ACPCUG Newsletter

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February 2004

Akron-Canton PC Users Group

From The DealsGuy For March 2004, by Bob Click, Greater Orlando Computer Users Group

***This Is No Hoax**

This may sound like a broken record, but I find this stuff interesting. In the 12/22/03 issue of InfoWorld, columnist Ephraim Schwartz wrote an article about exploding batteries in cell phones and laptops. It concerns the change from nickel metal hydride to lithium-ion batteries. Seems the new technology can lead to "thermal runaway." He says it is not a frequent problem for a battery to explode, but it is certainly a distinct possibility and has happened, although he did not mention anything about gas stations. <G> His article should be posted at [http://www.infoworld.com/article/03/12/19/50OPreality_1.html] .

Two of my readers told me that gas stations in their area have signs posted forbidding cell phone use while pumping gas. I'm not the only one who wants to be

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careful. I've also had messages explaining to me that Hydrogen power is NOT any safer than gas.

In other news of note, one of our favorite vendors is being bought. It was reported that VPN and firewall vendor "Check Point Software Technologies Ltd." acquired desktop firewall maker Zone Labs Inc. for $205 million. It was said that Check Point must integrate more security into the desktop and that they plan to do that. I hope the free version of Zone Alarm remains free for home use.

You might be interested in knowing that Microsoft is reconfiguring the jobs of the managers in charge of operating system development. It is supposed to improve the product quality and a lot of other things. Haven't we heard that one before? I hope it works. I imagine it does become a big problem when you sell the most prolific operating system in the entire world and all the hackers lay awake nights trying to exploit it, and often succeed before it is even officially released.

In the category of old business, I've received only a couple of messages with comments about my possible plans for the monthly column. After doing it for over nine years each month without a miss, I have established an excellent network to many user groups and would hate to see it come tumbling down. I still have a little material so we'll see where it goes. Since I have tons of announcements for new products, I may start posting some of them on my Web site for the time being although so far I have heard little interest in these mostly unknown products.

*Why Pay For Income Tax Preparation!!

If you have a simple income tax to make out, don't pay for the tax return prep because you just might qualify for the IRS's very own **FREE** File Service. Check further for that at [http://www.irs.gov] and if you feel its really not that simple, or you are a klutz with the computer, call 1-800-829-1040 to find the closest Volunteer Income Tax Assistance location. That free service is meant for the elderly, low-income people, disabled folks, or people with problems speaking English. My wife says I seem to qualify in all those ways when she has a honey-do job. Don't forget the free income tax service for uncomplicated tax returns by AARP volunteers, most of whom are actually specialists donating their time. Call your local AARP chapter for more information.

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*How's Your Credit These Days?

With identity theft so rampant today, people should do themselves a favor and occasionally check their own credit. You can't be too careful and a simple way to get the most information is to check with Equifax where you can get reports from all three credit-reporting agencies (Equifax, Experian and TransUnion) for just $29.95. Yes, I know they are working on a law for you to get your credit report at no cost, but don't hold your breath for that right now, even though it's in the works. Most people don't know that if you have a low score (around 600) for your credit rating, your interest rate will be higher than if your credit rating was near 800. That could mean thousands extra for a mortgage.

*Free Phone Calls – Yup, All Over The Globe

My thanks to JB Hillard of Chautauqua Cyber Club who sent me this item for the DealsGuy column. Check out [http://ui.skype.com/help_faq.html] where you can set up an account to make free phone calls all over the globe. It uses peer-to-peer technology and is presently available only to Windows XP and 2000 operating systems. They say it may work with ME or Win98, but that is not promised. The download is free and right now you would be a beta tester. However, later when they are further along with the development, there may be a subscriber fee. Check it out.

*This One Does it Better

I received a message the other day from Colleen Toumayan of Executive Software telling me they are offering Diskeeper Professional Edition 8.0 bundled with Undelete Home Edition for just $49.95. [http://consumer.execsoft.com/home.asp] (Diskeeper will not install on Microsoft Windows Server Operating systems, although they do have a version that will for more money.) Colleen was kind enough to send me the software because I had never used it before. After trying it out, I became convinced. I am used to starting the defrag in Windows and leaving the room to do something else while it works, but Executive Software's Diskeeper has shown me there was a better way.

Undelete does what it says and can sure be handy in some cases. I often delete things by holding the shift key so it will bypass the Recycle Bin. Once in a while I regret doing that and Undelete helps with that problem. I'm not sure how long this special offer will last. By the way, if you delete something from a floppy or external drive, they don't normally end up in

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the Recycle Bin either.

