

Chapter 9

Downloading Sound Files

Internet Web sites, FTP sites, and newsgroups contain hundreds of thousands of sound files. You can download the ones you like and build your own local collection. This chapter shows you how. And since you may want to share some of your favorites with others, it also covers how to post them to a newsgroup.

What you'll learn:

- How to download sound files from Web sites using Netscape Navigator and Microsoft Internet Explorer
- How to download sound files from an FTP site
- How to download sound files from a newsgroup using Outlook Express, Netscape Messenger, and CompuServe
- How to post sounds on a newsgroup using the same newsreaders

Downloading from Web Sites

The way that you download a file from a Web site depends on two factors: first, whether it is a background sound or a linked file, and second, which browser you're using. Linked files are easier in both browsers, so let's tackle them first.

Downloading linked files

Figure 9-1 shows an example of a Web page that offers sound files to play or download. The links such as “Lincoln’s Gettysburg Address” and “FDR’s Pearl Harbor Speech” refer to files instead of other pages. How can you tell? When you pause your mouse pointer over a link, both Netscape Navigator and Microsoft Internet Explorer display the linked URL in the status bar. In Figure 9-1, I paused the mouse pointer over “Lincoln’s Gettysburg Address,” and you can see “<http://www.ptu.edu/media/~knudsen/speeches/gettysburg.ra>” in the status bar. The filename `gettysburg.ra` tells you that this refers to a RealAudio sound file. As explained in Chapter 8, RA files are downloadable, but RAM files are not.



Note

Please don’t try to access this Web site, as it’s not real. I made it up for this example.

Downloading the linked file is simple as long as you don’t want to preview it first. In Windows, right-click the link to pop up a context menu. Figure 9-2 shows Netscape Navigator’s version of the context menu, where you would choose **Save Link As**. Internet Explorer’s context menu is similar, but the option is called **Save Target As**. A common **Save As** dialog box appears so that you can select a name and location for the file. With Macintosh, hold down the **Option** key and click the link to open the **Save As** dialog box.



Figure 9-1 "Lincoln's Gettysburg Address" links to an RA file, not an Internet site.



Figure 9-2 This context menu pops up in Netscape Navigator when you right-click a link to a filename.

If you want to listen to the file before deciding to download it, simply click the link instead of right-clicking it or holding down the Option key. When you click a link to a filename, instead of a link to another site, your browser reacts in one of three ways:

- If it can find a plug-in for the file's type, it downloads and opens (plays) the file.
- If it finds a helper application instead of a plug-in, it displays a dialog box asking if you want to save the file on your hard drive or open it right away.
- If it can't find either a plug-in or a helper application, it asks you what to do with the file.

File types that are handled by plug-ins

When you play a sound file that is handled by a plug-in, both Netscape Navigator and Microsoft Internet Explorer launch a new window for the plug-in. The new window may not give you a chance to save the file. Navigator's does — the File menu includes a Save As option. Internet Explorer's doesn't, but the plug-in itself might. For example, right-clicking the Crescendo control panel pops up a menu that includes a Save As option. QuickTime and Media Player, however, do not provide such an option. Try right-clicking your plug-in's control panel to see what options it gives you.

What if you have Internet Explorer and your plug-in doesn't give you a way to save the file? Fortunately, Internet Explorer maintains a cache on your hard drive where it temporarily stores all the files that it opens. Figure 9-3 shows an example of Internet Explorer's cache. It removes files from the cache after a few days or if it needs room for new files. When you open a file handled by a plug-in, Internet Explorer downloads the file to its cache before the plug-in can play it. It shows a Downloading message while it's downloading, but for a short file the message flashes by too fast to read. Most of the work of downloading the file is done, but you still haven't

managed to save it permanently on your hard drive — remember, it's going to disappear from the cache in just a few days. But you can copy the file from the cache into a more permanent folder on your hard drive.

