Symantec C++ ◆

About Managing Resources

Part Six

ResourceStudio Window ◆

25

This ResourceStudio reference chapter contains details about the commands and options found in the Shell and Browser windows. For an introduction to ResourceStudio, see Chapter 7, "Adding Look and Feel with Resources."

The Shell Window

The ResourceStudio Shell window is shown in Figure 25-1.
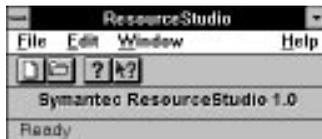
Figure 25-1 The Shell window

The Shell window is ResourceStudio's main control center. From this window you can open resource files, create new resource files, set preferences, arrange windows, and access online help.

File menu commands

The **File** menu (see Figure 25-2) contains commands to create and open resource files and to exit ResourceStudio. In addition to the commands listed below, the **File** menu contains a list of recently opened resource files.

Any of these files may be reopened by choosing its name from the menu.

File

|	
New...	
Open...	Ctrl+O
1 SDIAPP.RC	
E**xit**	
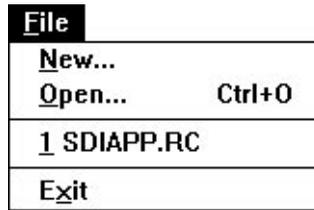
Figure 25-2 Shell window File menu

New

Opens the **New File** dialog box (see Figure 25-3). Use this dialog box to create a new resource file.

Figure 25-3 New File dialog box

Type
Specifies the type of resource file to create.

Resource script: Creates a resource script (.rc) file.

Binary resource: Creates a binary resource (.res) file.

Icon: Creates an icon (.ico) file.

Cursor: Creates a cursor (.cur) file.

Bitmap: Creates a bitmap (.bmp) file.

Font: Creates a font (.fnt) file.

If you select Resource Script or Binary Resource, the new file opens in a Browser window; otherwise, the appropriate resource editor opens in a separate window.

Platform
Specifies the target platform for the resource file.

Windows 3.1: Creates resources for Windows 3.1.

Windows NT: Creates resources for Windows NT.

Windows 95: Creates resources for Windows 95.

Windows 95 resources use the MENUEX and DIALOGEX resource types for menus and dialogs, respectively. For more information, see your Windows 95 documentation.

Support MFC
Applies to resource script files; specifies that the file should include MFC resource headers. Check this box if you plan to use your resources in an MFC application.

Open Opens the **File Open** dialog box (see Figure 25-4). This is a standard dialog box for opening files, with an extra field for specifying the target platform.

Figure 25-4 File Open dialog box

Target platform
Specifies the target platform. Choices include Windows 3.1, Windows NT, and Windows 95.

Exit Closes ResourceStudio.

Edit menu commands

The **Edit** menu (see Figure 25-5) contains a single command, used to set ResourceStudio preferences.

Edit
  Preferences...

Figure 25-5 Shell window Edit menu

Preferences

Opens the **Preferences** dialog box, used to set miscellaneous ResourceStudio options. This dialog box has three pages of options.

Note

> The Controls page of options is not available when you run ResourceStudio on Windows 95 and Windows NT.

The General page (see Figure 25-6) contains miscellaneous ResourceStudio options.

Figure 25-6 General page of Preferences dialog box

Undo

Specifies the number of previous states that are saved and, therefore, the number of actions that can be undone. Each Browser window and each individual resource editor keeps a separate list of actions that were undone.

Assume file platform
These options specify default file platforms for creating and loading resource files.

When creating files: Specifies default platform for new resource files.

When opening files: Specifies default platform for opened resource files.

3d look for new dialogs
If checked, new dialogs are given a 3-dimensional look by default.

The RC Script page (see Figure 25-7) contains options for resource script files.

Figure 25-7 RC Script page of Preferences dialog box

Definitions
Contains a list of symbols to be defined with a #define directive in each .rc file. Click on a symbol to copy its name and value to the textboxes below the list. You can edit the name or value, then click on the symbol in the list again to copy the new name and value back to the list.

Name
Contains a symbol name.

Value
Contains a symbol value.

Add
Adds the current symbol and value to the Definitions list.

Delete
Deletes the currently selected symbol from the Definitions list.

The Controls page (see Figure 25-5) contains options for installing custom controls. A custom control resides in a DLL that implements the standard functions which allow a dialog editor (such as ResourceStudio) to manipulate and display the control.

Note

> The Controls page of options is not available when you run ResourceStudio on Windows 95 and Windows NT.

Figure 25-8 Controls page of Preferences dialog box

Installed Controls
Contains a list of custom control DLLs that are currently installed.

Add
Adds a custom control DLL to the list of installed controls.

Remove
Removes a custom control DLL from the list of installed controls.

Window menu commands

The **Window** menu (see Figure 25-8) contains commands to arrange ResourceStudio windows. These commands execute the standard Windows **Cascade**, **Tile**, and **Close All** functions. Attached to the bottom of the menu is a list of currently opened Browser and editor windows. Choose a window name to bring that window to the foreground or to restore it after it has been minimized.
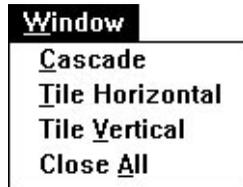

Figure 25-9 Shell window Window menu

Help menu commands

The **Help** menu (see Figure 25-9) contains commands to access online help and to display program information.
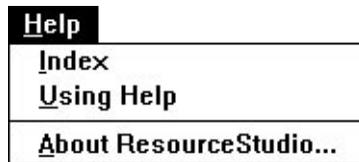
Figure 25-10 Shell window Help menu

Index	Opens ResourceStudio online help to the index.
Using Help	Opens online help to information about how to use help.
About ResourceStudio	Opens a dialog box that displays ResourceStudio version and copyright information.

Toolbar commands

The Shell window toolbar (see Figure 25-10) provides quick access to menu commands and to context-sensitive help.

Figure 25-11 Shell window toolbar

New: Creates a new resource script file and opens it in a Browser window. The platform is set to the default platform for creating new files (as set in the **Preferences** dialog box).

Open: Same as choosing **Open** from the **File** menu, except that the target platform for the resource is automatically set to the last platform chosen with **File Open**.

About: Same as choosing **About ResourceStudio** from the **Help** menu.

Context-sensitive help: Enters context-sensitive help mode. A question mark is appended to the cursor while in this mode. Select any component of ResourceStudio, such as a menu item or a toolbar icon, to open the online help for information about that component.

The Browser Window

The Browser window (see Figure 25-11) supervises the editing of a multiresource file, such as a resource script file. The resource types contained in the file are listed in the upper-left pane; when a type is selected, the resources of that type are listed in the lower-left pane. The right pane contains a preview of the currently selected resource.
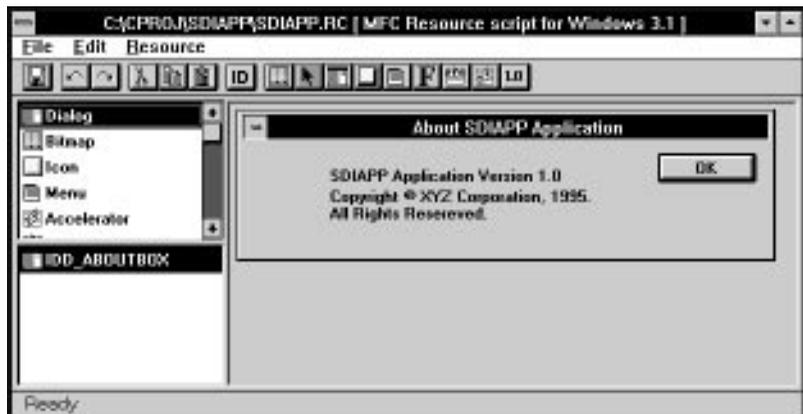

Figure 25-12 The Browser window

Individual resources can be edited either in separate windows or in the right pane of the Browser window. In the latter case, the menu bar of the resource editor replaces the Browser window's menu bar during editing.

File menu commands

The **File** menu (see Figure 25-12) contains commands to save the resource file, to edit resources, and to perform other miscellaneous functions.

```
File
    Save                    Ctrl+S
    Save As...

    Edit Resource
    Edit In Separate Window
    Export Resource...

    Edit Resource IDs...     Ctrl+I

    ClassExpress...          Ctrl+W

    Close
```

Figure 25-13 Browser window File menu

Save	Saves the resource file. If the file is unnamed, this command executes **Save As**.
Save As	Opens a Windows **File Save As** dialog box, which can be used to save the resource file under a new name.
Edit Resource	Opens the selected resource in the right pane of the Browser window so that the resource can be edited. This command is also executed by double-clicking on a resource, or double-clicking in the right pane when a preview of the resource is displayed there.
Edit in Separate Window	Opens the selected resource in a separate window so that the resource can be edited.
Export Resource	Opens a dialog box that can be used to save the currently selected resource in a separate file. This command is only available when the current resource is a bitmap, icon, cursor, or font.

Edit Resource IDs   Opens the **Resource ID Browser** dialog box (see Figure 25-13). This dialog box is used to browse and modify resource IDs.
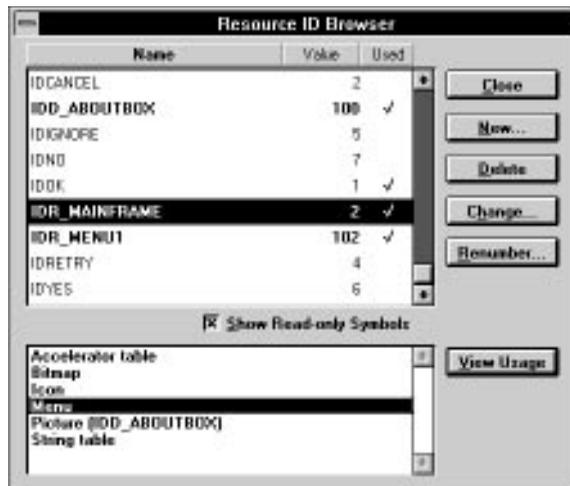

Figure 25-14 Resource ID Browser dialog box

For more information about managing resource IDs and using the **Resource ID Browser** dialog box, see "Managing Resource IDs," in Chapter 7, "Adding Look and Feel with Resources."

ClassExpress   Runs ClassExpress and passes the filename of the resource file as the project that ClassExpress should open. You should run ClassExpress, for example, after creating a dialog box. With ClassExpress you can create a class for the dialog box, set up a message map, and add member variables corresponding to controls. For more information, see Chapter 18, "More about ClassExpress," and Chapter 14, "Lesson 5: Add a Dialog Box with ClassExpress."

Close   Closes the Browser window.

Edit menu commands

The **Edit** menu (see Figure 25-15) contains standard editing commands. You can copy and paste entire resources, making it easy to move resources from one file to another.

Edit	
Nothing to Undo	
Nothing to Redo	
Cut	Shift+Ctrl+X
Copy	Shift+Ctrl+C
Paste	Shift+Ctrl+V
Delete	Shift+Del

Figure 25-15 Browser window Edit menu

Undo	Undoes the last Browser window operation.
Redo	Redoes the last Browser window operation that was undone.
Cut	Copies the selected resource to the Clipboard, then deletes it from the resource file.
Copy	Copies the selected resource to the Clipboard.
Paste	Copies the resource in the Clipboard into the resource file.
Delete	Deletes the selected resource from the resource file.

Resource menu commands

Commands in the **Resource** menu (see Figure 25-16) are used to create new resources. In each case, a new ID is automatically created and assigned to the resource, and the resource is opened in the right pane of the Browser window so that the resource can be edited.
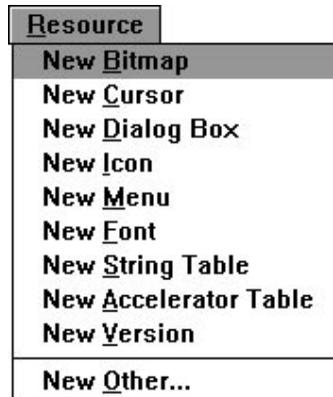

Figure 25-16 Browser window Resource menu

New Dialog Box	Creates a new dialog box. As the resource is created, the **DialogExpress** dialog box lets you select a predefined dialog type to use as a starting point (see "Dialog Editor," in Chapter 26, "Dialog Editor").
New Bitmap	Creates a new bitmap. As the resource is created, the **BitmapExpress** dialog box lets you specify initial bitmap parameters (see "Bitmap Editor," in Chapter 28, "Bitmap, Cursor, Icon, and Font Editors").
New Icon	Creates a new icon.
New Cursor	Creates a new cursor.
New Menu	Creates a new menu.
New Font	Creates a new font. As the resource is created, the **FontExpress** dialog box lets you specify initial font parameters (see "Font Editor," in Chapter 28, "Bitmap, Cursor, Icon, and Font Editors").
New String Table	Creates a new string table.

|	
New Accelerator Table	Creates a new accelerator table.
New Version	Creates a new version information resource.
New Other	Opens the **Create Resource** dialog box (see Figure 25-17). Use this dialog box to select a custom resource type to create and to define new custom resource types.
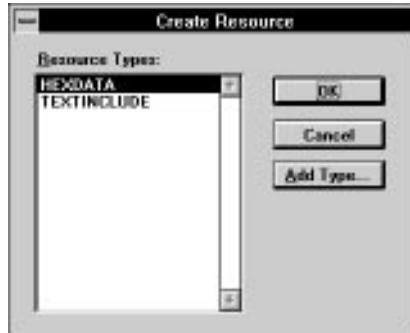
Figure 25-17 Create Resource dialog box

To create one of the listed resource types, select it and click OK. To define a new resource type, click on Add Type. The **New Resource Type** dialog box opens (see Figure 25-18).
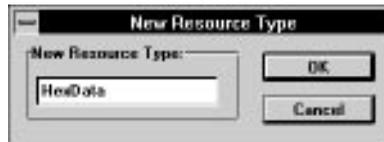

Figure 25-18 New Resource Type dialog box

Type a name for the new resource type in the textbox and click OK. The new type is added to the list in the **Create Resource** dialog box.

Toolbar commands

The Browser window toolbar (see Figure 25-19) provides quick access to frequently used menu commands.

