel or Switch menu. This can help save on system resources as Album is no longer occupying the desktop.

3 **Free up memory when minimized** releases any system memory used by an album by swapping it out to disk whenever it is minimized. When you swap out to disk, the memory contents of the album are saved to a file in your TEMP folder (*.$$$). Restoring the album reads that file back into memory. This may slow processing time depending on the size of this file and the current state of your system's resources.

4 **Confirm on thumbnail deletion** prompts you with a confirmation message whenever you try to delete thumbnails.

5 **Create best quality thumbnail images** tells Album to generate the best quality images for use as thumbnails. Check this option if you want your thumbnails to be as clear as possible. (This does, however, require a longer thumbnail insertion time.) Leave this option unchecked if you are satisfied with the existing thumbnail image quality.

6 **Display fixed-length tabs** makes all the tabs in an album appear at a fixed size. If this option is left unchecked, each tab appears as large as the number of characters it contains. (You control the number of characters with the *Maximum tab width* option below.)

7 **Print field data with source files** attaches field data to source files when printed.

8 **Play annotation file after viewing thumbnails** plays the annotation file associated with a thumbnail after you open the thumbnail's source file, (using the View command in the Source menu).

9 **Maximum tab width: (in characters)** allows you to specify the length of the names that appear in tabs (from 3 to 30). Keep this number low when you need more space to show tabs. To see tab names in full, increase this number.

10 **Number of recently removed files** specifies the number of files to list at the bottom of the File menu, (up to 9). Clicking on a name from the list reopens the album.

11 **Delimiter used in search toolbar** allows you to choose which delimiter to use in the Search toolbar.

ALBUM PREFERENCES DIALOG BOX: FONT TAB

The Font tab allows you to control the type and size of the font used to display the text in an album. (The options and dialog box layout displayed here are standard to all Windows compatible programs.) If you are in high resolution display mode, such as 1024x768, you may want to increase your font size so you can better see the names of your thumbnails. Likewise, if you are in a lower resolution display mode, such as 640x480, you may want to decrease the font size.

ALBUM PREFERENCES DIALOG BOX: OLE REPRESENTATION TAB
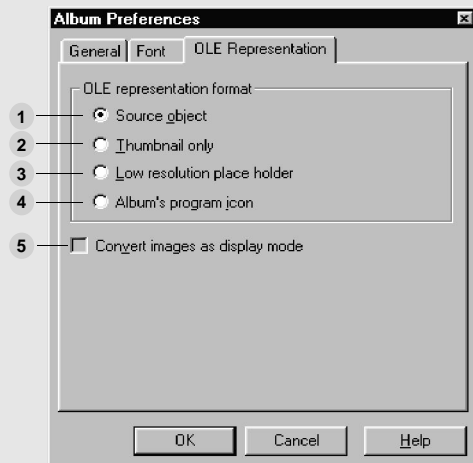
The OLE Representation tab allows you to define how an object looks when placed into another program (the container program).

1 **Source object** displays the entire file in the container document. This allows you to clearly see the contents and dimensions of the object file but does increase the container's file size and slow down its operation.

2 **Thumbnail only** replaces the source file with its thumbnail in the container's document. This provides a visual clue as to the contents of the file without affecting the container's file size or speed of operation too much.

3 **Low resolution place holder** places a low resolution version of the object file into the container document. This is particularly helpful in preparing images for publication when it is not necessary to have a good quality image displayed on screen at all times. When you print the document, however, the low resolution image is printed. To print the original file, you must first update the thumbnail from the container program.

4 **Album's program icon** allows you to use Album's program icon to represent the object file. This adds the least to the container's file size, but you do not have a visual clue as to the contents of the file.

5 **Convert images as display mode** converts the data type of an image (when placed onto the clipboard) to that of your current display mode. This is particularly useful if you are using a low resolution display and wish to save on system resources. (This option is only enabled if you are running in 256-Color display mode.)

Creating an album

Your first step on the way to managing files in your system is to arrange them into albums. A key feature of albums is their support for UDFs or user definable fields. Fields allow you to append all sorts of information about a file, in any category that you determine.

When you run Album for the first time, it opens with existing albums in the workspace containing thumbnails of the PhotoImpact sample files. You can immediately begin to place your own thumbnails into these albums, or create a new album. You can create a new album by:

• Clicking the New button on the Standard toolbar.

• Choosing the New command[CTRL+N] in the File menu.

• Clicking the Album button in any of the other PhotoImpact programs' Save As dialog boxes and choosing "New".

• Selecting thumbnails in an existing album and then choosing the Make Album command in the Edit menu.

Note: *You can have any number of albums open in the workspace, and each album supports over 64,000 files.*

To create a new album:

1. Click the New Album button on the Standard toolbar or choose "New" [CTRL+N] from the File menu. The New dialog box opens displaying a number of template options.

   Templates are provided to help get you started with your album. For example, the Personnel Database template contains fields such as Name, Address, Gender, Salary and Job Title. Album templates are also fully customizable, so you can add, remove or rename fields whenever necessary.

2. In the Album template list box, select a template that you want to base your album on. The Total fields list box changes to show the fields included in that template.

   If you want to create a multipurpose album for simple file cataloging, choose the default General Purpose template.

   Note: *You can edit the fields of an album by clicking on the Customize button. For more information, see "Editing an album's properties", p.196.*

3. Decide on a name for your album and enter it in the Title entry box.

   The title you enter appears in the album's title bar and also becomes the filename for the album itself. (Album files are indicated with an AB3 file extension and are stored in the folder specified in the General tab of the New dialog box, see p.177.)

4. Click OK. The new album appears in the Album workspace and the Insert dialog box opens. You can close this dialog box and leave the album empty, or continue to insert files. (For more on inserting files, see p.198.)

Using the album shelf

Whenever you create an album, it appears in the Album workspace. You can have any number of albums open in the workspace at one time. Of course, a large number of albums would not only clutter your workspace but make it hard to find those albums you want to work with. To help manage albums in the workspace, Album provides the Shelf command in the File menu.

The shelf is a storage area in which you can place the albums you are not currently working on or wish to remove from the workspace. It is a good idea to place excess albums onto the shelf, as this not only makes it easier to work with those albums you often use, but also frees up system resources.

Note: *To access files referenced in an album on the shelf, you must bring the album back to the workspace.*

You can place albums onto the shelf in the following ways:

- Choose the Shelf command in the File menu (the Shelf dialog box opens) and select the album you want to place onto the shelf from the Albums in workspace list box. Clicking "=>" automatically removes the selected album from the workspace, and it then appears in the Albums on shelf list box.

- Right mouse click on an empty part of an album's workspace or its title bar, and choose the Put on Shelf command from the pop-up menu.

To retrieve albums from the shelf:

- Choose the Shelf command in the File menu (the Shelf dialog box opens) and select the album you want to retrieve from the Albums on shelf list box. Clicking "<=" automatically moves the selected album into the workspace, and it then appears in the Albums in workspace list box.

- Open the file using the Open command in the File menu.

Viewing

Thumbnails are one way (or mode) of viewing files in an album. You can also view files in attribute, filename or data entry mode. Choose which one by selecting the appropriate mode from the Standard toolbar or by choosing its corresponding command from the View: Mode submenu or from the Viewing Mode button on the status bar. (An additional Layout command allows you to configure each of these modes except data entry.) You can also view an album in two different modes simultaneously by splitting the window document into an upper and lower pane. To split an album window, simply drag the splitter at the bottom of the scroll bar up.

If you split an album into panes, changing the viewing mode via the Standard toolbar or with a mode command from the View: Mode submenu only changes the thumbnails in the default upper pane. To change the viewing mode of the lower pane, use the Viewing Mode button on the status bar. This has a menu with two sets of Mode commands. The top set is for the upper pane and the lower set for the lower pane. The following provides a brief explanation of what information is displayed when you choose any of the four viewing modes:

• Thumbnail displays the thumbnails of files from left to right and top to bottom. You can choose whether or not to display certain album file attributes or data field entries using the Layout dialog box, accessed by choosing the Layout command from the View: Mode submenu.

• Attribute displays both the thumbnails and information about each file. As with the Thumbnail mode, you can specify what information to display from the Layout dialog box.
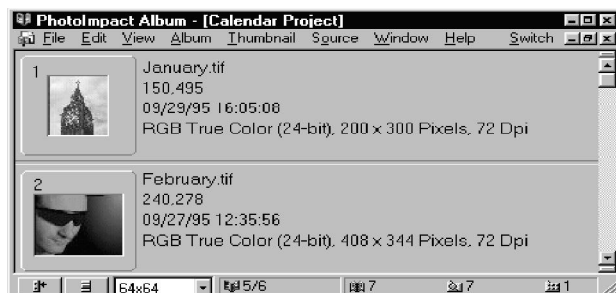

• Filename displays filenames from top to bottom in the albumDepending on selections made in the Layout dialog box, various information is displayed about each file, such as file attributes, subject, description and pathname. (Viewing in filename mode is quicker than thumbnail mode and requires less memory.)
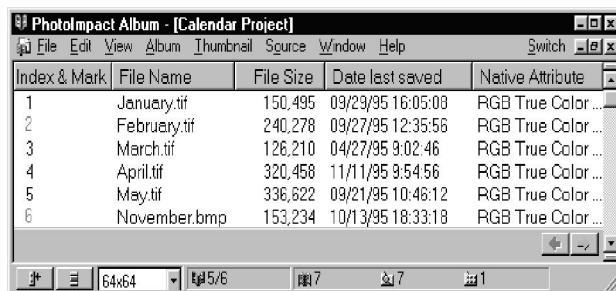

• Data Entry displays the field names and data of each thumbnail with the image shown to the left of the fields. Choose this mode if you want to add or edit information in the fields of an album.
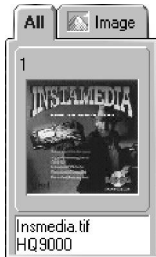
Viewing by tabs

Another way to view thumbnails is by tabs, displayed by choosing the Show Tabs command in the View menu or by dragging down the splitter at the top of each album window's vertical scroll bar. Each tab contains a collection of thumbnails with a common theme. The default classification is by media type. To change this, you can select another type from the View: Tab by submenu. This is also a quick way to find information within an album, particularly when the album has a defined value list. For example, you can view your album based on marital status, age, gender or income. (To create a value list, see p.204.)
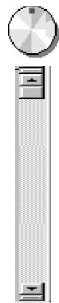
Scrolling an album

Album provides several methods for locating thumbnails in an album. The most obvious is the scroll bar which appears on the right side of the album. Clicking the scroll bar direction buttons moves the view by a single line. Clicking in the scroll bar moves the view by a page, and dragging the slider allows you to move quickly to a new location. The number that appears next to the slider is the index number of the first thumbnail in the row that you are scrolling to. To scroll quickly through an album, click and turn the red dot on the scroll dial at the top of the Tool panel. Turning it clockwise scrolls down, while turning it counterclockwise scrolls up.

