STAR Watch

Statewide Technology Assistance Resources Project

A publication of the Western New York Law Center, Inc.

Volume 14 Issue 4 July-August 2010

"Helpful" Advice for Computer Users — NOT!

There is a lot of information available on the Internet. Pick any topic that comes to mind and Google it. Regardless of how inconceivable the subject is, there will always be a location on the Internet that you can go to where someone has posted information or advice on that topic. If the topic is more mainstream, it is highly likely that there is an over-whelming amount of information posted about it – such as computers. There is, however, a small problem with information that one finds on the Internet: The accuracy is not necessarily guaranteed.

Sprinkled in with the carefully researched, genuine, authentic information from true experts on the topic, is information that is misleading, incorrect, or absolute lies. This is especially true when it comes to computers.

When it comes to providing advice on any conceivable computer issue, it's out there. Within the universe of information about computers, we have chosen two subject areas where there seems to be great interest: Viruses and computer performance. From multiple articles on these two topics, we will provide you with the commonly accepted information about that topic.

All of these articles have one thing in common: The advice given is wrong or seriously misleading.

In this issue…

Virus Myth 1: Only Windows computers get viruses or other malware.

Since the majority of computers use Windows, it is only logical that the low-life scum that create the malware would try to get the most bang for the buck.

But owners of Macintosh or Linux computers should not get too overconfident. As the percentage of those computers continues to increase, so does the number of viruses and other malware that are targeted to them. No computer, regardless of manufacturer, is invulnerable to viruses, spyware or other malware.

Virus Myth 2: When a computer starts displaying a lot of error messages, it must be infected by a virus.

This one is very easy to disprove: Use your antivirus software to scan the computer system. Did it find a virus? Probably not. Files can be corrupted by buggy software. Hard drives can develop bad sectors. RAM can have addresses that are defective. And sometimes, the electronics just begins to fail.

When these errors appear, write them down. Error messages are intended to help the people who can fix the problem, not necessarily the people who encounter the problem. Write the messages down exactly as they appear on the screen – don't editorialize. Write everything down. If there are parts of the message that you don't understand, write those down too. Give all of the information to your computer technician so that he or she can solve the issue.

Virus Myth 3: A computer is displaying the Blue Screen of Death. There must be a virus on that computer.

The causes of this problem are almost identical to those named in the previous myth, but getting the error message to stay on the screen long enough will probably require that "automatic reboot" be disabled to allow the message to stay on the screen long enough to be written down. Forward all of the information to your computer technician.

Virus Myth 4: Viruses can physically damage computer hardware.

While it is possible for a virus to infect firmware or BIOS, it cannot harm the hardware itself. If the BIOS or firmware is infected, a competent computer technician should be able to solve the problem.

Virus Myth 5: When a computer is infected by a virus, simply reinstalling Windows will fix everything.

Viruses don't reside only in the operating components. They could also be hidden in the documents and data stored on the computer. Sometimes, a computer is so badly infected that a complete reinstallation of the operating system is required, but more is needed: Everything that will be reloaded on the computer after Windows is reinstalled must be scanned for viruses. If that is not done, the likelihood of reinfection is almost certain.

Virus Myth 6: Any computer that has a firewall built into it is safe from all viruses and malware.

Firewalls can protect a computer from worms, but they will not stop viruses, trojan horses, or spyware. You need to have a quality antivirus program installed, kept up-to-date, and running in real-time.

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While it is true that a computer infected with a virus is a major problem, it is also true that many of the bad things that happen to computers are not caused by viruses. If you have installed antivirus protection from a reputable vendor and you use a reasonable amount of common sense while 'net surfing or opening emails from unknown parties, the likelihood of infecting your computer with a virus is unlikely. Don't automatically assume that every computer problem is the result of a virus.

Another topic that generates a lot of advice addresses the issue of computer performance. Many of us are trying to squeeze more performance out of our computers without spending any money. Listed below are some of the more popular performance improvement tips.

Performance Myth 1: On computers with multicore processors, Windows Vista and Windows 7 will boot faster by increasing the number of processors used during the boot process.

According to the advice on multiple web sites, using the program MSCONFIG.EXE to change the number of processors will improve performance when the computer boots up. It's not true. By default, all available processors are used during boot up.

This option was intended for troubleshooting purposes, not regular computer operation. Its primary use is to restrict the number of processors in use. This could be helpful in determining if one of the processor cores is defective. It could also be used to determine if an application program was unable to run on a multicore processor. It was never intended to be a performance enhancement option. Leave it alone.

Performance Myth 2: Turn on Level 2 cache to improve performance.

