



MUG Monitor

Macon Users Group—Serving Southwestern North Carolina and Northeastern Georgia

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October 2008

Next Meeting:

Digital TV Conversion

by Frank Davis,
Engineering Supervisor
with UNC-TV

Macon Community
Facilities Building
October 14th, 7 PM

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Tech Talk

by Lizz Russell

Viruses and spyware are being created at an absolutely alarming rate. According to Sophos, which is one of the companies fighting viruses and spyware, they are receiving around 20,000 new malware and virus files each and every day. There are now over 11 million known threats. We owe this dramatic increase to the use of programs to write virus and malware programs. It's automation that I hate to see, and the methods of delivery are cunning and brilliant.

The virus files themselves are often different on each machine, even though the virus itself looks exactly the same. There is one particularly disgusting virus that I've seen on around 20 computers in two weeks. It calls itself Windows Antivirus, it was installed differently on each computer, and it was a rootkit, which is very difficult to remove.

Today, websites and peer-to-peer music download sites (like LimeWire, Kazaa, Bear Share, and many others) and social networking sites (like MySpace and Facebook) are the primary targets. For websites, chances are a minimum of 1 in 1000 that you'll be hit. There's an even better chance, and in some cases almost a guarantee, that you'll get a drive-by virus download if you're downloading copyrighted music without paying for it, or if you're clicking around on a social networking site.

If you want to download music, the legal music download sites are much, much safer. For example, there's itunes.com, bestbuy.com, walmart.com, and many others.

The primary goals of viruses and malware originating from websites and social networking sites are to get your

money and to get your identity to get more money. The primary goal of the peer-to-peer music downloading sites is to punish you for illegal downloads, plus in downloading copyrighted material, you open yourself up to being sued for copyright infringement (it's big bucks and possible jail time if you get caught).

There are actually some malware protection programs out there that are now updating every 5 minutes, and still....

No website that I know of can be guaranteed to be 100% safe.

If you bank online, you might want to order and read *Zero Day Threat—The Shocking Truth of How Banks and Credit Bureaus Help Cyber Crooks Steal Your Money and Identity*. It's by Byron Acohido and Jon Swartz. (A Zero Day Threat is a hazard so new that no viable protection against it yet exists.)

There is also a new line of viruses and spyware emerging. These viruses and spyware specifically target VoIP (Voice over Internet Protocol), which is phone calls over the internet services such as Skype, Vonage, Microsoft, and a multitude of others. Yep, now they'll be into your phone calls, too, if you're using VoIP.

If you want to know what you can do to protect yourself, please refer to my "Seven Steps for Safer Surfing," especially the step for setting up a limited account, which is available on the MUG website.

Digital TV

7 PM, October 14th

Macon Users Group Franklin, NC

Please see the printed edition
for contact information

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Monthly Meetings

MUG meets the second Tuesday of every month at 7 P.M. in the Macon County Community Facilities Building on Georgia Road (US 441 South).

MUG Monitor Staff

Rhonda Tomlinson, editor

Website

www.maconusersgroup.org

Volunteers Available

The following club members have thoughtfully volunteered to be on call for other members having problems or needing a little extra help. If you would like to add your services, please email the newsletter editor.

Lee Alexander
Jerry Ray
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Going Green

by Jerry Grommes, Past President,
Sandwich Computer Users Group, IL,
www.scug.org

Obtained from APCUG with the author's permission for publication by APCUG member groups.

During our June program, there was quite a discussion about whether to leave your computer on versus shutting it off when not in use.

I, personally, like to leave my computers run so they are kept up-to-date with auto updates and backed up with scheduled backups. These tasks are done in the early morning so my computers are fully functional when I sit down to use them.

However, others asked why not just leave them on the nights that the backup runs instead of 24/7. I didn't think it was using much energy by running 24/7, but decided to check it out and run some tests using my "Kill-AWatt" meter (measures watts, amps, hours, kilowatt hours, etc.)

(see Green on page 11)

Linux SIG

with Jim Swanson, Mentor

The next Linux SIG meeting is Tuesday, October 28th at 7:00 PM in the large meeting room at the Macon County Public Library.

At the last Linux SIG meeting, there was a presentation on the Linux Command Line entitled "What is the Command Line and Why Should I Care?" This presentation, in both PowerPoint and OpenOffice formats, is available on the MUG website. Scroll to the bottom of the home page and click on the link offered there. (The OpenOffice version looks better!)

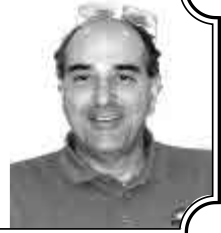
Treasurer's Report

Phyllis Minnich

Balance forward.....	748.71
Income: interest, dues, 5□0/50.....	72.00
Expense.....	(79.00)
Balance*	
(including equipment fund).....	\$741.71
*Equipment Fund (50/50, auction).....	16.00
Investment Fund.....	1572.27

Lou's Views!