If you have a large number of thumbnails in an album you can automatically scroll through them by using the Auto Scroll dialog box, accessed by choosing the Auto Scroll command in the View menu. In the Delay time entry box, type the time (in seconds) that you want Album to wait before each scroll. When ready, click on the OK button. The dialog box closes and automatic scrolling begins. (To pause/continue scrolling, press the Space bar; to stop scrolling press the Esc key.)

If you want to go to a specific thumbnail, choose the Scroll to command in the View menu. This opens the Scroll to dialog box which lists the filenames and index numbers of all the thumbnails in the album. Selecting a filename and clicking OK automatically scrolls to the location of that thumbnail. (Double-clicking on a filename performs the same effect.)

Using scan play

To quickly browse through a large number of wave, MIDI, video, or animation files, choose the Scan Play command in the View menu. The multimedia files of the selected thumbnails are played sequentially in a media window. The Play/Pause button in this window allows you to pause and continue the playing of files. The Skip button allows you to skip the current thumbnail and start playing the next one. You can mark thumbnails as you scan play by choosing a mark from the combo box and then clicking the Marks button.

Using Explorer to view files

If you have yet to place thumbnails of your files in an album, PhotoImpact provides Explorer, a handy utility that allows you to quickly view the contents of any image or graphics file. When you run Explorer, it opens like Windows Explorer, displaying the contents of each drive and folder. The only difference is that any image or graphics file that Explorer comes across is displayed as a small thumbnail. Used in this way, you can quickly browse through the contents of your system before committing to inserting thumbnails or to get an idea of what a file contains. Explorer also allows you to perform basic file maintenance such as copying and moving files, viewing file properties and sorting.

Note: *For more information on how to use Explorer, refer to the program's on-line Help.*
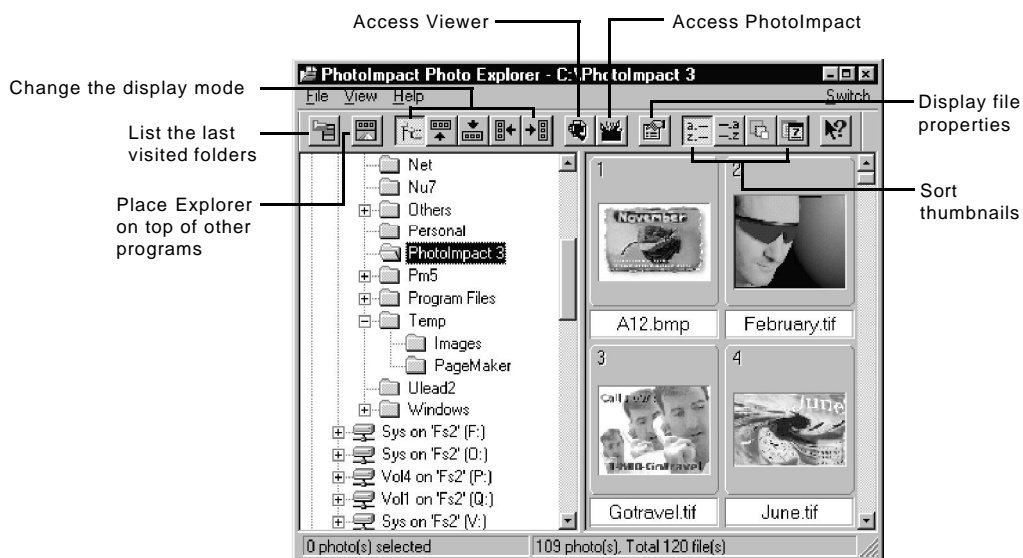
Using CD Browser to view Photo CDs

If you have a Photo CD and wish to view and organize the photos contained on it, use the PhotoImpact CD Browser utility. (You cannot use PhotoImpact CD Browser if you do not have a CD drive installed on your system.) When you open PhotoImpact CD Browser, photos on the Photo CD are displayed as thumbnails in the workspace. Once displayed, you can choose to save them to your hard disk, catalog them in Album, or open them in either PhotoImpact or another editor of your choice.

Although CDs have great storage capacity, they are relatively slow when compared to hard disks. Therefore, whenever you view or scroll through photos on a CD, it may take a little longer for the photos to refresh. To overcome such delays, you can insert thumbnails of the photos into Album. This allows you to view the contents of your CD quickly and easily – without even having to have your CD present in the CD drive. (To access the actual photos themselves, however, you will need to reinsert the Photo CD into your CD drive.)

Note: *For more information on how to use CD Browser, refer to the program's on-line Help.*
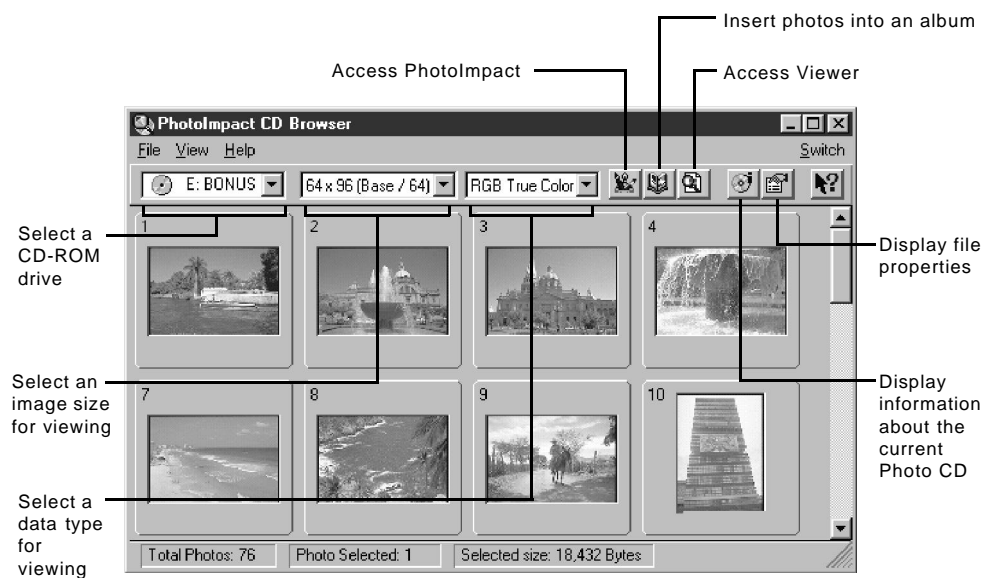
Using the clipboard

One of the easiest ways to move thumbnails is by dragging and dropping them into other albums. Other means involve using the clipboard and the Cut [CTRL+X], Copy [CTRL+C], and Paste [CTRL+V] commands in the Edit menu.

Cutting a thumbnail removes it from the album and places it onto the clipboard (only the thumbnail is cut: the thumbnail's source file is not affected and remains where it is). If you choose to use the Copy command, you have the option of copying the thumbnail, its field data, or the filename. If you choose "Field Data", all field data is copied. To only copy certain field data, first highlight the data you want to copy and right mouse click in the data entry pane to show the pop-up menu. Choosing the Copy command from this menu only copies the selected data to the clipboard.

Pasting field data into an album

The Paste command is available only when the clipboard contains a thumbnail or field data that has been cut or copied from an album. This command is useful when you have thumbnails that share the same or similar field data. By copying the field data for one thumbnail, you can then paste it into others, saving the time needed for retyping the same information several times. (If pasting single field data, use the Paste command in the pop-up menu that appears when you right mouse click on a field in data entry mode.)

Printing thumbnails

Album allows you to print the thumbnails of an album (in either of the four different display modes) to any Windows compatible output device. Before you print make sure that your output device is turned on, connected, and selected in the Print dialog box. You can access this dialog box through the Print command [CTRL+P] in the File menu.

To print all thumbnails, check the All option in the Thumbnail range group box. To print only the currently selected thumbnails, check the Selection option (this is disabled if no thumbnails are selected). To print a range of thumbnails, check the Range from option and enter the first and last thumbnail index numbers of the range into the entry boxes provided. For the best possible representation of thumbnails, check the Create thumbnails from source files option. This produces a clearer thumbnail but does slow down processing time.

Other options are also included in the Page Setup dialog box, accessed by clicking on the Page Setup button. Here you can change the page layout, create a header and/or footer as well as choose to append any relevant file information, such as the album's title, filename and current date. (This dialog box can also be accessed directly by choosing the Page Setup command in the File menu.)

Note: *To preview how your thumbnails will look when printed, choose the Print Preview command in the File menu or click on the Print Preview button in the Standard toolbar.*

Using the Tool panel

Central to Album's ability to manage files is its ability to act as a program manager through the Tool panel. By adding frequently used programs to the Tool panel you can transfer control and, in many cases, files between Album and those programs. You can also place similar programs into program groups, allowing you to instantly change the Tool panel configuration depending on the task at hand. For example, one group can consist of your multimedia programs; another, your word processing programs and so on. Once an icon is added to the Tool panel, simply click on it to open the corresponding program.

Note: *You can also open programs from the Run dialog box, accessed by choosing the Run [CTRL+R] command in the Tool panel menu.*

Adding programs to the Tool panel

When you invoke Album for the first time, the Tool panel appears with a group of icons featuring the PhotoImpact programs. You can choose to add more icons to this group, or create a group specific to the programs on your system.

To add a program icon:

1. Click the menu button in the Tool panel and choose "New" from the menu. The New Group dialog box opens.

2. Click on the Program group option and in the Group name entry box enter the name of the group you want the program to be associated with, for example, Word Processing, and click the New button.

