

MONITOR

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Next Meeting
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Hidden Features of Windows 7

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Viruses, Spyware, and Spam ... Oh My!

by Bob Rankin
Internet Tourbus

Malware Threats

The ailing global economy makes cybercrime more attractive. Desperate to make a living, even a dishonest one, more people are launching malware (viruses, spyware and other nasties) designed to fleece both enterprises and individuals. The kingpins of hacking – organized crime syndicates – are recouping their investments in malware development by selling “malware for dummies” software kits for a few hundred bucks a pop. The cost of such kits plummets to zero when buyers share their malware kits on peer-to-peer networks. This “trickle-down” trend results in an explosion of malware in the wild.

One of the biggest changes in the malware landscape is that attacks no longer have to come from the dark and seedy corners of the Internet. As millions of ordinary home and office computers become

ensnared in botnets, the cyber criminals who control them can launch spam, scams and other attacks from the compromised computers of unsuspecting users.

Over 60,000 security attacks were launched per day in 2010, an increase of over 70 per cent versus the previous year! The frequency and variety of malware attacks completely overwhelms law enforcement. Despite a handful of high-profile arrests in the news, cybercrime is growing rapidly.

Mobile devices such as smartphones were once considered safe from the attentions of hackers because there were too few of these devices to bother with. But that is changing now and hackers are expected to follow the growing herd of mobile prey. Security experts predict the appearance of new malware tailored to security flaws in the Apple iOS (iPhone and iPod Touch) and Google Android devices, the emerging leaders in mobile operating systems. Mobile devices need to be hardened against malware attacks, and mobile users need to stop being complacent about their illusory safety.

Although antivirus protection for iOS devices is not yet available, you can protect yourself by resisting the temptation to jailbreak your iPhone. Jailbreaking can leave you vulnerable to attack because it negates some of the protection built into iOS, and also enables users to download apps that have not been vetted by Apple. Android users must also be careful about the apps they download, because the Android Market has fewer restrictions on app developers. Follow this link to find antivirus software for Android devices. <https://market.android.com/search?q=antivirus>

Other Attack Vectors

Social networks such as Twitter and Facebook are already plagued by social engineering exploits that dupe victims into giving up critical personal information. Banks that maintain social network presences risk being impersonated by identity thieves who lure customers to counterfeit Web sites and wheedle account passwords out of them. Individuals may find their social network identities stolen or imitated for the purpose of duping their friends into sending money “for my dying son’s life-saving operation.” Just clicking on a URL that you think is recommended by a trusted friend may take you to a site that covertly downloads a Trojan horse malware app to your computer. Recommendation: Verify that your “friends” on social sites are really people you know.

Money is not the only motive behind cybercrime. “Hacktivists” launched Distributed Denial of Service (DDoS) attacks against major corporations such as Visa, Paypal, and Amazon.com to protest those firms’ treatment of Julian Assange, founder of Wikileaks. With the cost and technical savvy required to launch such “protests” falling we can expect to see more disruptions of e-commerce affecting both enterprises and consumers.

Make sure to keep your guard up as computing and communication habits change. Keep your operating system and web browser up to date with the latest version and security patches. Install anti-virus and anti-spyware protection on all of your computers. (See my related article Microsoft Security Essentials) And be wary of “social engineering” attacks that no software can protect you from. Press delete when unsolicited emails or text messages urge you to visit a website, download an app, or cough up personal information.

From the Internet TOURBUS, Vol 15, Number 57, 15 Feb 2011. To subscribe go to: <<http://internet.tourbus.com/tickets.html>>



Free Comic Books Online

by Ira Wilsker

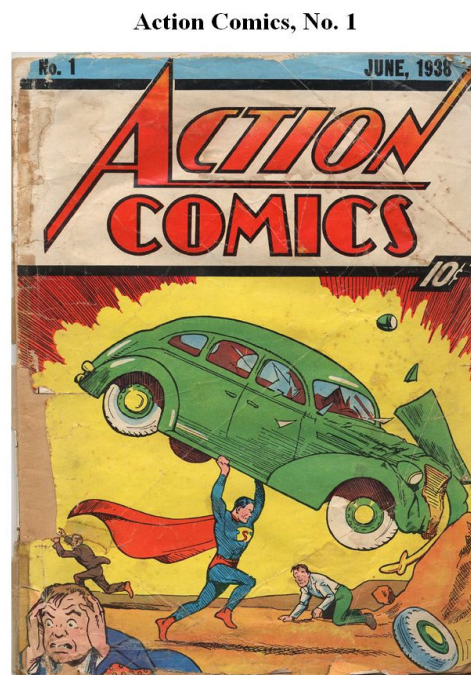
When I was a kid growing up in the 50's, I enjoyed buying and reading comic books. While most of them were a dime, some were expensive at a quarter. My dad acquiesced and when I with him to the drug store to buy funny comic books that he approved, such as Little Lulu. My mom gave in if I wanted to buy any of the classic comic books, which were literature transformed into a comic book format.

Some of my elementary school teachers decried comic books as the ruin of my generation, and confiscated them in wholesale quantities from me and my classmates, probably to surreptitiously read in private and to trade with the other teachers for their stash of contraband. Today, with the internet, video games, and other forms of entertainment, contemporary comic books are not as popular or as widely available as in the past. For present and former comic book aficionados, there are now free online resources that allow some of us to relive our long lost juvenile days, and to also allow today's generations to experience the joys that I enjoyed decades ago. One of the top free software information websites, Gizmo's Freeware (techsupportalert.com) recently published a directory and reviews of the top free online comic book repositories (techsupportalert.com/free-books-comics).