It's interesting that Undelete replaces the Recycle Bin with a "Recovery Bin." What is the difference --- too much for me to explain here, but it catches much more than the Windows Recycle Bin does, such as items I just described. Go to[http://consumer.execsoft.com/home.asp] for more information and to order this bundle at the special price.

***Get Out Of Here You #@&% Spies!**

Most of you know about spyware that sometimes finds its way on your computer, and some freeware to get rid of it such as AdAware and SpyBot. Here is something called Spyware Blaster that is said to prevent spyware from even being installed on your machine. I read about it in a users group newsletter, but neglected to make a note so I could credit the person who recommended it, but the concept sounds interesting. [http://www.wilderssecurity.net/spywareblaster.html] is the place to take a look and see what you think. Since it is free, trying it is cheap. However, the developer does ask for a small donation if you like it. Remember that sometimes trying to remove trial software can be a problem. I have not tried this product so I cannot speak from experience. Try it at your own risk. If you read through the material on the Web site, it is said to also do other tasks.

That's it for this month. Meet me here again next month if your editor permits. This column is written to make user group members aware of special offers or freebies I have found or arranged, and my comments should not be interpreted to encourage, or discourage, the purchase of any products, no matter how enthused I might sound. Bob (The Cheapskate) Click [Bobclick@mindspring.com]. Visit my Web site at [http://www.dealsguy.com] for past columns and many interesting articles I have taken from various users group newsletters.

Is That a PC in Your Pocket/Purse?

By Lee Schwab
KISS = Keep It Simple Schwab
Napa Valley Personal Computer User Group, Inc., California

Hewlett-Packard
iPAQ 3800 series

For some people, the Pocket PC (PPC) is an incredibly useful tool while other people are not familiar with the Pocket PC. Some people confuse the Pocket PC with a Palm which is similar in appearance but is a different device that uses the Palm operating system. Below is an overview of what is included in a Pocket PC and how it helps me organize and simplify my life.

The Pocket PC uses a scaled down version of the Microsoft Windows operating system which is called Microsoft Windows Mobile 2003 (replaced Microsoft Pocket PC 2002 in June 03). Pocket PCs ship with lots of software, are very powerful, lightweight (4-7 ounces), small enough to carry in your pocket or purse (approximately 3" wide and 5" long), and easily synchronize with your desktop or notebook PC.

Here are some of the Pocket PC features:

ActiveSync: This third party software automatically synchronizes the data on your Pocket PC with your desktop or notebook PC. You can also use it to transfer files between the devices. Because I use the Pocket PC extensively, I synchronize them almost every day.

Calculator: Use it as you would any simple math calculator. Use it to figure the tax on a purchase, the unit price of grocery items, the percent of a discount, tips, etc. Third party calculators are also available for more sophisticated or specialized calculations (i.e., financial, scientific, statistical).

Calendar: Keeps track of your appointments (who meeting with, where to go, what time, and notes). You can also set up reoccurring appointments, a reminder alarm, or cut and paste appointments. Information

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can be viewed by day (with a choice of two formats), week, month, or year.

Communications: Wi-Fi and/or Bluetooth may be included in the Pocket PC or added using the SD (Secure Data) or CF (CompactFlash) slot.

Contacts: Use to organize address book information (i.e., name, address, phone, email).

Excel: This Pocket version of Excel supports 100 functions and formulas, rows, columns, and spell checker. Use it to keep track of expenses when traveling, rosters, fundraisers, etc.

Expansion: Many Pocket PCs include slots for CF (CompactFlash), SD (Secure Data), and/or PC Cards. Use them to add memory, a camera, communications capabilities, etc.

Find: Search the entire Pocket PC or a specific area (i.e., calendar). Use it to find a contact, a specific appointment, something in a Word or Excel document, etc.

Games: Solitaire and jawbreaker are included with the Pocket PC. I am not a gamer but there are lots of third party games available.

Inbox: An email application that lets you send, receive and synchronize email.

Infrared beaming: Beam information between devices. My husband and I beam appointments and documents between our Pocket PCs.

Internet Explorer: This software program is included on the CD-ROM that accompanies the Pocket PC.

Memory: Pocket PCs come with 32-128MB built in RAM and 32-64MB ROM.

Microsoft Reader: This eBook reader can be used to read electronic books. Use it to read the Pocket PC manual, books that are on the accompanying CD-ROM, or books that are downloaded. It includes search capabilities to help find a section or word in the eBook.

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MSN Messenger: Instant Messenger application.

Notes: Create handwritten or typed notes, drawings, or make a short voice recording.