Figure 25-19 Browser window toolbar

Save: Same as choosing **Save** from the **File** menu.

Undo: Same as choosing **Undo** from the **Edit** menu. Right-click on this button to undo multiple operations at once.

Redo: Same as choosing **Redo** from the **Edit** menu. Right-click on this button to redo multiple operations at once.

Cut: Same as choosing **Cut** from the **Edit** menu.

Copy: Same as choosing **Copy** from the **Edit** menu.

Paste: Same as choosing **Paste** from the **Edit** menu.

Resource ID browser: Same as choosing **Edit Resource IDs** from the **File** menu.

New bitmap: Same as choosing **New Bitmap** from the **Resource** menu.

New cursor: Same as choosing **New Cursor** from the **Resource** menu.

New dialog box: Same as choosing **New Dialog Box** from the **Resource** menu.

New icon: Same as choosing **New Icon** from the **Resource** menu.

New menu: Same as choosing **New Menu** from the **Resource** menu.

New font: Same as choosing **New Font** from the **Resource** menu.

New string table: Same as choosing **New String Table** from the **Resource** menu.

New accelerator table: Same as choosing **New Accelerator Table** from the **Resource** menu.

New version information: Same as choosing **New Version** from the **Resource** menu.

Resource properties

When the Browser window is active and a resource in the lower-left pane is selected, the Property Sheet displays properties of the resource, which specify the resource ID and the resource memory options. Figure 25-20 shows the properties of a Menu resource.

Figure 25-20 Resource properties

ID

Specifies the resource ID. You can do one of the following:

- Select an existing ID from the drop-down list.

- Type a new symbol for the resource ID. The ID is assigned a new, unique value.

- Type a new symbol, followed by an equal sign, followed by a value (for example, IDC_NAME=550). If you do not specify a value, one is supplied. The ID is assigned the value.

- Type a textual resource identifier, enclosed in double quotes (for example, "MenuOne"). Textual IDs cannot be assigned to font resources.

Preload

Specifies that the resource should be loaded into memory when the application is started. If this option is not checked, the resource is loaded when it is needed.

Moveable

Lets Windows move the resource in memory after it is loaded.

Discardable

Lets Windows remove the resource from memory when it is no longer needed.

Pure

Protects the resource in memory from being modified.

Dialog Editor ◆
26

*T*his ResourceStudio reference chapter contains details about the commands and options found in the Dialog editor. For an introduction to ResourceStudio, see Chapter 7, "Adding Look and Feel with Resources."

Dialog Editor

The Dialog editor (see Figure 26-1) is used to edit dialog resources.
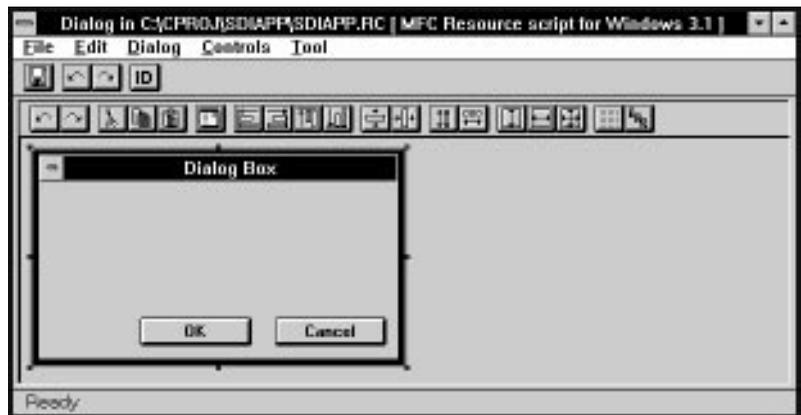
Figure 26-1 The Dialog editor

The Dialog editor displays the dialog box and its controls as they will appear at run time. To add a new control to the dialog box, select a tool from the **Tool** menu (or from the toolbox), then place the control in the dialog box by clicking and dragging. Controls can be moved and resized by clicking and dragging as well. Commands in the **Controls** menu can be used to center and align controls. The dialog box can be tested by choosing **Test Dialog** in the **Dialog** menu. For more information about using the Dialog editor, see Chapter 7, "Adding Look and Feel with Resources."

DialogExpress

As a new dialog resource is created, the **DialogExpress** dialog box opens (see Figure 26-2). DialogExpress lets you select a predefined dialog box type to use as a starting point for your dialog resource.

Figure 26-2 DialogExpress

Select dialog type
Specifies a type of dialog box to create as a starting point for the dialog resource.

Standard: Creates a dialog box with no controls.

About box: Creates a dialog box with static text and an OK button.

Standard, buttons on the bottom: Creates a dialog box with OK and Cancel buttons along the bottom.

Standard, buttons on the right: Creates a dialog box with OK and Cancel buttons along the right edge.

3-dimensional look
Specifies that the dialog box and controls should look 3-dimensional.

File menu commands

The **File** menu (see Figure 26-3) contains commands to save the resource file, edit resource IDs, and perform other miscellaneous functions.

Figure 26-3 Dialog editor File menu

Save	Saves the resource file. If the file is unnamed, this command executes **Save As**.
Save As	Opens a Windows **File Save As** dialog box, which is used to save the resource file under a new name.
Edit Resource IDs	Opens the **Resource ID Browser** dialog box, used to browse and modify resource IDs. For more information about managing resource IDs and using the **Resource ID Browser** dialog box, see "Managing Resource IDs," in Chapter 7, "Adding Look and Feel with Resources."
ClassExpress	Runs ClassExpress, passing the filename of the resource file as the project that ClassExpress should open. This command is only enabled if the Dialog editor is running in the right pane of the Browser window.
Close Editing	Closes the Dialog editor.

Edit menu commands

The **Edit** menu (see Figure 26-4) contains standard editing commands. You can undo operations, and can cut, copy, paste, and delete single or multiple controls. Note that to select multiple controls, you must press Shift or Control while clicking the second and subsequent controls, or must use the selection tool to drag a box around the controls.

Edit	
Nothing to Undo	
Nothing to Redo	
Cut	Ctrl+X
Copy	Ctrl+C
Paste	Ctrl+V
Delete	Del
Select All	

Figure 26-4 Dialog editor Edit menu

Undo	Undoes the last Dialog editor operation.
Redo	Redoes the last action that was undone.
Cut	Copies the selected control to the Clipboard, then deletes it from the dialog box.
Copy	Copies the selected control to the Clipboard.
Paste	Copies the control in the Clipboard to the dialog box.
Delete	Deletes the selected control from the dialog box.
Select All	Selects all controls in the dialog box.

Dialog menu commands

The **Dialog** menu (see Figure 26-5) contains commands to control the grid, display tab stops, test the dialog, and check for duplicate control IDs.

Dialog
Grid **O**ptions...
√ **Grid**
Snap to Grid
√ Display T**a**b Stops

Test Dialog...
Check Duplicate IDs...

Figure 26-5 Dialog editor Dialog menu

Grid Options   Opens the **Grid Settings** dialog box (see Figure 26-6), used to set grid options.

Grid Settings

Grid Steps

Width: 4

Height: 4

Options

☐ Snap To Grid

☐ Display Grid

OK   Cancel

Figure 26-6 Grid Settings dialog box

Width
Specifies the grid point horizontal spacing.

Height
Specifies the grid point vertical spacing.

Snap to grid
If checked, controls can only be moved to positions which coincide with grid points. When controls are resized, horizontal and vertical sizes are adjusted to multiples of the grid point spacings.

Display grid
If checked, the grid is displayed.

Grid   Toggles display of the grid.

|	
Snap to Grid	Moves the selected control to the nearest grid point.
Display Tab Stops	Toggles the display of tab stop numbers on controls. Tab order can be adjusted with commands in the **Tab Order** submenu of the **Controls** menu.
Test Dialog	Runs the dialog. End testing by clicking on a button with a resource ID of IDOK or IDCANCEL, or by pressing Alt+F4.
Check Duplicate IDs	Checks the dialog for duplicate control IDs. If any two items have the same ID, the **Resolve Duplicate IDs** dialog box opens (see Figure 26-7).
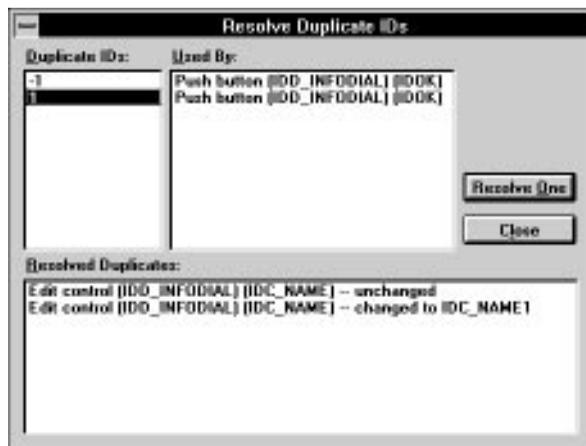
Figure 26-7 Resolve Duplicate IDs dialog box

To resolve duplicate IDs, first click on a number in the Duplicate IDs list. The Used By listbox displays the controls that are using that ID. Click on Resolve One to automatically assign new IDs (with unique values) to the controls.

Note that all static text usually shares the same ID; in general, this is acceptable and does not cause conflicts in the application.

Controls menu commands

The Controls menu (see Figure 26-8) contains commands to align, space, and center controls, and to adjust tab order.

Figure 26-8 Dialog editor Controls menu

Align   Opens the **Align** submenu (see Figure 26-9). Before choosing one of these commands, select two or more controls and designate one as the standard by clicking on it while pressing the Control key.
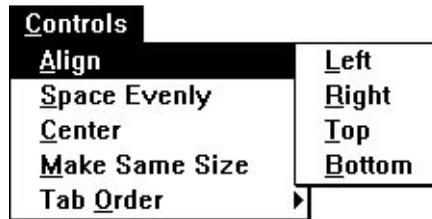

Figure 26-9 Dialog editor Controls menu Align submenu

Left   Aligns the left edges of the selected controls with the left edge of the standard.

Right   Aligns the right edges of the selected controls with the right edge of the standard.

Top   Aligns the top edges of the selected controls with the top edge of the standard.

Bottom   Aligns the bottom edges of the selected controls with the bottom edge of the standard.

Space Evenly   Opens the **Space Evenly** submenu (see Figure 26-10). Before choosing one of these commands, select three or more controls.
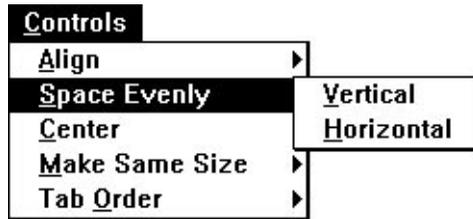

Figure 26-10 Dialog editor Controls menu Space Evenly submenu

Vertical   Spaces the selected controls evenly in the vertical direction.

Horizontal   Spaces the selected controls evenly in the horizontal direction.

Center   Opens the **Center** submenu (see Figure 26-11). Before choosing one of these commands, select one or more controls.
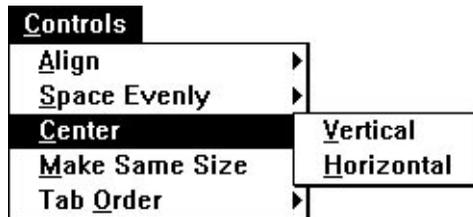

Figure 26-11 Dialog editor Controls menu Center submenu

Vertical   Centers the selected controls vertically within the dialog box.

Horizontal   Centers the selected controls horizontally within the dialog box.

|	
Make Same Size	Opens the **Make Same Size** submenu (see Figure 26-12). Before choosing one of these commands, select two or more controls and designate one as the standard by clicking on it while pressing the Control key.
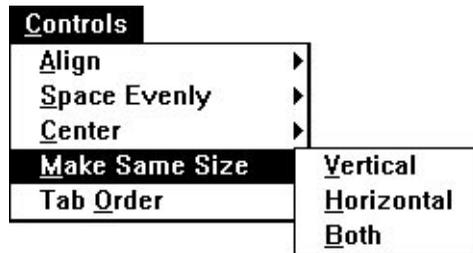
Figure 26-12 Dialog editor Controls menu Make Same Size submenu

|	
Vertical	Changes the vertical size of the selected controls to that of the standard.
Horizontal	Changes the horizontal size of the selected controls to that of the standard.
Both	Changes both the vertical and horizontal sizes of the selected controls to those of the standard.
Tab Order	Opens the Tab Order submenu (see Figure 26-13). Before choosing one of these commands, select a single control.
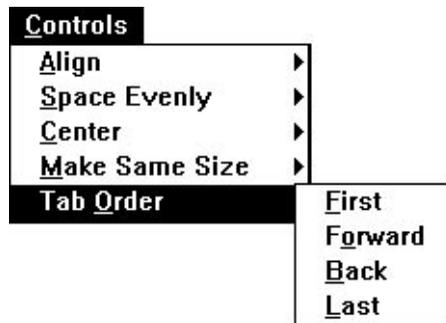
Figure 26-13 Dialog editor Controls menu Tab Order submenu

First	Moves the selected control to the front of the tab sequence.
Forward	Moves the selected control forward in the tab sequence.

Back	Moves the selected control back in the tab sequence.
Last	Moves the selected control to the end of the tab sequence.

Tool menu commands

The **Tool** menu (see Figure 26-14) lets you select tools used to place controls in the dialog box. After selecting a tool, click and drag in the dialog box to place and size the new control. Once the control is placed, the Select tool is selected automatically.

