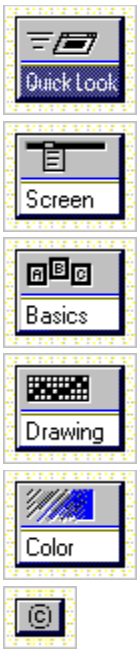
Quick Look
Screen
Basics
Drawing
Color
©

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File Types

With the Image Editor, you can create files for cursor, bitmap, and icon resources. Both cursor (.CUR) and icon (.ICO) files can have multiple images. Multiple images are a set of modified images based on a single image. Each image in the set matches a display device, such as a VGA or monochrome display.

- Descriptions:

  Images Described

  Cursors and Icons

  Bitmaps

In an icon or a cursor, each pixel description can consist of either an opaque color from a color palette, a screen color, or an inverse color.

If the pixel has an opaque color, it always takes that fixed color. In a cursor, black and white are the only opaque color choices for most devices. Screen colors and inverse colors are masks. They indicate either that the pixel should take the screen color of the display or that it should take the inverse of the screen color. If a pixel takes the screen color, that portion of the icon or cursor appears transparent. If a pixel takes the inverse color, that portion of the icon or cursor appears to be highlighted. These two color values change automatically as the screen color changes. In a cursor, these two color values also change automatically as the cursor passes over different portions of the screen.

In a bitmap, each pixel displays an opaque color that you choose from the color palette.

A bitmap type always displays the same colors no matter what screen color appears on the display device.

All the images that you can create with the Image Editor are bitmaps. A bitmap describes the color characteristics for every pixel contained in an image.

In a monochrome (two-color) bitmap, each pixel is represented by one bit, with a value of 1 for white and 0 for black. A color bitmap uses multiple bits to define the color for a single pixel.

Icons represent files or windows when they are minimized. You can place the mouse pointer on an icon, and take some action involving that object. For example, you could:

- Δραγ τηε the icon to another screen location
- Cause an action by moving the icon from one window to another---such as moving files in the File Manager.
- Expand a window by double-clicking the icon

Creating a File

When creating a file, you must choose either a bitmap, icon, or cursor file type. Each file type has a different purpose in your application. You can create cursor (.CUR) and icon (.ICO) files with multiple images. Multiple images can match displays---for example, VGA, EGA, CGA, and monochrome monitors---with the proper image. Windows selects the correct resource to display.

- To create a new file:

1. From the File menu, choose New. The Resource Type dialog box appears.

2. Select either Cursor, Bitmap, or Icon.

3. Choose OK.

After you select a resource type (image), a dialog box appears in which you can set values for the image.

- Values for Bitmaps:

Width Height Colors

- Values for Cursors and Icons:

Target Device

A pixel dimension with the maximum value of 256

A pixel dimension with the maximum value of 256

By default, the Image Editor uses values matching the display on which it is running. You can change the selection.

Use the 2-color option for monochrome displays. Use the 16-color option for all other displays.

The color palette shows the colors available by the selection. Dithered colors also appear in the palette. The dithered colors are based on the available colors. You can use dithered colors to fill but not to draw.

The type of display device on which the image will appear.

Setting Values for Bitmaps

Values for bitmaps:

Width	Height	Colors

Opening a File

The Open command on the File menu loads an existing .CUR, .BMP, or .ICO file.

To open a file:

1. From the File menu, choose Open.
2. Choose a drive from the Drives drop-down list box. The default drive is the current drive.
3. From the Directories list box, select the directory in which the file is stored .
4. Determine if the default extension in the File Name text box is the correct extension for the file type---the default is the extension of the previously opened file. If not, choose a file type in the List Files of Type box or type in an extension in the File Name text box, and then press ENTER. Files with the chosen extension are displayed in the File Name box.
5. Double-click a filename, or click a filename and choose OK.

For .CUR and .ICO files only:

After you choose to open a .CUR or .ICO file, a dialog box displays the image or images in the file. Since you can create more than one image in a .CUR or .ICO file, this dialog box allows you to open the image of your choice. The images are listed by device type---for example, 4-Plane 32x32 Pixels.

Extension	File Type
.CUR	Cursor files
.BMP	Bitmap files
.ICO	Icon files
.	All files in a directory

Open CTRL+O

Saving or Renaming a File

You can use the Save command on the File menu to save a new file. You can also use the Save As command to save a new file or rename an existing file. A file is saved as either a .CUR, .BMP, or .ICO file.

