

EZ ViewerTM

Professional Edition

Graphics Viewing and Editing Program for
All WindowsTM 32 bit Platforms

Version 3

GJC SOFTWARE, INC.

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Chapter I. Introduction

Thank you for purchasing **EZ Viewer**, the most complete graphics software program on the market today! You'll find **EZ Viewer** indispensable for viewing, printing, managing, editing, and enhancing your digital images.

EZ Viewer provides two written tools to help you understand the program: (1) This Guide and (2) the Manual, which includes all the Help files. They are both available in electronic form either on your CD or on the company website. It is helpful to know the difference between the two.

The Manual provides specific information on the tools and buttons in **EZ Viewer**. You can simply mouse-over (placing the cursor over an unknown button) a feature you're not familiar with. Then when you leave the cursor stationary over the feature, a small pop-up text box appears with the name of the feature that can be typed into the Help contents. The Manual or Help files then explain all the buttons, folder tabs, and functions of the feature.

This Guide explains how, when, and why you apply these tools. There are sample image files we include that you can practice with in specific "Projects" in certain chapters. They are located in the "Samples" folder in the "Guide" folder on the CD. If you downloaded this guide from the web, just follow the instructions on the download page on the web to locate the files. Also, you don't have to read the Manual in order or in totality. So, advanced users may decide to skip the chapter on Basic Digital Imaging for example.

The Manual uses a certain convention for drop-down menus. For instance, if you saw...

File → Open

...this means that you would left-click on the File menu at the top of program window, then mouse over where it says "Open" and left-click.

Finally, be sure to check our website at least once a month for the latest update downloads. They're free for all Version 3 owners. Any changes to the Manual will also be posted there. And don't forget, you have free tech support through email. So any questions on the Help Manual or Guide, feel free to contact us. We want to know what you think. Enjoy!

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Chapter II. Basic Digital Imaging Concepts

Welcome to the wonderful world of digital imaging. We'll begin here by defining some basic concepts that will help you make the most out of *EZ Viewer*.

Digital imaging utilizes two types of files. The first type of files are of the *Vector* variety. These files take an image and define areas that are filled with particular colors. These files can be any physical size and still maintain a crisp look since they simply involve colors and shapes, not gradations of color. Also, since they are mathematically defined, their file sizes do not increase with physical size. *Vector* images are primarily used in line art and images containing few colors.

Raster image files are the second type. They break an image down into individual colored pixels. These are the types of files that *EZ Viewer* utilizes since they are the file types used in converting photographic images to digital images. File data size and physical image size are related in *Raster* images. Therefore, the larger and/or more detailed a *Raster* image is, the larger it's file size is. Some important concepts in working with *Raster* files are:

Resolution

Image Resolution

This is the number of pixels contained in a digital image in a given physical unit of measurement, typically in inches. Often it is measured in one direction; however, *EZ Viewer* defines image resolution two-dimensionally on an x-axis (width) and y-axis (height). Many times, the x and y resolutions are the same. An example of an image containing 192 pixels for every inch of an image both in the width and height directions can be expressed as image with a resolution of 192 pixels/inch, 192 pixels per inch, 192 ppi, or 192 dpi (dots per inch).

Monitor Resolution

The number pixels per inch on a monitor are referred to as the monitor resolution. Its measured in dots (pixels) per inch or dpi, with each dot comprised of smaller colored pixels. Typically, the monitor resolution is 72 dpi for Macintosh style computers and 96 dpi for PC compatible computer systems.

There is an important relationship between image resolution and monitor resolution. A monitor can only display pixels up to its screen resolution as a maximum. So for example, take an image with a physical size of 4" x 4" at 96ppi. It's size at true actual size or 100% zoom will be 4" x 4" on a monitor. However, an image that has a physical size of 4" x 4" and a resolution of 192 ppi (96 times 2) will appear twice the size 8" x 8" on a monitor at 100% zoom or actual size since it takes a larger area on computer screen to represent image resolutions denser than the monitor resolution. This property will come into play when viewing images.

Screen Resolutions

Screens on monitors can be set to selectable screen resolutions through the control panel in Windows. They measure the total number of pixels that can be represented on the complete area of the monitor screen in width pixels by height pixels. As the screen resolution is increased, the size of the objects on the screen are decreased. Typical resolutions are 640 x 480, 800 x 600, 1024 x 768, and 1280 x 1024.

Input/Output Resolutions

These are the resolutions of your input and output devices. Scanners and digital cameras are some examples of input devices while printers are examples of output devices. They are important to keep in mind since your images can only be as good as the resolution specifications of the input/output devices. These resolution specs come from the manufacturers. Therefore, check your equipment literature.

For decent quality scanning and printing, have your scanner set to 300ppi/dpi or higher. Then take your 300ppi+ image file and print it with a printer that has a resolution of 300dpi or higher.

If you are using your images for digital output use only (monitor viewing or web sites), anything above the screen resolution of 96 dpi is useless and takes up memory space.

Image Sizing

Digital images can be expressed by their physical sizes, pixel sizes, and file sizes.

Physical size is simply the size of the image as a real physical image (i.e. a printed image).

Pixel size is the size of the image in pixels. This is the means of image size measurement that is utilized for images in the digital domain. Some examples are images strictly for computer use and images used for page layouts and web sites.

File size is the size of the file data in bytes, kilobytes(kB), or megabytes(MB). As you get a feel for how much data images use for specific sizes and resolutions, the better you'll be able to manage your files in general. No need to go more in depth here but we'll go over file sizes and their relevance in subsequent sections of this documentation.

While we are on the subject of sizing, we should mention the concept of image aspect. Aspect is simply the ratio of width divided by height. Knowing how to manipulate image aspect will help you size your images properly. We'll go into more detail in the chapter on viewing.

File Formats

Raster image files come in many different flavors. There are over twenty different file formats used in **EZ Viewer**. For a look at a list of all the formats, you can click on the file

menu, then choose “Associate Files...”. For a detailed description of each type of file format, simply look it up in the help contents. However here, we want to mention a few commonly used file formats and their varying uses and properties.

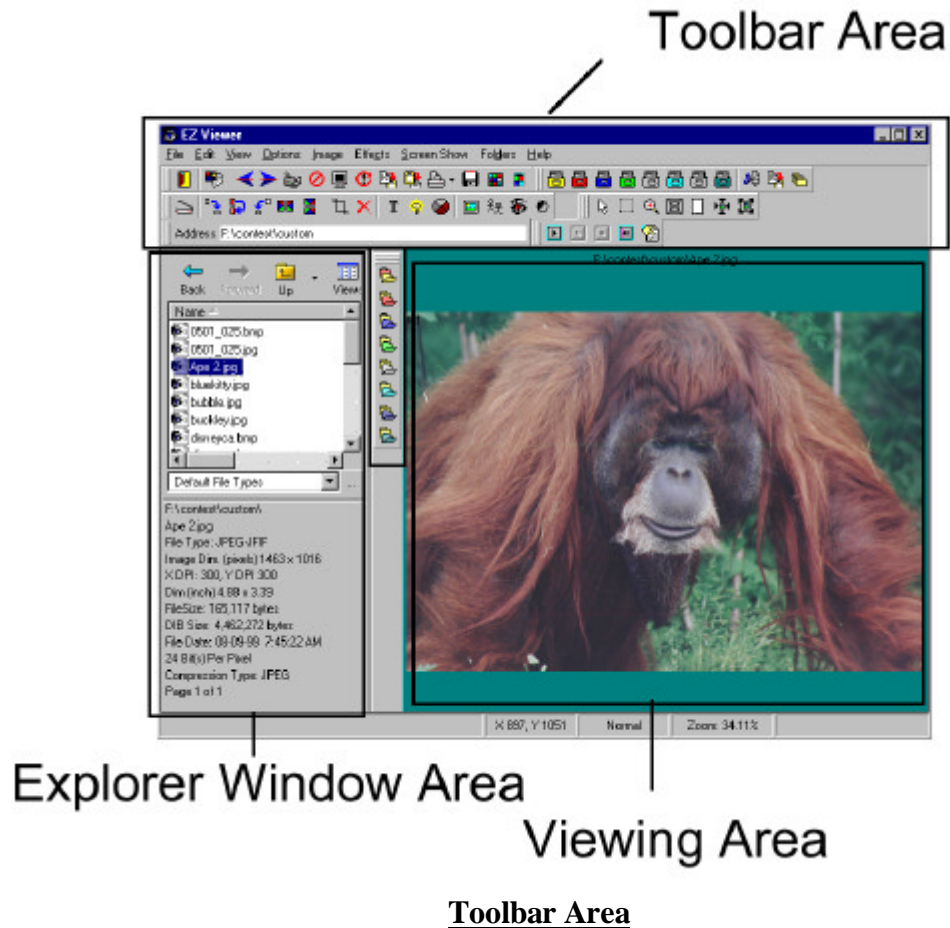
Bitmap(.bmp) is the standard Windows file format. It is a good format to use to preserve 100% image quality and archive your images to disk. However, watch your memory, as file sizes can on occasion get big. Look to archive large number of files to CD, tape, or Zip drives.

JPEG(.jpeg) is a format useful for reducing file size while minimizing image quality loss. It utilizes jpeg compression that is lossy, a technical term meaning that some data is lost in the compression process. Use JPEG for images that don’t require pristine quality, for example when emailing images or posting images to a web site.

GIF (.gif) is a compressed file format as well. It uses LZW compression, which is not a lossy compression scheme like JPEG. However, GIF is not a true color (millions of colors) file format. It has a palette of 256 colors or less. Typically, GIF is used for line art graphics. However GIF could be used for photographic images that are small physically and/or pixelwise. Therefore, for thumb nailed images or contact sheets, you could use GIF. Also, GIF supports the saving of transparent color information. Plus in ***EZ Viewer***, you can save multiple images to on GIF and make an animated GIF file as well.

TIFF (.tif) can be used as a substitute for a BMP format. It is good for preserving image quality and can support multiple pages (multiple images in one file). As with BMP’s, file sizes can on occasion get big so you may want to archive large number of files to CD, tape, or Zip drives.

Chapter III. EZ Viewer's Main Screen Layout



Note: We recommend all toolbars be activated when you first use this program. To check, go to the “View” menu and select “Tool Bar Display...”. Then make sure each tool bar set is checked off, then click “OK”. Your toolbar locations may vary from those in this documentation.

Main Tool Bar:



(Buttons Above from Left to Right)

Exit, Properties, Previous File, Next File, Slideshow Starter, Slideshow Terminator, Undo/Redo, Copy to Clipboard, Paste from Clipboard, Print/Print to File Options, Save, Thumbnail View Toggle, Multi-View Toggle

Fast Folders Bar:



(Bring up any image file for viewing. Then right click on any one of these eight folders to set that folder to the image file's directory path. Click on a set folder to bring you to the set path)

Move/Copy Folders - Filing Cabinets Bar:



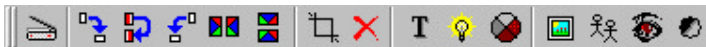
Eight Copy/Move Folders (set them same way as Fast Folders), Set Folders to Move, Set Folders to Copy, Manually Assign Folder Directories

MIDI/Audio Tool Bar:



Show/Hide MP3 Audio Player, Play Current MIDI File, Pause MIDI File, Stop MIDI File, Rewind MIDI File, Select MIDI File

Image Tool Bar:



Scan, Rotate Clockwise 90 degrees, Rotate 180 degrees, Rotate Counter-Clockwise 90 degrees, Flip Horizontally, Flip Vertically, Crop, Delete Current File, Add Text into Image, EZ Fix, Add Default Sepia Tone, Add Border, Clone Tool, Red-Eye/Air Brush Tool, Red-Green-Blue Levels

Image Name Line:

(Not actually a tool bar. This can be toggled on/off to show the name and directory of the current file in the top portion of the viewing area)

Image Information Panel:

(Not actually a tool bar. This can be toggled on/off to display image information under the file list in the Explorer Area of the main screen)

Status Bar Line:

(Not actually a tool bar. This can be toggled on/off to display cursor position, normal or rectangular zoom mode, and zoom percentage in an area just below the image)

Address Line Tool Bar:



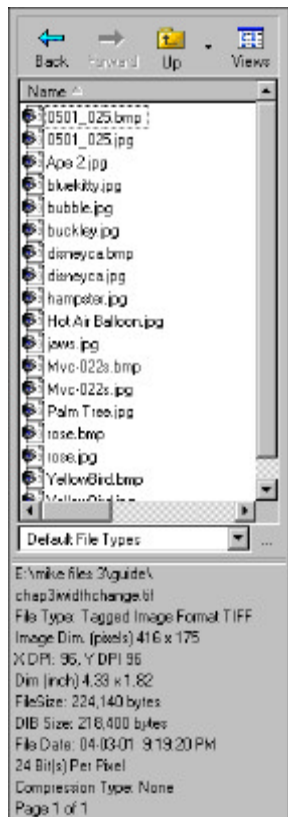
(Displays the directory of the current image file)

Image Fitting Tool Bar:



Normal View Mode, Selection Mode Tool, Linear Zoom, Rectangular Zoom, Actual Image Size, Shrink Fit Sizing, Fits All Sizing

Explorer Window Area

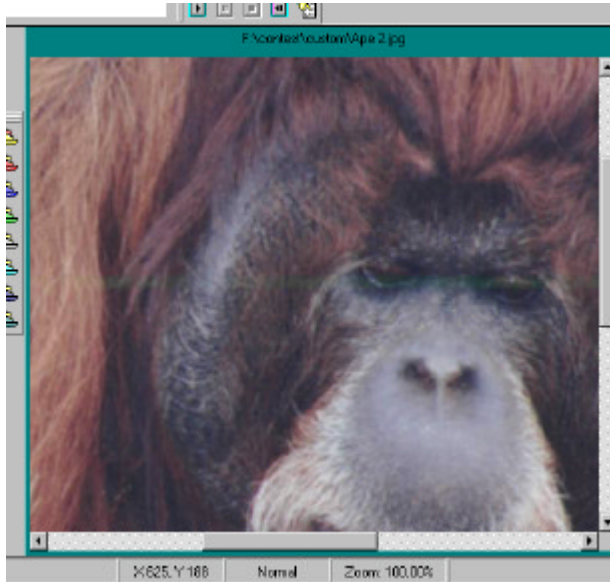


At the top of this pane are the buttons that navigate, edit, or create folders in a current directory.

In the middle are the actual files you can click on for access. Any image format EZ Viewer supports will be displayed if the drop down menu just below the file list is selected to “Defined File Types”. You can also filter the list through this menu to display a particular format (i.e. jpg only).

The information pane (turned on/off in the toolbar menu) lists the current file directory, file name, format, size in pixels, image resolution, physical dimensions in inches, file memory size, file size after compression if any, date and time, color depth in bits, compression type if any, and page number if the file contains multiple pages.

Viewing Area



This is where the single and multi-viewed images are displayed. When thumbnails or print previews are activated, special viewing windows appear.

Notice the image name right above the image and the status bar below the image. These can be turned on/off in the toolbar menu located at View → Tool Bar Display... → (*tool checkboxes*).

Note: You can resize the Explorer and Viewing areas of the main screen by placing the cursor over the dividing borderline between these areas, then while clicking down the left mouse button moving the borderline.

Chapter IV. Viewing in Single, Multi, or Thumbnail Modes

EZ Viewer lets you view single images. It also lets you view multiple images through two methods: (1) Multi-View, which lets you select a template of 1 to 25 blank cells that you fill with your choice of image files and (2) Thumbnails, which displays every image file in the currently opened folder in a special thumbnail display window.

