

Lab 1.3 Using the WWW

Lab Overview

Objectives

After completing this lab, you will be able to:

- ♦ Use the Internet Explorer to browse local files and WWW resources.
- ♦ Use the Internet Explorer to download files.
- ♦ Search for resources on the Internet using WWW search engines.
- ♦ Create and manage Windows Internet shortcuts.

Scenario

As a prerequisite for the rest of this course, which concentrates almost exclusively on the World Wide Web, you must learn how to access, navigate, and efficiently use the Web. Your main client interface to the Web will be the Microsoft Internet Explorer.

Lab Setup

This exercise assumes that you have Microsoft Internet Explorer installed and have Internet access. The first exercise also assumes that you have installed either Microsoft Office 95 or the free Microsoft Office viewers. These viewers can be found in the Library section of this CD-ROM, under Microsoft Tools.

Estimated time to complete this lab: **45 minutes**

Exercises

The following exercises provide practice working with the concepts and techniques covered in this chapter.

Exercise 1: Using the World Wide Web

This exercise has two parts. In the first part, you will use Internet Explorer 3.0 to open and view local files on the *Mastering Internet Development* CD-ROM. In the second part of the exercise, you will use Internet Explorer to browse the Microsoft web site <http://www.microsoft.com>. You will navigate down the Internet development branch of the document, and you will be given the option of downloading the latest version of the Microsoft Internet Information Server (IIS).

Exercise 2: Using URLs and Internet Shortcuts

In this exercise, you will explore how URLs are encapsulated as Internet shortcuts by the Microsoft Windows operating system, and how these shortcuts can be used in Windows and Windows-based applications.

Exercise 1: Using the World Wide Web

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► Use Internet Explorer 3.0 to view local files

One of the primary functions of Internet Explorer is to view files. To extend its usefulness to the Internet, it also happens to be a client for many of the standard higher-level protocols like NNTP, FTP, gopher, and HTTP. However, you can demonstrate many of its file-viewing capabilities on local files.

1. Start Internet Explorer. Place the *Mastering Internet Development* CD-ROM in an accessible CD-ROM drive. It should display your start page. From the File menu, choose Open. In the Open dialog box, choose the Browse button. In the Open File common dialog box, navigate to the CD-ROM drive, then to the directory `\Labs\Lab01.3\`. This directory has several local sample files for you to view with Internet Explorer.
2. Open the first file from the list below. For each of the following files, you can edit the string in the Address/Open edit box found just underneath the toolbar on Internet Explorer.

Text.txt - a plain text file

Hypertext.htm - an hypertext markup (HTML) file

Bitmap.gif - a bitmap file (CompuServe's Graphic Image Format)

Picture.jpg - a bitmap file (Joint Photographer's graphic format)

Movie.avi - a multi-media file (Windows Audio-Video Interleaved format)

Sound.wav - a sound file (Windows format)

Virt3D.xof - a virtual reality markup language (VRML) file. (To view this file format, you will need a newer version of IE 3.0 than is included on the *Mastering Internet Development* CD-ROM.)

All of these files type are native to Internet Explorer because they are displayed directly within the context of the client area.

3. Repeat the procedure in Step 2 with each of the Microsoft Office files below.

WinWord.doc - a Word for Windows document

Sprdsht.xls - a Microsoft Excel spreadsheet

Each of these files are displayed in the client area of Internet Explorer, but their display is handled by the associated DocObject server. Notice that when you load each of these files, the menu structure of Internet Explorer changes partly to reflect that of the server application.

4. Repeat the procedure in Step 2 with each of the files below.

Write.wri - a Windows Write editor file

Sol.hlp - a Windows Help file

These files have a known associated helper application type. To see a list of MIME file associations, from the View menu, choose Options. In the Options property sheet, choose the File Types property page. These MIME types associate a file content type with a filename extension and a helper application.

5. Repeat the procedure in Step 2 with each of the files below. Because these files have no associated helper application, you must specify an application to open each of them.

Shape1.shp - the MFC Shapes program serialization file. Open With Shapes.exe.

Shapes.exe - click Open to execute this program.

Note that the first time you run Shapes, it registers the file extension .SHP in the Windows registration database.