3. Click on the Program icon option and enter the Description (optional), Command line and Working folder (optional) of the program concerned.

   To load the Windows WordPad program, type in WordPad for the Description, the full pathname where the WordPad file is located for the Command Line and the full pathname of your temp folder for the Working Folder.

4. Click the New button. The program icon appears in the Tool panel. (If you want to add more programs to the Tool panel, repeat steps 3 and 4.)

5. Click the Close button to close the dialog box and return to the Album workspace.

Notes:
- *You can also add programs to the Tool panel by dragging execution files (EXE) from Windows Explorer and dropping them onto an empty icon in the Tool panel.*
- *To change program groups, choose the appropriate group name from the list of group commands, available when you click on the Menu button.*
- *If you wish to change any of the options specified in the New Group dialog box, choose the Properties command in the Menu button.*

Removing a program from the Tool panel

At times you may want to remove a program icon: this can be because you no longer need it, have deleted the program from your hard disk, or feel that there are too many icons in the program group. When you remove icons, you can choose to remove individual ones or all those associated with a program group.

To remove a program icon or a program group:

1. Click the Configure button on the Tool panel and choose "Delete". The Delete dialog box opens.

2. To delete the current program group, select the Delete current program group option. (This deletes the group and all program icons associated with that group.) To delete an individual program icon, select the Delete program icon from current group option and click on the icon to be deleted from the Icon combo box.

3. Click OK. The selected program icon or group disappears from the Tool panel, and the dialog box closes.

Repositioning the Tool panel

When you work in Album, you may prefer to have the Tool panel in another position. In other PhotoImpact programs, you would normally drag on the Tool panel to remove it from its docked position. In Album, however, this is not possible. Instead, Album allows you to configure the position of the Tool panel via the Configure command (accessed by clicking the menu button on the Tool panel) or by one of the positioning commands in the Configure pop-up menu, accessed by right mouse clicking on the Tool panel. These allow you to dock the Tool panel to the left or the right of the Album window or to make it floating. (Once floating, the Tool panel can be dragged anywhere on the desktop.)

Performing drag-and-drop operations

Drag-and-drop is a simple, yet powerful technique for transferring information within and between programs. Album provides extensive support for drag-and-drop that enhances its ability to provide complete file and program management.

Drag-and-drop to the Tool panel

One of the more common drag-and-drop operations you will perform is to drag a thumbnail from an album and drop it onto a program icon on the Tool panel. Given that the file is compatible and the program accepts command line opening of files, the file associated with the thumbnail is opened in the destination program. Dragging and dropping to one of the PhotoImpact program icons (except for CD Browser and Explorer) is even more powerful, as you can drag-and-drop multiple thumbnails in one go.

Note: *Pressing the Enter key with a thumbnail selected also opens the file of a thumbnail as long as it has the correct program association.*

Drag-and-drop to another program's workspace

If you have other programs running at the same time, you can drag-and-drop thumbnails directly into the program's workspace rather than to its program icon on the Tool panel. (Depending on the settings in the OLE Representation tab of the Album Preferences dialog box, see p.176, this either embeds, links or opens the file, where compatible.)

If you are working from Windows Explorer, you can:

- drag-and-drop program files (EXE) to an empty icon on the Tool panel of Album to create program icons.
- drag-and-drop album files (AB3) into the Album workspace to open them.
- drag-and-drop files into albums to create thumbnails of the files.

Drag-and-drop thumbnails to albums

Using drag-and-drop, you can easily move thumbnails within or between albums by simply selecting the thumbnails and dragging them to their new destination. (This can be to an open album or to its minimized icon.) Thumbnails moved from one album to another are removed from the first and introduced at the end of the second (or in the position determined by the album's current sort mode). If you hold the Ctrl key down while dragging, the thumbnails are copied. (The original files associated with the thumbnails are not duplicated.)

Note: *Thumbnails dropped into an album change to suit the properties of the thumbnails in that album.*

Drag-and-drop thumbnails between tabs

To move thumbnails from one tab to another, simply select them and drag them to the other tab. Doing this not only moves the thumbnails but also changes the thumbnails' list value. For example, if you have thumbnails in a tab for the Sales department and drag them to the tab for the Marketing department, the value for the Department field changes accordingly, from Sales to Marketing.

Notes:
- *You cannot drag thumbnails from a specific tab to the All tab.*
- *You can also move thumbnails from one tab to another by first selecting the thumbnails you want to move and then choosing the Switch To command from the tab menu button.*

Drag-and-drop thumbnails to other programs

When dragging thumbnails to other programs, the result is determined by the particular program. In general, if you drop a thumbnail onto a minimized program icon, or onto the program window's title bar, the program will attempt to open it. If you drop the thumbnail into the program's workspace, it may be placed into the active document as an object, or it may be opened: exactly which depends on the program and the settings in the OLE Representation tab in the Album Preferences dialog box (see p.176).

Note: *Holding down the Ctrl key as you drop an object into the destination program embeds it, irrespective of the selection made in the OLE Representation tab of the Album Preferences dialog box, (see p.176). Holding down the Ctrl +Shift keys links it. (If you do not hold down any keys, the embedded object is linked to it associated program.)*

Working in compact mode

When dropping thumbnails into another program, it is often easier to have Album in compact mode and have the destination program running at the same time. You can switch to compact mode by choosing the Compact Mode command from the View menu or by clicking the Compact Mode button located on the status bar. In compact mode, the Album program window occupies minimum screen space with no menu bar, allowing you to see both the active album and the destination program window. To switch back to normal mode, select the Switch to Normal Mode command in the same menu. (See the "Using Album with other programs" tutorial, p.69)

Note: *In compact mode you can still access Album's commands by clicking on the Display menu button located on the status bar.*

Performing OLE operations

Album supports linking and embedding features that allow you to easily modify objects which have been incorporated into other program documents. When an object is linked, information gets updated each time the source file is modified. The container file, the file into which you insert the object into, only stores a connection to the source file and a representation of the linked object. When an object is embedded, it becomes part of the container file itself and the information does not change if the source file is modified.

Linking and embedding objects

You can link objects by:

- Holding down the Ctrl and Shift keys while you drag-and-drop a thumb-nail to a container program.
- Using the Copy: Thumbnail command in Album and the Paste Special command (with the Paste Link option selected) in the container program's Edit menu.
- Using the Insert/Object command in the container program.

You can embed objects by:

- Holding down the Ctrl Key while you drag-and-drop a thumbnail to the container program.
- Using the Copy: Thumbnail command in Album and the Paste Special command (with the Paste option selected) in the container program.
- Using the Copy: Thumbnail command in Album and the Paste command in the container program.
- Using the Insert/Object command in the container program.

Editing linked or embedded objects

Right mouse clicking on an object in a container program's document brings up the following commands:

- View/Play Ulead Album Thumbnail Link: Opens the object in PhotoImpact Viewer for image and graphics files and in Windows Media Player for sound, animation, and video files for a quick and more detailed look at an object.
- Reselect Ulead Album Thumbnail: For embedded objects, allows you to select another thumbnail to replace the current thumbnail.

To reselect a thumbnail:

1. Right mouse click on the thumbnail in the container program document that you want to replace with another thumbnail, and choose "Reselect Ulead Album Thumbnail". PhotoImpact Album opens.

2. Select another thumbnail to replace the current thumbnail.

3. In the File: Update submenu, find the container document with the thumbnail you want to replace and select it.

4. Return to the container program document.The thumbnail is now replaced with the newly selected one.

Working with albums

In the previous chapter you learned about albums and how they can help to organize the files on your system. This chapter takes you one step further, explaining how to insert thumbnails of your files into albums as well as how to enter information. Once the thumbnails are inserted, you can manipulate them and perform various file management tasks such as copying, moving, renaming and converting.

Chapter contents at a glance

Maintaining albums

When working with albums, it is easy to forget that they are in fact files, and as such, can be managed and maintained. (The album file is identified with an AB3 extension.) All the commands to maintain album files can be found in the Album menu and include common commands such as Move, Copy, Delete, and Rename. (Other more specific commands are discussed later in this chapter). It is important to remember that when performing operations on album files, you are not affecting the actual source files of the thumbnails. For example, if you choose the Delete command, the album file is removed from disk, but all the source files associated with it remain.

Note: *If you want to remove an album from the workspace without deleting it, either place it onto the shelf (see p.178) or choose the Close command in the File menu.*

Refreshing an album

If you are sharing albums over a network, changes made to the source files may not be reflected in the current thumbnails. To update the album, choose the Refresh command in the Album menu. (This command is disabled if you are not currently sharing an album over a network.) This checks each thumbnail in an album against its source file. If the file has changed, the thumbnail is updated accordingly.

Checking the thumbnails in an album

If you have been using the Windows Explorer or a DOS session to manage your files, you may inadvertently "break" the link between some files and their thumbnails. This can be because the original files have been moved, renamed, or perhaps deleted.

To determine if this link has been broken, choose the Check command in the Album menu. After checking for any missing or modified files, the Check dialog box opens with two tabs: Missing files and Modified files. The Missing files tab indicates those thumbnails whose original source files are now missing. You can then choose to relink or delete the thumbnails of these files. (Delete removes the thumbnail from the album, not the source file.) The Modified files tab indicates those files which have been changed since they were originally inserted into an album. Here you can choose to relink, update or delete the thumbnails.

Notes:

- *Check cannot be performed on read-only albums. To take the read-only attribute off an album, choose the Sharing command in the Album menu and deselect the* Read-only *mode option in the Sharing dialog box, (see p.195).*
- *Checking the* Check *links to source files* option in the Album Preferences dialog box (see p.174) automatically checks thumbnails whenever you select them, perform a sorting operation, or scroll.*

Backing up an album file

When you backup an album, you not only backup the album file but all those files associated with the thumbnails. This serves two purposes: one, it creates a copy of the important files you want to keep a record of, and two, it allows you to delete the backed up files to create more storage space.

If you choose to delete the original files after a backup, you can still keep a record of them by not deleting the album file. This allows you to view the thumbnails of the files in the album. (To access the files you need to restore the original album.)