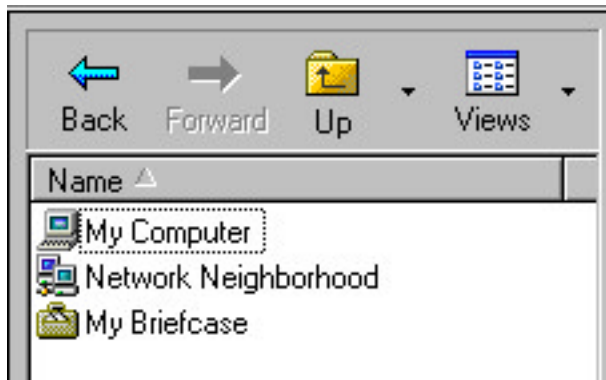
Single View

It's worth mentioning quickly here just some of the ways you can take photographs and convert them to digital images:

- Scanning photos (*more on this subject a little later in this chapter*)
- Shooting a photo with a digital camera
- Having your roll of film turned into a Photo CD

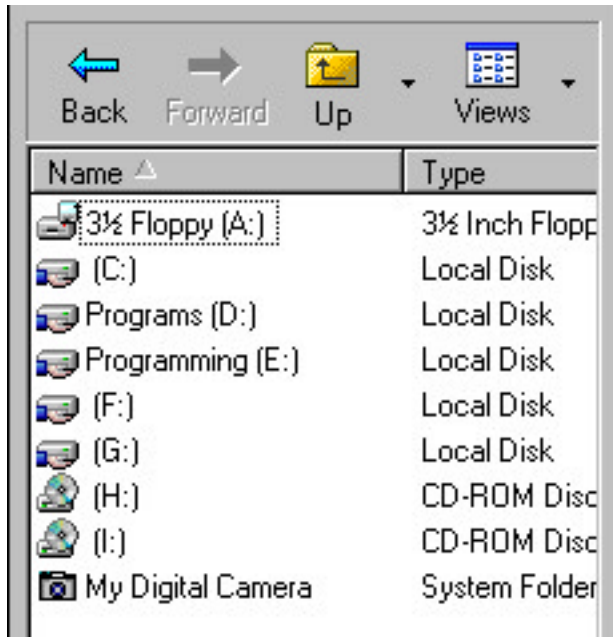
You can also download images from the Internet from emails and web sites. You can also access pictures that are on CDs already, such as digital encyclopedias or even our own **EZ Viewer** CD.

In scanning, **EZ Viewer** directly imports a photo to the viewing area, where you can then save it. Otherwise, saved images are accessed from their respective directories on disk or CD. So for an image that resides in the "My Documents" folder as an example, follow these steps:



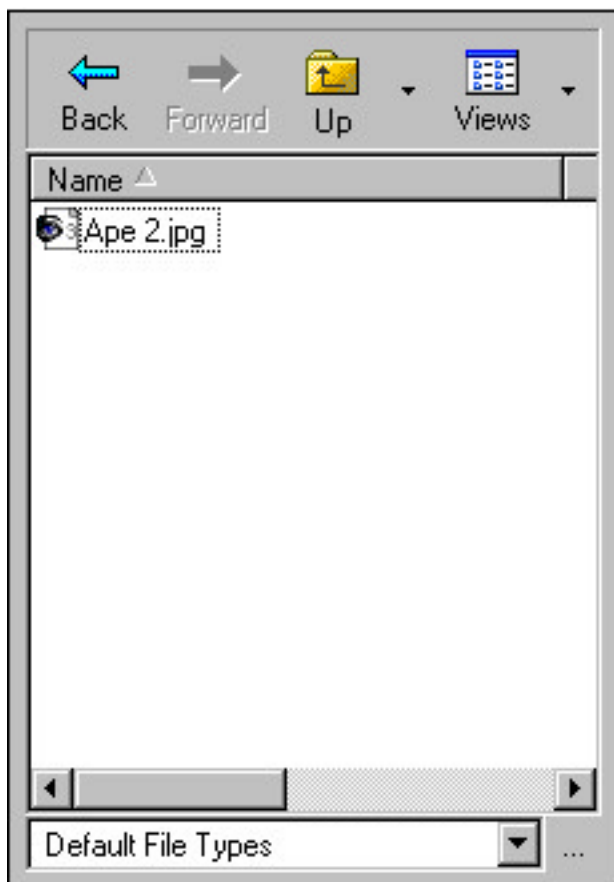
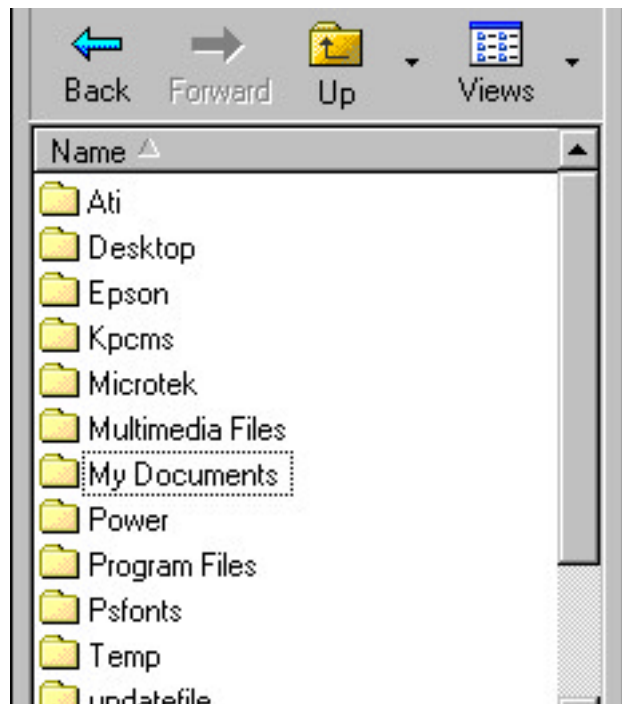
(1) In the Explorer Window Area, double-click on "My Computer".

If you don't see "My Computer", simply click on the "UP" button until the "My Computer" icon appears. You could also click on the small black arrow to the right of the "UP" button for a drop-down menu. Then choose "Desktop".



←(2) Now double-click the drive where your image resides. In our example, it's the "C" drive.

(3) Then double-click the folder where your images are. Here, it's "My Documents".
→

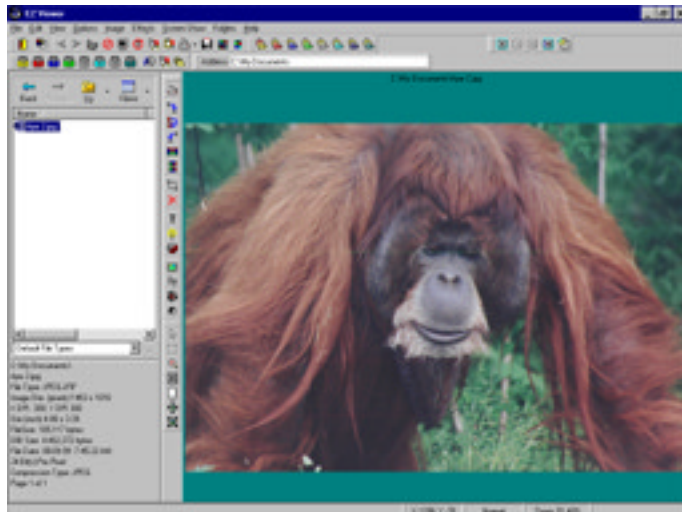
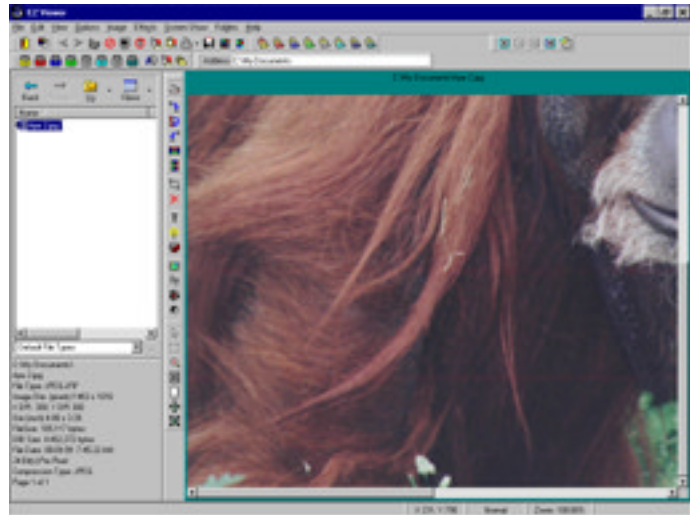


(4) Finally, single click on the image you want to open.

In our example, we've just opened:
C:\My Documents\Ape 2.jpg

And now our image appears. But wait a minute...a portion of the image seems to appear out of the viewing area.

If you were able to see this image's information area, you'd see that this image has a resolution of 300dpi. Most PC monitors have a resolution of 96dpi. Since this image is at 100% zoom or true size, this image's appearance on a monitor will be larger than it's printable size.



This can be fixed with the image fitting tools.

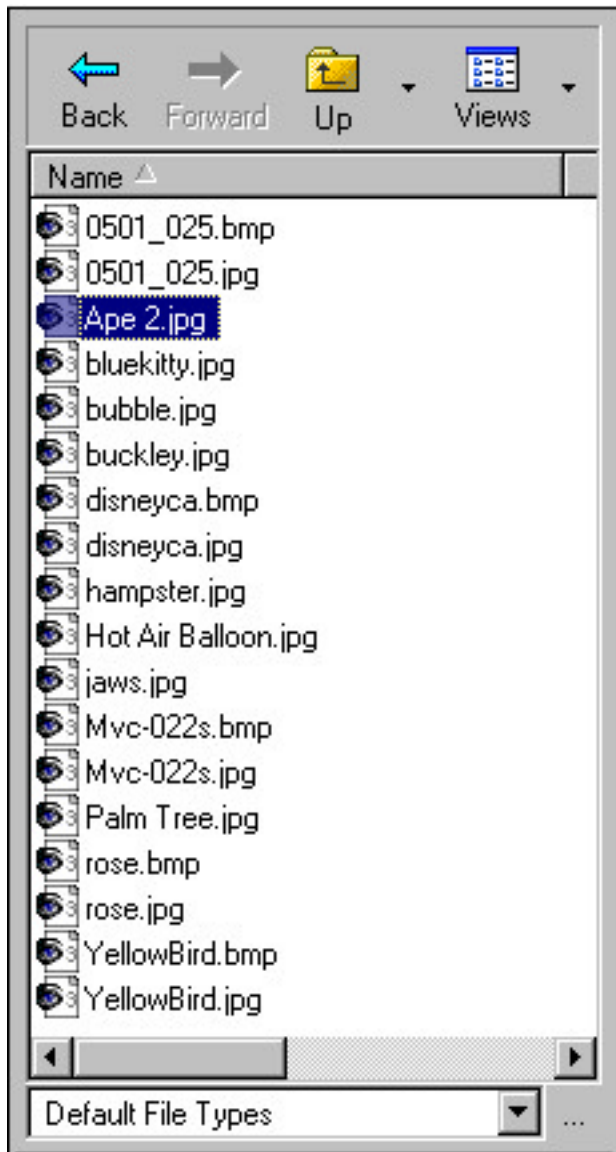


In the case of our image, we would click on the “Shrink Fit” button (second from right on bar) to shrink the zoom level so that the entire image fits in the viewing area.

Let's look into this tool bar more in-depth.



From Left to Right: The arrow returns the selection mode to normal. The selection rectangle can be used to select an area for certain operations, such as placing text into an image. The magnifying glass is the linear-zoom tool, that when selected and moved over an image, left clicking will zoom in while right-clicking will zoom out. The spider-web-looking rectangle is the rectangular zoom tool, which works when selected by placing the cursor (now a cross-hair instead of arrow) over the image, holding down the left mouse button and “stretching” a selection area that will be zoomed into the entire viewing area. The last three buttons toggle the viewing mode...the plain white button is the actual size mode that will display an image at 100% zoom, which is the true digital size of an image for viewing or placing on the web. Shrink Fit will shrink a large image into the entire viewing area. Fits All will expand a smaller image into the entire viewing area.



More typically, you would encounter folders with more than one picture file. To select another image file:

- Simply click on another file name
- Use the up or down arrow keys on the keyboard to open the previous or next file
- Use the “Previous Item” or “Next Item” blue arrow keys on the main tool bar as shown below



- Double-click on a thumb nailed image in the thumbnail view (more on this in the thumbnail section)

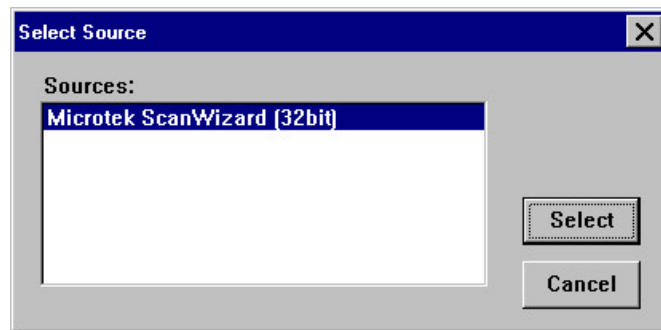
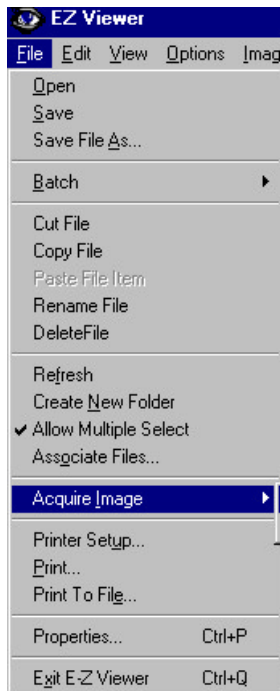
A good tip when viewing many pictures one file at a time is to set the fitting mode to “Fits All”. Remember, the “Fits All” button is on the Image Fitting Tool Bar. Clicking on the “Fits All” button will fit any image into the viewing area regardless of its true size. So as you view one picture after another, you’ll see all of each picture. This mode will remain in effect until you select another mode such as “Actual Size”.

Scanning

If you have a TWAIN compliant scanner, **EZ Viewer** can access its drivers and let you scan your photos directly from **EZ Viewer**.

There are two ways you can initiate a scan. The first way is to go to the file menu and select “Acquire Image”. The other way is to click on the Scanner button in the main menu.

For the first time you scan, use the file menu to select File→Acquire Image→Select Source. You can then verify that **EZ Viewer** is recognizing your scanner drivers.



Once you select your scanner, you can simply select File→Acquire Image→Acquire Image... or click the scanner button on the main toolbar. Then, the driver software will walk you through the rest of the steps.

Once your image is in the viewing area, you'll probably want to save the raw image at least temporarily. Then if you need to start from scratch in editing your image, you'll have the original scan to work with.

Save with the following methods:

1. With the cursor place anywhere over the image, right-click and select "Save File As" from the pop-up menu (...by the way, notice the many options on a image right-click).
2. Select File→Save File As and you'll get the standard save dialog box, just as you would with right-clicking.
3. Select File→Save. With this method, you save to the previous selected destination. Good for saving multiple images to the same location, using "Save File As" to set the destination location.
4. Click the Save button on the main toolbar. This is the same as selecting File→Save.

PROJECT: PREPARE AN IMAGE FOR USE ON THE WEB OR IN AN EMAIL

Find the image file “proj4-1.bmp” and open it with *EZ Viewer*.

It’s in the folder called “Samples” in the “Guide” folder

1. We are going to resize this image, then convert and compress the file to .jpg format for emailing.
2. We’ll also briefly explain saving the image as a .gif.

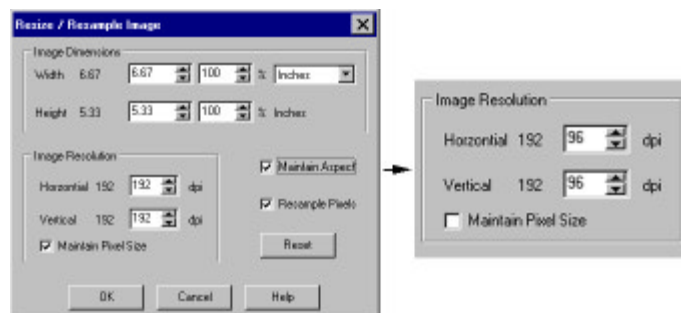
Open proj4-1.bmp in *EZ Viewer*.

You’ll notice if you click on the “Actual Size” button (actual size also accessed through View→Fitting→Actual Size or Ctrl+N), this image is physically large. Also, in the information area, you’ll see that it has a file size of over 3,800,000 or roughly 3.8MB.

These two issues should be corrected when emailing a picture. If the size of the image is physically large, chances are that’s how it will look to the mail recipient. Also, most people have Dial-Up Internet service as opposed to Cable Modems and DSL. A 3.8MB+ file will take quite a long time for just one file to upload and download (although its sometimes desirable for very high quality images).

Let’s fix the physical size issue first. The first thing to check is the image resolution. Remember, anything over 96 dpi is wasted if the image is just for online viewing.

Go to Image→Resize\Resample... or right-click with the cursor over the image and choose Image Options→ Resize\Resample from the pop-up menu. Then change both the horizontal and vertical image resolutions from 192 to 96 dpi. Also uncheck “Maintain Pixel Size”.

