The Cursor

Monthly Newsletter of the
Washington Area Computer User Group

Presidential Bits

July 2007 Meeting

By Paul Howard

Whoof .... I'm still ducking from Geof Goodrum's July presentation of PlayStation III and the Motorstorm game. Good thing we didn't have multi-channel surround sound available, or we probably would have had to call the rescue squad. I've never found the time for computer gaming, but last month may have changed my mind! What was particularly interesting for me was Geof's discussion of the underlying computer platform, and the availability of Linux distributions to run on it.

My recollection of the last time WAC had a discussion on gaming was with the introduction of PlayStation2, when a DVD player was rare, and Sony's inclusion of it in a $300 system was a big deal. Hear we are again, and the new system now sells for $499, an amazingly low price for a gaming system including the latest high end media BluRay disc player.

WAC's August 18th meeting will again be held in conference center room 2/3 of the Fairfax County Government Center. Our meeting's presentation theme will be "Utilities and Other Useful Software." Chuck Roberts will discuss Acronis Disk Director partitioning software, and True Image backup software. I'll be discussing Avanquest's Power Desk Pro, a file management utility. I'll also demonstrate RoboForm, a password management utility that also fills out online web forms, and allows you to keep certain kinds of information encrypted in your computer.

WAC is always looking for program topics of interest to our members. Please contact a board member with your suggestions. Got a program you're wild about? Present it to the group, or write it up for the Cursor - don't hide good things from your WAC colleagues!

WAC AnswerLine

The WAC AnswerLine phone number (703-370-7649) is transferring to a new phone service. Until the transfer is complete, the phone number may be unavailable at times, or the meeting announcement may not be current. However, the phone

Lloyd's Web Sites for August, 2007

by Lloyd Johnson, WACUG Member

http://www.wacug.org/ is the URL for the Washington Area Computer User Group. Visit it for past issues of Web Sites with hyperlinks

1. Global display of Terrorism and other Suspicious Events
   http://globalincidentmap.com/map.php

2. Stuck at an airport? This site gives nearby gyms
   www.airportgyms.com/gyms

3. The Tornado Project. An amazing collection of data, stories, and even films and pictures of tornadoes.
   www.tornadoproject.com

4. Children's health Site
   www.seattlechildrens.org
   click on Child Health Advice

5. Many NASA photo's
   http://grin.hq.nasa.gov

6. Look at current edition of Popular Science
   www.popsci.com

7. Some ways to fix windows. Better not deal with the registry.
   www.fixwindows.com

8. Some (may be useful) technical advice
   www.techadvice.com

9. Online games are a lot more than solitaire and checkers. With Yahoo! Games you can enjoy board games, arcade games, word games, as well as games you can download to your computer and phone.
   http://games.yahoo.com/games/front

10. A 5 minute video that gives useful (or maybe not) information
    www.glumbert.com/media/shift

11. Great pictures of automobiles.
    www.wtv-zone.com/cal731/SH/c1/frames.html

12. Blue Angels flights. Note the Twin Towers in New York.
    http://www.bentbay.dk/blue_angels.htm

number will not change, and the transfer should be complete by late August.

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GNU/Linux SIG

By Geof Goodrum, WACUG

GNU General Public License 3 Released

After a year and a half of public comment on three previous drafts, the Free Software Foundation (FSF) released version 3 of the GNU General Public License (GPLv3) on June 29, 2007. The previous version, GPLv2, is one of the most common Open Source software licenses in use. The FSF announced that their substantial library of software will be relicensed under GPLv3. Software licensed under terms of the GPL are an integral part of all GNU/Linux distributions, including Red Hat, Fedora, Mandriva, Ubuntu and Knoppix.

GPLv3 was designed to address shortcomings in GPLv2, specifically the threat to users' free software rights from software patents and companies that use GPL software in such a way that users can't modify it (e.g. firmware in embedded devices). The first draft of GPLv3 also ruled out Digital Rights/Restrictions Management (DRM), but this wording was removed in the final version. Software with DRM can be licensed under GPLv3, but the license allows others to circumvent those DRM features and release the code unhindered by the Digital Millennium Copyright Act (DMCA) or similar laws.

Linus Torvalds, creator and chief developer of the Linux operating system kernel, objected to the DRM stance of the earlier GPLv3 draft, and still expresses disagreement with the measures restricting manufacturer applications (termed "tivoization" by the FSF). Although Linus does not rule out some of the Linux kernel being licensed under GPLv3, he seems inclined to leave Linux kernel code under the GPLv2 license.

There is also some debate over whether GPLv3 will force Microsoft to extend patent protection to all Linux users through its agreements with Novell and other vendors. Once GPLv3 software shows up in these vendor's distributions (which it will), some argue that Microsoft must support the terms of the new license. However, Microsoft released a public statement refuting that claim (http://www.microsoft.com/presspass/misc/07-05statement.mspx).

The FSF press release about the GPLv3 license is at http://www.fsf.org/news/gplv3_launched/ The actual text of the GPLv3 license can be found at http://www.gnu.org/licenses/gpl.html.

Sony PlayStation® 3

The Sony PlayStation 3 (PS3) is the most expensive of the current generation game consoles, but also the most technologically advanced. However, it can do much more than play games. The following summarizes the PS3 features.

Hardware Features:

- Blu-Ray Disc/DVD/CD Player w/ upscaling

- 20 or 60 GB hard disk (2.5" SATA, user replaceable)

- 1x 10Mbps/100Mbps/Gigabit Ethernet

- BlueTooth 2.0 wireless

- 802.11b/g Wi-Fi (60GB model only)

- 4x USB 2.0 ports

- 1x (7 max) Six Axis motion sensitive Bluetooth/USB Controller (rechargeable, replaceable lithium battery)

- Digital Audio Output (Dolby Digital and DTS 5.1 over optical and HDMI; PCM 7.1 over HDMI only)

- HD Video Output (480i to 1080p, HDMI and Component)

- Cell Broadband Engine (3.2 Ghz 64-bit PowerPC core, 7 synergistic processing elements)

- 3x Media Card slots (CF, SD, MemoryStick) (60 GB model only)

- Nvidia RSX graphics chipset w/ 256MB RAM

Software Features:

- Compatible with most PSOne and PS2 games (list posted at http://www.us.playstation.com/Support/CompatibleStatus)