To save a new file:

1. From the File menu, choose Save.

   The first time a files is saved, the Save File dialog box is displayed in order for the file to be given a name. After the first save, the dialog box is no longer necessary.

2. From the Directories list box, select the directory in which you want to store the file. The default directory is the current directory.
3. Type a filename in the File Name text box, then choose OK.

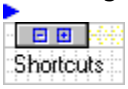
The default extension given to a file is the extension for the file type you opened. You can change the extension as desired.

When you save a file that can have multiple images---.CUR and .ICO files---all images are saved.

To save a new file or rename an existing file:

1. From the File menu, choose Save As.
2. From the Directories list box, select the directory in which you want to store the file. The default directory is the current directory.
3. Type a filename in the File Name text box, then choose OK.

- This procedure is useful for maintaining revised copies of a file while keeping the original unchanged.



Save CTRL+S

The file extension for cursor resources.

The file extension for bitmap resources.

The file extension for icon resources.

Creating a New Image in a File

You can create multiple icon and cursor images for various display devices. For instance, you might create a cursor file with both a 16-color image and a monochrome image. Windows determines the display that your application is running on and selects the proper resource for it.

To create a cursor or icon for a specific display type:

1. From the File menu, choose New. The Resource Type dialog appears.
2. Select Icon or Cursor, then choose OK. A dialog box specific to cursor or icon files appears.
3. In the Target Device list box, choose a device type. The default is the display type for your monitor.

Having created a .CUR or .ICO file for one display type, you can add images for other display types to it. This allows you to prepare images adapted to different possible pixel dimensions and color capabilities of various display devices.

To create a new image in a file:

1. From the Edit menu, choose Copy. This copies the existing image to the Clipboard.
2. From the Edit menu, choose New Image. A dialog box specific to cursor or icon files appears.
3. Select the image type from the list, then choose OK.
4. From the Edit menu, choose Paste.

The image is now copied into the drawing area for editing.

Selecting an Image

When you create, open, or edit a .ICO or .CUR file, the Image Editor allows you to select an image type or an existing image in a file.

To create a cursor or icon type for a specific display:

1. From the File menu, choose New. The Resource Type dialog appears.
2. Select Icon or Cursor, then choose OK. A dialog box specific to cursor or icon files appears.
3. In the Target Device list box, choose a device type. The default is the display type for your monitor.

To select a cursor or icon in a file you are opening:

1. From the File menu, choose Open. The Open File dialog appears.
2. Open a .ICO or .CUR file. A dialog box specific to cursor or icon files appears. The dialog box lists the images in the file.
3. Select an image type from the list box.
4. Choose OK.

To select an image in an open file:

1. From the Edit menu, choose Select Image. A dialog box specific to cursors or icons appears.
2. Select an image type from the list box.
3. Choose OK.

Deleting an Image in a File

You can delete the current image by choosing the Delete command on the Edit menu. To delete an undisplayed image in a file, you must first select it.

To select and then delete an image:

1. From the Edit menu, choose Select Image. A dialog box specific to cursors or icons appears.
2. Select an image type from the list box.
3. Choose OK. The image is displayed in the drawing area.
4. From the Edit menu, choose Delete Image.

Clear CTRL+L

Restoring an Image to the Previous Save

You can undo all of your editing changes to an image since the image was last saved or loaded to the drawing area.

To restore an image:

- From the Edit menu, choose Restore.

The Undo command undoes the last change to an image. The Restore command returns an image to the state it was in when it was loaded or last saved.

Copying an Image to Another Application

You can copy images from other drawing applications to the Image Editor. The image does not need the same pixel dimensions as the drawing area. You can shrink, expand, or clip the image in the Image Editor as you paste the image. You can also copy images created in the Image Editor from the Clipboard to other applications.

To copy an image from another application:

1. Select an image in the other application. Use the Cut or Copy command in the other application to copy the image to the Clipboard. All standard Windows applications have Cut and Copy commands.
2. Create a file or a new image in the Image Editor, then choose the type of image and its properties.
3. Open the Edit menu and choose Paste. A dialog box appears if the image you are pasting does not have the exact pixel dimensions as the drawing area. You have several options in the dialog box:

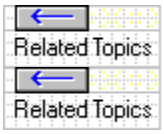
- Choose Stretch/shrink clipboard bitmap if the image is larger than the drawing area and you want to shrink it to appear in the drawing area.
- Choose Stretch/shrink clipboard bitmap if the image is smaller than the drawing area and you want to expand it to fill the entire drawing area.
- Choose Clip clipboard bitmap if the image is either larger or smaller than drawing area. This option pastes only the upper left rows and columns of pixels corresponding exactly to those rows and columns in the drawing area.