Pictures: View your .JPG pictures in thumbnail or full screen. This is a good place to keep an electronic picture of your spouse, children, or special events because it can easily be updated and the edges do not get frayed.

Power: Many Pocket PCs include a main battery, back up battery, and power cord for external power. The suspend mode and brightness levels can help conserve battery life so the Pocket PC can be used all day without a charge. If the Pocket PC battery is allowed to run all the way down, data may be lost. It is recommended to fully charge the batteries every night.

Price: Depending on features and manufacturer, the prices range from $199 - $649.

Processor: Chips (Intel, Samsung) and speeds (200-400 MHz) vary depending on the device manufacturer.

Screen: Most screens are 3.5” (measured diagonally) and are Transflective TFT or Reflective TFT.

Tasks: Keep track of your “to do” or “honey do” tasks. You can prioritize the tasks so the most important tasks will be at the top of the list.

Text Entry: You can enter text using the software keyboard, block recognizer (graffiti), letter recognizer, or transcriber (cursive, print, or mixed handwriting recognition). As you enter text, words are suggested to help you complete the words. Some Pocket PCs have built in miniature keyboard where your thumbs are used to enter or you can purchase a foldable keyboard (Targus makes good and sturdy keyboards).

Voice Recorder: Make short recordings and playback using the Notes application.

Windows Media Player: Use to play MP3 or Microsoft Audio Format music, or Microsoft Video Format videos.

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Word: The Pocket version of Word is incredibly useful for keeping reference documents, taking notes in meetings, writing articles, keeping shopping lists, etc.

The Pocket PC also includes lots of systems software (Asset Viewer, External Keyboards Functions Support, File Explorer, Infrared OBEX beaming, Server Sync Client, setup/configuration utilities, Terminal Server Client, VPN Client, etc.).

I bought Hewlett Packard iPAQ 3800 series Pocket PC in 2001 and my husband is using it now. This year I bought a DELL Axim5 but I would not recommend a DELL because the screen was badly scratched within one month, the calendar intermittently and randomly changes appointment times (i.e., 1:00PM becomes 2:00PM). I will probably buy a Hewlett Packard iPAQ but there are many choices.

Pocket PCs and cell phones have teamed up and are called smartphones. These devices use the Microsoft Windows Mobile for Smartphone software. The smartphones have to make some compromises in their form and function. To learn more about Pocket PCs or to make a purchase, check out the following. My favorite is the Pocket PC magazine (their 2004 Buyer's Guide is available now).

Magazines:
Handheld Computing (PPC & Palm devices)
Mobility (mobile and wireless)
Pen Computing (mobile computing & communications)
PocketPC (Windows Mobile PPC reviews, comparisons, & smartphones)
Wireless (wireless communications)

Websites:
amazon.com
hpshopping.com
mobileplanet.com
PocketPCmag.com
pcconnection.com
tigerdirect.com

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in context with proper credit given the author. The Editorial Committee of the Association of Personal Computer User Groups (APCUG), an international organization of which this group is a member, brings this article to you.

"May the fleas of a thousand camels infest the crotch of the RealPlayer developer who decided to stick icons in my system tray, Startup menu, and desktop, and may his arms be too short to scratch. —Snarfed from Internet, author unknown.
Or
"I want to thank Bill Gates, his Microsofties, and the entire Redmond Empire. Without them, this PC Annoyances wouldn't be possible (or even necessary)" — Steve Bass

Still Annoyed with Your PC? Keep Fighting Back!

Steve Bass tackles another handful of his most irritating annoyances. By Steve Bass, Contributing Editor, PC World (and allegedly famous author)

You know the drill—readers send me the PC behaviors that annoy, irritate and aggravate; I spend countless hours finding fixes.

Here are another four egregious examples of Windows annoyances—and fixes. I'll also provide a few time-wasting, deadline avoiding (and often weird) Web sites I've discovered.

The big collection of annoyances—over 100 of them—are in PC Annoyances: How to Fix the Most Annoying Things About Your Personal Computer. (Caution: another shameless plug to follow.) If these annoyances are annoying—and you like the fixes—well, maybe you'll buy the book. You can get a copy here at: http://www.snipurl.com/annoyed

Boot Boring IE Icons

The Annoyance: Internet Explorer's Favorite's icons are nothing more than Microsoft's dull, blue "e" emblem. I'd much prefer anything other than these tiny logos reminding me how much I've spent on Microsoft products.