- XMB Cross Media Bar menu interface

- Multi OS capability (e.g. runs GNU/Linux)

- Rip CDs in MP3, AAC, ATRAC formats; selectable rates

- Media Center (photos, videos, music)

- Folding@Home distributed computing project client built-

in (http://folding.stanford.edu/)

Network Features:

- Gracenote CD database
- Network DLNA Media Client and Server (i.e., share media through a home network)
- Built-in web browser
- Online software updates
- Multiplayer games and online chat
- Playstation Store (demos, movie trailers, full games for purchase)

Drawbacks:

- Runs hot; needs good airflow
- 256MB RAM (not expandable)
- Other OS option is buried in the menu
- System updates are not reversible
- Vulnerable during updates (e.g. power outage during update could leave system unusable; use an UPS)
- Expensive games ($60)
- Only one controller included (additional controllers @ ~$50 each)
- Hypervisor prevents Other OS direct access to hardware (e.g. framebuffer prevents OpenGL features and desktop enhancements)
- HD monitor highly recommended (720p or better resolution)
- DLNA Media Server/Client is not compatible with TiVo
- HDMI/component cable must be purchased separately (~$15-

$30)

- Controllers don't have "rumble" feedback
- USB adapter (~$15 USD) required for PSOne/PS2 memory cards (i.e., to import saved games from old systems)
- PlayStation Network Privacy Policy (http://www.scei.co.jp/ps3-eula/us/us_pp_en.html) is intrusive (e.g. collection of online and offline console usage data)

Comments:

I purchased the 60GB model in March 2007. I find the PS3 to be an exceptional game system, with excellent graphics and sound. The model with 20GB hard drive is relatively rare and lacks useful features such as the media card adapters and the wireless network capability (both could be added with USB adapters, but the 60GB model is more cost-effective).

The PS3 is a complete media center, which is often overlooked. In addition to DVDs (+/-R & RW), it plays high-definition movies on Blu-Ray Disc at approximately the same cost as dedicated players. The PS3 can play and also import (rip) music from CDs to the local hard disk. If attached to a network with Internet access, the PS3 has an option to lookup the CD title, artist and track information from the Gracenote database (service included). The PS3 also has features to search and organize your stored music. Digital photos can also be imported to the hard disk from the network or media cards, viewed as slideshows, sorted, and managed. Digital videos can also be imported, stored and viewed on the PS3. Media can be shared in a home network with PCs and network appliances

equipped with DLNA compatible media servers and clients.

With a network connection, the PS3's built-in web browser can be handy to check on web sites. It features a zoom feature (useful for viewing web pages on TV sets) and support for up to six open browser windows. However, it lacks support for Flash media, which is required to navigate some web sites. I also encountered occasional out of memory errors that required closing browser windows.

PS3 software updates, which fix bugs and add new features, are downloaded over the network connection or can be downloaded manually from the PlayStation web site with a PC and installed from media (CD, USB flash drive, media card, etc.). Users are notified automatically about updates if the PS3 is attached to the Internet.

Sony will release an online feature called PlayStation Home this Fall. While users can already chat online (text and voice) and play games together over the PlayStation Network, PlayStation Home creates a virtual reality environment in which PS3 owners can create their own virtual character (avatar), meet other people and play games in virtual space, and create their own personal space. Access to PlayStation Home will be free, but some items may be purchased. A video preview of PlayStation Home is online at http://www.youtube.com/watch?v=8ZY2vwlh5-g.

Text entry on the PS3 requires scrolling through a virtual keyboard when using the controller. This is usable for system configuration, but a bit annoying when entering ad-

dresses in the web browser. If the system will be used for text chatting or with the Other OS feature, you need a keyboard. I was able to use an inexpensive wired USB keyboard from my PC, but later found a wireless USB keyboard and optical mouse combination (Kensington PilotBoard model 64382) on sale for $24 that works quite well. Logitech sells an RF wireless PS3 keyboard with built-in trackmouse for about $80, but it has only minimum functions. Bluetooth keyboards might work, but are relatively expensive and largely untested.

For use as an Other OS, I installed and used Gentoo Linux with the PS3 overlay (http://overlays.gentoo.org/proj/cell/wiki/InstallGentooOnPS3) and TerraSoft Solutions' Yellow Dog Linux v5.0.2 (http://www.terrasoftsolutions.com/products/ydl/) as an Other OS on the PS3. Both are available as free downloads. Yellow Dog Linux (YDL) is long-established on PowerPC based systems, and is easier for new users to install and configure, while Gentoo provides more flexibility in optimizing the system. The following comments are specific to YDL.

TerraSoft Solutions provides excellent instructions on how to create an installation DVD and install the operating system on the PS3. Unfortunately, my five year old High Definition television (HDTV) does not support 720p mode, which appears to be the default and optimum choice for installing and running YDL. I was able to use the text install option and use 480p and 1080i modes for graphics. Wired network support is enabled by default, but YDL only recently added support for the PS3 wireless network adapter; instructions are on their website's support area. However, WPA encryption support is not documented, yet, and apparently has a software bug. I found a fix with instructions online at http://dachaac.blogspot.com/2007/08/guide-to-get-wpa-psk-working-on-ps3-ydl.html.

I still have mixed feelings about the PS3, though it is a bargain for what you get. I intended to use it as my next GNU/Linux PC, since the Cell is the most advanced and powerful microprocessor currently on the consumer market. However, my HDTV's lack of support for 720p mode makes screen viewing difficult (480p is too coarse, 1080i is too fine), and the restrictions Sony placed on accessing the system's hardware (video adapter and network capabilities) reduced its functionality as a GNU/Linux platform. The games are great, but I don't play them very often. The built-in web browser is handy for quick look-ups online. I am also looking forward to trying out PlayStation Home when it is released.

A final note for potential purchasers: Sony is selling off the remaining stock of 60 GB models at a reduced price of $499, $100 less than the original price. The 60 GB model will be replaced with an 80 GB hard disk model, but word is that the 80 GB model will eliminate the PlayStation 2 Emotion Engine chipset used to ensure PS3 backwards compatibility. Instead, the PS3 80GB model will use the Cell processor's horsepower to provide software emulation of the PS2. Software emulation is always tricky, so the 60GB model may be the better buy while they last, especially if you have PS2 games in your library.