To backup an album:

1. Select the album you want to backup.

2. Choose "Backup" from the Album menu. The Backup dialog box opens.

3. Use the Backup album to folder list box and the Drives combo box to specify the folder and drive to save the album.

    Important: Any files in the target folder are deleted before backing up begins.

4. If you have selected specific thumbnails to backup, check the Backup selected files only option. Unchecked, and all files are backed up.

5. Check the Compress files option to compress the files as they are backed up.

> **Note:** *If it is important to achieve maximum compression, try converting all image files in the album to the JPEG format before backing up. JPEG, however, is a lossey compression scheme, and as such the quality of the compressed files may not be as good as the original.*

6. Click OK. The dialog box closes and the backup process begins. (The progress of the backup is displayed in the album's status bar.)

Backing up to floppy disks

If you are backing up to floppy disks, you will be asked to insert additional disks as they are filled up. During the backup operation, Album splits files so that the disks are filled as efficiently as possible. For an indication of the total number of disks required to backup an album, refer to the Total size to backup indicator in the Backup dialog box and divide this by the capacity of your disks.

> **Note:** *It is important that you sequentially number and label each disk used during the backup. This way when you come to restore the album, you will know which disks to insert and in which order.*

Restoring an album file

After backing up an album, you must restore the album to be able to use any of the files contained in it.

To restore an album:

1. Choose "Restore" from the Album menu. The Restore dialog box opens.

2. Using the Restore album from folder list box and the Drives combo box, locate the folder and drive containing the album you wish to restore.

3. In the Restore to group box, select the subfolder to restore the backed up files to.

4. Click OK. The dialog box closes, your album and associated files are restored to their specified subfolders, and the album appears in the Album workspace.

When you restore an album, any existing files with the same filename as the files to be restored are replaced. These files may be the files you originally backed up and did not delete or files you have since created with the same filenames.

Note: *You can restore an album file that has the same title as an existing one, as long as the filename is different or you restore it to a different folder. However, once restored, you cannot open it in Album until you have renamed, removed, or deleted the other.*

Sharing albums over a network

Album allows more than one user to use the same album file at the same time. To control sharing, choose the Sharing command in the Album menu, this opens the Sharing dialog box. Here you can set the rights associated to the currently active album as well as how that album can be used by others. For example, in the Active album group box, an album can be set as either read/write or read-only, while in the Sharing mode group box, an album can be set as exclusive, read-only, or read/write. Setting the sharing mode to exclusive gives you exclusive use of the album and other users on the network have no access to it at all. If the sharing mode is read-only, then the album can only be viewed. Read/write mode allows albums to be both viewed and worked on simultaneously by multiple users. However, this mode does slow down performance dramatically, as Album has to read data from disk whenever possible to ensure that the data shown on the screen is consistent to those on file.

Note: *If there are others already using the album, you will not be able to set the options for it.*

Sending an album

The Send command in the File menu is available only if MS Exchange (Windows 95) or MS Mail (Windows NT) has been properly set up. With this command, you can send an album to anyone else connected to your PC through MS Exchange or MS Mail.

When you choose this command, the Send Mail dialog box opens with two tabs, Send files and Message text. In the Send files tab you can choose to send the album file and/or the source files for all or some of the thumbnails in an album. (When you send an album, Album sends only a duplicate of your original album file and/or the source files of the thumbnails.) If you cannot send large file sizes over the network, check the Send files as separate mails option. This sends each file as a separate mail rather than attaching all files to one mail. You can also choose to append the album's field data by checking the Include field data in message text option.

The Message text tab allows you to enter a subject and message for the mail. If you checked the Send files as separate mails option under the Send Files tab, the subject and message will appear in all mails.

Editing an album's properties

When you create an album, you have the opportunity to define certain properties of the album such as its title, description, and fields. To modify these properties, choose the Properties command in the Album menu or click the Customize button in the New dialog box. This opens the Album Properties dialog box with four tabs: General, Field, Advanced and More. (For more about changing the properties of an album, see the "To add and remove fields" tutorial, p.62.)

Note: *If the album is password protected, the Password Protected dialog box opens asking you to enter the password.*

ALBUM PROPERTIES DIALOG BOX: GENERAL TAB
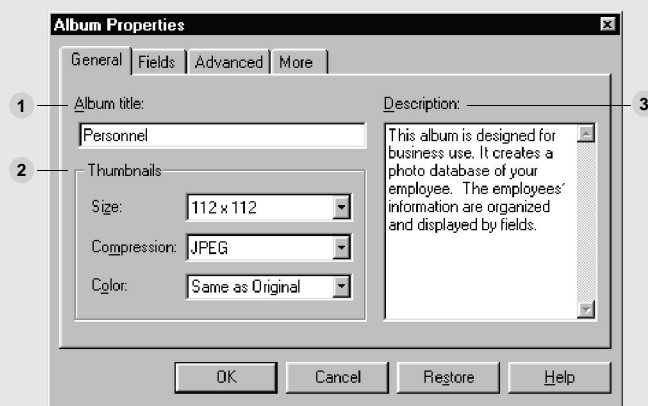
1 **Album title** allows you to enter or edit the name of the album. The name you type here appears in the album's title bar but does not change the filename of the album.

2 **Thumbnails** allows you to specify the size of the thumbnails, the compression scheme to use, as well as the thumbnails' number of colors. (It is important to remember that your choices here only affect the thumbnails, not the actual source files themselves.) To save on disk space, choose a small thumbnail size and JPEG compression. JPEG compression is lossey, so you may notice some degradation in quality. To improve on this, choose lossless. This compression scheme retains all data but does not achieve as high a compression rate as JPEG.

3 **Description** list box provides a brief summary of an album's template and its intended purpose.

ALBUM PROPERTIES DIALOG BOX: FIELDS TAB
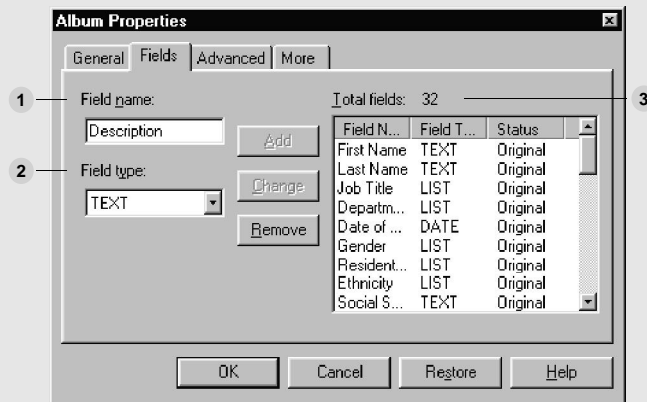
1 **Field name** indicates the name of the currently selected field displayed in the *Total Fields* list box. You can change this to more accurately represent your album database, for example, Work, Transport or Holiday.

2 **Field type** specifies the type associated with the currently selected field. The type of a field is important as it indicates the kind of information you can place in the field. For example, text fields allow you to use text; filename fields are for entering filenames and so on.

3 **Total fields** list box displays all the fields in the current album or template. You can select a particular field by clicking on it with your mouse and then use the Add, Change and Remove buttons to edit the contents of this list box.

Note: *For more information on fields, see the "To add and remove fields" tutorial, p.62.*

ALBUM PROPERTIES DIALOG BOX: ADVANCED TAB
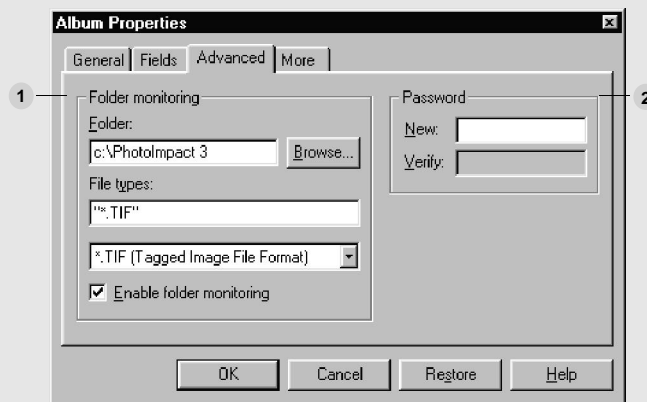
1 **Folder monitoring** allows you to specify which folder you want Album to monitor. To monitor a folder, you must check the *Enable folder monitoring* option. Any changes to the specified folder, such as file deletions or additions, are immediately updated in the album. In this way you do not have to insert thumbnails to an album or remember to insert a thumbnail whenever you create a file in another program such as PhotoImpact. You can select multiple types of files to monitor by clicking on them in the *File types* combo box, (up to 26).

2 **Password** allows you to specify a password of up to 22 characters to prevent your album from being modified by unauthorized users. If users do not have the correct password for a password protected album, they are automatically put in read-only mode.

ALBUM PROPERTIES DIALOG BOX: MORE TAB

The More tab displays information about the album file including name, size and date last modified. (This tab does not appear if you access the Properties dialog box from the Customize button in the New dialog box.)

Inserting thumbnails

Once you have created an album, you can proceed to insert thumbnails of your files. It is important to remember that the original, or source, file never moves: it remains where it is on your disk. How the thumbnail is represented depends on the type of file it is linked or associated to. If its associated file is an image or graphics file, the thumbnail displays the contents of that file. For video and animation files, the first frame of the sequence is displayed. If the file's contents cannot be shown, as for text or sound files, the thumbnail displays the source file's program icon or a default icon.

Whether you want to insert thumbnails into an empty album or one that already contains existing thumbnails, you can:

- Use the Insert command[INS] in the Thumbnail menu, (see over).
- Use the CD Browser utility to insert photos from a Photo CD.
- Drag-and-drop existing thumbnails from one album to another.
- Use the Acquire command in the File menu (only available if you have an installed TWAIN device).
- Click the Album button in any of the PhotoImpact programs Save As dialog boxes.
- Drag-and-drop files directly from Windows Explorer or Photo Explorer into an album.

> **Note:** *The thumbnail of a given file can only be inserted into the same album once. If you insert a thumbnail from the same file more than once, the original thumbnail and information are updated each time.*

To insert thumbnails of files:

1. Choose "Insert" [INS] from the Thumbnail menu. The Insert dialog box opens with two tabs: Files and Folder.

   To insert specific files, choose the Files tab. To insert all the files of a folder, choose the Folder tab. (This inserts thumbnails for all files found within the specified folder and/or subfolders.)