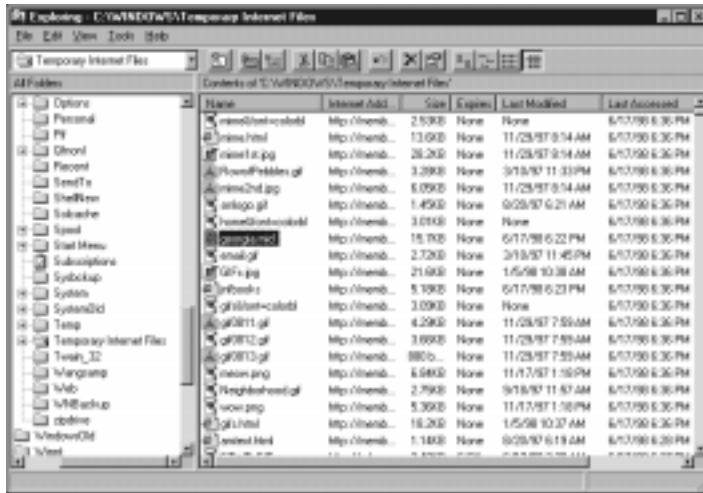


Figure 9-3 Notice the MIDI file in my Internet Explorer cache.

How to locate Internet Explorer's cache in Windows 95, 98, and NT:

1. Start Internet Explorer and choose View ⇨ Internet Options to open the Internet Options dialog box. (You can do this offline.)
2. The General page includes a group called Temporary Internet Files. Choose the Settings button in that group to open the Settings dialog box shown in Figure 9-4.
3. Choose View Files to open the cache.



Figure 9-4 Internet Explorer's Settings dialog box gives you access to your cache.



Tip

Your browser cache fills up quickly, and sometimes it's hard to spot the file you want. Try choosing **View ⇨ Details** to show the file details, as in Figure 9-3. Then sort the files in reverse chronological order by clicking the **Last Accessed** header twice. The files you opened last will be at the top of the list.

How to locate Macintosh Internet Explorer's cache:

1. Start Internet Explorer and choose **Edit ⇨ Preferences** to open the Internet Explorer Preferences dialog box. (You can do this offline.)
2. In the panel on the left, choose **Advanced** in the **Web Browser** group to display the Advanced Preferences.
3. The Cache preferences describe the location of your cache.
4. Now that you know where your cache is, use Finder to open it.

By the way, Netscape Navigator also maintains a cache from which you can copy files. If you decide to save a file after the plug-in window closes, you don't have to go back to the Web to find it. You have a few days to copy it from your cache. Unfortunately,

Navigator assigns generic names to the files in its cache, which makes it a bit harder to find what you're looking for. Figure 9-5 shows an example of Navigator's cache, where I have highlighted a MIDI file. As you can see, the file's name is meaningless to anyone but Navigator, but at least you can find it by its file type. If there are several files of the same type in the cache, and if you can't tell by the Modified date and time (in Details view) which one you want, you can try out each one by double-clicking it.

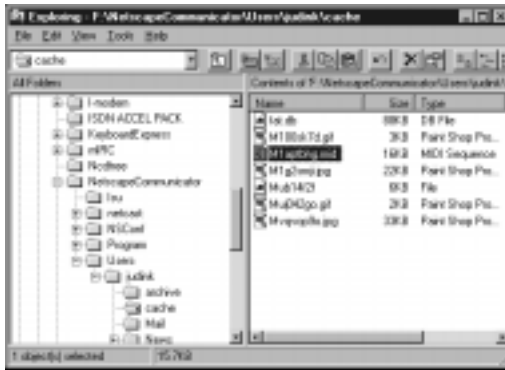


Figure 9-5 Netscape Navigator's habit of assigning generic names to the files in its cache makes it harder to find the file you want.

Navigator usually keeps its cache in the folder Netscape Communicator\Users\yourname\cache, where *yourname* stands for your user name. If you can't find it there, the following procedure helps you find it.

How to locate Netscape Navigator's cache:

1. Start Netscape Navigator and choose Edit ⇨ Preferences to open the Preferences dialog box, shown in Figure 9-6. (You can do this offline.)
2. Click the icon next to Advanced to expand that item, as shown in the figure.

3. Select Cache to display your cache preferences in the dialog box. The location of your cache folder is shown in Disk Cache Folder.
4. If you can't see the entire location, in Windows click the text box to place a typing cursor in it, then press the End key on your keyboard to scroll to the end of the pathname. In Macintosh, click the Choose button, then use the pop-up menu to figure out where the cache is.