Linux Software of the Month

The software described below is downloadable at the links provided or may be requested on the monthly CD. In addition to the monthly CD described below, WAC can provide CD-R and DVD±R media for any downloadable GNU/Linux operating system distribution (e.g. Fedora, Mandriva, Ubuntu, Debian, Knoppix). Please note that download versions of commercial distributions do not include official technical support nor printed documentation.

Discs are available only by pre-order. Contact Geof Goodrum by e-mail (linux@wacug.org) at least 48 hours before meeting day to order or for more information. Single CD-R discs are available with a $3 donation; GNU/Linux distributions on multiple CD-Rs or single DVD±R are available with a $6 donation.

August 2007

C-Dogs SDL – v0.4. http://linux.softpedia.com/progDownload/C-Dogs-SDL-Port-Download-10937.html. Free GNU General Public License source code and executable by Jeremy Chin and Lucas Martin-King. C-Dogs SDL is a port of the old DOS arcade game C-Dogs to modern operating systems. C-Dogs is an arcade shoot-em-up that lets players work alone or co-operatively

during missions, and against each other in the „dogfight" deathmatch mode. The original DOS version of C-Dogs came with several built in missions and dogfight maps, and this version is no exception. The author of the DOS version of C-Dogs was Ronny Wester. Requires Simple DirectMedia Layer (SDL) libraries, included in most distributions.

Firefox – v2.0.0.6. http://en-us.www.mozilla.com/en-US/firefox/. Free Mozilla Public License source code and executable package by the Mozilla Foundation. Firefox 2 is a web browser with features including tabbed browsing, spell-checking, integrated and configurable search engine tool, RSS Web feed reader, pop-up blocker, phishing protection, plug-in feature extensions and themes. This release fixes several security issues. System requirements include Linux kernel-2.2.14 with the following libraries or packages minimums: glibc 2.3.2; gtk+2.0; Xfree86-3.3.6; fontconfig (also known as xft); libstdc++5; Intel Pentium II or AMD K6-III+ 233 MHz CPU (*Recommended:* 500MHz or greater); 64 MB RAM (*Recommended:* 128 MB RAM or greater); 52 MB hard drive space.

Thunderbird – v2.0.0.6. http://en-us.www.mozilla.com/en-US/thunderbird/. Free Mozilla Public License source code and executable package by the Mozilla Foundation. Thunderbird 2 is an e-mail, RSS and newsfeed client, featuring folders to organize your messages, phishing and junk mail filters, message tagging, advanced message search, plug-in feature extensions, and privacy protection options. This release fixes several security vulnerabilities. System requirements include Linux kernel-2.2.14 with the following libraries or packages minimums:

glibc 2.3.2; gtk+2.0; Xfree86-3.3.6; fontconfig (also known as xft); libstdc++5; Intel Pentium II or AMD K6-III+ 233 MHz CPU (*Recommended:* 500MHz or greater); 64 MB RAM (*Recommended:* 128 MB RAM or greater); 52 MB hard drive space.

zzuf – v0.9. http://sam.zoy.org/zzuf/. Free WTF Public License source code by Sam Hocevar. zzuf is a transparent application input fuzzer. Its purpose is to find bugs in applications by corrupting their user-contributed data (which more than often comes from untrusted sources on the Internet). It works by intercepting file and network operations and changing random bits in the program's input. zzuf's behavior is deterministic, making it easier to reproduce bugs. Its main areas of use are: quality assurance - use zzuf to test existing software, or integrate it into your own software's testsuite; security - very often, segmentation faults or memory corruption issues mean a potential security hole, zzuf helps exposing some of them.

GNU/Linux Distibution Updates – http://mirrors.fedoraproject.org/publiclist/Fedora/7/. Security and bug fix monthly updates for Fedora 7.

Kernel Source – http://www.kernel.org/. The latest versions of 2.4 and 2.6 kernel source code for all platforms.

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The New, the Best, and the Worst –June 2007

by Pim Borman, Webmster, SW Indiana PC Users Group, Inc.
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Digital Camera Lessons

My first digital camera was a 3.1 megapixel Olympus C-730 Ultra Zoom. With its 10x optical zoom lens I hoped to take candid pictures of squirrels feeding at the corn spike on the back fence. To my disappointment they turned out on the fuzzy side. I blamed the optics, until it was pointed out to me that a hand-held camera is too unsteady at that zoom level.

Lesson #1: It takes a tripod for best results at elevated zoom levels.

Indoor pictures, especially those I took at our monthly meetings, were never as bright and sharp as some of those taken by others, even after processing with a photo editor. The pictures were underexposed due to the inadequate flash and small lens diameter. To compensate, the camera used a large aperture (affecting sharpness) and amplified the signal from the CCD as much as possible (to an equivalent of ISO 400 maximum in this camera). Amplifying the signal also amplified the electronic noise inherent in all electronic systems, resulting in a mottled background. The camera minimized the mottling by blurring the image.

Lesson #2: Higher ISO specifications are meaningless unless the CCD chip has a higher signal-to-noise ratio. Otherwise it takes a stronger (external) flash, and/or a larger lens for better light gathering. If you already have an old SLR film camera with several large lenses you may be better off with a new SLR camera body that accepts your lenses. More expensive and bulky, but it will get the best results.

Digital pictures don't always turn

out as intended. Taking a picture of a roomful of people may end up with people in the back of the room barely visible while the ones up front are overexposed. Often a part of the picture can be rescued by severely cropping to retain the group in the foreground only. Unless you start out with a large excess of pixels, the remaining edited version may not have enough pixels left for a sharp image of reasonable size, resulting in blurriness or even pixelation. 7 megapixel images can be cropped smaller than 3 megapixel ones.

Lesson #3: Get as many pixels as you can afford. You can always discard the excess later.

My next camera was a Casio EXZ-750 with 7.2 megapixels and no more than 3x optical zoom. I already knew that higher zoom levels gave unsatisfactory results. Much more compact than the Olympus, with a large LCD screen and an optical viewfinder for bright outdoor use. According to the PC magazines it provided outstanding image quality. I did see a comment somewhere that its low-light performance was marginal and I should have paid heed to that. As it turned out, the camera performed beautifully under daylight conditions, but flash pictures taken in semi-dark rooms invariably showed the multicolored mottling due to background electronic noise in the chip. I have not found a photo editor (yet?) that corrects that problem, other than by blurring the picture to make the mottling less visible.

