The Cursor

Monthly Newsletter of the
Washington Area Computer User Group

Meeting Location
OLLI, 4210 Roberts Road,
Fairfax, VA

apcug Member of

Next Meeting:
January 22, 2011

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Plus, in the Download Edition

Malware, Viruses, Trojans Defined BP1
Millions of Historic Photos Online BP2

Presidential Bits

by Geof Goodrum, President WACUG, president@wacug.org

Happy New Year! I hope that 2011 finds you well, and you plan to spend some of it with WAC. Our first meeting of the year, January 22nd, is a special one. Gene and Linda Barlow of User Group Relations (http://www.ugr.com/) will be in town to give a presentation "Organizing Your Hard Drive and The Best Backup Plan to Protect your System from Failure". Gene and Linda, residents of St. George, Utah, are long-time supporters of computer user groups. You may recall that Gene helped WAC get started with webinars (live meetings over the Internet). For more details, please see the meeting announcement elsewhere in this issue.

The January meeting also includes the Annual Meeting for WAC, including election of the President, Vice President, Treasurer, and Secretary for 2011. Mel Mikosinski and Jim Brueggeman kindly volunteered to serve as the Nominating Committee for the election. If you are a member in good standing (at least through the end of January 2011), you should have received a ballot by e-mail. E-mail ballots must be returned by noon on January 21st, 2011. Final ballots will be tallied during the Annual Meeting, including those of any members who join before the meeting begins. You can review the WAC Bylaws as a PDF file at http://www.wacug.org/pdf/wac_bylaws051119.pdf.

Last, but not least, January 2011 is the two year anniversary of the combined WAC/OPCUG meetings at the Osher Lifelong Learning Institute facility in Fairfax. To celebrate, we are having a pizza party for our members and invited guests (the Barlows) after the main meeting on the 22nd. I hope that you can join us!

I would also be remiss if I did not thank Gabe Goldberg, Lorrin Garson, and the PC Clinic crew (Scott Hanak, Neal Grotenstein, Roger Fujii, and Nick Wenri) for making the December meeting a success. Gabe finally had a chance to follow-up on his Fundamental Technologies presentation from October, and Lorrin used his experience being the victim of a stolen laptop while on overseas travel to give a Learn 30 tutorial about protecting your computer and, perhaps more importantly, the data on it. One free tool that

See *Presidental Bits* on page 6

Lloyd's Web Sites for January, 2011

by Lloyd Johnson, WACUG Member

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

1. .Contact Your Elected Officials and share your thoughts on current events and government policy – www.usa.gov/Contact/Elected.shtml
2. Cold remedies: What works, what doesn't, what can't hurt – www.mayoclinic.com/health/cold-remedies/ID00036 – "A look at some common cold remedies and what's known about them." A Mayo Clinic site.
3. . State information resource links to state homepage, symbols, flags, maps, constitutions, representitives, songs, birds, flowers, trees and much more – www.50states.com.
4. HowStuffWorks. An update of older URL – www.howstuffworks.com.
5. "Your source for reliable health information from the Federal government. Offering quick guides to healthy living, personalized health advice, and tips and tools to help you and those you care about stay healthy" – www.healthfinder.gov
6. Determine your Carbon Footprint – www.carbonfund.org – A request for funds to reduce your carbon footprint will show up.
7. 100 Milestone Documents that Shaped America – www.ourdocuments.gov/content.php?flash=true&page=milestone – This site provides a listing of 100 milestone documents, compiled by the National Archives and Records Administration. (United States history from 1776 to 1965).
8. MonkeySee: Free Instructional Videos – www.monkeysee.com – Thousands of professional-quality how-to videos by accomplished experts on every conceivable topic. See how the experts do it!
9. Pew Research Center: The Daily Number – http://pewresearch.org/databank/dailynumber – "The Daily Number is a statistic, updated every weekday that highlights an important finding or trend. The Daily Number is typically drawn from surveys, research or analysis done by one of the Pew Research Center projects. Each day's entry includes links to additional information on the subject as well as to an archive of past Daily Numbers.
10. Search for short or long-term Volunteer activities – www.1-800-volunteer.org

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

Washington Area User Group Partners

Working Together For Our Members

NCTCUG

WACUG

OPCUG

GNU/Linux SIG

By Geof Goodrum, WACUG

GNU/Linux Distribution Releases

GNU/Linux distributions are bundled collections of software including a set of applications and an operating system built on the Linux kernel. Some distributions include general applications such as office suites, music players, and web browsers, while others may have specific purposes such as computer system recovery, network firewall, media center, or gaming. Individuals, community projects, or businesses create distributions. While some distributions are commercial and include fee-based technical support, other distributions are freely downloadable or can be ordered on CDs or DVD at low cost.

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 downloadable distributions do not include official technical support nor printed documentation. 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. 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.

