

Lab 10.1: Viewing HTTP Messages

Lab Overview

Objectives

After completing this lab, you will be able to understand the contents of typical HTTP response messages.

Scenario

To the WWW user, Web communication seems to entail just a request, embodied by a URL, and a response by the Web server, typically an HTML file. However, behind the scenes, much richer information is being transferred between the client and server. Before you develop ISAPI extension components, you must be familiar with the HTTP protocol.

Lab Setup

This exercise assumes that you have an Microsoft Web server installed, and have a default Web page on it.

This demonstration shows the solution to this lab.



Estimated time to complete this lab: **15 minutes**.

Exercise

The following exercise provides practice working with the concepts and techniques covered in this chapter.

Exercise1: Viewing HTTP Response Messages

In this exercise, you will use the WebClient utility to view some common HTTP response messages.

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In this exercise, you will use the WebClient utility to view some common HTTP response messages. (This lab can also be performed with a packet capturing tool, such as Microsoft Network Monitor.)

WebClient is an MFC-based tool provided only with this course.

➤ Install the WebClient tool

1. Use Windows Explorer to view the *Mastering Internet Development* CD-ROM directory \Labs\Lab10.1\WebCInt.
2. If you do not have Microsoft Visual C++ 4.0 (or another application that uses the MFC 4.0 shared libraries) installed on your system, copy the MFC library files Msvcrt40.dll and Mfc40.dll to your Windows system directory. For Windows 95, this is typically C:\Windows\System; for Windows NT, this is typically C:\WinNT\System32.
3. Select or create a directory on your hard disk for the WebClient executable file. Then, copy WebCInt.exe and WebCInt.txt into this directory. (Optionally, you can rename both files to have the base name "WebClient".)
4. Create a shortcut in an appropriate folder for this application.
5. Read WebCInt.txt for more information about this utility.
6. Start an instance of WebClient.

➤ **View HTTP response messages**

1. From the Web menu, choose Get.
2. In the Request dialog box, enter the following line in the URL text box:

http://<your server name>/default.htm

For example:

http://ddtthumper/default.htm

The HTTP Header field text box entry should be:

Allow: *.*

3. Choose OK. The appropriate GET HTTP message should be sent to your Intranet server. It returns the default home page, which is displayed in its full, uninterpreted HTTP format in WebClient's client window.
4. Examine the response message. The header should look similar to this:

```
HTTP/1.0 200 OK
Server: Microsoft-IIS/2.0
Date: Thu, 23 May 1996 13:07:09 GMT
Content-Type: text/html
Accept-Ranges: bytes
Last-Modified: Tue, 14 May 1996 02:50:06 GMT
Content-Length: 3183
```

The dates will reflect when you sent the message, and when you last modified your version of the Main Street Market home page, respectively.

The body of the response message will be the HTML code for this page. (Note that WebClient will occasionally truncate messages.)

5. Save the file to a local directory and name it Get1.htm. Open this file in Notepad and notice that WebClient has automatically stripped the HTTP header.
6. In the Windows Explorer, double-click this file to display it. Note that the referenced elements, like embedded graphics, cannot be found by Internet Explorer because the relative paths are no longer correct.
7. In WebClient, repeat this GET for an imaginary page. For example, in the URL text box, type:

http://<your server name>/Flem4.html

Examine the status line and body of the response header. The response contains the error message that a Web browser would display.

8. From the Web menu, choose Head. In the Request dialog box, enter the same URL that you did in Step 2 above. The resulting HTTP response message will be the same as the header text you received in Step 4, except that the reply time will differ.