2. Using the Drives combo box and the Folder list box, locate the folder containing the files you want to insert.

3. Select the media type you want from the List files of media combo box.

   Choosing a type here determines which file extensions are available in the List files of type combo box below.

4. Select the file extensions of the files you wish to insert from the List files of type combo box.

   To insert all types of files, choose the All Formats option.

5. Select the files you want to insert from the File name list box . (Not necessary if you are inserting a folder.) You can perform a quick insert of single files by double-clicking on their filenames.

6. Check the Write errors and journals to file option if you wish to see a report about the problems that occurred while inserting the selected files.

   Use this option when inserting a large number of thumbnails and you don't want the insertion process to be halted if any errors occur. (This is particularly useful if inserting files overnight.) If this is left unchecked, any problem that occurs prompts a message box and halts the insertion process.

7. Click Insert. The selected files are inserted into the currently active album. The dialog box remains open to allow you to insert more files into the same or different albums. To close the dialog box click on the Close button.

Inserting files from a TWAIN device

If you have an installed TWAIN device, such as a frame grabber or scanner, you can input images directly to albums, fax machines, printers, or electronic mails using the Acquire button on the Standard toolbar or the Acquire command in the File menu. Clicking the Acquire button or choosing the Acquire command brings up a submenu with the following buttons or commands.

- File & Album acquires an image and inserts the file into the active album.

  When you select this button or command, the Acquire dialog box opens. In this dialog box, you can specify the filename and folder of the file to be created. Once created, a thumbnail of the file is automatically placed in the currently active album. (If acquiring multiple images, ensure that the last character in the filename is a number. Album will automatically add one to this with each successive input.)

  If using an auto feed scanner and scanning large numbers of pages with information on both sides, check the Increase file number by two option. For the first scan, all files are saved in consecutive odd numbers, for example, IMG0001.BMP, IMG0003.BMP... When you scan in the reverse sides of the pages, the files are saved as even numbers, for example, IMG0002.BMP, IMG0004.BMP... This way you can be sure that the file order is identical to your page order.

- Fax in B&W acquires an image and sends it as a black and white fax.
- Fax in Color acquires an image and sends it as a colored fax.
- Printer sends an acquired image to your PC's default printer.

  Selecting the Printer button or command opens the Print dialog box from which you can specify the number of copies to send to the printer. To scale the file to be as large as possible on the page while maintaining its aspect ratio, check the Scale to fit the page option. With this option unselected, the file prints at the size determined by its resolution. To print the acquired image centered on the page, check both the Center image horizontally and Center image vertically options.

- e-Mail acquires an image and sends it as e-mail.

  Note: *Before you use the Acquire command, you may need to select a TWAIN device from in the Select Source dialog box, opened by choosing the Select Source command in the File menu.*

Entering field data

After you have finished inserting thumbnails into a new album or have opened an existing album, you are ready to start entering information about each thumbnail. The information that you enter can then be used to help locate and sort thumbnails later on. The following section explains what kind of information can be accepted by each of the field types.

Note: *Fields are defined at the time an album was created. To edit these fields, see "Editing an album's properties", p.196.*

To enter data, you must be in data entry mode, accessed by clicking the Data Entry Mode button on the Standard toolbar. When you do so, the first thumbnail in the album, (or the selected thumbnail), appears with all of the fields associated with that album to the right of it. Place your pointer in one of the field entry boxes to begin entering data. The scroll buttons along the top allow you to step forward or backwards through the thumbnails in the album or jump to the start or end.

Number

Number fields accept any numeric data from 0 to 4,294,967,294. Negative numbers are not accepted in this field, and if decimals are used, the numbers after the decimals are truncated. For example, 16.75 becomes 16.

Age	43

Date

When entering data into date fields, you must use the same short date format as defined in the Date tab of the Regional Settings dialog box accessed from the Windows Control Panel. For example, if your date format is YY/MM/DD, then your date should be 65/10/20. (If the date you enter does not conform to that format, a message appears requesting you to enter the date again using the correct format or change your Regional Settings.)

Date of Birth	01/16/52

Text

Text fields can hold up to 255 characters and are very flexible as they allow you to enter a variety of information, all of which you can later search and sort on.

First Name	Kalvin

Filename

Filename fields can accept a filename of up to 259 characters. When you type in a filename, you need not include a file extension.

Filename	Kalvin Simpson.bmp

Keyword

Keyword fields allow you to assign keywords or phrases to thumbnails, making it easy to find files that share common themes. For example, the keyword "Sports" can be assigned to all those files in an album that are related to sports. A keyword can consist of one word, such as "sun" or multiple words such as "sun in Hawaii".

To edit a keyword list:

1. Click on a Keyword field from theTotal fields list in the Field tab of the New (or Album Properties) dialog box, (see p.177). The Edit Keyword button appears.

2. Click the Edit Keyword button (the Edit Keyword dialog box opens), and in the New keyword entry box, type in a keyword.

   If there are existing keywords, the Change button is enabled. Clicking this button changes the highlighted keyword in the list to the keyword appearing in the New keyword entry box.

3. Click the Add button or press the Enter key. This adds the keyword to the keywords list box.

   To add more keywords repeat this procedure. If you have mistakenly added the wrong keyword to the list, select that keyword and click the Remove button. To remove all keywords in the list, click the Remove All button.

4. Click OK. The dialog box closes and the keywords are now included in the album. (They are not yet, however, assigned to any thumbnails.)

   Note: *The total number of keywords you can have in an album is 8,000. You can assign up to 32 keywords to each keyword field, but each keyword cannot exceed 255 characters.*

Assigning keywords

To assign keywords to a thumbnail, double-click on the appropriate Keyword field in data entry mode (the Keyword dialog box opens) and select one of the keywords to assign to the thumbnail from the Current keywords available list box. Clicking Add places that keyword into the Current keywords in field list box. Repeat until all keywords for this field are added and then click OK. (For more information, see the "Creating a database" tutorial p.61)

| Personality | friendly, outgoing |

Saving and loading keywords

When you create a keyword list, you can save it for use in another album. To do this, click the Save button in the Edit Keyword dialog box. This opens the Save Keywords dialog box. Select the path you want to save the keyword file to and type in a filename, choosing either a DOS or Windows TXT file format. Use Windows if you are working with Windows, DOS if you want to transport your file to a DOS application program for editing.

To add keywords from an existing keyword file, click on the Load button in the Edit Keyword dialog box. The Load Keywords dialog box opens. Choose the appropriate keyword file and click Open. You will be asked if you want to retain the current keywords. Selecting YES adds the new keywords to those currently in the keyword list box; NO replaces the current keywords with those from the file.

If you are preparing a large number of keywords, you may find it easier to first compile the keywords in a word processing program and then load them into an album. Doing so, you can easily edit and, where possible, spell check your work before assigning keywords to thumbnails. (If using a word processing program, each keyword must appear on its own line, that is, separated by a paragraph break.)

List

The data in list fields is taken from a predefined list of values, called a value list. For example, if you are setting up an employee database, you may have a list field for marital status. Your value list would provide the values: Single and Married.

To create a value list:

1. Click on a list field from the Total fields list in the Field tab of the New (or Album Properties) dialog box (see p.177). The Edit List button appears.

2. Click the Edit List button (the Edit List dialog box opens) and in the New value entry box, type in a word you want the list to contain – for example, Single.

   If there are existing values, the Change button is enabled. Clicking this button changes the highlighted value in the list to the word appearing in the New value entry box.

3. Click the Add button or press the Enter key. This adds the word to the values list box.

   To add more values, repeat this procedure. If you have mistakenly added a wrong value to the list, select that value and click the Remove button. To remove all values in the list, click the Remove All button.

4. Click OK. The dialog box closes and the values are now available to the album. (They are not yet, however, assigned to any thumbnails.)

Note: *You can have as many as 8,000 values in a single value list.*

Assigning value lists

To assign values from a value list, double-click on the appropriate list field in data entry mode (the List dialog box opens) and select one of the values to assign to the thumbnail from the Current values available list box. (You can only assign one value at any time.) The value appears in the New value entry box. (You can also type in a new value here directly if one does not exist in the Current values available list box.) Click OK. The value is now added to the field.

Department	Marketing

Memo

This a special type of text data. It can contain up to 65,635 characters in a field and is useful for appending miscellaneous information to a thumbnail.

Comment	Kalvin is on vacation from 12/1/95-1/17/95

Importing field data

If you have database file information from another album or another database program, such as dBASE IV, you can include it in your current album with the From File command in the Thumbnail: Import submenu. This opens the Import dialog box with two tabs: File and Fields. Use the File tab to locate the database file you want to import and then click on the Fields tab. This contains two list boxes: Fields in input file and Fields in album. The Fields in input file list box displays the fields found in the input file and the Fields in album list box displays the fields in the currently active album.

To import a file, simply drag-and-drop the appropriate fields in the Fields in album list box. This replaces the field data in the album with that of the input file.

Note: *If there are more records in the input file than thumbnails in the album, the extra records are discarded. If there are fewer records, the fields are left empty in the remaining thumbnails.*

To compare the values of the input list fields to that of the album, check the Match field values with album's fields option. The Treat first record in file as field names option lets Album know that the first row of information to be imported contains field names, not field data. When this option is selected, the field names appear in the Fields in input file list box, allowing you to quickly match the two lists of fields without making any mistakes.
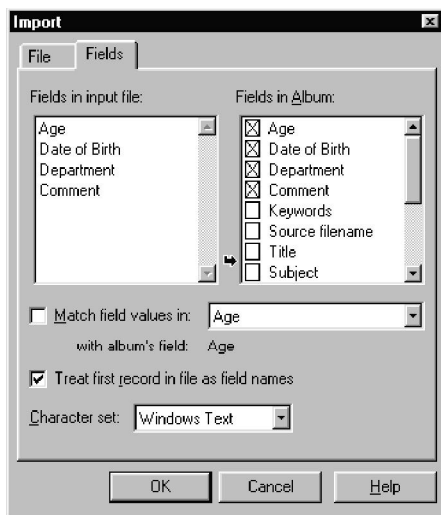
Exporting field data to an external file

To save selected field data to an external file, choose the Export command in the Thumbnail menu. The Export dialog box opens. In the File tab, you can specify the file name and format of the exported file. You can choose to export a file as either Formatted Text Files, Tab Delimited Text Files (field data separated by tabs), Comma Delimited Text Files (field data separated by commas), and dBase IV Files.

