# Monitoring your Web site

**The Web allows you to keep an eye on audience demographics as people visit your site. *Tony Smith* explores the options and services, and shows you how.**

**W**hat really marks the Web out from other media is the scope it provides to respond rapidly to interested parties. Unlike TV, radio and paper-based publications which have to wait for ratings circulation and figures to gauge how well they're meeting their customers' needs, the Web is capable of delivering that information to site managers instantaneously. And thanks to the simplicity of HTML, companies which use the Web can modify their sites in response to the data almost as quickly.

That said, few of them do. Many sites sport visitor counters on their pages, but few seem to use them as anything more than a graphical gizmo. Yet even a device as simple as a counter provides feedback on the popularity of a page, an indication of how the site should evolve to improve its usefulness and increase its readership.

While the Web continues to develop as a commercial environment, visitor figures are going to play an ever more significant part in Internet business. With the idea that the Web is about free access now firmly established in the minds of users, advertising is now seen as the chief source of revenue for a commercial site. Advertisers, too, have woken up to the value of the Web as a channel to potential consumers, and are seeking clear evidence that a site can deliver sufficient numbers of buyers, and that users are noticing and acting on their campaigns.

## Charting the hit parade

Pressure from advertisers and the need to register users' preferences are forcing Web developers to think again about monitoring site activity – there's clearly more to it than keeping an eye on bandwidth usage and disk space. In response, a number of third-party products and services are emerging to help them. Some of the more basic monitoring tasks, such as tracking the links users exit a site by, can be implemented through CGI (Common Gateway Interface) scripts.
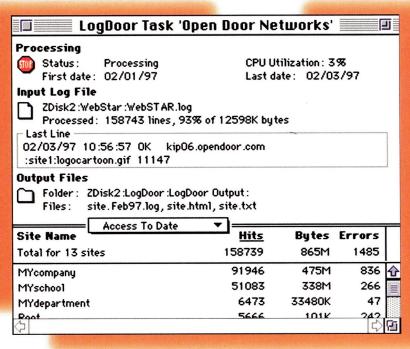
Less technically-minded page designers can add visitor counters or select an independent monitoring service to track site accesses. Server owners can run large statistical applicat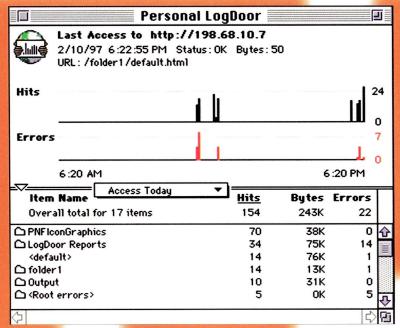ions to provide this information. Client-oriented programs are available for page creators working through an ISP. In addition, technologies like Cookies allow sites to track individual users' preferences.

The simplest way of measuring a site's popularity is to count hits, demands from a Web browser for information. Hits, however, don't give a truly accurate readership figure: a page scores a hit

### Biting into Cookies

One of the more interesting – and the most controversial – methods of monitoring a visitor's use of a Web site is provided by Cookies. The controversy has emerged through fears that Cookies – small text files sent from the server to the user's computer, often without the user's knowledge – can be used to pass information on the contents of a machine's hard disk to people who have no right to it.

As with most Web scares, there's little substance to those fears. However, Cookies are designed to show Web developers which sites users have visited, and that may very well lead to advertising being focused at specific users, though in most instances they will simply be used to make a Web site feel more tailored to individual users' requirements. A Cookie is essentially a user preferences file for a Web site, created and read through CGI scripts.

Most modern browsers, including Netscape, Spyglass and Internet Explorer, are Cookie-compatible, though Netscape Navigator 3.0 and above will, if the user requests it, prevent them from being downloaded. Cookie files can be deleted, though, as one programmer has put it, that's "like welding your front door shut for fear that it's a passageway for unscrupulous people".

**Exit link:** this provides a lists of the Web page that visitors go to after your Web site, ideal for informing advertisers with on-site banners the number of people using the ad.