Tool
- **Select**
- **Picture**
- **Text**
- **Edit Control**
- **Group Box**
- **Push Button**
- • **Check Box**
- **Radio Button**
- **List Box**
- **Combo Box**
- **Vertical Scroll Bar**
- **Horizontal Scroll Bar**
- **Animate**
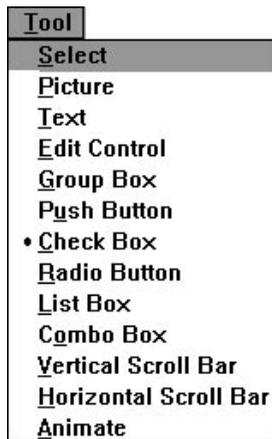
Figure 26-14 Dialog editor Tool menu

Select	Selects the Select tool. With the Select tool, you can select individual controls. You can select groups of controls by clicking in the dialog box outside of any control and dragging a box over the controls to be selected.
Picture	Selects the Picture tool, used to place a static image (a box, frame, or icon) in the dialog box.
Text	Selects the Text tool, used to place static text in the dialog box.
Edit Control	Selects the Edit Control tool, used to place an edit control (a textbox) in the dialog box.
Group Box	Selects the Group Box tool, used to place a group box in the dialog box.

Push Button	Selects the Push Button tool, used to place a push button in the dialog box.
Check Box	Selects the Check Box tool, used to place a check box in the dialog box.
Radio Button	Selects the Radio Button tool, used to place a radio button in the dialog box.
List Box	Selects the List Box tool, used to place a listbox in the dialog box.
Combox Box	Selects the Combo Box tool, used to place a combobox in the dialog box.
Vertical Scroll Bar	Selects the Vertical Scroll Bar tool, used to place a vertical scroll bar in the dialog box.
Horizontal Scroll Bar	Selects the Horizontal Scroll Bar tool, used to place a horizontal scroll bar in the dialog box.

Toolbar commands

The Dialog editor toolbar (see Figure 26-15) provides quick access to frequently used menu commands. Left-click on these buttons, except where noted.

Figure 26-15 Dialog editor toolbar

Undo: Same as choosing **Undo** from the **Edit** menu. You can right-click on this button to undo multiple operations at once.

Redo: Same as choosing **Redo** from the **Edit** menu. You can right-click on this button to redo multiple operations at once.

Cut: Same as choosing **Cut** from the **Edit** menu.

Copy: Same as choosing **Copy** from the **Edit** menu.

Paste: Same as choosing **Paste** from the **Edit** menu.

Test Dialog: Same as choosing **Test Dialog** from the **Dialog** menu.

Align Left: Same as choosing **Left** from the **Align** submenu of the **Controls** menu.

Align Right: Same as choosing **Right** from the **Align** submenu of the **Controls** menu.

Align Top: Same as choosing **Top** from the **Align** submenu of the **Controls** menu.

Align Bottom: Same as choosing **Bottom** from the **Align** submenu of the **Controls** menu.

Center Vertical: Same as choosing **Vertical** from the **Center** submenu of the **Controls** menu.

Center Horizontal: Same as choosing **Horizontal** from the **Center** submenu of the **Controls** menu.

Space Evenly Vertical: Same as choosing **Vertical** from the **Space Evenly** submenu of the **Controls** menu.

Space Evenly Horizontal: Same as choosing **Horizontal** from the **Space Evenly** submenu of the **Controls** menu.

Same Size Vertical: Same as choosing **Vertical** from the **Make Same Size** submenu of the **Controls** menu.

Same Size Horizontal: Same as choosing **Horizontal** from the **Make Same Size** submenu of the **Controls** menu.

Same Size Both: Same as choosing **Both** from the **Make Same Size** submenu of the **Controls** menu.

Grid: Same as choosing **Grid** from the **Dialog** menu.

Tab Stops: Same as choosing **Display Tab Stops** from the **Dialog** menu.

Toolbox

The Dialog editor toolbox (see Figure 26-16) provides quick access to the tools available in the **Tool** menu, plus tools for adding custom

controls and user controls (not pictured). For more information, see "Tool menu commands," earlier in this chapter.

Figure 26-16 Dialog editor toolbox

Dialog box properties

The dialog box has three pages of properties (four if the target platform is Windows 95). The General properties are shown in Figure 26-17.
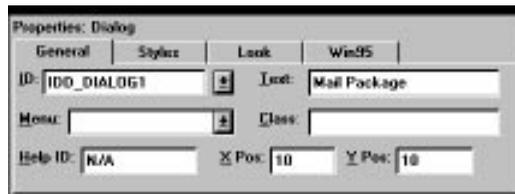

Figure 26-17 Dialog box General properties

The Text field is used to specify the dialog box title.

Styles properties are shown in Figure 26-18.

Figure 26-18 Dialog box Styles properties

Look properties are shown in Figure 26-19.

Figure 26-19 Dialog box Look properties

The dialog box font can be set by clicking on Set Font and selecting a font from the dialog box which opens. The Reset Font button resets the dialog box font to the system default.

If the target platform is Windows 95, the dialog box has an extra page of properties, as shown in Figure 26-20.
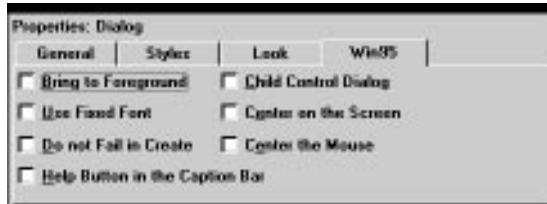

Figure 26-20 Dialog box Win95 properties

See your Windows 95 documentation for more information.

Picture properties

Pictures (static images) have properties as shown in Figure 26-21.

Figure 26-21 Picture properties

Select a Type from the drop-down list. If you select Icon, you must also select an icon from the Icon drop-down list.

Text properties

Static text properties are shown in Figure 26-22.
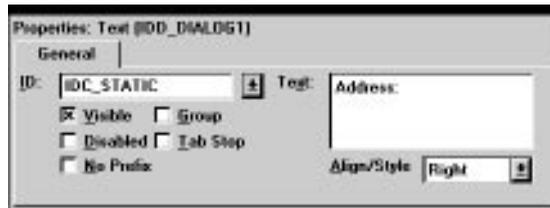
Figure 26-22 Text properties

Type the static text into the Text textbox. Newlines can be entered by typing Ctrl+Enter.

Edit control properties

Edit controls have two pages of properties. The General properties are shown in Figure 26-23.
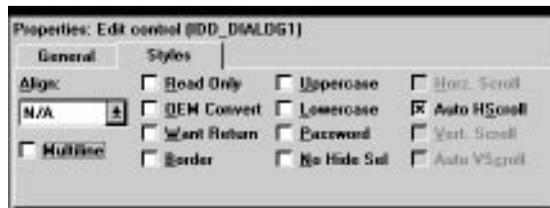

Figure 26-23 Edit control General properties

Edit control Styles properties are shown in Figure 26-24.
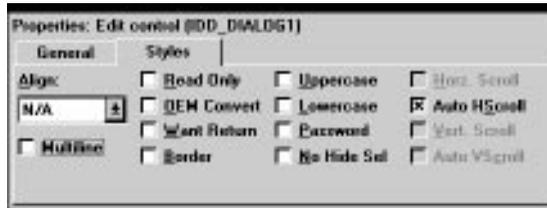
Figure 26-24 Edit control Styles properties

Group box properties
Group box properties are shown in Figure 26-25.

Figure 26-25 Group box properties

Push button properties
Push button properties are shown in Figure 26-26.

Figure 26-26 Push button properties

Check box properties

Check box properties are shown in Figure 26-27.

Figure 26-27 Check box properties

Radio button properties

Radio button properties are shown in Figure 26-28.

Figure 26-28 Radio button properties

Listbox properties

Listboxes have two pages of properties. The General properties are shown in Figure 26-29.

Figure 26-29 Listbox General properties

Listbox Styles properties are shown in Figure 26-30.

Figure 26-30 Listbox Styles properties

Combobox properties

Comboboxes have two pages of properties. The General properties are shown in Figure 26-31.

Figure 26-31 Combobox General properties

Combobox Styles properties are shown in Figure 26-32.
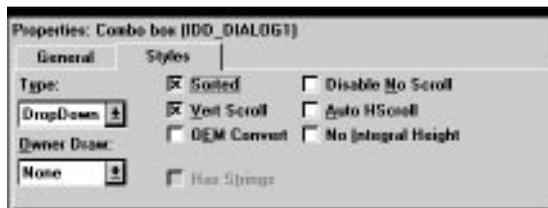
Figure 26-32 Combobox Styles properties

Scroll bar properties

Scroll bar properties are shown in Figure 26-33.

Figure 26-33 Scroll bar properties

Custom control properties

These pages let you work with custom controls. A custom control resides in a DLL that implements the standard functions for manipulating and displaying the control. ResourceStudio can display a custom control as it will appear in your application.

Custom controls have two pages of properties. The General properties are shown in Figure 26-31. Use the ID field to edit a custom control's resource ID. To change its style attributes, click Style; this displays the dialog box that the control DLL implements for that purpose.

Figure 26-34 Custom Control General properties

Custom control Extra properties are shown in Figure 26-32. You edit the initialization data for custom controls in this page.
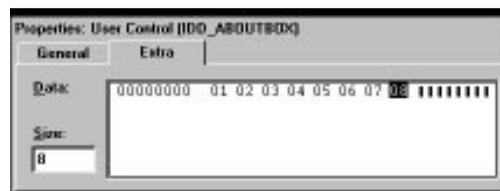

Figure 26-35 Custom Control Extra properties

Working with custom controls

Installed custom control DLLs provide ResourceStudio with the information it needs to display the control as it will appear in the application, and open the DLL's control-specific dialog box, with which you specify the control's attributes.

To place a custom control in a dialog box:

1. Install its DLL using the Add button on the Controls page of the Preferences dialog box.

2. Click the button in the Toolbox that corresponds to the control, and drag it into the dialog box. Right-clicking on a custom control's button displays its name.

3. Use the General property page to specify the control's resource ID and style attributes.

4. Use the Extra property page to specify any initialization data for the control. At run-time, the control's window procedure receives a pointer to this data in `lParam` of the `WM_CREATE` message.

User control properties

These pages let you work with user controls. A user control is any control that either is not implemented in a DLL, or whose implementation is non-standard. ResourceStudio can only display a user control as a box. ResourceStudio treats VBX controls as user controls.

User controls have two pages of properties. The General properties are shown in Figure 26-36. You use this page to edit a user control's resource ID or change its style bits.
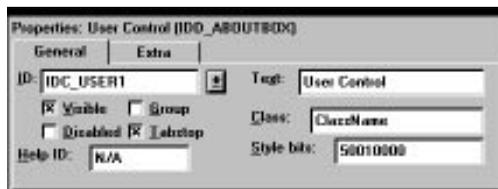

Figure 26-36 User Control General properties

User control Extra properties are shown in Figure 26-32. You edit the initialization data for user controlsin this page.
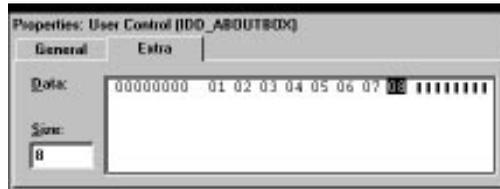

Figure 26-37 User Control Extra properties

Working with user controls
To place a user control in a dialog box:

1. Click the user control button in the Toolbox, and drag it into the dialog box.

2. Use the General property page to specify the control's resource ID, style bits, and other information.

3. Use the Extra property page to specify any initialization data for the user control. At run-time, the control's window procedure receives a pointer to this data in `lParam` of the `WM_CREATE` message.

Animate control properties

Animate control properties are shown in Figure 26-38.
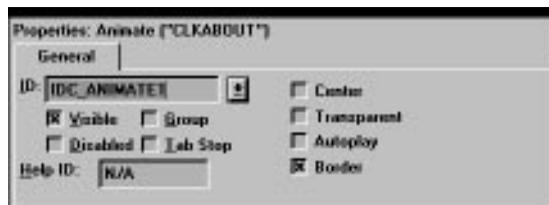
Figure 26-38 Animate control properties

Tree view properties

Tree view properties are shown in Figure 26-39.

Figure 26-39 Tree View properties

Tab control properties

Tab controls have two pages of properties. The General properties are shown in Figure 26-40.
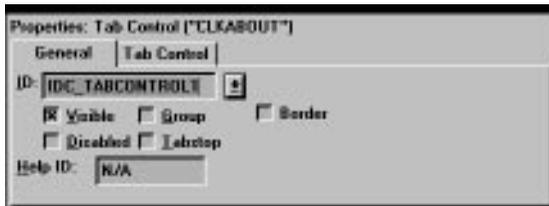

Figure 26-40 Tab Control General properties

Tab Control properties are shown in Figure 26-41.

Figure 26-41 Tab Control properties

List view control properties

List view controls have three pages of properties. The General properties are shown in Figure 26-42.

Figure 26-42 List View Control General properties

List View properties are shown in Figure 26-43.
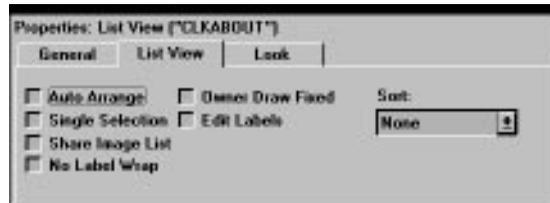
Figure 26-43 List View properties

Look properties are shown in Figure 26-44.

Figure 26-44 List View Look properties

Hotkey properties

Hotkey properties are shown in Figure 26-45.

Figure 26-45 Hotkey properties

Track Bar properties

Track bars have two pages of properties. The General properties are shown in Figure 26-46.

Figure 26-46 Track Bar General properties

Track Bar properties are shown in Figure 26-47.

Figure 26-47 Track Bar properties

Progress control properties

Progress control properties are shown in Figure 26-48.

