

## Cookies

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Computer world cookies are not nearly as nice as the kinds that come out of an oven. I admit, the impetus for this article stemmed from my personal frustration with them. Lets examine what they are, what they can do for you, and what they might do that you might not want done. Finally, I will show you how to prevent them, should you wish to. Remember, YOU are the human commander of your computer, and can make decisions on what comes in from the outside world as well as what goes out.

A COOKIE is a small file (but not necessarily a tiny one) that is sent to your web browser (Netscape, Internet Explorer) by a web server when you are on the web. The file is written to your hard drive by your browser, and occupies space just like any other file. It stays on your hard drive even after you disconnect from the web, and it may persist for weeks, months or years.

**SIZE AND NUMBER:** According to a preliminary specification paper by Netscape, there are limitations on the number and size of cookies that you should be asked to store at one time. This limit is 300 total cookies, each of which should be 4,000 bytes or smaller (totaling 1,200,000 bytes). They also specify that no single site should send you more than 20 cookies. Very nice, indeed, but this is only a set of guidelines and is not coded into Netscape's browser. Further, I do not know if Microsoft (Internet Explorer) has or plans to have any such limitations. To the best of my knowledge, there are currently no limits, and no site you visit is bound by any rules. Therefore, if you visit ten sites today while browsing the web, and each sends you ten 2,000-byte cookies, you have acquired 200,000 bytes of data. Five days of browsing under the same conditions bring that to a megabyte. Fifty days yields 50 Mb, and so on.

**EXPIRATION:** If your browser is set to accept all cookies, you will never see a request on your screen. But if it set to "Warn me before accepting cookies," a box will pop up on your screen whenever a site wants to write one to your hard drive. A date will typically be displayed, which is the date the cookie expires. However, that does not mean that the file goes "poof" on that date. Indeed, there is no mechanism for erasing that cookie automatically. The only way that it is normally erased is if you log into that site again, and the site sends you another cookie with the same name containing an expiration date in the past. It can then delete its "old" cookie. Do many sites do this? I don't know, but I doubt it. They are not really interested in "housekeeping" chores on your computer. Norton Utilities' CLEANSWEEP will clean up cookie files for you, both expired and unexpired. A better ploy is to keep them from being written to your disk in the first place.

**GOOD STUFF:** Cookies do have positive attributes. They can store your preferences so that when log on to CheapParts.com, their server knows you are usually interested in hard drives so it takes you right to that section. When you log into your start page at SurfTheWeb.com, their server knows you don't like international news but really do like sports; it then fills the page with the latest breaking sports news.

**NOT SO GOOD STUFF:** Web site designers can use cookies to track what you do on their site. It can give them information on those customers who jump from one place to another, then "bail out" of the site because nothing more interests them. It can also give them more accurate information on who visits them. For example, cookies can help differentiate between 10 different

people who visit the site and a single person who punches the reload button ten times. Some people think this is an invasion of privacy.

**BAD STUFF:** In Internet Explorer 3.0, the first part of the cookie is your Windows 95 login name. Early implementations of Java made it possible to get your email address and just about any other data that was on your hard drive. It is claimed that most of these security leaks have now been plugged. Do you believe that? I do, but I also believe that wicked people can get around the security plugs if they really want to.

There is a great analogy, which I read at <http://www.junkbusters.com> (recommended!) that goes like this. You are watching TV, surfing the channels with your remote control. Suppose that your remote control informed each TV station the second you switched to it, and that they could gather and sell this information to their advertisers to help them decide what junk mail to send you. Further, pushing that Channel X button could tell an insurance company to phone you while you are watching a program on financial planning. Or, a less blatant example: suppose that switching to a channel during a bass fishing program lets a fishing lure company know, and they send you a catalog. Are these services to you, to help you target those things you want to purchase? Or is it an invasion of privacy, par excellence? The call is yours.

I think cookies are a dangerous pain, and have shut them off in my Netscape 4.5 browser. Here is how you can, too. In Netscape, click on Edit, then Preferences, then Advanced. You will see four buttons at the bottom of the screen: Accept all cookies, Accept only cookies that get sent back to the originating server, Disable cookies, and Warn me before accepting a cookie. If you select either of the first two AND the Warn me button, you can accept or not accept a cookie each time someone wants to send one. Try it. If you are like me, after awhile it will become annoying to have to hit the Cancel (do not accept) button each time a cookie is offered. My Disable Cookies button is selected. In IE, the path to the buttons is Edit, Preferences, Cookies or View, Internet Options, Advanced, Security, Cookies. A reported alternate path is to right click the IE Shortcut, then (left) click Properties, Advanced, and Cookies.

Be advised that some sites require you to accept cookies! In that case, you will not be able to navigate or download from that site, depending upon the site restrictions. At Microsoft, for example, you can navigate around the site, but you cannot download any upgrades without accepting a cookie. Be prepared to turn cookie acceptance back on if you really want that file. But also be advised that in doing so, you are opening your computer to potential information gathering.

Cookies are like computer viruses. They are files written to your computer's hard drive without your informed consent (at least without your informed consent before you read this article). The only way they differ from viruses is that they do not reproduce themselves (*yet*). Be informed, keep learning, and happy computing!