Gizmo made it a point that the listed sites were not pirate websites displaying illicit copies of copyrighted content, but instead were totally legitimate websites with totally legal content. The first listed site that I visited displayed the first issue of Action Comics, dated June, 1938, which is the issue that introduced Superman to the world. According to Gizmo, a copy of this issue sold recently for \$1.5 million, but anyone can view it online for free.

One of my adult daughters is a fan of the TV version of "Buffy the Vampire Slayer," and would probably find the 11 "e-comics" posted online by the BBC most interesting (bbc.co.uk/cult/buffy/ecomics). The BBC has also posted several of the "Dr. Who" comic series online at www.bbc.co.uk/doctorwho/s4/misc/fiction/writerscomics for those who like the popular TV show of the same name. "The Comic Web" at www.comicweb.com/goldenage_comics.htm has over 30 full-length comics from 1936 to 1955 that can be viewed online for free, and downloaded as a PDF for only a dime. Captain Marvel #1 "Captain Marvel Battles the Vampire" from 1941 started a cult classic, and can be viewed online at www.comicweb.com/onlinecomics/captain_marvel_01_story.pdf.

Other Comic Web holdings include a few of the World War II series of super hero comics "Fighting Yank" where the super hero, wearing a cloak and tri-corner hat reminiscent of 1776 takes on the axis powers. On the bottom of each "Fighting Yank" page is a patriotic statement of the day, encouraging the reader to buy war bonds or to contribute to the scrap drives to defeat the axis. Considering the date of publication and the then contemporary events in the news, it is obvious how the "Fighting Yank" would appeal to the children of the day. One of the oldest comics on the Comic Web page is "Detective Picture Stories #1 – Bogus Bills" from 1936. "GI Joe #10" from 1950, reflects some of the



sentiments from early in the Korean War, where the U. S. soldiers have to deal with the likes of an attractive female reporter while dealing with a “Russky tank.”

While patriotism is a common theme of many comics of the period, what may be the epitome of a patriot super hero may be the 1941 rendition of “The Flag” who is the adopted son of a crippled war hero, and has the speed of the wind, and the strength of a hundred men. In his red, white, and blue uniform he takes on the enemies of America. In Our Flag #3, The Flag removes a flag bearing the swastika from the dome of the capitol building, and defeats the enemy who has torn down the American flag from the Capitol building; in just 16 pages, The Flag saves the country. While not as dramatic, in the 1941 comic book “Stars and Stripes #4” another super hero, the Iron Skull, saves a convoy of ships from marauding U-Boats. While historically inaccurate, comics like these can be used to demonstrate some of the popular ideas and philosophies of the day, and show how those contemporary super heroes dealt with the pressing issues facing the country.

DC Comics, one of today’s predominate comic book publishers, has been publishing comic books since 1934. In addition to producing print comic books, DC Comics has made available a large collection of free comics online at read.dccomics.com/comixology/#/free_comics. With new titles added frequently, DC Comics has an impressive collections of comic books available.

In Superman Confidential #1 (January 2007), the secrets of Kryptonite are explained; for those who may be unaware of the Superman saga, Kryptonite is a strange mineral from the defunct planet Krypton, that has the unique power of sapping Superman’s legendary strength, depriving him of his super powers. In a two-page teaser to encourage the reader to purchase the full comic, DC Comics online has “The Origin of Robin,” the super hero that becomes the famous sidekick of Batman. Other super hero comics included on the free DC Comics website, consisting of either teasers or full editions, are the likes of Justice League of America, Wonder Woman, and the Green Lantern.

One of the largest libraries of online comic books is the Digital Comic Museum (digitalcomic.museum.com) which has over 6000 comic books available for free download (free registration required). On this website I found many of the comics that I enjoyed as a child. The date ranges of the comics at the Digital Comic Museum are from 1902 to 1986. Some of the larger collections sorted by publisher on this site include Charlton Comics with 650 issues; American Comics group (493); Better/Nedor Standard/Pines Publications (410); Comics House Publications (445); Dell Comics (517); Quality Comics (1243); and Fawcett Comics (1120 issues). Many old classics are available, including such oldies as The Katzenjammer Kids and Little Orphan Annie.

There is even a comic book available that was published and distributed by the U. S. Government, “Burt the Turtle Says Duck and Cover”; we were provided a copy of this exact comic book in elementary school where it was mandatory that we read it in class, and then practiced our “Duck and Cover” drills that were supposed to protect us from a Soviet nuclear missile strike. The user should be aware that many of the comic books available for free download from this website are compressed with a variety of compression methods, so that a free universal decompression utility such as PeaZip (peazip.org), or 7-Zip (7-zip.org) may be necessary to prepare the files for viewing. There are many other websites listed by Gizmo that have free comic books to view and download. With free resources such as these, it is easy for some of us to relive our childhood, while others may discover a forgotten but very entertaining resource.

Websites:

<http://www.techsupportalert.com/free-books-comics>

<http://www.bbc.co.uk/cult/buffy/ecomics>

<http://borderwalker.com> http://www.comicweb.com/goldenage_comics.htm

https://read.dccomics.com/comixology/#/free_comics



Use Caution Renaming Files

Q. I have about 60 installation files that I have saved from programs downloaded over time. Many of these files do not reveal what program they're associated with so I'm not sure what file to select if I need to reinstall something. For example, the install file for Avast Antivirus is setupeng.exe. If I change the name of the file to setupeng_avast.exe, will it still function properly?

