



ResEdit 3.0 User's Guide

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Introducing ResEdit 3.0

Contents

Introduction	1-3	
New Features	1-3	
Resources	1-3	
Getting Started	1-4	
The Windows in ResEdit 3.0	1-5	
The Resource Type Window	1-6	
The Resource List Window	1-8	
A Resource Editor Window	1-9	
Managing Files	1-10	
Creating a New File	1-10	
Opening a File	1-11	
Saving a File	1-11	
Working With Resources	1-12	
Creating Resources	1-12	
Deleting Resources	1-12	
Selecting Resources	1-12	
Performing a Drag-and-Drop Operation	1-12	
Editing Resources	1-13	
Editing Resource Attributes	1-13	
Editing a Resource	1-13	
Setting Preferences	1-13	

Introducing ResEdit 3.0

ResEdit 3.0 is a resource editing application used to create and edit Macintosh resources. It is part of the Macintosh suite of development tools, for developing Macintosh applications. ResEdit is a standard Macintosh application that runs on System 7.1 and later, as well as on Mac OS 8. The current version does not run on Motorola 68K-based Macintosh platforms.

This chapter describes ResEdit's new features and then reviews the concepts and terminology you need to work with resources. It then shows you how to get started using ResEdit 3.0, complete with steps and sample screen shots.

Introduction

New Features

ResEdit 3 offers several new features:

- **Drag and drop.** ResEdit provides drag-and-drop support for convenient resource manipulation.
- **WorldScript support.** ResEdit provides support for double-byte, right-to-left scripts, allowing you to edit resources in any language or script.
- **Inline editing.** ResEdit provides inline editing of resource attributes.
- **Hierarchical views.** In the main document (resource type) window, ResEdit provides a Finder-like hierarchy, with a right-facing triangle next to each resource type. When clicked, the triangle turns down and exposes the individual resources in that resource type.

Resources

While familiarity with Macintosh programming concepts and terms is assumed, this section touches on the basic concepts you should understand before you begin to use ResEdit. For more information, see *Inside Macintosh: More Macintosh Toolbox*, for its description of the Resource Manager.

The Macintosh file structure is designed to include a *data fork* and a *resource fork*. Within the resource fork are stored individual resources, which are a basic element of every Macintosh application. Resources typically include data that

describes menus, windows, controls, dialog boxes, sounds, fonts, and icons. Because such resources are separate from the application's code, you can easily create and manage resources for menu titles, dialog boxes, and other parts of your application without recompiling. Resources also simplify the process of translating interface elements containing text into other languages.

Resources are classified by *type*. Each type has its own name, which consists of exactly four characters. Any characters in the Macintosh character set can occur in resource type names, but typically they consist of lower and uppercase letters, numerals, punctuation marks, and the space and Option-space characters. There are many types of resources, and you can create your own resource types with ResEdit if you don't find the type you need.

To distinguish individual resources within a resource type, each one is given a *resource ID* number. Within a resource type, these numbers must be unique. The resource can also be given a resource name, but whether you provide this string is optional.

Resource flags specify how the resource is treated at runtime. See *Inside Macintosh: More Macintosh Toolbox* for more information on resource flags.

The rest of this chapter describes using ResEdit 3.0—how resource information is presented to you and how to create and edit resources.

Getting Started

Once you've installed ResEdit, you're ready to begin creating or editing resources.

Launch ResEdit like any other Macintosh application, by double-clicking its icon from within the Finder or by selecting the application and going to the File menu in the Finder and choosing the Open command.