The following list summarizes distribution release announcements from Distrowatch.com for the period November 25, 2010 – January 1, 2011.

aptosid 2010-03

Asturix 3

Chakra GNU/Linux 0.3.0

Dragora GNU/Linux 2.1

Finnix 101

Grml 2010.12

Jolicloud 1.1

KNOPPIX 6.4.3

Linux Deepin 10.12

Linux Mint 201012 "Debian"

LinuxConsole 1.0.2010

Mandriva Linux 2010.2

MoLinux 6.2

moonOS 4

NuTyX Attapu.1

Openwall GNU/*/Linux 3.0

Parsix GNU/Linux 3.6r1

Parted Magic 5.8

PCLinuxOS 2010.12

Puppy Linux 5.0 "Wary"

Quirky 1.4

Sabayon Linux 5.4 "Gaming"

Salix OS 13.1.2 "Fluxbox"

Salix OS 13.1.2 "LXDE"

Superb Mini Server 1.5.4

Tiny Core Linux 3.4

Tuquito 4.1

Ultimate Edition 2.8 "Gamers"

Ultimate Edition 2.8 "Lite"

Unity Linux 2010.2

Vine Linux 5.2

Vinux 3.1

VortexBox 1.7

Zentyal 2.0-3

ZevenOS 1.9.1 "Neptune"

Zorin OS 4

See *Linux* page 4

Linux from page 3

Linux Software of the Month: January 2011

The software described below can be downloaded at the links provided or copied onto a USB flash drive at the WAC meeting.

GFingerPoken – v0.32. http://savannah.nongnu.org/projects/gfpoken/. Free GNU General Public License 3 source code by Martin Hock. GfingerPoken is a puzzle game in which you must determine the location of hidden mirrors, deflectors, and weirder gadgets by rolling marbles into a grid and examining where they exit. Requires GTK+ v1.2, included in GNU/Linux distributions.

Online Chess Club – v1.3.3. http://lgames.sourceforge.net/index.php?project=OCC. Free GNU General Public License PHP code. Online Chess Club (OCC) is a small PHP chess game. It is not meant for public use but rather for playing with friends. Any number of games can be opened and the idea is to check once in a while (like once a day) whether somebody has moved and, if so, respond along with a comment. While it is possible to play a quick game by hitting Refresh frequently or using a chat tool for communication this is not the aim of OCC. Other online chess games may fit this purpose better. OCC stores all moves of a game (can be replayed in history browser) and automatically recognizes checkmate and stalemate. A draw can be proposed at any time (opponent needs to agree). When a game is finished it is archived. All games can be saved as PGN to analyze them with your favorite chess tool, e.g., with Fritz. A PHP-ready web server is required to set up a chess server while playing itself requires a browser.

RRDTool – v1.4.5. http://oss.oetiker.ch/rrdtool/. Free GNU General Public License C and Perl code by Tobias Oetiker. RRDtool (Round Robin Database Tool) is time-series data storage and graphing utility created by the author of Multi Router Traffic Grapher (MRTG). Using RRDtool, you can write your own MRTG-like tools in a matter minutes with only a few lines of Perl or shell code.

TrueCrypt – v7.0a. http://www.truecrypt.org/. Free TrueCrypt License Version 3.0 source code and executable by Paul Le Roux et al. TrueCrypt is free, open source disk encryption software that: Creates a virtual encrypted disk within a file and mounts it as a real disk; Encrypts an entire partition or storage device such as USB flash drive or hard drive; Encrypts a partition or drive where Windows is installed (pre-boot authentication); Provides plausible deniability, in case an adversary forces you to reveal the password (Hidden volume (steganography) and hidden operating system). Encryption is automatic, real-time (on-the-fly) and transparent. Parallelization and pipelining allow data to be read and written as fast as if the drive was not encrypted. Encryption can be hardware-accelerated on modern processors.

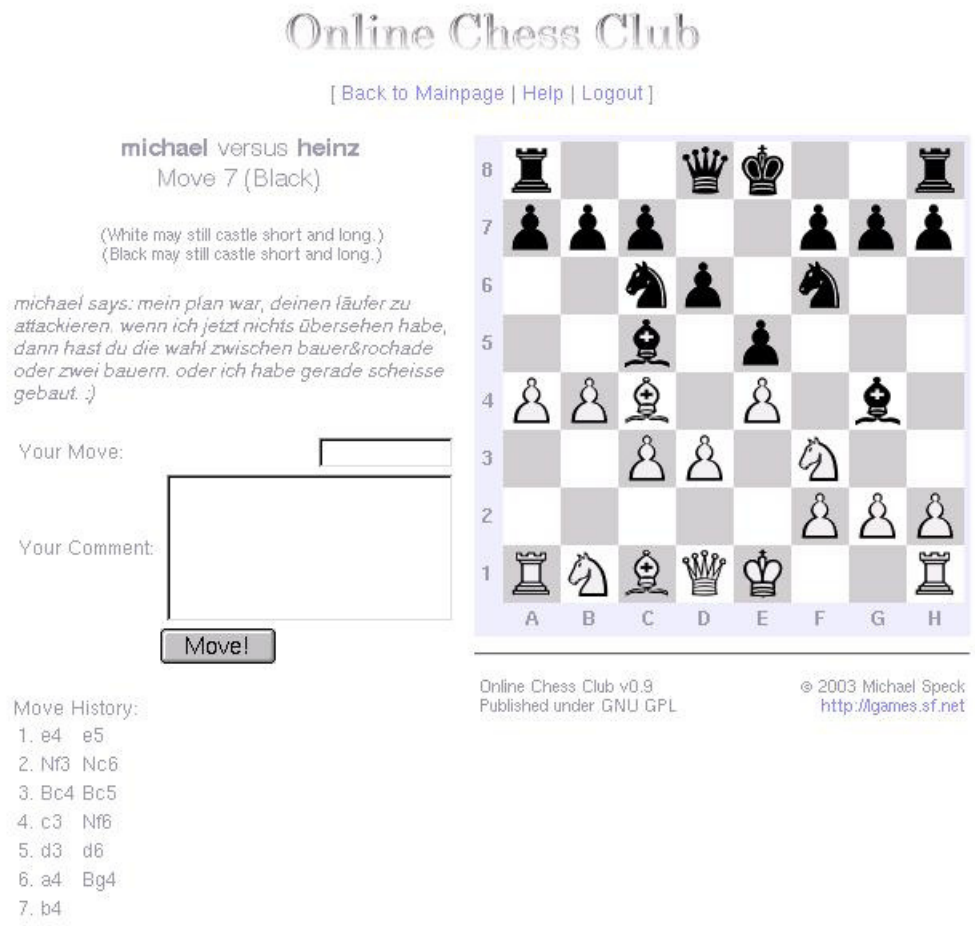
Kernel Source - v2.6.36. http://www.kernel.org/. Free GNU Public License source code for all platforms by the Linux community.