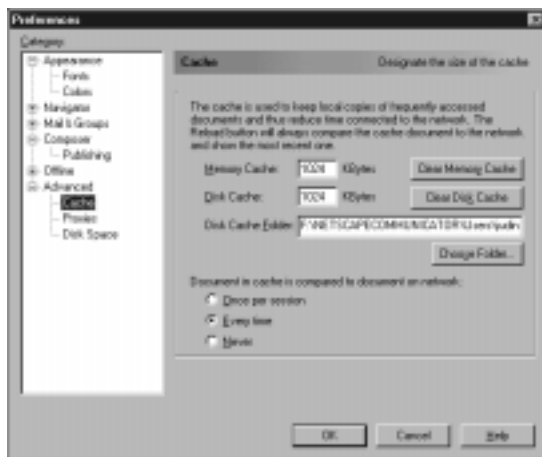


Figure 9-6 Netscape Navigator's Preferences dialog shows you where the cache is located.

File types that are handled by helper applications

Most types of audio files are handled by plug-ins in your browser, but you may run into some rare type that needs a helper application such as Jet-Audio. When your browser uses a helper application instead of a plug-in, it does not automatically start up the helper application. Instead, it asks you whether you want to open the file or save it on your hard drive. Figure 9-7 shows the dialog box that Netscape Navigator uses for this function. Microsoft Internet

Explorer's dialog box is similar, although the wording is different. If you choose "Save it to disk," your browser next displays a common browse dialog box so you can specify a name and location for the file. Then it downloads and saves the file. On the other hand, choosing "Open it" downloads the file to your cache and starts up the helper application to open and play it. If you decide that you want to save the file, you can most likely do so by using the helper application's File menu. Or you can copy the file from your cache as explained before.



Figure 9-7 Netscape displays this Warning dialog box when it finds a helper application for a file.

Your browser puts you through this extra step for security reasons. As Navigator advises you in the Warning dialog box, opening files that you get from the Internet is risky business. They could contain viruses or other nasty surprises. It is much safer to save them and scan them with a virus scanner or two before opening them. That's why the default choice is "Save it to disk." I recommend using two virus-scanning programs that have been updated no more than two weeks ago. The types of files we are dealing with in this book—WAVs, MIDIIs, RealAudio files, and their cousins—pose no threat. There is no way they can contain any program commands, so they cannot contain viruses. At most, they could crank up

your speaker volume higher than you'd like. So you can feel safe in choosing "Open it" if you want to listen to a file before you download it.

In the dialog box in Figure 9-7, the option called "Always ask before opening this type of file" is enabled, the default setting. When this option is enabled, your browser always displays this Warning dialog box whenever you click a link to this type of file. If you decide that this file type is safe, and you want to always open it without being asked, you can bypass this dialog box in the future by disabling "Always ask before opening this type of file." Since audio files cannot contain viruses, you can safely disable this check box for them.



Note

"Always ask before opening this type of file" cannot be disabled for certain high-risk file types, such as program files with extension .exe or .com. You cannot bypass the File Download dialog box for such files.

If I'm connected at 33.6 Kbps, how come I'm downloading at 3.2 Kbps?

This disparity perplexes and irritates a lot of folks. It sounds like you're using only one tenth of your bandwidth, but that's not really true. You're not connected at 33.6 kilobytes per second but 33.6 kilobits per second. Modem speeds are stated in kilobits per second – what the heck, it sounds faster. But your browser shows your download speed in kilobytes per second so you can estimate how long a download will take. Downloading at 33.6 kilobits per second works out to approximately 3.4 kilobytes per second. (It takes about ten bits to send a byte over a modem.) So 3.2 kilobytes per second comes close to your maximum speed. Doesn't that make you feel better?

You may be able to achieve maximum speed downloading from a nearby site at 3 a.m. But the traffic being handled by your ISP, the server you're accessing, and the Internet nodes your data must travel through all serve to slow things down. At each step, your data must wait its turn. Hence, your speed is often short of the maximum.

More factors intervene when you're connected at today's high speeds of 56 Kbps or faster. The server you're requesting data from may have slower modems than you do, so you may be stuck with a 33.6 Kbps rate even though your modem can go much faster. Even if the server also has 56 Kbps modems, FCC regulations currently prohibit servers using *plain old telephone service* (POTS—it's a technical term, honest) to transmit data faster than 53 Kbps, so that becomes the ultimate limit unless the server has digital phone service. (The same FCC regulations prohibit you from uploading any faster than 33.6 Kbps via POTS.) Other factors may also slow you down, in particular your own serial port's capabilities, as well as the number of connection points between you and your phone company. If you're managing to download at a rate between 6 and 7K per second, you're close to the maximum speed for a 56 Kbps modem via POTS.