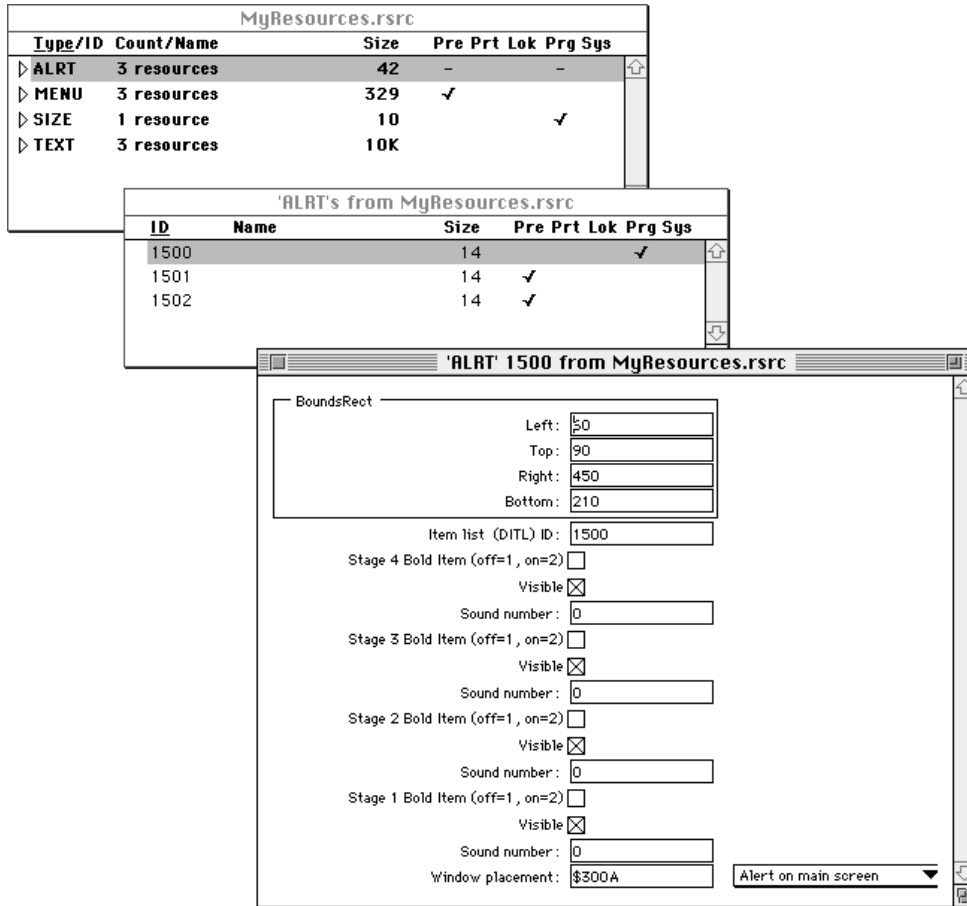
After the application has been launched, you can create a new document (resource type) or open an existing resource file. You can set numerous preferences to affect the behavior of ResEdit. For more information see "The File Menu" (page 2-3).

The Windows in ResEdit 3.0

ResEdit 3.0 has a three-level window hierarchy. The main document window, called the *resource type window*, displays a list of resource types. Associated with the main window are two other windows you can open and work with:

- the *resource list window*, which displays a list of individual resources of a single type
- the *resource editor window*, where you can display and edit a single resource

In using ResEdit, most of your time is spent in manipulating and displaying data using these three windows. Figure 1-1 shows the three windows.

Figure 1-1 The editor's three windows

The Resource Type Window

The resource type window is a visual representation of all the resources found within the resource fork of a file. The resources are grouped by resource type and are listed alphabetically (Figure 1-2).

Figure 1-2 Resource type window for the file `MyResources.rsrc`

Type/ID	Count/Name	Size	Pre	Prt	Lok	Prg	Sys
▶ ALRT	3 resources	42	-				
▼ MENU	3 resources	329	✓				
128	Apple	44	✓				
129	File	159	✓				
130	Edit	126	✓				
▶ SIZE	1 resource	10					✓
▶ TEXT	3 resources	10K					

To the left of each resource type is a triangle, which can be flipped downward to expand or collapse a sorted list of resources. Clicking the triangle toggles its orientation. When the triangle is facing right, individual resources for that type are not displayed. When the triangle is facing downward, individual resources are displayed.

Resource types within the resource types window are displayed in boldface, and individual resources are displayed in plain text. Just below the name of the resource types window are labels for the columns of resource attributes.

This information and its default format are presented in Table 1-1.