Figure 26-48 Progress control properties

Up/Down control properties

Up/Down controls have two pages of properties. The General properties are shown in Figure 26-49.
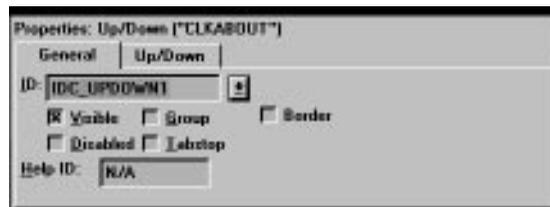
Figure 26-49 Up/Down control General properties

Up/Down properties are shown in Figure 26-50.
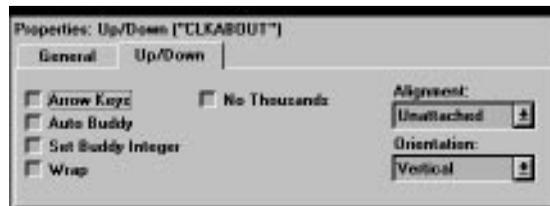
Figure 26-50 Up/Down properties

Menu, Accelerator and String Table Editors ◆

27

T*his ResourceStudio reference chapter contains details about the commands and options found in the Menu editor, the Accelerator Table editor and the String Table editor. For an introduction to ResourceStudio, see Chapter 7, "Adding Look and Feel with Resources."*

Menu Editor

The Menu editor (see Figure 27-1) is used to edit menu resources.
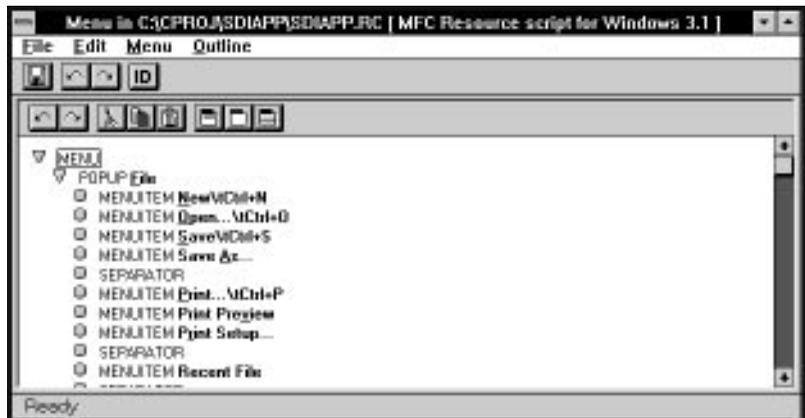

Figure 27-1 The Menu editor

The Menu editor displays the menu as a hierarchy of POPUPs, each of which may contain MENUITEMs, SEPARATORs, and other POPUPs. Items are added to the menu with commands in the **Menu** menu (or by clicking buttons in the toolbar), and are rearranged with commands in the **Outline** menu or by dragging with the mouse. The menu may be tested as a pull-down or pop-up menu at any time in the Test menu window, which is opened automatically when the Menu editor is started. For more information about using the Menu editor, see Chapter 7, "Adding Look and Feel with Resources."

File menu commands

The **File** menu (see Figure 27-2) contains commands to save the resource file, to edit resource IDs, and to perform other miscellaneous functions.

File	
<u>S</u>ave	Ctrl+S
Save <u>A</u>s...	
Export <u>R</u>esource...	
Edit Resource <u>I</u>Ds...	Ctrl+I
ClassE<u>x</u>press...	Ctrl+W
<u>C</u>lose editing	Esc

Figure 27-2 Menu editor File menu

Save	Saves the resource file. If the file is unnamed, this command executes **Save As**.
Save As	Opens a Windows **File Save As** dialog box, which can be used to save the resource file under a new name.
Edit Resource IDs	Opens the **Resource ID Browser** dialog box, used to browse and modify resource IDs. For more information about managing resource IDs and using the **Resource ID Browser** dialog box, see "Managing Resource IDs," in Chapter 7, "Adding Look and Feel with Resources."
ClassExpress	Runs ClassExpress, passing the filename of the resource file as the project that ClassExpress should open. This command is only enabled if the Menu editor is running in the right pane of the Browser window.
Close Editing	Closes the Menu editor.

Edit menu commands

The **Edit** menu (see Figure 27-3) contains standard editing commands. You can undo operations, and can cut, copy, paste, and delete individual MENUITEMs or entire POPUPs.

Figure 27-3 Menu editor Edit menu

Undo	Undoes the last Menu editor operation.
Redo	Redoes the last Menu editor operation that was undone.
Cut	Copies the selected item to the Clipboard, then deletes it from the menu.
Copy	Copies the selected item to the Clipboard.
Paste	Copies the item in the Clipboard into the menu.
Delete	Deletes the selected item from the menu.

Menu menu commands

The **Menu** menu (see Figure 27-4) contains commands to add items to the menu. You can insert individual MENUITEMs, POPUPs, and SEPARATORs, and you can insert predefined File, Edit, and Help menus. An additional command lets you check for duplicate command IDs.

Figure 27-4 Menu editor Menu menu

Before adding a new item, select the item after which the new item should be inserted.

New Item	Adds a new MENUITEM after the selected item.
New Popup	Adds a new POPUP after the selected item.
New Separator	Adds a new SEPARATOR after the selected item.
Standard File Menu	Adds a standard **File** menu after the selected item.
Standard Edit Menu	Adds a standard **Edit** menu after the selected item.
Standard Help Menu	Adds a standard **Help** menu after the selected item.

Check Duplicate IDs   Checks the menu for duplicate command IDs. If any two items have the same ID, the **Resolve Duplicate IDs** dialog box opens (see Figure 27-5).
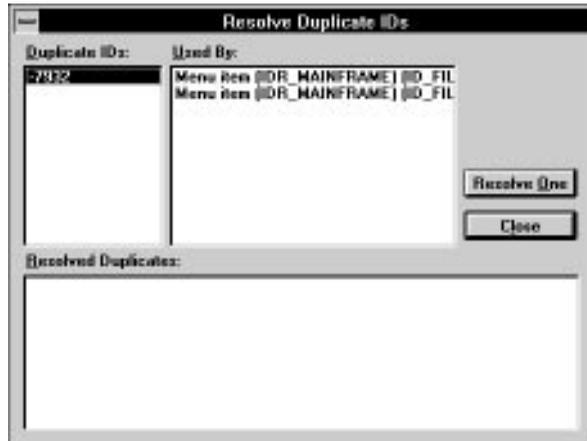

Figure 27-5 Resolve Duplicate IDs dialog box

To resolve duplicate IDs, first click on a number in the Duplicate IDs list. The Used By listbox displays the items that are using that ID. Click on Resolve One to automatically assign new IDs (with unique values) to the items.

Outline menu commands

The **Outline** menu (see Figure 27-6) is used to rearrange the menu. You can move items within their current hierarchical level, or you can promote or demote items from one level to another.

Figure 27-6 Menu editor Outline menu

Expand/Collapse	Expands or collapses (depending on the present state) the view of the contents of a POPUP item. While a POPUP is collapsed, the items within a POPUP are not shown, and the triangle to the left of the POPUP points rightward. While expanded, the items within the POPUP are shown and the triangle points downward. You can also execute this command by clicking on the triangle next to the POPUP.
Move Up	Exchanges the selected item with the previous item in the same level of the hierarchy.
Move Down	Exchanges the selected item with the next item in the same level of the hierarchy.
Demote	If the previous item in the same level of the hierarchy is a POPUP, moves the selected item into the POPUP.
Promote	If the selected item is within a POPUP, moves the item out of the POPUP to the same hierarchical level as the POPUP.

Toolbar commands

The Menu editor toolbar (see Figure 27-7) provides quick access to frequently used menu commands.

Figure 27-7 Menu editor toolbar

Undo: Same as choosing **Undo** from the **Edit** menu. Right-click on this button to undo multiple operations at once.

Redo: Same as choosing **Redo** from the **Edit** menu. Right-click on this button to redo multiple operations at once.

Cut: Same as choosing **Cut** from the **Edit** menu.

Copy: Same as choosing **Copy** from the **Edit** menu.

Paste: Same as choosing **Paste** from the **Edit** menu.

New Item: Same as choosing **New Item** from the **Menu** menu.

New Popup: Same as choosing **New Popup** from the **Menu** menu.

New Separator: Same as choosing **New Separator** from the **Menu** menu.

Popup item properties

POPUP item properties are shown in Figure 27-8.

Figure 27-8 Popup properties

Menu item properties

MENUITEMs and SEPARATORs have two pages of properties. The General properties are shown in Figure 27-9.

Figure 27-9 Menu item / separator General properties

A SEPARATOR would have the Separator box checked.

The Connect properties (see Figure 27-10) only apply to MENUITEMs.
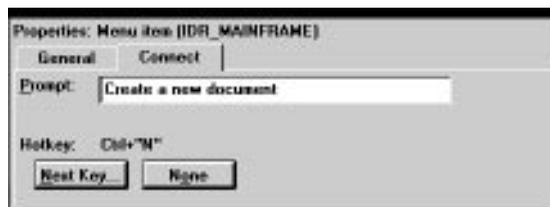

Figure 27-10 Menu item Connect properties

The Prompt textbox is used to set help text for the item. The Hotkey field displays the accelerator key combination associated with the

item. For more information about how to create menus with help text and accelerators, see Chapter 7, "Adding Look and Feel with Resources."

Accelerator Table Editor

The Accelerator Table editor (see Figure 27-11) is used to edit accelerator tables.
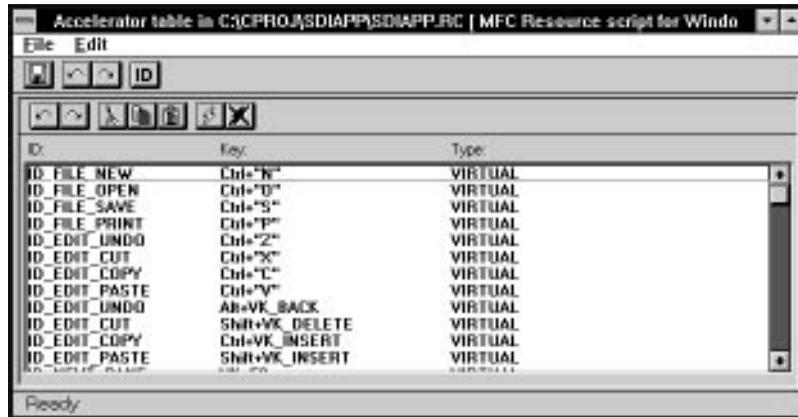
Figure 27-11 The Accelerator Table editor

The Accelerator Table editor displays a list of accelerator IDs and associated key combinations. To create and delete accelerators, use the **New** and **Delete** commands in the **Edit** menu. You can set the ID and key combination of an accelerator in the Property Sheet.

Accelerators are usually associated with menu items, and you can create accelerators directly from the Menu editor. For more information, see Chapter 7, "Adding Look and Feel with Resources."

File menu commands

The **File** menu (see Figure 27-12) contains commands to save the resource file, to edit resource IDs, and to perform other miscellaneous functions.

```
 File 
   Save              Ctrl+S
   Save As...
   Export Resource...
   Edit Resource IDs... Ctrl+I
   ClassExpress...     Ctrl+W
   Close editing       Esc
```

Figure 27-12 Accelerator Table editor File menu

Save	Saves the resource file. If the file is unnamed, this command executes **Save As**.
Save As	Opens a Windows **File Save As** dialog box, which can be used to save the resource file under a new name.
Edit Resource IDs	Opens the **Resource ID Browser** dialog box, used to browse and modify resource IDs. For more information about managing resource IDs and using the **Resource ID Browser** dialog box, see "Managing Resource IDs," in Chapter 7, "Adding Look and Feel with Resources."
ClassExpress	Runs ClassExpress, passing the filename of the resource file as the project that ClassExpress should open. This command is only enabled if the Accelerator Table editor is running in the right pane of the Browser window.
Close Editing	Closes the Accelerator Table editor.

Edit menu commands

The **Edit** menu (see Figure 27-13) contains standard editing commands. You can undo operations, and can cut, copy, paste, add, and delete accelerators.

Figure 27-13 Accelerator Table editor Edit menu

Undo	Undoes the last Accelerator Table editor operation.
Redo	Redoes the last Accelerator Table editor operation that was undone.
Cut	Copies the selected accelerator to the Clipboard, then deletes it from the table.
Copy	Copies the selected accelerator to the Clipboard.
Paste	Copies the accelerator in the Clipboard into the table.
New	Adds a new accelerator to the table.
Delete	Deletes the selected accelerator from the table.

Toolbar commands

The Accelerator Table editor toolbar (see Figure 27-14) provides quick access to frequently used menu commands.
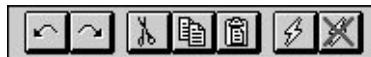
Figure 27-14 Accelerator Table editor toolbar

Undo: Same as choosing **Undo** from the **Edit** menu. Right-click on this button to undo multiple operations at once.

Redo: Same as choosing **Redo** from the **Edit** menu. Right-click on this button to redo multiple operations at once.

Cut: Same as choosing **Cut** from the **Edit** menu.

Copy: Same as choosing **Copy** from the **Edit** menu.

Paste: Same as choosing **Paste** from the **Edit** menu.

New: Same as choosing **New** from the **Edit** menu.

Delete: Same as choosing **Delete** from the **Edit** menu.

Accelerator properties

Accelerator properties are shown in Figure 27-15.

Figure 27-15 Accelerator properties

The accelerator key combination can be set by clicking on Next Typed, then pressing the key combination. The Key, Type, and Modifiers options are set automatically.

String Table Editor

The String Table editor (see Figure 27-16) is used to edit string tables.
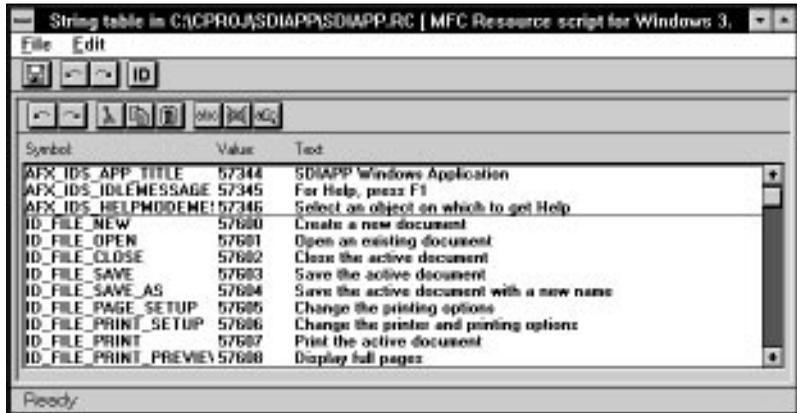
Figure 27-16 The String Table editor

The String Table editor displays a list of IDs and associated text. To create and delete strings, use the **New** and **Delete** commands in the **Edit** menu. You can set the ID and text of a string in the Property Sheet.