A. For any UFOs (Unidentified File Objects), first try right-clicking a file, select Properties and see if there is any information that identifies the program. There often is.

If you're feeling frisky, you might want to double-click an install (.exe) file to start its installation. When you get to a point where the program is identified, cancel the installation.

Beyond that, it is fine to rename a file in the manner you describe, as long as you retain the same file extension. In other words, if the file is named setupeng.exe, you can change it to aardvark.exe or cherries jubilee.exe and it will function as intended. Aardvarks and flaming desserts notwithstanding, I'd suggest renaming it with something more descriptive, such as avast_install.exe or avast_version 4.8.exe or avast_MAR2011.exe, to include the date.

Q. I have a Gmail address, but I also have Outlook Express on my computer and I'm just not sure which is which or what I should be using for what. I'm sorry if this is too basic, but I just can't figure it out, so any help would be appreciated, Mr. M.

A. I'll be happy to help you sort this out. Gmail is Web-based mail, so you don't need an email program to send and receive Gmail. Instead, you use your Web browser (such as Internet Explorer or Firefox). Using your browser, you would go to the Gmail Web site at www.gmail.com, log in, then send and receive messages from that location.

Outlook, Outlook Express, Eudora, and Thunderbird are all email programs (called client software) that are primarily used with what is called POP email. Mail you receive from others is sent to your Internet Service Provider's mail server. Your client software, which resides on your computer, is then used to connect to the server and retrieve your mail. When you send mail using any of these programs, it routes from your email program to your ISP's SMTP (outgoing mail) server. Incoming mail uses a POP mail server.

For the sake of completeness, and because I'm sure you're just dying to know, SMTP stands for Simple Mail Transfer Protocol; POP stands for Post Office Protocol; TMIYGMAH stands for Too Much Information; You're Giving Me a Headache.

Q. I received a message from Yahoo! Mail telling me that I'm running out of storage space and that I need to provide my username and password so they can increase my capacity. You've warned us about anybody that asks for our passwords, so I'm suspicious. Is this for real or what? Thanks for your help, Mr. M.

A. Your suspicion is warranted. Good job! Never provide your password or any other personal or account information when requested to do so by email in that manner. No legitimate organization or service will EVER ask you for that information. Just delete the message you received and don't give it a second thought.

Mr. Modem's DME (Don't Miss 'Em) Sites of the Month

Airport Sleeping

Seasoned travelers know all too well that long security lines, flight cancellations and delays are common these days. If you find yourself stranded at an airport, visit this site which lists the best and worst airports, and their respective facilities for snoozers. The site also has tips for sleeping safely and comfortably when you're grounded at the terminal.

www.sleepinginairports.net

Eat Your Veggies!

There is never a shortage of nutritional schemes, fad weight-loss diets, and health crazes (and crazies) out there, many of which contradict one another. The one thing that virtually every dietary diva and gourmet guru agrees on is that vegetables are good for you. This site is a fat-free, high-cyber bonanza for anyone trying to switch from brownies to broccoli, with a host of useful tips on how to select, prepare, cook and store fresh produce.

www.fruitsandveggiesmorematters.org

Timeless Short Stories

Our increasingly fast-paced society has lured many people away from the joy of traditional reading. Short Stories, one of the classic genres of fiction, is a format that allows readers with limited time to delve into the incomparable power of classic literature. This site is a free short-story repository that offers a wonderful selection of brief fiction and light prose. Scroll the site to find literary gems from icons such as Edith Wharton, Nathaniel Hawthorne, Dylan Thomas, Rudyard Kipling, Edgar Allen Poe, Twain, Mr. Modem, Jack London, Guy de Maupassant, and other legendary authors.

www.classicshorts.com

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Should You Encrypt Your Hard Drive?

by Bob Rankin

Internet Tourbus

It's true that encryption will make the data on your hard drive a lot more secure. But encryption takes a toll on system performance, so you have to strike a balance between security and usability.

Laptop and removable drives are most vulnerable to theft, and therefore are prime candidates for encryption. USB thumb drives are particularly prone to loss, and can be encrypted just like any other drive. Desktop computers are less exposed to theft. Desktops in homes are probably least in need of encryption protection. Of course, only you know what data is stored on your home computer and what might happen if it gets into the wrong hands.

Hard drive encryption software encrypts data on the fly. That is, data is encrypted as it is written to disk and decrypted as it is read from disk. The CPU cycles required to encrypt and decrypt data are system overhead that detracts from other operations. To minimize this performance hit, you should encrypt only data that needs protection.

Application software, the operating system, and user settings seldom need to be encrypted. It's the data generated by applications that is most sensitive. So it is best to partition your hard drive into two or more logical drives, one for sensitive data and the other for non-sensitive data. Encrypt only

the drive (partition) that will store sensitive data. Of course, you must make sure that your application software saves and reads data only from the encrypted drive.

Free Encryption Software

BitLocker Drive Encryption is an encryption utility built into the Ultimate and Enterprise editions of Microsoft Windows 7 and Vista, as well as Windows Server 2008. By default, BitLocker uses 128-bit AES encryption. BitLocker encrypts logical drives, which may span more than one physical drive. It's a free tool that does a good job of protecting data.

