

## Chapter 4

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# Using Sound Files with Windows 95, 98, and NT

Now that you have some sound files, what are you going to do with them? Windows 95, 98, or NT give you lots of sound facilities. You can configure your sound properties, assign sounds to your Windows events, and of course, listen to all those sounds offline.

What you'll learn:

- How to assign sounds to sound events in Windows and in your applications
- How to use Volume Control to control the volume and mix of your sound devices
- How to use the Multimedia applet to set properties for your sound devices
- Most of the explanations in this chapter are the same for all three versions of Windows. Whenever there's a difference, I included separate explanations for each operating system.

## Dressing Up Your Windows Sounds

You're probably used to Windows dinging, beeping, and chiming as you work. But did you know that it could chirp, bark, and hiss

instead? Or perhaps you'd like it to cough, hiccup, and belch, especially on days when you feel like annoying your co-workers. Any kinds of sounds are possible, as you can assign any WAV file to a *sound event*—a program event that triggers a sound. You could even set up Windows so that, when it starts up, your voice says, “Keep your scabby hands off my computer, you verminous cretin!”

## Windows sound events

Windows provides over 20 general sound events, such as the Question event that happens whenever a question box pops up. Other sound events occur when Windows starts or ends, a warning message pops up, an error is detected, and on several other occasions. Figure 4-1 shows the Sounds Properties window, where you can scroll through a list of all the sound events in your system. You'll learn how to use the Sounds Properties window to review and change your sound assignments in this section.



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**Figure 4-1** *The Sounds Properties window shows the sound events registered with Windows.*

How to open the Sounds Properties window:

1. Choose Start→Settings→Control Panel to open the Control Panel.
2. Start the Sounds applet to open the Sounds Properties window.

Some sound events have no WAVs assigned to them by default. For example, sound events occur when you open a menu, choose a menu item, maximize or minimize a window, restore the window's former size, and open or close a program. If you actually assigned sounds to all these events, your computer would keep up a constant racket. Not only that, but playing all those WAVs would noticeably slow down your system. Notice in Figure 4-1 that the Close Program event has no speaker icon, meaning that file is assigned to no sound assignment, the default setting for this particular event.



### Tip

Most sound events should have the shortest possible WAVs. Trust me, you don't want to wait for your favorite tenor to sing all of "O Sole Mio" each time you pull down a menu.

## Application sound events

Many sound-enabled applications add their own events to your list. You can see an example in Figure 4-2, where I have scrolled down in Sounds Properties to show the Microsoft NetMeeting group. You can also see the beginning of the America Online group. The events in these groups are unique to their applications, whereas the Windows events pertain to all applications. Nonetheless, you can change the sound assignments for these application events just as you can for the Windows events.



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**Figure 4-2** Application sound events also show up in the *Sounds Properties* window.

## WAVs to use with sound events

You probably have more WAV files on your hard drive than you realize. Windows offers several collections of sounds, your sound-enabled applications add more, and of course, you may have added quite a few yourself. All these WAV files are candidates for assignment to sound events.

### WAVs provided by Windows

Windows provides a sample set of WAVs that you might call the “starter set:” Chimes, Ding, Chord, Tada, and the Microsoft Sound that plays by default when you start Windows. (The sample set includes several MIDIs, but only WAVs can be assigned to sound events.) Windows also offers an extensive library of alternative sounds in four collections. The *Jungle* collection provides birds chirping, frogs croaking, and animals growling. The *Musica* collection includes guitar chords, drum taps, horn toots, and other musical sounds. (One Musica WAV sounds to me like someone yelping, but then, so does some music.) The *Robotz* collection are high-tech

electronic sounds. The Utopia collection are modernistic clicks, pops, thweeps, psssts, and several sounds that I can't describe. These additional WAVs are named for the sound events they were designed for—names like Musica Asterisk, Jungle Error, and Robotz Maximize—but they're not limited to those events. You could, if you wish, assign Utopia Maximize to the Asterisk event and Robotz Critical Stop to the Open Program event.

The sample sounds and the four additional collections are located in your Windows\Media folder. If yours are missing and you want to try them out, you can install them from your Windows CD-ROM as long as you have 6.8MB of space available on your hard drive.

How to install the additional windows sounds collections in Windows 95 and 98:

1. Choose Start ⇨ Settings ⇨ Control Panel to open the Control Panel.
2. Open Add/Remove Programs.
3. Choose the Windows Setup tab (see Figure 4-3).
4. Open Multimedia by double-clicking it. Figure 4-4 shows the Multimedia dialog box.
5. Select Multimedia Sound Schemes.



### Caution

Be careful not to select or deselect any other item. If you add a check mark to another item, Windows installs that item. Worse, if you accidentally remove an existing check mark, Windows uninstalls that item.

6. Choose OK to close the Details dialog box. Then choose OK to close the Add/Remove Programs Properties dialog box.
7. At this point, Windows installs the items you selected. Follow the onscreen directions, which tell you when to insert the Windows disc into the CD-ROM drive.