Googolplex?

by Louis Vitale (aka 44RAILGUY)

Is Googolplex the current number of Google applications, or the possible number ways we will use Google in the future? I don't know, but either way it boggles the mind. Just for fun, I looked under the hood of Google to see what was new. That is when I ran out of numbers.

Go to the famous white page and navigate to the "More" drop-down menu, and then go to the "even more" link. I counted 45 links. Each link either goes to a search application, a web-based application, or a downloadable application. Listed there is the new web browser Chrome, along with other new applications.

Chrome has attracted many fans in the short time it has been available. It has a number of features that are very attractive. This is what PC World has to say about it: "Google takes aim squarely at Microsoft with the release of its new Web browser, Chrome. And Microsoft should be very afraid: Chrome lives up to its hype by rethinking the Web browser in clever and convenient ways that make using the Web a more organic experience than you'd get with either Microsoft's Internet Explorer 8 or Mozilla's Firefox 3."

The article goes on to say, "It automatically detects the Web browser you're using and prompts you through the process of installation. Chrome has a remarkably minimalist interface. You'll see a row of tabs running

along the top, a Web address bar, and a bookmarks bar that runs beneath the address bar. A separate recent bookmarks box appears at the right of the screen, as does a history search field." It will be interesting to see how many of you try out this new browser. I for one will, as I slowly try to migrate to anything but Vista.

Speaking of operating systems, there is a "new" one out there and it is called gOS 3 Gadgets, and of course it is from Google. This is version 3 of the Google-sponsored operation system. It first appeared in Wal-Mart on Everex PCs as a less expensive alternative to Windows. It enjoyed some success and critical acclaim. It is actually a version of Ubuntu (Linux).

gOS has one simple goal: make a lightweight, web-heavy operating system that anyone can use. gOS isn't aimed at hard-core Linux users. It's aimed at otherwise computer illiterate users who simply want an easy way to check email, browse the web and share some photos online. The emphasis in gOS is on web

apps and everyday tasks like browsing the web and checking email. The original release shipped with Wine pre-installed and used Picasa instead of the traditional Gnome photo manager FSpot. The latest release continues that trend, shipping with Wine 1.0 to make installing Windows apps easier, and Google Gadgets for Linux are also pre-installed. See www.theregister.co.uk.

So what are Google Gadgets? They are mini applications that can be added to your web page, blog, or your desktop. There are 7 main categories, and hundreds of them. Each one is powered by Google and updated constantly. Go to desktop.google.com/plugins/?hl=en for the current list. They are developed by individuals and companies and new ones appear constantly.

Here are two "News" examples: NPR Public Radio, or Ticker for Trekkers, which Shows the Star Date on your desktop and keeps you up to date with news for Trek fans. Two examples of "Tools": a Performance Meter, which measures CPU usage and RAM usage, and "Wireless Signal Meter" which lets you see local wireless signal strength. All these Gadgets require installation of a current Google Tool Bar. These mini apps are ideal for portable devices, such as a Blackberry, but they work great on your desktop.

Google is changing the computing experience: a new browser, a serious Linux operating system, and mini apps that finally do those things a computer should do. I think Bill got out just in time.



Rootkits—A Continuing Security Problem

by **Brian K. Lewis, Ph.D., Member of the Sarasota Personal Computer Users Group, Inc., Florida, www.spcug.org**

Obtained from APCUG with the author's permission for publication by APCUG member groups

By now, I suspect everyone reading this article is familiar with most malware: viruses, botnets, Trojans, etc. These are becoming less of a problem because of the efforts of the security companies to provide software solutions. More and more users are also becoming aware of the need to have some means of protecting their computer. As a result, hackers are turning to a more effective method of controlling your computer—rootkits. Although these have been around more than ten years, like other malware, their numbers seem to be increasing.

Probably the most dangerous form of the rootkit is the “kernel mode Trojan.” This is a program that inserts itself into the “kernel” of the operating system. The kernel is the central component of the operating system—its heart or brain, to put it in more common terms. It manages the communication between the operating system, the hardware and the software applications.

Most viruses operate as applications, and can be readily found in memory or in the file system. Rootkits, however, can hide themselves in such a way that it is very difficult to find them. In order for a rootkit to alter the normal execution path of the operating system, one of the techniques it may employ is “hooking.” In modern operating systems, there are many places to hook, because the system was designed to be flexible, extendable, and backward compatible. For example, a rootkit can “hook” itself into the Application Programming Interface (API), which allows it to intercept the system calls that other programs use to perform basic functions, like accessing files on the computer's hard drive. If an

application tries to list the contents of a directory containing one of the rootkit's files, the rootkit will censor its filename from the list. It'll do the same thing with the system registry and the list of running processes.

