Fact Sheet:
Internet cookies

What is a cookie?

"Cookies are a general mechanism which server side connections can use both to store and retrieve information on the client side of the connection." Source: Netscape

"Cookies are short pieces of data used by web servers to help identify web users." Source: US Department of Energy.

What a cookie is not

Cookies are not computer programs.

What cookies CAN do

A cookie can allow a website to store information on the hard disk of a visitor's computer.

Most cookies store very simple information – like a user ID, others record this information alongside basic 'session information' - a record of each visit and its duration. More detailed information, like pages visited, shopping cart contents and user preferences, is typically stored in a separate database, accessed using the ID stored on the cookie.

Because cookies allow website to recognise repeat visitors they can accurately calculate the number of new visitors, the number of unique visitors and the number of visits each user makes – assuming one visitor per machine.

On every visit to a web page your computer's browser checks to see if it has any cookies for the given website. If you have it will use the information to enable a personalised greeting or allow access to tailored pages of information. And once you're in the site the cookie will be used to store that session's information alongside the information recorded during previous visits.

If you have not got a cookie, a cookie is usually dispensed according to the site's registration process.

The web servers of websites without cookies do not have the facility to automatically recognise the originators of the many requests they receive. Meaning that without cookies every hit, click-through and download is impossible to track unless the user has been through a separate log-in process on each visit - a time-consuming, off-putting and often unnecessary ritual as far as site visitor is concerned.

What cookies CAN'T do

Because cookies are not computer programs they cannot gather information on their own. It is the website that retrieves the information, alters it if needs be, and then stores it again.

Cookies are securely linked to the issuing website domain, so no other website domain or cookie can retrieve the information the issuing website stores. However, there may be more than one web site attached to a single domain and here it is technically possible to share cookie information.

Even though a PC 'hosts' a cookie, the cookie cannot gather any information stored anywhere else on the machine or any other machine connected to it.

Cookies are specific to a machine and so in the case of multiple users, like at internet cafes and universities, they cannot distinguish one user from another. And in cases where one person visits the same site from more than one machine, they will generate more than one cookie. However, these obstacles can be overcome if your log-in process is configured to:

- Allow multiple log-ins from one machine, and feed a cookie to it to welcome more than one user.

and/or

- Allow the same person to log in from multiple machines, and feed cookies to all machines that relate to the same person on the database

Lastly, remember the internet is not outside the law, so cookies are subject to the same privacy and data protection laws as all other personal data. What is being proposed in Europe (March 2002) will supplement the established legal constraints. In the US, additional legislation is also being lobbied for by the Internet Engineering Task Force.

Finding, analysing and stopping cookies

Cookies are stored in different places on your system depending the web browser you use. Netscape stores all its cookies in a file names 'cookie.txt', Internet explorer stores them in two separate files: 'windows/cookies' and 'windows/profiles/cookies'.

If you open your cookie files you can see where they came from and what information they contain. Information such as the URL and your user name will be instantly recognisable. Lists of digits will be harder to decode and may be dates of visits, numbers of hits on a given page, or an arbitrary number relating to your record on the website's database.

Users can shield themselves from cookies by setting an option on their browsers. In Internet Explorer 4.0 choose 'View', 'Internet options' and click on the 'advanced' where there is a 'Disable all cookies option'. For Netscape 4.0 choose 'Edit', 'Options' and click on the 'advanced' button where there is a 'Disable cookies' option.

Some companies now offer software which filters cookies according to which site sends them.
To find out more visit

www.cookiecentral.com
or
www.junkbusters.com

Links for further reading

www.howstuffworks.com/cookie

www.netscape.com/newsref/std/cookie_spec.html

www.cookiecentral.com

www.junkbusters.com

www.epic.org

www.worldwidemart.com/scripts/faq/cookielib.shtml