Downloading background sounds from a Web site

When a sound plays in the background of a Web page, how can you download and save it? The site may not display a control panel for the background sound. If it does give you a control panel, you can try right-clicking the control panel to look for a Save As option. If not, the easiest way to save the sound is to copy it from the browser's cache as described earlier. Since you don't know the name of the file—which wouldn't help you in Netscape Navigator anyway—use the date and time to locate the right one. You can play any sound file in the cache by double-clicking it.

Downloading Files from FTP

Have you ever clicked a link on a Web site and ended up on a page like the one in Figure 9-8? This is an FTP (File Transfer Protocol) site, not a Web site. The Web has become so popular that newcomers tend to think it's synonymous with the Internet, but it's not. FTP is another service that gives people a way to share files over the Internet. It's a no-frills service—no graphics, no background sounds, no fancy fonts, no hyperlinks to other sites. Just a directory full of files for you to open or download. And because it doesn't have any frills, it's a lot faster.

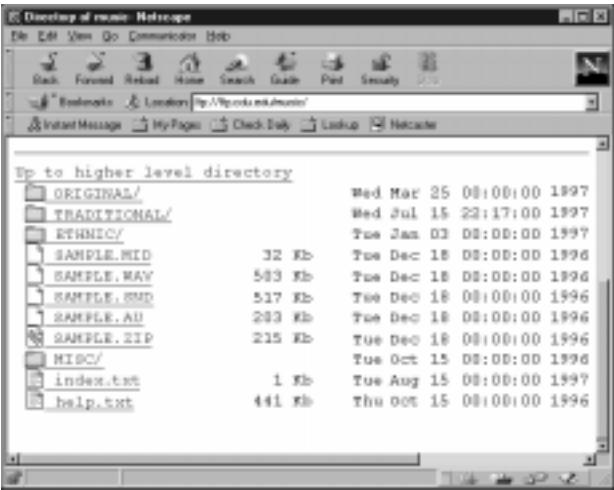


Figure 9-8 Sometimes you end up on an FTP site when looking for files to download.

An FTP site looks and behaves much like a directory tree. It might contain several subdirectories and/or files that you can open by clicking. If the directory you're currently viewing is a subdirectory, the entry at the top takes you up to the parent directory. There is often a text file called `index.txt` or `readme.txt` that describes what's in the directory, since the directory itself contains only file-names with no explanations.

When you access an FTP site via your Web browser, all the files listed are linked files and you can preview, download, and save them the same way you do linked files on a Web page.

Downloading Files from Newsgroups

A *newsgroup* is an Internet service where people post messages that anyone else can read and respond to, kind of like a bulletin board at the grocery store. In fact, newsgroups are often called bulletin boards. Figure 9-9 shows an example of a newsgroup devoted to bluegrass music. The example shows just the subject headings of the messages that are currently posted. You use the buttons at the bottom of the window to read or otherwise handle messages, as well as posting your own messages.



Figure 9-9 This newsgroup is for fans of bluegrass music.

To access a newsgroup, you need a *newsreader*—a program that formats and displays the contents of newsgroups, like the one shown in Figure 9-9. America Online and CompuServe both include built-in newsreaders—that's AOL's in Figure 9-9. The Microsoft Network doesn't provide a newsreader. You use your own

newsreader, probably the one built into Outlook Express if you have installed that feature. If you don't have any of these services, but you do have an Internet service, you can access newsgroups by using an independent newsreader.

Newsgroups on the Internet can handle text data only, causing tons of complications and hassle for people who want to post pictures or songs. Graphics and sound files are binary files, not text files. Theoretically, you can't post them in a newsgroup. But you can get around the limitation by encoding the file. Encoding turns a binary file into a text file. You can't read the text file—it looks like nonsense data—but when you decode it, it turns back into the original binary file. I don't want to get too deeply into encoding here. If you want to learn more about it, please see my book *MIME, UUENCODE & ZIP: Decompressing & Decoding Internet Files* (MIS:Press, 1997). Fortunately, most newsreaders now encode and decode binary files automatically, so you need only to be aware of the process.

Another problem with newsgroups is that they limit the amount of data you can send in a single message. Encoded binary files often exceed the limit, and you have to divide them into several messages to upload them. When you download them, you have to combine them again before decoding them. Fortunately again, most newsreaders now split messages automatically. Combining them is not so automatic, since you have to identify all the parts of the message for the newsreader. Take a look at the example in Figure 9-10, which shows a newsgroup where people post a lot of graphics and music files. When messages are split into parts, each part is marked [1/3], [2/3], and so on. I'll show you how to reassemble the parts when I talk about specific newsreaders in the following sections.

