The Cursor

Monthly Newsletter of the
Washington Area Computer User Group

Meeting Location
Fairfax County
Government Center

apcug
Member of

Next Meeting:
October 18 2008

Presidential Bits

October 2008 Meeting

By Paul Howard

Michael Coyne, a new addition to the WAC membership fold, provided a demonstration of the XO-1, the initial roll-out of the "One Laptop Per Child" project, which seeks to get computer technology into the hands of children in less developed areas of the world. The program currently will send one of these small, innovative laptops to donors who provide the organization with the price of two systems - currently $400. Michael provided his slides from the presentation for the WAC web site. Check out the "recent meetings" page. http://www. wacug.org/recmtgs.html

Our next meeting will be held at the Fairfax County Government Center, on October 18th, in room 2/3. Geof Goodrum will demonstrate geotagging, or applying location information to digital photos. Geotagging is becoming increasingly popular, and allows posting photos online linked to services like Google Earth and Google Maps, so not only does your audience see your pictures, but better understands where they were taken and how they relate to one another during a trip.

Geof will discuss how some cameras and cell phones now support geotagging automatically, but also how to geotag your own photos using freely available software for Microsoft Windows and GNU/Linux. Geof will also demonstrate how the same software can be used to download, map and analyze GPS data for distance and elevation changes.

Earn Donations for WAC: WACUG members who order Verizon services through the Velocity program earn donations to WAC. You must place you new Verizon order by calling the special Velocity sales office 1-888-695-5299 and providing our Tracking Code - 12426. Velocity users can take advantage of any currently advertised promotions.

Lloyd's Web Sites for October, 2008

by Lloyd Johnson, WACUIG Member

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

October Sites

1. **U.S. Gazetteer** profiles for 166,000 U.S. cities, towns, neighborhoods and subdivisions as well as maps, data and directions – www.hometownlocator.com

2. **AIRNow** provides the public with easy access to national air quality information – www.airnow.gov

3. **The Pulitzer Prize** Beginning in 1917 the Pulitzer Prize is awarded in 21 different areas of journalism and photography – www.pulitzer.org

4. **The Old House Web** restoration, home improvement, and remodeling advice for old house lovers – www.oldhouseweb.com

5. **History Channel: This Day in History** Features daily topical stories from the Civil War, crime history, technology, the Old West, literature, and World War II. – www.history.com/this-day-in-history.do

6. **Day of the Week Calculator** Enter the date to calculate the day of the week for an historic or future year – www.searchforancestors.com/utility/dayofweek.html.

7. **State of Virginia wants to hear from you –** www.ideas.virginia.gov

8. **Allergies Season.** Find out how much pollen is in the air. (Baltimore or Washington, DC). – www.aaaai.org/nab

9. **Biographical Dictionary**. More than 33,000 notable men and women who have shaped our world. – www.s9.com

10. **Follow Hurricanes.** Thanks to Bill Bailes for this site – www.stormpulse.com

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Washington Area User Group Partners Working Together For Our Members

**CPCUG
NCTCUG
WACUG**

NCTCUG

Visit our "sister" user group. The National Capital Technology and Computer User's Group meets the first and fourth Wednesday of the month. They meet in Carlin Hall in Arlington at 5711 South 4th Street. Visit their web site for more information, a map and directions:

http://www.nctcug.org/
Meetings start at 7:00 PM

GNU/Linux SIG

By Geof GooGNU/Linux SIG

T-Mobile's Android Phone

T-Mobile announced that the first commercial smart cell phone built on Google's Android™ Open Source operating system will be available online and at select T-Mobile retail stores beginning October 22nd. The T-Mobile G1 phone will cost $179 with a two year voice and data agreement. The phone features

a slide-out QWERTY keyboard, a built-in trackball, a touch sensitive color screen, and a 3 megapixel camera. The phone works with 3G and EDGE networks, and includes WiFi networking.

The Android operating system runs Java applications under the Linux kernel (http://code.google.com/p/android/). Tser is built upon Web-Kit, used in Apple's Safari browser and based upon the KHTML library developed for the KDE desktop and Konqueror web browser. Incidentally, a development version of WebKit became the first web browser framework to pass the Acid3 web standard compatibility The G1 phone supports an assortment of Google applications, including Google Maps with Street View, Google Talk instant messaging, Calendar, Gmail, and YouTube video. The G1's web browy test. The G1 comes pre-loaded with a new application developed by Amazon.com that gives customers easy access to Amazon MP3, Amazon.com's digital music download store with more than 6 million DRM-free MP3 tracks.

Additional applications are available for download from Android Market. ShopSavvy uses the G1's camera to read product barcodes and compare prices from a list of online merchants. BreadCrumbz allows to user to create and share visual maps using photos.

Some initial criticisms from those who have reviewed the G1 specs and product images are that the phone is ugly and lacks the multitouch screen capabilities of the Apple iPhone. Expect to see a variety of other Android-based smartphones in the near future from several companies.

T-Mobile's website *http://www.t-mobileg1.com/* has a Flash presentation about the phone and additional information.

GNU/Linux Distribution Releases

GNU/Linux distributions are complete GNU/Linux operating system and application software collections. Many are freely downloadable or can be ordered on CDs or DVD at low cost. DistroWatch.com lists the following distribution release announcements for the period August 24 – October 1, 2008.

