

## Make an old computer fast and secure

A number of things can make a computer drag. It could be bad hardware, or maybe you're trying to do too much. However, bad hardware usually just dies.

Viruses and spyware can bog a computer down but that should be reasonably easy to fix.

Start at the [Security Center](#) on Komando.com . She has written a piece about security and at the end of each section she recommends programs. These programs are free and quite competent. You need one antivirus program, multiple anti-spyware programs and a firewall.

Do not depend on the Windows Firewall; it is inadequate. That firewall should be disabled when you install a third-party replacement. She recommends ZoneAlarm which is free.

To disable the Windows Firewall, click Start>>Control Panel. Double-click Windows Firewall. In Windows 7 and Vista, click "Turn Windows Firewall on or off." Make your selection. In XP, just make the selection. Click OK and close the windows

Once your security programs are installed, update them. Schedule them for automatic updates, wherever possible. Updates are critical. Most antivirus and anti-spyware programs can scan your computer. Run each program's scan, but not simultaneously. Hopefully, that will straighten out the computer. But it may not

Older computers often have another problem—terminal crud. This isn't malware. It's the accumulated detritus of years of computing. It gathers in the registry, the database that runs Windows. The usual cure is a reinstallation of Windows.

Most people would never take this on and buy new computers instead.

If you choose to use a Registry Cleaner be careful - not all are legitimate. Try That program is Macecraft's jv16 PowerTools or Uniblue has a registry cleaner; PC Pitstop's PC Matic addresses registry errors, among other things. Both are legitimate, good companies. Try this if really have nothing to lose because your pc is acting up badly and it is a last step before buying a new pc.

Sometimes, lack of memory (RAM) can cause slowness. Windows XP needs 512 megabytes of RAM; Vista and 7 need 2 gigabytes. To check your total, click Start>>Control Panel. Double-click System. The number will be on the window that opens.

If you have less than the optimum RAM, don't rush out for more. If your machine once ran OK, and you're not editing movies or hundreds of photos, your RAM is probably OK.

Other things can cause a slow system. Is your hard drive crammed? If so, delete stuff or get a bigger drive. A slow processor could also cause problems.

Also, try defragmenting your hard drive. To do that, click Start>>All Programs>>Accessories>>System Tools>>Disk Defragmenter. The defragmenter can take awhile to run, so give it time.

If nothing works, you probably need to reformat the hard drive.

That process is more tedious than difficult. Be sure to back up your personal files. Reformatting the hard drive will destroy them

To do this, you need to reinstall Windows. In the process, you will reformat the hard drive. All the data on it will be destroyed. If you have a Windows disc, use that. If not, an area on your hard drive probably has the Windows files. Hopefully, it will include instructions for reinstalling Windows. Read and follow those BEFORE starting