

through anonymous FTP at **ftp.ncsa.uiuc.edu** in the directory /Web /Windows/Mosaic/viewers. The following are some of the software packages:

- GhostScript and Ghostview, display PostScript documents
- Lview, displays GIF and JPEG images
- MPEGPLAY, displays MPEG movies
- Speak, a Windows driver which allows the speaker in your personal computer to play sound files
- WHAM, an audio file player that works with Windows-supported sound cards
- Wplay, another audio file player that works with the PC speaker driver to play sound files

There are many viewer programs that can handle the different types of media files you find on the WWW. Some of these are commercial software packages; others are shareware that you can find on the Internet. If you have more questions about viewers or can't find the viewers you need, here are some additional sources of information:

- Read the FAQ (Frequently Asked Questions) file by clicking **FAQ Page** under the **Help** menu. If you scroll to the bottom of the document, there is a hyperlink entitled **Viewer Software Information**. Click this to load a document that gives you general information on how to customize Mosaic to use different viewers. This document also has links that let you load some of the more popular shareware viewers.
- Use Gopher or FTP to go to some of the big software repositories on the Internet and look around for viewer programs. Chapter 14, "Hot FTP and Gopher Sites," lists some of these servers.
- If you have Usenet access, read the newsgroup **comp.infosystems.www.users**. A discussion of viewers that work with Mosaic is an appropriate topic with this group.

Note

After you have Mosaic running, you can get more information about different viewers and where to find them from the URL **<http://www.ncsa.uiuc.edu/SDG/Software/WinMosaic/viewers.html>**.

Setting Up Mosaic for Windows on Your System

After you have obtained all the files you need to run Mosaic for Windows on your PC, you can go through the process of getting the software ready to run. This section covers the steps necessary to set up the basic Mosaic for Windows software, gives an example of setting up SL/IP software to connect your personal computer to the Internet, and discusses how to set up any auxiliary software you have retrieved to use with Mosaic.

Setting Up the Basic Mosaic Software

Setting up the basic Mosaic for Windows software consists of unpacking and installing the Windows 32-bit libraries and the Mosaic software itself. The first step is to install the Windows 32-bit libraries into your Microsoft Windows directories.

Installing the Windows 32-bit Libraries

The Windows 32-bit libraries, written by Microsoft, come with the standard Windows setup utility to do the installation. This makes the process of installing these libraries simple and almost foolproof. The following are the steps necessary to install these libraries:

Note

The Win32s add-ins enable Windows to run 32-bit programs such as Mosaic. 32-bit programs run faster than their 16-bit counterparts. The down side of this is that some users have complained that Win32s is not 100 percent stable. There have been complaints that it is buggy and won't work reliably with many existing applications. So, many Windows users have been reluctant to upgrade to Win32s.

Most software vendors whose programs have had trouble under Win32 have released updates and fixes so that their programs work in Win32. Microsoft also has released several updated versions of Win32s and these have dramatically reduced the problems with Win32 incompatibilities.

The authors and development staff of this book all have worked using the latest version of Mosaic, which is a 32-bit version. We have not experienced any problems with Win32s—with only one exception noted later in this section. The best advice we can give you is to back up your Windows directory and subdirectory before installing Win32s. That way if you have problems, you can restore from your backup.

1. Move the ZIP file you retrieved from the FTP site to a temporary directory on your hard drive.
2. Use the PKUNZIP command to unpack the ZIP file. For example, if the file name you retrieved was called WIN32S.ZIP, the command to unpack this file is **PKUNZIP WIN32S.ZIP**.

Note

This assumes that you have the PKZIP utilities in your standard path for executables on your system. You can put these utilities into your C:\DOS directory so the system can find them.

3. The temporary directory now contains the original ZIP file and several other files. One of these files is another ZIP file that contains the actual Windows libraries. If this file is called W32S115A.ZIP, use the command **pkunzip -d W32S115A.ZIP**.

Caution

The -d in the above PKUNZIP command is very important because it creates the correct directories to hold the distribution files. The setup program will not be able to find the files if the -d switch is not used.

4. The temporary directory now contains two directories called DISK1 and DISK2 that hold the Windows 32-bit library distribution files.
5. Start up Microsoft Windows.
6. Open the **File** menu and choose **Run**.
7. If the temporary directory you used is called C:\TEMP, type the following command in the Run dialog box: **C:\TEMP\DISK1\SETUP**. Select OK to run the setup program.
8. The setup program displays where it thinks your standard Windows directories are and asks you to confirm that you want to load the 32-bit libraries. Select Continue to load the libraries.
9. After setup has loaded the 32-bit libraries, it asks if you want to load a 32-bit version of the game FreeCell to test that the libraries were loaded correctly. If you have enough disk space to do this (less than 1 megabyte of space is required) you should select Continue to load this

software—it allows you to make sure that the 32-bit libraries are running correctly.

10. After setup is complete select Exit to leave the program. The 32-bit libraries should be completely loaded.
11. You can remove the files in the temporary directory, as they are no longer needed.

This completes the process of loading the Windows 32-bit library software. You can now proceed with loading the Mosaic for Windows software.

If you have a LaserMaster printer or printer accessory you may have a little work to do before you can install Win32s. For years, LaserMaster has used the term *Winspool* for their printer ports. For example, if you have a WinJet800—a modification that makes a LaserJet III print at 800 dots per inch—you have a print driver that is named *LM WinJet 800 PS on WINSPOOL*. The term WINSPOOL, then, is a protected one—after you've started Windows you cannot create a file called WINSPOOL, in the same way that you cannot create a file in DOS called LPT1 or COM1.

Unfortunately, Microsoft picked the name WINSPOOL.DRV for one of the Win32s files. So if you have installed a LaserMaster product, when you try to install your Win32s system, the setup program locks up when it tries to copy and extract the WINSPOOL.DR_ file off the disk.

That's if you have the Win32s files on a disk—if you are getting the ZIP file off the Internet and are trying to extract the archived files out of the ZIP file, you won't even be able to get as far as the installation procedure. You'll be able to extract all of the files out of the ZIP file except for one—WINSPOOL.DR_.

Luckily, the fix is fairly easy. Just follow these steps:

1. At the File Manager or Program Manager, open the **File** menu and choose **Run**. Type **sysedit** and press Enter. The Windows System Configuration Editor appears. This contains several document windows, one of which contains the SYSTEM.INI file.
2. Maximize the SYSTEM.INI document window.
3. In the SYSTEM.INI file, find these lines:

```
device=LMHAROLD.386  
device=LMCAP.386  
device=LMMI.386
```


4. Place a semicolon (;) at the beginning of each line (;device-LMHAROLD.386, for example).
5. Exit Windows.
6. Restart Windows.
7. Now you can continue. If you got the Win32s files off the Internet, extract them from the ZIP file into the directory you created for that purpose, and run the installation program.
8. When you have finished installing the Win32s system, go back to the SYSTEM.INI and remove the semicolons that you placed. The next time you open Windows you'll be able to use both your 32-bit Mosaic *and* your LaserMaster printer.

Installing the Mosaic for Windows Software

After you have loaded the 32-bit libraries, loading the Mosaic for Windows software is very straightforward. To set up the software, follow these steps:

1. Create a directory to hold the Mosaic for Windows software. (For example, you might create a directory called C:\MOSAIC.)
2. Move the Mosaic for Windows ZIP file you retrieved from the FTP site into this directory.
3. If, for example, the ZIP file is called WMOS20A7.ZIP, you can use the command `pkunzip WMOS20A7.ZIP` to unpack this file.
4. Copy the file MOSAIC.INI from your Mosaic directory to the directory C:\WINDOWS. This file contains configuration information used by Mosaic for Windows.
5. After you install the Mosaic software, you will probably want to create a program item in the Program Manager so that you can start Mosaic by clicking an icon. You may want to create your Mosaic program item in an already existing program group. However, you might want to go to the Program Manager and create a new program group for Mosaic.

To create a new program group, open the **File** menu and choose **New**. In the New Program Object dialog box, select Program Group, then select OK. Enter the name of the program group in the Description: field of the Program Group Properties dialog box, then select OK. A window for the new program group opens.

Now you have to create a new program item. Select the program group where you want to put Mosaic. To create a new program item, open the **File** menu and choose **New**. In the New Program Object dialog box that appears, select **Program Item**, then select **OK**. In the Program Item Properties dialog, select **Browse**; select the Mosaic EXE file in the browser; then select **OK** (or double-click the EXE file). This fills in the **Command Line:** field of the Program Item Properties dialog box. You can now select **OK** in this dialog box. The Mosaic icon appears in the program group.

6. The setup of the Mosaic for Windows software is now complete. You can remove the Mosaic ZIP file if you want—it is no longer needed.

While there are some customizations that can be done to the Mosaic for Windows software to personalize it to your needs, you can run the Mosaic software without any further work. You will, of course, need to set up your software to connect to the Internet before using Mosaic for Windows.

Note

After you have unpacked the Mosaic software, there are several files you should read before installing the software. The file **INSTALL.WRI** gives important installation information. The file **FAQ.WRI** answers some common questions about Mosaic, and also contains some installation information. There are several other WRI files, but these two are the most useful for someone just starting out with Mosaic.

Tip

When you create the Mosaic program item, the Program Manager uses the icon that is built into Mosaic, unless you specify a different icon.

Installing Viewers

You can run Mosaic without installing any additional viewers or configuring Mosaic to use them. But you may want to install these so you can view images, watch movies, and listen to sounds that you download through Mosaic. In general, to install a viewer for Mosaic, you only need to load the viewer program onto your local disk, then tell Mosaic where it is located, and what type of files you can view with it. To set up Mosaic to use a viewer, follow these steps:

1. If you haven't already downloaded the files for the viewers you need, consult the section "Multimedia Viewers" earlier in this chapter, to find the viewer you need, then use FTP to transfer it.

Note

If you are using a program you already have installed as a viewer, skip to step 6.

2. Create a directory for the viewer.
3. If the viewer files are compressed with PKZIP, unzip them into this directory.
4. Start Windows (if it isn't running).
5. If the viewer has an install or setup program, run it from Program Manager or File Manager by opening the **File** menu and choosing **Run**. Then enter the drive, directory, and install or setup like this:

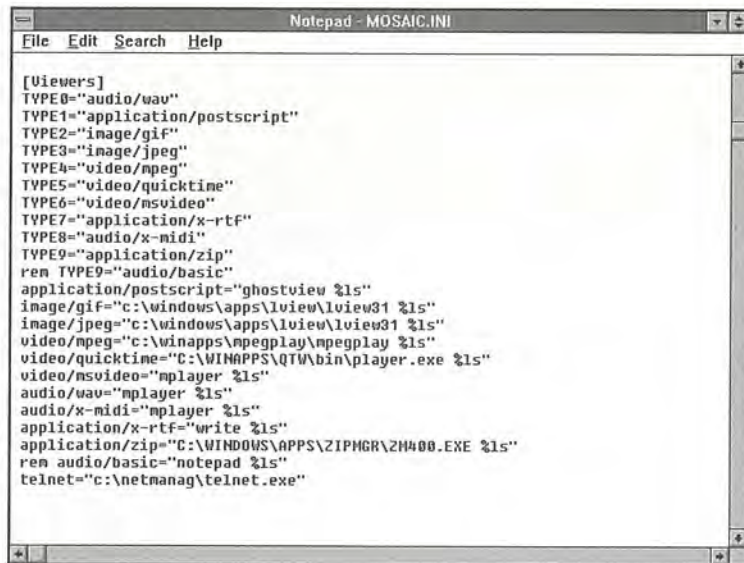
c:\viewer\install.exe

To install the viewer, follow on-screen directions.

6. After the viewer is installed, edit the MOSAIC.INI file in your c:\WINDOWS directory. (Use Notepad or any other text editor to open and edit this file.) Scroll down until you see the [Viewers] section, as pictured in figure 3.4.

Fig. 3.4

Your MOSAIC.INI file contains statements that tell Mosaic where it can find viewers for the different file types.



7. Find the lines for the file types for the viewer you are installing. (For example, GIF and JPEG for an image viewer, AU and WAV for a sound player, and so on.)
8. Change the path and program name in these lines to the path and program name of the viewer you installed. The line should look like this:

```
image/gif="c:\mosaic\lview\lview31 %ls"
```

where image/gif is the type of file and file extension,
c:\mosaic\lview\lview31 is the path and file name for your viewer,
and %ls ends every entry.

Note

If there isn't a line for the file type you need, you can add it anywhere in the viewer section using this syntax.

9. Save the file and exit the text editor. (If you are using an editor other than Notepad, be sure to save as text only.)

You can make additional changes to installed viewers in this section at any time.

Note

One of the nice features of Mosaic is that you can define "viewers" for things like Excel or Word files so that if Mosaic loads one of these file types, it automatically starts up the correct application to display the file. If you would like to define "viewers" for specific application files, check out items 11 and 12 in the FAQ/VRT file included with the Mosaic release. These items discuss in more detail how to modify the MOSAIC.INI file to define viewers for various file types, and specify new file types.

Using the Mosaic Interface

After you have installed all of the software that you need to run Mosaic, you can connect to your Internet provider and start Mosaic. Mosaic is a very powerful application, but it is graphically oriented and not difficult to use after you are familiar with all of its features.

Starting Mosaic

Before starting Mosaic, you should first be connected to the Internet. If your Internet connection is via your LAN, be sure you are logged onto your network. If you are connected to the Internet by a modem, start your TCP/IP software and login to your account.

After you have established your Internet connection, open the Mosaic program group (or whatever program group you put Mosaic in), and double-click the Mosaic icon. You are now ready to explore the Internet with Mosaic.

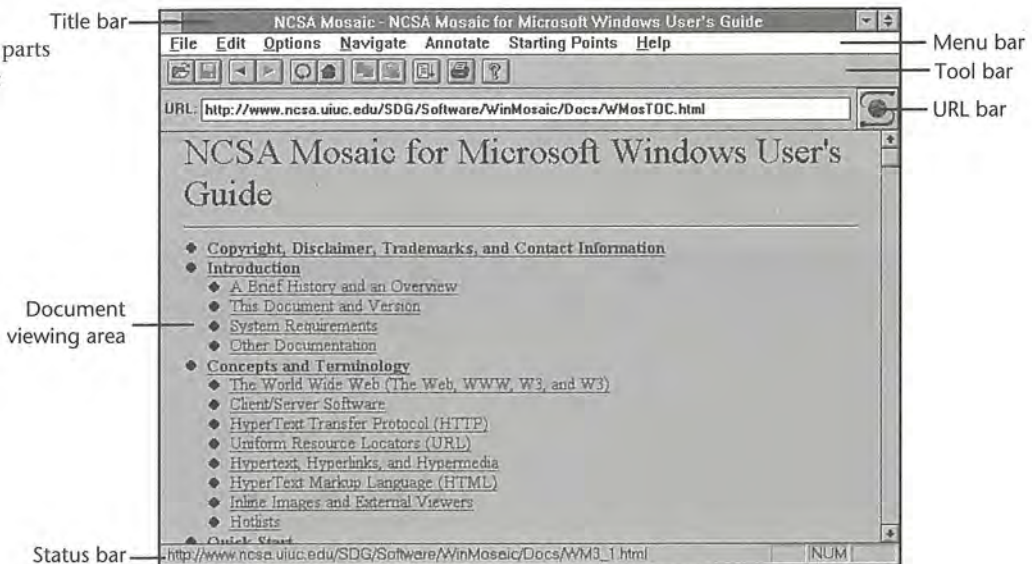
The Mosaic Window

When Mosaic starts up, it loads the document that is specified as the home page in your MOSAIC.INI file. Your window should look like the one shown in figure 3.5.

The full URL for the default home page (which is the Windows Mosaic home page, not the Mosaic home page) is: **<http://www.ncsa.uiuc.edu/SDG/Software/Mosaic/NCSAMosaicHome.html>**

Fig. 3.5

The different parts of the Mosaic window.



A brief description of each window part is given in the remainder of this chapter. Each window function is discussed in more depth in Chapter 5, “Navigating with Mosaic,” and Chapter 6, “Shortcuts to Favorite Places.”

Caution

Although the current version of Mosaic is very powerful, it is an application that is still under development. Some of the features shown in the menus and tool bar are not yet implemented. Features (words or icons that you would select) that are not available are dimmed. The developers intend to implement these features as soon as possible.

- The title bar contains the usual window function buttons (control menu box, and maximize and minimize buttons). In addition, it has

the name of the application (NCSA Mosaic) and the name of the WWW document that you are viewing.

- The menu bar gives access to all of the functions you need to use Mosaic. You can retrieve documents to view, print documents, customize the look of your Mosaic window, navigate between documents, annotate documents, save files, and access Mosaic's on-line help.
- The URL bar shows the URL of the current document. When you open a document, its URL is displayed, and the Mosaic logo on the right side of the URL bar spins while the document is being retrieved.
- The document viewing area is the area of the window where you see the text of a document and any inline images it may contain.
- The status bar serves two functions. While Mosaic is loading your document, it shows the progress of the different files that are being loaded. When you are viewing a document, it shows the URL of the hyperlink that is under your cursor. The three boxes at the right of the status bar show the state of your Caps Lock, Num Lock, and Scroll Lock keys on your keyboard.
- The tool bar gives you quick access to some of the most used features in Mosaic (see fig. 3.6).