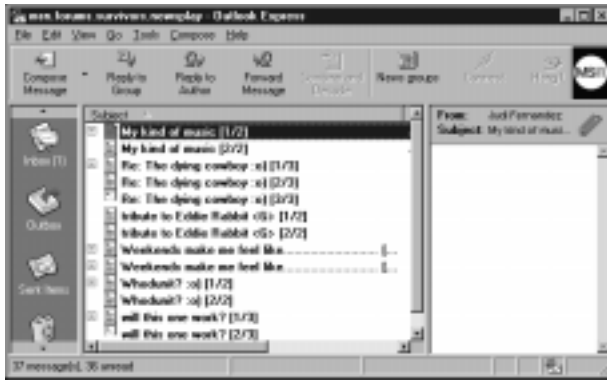


Figure 9-10 *These are all multipart messages as indicated by the [n/n] markers.*

Microsoft Outlook Express

Microsoft Outlook Express includes both an e-mail handler and a newsreader that are Internet capable—they can interpret HTML and Java scripts. You end up with colorful e-mail and newsgroups, because you can include photos, animated GIFs, and Java applets right in a message. This chapter shows you how to use the Outlook Express newsreader; the e-mail handler is covered in Chapter 10.

Only people who are also using Outlook Express or another newsreader with HTML capabilities can receive the graphics and sound files in their messages. Depending on their newsreader, other people may receive the files as attachments, which is fine, or they may receive unintelligible code, which they probably won't appreciate. Most of the people on the Microsoft Network (MSN) are using Outlook Express, so you can feel safe in posting messages containing HTML and Java scripts to MSN newsgroups, or to any newsgroup about MSN, Microsoft Outlook, or Microsoft Outlook Express.

MSN has many newsgroups related to sound. Here are a few of my favorite sound-oriented newsgroups to get you started. These are all on the `msnnews.msn.com` server, for MSN members only:

Some serious MIDI composers post their new works here:

`msn.computingcentral.electronicmusic.featured.performances`

People discuss MODs and post new works here:

`msn.computingcentral.electronicmusic.mod.music`

No files here, but lots of questions and answers about sound hardware, software, and files:

`msn.computingcentral.multimedia.sound`

When a file is attached to a newsgroup message instead of embedded in it, the message looks something like the one in Figure 9-11. You can see the attached file in the bottom pane of the window. Double-click the file to play it. To save it on your hard drive, right-click it to pop up a context menu where you can choose Save As.

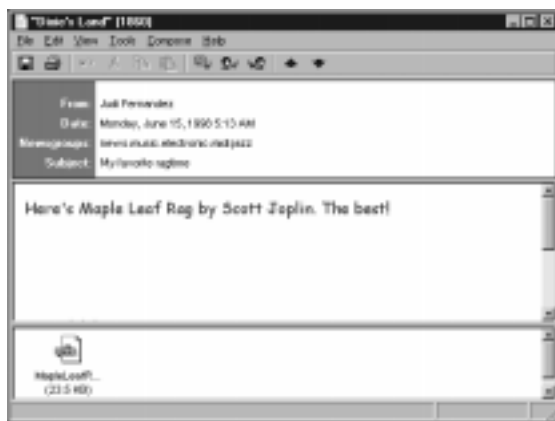


Figure 9-11 *The file attached to this message shows up in the bottom pane.*

If a message contains an embedded sound, you'll hear it when you read the message. But it's a little harder to save it on your hard drive. You can extract it from the background by forwarding the message to yourself as a plain text e-mail. Because plain text messages cannot contain embedded files, Outlook Express changes all embedded files into attached files when converting a message to plain text. The following procedure shows the exact steps to follow.

How to extract a background sound from an Outlook Express message:

1. Choose Tools ⇨ Options to open the Options dialog box.
2. Choose the Send tab to open the Send options.
3. In the "Mail sending format" box, select Plain Text.
4. Choose OK to close the Options dialog box.
5. Open the message with the embedded sound.
6. Choose the Forward Message icon. Outlook Express opens the message in a mail window. The bottom pane shows the sound file, which is now attached instead of embedded.
7. Right-click the file's icon in the bottom pane and then choose Save As.
8. You don't need to actually send the file to yourself. You can close the window after you save the file.