Listed in the Export fields list box in the Fields tab are the fields in the present album along with the width (the number of characters) reserved for each field. From here, you can specify which ones to export to an external file by checking/unchecking them appropriately. You can also drag-and-drop these selections to change the order that they appear in the file.

From the Character set combo box, you can choose to export the file as Windows or DOS text. Export the data as DOS text if you plan to import the data to a DOS program later on. TheStore field names as first record in file option saves the field names of the exported fields in the first row of the file to facilitate in the importing process.

Notes:
- *If there are thumbnails selected in the current album, only the field data from those selected is exported. To export data of all thumbnails, make sure that all or none are selected.*
- *You can have anywhere from 1 to 999 characters reserved for each field.*

Managing thumbnails

Albums are essentially databases that provide an easy-to-use and efficient way of cataloging and managing files. As with any database, its real worth is how it allows you to organize, label and search for information related to these files. This chapter explains how you can do just that, by using visual marks and a variety of advanced search and sort techniques.

Maintaining thumbnails

Album allows you to maintain thumbnails so that they always accurately represent the files that they are associated to. One of the most obvious methods is to set an album to monitor a particular folder (see p.198). Any changes made to either a file or the contents of that folder are then immediately reflected in the album and its thumbnails. If you do not monitor a folder, you can still maintain thumbnails by either reinserting their associated files or by choosing one of the update commands from the Thumbnail menu.

Updating a thumbnail

There may be times when you need to check a thumbnail to its source file, for example, the source file may have been removed or its contents changed. To do this, choose the From Source File command in the Thumbnail: Update submenu. This performs a check between each selected thumbnail and its associated file. (Holding the Ctrl+Shift keys down as you choose this command creates a thumbnail at best quality: holding Ctrl only produces a good quality thumbnail.)

Note: *If you have the* Check links to source files *option checked in the Album Preferences dialog box (see p.174), thumbnails are updated whenever the view in the album changes. To update a large number of thumbnails, it is quicker to first check this option and then scroll through the album.*

Changing a thumbnail's image

When you first insert the thumbnail of a file, it displays the contents of that file, when possible. At times you may want to change the thumbnail, especially for those thumbnails whose contents cannot be displayed, for example, sound and text files.

When you change a thumbnail, you replace it with image or graphics data from the clipboard using the From Clipboard command in the Thumbnail: Update submenu. By doing this, you can use your favorite images to represent thumbnails or customize thumbnails to represent particular files.
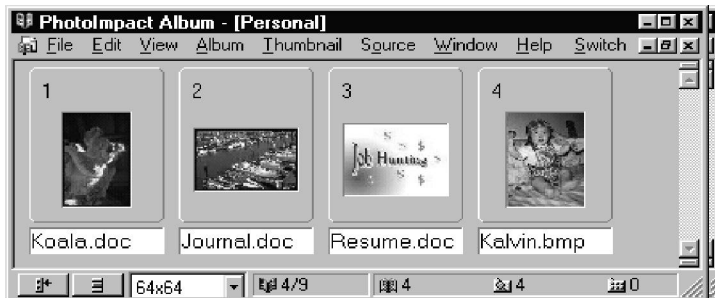
Relinking thumbnails to their associated files

When the thumbnail of a file is inserted into an album, it maintains a link to the location of this file. This is why you can manage files by manipulating their thumbnails. If files have been moved using DOS or Windows Explorer or if you have remapped your disk drives, Album may lose this link. Thumbnails that have lost their link appear with their index numbers grayed-out if the Check links to source files option is checked in the Album Preferences dialog box. (The file commands in the Source menu are also disabled for such thumbnails.) If you want to reestablish the link, you can reinsert the file for the thumbnail or use the Relink command.

To relink thumbnails:

1. Select the thumbnails that need relinking.

2. Choose "Relink" from the Thumbnail menu. The Relink dialog box opens.

3. Select the drive and folder that contains the files you want to relink the thumbnails to.

4. Click OK. The dialog box closes and the relinking process begins. The thumbnails are compared against the files present at the new location; their paths are updated, and if necessary, so are their thumbnails and related information.

Preparing CD-ROMs for distribution

The Relink dialog box also includes the option Album drive, which allows you to link source files to the drive where the album file resides. For example, if your source file is located in C:\PHOTOS, and the album file is on your D: drive, then the source location will be changed to D:\PHOTOS. The advantage of this is that you can move all your files, both album and associated source files, to another drive or medium, such as CD-ROM, and still have album accurately locate them. If you do not do this, album will assume that the files are still at their original location, and thus be unable to find them.

To distribute albums on a CD-ROM

1. Make sure all the files you want to distribute are in their appropriate folders, and then choose "Relink" from the Thumbnail menu. The Relink dialog box opens.

2. Select the Album drive option and click OK. If you have any files not currently on the same drive as the album file, an error message appears asking if you still want to link this file. Click YES if you are going to distribute the file, NO if you are not.

3. Copy all your files to distribute, both source and album, to the CD-ROM. Be sure to keep the same folder structure as you copy the files. If you use a different structure, album will be unable to find the source files.

♪ **Annotating a thumbnail**

In Album, you can annotate sound, MIDI, video, or animation files to any thumbnail. This gives you an added dimension to identifying thumbnails, and is particularly useful if you have audio editing software that allows you to record audio files (WAV). To annotate a thumbnail, first select the thumbnail and then choose the Add command in the Thumbnail: Annotation submenu. The Add Annotation dialog box opens. Locate the multimedia file you want to annotate and click OK. The dialog box closes and a red music note appears on the thumbnail slide indicating that it has an annotation. To play the annotation, double click on the music note.

Note: *Checking the* Play annotation after viewing thumbnail *option in the Album Preferences dialog box (see p.174), automatically plays the annotation file whenever you view a thumbnail by double-clicking on it or by choosing the View command in the Thumbnail menu.*

Reordering thumbnail index numbers

Album allows you to freely change the position of thumbnails by either dragging-and-dropping them to new positions or to sort them in a particular order through the Sort dialog box, accessed by choosing the Sort command in the Thumbnail menu. Whenever you rearrange the order of thumbnails, you may find that their index numbers no longer accurately represent their position in the album. To reorder these numbers, click the Save button on the Standard toolbar or choose the Save Sequence command in the Thumbnail menu. This automatically changes all index numbers so that they run consecutively from the first to the last thumbnail in an album.

Note: *Save Sequence also compacts albums and should be used before distributing albums to other users.*

Maintaining source files

Once files are represented in an album, you can manage them just as you would with Windows Explorer. This includes such commands as Open, Move, Copy, Delete, Create and Remove Folder. All the commands to manage files are contained in the Source menu. When using these commands, you must remember that any action performed is done to the actual file. For example, if you choose the Delete command, the file is removed from disk and cannot be retrieved unless you have a utility with an undelete function. (To delete only the thumbnail and not its source file, select it and choose the Clear command in the Edit menu, or press the Delete key.)

> **Note:** *You can use wildcards when renaming multiple files. For example, the string "NEW*" will replace the first three characters of all selected files with NEW.*

Opening and viewing files

Album allows you to directly open a file in its associated program by choosing the Open command [ENTER] in the Source menu. If you only want to see the file in greater detail and not do any extensive editing, a quicker method is to choose the View command in the Source menu or double-click on the thumbnail itself. This opens any image or graphics file in the PhotoImpact Viewer utility, and any multimedia files in Windows Media Player. Once an image or graphic is open in a Viewer window, you can copy any area of it or send the file to another program for further editing.

> **Note:** *For more information on how to use the PhotoImpact Viewer, refer to the program's on-line Help.*

Select files to open

Access PhotoImpact

Access another editing program of your choice

Display file properties

Zoom in or out on the image

Display Global Viewer

Drag-and-drop the image into another program
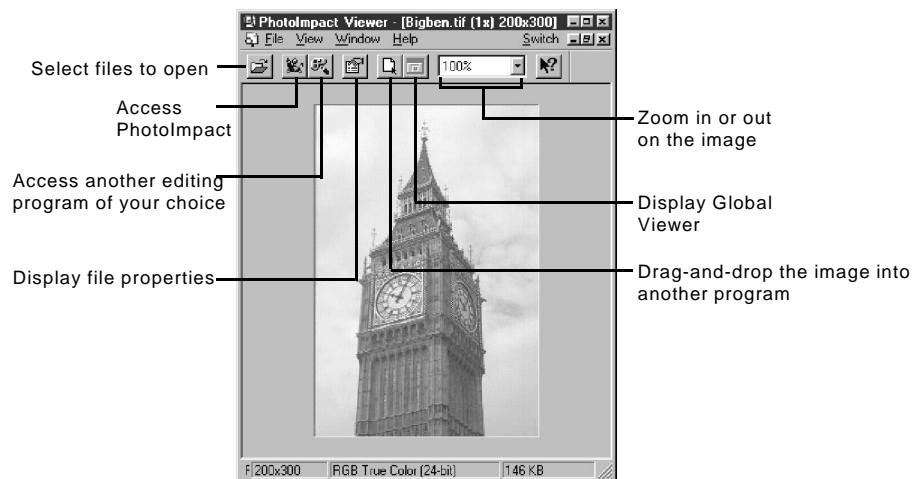
Converting a file's format and/or data type

Choosing the Convert command in the Source menu allows you to convert image and graphics files to other file formats and data types. This command can be applied to individual or multiple files, sharing the same or different file formats and data types.

Being able to change the file format is particularly useful when you want to open a file in a program that doesn't support that file's current format, for example, changing TIF files to a BMP format so they can be opened in Windows Paintbrush. Changing the data type is also useful when you are preparing a large number of images for publication and wish to, for example, convert your images from True Color to Grayscale.