Distribution
Absolute Linux 12.1.07
antiX MEPIS 7.5
Beyond Linux From Scratch 6.3
BOSS GNU/Linux 3.0
CentOS 4.7
easys GNU/Linux 4.2
elpicx 2.0
Foresight Linux 1.0 "Kid's"
Foresight Linux 1.0 "Mobile"
Frugalware Linux 0.9
gNewSense 2.1
gOS 3.0
GParted LiveCD 0.3.9-4
Greenie Linux 3.1H
Helix 2008R1
Kiwi Linux 8.08
Linux Mint 5 "Xfce"
linuX-gamers Live DVD 0.9.4
MilaX 0.3.2
NetSecL 2.3
OpenGEU 8.04.1
Pardus Linux 2008.1

PC/OS 2008v2
PLD Live 2008.09
Scientific Linux 4.7
sidux 2008-03
STUX GNU/Linux 2.0
SystemRescueCd 1.1.0
Turbolinux 12
Ubuntu Christian Edition 4.0
Ultima Linux 8.4
VectorLinux 5.9.1 "SOHO"
Zenwalk Linux 5.2 "GNOME"

Linux Software of the Month

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

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

October 2008

freeciv – v2.1.6. http://freeciv.wikia.com/wiki/Main_Page. Free GNU General Public License source code and executables for Ubuntu, Fedora 9, and openSUSE 10.3 by the Freeciv community. Freeciv is a Free and Open Source empire-building strategy game inspired by the history of human civilization. The game commences in prehistory and your mission is to lead your tribe from the stone age to the space age. You can play Freeciv solo, with one or more artificial intelligent players (AIs) run by the computer, in real time and worldwide by hosting a game through the Internet, or it can be played in any numbers of combinations of these. For example, two human players could play with many AIs, all run on two machines connected to one another. The game requires up to 25 MB of free RAM. Recommended: 1024X800 or higher resolution display and at least a 100 MHz processor.

iptraf – v3.0.0. http://iptraf.seul.org/. Free GNU General Public License source code by Gerard Paul Java and executables for Fedora 9 and Ubuntu. IPTraf is a console-based network statistics utility for Linux. It gathers a variety of figures such as TCP connection packet and byte counts, interface statistics and activity indicators, TCP/UDP traffic breakdowns, and LAN station packet and byte counts.

Rockbox – v3.0. http://www.rockbox.org/. Free GNU General Public License source code and firmware. Rockbox is an open source firmware replacement for a growing number of digital audio players, including: Apple 1st through 5.5th generation iPod, iPod Mini and 1st generation iPod Nano (not the Shuffle, 2nd/3rd gen Nano, Classic or Touch); Archos Jukebox 5000, 6000, Studio, Recorder, FM Recorder, Recorder V2 and Ondio; Cowon iAudio X5, X5V, X5L, M5, and M5L; iriver H100, H300 and H10 series; Olympus M:Robe 100; SanDisk Sansa c200, e200 and e200R series (not the v2 models); Toshiba Gigabeat X and F series (not the S series). It has been in development since 2001 and receives new features, tweaks and fixes every day to provide you with the best possible music listening experience. Rockbox aims to be considerably more functional and efficient than your device's stock firmware while remaining easy to use and customizable. We believe that you should never need to go through a series of menus for an action you perform frequently. We also believe that you should be able to configure almost anything about Rockbox you could want, pertaining to functionality. It is written by users, for users. Another top priority of Rockbox is audio playback quality. Rockbox, for most models, includes a wider range of sound settings than that device's original firmware. A lot of work has been put into making Rockbox sound the best it can, and improvements are constantly being made. All models have access to a large number of plugins, including many games, applications, and graphical demos. You can load different configurations quickly for different purposes (e.g. a large font for in your car, different sound settings for at home). You can even customize your While Playing Screen to display only and exactly what you want to see when your music is playing. In addition, Rockbox features a wide range of

languages, and all supported models also have the ability to talk to you - menus can be voiced and filenames spelled out or spoken.

Xara Xtreme – v0.7 rev 1692. http://www.xaraxtreme.org/. Free GNU General Public License source code and autopackage executable installer originally developed as a commercial product by the Xara Group, Ltd. Xara Xtreme for Linux is a powerful, general purpose vector and raster graphics drawing program for Unix platforms including Linux, FreeBSD and (in development) OS-X. Formerly known as Xara LX, it is based on Xara Xtreme for Windows. The Xara Xtreme source code was made available open-source in early 2006, and is being ported to Linux. Xara Xtreme is very fast and memory efficient. The application includes import and export of PNG, JPEG, GIF and many other graphics formats supported by ImageMagick, as well as import of Adobe Illustrator files and Xara XAR files.

Kernel Source – http://www.kernel.org/. 2.6 kernel source code for all platforms (stable 2.6.26).

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Keeping Up

By Paul Howard, WACUG

Are you a techtoyaholic? I know I am. When APCUG colleague Gabe Goldberg does his Gadgets Grabbag presentation for our user groups, I can't sleep for three days, thinking about all those nifty toys! See: http://www.nctcug.org/recmtgs.html (July 2nd, 2008 Mtg.)

I have a severe weakness for flashlights - size doesn't matter, but lumens do! I'm not sure if it's a suppressed fear of the dark (I've never liked horror movies), or that being quite nearsighted from about age ten, I've always wanted lots of light focused on whatever I'm working on. My early favorite, from my career more than 35 years ago as a telephone installer / repairman, was a Lightstick, product of the Justrite Manufacturing Company: http://snipurl.com/3l09s Best described as a slightly flattened steel can, it holds 4 "D" cells, has a swiveling head with a focusing reflector that allows spot or flood light diffusion, along with a belt clip, and a loop handle / hanger on the bottom. It's still being sold, although a quick Internet search of about three companies showed the lowest price around $47. That's kind of pricey for a flashlight that still uses an incandescent lamp.

I've got one that I salvaged years ago from a dumpster, with a loose belt clip I repaired with 'liquid solder' and damaged battery terminal connections that required careful attention with long nosed pliers. The beauty of this light was that, in virtually any situation, and tight working environments, with the swivel head and focusing beam, along with the Lightstick's shape, belt clip, and hanging loop, you could find a way to place it and get light on the work area - even when you had to climb a pole to a cable terminal at night.

