Here's my approach to spyware/adware protection and system security. I use the following settings and programs and install them in the following order:

Virus Detection: Make sure you have a relatively up to date virus detection program installed on your system and make sure it has the latest signature updates installed with it. Signature updates are released at least weekly by most major software vendors and more often when there is a known outbreak of a newly discovered virus. Most virus detection programs can be set to automatically update but that feature has tended not to be the most reliable feature in virus detection, so it's best to check that your virus detection is actually up to date, especially when you know there is a new virus on the loose. You can check most virus detection programs release dates by right clicking on the little logo icon in the system Tray (now called the "Notification Area" in Windows XP) which is the area located adjacent to the clock display on the right end of the Task Bar (usually the lower right hand corner of the display area). Notrton Anti-Virus from Symantec is Not my favorite choice for virus detection. A better choice is available for Free at http://www.grisoft.com/doc/products-avg-anti-virus-free-edition/lng/us/tpl/tpl01 I personally use this product on my system at home and it has served us very well.

Windows Updates: In "My Computer" (right click, "Properties" "Automatic Updates" and choose "Keep My Computer Up to Date . . ." and select the top choice to notify when Windows updates are available and then to notify again when they are ready to install. That way the user knows when their system is downloading or installing so they know that there is a reason that their system is running slowly (or if they're busy they can postpone the download or install until they're not busy using the system). You can manually check for Windows updates by launching Internet Explorer browser and choosing "Tools" from the Menu Bar and then "Windows Updates" or go to http://v4.windowsupdate.microsoft.com

Note: SP2 (Service Pack 2) has been out for a few years now and proven to be a Tremendous improvement to the security of Windows XP as well as a significant improvement to the Windows XP operating system in general, not the least of which is the improvement it provided for wireless networking on the operating system. More about \sP2 will be covered later in this document. Se also http://support.microsoft.com/default.aspx?pr=windowsxpsp2

Microsoft Office Updates: Microsoft Office updates are also important to system security and have to be checked for, downloaded and installed manually. A hyperlink to the Office update page at Microsoft can be found near the upper edge of the Windows update page or go to

http://office.microsoft.com/search/redir.aspx?AssetID=ES790020331033&Origin=HH011277401033&CTT=5

Spyware/Adware Blockers & Scanners: I use six programs to block and clean spyware. I probably do the updates and then scan about once per month. I also run a **full virus scan** on my whole hard drive once a month and then run a **defrag**. By using this approach and being selective in what things you download and install from the web it is probably possible to run your system for a year between major cleanups. However, this will be very dependent upon how careful the user is when browsing the web. **Toolbars, files sharing services such as Napster, WinMX, and Kazaa, and free software on the web are notorious sources of spyware and viruses.** The **only** file sharing program we use and I **think** it <u>might</u> be clean is LimeWire **www.limewire.com**

The new Microsoft "Windows Defender" final release:

http://www.microsoft.com/downloads/details.aspx?FamilyID=435bfce7-da2b-4a6a-afa4-

f7f14e605a0d&displaylang=en Windows Defender is a free program that helps you stay productive by protecting your computer against pop-ups, slow performance and security threats caused by spyware and other potentially unwanted software

http://www.spywarewarrior.com/uiuc/res/ie-spyad.exe *Start Here*~ IESPYAD: IE-SPYAD is a Registry file that adds a long list of known advertisers, marketers, and junkware pushers to the Restricted sites zone of Internet Explorer. Once IE-ADS is "merged" into your Registry, most direct marketers and malware pushers will not be able to resort to their usual "tricks" (e.g., cookies, scripts, popups, et al) in order to monitor and track your behaviour while you surf the Net. IESPYAD covers over 30,000 sites and is well worth using. *NOTE*: It's updated every week by the

author. Download the updated version and run the install. One of the options is to uninstall the current installation and then run a new install which will insert the updated site blockings.

http://www.javacoolsoftware.com/spywareblaster.html SpywareBlaster (an updateable blocker)

http://www.download.com/Ad-Aware-SE-Personal-Edition/3000-8022_4-10045910.html?part=dl-ad-aware&subj=dl&tag=top5 Ad-Aware ~ Popular, effective, updateable, & free.

http://www.safer-networking.org/en/download/index.html SpyBot Search & Destroy ~ Popular, effective, updateable, & free.

http://www.webroot.com/wb/products/spysweeper/index.php SpySweeper ~ Very effective. Can only be updated in the 'paid-for' version. You can use it for a period of time for an initial cleanup. For about \$20 per year it's well worth the money.