A rootkit is a collection of tools an intruder brings along to a victim computer after gaining initial access. A rootkit may contain network sniffers, log-cleaning scripts, key-loggers and trojaned replacements of core system utilities. Although the intruders still need to break into a victim system before they can install their rootkits, the ease-of-use and the amount of destruction they cause make rootkits a considerable threat. One main purpose of a rootkit is to allow the intruder to come back to the compromised system later and access it without being detected. A rootkit makes this very easy by installing a remote-access backdoor. A rootkit can also allow the intruder to use the compromised computer as part of a botnet (see Botnets, SPCUG Monitor, January, 2008).

Another mechanism for hiding a rootkit is to add it to a system driver file. Windows XP and Vista store driver files in the System32/drivers folder. Many of these system files load early in the boot process. These files have boot or system flags in the registry and load before any of the malware-prevention software. That means they are very difficult to find. Although the file size for the driver will be increased, the rootkit may report the original file size to any query, not the infected file size. All of this means that once a rootkit has been installed and activated on your computer, it is difficult to find by any of the usual malware prevention software.

Rootkits do not require large software applications to carry out their function. We are accustomed to commercial applications that are many megabytes in size. Even the anti-virus software may be 40–50 megabytes in size. In 2003, a rootkit was identified that required only 7 kilobytes for its cloaking routine and 27 kilobytes for maintaining the open backdoor.

Anti-malware programs depend on two main means of identifying malware. One is the signature method and the other is heuristics. The signature method requires that the malware be identified and reverse engineered to determine a code sequence that can be used to identify the application in the wild. This code sequence is referred to as the signature and is used by the anti-virus database. This signature is then compared to code sequences in applications to determine if they are malware. This method is of no value when dealing with new or unreported malware.

So the next option is heuristic signatures. Their primary advantage lies in their ability to identify new, previously unidentified malware. The heuristics technique assumes that malware will display certain characteristics or attributes. They also attempt to recognize deviations in “normal” system patterns or behaviors. Using these predicted patterns, the anti-malware application will attempt to determine if the target application is malware. This has been a successful approach for identifying viruses, but it is less successful for active rootkits.

The April 2008 Virus Bulletin (www.virusbtn.com) reported the re-

(see *Rootkits* on page 5)

(Rootkits—continued from page 4)

sults of testing a number of popular commercial A-V programs, Internet security suites, web-based scanners and specialized anti-rootkit tools. The testing involved 30 known rootkits. The testing categories were detection of: (1) inactive rootkits; (2) active rootkits; and (3) malware hidden by rootkits. Then they tested removal of (1) inactive rootkits; (2) malware hidden by rootkits; and (3) active rootkits. The results were not encouraging.

The seven Internet Security Suites used in the test were able to detect 95% of the inactive rootkits. (Remember, these were known samples that had already been identified and their signatures incorporated into the anti-malware applications.) These suites were also able to remove 95% of the inactive rootkits. However, when it came to active rootkits the story was very different. The Internet security suites detected only 65% of the active rootkits and were able to remove only 48%. They also were able to remove only 48% of the hidden malware. All of the versions of the Internet security suites were the latest available at the time of the test.

There were 14 specialized anti-rootkit tools tested using the same 30 rootkits. They were not tested against the inactive rootkits, only the active rootkits and the hidden malware. Again, the results were anything but satisfying. These tools detected 83% of the active rootkits and 80% of the hidden malware. The anti-rootkit tools removed only 60% of the active rootkits and 67% of the hidden malware.

The web-based scanners did a far poorer job of identification of the rootkits. They also were uniformly unsuccessful in removing rootkits. The detection rate was 53% and the removal was around 32%.

In reviewing these tests, it is obvious that successful detection and removal

of rootkits depends on their being inactivated. This can be done by running the computer in “safe” mode, which does not allow the rootkit to load from the hard drive. However, it would be expected that if detection/removal tools were developed for this specific purpose, then rootkits would appear that would load in “safe” mode. Another alternative would be to develop rootkit scanning software that would run from a CD. The computer would boot from the CD and the operating system for the scan would load from the CD. This should improve the detection and removal rates considerably. However, it then depends on the user running the CD application periodically to scan the entire computer. Considering how few users back up their hard drives on a regular basis, this CD system might be less than universally successful.