Table 1-1 Displaying information in the resource type window

Column name	Description
Type	Gives the resource type for the class of resources.
ID	Gives the resource ID of an individual resource.
Count	Gives the number (count) of individual resources contained within a particular resource type.
Name	Gives the resource name of each resource.
Size	For a resource type, gives the total size in bytes of all resources within it. Also, the size in bytes for each individual resource.
Flag settings	Give the flag settings currently chosen for each resource listed.
Pre	Preload. Setting this attribute causes the Resource Manager to load the resource into memory immediately after opening the resource file.
Prt	Protected. If this attribute is set, the Resource Manager can't change the name or ID number of the resource, modify its contents, or remove the resource from the file that contains it.
Lok	Locked. If this attribute is set, the resource is locked in place in the heap and can't be moved. Lok overrides the Purgeable attribute.
Prg	Purgeable. If this attribute is set, the resource can't be purged from memory if more room is needed.
Sys	System heap. If this attribute is set, the resource is placed in the system heap unless it is too large to fit. If it is too large, it is placed in the application heap, as if the box were not checked. This attribute should not be set for an application's resources.

The Resource List Window

The resource list window (Figure 1-3) displays a sorted list of each resource for a single given Resource Type. These resources can be sorted by resource ID, name, or size. Clicking on a column label selects the sort criteria.

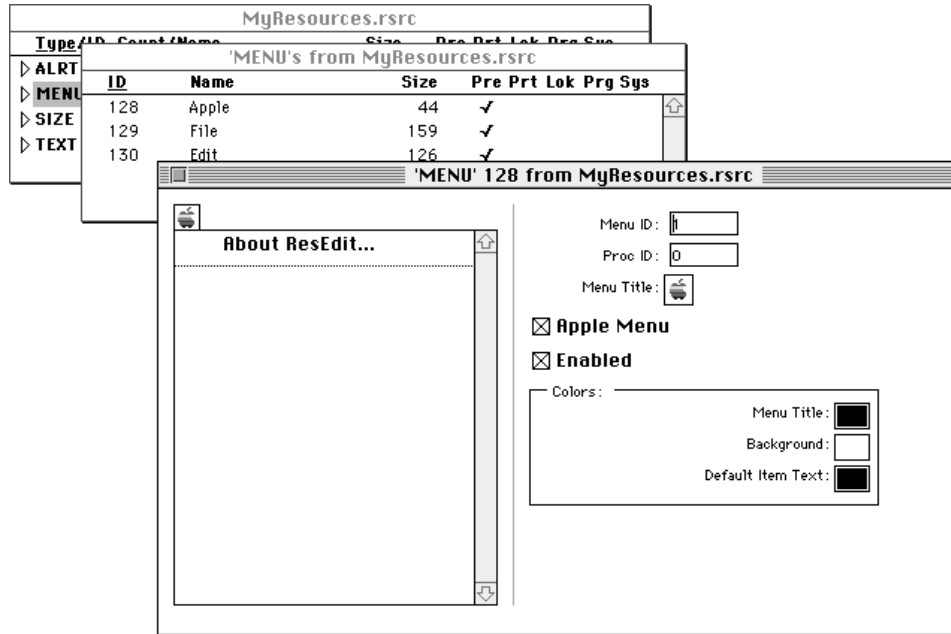
Figure 1-3 A resource list window

MyResources.rsrc						
Type/ID	Count/Name	Size	Pre	Prt	Lok	Prg Sys
▶ ALRT	3 resources	42	-	-		↑
▶ MENU	3 resources	329	✓			
▶ SIZE	1 resource	10				✓
▶ TEXT						

'ALRT's from MyResources.rsrc						
ID	Name	Size	Pre	Prt	Lok	Prg Sys
1500		14				✓
1501		14	✓			
1502		14	✓			

A Resource Editor Window

A resource editor window (Figure 1-4) allows you to manipulate the data contained in a single resource. Each resource type has a specific editor associated with it so that the data can be meaningfully presented and edited.

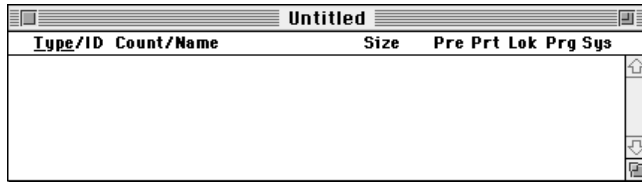
Figure 1-4 A resource editor window, open for editing

Managing Files

This section tells you how to create, open, and edit files using ResEdit.