The Fix: This one's easy (and if you like it, you really, really need to buy my book—there are dozens of fixes just like this one.) Start by right clicking on any icon, then on Properties. Choose Shortcut, select Change Icon, then Browse, and click on any file ending in EXE. You'll likely see an

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icon (maybe not; not all EXE's have icons). Find an icon you like and click OK and OK again.

If you have the time and inclination, poke around in other folders in \Windows and \Windows\System for other EXEs that have icons you can use.

Kill Some Time: You'll find these images from the Hubble more than just incredible—they're just stunning. Find them at:
http://snipurl.com/hubble

Search Animations Begone
The Annoyance: I was annoyed with Office Clippy and your book showed me how to dump it. How about the irritating animation in XP's Search feature?

The Fix: Start a search from the desktop by clicking F3 and then take one last look at the dumb animation. Click Change Preferences at the bottom of the Search pane, press "Without an animated screen character," and say adios to the creature.

Zap Microsoft's Passport
The Annoyance: I just bought a new PC and don't plan to leave the country. So how in the world do I stop that annoying icon from asking me if I want to sign up for a Passport.

The Fix: By now it's probably stopped—Microsoft's perky Passport account.net Messenger appears the first few times you access try to connect to the Web. If it doesn't—or you're impatient—click the Passport message and when the window appears, select Cancel.

Kill Some Time: Almost everyone jokes that the number one way to fix any PC annoyance is to switch to a Mac. Before you do, check out their new iToilet, a little something that may change your mind. It's at http://snipurl.com/i_toilet

Disable the CapsLock Key
The Annoyance: I keep accidentally hitting the durn thing on my notebook, and I'm getting mighty sick of typing things that look like a dumb ransom note. When I'm in Word, of course, AutoCorrect fixes the problem (usually), but in other apps, it's a pain in the butt. Can the CapsLock key be disabled?

The Fix: Whenever I get a chance to circumvent something Microsoft should

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have built into Windows, I get a warm, content feeling. The fix will cost you ten minutes, including downloading "Disable the Caps Lock key," an aptly named free utility. The utility works in Win 95, 98, SE, and XP (I haven't tested it using NT or Windows 2000, but it's benign and won't do any harm if it doesn't work.) Get the zipped files at http://snipurl.com/capslockoff. Unzip it to any folder using Windows Explorer. (My example shows it in C:\Windows. See figure One.)

Figure One: Here's what you'll see when you create a CapsLock shortcut on your desktop.

Now you'll need to create a shortcut on the desktop that points to the utility. Right-mouse-click any empty spot on your desktop, select New, and choose Shortcut. In the "Command Line" (98 and ME) or "location" (2000 and XP) field, type "C:\Windows\CapsLockOff.exe" /off making sure to include the quotes. (Substitute the location of the utility if it's not in "c:\Windows.") Click Next and you'll see a new shortcut with the name "CapsLockOff" on your desktop.

Now it's an easy task to drag the desktop shortcut over to the Start menu and hover until you see All Programs (Programs in Windows 98 and ME); continue hovering until the Startup icon appears and drop the icon onto that folder. "Disable the Caps Lock key" will now automatically run when you boot your system.

If you're an advanced PC user, pick up three REG files (small pseudo-programs that modify the Registry) that change the Capslock key to shift, completely disables it, and changes it back to normal. The files are available at http://snipurl.com/capslock2

Kill Some Time: Need something to do that doesn't take creating a shortcut on your desktop? I have just the thing—it's the "Specs of the Century" site. They present you with specs and you try to figure out who they belong to. Try it here: http://snipurl.com/specs

Choosing a Surge Suppressor

by Vinny La Bash, vlabash@home.com
Member of the Sarasota Personal Computer Users Group, Inc.

Let's start with some basics. Standard voltage in the United States is 120 volts. You can think of voltage as a measure of electrical pressure; the higher the voltage, the higher the pressure. It's similar to water pressure that makes water flow through a pipe or a hose. Voltage or electrical pressure is the force that makes electricity flow through a circuit. A sudden, temporary increase in line voltage above 120 volts has the potential to do serious damage to electrical devices.

If a sudden increase in voltage lasts for one or two nanoseconds, it's called a spike. If the increase lasts for three nanoseconds or longer, it's called a surge. A nanosecond is a billionth of a second. How short a period of time is a nanosecond?

Admiral Grace Hopper, developer of COBOL and the first computer compiler, used to use a piece of fiber optic wire in her lectures and speaking engagements to demonstrate a nanosecond. Light travels at about 186,000 miles a second. Her piece of fiber optic wire measured about 18 inches, which illustrated how far light can travel in one nanosecond.