Given the current difficulty of detecting and removing rootkits from your computer, what is a user to do for protection? The only answer to this is to prevent the rootkit from getting access to your computer. That means using every tool you have available to prevent the malware from gaining access to your system. Your firewall

is the first line of defense, followed by your anti-virus, then your anti-spyware. Also, when you are surfing the web, make sure you aren't your own worst enemy. Be careful and check out links before you click on them. It's just like getting spam in your email. Check where the link will take you before you click on it. Social engineering techniques are also used to propagate everything from viruses to rootkits. These are techniques that encourage the user to take some action which allows the malware to be downloaded and installed on the user's computer. A very interesting analysis on these techniques is contained in this article from the University of Cambridge (U.K.): tinyurl.com/53wfyf. Although this is written specifically about virus propagation, similar techniques are used to gain entry for rootkits. This paper illustrates many of the “carrot & stick” methods used by malware to gain access to computer systems. Microsoft has also published a paper detailing many of the common methods used to trick users into installing malware. These can be found in the paper “Behavioral Modeling of Social En-

(see Rootkits on page 10)



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The Deals Guy

by Bob Click, Greater Orlando Computer Users Group



This Will Be Easy, I Thought!

About three months ago, I bought a basic new Toshiba Satellite A-205 laptop with a Celeron processor, one gig of RAM and Vista Home Basic. It was also Wi-Fi ready. I thought I would probably only use it when I go out of town, mostly for email and MS Office 2003. I booted it up to look at Vista and decided to register it with Toshiba, but before I finished the registration, a message told me McAfee had finished installing, which frustrated me since it had not asked my permission. After taking a quick look at Vista, and being hounded by more advertising, I set it in the closet until I had more time to work with it.

About three months later, it was time to finish preparing it for a trip out of town, so I started by downloading the free PC Decrapifier (www.PCdecrapifier.com) to remove the trial products on the laptop. There were five columns of icons for all kinds of stuff that I would mostly not want. Decrapifier puts itself into a temporary folder and then searches your machine for all the items it has on it. I selected everything I wanted taken off and it proceeded to remove all except the MS Office trial; and when it finished, only two columns of icons remained. I found a bargain to add more memory, giving me noticeably better speed loading, and later upgraded to Vista Home Premium since I was repeatedly told that Vista Home Basic doesn't offer much.

On my trip north, I visited my friend Bob Clyne, who I had previously spoken with on the phone and mentioned upgrading the laptop. I had not upgraded Vista yet when I got there and asked him to help install

the Vista Home Premium upgrade. What followed sure didn't seem like routine for such an install. On the package, it stated that the upgrade included SP1 for Vista. After starting the upgrade installation, it suddenly stopped with a message stating that before the package could be installed over Vista Home Basic, we would have to install Vista SP1. I finally left the machine with him to finish the job and he said it took several hours to get it done.

He said that even after installing all the updates from Microsoft Update and several updates from the Toshiba site, Microsoft Update would not make Vista SP1 available as an update. He finally called Toshiba who told him he should download the entire Service Pack from Microsoft and install it manually. After installing SP1 and the Vista Home Premium upgrade, there were about 18 additional updates showing in Microsoft Update. After installing them as a batch, the machine would not reboot. He repaired that using the Repair option from the Vista Home Premium Update disc. He then installed the updates one at a time, which took ages because several of the updates required a reboot after installation, but that did work better. We have no idea why Microsoft Update would not offer Vista SP1 and the Toshiba tech support person would not address the problem other than to refer us to Microsoft.

Originally, I wanted to reformat the HD and install XP Professional, but was warned that might be a major problem because the XP drivers might not be available for the new machine. I was told to check for and

download the XP drivers before attempting to install Windows XP.

I had already installed AOL (my backup ISP) software, some of which Bob felt was rather obtrusive, but had rejected installing their free antivirus and antispyware software. Bob suspects that the AOL software might have been part of the problem with the updates after the Vista Home Premium upgrade, but that was merely conjecture. Maybe I should have let him remove the AOL software to find out, but I didn't know the correct settings to use for AOL without using all their software.

Help For People

Who Can't Attend Meetings

I've previously mentioned Hewie Poplock and Mike Ungerman at Central Florida Computer Society trying different online meeting software to help members attend meetings, even when a member can't do it physically. At the Tech SIG this week, Hewie used www.Ustream.tv to capture the video and sound during the meeting and put it in a file to post on the Internet. Attendees can also join the meeting from home and watch the proceedings, even typing in a question for the moderator to bring up at the meeting. This experiment still needs refinement, such as a dedicated camera operator and more microphones, but see it for yourself at: (Part 1) www.ustream.tv/recorded/664934 and (Part 2) www.ustream.tv/recorded/665065.

