

Using IconEdit

Quick start: Select File|New to create a new icon, or File|Open to load an existing icon for editing.

The editing window displays two representations of the icon: a large zoomed-in square that's eight times bigger than the actual icon, and a small square to its right that's actual size. The zoomed square is where the editing takes place. New icons appear as solid green with a black square surrounding each pixel representation. The pixels are, of course, eight times actual size like the square itself for ease of editing. The green color is not actually the starting color of the icon, but instead represents the transparent "color" (more on transparency in a moment).

The tool bar consists of eight tools: capture, pencil, fill, line, hollow and filled rectangle, and hollow and filled ellipse. These will be familiar to anyone who has used a paint program. The default tool when you start editing an icon is the pencil, since this is the tool you'll probably use the most. The pencil let's you color one pixel at a time. To change a pixel simply place the point of the pencil cursor over a pixel in the big editing square and click. You can pencil-draw several pixels at once by dragging the pencil over an area.

The two large color squares right under the tools are the current colors for the left and right mouse buttons, respectively. When you launch IconEdit, the left mouse button color is black and the right mouse button color is white. If you click with the left mouse button on a pixel with the pencil tool, for example, the pixel will turn black. Click with the right mouse button and the pixel will turn white. To change the default colors, click on one of the 16 colors in the palette just below the current color boxes with either the left or right mouse button. Clicking on a palette color with the left button will change the left button color and a right button click will change the right button color.

Special Icon Colors

An icon is a bitmap with two additional special properties. Pixels of an icon can not only be a specific color; they also can be transparent or screen reverse color. A transparent pixel lets the background color of whatever the icon is over show through. A reverse screen color pixel takes on the opposite color of whatever the icon is over. Both IconEdit's large editing square and the actual icon sized square are ordinary bitmaps *without* transparent or reverse screen color capabilities.

The display of transparency and reverse screen color during editing would cause a substantial performance hit, so IconEdit instead substitutes fixed colors for transparent and reverse screen colors. IconEdit uses dark green in the editing bitmap to represent transparency. When you start editing a new icon all the pixels are transparent, in effect comprising a blank canvas to draw on. If you choose to draw with the dark green color over the dark green representing transparency, it will look as though nothing has changed in the editing window. The pixels that you painted have, however, changed from transparent to dark green. You can see this change by selecting Test Icon from the Icon menu. In the test icon window that appears you'll see the icon as a true icon. The transparent dark green pixels turn into true transparent pixels letting the background color show through, and the pixels that you painted dark green will appear dark green. You can select different window colors to see how the icon looks against different color backgrounds.

The opposite color of green is red, so that's the color used by IconEdit to represent reverse color. You can draw with both the transparent color and reverse screen color by selecting them from the two color wells at the very bottom of the toolbar. You select these special colors the same way you select the regular palette colors—by clicking on them. To help remind you that you're now using these special attributes a "T" will appear in the current color square when you select transparent and a "R" will appear when you select reverse color.

As with transparent color, when you draw reverse color you won't be able to tell the difference between a true red pixel and a red reverse screen pixel in the editing window. However, if you test the icon, the red pixels will stay red and the reverse pixels will take on the opposite color of the background. If you change the background color in the test window by clicking on a different color in the window color palette, you'll see the background change and the reverse color pixels change to the opposite color.

The transparent color is usually used as the background for the icon image. When you create a new icon, you're already a step ahead in this effort since all the pixels default to transparent. All you have to do is add the color.

The reasons for using reverse color are a little less obvious. You can't know ahead of time what color a reverse pixel will take on. If you change the color of the desktop, the reverse pixels in your icon will change also. It seems, therefore, that using the reverse color is a disadvantage since you have no control of what the color it will end up. But what you do know is that reverse color pixels will always be visible because they'll contrast with whatever they're over. One use of the reverse color is as a border for your icon. No matter how you change your desktop colors, a reverse color border will always stand out.

Editing Tools

To change editing tools, simply click the tool button of your choice. The fill tool (represented by a paint can) will color the pixel you point to and all adjacent pixels of the same color with the color you've selected. The remaining five tools all operate in the same way. You click and hold the mouse button at the starting pixel position, drag the mouse to an ending position, and release the mouse button. For example, to draw a line you click and hold the mouse button on the starting point for the line and drag to the ending point. As you drag the line will stretch between where you started and the current ending position. Only when you release the mouse button will the line be permanently drawn. For a rectangle or an ellipse you drag from one corner to the opposite corner. You control the color that the tool uses by pressing either the left or right mouse button.

The capture tool is in a category by itself since it's not a drawing tool like the others. The capture tool let's you select a rectangular set of pixels for manipulation. To capture a rectangular set of pixels, drag the mouse over the pixels as if you were drawing a rectangle. When you let go of the mouse button the captured pixels will have a dotted white line around them. Once captured, you can move, copy, or cut the pixel block.

To move the captured pixels, place the cursor within the dotted line rectangle. The cursor will change to a grabbing hand. You can now move the captured pixels to a new position by clicking and holding down the mouse button as you drag. The block of pixels you drag will remain at the old location and will *also* appear at the new location. (If you cut and paste it works differently; see below.) As long as the dotted line is around the pixels, you can drag and release, drag and release until you're satisfied with the new position. When you change tools or start a new capture, the dotted line will disappear and the captured pixels will become part of the new position.

Pressing Ctrl+C or selecting Copy from the Edit menu will copy the captured pixels to the clipboard. You can subsequently paste the pixel block back into the icon. When you paste, the pixel block will appear in the upper left corner with a dotted line around it. You can then move the block around as described above. You can work on multiple icons at a time and copy and paste between them. Be warned that any transparent or reverse pixel information will be lost in the copy and paste process. The clipboard stores the bitmap information but not the transparency or reverse color information. Any transparent pixels will paste as black and reverse color pixels will paste as white.

If you press Ctrl+X or select Cut from the Edit menu, the captured pixel block is replaced by transparent pixels. The cut pixel block is transferred to the clipboard so you can paste it back if you need to.

You can quickly select all the pixels in the icon by selecting Select All in the Edit menu or by pressing Ctrl+A. IconEdit has 20 undo buffers that hold the last 20 drawing changes. Press Ctrl+Z or select Undo from the Edit menu to go backwards in the editing session. You can turn off the black pixel outlines in the zoomed edit box to get a cleaner picture of the icon by unchecking Show Pixels in the Icon menu, but you won't be able to tell as easy were the individual pixels are.

To load an existing icon for editing, select Open from the File menu. You can save an icon you've edited by clicking the diskette button at the top of the tool bar or by selecting Save in the File menu. If you obtained the icon from within an .EXE or .DLL file, it will be saved as an icon file (.ICO) and not back into the file from which you obtained it.