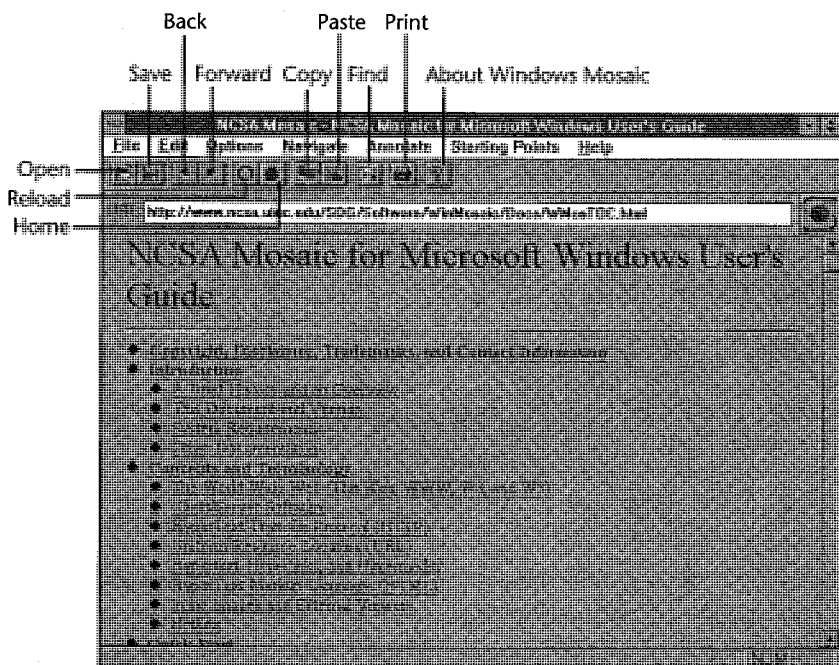


Fig. 3.6
The buttons on the toolbar.

The following list gives basic descriptions of these buttons:

- **Open.** Opens a URL
- **Save.** Saves the current document to disk (not yet implemented)
- **Back.** Displays the previous document in the history list
- **Next.** Displays the next document in the history list
- **Reload.** Reloads the current document
- **Home.** Goes to the default home page
- **Copy.** Copies the current selection to the Clipboard
- **Paste.** Pastes the contents of the Clipboard to the active window (not yet implemented)
- **Find.** Finds a text string in the current document
- **Print.** Prints the current document
- **About Windows Mosaic.** Shows the About Windows Mosaic window

From Here...

To learn more about using Mosaic and to find interesting WWW documents, refer to these chapters:

- Chapter 5, "Navigating with Mosaic," tells you how to use Mosaic to find and view documents on the WWW.
- Chapter 6, "Shortcuts to Favorite Places," tells you how to become an expert WWW Navigator.
- Chapter 13, "Hot Home Pages," discusses where to find some of the most interesting collections of WWW documents.

Chapter 4

Getting Mosaic for Mac Running



Before you can surf the net with Mosaic on your Macintosh, your Mac must be connected to the Internet and have the relevant software loaded.

In this chapter, you learn to do the following:

- Assess your computer to see if it can handle Mosaic for Macintosh
- Obtain a copy of Mosaic for Macintosh and its auxiliary viewers
- Install and configure Mosaic and its viewers
- Recognize the Mosaic for Macintosh interface and interact with it

Can Your Computer System Run Mosaic for Macintosh?

Before you attempt to load and run Mosaic for Macintosh, you must determine whether your personal computer has adequate resources for the job. Mosaic is a fairly hefty application; it will test your system's capabilities.

Basic System Requirements

The Macintosh product line is quite consistent across all models, so in general Mosaic will run on any Mac with System 7. You may, however, experience dilemmas with a Mac Plus keyboard, as it lacks a Control key.

To run Mosaic, your computer needs adequate main memory (RAM). Most Macintoshes have at least 4M RAM. Most systems are usually 1M-3M and because Mosaic needs 3M and also transparently launches auxiliary

programs on the fly that take up to 1M, things get tight quickly. 6M of RAM is recommend. If you are short on memory, you might try an alternative to Mosaic, the less resource-intensive MacWeb (discussed in chapter 12), or the commercial RAM Doubler product. In a pinch, Mosaic will run somewhat crippled, without graphics or sounds, in 4M RAM.

Minimum disk space required is 3M, not counting room to download and install the basic Mosaic configuration. Mosaic needs some space for temporary files as it's running. If you collect all the auxiliary viewers, you'll need about 3M more. To be comfortable, plan on 10M total.

Because a big part of Mosaic's appeal is its multimedia offerings, having the right peripherals to fully enjoy them is a big win. A color monitor is a must. All Macs have sound capabilities and new models sometimes feature stereo speaker jacks.

Mosaic performance is primarily limited by the link speed, not by your system speed, but of course more processor speed is always nice.

Network Requirements

Mosaic is a TCP/IP-based client application that requires TCP/IP Internet access. You have to be on a LAN that has a high speed dedicated connection, or you need to set up a SLIP or PPP link using a modem and a regular phone line. The second option is discussed in books such as Adam Engst's *Internet Starter Kit for Macintosh* (published by Hayden Books). Note that System 7 requires only MacTCP 1.1.1, but Mosaic requires a newer version, 2.0.2; the latest is 2.0.4 (patches are available on-line).

Other Software Requirements

You also need a utility to download the files to your Mac. If you are UNIX-literate and you have a shell account on your access provider's host, it is possible to obtain the files that way. An easier route is to have Fetch, the best Macintosh FTP client application, ahead of time so that you can FTP files directly to your computer.

All files that you download from the Internet come archived and compressed, indicated by file extensions such as SEA, HQX, CPT, and SIT. You need a utility to uncompress and unarchive them. Fortunately, a freeware product from Aladdin Systems, Stuffit Expander, can handle all common formats. You may very well already have a copy of this product, as it is often included with commercial software.

Where to Get Mosaic for Macintosh and Associated Software

All the software necessary to run Mosaic is public domain, freeware, or shareware written by universities, companies, or individuals. The following sections discuss where you can find and download this software.

Obtaining Network Software

If you are on an Ethernet LAN, you probably already have a TCP/IP stack and a system administrator. If you are not on an Ethernet LAN, you have to set up your standalone Mac with a SLIP or PPP connection. Though it is assumed in this book that you have already solved this issue, here is a recap of the elements you need:

- SLIP or PPP software, which can be obtained by downloading from the net, by buying an Internet beginner's book that includes a disk, or by buying a commercial communications package (such as Symantec's VersaTilities).
- MacTCP, the only TCP/IP stack for the Mac, available from Apple (separately and now bundled, starting with System 7.5) or included with the books or commercial packages mentioned previously.
- A high speed modem—V.32 9600 bps or above.
- A provider, such as Netcom or Panix.

The next sections discuss where on the Internet you can find Mosaic and its helper applications, exactly which helper applications to look for, and what versions are the latest.

Where to Get Mosaic Software

You can download Mosaic software from the Internet. If you haven't downloaded from the Internet, don't panic—there's a first time for everything. The process is painless. Use the Internet's File Transfer Protocol, or FTP, to access public access sites (called anonymous because that's the guest login name) where public domain, freeware, or shareware archives of Macintosh software reside.

Be aware that the software in these archives is work in progress, and unlike infrequent upgrades of commercial software, new versions come out weekly or monthly rather than yearly. The current versions at the time of writing

this book will undoubtedly not be the current versions when you read this book. Usually it isn't critical to have the latest and greatest version of an application; in fact, it can be considered wise to lag behind a bit, to avoid new bugs. Update your versions quarterly if you want to, and keep your ear to the Net with respect to bug reports and major version updates. Otherwise, don't worry.

Major FTP sites are usually run by universities on a voluntary basis. The number of people on the Internet is growing by about 20 percent per month. It should be no surprise that traditional Mac archives are overloaded; you may experience slow response, refused connections, or policy changes.

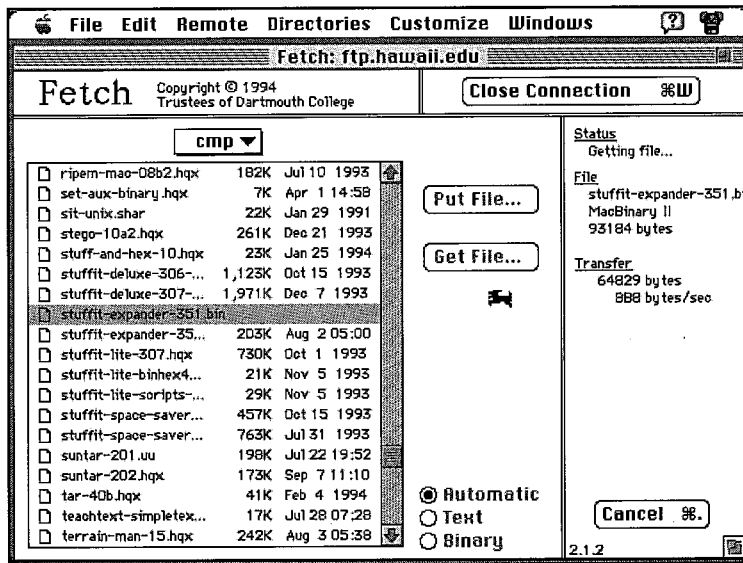
Another difficulty you may run into is that naming conventions for directories and file names are inconsistent across FTP sites, as are archive/compression methods. Thus, it is difficult to definitively and concisely document how to obtain these applications.

Now, here's some good news. There is a subset of all the Mac software archive sites, the Info-Mac sites, numbering about 30 worldwide, that follow standard directory and file naming conventions. You may hear these sites referred to as Info-Mac *mirrors*, because they mirror or duplicate each other exactly. Restrict your searches to these sites; if one is busy, just move on to the next one. Also, use Anarchie (available at any of the Info-Mac sites, in the directory Communications/tcp/anarchie-130.hqx). It's more than just a Mac implementation of Archie, a global FTP-space search tool; it's that plus FTP. Even if you are competent with Fetch, the most popular Mac FTP client, changing to Anarchie is a good move.

Anarchie plus the Info-Mac sites greatly simplify an otherwise frustrating downloading task. However, in case you choose to go it alone, a few of the Info-Mac FTP sites are **ftp.hawaii.edu**, **grind.isca.uiowa.edu**, and **mrcnext.cso.uiuc.edu**.

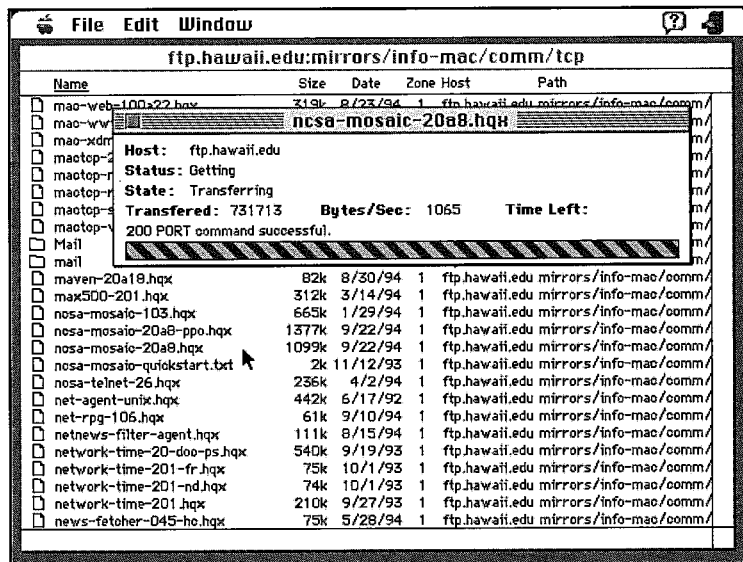
The next step is to move from Fetch, Anarchie, and Stuffit Expander, to Mosaic and its helper applications. A little extra work on the front end can save you enormous amounts of effort and grief later.

Use Fetch to retrieve a copy of Stuffit Expander (see fig. 4.1).

**Fig. 4.1**

You can use Fetch to retrieve the binary of Stuffit Expander from an Info-Mac site like **ftp.hawaii.edu**.

Next, use Anarchie to select and download Mosaic from an Info-Mac mirror (see fig. 4.2).

**Fig. 4.2**

The Info-Mac site **ftp.hawaii.edu**, using Anarchie to download Mosaic.

Multimedia Viewers

To add some pizzazz to your exploration of the Internet with its multimedia capabilities, Mosaic must be able to interpret graphics and sound files. Because graphics and sound files can be large, they are usually compressed to save server disk space and transmission time. Mosaic can interpret the majority of files it accesses by itself. To view some images, watch movies, and listen to sounds, however, Mosaic needs help from additional utilities or auxiliary viewers.

Table 4.1 lists the external viewers Mosaic is initially configured to use, the latest version number, their size in kilobytes, and their location on any Info-Mac server.

Table 4.1 Mosaic Viewers and Their Info-Mac locations

Application	K	Directory
Anarchie 1.3	461	Communications/tcp/anarchie-131.hqx
GhostScript 2.5.2b3	3058	Graphic/util/mac-ghostscript-242b3.hqx
GIFConverter 2.3.7	475	Graphic/util/gif-converter-237.hqx
JPEGView 3.3	776	Graphic/util/jpeg-view-33.hqx
NCSA Mosaic 2.0A8	1099	Communications/tcp/ncsa-mosaic-20a8.hqx
Sound Machine 2.1	75	Sound/util/sound-machine-21.hqx
Sparkle 2.14b	344	Graphic/util/sparkle-214b.hqx
Stuftit Expander 3.5.1	93	Compress-Translate/stuftit-expander-351.bin

Some notes on the applications in Table 4.1:

- Stuftit Expander not only is used during Mosaic installation, but also is used while Mosaic is running to uncompress downloaded information. Note that Info-Mac files nearly all have HQX endings.

- GhostScript is a PostScript on-line viewer. Because GhostScript is so large and used infrequently, feel free to come back for it later.
- JPEGView, Sparkle, and GIFConverter handle graphics. GIFConverter is shareware, for which the author requests voluntary payment.
- Sound Machine handles sound files.
- You'll see a PowerPC version of Mosaic next to the one mentioned in table 4.1, named **ncsa-mosaic-20a8-ppc.hqx**.
- An upgrade patch from earlier versions of MacTCP to the latest, 2.0.4, is also available as **Communications/tcp/mactcp-20x-to-204-updt.hqx**.

Mosaic also uses some programs you probably already have local to your Macintosh as helper applications, such as TeachText, Microsoft Word, and Simple Player (the latter bundled with QuickTime from Apple).

Setting Up Mosaic for Macintosh on Your System

Mosaic and its viewers install in the normal Macintosh fashion; if you are familiar with this process, you can safely skim or skip this section.

First, here are some general Macintosh housekeeping procedures we like to follow:

- Place the application(s) you are installing in a top-level folder called Applications.
- For any application that you launch often, consider making it an Apple menu item. Consult your Mac manual for the specifics, but here's a quick lesson: click the application once, open the File menu and choose Make Alias, and place the resulting alias in System:Apple Menu Items.

If you followed these suggestions and if you used Anarchie and Info-Mac sites to retrieve the files, you can now install Mosaic and its helper applications.

For each application you downloaded, Anarchie has left three files on your Desktop. The first file is the actual downloaded file, ending with the file name extension HQX. This is an ASCII-encoded or BinHexed file; it just

means 8-bit ASCII was encoded into 7-bit ASCII because some transmissions will lose the eighth bit. Throw this file away. Anarchie automatically unencoded it already to produce the second file, a compressed archive, usually ending with the file name extension SIT. Throw this file away too. Lastly, Anarchie automatically uncompressed and unarchived the second file to produce the third file, a Macintosh folder (usually) containing the program you were after and any associated files such as documentation. Keep this file and move it into your top-level folder named Applications.

In case you didn't use Anarchie, you may have to manually and perhaps repeatedly use StuffIt Expander for this unpacking. Note that the file to be unpacked has to be dragged on top of the StuffIt Expander icon; it doesn't work to double-click on either the packed file or StuffIt Expander.

Optionally, throw away all documentation and samples to save disk space. If an application is left alone in a folder, move it up a level and delete its folder.

JPEGView and GhostScript are unusual in that they have system extensions. Drag and drop JPEGView, JFIF Preview and MacGS Menu INIT to the System Folder icon. This triggers Finder to ask if you want to put them in the Control Panels folder; you do. Reboot so the extensions take effect.

Make an Apple menu alias for the Mosaic application and rename it Mosaic. There is no need to do this for Mosaic's helper applications as Mosaic launches them as needed automatically.