The reason for two parts is that Denny's Wi-Fi connection dropped us in the middle of the meeting. Hopefully everyone that speaks will be includ-

(see *Deals Guy* on page 10)

Using CrossLoop to Troubleshoot and Control Remote Machines

by Vinny LaBash, Member & Contributing Columnist, Sarasota PCUG, FL, www.spcug.org

Obtained from APCUG with the author's permission for publication by APCUG member groups

Third party Windows applications are rarely examined in this column, but CrossLoop is too good a utility to ignore. Trying to walk someone through a computer problem over the telephone is often an exercise in frustration. There is no substitute for seeing what is actually on a user's screen to find out the root cause of a problem.

Vista has a built-in support tool known as Remote Desktop, but far from making the process easy, it has a tendency to confuse those with no technical background. Remote Desktop makes it rough on those who don't know how to handle the added complications of firewalls and routers. CrossLoop, which is a free remote support utility, could be an excellent solution.

CrossLoop shields users from tricky situations involving communicating through routers, firewalls, and other potential obstacles. Setting up a communications session between two computers physically separated, but connected through the internet, is reduced to a process hardly more complex than turning on your TV. Those concerned about security can relax. CrossLoop uses something called TightVNC which safeguards data with 128 bit encryption.

Crossloop is useful for people who want to train or support others remotely. If you're an experienced web surfer, for example, and need to show someone how to access a disk drive or retrieve a lost document, CrossLoop allows you to take control of their computer screen, and show them exactly how to do it.

Hard core geeks may not be satisfied with CrossLoop. It's not complicated enough. It works better than most

similar commercial utilities, and your technically challenged friends and relatives will find it aggravation free.

You can download the program without charge from www.crossloop.com. The site has a video that demonstrates how to install and use the program which is very helpful for technophobes.

Once you're up and running, the interface presenting itself is a model of simplicity which effectively masks the complexity behind the scenes. As mentioned earlier, security and remote control is handled by TightVNC. VNC stands for Virtual Network Computing, and is a very well designed soft-



ware tool that easily allows remote access to Operating Systems with a graphical interface. The technical specifications say you need Windows 98 or higher. A broadband internet connection is also a requirement. Dialup connections won't work. Drive

space, processor speed, and memory requirements are negligible given the general power of today's computers.

Another benefit of TightVNC is the built-in 128-bit encrypted security. When you begin a communications session, the program generates a new 12-digit access code. The access code then generates the encryption

(see *CrossLoop* on page 11)

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System Mechanic 8—A PC “Swiss Army Knife”

by Ira Wilsker; APCUG Director, Columnist, The Examiner, Beaumont, TX,
Radio and TV Show Host

Obtained from APCUG with the author's permission for publication by APCUG member groups

Frequent readers of this column will be well aware that there are many computer utilities in cyberspace that can improve the performance of our PCs. As we use our computers, the registry becomes cluttered and inefficient; useless files consume valuable real estate on our hard drives; and other maladies caused by the software on our computers deprive us of the performance we paid for and deserve. While I admittedly use several different utilities to maintain peak operating efficiency of my computers, if I had to choose only a single utility for computer maintenance, it would be Iolo's System Mechanic (www.iolo.com). I have used System Mechanic for many years in its earlier versions, but now Iolo has released the latest iteration, System Mechanic version 8.

Simply, System Mechanic 8 is arguably the most comprehensive PC maintenance utility available, with over 40 distinct performance and security tools included, giving it “Swiss Army Knife” features. According to published sales figures, System Mechanic is the #1 best selling PC tune-up software on the market, and has won awards for excellence from dozens of computer publications, including Cnet's Editors' Choice, Windows Magazine, PC Computing, ZDNet Editors' Pick, Computer Shopper's Top 100, Computerworld, and many others.

Rhetorically, why would I choose System Mechanic 8 over all of its competitors? Because of what it does, its power, versatility, and features; that is why. Compared to its major competitors, none of them offer the feature-rich set of func-

tions that System Mechanic offers. According to Iolo, “Over 98% of PC problems are caused by clutter and faulty settings that are the result of everyday PC use.” System Mechanic 8 can repair or otherwise remedy virtually all of these problems. Many of a PC's problems can be traced to problems and errors in the registry, a large data file that contains information on the hardware and software installed on the computer. The registry is almost constantly written to, and read, often leaving obsolete data in the registry. This obsolete, and eventually erroneous data left in the registry consumes some system resources, and can promote errors and other problems as faulty data is read and processed. The registry must be periodically purged of useless data, defragmented and compacted in order to contribute to better PC performance, a function that System Mechanic 8 excels at.