Although they can be used for any purpose, strings are commonly used to display information about menu commands. You can create strings associated with menu items directly from the Menu editor. For more information, see Chapter 7, "Adding Look and Feel with Resources."

File menu commands

The **File** menu (see Figure 27-17) contains commands to save the resource file, to edit resource IDs, and to perform other miscellaneous functions.

File	
<u>S</u>ave	Ctrl+S
Save <u>A</u>s...	
Export Resource...	
Edit Resource <u>I</u>Ds...	Ctrl+I
ClassE<u>x</u>press...	Ctrl+W
<u>C</u>lose editing	Esc

Figure 27-17 String Table editor File menu

Save	Saves the resource file. If the file is unnamed, this command executes **Save As**.
Save As	Opens a Windows **File Save As** dialog box, which can be used to save the resource file under a new name.
Edit Resource IDs	Opens the **Resource ID Browser** dialog box, used to browse and modify resource IDs. For more information about managing resource IDs and using the **Resource ID Browser** dialog box, see "Managing Resource IDs," in Chapter 7, "Adding Look and Feel with Resources."
ClassExpress	Runs ClassExpress, passing the filename of the resource file as the project that ClassExpress should open. This command is only enabled if the String Table editor is running in the right pane of the Browser window.
Close Editing	Closes the String Table editor.

Edit menu commands

The **Edit** menu (see Figure 27-18) contains standard editing commands. You can undo operations, and can cut, copy, paste, add, and delete strings. The find commands can help you to locate particular strings in large tables.

Figure 27-18 String Table editor Edit menu

Undo	Undoes the last String Table editor operation.
Redo	Redoes the last String Table editor operation that was undone.
Cut	Copies the selected string to the Clipboard, then deletes it from the table.
Copy	Copies the selected string to the Clipboard.
Paste	Copies the string in the Clipboard into the table.
New	Adds a new string to the table.
Delete	Deletes the selected string from the table.

Find Opens the **Find String** dialog box (see Figure 27-19). This dialog box is used to locate a string containing particular text.
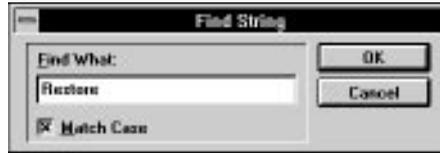
Figure 27-19 Find String dialog box

Type the search text into the Find What textbox. Select Match Case to make the search case sensitive. When you click OK, the String Table editor locates the first occurrence of the text in the string table.

Find Again Finds the next occurrence of the search text, starting from the currently selected string.

Toolbar commands

The String Table editor toolbar (see Figure 27-20) provides quick access to frequently used menu commands.

Figure 27-20 String Table editor toolbar

Undo: Same as choosing **Undo** from the **Edit** menu. Right-click on this button to undo multiple operations at once.

Redo: Same as choosing **Redo** from the **Edit** menu. Right-click on this button to redo multiple operations at once.

Cut: Same as choosing **Cut** from the **Edit** menu.

Copy: Same as choosing **Copy** from the **Edit** menu.

Paste: Same as choosing **Paste** from the **Edit** menu.

New: Same as choosing **New** from the **Edit** menu.

Delete: Same as choosing **Delete** from the **Edit** menu.

Find: Same as choosing **Find** from the **Edit** menu.

String properties

String properties are shown in Figure 27-21.

Figure 27-21 String properties

Enter the string in the Text textbox. You can insert tabs and carriage returns by typing Ctrl+Tab and Ctrl+Enter, respectively. You can also use \t to represent a tab and \n for a carriage return.

Bitmap, Cursor, Icon, and Font Editors ◆
28

*T*his ResourceStudio reference chapter contains details about the commands and options found in the Bitmap editor, the Cursor editor, the Icon editor, and the Font editor. For an introduction to ResourceStudio, see Chapter 7, "Adding Look and Feel with Resources."

This chapter shows the editors running in standalone windows. If you edit a binary resource directly (that is, if you open or create it by choosing **Open** from the Shell window's **File** menu), the File menu you will see will not match those shown below, and the ID and File fields in the Property sheet will be disabled.

Bitmap Editor

The Bitmap editor (see Figure 28-1) is used to edit bitmaps.
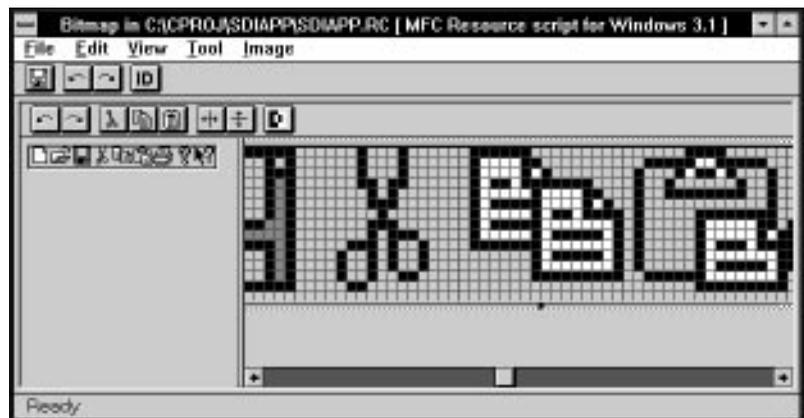

Figure 28-1 The Bitmap editor

The Bitmap editor displays two views of the bitmap. Each view can be independently zoomed; you may wish to keep one view at

normal size for reference, and one at a higher magnification for easier drawing. You can draw in either view, though.

Drawing tools are selected by choosing commands in the **Tool** menu, or by clicking on the tool in the toolbox. Colors are selected in the palette section of the toolbox. The **View** menu is used to zoom the views and to turn on the grid. Simple image manipulation functions are available in the **Image** menu.

For more information about using the Bitmap editor, see Chapter 7, "Adding Look and Feel with Resources."

BitmapExpress

As a new bitmap is created, the **BitmapExpress** dialog box opens (see Figure 28-2). This dialog box is used to set initial bitmap properties.

Figure 28-2 BitmapExpress

Select bitmap type
Specifies the number of colors in the bitmap (2, 16, or 256).

Initial size
Specifies the bitmap width and height.

Toolbar bitmap
Select this option if the bitmap will be used as the toolbar in an MFC application. If this option is selected, the number of colors is set to 16 and the initial size is determined by the value of the Buttons across option.

Buttons across
Specifies the number of buttons for toolbar bitmaps. The bitmap's initial size is changed to accommodate the number of buttons you request. Each button is 15 pixels high and 16 pixels across.

File menu commands

The **File** menu (see Figure 28-3) contains commands to save the resource file, to edit resource IDs, and to perform other miscellaneous functions.

File	
Save	Ctrl+S
Save **A**s...	
Export **R**esource...	
Edit Resource **I**Ds...	Ctrl+I
ClassE**x**press...	Ctrl+W
Close editing	Esc

Figure 28-3 Bitmap editor File menu

Save Saves the resource file. If the file is unnamed, this command executes **Save As**.

Save As Opens a Windows **File Save As** dialog box, which can be used to save the resource file under a new name.

Export Resource Opens a dialog box which can be used to save the bitmap in a separate file.

Edit Resource IDs Opens the **Resource ID Browser** dialog box, used to browse and modify resource IDs. For more information about managing resource IDs and using the **Resource ID Browser** dialog box, see "Managing Resource IDs," in Chapter 7, "Adding Look and Feel with Resources."

ClassExpress Runs ClassExpress, passing the filename of the resource file as the project that ClassExpress should open. This command is only enabled if the Bitmap editor is running in the right pane of the Browser window.

Close Editing Closes the Bitmap editor.

Edit menu commands

The **Edit** menu (see Figure 28-4) contains standard editing commands. You can undo operations, and can cut, copy, paste, and clear rectangular regions of the bitmap. To select a region to cut,

copy, or clear, select the Selection tool from the toolbox or from the **Tool** menu, then drag a box around the region.

Edit	
Nothing to Undo	
Nothing to Redo	
Cut	Ctrl+X
Copy	Ctrl+C
Paste	Ctrl+V
Clear	Del
Select All	
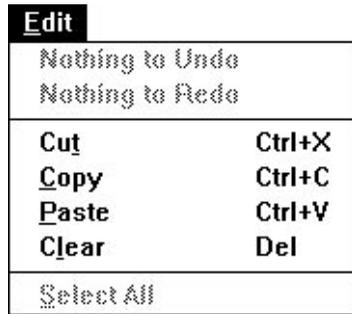
Figure 28-4 Bitmap editor Edit menu

Undo	Undoes the last Bitmap editor operation.
Redo	Redoes the last undone Bitmap editor operation.
Cut	Copies the selected region to the Clipboard, then clears the region in the bitmap, filling it with the current background color.
Copy	Copies the selected region to the Clipboard.
Paste	Copies the region in the Clipboard to the bitmap. The new region is initially placed in the upper left corner of the bitmap, but may be dragged to a new location.
Clear	Clears the selected region, filling it with the current background color. If no region is selected, the entire bitmap is cleared.

View menu commands

The **View** menu (see Figure 28-5) contains commands to set view magnification and to set grid options.
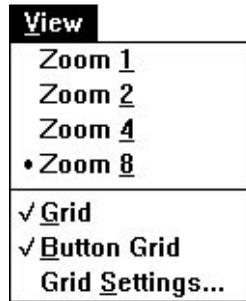
Figure 28-5 Bitmap editor View menu

Zoom 1   Sets the current view's zoom factor to 1 (normal size).

Zoom 2   Sets the current view's zoom factor to 2 (twice normal size).

Zoom 4   Sets the current view's zoom factor to 4 (four times normal size).

Zoom 8   Sets the current view's zoom factor to 8 (eight times normal size).

Grid   Turns on the grid. The grid is only visible in views where the zoom factor is 4 or 8.

Button Grid   Turns on the button grid. The button grid is used to identify the boundaries of toolbar buttons when you are creating a toolbar bitmap.

Grid Settings   Opens the **Grid Settings** dialog box (see Figure 28-6), used to set grid options.
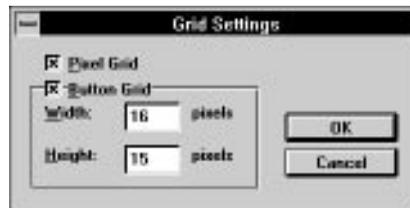
Figure 28-6 Grid Settings dialog box

Pixel grid
Turns on display of the pixel grid.

Button grid

Turns on display of the button grid. The spacing of points on the button grid can be specified in the Width and Height fields; defaults for an MFC application toolbar are 16 pixels wide by 15 pixels high.

Tool menu commands

The **Tool** menu (see Figure 28-7) lets you select drawing tools. While over the drawing area, the cursor changes shape to indicate the currently selected tool. To draw, click or click and drag (as appropriate) in the drawing area. Using the right button rather than the left reverses the roles of foreground and background colors. Drawing tools can also be selected in the toolbox. For more information about drawing operations in the Bitmap editor, see Chapter 7, "Adding Look and Feel with Resources."

```
 Tool
   Brush
   Erase
   Eye Drop
   Line
   Text
   Oval
   Oval (Filled)
   Paint
   Pen
   Rect
   Rect (Filled)
   Round Rect
   Round Rect (Filled)
 • Select
   Spray
```
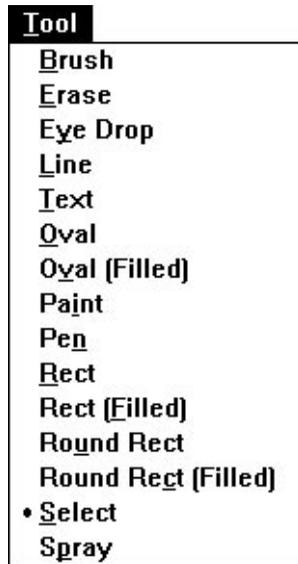
Figure 28-7 Bitmap editor Tool menu

Brush	Selects the brush tool.
Erase	Selects the eraser tool.
Eye Drop	Selects the eye-dropper tool. Use this tool to select foreground and background colors directly from the image.
Line	Selects the straight line tool.

Text	Selects the text tool.
Oval	Selects the hollow oval tool.
Oval (Filled)	Selects the solid oval tool.
Paint	Selects the paint can (flood fill) tool.
Pen	Selects the pen (pencil) tool.
Rect	Selects the hollow rectangle tool.
Rect (Filled)	Selects the solid rectangle tool.
Round Rect	Selects the hollow rounded rectangle tool.
Round Rect (Filled)	Selects the solid rounded rectangle tool.
Select	Selects the Selection tool. Use this tool to select rectangular regions for cut, copy, clear, drag, flip, and invert operations.
Spray	Selects the spray brush (airbrush) tool.

Image menu commands

Commands in the Image menu (see Figure 28-8) perform simple image manipulation functions. To select a region to flip or invert, select the Selection tool from the toolbox or from the **Tool** menu, then drag a box around the region. If no region is selected, these commands operate on the entire bitmap.

```
Image
  Flip Vertically
  Flip Horizontally
  Invert Colors
```

Figure 28-8 Bitmap editor Image menu

Flip Vertically	Flips the selected region vertically.
Flip Horizontally	Flips the selected region horizontally.
Invert Colors	Inverts the colors in the selected region (for example, in a 16 color bitmap, color 0 is replaced with color 15, color 1 is replaced with color 14, and so on).

Toolbar commands

The Bitmap editor toolbar (see Figure 28-9) provides quick access to frequently used menu commands.

Figure 28-9 Bitmap editor toolbar

Undo: Same as choosing **Undo** from the **Edit** menu. Right-click on this button to undo multiple operations at once.

Redo: Same as choosing **Redo** from the **Edit** menu. Right-click on this button to redo multiple operations at once.

Cut: Same as choosing **Cut** from the **Edit** menu.

Copy: Same as choosing **Copy** from the **Edit** menu.

Paste: Same as choosing **Paste** from the **Edit** menu.