Over the years, I acquired a number of Maglites, http://www.maglite.com wonderfully rugged flashlights made from aircraft grade aluminum, with focusing reflector systems that work quite well. An outfit called Nite-Ize http://niteize.com/ supplies

a variety of accessories to make the Maglites more versatile, with various options for getting the light on the work, multi-tool pouches, etc. I was disappointed by their modification for the Mini-Maglite (2 - AA cells) that added a switch and an LED in place of the regular hi-intensity lamp. It may have extended battery life, but seriously degraded the unit's brightness.

A friend with a serious SCUBA diving hobby gave me an Underwater Kinetics UK4AA, a rugged, plastic cased flashlight using, not surprisingly, 4 AA cells. This flashlight is only slightly larger than the MagLites that use 2 AA cells, and typical versions mount on diving masks and firemen's helmets. UK offers a broad range of flashlights for a variety of demanding uses. http://www.uwkinetics.com/product/69

Over the last few years, the availability of high intensity LEDs have spawned an explosion of flashlights of various shapes, sizes, and battery requirements. New and brighter flashlights make regular appearances at user group meetings, although we've yet to see the tactical flashlights sold for military and police use - read "blindingly bright" and "expensive". There are also lights with built-in, hand crank generators that I have several models of, carrying the DuraPro label. Lighting products from this company now carry the MegaBRITE brand. http://durapro.com/mb_home.html

Recently, I was again tempted by a small flashlight that seemed to offer significant brightness from a single AA cell. Hanging at the checkout

(impulse buy! - guess why there are never enough cashiers at a store with lots of toys at the check stand?) at Lowes was a "Led Lenser" by Coast Products, a maker of knives, tools, and lighting products. http://snipurl.com/3lcfc

Our friend Mel Mikosinski seems similarly fascinated with LED lighting products. At an August meeting, he showed the gang an impressive collection of LED lights for use around the home, acquired at BJ's Club and WalMart. Several were of the "hockey puck" variety, designed for use under kitchen counters, in cabinets or closets. These allow illumination in places that may resist wiring for AC lamp installation. http://snipurl.com/3lcmq

Other products included a tiny "camp lantern" and a variation of the "hockey puck" lamp on a stalk, that Mel touted for use in power blackouts. Having recently experienced a nine hour power interruption, I could really appreciate the attraction!

What really got my attention, and caused me to race out to BJ's the next day - after bribing my wife to accompany me with a visit to a nearby restaurant, were "LED Micro Task Lights." These seemingly are an ideal solution for lighting a laptop keyboard when giving a presentation in a darkened room. I have several other LED lights I've acquired over the last five years for that purpose, and they were basically flawed. While operating power supplied via a USB port is certainly a plus, the lights I'd previously used provided insufficient illumination, and were awkward to use.

This unit is about the size of a deck of cards, with two telescoping stalks that support the light bar containing the LEDs. Powered by three AAA cells, it has clips to attach to a laptop screen, a wire bail for attaching to a book page - tho' I doubt you'd want to move it as you read each page, and even magnets, to attach to a metal surface. At two to a package for ten bucks, these are, I think, a bargain - especially since it included six Duracell batteries. Unfortunately, this unit isn't shown on the packager's web site yet - model LPL904. http://snipurl.com/3ld6p

Another product from the same company (Leader & Loader Group) are called Wireless LED Task Lights, using 6 LEDs and the same complement of AAA cells (tho' not included in the package) and come two to a blister pack for $20 - model LPL616 . These can sit on a desk or table, and also come with a spring clip for attaching to shelf edges, for example. I plan to use one for illuminating the controls on my home theater receiver, which are difficult to see in the subdued lighting normal in the room. Thanks for finding these treasures, Mel !!

Just Can't Win Department

I hate to own up to how inconsistent my exercise program is - though I'm sure it's obvious from the extra thirty pounds floating about my navel. Some time ago, I got a combo 13" TV and VCR from Circuit City - the plan being to record the "Nightly Business Report" at 6:30 PM every evening, Mon - Fri, on WETA, and then play it back during my normal (read - if I get around to it!) session on the treadmill the next morning.

My treadmill time was so infrequent that I didn't get to the bottom of why I had a lot of extraneous material on the tape, and the Business Report was so hard to find. I kept checking the programming page of the VCR, where I had Monday through Friday set up to record from 6:30 - 7:00 PM - or so I thought. I finally found the glitch - on Wednesdays, the end time was set to "7:00 a" rather than "7:00 p" so the recorder would run until the next morning - or the end of the tape, which ever came first! At the distance from which I normally watch the TV, the difference between "a" and "p" wasn't really apparent. I think I shoulda stood in bed. <grin>

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Ubuntu & Linux Software

by Brian K. Lewis, Ph.D., Member of the Sarasota Personal Computer Users Group, Inc., Florida
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I suppose some of you might be wondering why I have been writing about the Ubuntu Linux operating system and Linux software. As I noted in last month's article my laptop is now my sole computer. Although it has a Pentium 4 processor it only has 512 MB of RAM. Naturally, that means it is incapable of running Windows Vista. But it does easily run Ubuntu with more than enough memory to do multitasking with no reduction in speed. I also know that there are a number of the members of the SPCUG that use computers that are running Windows 98 or Windows XP. The point is, that it is not necessary to try to upgrade these computers to run Vista or to buy a new computer. Instead you have the free alternative of installing Ubuntu or another version of Linux. This article will discuss some of the range of free Linux

software and how easy it is to install it.