  If the image is larger than the drawing area, those parts of the image that would appear beyond the lower right corner of the drawing area disappear.

  If the image is smaller than the drawing area, those parts of the drawing area beyond the lower right-hand corner of the image remain unchanged.

To copy an image to another application:

1. Select the pick rectangle tool in the Toolbox of the Image Editor.
2. Select the image you want to copy from the drawing area.
3. From the Edit menu of the Image Editor, choose Copy.
4. Switch to the other application, then use the Paste command in the other application to paste the image from the Clipboard.



Copy	CTRL+C
Paste	CTRL+V

Exiting the Image Editor

The Exit command on the File menu closes the Image Editor.

If there is an unsaved file open, you will be asked whether it should be saved.

Exit ALT+F4

Steps to Creating an Image

Before creating a new image, you first need to design it. The image should be appropriate for the application and suited to the display types on which the application runs.

To create an image, follow these general steps:

1. Design an appropriate graphical representation.
2. Open a file.
3. Select an image type, its size, and its display attributes.
4. Select colors from the palette.
5. Select drawing tools.
6. Draw the image in the drawing area with the selected tools.

You may want to look at these topics before you design an image:

- Tips on Using Color
- Tips on Designing Images

Defining Images in the IMAGEDIT.INI File

By default, the Image Editor allows you to edit images for common display devices such as VGA or monochrome. You can create definitions of image types for other display devices. The Image Editor uses the IMAGEDIT.INI file to keep the image definitions for icons and cursors used on display devices other than the default devices. These definitions will appear as options in a list of target devices in a New Image dialog box.

IMAGEDIT.INI is an ASCII, comma-delimited file that you can edit. It contains sections with information about your preferences. You create separate sections for the definitions of devices associated with icons and cursors. Each string in the section defines a display device. Each string is terminated by a carriage return and contains the following four fields:

- Name of the display device. The name can contain up to 12 uppercase and lowercase letters.
- Number of colors in the icon or cursor image.
- Horizontal size of a cursor or icon in pixels.
- Vertical size of a cursor or icon in pixels.

In addition to information about icon and cursor images, IMAGEDIT.INI can include comments. Indicate a comment by placing a semicolon (;) at the beginning of the comment line.

For example, you could add the following IMAGEDIT.INI sections to specify information for a Super-VGA device:

```
[ImagEdit.Icon]
SuperVGA=16,64,64

[ImagEdit.Cursor]
SuperVGA=16,32,32
```

These two sections define a 16-color icon with a size of 64 by 64 pixels, and a 16-color cursor, but with a size of 32 by 32 pixels.

The Image Editor displays this information when you choose characteristics for a new image, and it displays the characteristics for the image type after you load the image into the editor.

Tips on Using Color

When possible, you should follow these general guidelines to create the most effective images:

- Always begin designing images in black and white. If the image looks good in black and white, it will look even better in color.
- Use three-dimensional effects to emphasize function. Changes in three-dimensional appearance emphasize changes in function, as when a button is "pressed." Use black, white, light gray, and dark gray to create three-dimensional shading effects.
- Examine your designs on a variety of backgrounds because they will not always appear on white or gray, for instance. It is especially important to check cursors against black and white backgrounds, because black and white are the only opaque colors available for the creation of cursors on most devices. To ensure that cursors are always visible, outline them in the opposing color, or use inverse color for the cursor shape.
- About 10% of the adult male population has some form of color confusion, with a small fraction of that being true red/green color blindness. Because of this reason, use color as a redundant cue, and don't rely on color alone to indicate a property or function.
- Use color to direct attention and to show relatedness and grouping.
- Avoid blue for small or thin graphic elements or small text, because the focusing center of the eye (the fovea) has very few light receptors for blue (blue cones). Blue works well as a background, however.
- Avoid large areas of bright colors because they tend to leave afterimages of the opponent color on the retina.

Using Opaque Colors

Opaque colors in the Image Editor always take the same fixed value in the image when it is displayed in the application. Values of red, green, and blue are opaque colors.

The rows of boxes at the right of the Color Palette window are opaque colors.

You can use opaque colors in bitmaps, icons, and cursors.

