

# THE SOUND EDITOR

## INTRODUCTION

This chapter explains how to use Resorcerer's Sound Editor, which lets you listen to and record Macintosh 'snd' resources. The Editor does not let you edit individual data fields (other than the first format field) in the actual resource; however, it does allow you to play the sound either synchronously or asynchronously in order to identify it.

**Note:** Resorcerer is shipped with a template that can parse many standard 'snd' resources, as well as let you build simple sounds using note commands. However, you need to be familiar with the internals of sound resources, as documented in Apple's Inside Macintosh.

As always, if you are not already familiar with general resource editing, you may want to read the "Editing Resources" chapter earlier in this manual.

## TOPICS COVERED

- Opening a sound resource
- Playing the sound
- Recording a new sound
- Decompiling a sound resource
- Closing a sound resource

## OPENING A SOUND RESOURCE

The Sound Editor shows you the first format field of the sound, the number of synthesizers or modifiers, and the number of sound commands. For standard sampled sounds, these all typically have values of 1.



The Editor lets you change the first format field of a sound resource. This is for historical reasons, since early versions of HyperCard had sound resources in it that had an incorrect format version word.

In addition, the Editor has buttons for playing and recording over the current sound.

To edit individual sound commands or other fields in the 'snd' resource, you may be able to open the resource using a template. To do this, select the sound resource in your File Window, and click on the **Data** button. You should be familiar with the Sound Manager chapter of Inside Macintosh prior to changing much of anything in the resource data this way.

**Note:** Unless the template has an associated filter with it that has been specifically designed to make sounds completely editable, you will only be able to open simply-structured 'snd' resources with the standard template distributed with Resorcerer.

Once you've used the Data Editor to edit a sound resource, such as a simple sound consisting solely of note commands, you can re-open it with the Sound Editor, and listen to how the Sound Manager plays it back.

## PLAYING A SOUND RESOURCE

To play a sound, click on the **Sound Me Out!** button. The Editor allocates a sound channel from the Sound Manager, and then asks the Sound Manager to play the sound synchronously. This means that you can stop the sound from playing in the background at any time.



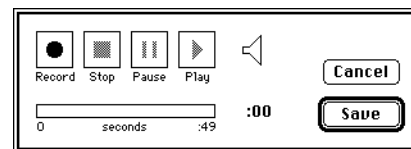
To stop the sound from playing in the background, click on the **Silence!** button. This is only useful for very long recorded sounds. The sound is also silenced when you close the editing window or bring another window to the front.

**Sorcery:** To play the sound asynchronously, hold the Option key down prior to clicking on the **Sound Me Out!** button. Because you will not be able to do anything until the asynchronous sound has finished playing, the **Silence!** button will be disabled.

## RECORDING A NEW SOUND

To record over the current sound, you need to use a microphone plugged into the sound input jack of your Macintosh, or you can use the built in microphone if your Mac hardware supports one. Click on the **Record** button in the Sound Editor window. Resorcerer only supports recording when you are running under System 7 or later.

The Editor displays the standard Mac sound recording dialog, and initializes things so that you can use as much recording time as free memory will allow. Click on the input dialog's **Record** icon (the one with the circle in the middle) to start recording, and click on it again when you want to stop.



In order to save space at the expense of high fidelity, the Mac's standard sound recording equipment supports 1:1, 3:1, and 6:1 compression when

storing sampled sound data. 1:1 (no compression) is considered best quality, 3:1 is considered better quality, and 6:1 is considered good quality. You can use the **Sound** menu to choose which level of fidelity you want prior to clicking on the **Record** button.

When you've finished recording, click on the dialog's **Save** button to replace the current sound data in the resource with the new data. If you want to compare the old with the new sound, you can choose **Undo** to re-install the last sound as the resource's data, play it, and then choose **Undo** again to go back to the new sound.

## DECOMPILING A SOUND RESOURCE

To decompile your 'snd' resource, make sure no text is selected in the format field, and then choose **Copy** from the **Edit** menu. The decompiled Rez source data for the resource is placed into the Mac clipboard as text for you to **Paste** into your source file.

**Note:** Sounds can get quite large, and the decompiled text, which is in hex digits, will be at least twice as large. You may have problems importing the text scrap if it exceeds 32K bytes in size.

## CLOSING A SOUND RESOURCE

When you're done with the Sound Editor dialog, click in its GoAway box to close the resource.

If you want to throw away any changes you've made since opening the resource, click in the dialog's **Cancel** button.