On the other hand, with the higher pixel count I took a daylight picture of a squirrel on the back fence from the kitchen door with 3x zoom and cropped it back tightly without los-

ing quality. One night I surprised a raccoon raiding the bird feeders. It may have been a youngster, at least it did not show any fear and allowed me to walk right up to it and snap some flash pictures. Under these close-up conditions, with plenty of light from the flash, the pictures were sharp without mottling of the dark background. Still, the new camera did not solve my problem with the unsatisfactory performance in open areas under low light conditions.

Lately many camera manufacturers have started to emphasize higher light sensitivity of their cameras in terms of ISO values. Both my Olympus and the Casio had a maximum of ISO 400 speed. I took some trial pictures with both my cameras, changing the ISO setting from 100 to the maximum 400. As a target I used my 40-year old, seldom-used, set of Encyclopedia Britannicas, in dark-brown imitation-leather bindings and gold lettering on the spines. Sitting in their own bookcase in a dark corner of the den they make a perfect test image. It only confirmed lesson 2: higher ISO settings by themselves don't help. They just amplify the noise as much as the signal.

And then I read about the new Olympus SP-550 UZ camera. All-new technology! 18X optical zoom! Includes wide-angle! New Dual Sensor-Shift and Digital Image Stabilization! Up to ISO 5000 sensitivity (with reduced image size) and up to 1/2000 second shutter speed! I liked my old Olympus and this seemed to be everything I needed to solve my problems. I was ready to order but hesitated at the last moment. It sounded almost too good to be true, and frequently that turns out to be true.

Lesson 4: First find out all you can about a new camera from an independent source.

PC World and PC Magazine were no help, since the camera had only recently become available. I found a terrific Web site, Digital Photography (www.dpreview.com) with in-depth reviews of just about any digital camera on the market. More detail than you knew existed, sure to uncover any shortcomings. Its summary opinion of the Olympus SP-550 UZ was deadly. In essence: a camera designed by the marketing department, out to establish the best-looking list of specifications without regard to actual performance. A detailed series of test images showed how the performance of the camera rapidly degraded with increasing ISO values, even well below ISO 1000, let alone 5000. The dual image stabilization didn't work well at the high zoom levels where it is most needed. Even under the best conditions, images were not as sharp as with competing cameras.

Lesson 5: Image stabilization may not work as well as promised, especially at high zoom levels when it is most needed.

Having found dpreview to be a goldmine of information about cameras, I checked to see which make and model they liked best, especially under low-light conditions. Their clear choice was the Fujifilm FinePix F31fd camera, a minor upgrade of the previous F30 (http://www.dpreview.com/reviews/fujifilmf31fd/). In many respects it looked and acted like so many other compact digital cameras, but it boasted of having a Super CCD and a new Real Photo Processor. Also , ISO 3200 maximum, 6.3 megapixels, 3x optical

zoom. The review showed that, as in other cameras, the image quality at the highest ISO settings was unacceptable, but it still found that "this camera has Class-leading high ISO performance; superb results up to ISO 400, surprisingly good ISO 800 performance." This is presumably due to a higher signal-to-noise ratio of its CCD chip. As a result its performance at low light levels is superior. In other respects the camera is unremarkable. It lacks an optical view finder and its LCD screen is hard to see in bright light. It uses more expensive XD picture cards that have lower writing speeds than SD cards.

Lesson #6 : Digital cameras come with a minimum of built-in memory. Buy at least 512 MB of removable additional storage. SD picture cards are less expensive and faster than XD cards, but are not interchangeable. Check to see what the camera uses.

At half the (street) price of the new Olympus, I bought the Fujifilm camera. Test pictures of my encyclopedia confirmed its superior low-light performance. That is also clear in the first indoor group pictures I have taken with it. For outside pictures I still prefer the Casio, mostly because of its convenient optical view finder.

Lesson #7: An optical or miniature LCD viewfinder is essential for accurately framing pictures under bright conditions.

Finally, if you are a stickler for perfection, get a digital SLR camera with a set of high-quality lenses. You'll never be satisfied with the small pocket cameras. But even with less than absolutely perfect technical quality, an interesting picture is still

worth at least a thousand words!

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The Nightmare

By Berry F. Phillips, a member of ccOKC and a frequent contributor to the eMonitor, Computer Club of Oklahoma City
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My computer growled like some prehistoric monster rebelling at being awakened from a deep slumber and then checking my financial data online almost by habit. Terror pulsed through my veins as I no longer existed; all my personal data had been deleted! I then checked to see if my credit cards were in my wallet, which gave me a momentary feeling of security that I still existed. However, the panic returned when I remembered the credit cards while having a physical reality actually have only a cyber reality. What did I do wrong? Do you suppose the last time I kicked my computer out of frustration caused this animosity? On the verge of hysteria, I shouted, "I am too young to be cyber terminated and deleted into nonexistence!" Looking for something to

save me from termination, I am very appreciative of the National Cyber Security Alliance (NCSA) for their contribution to this article. NCSA is a go to resource for cyber security awareness and education for the home user, and small business, and education audiences. NCSA is a private partnership whose sponsors include the Department of Homeland Security, Federal Trade Commission, and many private-sector corporations and organizations.

"The widespread availability of computers and connections to the Internet provide everyone with 24/7 access to information, credit, financial services, and shopping. The Internet is also an incredible tool for educators and students to communicate and learn. Unfortunately, some individuals exploit the Internet through criminal behavior and other harmful acts. Criminals can try to gain unauthorized access to your computer and then use that access to steal your identity, commit fraud, or even launch cyber attacks against others. By following the recommended cyber security practices outlined here you can limit the harm cyber-criminals can do not only to your computer, but to everyone's computer.

However, there is no single cyber security practice or technological solution that will prevent online crime. These recommended cyber security practices that highlight that using a set of practices that include Internet habits as well as technological solutions can make a difference. The National Cyber Security Alliance's Top Eight Cyber Security Practices are practical steps you can take to stay safe online and avoid becoming a victim of fraud, identity theft, or cyber crime.