The original installation CD of Ubuntu included the OpenOffice software. OpenOffice includes a word processor, spreadsheet and presentation applications. These are fully compatible with the components of Microsoft Office. I frequently receive documents prepared in MS Word and they open directly into OpenOffice Writer. I can edit, comment and save a copy in the OpenOffice format. Then I can return the modified document to the originator in MS Word format with all the edits and comments intact. The same is true for spreadsheets. The OpenOffice presentation application (Impress) reads, writes and modifies PowerPoint files as easily as Writer works with documents. OpenOffice also includes a Drawing application. Drawing is an application that I haven't used.

Other included software with Ubuntu are Ekiga (internet phone software), Pidgeon (internet messenger), Evolution (e-mail), and a remote desktop viewer. Graphics software includes the F-Spot photo manager, GIMP Image Editor and Xsane scanner software. Also, there is a CD burner, movie player for DVDs and two music players.

I grant you that the included software doesn't always meet all the needs for many users. So Ubuntu has several ways of installing additional software. I mentioned last month about installing the drivers for my printer, scanner and the wireless modem. This month I will continue with other applications that are the equivalent of those that I used under Windows. The installation of these applications

was much easier than installing drivers for the accessory hardware.

The first step in installing any application is to go to the Applications – Add/Remove menu. When this application runs it provides you with a list of all the software available through Ubuntu and its third-party providers. On the left side of the window are listed various categories that you can highlight and the appropriate applications are then listed on the right side. When you highlight a specific application, a description appears in the lower portion of the window. There is also a search box that you can use to find a specific program or a group of programs.

Since I maintain my financial records on my computer I wanted a financial program that ran under Ubuntu. Not knowing the specific name, I just searched on the term "finances". This brought up a list of financial software. One of the interesting aspects of the Add/Remove application is that programs are rated based on feedback from users using 1 to 5 stars. There was a 5 star application listed, GNUcash, which can import files in the Quicken format. So I put a check mark in the box by the application name and then clicked on the "Apply Changes" button. This brought up another window for verification of the changes to be made. After clicking on "OK", the application was downloaded from the Internet and installed on the hard drive without any further action on my part. A shortcut icon was also added to the Office portion of the applications menu. There was no reboot required to complete this process. After the installation, the "Add/Remove" application reported the successful installation and remained open

in case I wanted to use it further.

My Windows financial software was Microsoft Money. Supposedly it will export its data files in the Quicken format. I did that and then copied the files from the Windows partition to the Ubuntu partition. However, the import into GNUcash was not really successful. I'm not sure why but I suspect there was information missing which resulted in misidentification of some of the accounts. Anyway, I selected an arbitrary date and entered opening balances for that date. So now, it is working perfectly and is in agreement with my bank balances. Using it is even somewhat easier than working with either Money or Quicken. Plus, the price is right.

Another application that I needed for Ubuntu was a genealogy program. Here again I was able to find a five star program, GRAMPS. (Very appropriate name I thought.) It was also available through the "Add/Remove" application so installation was completed quickly. GRAMPS imports GED files as do many genealogy programs. So I exported my files from my Windows software in the GED format then copied the GED file to the Ubuntu partition. The import into GRAMPS was essentially a two-click operation. Everything, including notes and references, were now available in an Ubuntu application. GRAMPS also has more report formats than my Windows software included. So I consider it a very successful replacement.

For quite some time I have used a PDA, specifically a Sony Clie which runs Palm Pilot software. The Sony CD loaded the Windows

version to the hard drive and also included software to synchronize with the PDA. Since I have considerable contact information in the Clie along with many memoranda, I really wanted to be able to run this under Ubuntu. In the System-Preferences menu there is a selection for PalmOS devices. Now that sounded like it would be quite simple to install the applications necessary to run the Clie. Clicking on the selection runs the Gnome-Pilot application which helps the user to determine the settings for synchronizing with the Clie. Unfortunately, it could not find the Clie PDA. So I had to go back online to the Ubuntu forums to see if I could find the secret. It turns out that getting a PDA recognized and synced with Ubuntu is not always simple. After spending considerable time reading various solutions I came across a command line entry that showed the entries where my Clie was being recognized by Ubuntu. The PDA was properly identified by vendor and product ID's. Now all the information I had gathered indicated that the PDA should be listed as using a USB connection and usually ttyUSB0 and ttyUSB1. Much to my surprise my printout showed the Clie as using ttyUSB9 and ttyUSB10. The Gnome-Pilot software refused to accept either of these as valid locations. However, another application, J-Pilot, accepted ttyUSB10 and synced with the Clie when the sync button was clicked. The synchronization transferred all of my information directly into the J-Pilot software. This software works on the desktop in a very similar manner to the Clie and Pilot software I had used under

Windows. Successive synchronizations have also been successful. So that was one less application that would need to run under Windows.

There has been one big disappointment in the hardware setup. I have a multi-function media card reader built into the laptop. It reads SD cards as well as xD, MMC, and memory sticks. This reader works great under Windows as a way to transfer photos from my camera to the computer. However, there is apparently no driver available for this to work under Ubuntu. The card reader is manufactured by 02 Micro and they apparently don't believe Linux is here to stay so they have no plans to create Linux drivers for any of their products. At least that's the quotation from a response to a query from a Ubuntu user. So when I have photos to transfer to my computer I can either reboot into Windows, or I can connect the camera with a USB cable. The USB cable works fine as Ubuntu recognizes the camera right away. It also opens the F-Spot Photo Manager which allows me to choose the pictures and the location where I want them saved.