**Figure 4-3** *The Windows Setup page lets you add and remove Windows features.*



**Figure 4-4** *Use the Multimedia dialog box to add the Multimedia Sound Schemes.*

How to install the additional windows sounds collections in Windows NT:

1. Choose Start ⇨ Settings ⇨ Control Panel to open the Control Panel.
2. Open Add/Remove Programs.

3. Choose the Windows NT Setup tab.
4. Open Multimedia by double-clicking it.
5. Select the schemes you want to add, such as Robotz Sound Scheme and Utopia Sound Scheme.

**Caution**

Be careful not to select or deselect any other item. If you add a check mark to another item, Windows installs that item. Worse, if you accidentally remove an existing check mark, Windows uninstalls that item.

6. Choose OK to close the Details dialog box. Then choose OK to close the Add/Remove Programs Properties dialog box.
7. At this point, Windows installs the items you selected. Follow the directions on the screen, which tell you when to insert the Windows disc into the CD-ROM drive.

**Tip**

The Windows floppy disks do not have the additional sound files. But all is not lost, as you can download the WAVs free from Microsoft's Web site:

<http://www.microsoft.com/windows95/info>

In case that address no longer works, don't forget to check this book's Web site for an updated address:

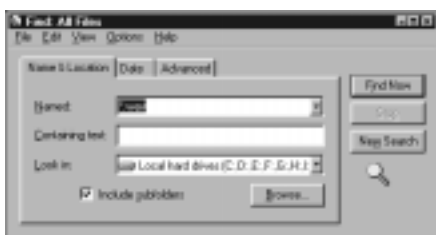
<http://members.aol.com/jnfbooks>

## All the other sounds on your hard drive

You may have a lot of WAVs that weren't provided by Windows. You may have hundreds of WAVs here and there on your hard drive that were installed by various programs, or that you created or downloaded. Since they can all be used with sound events, it's good to know everything available to you. The Windows Find feature helps you locate every WAV file on your hard drive.

How to find all the WAVs on your hard drive:

1. Choose Start ⇨ Find ⇨ Files or Folders to open the Find window, shown in Figure 4-5.
2. In the Named box, type \*.wav.
3. Drop down the Look In list and choose your hard drive. If you have multiple hard drives, choose them one at a time in Windows 95, or choose Local Hard Drives in Windows 98 or NT.
4. Make sure that “Include subfolders” is checked.
5. Choose Find Now.

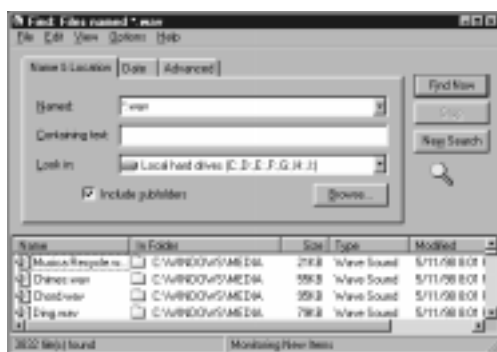


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**Figure 4-5** Windows Find function can locate all the WAV files on your drives.

Windows adds a new area to the bottom of the Find window (see Figure 4-6), where it lists the files it finds. In the figure, I have chosen View ⇨ Details so that you can see the file locations, sizes, and dates. The other views don't include this information, and you need it when you're trying to organize your WAVs.





**Figure 4-6** Find builds a list of found files in the bottom part of its window.



### Tip

Resize or maximize the window to see as much of the list as possible.

You use the Find list just like an Explorer window. You can play sounds by double-clicking them; sort the list by name, folder, size, and date; and move, copy, rename, and delete files. You can even save the list if you think you'll want to come back to it later. First, choose Options ⇨ Save Results to enable this option. (If it already has a check mark next to it, don't select it or you'll disable it.) Then choose File ⇨ Save Search. Windows places an icon on your desktop labeled Files named \*.wav. Double-click this icon to reopen the list of found files.

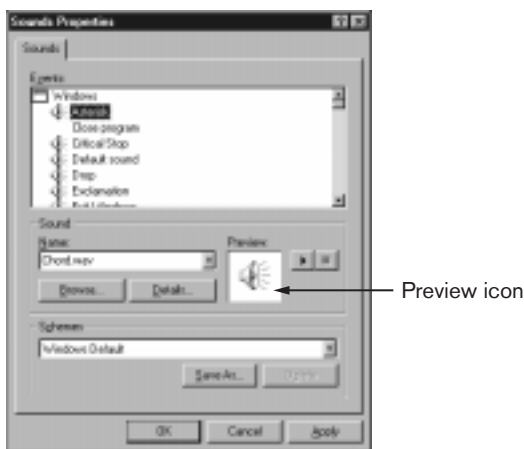


### Tip

You can use these same search techniques to find other types of files too. For example, you could search for \*.mid or \*.rmi to find MIDI files.