When you want to read a split message, you must first select all the parts of the message. The following procedure shows you how.

How to combine and decode a multipart message in Outlook Express:

1. Click the first part of the message.
2. Hold down Ctrl while you click the remaining parts of the message.
3. Choose Combine and Decode. Outlook Express opens a dialog box listing the messages you have chosen.

4. Drag the parts up and down as necessary to put them in the correct numerical order.
5. Choose OK to combine and decode the message. Outlook Express does the rest of the work and displays the finished message.

When you want to post a sound file to a newsgroup, you can either embed it in the message or attach it to the message. If you embed it, it plays automatically when someone reads the message, much like the background sound on a Web page. An attached sound must be downloaded and saved by readers who want to hear it. It's easier for your recipients to listen to an embedded sound but easier to save an attached one.

**Tip**

Figure out the “rules” of a newsgroup before posting a message with embedded sound. If all the other messages are plain text, and any sound files or graphics are attached, the people in that newsgroup probably don't want to be bothered with the extra time it takes to download messages with HTML content. But if you see that other people are embedding sounds, feel free to express your creativity and entertain your readers.

It's easy to embed a sound with Outlook Express 5.0—choose Format ⇄ Background ⇄ Sound and select the file. For earlier versions of Outlook Express, you have to use a rather intimidating Javascript if you want to embed a sound. You can find the instructions and the script at this Web site:

http://www.okinfoWeb.com/moe/format/format_008.htm

How to attach a sound file to a newsgroup posting using Outlook Express:

1. Choose Compose Message to start a new message or Reply to Group to respond to the current message. A new message window opens. Figure 9-12 shows what this dialog box looks like when the message is ready to send.

below the message, along with a link to the file. Clicking the link plays the file using your Netscape plug-in. Right-click the link and choose Save Link As to save the file on your hard drive.



Figure 9-13 You download an attached file by right-clicking the link at the bottom of the message.

Suppose you want to post a file by attaching it. After you open the Composition window by choosing New Message or Reply, click the Attach tool and select the file you want to attach. It's as easy as that. There is a way to embed sounds in a newsgroup message, but it's hard to do. If you're interested in trying, Chapter 10 contains a step-by-step procedure for embedding sounds in Netscape Messenger e-mail. The process is nearly identical for newsgroup messages.

CompuServe's CIM newsreader

CompuServe's newsreaders are much more primitive than Outlook Express. Figure 9-14 shows an example of a newsgroup displayed in CompuServe's CIM newsreader. I have set it up to retrieve and

decode a MIDI file attached to a message. (There's no way to preview a sound before downloading it.) You click the box next to the message to place an *X* in it. You also select the "Decoded" option so the newsreader will decode the file. Then you click Retrieve to download the file. When CompuServe displays the Save As dialog box, be sure to add the right extension to the filename if it doesn't already have one. After retrieving the file, use Windows Explorer or My Computer to locate and play it.

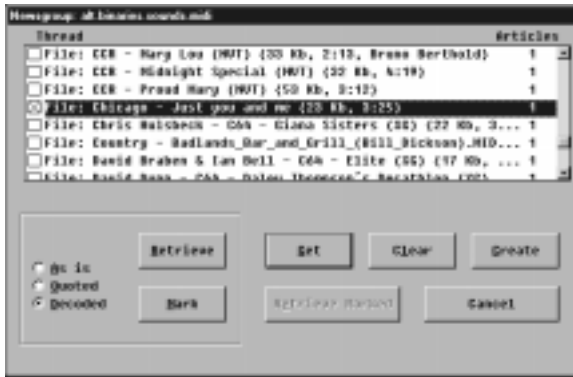


Figure 9-14 CompuServe's CIM newsreader can retrieve and decode sound files posted in messages.

Posting a sound file, or any binary file, to a newsgroup by using the CIM newsreader is not so easy, because you must encode and split the file yourself. I don't have room here to explain how to do that, as it's a huge topic, and you'll need some special software. For more information on how to post a sound file or a binary file to a newsgroup by using the CIM newsreader, see my book *MIME, UUENCODE & ZIP: Decompressing & Decoding Internet Files*, mentioned earlier in this chapter.

What's Next?

In Chapter 10, you'll learn how to send sound files to your friends via e-mail, as well as how to download the ones they send you.