Using the Mosaic Interface

For all the complexity required to make WWW work, Mosaic is incredibly easy to use, which is exactly why it was created. In this section you bring up your Internet link, launch Mosaic, and familiarize yourself with Mosaic's look and feel.

Starting Mosaic

First, you must have your link to the Internet up and running. On a LAN with a dedicated link to the world, that's no problem—it's always up. If you are using InterSLIP or MacPPP as your connection software there is also no problem—they can detect when a TCP/IP application such as Mosaic attempts to access the Net, and they bring up the link transparently. Otherwise, you have to manually launch your SLIP link.

Now double-click the Mosaic icon to launch it (or, if you have created an Apple menu item for it, select the Mosaic icon).

The Mosaic Interface

This section explains the basics of Mosaic's user interface—what it looks like and what you can do with it.

The Document Window

The first screen you see is the NCSA Mosaic Home Page (see fig. 4.3). This section explains the document window first, and then explains the menus and buttons.

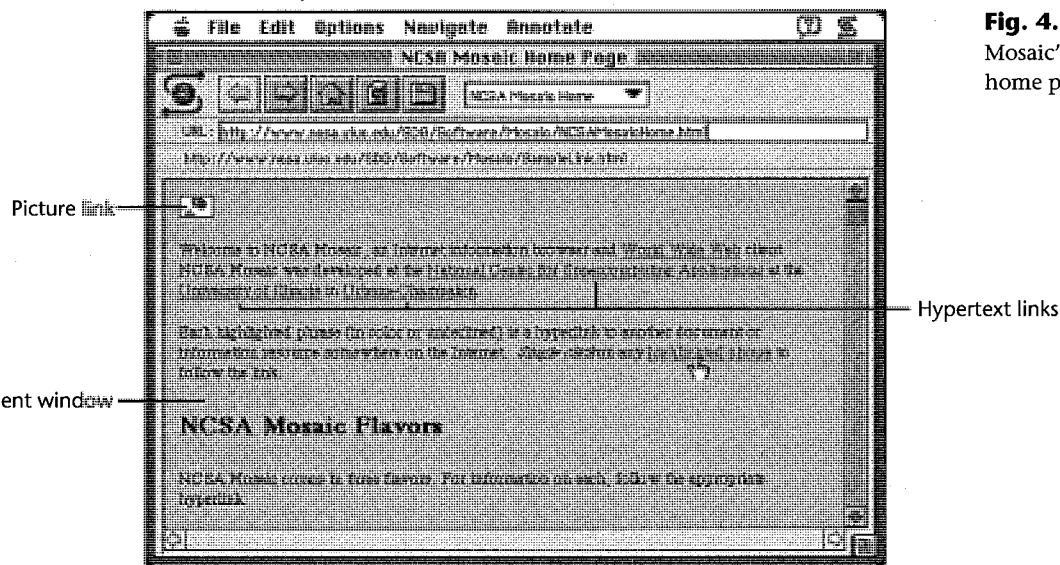


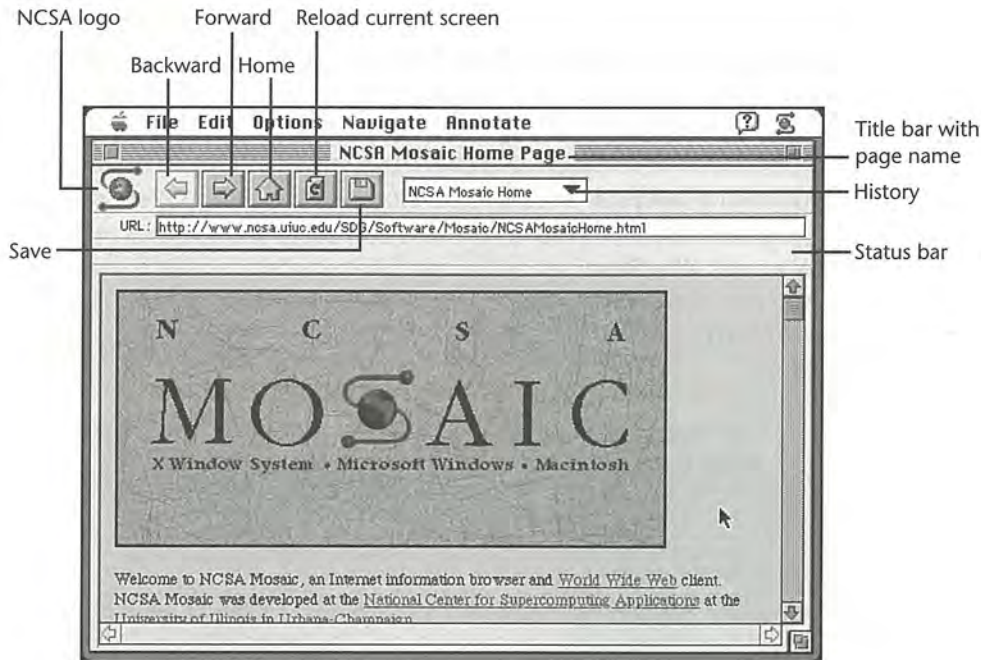
Fig. 4.3
Mosaic's default
home page.

Notice that some text is highlighted; if you have a color monitor, this text also is blue. These highlighted phrases are the hyperlinks; click one and it branches to another page or screen. If you choose to backtrack to a previous screen, you will see that any branches already explored are red.

Also, notice the little square icons. These are links to either graphics or sound files, the multimedia part of Mosaic. Click them and a picture expands or sounds play. Compare figures 4.3 and 4.4; figure 4.4 shows the expanded graphic from figure 4.3.

Fig. 4.4

Picture icon expanded and several links already explored.



Mosaic's Interface

This section covers Mosaic's menus, buttons, and status windows (refer to fig. 4.4).

You immediately see many familiar elements. The usual elements of Macintosh's user interface are present, including the window close box, window zoom box, window resize box, and scroll bars. Mosaic uses the Macintosh title bar to display the name of the current web page.

With Mosaic's pull-down menus you can type a URL name to jump to. You can set your personal preferences such as colors and fonts. You also can choose to start your journey from one of a half dozen recommended starting points. You can control whether images are automatically expanded, which is especially useful if you are on a slow link. Lastly, you might create your own hot list of nifty URLs (or bookmarks) you find on your explorations, so you can find them easily again.

Next, find the NCSA logo (an icon that resembles an uppercase S); it spins to show downloading activity. To the right of the S are five tool icons that provide shortcuts for moving forward or for moving backward a page, for returning to the home page, for reloading the current screen, and for saving a screen to a local file.

To the right of the five icons is the history list. If you click and hold the down arrow, a stack of the pages you've visited displays; you can use the mouse to select one and jump back to it immediately.

Open the Options pull-down menu and choose the first item, Show URLs. A new window appears below the line of items. It's called the URL bar, and shows the URL of the web page you are currently viewing. It's up to you whether to leave the URL bar showing (you can hide it by toggling Show URLs), though typing in new URL descriptions here is a bit faster than using Open URL in the File menu.

Look at the last display item, the status bar, located below the URL bar. Informative messages (good and bad) are displayed here. As you pass the mouse arrow over highlighted text, the hyperlink of that text is displayed. When you choose to explore a hyperlink by clicking it, the status window either says the link is being downloaded or that an error occurred.

From Here...

Now you're ready to explore. Use the following chapters as your guide:

- Chapter 5, "Navigating with Mosaic," teaches you more about manipulating Mosaic.
- Chapter 6, "Shortcuts to Favorite Places," shows you advanced Mosaic tricks.
- Chapter 13, "Hot Home Pages," points you to the best of WWW home pages.

5

Chapter 5

Navigating with Mosaic

The World Wide Web is one of the best examples of *cyberspace*. This system of linking documents together so that you can move between them with little effort lets you travel to many different places, literally, around the world, learning about any topic you can imagine. But, like any traveler in a new place, you can easily get lost.

Mosaic is an easy-to-use interface that lets you travel the WWW. It has many convenient features to allow you to keep track of where you've been and get to places quickly. This chapter assumes that you have read the section, "Using the Mosaic Interface" at the end of chapter 3, "Getting Mosaic for Windows Running," and are familiar with the Mosaic concepts discussed in chapter 2, "Introduction to the World Wide Web."

In this chapter, you learn to do the following:

- Start up Mosaic
- Use Mosaic's basic features
- Navigate between documents
- Handle errors you may encounter

What Is a Home Page?

The designers of Mosaic define a *home page* (or home document) as the document that you tell Mosaic to display when it starts up. This document should contain links to the documents and WWW sites that you use most frequently. Many people mistakenly use the term home page for the welcome

page that you get when you connect to a WWW site. A home page provides you with access to the WWW sites or documents that you use most. Your project or company may have its own home page to give members easy access to needed information. You can load someone else's home page or design your own.

When you start the Mosaic software, it comes with the home page predefined as the NCSA Mosaic welcome page for your particular computer type (Windows or Macintosh). You probably want to change this, because, for one thing, the NCSA Mosaic page is probably not very useful to you, unless you are involved in the installation and maintenance of Mosaic at your site, and you want to keep up with the latest information from NCSA. Retrieving a document causes a load on the machine where the document is located. If everyone used the NCSA Mosaic home page as their home page, the NCSA WWW machine would become very slow.

Telling Mosaic What Home Page to Load

Mosaic finds the URL for your home page in the Main section of your MOSAIC.INI file. Replace the default URL (everything after the equal sign) in the line

```
Home Page=http://www.ncsa.uiuc.edu/SDG/Software/WinMosaic/HomePage.html
```

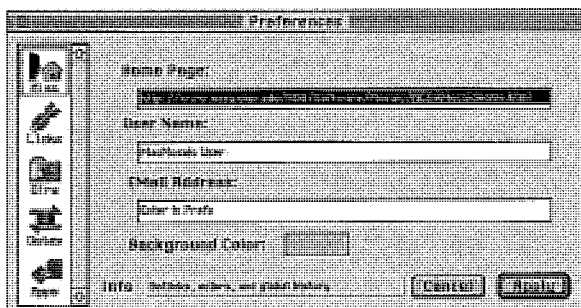
with the URL for the document you want to display as your home page. Your home page can be any document that you can access at a WWW site. (See "Working with Local Files" later in this chapter for details on how to make your own home page or on how to make a file saved on your computer into a home page.)

When Mosaic starts up, it displays the document that was specified in your MOSAIC.INI file. After the home page loads, the URL for your home page appears in the URL bar (if you have it enabled). From here, you can click on any of the links in your home page document to load the documents you use frequently.

If you want to return to your home page at any time, open the **Navigate** menu and choose **H**ome. This reloads your home page document.

Note

If you have a Mac, it's easy to change the home page. Open the Options menu, choose Use this URL for Home. This makes the currently open document your new home page. You can also change this by opening the Options menu and choosing Preferences. Click Misc (miscellaneous) and type the URL in the Home Page text box in the Preferences dialog box (see fig. 5.1).

**Fig. 5.1**

Changing the home page on a Mac in the Preferences dialog box.

You can also tell Mosaic not to load any page when it starts up. To do this, edit your MOSAIC.INI file. In the Main section of the file, set the following:

```
AutoLoad Home Page=no
```

Mosaic starts up with a blank display, and you can begin your navigation of the WWW from there.

Note

To set Mac Mosaic so that it doesn't open a home page automatically, open the Options menu and choose Preferences. Click Misc and then delete the home page from the Home Page text box. A better strategy is to have a local .html document as your home page so it starts up immediately. See "Creating Your Personal Home Page" later in this chapter.

Moving between Documents

After you start Mosaic, you can move between WWW documents in two ways—you can click on links in the document you are viewing or you can use Mosaic's Open URL dialog box to enter a URL. If you have loaded a document, it will probably include links to other documents. After all, the purpose of the WWW is to let you move quickly between related documents without having to enter long path names. If there are no links in the document, it's not a very useful WWW document. But, even if your current document has no links, you can still move between documents.

Moving between Documents Using Links

Hypertext links in a document are indicated in the document viewing area. They may be indicated in a number of different ways. If your monitor is color, the links can be displayed in a different color than other text. If you have a black-and-white monitor, the links can be underlined. On all displays, when you move your cursor over an area of the screen that has an active link, your cursor changes from an arrow to a pointing hand.

Tip

A third way to move between documents is to use hotlists that contain items with predefined URLs. Creating and using hotlists is covered in chapter 6, "Shortcuts to Favorite Places."

Note

On the Macintosh, Mosaic can distinguish links to documents that you have viewed previously from links to documents that you have never viewed (or viewed long ago). By default, blue links are those that you have not travelled, and red links are those you have seen.

A *link* can be a word, a group of words, or an image. Look at the Windows Mosaic home page in figure 5.2. When you run Mosaic on a color display, you see a number of blue items. The words *University of Illinois*, *Last Update*, *alpha 6*, *GrowStub*, *Second International WWW Conference '94: Mosaic and the Web*, and *NEW* are all in blue (the default hyperlink color, which you can change). In addition, the large graphic at the top of the window is outlined in blue.

If you move your cursor over any of these words or over the graphic, the cursor changes to a pointing hand. The URL associated with each of the links that you pass over appears in the status bar (if it is enabled). To activate a link, place your cursor over the link and click. Mosaic loads that document and displays the URL for the document in the URL bar (if it is enabled).

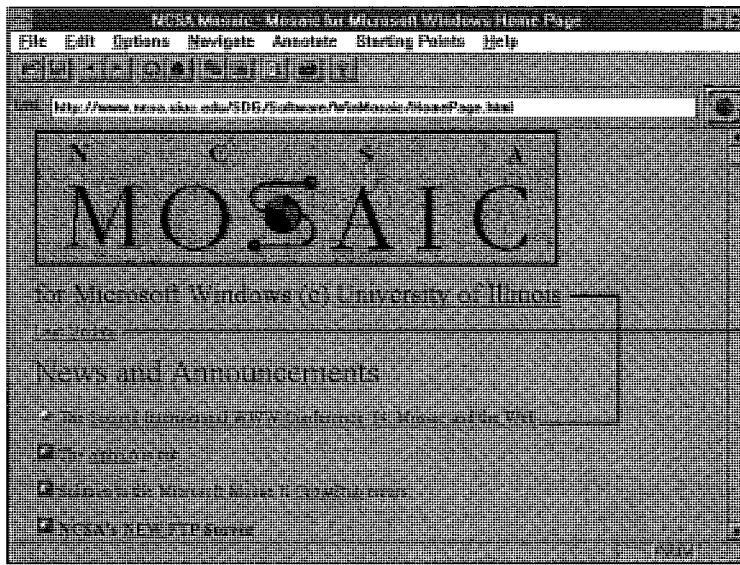


Fig. 5.2
The Windows
Mosaic home page,
with hyperlinks
identified.

Moving Backward and Forward

Typing long URLs and scrolling through documents to look for the links you want gets rather tedious. If you're jumping between a number of documents, take advantage of three helpful navigating commands: **Back**, **Forward**, and **Reload**.

Mosaic keeps information about what documents you have loaded (see a discussion of the history list in chapter 6), and lets you move quickly between these documents using the **Back** and **Forward** commands. The **Back** command takes you to the previous document that you had open. To go back, open the **Navigate** menu and choose **Back**.

The next of these commands is **Forward**. The thing you have to remember about **Forward** is that you can only move forward after moving back. (This concept is rather confusing, but makes more sense when you have read about history lists in chapter 6). To move forward, open the **Navigate** menu and choose **Forward**.

The last command is **Reload**. This command again displays the document that you are currently viewing. To reload the current document, open the **Navigate** menu and choose **Reload**.

Note

Sometimes documents have forward and backward link buttons at the top or bottom of the document. This is especially true for a series of documents that is meant to be read in order, or where the documents are closely related. These link buttons usually take you to the next or to the preceding document in the series. There is often an “up” button that takes you back to the point from which you entered the series, also. To use these buttons, click them just as you would any other link in a document.

Tip

On the Macintosh, you can get rid of all the documents in your cache (causing Mosaic to reload them the next time you jump to them). Open Options and choose Flush Cache.

When you are reading documents, often you move back and forth between one document and others which are linked to that document. To keep from having to load the main document from its URL every time you view it, Mosaic keeps copies of the last few documents you viewed on your local computer. This is called *caching*.

Caching is good because it keeps Mosaic from making unnecessary demands on Internet resources. It does take up resources on your own computer, though, so you can only cache a limited number of documents. In Windows Mosaic, you can edit your MOSAIC.INI file and set the number of documents you want to cache by setting the `Number=` line in the [Document Caching] section of the file (the default is 2).

Moving between Documents Using URLs

If you don't want to go to any of the documents whose links are displayed in the current document, or if you did not load a home page or for some other reason currently have no document displayed, you can load a new document by specifying its URL to Mosaic. Refer to the “URLs” section in chapter 2 for information about how to correctly format a URL. To enter a URL directly:

1. Open the **File** menu and choose **Open URL**.
2. The Open URL dialog box appears (see fig. 5.3). Click the box next to URL. The contents of the box (set to the first item in your current hotlist) are highlighted.