Flip horizontally: Same as choosing **Flip Horizontally** from the **Image** menu.

Flip vertically: Same as choosing **Flip Vertically** from the **Image** menu.

Invert colors: Same as choosing **Invert Colors** from the **Image** menu.

Toolbox

The Bitmap editor toolbox (see Figure 28-10) provides quick access to the tools available in the **Tool** menu. The toolbox also lets you select foreground and background colors, brush types, background pattern, and line type.

For more information on the Bitmap editor toolbox, see Chapter 7, "Adding Look and Feel with Resources."
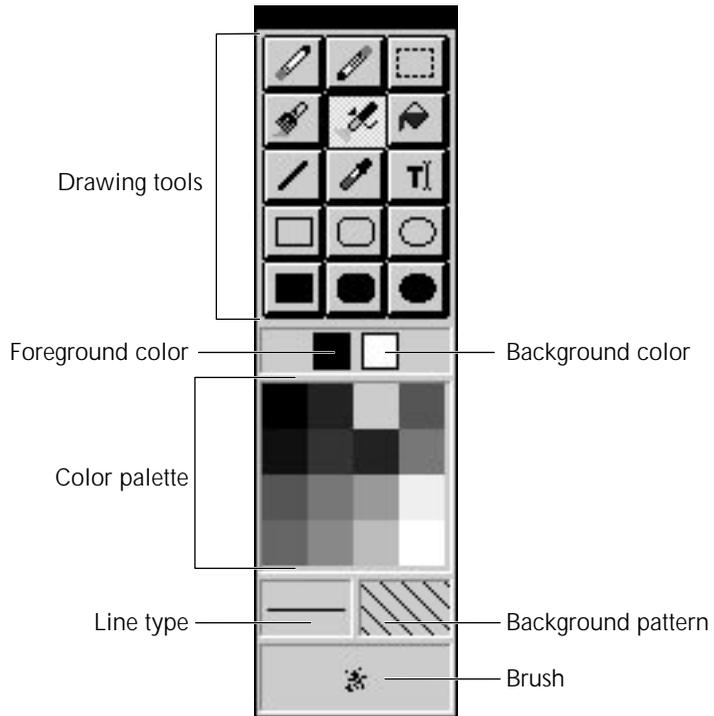

Figure 28-10 Bitmap editor toolbox

Bitmap properties
Bitmaps have two pages of properties. The General properties are shown in Figure 28-11.
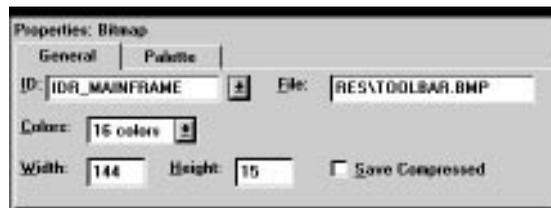
Figure 28-11 Bitmap General properties

◆

Specify a filename for the bitmap in the File textbox. The Width and Height of the bitmap can be changed here, or the bitmap can be resized in the main display by dragging one of the handles along the bitmap edge.

Palette properties of a bitmap are shown in Figure 28-12.

Figure 28-12 Bitmap Palette properties

Foreground and background drawing colors can be set by respectively clicking and right-clicking colors in this display. Double-clicking a color opens the **Custom Color** dialog box, which can be used to change the color's red, green, and blue components.

Cursor Editor

The Cursor editor (see Figure 28-13) is used to edit cursors.
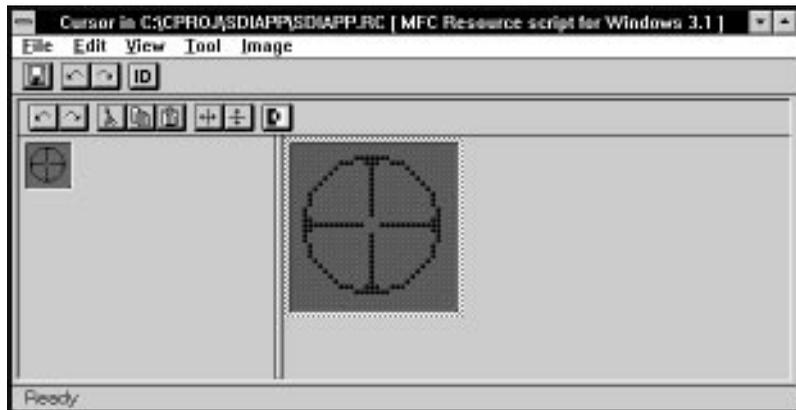
Figure 28-13 The Cursor editor

Since cursors are much like bitmaps, the Cursor editor behaves much like the Bitmap editor (see "Bitmap Editor," earlier in this chapter). The distinguishing characteristics of cursors are as follows:

• A cursor resource may contain more than one cursor. ResourceStudio lets you create up to four different cursors in a cursor resource. The four possible cursor types have predefined sizes and color depths.

• In addition to normal colors, cursors can have areas which are tagged "Transparent" and "Inverted." In Transparent areas, the background screen color shows through the cursor. In Inverted areas, the background screen color is bitwise-complemented.

• Cursors have a "hotspot," a particular pixel which is used by Windows to map the cursor to a screen location.

The Cursor editor displays two views of the cursor. Each view can be independently zoomed; you may wish to keep one view at normal size for reference, and one at a higher magnification for easier drawing. You can draw in either view, though.

Drawing tools are selected by choosing commands in the **Tool** menu, or by clicking on the tool in the toolbox. Colors are selected in the palette section of the toolbox. The **View** menu is used to zoom the views and to turn on the grid. Simple image manipulation functions are available in the **Image** menu. The cursor hotspot is set by choosing **Set Hotspot** from the **Image** menu.

File menu commands

The **File** menu (see Figure 28-14) contains commands to save the resource file, to edit resource IDs, and to perform other miscellaneous functions.

Figure 28-14 Cursor editor File menu

Save	Saves the resource file. If the file is unnamed, this command executes **Save As**.
Save As	Opens a Windows **File Save As** dialog box, which can be used to save the resource file under a new name.
Export Resource	Opens a dialog box which can be used to save the cursor resource in a separate file.
Edit Resource IDs	Opens the **Resource ID Browser** dialog box, used to browse and modify resource IDs. For more information about managing resource IDs and using the **Resource ID Browser** dialog box, see "Managing Resource IDs," in Chapter 7, "Adding Look and Feel with Resources."
ClassExpress	Runs ClassExpress, passing the filename of the resource file as the project that ClassExpress should open. This command is only enabled if the Cursor editor is running in the right pane of the Browser window.
Close Editing	Closes the Cursor editor.

Edit menu commands

The **Edit** menu (see Figure 28-15) contains standard editing commands. You can undo operations, and can cut, copy, paste, and clear rectangular regions of the cursor. To select a region to cut, copy, or clear, select the Selection tool from the toolbox or from the **Tool** menu, then drag a box around the region.
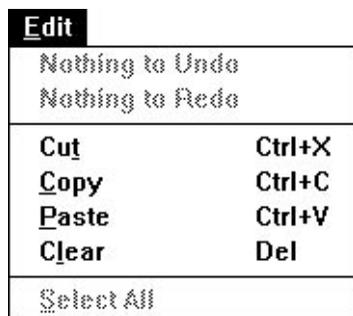
Figure 28-15 Cursor editor Edit menu

Undo	Undoes the last Cursor editor operation.
Redo	Redoes the last undone Cursor editor operation.

Cut	Copies the selected region to the Clipboard, then clears the region in the cursor, filling it with the current background color.
Copy	Copies the selected region to the Clipboard.
Paste	Copies the region in the Clipboard to the cursor. The new region is initially placed in the upper-left corner of the cursor, but may be dragged to a new location.
Clear	Clears the selected region, filling it with the current background color. If no region is selected, the entire cursor is cleared.
Select All	Select all cursor regions.

View menu commands

The **View** menu (see Figure 28-16) contains commands to set view magnification and to set grid options.

```
┌─────────────────┐
│ View            │
├─────────────────┤
│   Zoom 1        │
│   Zoom 2        │
│ • Zoom 4        │
│   Zoom 8        │
├─────────────────┤
│ √ Grid          │
│   Button Grid   │
│   Grid Settings...│
└─────────────────┘
```
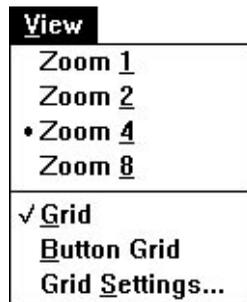
Figure 28-16 Cursor editor View menu

Zoom 1	Sets the current view's zoom factor to 1 (normal size).
Zoom 2	Sets the current view's zoom factor to 2 (twice normal size).
Zoom 4	Sets the current view's zoom factor to 4 (four times normal size).
Zoom 8	Sets the current view's zoom factor to 8 (eight times normal size).
Grid	Turns on the grid. The grid is only visible in views where the zoom factor is 4 or 8.
Button Grid	Turns on the button grid.

Grid Settings   Opens the **Grid Settings** dialog box (see Figure 28-17), used to set grid options.
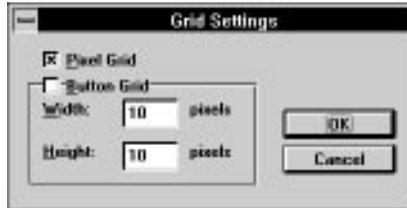

Figure 28-17 Grid Settings dialog box

Pixel grid
Turns on display of the pixel grid.

Button grid
Turns on display of the button grid. The spacing of points on the button grid can be specified in the Width and Height fields.

Tool menu commands

The **Tool** menu (see Figure 28-18) lets you select drawing tools. While over the drawing area, the cursor changes shape to indicate the currently selected tool. To draw, click or click and drag (as appropriate) in the drawing area. Using the right button rather than the left reverses the roles of foreground and background colors. Drawing tools can also be selected in the toolbox. Drawing operations are identical to those in the Bitmap editor.

For more information, see Chapter 7, "Adding Look and Feel with Resources."
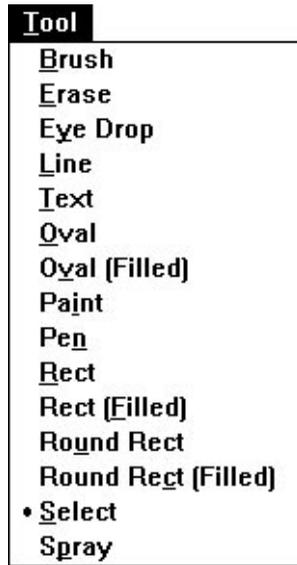
Figure 28-18 Cursor editor Tool menu

Brush	Selects the brush tool.
Erase	Selects the eraser tool.
Eye Drop	Selects the eye-dropper tool. Use this tool to select foreground and background colors directly from the image.
Line	Selects the straight line tool.
Text	Selects the text tool.
Oval	Selects the hollow oval tool.
Oval (Filled)	Selects the solid oval tool.
Paint	Selects the paint can (flood fill) tool.
Pen	Selects the pen (pencil) tool.

Rect	Selects the hollow rectangle tool.
Rect (Filled)	Selects the solid rectangle tool.
Round Rect	Selects the hollow rounded rectangle tool.
Round Rect (Filled)	Selects the solid rounded rectangle tool.
Select	Selects the Selection tool. Use this tool to select rectangular regions for cut, copy, clear, drag, flip, and invert operations.
Spray	Selects the spray brush (airbrush) tool.

Image menu commands

Commands in the **Image** menu (see Figure 28-19) perform simple image manipulation functions. To select a region to flip or invert, select the Selection tool from the toolbox or from the **Tool** menu, then drag a box around the region. If no region is selected, these commands operate on the entire cursor. This menu also contains a command to set the cursor hotspot.

Image
Flip **V**ertically
Flip **H**orizontally
Invert Colors

Set **H**otspot
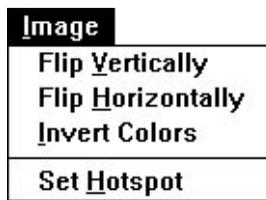
Figure 28-19 Cursor editor Image menu

Flip Vertically	Flips the selected region vertically.
Flip Horizontally	Flips the selected region horizontally.
Invert Colors	Inverts the colors in the selected region (for example, in a 16 color cursor, color 0 is replaced with color 15, color 1 is replaced with color 14, and so on).
Set Hotspot	Sets the cursor hotspot. You are prompted to click on the image at the location of the hotspot.

Toolbar commands

The Cursor editor toolbar (see Figure 28-20) provides quick access to frequently used menu commands.

Figure 28-20 Cursor editor toolbar

Undo: Same as choosing **Undo** from the **Edit** menu. Right-click on this button to undo multiple operations at once.

Redo: Same as choosing **Redo** from the **Edit** menu. Right-click on this button to redo multiple operations at once.

Cut: Same as choosing **Cut** from the **Edit** menu.

Copy: Same as choosing **Copy** from the **Edit** menu.

Paste: Same as choosing **Paste** from the **Edit** menu.

Flip horizontally: Same as choosing **Flip Horizontally** from the **Image** menu.

Flip vertically: Same as choosing **Flip Vertically** from the **Image** menu.

Invert colors: Same as choosing **Invert Colors** from the **Image** menu.

Toolbox

The Cursor editor toolbox (see Figure 28-21) provides quick access to the tools available in the **Tool** menu. The toolbox also lets you select foreground and background colors, brush types, background pattern, and line type.
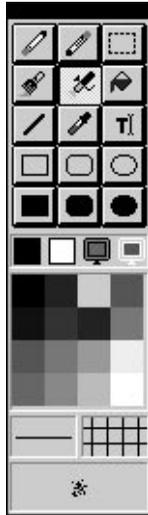
Figure 28-21 Cursor editor toolbox

The toolbox is slightly different from the toolbox used in the Bitmap editor. In addition to the usual color palette, two extra colors are available: Transparent and Inverted. Transparent is used to draw areas in the cursor where the background screen color shows through. Inverted is used to draw areas in the cursor where the background screen color is bitwise-complemented.

Other than these two additions, the Cursor editor toolbox is identical to the Bitmap editor toolbox. For more information on the Bitmap editor toolbox, see Chapter 7, "Adding Look and Feel with Resources."