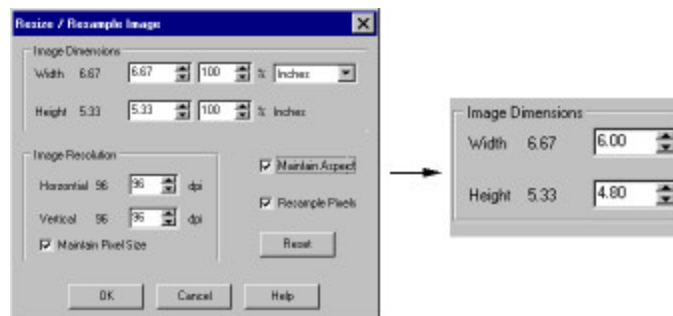


Click OK to close the box. You’ll see immediately that the size of image on the monitor decreased, while the physical size of the image remained the same. Generally speaking, if you

decide to change just the resolution without changing the size or vice versa, the “Resample Pixels” box should be checked so *EZ Viewer* can correctly map new pixels and discard old ones.

Now we’ll make the width of this image six inches.

Go to Image→Resize\Resample... or right-click with the cursor over the image and choose Image Options→Resize\Resample from the pop-up menu. Make sure the image dimension units in the drop down menu are in inches... not pixels, millimeters, centimeters, or points. Change the width dimension by clicking in the box and typing “6” or use the down arrow button.



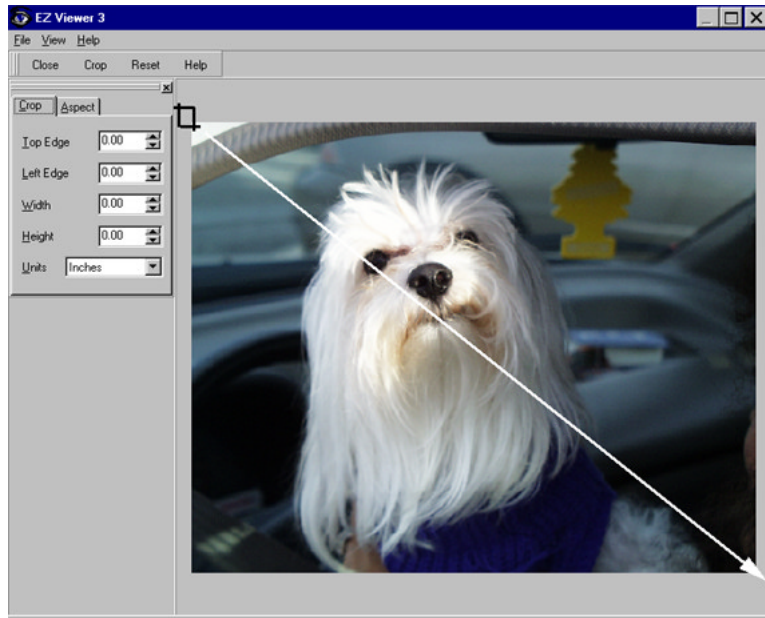
Click Ok to close the window. The resulting picture is now 6” x 4.8” . But what if we want a nice even size, say 6 inches by 4 inches?

Just crop the picture. The four ways to access the Cropping Tool are:

1. Image→Cropping...
2. Ctrl+G
3. Click the crop button on the Image Tool Bar.
4. Right-Click on image, then from the pull-down menu..., Image Options→Cropping.

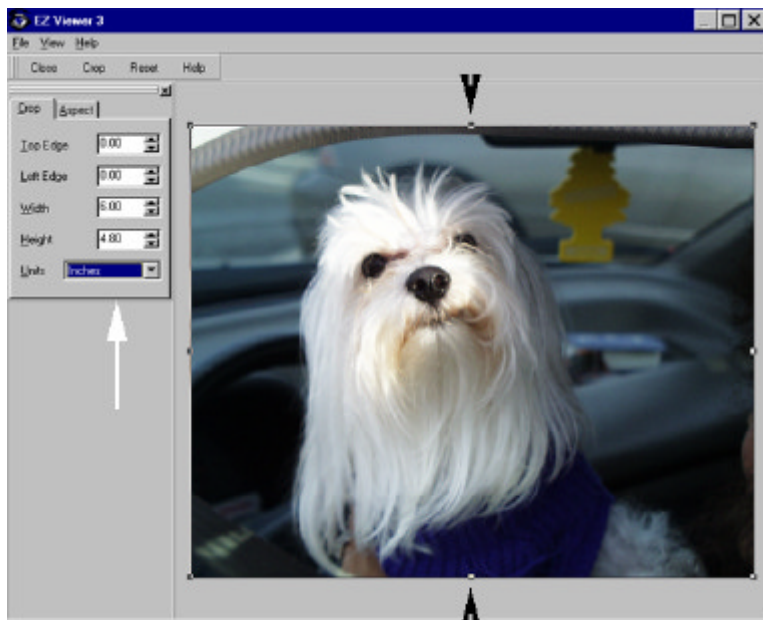
A new window appears with the image inside.

You could just simply place the cursor at a point, hold down the left mouse button, stretch a perimeter, and then click on the crop button. But as you’ll quickly see, the crop tool will give you exact sizes and help you establish image aspect to your preferences. We’ll show two ways you can get our image to 6” x 4”.



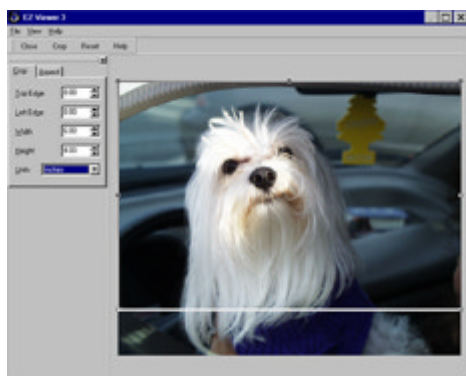
With the first method, we'll click and hold the left mouse button just outside the upper left corner of the image and stretch a perimeter diagonally to the lower right corner to select the entire image.

Note: The white arrow line is not part of what you'll see in EZ Viewer. It is there to simply illustrate where to drag the cropping cursor.



The white arrow indicates the units of the picture. If it's not in inches, click on its pull-down menu and change it.

You'll see that a size of 6" x 4.8" is indicated. Place your cursor over either the top or bottom center square dots, hold down the left mouse button, and drag the horizontal edge in the direction of the black arrow. You may decide to do this for both the top and bottom edges. Do this until you see 4.00 indicated in the height box.



Now click on the crop button. The picture is now cropped.

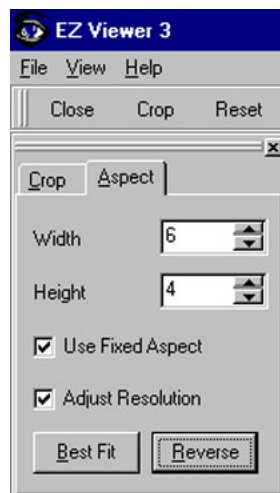
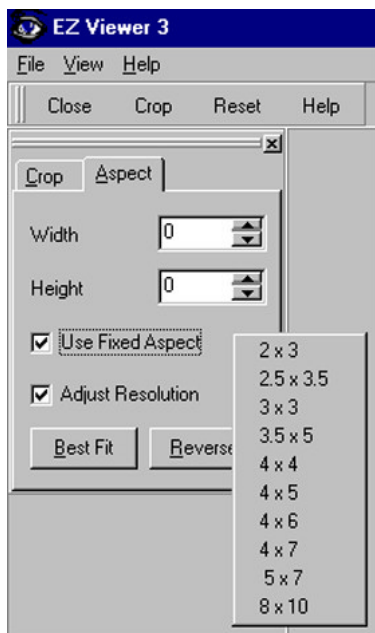
Close Crop Reset Help



You can now save the image by the methods explained earlier.

The second method of cropping lets the Crop Tool access preset sizes.

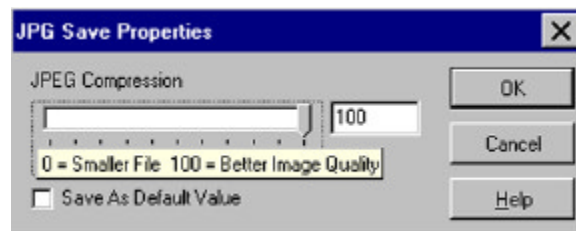
Re-enter the Crop tool window by any of methods we've mentioned. Stretch a perimeter selection around the entire image as we did in the first method. Then right-click either in the width or the height box.



You'll get a drop-down menu of preset aspects or sizes. Choose 4" x 6", then click on the reverse button to make the size aspect 6" x 4".

Notice that when you click and hold the left mouse button over a corner of the selected perimeter, you can resize the selection perimeter in 6" x 4" aspect. This means that whatever portion of the image is in the perimeter window will be 6" x 4"! If the perimeter is smaller than the image, you can place the cursor inside the center of the perimeter, click and hold the left mouse button, and then while holding the mouse button down move the perimeter over any desired portion of the image. Thus the cropping tool cuts out the selected portion and resizes it with the chosen aspect in one step!

Now we'll save this file as a .jpg and attached it to an outgoing mail message. When you open the "Save File As" dialog box, choose JPEG and then give your file a name. Make sure the filename ends in .jpg. Click on the save button and before the file saves, the JPEG compression dialog box appears:



Experiment with different settings and save a handful of copies to make a visual judgment of file size versus image quality. In general terms, emailing a casual picture of less than 50kB is a good starting point. So try to adjust the compression level to attain such a target file size and get the best quality you can.

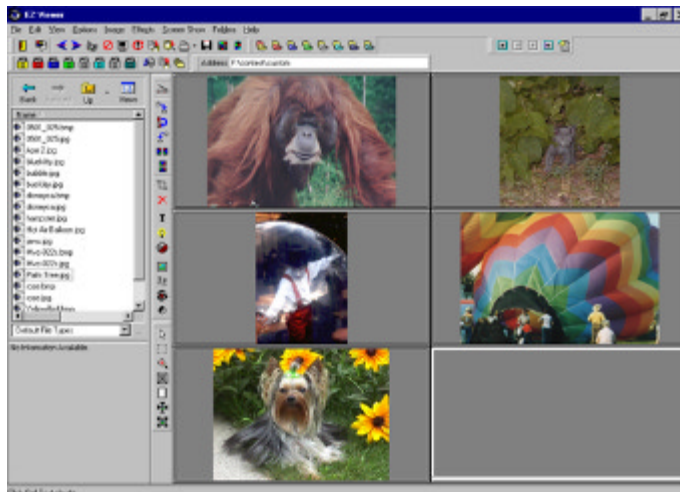
AS A GIF FILE: In most cases the JPEG format will provide the best results for photos. However, if you have an image with few colors or an image very small in physical size, you may elect to save the image as a GIF file type.

The GIF format requires that the image color palette consist of 256 colors or less. To make sure of this, **EZ Viewer** provides a color reducer. It's in Image→Color→Reduce Color→256 colors... . Once the color palette is reduced, save the file with the file type GIF. Note that if you save different GIF images to the same filename in **EZ Viewer**, it will create a multi-page GIF file that you can use for animated GIFs.

Multi View

Multi-View is a viewing mode in **EZ Viewer** that lets you take any 1 to 25-image file(s) and view them in preset template layouts.

Click on the Multi-View toggle button on the main tool bar or go to View→MultiView and Print. The first time you use Multi-View in any session will activate the Layout Styles template. Choose the closet layout of empty image cells that best fit the type of layout you want to view (as a tip, consider the orientation, landscape or portrait of the images you'll be inserting into the cells). Click OK and the viewing area will partition into the layout you selected. If you click on the Multi-View toggle button or choose the menu Image→Return to Single View, you go back to the normal single view mode. Any time you return to the Multi-View mode, you can reselect a Layout Style by choosing Image→Select View Port Style.



Once you've selected your template, populate or fill the cells with images by:

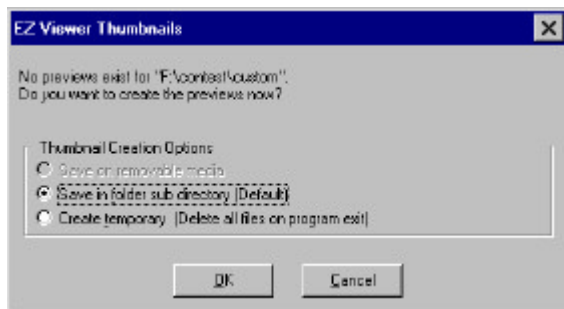
1. Clicking on an empty cell. It will highlight a white border edge.
2. Then clicking a file in the Explorer file list just as you would in the single view mode. Do both these steps for each cell.

Keep in mind here we've only explained the viewing features of Multi-View so far. It's so versatile that we've have dedicated an entire chapter on its printing capabilities and another entire chapter on the Print-to-File Feature.

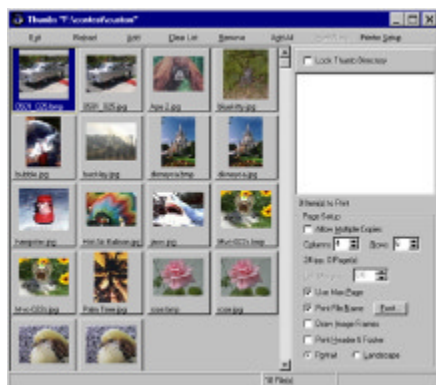
Thumbnail Viewing

EZ Viewer can take an entire folder of image files and convert them to small thumbnail size images that are viewed in a separate window. The Thumbnail View links to the Single View, therefore making it possible to go back and forth between the two views through a single file.

To activate the Thumbnail Viewing window, start by opening the particular folder of pictures you want to view thumb nailed. Then click on the Thumbnail toggle button on the main toolbar or choose View→Thumbnails... . If a subfolder of thumbnails hasn't been built yet, **EZ Viewer** will prompt you what you want to do with the subfolder.



The default will make a subfolder inside the folder where your images reside on your hard drive. You can also select that the subfolder be made temporary, in which case the next time you want thumbnails of that folder, they would have to build them from scratch. And if you have a source folder on floppy or Zip removable disks, you can place the thumbnail folder with the source images.



Once you have your Thumbnail window open, you can double-click on any image and have that image appear in the Single View mode, a great way to view many pictures at a time. Then to return to the Thumbnail View, click on the Thumbnail toggle button or select View→Thumbnails... .

If at a later point in time you add more pictures to your source folder, you can rebuild the Thumbnails. Select **View→Thumbnails Manager** and either add the new images or update the entire thumbnail build.

As with Multi-View, the Thumbnail View mode also has some powerful printing options that we dedicated to a separate chapter.

Chapter V. Single Image Printing

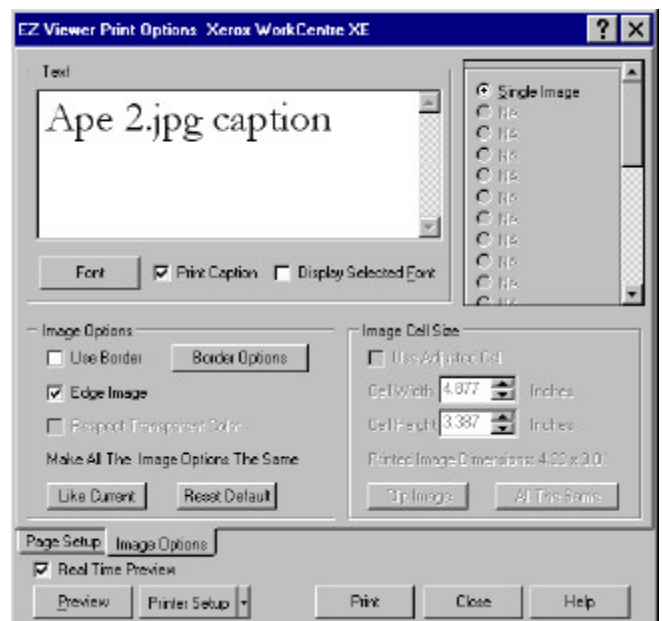
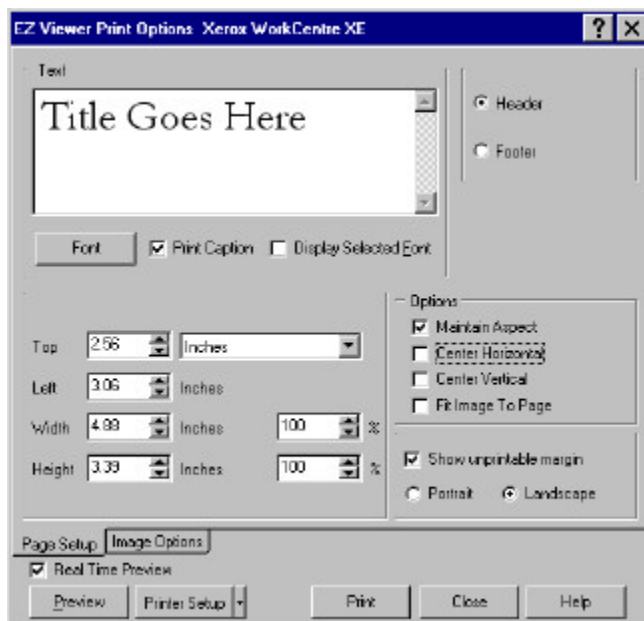
EZ Viewer prints a single image by using a Print-Preview editor with a real-time preview. You can print an image with a caption and/or a title. Additionally, you can size the image without affecting the image file itself and place the image anywhere on paper.