Popup Protection: My experience is that a clean system using the techniques listed above will probably result in an almost total absence of pop-ups. Additional protection can be gained from using PanicWare's "Pop-Up Stopper" http://www.panicware.com/popupstoppercompare.html or Google's http://toolbar.google.com/ or MSN's http://g.msn.com/0US!s5.31472_315529/37.c6845/1??cm=IconNav browser toolbars (yes, we *think* these are safe from spyware~;) which have pop-up blockers built in. Personally, however, I don't care for (or trust) the various 'toolbars.' I'm not convinced that they don't actually install their own variety of spyware. Microsoft's latest service pack (SP2) for Windows XP adds a pop-up blocker to Internet Explorer and Mozilla's FireFox browser (which will be covered more thoroughly later in this article) also has *very* effective pop-up blocking built-in.

Firewalls:

Because broadband Internet users' systems (i.e. roadrunner, DSL, etc.) are connected to the Internet for extended periods of time they are more vulnerable to outside intrusion than dial-up users whose systems connect to the Internet at irregular intervals. Because of this, broadband users should have a firewall protecting their system from outside intrusion. There are two types of firewalls: Hardware & Software. I recommend a hardware firewall such as one of the Linksys routers http://www.linksys.com, either in wireless or non-wireless. They are much easier to configure than the software variety of firewalls, probably more effective, and don't require any system resources like the software variety which are actually a program running on the computer itself. Many of the hardware firewalls are also network hubs that allow the user to connect more than one computer to their home network in order to share resources, printers, etc. and they also allow for the sharing of the Internet service between all the computers in the home.

For dialup users using Windows XP there is a firewall feature (software) that has been built into Windows operating system and is probably adequate for the average user. However, in version SP1 (Service Pack 1) it needs to be turned on to put it into use because the default setting is "Off." In SP2 (Service Pack 2), which |Everyone should be upgraded to, the much improved version of this firewall is turned on as the default setting.

ZoneAlarm from Zonelabs http://www.zonelabs.com/store/content/catalog/products/sku_list_za.jsp is an excellent Free version of software firewall that does a somewhat more thorough job of securing the system compared to the firewall built into Windows XP (even SP2's updated version) It does require a little more knowledge & tweaking by the user and on occasion can experience conflicts with Microsoft's Windows security updates (ask me how I know~ ;) I used it for quite awhile but after it disabled my Internet service after I ran a Windows update I decided to just depend on the Windows XP SP2 firewall in combination with my Linksys router.

Alternate Web Browser & E-mail clients (readers):

<u>One of the Most Effective defenses against spyware and viruses</u> has come from using an alternate web browser and an alternate e-mail reader (client). The results are remarkable! The *FireFox* browser and the *Thunderbird* e-mail client

from *Mozilla* can be downloaded at **http://www.mozilla.com** There are also copies on this CD in folders called "FireFox" and "ThunderBird."

Here are a number of links where many of these resources can be found:

http://www.grisoft.com/us/us_dwnl_free.php Link to the free edition of AVG anti-virus software from Grisoft

http://www.drcolburn.com/Tech/Pages/Virus.htm Virus, spyware, & firewall info on my web site:

http://www.drcolburn.com/Tech My computer resource site:

http://www.microsoft.com/security/ Microsoft's main security web site:

http://www.drcolburn.com/colburncomputer/ How to get in touch with me~

315.524.9513 Home 315.524.1134 Work (voice mail 3750) dcolburn@wayne.k12.ny.us Dave@DRColburn.com