Screenshots for the Linux Software of the month follow...

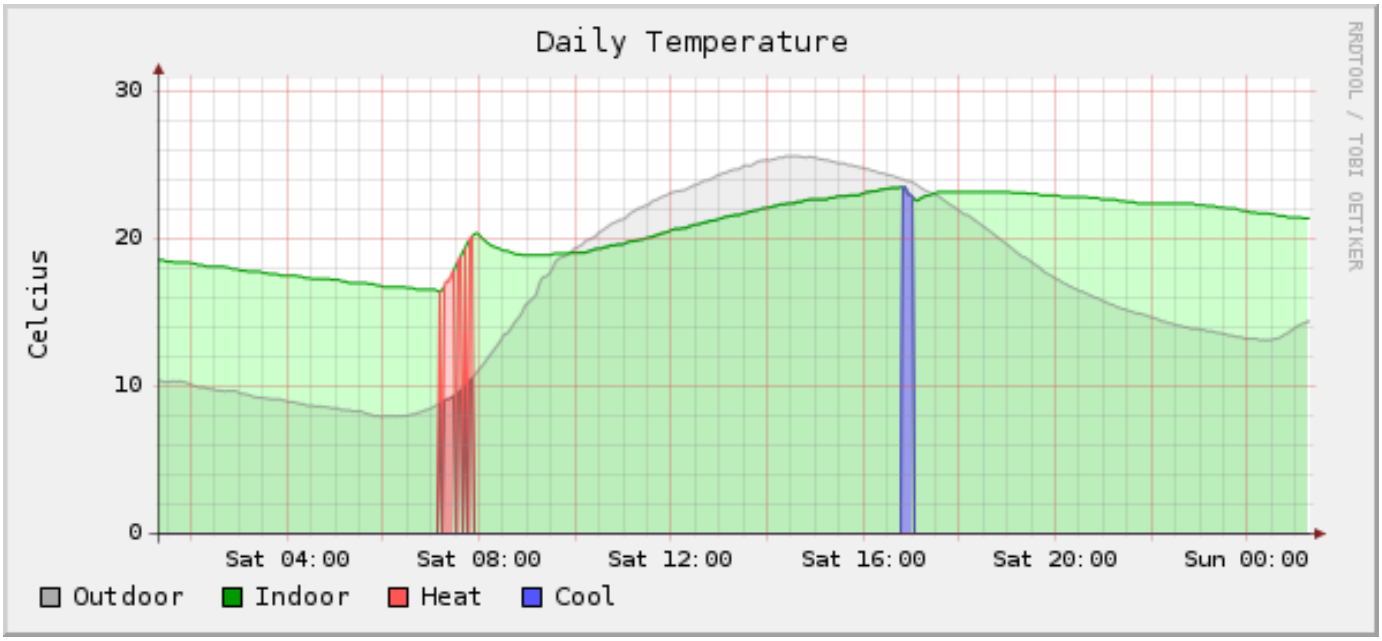
GFingerPoken

See *Linux* page 5

Linux from page 4

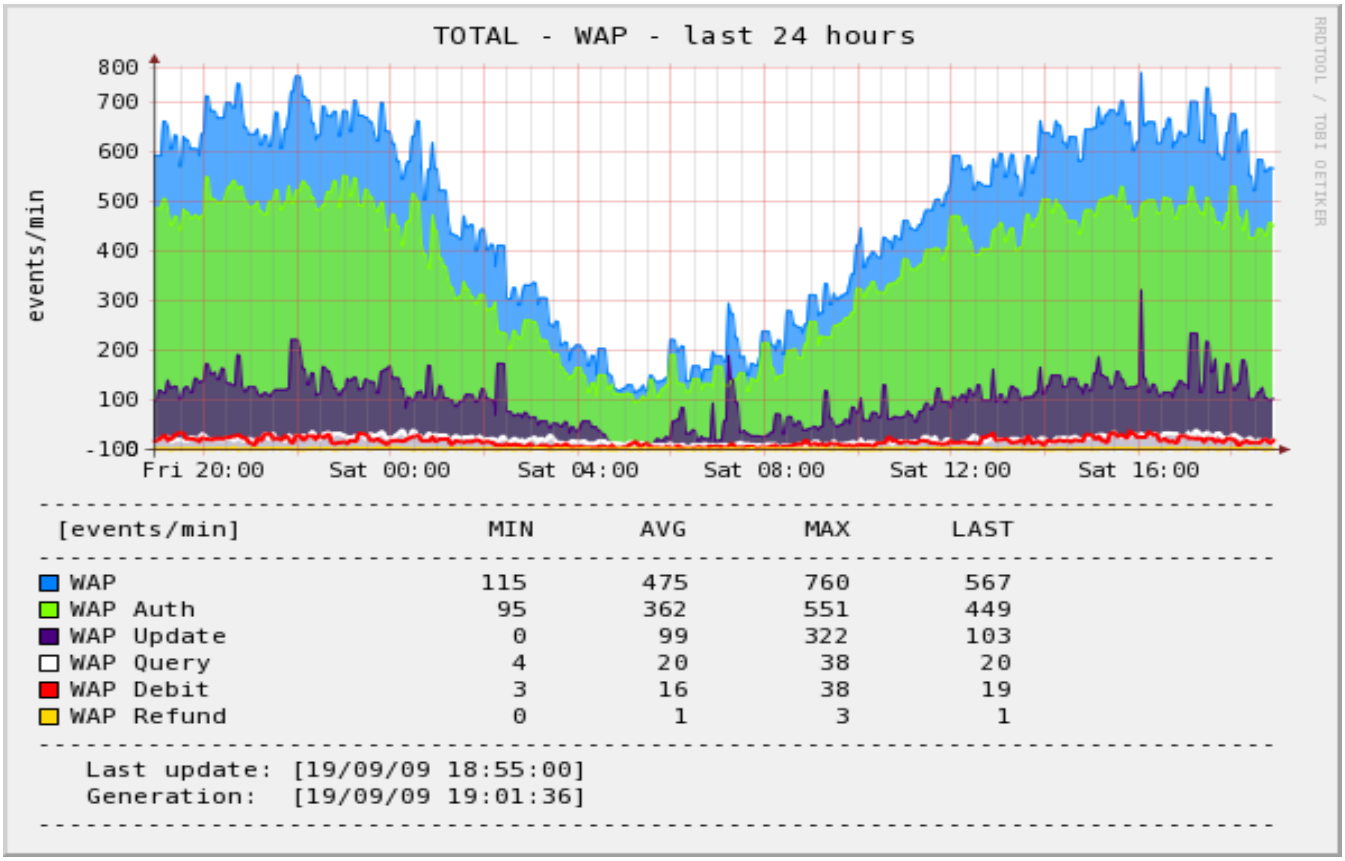


Online Chess Club



RRDTool

See *Linux* on next page



RRDTool

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Lorrin recommends is the free, Open Source TrueCrypt hard disk encryption