

On-line Advertising: The Fear Factor

You want to protect your privacy on-line. You don't want to be at risk for a security breach. They want to help you.

Who are they? They are companies that make software that they claim will protect your privacy and help you secure your computer. Some companies have started using scare tactics to induce you to buy their product.

I've seen, and so have a lot of other people, a pop-up window that suddenly comes up in front of your web browser:

Your computer is currently broadcasting the following Internet Address: [your IP address is shown here]. Every time you connect to the Internet, send email or submit a private information to a web site, you are broadcasting this unique address. With this address, someone can immediately begin attacking your computer. Download Internet Alert to protect yourself now!

This company is taking advantage of the public's lack of awareness of how the Internet works at its most basic level. The Internet does not work like television or radio, where you tune in and anonymously receive content. Instead, think of it almost like postal mail where you are requesting information and somebody is sending the information back to you.

When you go to a web site your computer is sending a request for information to a web server. In order to know which computer to send the information to, out of the millions of computers that are also on the Internet, the web server needs to have a "return address" that points to your computer. That "return address" is your IP address. Having your IP address known is not a breach of security or privacy; it's the fundamental way the Internet works.

Your web browser sends additional information that may also be used in advertising scare tactics. Your browser type and version, operating system, the page you last visited, and what language you are using in your web browser are all sent with your request for a web page. There are many legitimate reasons for sending this information. The correct look and functionality of a web site often depends on the web browser and operating system you have on your computer. In order to make a web site work for multiple browsers and operating systems, different information needs to be sent if you're using Internet Explorer or if you're using Netscape. You could be sent different versions of a web site depending on what language you are using so you don't have to translate on your own.

Here is a sample entry in the log file of the AF&F web site, <http://www.aff.cornell.edu>:

111.111.111.1 09/13/02 OK 19:12:41 :as:it:kronos-form.html
<http://dataworks.fcs.cornell.edu/KRONOS/kronos.htm> Mozilla/4.0 (compatible; MSIE
6.0; Windows NT 5.0)

This tells me that someone using that ip address at that time (if you dial in your ip address can change each time) went to the Information Technology Services kronos clock request web page on September 13 at 7:12 pm. I also know that they came from the DataWorks Kronos web page using Internet Explorer 6 on a Windows 2000 computer. But it does not tell me who that person was, where they are physically located, or how to contact them.

What does that information really mean? It is true that with this information a hacker can try to attack your computer, but it is also true that with out sending this information out the Web would stop dead in its tracks. None of this information automatically broadcast by your computer or web browser is of the personal nature. Your name, mailing address, email address, credit card numbers, et cetera, are not sent by your web browser or automatically transmitted by your computer. Most violations of privacy need an interaction that you participate in; an on-line form you filled out, a program you downloaded that automatically sends information about you, a virus that infected your computer, an email you responded to, a web site you registered for, even a product you bought.

Be careful, research software before you buy it, and don't fall into the fear trap.

<http://www.langa.com/newsletters/2002/2002-08-29.htm#3>
<http://www.langa.com/newsletters/2001/2001-07-02.htm#1>
<http://www.phdsystems.com/tutorials/internet/index.html>
<http://www.howstuffworks.com/web-server.htm>