## How to assign WAVs to sound events

You have already seen a couple of examples of the Sounds Properties window, where you can review and change sound event assignments. In the example in Figure 4-7, I have selected the Asterisk event. (Applications generally use the Asterisk event to add emphasis to a message.) The Name box shows the name of the WAV assigned to this event, in this case *Chord.wav*. You can hear the sound by clicking the preview icon (shown here in the margin).



**Figure 4-7** When you select an event, *Sounds Properties* displays the sound assigned to it.

### Displaying your filename extensions

**Tip #41** to avoid premature aging: Notice that the filename shown in Figure 4-7 includes the .wav extension. Windows normally suppresses registered extensions, driving this old DOS user batty. I force Windows to show all filename extensions, registered or not.

How to display filename extensions in Windows 95 and NT:

1. Open My Computer or Explorer. (Either one will do.)
2. Choose View ⇨ Options to open the Options dialog box.

3. For Windows 95, disable “Hide MS-DOS file extensions for file types that are registered.” For Windows NT, disable “Hide file extensions for known file types.” (By *disable*, I mean click it to remove the check mark from the check box.)
4. Choose OK to close the dialog box.

How to display filename extensions in Windows 98:

1. Open My Computer or Explorer. (Either one will do.)
2. Choose View ⇄ Folder Options to open the Options dialog box.
3. Choose the View tab to open the View options page.
4. Disable “Hide file extensions for known file types.” (By *disable*, I mean click it to remove the check mark from the check box.)
5. Choose OK to close the dialog box.

This affects every dialog box that lists filenames, including My Computer, Explorer, and Open and Save As dialog boxes in applications such as Word and Lotus 1-2-3.

The Name box is a drop-down list showing all the WAVs in the Windows\Media folder. You can select a WAV from this list or click the Browse button to view other folders. When you browse another folder, that folder’s WAVs replace the default list until you close the dialog box. The next time you open the dialog box, the Windows\Media folder once again appears in the drop-down list.



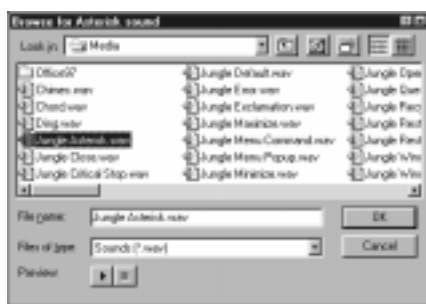
### Tip

Store all the WAVs that you use for sound events in the Windows\Media folder. (Copy them to the Media folder if they’re also needed elsewhere.) It’s easier to find them in the Media folder when you’re assigning sounds, Windows doesn’t have to change folders to play them, and it’s less likely that you’ll delete them when weeding out your hard drive.

How to change the WAV assigned to a sound event:

1. Open the Sounds Properties window.
2. Scroll through the Events list and select the event you want to change.
3. Drop down the Name list and select a file, or click the Browse button to locate and select the desired file.
4. Listen to the selected file by clicking the preview icon.
5. If you decide that you don't want to use this sound, repeat steps 3 and 4 until you find the sound you want to assign.
6. Repeat steps 2 through 5 for all the events you want to change.
7. Click OK to close the window and put your new sounds into effect.

The Browse dialog box (see Figure 4-8) has a couple of features that make your life a little easier. First, it has its own preview icon so you can listen to sounds while browsing—a real time-saver. Second, after you play around long enough in various folders, you might forget what event you were trying to assign. Fortunately, the title of the dialog box includes the name of the event, as in Browse for Asterisk Sound or Browse for Critical Stop Sound.



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**Figure 4-8** Use the Browse for Sound dialog box to locate a sound to assign to an event.

**Note**

The first item in the drop-down list is always (None). Choose (None) to unassign an event.

Sometimes when you're cleaning up your hard drive, you accidentally delete, rename, or move a WAV that is assigned to a sound event. The next time that event occurs, Windows won't be able to find the file. It does not display an error message (thank goodness) nor play a default sound. If you go to the Sounds Properties window and select that event, however, you'll see this error message: `Windows cannot find the file xxxxxxxx. Do you want to use the file for this event anyway?` Click No to clear the message and then reassign or unassign the sound event, if you wish.

## Sound schemes

So far you have seen how to assign sounds one at a time. With a sound scheme, you assign all your events at once. Windows gives you a few sound schemes to start with, and it's a simple task to create your own. Read on.

### Creating and installing sound schemes

A *sound scheme* is a named set of sound assignments stored in your system so that you can go back to it at any time. For example, suppose you want some spooky Halloween sounds in October but your usual sounds again in November. First you save your current setup as a scheme, perhaps naming it Normal. Then you assign the new sounds. You also might save the new sounds as a scheme named Halloween. It takes just one step to return to your Normal scheme after the holiday. And it's just as easy to reinstate the Halloween scheme next October.