Cursor properties

Cursor properties are shown in Figure 28-22.
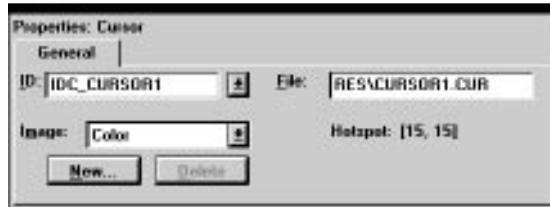
Figure 28-22 Cursor properties

Specify a filename for the cursor resource in the File textbox. The cursor hotspot coordinates are displayed below the File textbox. The Image field specifies which of the cursors in the cursor resource is currently displayed. Click on New to create a new cursor in the current resource, or click on Delete to delete the current cursor from the resource. Note that you cannot delete the last cursor from the resource.

Icon Editor

The Icon editor (see Figure 28-23) is used to edit icons.

Figure 28-23 The Icon editor

Since icons are much like bitmaps, the Icon editor behaves much like the Bitmap editor (see "Bitmap Editor," earlier in this chapter). The distinguishing characteristics of icons are as follows:

- An icon resource may contain more than one icon. ResourceStudio lets you create up to twelve different icons in an icon resource. You can create 32 by 16, 32 by 32, 16 by 16, and 64 by 64 pixel icons in 2, 8, 16, and 256 colors.

- In addition to normal colors, icons can have areas which are tagged "Transparent" and "Inverted." In Transparent areas, the background screen color shows through the icon. In Inverted areas, the background screen color is bitwise-complemented.

The Icon editor displays two views of the icon. Each view can be independently zoomed; you may wish to keep one view at normal size for reference, and one at a higher magnification for easier drawing. You can draw in either view, though.

Drawing tools are selected by choosing commands in the **Tool** menu, or by clicking on the tool in the toolbox. Colors are selected in the palette section of the toolbox. The **View** menu is used to zoom the views and to turn on the grid. Simple image manipulation functions are available in the **Image** menu.

File menu commands

The **File** menu (see Figure 28-24) contains commands to save the resource file, to edit resource IDs, and to perform other miscellaneous functions.

File	
<u>S</u>ave	Ctrl+S
Save <u>A</u>s...	
Export <u>R</u>esource...	
Edit Resource <u>I</u>Ds...	Ctrl+I
ClassE<u>x</u>press...	Ctrl+W
<u>C</u>lose editing	Esc

Figure 28-24 Icon editor File menu

Save	Saves the resource file. If the file is unnamed, this command executes **Save As**.
Save As	Opens a Windows **File Save As** dialog box, which can be used to save the resource file under a new name.
Export Resource	Opens a dialog box which can be used to save the icon resource in a separate file.
Edit Resource IDs	Opens the **Resource ID Browser** dialog box, used to browse and modify resource IDs. For more information about managing resource IDs and using the **Resource ID Browser** dialog box, see "Managing Resource IDs," in Chapter 7, "Adding Look and Feel with Resources."
ClassExpress	Runs ClassExpress, passing the filename of the resource file as the project that ClassExpress should open. This command is only enabled if the Icon editor is running in the right pane of the Browser window.
Close Editing	Closes the Icon editor.

Edit menu commands

The **Edit** menu (see Figure 28-25) contains standard editing commands. You can undo operations, and can cut, copy, paste, and clear rectangular regions of the icon. To select a region to cut, copy, or clear, select the Selection tool from the toolbox or from the **Tool** menu, then drag a box around the region.

Figure 28-25 Icon editor Edit menu

Undo	Undoes the last Icon editor operation.
Redo	Redoes the last undone Icon editor operation.

Cut	Copies the selected region to the Clipboard, then clears the region in the icon, filling it with the current background color.
Copy	Copies the selected region to the Clipboard.
Paste	Copies the region in the Clipboard to the icon. The new region is initially placed in the upper-left corner of the icon, but may be dragged to a new location.
Clear	Clears the selected region, filling it with the current background color. If no region is selected, the entire icon is cleared.
Select All	Select all icon regions.

View menu commands

The **View** menu (see Figure 28-26) contains commands to set view magnification and to set grid options.
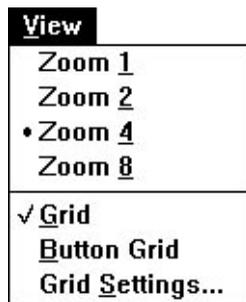
Figure 28-26 Cursor editor View menu

Zoom 1	Sets the current view's zoom factor to 1 (normal size).
Zoom 2	Sets the current view's zoom factor to 2 (twice normal size).
Zoom 4	Sets the current view's zoom factor to 4 (four times normal size).
Zoom 8	Sets the current view's zoom factor to 8 (eight times normal size).
Grid	Turns on the grid. The grid is only visible in views where the zoom factor is 4 or 8.

Button Grid   Turns on the button grid.

Grid Settings   Opens the **Grid Settings** dialog box (see Figure 28-27), used to set grid options.
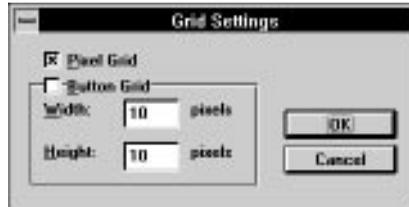

Figure 28-27 Grid Settings dialog box

Pixel grid
Turns on display of the pixel grid.

Button grid
Turns on display of the button grid. The spacing of points on the button grid can be specified in the Width and Height fields.

Tool menu commands
The **Tool** menu (see Figure 28-28) lets you select drawing tools. While over the drawing area, the cursor changes shape to indicate the currently selected tool. To draw, click or click and drag (as appropriate) in the drawing area. Using the right button rather than the left reverses the roles of foreground and background colors. Drawing tools can also be selected in the toolbox. Drawing operations are identical to those in the Bitmap editor.

For more information, see Chapter 7, "Adding Look and Feel with
Resources."
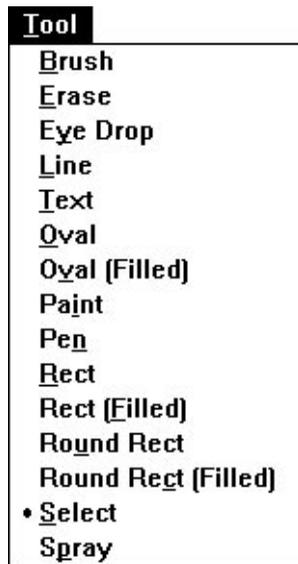
Figure 28-28 Icon editor Tool menu

Brush	Selects the brush tool.
Erase	Selects the eraser tool.
Eye Drop	Selects the eye-dropper tool. Use this tool to select foreground and background colors directly from the image.
Line	Selects the straight line tool.
Text	Selects the text tool.
Oval	Selects the hollow oval tool.
Oval (Filled)	Selects the solid oval tool.
Paint	Selects the paint can (flood fill) tool.
Pen	Selects the pen (pencil) tool.

Rect	Selects the hollow rectangle tool.
Rect (Filled)	Selects the solid rectangle tool.
Round Rect	Selects the hollow rounded rectangle tool.
Round Rect (Filled)	Selects the solid rounded rectangle tool.
Select	Selects the Selection tool. Use this tool to select rectangular regions for cut, copy, clear, drag, flip, and invert operations.
Spray	Selects the spray brush (airbrush) tool.

Image menu commands

Commands in the **Image** menu (see Figure 28-29) perform simple image manipulation functions. To select a region to flip or invert, select the Selection tool from the toolbox or from the **Tool** menu, then drag a box around the region. If no region is selected, these commands operate on the entire icon.

Figure 28-29 Icon editor Image menu

Flip Vertically	Flips the selected region vertically.
Flip Horizontally	Flips the selected region horizontally.
Invert Colors	Inverts the colors in the selected region (for example, in a 16 color icon, color 0 is replaced with color 15, color 1 is replaced with color 14, and so on).

Toolbar commands

The Icon editor toolbar (see Figure 28-30) provides quick access to frequently-used menu commands.

Figure 28-30 Icon editor toolbar

Undo: Same as choosing **Undo** from the **Edit** menu. Right-click on this button to undo multiple operations at once.

Redo: Same as choosing **Redo** from the **Edit** menu. Right-click on this button to redo multiple operations at once.

Cut: Same as choosing **Cut** from the **Edit** menu.

Copy: Same as choosing **Copy** from the **Edit** menu.

Paste: Same as choosing **Paste** from the **Edit** menu.

Flip horizontally: Same as choosing **Flip Horizontally** from the **Image** menu.

Flip vertically: Same as choosing **Flip Vertically** from the **Image** menu.

Invert colors: Same as choosing **Invert Colors** from the **Image** menu.

Toolbox

The Icon editor toolbox (see Figure 28-31) provides quick access to the tools available in the **Tool** menu. The toolbox also lets you select foreground and background colors, brush types, background pattern, and line type.
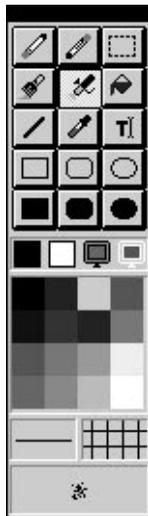
Figure 28-31 Icon editor toolbox

The toolbox is slightly different from the toolbox used in the Bitmap editor. In addition to the usual color palette, two extra colors are available: Transparent and Inverted. Transparent is used to draw areas in the cursor where the background screen color shows through. Inverted is used to draw areas in the cursor where the background screen color is bitwise-complemented.

Other than these two additions, the Icon editor toolbox is identical to the Bitmap editor toolbox. For more information on the Bitmap editor toolbox, see Chapter 7, "Adding Look and Feel with Resources."

Icon properties

Icon properties are shown in Figure 28-32.

Figure 28-32 Icon properties

Specify a filename for the icon resource in the File textbox. The Image field specifies which of the icons in the icon resource is currently displayed. Click on New to create a new icon in the current resource, or click on Delete to delete the current icon from the resource. Note that you cannot delete the last icon from the resource.

Font Editor

The Font editor (see Figure 28-33) is used to edit font resources.
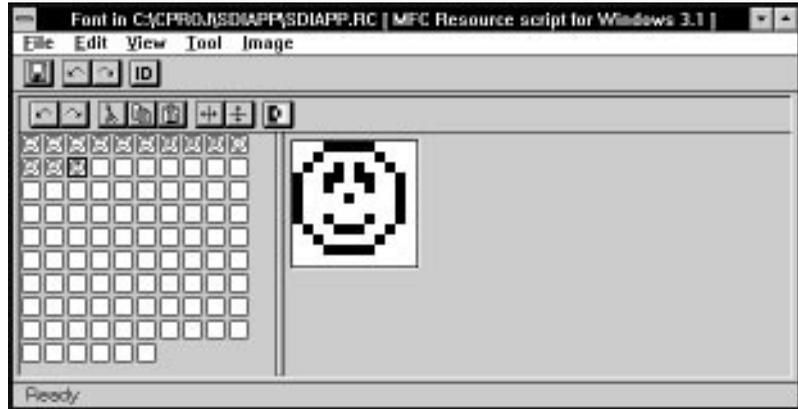
Figure 28-33 The Font editor

Unlike the Bitmap editor, the two views in the Font editor are not equivalent. The left pane displays each of the character bitmaps in the font at normal size. To select a bitmap for editing, click on it in the left pane. The current bitmap is edited in the right pane, which functions in the same way as a pane in the Bitmap editor.

Otherwise, the Font editor functions much like the Bitmap editor. Drawing tools are selected by choosing commands in the **Tool** menu, or by clicking on the tool in the toolbox. Colors are selected in the palette section of the toolbox (font bitmaps are monochrome, so only two colors are available). The **View** menu is used to zoom the editing view and to turn on the grid. Simple image manipulation functions are available in the **Image** menu.

FontExpress

As a new font is created, the **FontExpress** dialog box opens (see Figure 28-34). This dialog box is used to set initial font properties.

Figure 28-34 FontExpress

The most important option to specify is the point size. While most of the other options can be easily changed at a later time, a change in the font height may require redrawing any characters you have drawn so far. All of the character bitmaps in the font have the same height.

You may also wish to check the Proportional option. This lets you set the horizontal size of each character independently.

File menu commands

The **File** menu (see Figure 28-35) contains commands to save the resource file, to edit resource IDs, and to perform other miscellaneous functions.

Figure 28-35 Font editor File menu

Save	Saves the resource file. If the file is unnamed, this command executes **Save As**.
Save As	Opens a Windows **File Save As** dialog box, which can be used to save the resource file under a new name.
Export Resource	Opens a dialog box which can be used to save the font in a separate file.
Edit Resource IDs	Opens the **Resource ID Browser** dialog box, used to browse and modify resource IDs. For more information about managing resource IDs and using the **Resource ID Browser** dialog box, see "Managing Resource IDs," in Chapter 7, "Adding Look and Feel with Resources."
ClassExpress	Runs ClassExpress, passing the filename of the resource file as the project that ClassExpress should open. This command is only enabled if the Font editor is running in the right pane of the Browser window.
Close Editing	Closes the Font editor.

Edit menu commands

The **Edit** menu (see Figure 28-36) contains standard editing commands. You can undo operations, and can cut, copy, paste, and clear rectangular regions of the character bitmap. To select a region to cut, copy, or clear, select the Selection tool from the toolbox or from the **Tool** menu, then drag a box around the region.
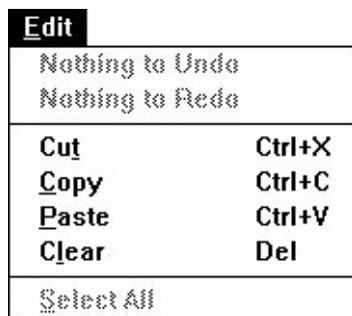
Figure 28-36 Font editor Edit menu

Undo	Undoes the last Font editor operation.
Redo	Redoes the last undone Font editor operation.