Here are the eight NCSA cyber security practices to stay safe online: "1. Protect your personal information. It's valuable. 2. Know who you are dealing with online. 3. Use anti virus software, a firewall, and anti-spyware software to help keep your computer safe and secure. 4. be sure to set up your operating system and Web browser software properly, and update them regularly. 5. Use strong passwords or strong authentication technology to help protect your personal information. 6. Back up important files. 7. Learn what to do if something goes wrong. 8. Protect your children online."

Upon awakening after having once more dozed off in front of my computer while online, I saw my personal data that confirmed I really did exist. I am alive! I have not been deleted! It was only a nightmare. I simply must stop watching those late night horror movies, kicking my computer in frustration, and improve my online security practices to avoid cyber fireworks.

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Improve Computing Pleasure with Free Widgets for Windows and Mac

By Ira Wilsker, APCUG Director; Columnist, The Examiner, Beaumont TX; radio and TV show host
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WEBSITES
http://widgets.yahoo.com
http://widgets.yahoo.com/gallery

Many of us are extremely busy, and often lack the time to search the internet for items of frequent interest. Many of us have dull and boring desktops displayed on our monitors, often using the default images of our computer or software maker. Fortunately for us, there is a free service offered by Yahoo!, called "widgets".

Widgets, also known as "gadgets" by some web services, are small programs that display a wide variety of information on the otherwise wasted space on our desktops. This information is automatically updated on a frequent basis, providing the user with current data without loading another program or browsing to a website, as widgets are displayed on the desktop on a full time basis.

Widgets is the name for the products distributed by Yahoo!, and gadgets are distributed by other web service providers. While similar in appearance and function, widgets and gadgets are generally not interchangeable, and in order to conserve system resources, users should choose gadgets or widgets, but not both.

Yahoo!'s widgets can be found at widgets.yahoo.com. Upon opening that page, the user is greeted with a button to download the widget engine, which includes about a dozen popular widgets, including a picture frame (displays digital photos on desktop), weather display, notepad, daily planner, maps, stock ticker, and others. The opacity of widgets can be controlled to make them nearly opaque, hiding the desktop behind the widget, to almost totally transparent, fully displaying the desktop. Widgets can be dragged and dropped anywhere on the screen. I have a lot of icons on my desktop, and my widgets cover several of the icons, but this is not a problem as I drag the widget out of the way whenever I want to access those previously covered icons.

The widget engine works on Windows XP with service pack 2, Windows 2000 with service pack 4, Vista, or Macs with OS X 10.3.9 or higher. An internet connection is necessary in order to update the widgets, and 512 megabytes (minimum) ram is recommended for improved performance.

Among the default widgets included with the widget engine, I personally have the stock ticker and weather widgets loaded and running, and also have a TV widget which displays the shows for the next few hours on the channels of my choice.

The stock ticker widget is very easy to use, and is automatically updated every few minutes. The default listings are for popular quotes, such as the Dow Jones Industrial Averages, NASDAQ, Yahoo!, and similar issues. It is very simple to modify the listing to show any desired quotes and indices, and the number of issues displayed is only limited by the space available on the desktop.

The weather widget is customizable for any city or zip code, and graphically displays the weather for five days, current conditions, temperature, and moon phases. By moving the cursor over the weather widget (sometimes it also requires a

mouse click), a balloon opens which displays the humidity, barometric pressure, wind chill or heat index, wind direction and speed, and the time of most recent update.

The widget I seem to refer to the most is the TV widget called "TV Tracker", which can be downloaded from the Widget Gallery. Once downloaded and installed, a city and zip code is selected, which displays the on-air, cable, and satellite options and carriers locally available. Selecting the appropriate carrier displays a two hour grid of what is on television. Different genres, such as sports and movies are highlighted in different colors for easy viewing. Clicking on a highlighted title will "fetch" the description and details of the movie or sports event, displaying it in a sub-widget adjacent to the primary widget. I will be honest and say that there are several cable channels available to me that I simply never watch, and TV Tracker easily allows for the display of only selected channels, making the display that much easier to follow.

The widget gallery, widgets.yahoo.com/gallery, currently lists 4242 Windows widgets available for download, and 3977 widgets for Mac, in a variety of categories. As I type this, Yahoo! is featuring Motor Trend Magazine's "Gas Alert Savings" widget which displays a localized list of the lowest priced gas stations in the area, and is available for both Windows and Mac. Widgets can be searched by name, type, or date. The widget categories listed in the gallery are latest (4242 widgets), updates (2158 widgets), fun & games (575 widgets), date & time (470), news feeds (952), sys-

tem utilities (354), sight and sound (554), geek stuff (120), cam viewers (273), widget tools (63), app (application) enhancers (109), search tools (352), and various (miscellaneous, 416). Each category may contain hundreds of different widgets, all of which are available for free download.

I have downloaded several other widgets, and selectively load them when I want, and stop them when no longer wanted. In Windows, widgets as a group can be controlled by clicking on the widget icon in the system tray, near the clock. The widget icon is a black background, with two diagonal and interlocked gears. Right clicking on the widget icon displays a comprehensive menu of options which allows the user to control the appearance and function of widgets, load and unload widgets, and otherwise control their behavior.

Some widgets that I selectively use are news feeds which display real time news headlines from hundreds of sources, live weather radar, streaming audio from dozens of radio stations from all over the globe, and many others. Although I have never used it, there is even a pregnancy calculator widget!

Widgets can be a fun adjunct to improve the satisfaction and use of our computers.