We want to familiarize you with the different ways you can access printing and the dialog boxes you'll encounter. First we'll access the Print-Preview Dialog Box. *Note: If you encounter a message saying "Current Page Orientation does not match image. Do you want to adjust it now?", all this means is that your image is oriented in a portrait aspect while the print-preview is set to a landscape aspect or vice-versa. It's a good idea to say "Yes" to this message, but you can change the orientation in the Print-Preview Dialog Box regardless of your answer. You can activate the Print-Preview Dialog Box by:*

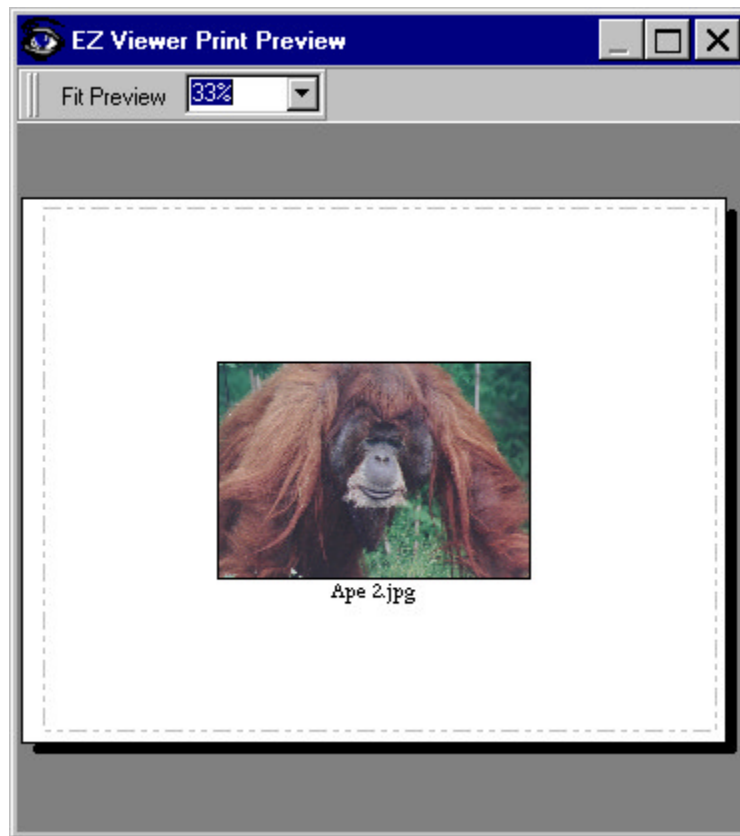
1. Selecting File→Print...
2. Clicking on the Printer Icon button. You can also use the drop-down menu next to the Printer Icon button and select "Print".
3. With the cursor arrow over the image, right-clicking and selecting "Print".

The entire main window for **EZ Viewer** then disappears and the Print-Preview Dialog box appears. *Note: Closing the Print-Preview Dialog Box will return the program to the normal main window.*

The dialog box defaults to the "Page Setup" tab. Inside the "Image Options" tab, the "Image Cell Size" portion is not active for single image printing.



Working inside the “Page Setup” tab, make sure the “Real Time Preview” checkbox is checked and click on the “Preview” button. Then select either 25% or 33% in the drop-down menu and move the Preview Window so you can see both the Preview Window and the Dialog Box.



Now some possible printing scenarios in the “Page Setup” tab of the Print Preview Dialog Box:

1. *Maximizing the fit of the image so the entire image fits on the page.* Put a check in the checkboxes for “Maintain Aspect”, “Center Horizontal”, “Center Vertical”, and “Fit Image To Page”. Make sure your orientation of portrait or landscape best fits the image as well.
2. *Placing an image smaller than the page in a specific place on the page.* With checks in the “Maintain Aspect”, “Center Horizontal”, and “Center Vertical” checkboxes, make sure that “Fit Image To Page” is unchecked and reduce the percentage of the image size. If you don’t want the image in the center of the page, uncheck the “Center Horizontal”, and “Center Vertical”. Then, adjust the “Top(Vertical)” and “Left(Horizontal)” margins to your preferences and the image will move with your changes in the Preview Window.
3. *Placing a portion of a blown-up image onto the page for printing.* Start by following the instructions for scenario 1 to maximize the image to fit the page. Then uncheck the “Fit Image To Page” checkbox and blow-up the image size percentage (the max is 1000%). To move the image within the page, uncheck “Center Horizontal” and “Center Vertical”. Then the “Top(Vertical)” and “Left(Horizontal)” margins adjustments move the image.

Titling and Captioning

By typing text in the text box in the “Page Setup” tab of the Print Preview Dialog Box, you effectively are typing in a title. You can click on the font button and change the font if you like. We recommend that at some point, you view the Preview Window at 100% to compare the size of the text versus the size of the image. You may have to reduce the size of the image to accommodate the title text.

For a caption, click on the “Image Options” tab and enter text in that text box. Again you may want to view the Preview Window at 100% and compare image size versus caption text size and adjust the image size accordingly. Also inside the “Image Options” tab are checkboxes to add a thin edging around the image (recommended) and borders. The buttons “Like Current” and “Restore Default” are for use in the Multi-View printing.

Chapter VI. Multi-View Printing

Print 2 to 25 images on one sheet of paper. You can select different layout styles, format size and aspect of individual images, and add titling/captioning text if desired.

We feel Multi-View printing is best explained by example. We'll use the following project as the explanation.

PROJECT: PRINT SIX IMAGES EVENLY ON ONE 8 ½ x 11 SHEET

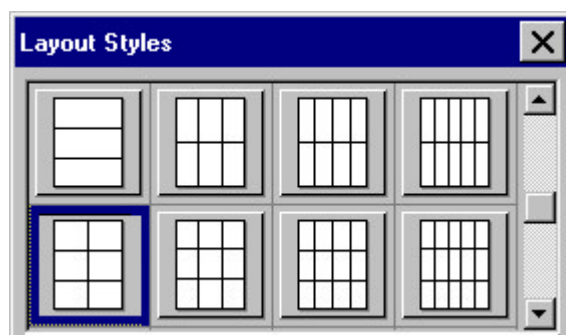
Find the image files “proj6-1.jpg”, “proj6-2.jpg”, “proj6-3.jpg” “proj6-4.jpg” “proj6-5.jpg” “proj6-6.jpg”.

They are in the folder called “Samples” in the “Guide” folder.

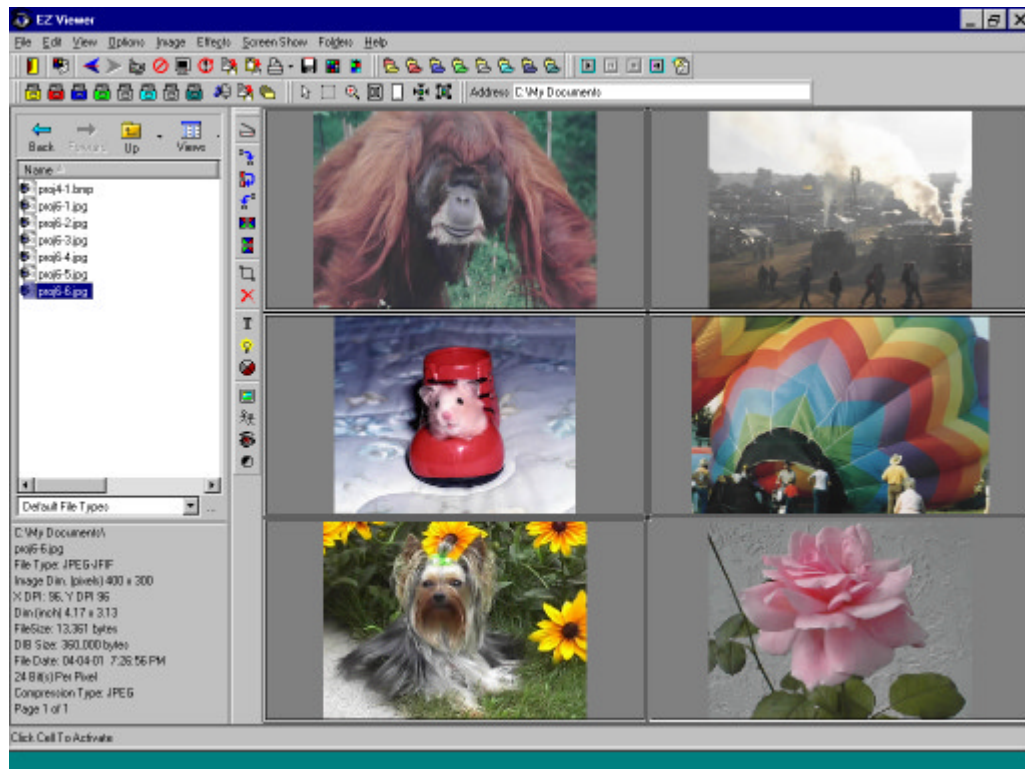
In this project, we're going to:

1. Place the image files inside the six cells of a Multi-View template.
2. Bring up the Print Preview Dialog Box and Print Preview Window.
3. Pick a uniform size for each of the six cells.
4. Best fit each image into each cell.
5. Print the Page.
6. Examine how to start a Multi-View printout with image captioning and page titling

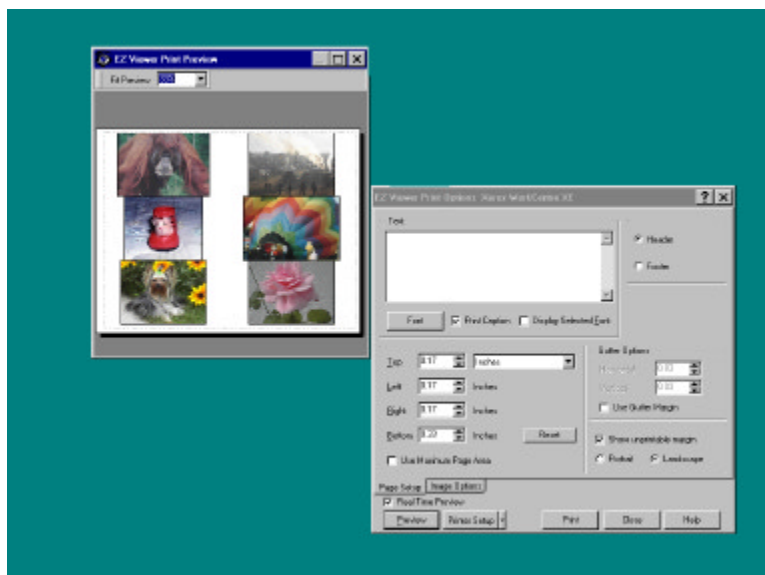
Let's start by picking a template and populating the cells with images. If you have trouble placing the images into the template, review the chapter on Multi-View viewing. However, you will need to know the layout template (or port style) we're using here. It's the template with 2 columns and 3 rows with the page in a portrait layout.



It doesn't really matter which order they're in, but if you like to stay consistent with the project, here is how ours turned out:

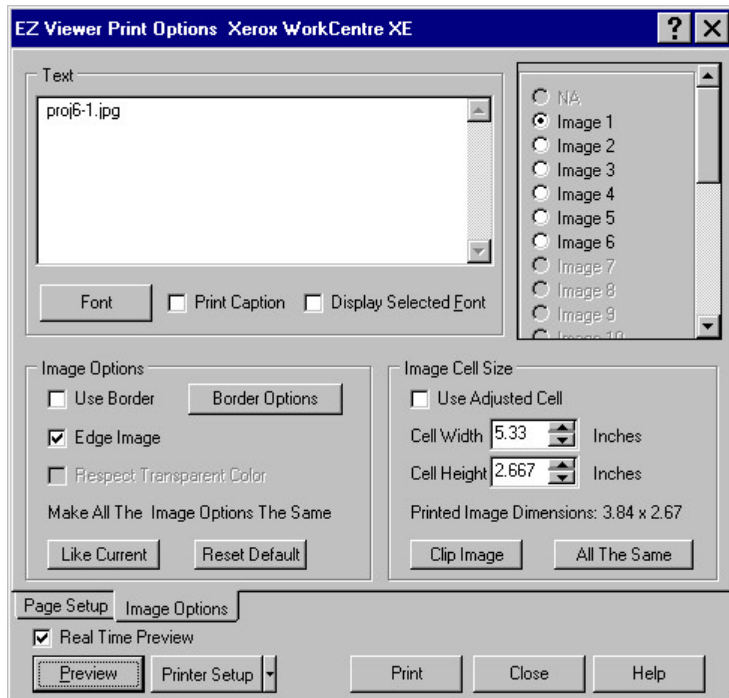


Now enter the Print Preview Dialog Box by any of the methods used in the chapter for printing a single image, such as clicking on the Printer Icon button. Also, just as in printing a single image, immediately open a Real-Time Preview Window at 25% or 33% view. You should have something that looks similar to this:



Even though we chose a portrait template, we can still print out our page with the landscape orientation button clicked on.

The next step is to click on the "Image Options" tab of the Print Preview Dialog Box. You'll notice that it looks just a little different from when it did for a single image.



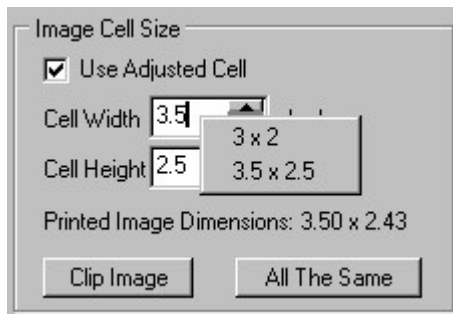
In the upper right-hand corner of the dialog box, there are six radio buttons corresponding to each of the six images named Image 1 through Image 6.

Also, the “Image Cell Size” section is now active.

There are buttons we haven’t explained yet. As we execute each task, we’ll go over the buttons “Clip Image” and “All The Same” as well as the “Like Current” and “Reset Default” buttons.

In fact, we’re going to format our images and cells now.

Make sure the radio button for Image 1 is selected. Now place the cursor anywhere inside the box for cell width and right click.

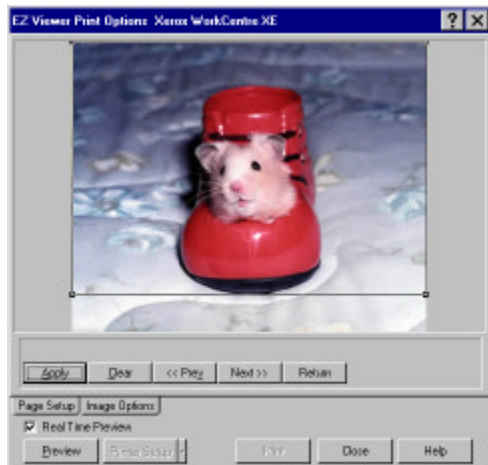


While you can choose your own custom cell sizes, **EZ Viewer** has built-in preset sizes. The sizes available vary depending on how many images are going on a page and the page layout, possibly up to 5” x 7” or 7” x 5”. However for six images in this particular layout, the maximum preset size available is 3.5” x 2.5”, which will be our choice.

Also, check on the “Use Adjusted Cell” checkbox.

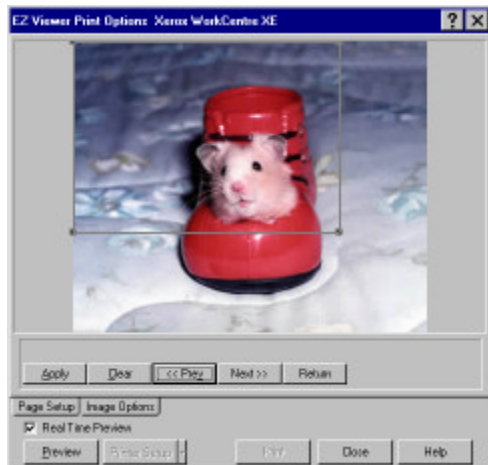
Now, you could click on the radio button for Image 2 and repeat the above procedure and do so for all the remaining cell sizes. In fact, that is what you would do if you put in different sizes for each of the cells. But since we want all the cells to be 3.5” x 2.5”, click on the “All The Same” button. Thus, all six images are now 3.5” x 2.5”.

