

From the Technomanor (Part I)

I found this in my Inbox a few days ago:

My new computer was great, but lately it has become increasingly slower and more difficult to use. What can I do to get my computer to perform better and faster?

This is a common issue with computers. There is no single (easy) answer. So, this week, I'll talk about the various causes of computer slowness. Next week, I'll give specific tools and techniques to ferret out some of the culprits.

I'll focus on Microsoft Windows computers. Most of these causes affect Apple Macintosh computers, too.

Following are common causes of slowness, with an explanation of each and approaches to test or solve the cause.

Insufficient memory (RAM)

Most computers ship with enough memory to run the operating system and a few applications, comfortably. This also makes the computer a little more affordable. Trouble is, once you add other software to make the computer safe and usable (i.e., security software and Adobe Reader), "enough memory" becomes not enough memory. Your computer slows down while trying to find space to run all the programs.

So, the more memory you can have in your computer, the faster it can run. How much memory should you have? My rules-of-thumb advice:

Windows XP:	1 GB, minimum 2 GB if you can afford it
Windows Vista (32-bit):	2 GB, minimum 3 GB, if you can afford it
Windows Vista (64-bit);	2 GB, minimum 4 GB, if you can afford it

Extra memory costs about \$100 per 1 GB.

Extra (unwanted) programs running in the background

I have an Apple iPod. I listen to music on it. It connects to my desktop computer to get those songs. On my computer is its partner program, iTunes.

But when I installed iTunes, I got more than only 1 program. 4 programs were installed and all claim they have to run so I can use my iPod. Huh?

Many applications that you install these days bring along more than you bargain for. Some of these programs are necessary, others are not. Each program takes up memory and wants its share of the computer's time. Thus slowing things down. Do you need all of them?

Many times, no, you don't.

How can you tell which programs aren't needed? Well, that's the trick. There's no easy way to make this assessment and it takes some time.

Sit back and think for a moment. Do you remember installing a program recently and shortly afterwards discovered a slower computer. If something comes to mind, then that's where you need to begin your work.

Otherwise, we need to spend some time looking for unwanted programs. I'll tell you how, next week.

"Bad citizen" program

Although we all complain how bad Microsoft's Windows seems to be, there are some truly poorly-written programs. I dub them, "bad citizens." These are programs that consume computer resources and bog down the computer. They don't play nice with the other programs running in the computer.

You tend to know about their bad behavior the first (or second) time you run them. Unless you really need them, you should uninstall them immediately. If you really need them, check with their support Web site to see if there is a newer version that fixes their bad behavior.

I'll defer to next week to show you how to find these bad citizens and show them the door.

Infection

Another possible cause of a slow computer is that it has been infected with malware. *Malware* can be a virus (that changes or replaces native Windows files with broken ones), or spyware (that takes over your computer for malicious purposes). Malware can cause your computer to run slower.

What can you do?

Verify that your security software is turned on and current. Run a full scan of your hard drive, too.

Run one of the free, Internet-based scanners to get a “second opinion.”

From McAfee: <http://us.mcafee.com/root/mfs/default.asp>

Click **Scan Now**

Follow the prompts

From Microsoft: <http://onecare.live.com/site/en-us/default.htm>

Click **Full Service Scan**

Follow the prompts

Cruft

This is a term I use to mean “the gunk that accumulates in the corners of the operating system.” It’s sort of like the stuff that has accumulated in the corner of your garage after about seven years! This could be forgotten files in temporary folders, stale entries in the Registry, knowledge of long defunct printers, memories of old USB devices once connected, and other obscure digital detritus.

Cruft causes computers to slow down after a few years. Windows has to slog through all this old junk to do its work. On a new computer, this shouldn’t be a problem.

Getting rid of cruft isn’t fun. The surest way is to erase your hard drive, reinstall the operating system, all the programs, and reload your data. Essentially you are starting fresh.

This should only be done on a computer that’s a few years old.

Failing piece of hardware

Sometimes a rogue piece of hardware will cause a computer to slow down. This could be a printer that is failing, a USB flash drive that is wearing out, and so on. This device is tapping the computer on the shoulder every few milliseconds, asking for attention. This distracts the computer and slows it down.

To solve this problem: Turn off your computer. Unplug everything except the bare essentials to run a computer: a monitor, keyboard, and mouse. Then start your computer. If the computer is still running slowly, then this isn’t the problem.

However, if things are running much better, then you’re on the right track. Turn your computer off. Plug one thing back in. Turn your computer back on. Observe. If things continue to work properly, repeat. Keep doing this until you’ve plugged in something that causes the computer to bog down.

Then you’ve uncovered the failing piece of hardware.

Disk Full or Fragmented

When the computer has to huff and puff to find files or free space for files, you feel the impact in a slower computer.

Make sure you have sufficient free space on your hard drive. My rule of thumb is that you should have at least 10% of the hard drive's capacity as free space. The more, the better. When you're below this figure, you should do some serious housecleaning, and think about upgrading to a larger drive.

A similar concern is disk fragmentation.

We think of files as a series of connected pieces on a hard drive. In reality, these pieces are broken up and scattered around the hard drive. When these pieces are too scattered on the drive, the hard drive is said to be "fragmented" The more fragmented a hard drive, the longer it takes to find a file or space for a new file. This extra time shows up as a slower computer.

Next week I'll tell you how to defragment your hard drive.

Computer ok but surfing the Web slow

If you use your computer mostly to surf the Web, it may be your network connection, or your favorite Web sites that are slow, not your computer.

Again, I'll tell you next week of some techniques to give you a better sense if this is the problem.

Perception

Sometimes your computer isn't slow at all. At least, not technically.

I have 3 computers. My oldest is 5 years old. Based on it's specs, it's the slowest. When I use it, I grumble to myself about its sluggishness. Yet I've done all the suggestions I've listed above. In fact, it's performing about the same as the day I bought it.

Why is it slow? Because I have a faster, newer computer to compare it with.

If you are exposed to a newer computer, or become accustomed to the one you have, sometimes it starts to feel slower to you. I attribute this to your perception of the computer. The computer in fact may be working properly.

I'm not saying perception is always the case. It's just something you need to be aware of when you think your computer is slow.

Remember, next week we'll focus on tools and techniques to zero in on slow computer culprits. Bring your "propeller caps" along this will be a techie article!

In the meantime, be sure to send me your computer and Web questions at
frenchygrey@gmail.com

I'll attempt to answer one question each week in *The Link*.

Dave Gillen