To draw an oval and color it:

1. Select an opaque color in the color palette.

   If you are creating a cursor, you can select only black or white.
2. Select the circle tool from the Toolbox.
3. Drag the mouse on drawing area.

- Because black and white are the only opaque colors available for the creation of cursors on most devices, it is important to check cursors against black screens and against white screens. To ensure that cursors are always visible, outline them in the opposing color or use the inverse color for the entire cursor shape.

Using Screen Color

Areas of the image painted with screen color in the Image Editor always take the color of the screen when the image is displayed in the application. These areas appear transparent in the application. All pixels in the drawing area use screen color by default when you create a new image.

While you are editing images, you can choose which color the screen should display. The chosen color appears anywhere you use screen color in the drawing area. It also appears around the perimeter of the View window. In an application, the screen color depends on choices the application's user has made.

The screen color is shown in the top box between the mouse button boxes and the opaque colors in the Color Palette.

You can use screen color only in icons and cursors.

To create an image containing an opaque square with a transparent circle in its center:

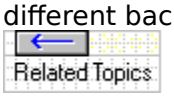
1. Select an opaque color in the palette with the left mouse button.

   If you are creating a cursor, you can select only black or white.
2. From the Toolbox, select the rectangle tool.
3. Drag the mouse on the drawing area to create the square.
4. From the palette, select the screen color.

   The screen color is the top box between the mouse button boxes and the opaque colors on the Color Palette window.
5. From the toolbox, select the circle tool.
6. Drag the mouse on the square to create the circle.

   The circle inside the square always takes whatever color you now choose for the screen.

Choose various screen or inverse colors to see how your image appears on different backgrounds. Your image will not always appear on white or gray, for instance.



Using Inverse Color

Areas of the image painted with inverse color in the Image Editor always take the inverse of the screen color when the image is displayed in the application. These areas appear highlighted in the application.

While you are editing images, you can choose which inverse color to display. Choosing an inverse color also sets the screen color. In an application, the inverse color depends on choices the application's user has made.

The inverse color is shown in the bottom box between the mouse button boxes and the opaque colors on the Color Palette window.

You can use screen color only in icons and cursors.

To create an image containing an opaque circle with a highlighted center:

1. Select an opaque color in the palette with the left mouse button.

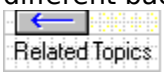
   If you are creating a cursor, you can select only black or white.

2. From the Toolbox, select the circle tool.
3. Drag the mouse on the drawing area to create the circle.
5. From the palette, select the inverse color.

   The inverse color is the bottom box between the mouse button boxes and the opaque colors on the Color Palette window.

6. From the toolbox, select the flood fill tool.
7. Move the flood fill tool into the center of the circle and click.

Choose various screen or inverse colors to see how your image appears on different backgrounds. Your image will not always appear on white or gray, for instance.



Setting Colors to the Mouse Buttons

You can associate colors with both the left and the right mouse buttons. The chosen color appears on the drawing area when you manipulate a drawing tool with that button. The boxes at the far left of the Color Palette window show the colors associated with the left and right mouse buttons.

If you are creating a bitmap, you can choose only opaque colors. The opaque colors are shown in the rows at the right of the Color Palette window.

If you are creating an icon or a cursor, you can associate either the screen color or the inverse color with a mouse button. When you are creating an icon or a cursor, the screen and inverse colors are shown on the Color Palette between the mouse button boxes and the opaque colors. The top box shows the screen color; the bottom box shows the inverse color.

The drawing tool that you are currently using creates shapes with the color associated with the mouse button that you hold down while using the tool. If it is a dithered color, the filled rectangle, filled ellipse and flood fill tools use the actual color from the palette, as shown in the bottom part of the mouse button box. The other tools use the color shown in the top part of the mouse box, which is the solid color nearest to the chosen dithered color.

You choose opaque, inverse and screen colors in exactly the same manner.

To associate colors with the mouse buttons:

1. Use the left mouse button to select the color that you want associated with that mouse button.
2. Use the right mouse button to select the color that you want associated with that mouse button.

Avoid blue for small or thin graphic elements or small text. Avoid large areas of bright colors because they tend to leave afterimages of the opponent color on the retina.

Viewing Different Screen Colors

You can either choose a single color for the screen color in the View window using the mouse, or you can cycle through all the possible solid screen colors on the palette one after another in the View window using the keyboard. With these methods, you can see what your images look like on different backgrounds.