To complete the image and cell formatting, click on the “Clip Image” button and you’ll see that the Print Preview Dialog Box has turned into a single image-viewing window. When we say “clip image”, we mean we are going to select the portion of each image we want to appear in each cell. You can think of the clipping function as a combination of cropping and zooming. In fact, it works very similar to the crop tool.



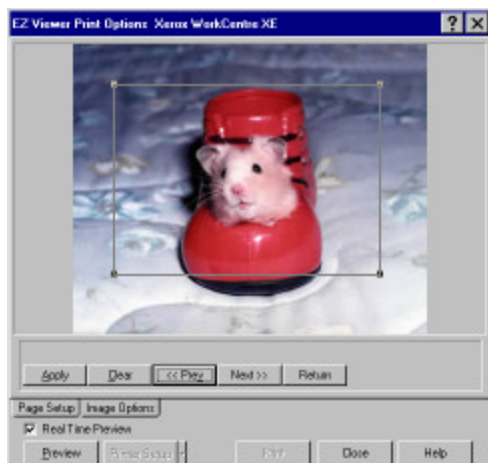
The Clipping Window may not begin with the first image. Here, it's starting with the third image.

We are going to isolate the hamster just as we would with the crop tool. Place the cursor over the lower corner "handle" dot. Then while holding down the left mouse button, drag the rectangular selection box upward. It doesn't matter if the selection box is over the mouse just yet. We simply want to shrink the selection box down. Notice that the selection shrinks down in the aspect of 3.5 x 2.5.

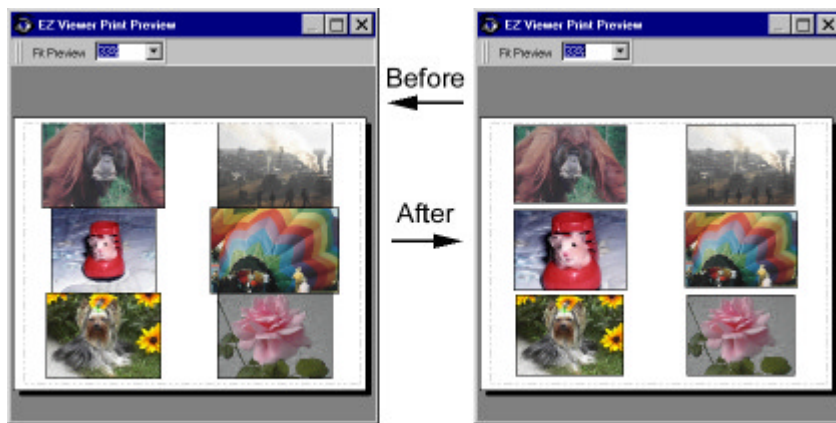


It should now look like the selection rectangle has shrunk toward the upper right or left corner.

Now place the cursor anywhere inside the selection rectangle. Then while holding down the mouse button, move the selection rectangle to the center of the window.



With the selection rectangle now centered (it doesn't have to be perfect), click on the "Apply" button. Notice what happens in the Print Preview Window.



The hamster picture is now 3.5" x 2.5" and zoomed in without affecting its cell size. Now click on either "Prev" or "Next" to change another image to your preferences. Make sure you click on apply when your finished resizing and repositioning the clipping selection rectangle.

Continue clipping until all of the images have been clipped to your preferences. Then click "Return" to return to the "Images Options" tab of the Print Preview Dialog Box.

Adding Titling and Caption Text to a Multi-View Printout

You can add a page title and a caption for each image in your printout. If you'd like to add text to the six images in our project as practice, make sure you close then reopen the Print Preview Dialog Box to reset the cell adjustments. Before any changes are made to the cell sizes, the captions and title are added *first*. There are these considerations when adding text in a Multi-View printout:

- Before you start modifying the image cells, go to the "Top" margin box in the "Image Options" tab of the "Print Preview Dialog Box" and enter an amount that will accommodate your title. For our six images as an example, we could enter the value "1.27" for the top margin so we can enter a 48pt font title at the top of our page. Remember, the title is entered in the text box in the "Page Setup" tab of the "Print Preview Dialog Box". We'll type in the imaginative title "Title 48 pt – Caps 18 pt" in the text box and show you how it looks following the rest of the steps.
- The default caption for each image is the respective file name. You can change each caption by clicking on the radio button for the labeled image and typing in the desired text. Then click a radio button for another image and do the same thing until all the images have the desired captions. It's important to put all the captions in so we can size the cells around both the images and the caption text. *Note: At this time, you cannot use adjusted or clipped cells with titling or captioning.* However for a workaround, crop all your images to a consistent aspect and save the copies with changed file names for use in another Multi-View printout.
- Go to the "Image Cell Size" of the "Image Options" tab of the "Print Preview Dialog Box". With a radio button selected for a particular image, double-left-click inside the Cell

Width box, then double-left-click inside the Cell Height box to maximize the size of the cell. Repeat this step for all of the images.

- Go to the “Gutter Options” section of the “Page Setup” tab of the “Print Preview Dialog Box”. You may choose to change the gutter settings. Don’t be afraid to use negative numbered settings either. Choose what you think is best to make an aesthetically pleasing layout. Modifying the gutter spacing is also useful for preventing images and captions from overlapping one another.

Here is how our layout looks in the Print Preview window:



If it looks like we added borders to the images, we did. If you like, experiment with the settings for borders and make your own. They are in the “Image Options” tab of “Print Preview Dialog box”.

Multi-View is a powerful and quick way to print many images neatly. Not to mention too that it is so much easier than having to open and paste in each file to a layout page. With Multi-View, all you do is pick a template, fill it with images, format it, and click on print!

Chapter VII. Print-to-File

Working with the Multi-View mode, save 1 to 25 image files to a single Bitmap (.bmp) file format. Just as you could in the Multi-View printing mode, add optional text. Also, you can add optional backgrounds to the image(s).

So what can you use Print-to-File for? Just some ideas...

- You could use a Multi-View collage in a Screen show (Slideshow). Just view your collage in Multi-View as you normally would, then select Print-to-File. ***EZ Viewer*** then combines all the images into a single .bmp file that can be used in a Screen show.
- Perhaps you like to have a background on your Multi-View printouts. Just use Print-to-File to combine all of your images and your selected background to one .bmp file for printing.
- Emailing multiple images can be cumbersome at times. Use Print-to-File to attach just one file to your email.
- Online auction sites have limitations on how many images you can post. Use Print-to-File to combine up to 25 images onto one file!
- Take just a single image and use Print-to-File to add a background.

We'll once again use our project to explain the mechanics of using Print-to-File.

PROJECT: COMBINE TWO IMAGES AND A BACKGROUND TO ONE .BMP FILE

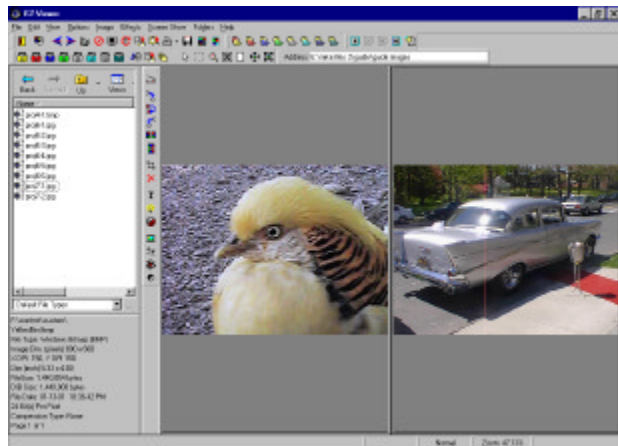
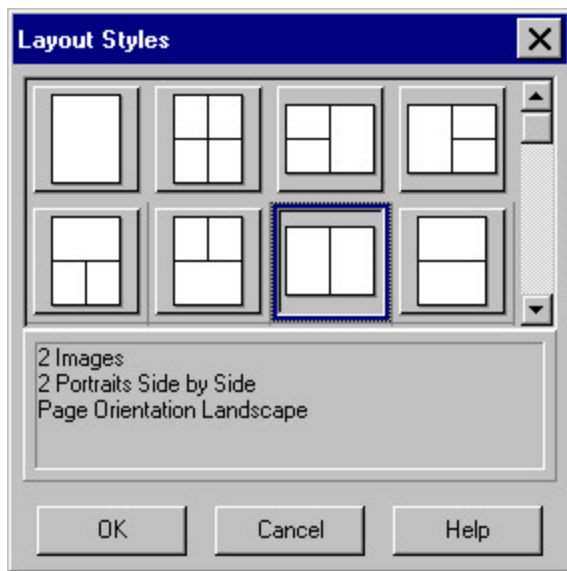
Find the image files “proj7-1.jpg”, “proj7-2.jpg”

They are in the folder called “Samples” in the “Guide” folder.

In this project, we're going to:

1. Place the image files inside the two cells of a Multi-View template.
2. Bring up the Print-to-File Dialog Box.
3. Select a canvas size and background.
4. Print the Page.

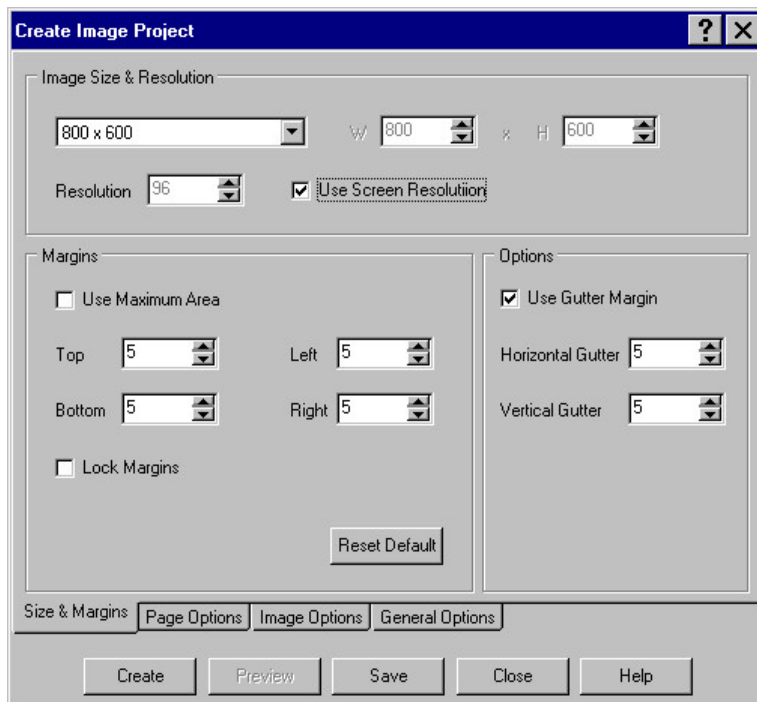
First, we'll open the two images in Multi-View with a side-by-side port style. You should end up with something that looks like the following.



This is a side-by-side port for Multi-View.

Now, three ways to access Print-to-File:

1. File → Print to File...
2. Place the cursor anywhere in the viewing area, then right-click and select “Print to File...”
3. Click on the drop down button right next to the Printer Icon button and select “Print to File...”

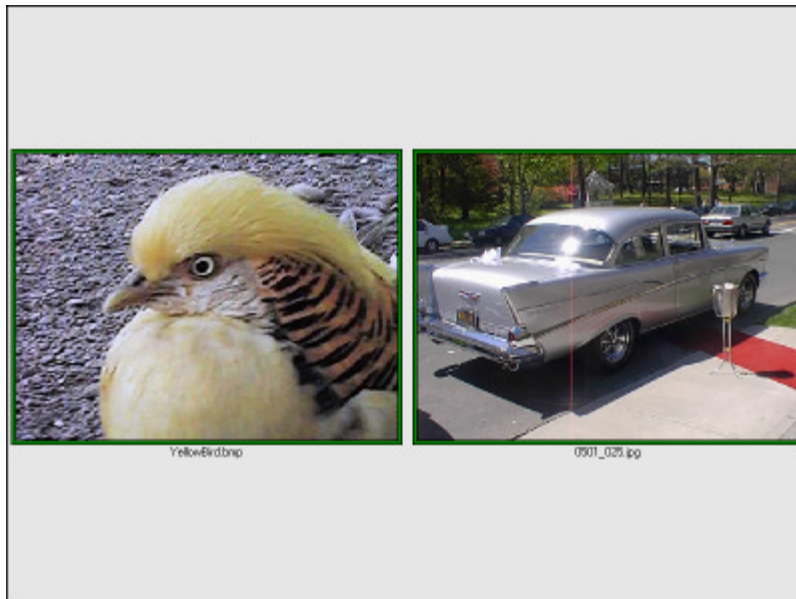


You should now have the Print-to-File Dialog Box.

We won't change the settings in the “Size & Margins” tab. Just make sure though that the “Use Screen Resolution” checkbox is checked, the canvas size in the drop down menu is set to 800 x 600, and the “Use Gutter Margin” checkbox is checked with a setting of ‘5’ for both the horizontal and vertical gutters.

After this project, do experiment with different canvas sizes and resolutions.

Click “Create”, then “Preview”.

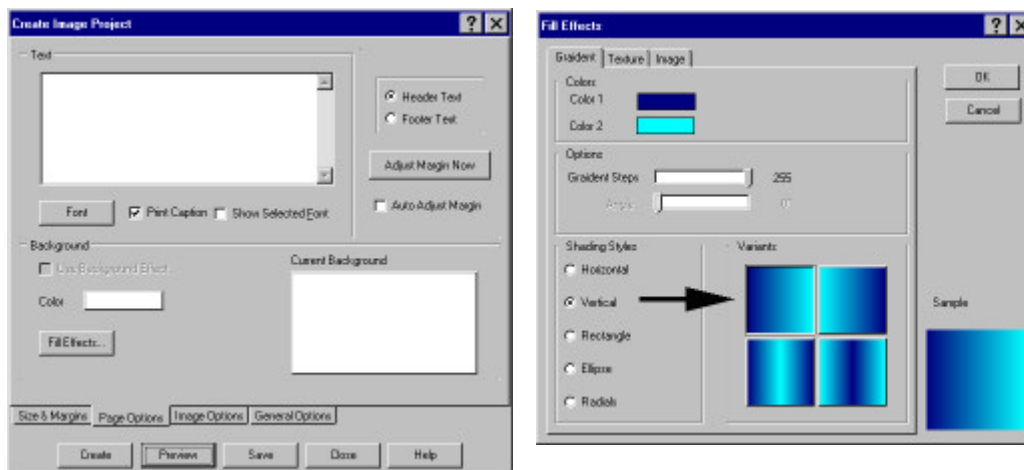


This is now savable as one .bmp file.

However, we wanted to add a background to this collage. So we'll go back to the dialog box and add it.

To exit the preview, simply place the cursor anywhere over the image and left-click.

Now click on the “Page Options” tab of the Print-to-File Dialog Box. Then click on the “Fill Effects...” button. There, you'll click on the “Vertical” radio button for a shading style and click on the upper left-hand variant.



As a quick note, double-clicking on the color boxes allow you to choose any two colors you'd like for your gradient. After this project, experiment with textures and images for variety.

Click “OK”. Then click “Create” and “Preview”.

EZ Viewer takes the two images plus the background and combines them to one image. Notice how clicking the Create button allows you to make changes to the original Print-to-File file and lets you see the change with the Preview button.



Again, clicking anywhere on the image escapes back to the dialog box. There, you can save the file and print it later as a single file!

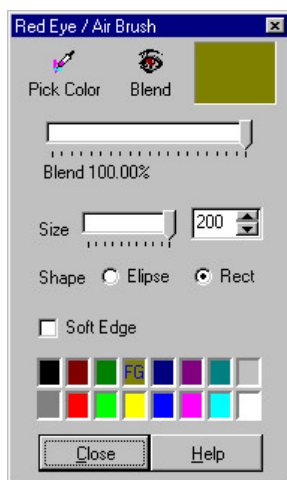
PROJECT: COMBINE A CUT OUT AND A BACKGROUND TO ONE .BMP FILE

Find the image file “proj7-3.jpg

It is in the folder called “Samples” in the “Guide” folder.

In this project, we’re going to:

1. Use the Air Brush Tool to paint a solid color around the portion of an image we want to cut out.
2. Index the painted color as transparent to effectively “cut out” the portion.
3. Use Print-to-File to add a background.

