http://www.whatarecookies.com/

What Are Cookies?

Cookies are small files which are stored on a user's computer. They are designed to hold a modest amount of data specific to a particular client and website, and can be accessed either by the web server or the client computer. This allows the server to deliver a page tailored to a particular user, or the page itself can contain some script which is aware of the data in the cookie and so is able to carry information from one visit to the website (or related site) to the next.

Are Cookies Enabled in my Browser?

To check whether your browser is configured to allow cookies, visit the Cookie checker. This page will attempt to create a cookie and report on whether or not it succeeded. For information on how to enable or disable cookies, see 'Enabling cookies'. For information on how to delete and clear cookies, see 'Deleting cookies'.

Can I see/view the cookies I have on my computer?

Most browsers have a configuration screen which allows users to see what cookies have been stored on the computer, and optionally to delete them. For more information, see the viewing cookies page.

Note it is not possible for a webpage to view cookies set by other sites, as this would represent a privacy and security problem.

What's in a Cookie?

Each cookie is effectively a small lookup table containing pairs of (key, data) values - for example (firstname, John) (lastname, Smith). Once the cookie has been read by the code on the server or client computer, the data can be retrieved and used to customise the web page appropriately.

When are Cookies Created?

Writing data to a cookie is usually done when a new webpage is loaded - for example after a 'submit' button is pressed the data handling page would be responsible for storing the values in a cookie. If the user has elected to disable cookies then the write operation will fail, and subsequent sites which rely on the cookie will either have to take a default action, or prompt the user to re-enter the information that would be stored in the cookie.

Why are Cookies Used and how long do they last?

Cookies are a convenient way to carry information from one session on a website to another, or between sessions on related websites, without having to burden a server machine with massive amounts of data storage. Storing the data on the server without using cookies would also be problematic because it would be difficult to retrieve a particular user's information without requiring a login on each visit to the website. If there is a large amount of information to store, then a cookie can simply be used as a means to identify a given user so that further related information can be looked up on a server-side database. For example the first time a user visits a site they may choose a username which is stored in the cookie, and then provide data such as password, name, address, preferred font size, page layout, etc. - this information would all be stored on the database using the username as a key. Subsequently when the site is revisited the server will read the cookie to find the username, and then retrieve all the user's information from the database without it having to be re-entered. The time of expiry of a cookie can be set when the cookie is created. By default the cookie is destroyed when the current browser window is closed, but it can be made to persist for an arbitrary length of time after that.

Who Can Access Cookies?

When a cookie is created it is possible to control its visibility by setting its 'root domain'. It will then be accessible to any URL belonging to that root. For example the root could be set to "whatarecookies.com" and the cookie would then be available to sites in "www.whatarecookies.com" or "xyz.whatarecookies.com" or "whatarecookies.com". This might be used to allow related pages to 'communicate' with each other. It is not possible to set the root domain to 'top level' domains such as '.com' or '.co.uk' since this would allow widespread access to the cookie. By default cookies are visible to all paths in their domains, but at the time of creation they can be restricted to a given sub path - for example "www.whatarecookies.com/images".

How Secure are Cookies?

Cookies do not in themselves present a threat to privacy, since they can only be used to store information that the user has volunteered or that the web server already has. Whilst it is possible that this information could be made available to specific third party websites, this is no worse than storing it in a central database. If you are concerned that the information you provide to a webserver will not be treated as confidential then you should question whether you actually need to provide that information.

What are Tracking Cookies?

Some commercial websites include embedded advertising material which is served from a third-party site, and it is possible for such adverts to store a cookie for that third-party site, containing information fed to it from the containing site - such information might include the name of the site, particular products being viewed, pages visited, etc. When the user later visits another site containing a similar embedded advert from the same third-party site, the advertiser will be able to read the cookie and use it to determine some information about the user's browsing history. This enables publishers to serve adverts targeted at a user's interests, so in theory having a greater chance of being relevant to the user. However, many people see such 'tracking cookies' as an invasion of privacy since they allow an advertiser to build up profiles of users without their consent or knowledge.