TrueCrypt is a free, open source encryption utility. It creates a virtual encrypted disk and mounts it as a new drive letter, allowing you to use the virtual disk as if it was a real drive. TrueCrypt works over networks and can encrypt removable media as well as hard drives. Performance is maximized by TrueCrypt's use of "parallelization and pipelining" so that read/write operations happen almost as fast as they would on unencrypted media.

Modern Intel processors support hardware-accelerated AES encryption, which can be 4 to 8 times faster than software-only encryption schemes. BitLocker and TrueCrypt can take advantage of hardware acceleration if the processor supports it.

Individual files can be encrypted using the Encrypting File System (EFS) service built into professional editions of Microsoft Windows. One of the benefits of EFS encryption is that only users who know the decryption key can access EFS-protected data. Under BitLocker, anyone with administrator rights can decrypt BitLocker-protected data.

Personally, I believe that encryption is overkill for most users. It's a security measure that should be reserved only for the most vulnerable data and disk drives. If you travel with a laptop, or you deal with confidential client files, encryption might make sense for you.

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Smart Computing Tips

www.smartcomputing.com

Noise Canceling Technology

Although headphones with noise-canceling or sound-isolating abilities aim to accomplish the same goal, namely keep the audio you're listening to clear and crisp while blocking ambient noise surrounding you from creeping in, the two techniques aren't the same. Makers of noise-canceling headphones typically use software to achieve noise-blocking ability. These models usually require battery power (usually two AAA batteries) to power the company's respective noise-canceling technology. Sound-isolating models, conversely, don't use battery power and are much lighter than noise-canceling models that use over-the-ear headphone styles. Sound-isolating headphones use earbuds and a combination of ear cushions and filters that attach to the earbuds to create a seal inside the ear canal to keep noise out.

Pack Your Camera

You might leave your digital camera at home during business trips, but a digicam doesn't have to be just tourist baggage—it can be a powerful tool. Together with your notebook PC, you can use your camera to better illustrate a presentation. And while you're at a trade show, you can use a camera to take pictures of interesting products that you might otherwise not remember. What's more, you

can use a camera to capture text from a presenter's notes, or from a brochure that you'd rather not lug back home.

Digital Asset Management Software

by Mike Morris

What is interesting to me is that many of today's digital imaging software applications offer both image editing and what is called "Digital Asset Management" (DAM) capabilities.

In the not-so-distant past, the only image software choice was what image editor to use (Photoshop or something else). But with the "explosion" of digital camera use, keeping track of all the images (and protecting intellectual property rights) has clearly become a significant issue. While this is certainly an issue especially for professional photographers, with digital cameras, even the most casual photographer will soon find hundreds, if not thousands of photos on their computer.

Perhaps you are thinking, as you read this, that you don't need image management of any kind, because your digital camera provides all the necessary information.

Actually, that is NOT the case. The camera provides information about camera settings (including date and time of the photo). But not included in that data is information such as the event (e.g., parent's 50th wedding anniversary), or the names of the people in the photo. Yes, *you* may have an excellent memory, but your children and grand-children probably won't remember or know the names of all the people in the photos of those special events (I can verify that from personal experience).

That is why image management software is so helpful – it allows you to capture that information. You have a wide range of software choices for this application:

- digiKam (<http://www.digikam.org/>) an image management application claimed to be designed by photographers. It is open source and therefore free. This application offers both DAM and image editing capabilities (which are significant, although not equivalent to the editing features of Photoshop or GIMP). For Windows users, you can download the Windows version from [download](http://bit.ly/hWfFrt) (<http://bit.ly/hWfFrt>).
- DigitalPro (<http://bit.ly/faHwgJ>), also claimed to be designed by photographers, and is proprietary (\$179). This application is primarily for image management (and primarily for professional or advanced amateur photographers), not image editing.
- Bibble Labs (<http://bibblelabs.com/>) Pro (and Lite). This proprietary application (\$199.95) offers both editing and DAM features. One major claim on their website is that this application is faster than any other. For a list of editing tools this application provides, connect to [features](http://bit.ly/82JzsV) (<http://bit.ly/82JzsV>).
- Adobe CS3 (and later) applications. The Adobe Bridge program is bundled with the CSx (the latest release is CS5) series of Adobe products. In my case, I received it when I purchased Adobe InDesign CS3. Adobe Bridge brings DAM features to the Adobe products, all of which, as I am sure you know, are very expensive applications (full retail price for Photoshop CS5 is \$699). They are, however, designed for professional/business use, originally commercial printing, but now expanded into electronic publishing as well. The Adobe products (Photoshop, Illustrator, InDesign among others), despite the many competitors, are still considered "industry standards." For more information on these products, connect to Adobe (<http://www.adobe.com>).
- Adobe Lightroom. From Wikipedia (<http://bit.ly/3wnGqF>) is this description: Lightroom is an application "...designed to assist professional photographers in managing thousands of digital



images and doing post production work. It is not a file browser like Adobe Bridge, but rather an image management application database which helps in viewing, editing, and managing digital photos, the same way photographers used to do in the non-digital world.” Connect to Lightroom (<http://adobe.ly/6dBlz>) for a list of features. Full retail price is \$299.

- For the casual computer user/casual photographer, there is Google Picasa (<http://picasa.google.com/>). It offers simple image organizing features and a few simple editing features. It is free, and “automatic.” After you download and install the program, it will, when you first launch it, catalog virtually all the images (with a few minor exceptions) on your computer.
- Most, if not all major camera makers provide some software with their cameras that include some basic image organization and image editing features.