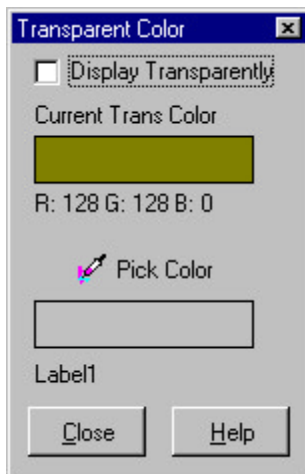


Open the sample image file in the single view mode. Then click on the “Red Eye Reduction/Image Air Brush” icon button. The Air Brush Tool Box appears.

We want to isolate the small house in the sample image. To do that, we’ll paint around it with the Air Brush. Set the “Blend” ratio to 100%. You may start with a large brush, then select a smaller sized brush as you get closer to the house. Choose the shape of your brush. For smaller brushes, we recommend the “Ellipse” which provides you with a circular brush. Leave the “Soft Edge” checkbox unchecked. Then choose a non-photorealistic color such as purple or the color we choose, olive.



Once you've painted completely around the house, select Image → Color → Transparent Color...



Click on the “Pick Color” button and place the eyedropper cursor anywhere over the painted color and click on it. The painted color disappears and the house is now isolated. Then simply access Print-to-File and put a background behind the house.



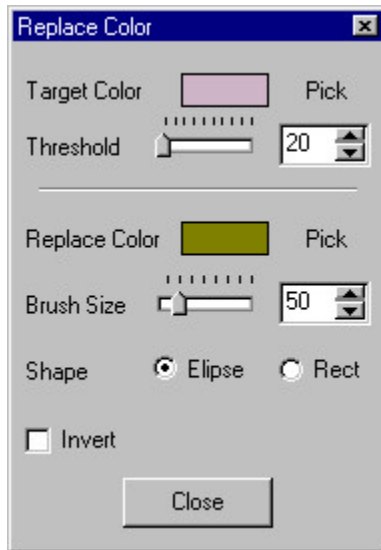
As an added touch, don't forget you can add text and borders to the Print-to-File bitmaps for completely finished portraits.

Chapter VIII. Color Swap

Color Swap uses a paintbrush to replace one color in a given brush-sized area with a second color. This is helpful in reducing unwanted pixels around edges of an object in an image.



Access Color Swap by clicking on the Color Swap Icon Button on the Image Tool Bar. Note that once the Color Swap Dialog Box is open in your *EZ Viewer*, it might include buttons that can be right-clicked for preset thresholds and might contain an advanced button for 3-color target color settings. So don't panic, the concepts presented here will still apply.



Target Color: Color that will get replaced by the Replace Color. Access the eyedropper by clicking the Pick Button or by right clicking on the image. Then left click over the color in the image. Threshold determines how close the Replace Color must be to replace the target color, the default value is 20. Smaller values mean color must match closely while larger values are more tolerant of closeness, with Invert off. 255 is virtually painting all colors solid including Target and background colors.

Replace Color: Color that will replace the selected Target color. You must use the Pick button to get the eyedropper for the Replace Color. Brush Size is selectable in pixels and in Ellipse or Rectangular shapes. When the Invert checkbox is checked, Color Swap will replace all color *except* the target color.

PROJECT: REPLACE PIXELS OF ONE COLOR WITH ANOTHER

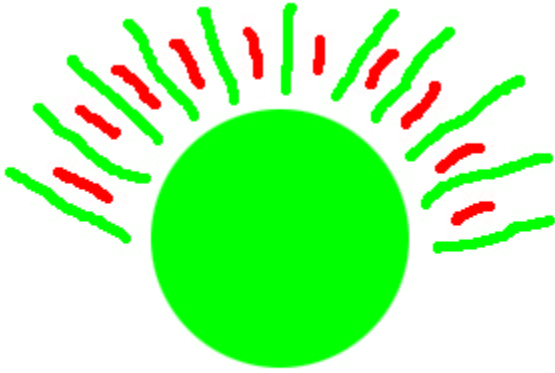
Find the image files “proj15-1.bmp”.

It is in the folder called “Samples” in the “Guide” folder.

In this project, we're going to:

1. Set the target color and threshold of the unwanted objects.
2. Set the replace color.
3. Pick a brush size and paint over the unwanted objects.

Note that this exercise is an oversimplification of what you can use Color Swap for. At the end of the exercise, we'll provide some tips for where Color Swap is most useful.



This Cartoon-Like representation could be just as well have been a head of hair on a person you'd like to cut out of an image as we did in Section VII Print-to-File. The green circle and long strokes are what we want to cut out while the short red strokes in between the long strokes are unwanted pixels.

Step 1:

With the Color Swap Replace Color Dialog Box open, click on the Pick Button next to Target Color, then click anywhere on one of short red strokes. (Note that you could also right click on the image to get the Target Color eyedropper. Note also that for both Target and Replace colors, you can double-click on the palette color to manually choose a color without the eyedropper. For this example, do use the eyedropper.)

Step 2:

Set the Threshold to 20 if it isn't already set to 20.

Step 3:

Click on the Pick Button next to Replace Color and then click anywhere on the white background.

Step 4:

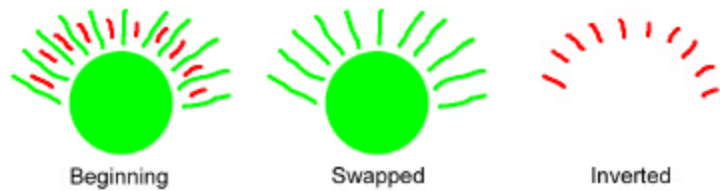
Set the Brush Size to 40 pixels and the shape to Ellipse. Make sure that Invert is not checked.

Step 5:

Paint over the red strokes. Notice that the red disappears!

Step 6:

Reload file "Proj15-1.bmp". Click on the Color Swap Icon Button and this time check on the Invert checkbox. Then paint over the image and notice what happens.



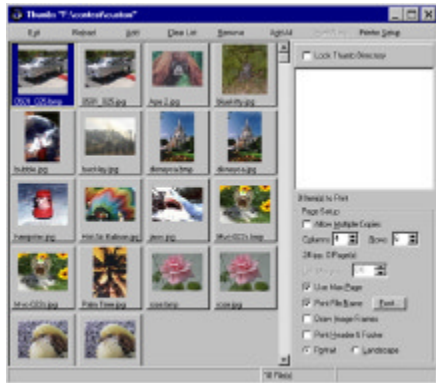
Chances are you won't be using Color Swap on an image with such a simple color scheme. More than likely, you'd want to use it to touch up an object you're cutting out of an image. If the cartoon-like example looks like a hair on a head, that's no coincidence. You can use Color Swap to paint out the background around hairlines in such images. The mechanics of what Color Swapping is doing is the same. Only with a photorealistic image, the color swap probably won't be made in one pass. Thus, some tips below for using Color Swap on more complicated images:

- Paint out most of the image by setting the Threshold to 255 with the default olive green Replace Color. Leave the areas around the edges or other fine areas untouched.
- Then start the process of picking the target color and painting the replace color in. By repeatedly right clicking and painting as you go to continuously set the target color, you can pick up the gradations of target colors as you go.
- Start with relatively low thresholds and go up in steps as needed.
- If the only thing left to do is clean up one or two pixel sized specks, try using Pixel Fix and set the Pixel Neighborhood Size to 2 x 2.

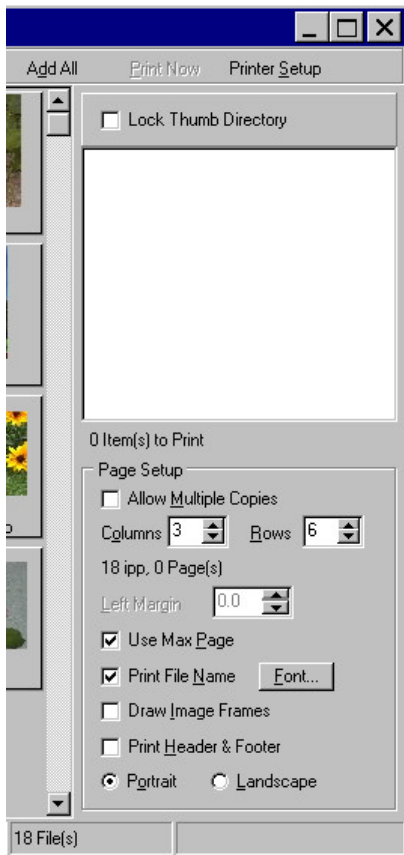
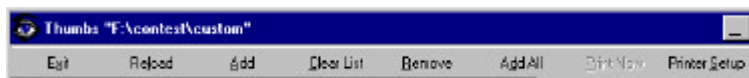
Chapter IX. Thumbnail Printing

Print any 1 to 64 images from any one folder.

To access the Thumbnail Print Utility, simply open a folder of images. If necessary, you may review Chapter 4 titled “Viewing in Single, Multi, and Thumbnail Modes”.



The Thumbnail Print Utility section is simply the right portion of the Thumbnail Viewing Window. It contains a file list box, a selection for columns and rows, and various checkboxes. There is also a basic toolbar at the top of the window with buttons for adding files to the file list.



To print thumbnails:

1. Set the number of columns (max. 8) and rows (max. 8) for the printout. The settings should match the number of images you wish to print. For example, if you wish to print 12 images, set the ‘columns by rows’ to 4 x 3, 3 x 4, 2 x 6, 6 x 2, or even 12 x 1.
2. If you want to print all of the images in the folder, click on “Add All” on the top toolbar. Remember, you can accommodate up to 64 images as a maximum.
3. If you want to print only selected files, click on the desired image file in the window to highlight it and then click “Add” on the top toolbar. If you try to add the same image file more than one time, be sure to check on “Allow Multiple Copies”.
4. Check the options you want then click on the “Print Now” button on the top toolbar.

EZ Viewer partitions the page evenly into a number of cells that add up to the number of columns and rows you selected, then fills those cells with the images.

- Use Thumbnail Printing to print more than the maximum of 25 images allowed in Multi-View Printing.
- Create “Contact Sheets” that help you organize your images. A good way to do this is to create folders containing 64 images. Then, your contact sheet of 8 columns by 8 rows will perfectly represent that folder.
- You may elect to tag each image with its file name by clicking on “Print File Name”. You may also elect to click on “Print Header & Footer”. The default header is the path where your folder resides on your drive. However, you can choose to write your own footer and header by right clicking inside the file list box and selecting “Set Custom Header” or “Set Custom Footer”.

Chapter X. Color and Lighting Levels

There are various ways you can adjust an image's color and light levels in *EZ Viewer*.

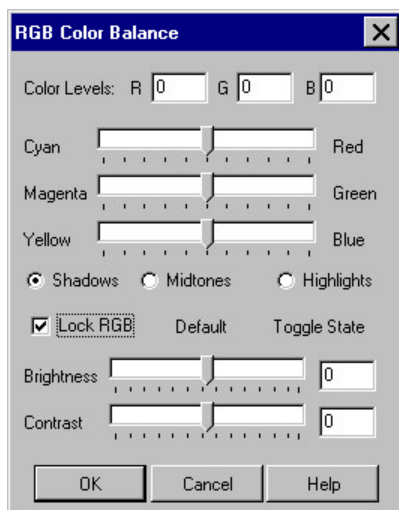
For adjusting light levels, you can adjust the contrast and brightness by selecting Image → Adjust → Contrast Brightness. There's also a method utilizing the RGB color adjustments to adjust light levels, which we'll mention in a moment. You may also adjust the gamma in an image by selecting Image → Adjust → Gamma... If you wish to adjust the *display* contrast, brightness, and gamma *without* affecting any image for viewing, select View → Display Settings...then select View → Display Setting On to activate you settings.

Color can be adjusted through the RGB Color Balance Dialog Box. Access it by selecting Image → Adjust → RGB Color Balance... or click on the RGB Icon Button (next to the Red-Eye Button) on the Image Tool Bar.

Some possible scenarios for adjusting color and light levels:

- Your scanned images have a color bias resulting from a particular camera/film combination
- The image's picture was taken under poor light conditions.
- You need to print an image, but what's printed doesn't quite match what's on screen

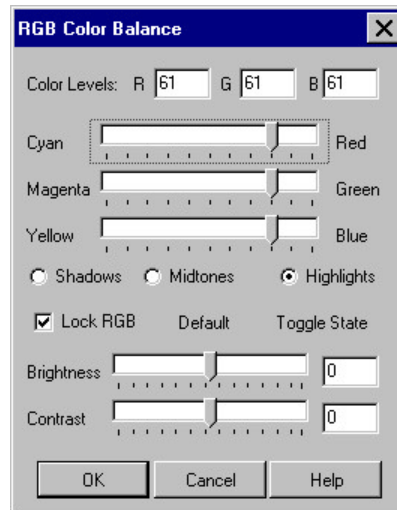
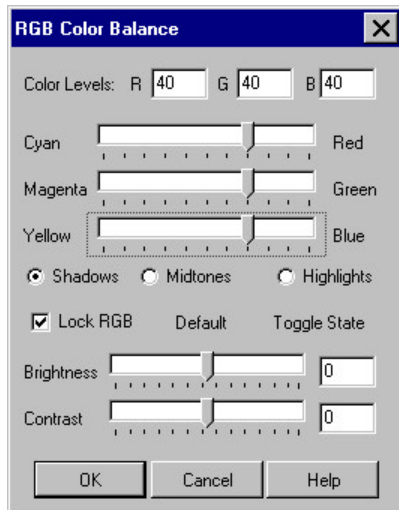
Since the last scenario is important, we'll give you two solutions for it. The first and simplest is simply reducing the image gamma level. Typically, ink-jet printers print images darker than the displayed image. So by reducing the gamma, the image can be just slightly under-contrasted on-screen but print out with a better contrast balance.



The second solution is a bit more elegant. It involves using the RGB Color Balance to adjust varying shades of black within an image. With any image in view, open up the RGB Color Balance Dialog Box.

Make sure than the radio check buttons for “Shadows” and “Lock RGB” are on.

Place the cursor on any color slider and increase the slider two notches to the right. Since the Lock RGB is activated, all the sliders should move at once. Then click on the radio buttons for highlights and slide the sliders three notches to the right.



The “two notches” and “three notches” are simply starting points. You can select any levels that you wish. Thus by increasing the shadow and highlight levels, the chances of getting a dark printout have been greatly reduced.

Chapter XI. Cloning

Cloning is a very powerful editing tool that picks up one part of an image and places it anywhere within the image.

Almost endless applications:

- Repair a scratch or tear in an image
- Cover up a blemish or unwanted spot
- Remove objects from an image
- With Print-to-File, place objects from one image to another
- Create fun special effects such as cloning one person's head and placing it on someone else's head!
- Duplicate objects in an image, especially objects with simple regular shapes

We hope with the following two projects, you'll get a handle on how to do all of the above.

PROJECT: RETOUCH A PHOTO

Find the image file "proj10-1.jpg"

It is in the folder called "Samples" in the "Guide" folder.

In this project, we're going to:

1. Activate the Clone Tool.
2. Choose the appropriate tool settings for the task.
3. Use the Clone Tool to pick up one part of an image that will be used for covering up another part of the same image.

When you open the file proj10-1.jpg, you'll notice a bit of a surprise.



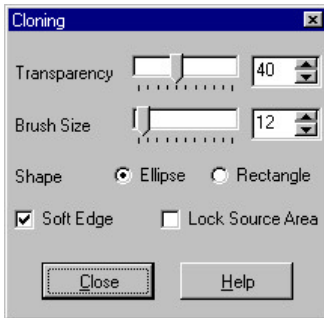
Indeed, our hairy friend has developed an unsightly blemish!

And what are friends for if nothing else but to help in time of need. So we're going to help our friend by giving him a makeover.

First, zoom in reasonably close so that the blemish is, very roughly, 15% to 25% of the viewing area. The next image will suggest a good zoom level.

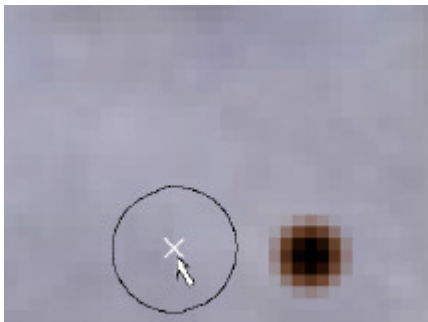


This zoom level should provide enough image area for us to pick just a portion of it and use it to cover up the nasty blemish. This is not required but if you'd like to stay consistent with our numbers, start by viewing the image at actual size (100% zoom). Then left-click to zoom-in with the Linear Zoom Tool until the zoom level shown on **EZ Viewer**'s bottom display bar is 1465.31%. Then, move the scroll bars to position the image with the blemish anywhere in the lower right-hand portion of the image.