Without getting too deep into technical issues, spikes and surges create excess heat within electrical circuits. If the surge or spike is high enough, it can cause severe damage to electronic equipment. Anything electrical can be fried, from a large mainframe right down to your toaster.

A standard surge suppressor works by diverting power during a spike or surge to the outlet's ground wire. Lightning is the most familiar cause of power surges and gets the most attention because its results tend to be spectacular. In a lightning storm your surge suppressor is likely to be toasted along with anything connected to it. Your best protection is to unplug everything for the duration of the storm.

Surge suppressors are far from useless, but you should understand their capabilities along with their limitations. They are designed to protect you from common causes of line voltage fluctuations. Air conditioners, refrigerators, toasters, and blow driers are the most common sources of

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spikes and surges generated in the home. You can be affected by faulty wiring, downed power lines or even problems with your utility company's generating and transmission equipment. Because of the sheer complexity of power generation and distribution, power surges are unavoidable.

So why didn't we need surge suppressors 50 or 25 years ago? It is only recently, relatively speaking, that modern electronic devices such as computers and TV sets became controlled by small delicate circuits that are sensitive to surges. Microprocessors can function properly only when line voltage is correct and stable.

What kind of equipment should be protected by a surge suppressor? The short answer is anything that plugs into a wall outlet that is controlled by a microprocessor. That includes, but is not limited to, computers, TV sets, DVD players, and most home entertainment components. If it's expensive to replace, it makes economic sense to protect it with a surge suppressor.

Broadband modems, telephone equipment, and cable TV systems also require protection from voltage spikes and surges. Your surge protector should have phone line input jacks, and if you have equipment hooked up to coaxial cables, look for a cable surge protector.

Be aware that there are three levels of surge protectors:

The Basic Power Strip:

This equipment is characterized by low price, up to six outlets, and rarely phone or cable outlets. It offers very limited protection.

The Surge Station:

These are physically much larger units offering superior protection and in most cases, line conditioning. They feature internal circuit breakers and protection for phone and cable equipment.

Uninterruptible Power Supply (UPS) UPS):

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These devices have all the capabilities of a surge station plus battery backup in case of a power failure. This lets you to shut down your equipment normally and greatly reduces the chances of lost data or damaged equipment. High quality units filter out noise from your power lines and provide the highest level of protection.

Here's what to look for when shopping for a device:

Clamping Voltage Voltage: This is the point at which the device starts shunting voltage to the ground line. The lower the clamping voltage, the better protection you have. Look for an Underwriters Labs (UL) rating lower than 400. If there is no UL label, move on to the next candidate.

Energy Absorbtion/Disapation Disapation: This tells you how much punishment the unit can take before failing. The rating is measured in joules and you want a high number. Most homes can get along with a rating of 200 to 400 joules. Units which can absorb 600 joules or more tend to be expensive, but they are worth the money if you need the protection.

Response Time Time: This is the time the unit needs to respond to a voltage surge. You want a unit that can respond in less than a nanosecond.

Indicators Indicators: Look for indicator lights that will tell you if all components are functioning.

This article is hardly the last word on surge suppressors and Uninterruptible Power Supplies. However, you should now have a basis to find the kind of unit you need for your particular circumstances.

Picture and Video Files: Size Matters

By Timothy Everingham, TUGNET (The User Group Network), Granada Hills, CA teveringham@acm.org

You may have gotten a bunch of spam that try to sell you something because they are telling you that size matters. However even though they may be trying to con you, in regards to the size of picture, graphics, and video files size does matter. Some of it is because it is related to image size. However, when you try to compress files there reaches a point where you start to lose something.

First you have to understand that if it is either an image or video file each little pixel or time interval is represented by bits of data. You may have heard 8, 16, 24, 32 bit color. The number of bits represents the color of each pixel. On an 800x600 image you have 480,000 pixels (800 multiplied by 600). Then you multiply the color bit depth to get the size of the image representation (800 x 600 x 24 bit equals 11,520,000 bits). Divide by 8 and you get the number of bytes (11,520,000 bits divided by 8 equals 1,440,000 bytes). It get worse with video because you have to multiply by the frames per second and by the number of seconds in the video (at a standard 30 frames per second it would be 41 Megabytes per second or 2.4 Gigabytes per minute). Now if you have a lot of large image or video files you are trying to transfer through a dial up connection to the Internet you have problems. If that is the case, you just figure you will save and send things using a smaller image size and blow up when it will be used. The problem is that when you go to a smaller image size you loose detail in the process. Then when you try to blow it up again it just gets blocky. The same thing goes for video files, the smaller the file size the less detail and nuances are in the file. This really shows up when you take a small image and then try to project it using a good LCD projector. So if you want to project it, show it on a large monitor, or print it out large you need to keep the image size up. This is one reason there is so much hype on the amount of megapixels a digital camera has.