software (see Linux Software of the Month in this issue). I spent most of the meeting at the PC Clinic in the OLLI Annex, where the crew helped several members remove malware infections and Microsoft Windows registry problems from their PCs, and securely erase data from a hard disk.

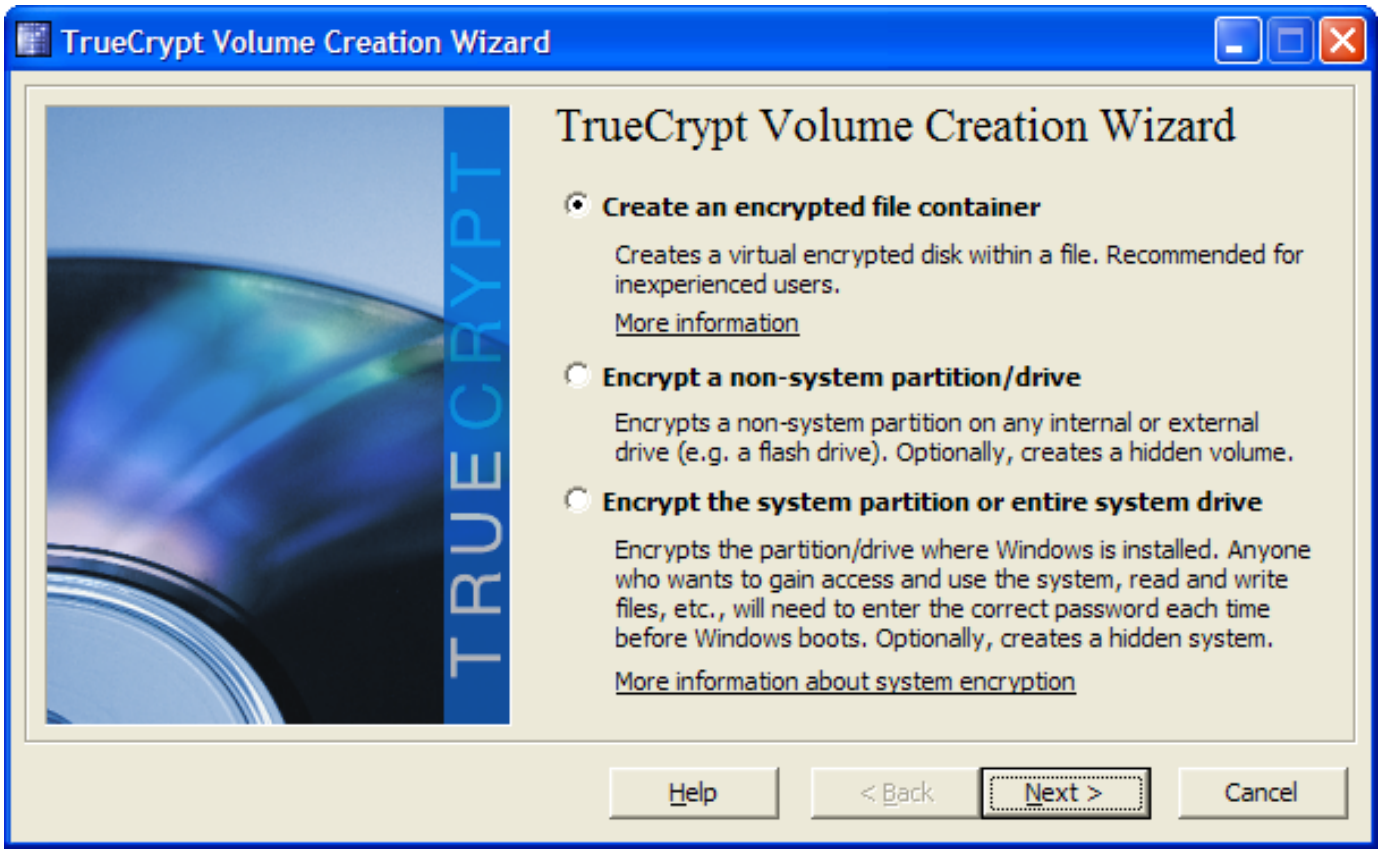
I look forward to seeing you at WAC meetings in 2011!