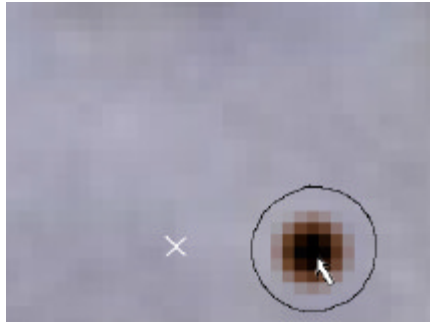
Bring up the Clone Tool by clicking on the Clone Tool Icon Button (Stick-Figures Button).

Set the "Transparency" Slider to 40. Then pick an elliptical brush size that is just slightly larger than the blemish. In our example, a brush size of 12 will do just that. Your brush size may vary slightly if you're zoomed in at a different level, and that's perfectly fine. Do make sure though that the "Soft Edge" box is checked off.



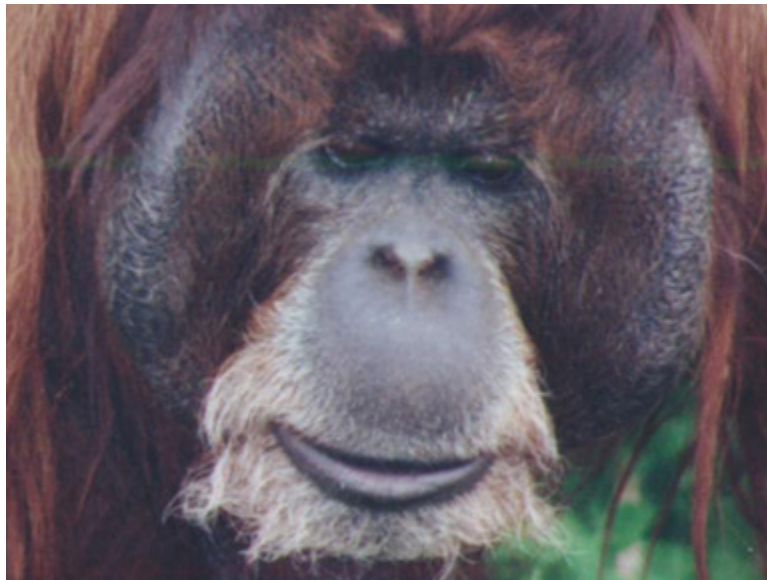
Place the brush cursor anywhere adjacent to the blemish and right-click. This sets the source area of the clone.

Note that if you're not happy with the source location, you can place the cursor at another location and right-click again. This is helpful for future cloning tasks where you may have to repetitively reset the source area.



Then place the brush cursor over the blemish. This will be the destination area of the clone. Start with ONE left-click and see how much of the blemish goes away. Then left-click, one click at-a-time, until the blemish disappears.

If you look up the Clone Tool in the help files, you'll see a more technical explanation of the Transparency setting. Essentially, the Transparency and the Soft Edge enable the Clone Tool to effectively remove the blemish.



Our friend now looks just great.

This technique can be applied with some variations to repairing tears, scratches, and removing objects.

Experimenting is key here. For example, try setting the Transparency level to zero. That's good for copying objects. Or try a very high transparency setting (93-96) for a cool double-exposure effect.

Next, we'll explain how to clone from one image to another.

PROJECT: CLONE FROM ONE IMAGE TO ANOTHER

Find the image files “proj10-2.jpg” and “proj10-3.jpg”.

They are in the folder called “Samples” in the “Guide” folder.

In this project, we’re going to:

1. Use Multi-View and Print-to-File to put two images together.
2. Activate the Clone Tool to pick-up part of one image and place it on another.
3. Crop the resulting image to complete the project.

We won’t go into too much detail here for the Multi-View, Print-to-File, and Cloning tasks since they are covered in other sections. However, we will step through what the result is after each task is completed.



First, open the two images in a two-celled side-by-side port style Multi-View.

The first image of the hamster should be in the left cell. The image of the dog should be in the right cell.

Bring up “Print-to-File”. Select an “800 x 600” canvas size, then click on the “Create” and “Preview” buttons to confirm the layout. Click on the “Save” button, give the file a name, and open the new file in the single view mode.



The background created in Print-to-File is irrelevant since it’s going to get discarded anyway.

Bring up the Clone Tool. Choose a setting of 40 for both Transparency and Brush Size, Ellipse clicked on, Soft Edge checked on, and Lock Source area unchecked. Then place the brush cursor over the dog. The center of the brush should be over the dog’s nose, then right click to set the source area.



With the source area set, place the brush cursor over the hamster, with the center of the brush over the hamster's nose. Hold down the left mouse button and clone in small outward spirals. We recommend using multiple strokes. In other words clone, then let go of the mouse button, then repeat. This way, you can undo a stroke easier if need be.

Continue outward until just the face of the dog occupies the interior of the hamster's face.



When done cloning, crop out the hamster-dog face picture.

If you like, save the resulting file and print it.

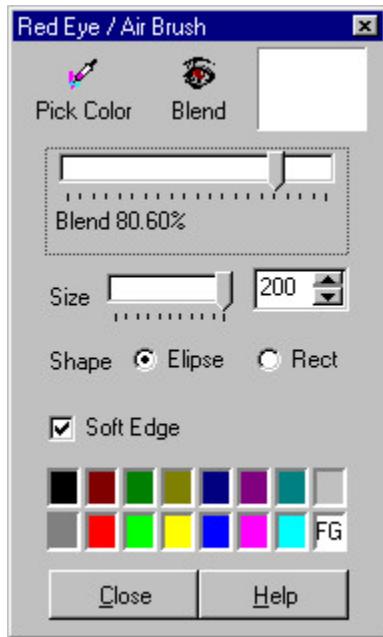
You may also elect to touch up any stray or awkward edges by cloning the resulting image.

Again, transparency and soft edging really help make the dog face fit inside the hamster face smoothly.

Chapter XII. Red-Eye Reduction

Red-Eye Reduction is a paintbrush tool that can be used as both an airbrush and as a color reduction tool.

To get a feel for how the Red-Eye Tool works, let's first look at how it paints. Click on the “Red Eye” Icon Button on the Image Editing Toolbar to open the Red-Eye/Airbrush Tool.



Say for instance you wanted to paint a cloud into one of our images. First, pick a blend ratio (we picked ~80%). Then pick a brush size (we chose 200 pixels, yours will vary according to the image). Choose an Ellipse Brush with a Soft Edge. Then simply click “Blend” to activate the painting brush cursor and paint overlapping solid circles.



PROJECT: REDUCE RED-EYE IN AN IMAGE

Find the image file “proj11-1.jpg”.

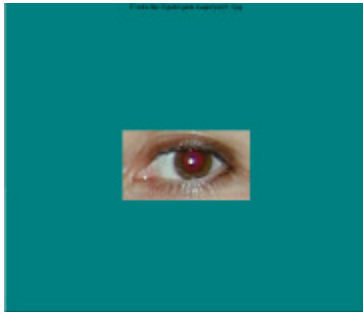
It is in the folder called “Samples” in the “Guide” folder.

In this project, we're going to:

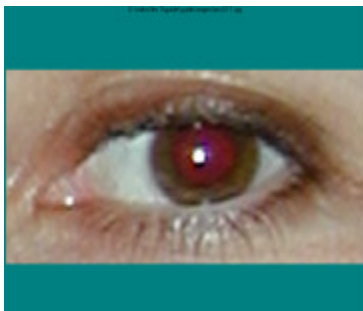
1. Index a color inside an eye.
2. Use the indexed color to blend out the red areas.
3. Re-index another eye color to finish the task.
4. We'll also show how to change an eye color!

When you open the sample file, you'll see that the image is zoomed into an entire eye.

Typically, you'll want to zoom into an eye until it occupies just about all of the viewing area. So even though the image is of just an eye, we are going to zoom in as well.



Open up the sample image. It may open up in actual size or 100% zoom level.

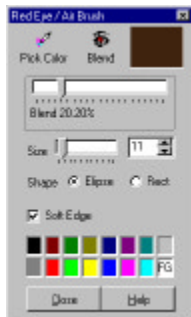


If it does open up at 100% zoom, just hit the “Fits All” button or choose “Fits All” from the “Fitting” options in the right-clicked context menu.

We can now work with the image. You may even choose to zoom in even more and that's fine too.

In this particular eye, you'll see a typical setup of red areas and non-affected areas. We're going to use those non-affected areas to blend out the red areas.

With the Red-Eye Tool open, click “Pick Color”. Then bring the eyedropper tool over a dark brown portion of the eye and click once. If you're not happy with the color you picked up, simply choose another section and click on it.



You'll see that the color in the upper right palette has changed to the color you picked up.

We'll set the Blend Ratio to approximately 20% for our first paint strokes. The size of the brush will vary from image to image. We're using an 11-pixel brush here. Typically, you'll want to choose a brush size approximately a third to half the diameter of the eye for the first strokes.



Then click on the “Blend” button and paint over the red areas. You can then make a second pass with a smaller brush to get in tight around the white area of the eye. At this point, we’re almost done. The painted part can look overly smooth. To fix this, click on “Pick Color” and pick up a lighter color brown. Then set the Blend Ratio to approximately 10%.



Make a second pass and paint over the formerly red area again with the new color. This time, paint in one-click-at-a-time to achieve sort of a speckled look. Although this may look strange at first, this will give the eye a natural appearance once zoom out. This completes the Red Eye Reduction. You may save the file for future reference.

Variation: Change the Eye Color

For a cool eye color change, simply pick a color from the preset palette on the bottom portion of the Red Eye Tool Dialog Box. We picked the olive green color (top, fourth from left) and set the blend ratio to approximately 4%. We then picked a brush size that covered the area in between the white area and the edge of the brown colored portion. We suggest you experiment with different colors by double-left-clicking on the upper right color palette box and choosing a custom color. Watercolor-like colors seem to work best.



Here’s our resulting eye. Notice how we left the white of the eye intact and the extreme outer portion of the colored area brown. This gives the eye a natural appearance.

Experiment with the different shades and blending and you’ll discover even more possibilities!

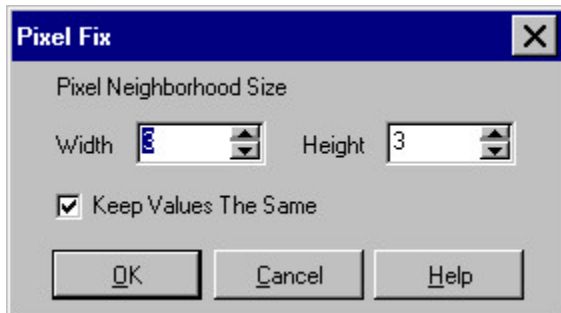
Chapter XIII. Effects, Borders, Embedded Text, and Other Adjustments

Some additional editing tools are available in **EZ Viewer** to make your images look better. Also, you can add borders, text, and numerous special effects to your images.

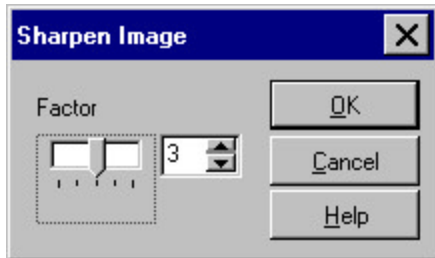
We want to mention three editing tools we think can improve the quality of your images. The first is “EZ Fix”, the second is “Pixel Fix”, and the third is the “Sharpen” tool.



Click on the Light Bulb Icon Button to initiate EZ Fix on an image. EZ Fix will automatically adjust the contrast and brightness in an image. Typically, it works best on images that are overly dark or overly hazy. Applying EZ Fix on an image as a first step in light adjustment is quick and easy. Plus, EZ Fix will not change an image already in proper balance, so it will never hurt to use EZ Fix.



Access Pixel Fix by selecting Image → Adjust → Pixel Fix... You can leave the default setting of 3 x 3 pixels as is. Pixel Fix will find stray specks typically found in certain scans or images scanned with original pictures containing specks. Then, Pixel Fix will fill them in by interpolating the surrounding pixels around the specks.



Sharpening is found by selecting Image → Adjust → Sharpen... It can help images that are blurry but contain a fair amount of resolution to work with. Be careful though as sometimes the image can get grainy. Try using lower values at first if that happens. Also, some images don't respond well to sharpening, so your results will vary from image to image.

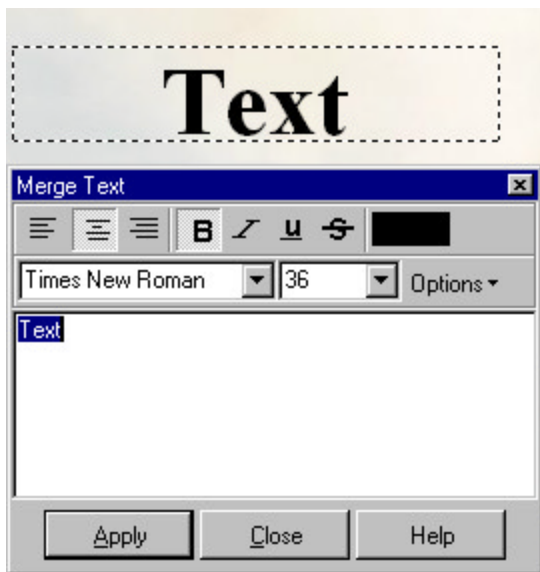
There are many special effects and motion effects you can apply to your images. Since these are relatively simple tools, we won't explain them here. Just dive in and experiment with them. For example, the “Line Drawing” tool has essentially one adjustment. So you can start with low values and then reapply the effect with higher values and compare the results. You'll also discover that certain images work better with certain tools.



Borders can be access by clicking on the Borders Icon Button or by selecting Effects → Borders.



Applying borders should be pretty straightforward. Simply choose a shape from the drop down menu. If you choose the “Rectangle” or “Square” shapes, you’ll have the option of checking on the “Fade Edge” box. Then pick an edge width. Some computers may experience slow processing creating the border width due to processor speed. Choose a color by double left clicking over the color palette box. Some shapes allow for vector shape adjustments such as the “Polygon”, so make those adjustments as necessary. For a cool variation, try saving an image with a border, then apply a second border of width less than the original border and of different color for a double border.

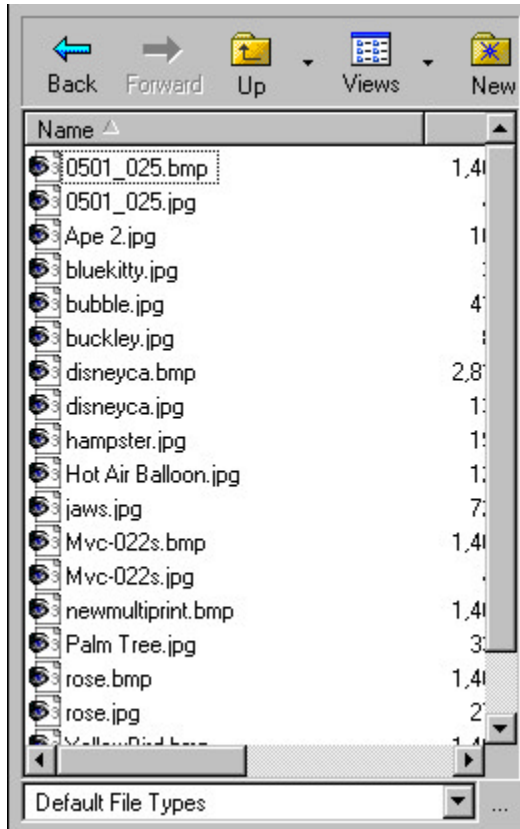


Embedding text into an image is also quite simple. Just click on the Text Icon Button, which is the capital “T” on the image Tool Bar. Or, select Image → Add Text... Type in your text and choose your size, font, justifications, and other adjustments. The text will be placed at an arbitrary location on the image. To position the text where you want it to go on the image, just click on the Selection Rectangle Icon and select an area for the text to go in. You can repeat selecting the rectangle as many times as you like to get the text placed just right.