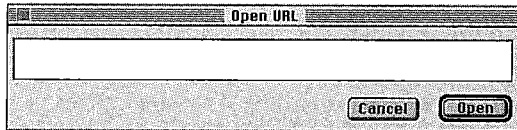
Fig. 5.3

The Open URL window enables you to enter directly the URL for the next document that you want to view.



Note

This dialog box looks slightly different on a Mac (see fig. 5.4). As you can see, there is simply a blank text box in which to enter the URL. When you open this dialog box again, the last URL you typed is there.

**Fig. 5.4**

The Open URL dialog box on a Mac.

3. If you want to enter a completely new URL, just begin typing the URL in the box and the old contents are deleted. If you want to modify the URL that is shown, click the box again and your cursor is inserted in the text, where you can edit the current URL.
4. Choose OK (Open on the Mac) to load the URL that you entered, or choose Cancel if you do not want to load that document. If you choose OK, Mosaic loads that document and displays the URL for the document in the URL bar (if you have it enabled).

Note

When you load a new document, Mosaic usually erases the document that was in the document viewing area and displays the new document there. On the Macintosh, you have the option of opening a new document window, which displays more than one document at a time. To open a new document window, open the File menu and choose New Window: a new window appears with your home page displayed. If you choose Clone Window, the new window displays the same document as the first window. To close any of your Mosaic document windows, open the File menu and choose Close.

What You See When a Document Is Loaded

When you load a document, Mosaic gives you a lot of information about what is happening. The globe in the URL bar rotates, with its beacon flashing. A number of different messages appear in the status bar. These messages can include:

- Doing nameserver lookup on:<hostname>
- Connecting to HTTP server (If it is another type of server, such as Gopher or FTP, that protocol is indicated rather than HTTP.)

- Reading response
- Transferring:<counter> bytes
- Transferring inline image <filename.gif>:<counter> bytes

Loading documents can take a few minutes, especially if the document has a lot of large graphics and your computer has a relatively slow (less than 9600 bps) connection to the Internet. There is one thing you can do to speed up the loading of the document: tell Mosaic not to load the in-line graphics from the document. To stop the loading of in-line images in Windows Mosaic, open **O**ptions and choose Display Inline Images. This feature is turned off if there is no check mark next to it. On the Macintosh, open Options and select Auto-Load Images.

If you turn off the loading of in-line graphics, Mosaic displays placeholder icons in the document instead of the graphics. If you want to see one of the graphics that was not loaded, click the graphic icon and Mosaic will load that graphic.

It is nice to be able to follow the status of the document load because this can be the first (or sometimes the only) indication that there is a problem. For example, if you try to load a document that is of a type Mosaic does not recognize, Mosaic makes the connection to the server, but simply aborts the load because it does not recognize the document type. If Mosaic aborts a load in this way, it shows an initial connecting message, but then doesn't show a transferring message in the status bar. Another indication of a transfer error is that the globe in the URL bar stops spinning. Mosaic gives no other indication that it aborted the document load.

It is also nice to be able to watch the counter increase as the document is loaded. If you know the file size of the document you are loading, you have an idea of how far along you are and how much longer you can expect it to be before the document is loaded.

Note

If you don't know the size of the file you are loading, the counter isn't very useful. There is another Web browser from EiNet (they have Windows and Mac versions) that adds a visual progress meter to show how much of the page has loaded. This shareware program is covered in chapter 12, "Other Ways to Access the World Wide Web."

Looking for Information in a Document

If the WWW document you are reading is short, it is easy to scroll through the document (or use Page Up and Page Down) to find information of interest to you. If you have loaded a very long document, though, Mosaic does provide a way to look for information. Follow these steps:

1. Open the **Edit** menu and choose **Find** to bring up the Find window.
2. Click the box next to **Find What:** and enter the word for which you want to search.
3. Click **Match Case** if you want Mosaic to match exactly the capitalization of the word you entered.
4. Choose **Find Next** to begin the search. If a match is found, Mosaic scrolls the window to the section where the match is. An alert box informs you if no match is found.

Caution

The Find feature does not work properly in the Windows version of Mosaic. It does not always find matching words when they do exist, and does not always notify you when no matches are found. Sometimes, the find feature causes your PC to lock up, requiring you to reboot your computer. This is a known bug.

Saving and Printing Documents

In general, the purpose of the WWW is to be able to have one copy of a document that many people can view, although there are times when you might want to save a copy of a document to your local computer. Mosaic gives you several options for saving files.

On both the Macintosh and Windows versions of Mosaic, you can open the File menu and choose **Save As** (this feature did not work in the 2.0a6 Windows version, but is working in the 2.0a7 version). This brings up a **Save As** dialog box that lets you browse through your directories and store the file wherever you like.

Note

In the Windows version of Mosaic, the documents are stored as HTML documents and can be loaded and viewed. On the Macintosh, there is an option to save the document as unformatted text or HTML. Only the unformatted text option is working. If you try to save the document as HTML, it does not save properly and crashes the Macintosh if you try to save it repeatedly.

Tip

If you want to load a single file to disk, in Windows Mosaic you can Shift-click on the hyperlink rather than selecting Load to Disk from the Options menu. This loads only that one file to disk, and you won't have to worry about forgetting to turn off Load to Disk.

Tip

If you want to save the file you are currently viewing to disk, click Load to Disk from the Options menu, then click Reload from the Navigate menu. This brings up the Save As dialog box.

There is another way to save files in both the Windows and Macintosh version of Mosaic. Open the Options menu and choose Load to Disk. A check mark appears next to the item, and the feature is enabled. The next time you click a hyperlink, rather than Mosaic loading the document for viewing, it brings up a Save As dialog box, letting you specify a file on your local disk where the document can be saved. You can save any format document in this manner—HTML file, image file, sound file, or unformatted text.

Remember to turn off the option if you want to go back to viewing files with Mosaic (open the Options menu and select Load to Disk again to turn it off).

When you save an HTML document to your local disk, remember that the document probably contains hyperlinks in it. These links can be relative or absolute. An absolute reference contains the complete address of the document that is being referenced, including the host name, directory path, and file name. A relative reference assumes that the previous machine and directory path are being used, and just the file name (or possibly a subdirectory and file name) is specified.

If the document references other documents with relative addresses, you can not view those documents unless you copy them to your local disk and set them up with the same directory structure they had at the original site. You might want to set up a document and its linked documents on your local disk if you want to view the document without connecting to the Internet. The problem with this is that if the original document changes, you are not aware of it and are viewing an outdated version of the document.

Absolute references always work unless your Internet connection fails or the referenced documents are moved.

In addition to being able to save documents, both the Windows and Macintosh versions of Mosaic allow you to print documents. Open the File menu and choose Print to send a copy of the current document to your printer.

Customizing Your Mosaic Window

This chapter has covered some of the features of Mosaic that let you move between documents. You can customize a number of these features; you can set up Mosaic to behave in a way that is most comfortable for you. This section discusses how to set up Mosaic to your preferences.

Customizing the Hyperlink Indicators in Windows

You can change the default appearance and color of the hyperlinks in the documents Mosaic loads. To do so, edit the MOSAIC.INI file and set the following lines:

```
[Main]
Anchor Underline=no
Anchor Cursor=yes
[Settings]
Anchor Color=0,0,255
```

Setting Anchor Underline to No turns off the anchor underlining in documents (this feature does not work and is a reported bug in the 2.0 alpha 6 release of Mosaic, and does not appear to have been fixed in the 2.0 alpha 8 release). Setting Anchor Cursor to Yes enables the Anchor Color variable. The Anchor Color variable takes values from 0 to 255 for red, green, and blue components to create the hyperlink identifying color (this feature also appears to be broken, although it is not a listed bug).

You can set your cursor so that it does not change shape when you are over a hyperlink. Open the Options menu, and select Change Cursor Over Anchors (it's off when the check mark disappears). If this option is on, your cursor will change (by default, to a pointing hand) when it is over a link.

Customizing the Hyperlink Indicators and Background Colors on a Mac

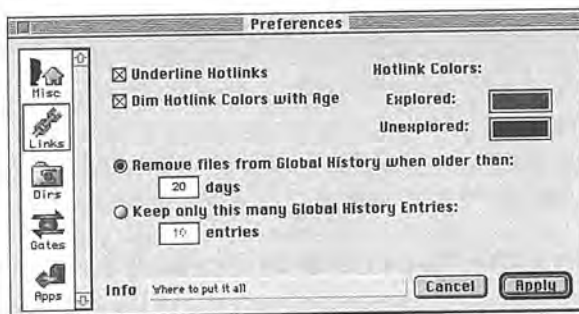
Changing the colors used for explored and unexplored links is quite straightforward on the Macintosh.



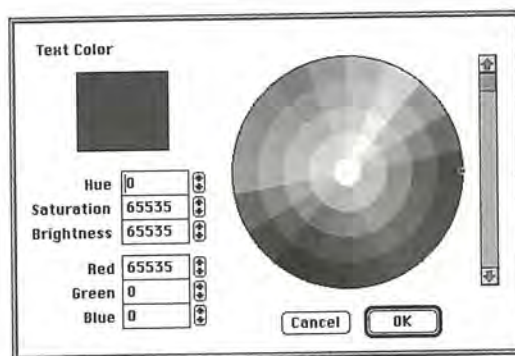
1. Open the Options menu and choose Preferences.
2. In the Preferences dialog box, choose Links from the strip of buttons on the left side. You see a variety of possible link items: the top right are the explored and unexplored color choices (see fig. 5.5).
3. If you click one of the color boxes, you get a color wheel from which you can choose your favorite colors (see fig. 5.6).

Fig. 5.5

Among other things, the Macintosh Preferences dialog box lets you change the color of your explored and unexplored hotlinks.

**Fig. 5.6**

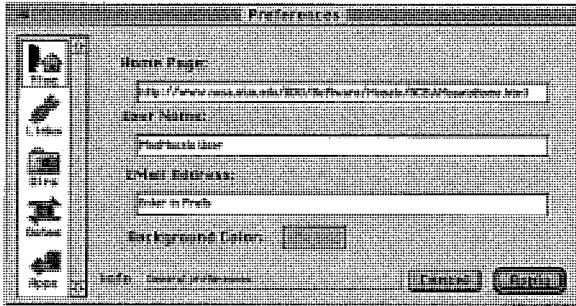
The color wheel dialog box gives you a wide range of colors to choose from for your hotlink colors.



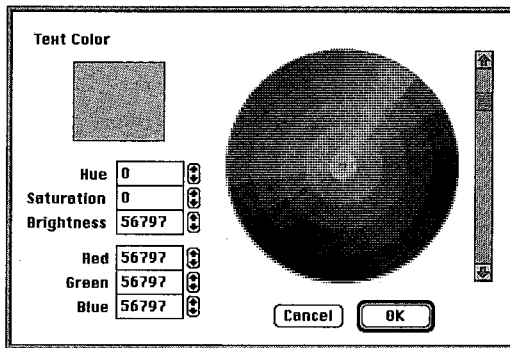
4. Click the color you want. The color in the box on the left of the dialog box should reflect your choice.
5. Click OK and then Apply and you're finished.

You can also change the color used for the background of the Mosaic window.

1. Open the Options menu and choose Preferences.
2. In the Preferences dialog box, choose Misc from the strip of buttons on the left side. At the bottom of the dialog box, you see the words Background Color with a color box next to them (see fig. 5.7).
3. If you click the color box, you get a color wheel from which you can choose your favorite colors (see fig. 5.8).

**Fig. 5.7**

You can also set the color of your Mosaic window background in the Preferences dialog box.

**Fig. 5.8**

The color wheel dialog box gives you a wide range of colors to choose from for your background color.

4. Click on the color you want. The color in the box on the left of the dialog box should reflect your choice.
5. Click OK and then Apply and you're finished.

Customizing the Displayed Fonts in Windows

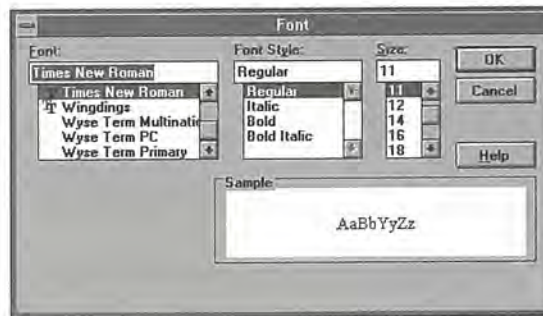
You can customize the fonts that Mosaic uses when displaying documents. HTML documents use standard paragraph tags to describe each paragraph in the document. Mosaic lets you specify the font family, size, and style for each of the standard HTML paragraph tags.

1. Open the **Options** menu, and choose **Font**. A walking menu appears that lists the different HTML paragraph tags.
2. From this walking menu, select the paragraph tag of the font you want to change. Even if you aren't familiar with HTML, you can guess what the different paragraph types are. For example, Normal is the regular text font, Heading1 is usually the large heading at the top of a document, and so on.

3. When you select a paragraph tag, the Font window appears, as shown in figure 5.9.

Fig. 5.9

The Style Window dialog box lets you define the font displayed for the paragraph type you selected.



4. Scroll down through the Font list until you find the font you want and select it. You can also set the Font Style (bold, italic, and so on) and the Size.
5. Choose OK to make the selections take effect, or Cancel if you decide not to change the fonts.

The changes that you make take effect immediately, and are used by Mosaic in future sessions.

Customizing the Displayed Fonts on a Mac



You can customize the fonts that Mosaic uses when displaying documents. HTML documents use standard paragraph tags to describe each paragraph in the document. Macintosh Mosaic lets you specify the font family, size, style, color, and spacing for each of the standard HTML paragraph tags.

To change fonts on the Macintosh, you first have to decide whether your changes are global to all formats or specific to an individual format.

On the Options menu, choose Styles. You see the Style Window dialog box, as shown in figure 5.10. Running along the left side of this dialog box are four icons: document (Doc), paragraph (Para), character (Char) and Table.

To make global changes, click the Doc icon. To change the respective size of all typefaces used in Mosaic, you can either click the up arrow once (to increment the size of each typeface) or down arrow once (to decrement the size of each typeface) next to the label (Change Respective Size of ALL Tags). To set ALL of the fonts in the document to the same value, click the font, color, or size buttons on the lower right under Check Attribute to Set for ALL Tags and

fill in the appropriate fields. If you want to these changes to apply to every font in the document, click Apply. If you change your mind, click Cancel.

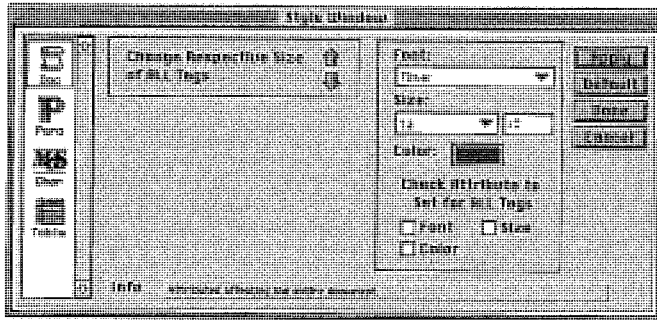


Fig. 5.10

The Style Window dialog box lets you change the font attributes of entire documents, paragraphs types, characters types, or tables.

More likely than not, however, you want to modify specific paragraph tags, not an entire document. To modify individual tags, follow these steps:

1. Click the paragraph icon on the left side of the Style Window dialog box. Now you see the possible settings have changed to those shown in figure 5.11. The key item here is the top left box called HTML style.

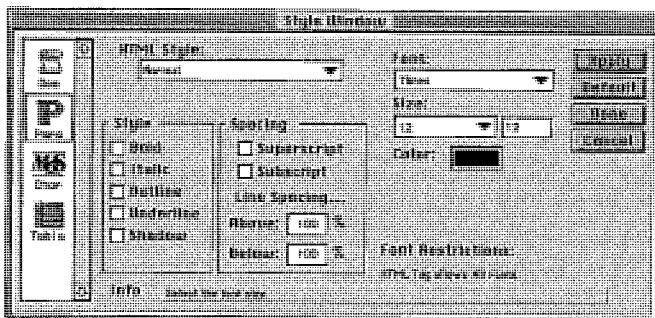


Fig. 5.11

The Paragraph option in the Style Window dialog box lets you change the font characteristics of each HTML paragraph tag.

2. Click any of about a dozen different paragraph tags in a document, then modify it to your preferences (see fig. 5.12). To modify a paragraph tag, choose it from the HTML style box.
3. After you select the paragraph tag to modify, set the parameters to your liking for any of the characteristics (font family, size, style, color or spacing), and choose Apply. If you decide that you don't want to modify the paragraph tag, choose Cancel.

Fig. 5.12

The HTML Style pop-up menu allows you to select individual HTML paragraph tags to modify.