Creating a New File

Choose New from the File menu to create a new, untitled document, as shown in Figure 1-5.

Figure 1-5 A new, untitled document

Opening a File

You can open a file with ResEdit in several ways:

- To open an existing file from within ResEdit, choose Open from the File menu and select the file you want to open.
- To open an existing file from within the Finder, drag the file on top of the ResEdit application.

To edit an existing resource, you simply choose Open from the File menu and then choose the file you want to open. The example shown here (Figure 1-6) is taken from a sample file titled `MyResources.rsrc`.

Figure 1-6 An open resource file

Type/ID	Count/Name	Size	Pre	Prt	Lok	Prg	Sys
▶ ALRT	3 resources	42	-				
▶ MENU	3 resources	329	✓				
▶ SIZE	1 resource	10				✓	
▶ TEXT	3 resources	10K					

Saving a File

To save the current file, choose Save or Save As from the File menu. Use Save As to save your file for the first time or to rename it.

Working With Resources

This section describes very simply how to create, delete, and select resources.

Creating Resources

To create a new resource, choose New Resource from the Resource menu. A dialog box appears, allowing you to enter the type of resource you want to create. Enter a four-character resource type into the dialog box and click OK to bring up a resource editor window. Which editor is invoked depends upon the particular resource type you've created.

When you have finished editing the resource, you can close the window.

Deleting Resources

An individual resource can be deleted by selecting it and either pressing the Delete key or choosing Clear from the Edit menu.

Selecting Resources

ResEdit supports selection of more than one resource at a time. This design lets you perform edit operations (such as Copy or Clear) easily on sets of resources.

The Shift and Command keys provide different behaviors of multiple selection. The Shift key lets you select adjacent resources. The Command key lets you select and deselect individual resources.

From the resource types window you can select any number of resources or types. Selecting a resource type is a simple way of selecting all the resources within that type.

Performing a Drag-and-Drop Operation

ResEdit supports drag and drop for convenient manipulation of resources. For example, you can drag the currently selected resources to copy them to a second open resource file. You can also create a Finder Clipping file for future access to commonly used resources.

Editing Resources

In ResEdit you can edit resource attributes and resources. This section shows you how.

Editing Resource Attributes

Attributes such as resource ID, name, and each of the five flags (Pre, Prt, Lok, Prg, and Sys) can be edited in place in both the resource type window and the resource list window. To edit an attribute, click once to select a resource. Then click once again on the desired attribute to be edited. A text edit box will appear around the attribute, which you can now edit. This is shown in Figure 1-7.

Figure 1-7 Editing the resource name for 'MENU' 128

Type/ID	Count/Name	Size	Pre	Prt	Lok	Prg	Sys
▶ ALRT	3 resources	42	-				
▼ MENU	3 resources	329	✓				
128	Apple	44	✓				
129	File	159	✓				
130	Edit	126	✓				
▶ SIZE	1 resource	10				✓	
▶ TEXT	3 resources	10K					

Editing a Resource

Resources are edited by invoking an editor on them. Editors can be invoked from either the resource type window or the resource list window. To invoke the editor specific to the chosen resource, either double-click an individual resource or select the resource and choose Open Selection from the Resource menu. A resource editor window appears. You can manipulate the resource data within this box.

Setting Preferences

This section to be completed in a future release.

CHAPTER 1

Introducing ResEdit 3.0

In this chapter you've learned how to get started using ResEdit so that you can port your applications to Mac OS 8. In the next chapter you learn the basic menu commands.

The Menu

Contents

The File Menu	2-3
The Edit Menu	2-4
The Resource Menu	2-5
The View Menu	2-7
The Window Menu	2-7

The Menus

This chapter describes the five main menus of ResEdit: File, Edit, Resource, Window, and View. Discussion of several of the ResEdit menu items has been deferred until later developer releases.

The File Menu

The File menu contains the standard commands used in most applications, as you can see in Figure 2-1.