How to save a sound scheme:

1. In the Sounds Properties dialog box, set up all the events the way you want them.

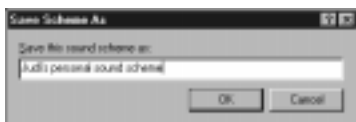
2. In the Schemes group, choose **Save As** to open the **Save Scheme As** dialog box (see Figure 4-9). Windows provides the current scheme's name as the default in this dialog box.
3. Type a name for your scheme, which can be a new name or an existing one. If you use an existing name, Windows replaces the existing scheme with the new one.

**Tip**

You can't replace or modify the two basic schemes provided by Windows, **No Sounds** and **Windows Default**. These two schemes are described in the next section. (In Windows NT, the default theme is called **Windows NT Default**.)

4. Choose **OK**.
5. If you used an existing name, you must confirm that you want to replace the scheme.

Your new scheme now appears in the **Schemes** drop-down list.



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**Figure 4-9** *You provide a name for your sound scheme in the **Save Scheme As** dialog box.*

A sound scheme stores the status for *all* sound events, those with sounds and those with none. When you recall the sound scheme, it restores the status of all events, not just the ones with assignments. Suppose, for example, that you currently have sounds assigned to the **Maximize** and **Minimize** events. If you install the **Windows Default** scheme, **Minimize** and **Maximize** will be cleared.

How to install a sound scheme:

1. Open the **Sounds Properties** window.
2. Select the desired scheme from the **Schemes** drop-down list.

**Tip**

You modify a sound scheme by installing it, making whatever changes you want, and then saving it with the same name.

How to delete a sound scheme:

1. Select the scheme in the Schemes drop-down list and choose Delete.
2. A dialog box asks if you're sure you want to delete the scheme. You must choose Yes to delete it.

Because you have just deleted the current sound scheme, Windows automatically returns to the No Sounds scheme.

## Windows sound schemes

Windows provides a few schemes to get you started. The default sound assignments appear in a scheme called Windows Default. Returning to this scheme is like wiping the slate clean and starting over—you go back to the five sample sounds. The No Sounds scheme clears all sound assignments, which comes in handy in settings where quiet is essential. You cannot modify or delete either of these schemes.

If you have installed the additional sound collections, you also have Jungle, Musica, Robotz, and Utopia sound schemes. Each scheme uses many, but not all, of the sounds from the collection with the same name. They don't assign sounds to the Open Program and Close Program events, for example, even though the collections include WAVs designed for those events. These four schemes are not protected by Windows; you can modify and delete them as you wish.

## Microsoft Plus! themes

If you have the Microsoft Plus! pack, you have another way to set sounds—themes. A *theme* is a collection of related sounds, desktop icons, wallpaper, mouse pointers, fonts, screen saver, and colors.

Themes make it easy to coordinate your entire Windows environment with just a few clicks. Figure 4-10 shows the Dangerous Creatures desktop, but I have no way to show you the other elements in the theme. Plus! 95 provides more than a dozen themes, including Science, Nature, Travel, Sports, The 60s USA, and Mystery. Plus! 98 gives you 18 themes, including Architecture, Jazz, Science Fiction, and several based on popular comic strips (Doonesbury, Cathy, and Garfield, for starters) with animated wall-paper.

**Tip**

Don't worry – Plus! 98 does not remove your Plus! 95 desktop themes. Adding Plus! 98's themes to Plus 95's themes, gives you nearly three dozen themes from which to choose.



**Figure 4-10** *The Dangerous Creatures theme features the cougar wallpaper and various creature icons for the standard Windows objects on your desktop.*



To use themes, you must first install them from the Plus! CD-ROM. If you haven't already done that, the following procedure will guide you.

How to install desktop themes:

1. Insert the Plus! CD-ROM into your CD-ROM drive. If Plus! doesn't start automatically, use Windows Explorer to view the contents of your CD-ROM drive and double-click **autorun**.
2. If you have already installed Plus! and just need to add Desktop Themes, follow these steps:
  - a. Choose **Add/Remove Programs** to open the Setup Maintenance wizard.
  - b. Select the **Add/Remove** option and click **Next**.
  - c. In the list of Plus! components, enable **Desktop Themes** and click **Next**.
  - d. Follow the directions on your screen while Plus! installs your themes.
3. If you have not yet installed Plus!, choose **Install Plus!** and follow the directions on your screen. Be sure to include Desktop Themes when you select components to install.



#### **Tip**

Actually, you don't need Plus! to get the Dangerous Creatures theme. You can download it for free from Microsoft's Web site as a demo of the Plus! package. Here's the URL:

<http://www.microsoft.com/windows95/info>

Now you can select whichever theme you're in the mood for.  
How to select a theme:

1. Open the Control Panel.
2. Open the Desktop Themes applet to open the Desktop Themes window shown in Figure 4-11.

3. Select a theme from the Theme drop-down list. The sample desktop in the window shows the new theme. Keep trying out themes until you find one you like.
4. Choose OK to close the window and put the new theme into effect.



**Figure 4-11** *The Desktop Themes window lets you preview and select from all the installed schemes.*

While you're in the Desktop Themes window, you can preview the sounds and other elements by clicking the buttons in the Preview section in the upper-right corner of the window.