To choose a single color for the screen color:

1. Select the desired color on the color palette with the left mouse button.
2. Click the View window.

To cycle through the colors:

1. Click the View window.
2. Press the PLUS (+) key on the numeric keypad to display the next color, or press the MINUS (-) key to display the previous color.

   Each subsequent press on the PLUS or MINUS key displays another color.

Editing Colors on the Color Palette

You can edit the colors on the Image Editor color palette one color at a time. You can edit the opaque colors for all image types, and additionally, you can edit the screen color or inverse color for icon and cursor images.

To edit a color:

- Select the color on the palette, and then choose the Edit button on the Color Palette window.

  --or--

- Double-click the color on the palette.

Either method displays the Color dialog box.

To specify a color from the basic colors in the Color dialog box:

1. Select a color from the basic colors.
2. Choose OK.

The selected color now appears in the Image Editor palette in place of the default color.

You can also define custom colors different from the basic colors in the Color dialog box.

To define a custom color in the Color dialog box:

1. In the Color dialog box, choose the Define Custom Colors button.
2. In the Custom Colors boxes, select a box.
3. Define a color using one of the following methods:
   - Type the RGB values in the RGB entry boxes.
   - Type the HLS values in the HLS entry boxes.
   - Move the crosshair on the color spectrum control to the desired color and then move the luminosity indicator on the right edge of the dialog box to the desired value.

   With all methods, the color that you're defining appears in the Color/Solid box.
4. Choose the Add to Custom Colors button.

   The color appears in the selected Custom Colors box.
5. Choose OK.

The newly defined color now replaces the color that you originally selected in the Image Editor color palette.

Saving or Loading a Color Palette

You can save a color palette in a palette file (.PAL). You can load the colors from a palette file into the Image Editor's color palette.

To save a palette:

1. From the File menu, choose Save Colors.
2. Enter a name for the file in the File Name text box.

   Palette files have the default filename extension .PAL.

   If necessary, select the drive and directory from the displayed list boxes.
3. Choose OK.

To load a palette:

1. From the File menu, choose Load Colors.
2. Select a file from the File Name text box.

   Palette files have the default filename extension .PAL.

   If necessary, select the drive and directory from the displayed list boxes to find the desired palette file.
3. Choose OK.

To restore the default palette:

- You can restore the default palette by choosing Restore Default Colors from the File menu.

Opaque color is always the same color, regardless of the screen color.
The rows of indicators on the right side of the Color Palette window are all opaque colors.

Screen color always takes the value of the screen and appears transparent in images.

The screen color shows in the top indicator between the mouse button indicators and the opaque color indicators on the Color Palette (for icons and cursors only).

For the initial value of this color, the Image Editor uses the solid color nearest to the color set for the Windows background.

Inverse color always takes the inverse value of the screen color.

The inverse color shows in the bottom indicator between the mouse button indicators and the opaque color indicators on the Color Palette (for icons and cursors only).

For the initial value of this color, the Image Editor uses the inverse of the solid color nearest to the color set for the Windows background.

Tips on Designing Images

Follow these general guidelines to create the most effective images:

- Always begin designing images in black and white. If the image looks good in black and white, it will look even better in color.
- Use three-dimensional effects to emphasize function. Changes in three-dimensional appearance emphasize changes in function, as when a button is "pressed." Use black, white, light gray, and dark gray to create three-dimensional shading effects.
- Examine your designs on a variety of backgrounds, because they will not always appear on white or gray, for instance.

  It is especially important to check cursors on black screens and on white screens, because black and white are the only opaque colors available for the creation of cursors. To ensure that cursors are always visible, outline them in the opposing color, or use inverse color for the cursor shape.
- Create a similar style for icons which appear together, in order to minimize distraction.

Drawing Free-Form Lines

Use the brush tool or pencil tool to draw a continuously connected curve or free-form line segment. The pencil tool draws in a single width---one pixel---and the brush tools draws in four possible widths---two, three, four, or five pixels. Both draw in the current color.

To draw a free-form line:

1. From the color palette, select a color for one of the mouse buttons.
2. From the Toolbox, select the brush or pencil tool.
3. Drag the mouse on the drawing area, using the button with the assigned color.

To change the line width of the brush tool:

1. From the Options menu, choose Brush Size.
2. Select a brush width.

Drawing Straight Lines

Use the line tool to draw a straight line. The line tool draws in a single width---one pixel.

