

How Web Hits Work

Most of us give little thought to the process of accessing a Web site through our home computers. We're mostly concerned with one thing: time. Unfortunately, the more interesting the Web page, the more graphics it probably contains, and the more items of information the Internet must send your PC. The more items it must send your PC, the longer it takes to process.

As you sit waiting for a Web page to download onto your screen, the computers connected through the Internet are far from idle. Numerous computers are scurrying to process your request and return the pages you want to see. Once the request reaches the Web server, it sends your request to its own application that keeps track of the pages your PC accesses. With applications like these at work, records of your Web activities become valuable marketing information for Web content providers and Web advertisers.

Below, we take you through the process of requesting and viewing an Internet Web page. Our example shows one of I/PRO's Web pages and log files. We have changed a few numbers and letters in the log files and cookie file so they cannot be linked to a specific personal computer.

1 The user requests a Web page by typing in its URL (uniform resource locator).

User Request
`http://www.ipro.com`

2 The user's ISP (Internet service provider) changes the URL address to an IP (Internet Protocol) address and routes the request to the server that holds the Web page.



ISP

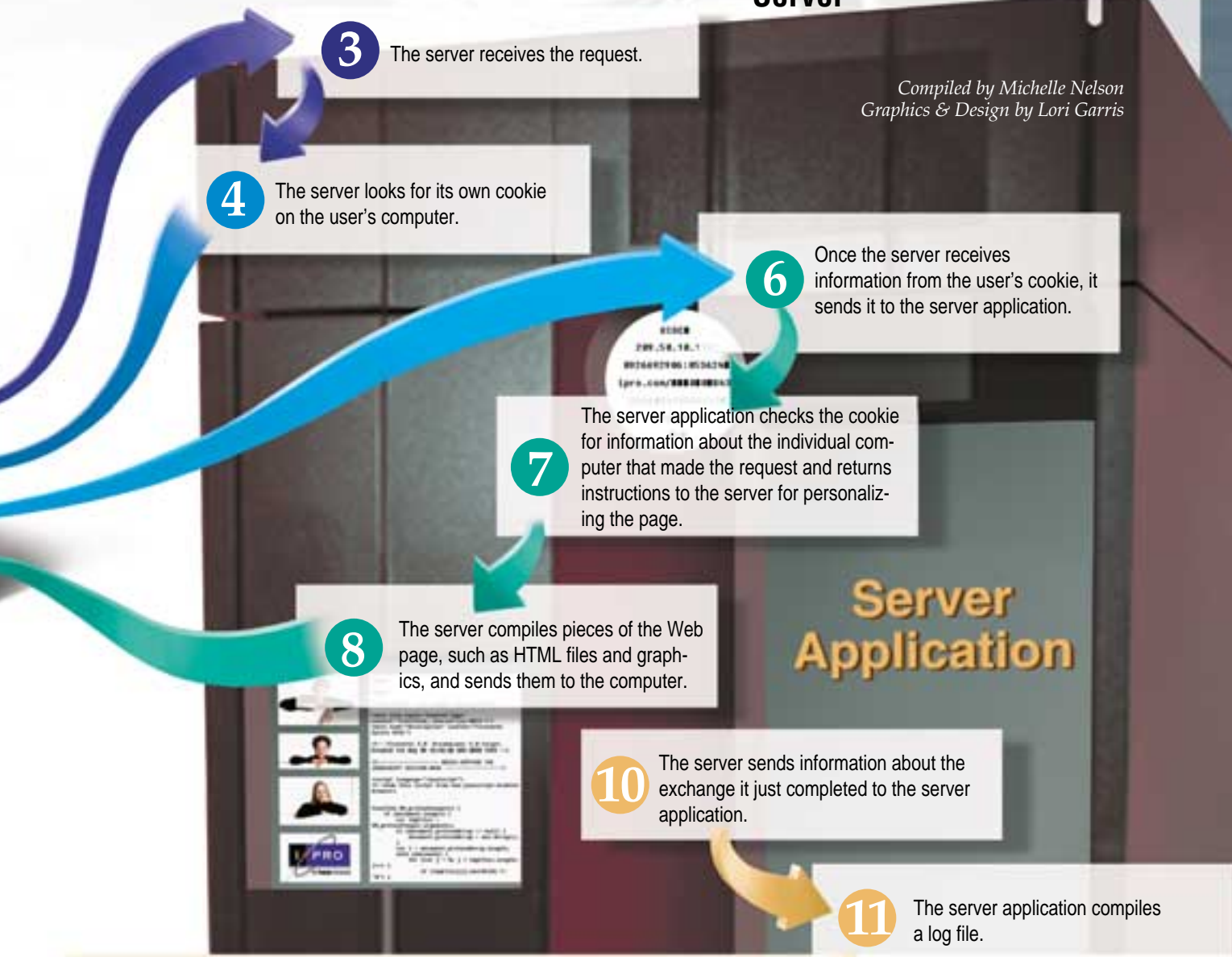
5 The server reads a cookie text file it previously placed on the user's hard drive. This file contains information about the user and helps the server deliver the right content more efficiently.

9 The computer receives the pieces of the Web page, where the browser application compiles them into a readable Web page.



Server

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3 The server receives the request.

4 The server looks for its own cookie on the user's computer.

6 Once the server receives information from the user's cookie, it sends it to the server application.

7 The server application checks the cookie for information about the individual computer that made the request and returns instructions to the server for personalizing the page.

8 The server compiles pieces of the Web page, such as HTML files and graphics, and sends them to the computer.

10 The server sends information about the exchange it just completed to the server application.

11 The server application compiles a log file.

Server Application

Log File

These are requests from a sample log file taken from I/PRO's Web server. It shows the request for three pieces of information from the company's home page address, <http://www.ipro.com>. I/PRO uses Netscape server software on a Unix machine. This log file version is in the ECLF (Extended

Common Log File). All three requests show a graphical file extension, GIF, meaning these three requests are retrieving graphics. "Mozilla" is Netscape's log file name, meaning the user's browser is Netscape. If this log kept track of cookies, it would list the cookie file name at the end of the log file item list.

IP Address	Username	Date	Time	Method	Request	Status Codes
206.171.16.115-	-	[28/Jun/1999:13:39:25	-0700]	"GET	/home/PICS/scnl.gif HTTP/1.0"	200 2745 c0000 3777dd7a00bb72
206.171.16.115-	-	[28/Jun/1999:13:39:25	-0700]	"GET	/home/PICS/a1.gif HTTP/1.0"	200 207 c0000 3777dd7a00bb72
206.171.16.115	-	[28/Jun/1999:13:39:26	-0700]	"GET	/home/PICS/a1.gif HTTP/1.0"	200 207 c0000 3777dd7a00bb72

Referrer

Browser

Browser Size