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GasAlert Widget.jpg

WeatherWidget.jpg

TVWidget.jpg

The Cursor

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Operating System(s):
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Circle Your Interests: Photo Printing   Investing   Games
Digital Photography   Internet Access   Education   Music
Graphics/Animation   Genealogy   Video   Finance
Programming Language(s)
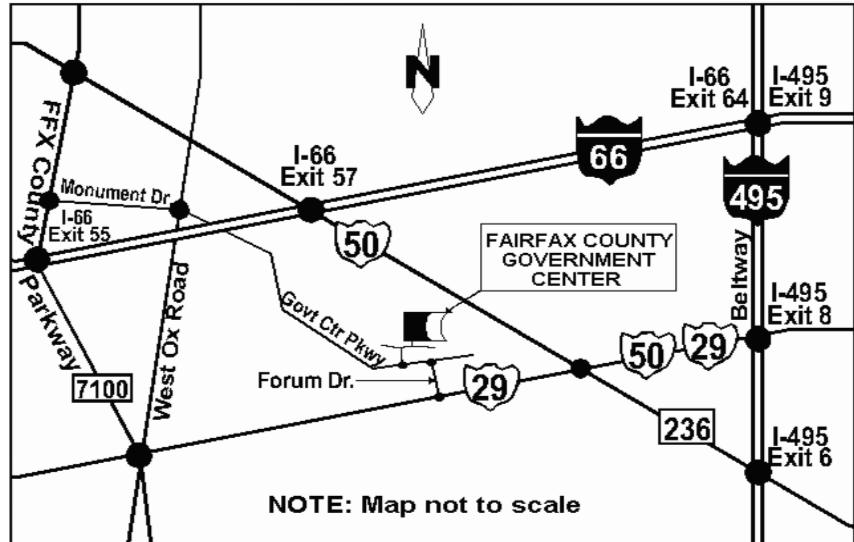Hardware Upgrades/Repair   List others below

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August Meeting will be held at the Fairfax County Government Center, Fairfax , VA

Go through front entrance, then follow the hall on the left to Meeting Room 2 & 3 on the right

Service Desks Open at 12:30
Meeting Starts at 1:00 PM
FREE ADMISSION
BRING A FRIEND!

NOTE: Map not to scale

DustKleen™

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Introduction

DustKleen is an innovative stand alone application from Image Trends Inc. DustKLeen will automatically remove most dirt and dust from any scanned images regardless of the source. The scanned images can be color, black and white negatives, color slides including Kodachrome or prints. The technology which is patent pending, identifies the dust or debris on the image. These "defects" are removed without destroying the image quality. DustKleen is exactly the type of innovative software that digital image users need who use a scanner to convert images to a digital format. DustKleen occupies 2.97 mb of hard disk space once it's been installed.

Working with DustKleen

When was the last time you installed a *stand alone* program that used so little hard disk space? My test hardware is running XP Pro with an AMD 3200 processor, 1 Gig Dual Channel RAM, 320 gig of hard disk space on two hard drives, CD and DVD burners, ATI Radeon video card with 64 mb of RAM. Windows NT, 2000 and Vista operating systems are also supported. A Mac version is currently under development.

The software interface is clean and very easy to use. Press the ? on the bottom left of the program to get a quick overview of how to use Dust-Kleen. Clicking on the ? will bring up more detailed help information. The help files are very well written

and have all the information required to answer questions. Because DustKleen is a stand alone program it works very fast. DustKleen targets one real problem, dust and debris on scanned images, and does the job it was designed to do very well. Dust-Kleen can read BMP, JPG, PNG, PSD and TIFF files.

The automatic detection and removal default setting works great for most images without any end user intervention. There will be times when the default settings do not clean up all of the dust or debris defects. However, the good news is that the default automatic detection and removal gives the end user three tools for removing dust and debris. These tools are: dust size, dust amount and dust aggression. Any additional defects can be handled using the advanced "Manual Touch Up" mode. The Manual Touch Up modes lets the end user adjust both brush and dust size to target a specific area of the image. The "Add Touch Up" feature works very similar to the healing brush in Adobe Photoshop and Adobe Photoshop Elements. If you do not like your change, pressing Ctrl+Z will remove it immediately or you can use the "Remove Touch Up" feature to remove either an automatic or manual correction in a specific area with a single brush stroke.

Note: All images are on Bonus Pages 2 & 3.

Figure 1 (DKBefore.png) shows the dust and debris on a scanned Kodachrome slide taken in October 1970. The little black spots are dust on the image. Figure 2 (DKAfter.png) shows the image after automatic dust and debris removal. The dust and debris are highlighted in yellow. As you can see there was a lot of dust on this image. Finally,

Figure 3 (PSAfter.png) shows the final image in Adobe Photoshop CS after the file has cleaned.

People do not want to spend a lot of time in front of a computer screen correcting scanned images. Cleaning up visible defects from scanned images takes time. I actually tried cleaning up some of these scanned images by hand using the healing brush in Adobe Photoshop CS. Guess what, I didn't come close to getting all the spots. I then ran the my supposedly cleaned up image through DustKleen. DustKleen found a lot more dust. This dust and debris was visible in the final print. *DustKleen is an easy to use stand alone application that works and solves the problem!* Question: Why not just use the "remove dust and scratches filter" that's available in both Adobe Photoshop and Elements? I tried this method as well but found that the image quality was degraded.

Scanning and removing visible dust and defects Kodachrome slides is no easy job. I scanned the Kodachrome slides with a Minolta Dimage Scan Elite 5400. This scanner supports Kodak's hardware Digital Ice. Digital Ice is a terrific hardware solution. However, Digital Ice does not work with Kodachrome slides or black and white negatives. Even if Digital Ice did work on Kodachrome slides, it still takes approximately seven minutes to scan a slide at 2700 dpi and to clean up dust and debris. Digital Ice works great on E6 processed slides and color negative film but is time consuming. By comparison, scanning four slides at 2700 dpi without Digital Ice takes about five and a half minutes. Cleaning up and saving the four scanned slides using DustKleen

takes another minute.

Hint: Scan and save your files as PSD or TIFF. Then run DustKleen to clean up the file and save the file. When you want to make prints convert the files to JPEG and upload them to your favorite photo lab or print them on your own inkjet printers. Remember you do not lose any information when you save a file as a PSD or TIFF.

Conclusion

Every photographer, amateur or professional needs a "digital toolbox" to solve specific problems quickly. In my opinion, DustKleen is a very innovative working tool that should be in every digital photographers digital toolbox. Yes, most of us are now using digital cameras but there is still a sea of prints, negatives and slides that many end users want to convert to a digital format.

DustKleen worked great for me on scanned prints, color negatives, really old black and white Tri-X negatives, E6 processed slides and Kodachrome slides. In every case, there was dust that was not readily visible to the eye or with a loupe. The best part, was I now have some very nice prints made from Kodachrome slides.

DustKleen is a product that needs to be used to really appreciate just how good it is. Be sure to visit www.imagetrendsinc.com and download the trial version for yourself. This is a very impressive innovative product that works.