There are many other choices, some of which you can find in the Wikipedia comparisons at: image viewers (<http://bit.ly/asWUi>), image organizers (<http://bit.ly/CNnwr>), and graphics editors (<http://bit.ly/1OxtOU>).



I ended up with Adobe Bridge “by default.” Since I make no claim to being a professional photographer, or even (yet) a knowledgeable amateur, I would very probably have picked a free application (such as digiKam) for “Digital Asset Management” if I didn’t already have Bridge.

For me, Picasa does not have enough features. However, I expect it will be sufficient for many digital camera users.

I have not tried to compare in detail either editing features or DAM capabilities of these programs. I have, however, scanned through the digiKam manual (<http://bit.ly/hZaFX9>). My conclusion is that if you download and install digiKam and GIMP, you will have a very powerful, very feature-rich set of image editing and image management tools.

From the Front Range PCUG, CO, February 2011 issue of k-Byte™.

Gizmo's Freeware

Probably the Best Free Security List in the World

The products are almost exclusively free with some exceptions: products where there is no free alternative, good products that offer a lifelong license, and exceptional products. In some cases the links point to executables. In such cases replace [dot] with . and the link will work.

Alias: <http://tinyurl.com/free-security>

<http://bit.ly/DQNn0>

<http://goo.gl/nw5c>

A Convenient Way to Temporarily Stop Your PC from Going to Sleep

Windows allows you to set your power settings, which force the computer to enter sleep mode if you don’t press a key or move the mouse for a given period of time. Generally speaking, these settings work well but sometimes you might need to temporarily prevent the computer from sleeping. For example, if you’re downloading a large file or keeping an eye on a particular web page that keeps refreshing itself automatically.

This tiny free utility temporarily prevents your PC going to sleep. It doesn't interfere with your Windows settings; you just run it when you need it. Another simple, special purpose program for your tool box. <http://www.techsupportalert.com/content/give-your-pc-insomnia-stop-it-going-sleep.htm>

Baroque Around The Clock!

Our roving editor Rhiannon has discovered this terrific way of locating the best radio stations for streaming classical music and other genres. I checked out some of the classical music choices and they were superb.

<http://www.techsupportalert.com/content/workspace-bob-baroque-around-clock-and-all-jazz.htm>

Images from the Mars Reconnaissance Orbiter's First Years

Images from the Mars Reconnaissance Orbiters First Years The Mars Reconnaissance Orbiter (MRO) is five years old this week, and *Wired* magazine has a great article with all kinds of interesting information and a selection of their favorite Mars Reconnaissance Orbiter (MRO) images.

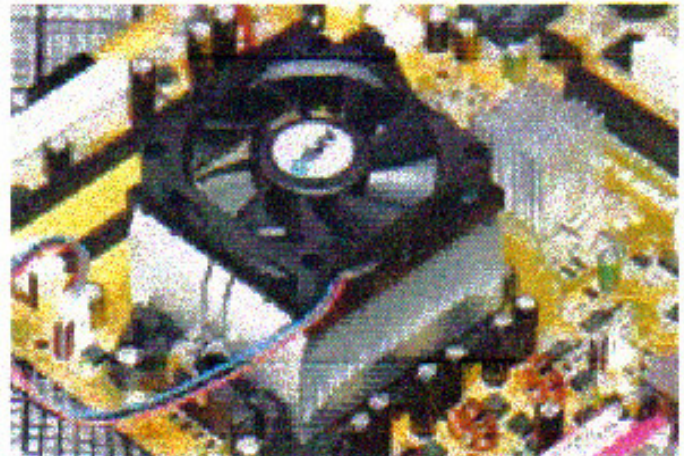
<http://www.techsupportalert.com/content/mars-images-orbiter-s-first-five-years.htm>

PC Cooling - Keep it Cool!

by Phil Sorrentino

Just like your car, your computer has to be cooled because it generates a lot of heat. Some of the computer's components produce large amounts of heat during operation, and this heat must be removed in order to keep these components within their safe operating temperatures. PC Cooling, then, is the process of removing the heat from the computer's components. Components which produce heat and are susceptible to performance loss and/or damage due to that heat include integrated circuits, such as the Central Processing Unit (CPU), graphics processors, chipsets, and memory. Hard drives also produce heat but typical air flow is usually adequate to keep them within their operating temperature. (Although some of the very fast drives (10,000 rpm), may need additional cooling.)

Most of the heat produced in a computer is generated by the power supply, the CPU and possibly the graphics processor. That's probably where you'll find the additional fans (beyond the normal chassis cooling fans). You might not think such a small electronic chip, the CPU, could generate so much heat, but many modern CPUs need a separate fan mounted on a heat-sink to remove all of the heat generated. Overheated parts generally exhibit a shorter maximum life-span and may give sporadic problems resulting in system freezes or crashes. PC Cooling is mainly done using heat sinks to increase the surface area which dissipates heat, fans to speed up the exchange of air heated by the computer parts for cooler ambient air, and in some cases soft cooling, or the throttling of the speed of some computer parts in order to decrease heat generation.



First a little thermodynamics review. A heat-sink is an object that moves heat from an object that it is trying to cool, to a lesser hot area or object. It absorbs heat from an object, and transfers that

heat to another object or the surrounding air. In the computer, a heat-sink, usually made of aluminum, is placed in direct contact with the CPU chip. A thermal grease is used to help the heat transfer from the CPU chip to the heat-sink. The heat is then typically transferred to the ambient air (the lesser hot area). The heat sink helps cool the CPU by transferring heat from the CPU, at a relatively high temperature, to the ambient air, at a relatively lower temperature. This transfer of heat keeps the CPU from overheating and possibly shutting down. The most common design for a heat-sink is a piece of metal with many fins. The large surface area due to the fins results in the rapid transfer of heat to the surrounding, cooler air. A fan improves the transfer of heat from the heat-sink to the air by moving cooler air between the fins. This is how the combined heat-sink and fan work to cool down the CPU chip.