Our computers are constantly reading from and writing to the hard drive, and that drive often becomes cluttered, fragmented, and may also have some errors in the data stored on it. While almost all flavors of Windows have some type of “defrag” and “chkdsk” software to defragment the hard drive and check it for errors, the Windows integral versions of those utilities are very basic and lack the power to do a truly thorough job, as System Mechanic will do. Clutter and useless files consume a lot of the storage space on our hard drives; System Mechanic 8 can identify and remove that clutter, freeing up that hard drive space, making for a more efficient hard drive.

Sometimes, and it will likely happen eventually to each PC user, the computer will not properly boot. For that particular eventuality, System Mechanic 8 will allow the user to create a bootable emergency CD that may be able to revive “crashed” systems. Another irritant that many of us suffer through on a regular basis is the boringly slow boot process itself, where we wait and wait for our computer to become usable. System Mechanic 8 claims to have 19 different ways that it can speed the boot process by making it more logical and efficient. Another way that we are losing performance that we are paying for is by having improper internet settings. Many of these settings are mundane and not readily accessible to the typical user. By modifying these settings to their ideal point, internet throughput can be improved, in some cases tripled. System Mechanic 8 will analyze our internet connection, and make any changes necessary to maximize performance.

PC security is a major issue that all of us must deal with on a constant basis. System Mechanic 8 contributes to system security by fixing settings that would otherwise allow an intruder to access the computer, making cyber attacks that more difficult. Sometimes we have files that we want to securely delete, being well aware that normally deleted files are easy to recover, which may create another security problem. This utility offers the user a military-grade wiping function that can securely delete unwanted data.

System Mechanic 8 retails for \$49.95 for a one-year license, and can be used on up to three comput-

(see *Knife* on page 11)

The New, The Best, and The Worst

Collected by Pim Borman, Webmaster, SW Indiana PC Users Group, swipcug.apcug.org

Obtained from APCUG with the author's permission for publication by APCUG member groups.

Picasa web album

In June I took a brief vacation with son Mike and cocker spaniel Bonnie, touring scenic central West Virginia. We visited the stark rock outcropping known as Seneca rocks, admired the amazing 110-meter steerable radio telescope at the Green Bank National Radio Astronomy Observatory, and found carnivorous plants in their natural habitat in the Cranberry Glades Botanic Area. Together we took over 400 pictures along the way that we culled down to 60-some upon our return. It is often said that the secret of great photographers is that they take hundreds of pictures but save only the one or two best ones. Nobody ever mentions how hard it is to pick out those few winners!

I decided to try and upload the best pictures to one of the online free photo albums. I was already somewhat familiar with Flickr, but I decided to try the Google Picasa web album instead. Picasa is an excellent simple photo editor and it gives direct access to the online web album. The album allows 1GB of storage, enough for some 4,000 pictures, and you can get even more than that for a small fee.

Since I already had a Google email account, setting up the web album was easy, using the same user name and password. On the website you can set up separate albums (folders, really) to store pictures in separate categories. I created a new album for my vacation pictures and prepared to upload them. After some trial and error, I found it easiest to first assemble the captioned pictures in a Picasa album on my PC and then to upload them all at once to the web album. Once the pictures are uploaded, you can add more or delete

mistakes, move them around into the desired order, and add or change captions. By default, the photos are automatically converted to the optimum size for display on a computer screen, but there are options for larger (up to 20mb) or smaller file sizes.

Once the album has been installed, it is ready to be shared with the rest of the world. You may choose to make your photos public, available to anyone, or keep them private, only accessible to those you share the URL with. The *View Album* page shows large thumbnails of the photos. They can be viewed individually or as a slide show. The *View Map* button brings up Google maps, where you can indicate where you took your pictures. The *Organize* and *Edit Captions* buttons are self-explanatory. A *New Features* link at the top of the page leads to the latest features added. It is now also possible to upload videos from Picasa to your web album. That might be preferable to using YouTube, unless you want the whole world to admire your movie.

The web album displays the URL of your album site either as the address itself or as a short paragraph of html code that you can insert on your website. Either way, it is best to copy and paste the information, since the URL tends to be lengthy and confusing. My vacation pictures are located at picasaweb.google.com/swipcug/westvirginiavacationjune2008?Authkey=kovcoyrboay.

To do your correspondents a favor, convert the URL with SnipURL (snipurl.com) or TinyURL (tinyurl.com) to a simpler address, such as snipurl.com/pimspix. If you have never done that before, you'll

find it easy to do. Just go to snipurl.com (or the TinyURL site) and paste the URL of your album in the box. Specify an easy-to-remember nickname (such as "pimspix," but only available in SNIPURL) and "snip it!" the shortened URL (snipurl.com/pimspix) will be shown and also copied to your clipboard, ready to be pasted in your message.

