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# *BPSD Technology Publication*

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## *Protecting Your Home Computer*

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### **Spyware, adware, viruses. How to protect your Internet connected computer.**

#### **My computer is really slow. What is the problem?**

It depends on many things. Older computers will run slower than newer, faster ones. Computers which are full with very little free space will run slower. Computers with lots of programs loading when you Startup will run slower.

#### **When I start my fairly new computer, even before I run a program like Word or Internet Explorer, it is still slow. Why is it slow when no programs are running?**

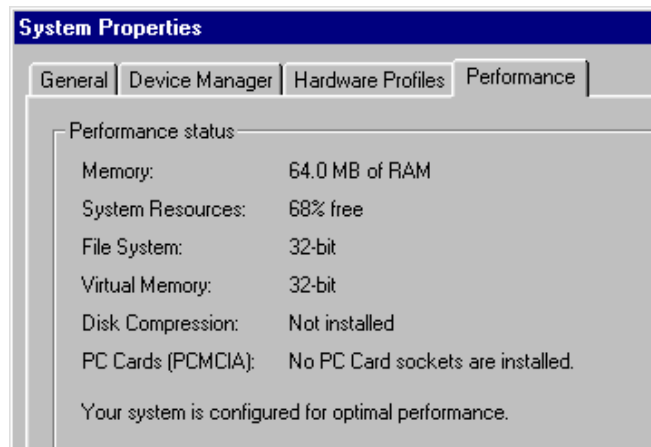
Even though you are not using an application like Word, when you start your computer, lots of programs load and run in the background. You can look at your system tray at the bottom right of the screen to see how many programs have loaded there. Not everything shows up in the system tray. You may have many **spyware** or other programs loading that you know nothing about. These programs use a lot of system resources and slow the computer down.



This is the system tray in my computer. These are all programs running although I have not launched any applications. You will find this in the lower right corner of your computer.

#### **How can I tell if my computer is using too many system resources?**

Close all visible programs like Word, Internet Explorer, etc. On your desktop, right click the MY COMPUTER icon, then choose Properties. This screen will pop up. Choose the performance tab and check System Resources. Mine is currently at 68%. When you first bought your computer, it was probably between 80 and 90%. If it is in the 50's or 60's, that is a sign that too many programs are running in the background.



## What can I do to get rid of some of the programs running in the background?

One of the safest things you can do is to click (right on some, left on others) on items in the system tray and try to exit from them. You may need to experiment to see which you need and should not exit from.

## I did that and my resources are still low. What now?

Do you or someone who uses your computer surf the web? Do you download songs or games to play on your computer. If you ever have, chances are you have Spyware which is hogging your system resources.



## What is Spyware? What is Adware? What's the difference

Adware is 'freeware', whereby ads are embedded in the program. These ads will show up when you open the program. Most adware authors provide the free version with ads and a registered version whereby the ads are disabled. An example of this is Eudora. Most of us use the freeware version so we see ads. We can easily ignore the ads. As such, you the user have the choice, you either use the freeware with ads served or you purchase the registered version. Adware is annoying, but will not affect the performance of your computer.

Spyware, however, is published as 'freeware' or as 'adware', but the fact that an analysis and tracking program (which reports your activities to the advertising providers' web site for storage and analysis) is also installed on your system when you install this so-called 'freeware', is usually not mentioned. Even though the name may indicate so, spyware is not an illegal type of software in any way. But what the adware and spyware providers do with the collected information and what they're going to 'feed' you with, is beyond your control.

**About cookies:** Netscape Navigator and Internet Explorer will still send out existing cookies even after disabling cookies in the browser settings. You must manually delete any/all cookie files on your system to eliminate being tracked by third-party ad networks or spyware or adware providers.

If you have experienced any of the following scenarios, then you may have a great deal of Spyware unknowingly installed on your computer.

- Your, once fast-loading/running, computer is beginning to behave somewhat sluggish
- Even though you have Internet cable or DSL access, your downloads seem to be getting slower
- Even when you are not doing anything on-line, your modem lights indicate that your system is sending and receiving data
- Your system tray (in the lower right corner of the screen) has more than eight icons in it
- For example, you search the Internet for holiday vacations in Hawaii and the very next day your screen starts popping up with all sorts of ads for discounts in Maui. Don't write it off to coincidence.
- Similarly, your e-mail in-box begins filling up with unsolicited messages (spam) directed to you specifically with information on holiday vacation opportunities
- Do you, or your children, download mp3-formatted songs off the Internet?