Now all that may seem a bit academic, but the point is that the components inside the PC must be cooled. You know how good you feel when you turn on a fan on a hot day. The heat-sinks and the fans are necessary for your computer to continue operating. So, if your fans stop or your heat-sinks stop being effective, your computer will eventually stop operating. If a fan stops it is usually easily noticed either by seeing it stopped when the computer is on or the lack of air flowing or the lack of the sound of the fan motor. It's the heat-sinks operation that is hard to determine. The best way to discern the operation of the heat-sink is to look at it. (Yes, that means removing the cover.) It should be nice and shiny and new looking, and not covered with dust or animal hair. Dust covering the heat-sink will impede its ability to transfer heat to the air, even if the fan is moving the air over the dust laden heat-sink.

A visual check of the cleanliness of the heat-sinks every 3 to 6 months is advisable. (Maybe even more often if your computer is in a dusty environment – like in the corner of a room on a rug – and/or you have furry pets in the area.) Make sure you unplug the computer before you do this. While you are in there checking, take a can of “dust remover,” which is like compressed air, and blow out all of the dust you can see, especially around the CPU heatsink. Also, make sure all of the inlets and exhaust holes in the case are free from dust and debris so that the normal air flow will not be disturbed. That can of “dust remover” is your best defense against dust buildup both on the heat-sink surfaces, and around the air holes. (Keep a can of dust remover close at hand and give a package of them to your computer owning friends during the holiday season.) Follow the directions on the can. Be especially careful not to hold the can on an angle or upside down, as doing so may force out a flammable freezing liquid. (Note that it is normal to feel the bottom of the can getting cold while the can is blowing air.) If you blow out the dust every 3 to 6 months, your computer should run nice and cool for many years, and you'll be spared some very strange and possibly aggravating problems.

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Software Review

System Mechanic v10

by Mark Mattson

Computer Users of Erie, PA

There are several popular utility suites on the market currently, but this is the most popular one, with a base of 23 million users according to the latest statistics. I am speaking of course, of System Mechanic.

This 12 year-old product is now at version 10, the most current release available, brand new for this year. It's an integrated collection of system tune-up and configuration tools, giving you the ability to repair problems and optimize your entire computer from one central location.

The application is available to those users that run Windows XP, Vista, and 7. Support for older versions is not available with this release. You also need Internet Explorer v6 or later, 30Mb of hard drive space for installation, and an Internet connection for license activation. Delivery is via download from the iolo website (a 19Mb file). At the present time, it is on special pricing of \$39.95, a \$10 savings. This allows you to install the product on all your HOME PCs via the Whole Home licensing concept, using the same license key. However, if any of them are used for business, you need to follow their Business Licensing regulations.

So what is System Mechanic? It is, as I mentioned above, an integrated suite of utilities and applications that allow you to tune up and repair problems on your computer system that cause slow-downs, crashes, and poor performance.

There are several ways to run the program. The first, which is the way most users (especially novice ones) will use, is to run the System Analyzer, and follow the recommendations for repairs and optimizations that are given. This gives you the most comprehensive and automatic way to scan your system, finding the most problems with the least amount of effort on your part.

The other way, which more advanced users will find useful, is to run the individual utilities on an as-needed basis, giving you more control over what is performed on your computer.

When you first run the program, you are presented with the Dashboard, which is where you perform all major system operations. I have the software installed on needs some attention ... the indicators are in the Yellow zone. When the tasks have been completed and the system is optimized, they are all in the Green area, and the indicator arrows are all to the far right of the dial.

When the Analysis is complete, you are presented with a report of the problems that were found. You can then repair individual problems, one at a time, by selecting it with the button to the right of the description. It will give you the choice to automatically repair it, or use a wizard to fine tune the repair (such as choosing individual registry problems to fix while leaving others alone).

For most users, clicking the Repair All button will give you the optimum repairs needed to return your system to peak performance. Note that some repairs may require a system restart to complete, so be prepared for this ... it will prompt you if needed.

Power users and ultimate system tweakers will find the Toolbox entry labeled as Individual Tools the place they hang out the most. Here one will find all the individual utilities that make up System Mechanic in one place. Pick the category of tool you wish to use, and the components will appear in the list to the right, ready for your use.

Besides the usual cleanup tools, which remove system clutter such as temp files and internet cache files, you'll find those that enhance performance in other ways: defragmenters for the registry and your drives, registry cleaner, program optimization. (Defrag the program itself, to keep all parts together on the drive ... which is different from the drive defrag utility).

There are tools that analyze your startup and give you the opportunity to disable unneeded programs to conserve memory and resources. There are also utilities that analyze and tune your Internet connection settings, boosting your web surfing and downloading experiences. And for even more powerful tuning and repair options, run the all-in-one tools in the so-named category to further improve your system.

I have been testing and using this suite on my personal systems here at home for the past couple of months, testing and tweaking different areas to improve my systems.

So far, everything has worked as it should. With only one exception. There is a tool called Drive Medic that you find in the toolbox. As part of my testing, I ran it and was surprised by the results, especially on my wife's machine.