Gathering Clouds

My experience with setting up a photo album "somewhere up there" is a typical example of the current trend towards "cloud" computing. Almost since the beginning of the world wide web, we have been using online search engines that access indexed information stored "somewhere up there." many of us have changed from our PC-based email programs to online programs, such as Yahoo or Google Mail, that store our email correspondence on computers "somewhere up there." somewhere up there in the clouds, as it were.

The push is now to extend cloud computing to office suites. Instead of using expensive MS Office, we can choose to use Google docs and conduct all our administrative activities online, with the option of sharing our work with colleagues far away if necessary. Microsoft, always ready to recognize good ideas after others first thought of them, is moving versions of its Office suite online under the "live" banner. Others are jostling to join the crowd.

If this trend continues and spreads to other computer activities, our operating systems, whether Windows, Mac or Linux, will become less and less important. The functions of the operat-

(see *The New* on page 11)

(Rootkits—continued from page 5)

gineering-Based Malicious Software” on the Microsoft website.

So to all of you reading this paper, I would suggest that caution is the watchword when it comes to using your computer. I’m afraid that the situation will only get worse when it comes to new forms of malware.

Dr. Lewis is a former university and medical school professor of physiology. He has been working with personal computers for over thirty years, developing software and assembling systems. This article has been provided to APCUG by the author solely for publication by APCUG member groups. All other uses require the permission of the author at bwsail@yahoo.com.

(CrossLoop—continued from page 7)

codes, giving you an additional layer of security. Not bad for a free utility.

Running the program is so easy it’s almost boring. As you can see from the illustration, the interface is simple and straightforward. Assuming you started the session, the next step is to communicate the access code to the person you are communicating with. You can do this by email, telephone, screaming into the next room, etc.

After starting the session, your friend types the access code into the box and clicks **Connect**. When the **Connect** button is clicked on both sides, the two PCs are linked.

This method of troubleshooting a remote PC eliminates all the hassles of trying to interpret what an inexperienced user is attempting to explain. It’s difficult to imagine anything less complex than a one-button interface. With 128-bit encryption built in, it’s tough to beat.

Other applications that make such connections possible have been available for years, but nothing I’ve seen makes it as simple as CrossLoop.

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(Deals Guy—continued from page 6)

ed in the future. If you look closely, it could also be called the Pig SIG/Tech SIG since the SIG meets at a Denny’s and they enjoy food as well <G>. Hewie and Mike will be demonstrating different methods at the Florida Association of Computer Users Groups (FACUG) one-day fall conference Oct. 25, 2008 in Clearwater, FL. A couple folks had minor complaints about the recordings, but I was very impressed. Contact Hewie at hewie@hewie.net if you want more info.

iTurns, A Freebie That Could Be A Big Help

DVDneXtCOPY Inc. announces DVDneXtCOPY iTurns, a tool to make hardware linked music *free*. This brand-new one-step tool breaks no laws because it uses procedures not restricted by DRM (Digital Rights Management). DVDneXtCOPY iTurns is available in a completely free version. (DealsGuy Note: The free version has limitations compared to the Pro Version.) iTurns software is a virtual program that emulates a CD recorder in your computer system. A built-in encoder can transcode any burn job to a portable MP3 music file. Just burn your iTunes music and create a freely portable music library. iTurns will do automatic iD3 tagging on the fly, which allows information such as the title, artist, album, track number, or other information about the file to be stored in the file itself. Just create your portable library and import it to any new computer system, mobile audio device or music player.

Create your own “free library” and move it anywhere without the message “you are not allowed to play this audio file on this system.” Read more information about the new DVDneXtCOPY iTurns at www.dvdnextcopyiturns.com.

Clean Off Your Discarded Drive With Confidence

Are you replacing your old HD, but want to make sure your data is com-

pletely removed? Consider Active@ KillDisk hard drive eraser www.killdisk.com. I’ve seen this in a few UG newsletters, so it must be pretty reliable. It is powerful software that will destroy all data on your hard drives, and even your floppy drives, completely. They claim this product will make restoration of your deleted data next to impossible. It can also erase a partition, according to their website, although I didn’t use the product myself. It’s free, but there are also pay versions. In fact, the pay version actually conforms to the US Department of Defense cleaning and sanitizing standard DoD 5220.22-M. Visit their website for better information.

Excuse Me, But What Time Is It?

How good is your PC’s clock keeping time? Windows XP and Vista have a built-in code for setting your clock via the Internet, but that only happens once a week. If you have broadband Internet service, you could change the frequency that your Windows OS will update the clock. Check out www.thinkman.com/dimension4/ where you can get Dimension 4 at no cost and it will set your computer’s time from servers on the Internet. There are lots of options, including how often to update the time. Check out their website for further information on how it works and for the free download.

Another way to do this is to try installing the Internet Time Sync Utility from tinyurl.com/7ghj that will also reset the computer’s time at whatever interval you wish. Again, it is free and their website has further information and the free download.