## The Wave Events editor

For people like me, the sound event features built into Windows aren't quite enough. Wave Events is a shareware program by Gregory Jones that gives you the ability to add and remove sound events for specific applications.

## What Wave Events does

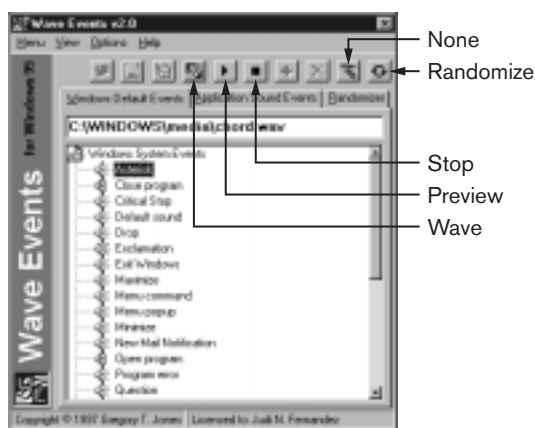
Wave Events can't create sound events that would be unique to an application, such as opening a file or recalculating a worksheet. It assigns only general Windows events: Open Program, Maximize, Menu Command, and so on. What makes Wave Events different from the basic Windows facility is that it can assign different sounds for each application. So you could set up WordPad, for example, with sounds for Minimize, Maximize, Question, and Asterisk, that are different from Calculator's sounds for those same events. With Wave Events, you can assign sound events to applications (EXE files), screen savers (SCR files), and links to applications and screen savers (LNK files).

Here's what you can do with Wave Events:

- Add new sound events for specific applications
- Remove existing sound events (except for the standard Windows events)
- Assign and unassign sounds
- Randomize sound assignments

## The Wave Events interface

Starting Wave Events opens the window shown in Figure 4-12. As with many Windows applications, Wave Events gives you several ways to accomplish a task, including menus, shortcut keys, toolbar buttons, drag-and-drop, and context menus. If I showed you all these methods, this chapter would be twice as long. I personally prefer toolbar buttons, which are always right there when you need them, so I use those in this section.



**Figure 4-12** *The Wave Events window shows your current sound assignments and lets you change them.*

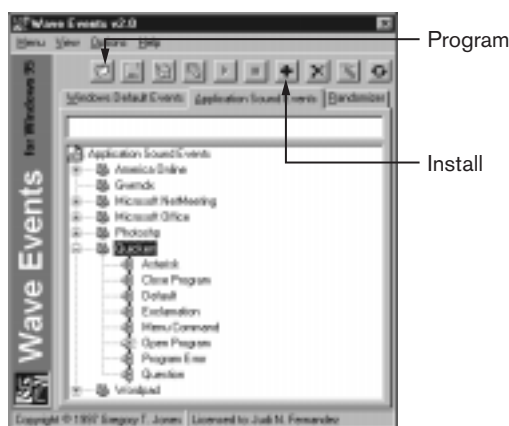
The speaker icons in the events list are slightly different from those in the Sounds Properties window. A yellow icon indicates an assigned event, a gray icon indicates an unassigned event, and a red X over a yellow icon (see Exclamation in Figure 4-12) indicates an assigned event where the sound file is missing.

## Windows system events

Figure 4-12 shows the Windows Default Events page, where you can see the Windows System Events group. You can do only two things with these events: you can change or remove sound assignments. Changes you make on this page affect all applications that don't have specific sound assignments, just like making the changes in the Sounds Properties window.

## Adding your own application events

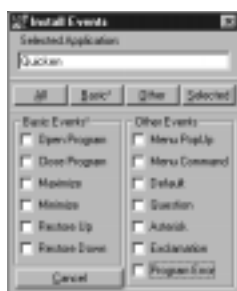
Choosing the Application Sound Events tab takes you to the page shown in Figure 4-13, where you can see all the currently installed application events. I have expanded the Quicken group so you can see the events I installed for that application.



**Figure 4-13** You create new sound events for your applications on the *Application Sound Events* page.

How to add an application to the Application Sound Events page:

1. Choose the Application Sound Events tab.
2. Choose the Program button, shown in Figure 4-13. A common Open dialog box appears. (If you have not registered Wave Events, you must respond to a nag screen before the dialog box appears.)
3. Locate and select the program for which you want to create sound events. The Install Events dialog box appears (see Figure 4-14), showing 13 possible sound events divided into two categories: Basic and Other.
4. Choose one of the four buttons depending on whether you want to install All 13 events, the Basic events, the Other events, or just the events you have Selected from the list. The dialog box closes and the new events appear in the Wave Events window.



**Figure 4-14** *The Install Events dialog box lets you create new sound events for an application.*

If the application already has a group, you don't need to go through the above steps. All you have to do is add more sounds to the existing group.

How to add more sound events to an application:

1. In the Wave Events window, choose the Application Sound Events tab.
2. Select the desired program.
3. Choose the Install button, shown in Figure 4-13. The Install Events dialog box appears (see Figure 4-14).
4. Choose one of the four buttons depending on whether you want to install all 13 events, the basic events, the other events, or just the events you have selected from the list. The dialog box closes and the new events appear in the Wave Events window.



