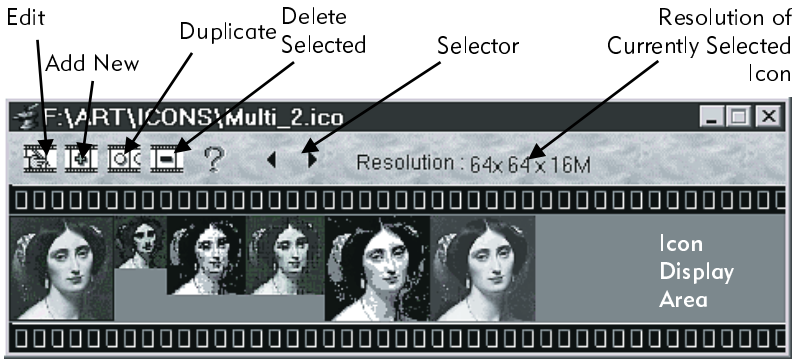
Chapter 3
Multiple Resolution Icons

Windows-format icons can contain multiple images having different sizes and color depths. Such icon files are referred to as "multi-resolution icons," or "multi-res ico's."

Why Use Multi-Resolution Icons

Newer versions of Windows can read an icon which contains multiple images having different sizes and numbers of colors. Windows will attempt to pick an image from the icon file which most closely matches the current display mode. If Windows cannot find an icon close to the size and colors it needs, then it will resize the available icon — often resulting in an icon being shown which is either unrecognizable, or simply unattractive.

Multi-resolution icons are frequently used by programmers and others when creating their own Windows applications, and you can do the same for your shortcuts and other desktop items. Because Windows displays icons in different sizes, using a multi-resolution icon for desktop items will allow Windows to select the most suitable icon size and



colors for a particular location, allowing your icons to look their best. For example, an icon is usually displayed at 32x32 size on the desktop, however, in title bars and file listings, it is condensed to 16x16.

Creating a Multi-Resolution Icon

When editing a multi-resolution icon, the images are displayed as individual frames in a special window *(see illustration)*.

Open a New Multi-Resolution Icon

Go to the *File* menu and select the *New* function. Choose *New Multi-Resolution Icon* from the list.

Your editing Window will be blank. Use the *Add* button to insert a new icon. You will be asked to choose a size and number of colors. The standard sizes which are usually included in Multi-Resolution Icons are: 16x16, 32x32, 48x48 and 64x64. For most uses, you will want to include both 16-colors and 256-colors versions for each size.

Note: Some Windows versions do not properly display icons or cursors which contain more than 256 colors, so you should avoid including 16-million color icons unless you are certain that this resolution is supported by the version of Windows on which it will be used. However,

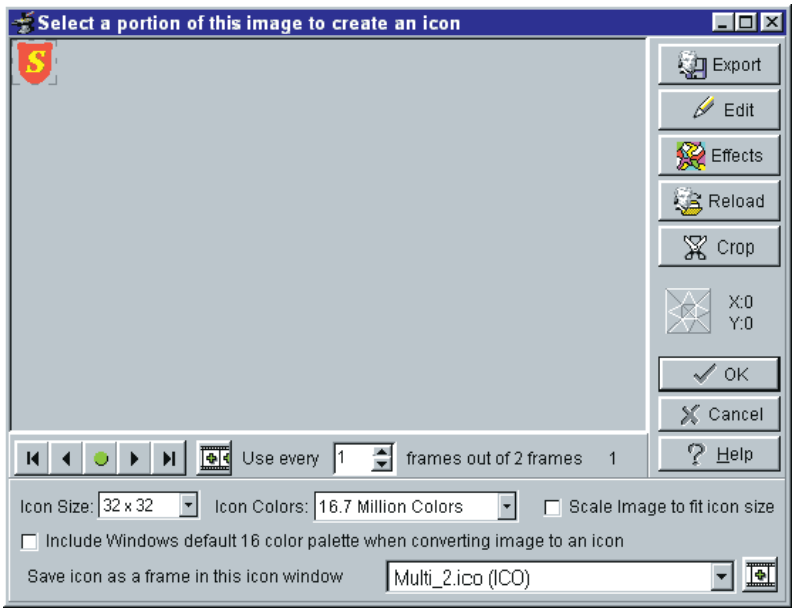
sometimes you can get a better result from the *Duplicate* function if you import or create an icon containing 16 million colors, then duplicate that icon to other sizes and colors. Once you have produced the other sizes and colors, you can then delete the 16-million colors version.

Adding Existing Images

To add an existing icon to your Multi-Resolution Icon window, go to the *File* menu and *Open* that icon's file. Then simply go to the lower/left corner of the existing icon's editing window and click the green + button to add it to the Multi-Resolution Icon's window.

Note: The multi-resolution icon's window must be open in *IconForge* in order to use the + icon to add an image.

To import an image directly into the Multi-Resolution icon, use the *File* menu's *Open* function



to select the existing image file. In the import window, choose your multi-resolution icon from the *Save icon as a frame in this icon window* drop-down list. Then click the green + button to add the new image. You can then click Cancel to go back to editing your icons.

To Edit an Existing Multi-Resolution Icon

Select an individual icon image by clicking in the *Icon Display Area*. To edit the selected icon, click on the *Edit* button. Frames are edited in individual windows, just as for normal icon images.

To add images with other resolutions, click on the *Add New Frame* icon. You may also duplicate the currently highlighted frame across all the frames in the current file by clicking on the *Duplicate* icon. For best results when duplicating an icon, we suggest that you select the largest available image which contains the most number of colors.

Use the *Delete* icon to remove a frame from the file.