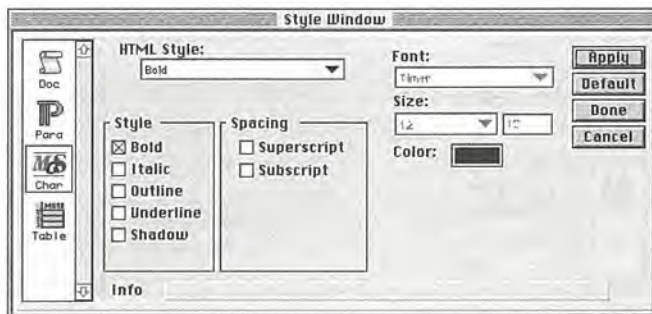


HTML also has a number of built-in character tags that you can modify. To modify individual tags, follow these steps:

1. Click the character icon on the left side of the Style Window dialog box. The HTML style box still appears in the dialog box, but if you click it now, it shows you the HTML character tags available, not the paragraph tags (see fig. 5.13).

Fig. 5.13

The Character option in the Style Window dialog box lets you change the font styles of the available HTML character tags.



2. After you select the character tag to modify, set the parameters to your liking. You can only modify the style and spacing of the character tags. When you have set everything, choose Apply. If you decide that you don't want to modify the paragraph tag, choose Cancel.

You can also set the font styles for HTML table tags. To do this, click the Table icon in the Style Window dialog box. The list of HTML styles is shorter, but other than that, parameters are very similar to those for the regular HTML paragraph tags (see fig. 5.14). Choose the table tag you want to modify

from the list of HTML Styles, change the parameters to your specifications, and choose Apply (or Cancel if you change your mind).

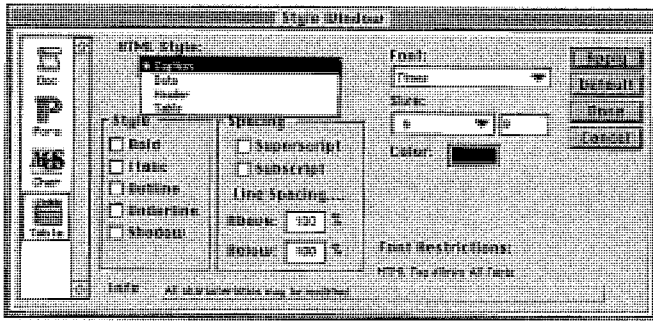


Fig. 5.14

The Styles Window dialog box lets you modify the font characteristics of HTML table tags.

Customizing the Window Areas

Many of the different window areas in Mosaic are optional (not, however, the document viewing area—Mosaic wouldn't be very useful without that!). The title bar and menu bar cannot be removed, but the tool bar, URL bar, and status bar can all be turned off. Turning these window areas off gives you a bigger viewing area, but removes some timesaving and informational features.

◀ See "Using the Mosaic Interface," p. 63

- To turn off the tool bar, open the **O**ptions menu and click Show Toolbar. The check mark next to the menu item disappears and the tool bar is removed from the window. (This option isn't available on a Mac.)
- To turn off the URL bar, open the **O**ptions menu and click Show Current URL. The check mark next to the menu item disappears and the URL bar is removed from the window. (Note that this also removes the globe; you can no longer click the globe to interrupt a command.)

Note

On the Mac, open the Options menu. The top item on the menu is Show URLs or Hide URLs. If the URL bar is showing and you want to hide it, choose Hide URLs.



- To turn off the status bar, open the **O**ptions menu and click Show Status Bar. The check mark next to the menu item disappears and the status bar is removed from the window.

**Note**

On the Mac, open the Options menu. The second item on the menu is Show Status Messages or Hide Status Messages. If the messages are showing and you want to hide them, choose Hide Status Messages.

Viewing Multimedia Files

- ◀ See “Can Your Computer System Run Mosaic for Windows,” p. 48
- ◀ See “Can Your Computer System Run Mosaic for Macintosh,” p. 67

One of Mosaic’s best features is that it enables you to view documents of many different types. If you remember from the introductory chapters, Mosaic is a *multimedia application*, which means that you can view files containing a number of different types of media—pictures, sound, and animation. Mosaic can display text and inline graphics directly, but to display other types of files, you must have viewers for these files installed on your machine.

After you have a viewer installed and Mosaic knows where to find it and what type of files it displays, you can load files of that type and Mosaic automatically starts the viewer to display them. Mosaic can recognize any of a number of standard image, sound, and animation formats. Some of the more common ones are shown in table 5.1.

Table 5.1 Multimedia File Types Recognized By Mosaic

Media	File Type
Audio	WAV, MIDI
Image	JPEG, GIF, TIFF
Video	MPEG, AVI, MOV
Formatted text	PS, RTF, DOC

When you find a file on a WWW server that is one of the types in table 5.1, and you set up an external viewer for that file type to work with Mosaic, you only need to click the hyperlink for the file and Mosaic launches the viewer application with the file loaded. You now can use any of the features of the viewer application to examine, modify, or save the file you loaded (see fig. 5.15).

**Fig. 5.15**

When Mosaic loads a file type that it recognizes, the viewer you specify for that file type displays the image, sound, animation, and so on.

Notice that because the image is loaded in an external application, you can use Mosaic at the same time you view the image.

Temporary Files on the Mac

The Mac version of Mosaic uses temporary files to store downloaded multimedia files while the download is in progress and while you are viewing the files. Several commands and options relate to these temporary files.



When Mosaic loads files that need an external viewer, it temporarily stores the files in the System Folder before launching the viewer. Although Mosaic deletes these files when you exit the application, you may want to set up a separate temporary file to keep your System Folder from becoming cluttered.

To tell Mosaic to use a temporary folder instead of storing temporary files in the System Folder, open the Options menu and select Use Mac Temporary Folder. When this option is selected, by default, Mosaic stores the temporary files in an invisible folder called Temporary Items on the top level of your system disk.

Caution

At one time, the invisible Temporary Items file occasionally disappeared and caused an error when an external viewer attempted to access this file. The authors could not verify whether this bug was fixed in the latest release of Mac Mosaic.

You can specify a different file for Mosaic to use for temporary storage by opening the Options menu and selecting Preferences. In the Preferences dialog box, click the Dirs (directories) icon. The current temporary directory is shown at the top of the dialog box (see fig. 5.16). Click Set Temp Directory and use the File Browser dialog box that appears to navigate to the directory where you want Mosaic to store its temporary files. Click Select for your changes to take effect, or Cancel to leave the directory as is.

Fig. 5.16

The Preferences dialog box lets you specify a directory for Mosaic to use for temporary file storage.



Working with Local Files

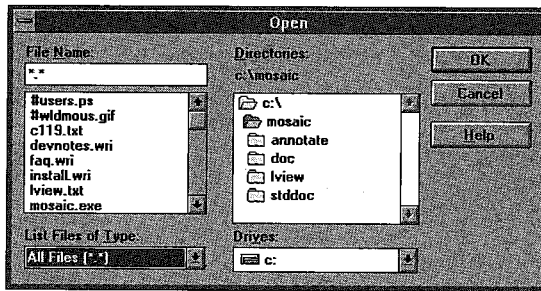
When you think of using Mosaic, you think of retrieving documents from WWW servers on the Internet to view. Mosaic can read documents from your local file system as well as it can read documents from halfway around the world. If you are sharing documents among members of your organization, many of the documents you view may be on a local file server, or possibly on your local computer.

Mosaic provides an option to make it easy to load a local file. If you want to load a local file, open the **F**ile menu and click **O**pen **L**ocal **F**ile. This brings up the Open dialog box shown in figure 5.17; this window lets you browse through all your local disks to find a file.

You can also load a local file in the same manner that you load any URL. Open the **F**ile menu and choose **O**pen **U**RL. To specify a local file in the URL box, precede the directory path of the file with **file:///c:** (you can substitute any of your local disk drives for c). The three slashes tell Mosaic that you are looking for a local file, and the bar is used instead of a colon because the colon has a specific purpose in a URL. Use slashes in the directory path you enter, even if you are describing a directory on a PC where the backslash is usually used. Mosaic properly translates the slashes when it retrieves the file.

◀ See “URLs,”
p. 38

Local URLs can be used just as all URLs are used—as items in hotlists, links in documents, and so on.

**Fig. 5.17**

The Open dialog box enables you to enter a local file name or to browse your local file system to find the next document that you want to view.

Creating Your Personal Home Page

Creating your own home page is simple. HTML comprises special codes, placed between < > symbols, that tell a Web browser what each piece of text is.

To create a home page, first open a text editor, or a word processor that lets you save your work in ASCII format. At the top of the page, type the document title. The title doesn't appear in the document when it is displayed in a browser, but is used as an identifier. Mosaic displays the title in the window's title bar.

Below the title, type the first heading you want to appear in the document. This heading appears at the top of the page. Then type a line or two of text. Below those lines, type another header then type the name of a document to which you want to link your home page. For example:

```
Personal Home Page
Personal Home Page
This is my very own home page.
Very Important Links
The Simpsons
```

In this example, Personal Home Page is the document title and the first heading. Next is a line of normal text (This is my very own home page), followed by another heading (Very Important Links). The Simpsons is the first link.

Next enter the HTML codes. The codes for the title are <TITLE> and </TITLE>, and placed as in this example:

```
<TITLE>Personal Home Page</TITLE>
```

The codes for a first heading are <H1> and </H1>. These codes are before and after the text in the same way as the preceding example. The body text doesn't need any code preceding it; browsers assume that if text has no code

in front of it, it must be normal text. But it does need a paragraph marker. At the end of each paragraph you must add `<P>`. Putting blank lines between lines of text will not separate them—Web browser joins the text together, unless the lines are separated by `<P>`.

Now, the second heading. A second-level heading uses the codes `<H2>` and `</H2>`. Here is an example:

```
<TITLE>Personal Home Page</TITLE>
<H1>Personal Home Page</H1>
This is my very own home page.<P>
<H2>Very Important Links</H2>
The Simpsons
```

The last part of this example is the link to The Simpsons. The text you want to act as a link must be preceded by the URL. So, to go to The Simpsons Web page, precede the text with this: ``. Place the URL between the ``. After the text place the `` code. The link looks like the following:

```
<A HREF="http://cc.lut.fi/[td]mega/simpsons.html">The Simpsons</A>
```

Now save the file. Remember, save it in ASCII format (use the HTM extension in DOS, .html on the Mac). You've created your own home page.

Open this file in Mosaic by opening the File menu and choosing Open Local File. When you open it you can click your link to travel to the referenced document.

If you want to learn more about working with HTML files see *Using the WWW* (Que), *WWW Unleashed* (Sams Publishing), or *The Complete Idiot's Guide to the World Wide Web* (Alpha Books).

You can also find extensive online documentation: start at <http://www.ncsa.uiuc.edu/General/Internet/WWW/HTMLPrimer.html>. This document gives a very thorough overview of the HTML commands that enable you to create WWW documents. It also gives you some document design advice, and gives you pointers to other HTML references.

Viewing Source Documents

Another way to learn HTML is to look at some HTML source files. Open the File menu and choose Document Source when you have a document loaded in Mosaic. This command opens a window that shows the HTML source for the current document. It shows you what the HTML document looks like, with all the hypertext codes still inside it (when Mosaic loads a document it strips all the codes out before it displays it). To close this window, select the

OK button at the bottom of the window, or open the **F**ile menu and choose **E**xit. Figure 5.18 shows a document loaded into Mosaic and its corresponding HTML code.

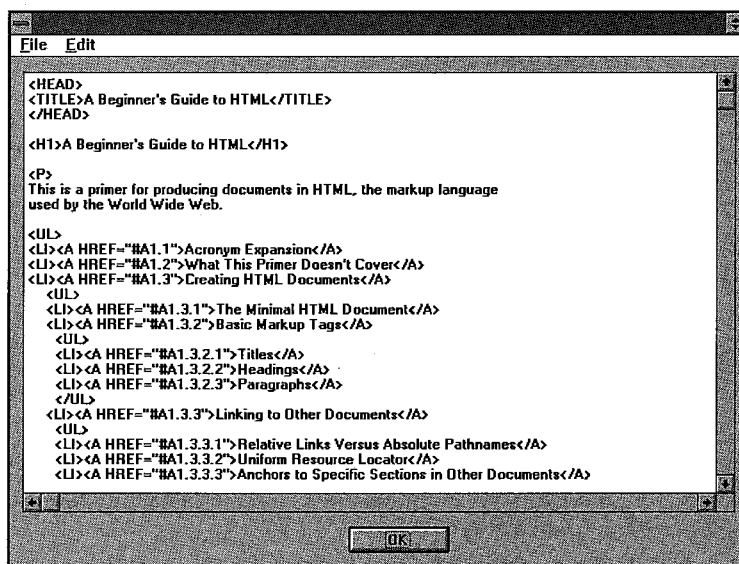


Fig. 5.18

The Document Source window enables you to scroll through the source file for the current document and see what HTML commands were used to create the document.

In the Document Source window, you can highlight and copy text to the Clipboard. Open the **E**dit menu and choose **C**opy. To save the entire source for this document to your local disk, open the **F**ile menu in the Document Source window and choose **S**ave. The Save As dialog box appears, letting you save the HTML source in a file anywhere on your local file system.

To close this window, click the OK button at the bottom of the window, or open the **F**ile menu and choose **E**xit.

Another way to save the HTML source of a document is to open the **O**ptions menu and choose **L**oad to Disk, then click on a link to the document. This brings up the Save As dialog box, which lets you save the HTML source for the document anywhere on your local file system.

Problems That Occur While Navigating the WWW

The World Wide Web is really a concept still under development, and Mosaic is definitely an application still under development. For an alpha release, it

works pretty well. But, with a complex application like Mosaic and a conceptually young Internet service like the WWW, there are bound to be problems occasionally.

Some problems that occur are related to limited resources on any particular Internet host (for example, the number of people who can connect to the host at one time may be limited). Traffic over the Internet is steadily growing and communications may be slow. Other problems may be actual bugs in Mosaic. Throughout the book, related problems are discussed when a topic is being discussed. This section discusses problems that are common to many different Mosaic functions that are not mentioned elsewhere in the book.

Mosaic Bugs

Mosaic admittedly has its flaws. After all, it is an alpha release, not yet to the point of a beta release. The designers realize this is somewhat of an inconvenience, and have tried to provide some help by publishing a list of known bugs. To see a list of bugs for Windows Mosaic, open the **Help** menu and click **Bug List**. Mosaic loads a document that describes all known Windows Mosaic bugs, and tells you how to get in touch with the developers if you find a bug that they don't know about.



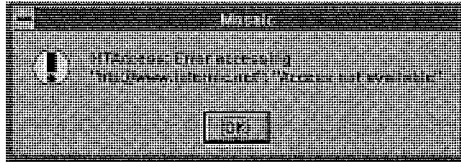
To see a list of bugs for Mac Mosaic, load the MacMosaic home page at the NCSA <http://www.ncsa.uiuc.edu/SDG/Software/MacMosaic>. In this document, there's a link to an HTML document that lists known bugs (**Bugs-mac.html**).

Most Mosaic bugs are discussed in the sections of this book that are related to the functions that cause the bugs. In the Windows version, the only Mosaic bug that currently is common enough to be mentioned is that Help buttons in some windows fail. Sometimes a window that Mosaic brings up has a Help button that brings up a blank Windows Help window. One such window is the Save As window that you get when you are loading files to disk. Also, sometimes you see the message **For Help, Press F1** in the status bar while you are using Mosaic. Pressing F1 also brings up a blank Windows Help window.

User Errors

Sometimes you can inadvertently ask Mosaic to do something it can't do. You can make a mistake when typing in the URL, or try to fetch the right document from the wrong machine. Here are a few of the more common user errors and Mosaic's reaction to them.

- **Enter an invalid protocol.** Windows Mosaic gives you an Access not available error alert like the one shown in figure 5.19. Choose OK to make the alert disappear, and then try to load a valid URL. (Mac Mosaic gives an Unable to Access Document error.)

**Fig. 5.19**

When Mosaic encounters an error, it usually brings up an alert box like this one to let you know what happened.

- **Try to load a document that doesn't exist.** You get a File/directory does not exist error alert. Choose OK to make the alert disappear, and then try to load a valid URL. (Mac Mosaic gives you a Not Found error.)
- **Try to load from a site that doesn't exist.** You get a Failed DNS Lookup error alert. Choose OK to make the alert disappear, and then try to load a valid URL. (Mac Mosaic gives you an Unable to connect to remote host error.)

Network Errors

A number of network-related errors can be caused by a machine being down, too much traffic on the network, too many people using a host's resources, or any number of other problems. These types of problems are associated with having a large number of different types of machines and services on a large network.

The following list of error alerts is by no means exhaustive, but shows some of the most common errors. If you load the Bug List document from the Windows Mosaic Help menu and scroll down to the bottom, you see the link Common Error Messages in a section entitled "Bug Like Features." This link loads a document (<http://www.ncsa.uiuc.edu/SDG/Software/WinMosaic/errors.html>) that lists most of the errors that you can see (but it doesn't tell you what caused them or how to avoid them). These errors can occur with Macintosh Mosaic, also, but they are reported slightly differently.