### Note

The only events that make sense for screen savers are Open Program and Close Program. Even though Wave Events lets you assign other events, they could never be triggered.

## Assigning sounds to events

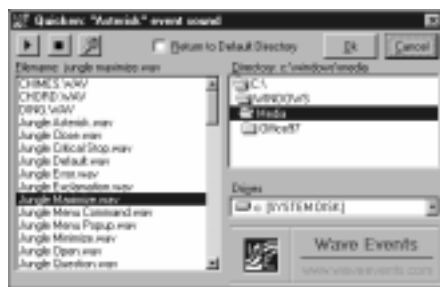
So far, your new events are unassigned. You use the following procedure to assign sounds to any events, Windows or applications, new or old, assigned or not.

How to assign sounds to events:

1. Select the desired event.
2. If the event currently has a sound, you can listen to it by choosing the Preview icon (shown in Figure 4-12).
3. Choose the Wave button to open the Event Sound dialog box (see Figure 4-15).
4. Locate and select the desired WAV. (You can preview WAVs by clicking the Preview icon. If you start one that goes on forever, use the Stop button, to interrupt it.)

To unassign the selected event, choose the None button.

5. Choose OK to close the dialog box and assign the selected WAV (or none) to the event.



**Figure 4-15** *The Event Sound dialog box lets you assign a WAV to an event.*

## Removing application events

The thing I like best about Wave Events is that it lets you *remove* sound events, which you can't do via Sounds Properties. At last you can get rid of events that some long-dead application orphaned in your system. Simply select an event (or an entire application) and press Delete.

Currently you can't remove Windows system events, just application events. Gregory Jones tells me that some day he might add a capability for advanced users to remove Windows system events. But you would be wise to exercise extreme caution with such a feature; once you've removed a Windows system event, you have to reinstall Windows to get it back.

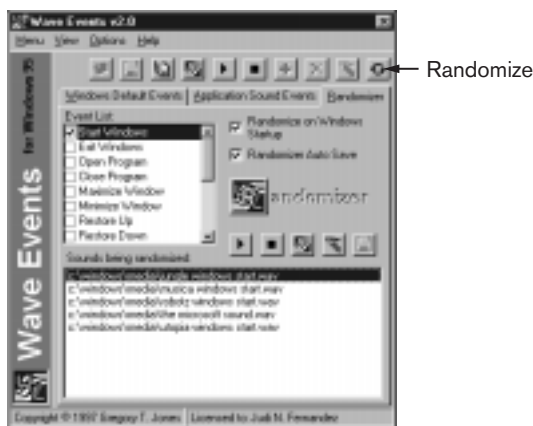
## Randomizing event assignments

If you have a strong need for constant change, try playing musical chairs with your Windows system event assignments via Wave Events' randomizer. It gives you two ways to randomize:

- A single time when you choose the randomize button
- Each time you boot

Choosing the Randomizer tab opens the page shown in Figure 4-16. On this page, you select the events that you want to randomize. For each event, you build a list of WAVs for the randomizer to choose from. The example in Figure 4-16 shows the list I have created for the Start Windows event. Each time I randomize, Wave Events assigns one of the sounds in this list to the Start Windows event.





**Figure 4-16** Use the Randomizer page if you want to randomize some of your sound assignments.

How to set up randomization:

1. Choose the Randomizer tab.
2. Select an event that you want to randomize.
3. Click the Wave button to open the dialog box called Select a WAVE File for the *xxx* Event (see Figure 4-17).



#### Tip


Drag the dialog box to the side so you can also see your list of WAVs in the Randomizer page. It's easier to recall what WAVs you have already selected when you can see the list.

4. Select a WAV file for the event. As always, the Preview and Stop buttons help in finding WAVs.
5. Choose the Add button to add the currently selected WAV to the event's WAV list.
6. Repeat steps 4 and 5 until you have selected all the WAVs for the event. (You can come back later and add more, if you wish.)

7. Choose Exit to close the dialog box.
8. Repeat steps 2 through 7 for each event you want to randomize.



**Figure 4-17** You build a list of WAVs for an event in this dialog box.

 Now that you have set up the randomization list, choose the Randomize button (shown in Figure 4-16) to randomize your sounds immediately. Or enable Randomize on Windows Startup if you want Wave Events to randomize your sounds each time you start up Windows.



### Note

To remove a sound from an event's randomization list, select the sound and press Delete.

## Volume Control

Suppose you're listening to some music when the phone rings. How do you mute the sound while you answer the phone? If your speakers have a volume knob, the answer is simple—just turn it down. But even if you don't have a volume knob, it's still fairly simple: pop up Volume Control and select Mute.

Or suppose you're listening to a CD while you work, but your word processor's WAVs interfere with your enjoyment of the music. In many systems, Volume Control acts as a mixer, so you can turn down the WAVs and turn up the CD in relationship to each other while keeping the overall volume the same.