**LogDoor Task 'Open Door Networks'**

Processing
Status: Processing          CPU Utilization: 3%
First date: 02/01/97       Last date: 02/03/97

Input Log File
ZDisk2:WebStar:WebSTAR.log
Processed: 158743 lines, 93% of 12598K bytes

Last Line
02/03/97 10:56:57 OK  kip06.opendoor.com
:site1:logocartoon.gif 11147

Output Files
Folder: ZDisk2:LogDoor:LogDoor Output:
Files: site.Feb97.log, site.html, site.txt

Access To Date

| Site Name | Hits | Bytes | Errors |
|---|---|---|---|
| Total for 13 sites | 158739 | 865M | 1485 |
| MYcompany | 91946 | 475M | 836 |
| MYschool | 51083 | 338M | 266 |
| MYdepartment | 6473 | 33480K | 47 |
| Root | 5666 | 101K | 242 |

**Personal LogDoor**

Last Access to http://198.68.10.7
2/10/97 6:22:55 PM  Status: OK  Bytes: 50
URL: /folder1/default.html

Hits                                          24
                                              0
Errors                                        7
                                              0
6:20 AM                          6:20 PM

Access Today

| Item Name | Hits | Bytes | Errors |
|---|---|---|---|
| Overall total for 17 items | 154 | 243K | 22 |
| PNFIconGraphics | 70 | 38K | 0 |
| LogDoor Reports | 34 | 75K | 14 |
| <default> | 14 | 76K | 1 |
| folder1 | 14 | 13K | 1 |
| Output | 10 | 31K | 0 |
| <Root errors> | 5 | 0K | 5 |

LogDoor from OpenDoor Networks offers all the expected visitor-tracking tools in real-time, and highlights broken links within the monitored site's pages.

whenever a single part of it – be it the file containing the HTML code or a graphic – is downloaded by the browser. So, a page containing five GIFs generates six hits (one for the HTML, and one each for the images) every time it's accessed.

## Easy as one, two, three

CGI scripts that increment the counter only when the HTML file is accessed are common. WebStat (www.webstat.com), for instance, offers a series of script packages, Explorer, Graphics and Plus, that generate session activity information, data on visitors' IP addresses, hit recording and measurements of the length of time a visitor spends on individual pages. However, these are of little use to page designers who don't have direct access to their Web server. Better for them are third-party counter services, such as CountMania (www.countmania.com) and the popular WebCounter (www.digits.com).

You simply set up an account through the WebCounter site then copy a line of HTML code into your own page. When the page is accessed, the extra code directs the browser to WebCounter's server, where your counter is incremented and the count is displayed on your page as a graphic. WebCounters for pages with low levels of access – under 999 per day – are free. A commercial service guaranteeing access – if the server is busy pages with free accounts may be ignored – and providing information on visiting systems and usage statistics is also available, for $35 per year (0-

999 accesses per day) up to $580 per year (5,000-9,999 accesses per day).

Visitor counters work on a page-by-page basis. However, you may not want to display a counter on every single page of a site. An alternative is to have your site monitored by a third-party, again by redirecting the visitor's browser by using HTML. The Internet Audit Bureau (www.internet-audit.com) offers just that, free of charge. As the first third-party monitoring agency, the IAB has attracted much support. Despite its name, it is not an officially-recognised body, unlike the Audit Bureau of Verification Services (www.accessabvs.com), a subsidiary of the Audit Bureau of Circulation, though the catch here is that it's only available to ABC members.

### In-house monitoring

Companies too small to consider ABC membership or who want more rigorous statistical information are catered for by a range of applications that run on their office computer. WebTrac, for instance, is a Windows-based (version 3.1 or above) package from US-based Logical Design Solutions (www.lds.com). It interrogates a server's Common File Format Log, analyses the data it contains then presents its findings graphically, as line, bar and pie charts, and region maps.