To draw a straight line:

1. From the color palette, select a color for one of the mouse buttons.
2. From the Toolbox, select the line tool.
3. On the drawing area, drag the mouse, using the button with the assigned color.
4. Release the mouse.

Drawing Ellipses

Use the circle tool to draw an ellipse. The circle tool draws in a single width---one pixel.

To draw an ellipse:

1. From the color palette, select a color for one of the mouse buttons.
2. From the Toolbox, select the circle tool.
3. Drag the mouse on the drawing area, using the button with the assigned color.

   Dragging the mouse on a forty-five degree diagonal produces a circle. Any other direction produces an ellipse.

Drawing Rectangles

You can use the rectangle tool to draw a rectangle. The rectangle tool draws in a single width---one pixel.

To draw a rectangle:

1. From the color palette, select a color for one of the mouse buttons.
2. From the Toolbox, select the rectangle tool.
3. Drag the mouse on the drawing area, using the button with the assigned color.

   Dragging the mouse on a forty-five degree diagonal produces a square. Any other direction produces a rectangle.

Drawing Shapes

You can draw the following shapes using the tools from the Toolbox:

- Rectangles, both filled and hollow.
- Ellipses, both filled and hollow.

To draw a shape:

1. From the color palette, select a color for one of the mouse buttons.
2. From the Toolbox, select the shape tool.
3. Drag the mouse on the drawing area, using the button with the assigned color. Dragging on a forty-five degree diagonal creates a circle or a square.

To fill a shape with a different color or a different kind of color:

1. From the color palette, select a color for one of the mouse buttons.
2. From the Toolbox, select the flood fill tool.
3. Click the mouse on the shape.

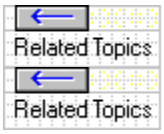
Use black, white, light gray, and dark gray to create three-dimensional shading effects.

Changing the Brush Width

The setting for the brush width controls the width of the line created by the brush tool, used for drawing free-form lines.

To change the brush width:

1. From the Options menu, choose Brush Size.
2. Select a brush width.



Brush Size CTRL+2, 3, 4, or 5

Toggling the Grid

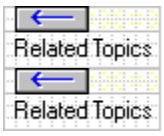
In some cases, it is helpful to know exactly where the pixels are located on an image. For instance, you might need to center an image, or divide it into thirds. To help you with these tasks, a grid can be displayed over the drawing area.

To toggle the grid:

- From the Options menu, choose Grid.

The grid appears on the drawing area. A check next to the Grid command on the Options menu indicates the grid is on. To remove the grid, choose Grid again.

Note For some combinations of window size, display resolution, and pixel dimensions, the Image Editor may not display the grid. For instance, with a small window---hence, a small drawing area---on a VGA monitor with a 100-by-100 bitmap, the Image Editor does not display the grid. In this case, the lines of the grid would be right next to one another, and the drawing area would appear to be solid black.



Toggle Grid CTRL+G

Creating a Cursor Hot Spot

Every cursor must have a single pixel designated as the exact location of the cursor. This location is called the "hot spot." The position of the hot spot on your application determines what actions are available in the application at that time---the hot spot position may determine what shape the pointer takes.

To mark the hot spot in a cursor:

1. Select the hot spot tool from the Toolbox.

2. Move the tool to the desired location on the cursor image.

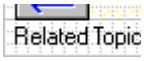
3. Click the left mouse button.

The status bar now displays the coordinates of the grid location chosen for the hot spot.

Place the cursor hot spot at a location where the eye is drawn naturally to it. A user will be able to position the cursor more easily and accurately when the hot spot fits in with the cursor design.

Draws a rectangle

Draws a filled rectangle



Draws a circle or ellipse

Draws a filled circle or ellipse

What is a Cursor?

A cursor---also called a pointer--represents the position of the mouse pointer. The pixel which indicates the exact location of the mouse pointer is called the hot spot. This location determines the action which occurs when the user presses a mouse button, for instance. Often in an application, different cursor shapes appear as the cursor passes from one screen region to another. These different cursor types graphically indicate that the types of action available to the user have changed. The drawing tool is an example of a cursor.

What is a Bitmap?

Bitmaps are pictures. The exclamation point or question mark in certain Windows messages, for example, is a bitmap. All the images that you can create with the Image Editor are bitmaps. However, the function of an image in a program determines whether the bitmap is a cursor, an icon, or a *bitmap* resource such as a question mark.