**Note**

If your sound board doesn't provide a volume control, you probably want to skip this section.

## What Volume Control does

Volume Control gives you the ability to adjust or mute the volume of your various sound devices. It also gives you a master volume control to adjust all the devices at once. But that's not all it does. You can also use it for these features:

- Adjust the balance between your speakers for each device and for the master control.
- Select the devices to use in cases where you have more than one.
- Configure advanced features for your devices.

And of course, you can tailor the Volume Control window.

## The Volume Control window

Volume Control is a Windows program, but its contents are determined by your sound hardware and software. I wish I could show you exactly what yours looks like, but unless you have the same sound hardware and software I do, yours will be different from what you see here. All I can do is show you my Volume Control, based on Creative's AWE64 with some Yamaha enhancements. Yours should be similar, but it might not be identical.

Your system might be set up to display the Volume Control icon, a tiny yellow speaker, in your system tray. If so, you can open Volume Control by double-clicking the icon. In any case, you can open it by choosing Start ⇨ Programs ⇨ Accessories ⇨ Multimedia ⇨ Volume Control. Figure 4-18 shows my Volume Control window, which acts as a mixer, letting me adjust the master volume as well as each individual device. The master control affects all sound, whereas the individual controls affect just the indicated devices.

**Tip**

To pop up just the master control without the entire mixer, single-click the Volume Control icon in the system tray.



**Figure 4-18** *The Volume Control window acts as a mixer.*

Using Volume control is fairly simple. Drag a vertical slider up and down to adjust a device's volume. Drag a Balance slider left and right to adjust a device's balance. Enable Mute to silence a device.

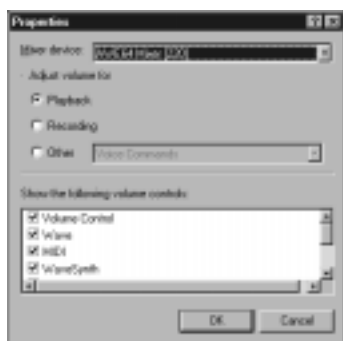
**Note**

For all sampled and streaming media, use the Wave control.

## Volume Control properties

The Options menu provides commands to configure the Volume Control window. In my system, choosing Options ⇨ Properties opens the Properties dialog box shown in Figure 4-19. Again, yours might be different from the one shown in the figure. At the top, you can select a mixer device if you have more than one. In the middle group ("Adjust volume for"), you can select which type of devices you want to display. The Playback option displays your playback devices: WAV device, MIDI device, CD-ROM drive, and so on. When you want to record something, change to the Recording option so that the mixer includes devices such as the microphone. Several devices appear on both lists since you might both listen to

and record from the CD-ROM drive, a MIDI instrument, or the line-in port. The Other option makes room for other types of sound features you may have, such as voice commands.



**Figure 4-19** Use the Volume Control Properties dialog box to configure your Volume Control window.

Once you have selected the category of devices for the Volume Control, you can enable and disable specific devices in the list box at the bottom of the dialog box. I usually leave them all enabled—Why not?—but some people may prefer to see just the devices they’re actually using. When you choose OK to close the dialog box, you’ll see the controls for the selected devices in your Volume Control window.

## Advanced settings

Some of your devices might have advanced options. To find out, choose Options ⇨ Advanced Controls, which adds Advanced buttons to your Volume Control window for those devices that have such options. Figure 4-20 shows my Volume Control window with two Advanced buttons: one for the master volume control and the other for the WaveSynth control. As always in this section, your system may offer different advanced options, or none at all.



**Figure 4-20** *The Advanced Control option adds Advanced buttons to your Volume Control window.*



**Tip**

Look for Advanced Controls for all three categories of devices from the Properties dialog box: Playback, Recording, and Other. You may find advanced options for any of these types of devices.

Clicking an Advanced button opens a dialog box where you review and set the advanced options for the indicated device. Figure 4-21 shows my Advanced Controls for Volume Control dialog box, which opens when I choose the Advanced button for my master volume control. As you can see, I can control tone (bass and treble) and 3D Stereo Enhancement.



**Figure 4-21** Choose an *Advanced* button to open a dialog box showing your advanced controls.

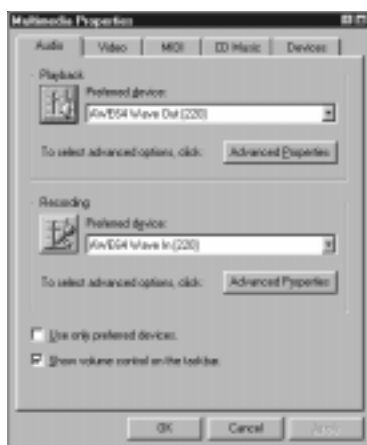


### Tip

Don't forget that media players such as Jet-Audio and CD/Spectrum Pro also provide mixers. Since they all affect the same sound board, the settings on one mixer are reflected on all the others.