Reminder: Annual Election at the January Meeting

WACUG's Board of Directors election will be held at the January 22nd Annual Meeting. The Board shall consist of four members, each individually elected by a majority vote of corporation members attending the Annual Meeting of the corporation and not more than 10 others as may be elected from time to time by majority vote of the Board. The four board members elected by vote of the corporation members shall be the President, Vice President, Treasurer, and Secretary. You should have already received your email ballot if you are eligible to vote.

Candidates for election: Anyone wishing to run must advise Nominating Committee Chairperson, Mel Mikosinski <melvin22003(at) aol.com> no later than 11 December 2010. Mel and Jim Brueggeman will be our election commissioners. Ballots will be emailed to members, with instructions for their return. Members wishing to be considered for the 10 indirectly elected board positions should contact Mel.

TrueCrypt Screenshots



WACUG Meeting, January 22, 2011

Our next meeting will be held on January 22nd, (4th Saturday) at OLLI, 4210 Roberts Road in Fairfax. Please join us immediately following our presentation for a pizza, drinks and snacks party! We'll be celebrating two successful years of joint meetings with our OLLI PC User Group partners.

For many years, our meetings have included training sessions from CDs on a variety of hard disk maintenance and backup topics. In July of 2009, we had a webinar presentation by the author of these offerings. Now, for the first time, we're able to have Gene Barlow visit us live, and in person, with a presentation entitled:

Organizing Your Hard Drive and The Best Backup Plan to Protect your System from Failure

Acronis just released a new version of their partitioning product, Disk Director 11 Home, now with support for the Windows7 OS. With the large terabyte hard drives we have today, the need to set up & organize your hard drive is essential in order to take advantage of the additional space. It can be done very easily with Acronis Disk Director 11 Home.

Acronis True Image Home 2011, new release just announced in August, is their backup and recovery product. This product provides the maximum flexibility to ensure that your computers' hard drive is adequately protected and can recover from any unforeseen events, such as hard drive failures, viruses or unstable software downloads. By having & implementing a well thought-out Backup and Recovery Plan, you can put your system together again fairly quickly, instead of days or weeks. This is an important topic that every PC User should implement on their computer.

The combination of one or both of these excellent hard drive utilities will give you the power to Organize Your Hard Drive for data safety in the event of a drive crash and Protect Your Hard Drive in case of a system failure.

Gene and Linda Barlow represent Acronis Software to the user group community. Gene has been a presenter in the user group community for over 28 years. For many years he managed IBM's user group support organization and has been called the Father of PC User Groups. Now retired, Gene started his own company called User Group Relations (www.ugr.com), providing support to the user group community for the software companies he represents. He is an informative and easy to understand presenter. Don't miss this important presentation.

Microsoft vs. OpenOffice.org — Office Suite Standoff

By Nancy DeMarte, Columnist, Office Talk, Sarasota PCUG, Inc., FL
January 2011 issue, Sarasota PC Monitor
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ndemarte (at) Verizon.net

An office suite is a software product that includes a group of programs which perform typical office functions; that is, creating and working with documents, spreadsheets, presentations, and databases. Some suites include specialized programs like email or calendars. There are many office suites available, such as Corel's WordPerfect Office, Lotus Symphony Suite by IBM, and ThinkFree3. Among the best known suites are Microsoft Office and OpenOffice.org.

My original intention this month was just to compare features and compatibility between Microsoft Office and OpenOffice.org. I installed OpenOffice.org on my computer and have been testing it against my familiar MS Office for several months. In researching the history of the two suites, however, I stumbled across a story that I felt needed to be part of this article. Let's start with that.

History

Microsoft introduced its Office suite in 1992 with Office 3.0. It included Word, Excel, PowerPoint, and Mail (later to become Outlook). Since that time, the suite has expanded to MS Office 2007, which comes in eight versions that include from 3 to 13 programs and runs on both Windows and Mac platforms. MS Office 2010, its newest suite, has reduced the versions to three, including 4 - 7 programs. Because it is a commercial product with a profit goal, MS Office is expensive, although non-profits can get substantial discounts through websites like TechSoup, and businesses can get deals on volume licensing. Office 2007 and 2010 are full-featured suites with frequent updates and great customer support and security.

OpenOffice.org has a different kind of history. The origins of OpenOffice.org (OOo) began in Germany in the mid-1980's with a suite called Star Office, created by the

Office Suites continues next page

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Star Division Company. It ran on several platforms, including Windows 98 and NT, Solaris, Java!, and Linux. In 1998, Star Office version 5.0 was offered free to users. The next year Sun Microsystems purchased Star Division, mainly to get free software for its thousands of employees and to compete with Microsoft.