Drive Medic is a tool similar to the Microsoft CHKDSK utility, that checks and repairs errors on your hard drive, such as bad sectors, corrupt files, and so forth.

I had just replaced one of the internal drives in this machine, and was surprised to find Drive Medic reporting bad sectors on it. I ran it, and it kept reporting bad sectors and corrupt files on the drive. Subsequent repairs continued, but eventually the drive became so corrupted, I was forced to do a low level format on it, and reload the system from scratch.

The drive in question was, as I mentioned, a brand-new 500GB Western Digital IDE drive. I ran the WD utilities on it, and it reported absolutely no errors present. But, again, when I got the system rebuilt, Drive Medic again reported bad areas on the disk.

In an effort to give iolo tech support as much information on this problem as possible, I ran Drive Medic on my other two machines here, and had similar results: errors reported on all drives, while the utilities from the drive manufacturers (both WD and Seagate), show nothing wrong at all with the drives.

After contacting support, I was asked to try running Drive Medic from the rescue disk you can create from inside System Mechanic. This disk tests and repairs (if needed) the Master Boot Record and file tables on your drives, in case your system become totally unusable and can't be booted. Running this test showed no problems with the MER and file table, but did nothing to scan the drive itself for errors ... which I found strange. I am currently waiting for a response from iolo support about this problem, but have heard nothing for over two weeks now. Probably due to the holidays, no doubt.

Overall, System Mechanic v10 is a very useful set of tools for maintaining and tuning your computer. It performs a wide variety of tests, and can increase performance slightly or greatly, depending on your particular machine's circumstances.

Is it worth the price? See for yourself. Download the free trial and give it a whirl on your system. But until the Drive Medic issue is fixed, I strongly advise against using it on your system. Stick with the Microsoft Windows-resident drive check utility to be safe.

For more information on System Mechanic, visit the iolo website at <http://www.iolo.com>

Mark Mattson is the editor of Horizons, the Official Journal of CUE, Computer Users of Erie, [PA]. "News and Information to expand your computing Horizons." This article is from their January 2011 issue.

What a Nasty Virus Can Do to Your Computer

by Merle Nicholson

Tampa PCUG, FL



I recently was asked to remove a virus from a friend/client's notebook. For all intents and purposes, it rendered the computer completely in-operative. The virus was in a virus category of "Rogue antivirus software." There are many of them out there for the unwary to catch, and this one, called "Think Point," even has the Windows flag on it to further fool you into thinking it is legitimate. The only option you can see is "Safe Startup," and that takes you to a virus scanner and a way to purchase the product. If you close it out, it shows you a blank desktop, no icons, no menus. You can turn the machine off, that's

about it. Turn it back on, same situation. I did figure out a way to kill it through the Task Manager's Run command, and then run the desktop.

I also found some things written up on the Internet to do something similar, but no help in removing it. I did remove it using some very clever, obscure skills, several virus scanners, then finding and removing twenty or so copies of it. But the computer really didn't work well enough to use. What I found surprised me, and this is what the article is about and what you can do.

Here's a list of what I found. Some things are by deduction and may not be 100% accurate. But I am 100% certain that these problems existed. All of the things fit into a strategy that prevents you from fixing the computer.

1. The worst thing: The computer will not boot into safe mode. It blue screens every time. I'm speculating that ThinkPoint either corrupted an existing driver or put a new one in that loads and then fails. The way to fix this is to do a system repair or a complete reformat and installation. I did not want to impose that cost on my customer, and she agreed (it's not a primary computer, and it's rather old). So I left it that way.
2. All the system restore points were unusable. Refused to restore to any point.
3. To run most anything, an official-looking popup would ask to confirm the logon user and give a box for an alternative user account that did not work. This is to make sure that everything you try is run under the current user account which has been modified to prevent circumventing the virus. What you want to run is Explorer.exe giving you your desktop, and every effort is made to prevent you from doing this.
4. Most – perhaps all – items in Control panel will not run. It gave a warning that the administrator account has restricted its use. I did manage to get into the power configuration, but it would not accept any change. The computer would go into sleep mode after about 20 minutes, keeping me from running a full system scan from any antivirus software unless I sat there and wiggled the mouse occasionally for four hours.
5. The Internet articles say that even if you purchase the software to fix a bogus virus, ThinkPoint stays on the computer. The uninstall just errors out.
6. The Internet articles say that it installs other viruses, and I did find a half dozen other viruses, mostly down loaders.
7. It leaves about 20 copies of itself under various random names, and places items in the registry to run each of them. So removing the active virus is just the beginning. I also found a couple of viruses in the System Restore files.
8. It apparently makes changes to the current user account profile that look like group policy changes, even though this was Windows XP Home, which doesn't have group policy capability.
9. Only after all the bad software is cleared from the machine can you then get rid of the modified account by creating a new administrative account, copying all of the user files from the old to the new — except for the profile files, then deleting the old account after locating the email files.

Isn't this scary? It is to me, and I (95%) fixed this one with a lot of work. The idea of having to fix my own machine after something like this gives me nightmares.

What you can do to prevent this: A sizable number of virus infections now are rogue antivirus'. There's an understandable reason for this. It creates revenue. Old-fashioned viruses are malicious, but have no revenue-producing strategy. In other words, it's now about money. Most all viruses are sent to you via web pages, and most of those are porn sites, either. designed that way or hacked from outside. Porn sites are visited so often, they are a very good candidate for this kind of thing. Also, presumably the porn site owners don't have the skill to remove sophisticated hacks. But most any web

site is vulnerable. In any case, you must select something on the site – click on it – to give the browser a chance to violate security rules.