So how then do we get the small file size of images we do. We use compression algorithms, also known as codecs (compressor/ decompressor). There are lossless and lossy compression algorithms. But how can there be lossless compression? It is because nature is filled with patterns and uniform things, which is what we take images of. So if we record info about the pattern instead of each pixel of it a lot of file space is saved. An example would be if a person in your image is wearing a

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blue sweater. Instead of recording every pixel individually you record this area of the image, where the sweater is, in blue. The Tiff image format (.tif) uses only lossless compression techniques, so it is a good format for achieving purposes or something you may wish to edit later. But then there is lossy compression. You lose some of your detail, but a lot less than if you just shrank the image. One of the regularly used lossy compression techniques is color palette reduction. With 24 bit color you have 16 million colors available. However, there are far less that many colors in an image. It takes less space to analyze which colors are in an image, and create a custom color table that will represent all the color in the image in less than 24 bits, write the color representation of the pixels with the custom table code, and then include a copy of the table in the file. This can be used as a lossless technique, but usually this is taken one step farther. In the analysis of the image it is detected how often each color is used and ranked. As the compression rate increases then thenumber of colors that are less used are converted to colors that are close to it but are widely used in the image. This compresses the size of the color table, which decreases the bits per pixel representation of a color used and the blending to nearby colors increases the space that areas of the image that can be described as having one color (this is a situation of compression techniques complementing each other). Some formats start out using only lossless compression techniques but as the level of compression increases they start to use lossy compression. Some common formats that use a combination of lossless and lossy compression are GIF (.gif) and JPEG (.jpg). Remember once you lose image data using a lossy technique you will not have it anymore unless you still have the original or a lossless copy. The compression methods discussed so far are referred to as spatial compression because they reduce the file size by compacting the description of the visual area (space) of an image.

Video is made up of sequential images played over time. This means we can not only use spatial compression; but also use temporal compression, which compresses the file using analysis of the difference and similarities of the frames in an image. This usually exhibits itself by the first frame in a video sequence being compressed just like a still image using spatial compression, but in the following frames only the changes from the previous frame is recorded. Periodically or when there are major changes between frames, a new initial frame, also called a keyframe, is produced followed by more just recording of differences between frames. These temporal compressions can be lossy or lossless. As with still images you should achieve them using only lossless compression. However, using only lossless compression may be impractical because of the limitation of your computers or

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hard drives' speed or hard drive space, but keep lossy compression at a minimum.

If you are creating a video DVD for achieving that uses the MPEG-2 format that uses both lossy and lossless compression techniques, it is better to achieve the file using the DV codec it was originally imported in from your video camera and writing that file to a data DVD or CD. Be aware that some compression techniques and settings are better for some types of video than others. If you just have a talking head in your video with a static background you can compresses it greatly without degrading the image much, But if there is a lot of fast action or panning of the camera, the amount of compression you can successfully have you have to be more picky on what codec you should use.

File size matters because it limits what you can use the file for. If you just want a small file you can send to a friend's dial up connection or have friends using a dial up connection view via a website a small file is good. However in printing large photos, showing on a large computer display or having it projected on a screen small files are not good. Use only lossless compression techniques on things you want to achieve or edit later because it keeps your options open. Keep your archival file large and make smaller copies of it for other purposes.

It is fortunate that hard drive and DVD and CD blank prices have come down a lot so doing this does not cost a fortune, but not planning ahead on image size and which compression techniques can cost you not being able to fully use your precious digital photos and videos.

Timothy Everingham is Vice Chair of the Los Angeles Chapter of ACM SIGGRAPH, the largest chapter of the Association for Computing Machinery's (ACM) Special Interest Group on Computer Graphics and Interactive Techniques and one of Southern California's significant professional organizations within the entertainment and media industries. He is also part-time press in the areas of high technology, computers, video, audio, and entertainment/media and has had articles published throughout the United States and Canada plus Australia, England, & Japan. Further information can be found at http://home.earthlink.net/~teveringham

Computer Viruses and Spam Ruled in 2003 – Be Prepared! By Ira Wilsker

The final statistics on spam emails and viruses have been released by several organizations and companies, and it was not a good year for computer users who had to deal with them. Through awareness of what happened last year, we may be better prepared to deal with what we may encounter in 2004.

