

## Resource File in Your Visual Basic Project

### Using A Resource File in Your Visual Basic Project

Many Visual Basic projects use data that is stored in external files. This can include bitmap images, icons, cursors, and WAV files. Including these elements as separate files in your installation has two drawbacks. First, the installation can become cluttered with a large number of files, and if any one of them is deleted or moved inadvertently by the user the program will not function properly. Second, the material in the files is freely accessible to the user and may be used in ways you did not want. You can avoid both of these problems by using a resource file. Another advantage of resource files is that you can create version-specific resource files to be included with installation in different locales.

A Visual Basic project can have only one resource file associated with it. This file can contain both binary and string items. Each item in the file has an identifier - you use this identifier to retrieve a specific resource when the program needs it. To create or modify a project's resource file use the Tools|Resource Editor command from within the Visual Basic IDE (you may need to use the Add-in Manager to load the Resource Editor first). Then, use the Resource Editor's commands to add bitmaps and other items to the file. Each resource is assigned an identifier at this time. You can also add an existing resource file to the project using the Project|Add New Resource File command.

In your program you use three functions to load data from the resource file: LoadResPicture for bitmap images, LoadResString for strings, and LoadResData for various kinds of data. Let's look at some examples. This line of code loads an icon resource with identifier 101 and assigns it as the icon for Form1:

```
Form1.Icon = LoadResPicture(101, vbResIcon)

'Likewise, this code loads a bitmap image and displays it in a picture box control:
Picture1.Picture = LoadResPicture(102, vbResBitmap)

'The following code loads a string from the resource file and displays it in a label control:
Label1.Caption = LoadResString(103)
```

The LoadResData function is used for arbitrary binary data such as WAV

(sound) and AVI (video) files. Your program must contain the code to make proper use of such data. Use of the LoadResData function is beyond the scope of this tip but there is more information in the Visual Basic documentation.