Cut	Copies the selected region to the Clipboard, then clears the region in the character bitmap, filling it with the current background color.
Copy	Copies the selected region to the Clipboard.
Paste	Copies the region in the Clipboard to the character bitmap. The new region is initially placed in the upper-left corner of the bitmap, but may be dragged to a new location.
Clear	Clears the selected region, filling it with the current background color. If no region is selected, the entire bitmap is cleared.
Select All	Select all bitmap regions.

View menu commands

The **View** menu (see Figure 28-37) contains commands to set editing view magnification and to set grid options.
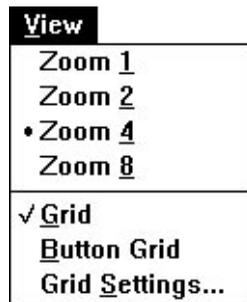

Figure 28-37 Font editor View menu

Zoom 1	Sets the editing view's zoom factor to 1 (normal size).
Zoom 2	Sets the editing view's zoom factor to 2 (twice normal size).
Zoom 4	Sets the editing view's zoom factor to 4 (four times normal size).
Zoom 8	Sets the editing view's zoom factor to 8 (eight times normal size).
Grid	Turns on the grid. The grid is only visible when the editing view zoom factor is 4 or 8.
Button Grid	Turns on the button grid.

Grid Settings   Opens the **Grid Settings** dialog box (see Figure 28-38), used to set grid options.
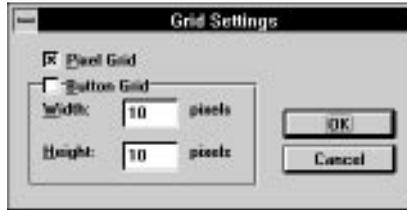

Figure 28-38 Grid Settings dialog box

Pixel grid
Turns on display of the pixel grid.

Button grid
Turns on display of the button grid. The spacing of points on the button grid can be specified in the Width and Height fields.

Tool menu commands

The **Tool** menu (see Figure 28-39) lets you select drawing tools. While over the drawing area, the cursor changes shape to indicate the currently selected tool. To draw, click or click and drag (as appropriate) in the drawing area. Using the right button rather than the left reverses the roles of foreground and background colors. Drawing tools can also be selected in the toolbox. Drawing operations are identical to those in the Bitmap editor.

For more information, see Chapter 7, "Adding Look and Feel with Resources."
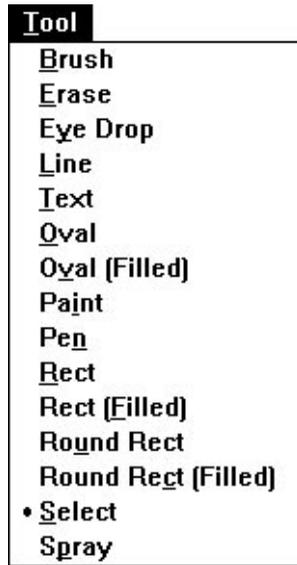
Figure 28-39 Font editor Tool menu

Brush	Selects the brush tool.
Erase	Selects the eraser tool.
Eye Drop	Selects the eye-dropper tool. Use this tool to select foreground and background colors directly from the image.
Line	Selects the straight line tool.
Text	Selects the text tool.
Oval	Selects the hollow oval tool.
Oval (Filled)	Selects the solid oval tool.
Paint	Selects the paint can (flood fill) tool.
Pen	Selects the pen (pencil) tool.
Rect	Selects the hollow rectangle tool.

Rect (Filled)	Selects the solid rectangle tool.
Round Rect	Selects the hollow rounded rectangle tool.
Round Rect (Filled)	Selects the solid rounded rectangle tool.
Select	Selects the Selection tool. Use this tool to select rectangular regions for cut, copy, clear, drag, flip, and invert operations.
Spray	Selects the spray brush (airbrush) tool.

Image menu commands

Commands in the **Image** menu (see Figure 28-40) perform simple image manipulation functions. To select a region to flip or invert, select the Selection tool from the toolbox or from the **Tool** menu, then drag a box around the region. If no region is selected, these commands operate on the entire character bitmap.

Figure 28-40 Font editor Image menu

Flip vertically	Flips the selected region vertically.
Flip horizontally	Flips the selected region horizontally.
Invert colors	Inverts the colors in the selected region. Black is changed to white, and white to black.

Toolbar commands

The Font editor toolbar (see Figure 28-41) provides quick access to frequently used menu commands.

Figure 28-41 Font editor toolbar

Undo: Same as choosing **Undo** from the **Edit** menu. Right-click on this button to undo multiple operations at once.

Redo: Same as choosing **Redo** from the **Edit** menu. Right-click on this button to redo multiple operations at once.

Cut: Same as choosing **Cut** from the **Edit** menu.

Copy: Same as choosing **Copy** from the **Edit** menu.

Paste: Same as choosing **Paste** from the **Edit** menu.

Flip horizontally: Same as choosing **Flip Horizontally** from the **Image** menu.

Flip vertically: Same as choosing **Flip Vertically** from the **Image** menu.

Invert colors: Same as choosing **Invert Colors** from the **Image** menu.

Toolbox

The Font editor toolbox (see Figure 28-42) provides quick access to the tools available in the **Tool** menu. The toolbox also lets you select foreground and background colors, brush types, background pattern, and line type.
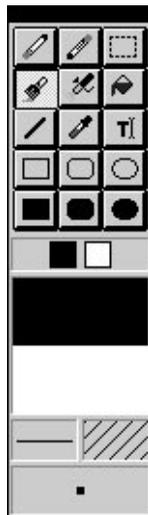
Figure 28-42 Font editor toolbox

The only difference between the Font editor toolbox and the Bitmap editor toolbox is that (since font character bitmaps are monochrome) only two colors are ever displayed in the Font editor toolbox palette. For more information on the Bitmap editor toolbox, see Chapter 7, "Adding Look and Feel with Resources."

Font properties

Fonts have four pages of properties. The General properties are shown in Figure 28-43.

Figure 28-43 Font General properties

Specify a filename for the font in the File textbox.

Header properties of a font are shown in Figure 28-44.
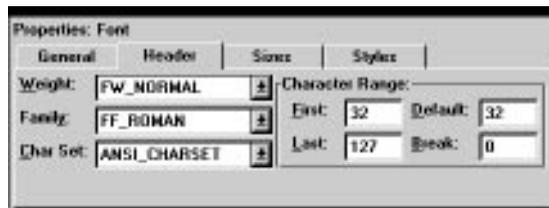

Figure 28-44 Font Header properties

Sizes properties of a font are shown in Figure 28-45.

Figure 28-45 Font Sizes properties

Styles properties of a font are shown in Figure 28-46.

Figure 28-46 Font Styles properties

Other Editors
29 ◆

*T*his ResourceStudio reference chapter contains details about the commands and options found in the Version Information editor and the Custom Resource editor. For an introduction to ResourceStudio, see Chapter 7, "Adding Look and Feel with Resources."

Version Information Editor

The Version Information editor (see Figure 29-1) is used to edit version information resources.


Figure 29-1 The Version Information editor

A version information resource consists of a header and one or more blocks of variable information. The Version Information editor displays the resource as a scrolling list of information, with the header information at the top of the list and the blocks of variable information below. Most data can be edited directly in the list; click on an item, and the data appears in a textbox, ready for editing.

File menu commands

The **File** menu (see Figure 29-2) contains commands to save the resource file, to edit resource IDs, and to perform other miscellaneous functions.

File	
<u>S</u>ave	Ctrl+S
Save <u>A</u>s...	
Export <u>R</u>esource...	
Edit Resource <u>I</u>Ds...	Ctrl+I
ClassE<u>x</u>press...	Ctrl+W
<u>C</u>lose editing	Esc

Figure 29-2 Version Information editor File menu

Save	Saves the resource file. If the file is unnamed, this command executes **Save As**.
Save As	Opens a Windows **File Save As** dialog box, which can be used to save the resource file under a new name.
Edit Resource IDs	Opens the **Resource ID Browser** dialog box, used to browse and modify resource IDs. For more information about managing resource IDs and using the **Resource ID Browser** dialog box, see "Managing Resource IDs," in Chapter 7, "Adding Look and Feel with Resources."
ClassExpress	Runs ClassExpress, passing the filename of the resource file as the project that ClassExpress should open. This command is only enabled if the Version Information editor is running in the right pane of the Browser window.
Close Editing	Closes the Version Information editor.

Edit menu commands

The **Edit** menu (see Figure 29-3) contains standard editing commands. You can undo operations, and can cut, copy, paste, delete, and add variable information blocks.

Edit	
Nothing to Undo	
Nothing to Redo	
Cu_t_	Ctrl+X
_C_opy	Ctrl+C
_P_aste	Ctrl+V
De_l_ete Block	Del
_N_ew Block	Ins

Figure 29-3 Version Information editor Edit menu

Undo	Undoes the last Version Information editor operation.
Redo	Redoes the last undone Version Information editor operation.
Cut	Copies the current variable information block to the Clipboard, then deletes the variable information block from the version information resource. Note that a version information resource must contain at least one variable information block, so the last one cannot be cut.
Copy	Copies the current variable information block to the Clipboard.
Paste	Copies the variable information block in the Clipboard to the version information resource.
Delete Block	Deletes the current variable information block from the version information resource. Note that a version information resource must contain at least one variable information block, so the last one cannot be deleted.
New Block	Adds a new variable information block to the version information resource.

Toolbar commands

The Version Information editor toolbar (see Figure 29-4) provides quick access to frequently used menu commands.

Figure 29-4 Version Information editor toolbar

Undo: Same as choosing **Undo** from the **Edit** menu. Right-click on this button to undo multiple operations at once.

Redo: Same as choosing **Redo** from the **Edit** menu. Right-click on this button to redo multiple operations at once.

Cut: Same as choosing **Cut** from the **Edit** menu.

Copy: Same as choosing **Copy** from the **Edit** menu.

Paste: Same as choosing **Paste** from the **Edit** menu.

New: Same as choosing **New Block** from the **Edit** menu.

Delete: Same as choosing **Delete Block** from the **Edit** menu.

Header properties

Properties of the version information resource header are shown in Figure 29-5.

Figure 29-5 Header properties

Block properties

Properties of the version information variable information block are shown in Figure 29-6.

Figure 29-6 Block properties

Custom Resource Editor

The Custom Resource editor (or Hex editor) is shown in Figure 29-7.
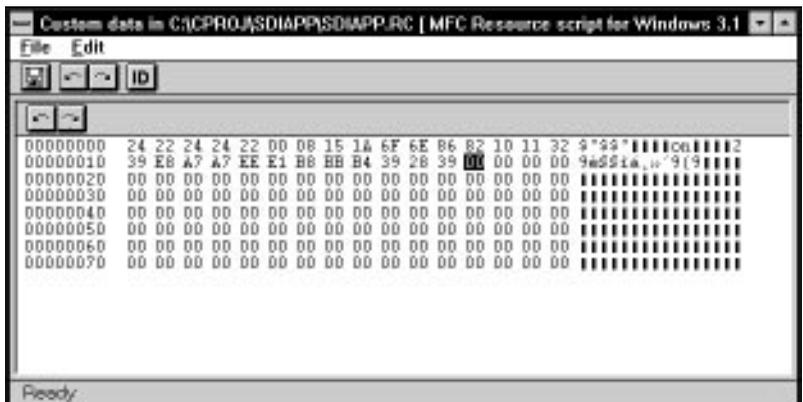
Figure 29-7 The Custom Resource editor

Custom resources are created by choosing **New Other** from the Browser window's **Resource** menu. Custom resources are edited as hexadecimal data. The size of the custom resource is set in the Property Sheet.

File menu commands

The **File** menu (see Figure 29-8) contains commands to save the resource file, to edit resource IDs, and to perform other miscellaneous functions.

File	
<u>S</u>ave	Ctrl+S
Save <u>A</u>s...	
Export <u>R</u>esource...	
Edit Resource <u>I</u>Ds...	Ctrl+I
ClassE<u>x</u>press...	Ctrl+W
<u>C</u>lose editing	Esc

Figure 29-8 Custom Resource editor File menu

Save	Saves the resource file. If the file is unnamed, this command executes **Save As**.
Save As	Opens a Windows **File Save As** dialog box, which can be used to save the resource file under a new name.
Edit Resource IDs	Opens the **Resource ID Browser** dialog box, used to browse and modify resource IDs. For more information about managing resource IDs and using the **Resource ID Browser** dialog box, see "Managing Resource IDs," in Chapter 7, "Adding Look and Feel with Resources."
ClassExpress	Runs ClassExpress, passing the filename of the resource file as the project that ClassExpress should open. This command is only enabled if the Custom Resource editor is running in the right pane of the Browser window.
Close Editing	Closes the Custom Resource editor.

Edit menu commands

The **Edit** menu (see Figure 29-9) contains commands to undo data changes and to redo undone changes.

Edit

Undo Data change	**Ctrl+Z**
Redo Data change	**Ctrl+A**
Cut	Ctrl+X
Copy	Ctrl+C
Paste	Ctrl+V
Clear	Del
Select All	Ctrl+A

Figure 29-9 Custom Resource editor Edit menu

Undo   Undoes the last data change in the Custom Resource editor.

Redo   Redoes the last undone data change in the Custom Resource editor.

Toolbar commands

The Custom Resource editor toolbar (see Figure 29-10) provides quick access to the undo and redo commands.

Figure 29-10 Custom Resource editor toolbar

Undo: Same as choosing **Undo** from the **Edit** menu. Right-click on this button to undo multiple operations at once.

Redo: Same as choosing **Redo** from the **Edit** menu. Right-click on this button to redo multiple operations at once.

Custom resource properties

Custom resource properties are shown in Figure 29-11.
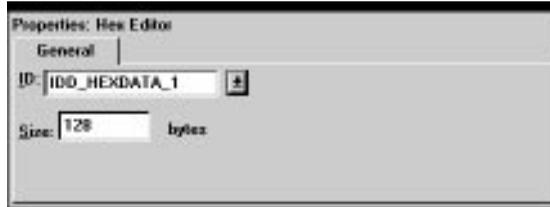
Figure 29-11 Custom resource properties

ID
Specifies the resource ID.

Size
Specifies the size of the custom resource in bytes.