- **SOCKET:Connection has been refused.** This error usually occurs because the maximum number of people allowed to use the host's resources are currently on-line. Try again later.

- **SOCKET:Connection timed out.** This message comes up if Mosaic tries to communicate with a host and receives no answer within a specific time period. The host is too busy to answer or the machine is hung up.
- **SOCKET:Host is down.** The host that you tried to reach is down. Try to reach another host that provides the same service or try this one again later.
- **Failed DNS Lookup.** The host that you tried to reach does not exist. This may or may not be a real error. If you typed the name of the host incorrectly, it is an error. This error also seems to occur if Mosaic tries to look up the host and doesn't get a response from the name server in a specific period of time.
- **Transfer canceled.** This error is not common, but seems to occur when there are communications problems. For example, if you are connected to your Internet provider using the SL/IP protocol, and the phone line that you are using to dial in becomes noisy for some reason, it will cause a transfer to abort.

From Here...

To learn more about using the WWW and Mosaic, refer to these chapters:

- Chapter 2, "Introduction to the World Wide Web," Gives you background information about the WWW.
- Chapter 6, "Shortcuts to Favorite Places," gives you some tips on effective browsing and how to get where you want to go quickly.
- Chapter 13, "Hot Home Pages," gives you some pointers on where to go to find interesting documents on the WWW.

Chapter 6

Shortcuts to Favorite Places



The WWW lets you move easily between documents. Although this is convenient, it also can be a curse. While moving back and forth, you easily can get lost—and URLs can be long, complicated, and difficult to remember.

Mosaic has many features that allow you to keep track of where you were and allow you to get to places quickly. This chapter assumes you have read chapter 5, “Navigating with Mosaic.”

In this chapter, you learn to do the following:

- Navigate the WWW efficiently
- Keep track of sites that interest you
- Quickly access the sites you use the most

Effective Browsing Techniques

Navigating between WWW documents can be confusing. Documents often connect back to documents you already read. You don’t know you’re going to a document you’ve already seen because different words or pictures are used for the hyperlink than the ones you used originally.

Sometimes you can’t tell from the hyperlink whether the document is of interest to you—loading documents uses valuable time. Often, you waste time loading documents that you dismiss immediately. This section helps you learn to reduce unnecessary document loading and circular navigating.

How to Keep Track of Where You've Been

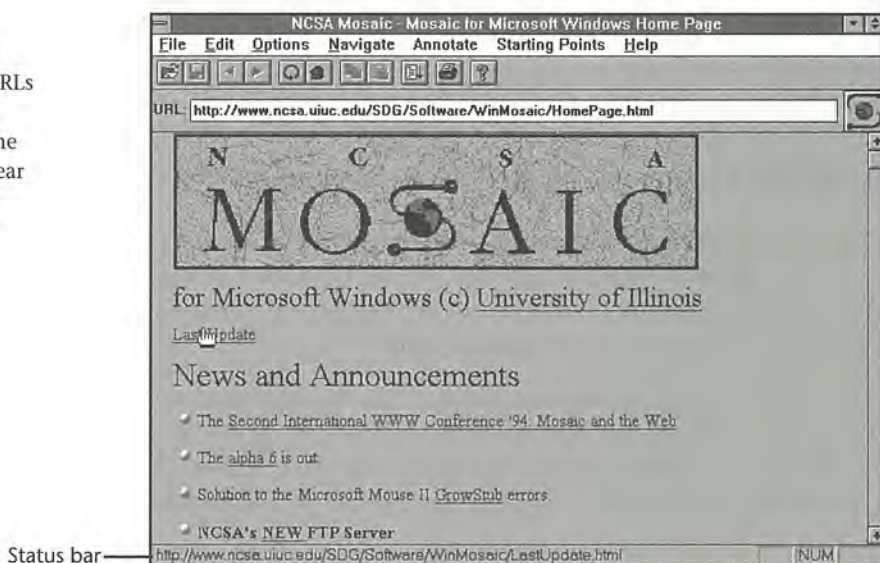
Keeping track of where you are and where you were is one of the biggest challenges of using Mosaic. For example, assume you're reading a document that deals with agriculture and you click a hyperlink to take you to Hay Field Seeding Suggestions. The document turns out to be one you loaded earlier—when you found a hyperlink for Pasture Management Techniques. How can you avoid this frustrating repetition?

One suggestion is to have a home page that provides links to your most-visited WWW pages. This home page is useful, for example, if you are working on a group project and frequently use documents with known locations. You can either create your own home page or someone can create a project home page for your group. In this scenario, you are probably already familiar with the servers, if not the exact documents.

But what if you're navigating in uncharted waters on the WWW? Although it sounds difficult, you probably can learn to recognize the URLs of the sites that keep information of interest to you. If the URL bar is displayed, the URL for the current document is shown there. If you have the status bar displayed, open the **Options** menu and choose **Show Anchor URLs** (on the Mac, open **Options** and deselect **Hide URLs**). The status bar shows the URL of a hyperlink when you move the cursor over it (see fig. 6.1). As you move between documents, you begin to remember some of the URLs you see frequently—when you put your cursor over a hyperlink, you recognize documents you know.

Fig. 6.1

The status bar displays the URLs of hyperlinks. (Remember, the status bar is near the top of the screen on the Mac.)



How to Get Where You Were

Trying to navigate back to a document you viewed in the current Mosaic session also can be challenging. In general, to go to the document you viewed prior to the current document, open the **Navigate** menu and choose the **Back** command (or the left arrow in the toolbar). Choosing the **Forward** command (or the right arrow) takes you to the last document you viewed after this document. This sounds rather confusing, but is understandable if you look at how Mosaic determines these links.

The **Navigate** menu has an item called **History** that brings up a window, similar to the one shown in figure 6.2. Notice, there is a list of URLs in this window—the URL for the current document is highlighted.

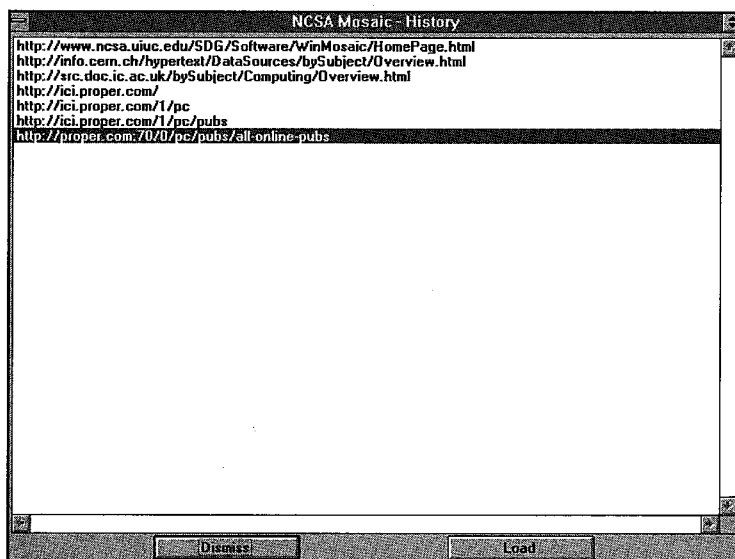


Fig. 6.2

The NCSA Mosaic History window shows a linear list of URLs you visit.

Note

The history list is different on the Mac. It is a drop-down list to the right of the toolbar buttons (see fig. 6.3). To open the history list, click the arrow (which you can't see in this figure because the list is open) and select an item.

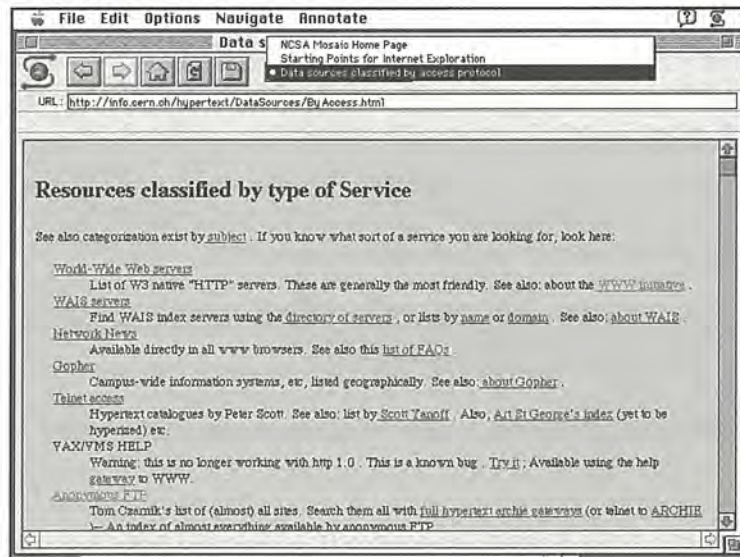


The history list shows you the URLs of the document chain that led you to this point and any documents that you visited after the current document. If you use the **Back** navigation command, you move up the list. If you use

the **Forward** navigation command, you move down the list. Click any URL in the list and choose **Load** to jump to that document (and that point in the list).

Fig. 6.3

The history list is always available on the Mac.



Tip

If the History window is open when you use the **Forward** and **Back** commands, you can see the highlighted item move in the list of URLs.

If you move up to one of the higher level links and then jump to a new URL from that document it wipes out all the URLs past the current document. So, while you can use the **Back** and **Forward** navigation commands to move between documents you already visited, if you jump to a new document while in the middle of the list, you erase the links at the end of the list.

To move quickly between documents that you load, use the history list. If you want to add a new document to the list of ones you're viewing, make sure you're at the end of the list before you jump to that document. You don't have to use hyperlinks to add the document you load to the history list. Load the document from the **File** menu's **Open URL** menu item or the URL toolbar button, and it is added to the list.

Global History and Explored Hotlinks on the Mac

The Mac version of Mosaic has another useful history feature that isn't available in the Windows version yet. This feature is *global history*. In addition to keeping a history list of all pages you open in a session, the Mac keeps a global history of all sites you visit, even in earlier sessions. You cannot jump back to previous documents, but the hyperlinks for the sites you visited (explore) are shown in a different color than unexplored sites. This feature is



very useful if you can't remember all the sites and don't want to waste time reloading a document that you already saw.

By default, the sites in the global history list are shown in red (as opposed to blue for unexplored sites). You can change the color for these previously explored sites. The global history list doesn't extend back in time indefinitely. By default, Mosaic keeps an item on the list for only 20 days. After that, it is removed from the list and appears in blue as an unexplored site. You can change this default, too, to suit your needs. You can also set a limit on the number of items tracked on the global hotlist. (Use this option or remove items after a given number of days.)

To change the color of explored sites, to change the length of time an item remains on the global history list, or to set a limit on the number of items on the list, follow these steps:

To change colors, open the Options menu and choose Preferences. In the Preferences dialog box, choose the Links item from the strip of buttons on the left side. You'll see a variety of possible link items (see fig. 6.4): the top right are the explored and unexplored color choices. If you click one of the color boxes, you get a color wheel from which you can choose your favorite colors (see fig. 6.5). Click OK and then click Apply.

The Links Preference dialog box also lets you change the length of time an item can remain on the global history list or how long the list can be (see fig. 6.4). Click the small radio button to the left of the explanatory phrase for the item that you want to set. After you've done that, the radio button will darken, and you can now click the entry field for that item and type in any value. The default values are 20 days for global history, and a maximum list size of 10 entries.

◀ See "Customizing the Hyperlink Indicators on a Mac," p. 89

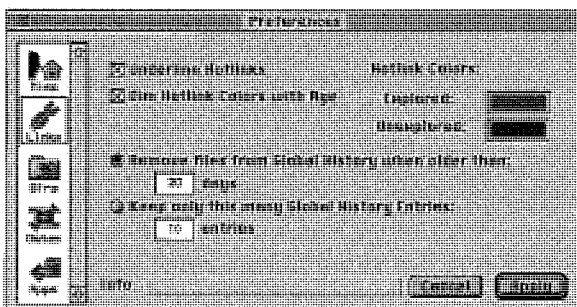
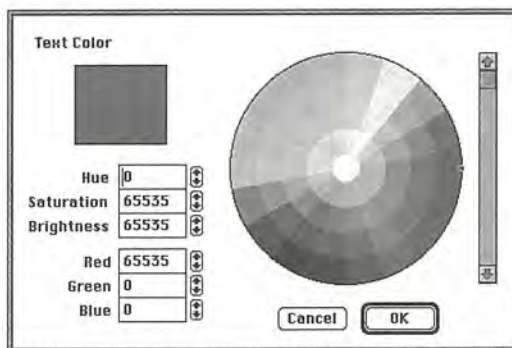


Fig. 6.4
The Links Preferences dialog box lets you set up how long an item remains in your global history list and the maximum length of the list.

Fig. 6.5

The color wheel allows you to easily set your explored and unexplored link colors by clicking the color you want.



Note

The global history is kept in a file called Mosaic Global History. You can open this file and edit it in a text editor if you want to remove or change individual items.

Create Lists of Your Favorite URLs

If you don't want to learn to use HTML commands to create a home page with all your favorite WWW documents, Mosaic has an alternative. To quickly access your favorite URLs, Mosaic enables you to create up to 20 personal menus and submenus. In addition, you can have a QUICKLIST that lets you access your favorite documents.

Note

The Macintosh doesn't have a QUICKLIST, but you can have an unlimited number of hotlists and the per list limit of items is 99. The 2.0 alpha 8 release of Macintosh Mosaic also lets you have user-configurable menus similar to Windows Mosaic.

Creating Your Own Menus

You can create up to 20 menus in Mosaic. As it is distributed, Mosaic has one preconfigured menu. The Starting Points menu lets you access a number of documents on the WWW that help you learn about the World Wide Web and the Internet, and gives you quick access to Internet Services and information repositories. You may want to create your own menus, though, to gain access to documents and services you use most. For example, you might want to have a menu for each project you work on, with each menu giving you access to the documents and services you need for that project.

The Personal Menus dialog box allows you to add, delete, and edit Mosaic menus. To open the Personal Menus dialog box, open the **Navigate** menu and choose **Menu Editor** (see fig. 6.6).

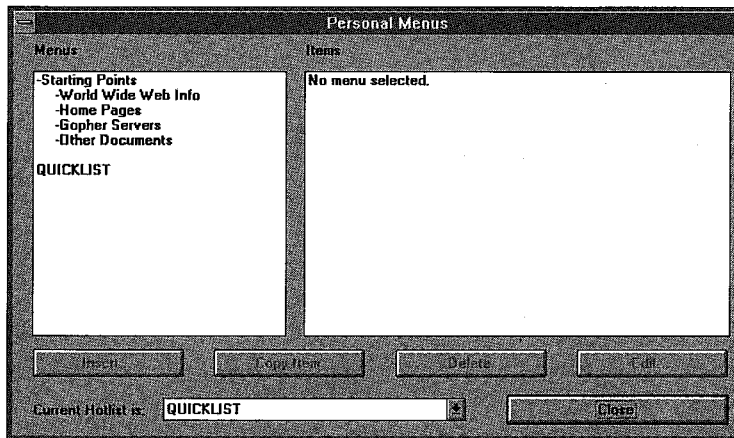


Fig. 6.6

The Mosaic Personal Menus dialog box shows current menus and items on those menus, and lets you create, delete, and edit these menus.

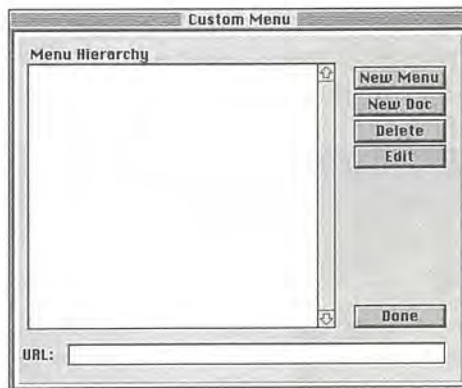
The existing user-configurable menus are shown in the Menus section of the dialog box. If you click a menu in this list, the items from that menu are displayed in the Items section. When you're finished modifying your personal menus, click **Close** to close the dialog box.

Note

As of release 2.0.16, the Mac version of Mosaic does not have a functional menu editing feature. Open the **Navigate** menu and choose **Custom Menu** to see what the feature may look like when it does work (see fig. 6.7). The 2.0.18 version that was released just as this book went to press has implemented the Custom Menu feature. The **Edit** and **Delete** buttons work in essentially the same way they do in the Windows version: the **New Menu** button adds a new menu as described for Windows in the next section, and the **New Doc** button adds a new document to a menu as described for Windows later in this chapter. The **Menu Hierarchy** box shows the current menus and their structure and where new menus are added, as described for Windows later in this chapter. Click the menus in the **Menu Hierarchy** box to expand them in the Mac version because there is no item box like in the Windows version.

Fig. 6.7

The Custom Menu dialog box in the Mac version is inoperative in version 2.0.a6, but functional in 2.0.a8.