Even though President Bush signed the "Can Spam" act, and it recently went into effect, the spam tracking companies have found no decrease in the amount of spam emails being sent, and in fact there are indications that it is still increasing at a rapid rate. According to the e-mail filtering service Brightmail (www.brightmail.com), the percentage of all emails in December, 2003, that were spam was 58%, compared to the January 2003 rate of 42%, a substantial increase. Of the spam filtered in December, Brightmail determined that 21% was for products advertising general goods and services, 18% was financially oriented, 18% was adult oriented, 9% was for outright scams, 6% each for health, leisure, or internet related, 3% was spiritual or religiously oriented, and 3% were for clear frauds.

The marketing research and information company Synovate (www.synovate.com) found that the average American received an average of 155 spam emails per week, for each email account used. One out of five Americans received over 200 spams per week, in each account. Statistically, men receive more spam than women each week, 164 compared to 147, and there is no major difference in the rate of spam based on age ranges. Geographically, people living in the northeast received the fewest spam emails at 131 per week, while those of us living in the south received the most at 163. While many computer security experts have stated that the best way to fight spam is to simply delete it, 11% acknowledged having a transaction initiated by a spam mail.

The commercial spam filtering company Commtouch (www.commtouch.com) reported that the single most common subject used by spammers was "Viagra", or a substitute for Viagra. In order to attempt to slip by the spam filters commonly used, the spammers uses over 50 variations of the spelling of Viagra, according to Commtouch. They also reported that 28% of all spam contained some form of trickery in the subject line in order to penetrate the spam filters, and be delivered

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to the recipient.

Far more destructive than spam mail was the proliferation of computer viruses, worms, Trojans, and spyware. According to the antivirus software company Panda (www.pandasoftware.com), over 3700 new viruses and worms, including variants, appeared in 2003, which was about a third more than appeared in 2002. Documented and projected damage from these digital vandals was enormous. The British security company "mi2g" (www.mi2g.com) calculated that the most damaging viruses and their variants of 2003, in terms of dollars of damage around the world, were Sobig ($36.7 billion), Klez ($19.4 billion), Yaha ($11.3 billion), Mimail ($10.5 billion – and still very active in 2004), and Swen ($10 billion).

Mi2g also saw, "a meteoric rise in electronic crime: business interruption, financial fraud, "phishing" scams, extortion demands post distributed denial of service attacks, espionage and mass spam campaigns." They attribute much of this increase to global criminal syndicates, and extremist group activities, the 2003 rate being several times more than in 2002. According to "mi2g", the most frequent victims were home users, and small to medium businesses. Users of broadband internet access were more frequent targets than dialup users. There also was a dramatic increase in "pfishing" and other elaborate scams to ensnare victims into disclosing sensitive personal and financial information through fraudulent email and websites appearing to be authentic banking, retail, or other commercial websites. Many customers of major banks, retailers, credit card companies, and online services were duped into providing their information to thieves who used that information to conduct financial transactions, steal their identities, hijack their internet access for nefarious purposes, or commit other criminal activities.

Mi2g also predicts that 2004 will see a worsening of cyber problems, with the rate of spam increasing to 66% of all email (despite recent US and European laws designed to restrict the practice), spam costing the world economy $60 billion in lost productivity and other costs. Mi2g also predict that there will be a greater merging of spam, viruses, worms, and Trojans in 2004, where personal computers hijacked by viruses and worms will be used to generate spam at far higher numbers than in 2003, or attack other computers. Where virus writers used to be vandals seeking notoriety, 2004 will see a dramatic increase of viruses and worms created for financial gain, identity theft, or infrastructure attack, with some of the most dangerous being politically motivated. It is predicted that while much of the politically motivated "hactivism" will originate in Moslem countries, with unofficial re-

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prisals from American, British, Indian, and Israeli hackers. "Pfishing", the attempt to steal sensitive personal information by tricking the victim into thinking that he is responding to a legitimate request from his credit card company, bank, or retailer with which he has a relationship, is expected to continue to increase, resulting in a continued loss of confidence in our established institutions.

Our personal risks can be reduced by using common sense, deleting all spam and other questionable emails without opening them, using updated antivirus, firewall, and anti-spyware software, and never disclosing personal information without verifying the necessity and destination of that information.

As the gruff sergeant on the "Hill Street Blues" said at the end of every roll call, "Be careful out there!"

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What Is Your Resolution

By Geroge McGinnis

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This story is not about your New Year's Resolutions. Instead it is about the resolution of your monitor. The resolution of a monitor is important because it determines how correctly the monitor will portray the textual and graphical material that is sent to it by the graphics board in your computer.