One of the applications included with Ubuntu is Brasero, a CD/DVD burner. When I first tried to use it, it refused to recognize my DVD+R discs. It would read and write DVD-R/RW with no difficulty. Since I had a supply of the +R discs I decided to look for other DVD burning software. In the ADD/Remove application there were several CD/DVD burners listed. One of them was five star application called K3B. It was written primarily to work with the KDE destop that is an alternative to the GNOME desktop. The KDE desktop comes with Kubuntu and has an interface that is closer to the one found in Win-

dows. Anyway, K3B will work with GNOME, so let ADD/Remove install it. Any software that you add through Add/Remove can be removed simply by locating it in the list and removing the checkmark that indicates it has been installed. So now I have both Brasero and K3B installed. I also found, the next time I wanted to burn a DVD, that Brasero would now work with my external burner and the +R discs. I do like the interface for K3B better than Brasero, but they both work.

As you can see one of the nice attributes of using open license software is the ability to install it and use it at no cost. If you don't like it, you simply remove it. It's certainly not that simple in Windows. So, if you want to try a Linux OS on your computer download a "Live CD" and try it out. Also check out the online help forums. I think you'll find them easier to understand than much of the material Microsoft makes available. Whatever you decide, enjoy your computing!

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.

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Hacking 101

By Marjie Tucker, Editor, Macon Computer User Group, North Carolina
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We are being bombarded with warnings about securing our data and the entry to our computers. Do you ever wonder what the big fuss is all about? How can a hacker possibly get into your data? And, what would he be looking for? Let's spend some time answering those questions.

How Does A Hacker Get In To Your Computer?

When you give your computer access to the Internet, you need an IP (Internet Protocol) address. The IP addresses that we are currently using have 4 octets with periods between them. They will be something like 192.168.100.1. When you access the Internet, that address is read by the router, modem, whatever that links you to your Internet Service Provider. Then it is read by the routers that route all the data through the Internet. This address makes it possible for you to send data, such as e-mail or requests for web pages. And, in turn, that same address is used to direct incoming e-mail and web pages into your computer. There are several websites and programs available that will translate these IP addresses into the name of the company that purchased them. In many cases, like our residential usages, the company name will be the ISP. For commercial use, it will be the name of the company that rents the block of IP addresses. Hackers use this IP address information to find their targets much like we use a physical address to find a house or office.

Once a hacker finds out your IP address it's relatively simple to send your computer a Trojan horse program, spyware, or a virus that will open a port that you usually don't use. Once that port has been opened, he can freely enter into your operating system and browse around just like he was there in person. He would look for programs that store valuable data like social security numbers and credit card account numbers. (Do you have that information entered into your Quicken or Money program?)

He would look through your My Documents folder for password lists and search your Internet Explorer favorites for financial sites where you saved the username and password. And, before he leaves he usually plants another Trojan horse that will give him the ability to take control of your computer in the future.

Commercial Websites

The most common way to hack into a company's website through the Internet is by using a Denial of Service attack. These DoS attacks use multiple computers to overload a website with bogus requests for information. The hacker usually creates a Trojan horse program that he sends into the computers of unsuspecting people (remember that program that was left behind when your computer was invaded above?) The message that he creates usually contains a header saying that it comes from an IP address that doesn't exist. When he is ready to attack, he calls up all the computers that he infected with his Trojan horse and tells them to contact a specific IP address. Those computers follow his instructions and send his preprogrammed message to that website. Servers that control websites always check to verify that IP addresses requesting information or webpage downloads are legitimate addresses. When a server is hit by a bombardment of these false address requests, it tries to track down every one of the fake addresses. Before long the server becomes overwhelmed by the fruitless process and crashes. When it crashes, the website will vanish and the hacker will be given access to a prompt for the server. He can then use Linux or DOS commands to request and view information on that server other servers.

How About Wireless?

Let's put this hacker into an airport where hundreds of people are sharing a wireless network. It's like leaving a child alone in a candy store. In this case the airport's wireless system usually provides the IP addresses through DHCP and he can easily look at the list of addresses that have been supplied. He can test each of the addresses for available ports and it's quick work to access the most vulnerable. The same principles apply in hotels and restaurants that provide wireless Internet access. If you have a wireless network in your home, our hacker can drive down your street using a laptop or PDA to search for wireless networks. This process is called Wardriving. If he finds one that has not been secured at all, he doesn't even have a challenge. If you have added a password, he simply has to crack the password.

What Tools Do They Use?

It's very easy for a potential hacker to find the tools of his trade. There are many websites that offer program tools and tutorials for using them. Here are some of the popular:

Anonymizers and Remailers - Anonymizers are online services that eliminate the trail of information that is left behind. These sites use anonymous proxies that a hacker can use to access computers and servers

without leaving his IP address on any log. Remailers strip the header off a message and replace it with a meaningless header that can't be traced.

Command.com - When this command is typed into a server it will basically give you administrative rights. You can then see all the folders and files. It's also very easy for the hacker to create a new administrative account that he can re-use in the future.

Password Crackers - These programs try random passwords at lightening speeds. They are usually very successful.

Key Loggers - Hackers frequently install these on computers, especially public PCs. The programs actually record every stroke that you make. Hence, when you type in a username and password, it has been captured.

Port Knocking - This is a method of externally opening ports on a firewall by mimicking the process you normally use to add a port to your firewall.

Wireshark - This popular program captures and analyzes the data on a network. It's used by hackers to find information they want and it's also used by network administrators to manage networks.

Aircrack - This program is used to crack wireless WEP and WPA passwords.

Metasploit Framework - This is a tool that can be used by hackers to search the Internet for sites that have dubious code. These are the sites that are the easiest to hack - especially when this program does the searching for you.

Networks identifying the types

of data and the internal addresses of this data. It's a valuable tool for administrators, but can save a great deal of time for a hacker.

NMAP - This is a port scanner. Since a hacker knows that he needs to use a port to access your computer or network, he can use this program to see which ports you have open.