➤ Browse the Microsoft WWW site

1. In the Address text box, type **http://www.microsoft.com** and press ENTER. The Microsoft home page should appear. Briefly browse the information on this page.
2. Slowly move the mouse cursor over the graphics and links on this page. (Text links are denoted by underlined words.) Note that the cursor changes to a hand shape and the status bar indicates where the link is connected to.
3. Navigate to the What's New page by clicking on the corresponding linked graphic at the top of the page. Briefly scan the contents of the page. Click on one of the topics (for example, Microsoft Press) to jump to that page. Continue browsing down into the site by clicking on more specific links.
4. Return to the Microsoft home page by one of the following methods:
 - Click the back arrow on the toolbar to traverse the navigation tree back to the home page.
 - From the Address Window list box, choose the URL for the Microsoft Web site.
 - Click the down arrow on the far right of the Address text window, and choose **http://www.microsoft.com** from the drop-down choices.
 - If you are on a page that contains a Microsoft navigation graphic, click on it to take you back.

➤ Save information about the site

Internet Explorer has a number of methods you can use to retain information about a site. In addition to the ones discussed in this step, the next lab will also show you how to use URLs and Internet shortcuts in the Windows operating system and in Windows-based applications.

1. If you have access to a printer from your system, print the Microsoft home page. To print a single page, from the File menu, choose Print. The Print dialog box is displayed. Internet Explorer cannot print an entire site in one operation.
2. To view the HTML source code for the page, do one of the following:
 - From the View menu, choose the Source command.
 - Right-click on a blank area in the page. From the View menu, choose View Source.

The HTML source code for the page is displayed in the default Windows text editor (most likely Notepad or WordPad). Note that embedded objects, like graphic images, are only referenced by filename. Since the source code is now in an editor, you can save this to a file, preferably with an .HTM or .HTML extension.

3. To access an embedded graphic object, right-click on the object. From the context menu, choose Save Picture As. In the Save As common dialog, save the graphic to a local drive. Now, locate this file with the Windows Explorer, then double-click on the file to activate it. The .GIF file will be displayed in the Internet Explorer or with another graphics-viewing application. Return to the Microsoft home page.
4. To perform text-based operations, like Cut and Paste, Internet Explorer has a standard Edit menu. From the Edit menu, choose Select All (CTRL+A). Then, from the same menu, choose Copy (CTRL+C). Start Microsoft Word or WordPad and Paste (CTRL+V) the information into a new document. Note that the formatting is lost, and embedded graphics are denoted by only a <picture> placeholder. The Edit menu also has a Find(On This Page) command for locating simple text strings within a page.
5. To save the current page as one of your favorites, use one of the following methods to display the Add To Favorites dialog box:
 - Right-click on an empty area of a page and choose Add To Favorites from the context menu.
 - From the Favorites menu, choose the Add To Favorites command.

The Add To Favorites dialog allows you to save the associated Internet shortcut in your Favorites folder. You can even manage the shortcuts by creating subfolders.

Using one of these methods, save the Microsoft home page as a favorite. Then, pull down the Favorites menu and select this new entry, Microsoft Corporation, to go to the address www.microsoft.com.

➤ Download software from the Microsoft site

Like FTP, one of the conveniences of the Web is the ability to download files to your local hard disk. Many computer companies, including Microsoft, make available many updates and utilities for the Web user.

1. Open the Microsoft home page, <http://www.microsoft.com>, in Internet Explorer.
2. Scroll down the page until you see an offer to download the Internet Explorer. Click on the associated link to go to the Microsoft Internet Explorer page. This page allows you to download versions of Internet Explorer for Windows 95, Windows NT, Windows 3.1, and the Macintosh. Note that these versions of the browser may be newer than the one included with this course.
3. Download the version appropriate to your computer. You will receive a Confirm File Open dialog box, which allows you to execute (Open) or save the file (Save As). Save this file to a local directory. Note the quoted size of the file on the HTML page.
4. Use the Windows Explorer to confirm the presence of the local copy of this downloaded file. Check the size of the copy versus the quoted size. (This is always a wise procedure to follow when downloading files.)
5. If you want to update your version of Internet Explorer, click on the appropriate download link, but choose Open from the Confirm File Open dialog box. You should then restart Windows to ensure a successful upgrade.

➤ Search the contents of the WWW

Because the World Wide Web has no directory services or overall organization, four general methods are used to search for information on the Web: subject trees, WAIS database gateways, Internet indexes (or catalogs), and search engines.