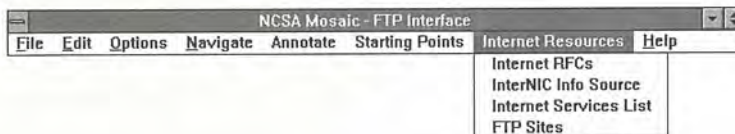


Creating a New Menu

Personal menus let you group WWW documents that you use frequently. For example, you may want to have a menu for each project you work on. The top-level menus you add are displayed in the menu bar, between the Starting Points menu and the Help menu (see fig. 6.8 for an example of a user-configured menu). You can click the menu and select items from it, just as you can with the other menus built into Mosaic. Mosaic has a limit of 20 user-configurable menus and submenus.

Fig. 6.8

The menu Internet Resources has been added to the menu bar.



To create a new menu, follow these steps:

1. Open the **Navigate** menu and choose **Menu Editor** to open the Personal Menus dialog box.
2. Click the blank line above the word **QUICKLIST** in the Menus section of the dialog box. The Add Item dialog box appears (see fig. 6.9).

Fig. 6.9

Enter the title of the menu you are adding in the Add Item dialog box.



3. Click the box next to Title and enter the name of the menu you want to add. Notice that the Menu radio button is checked automatically—you can't deselect it or select another radio button.
4. Click Close. The new menu appears highlighted in the Menus section of the Personal Menus dialog box. You are now ready to add items to the menu.

Note

Choose descriptive, yet short names for your menus. Mosaic displays these names in the menu bar; there isn't much room! If the menu list becomes longer than one line, Mosaic expands the size of the menu bar as many lines as it needs to display all menu names.

Tip

If you have a SuperVGA monitor, use Windows setup to choose a driver for a higher screen resolution (800 × 600) to get more menu items on-screen.

Adding Items to a Menu

After you create a new menu, you can add the items you want to appear in the menu—you can also add items to any existing menu. Mosaic currently has a limit of 40 items per menu.

To add items to a menu, follow these steps:

1. Open the **Navigate** menu and choose **Menu Editor** to open the Personal Menus dialog box.
2. In the Menus section of the dialog box, click the name of the menu to which you want to add items.
3. If there are existing items in that menu, you can place the new item anywhere in the list. If you click the name of an item in the Items section, the new item is added before the selected one. If you do not select one of the current items, the new item is added to the end of the list.
4. When you have selected the menu and item position, choose **Insert**. The Add Item dialog box appears (see fig. 6.10).

**Fig. 6.10**

In the Add Item dialog box, enter the name of the menu item you are adding and the URL associated with it, if there is one. You can also identify the type of the item.

You can now add items to the menu. The items can be of three types: a Document (with its associated URL), a Menu (submenu), or a Separator (to let you visually group items in a menu).



Note

On the Macintosh, you add a document with the New Doc button in the Custom Menu dialog box, and you add a submenu with the New Menu button (make sure the New Menu Bar Item checkbox is not checked if you want the new menu to be a submenu).

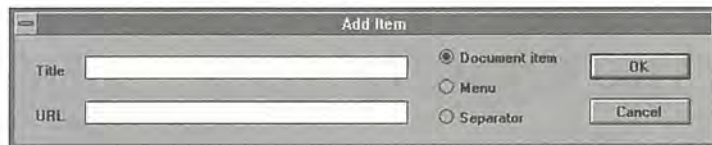
Adding a Document. You will probably add documents most often to your menus. In this case, “document” indicates any valid WWW URL; you can actually access more than just documents. Your URL can use any Internet protocol that Mosaic recognizes, including Gopher, FTP, and Telnet.

To add a document item to a menu, follow these steps:

1. Select the Document Item radio button in the Add Item dialog box. The fields pertaining to this item type become active (see fig. 6.11).

Fig. 6.11

When you select the Document Item radio button, the URL and Title fields become active.



2. Click the box next to Title and enter the name you want to appear in the menu. By default, the title and URL of the current document appear in the fields.
3. Click the box next to URL and enter the complete URL used to access this document—if it isn't already in the field.
4. Choose OK. The item appears in the Items section of the Personal Menus window.

Tip

A quick way to add a document to the end of the menu you've selected as your current hotlist is to open the **Navigate** menu and choose **Add Current To Hotlist**.

Note

If you want to have a menu item that is the same or similar to an existing menu item, you can copy that menu item to the Add Items buffer. Select the menu that contains the desired item in the Personal Menus dialog box. Click the desired item in the Items section (it is highlighted), and then choose **Copy Item**. The title and URL of the selected item appear in the Add Item dialog box the next time it is opened.

Adding a Submenu. Another way to group related items in your menus is to create a submenu that contains the related items. Remember, Mosaic has a limit of 20 user-configurable menus and submenus.

To create a submenu, follow these steps:

1. In the Add Item dialog box, select the Menu radio button. The fields that pertain to this item type become active, as shown in figure 6.12.

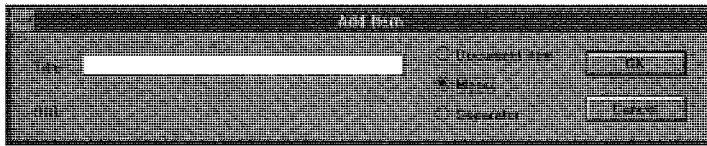


Fig. 6.12

When you select the Menu radio button, only the Title field is active.

2. Click the box next to Title and enter the name you want to appear in the menu.
3. Choose OK. The item appears in the Items section of the Personal Menu dialog box. Note that it has a right angle bracket next to it to indicate that it's a menu.

Adding a Separator. If you don't want to add any submenus, but still want to group some of your menu entries, you can visually group items in a menu by putting a thin line called a *separator* between groups of related items.

To add a separator, follow these steps:

1. In the Add Item dialog box, select the Separator radio button. No active entry fields are in the Add Item dialog box (see fig. 6.13).

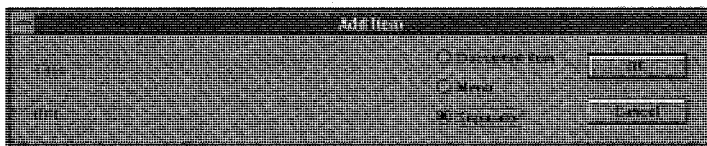


Fig. 6.13

When you click the Separator radio button, all entry fields become inactive; you do not need to enter any information for this type of item.

2. Choose OK. A line appears in the Items section of the Personal Menu dialog box.

Editing a Menu Item

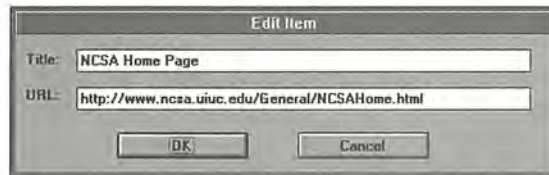
After you create a menu, you may want to change the name or URLs of some of the items in the menu. You can do this with the Edit button in the Personal Menus dialog box.

To edit menu items, follow these steps:

1. Open the **Navigate** menu and choose **Menu Editor**. The Personal Menus dialog box appears.
2. Click the name of the menu that has the item you want to change.
3. Select the item in the Items list you want to change and choose **Edit**. The Edit Item dialog box appears (see fig. 6.14).

Fig. 6.14

The Edit Item dialog box lets you change the title or URL of an existing menu item.



4. Edit the title and/or URL for that item, and then choose **OK**.

Your menu item is now changed as you specified. You can also edit a menu to change its name (the URL field doesn't appear).

Tip

Double-clicking either a menu or an item in the Personal Menus dialog box brings up the Edit Item dialog box for that item.

Deleting a Menu Item

Mosaic also lets you delete a menu item or an entire menu. To delete menus or menu items, follow these steps:

1. Open the **Navigate** menu and choose **Menu Editor**. The Personal Menus dialog box appears.
2. Click the name of the menu or menu item you want to delete, and choose **Delete**. You see a Menu Editor alert box asking you to confirm the deletion (see fig. 6.15).

Fig. 6.15

This Menu Editor alert box makes sure you want to delete the item or menu.



3. Choose **OK** to delete the menu or item.

If you are deleting an item, it is removed. If you are deleting a menu, you are asked if you want to recursively delete the menu—meaning it deletes everything under the menu. Choose OK; it is confusing to delete a menu, but not to delete items on that menu.

Caution

One of the problems with the 2.0 alpha 6 release of Mosaic involves deleting submenus. Mosaic asks if you are sure you want to delete the submenu, but if you try to cancel the request, the submenu is still deleted. Parts of the deleted submenu may show up when you look at a list of menus in the Current Hotlist field in the Open URL window.

Creating Your Own QUICKLIST

The QUICKLIST is a permanent hotlist that you cannot delete—or change the title. The QUICKLIST does not show up as a menu in the menu bar: the only way to access it is to make it the Current Hotlist and select an item from it in the Open URL window (this procedure is explained in more detail in the section, “Setting and Using the Current Hotlist,” later in this chapter).

You can insert, edit, and delete items in the QUICKLIST the same way you do for any of the other user-configurable menus—using the Personal Menus dialog box. Unlike the other user-configurable menus, which have a limit of 40 items, there is no limit to the number of items in the QUICKLIST.

Note

There is not a Mac QUICKLIST feature. Because the Mac version allows for unlimited hotlists, each with as many as 99 items, there isn't a need for a QUICKLIST on the Mac.

Quick Access to Your Favorite URLs

Now that you have all these hotlists set up, how do you use them? You can select items directly from the user-configurable menus, or you can select them from the Open URL window. This saves you the trouble of having to remember and type in long URLs.

Accessing Items in a Hotlist

The user-configurable menus and QUICKLIST comprise the hotlists. You can access items from the user-configurable menus either directly or from the Open URL window. The QUICKLIST items can only be accessed from the Open URL window.

Setting and Using the Current Hotlist

One way to use a hotlist is to make it the Current Hotlist in the Open URL dialog box. There are two ways to do this. The first way is as follows:

1. Open the **File** menu and choose **Open URL** (or click the Open URL button on the toolbar). The Open URL dialog box appears. The Current Hotlist field shows the current hotlist (see fig. 6.16).

Fig. 6.16

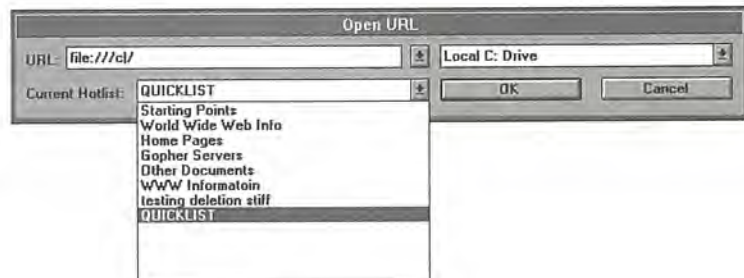
You can change the Current Hotlist in the Open URL dialog box.



2. Click the Current Hotlist field to display a drop-down list of available hotlists (see fig. 6.17).

Fig. 6.17

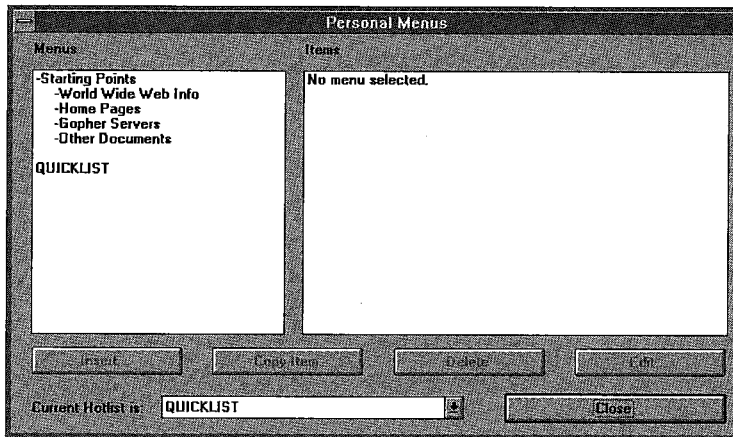
You can select any of the user-configurable menus to be the Current Hotlist.



3. Click the hotlist you want to be designated the Current Hotlist.
4. You can now click Cancel (which will keep the hotlist you selected), or select a URL to open from this dialog box.

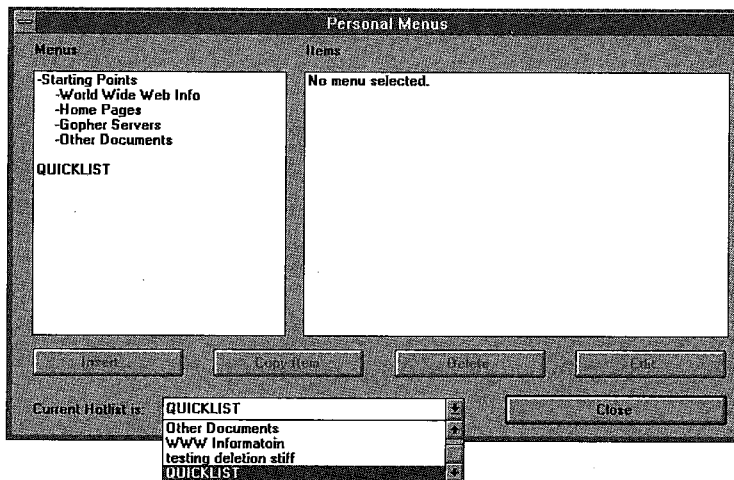
The other way to set the Current Hotlist is from the Personal Menus dialog box. To do this, follow these steps:

1. Open the **Navigate** menu and choose **Menu Editor**. The Personal Menus dialog box appears (see fig. 6.18).

**Fig. 6.18**

You can set the Current Hotlist from the Personal Menu window.

2. Click in the Current Hotlist field to display a drop-down list of available hotlists (see fig. 6.19).

**Fig. 6.19**

You can select any of the user-configurable menus to be the Current Hotlist.

3. Click the hotlist you want to designate as the Current Hotlist.
4. Click Close to dismiss this dialog box.

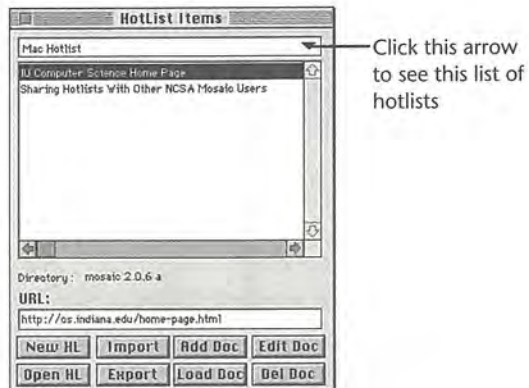
Note

The only way to set the current hotlist on the Mac is to open the Navigate Menu and choose Hotlist. Select the Hotlist from the drop-down list at the top of the dialog box. (See fig. 6.20.)



Fig. 6.20

Choose a hotlist from the drop-down list at the top of the dialog box.



Now that you have the Current Hotlist set, how do you use it? The Open URL dialog box gives you quick access to the items in the Current Hotlist. The URL field and the field to its right contain information from the current hotlist. If you click the URL field, you can select any of the URLs from the items in the Current Hotlist. If you click the field to its right, you can select any of the items in the Current Hotlist by title. To load the item you select, choose OK.



Note

To load a hotlist document on the Mac, select the item in the list and then click Load Doc.

Tip

To add the current document to the Current Hotlist, open the Navigate menu and choose Add Current to Hotlist. The document is added to the end of the Current Hotlist.

Remember, the only way to access items in the QUICKLIST is to make it the Current Hotlist and to load the items it contains from the Open URL window.

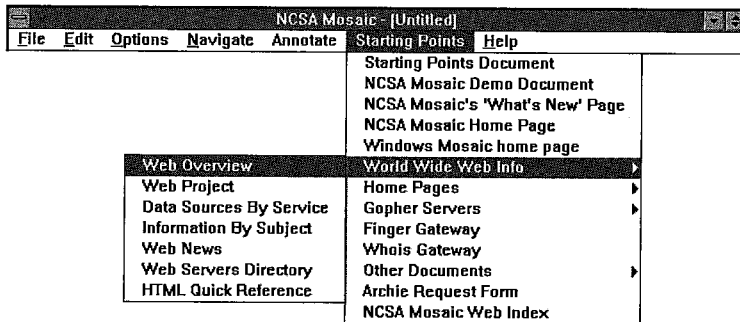
Loading a Document from a Menu

All documents in your hotlists (except for those in the QUICKLIST) are accessible from the menus you create. These menus appear between the Annotate and Help menu items in the menu bar. To access a document in one of these menus, simply follow these steps:

Note

Remember, as of this writing, you can't customize the menus in the 2.0.a6 Mac version—your hotlist entries aren't available there. They are available in the 2.0.a8 version, though, and can be accessed in the same way as the Windows menus.

1. Click the menu.
2. Choose an item from the menu. If the item you choose is also a menu, a submenu pops up, and from it you can choose an item (see fig. 6.21).

**Fig. 6.21**

The personal menus you create allow you to quickly load URLs from the menu bar.