A bitmap describes the color characteristics for every pixel contained in an image. In a monochrome (two-color) bitmap, each pixel is represented by one bit, with a value of 1 for white and 0 for black. A color bitmap uses multiple bits to define the color for a single pixel.

What is an Icon?

Icons represent files or windows when they are minimized. You can place the mouse pointer on an icon and take some action involving that object. For instance, you could move the icon to another location on the screen by dragging it. Or you could cause some action to occur by moving an icon from one window to another, such as moving files from one directory to another in the Windows File Manager. Or you could double-click an icon representing a window to expand it.

What is an .RC Script?

After creating individual resource files for your application's icon, cursor, bitmap, and dialog resources, you create a resource script file. The resource script file always has the .RC extension, and it often simply referred to as the .RC file.

The .RC file lists every resource in your application and describes some types of resources in great detail:

- For resources that exist in a separate file, such as icons and cursors, the .RC simply names the resource ad that file that contains it.
- For some types of resources, such as menus, the entire definition of the resource exists within the .RC file.

You create a resource script file using an ordinary ASCII text editor. The file can contain resource statements and directives.

Key to the Keyboard

Menu	Command	Key Combination
File	New	CTRL+N
	Open	CTRL+O
	Save	CTRL+S
	Exit	ALT+F4
Edit	Undo	CTRL+Z
	Copy	CTRL+C
	Paste	CTRL+V
	Clear	CTRL+L
Options	Grid	CTRL+G
	Brush Size	CTRL+2, 3, 4, 5
	Show Color Palette	CTRL+F7
	Show View Window	CTRL+F8
	Show Toolbox	CTRL+F9
Other	Jump to Color Palette	F7
	Jump to View Window	F8
	Jump to Toolbox	F9
	Jump to Properties Bar	F10

Related Topics **Key to the File Menu**

For help, click a menu command below---or press TAB to move to the field, and then press ENTER:

Related Topics

The New command initializes the drawing area with a cursor, bitmap, or icon image.

The Open command opens existing .CUR, .BMP, or .ICO files for editing. Cursors are saved in .CUR files, bitmaps in .BMP files, and icons in .ICO files.

The Save command saves changes to .CUR, .BMP, and .ICO files.
Cursors are saved in .CUR files, bitmaps in .BMP files, and icons in .ICO files.

The Save As command saves changes to cursors, bitmaps, and icons under a new name. The original file remains unchanged. You can also use Save As to save new files.

Cursors are saved in .CUR files, bitmaps in .BMP files, and icons in .ICO files.

The Load Colors command loads a color palette (.PAL) into the editor.

The Save Colors command saves newly created colors in a .PAL file.

The Restore Default Colors command restores the default colors on the color palette.

The Exit command exits the Image Editor.

Related Topics **Key to the Edit Menu**

For help, click a menu command below---or press TAB to move to the field, and then press ENTER:

Related Topics

The Undo command restores an image to its state before the last edit.

The Restore command restores an image to its state when initially loaded into the editor or when last saved.

The Copy command copies an image to the Clipboard.

The Paste command pastes an image from the Clipboard.

The Clear command clears the current image from the drawing area.

The New Image command initializes the drawing area with a new image for a file. You can have multiple images in .CUR or .ICO files for various display devices---CGA, EGA, VGA, and so on.

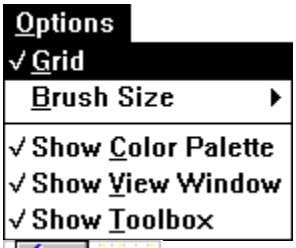
If the file has images for all currently defined device types, this command is dimmed.

The Select Image command selects an image in a file. This command allows you to select an image---for a particular display device---in a .CUR or .ICO file for editing.

The Delete Image command deletes an image from the file and clears the View Window.

Related Topics **Key to the Options Menu**

For help, click a menu command below---or press TAB to move to the field, and then press ENTER:



Related Topics

The Grid command superimposes a grid over your cursor, bitmap, or icon in the drawing area.

The Brush Size command allows you to choose the pixel-width of the brush tool: it can draw images that are two, three, four, or five pixels wide.

The Show Color Palette command toggles the display of the Color Palette on and off.

The View Window command toggles the display of the View Window on and off.

The Show Toolbox command toggles the display of the Toolbox on and off.

Key to the Help Menu

For help, click a menu command below---or press TAB to move to the field, and then press ENTER:

The Contents command opens the Contents screen for the Image Editor help.

The Search command opens the Search dialog box in help on top of the Contents screen.