The following information relates to cathode ray tube monitors and it is not intended to apply to the so-called "flat" Liquid Crystal Display "LCD" monitors.

Your monitor is based on a 4 x 3 aspect ratio. This means that it is four elements wide by three elements high. If you measure the screen of your monitor, taking into account the portion of the screen that is obscured by the plastic frame, you will find this to be true. Historically, these numbers relate to the aspect ratio generally used by the TV industry and in a loose way are also related to the aspect ratio of the movies as invented by Thomas Edison almost 100 years ago. Computer resolution refers to the number of pixels on the face of the monitor. For example, a resolution of 800 x 600 (note the 4 x 3 ratio) means that there are 800 pixels wide on the monitor face and 600 pixels high. The width is always expressed before the height. In this example, if you multiply 800 x 600 you will get the number 480,000 and this represents the total number of pixels on the face of the monitor. The general rule that applies is that the greater the number of pixels the better the quality of the reproduced image. This same reasoning applies to both graphical and textual material. Of the two, graphical material is of course more difficult to reproduce and the number of pixels is of greater importance.

Whom, or what, determines the resolution? You do. You set the resolution when you set up the computer when you take it out of the box. Each Windows version has a slightly different way of setting the resolution however they are all similar. For Windows XP go to Control Panel, Display, Setting and move the screen resolution slider to the desired resolution position. At the same time you can select the color quality from the pull down menu. The highest setting is (Highest 32 bit). By going to Advanced, you can set the monitor refresh rate and change the size of the text.

Now, you are probably wondering what your setting(s) should be. Here are most of the standard resolutions that are ordinarily available for your monitor, however they may vary slightly depending on the size and model of your monitor:

640 x 480
800 x 600
1024 x 768
1280 x 1024
1600 x 1200

However, each size monitor has a recommended resolution number. Here are the recommended numbers:

17" 1024 x 768
19" 1280 x 1024

The capability of your computer to obtain the desired resolution depends on several things. For example, the graphics board that is in your computer and the quality of the monitor are predominant. A high quality graphics board will probably permit you to go to the highest setting your monitor will permit. You will have to look at the manual you received with your monitor to find the settings that are recommended and to determine other parameters of the monitor's capabilities. For some monitors, you must not go above a certain resolution or refresh rate for fear of harming the monitor. Another factor to consider is the Screen Refresh Rate. This represents the number of times per second the monitor screen is refreshed. If your monitor will permit a refresh rate of as high as 85 Hz, at the recommended monitor resolution, then choose that number. However, a refresh rate of 75 Hz is more likely the maximum number your monitor will permit unless you have a high quality monitor. The higher the refresh rate, the finer detail the picture and the better the quality of reproduction. Very low refresh rates such as 65 Hz are likely to produce annoying flicker and possibly jumpy text. This is very hard on your eyes and is to be avoided. To repeat, look in your monitor manual and determine the maximum refresh rate it will permit and try for that number at the recommended resolution of your monitor.

I took a poll of 50 computer users to determine the monitor resolution they used. I was surprised to learn that, regardless of monitor size, the predominant resolution was 800 x 600. I also learned that most of the individuals were not aware that a higher resolution produced higher quality graphics representation on the monitor. Several individuals indicated that

the higher resolution produced very small text and small icons on the desktop and therefore they had difficulty reading the text. All this is true; however these problems can easily be remedied. With Windows XP, go to Control Panel, Display, Appearances, font size and choose the larger font. Then go to Advanced, desktop, icons, to increase the size of the icons; then to icon spacing to adjust the horizontal and vertical spacing of the desktop icons. All these adjustments are important and will overcome the objection to smaller icons and smaller text and at the same time give you better quality graphics and text.

In case you are interested, I have a 19" monitor. It is set for 1280 x 1024 pixels, 32 bit color quality and 90 Hz screen refresh rate. As you would expect at these numbers, it produces outstanding textual and graphics reproduction.

ACPCUG Club News

Contrary to earlier expectations you may have heard, we WILL BE Meeting at Taylor Memorial Library on Monday, February 2nd!

Thanks to Rick Lubinski's tireless efforts, we will be having broad-band Internet connection made available to us at Taylor Library!

Upcoming Computer Shows:

Peter Trapp at Tadmor Temple, Sunday, February 15, 2004
3000 Krebs Drive, Akron, OH.
Exit 120 off I-77 (Arlington Rd.)
Right on Jarvis. Right on Krebs to top of hill. 10am-3pm

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