NetStumbler - This program finds any wireless networks that are in range.

Wardrivers drive through residential neighborhoods using NetStumbler to search for available wireless networks.

Kismet - This program takes NetStumbler one step farther. It searches for wireless networks that are not broadcasting their SSID.

NSLookup - If you type a domain name into this program, it will give you the company's IP address

Traceroute - This is a very valuable troubleshooting tool for technicians. It will trace a packet on its route through the Internet. It shows every IP address it visits along the way.

Snort - This is an open-source intrusion detection system. It shows traffic analysis and packet logging on networks.

TCPdump - This is the most widely used network sniffer/analyzer for UNIX networks.

Net Cat - This has been called the Swiss army program for hackers. It performs many sniffing and cracking tasks.

This was really just some of the basics. But, if we know why security is so important, we may remember to take the right precautions. Hope your web surfing stays secure.

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Broadsides

by Ron Broadhurst, a member of the Space Coast PC Users Group, Inc., Florida
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These ideas are compiled from years of accumulations from various magazines, books, on-line sites, and my own personal experience. I claim neither originality nor ownership to any of its contents. My only intent is to share the various "tips, "tricks", & "hints" in hopes of helping & maybe enhancing your computing experiences. They are all intended for anyone who uses a PC. It is for beginners as well as advanced users.

Enjoy and use as you will.
Ron Broadhurst

HOW TO GET RID OF "SEND ERROR REPORT TO MICROSOFT

Right click My Computer on the desktop or in the Start menu.

Click Properties.

Click the Advanced tab.

Click the Error Reporting button at the bottom.

Click Disable error reporting. You can select the checkbox under it if you still want to be notified when errors occur.

Click OK.

Note that you can disable error reporting for the operating system only, or for programs only, by unchecking the appropriate box

The Cursor

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The Cursor provides news, commentary and product information to members of the Washington Area Computer User Group.

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Operating System(s):

Modem(s):

Printer(s):

Other Hardware:

Favorite Software:

Connection: (circle one)   Dial-up   or   Broadband

Circle Your Interests: Photo Printing   Investing   Games
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Graphics/Animation   Genealogy   Video   Finance
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October Meeting will be
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Go through front door
about 25 feet then follow
sign to the Meeting Room
on the right

Service Desks Open at
12:30 Meeting Starts at
1:00 PM
FREE ADMISSION
BRING A FRIEND!
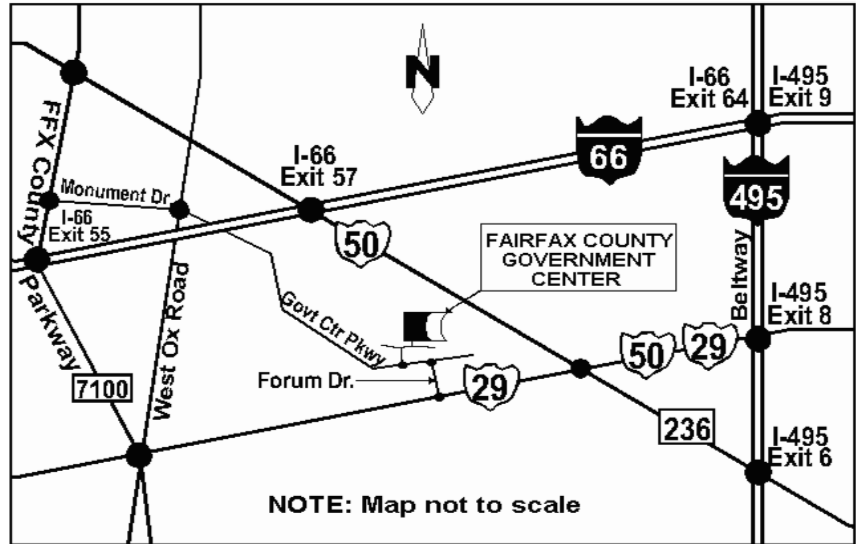
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Alexandria, VA 22304-6300
ADDRESS CORRECTION REQUESTED

Label

under the Enable error reporting option.

You can also configure error reporting only for specific programs by clicking the Choose Programs button.

ALPHABETIZE START MENU LISTINGS

When you install a new program on your system, it will often appear at the end of your Start menu. Reorganizing files alphabetically in the All Programs menu does not affect how they appear in your start menu. In order to alphabetize your start menu, you'll want to click Start and select All Programs. On any file or folder right-click and then select Sort By Name. Now all of your Start menu programs are in alphabetical order. You can also sort subfolders in your Start menu the same way.

MAKE YOUR QUICK LAUNCH ICONS BIGGER

Unlock the Toolbar

Right click the QL toolbar

Select the View tab

Select large icons

PIN AN APPLICATION TO START MENU

The Windows XP Start menu includes an area where two or more Microsoft applications, usually Internet Explorer and Outlook Express, are permanently positioned for easy access. You can add your favorite application to this same convenient location. Open Windows Explorer and locate the executable file for the application. Right-click

the file and select Pin To Start Menu. The application will now appear in the Start menu. To remove an application, locate it, right-click

it, and select Unpin From Start Menu.

Alternatively, you can right-click the app in the Start menu and click Unpin From Start Menu.

CHANGE SYSTEM SOUNDS

Through the Control Panel you can change your system's program event sounds. Click Start and Control Panel. If you're using Category View, click Sounds, Speech, and Audio Devices; and Sounds and Audio Devices. If you are using the Classic View, click Sounds and Audio Devices. This loads the Sounds and Audio Devices Properties dialog box. Choose the Sounds tab. Select the sound you'd like to change in the Program events box, and then select a new sound from the Sounds drop-down menu. Or select a sound you've saved to the hard drive by using the Browse button to navigate to the sound file. Change as many sounds as you like. Save your changes as a sort of theme from the Sound Scheme drop-down menu above the Program events box. (Select the blank line and click Save As.) You can also choose to disable program event sounds. When you're finished click OK.