As with the other items, I have not tried this product.

That’s it for this month. I’ll have more new product announcements on my website (most not offering a discount). www.dealsguy.com. Bob (The Cheapskate) Click, bobelick@bellsouth.net. Editor’s note: This column has been edited for space and content considerations.

(Green—continued from page 2)

I started with my newest computer (which is approximately 2 years old and probably the most efficient). This machine is running Vista and I had the Power Options set to turn off the monitor after 20 minutes and put the computer to sleep to “never.” With these settings, the computer was drawing between 110 and 140 Watts of power with a total average of 2.63 KWH (kilowatt hours) per day. Cost per day was \$.026 (\$7.87 a month) based on my most recent bill.

I then changed the Power Options to turn off the monitor after 20 minutes and put computer to sleep after 2 hours. The watts dropped from between 110 and 140 while I was using the computer to 6 while in the sleep mode, and the total average of KWH dropped to 0.65 per day. Cost is now down to 6 cents a day (\$1.94 a month).

With the current power options (turn off the monitor after 20 minutes and sleep after 2 hours), the computer will wake up and get updates as well as run the scheduled

backups. So with a simple change to a power option, I was able to reduce power consumption by approximately 76% and save \$5.93 per month without affecting my user experience.

I plan on testing my XP machine next to see what it is costing and to see if it can be reduced. Thanks go to Louise and the rest of the group for a great discussion on energy use.

To get more information and tips on energy savings, try one of Louise Dieden’s favorite links: www.energy.gov/forconsumers.htm. Louise is an SCUG Board Member at Large.

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(Knife—continued from page 8)

ers; discounts are available online (www.iolo.com) for longer licenses.

For those who want an even more feature-rich product, Iolo offers System Mechanic Professional, version 8 (\$69.95 for 3 computers). This Professional version is an integrated bundle which includes most of Iolo’s other popular products. The bundle includes Iolo’s antivirus software, renowned for its hourly updates; and its Personal Firewall to protect from intruders and malicious software. Another program included with the Professional bundle is another personal favorite of mine, Iolo’s Search and Recover. This program can recover files that were deleted, including photos, videos, documents, email, music, and other data that may have otherwise been lost. Search and Recover can undelete files from hard drives, digital cameras, memory cards, and almost all other digital media.

Professional also includes Drive-Scrubber, a utility that can securely erase data from hard drives. This is necessary when donating a computer, selling it, or recycling it. Without securely deleting our personal data, others can access it and use it for a variety of purposes, including identity theft. DriveScrubber overwrites the data using methods that meet strict government and military standards, ensuring the destruction of that data, without harm to the drive itself.

Iolo has a winner in System Mechanic 8. For those who like to try software before they purchase it, Iolo offers a free, 30-day, fully functional trial version of each of its products at www.iolo.com/downloads.aspx. If you try the software, you will probably like it as much as I do, and find it indispensable.

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(The New—continued from page 9)

ing system will be taken over by browsers. To those of us using multiple operating systems, such as Windows and Linux, we already find that it makes no difference if we use Firefox in Windows or Linux. Similarly, Picasa is Picasa and my new web album is the same no matter how i access it.

So far, that all sounds good. But gathering clouds threaten to bring rain. If everybody is going to use the Internet almost all the time, the current Internet infrastructure will not be able to keep up. There will be a need for millions of additional servers and drastically increased connection speeds.

The computer industry is aware of that. According to *The Economist* (May 24, 2008) Microsoft is building a new \$500 million data center near Chicago. It will require 3 electrical substations with a total capacity of almost 200 megawatts. Google is said to have 3 dozen data centers with an estimated million individual servers. More and more these extensive data centers are being built in out-of-the-way places near sources of low-cost power, even in Iceland with cheap geothermal power. With all this power consumption, computers are becoming a major source of global warming.

To increase transmission speeds, the industry is eyeing the airwave bands that will be freed up in February 2009 when analog TV will be phased out. There are so-called white spaces between the frequency bands assigned to TV broadcasts, and tech companies want to use those buffer zones for lightning-fast data transmissions. Initial tests show that it might wipe out nearby HDTV broadcasts, but they keep working at it. (*Scientific American*, June 2008)

The computer revolution has just begun!

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September's Door Prize Winners



Ecycle Set for Oct. 18th

Electronics recycling day is Saturday, Oct. 18th in front of Tech Place in Franklin from 10 AM until 4 PM. Old computers, monitors and entertainment electronics will be accepted. Televisions will not be accepted; take those to the landfill.



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www.maconusersgroup.org,
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as a PDF file.

For even more great computer
articles, download this month's
MUG Monitor Extra!