- If people in your household use programs that "help out" the user or change the appearance of the mouse cursor (like Bonzai Buddy or Comet Cursor), spyware is at work on your system
- If you, or your children use software or services from Morpheus, Go!Zilla, Kazaa, or BearShare you may be in deep trouble.

### What does Spyware do?

Using Spyware, companies can track your surfing habits, abuse your Internet connection by sending this data to a third party, profile your shopping preferences, hijack your browser start page or pages, alter important system files, and can do this without your knowledge or permission. The security and privacy implications of these exploits should be quite obvious and undesirable on any system or network!

### What is the first step in protecting an Internet-connected computer?



Before we attempt to safeguard one's privacy, it is very important that users connected to the Internet safeguard their home computers from viruses distributed by the Internet. You **NEED** virus protection.

Don't have virus protection? Get it fast. Norton is good, but only if it is up to date. The school uses AVG. You can get a **FREE** copy at [www.grisoft.com](http://www.grisoft.com). Click on free downloads, and follow the instructions. Update it often, and run scans often, especially if you have kids roaming the internet unsupervised. Without updating, it is practically useless.

### I am protected from viruses. How can I protect against Spyware?

First, have you ever seen screens with information like Cydoor, Comet Cursor, Gator, Hotbar, Lop, Morpheus, RealPlayer. Check out more at <http://www.simplythebest.net/info/spyware.html>. All these programs contain spyware components.



### Why should I be concerned?

- Can spyware send off information such as your snail-mail address and unlisted phone number when you are innocently completing an on-line form to register software?
- With tax season fast approaching, can spyware report to others (not E-file to the Government) various information including your S.I.N. number and financial status?
- Can spyware send off your Visa or Master Card numbers when you do on-line shopping?

One needs to become more diligent in removing spyware and learning more about its threat to one's privacy.

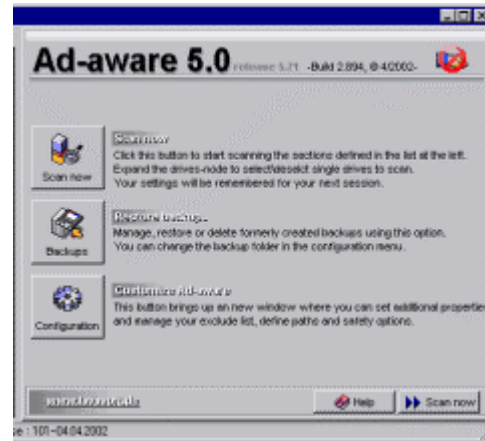
# Anti-Spyware Tools

## Ad-aware to the Rescue

Ad-aware describes itself as a "free multi spyware removal utility, that scans your memory, registry and hard drives for known spyware components and lets you remove them safely."

Those wishing to rid themselves of spyware should consider installing and running this product. The steps below are provided to assist in this process:

1. Point your browser to Lavasoft's [Ad-aware](http://www.lavasoftusa.com) site at: <http://www.lavasoftusa.com>
2. Select the Download Ad-aware link.



## Personal Experience

On my home computer, my system resources were at 46%. I downloaded Ad Aware and ran it. It found 28 programs and 135 files of spyware. I deleted these files and my system resources are now at 83%. I didn't think I had spyware on my computer. I obviously had, and it seriously affected the performance .

## As long as we're at it, how do I stop those annoying Pop-Ups when I surf the net?

There are free, shareware, or full commercial programs which will reduce the number of pop-ups you get. Go to [www.download.com](http://www.download.com) and type **popup killer** in the search box. You will find a number of different programs. Try one out, but remember, they will slow down your system, since each page is checked for popups as it loads. Try one out and see if you notice a difference in speed. You can always un-install it later. I have used Ad Subtract Pro with satisfactory results. You can try it for free, but it costs \$30 Americanian to buy.

### **Remember**

***A little knowledge can be dangerous. If you are unsure when deleting spyware or viruses, read the instructions in the help menu of Ad Aware first.***

Netscape 7, the latest Netscape also has a built in popup killer. You must set the preferences so that this feature is active.

**Please do not alter settings or run any unauthorized software on school computers. If you have a concern, talk to your principal, Mike Goodman, or myself. These programs often run differently on a network as opposed to a single computer you may have at home.**