In 2000 Sun first offered the source code for Star Office 5.2 free over the Internet. In October, the new OpenOffice.org website went online both as a free downloadable office suite product and a collaborative project. Anyone could participate in improving the suite by submitting ideas or code. OpenOffice.org immediately became popular; the open philosophy was embraced by software developers around the world. By 2005, the free suite had reached 20 million downloads and over 150,000 registered members. It was a David and Goliath situation: big corporation versus the little guys.

All this time Sun had also continued to market its commercial office suite, Star Office, for a nominal cost to businesses, but free to educators. In January 2010, the large company Oracle bought Sun Microsystems and acquired the OpenOffice.org brand. Before that year was over, Oracle had stopped making Star Office free to educators and had introduced a new commercial product, Oracle Open Office (standard version for $49.95 for 5 users or and enterprise version for $90.00 for 25 users). Oracle is planning to offer its own office suite soon, an online product called Cloud Office, using Java FX and open document format, but not based on OOo code. It will be competing against the new rash of "cloud" office suites, such as Google Docs and Microsoft's Web Docs on SkyDrive.

As 2010 ends, the OpenOffice.org website remains intact; the suite is still a free download. But some Sun developers and many OpenOffice.org contributors are unhappy about changes that Oracle has made and worried that the company will soon remove "free" and "collaborative" from the OpenOffice.org vocabulary. Late in 2010 a new organization, this group formed the Document Foundation (TDF), to keep the open philosophy alive. They are working on a new office suite, LibreOffice, which is now offered for free download in beta. Its final version, based on the OOo code, is scheduled to come out in early 2011 with sponsorship from Novell, Red Hat, and IBM. How all of this drama will impact OpenOffice.org as a product is unclear. But the little guys are again making a stand against another Goliath.

Feature Comparison

MS Office clearly beats OpenOffice.org in features and formatting options, especially those introduced with Office 2007, such as themes, Quick Parts, picture styles, Word Art, and content controls. Office 2007 offers encryption, more templates and an extensive Help system. It also has the new ribbon interface, whereas OpenOffice.org uses menus like MS Office 2003.

OpenOffice.org includes the common programs found in an office suite plus some interesting features such as font effects, backgrounds, and sounds. It is a solid office suite, especially for home and small business. Its advantages over Microsoft Office are cost (It is free with an unlimited number of installations.), its ability to work with Linux and many other operating systems besides Windows, and its open philosophy. OOo runs a bit slower than MS Office, but takes up less disc space. Because it is a collaborative, it issues fewer updates and has fewer support options, but it also is less frequently attacked by malware. Even if you have never used an office suite, you can download this efficient little suite at www.OpenOffice.org and use it without much instruction.

Compatibility

As a Microsoft Office user, I was interested in how easy it would be to save files between the two suites since I have hundreds of Word documents and Excel spreadsheets. When I created a feature-filled Word 2007 document (.docx) and saved it as an OpenOffice.org file (.odt), it did save, but there were changes in margins and line spacing, and I lost all the Word 2007 features. When I created a document in OpenOffice.org (.odt), it would not save as a Word 2007 document (docx). I had to save it as a Word 2003 document (.doc), and then open it with Word 2007 in compatibility mode.

I concluded that it's best to choose one office suite and stick with it. In short, if you are a current MS Office 2007 or 2010 user, you will probably be happier staying where you are. If you are new to office suites, by all means give OpenOffice.org a try.

21st Century Photos

By Wil Wakely, President, Seniors Computer Group, California
January 2011 issue, Bits and Bytes, The Official Electronic Newsletter of the Seniors Computer Group
www.SCGsd.org
wilw(at)adnc.com

The advent of the digital camera, about 1990, marked the demise of the film camera, much to the displeasure of Eastman Kodak. Digital technology allows the average amateur photographer the ability to manipulate the image very easily with his computer, even better than the skilled dark-room professional of yore.

Each digital pixel is a tiny area of the picture, so the more pixels available, the more detail the picture contains. Modern cameras have 10 megapixels or more (10 million pixels) which provide pictures almost as detailed as film, a difference hardly discernable by the naked eye. Also, the picture is shown on the LCD display on the back of the camera so you know immediately whether the shot is what you wanted. Automatic focus and exposure settings are welcome features of modern cameras and eliminate the confusing settings of film cameras. Small "Point-and-shoot" cameras now take great pictures with no operator skill required.

Even cell phones now come with built-in digital cameras.

Unlike film cameras, many more pictures are taken since the cost of each digital image is zero. As a result, the size of photo albums has exploded with the greater number of photos being stored on DVDs for posterity, or on a free Internet web site to be shared with friends.

There are now many computer programs available for modifying the image, from simple ones like "Picture-it" to powerful ones like "Photoshop," with many others in between. Perhaps the most common one is Picasa, a free program from Google. It provides common photo fixes like cropping, brightness and contrast adjustments, along with many other more subtle controls. It also categorizes and stores your photos for rapid retrieval. Be sure to download this marvelous program from the Google web site.

We can now digitize older photos so they can be modified and stored with ease. There are many scanners on the market to convert your photo to a digital file, whether it is from a photograph, 35mm slide, or film. A scanner will also let you convert a page of text to a digital file that a word processor can read and edit. A separate program called an OCR (Optical Character Recognition) is necessary to make the conversion from image to computer readable text file. These programs usually come bundled with the purchase of a scanner. A word of caution: scanning can be a very slow process so plan to do it while watching TV. A bevy of commercial scanning companies will convert your photos for prices ranging from five cents to fifty cents each, depending upon volume. Once they are in digital form, you can modify them at will and store them on DVDs.