Printing a file

If you want to print the file of a thumbnail, choose the Print command in the Source menu. The Print dialog box opens. In the Copies entry box, enter the number of copies to be printed. Checking the Scale to fit the page option scales the file to be as large as possible on the page while maintaining its aspect ratio. With this option unselected, the file prints at the size determined by its resolution. The Center image horizontally and Center image vertically options allow you to choose where images print on the page. If both options are selected, images print centered on the page.

Note: *For some application-linked files, their associated program will be called up to print the file. Once printed, the program will close. For example, to print a Write document, Write is opened with the selected document in the workspace and its Print dialog box also appears.*

Changing the program association of a file

The Associate command in the Source menu allows you to change the association of a file with a particular program. You will want to change the association of a file when, for example, you double-click on a filename in Windows Explorer and the file opens in a different program than expected. (Such situations often happen when you use different programs to work on the same file.)

Choosing the Associate command opens the Associate dialog box. In this dialog box, you can specify the file extension whose program association you want to change. If you do not select any thumbnails, this command affects all thumbnail files sharing the same extension.

Displaying a file's properties

Clicking the Properties button on the Standard toolbar or choosing the Properties command [ALT+ENTER] in the Source menu allows you to change the attributes of the file whose thumbnail is selected. These attributes can be: Read-only, Archived, Hidden, or System. A read-only file allows you to open the file but prevents any changes from being saved to it. This is useful when sharing files over a network and you do not want anyone changing the content of your files. The Archived attribute identifies those files which have been updated since their last save. Selecting the Hidden attribute hides files from view, and System marks files as MS-DOS system files, also hiding them from view.

Performing a slide show presentation

Album provides a slide show feature which allows you to showcase your image, graphics and sound files. This includes using impressive transition effects and providing manual or automatic playing. To run the slide show, click the Slide Show button on the Standard toolbar or choose the Slide Show command in the View menu.

Note: *Once you have played a slide show, you may want to retain the same slide show settings for future use. To do this, click the Save button to save your settings to file. Click the Load button to bring your settings back for another slide show .*

SLIDE SHOW DIALOG BOX: GENERAL TAB
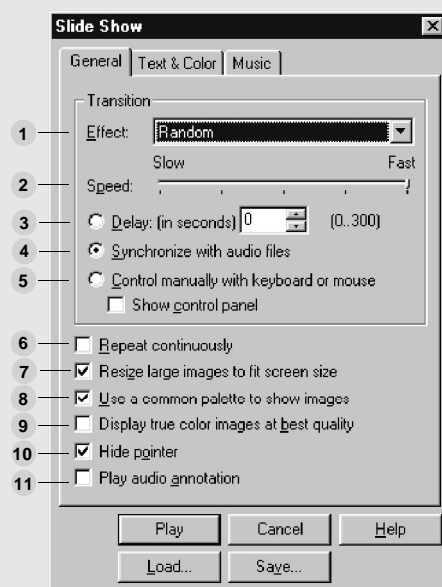
1 **Effect** contains a number of transitions that control the way one slide is replaced by the next.

2 **Speed** controls the speed of the transition effect between slides.

3 **Delay** specifies how much time elaspes before the next slide starts to display.

4 **Synchronize with audio files** displays a new slide once an audio file has finished playing.

5 **Control manually with keyboard or mouse** allows you to manually change slides by clicking your mouse or pressing a key. Check the Control panel option to display a navigation panel at the bottom of the presentation screen.

6 **Repeat continuously** runs the slide show nonstop. Check this if you wish to use your slide show as a screen saver or to have it run continuously in the background.

7 **Resize large images to fit screen** ensures that images too large for your current display are resized accordingly so that they can be seen in their entirety.

8 **Use a common palette to show images** is only enabled in 256-Color display mode and uses the system palette to show images.

9 **Display true color images at best quality** is only enabled in 256-Color display mode and ensures the best possible display of True Color images.

10 **Hide pointer** hides the pointer during a slide show. To stop the slide show, press the Esc key.

11 **Play audio annotation** plays any audio files annotated to files appearing in the slide show. This is a good way to present a file and then have a narration following to explain what the file is or represents.

SLIDE SHOW DIALOG BOX: TEXT & COLOR TAB

The Text & Color tab allows you to append information to the files in a slide show as well as control the background color of the presentation. You can also specify where on the screen you want the information to appear, such as lower right corner or above each slide.

SLIDE SHOW DIALOG BOX: MUSIC TAB

The Music tab allows you to add background music to a presentation using MIDI and/or sound files (WAV). If you are playing only one file, make sure that you check the *Repeat continuously* option so that the file doesn't stop while the presentation continues.

Note: *If you have the* Synchronize with audio files *option checked, the time specified in the* Delay *option is used as a pause between each audio file.*

Locating thumbnails

Album brings with it a variety of commands and features giving you the most efficient means of locating thumbnails and their associated files. For example, you can use the Sort command in the Thumbnail menu to organize thumbnails according to various file properties such as filenames and file sizes. Another method is to use the Search toolbar for quick, on-the-spot searches, while for more complex and involved searches, you can use the Search dialog box.

Before you begin performing searches, however, you need to have a clear idea of some of the logic behind them. The following section explains this logic and will help you better understand the power and possibilities of performing searches with Album.

Search criteria and queries

Whenever you perform a search, you must first specify what it is you want to search on. This is called the query. A query can consist of a single or multiple number of items, or criteria. For example, if you have chosen the query, filenames, the criteria would be the filename you are looking for.

Note: *If the criteria consists of more than one word, you must encase it with a delimiter, for example, "New York".*

Logical operators

One of the more powerful features of Album is its use of logical (Boolean) operators: Not, And, Or and ( ). These allow you to search through a vast number of files quickly, looking only for specific file features. Below is a brief description of how each of the operators work.

Not, is used to define the opposite of the indicated criteria. This allows you to isolate thumbnails whose attributes make it a minority in an album. For example, in an album consisting largely of TIF files, performing a file format search, "Not *.TIF", results in all thumbnails, except those linked to TIF files, being displayed.

And, allows you to specify more than one criteria to search on. (Matching thumbnails must meet all of these criteria.) For example, to find thumbnails about your holiday in Spain, you could perform a search on – "holidays And Spain". All thumbnails with the words holiday and Spain will be displayed.

Or, allows you to match thumbnails that meet one or more of a specified criteria. For example, performing a filename search on, "F*.* Or G*.*", will display all those thumbnails whose files begin with an F or G.

( ), the parenthesis are used to group criteria together. This is particularly important if you have several criteria, some of which must be paired together. For example, if you are searching on the values, A, B and C, then you could define the search as, "A And (B Or C)", or "(A And B) Or C". In the first example, the thumbnails must have A and either B or C. In the second example, the thumbnails must have either A and B together, or C only.

Note: *To use an operator, double-click (or select) the desired operator in any of the dialog boxes that support this feature. The operator then appears in the* Query *entry box. To add additional operators, simply repeat this procedure.*

Search operators

Operators are characters or phrases that help define the range of a search. Most of the search operators are quite self-explanatory – for example, = (equals to), > (greater than), < (less than) and <> (not equal to). However, there are two that require some clarification: "Contains" and "Empty". Both are operators that appear whenever you have a query consisting of text, memo, list, mark, and keyword fields.

The Contains search operator instructs Album to find all thumbnails that contain whatever is entered in theQuery entry box in the searched field. For keyword and list fields, theStart with option appears to the right of the Query entry box. Selecting this option tells Album to search for thumbnails that have keywords or values that begin with the entered text.

The Empty search operator, on the other hand, instructs Album to find all thumbnails with nothing entered into the searched field. This is particularly useful when you want to locate thumbnails that have empty fields you would like to complete.

About delimiters

Whenever you enter a criteria description that exceeds one word, you must encase it with a delimiter. For example, the word Holiday does not need a delimiter, however, "Holiday in Hawaii" does. Delimiters work by instructing Album to treat whatever it finds within the delimiter as a single string. In the Album Preferences dialog box (see p.174) and Search dialog box, you can specify the type of delimiter you want to use – for example, double quotes (" "). This allows you to choose a key that is more familiar or easier to access.

Note: *The delimiter you use in a criteria description must be the same as that specified in the Album Preferences dialog box (see p.174).*

Match case and match whole word

When performing a search on text, many of the search options allow you to "Match Case" or "Whole Word". Matching case tells Album to find those thumbnails matching the upper or lower case of the query. For example, to match the case of "New York", only New York would be selected, any variations, such as "new York" or "NEW YORK" would be ignored.

Matching the whole word searches on occurrences of a defined word. For example, to match the word "man", only "man" would be selected, not "woman". If this option is left unchecked, any occurrence of the letters (not the word), m-a-n would be selected, such as "man", "manage" and "human".

Note: *Selecting* Match whole word *performs a search much quicker than leaving this option unselected as Album only has to search for words, not sequences of characters.*

Start with

Check the Start with option if you want thumbnails with words that begin with the entered text in the specified keyword or list field. For example, if you entered "ch" in the Query entry box, then all thumbnails with words that begin with "ch" in the specified keyword or list field will be displayed.

Performing a search

Performing a search can be as simple, or as complex, as you want to make it. In most cases you will be performing simple, single criteria searches which are best done from the Search toolbar. If you want more control over the search process, choose the Search command in the Thumbnail menu.

Some notes before you start performing a search:

- Since it is not possible to itemize all the possible search variations here, the best thing to do is to read the previous section on search basics and then experiment with your own variations.
- Some queries and criteria can be very complex and involved. Try first working out your search on paper before entering it
- Whenever you perform a search, the search is done only on the thumbnails in the current view of the active album. If you want to perform a search on all thumbnails in an album, make sure you click on the View All button or select the All command in the View menu. The next time Album performs a search, all thumbnails in the album will be included, irrespective of the results of the previous search or current view.

To perform a search using the Search dialog box:

1. Click the Search button on the Standard toolbar or choose "Search" [CTRL+F] from the Thumbnail menu. The Search dialog box opens.

2. Select the query you wish to search on from the Search Type combo box in the Search criteria group box. Depending on the query chosen, define your criteria.

   To further edit a criteria, click the Edit Criteria button. The Edit Search Criteria dialog box opens. Here you can specify to match the whole word or its case, as well as use a logical operator and delimiter, (if necessary).