SAVING E-MAIL MESSAGES

To save e-mail messages highlight the message you want to save, then click on File -Save As. Select where you want to save the message and then save it as a txt file.

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FastStone Capture

by Ron Hirsch, a Member and Contributing Editor of the Boca Raton Computer Society, Florida
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A PRODUCT REVIEW

The Best Screen Capture Program I've Ever Used

Since it is possible that some of you may not know what a "screen capture program" is, I'll start off by defining that program type.

What Is A Screen Capture?

When you are working on your computer, the material you are working on/looking at, is displayed on your monitor screen, as a bunch of pixels. Often, it is nice to be able to "save" the info onscreen, or parts of it, for further uses.

Windows does offer a "Print Screen" capability, to send info to the clipboard or printer, but as with many of Windows utilities, it's a pretty barren utility, with very few options. Fortunately, there are several 3rd party utilities out there, one of which I consider the best I've ever used.

My History With FastStone

When I started using FastStone Capture in early 2007, it was still freeware, with a request to send in a "contribution", if one liked it. I liked it so much, I sent off a contribution immediately, and received a very nice "Thank You".

Shortly after my contribution, it became a "paid for" utility. For $19.95, you get the program, and updates are free forever. There is a 30-day free trial period, during which you can use a fully functional version, to convince yourself that this is indeed a program that you want to keep using.

Faststone Capture continues

Links

FastStone Main Site

The link to the FastStone site is: http://www.faststone.org/index.htm.

While here, check out the other excellent programs, all of which are free, or click on the Download button for FastStone Capture to download it.

Faststone Capture Page

The link to page for this program is: http://www.faststone.org/FSCaptureDetail.htm or just click on the "capture" program when you are on the first link noted above.

Ways To Use Screen CapturesBelow, I've included some of the ways I use this screen capture program – which, by the way, I use just about every time I'm on my computer.

Remember, this program can capture a wide variety of areas on your screen - see the listing below in one of the screen captured images.

1. Have you ever installed something where a variety of screens and dialog boxes came up, and had to be filled in with info for various options, etc.? Sometime later on - weeks, months, or even years, you need to know what info and options et al that you filled in. No problem - just save each screen and store the saved screens in a named folder. Then all that info is available at a moments notice. All you have to remember is where you stored it. And you can also print out each of the screens after saving them, and file those pages in a loose leaf notebook.

2. You have some digital photos that you'd like to send to someone in an e-mail. If you just "insert" the pix into the e-mail message as many people do, they may come out to a very large size - much larger than you wanted, or expected. There are of course a variety of ways to "resize" image files, but there is one that is pure simplicity. What I do is to display each picture file in a program such as Windows "Picture and Fax Viewer", or the free Fastone Viewer offered on their site. Then adjust the size of the displayed image on the screen, to what you'd like the size to be in your e-mail. Then capture the image. When inserted into your e-mail it will be exactly the size that you captured, since it captures pixels, and monitors all have very similar pixels/inch.

3. You're on a web page, and there is something interesting that you want to save, but you don't want to print out the whole page. Just select the desired area using Fastone Capture, and save/print that area only.

4. You're watching a video on your TV, and there was an image of someone/something you wanted to capture. Just pause the video, and select the area you want in Fastone Capture. Your image is captured. Remember, screen captures are just pixels. The capture process doesn't care what created those pixels.
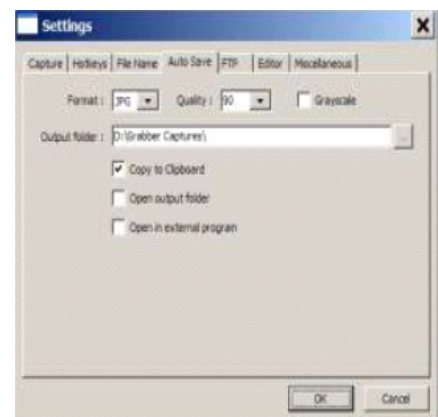
Remember, this capture method saves things as an "image" (I use the jpg choice). It will not save text in editable form. If you want to do that, you must copy and paste into a text editor, such as Notepad. But, if you have a program such as "Omnipage" which is generally included when you buy a flatbed scanner, you can use it to convert a jpg image of text to an editable page of text.
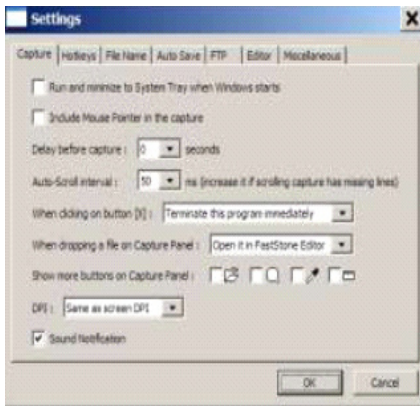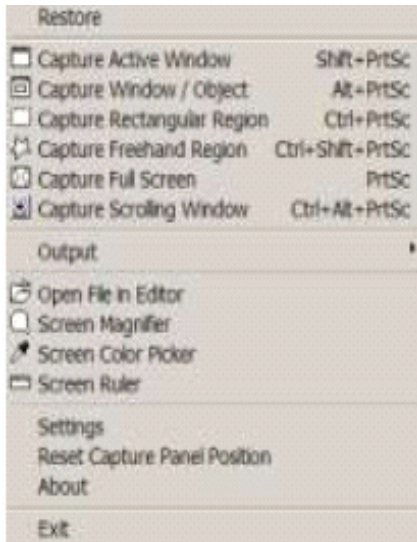
The images below are several of the screens and drop-down menus from Fastone. The choices available to the user are well thought out and very useful. Note all the various options for what can be chosen to get saved, and the hot keys for these choices.