Another word of caution: digital image files (JPG) can be huge and sending them by email can cause you to lose a lot of friends when their computer is tied up for a very long time while the large file is being received. Several programs are available that will reduce the file size suitable for email (<200KB) without losing much quality. One free program you can download that does this is called IrfanView: terrible name – wonderful program. Ain't technology great!

Happy New Year from the WACUG Board of Directors!

 Monthly Circulation: 60

The 2010 WAC Board of Directors, SIG Leaders and other Volunteers

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Vendor Contact:..... Chuck Roberts, 703-876-9787, chrobe(at)verizon.net
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The Cursor provides news, commentary and product information to members of the Washington Area Computer User Group.

Send membership inquiries and address changes to: membership@wacug.org
Send article submission and reprint requests to the Editor: cursor@wacug.org

WAC Membership Application / Renewal

Dues are collected on an Annual basis and includes: downloadable links for WAC's monthly newsletter, ***The Cursor***, in PDF format

Individual/Corporate/Family Dues: $25.00
$5 annual surcharge for delivery of the Cursor by 1st Class mail

Remit payment in person at the WAC Membership table on meeting day, or by mail to:
Washington Area Computer User Group
30 Fendall Ave.
Alexandria, VA 22304-6300
Make checks payable to WAC. Please do not send cash by mail. ***Thank you for joining WAC!***
Complete if you name and address do not appear on the reverse side. Include E-mail Address
Name: _____
Street: _____
City: _____
State: _____ Zip: _____
Phone: ( ) –

E-mail: _____

Membership Survey: Help us to help you by completing this survey.
List the computer systems you own / use (in order of preference)

Operating System(s): _____
Modem(s): _____
Printer(s): _____
Other Hardware: _____
Favorite Software: _____
Connection: (circle one) Dial-up or Broadband

Circle Your Interests:

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

Next WAC Meetings: • Feb 19 • Mar 19 • Apr 16 • May 21 • Jun 18

Call (703) 370-7649 for the latest meeting information or Visit our Web Site at:

http://www.wacug.org

All Meetings are held at the *Osher Lifelong Learning Institute* 4210 Roberts Road, Fairax, VA. Call our help line or visit our web site if you need additional information.

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January 14, 2011

Label

Malware, Viruses, Trojans Defined

by Ira Wilsker

WEBSITES;
http://en.wikipedia.org/wiki/Malware
http://www.ilovefreesoftware.com/08/featured/definiton-of-various-security-related-terms.html
http://lifehacker.com/5560443/whats-the-difference-between-viruses-trojans-worms-and-other-malware
http://en.wikipedia.org/wiki/Computer_virus
http://en.wikipedia.org/wiki/Computer_worm
http://en.wikipedia.org/wiki/Trojan_horse_(computing)
http://en.wikipedia.org/wiki/Rootkit
http://en.wikipedia.org/wiki/Backdoor_(computing)
http://en.wikipedia.org/wiki/Rogue_antivirus
http://us.trendmicro.com/imperia/md/content/us/trendwatch/researchandanalysis/12_december_2010_threat_roundup__010711_.pdf

In the past week, I was called upon four more times to clean malware off of infected computers. One user had a major name brand antivirus program installed, running, and updated and could not understand how the malware had penetrated his antivirus software and contaminated his computer. He had purchased the antivirus software last fall from a big box electronics store based on the recommendations of a salesperson. He had been told that this particular brand of security software was the best as it was their top seller, and that antivirus software was all that he really needed. Based on that recommendation he plopped his hard earned money on the counter, went home, installed it, updated it, and blissfully surfed the internet, opened email attachments, downloaded software and music, and had just a jolly good time online until his computer gradually slowed to a crawl, and friends informed him that they were receiving spam emails from him. This user was perplexed, as his antivirus software was running, and indicated that it was updating several times a day. He just could not understand how 90 different malware programs had infected his computer. His problem started when he purchased inadequate security software; while the product he bought was excellent at protecting his computer from viruses, and some Trojans and spyware, it did not offer the all-inclusive protection of the comprehensive security suite offered by that publisher (and others as well) that would have only cost him a few dollars more.

There is a common misconception in user circles that viruses are the primary computing threat, as users have had heard about viruses for several years. Today, viruses are present, but a relatively minor threat in terms of prevalence. I did a quick analysis of the most common new threats recently listed by TrendMicro, and found that viruses only made up 4% of the new significant threats to our computing security. On the other end of the spectrum, Trojans made up 42% of the commonly seen new threats, worms were at 14%, backdoors at 14%, web based threats were at 6%, java script malware was at 6%, 4% were hacking utilities, 2% adware, and about 8% other threats. It is obvious that protective software that protects the computer primarily from viruses is failing to protect the user from the majority of contemporary threats; it is precisely this fact that led to this user's infected computer, despite his premium quality antivirus software. A lot of users have a misconception about the common threats in circulation, believing that they are generically all viruses, but, as I saw in this case, this blissful ignorance may lead to a computing nightmare.