Figure 2-1 The File Menu

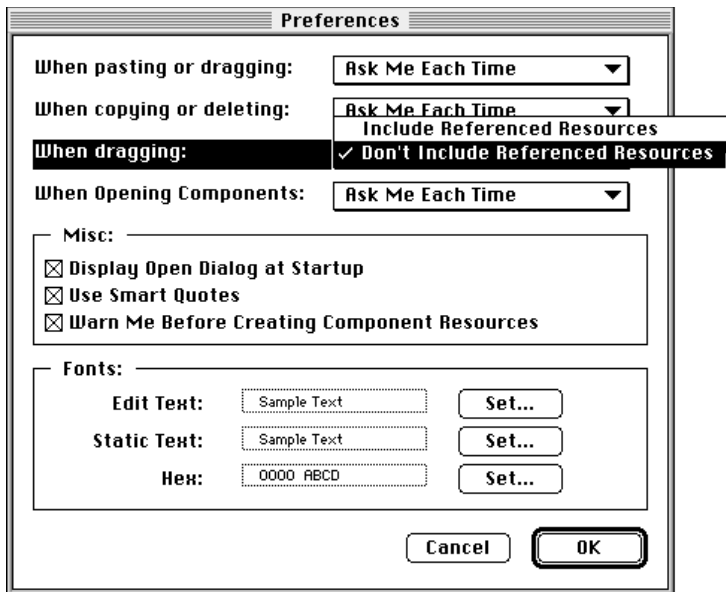
File	
New	⌘N
Open...	⌘O
Close	⌘W
Save	⌘S
Save As...	
Revert	
Preferences...	
Quit	⌘Q

Here's how the commands for this menu act:

New	Brings up a main document window named "Untitled".
Open	Brings up a dialog box. From it, you select the file you want to open.
Close	Closes the currently active window.
Save	Saves the currently active file. This item is dimmed if no changes have been made to it.
Save As...	Brings up a dialog box in which you can enter a filename to save the current file you're editing to.
Revert	Restores the currently active file, if there is one, to the last version you saved. This item is dimmed if no changes have been made.

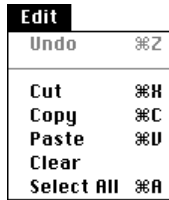
The Menus

Preferences	Brings up a dialog box (Figure 2-2) that lets you specify how to work with the resource editor. You can choose such things as whether the application should confirm certain operations with you before carrying them out. You can also choose fonts for displaying edit text, static text, and hexadecimal notation.
Quit	Quits the ResEdit application.

Figure 2-2 The Preferences dialog box


The Edit Menu

The Edit menu contains the standard editing commands used in most applications, as you can see in Figure 2-3.

Figure 2-3 The Edit menu

When a resource type window is active, the Edit menu commands have the following effects:

Undo/Redo	Undoes or redoes your last command.
Cut	Removes selection to the Clipboard.
Copy	Copies selection to the Clipboard.
Paste	Copies the previously cut resources into the resource type window.
Clear	Removes selection.
Select All	Selects all items at the current level.

The Resource Menu

The Resource menu (Figure 2-4) provides the commands appropriate for the frontmost window.

Figure 2-4 The Resource menu

Resource	
New Resource	⌘R
Open Selection	
Open Using Hex Editor	
Revert Resource(s)	
New List Entry	⌘K
Delete List Entry	
Convert TMPL(s)	

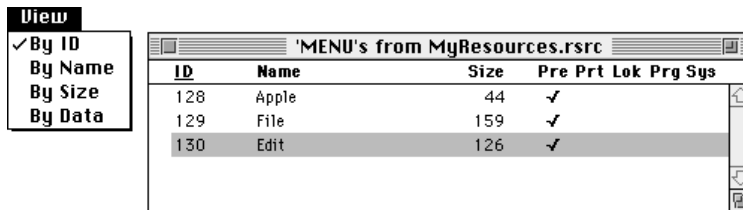
The Resource menu commands have the following effects:

- | | |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| New Resource | Creates a new resource of a specified type. |
| Open Selection | Where applicable, this command opens the item you have selected in the currently active window. If the item you have selected can't be opened, this command is dimmed. |
| Open Using Hex Editor | Where applicable, this command opens the item you have selected in the currently active window and shows the information in hexadecimal notation. If this information can't be shown in hexadecimal, this command is dimmed. |
| Revert Resource(s) | Restores the resources to their last saved state. If you have made changes in individual resources of the selected type since you last saved the file, you can undo those changes at this point. |
| New List Entry | Creates a new entry in the active resource list. |
| Delete List Entry | Deletes selected entry from the active resource list. |
| Convert TMPL(s) | To be described in a later release. |
| Duplicate | (not shown in figure) Copies a selected resource and gives it a unique resource ID starting with number 128. |

The View Menu

The View menu (Figure 2-5) lets you change the sort order of the resources in the resource list window.

Figure 2-5 The View menu and an open resource list window



The menu items have the following effects:

By ID	Sorts the resources by ID.
By Name	Sorts the resources by name.
By Size	Sorts the resources by size.
By Data	To be filled in for a later release.

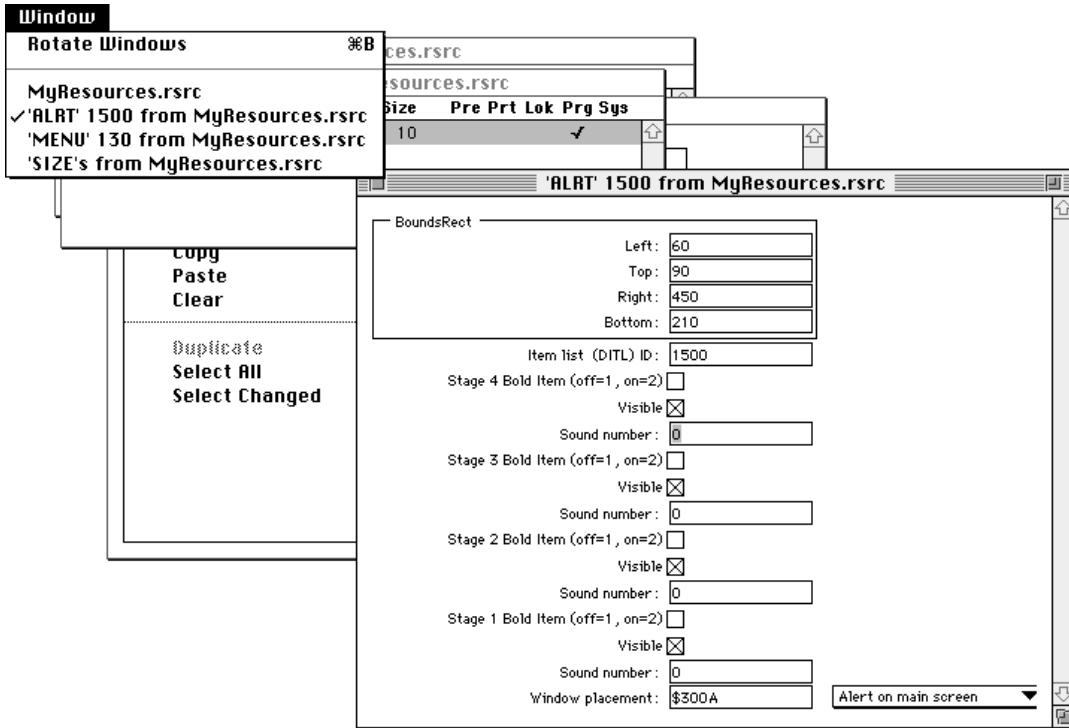
The Window Menu

The Window menu lists the windows that are currently open. The active window is indicated by a checkmark.

Figure 2-6 shows a Window menu listing four open windows. The checkmark next to the window titled "'ALRT' 1500 from MyResources.rsrc" indicates that this window is currently active.

Selecting a window from this menu will activate that window, making it frontmost.

Figure 2-6 The Window menu and four open files of the resource editor



There is one command in the Window menu:

Rotate Windows Activates the window that follows the currently active window.

CHAPTER 2

The Menu