Screen shots of various views follow.

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Restore	
Capture Active Window	Shift+PrtSc
Capture Window / Object	Alt+PrtSc
Capture Rectangular Region	Ctrl+PrtSc
Capture Freehand Region	Ctrl+Shift+PrtSc
Capture Full Screen	PrtSc
Capture Scrolling Window	Ctrl+Alt+PrtSc
Output	▸
Open File in Editor	
Screen Magnifier	
Screen Color Picker	
Screen Ruler	
Settings	
Reset Capture Panel Position	
About	
Exit	

TV Converter Box Notes

by Mike Morris, a member of the
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Regarding video (and audio) hardware, I have to admit to being an Old Analog Guy (the acronym = OAG and is pronounced "ogre"). I have 2 old analog TV's. I don't intend to buy a new HDTV until they both quit working. I don't intend to sign up for satellite or cable TV. I don't,

actually, watch very much TV (or movies), and I am not interested in computer games. For the "Digital TV Transition" coming in February 2009, a TV converter box is the solution for me; especially now that I have my two $40 coupons.

The question is, which converter to buy?

There are 52 DTV converter box models from 33 manufacturers listed on the enclosure that came with my converter box coupons (and many more listed on the website provided at the end of this article). Not all converters are equal. It is still "Buyer Beware," so you need to decide what features and specs you want (and/or don't want), and then check the specs of each unit carefully.

Perhaps there are a few others like me, who are considering buying a converter box. For my fellow OAG's (male or female), I have collected links to information on 6 of the converters that I will share with you.

Do check prices, with reputable online sellers and with your local big box or electronics store (local or national). Prices vary widely. I have picked some prices in order to provide an approximation of the "MSRP (Manufacturer's Suggested Retail Price)".

Channel Master CM-7000

A recent price: $79.99 (less $40 coupon)

Exact phrase Google search: 3860 hits

A few of those pages were investigated. One with information and specifications is Channel Master 1.

Channel Master is part of Andrew Corporation (known for its antennas, among other things), which is now part of CommScope. The

CommScope HQ are in North Carolina. For more information on these companies and their products, connect to CommScope.

Check out the discussion of this unit on AV Science Forum:

> This is part of a message posted in March of 2008:
>
> "The specifications on page 2 of the information sheet:
>
> Demodulator input for 1080i, 720p, 480i, and 480.
>
> Video output is 480i ONLY.
>
> 480i is Standard Definition DTV only. The CM-7000's claim to "Get Free HDTV
>
> Without Monthly Fees" is inaccurate."

Echostar TR-40

A recent price: Unofficially, $40, which means, effectively, free with the coupon.

Exact phrase Google search: 10,100 hits

Lots of information on this unit on the AfterDawn website. This website also provides comparisons to other similar units.

Digital Stream D2A1D110/20

A recent price: $69.99 (less $40 coupon)

Exact phrase Google search: 2 hits, plus 2 ads. None of the links from the Google search provided information on the model number listed above.

There are four other Digital Stream model numbers listed in coupon enclosure, one of which is described at Solid Signal.com.

GE 22729

TV Converter Notes Continues

TV Contertrt Notes from Bonus Page 3

A recent price: $79.99 (less $40 coupon)

Exact phrase Google search: 39,200 hits

For (limited) specs connect to this After Dawn web page.

Insignia NS-DXA1

A recent price: $59.99 (less $40 coupon)

Exact phrase Google search: 44,700 hits

Check out the information on the World-Wide TV-FM DX Association website.

There is also a detailed CNET review.

From the spec sheet: "(This unit)... displays digital TV at standard-definition (480i) screen resolution."

Magnavox TB-100MG9

A recent price: $79.99 (less $40.00 coupon)

Exact phrase Google search: 999 hits

You will find some information on this unit at Solid Signal.com. There is also a discussion of this product on the AV Science Forum.

RCA DTA 800A

A recent price: $49.99 (?) (less $40.00 coupon)

Exact phrase Google search: 412 hits

There are two versions of this product: the 800A and the 800B. The difference is the tuner manufacturer. For more information on this, connect to the AV Science Forum and scroll down to posting #39.

Remember this acronym, courtesy of the late Robert Heinlein (Science Fiction author): TANSTAAFL. That translates to "There Ain't No Such Thing As A Free Lunch." If you have decided to stay with your old analog TV, and you do not plan to sign up for satellite or cable TV, then you must do your homework in order to find the right product before spending your hard-earned money on a converter box.

Remember also that the word "converter" has real meaning in this context. The converter box is converting an HDTV signal into something an old analog TV can display. That "something an old analog TV can display" is definitely NOT HDTV (no matter WHAT the advertisements say).

You will likely find one other obvious difference between using your old analog TV to receive analog broadcasts, and using your old analog TV with a converter box. If you tuned (or tried to tune) to a distant station with your old analog TV, you would get a terrible picture (lots of noise, etc.). With the converter box, you simply won't know a weak station is even there. You need a strong signal--the converter boxes have a "threshold" effect. With a strong signal, everything looks good. With a weak signal, you get a black screen. So, when you are setting up your converter box and TV, you may want to move your antenna (or Rabbit Ears) around to get the maximum strength signal possible.

For more information on digital TV, connect to this Wikipedia article.

For more information on the TV Converter Box Coupon Program, connect to: https://www.dtv2009.gov

For an up-to-date list of qualifying products, connect to: https://www.ntiadtv.gov/cecb_list.cfm

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