The next common way to get a virus is with downloads. And that means just about any download or file transfer. So you have to get any and all files from reputable sites like iTunes or Downloads.com, Amazon, etc., which have the resources to check their own content.

But that leaves any and all file-sharing sites absolutely and definitely off the list. So if you're downloading songs for free, you're in trouble. Any file-sharing site's software must be uninstalled from your computer.

And that also goes for any peer-to-peer gaming sites, LimeWire, Kazaa, and any and all 1M programs that allow peer-to-peer file exchanges.

And while we're at it, remove – uninstall – anything that says "Toolbar." Right now. Want to know why tool bars are free? Because they're a conduit for pushing advertising to you; and they're easily exploited. Besides you don't need them. They want you to believe you do, of course! But the browser itself and a couple of favorites will do anything a tool bar will do.

An alternative is giving up gaming and 1M and to start purchasing songs. So if you have kids who will just die without peer-to-peer gaming or 1M and stealing songs, the answer is to live with it with some intelligent prevention.

First, if at all possible, put the kids (and maybe grandpa) on a Windows 7 machine. If you have some internal networking and file sharing, Windows 7 Pro is better because it will back up to a network drive. But so will Acronis Home, or 2010 or 2011, running under Win 7 Home Premium.

I guess it's obvious, but a strong anti-virus program running on your machine is essential. BUT – this is important – make sure you look at the scheduling part of it and make sure it will automatically download new definitions and also run a full system scan at a time of day that the machine will most likely be turned on. Same for Windows Updates. Make certain that all important updates are installed as soon as they are available.

Make sure you have a full system backup, and replace it monthly. Use Windows 7 Backup or Acronis. Believe me, restoring the entire system hard drive is way, way better than any alternative that I can think of. Look at what I had to do with ThinkPoint. Want to try it?

Password protect your main administrative account (this is the one that comes first with the computer) and bury the password paper in the back yard and leave the location with your attorney. Better yet, Win 7 allows you to create a flash drive that will unlock the computer. Hide it under some rubber fake dog poop someplace.

THEN: Create a non-administrative account for yourself – a regular non-privileged account, and a separate one – or one for each kid. A regular account cannot install software. But most importantly, SOFTWARE that is run under this account can't install software. Ah HAI

Then one more step. Set the screensavers to require a sign-in on wake-up, and ALWAYS log off when you leave the computer. That's especially essential when leaving the administrative account.

Skills: There are a few things that would be very helpful to learn. The big one is navigating the computer file system using Windows Explorer. Find out how your files are organized, and more importantly, how to change what files you can view. That's in Windows Explorer, Tools, Folder Options, View tab. Second Important Skill – learn to use the Add, Remove Programs. That's "Programs and Features" in Vista and Win 7. When you find an installed program that you are not using (say, anything with the word Apple or toolbar), just uninstall it, and see how it goes.

From the November 2010 issue of Bits of Blue.

Society News

Help's Half Hour

by Jan Rothfuss

Q: One member is having trouble turning off her computer. It turns off and then restarts by itself.

A: It may be a virus. She said that she simply turns off the power strip.

Q: One members' virus software was due for renewal. In December he paid but continued to get email warnings about it being overdue.

A: The notices referenced an incorrect number. Once the number was corrected, the notices ceased.

Q: One member asked about using the Ghost software. He is using an older version. He is getting a partition table error.

A: This may be caused by the starting address being changed as the drive is being copied. He wants to complete it with un-allocated space.

Q: One member has Copy Commander on a machine and wants to put it on a CD.

A: Perhaps he can copy it to his hard drive and then write it to a CD using burning software. Plain copy and paste may not do it.

The Lighter Side

Playing Unfair with the Fair Sex in a Call Center

I provide internet support over the phone, I am the only qualified technician working today, and I happen to be female.)

Me: "Welcome to [company name] internet support. My name is [name]. How can I help you?"

Customer: "Oh, hello sweetheart. I didn't realize I'd reached reception. Would you please connect me to internet support?"

Me: "This is internet support. What can I do for you?"

Customer: "I want help with a technical problem. I can't talk to you. I want to talk to a man!"

Me: "Sir, I can assure you that I'll be able to help you with your technical problem. I am the qualified technician here today."

Customer: "You are a girl! You have no clue how to help me! This is man stuff. I demand to speak with a man!"

(This continues for a while. The customer gets more and more aggravated, and starts yelling nasty comments. I give up, and connect him to my coworker, who sits next to me. My coworker is male.)

Coworker: "Welcome to [company name] internet support. My name is [name]. How can I help you?"

Customer: "Finally ... a man! My internet is so unstable these days; I can't seem to stay on it! It takes forever to load and the speed is horrible!"

Coworker: "Sir, I see the problem, and I'm sending a report. It will be fixed on Monday."

Customer: "What? It's Saturday! Why do you have to wait until Monday? I want it fixed now!"

Coworker: "Well, we would need a qualified technician to log into the system to fix your line. It's Saturday, so there is only one qualified technician working."

Customer: "Get him to fix it now! I demand to speak with him!"

Coworker: "Sir, you have already spoken to her."

Customer: "Wait. Her?"

Coworker: "Yes. You spoke to our only qualified technician. You yelled profanities at her, and demanded to speak to a man."

Customer: "So, I'll be lucky if my internet is up again on Monday?"

Coworker: "You'll be lucky if you have internet at all."