3. Click the Add button. The query is now placed in the Search Criteria window beneath.

   To include additional criteria, repeat step 2. To change a query, select the query in the Search criteria window and redefine the criteria and query in the Search criteria group box. This time, when you are ready to add the query, click the Change button. This replaces the query selected in the Search criteria window with the new one. To remove a query, highlight it and then click the Remove button.

4. To search on all albums in the workspace, check the Search all open albums except minimized option in the Search option group box. Check the Search entire folder option to search for all thumbnails in the current folder.
   To combine the thumbnails of successive searches, check the Add search result to current view option. (You can also select and deselect these options from the Thumbnail menu.)

   Notice that when the Search all open albums except minimized option is checked, the Search type combo box only lists the user-defined fields that are common to all albums. Fields are considered as common if they have the same field name, field type, and keyword/list definitions.

5. In the Action to take group box, check the View matched thumbnails option to display the matching thumbnails or the Select matched thumbnails option to select the matching thumbnails.

6. Click the Save Query button to save the query for future use or editing. This brings up the Save Query dialog box which prompts you for the query name. Type in a name in the Query entry box and press Enter. To remove an existing query, highlight it and click the Remove button. To edit a query, select it from the Query entry box, the contents of the query are displayed in the list box.

7. Click OK. The search is performed and, if you defined a query, the query is saved and any thumbnails matching the search criteria are displayed in the album.

> **Note** *Depending on the media type and file format of the thumbnail files, some search options may be disabled.*

Using the Search toolbar

Many of the search criteria found in the Search dialog box can also be accessed directly from the Search toolbar. You will find the Search toolbar a much more convenient and quicker way of performing single criteria searches. To use the Search toolbar, select a query to search on from the Search type combo box, the first on the left. The toolbar changes and, depending on the query itself, displays a Search operator combo box as well as a Criteria entry box. Select an operator and then enter in the description of the criteria you want to search on. Clicking the Search button then performs the search, and any thumbnails matching the search criteria are displayed in the album.

> **Note:** *To quickly perform a search using an existing query, choose* Query *from the Search Type combo box. In the combo box that appears, select the query and then click on the search button.*

Defining marks

Marks serve as visual tags for thumbnails in albums. In a sense they are very similar to keywords differing only in implementation. Whereas keywords work "behind the scenes", marks are clearly displayed on the thumbnail slide. You will find marks particularly useful when you want to quickly navigate around an album and pinpoint certain thumbnails for future operations.

Assigning marks

To assign marks, you need to use the Mark panel. This is a floating panel that allows you to assign up to 26 marks to thumbnails. Each mark is represented by a letter of the alphabet, and once assigned, the letter is displayed next to the index number on the thumbnail slide.

> **Note:** *If the Mark panel is not open, choose the Toolbars & Panels command in the View menu to open the Toolbars & Panels dialog box. Check the* Mark panel *option, and the Mark panel opens. (The same command can also be accessed by right mouse clicking on a toolbar.)*

To assign a mark:

1. Double-click on any letter in the Mark panel, the Edit Marks dialog box opens.

2. Select the letter you want to assign from the Marks list box. In the Mark name entry box, type in a description (up to 31 characters).

   You can edit and assign descriptions to any mark by simply clicking on it and then entering a description in the Mark name entry box. If you wish to use marks already present in another album, select the album from the Adopt marks from album combo box. The marks, if any, appear immediately in the Marks list box.

3. Click OK. The dialog box closes, returning you to the Album window. The mark description now appears in the Mark panel.

4. Click on the mark you want to assign in the Mark panel. The View Marks and Assign Marks buttons are enabled.

   To assign multiple marks, hold down the Ctrl key and click on each mark to select it. (Clicking again deselects the mark.) To select a range of marks, click on the first mark in the range, and, holding down the Shift key, click on the last. All marks in the range are selected. (Dragging your mouse over the marks performs the same function.)

5. Click the Assign Marks button, the button changes to Stop, and click on the thumbnail you wish to mark. The letter of the mark is immediately shown on the top left corner of the thumbnail slide, next to the index number. (Clicking again removes the mark.) Repeat this step if you want to assign the same mark to another thumbnail.

6. When you have finished assigning the current mark, click the Stop button on the Mark panel, the button changes back to Assign Mark.

   To assign another mark repeat steps 6 and 7. (You can assign more than one mark to the same thumbnail.)

> **Note:** *To remove the Mark panel, double-click on the title bar or uncheck the* Mark Panel *option in the Toolbars & Panels dialog box.*

Viewing marks

The advantage of using marks is that they are quick and easy to apply and you can see which thumbnails have been marked accordingly. When you want to view marked thumbnails the procedure is just as convenient.

Note: *If the Mark panel is not opened, choose the Toolbars & Panels command* in the View menu to open the Toolbars & Panels dialog box. Check the   Mark panel *option, and the Mark panel opens. (The same command can also be accessed by right mouse clicking on a toolbar.)*

To view marked thumbnails:

1. Select the letter or letters in the Mark panel you wish to view.

   To select individual marks, hold down the Ctrl key and click on the mark to select it. (Clicking again deselects the mark.) To select a range of marks, click on the first mark in the range, and holding down the Shift key, click on the last. All marks in the range are selected. (Dragging your mouse over the marks performs the same function.)

2. Click the View Marks button, a menu opens with the commands And, Or, and View All. Choosing And immediately displays those thumbnails that contain all the selected marks. For example, if you have selected the marks A, B and C, only those thumbnails with the marks A, B and C are displayed. Choosing the Or command displays those thumbnails with one or more of the selected marks.

Managing marks

When it comes to managing marks in an album, you can choose from a number of commands accessed by clicking the Mark panel Menu button on the Mark panel. These commands are particularly helpful when you want to perform batch operations over a large number of thumbnails.

Performing a batch mark assignment

To assign the same mark to many thumbnails, you can mark each one individually, as demonstrated in the previous procedure, or first select them and then use the Assign Selected command in the Mark panel Menu. This automatically affixes the currently selected mark or marks to the selected thumbnails.

Removing marks

To remove specific marks from thumbnails, first select the marks you want to remove and then select the thumbnails you want to remove them from. Click the Mark panel Menu button in the Mark panel, and choose the Clear Selected command. The selected marks are then removed from the appropriate thumbnails. To remove all the selected marks in the active album, choose the Clear All command.

Loading and saving marks

Whenever you assign a mark, it is recorded as an MRK file in the ULEAD.DAT folder. If other people share the same album, you can send this file to them and have them load it into their machine using the Load command in the Mark panel menu. This provides you with a convenient method of bringing to the attention of another user any thumbnails you may want to highlight. To only send the marks of a few thumbnails, select the concerned thumbnails and then save these as a new MRK file with the Save command.

Converting marks to keywords

There may be times when you would like to use the same mark as a keyword. The Convert to Keywords command in the Mark panel Menu allows you to include the mark in a thumbnail's properties, as well as use the mark when performing more complex searches. You may also find it easier to define keywords in this way rather then using the Data Entry mode.

Index

The index is a vital part of this user guide as it provides a quick and easy reference to the commands, tools and features of PhotoImpact. At the end of this index there are also menu and screen references which provide a graphical way for you to find information about any of the screen elements and menu commands in both PhotoImpact and PhotoImpact Album.

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Album Screen Reference

Standard toolbar

- Create a new album
- Open an album
- Save thumbnail order
- View in thumbnail mode
- View in attribute mode
- View in data entry mode
- View in filename mode
- Open Search dialog box
- Open Sort dialog box
- Print specified thumbnails
- Preview before printing
- Paste information from the clipboard into a field
- Copy thumbnails or field data onto the clipboard
- Move thumbnail from an album to the clipboard
- Perform slide show
- Display file information
- Acquire an image from a TWAIN device

Search toolbar

- Search Type
- Search Operator
- Query
- Search options
- Edit search criteria

Title | Contains | "apple pie" | ☐ Match case ☐ Match whole word

- Perform Search
- View All

Mark panel

- Mark Panel Menu

Mark Panel ✕

A.
B.
C.
D.
E.
F.
G.
H.

- View Marks
- Assign Marks

Sort toolbar

- Sort by

Thumbnail Index | a.– z.– | –.a –.z

- Sort thumbnails by name
- Sort thumbnails by type
- Sort thumbnails by size
- Sort thumbnails by date

Tool panel

- Auto Scroll dial
- Configure
- Program Icons

Status bar

- Compact Mode/ Display Menu
- Viewing Mode Layout
- Thumbnail Size
- Albums in Workspace
- Albums on Shelf
- Number of thumbnails in tab
- Number of selected thumbnails in tab
- Number of thumbnails in album

144x144 | 4/6 | 10 | 4 | 2

PhotoImpact Menu Reference

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PhotoImpact Screen Reference

Standard toolbar

Create a new image
Open a file
Save image
Color Balance
Auto Process
Acquire an image
Brightness & Contrast
EasyPalette
Add frame and shadow

Print an image
Preview before printing
Move selection from PhotoImpact onto the clipboard
Redo
Undo
Paste information from the clipboard as a new object
Copy selection onto the clipboard
Zoom Level
Layout
Tile EasyPalette
Tile with Album

Tool panel

Create standard selection
Create freehand selection
Create selection area based on similar colors
Paint a selection area
Select colors
Change zoom level
Transform an object or selection
Retouch an image
Paint colors on an image
Clone an image
Erase to another color
Fill an area with color
Place or edit text
Edit vector paths

EasyPalette

Access galleries, Layer Manager, and Object Library

EasyPalette

Effect Gallery
Style Gallery
Texture Gallery
Gradient Gallery
My Gallery
Layer Control
Object Library

Tryl

pen | Noise | Camera Lens | 2D | 3D | Natural Paintir

Average-5 | Blur-medium | EdgeEnhanc... | GaussianBlur-5 | Sharpen-3

Quick Command panel

Custom Area

Quick Command
Show Properties
Send my image
Fit into selection
Preferences

Cache Area

Actual View
Add a View
Focus...
Resolution...

Color panel

Color Palette
Palette Switch
Background Color
Foreground Color
Color Cache
Quick Color Control