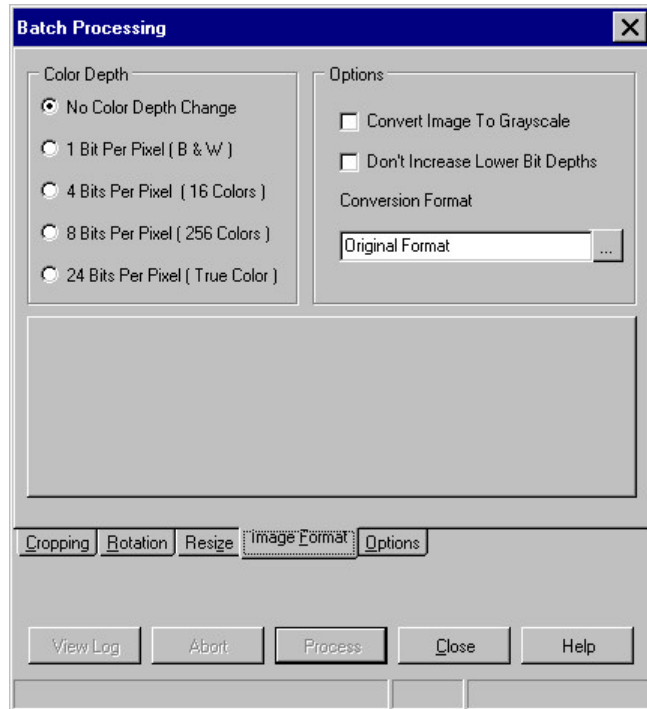
The text is not a part of the image until you render it into the image by clicking on the “Apply” button. Then save the image with text if you wish.

Chapter XIV. Batch Processing and Folder Management

In *EZ Viewer*, you can crop, rotate, resize, file rename, and file format convert an entire folder of images. As an added convenience, you can also access user-selectable folders for viewing, moving, or copying your images.

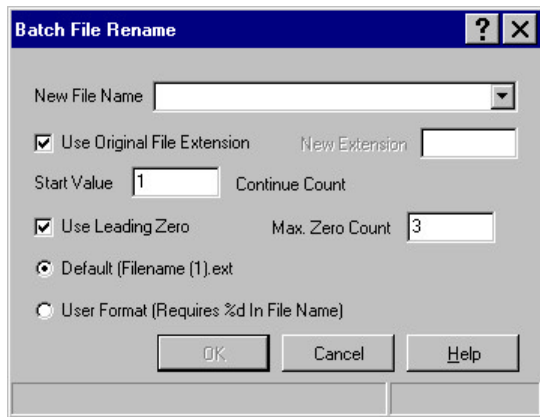


Begin by opening any folder of images. Then select File → Batch → Batch Processing...



Then simply click on the tab to choose the functions you want to perform, then click on “Process”. The functions all default to a ‘no’ action. So for example, unless you specify a cropping parameter, no cropping will occur on the folder. The help files should explain the options in detail if you need them. Two additional pieces of information on Batch Processing:

1. To change the file format of all the images in a folder, click on the “Image Format” tab, then click on the button containing three periods “...” . It’s located to the right of the text box for Conversion Format inside the Options portion of the dialog box.
2. The resulting ‘Batched Processed’ images will go into a subfolder of the folder you opened originally for the batch processing. If you’d like to change the destination of the resulting images, click on the “Options” tab. Then click on the button containing three periods “...” to the right of the text box for Destination. Then choose your destination folder for the sub folder.



You can rename all the files in any folder open in the Explorer Window Area.

Just select File → Batch → Batch Rename...

The simple method: Type in a common name for all the files. The resulting files will be named with the file name plus a corresponding consecutive number (newfilename(0001), newfilename(0002), newfilename(0003), etc.).

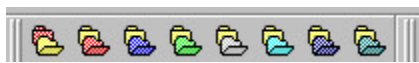
Notice the leading zeroes in the file names. You can select the number of leading zeros by checking on the “Use Leading Zero” checkbox and typing in a number in the “Max. Zero Count” text box.

You can also choose a user selectable format. Just make sure the “User Format” radio button is clicked on. Then type the format name in the “New File Name” text box. For example, if you had 50 files that you’d like named file(0001)of50, file(0002)of50, file(0003)of50 etc., type “file(%d)of50” in the “New File Name” text box.

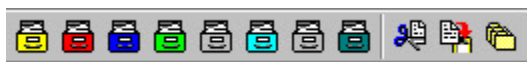
This is great for renaming files just downloaded from digital camera media since those file names are typically just arbitrary numbers.

N.B. Once you rename your files, they cannot be undone. The actual files are renamed in their original folders, not subfolders. So be sure you don’t need the old filenames that you wish to rename.

The Fast Folder and Copy/Move Buttons are great to use in conjunction with Batch Processing.



Fast Folders mark particular folders for quick opening without having to click through an entire file path directory. Just open a folder you’d like to set in the Explorer Viewing Area as you normally would. Then right click over the folder you’d like to set and click on “Yes” to confirm setting that folder to the current open folder. You can then open that folder later without having to click open all the drives and folders in the path. These folders can also be reset later by choosing File → Properties and clicking on the “Folders” tab. Then double-click in the text box of the folder you’d like to reset and choose a folder for fast access. If you’re not sure what you originally set the buttons to, place the cursor over the desired folder and leave the cursor stationary for a few seconds. Then the set path will appear next to the cursor.



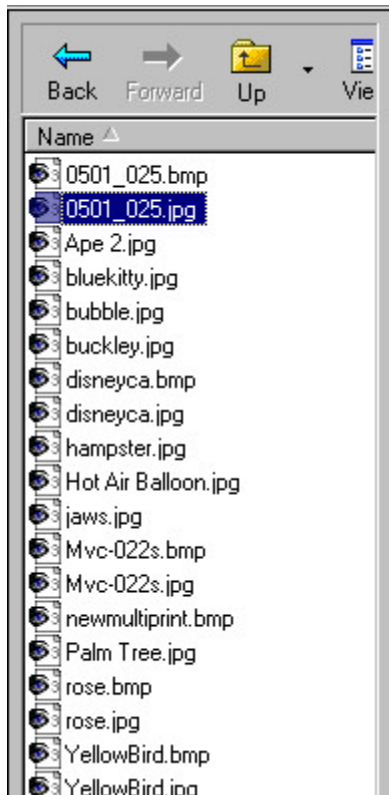
The Move/Copy Buttons copy (default or click on button with arrow) or move (click on button with

scissors) the current image on screen to the destination the button is set to. Setting a folder to a destination location is the same as the Fast Folder Buttons. Simply open the desired destination folder in the Explorer Viewing Area just as you would if you were going to view the folder's images. Then right-click over a folder you'd like to set and click on "Yes" to set the Button to the selected folder. You can later change the button destinations by clicking on the button with multiple folders on the Move/Copy Toolbar or select File → Properties and click on the tab for Move/Copy folders. Then double click inside the text box for the particular folder and choose the destination folder.

Whenever you'd like to quickly copy or move an image on screen to one of the destinations in the Move/Copy Buttons, just click on the button and click on the "Yes" button to confirm the move or copy. If you're not sure what you originally set the buttons to, place the cursor over the desired folder and leave the cursor stationary for a few seconds. Then the destination path will appear next to the cursor.

Chapter XV. The Screenshow Slideshow and MP3-MIDI Audio File Player

EZ Viewer provides a Screenshow slideshow mode that presents multiple images either in the viewing area or in a full-screen mode one image at a time. Also provided is a free MP3-MIDI Audio Player that can be used in conjunction with the Screenshow mode. The MP3 portion of the player can also be used by itself without **EZ Viewer** running to play *.mp3 audio files.

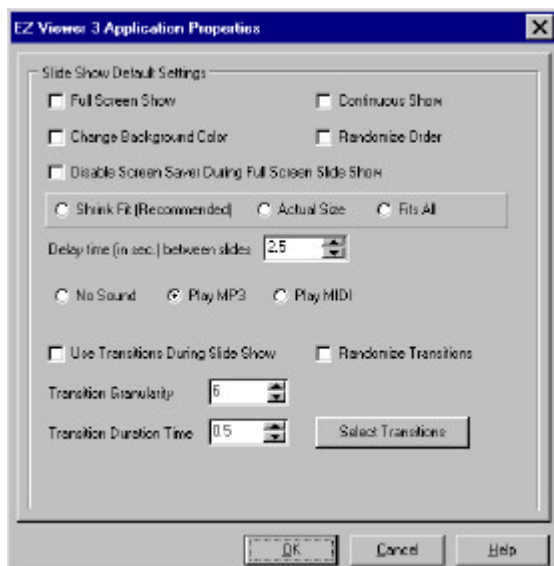


EZ Viewer plays the Screenshow based on the files in the open folder in the Explorer Viewing Area.

Simply open a list of files from a folder containing images just as you normally would to view the images.

Once started, the Screenshow Mode will play the sequence of images starting with the first file and ending with the last file in the list. There are options (which we'll mention in a moment) to randomize the order and continuously repeat the list in the show options.

If you wish to customize your list or change the order of presentation of the images, simply create a folder for the custom list. This can be done in **EZ Viewer** by right clicking with the cursor placed anywhere in the open space of the file list. Then you can set a Move/Copy button to that folder and start copying from the original folder to your new folder in the order you like.



Access the Show Options Dialog Box by selecting File → Properties and then the Slideshow Tabor Screen Show → Show Options.

Here is where you'll choose the screen mode (normal or full), to play continuously, and others.

Just about all of these options are straight forward enough. We'll discuss how to start and stop a show. Then, we'd like to mention a few things about Transitions and the options "Transition Granularity" and "Transition Duration Time". Transitions are special effects in between changes from one image to another. Then, we'll discuss how to add sound to your show.



To start Slide Shows in the normal viewing area or full screen mode, choose Screen Show → Start Show or click on the Movie Camera Icon Button to start the show.



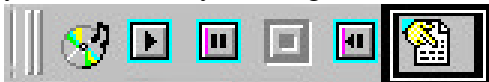
To stop Slide Shows in the normal view area, click on the Red Strikethrough Circle Icon Button. To stop Slide Shows in the full screen mode, simply left click anywhere on the current image.

You choose to use Transitions by putting a check in the “Use Transitions During Slide Show” checkbox. Then click on the “Select Transitions” to choose which Transitions will be used. The Transitions will change in the same order as they appear in the selection list unless you click on the “Randomize Transitions” checkbox. Then adjust the two settings for Granularity and Duration Time. But what do you set them to?

Transition Granularity is the size in pixels of each element in a transition, the default is value is 6. It is also the size of one step movement. Experiment with different settings for varying effects. In general, lower values will create smoother transitions and will work best with relatively faster computers. Larger values will produce “chunkier” transitions that will work well with fast or slow computers.

With Transition Duration Time, computer speed also comes into play. Fast computers might execute transitions from image to image too quickly for easy viewing, in which case you’d want to increase the duration time to slow the show down. Slow computers may not be able to keep up with quick transitions and thus overburden computer resources. Increasing transition time should help alleviate the situation. In short, there is simply a limit based on the computer your using to how fast transitions can execute. However, **EZ Viewer** is designed so that the vast majority of computers, even those most modest in speed and power, can run a very smooth running Slideshow.

One way to add audio to your Slideshow is by playing a MIDI song during the show. Your computer must be equipped with a MIDI compatible soundcard in order to use this feature. **EZ Viewer** supplies a default sample song (Little Brown Jug) or you can choose any MIDI song file you may have. Simply click on the radio button for “Play MIDI” in the Show Options Dialog Box. Then when you start a Slideshow, the MIDI file will start at the same time. You can choose your own file by clicking on the Select MIDI File Button on the MIDI/Audio Tool Bar.



It’s the button with the hand over a sheet of paper. You’ll then get a standard file dialog box where you open your MIDI file. In addition, you can simply play the MIDI file by itself without a Slideshow by selecting your file, then clicking on the play (arrow), pause (double-lines), or rewind buttons (back arrow+line) just like a tape player.

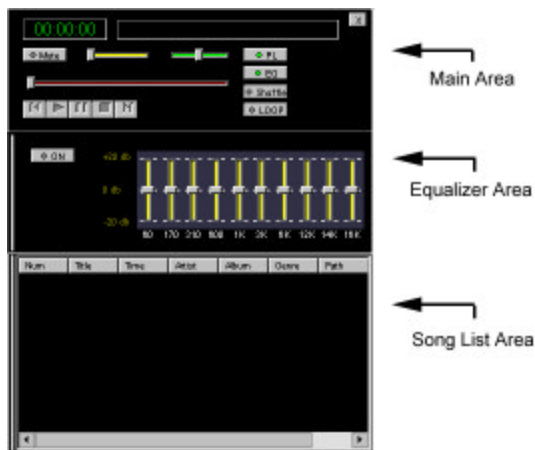
MP3 Audio Player

EZ Viewer now has the capability of playing MP3 audio files with a Slide Show. The MP3 Player portion of the program will also be available as a freeware program downloadable from the company website. You'll need a soundcard in a computer capable of multi-media output. Simple test: If you can play a regular audio CD in your computer and you can hear it playing, you should be able to use this feature.

Choose "Play MP3" in the Show Options" Dialog Box. **EZ Viewer** will start playing the default song(s) in the default song list with the start of a Screen Show. However, there are no supplied *.mp3 files with **EZ Viewer**, so you'll have to supply your own. You may want to do an Internet search for free downloadable MP3 song files that you can use to test the player. Then you must tell **EZ Viewer** what you want as your song list that will play with a Screen Show. Since, it's important to know how to select songs, put them into a list, and assign lists to **EZ Viewer**, we'll discuss the procedure below.



First, open the MP3 Player by clicking on the Show/Hide Audio Player button located on the MIDI/Audio Tool Bar to open the MP3 Player.



The Main Area contains song time elapsed, song title, mute button, volume slider, balance slider, display play list toggle, display EQ toggle, shuffle list button, loop list button, time line slider, and transport controls for play, stop, pause, and rewind.

The Equalizer Area contains an on/off button and a ten-band EQ to control tone.

The Song List Area is where you drag mp3 song files to from Windows "My Computer" directories or Window Explorer directories.

EZ Viewer's Audio Player for Screen Show purposes plays song lists, not actual songs. However, you can make a list one song long if you like. We'll construct a song list that will play with a Screen Show.

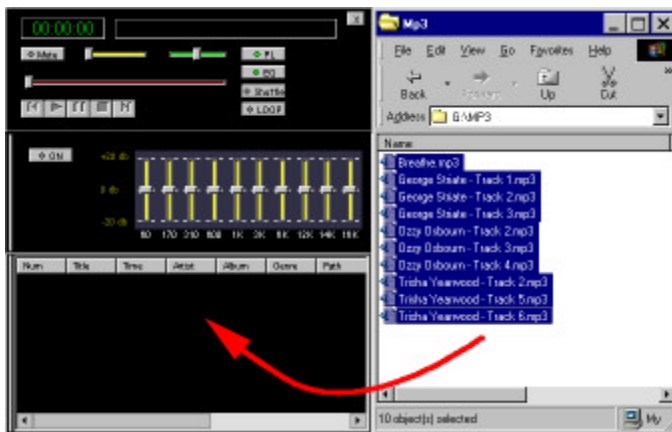
1. Move the song files you want for your list into one folder that contains only the files you want, in the order you want. You may have to rename and alphabetize the file names to get the order you want. Do this outside of **EZ Viewer** using standard Windows conventions: i.e. two "My Computer"'s open, multiple selecting with CTRL and SHIFT keys, and right clicking and choosing "Copy Here". You can also use Windows Explorer to do the same thing, or any other Windows conventions.

2. Once your folder is assembled with the files you like in the order you like, arrange your desktop so that you can see both

- (1) Either Windows Explorer or My Computer with your folder of song files open and
- (2) the MP3 Audio Player window.

It's important that your list is prepared outside of **EZ Viewer** since the only two ways to delete from a list in the MP3 Audio Player is one song at a time or exiting **EZ Viewer** and trashing the song list completely. Therefore, it's much easier to manipulate your list outside **EZ Viewer** first.

3. With your folder of song files and MP3 Audio Player both open and visible, multiple select your song files, then right click and hold, then drag into the Song List Area of the MP3 Audio Player.



To set this list that will play with a Screen Show, just right click anywhere in the Main Area and choose File → Save As. When you save, leave the file name as *default.m3u* and save it in the folder with the images for your Screen Show. You can have one list (*.m3u) file per folder but you'll end up with many files named default in different folders. Default in this sense means

default for a particular folder. However, you can have a real “default” list that will play when a folder doesn’t have it’s own default file (think of it as a global default). Just right click inside the Main Area of the player and choose File → Set As Default. Quick Recap:

- Saving a list to the folder containing images for a Screenshow will make that list the play list for that show.
- Setting a list as a default with “Set As Default” will make that list the play list for folders that don’t contain lists.

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