It will present hits scored against visitor, the document requested, and date and time. It will even calculate top-ten charts. The informa-

tion is recorded in a database, so graphs can easily be customised to compare any of the stored criteria. The basic version of WebTrac is free; LDS charges for customised versions of the application that have been tailored to your specific needs, such as tracking sales made through your site.

Web Counter Analysis (www.portset.co.uk/webcounter.htm) is a rival package to WebTrac that provides you with information on who is accessing your site, when they did so, and which pages they viewed. Web Counter Analysis costs £25, though a free evaluation version that lacks some of its more advanced features and is limited to tracking three pages is also available. Like WebTrac it runs on a PC running Windows 3.1 or above.

### Counting the client

Client-side software, however, tends to be fairly crude – it's limited by the availability of the server's log. Without a direct connection between client and server, the software can't provide real-time analysis of the site. For these reasons, most monitoring software is designed to run on the server. Open Market's powerful Unix-based software WebReporter 2.0 (www.openmarket.com/reporter/), for example, provides all the usual visitor monitoring options.

However, when working in conjunction with the company's Secure Server software, it will track any non-registered user during his or her visit. WebReporter generates its reports in HTML, allowing them to

be read by anyone connected with the site in their own, platform-independent browser. The reports are highly customisable through WebReporter's Wizards, which guide the user through the report-creation process. WebReporter 2.0 costs $495.

Companies running Macintosh and Windows 95/NT Internet servers (it also runs under a range of Unix varieties) can find a similar range of features in Bien Logic's SurfReport (www.bienlogic.com/SurfReport/), along with the ability to email reports to relevant users. It is, claims Bien Logic, completely customisable to allow you to find the information you need, no matter how specific it may be.

### Open the door

LogDoor 1.1, from Open Door Networks (www2.opendoor.com/logdoor/), is for Mac and Windows 95/NT-based Webmasters with less of an interest in statistics. Working across multiple domains, LogDoor offers all the expected visitor-tracking tools in real-time. It also highlights broken links within the monitored site's pages, bad links – if a would-be visitor gets a missing page error – to the site from other sites' pages, and changes in page-usage, such as a sudden increase in the number of accesses. LogDoor costs $249 and is also available as Personal LogDoor ($39) for users of Apple's Personal Web Sharing or Microsoft's Personal Web Server software.

While the majority of server-oriented monitoring applications, like

those above, are geared toward tracking visitor activity in general, some are focused on specific kinds of user. NetGravity's AdServer 3.0 (www.netgravity.com), for example, has been specifically designed to monitor the advertisements displayed on a Web site to provide indications of an ad's effectiveness and what kinds of user are following advertising links. It also boasts a range of advertising space management tools to help sites place a given advert where – and when – it will have the maximum impact.

Server applications, while the most powerful, are nevertheless of little use to companies whose site is hosted by a third-party such as an ISP. Many ISPs provide log information to their commercial account holders. Easynet, for instance, provide access and statistical data every week to companies renting 5 Mb or more on its commercial Web server. For £280 it will provide a week's referral log – the list of sites from which visitors entered yours – or add LogScribe, a set of CGI scripts, to your site which produce graphical read-outs of site accesses, which browsers were used, and so on. Other ISPs, like UUnet, provide detailed statistical information for a fee.

That may seem excessive, but the charge levied by your ISP is worth paying. No business can prosper without feedback – how else can it see if it's strategy is working? Commercial Web sites are no different. Only by monitoring a site's traffic, can it's success – and therefore its ability to make money – be proven.



WebCounter allows you to analyse your Web site, and provides information such as the number of pages accessed in relation to one another.



One software option for monitoring your Web site comes from Open Market, a Unix-based reporter. Find it at www.openmarket.com /reporter/

### Contacts

www.accessabvs.com
www.bienlogic.com/SurfReport/
www.countmania.com
www.digits.com
www.easynet.co.uk
www.internet-audit.com
www.lds.com
www.netgravity.com
www2.opendoor.com/logdoor/
www.openmarket.com/reporter/