The About command gives product information, such as version and name.

Related Topics **Key to the Properties Bar**

The Properties Bar is a graphical area below the menu bar that displays information about the currently selected image.

For help, click a field in the Properties Bar below---or press TAB to move to the field, and then press ENTER:

Related Topics

Related Topics

Jump to Properties Bar F10

The Image label identifies the type of image currently in the drawing area---icon, bitmap, or cursor. The Image field contains the type of device for the image. You can click the arrow at the end of the field to display a list of images---these images currently exist in the file. If you select an image from the list, it appears in the drawing area.

The Position field shows the x and y coordinates for the current position of the drawing tool on the image.

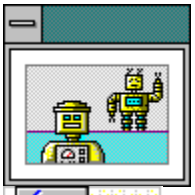
The Size field displays the horizontal and vertical dimensions of the current drag area for the mouse. The drag area is the area enclosed from the point where you first pressed the mouse button down to its present location.

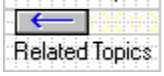
The HotSpot field shows the x and y coordinates for the position of a hot spot on a cursor. The HotSpot field appears only for cursor images.

Key to the View Window

The View window displays the image that you are creating. It displays the image in its actual size with the chosen screen color around the image perimeter. Use the View window to check the effect of the image against different screen colors.

For how-to help, click the View window below:





Show View Window	CTRL+F8
Jump to View Window	F8

You can choose screen colors for the View window by using either the mouse or keyboard.

To choose a single color for the screen color:

1. Click the desired color on the color palette with the left mouse button.
2. Click the View window.

To cycle through the colors:

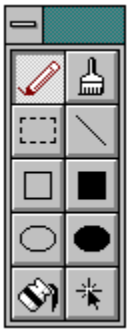
1. Click the View window.
2. Press the PLUS (+) key on the numeric keypad to display the next color, or press the MINUS (**-**) key to display the previous color.

   Each subsequent press on the PLUS or MINUS key displays another color.

Related Topics **Key to the Toolbox**

You select tools for creating images from the Toolbox.

For help, click a tool in the Toolbox below---or press TAB to move to the field, and then press ENTER:



Related Topics

Related Topics

Show Toolbox	CTRL+F9
Jump to Toolbox	F9

Pencil tool. Draws a free-form line one pixel in width using the current color.

Brush tool. Paints an image with the current drawing width and color.

Pick rectangle tool. Selects a rectangular region in the image.

Line tool. Draws a straight line between selected begin and end points using the current color.

Filled rectangle tool. Draws a rectangle and fills it with the current color.

Rectangle tool. Draws a hollow rectangle using the current color.

Circle tool. Draws a hollow circle or ellipse using the current color.

Filled circle tool. Draws a circle or ellipse and fills it with the current color.

Flood fill tool. Fills any form with the current color.

Hot spot tool. Creates a "hot spot" in a cursor. A hot spot is the active area of a cursor.

Related Topics

Key to the Color Palette

The Color Palette is a window that displays the current color palette and the colors associated with the mouse buttons. You can move this window anywhere on your display. From this window, you can also add different colors to the palette, save or load a palette or restore the default colors to the palette

For help, click a field in the Color Palette below---or press TAB to move to the field, and then press ENTER:

Related Topics
Related Topics

Show Color Palette	CTRL+F7
Jump to Color Palette	F7

Mouse button indicators.

These indicators display the colors associated with the left and and right mouse buttons. You can associate any of the opaque colors, the screen color or the inverse color with a mouse button.

The drawing tool that you are currently using creates shapes with the color associated with the mouse button that you hold down while using the tool. If it is a dithered color, the filled rectangle, filled ellipse and flood fill tools use the actual color from the palette, as shown in the bottom part of the mouse button box. The other tools use the color shown in the top part of the mouse box, which is the solid color nearest to the chosen dithered color.

Screen and Inverse color boxes (for cursors and icons only):

The top box shows the screen color; the bottom box shows the inverse color.

The initial colors displayed in these boxes are the nearest solid color to the color set for the Windows background and the inverse of that color, respectively.

The color boxes display the opaque colors for the currently loaded color palette.

The color palette for a two-color (or monochrome) cursor image shows only black, white, and dithered colors of black and white.

The Edit button allows you to edit the colors on the palette. You can save an edited color palette with the Save Colors command on the File menu. A color palette file has a .PAL extension.

The Default button restores an edited color to its default color value.

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