BY LOUIS BIRON

TIPS TO KEEP YOUR COMPUTER HEALTHY AND FAST

I am usually asked for help once a computer stops working altogether or has become as slow as molasses. Most of the time, people have no idea what they did or what happened to their computers. So maybe I will get fewer calls if I can spread the word about some dos and don'ts. Let's go over the basics of a computer first (I promise not to be too technical).

Any given computer is at its fastest when there is nothing installed on it. So let's take a computer out of the box. In theory there is only the operating system on it. Since the computer will not run without the operating system this should be when it is the fastest. Unfortunately that is rarely true. Unless you buy computers in large scale they come with pre-installed crapware. Most people leave it on the computer thinking it does not hurt me if I don't touch it. But in most cases there is an updater program running in the background and that slows the computer down. First thing I do when I take a computer out of the box is remove any piece of software that is not required. A word of caution before you remove any software: Google it to understand what it is. If you don't understand don't take it off.

So now you have a new computer cleaned of crapware, so enjoy it because it will never work as well as it does right now. Although the processor will run at the exact same speed the day you throw the computer in the trash, as the day it was made, the computer will gradually feel as if it is getting slower and slower. There are several reasons for this, some are in your control, some are not.

OUT OF YOUR CONTROL

People today spend most of their time on the computer using their browser. So let's say today you buy a new computer and get on the Yahoo website and let's say the page loads in 1 second. You say, "Great! That was pretty fast. I like this new computer." Let's say you turn off the computer and turn it back on two years later and go to the Yahoo website all of a sudden it takes 2 seconds to load. Although you will think there is something wrong with your computer that is not the issue. During those two years the Yahoo programmers added features to their website, and they tested with whatever the standard computer of the time could handle and thought it was fine. But a standard computer 2 years from now should be about twice as fast as the one you bought today (ever heard of Moore's law). So the computer is as fast as it was but the Yahoo page is now heavier and your pc takes more time to load it. There is not much you can do about it. If you are a budding conspiracy buff, you can add it to your list of conspiracies, otherwise just live with it.

SELF INFLICTED

Most legitimate programs you install will add some type of burden on the entire computer. Think Microsoft Office: Office will have an updater program that constantly checks for a newer version. There is not much you can do about it, but if you have programs you don't use and won't use, take them off the computer.

> **THE MOST LEGITAMATE PROGRAMS YOU INSTALL WILL ADD SOME TYPE OF BURDEN ON THE ENTIRE COMPUTER.**

VIRUS CHECKER

This is a big offender. Here is the typical scenario. Person buys computer. Person puts on virus checker. Person cranks the protection to the maximum. Person feels safe. Computer feels very slow. A virus checker can and is a lifesaver, and I would never recommend to do without it. But when you crank it to the max (or if you use a cheap one), the virus checker will take a significant portion of your processor's capacity for its own and leave you with a sluggish computer. You don't need to scan your hard drive constantly if you use good judgment about what you try and download. Unfortunately a lot of people don't use good judgment. Here is an example:

I was in a presentation the other day by a startup software company called Phish Train (they help companies train their employees to not get taken by phishing scams online). The presenter called on someone in the room and asked for the guy's credit card number. Everyone agreed that this is crazy and no one would ever give it. But every day, people receive emails offering 90 percent discounts on this or that product and willingly put their credit card information in. Then they are surprised by suspicious charges to their credit card. A variation on this scam is that once you click on this add for the 90 percent it does not steal your information but installs spy software on your computer. This spy software will suck the blood out of your computer's performance.

Another favorite is the tool bars on your browser. I am sure there are some legitimate ones out there, but the ones I get called on for help, take over your internet searches and present you with results that they get paid for and are probably not what you were looking for.

These are very hard to uninstall, and I would recommend never to let them in in the first place.

LEGITIMATE PROGRAMS THAT COME WITH BAGGAGE

There are legitimate programs like Adobe Acrobat Reader and Java that need to be updated on a regular basis to ensure a smooth running of your computer. But beware to pay attention when the software asks you to confirm the install. There might be a line that reads unless you uncheck this box, we will also install a toolbar or a virus checker automatically. Stay away from those.

WEB BROWSING

This is where most of the problems occur. You can get your computer pretty messed up just by browsing the internet. Your virus/spam

checker should be good enough to warn you of the most obvious ones. But a simple rule is don't download anything you don't trust for sure. If you have a habit of downloading pictures then you are at premium risk as it is a traditional method to embed a virus inside a picture of a scantily clad famous movie star.

THE FAKE VIRUS CHECKERS

This is a classic one. You browse an internet page and you get a small popup that looks like it is coming from your computer that reads, "Your computer may have been infected, please click here to run the virus cleaner." Once you click, an actual virus will download and install itself on your computer.

I have mentioned just a few of the ways I have seen for things to go bad and see your computer slow down or stop entirely. Here is a simple approach I take. I would never buy or give any sensitive information to anyone who calls me or emails me that I have not first contacted. So if the bank calls me and tells me there is something wrong with my account, I refuse to give any information and tell them I will call the bank myself. The same thing works with computers. Don't provide info to unsolicited emails. You would be amazed at how realistic some emails I received pretending to be from American Express that were in fact phishing scams.

Louis Biron is CEO of Stratebo Technologies. He earned his B.Eng. at McGill University, his MS in computer design at the University of Montreal and his MBA at HEC in France.

DEFINITIONS

OPERATING SYSTEM

Computer is useless without it. Manages every other programs or peripherals on your computer. Think Microsoft Windows, Apple OS X and IOS or the various flavors of Linux including Android (yes, your phone is a computer).

CRAPWARE

Pre-installed software that will temp you to upgrade to the paying version by taking up real estate space on your desktop. The value is only for the computer manufacturer who charges a fee for installing the software in the first place.

UPDATER PROGRAM

Small piece of code that stops your computer on a regular basis and connects to its manufacturer to see if there is any update to the software that could be downloaded. Think iTunes that constantly checks whether there is an upgrade available.

MOORE'S LAW

States that every two years the numbers of transistors per square inch on a chip doubles. With this doubling comes increases in speed and performance and reduction in power consumption. Although the law has changed in its application and definition over the years, it has stood for the last 50 years and is the main foundation of our connected lifestyle of today.

REMOVING SOFTWARE

Removing software does not mean deleting the icon on the desktop that does absolutely nothing. To remove a program you have to go to the control panel and select add/remove program (This is for Windows).

PHISHING

The activity of defrauding an online user of information by pretending to a legitimate company. Think of an email that pretends to be from your bank asking for you to reset your password by asking you for the current password.