Many articles claim that Windows doesn't recognize Level 2 cache (a high-speed storage area used by the CPU). The solution is simple: Use the registry editor to add a key named SecondLevelCache and set its value to the correct one for your processor and reboot. There will be an instant performance improvement.

If you insist, enter the key and set it appropriately. But, there will be no improvement. Most articles neglect to inform the reader that this tweak is only applicable to Windows NT operating systems running on some

very specific hardware. All other operating systems will simply ignore this registry key setting because Level 2 cache is always used.

Performance Myth 3: Performance will improve if the Prefetch folder is cleared out regularly.

According to the information in the articles on this topic, the prefetch folder keeps growing in size, takes up more and more space, and consequently takes longer and longer to locate files contained in it. If users regularly delete the contents, the folder remains a manageable size.

The "experts" who recommend this procedure don't have their facts straight. First of all, the maximum number of files that the prefetch folder will store is 128. That is not excessive. If that number is exceeded, the file with the least amount of usage is removed from the folder, keeping the high-use files in the prefetch folder. Secondly, as soon as the folder is cleared out by the user, Windows will immediately start filling it back up again. That will divert resources to a task that didn't need to be done and temporarily slow the computer down.

Prefetching is a good thing: It saves time.

Performance Myth 4: It is possible to improve performance network data transfers by enabling something called "TCP Offloading"

Most of the articles on this topic discuss a registry tweak that adds a key DisableTaskOffload and sets its value to zero. This is supposed to offload the work from the CPU to the processor on the network card. Does it work? Absolutely.

But, according to Microsoft, this key is already defaulted to zero. This does not need to be done. TCP Offloading is already enabled.

Performance Myth 5: Windows moves programs and/or data to the swap file, unnecessarily reducing a computer's performance. It can be remedied.

There are a number of articles dealing with computer performance that categorically state that Windows will use the swap file before it needs to. That forces programs and data onto the system hard drive where they cannot be accessed by the processor. This is an unnecessary waste of time and effort by Windows. The authors of the articles on this subject can fix this: Add the registry key ConservativeSwapFileUsage and set it to 1. The performance improvement will be noticeable as soon as the computer is rebooted.

According to Microsoft documents, this tweak will only affect performance on Windows 95 and 98. It has no effect on newer operating systems.

Performance Myth 6: Forcing DLLs to unload as soon as an application ends will free up more RAM and speed the computer up.

This tip shows up almost everywhere. The theory is that it is desirable to immediately remove the dynamic link libraries (DLL) from computer memory when the

application using them terminates. That frees up all of the space that they occupy and that is a good thing. Users are instructed to add another key to the registry called AlwaysUnloadDLL, set its value to 1 and performance will improve.

Again, don't waste your time with this tweak. Most articles neglect to inform readers that it only has an effect on Internet Explorer and only when it is running on operating systems prior to Windows 2000.

Performance Myth 7: Increasing the amount of RAM dedicated to system file caching will improve performance.

Just add a key to the registry (LargeSystemCache) and set it to 0. All of the system files will be accessed more quickly because they are stored in memory, right? Not exactly.

Computer operating systems are very sensitive to tradeoffs that affect performance. As more memory is allocated to caches of files and data, less is available to run programs. Windows is constantly adjusting the memory allocated to each to create the best performance environment.

According to Microsoft, adding this registry setting could significantly degrade performance causing Windows operating system to become more concerned about its own needs rather than the need to run application programs. Continuing on this topic, Microsoft states that this tweak is only intended for Windows server products that are acting as servers. It is not intended for user workstations.

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The biggest problem with most advice to improve computer performance is simply that it is outdated. It has no relevance to currently supported Windows platforms.

Most reputable authorities are in agreement about two things that will improve computer performance: Add more RAM and uninstall unused applications. There are no magic bullets when it comes to computer performance.

Hopefully, after reading this article, you will come away with a renewed sense of skepticism when it comes to advice about computer issues. We don't solicit advice from total strangers as they pass us on the street, but many of us will blindly accept everything that we read on the Internet as fact. Just because all the words in the Internet posting are spelled properly and the grammar is correct doesn't mean that the information in the posting is accurate.

WNYLC Web Statistics For July 2010

Total Hits…….....……501,574
Number of Pages Viewed.....…..…...183,009
Total Visitors.....……67,010
Average Hits/Day…….....….……16,179
Average Pages /Day…….……..……5,903
Top Web Browsers Used:
Internet Explorer 8.x…….…….....26%
Internet Explorer 7.x…….…….....32%
Internet Explorer 6.x……...22%
Firefox.....…..……...……18%
Google Chrome.....1%

Top 5 Operating Systems Used:
Windows 7…….....……8%
Windows Vista.....…….……15%
Windows XP.....……50%
Mac OS.....…….……....….2%
Other.....…….……25%

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