Recommended Improvements

Not every piece of software is perfect on the first release, but Dust-Kleen is very good. I would make a couple of changes to further improve the workflow. First, I would leave the Image Type to the last image type used, for example, scanned slide (black dust). More than likely the end user will be scanning images from the same format for some time and it's tiresome to keep changing from the default to the image type that is being scanned. When the end user changes the format he or she will change to the correct Image Type. The second change I would make would be in Save As. It would be great to just click on Save As and automatically have a user defined prefix added to the front of the open file name. For example, if the open image is named Tray1_025.jpg, the Save As image could be named automatically using the user defined prefix DK to DKTray1_025.jpg. Also, by default I would use the highest quality setting for JPEG images. Finally, Adobe's DNG universal RAW file format should be considered to be added to list of supported file formats.

Neil's rating (★ ★ ★ ★ ★ – five stars) plus +

Contact

Image Trends Inc.

1 - 512 - 637 - 7300

http://www.imagetrendsinc.com

Note: I would also like to thank the kind folks at Image Trends Inc. for providing me a copy of the DustKleen for review.
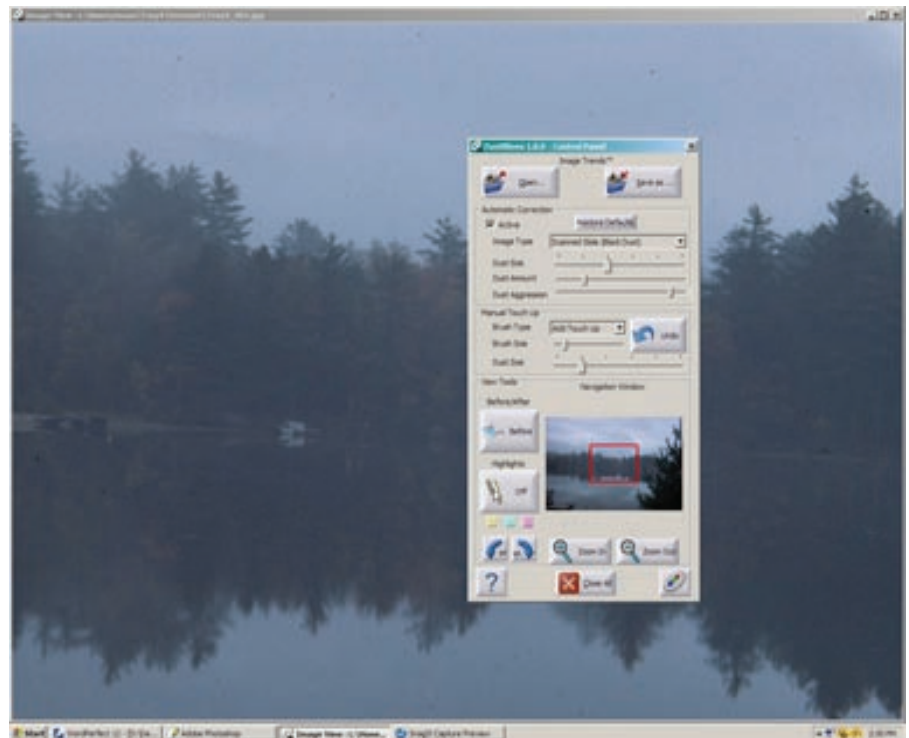
Figure 1
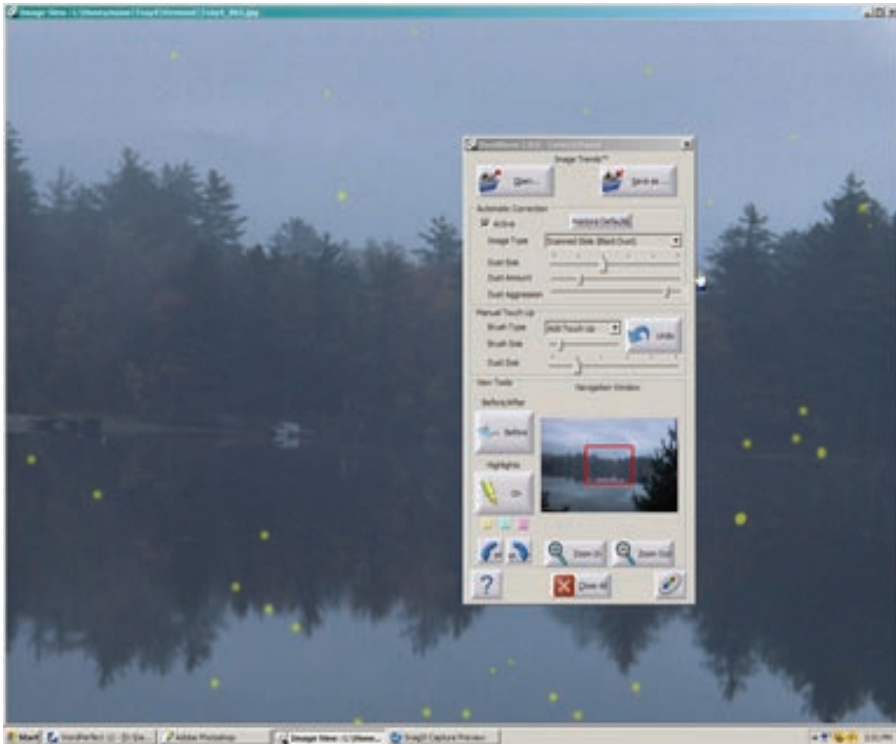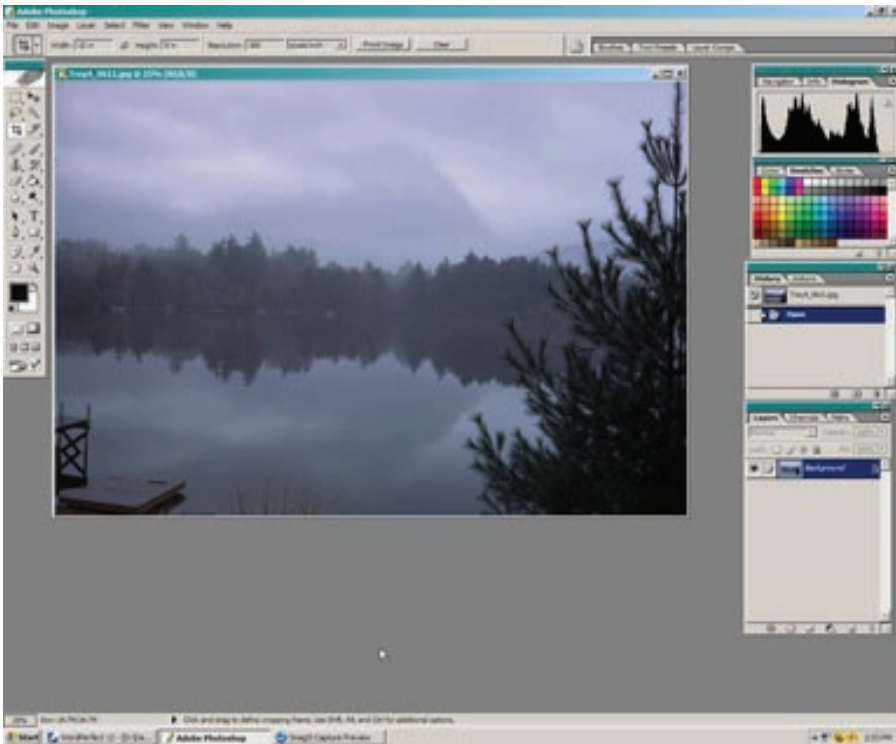*DK Before.jpg*