1. In Internet Explorer, from the Go menu, choose the Search The Web command. You will be taken to the Internet Searches page of The Microsoft Network (MSN) home page. (Note that this is *not* the MSN online service, but only their WWW presence.) This page allows you to search the Internet using the following six services: Excite, Infoseek, Lycos, Magellan, Yahoo, and a Microsoft-only search service.
2. In the Excite search box, type the string **Windows AND (95 OR NT) AND Internet** and choose Search (or press ENTER). The results of the search should be displayed in a new page. By default, the matches are sorted by confidence level, with the higher scores shown first.
3. Repeat the search using the Microsoft search service. Since this search only covers www.microsoft.com, the number of matches is much less.

➤ If time permits, browse the Internet Resource Center area of the Microsoft site

1. Return to the Microsoft home page. Click on the Internet Resource Center link to go to that page.
2. Using this page as your base, browse some of the information and software available from this section of the Microsoft site.

➤ If time permits, investigate some additional sites

The following Web sites represent just a tiny fraction of the varied, entertaining, and useful information that can be found on the Internet.

1. **www.altavista.digital.com** - Digital Equipment Corporation's very powerful search service.
2. **www.occ.com** - *The Internet's Online Career Center*, search for employment or post positions over the Internet.
3. **www.whitehouse.gov** - Web site of the Executive branch of the U.S. federal government.
4. **www.sciencedaily.com** - An electronic magazine devoted to science news and reporting.
5. **www.shareware.com** - Locate and download shareware and freeware on the Internet.

Exercise 2: Using URLs and Internet Shortcuts

In this exercise, you will explore how URLs are represented as Internet shortcuts by the Windows operating system, and how these shortcuts can be used in Windows and Windows-based applications.

➤ Managing favorite shortcuts in Microsoft Internet Explorer.

1. Go to the Microsoft home page at **<http://www.microsoft.com>**
2. Right-click on a link on the page. From the shortcut menu, choose the Add To Favorites command. In the Add To Favorites dialog box, choose Add to add this link to your Favorites folder. Repeat this procedure with two or three more links.
3. From the Favorites menu, choose Open Favorites Folder (or click the Favorites toolbar button). The C:\Windows\Favorites folder is displayed within Internet Explorer. Change the folder view to Details.
Note that each Internet shortcut is only 1K in size.
4. Right-click on one of the shortcuts, and choose Properties from the shortcut menu. This displays the Properties dialog box for that shortcut. Examine the General and Internet shortcut property pages. Click Cancel.

5. Start Notepad, then open one of these Internet shortcut files. (The path to the file will be in the address box of Internet Explorer.) Its contents should be small and look something like this:

```
[internetShortcut]
URL=http://www.microsoft.com/infouser/suiteover.html
```

Note that if you examine a normal Windows shortcut (for example to a folder), it will contain binary information. Close Notepad.

6. Reorganize the new links into a new folder. Create a new folder named "Microsoft Resources" inside of Favorites. Drag the new shortcuts into this folder. In Internet Explorer, click the Favorites menu, and then click the Microsoft Resources submenu to reveal the new shortcuts. Pick a shortcut to go to that page.
7. Produce Internet shortcuts on the Windows desktop. Return to the Microsoft home page. Drag and drop a text link from this page to the desktop. An Internet shortcut to that URL will be created on the desktop.

Place the mouse cursor on the graphic in the far-right side of the status bar. Drag and drop this icon to the desktop. You have now produced an Internet shortcut to the currently displayed page.

Note At the time of this writing, only the Windows desktop, Windows folders, and a few applications like Microsoft Exchange recognize Internet shortcuts. If, for example, you try to drop a shortcut into WordPad, you will receive the text representation of the corresponding URL.

8. Test one of the Internet shortcuts you placed on the desktop.

Close Internet Explorer. Double-click on one of the shortcuts you produced in the last step. This should launch Internet Explorer with the corresponding URL as the target.

➤ Using Internet shortcuts in mail

As mentioned in the previous section, the Microsoft Exchange client is aware of Internet shortcuts. Exchange also automatically links text URLs in messages to their associated Internet client application, such as the Internet Explorer.

1. Open Internet Explorer and the Microsoft Exchange client (Inbox icon) applications.
2. Create a new mail message. Address it to yourself.
3. Tile Internet Explorer and the new message on the Windows desktop. From Internet Explorer, drag a link to the new message body.
4. Copy and paste the URL from the address box of Internet Explorer to the mail message.
5. Send the message. When you receive the message in your Inbox, open it.
6. Click on the Internet shortcut icon. Repeat this process with the plain text URL, which should be underlined and colored now. Note that both launch Internet Explorer and take you to the associated Internet resource.