When you release the mouse button after selecting an item, Mosaic loads the URL for that item.

Sharing Hotlists

Sharing hotlists is a good way to make coworkers and colleagues aware of information resources they would otherwise not know. At this time, Mosaic does not have an automated way of exporting and importing hotlists. However, if you edit your MOSAIC.INI file, you find the hotlists defined after the Annotations section in the file and at the end of the file. Entries have headings, such as User Menu1, followed by the name and URL for each item in the menu. You can copy these menu definitions from your MOSAIC.INI file into an e-mail message, or file and distribute them to people you think might be interested in them. They can then edit their MOSAIC.INI file and insert these menus in the file.

Note

You can share a hotlist with someone else in the Mac version by giving them a copy of the file for that Hotlist. These files are stored in the folder determined by the Current Hotlist Directory setting in the Preferences dialog box. By default, this is in the same folder as Mosaic. To change the folder, click the Set Hotlist Directory and choose a directory in the dialog box.



Using Built-In Hotlists

Mosaic, as distributed from NCSA, comes with two built-in hotlists: the Starting Points hotlist and the QUICKLIST. You can edit both lists to suit your

particular needs, and you can delete the Starting Points hotlist just as you can delete any other user-configurable menu.



Note

The current version of Mosaic for the Mac does not come with a built-in Starting Points menu. Because the Mac does not need a QUICKLIST feature, it is also not predefined. At the bottom of the Navigate menu, however, are six predefined, useful Web sites that Mac Mosaic users may want to explore. One of these menu items, Network Starting Points, links to a Web document (<http://www.ncsa.uiuc.edu/SDG/Software/Mosaic/StartingPoints/NetworkStartingPoints.html>) that contains all the same sites that are in the predefined Starting Points menu in Windows. So, by opening this document, you easily can access all sites in the Windows Starting Points menu. And, you can save this file and copy the URLs to create Hotlists.

The Starting Points Hotlist

If you are new to the Internet and the World Wide Web, you may want to use the Starting Points hotlist to do some exploring and familiarize yourself with some of the most common Internet and WWW resources available. Some items in the Starting Points hotlist are:

- *The Starting Points Documents.* These contain links to many documents that provide introductory information to the Internet and the World Wide Web.
- *The NCSA Mosaic 'What's New' Page.* This gives an overview of new WWW resources. There are links to previous months' announcements at the end of this document.
- *World Wide Web Info menu.* A menu containing links to documents that give background information about the WWW and have links to interesting WWW sites.
- *Home Pages.* A menu that links you to some of the more interesting home pages on the WWW.
- *Gopher Servers.* A connection to a number of different Gopher servers that also gives you access to Veronica searches.
- *Other Documents.* These contain links to some interesting WWW and Internet services, such as a Beginners Guide to HTML and a summary report from the 1990 census.

The QUICKLIST Hotlist

The built-in QUICKLIST hotlist gives you access to some of the same places as the Starting Points hotlist. In addition, the QUICKLIST gives you:

- Quick access to your local hard disk.
- Access to on-line weather forecast information.

You may want to explore the items included with this list when you first start using Mosaic. If they are not of any use to you, replace the items with ones you use frequently.

Editing Mac Hotlists

You need a way to edit Hotlists on the Mac. This is done in the Hotlist Items dialog box, the same place you select a current hotlist or open a hotlist item (see fig. 6.22) To open this dialog box, open the Navigate menu and choose Hotlist.

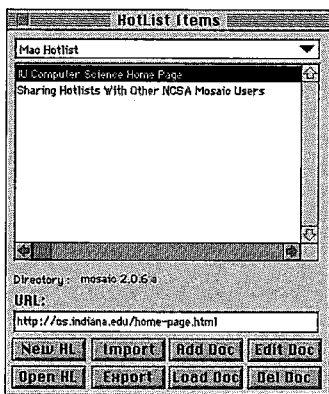


Fig. 6.22

Any change to any hotlist can be made in the Hotlist Items dialog box.

To create a new Hotlist, open the Hotlist Items dialog box and click New HL. This creates a new Hotlist called Untitled Hotlist.1. There aren't any items in it when you create it.



To add the open document to the current hotlist, open the Navigate menu and choose Add This Document.

To add any document to any hotlist follow these steps:

1. Open the Hotlist Items dialog box.
2. From the drop-down list, select the hotlist to which you want to add the item.

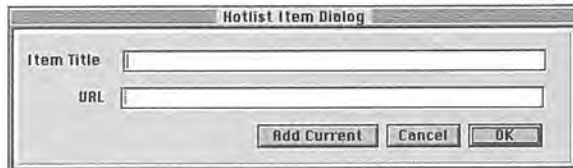
3. Click Add Doc. The dialog box shown in figure 6.23 appears.

Note

If you add the first item to an untitled hotlist, a standard Save dialog box opens. Name the hotlist and click Save before proceeding.

Fig. 6.23

In the Hotlist Item dialog box, you can add new items to a hotlist.



4. Enter the name of the item and the URL (or you can click Add Current to add the current document), and then click OK.

To edit a hotlist item, select the item and then choose Edit Doc. You see a dialog box similar to the Hotlist Item dialog box. You can edit the title or URL. When you're finished, click OK.

To delete an item, select the item, and then click Del Doc. The item is deleted immediately! There isn't a dialog box asking you to confirm the deletion.

To open a hotlist in a different folder than the default, click Open HL, and then choose the hotlist in the Open dialog box.

Using Annotations

Sometimes when you are exploring the WWW, you might find a document that has lots of information, but only a small amount of it is important to you. It would be nice if you could somehow mark the information of importance so that you could find it quickly. Mosaic has a feature that lets you make notes in a document to remind you of why this document is important to you and where the important information is.

Setting Up Mosaic to Use Annotations

Mosaic stores any annotations that you make as files. The first thing that you need to do is set up Mosaic so that it knows where to store these files. You can also specify a default title for your annotations.

To set up the annotation information in your MOSAIC.INI file follow these steps:

1. Edit the MOSAIC.INI with a text editor like Notepad.
2. Find the [Annotations] section of the file.
3. Change the Directory= entry to point to the directory where you want the annotation files to be stored.
4. Change the Default Title= entry to the default title for your annotations.
5. Set Group Annotations=no.
6. Although Mosaic does not support an e-mail protocol at this time, it lets you define a default e-mail address, and uses this address as the default value for the Author field in the Annotations Window. To set your e-mail address, scroll up to the top of your MOSAIC.INI file and under the [Main] section, change the E-mail= entry to your e-mail address,

You should now be ready to use Mosaic's annotation feature.

Using Mosaic's Annotation Feature

To add an annotation to a document, follow these steps:

1. Open the Annotate menu and choose Annotate. The Annotate Window dialog box shown in figure 6.24 appears.

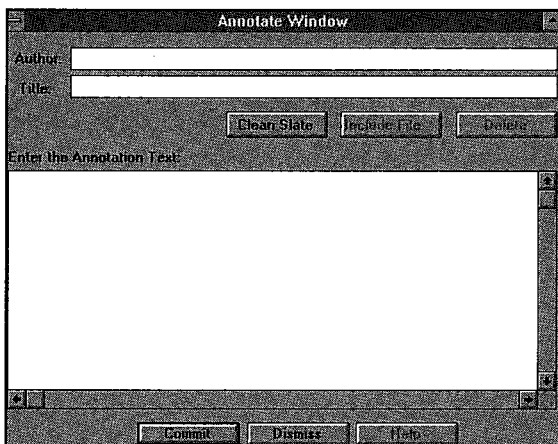


Fig. 6.24

The Annotate Window dialog box lets you create annotations for Mosaic documents.

2. Enter the Author information. It will default to the e-mail address in your MOSAIC.INI file, if you have specified one.
3. Enter the Title of this annotation.
4. Enter the text of the annotation where indicated (see fig. 6.24). You can make notes here about anything—interesting links in this document, a note of why this document is useful to you, and so on. If you would like to erase all of the annotation text you have entered, choose Clean Slate and reenter the annotation text.
5. If you are satisfied with this annotation, choose Commit. This will save the annotation in a file in the annotation directory that you specified in your MOSAIC.INI file. If you decide that you don't want to add this annotation, choose Dismiss.

Note

The Annotations feature was not working in the 2.0.a6 Macintosh version that was used while writing this book, but has been implemented in the 2.0.a8 version that was released just as this book went to print. To add a text annotation in 2.0.a8, open the Annotate menu and choose Text. The procedure is essentially the same as in Windows as described earlier in "Using Mosaic's Annotation Feature." (You can change the default user name in the Mac version by opening the Options menu and choosing Preferences. Click the Misc button and enter your name in the User Name text box.) You can delete an annotation by selecting it, then opening the Annotate menu and choosing Delete Annotation. However, the edit feature on the Mac version was still buggy enough to be of no use.

Note that in Windows Mosaic, the Delete, Include File, and Help buttons are not yet working. Also, the Edit this annotation and Delete this annotation items on the Annotations menu do not seem to work in the 2.0a6 or 2.0a7 versions of Windows Mosaic.

The next time you load this document, the title of your annotation and the date it was entered will show up as a link at the end of the document. Click the link to read your annotation (to return to the document, open the Navigate menu and choose **Back**).

You can have more than one annotation in a document. Click the title of the one that you want to read.

Adding an Audio Annotation on the Mac

The Macintosh version of Mosaic also offers audio annotations, a feature we haven't seen yet in the Windows version. Like the text annotations, this just became functional in the 2.0a8 release. To add an audio annotation to the current document:



1. Be sure the microphone on your Mac is plugged in and working.
2. Open the Annotate menu and choose Audio. A dialog box opens in which you can enter your name and a title for the annotation.
3. Click record. This will open the dialog box shown in figure 6.25.

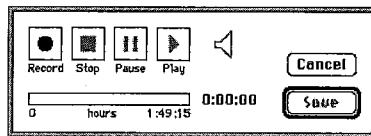


Fig. 6.25

This dialog box is used to record an audio annotation.

4. Click the record button then speak into the microphone.
5. Click the Stop button when finished.
6. Click Save to save the annotation.

To listen to the annotation, click the link for it in the document. A new document opens, like the one in figure 6.26, indicating that this is an audio annotation. Click where it says To hear the annotation.

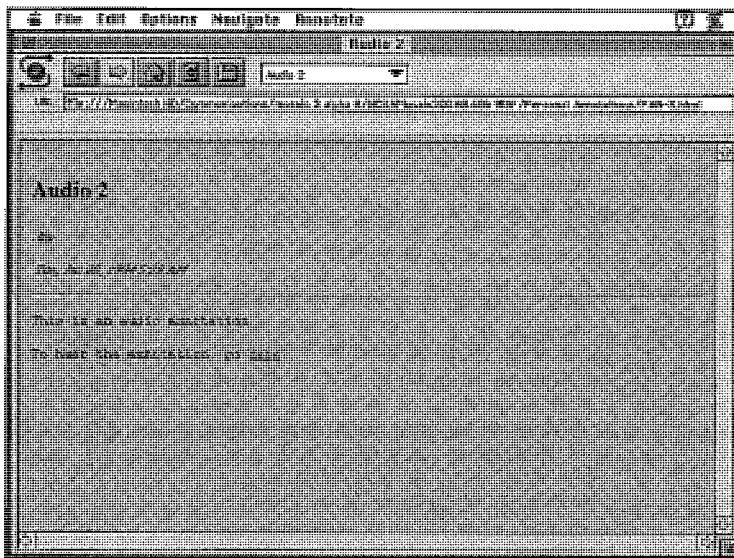


Fig. 6.26

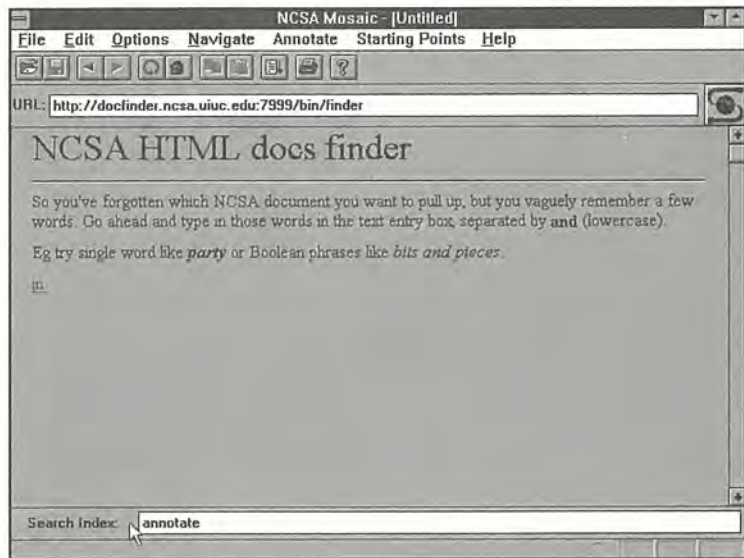
A document containing an audio annotation.

Searching Indexes and Using Forms

Some Web documents are special *index documents*, documents that are connected to *index servers*. These documents let you search for information. For example, choose the Starting Points, Starting Points Document menu option, then, when the Starting Points document appears, find the NCSA Doc Finder link and click it. When you see the WAIS Search on NCSA's HTML Documents document, click the [click here to begin search link](#). You see the document in fig. 6.27. (Or go straight to <http://docfinder.ncsa.uiuc.edu:7999/bin/finder> by typing the URL into the URL text box and pressing Enter.)

Fig. 6.27

Type your search word into the text box and press Enter.



Now, type the word for which you want to search. For example, if you are looking for documents related to annotations, type **annotate** and press Enter. The search begins, and if something is found, you'll see a document containing links to each document, as shown in figure 6.28. (If nothing is found, you may just see a blank page. Use the Back toolbar button to return to the search document.) You can click these links to go to the document.

You have just used a Web *form*, a sort of interactive document. Not all Web browsers have *forms support*—luckily, Mosaic does.

Other forms are more complicated than the one you just looked at. Sometimes you will see option buttons and check boxes, multiple text boxes, and even command buttons that you click. Using these forms is just like using a program's dialog box.

From Here...

To learn more about using the WWW and Mosaic, refer to:

- Chapter 5, “Navigating with Mosaic,” which discusses how to use Mosaic’s basic navigation features.
- Part III “Advanced Mosaic Features,” which talks about other Internet services you can access through Mosaic.
- Chapter 13, “Hot Home Pages,” which gives you some pointers on where to find interesting documents on the WWW.

Edit Search Help

Window]

Part III

1=480
2=563

It Title = www52... .. fredb

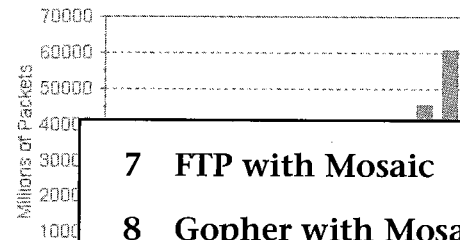
ices]

Server = "www52... .. fredb"

Server = "www52... .. fredb"

We know the above server will usually exist. Change it if you have a lo

NSFNET Packet Traffic



7 FTP with Mosaic

8 Gopher with Mosaic

9 Using Mosaic to Access Other Internet Services

Options Navigate



://www.ncsa.uiuc.edu/SDG/Softw

MosaicMacHelp

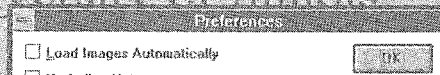
S-Mosaic 1.0b7 (Fat)

MOSAIC

Microsoft Windows (c) University of Illinois

update

and Announcements



151 Facebook Inc.'s Exhibit 1006

Petitioner Microsoft Corporation, Ex. 1006, p. 151

File Edit Search Help

[Main Window]
x=28
y=31
width=480
height=563

[Mail]
Default Title="WinMosaic auto-mail feedback"

[Services]
NNTP_Server="news.cso.uiuc.edu"
SMTP_Server="ftp.ncsa.uiuc.edu"
rem=We know the above server will usually exist.

back.gif
basic.s.htm
begin.htm
concepts
direct.htm
docuwin.g

Save file as:
Learn about MecklerWeb

Save
Cancel

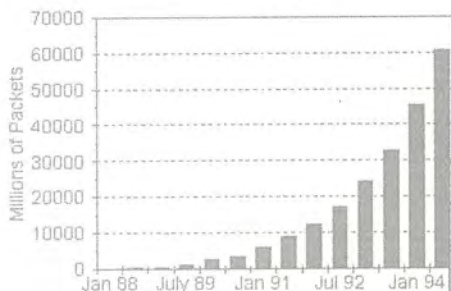
☒ Plain Text
☐ HTML Source



you have a 10

[View]
TYPE
TYPE
TYPE
TYPE
TYPE
TYPE
TYPE
TYPE
TYPE
TYPE

NSFNET Packet Traffic



le Edit Options Navigate Ann



IL: <http://www.ncsa.uiuc.edu/SDG/Softw>



for Microsoft Windows (c) University of Illinois

Last Update

Preferences

☐ Load Images Automatically

OK