## The Multimedia Properties

The Multimedia Properties window, shown in Figure 4-22, configures your multimedia devices, including your sound devices. Some features overlap with Volume Control, but others are unique to this window. Start the Multimedia applet on your Control Panel to open the Multimedia Properties window. Figure 4-12 shows the Windows 98 version of the window. The Windows 95 and NT dialog boxes are similar, but not exactly the same.



**Figure 4-22** Use the Audio Multimedia Properties to configure your multimedia devices.

## Audio (WAV) properties

The Audio page shown in Figure 4-26 sets the properties for your WAV devices — playback and recording. Here you can select your preferred devices if you have more than one of each. In Windows 98, the button in each box opens the playback or recording version of Volume Control. In Windows 95 and NT, the dialog box includes volume sliders.

## The Volume Control taskbar icon

It's nice to have program icons in your system tray where you can reach them easily and start your favorite programs with a simple double-click. But if your system is like mine, so many programs want to put their icons in your system tray that it threatens to take over your taskbar. I eliminate the programs that just as easily can be started from the Start menu. I like having Volume Control in my system tray, though, because I like to be able to mute the volume quickly when I get a phone call.



Notice in the Figure 4-22 a check box labeled “Show volume control on the taskbar.” This option refers not just to your WAV playback device but to the Volume Control taskbar icon. The option is selected by default, giving the icon residence in your taskbar. Disable this option to get rid of the icon.

## MIDI properties

Figure 4-23 shows the MIDI properties. Here you can select your MIDI device. If you have more than one possibility and don’t know which one you prefer, it’s fairly easy to try them out.



**Figure 4-23** You configure your MIDI devices in the MIDI Multimedia Properties window.

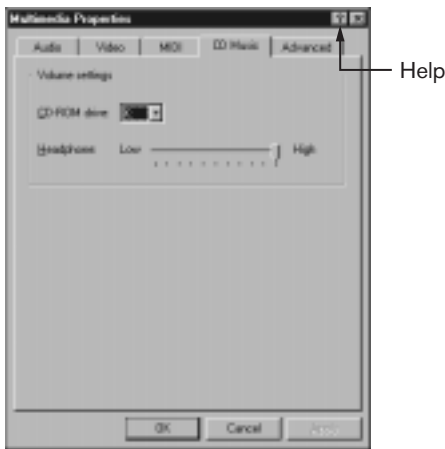
How to try out your MIDI devices:

1. Open a MIDI file but don’t play it yet.
2. Open the MIDI page in your Multimedia Properties window.
3. Select a device.

4. Choose Apply to put the new device into effect without closing the window.
5. Play the MIDI file.
6. Stop the MIDI file so you can select another device. (You can't change instruments while a MIDI is playing.)
7. Repeat steps 3 through 6 until you find the device you want.
8. Choose OK to close the window and continue using the chosen device.

## CD Music properties

Figure 4-24 shows the Windows 98 version of the CD Music properties. If you have only one CD-ROM drive, the CD-ROM drop-down list should show only that drive. For multiple drives, the drive you select here becomes the default drive for Media Player and CD Player. You can also set the volume for each CD-ROM drive here. This control is somewhat different than Volume Control's. It affects the volume of the CD-ROM drive, while Volume Control affects the volume of the sound board. When playing music through your speakers, it doesn't matter which control you use — the effect is the same. But if you want to adjust the volume of the CD-ROM drive's headphone jack, assuming your CD-ROM drive doesn't provide a manual volume knob, you must use this control. (In Windows 95 and NT, this volume control is labeled "Headphone.")



**Figure 4-24** You configure your CD player in the CD Music Multimedia Properties window.

## What else can you do in Multimedia Properties?

I have explained here the basic options in the Multimedia Properties window. Since so many multimedia configurations are possible, you might have additional features that other people don't. Notice in Figure 4-28, for example, that the whole bottom section of my CD Music page is dimmed. On my system, I cannot choose between analog and digital CD audio. Can you?

I encourage you to completely explore all the pages in your Multimedia Properties window. Click any Advanced buttons to see what other options you have. (Some "advanced" options aren't really advanced at all. They're just labeled "advanced" because they don't appear on the main page.)

If you're not sure what an option does, you can get pop-up help in Windows 95 and 98. A Help icon, shown in Figure 4-24, appears in the window's title bar. To pop up a brief explanation of an option, first click the Help icon and then click the option. Click the pop-up box to close it again. Finally, if you're still not sure what the option does, why not try it to see what happens? Just remember (or write down) the former setting so you can restore it if need be.

## What's Next?

This chapter has concentrated on using sounds with Windows. But I haven't left the Macintosh users out. Chapter 5 explains the sound facilities on the Mac OS.

### The fine print

Wave Events is a shareware program. Its registration fee is \$10. You can try it out for 30 days free of charge, but some of the functions are disabled in the unregistered version. It also nags you to register until you pay the fee. Wave Events works by editing the Windows Registry, where sound events are stored. It works with Windows 95 and 98 but not with NT, whose registry is structured differently.

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