Figure 2
DKAfter.jpg

Figure 3
PS After.jpg

How Does Windows Handle USB Devices?

Written by Dave Gerber, Program Chair, Sarasota PCUG, Florida; member of the "Live on the Internet" Bits and Bytes radio show team
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One subject that often comes up is how Windows handles USB (Universal Serial Bus) devices and what you can do when USB devices don't work as you expect. First, let's talk about the two versions of USB that you'll probably encounter:

USB 1.1: these were the first widely-available devices and usually ran at a speed of 1.5 mb/sec. They were meant to replace old-fashioned serial and parallel (printer) connections that ran at only a fraction of the speed and could connect only one device at a time. While this speed was OK for slow devices like mice and keyboards, it wasn't useful for transferring large amounts of data, like from digital video cameras. For faster speeds, you needed SCSI or FireWire (IEEE 1394) connections. Since these were used mostly on the Mac, you often needed an add-in card for your computer to use them, which is one of the inconveniences that USB was supposed to alleviate.

USB 2.0: typically runs at the much higher speed of 480 mb/sec, which is faster than the original FireWire standard and much faster than SCSI. This is more appropriate for large data transfer, such as to external hard drives, and necessary to connect CD or DVD burners. However, some people still prefer FireWire for devices like video

cameras, because FireWire is really a network that allows devices to be more interactive.

So how do you know which USB you have? If your computer was made sometime in the last few years, chances are its USB ports are version 2.0, which are backwards-compatible with 1.1 devices. One way you can tell which version your computer has is to look at the Device Manager in Windows XP:

- Press Windows Key + Break to open Device Manager (or click the Start button, then right-click My Computer and select Properties).

- Click the Hardware tab, then click Device Manager.

- At the bottom of the list, click the plus sign next to Universal Serial Bus controllers.

If your computer has is equipped with USB 1.1, you'll see a device or two called a Host Controller or Open Host Controller.

If your computer is equipped with USB 2.0, you'll see a device or two called an Enhanced Host Controller or USB 2.0 Controller.

Any USB device you buy will have the regular USB trident logo and any high-speed USB device will have the red, white and blue high-speed logo.

If you connect a high-speed USB device to a low-speed USB port on your computer, Windows will probably give you a message that the device can run faster if you connect it to a high-speed port. A USB 2.0 internal expansion card costs about $20 and a USB 2.0 notebook adapter (fits in the PC Card slot) costs about $40.

The most common problem people have is when they connect a USB flash drive (sometimes called a thumb drive) to a computer and the computer doesn't recognize it.

First, let me say that these are great devices. Connect one to your computer and it works like a removable hard drive.

When you connect a USB device to a computer running Windows XP, the computer will detect it immediately. When that device is a USB drive, you'll probably see a message on the taskbar that Windows detected a new device, followed by a dialog box that asks if you want to open the drive to see its contents, play a movie and other choices. Windows will also assign a drive letter to the device. But sometimes you won't get this dialog box, and when you open My Computer manually (Windows Key + E), you won't see the device listed. That means there's a drive letter conflict.

Here's how you fix it:

- Select Start/Control Panel, then double-click Administrative Tools. (You may also have Administrative Tools directly on the Start menu.)

- Double-click Computer Management.

- On the left side of the Computer Management console, select Disk Management.

- On the right side, you should see a device listed as a removable drive, probably with the same letter as another drive you're already using.

- Right-click the white bar where it shows the letter, then select Change Drive Letter and Paths.

- Select the letter, then click the

Change button.

- Pick a letter not already in use from the list, then click OK.

- Click OK on the warning message, then click OK again. (I assign U: to all USB flash drives, since I never use more than one flash drive at a time.)

- Close the Computer Management console. When you go back into My Computer, you should see the USB drive with the new letter.

Another common problem is running out of ports. When USB started being implemented, the idea was that you would daisy-chain the devices together. So computer manufacturers would put in only two ports (always in the back) and only one port on laptops. For a variety of reasons, the daisy-chain idea never caught on, and computers made today typically have four ports in the back and two in the front, for quick access.

If you run out of ports, you can fix the problem -- as with so many others -- by applying cash. Buy an external USB hub for anywhere from $10 to $40, depending on size, number of ports and power. A hub will split a single USB port into several more. The better ones have their own power supply, so your devices don't have to rely on the computer for powering the USB connection. When there isn't enough power to go around for all the devices, they can go offline.

This brings me to the last problem I'll mention: USB devices going offline because of reasons unrelated to power shortage. This was fairly common when you had many devices connected using USB 1.1 in

versions of Windows older than 2000, where the devices had to supply their own software to get USB to work. (Native USB drivers were first included with 2000, then made more robust in XP -- and Vista, presumably). If this happens, simply unplug all the USB devices, then plug them back in one-by-one. If any are daisy-chained together, connect the parent devices before connecting the child devices.

ENJOY THESE DOG DAYS OF SUMMER!