While not necessary to use a computer, it would likely be beneficial for computer users to be aware of the different threat groups that can impact our computing. According to Wikipedia, "A computer virus is a computer program that can copy itself and infect a computer." Many viruses attach themselves to legitimate programs or data files on the infected computer. The fact that a computer virus can copy itself to infect other computers is what makes it different from other types of malware, for which viruses are commonly confused. Viruses can be spread through digital media (USB drives, CD or DVD discs, and floppy discs) or through network connections that the virus can use to copy itself to other attached computers. Once a virus has infected a computer it may perform a variety of tasks as programmed by its author. Viruses may damage the data on a hard drive or degrade the performance of the computer. Some of the viruses are stealthy and their effect may not be noticeable by the user, as the viruses do their damage in the background. Some viruses are functionally benign, other than they reproduce themselves countless times on the infected hard drive, until they consume all of the free space on the hard drive.

Computer worms are a malicious computer program that wriggles through computer networks sending copies of itself to other computers attached to the network. Most worms are free standing programs, and are commonly programmed to spread themselves through the network without any action by the user. Most worms have an explicit nefarious function such as deleting files on the infected computer, or encrypting critical files, only releasing them after an extortion payment is made to the cyber criminal. Some worms open a backdoor into the computer that will enable the creator of the worm to take remote control of the computer, converting the computer into a "zombie" under his control, which can be used to

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generate revenue for the originator of the worm by sending spam mail from the infected computer, with the spam fees collected going to the author of the worm. Some worms are used to create a zombie network of computers, also called a "botnet", where the compromised computers can be used to launch directed cyber attacks on other computers or networks, in an act of cyber terrorism.

For those who are aware of the epic "Helen of Troy" of Greek mythology, the term "Trojan Horse" means an object looks like it serves one purpose, but really has an unobvious, usually nefarious, purpose. Cisco, the networking company, describes a Trojan as, "It is a harmful piece of software that looks legitimate. Users are typically tricked into loading and executing it on their systems". In cyber speak, a Trojan Horse, typically shortened to the simple moniker "Trojan" is a program that appears to have a useful function, but after being installed by the user, the Trojan may be used to perform other undesirable functions. Some Trojans are money makers for their authors because they place paid (and usually unwanted) pop up advertisements (Adware) on the infected computer, redirect web searches, or shift online purchases to a seller not of the buyer's choice without his knowledge. Some Trojans are keyloggers, which are commonly used for identity theft, or to give unauthorized users access to a computer system. Trojans are often spread through intentionally downloaded software, surreptitiously bundled with another often legitimate program, from email attachments, and purloined websites with executable contact (ActiveX is sometimes used for this). Some Trojans can be installed on the target computer by way of code written in Java, or a Java script, that when executed, implants the harmful content on the victim computer.

One of the more recent and costly types of malware to attack our computers is generically referred to as "Rogue Antivirus Software", which is usually implanted on the victim's computer by a Trojan. There are thousands of these rogue programs in current circulation, infecting millions of computers at any given time. Rogue antivirus is sometimes installed by the user using "social engineering" tactics, which tricks the user into clicking on something that installs the rogue software. Some of the common lures to ensnare the user into loading rogue software on the computer are offers for free screen savers, toolbars, utilities to play specific video formats (often attached to an email), sham online security scanners, contaminated PDF files, insecure web browsers, and other vectors. The common thread of this rogue software is an authentic looking popup that informs the user that his computer is (falsely) infected with hundreds of viruses and Trojans, and for a fee it will clean the computer. These popups which will not permanently close will typically hijack the computer, destroy the installed legitimate security software, prevent access to online services that can kill it, prevent cleaning utilities from executing, and otherwise take control of the computer until the user pays a fee, typically $30 to $70. This fee is to be paid by credit card or other online payment service to a website that looks legitimate, but is really a complete scam. Not just will the rogue software not clean the computer of the pseudo infections after the fee is paid, but now a cyber criminal, often in Russia, has the user's credit card information. it is not uncommon for that same credit card information to promptly be sold on illicit websites, and to have substantial unauthorized charges appear on the compromised credit card account.

While there are many other cyber threats out there, those listed above are among the most commonly encountered by users. The traditional antivirus software will protect from some of the threats listed, but not all of them; this enhanced security capability is in the purview of the comprehensive security suite, or a combination of different types of individual security utilities, and not the free standing antivirus program. this is explicitly why I currently recommend a high quality integrated security suite, rather than an antivirus program. There are several good commercial security suites available, as well as a few free security suites. Just be aware that antivirus software by itself is inadequate to protect against today's contemporary cyber security threats.

Millions of Historic Photos Online

by Ira Wilsker

WEBSITES:
http://www.mikelynaugh.com/VirtualCivilWar/New/Originals2/index.html
http://blogs.denverpost.com/captured/2010/03/18/captured-blog-the-pacific-and-adjacent-theaters
http://www.lib.byu.edu/dlib/historic_photos/
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http://www.nps.gov/anti/historyculture/photography.htm

I have always been interested in history, especially military history. Sadly, I find that most of today's college students are blissfully ignorant about history, unless it was in a fictional Oliver Stone movie, or shown on Comedy Central. Many students are oblivious to the fact that almost all major Hollywood productions are works of fiction, and that those based on historical incidents are liberally modified with "poetic license" to make them more exciting or visually pleasing, at the cost of historical accuracy. As a kid, I was always amazed how during the Saturday western matinees, the legendary Colt Peacemaker revolver could fire dozens of times without reloading, something that Samuel Colt never dreamed of, and a function that would make Dr. Richard J. Gatling proud.

While reading the text of history books, a vicarious experience is often created where the reader can only imagine what the event really looked like. In the mid 19th century, photography was in its infancy and considered a magical property. The oldest known photograph still in existence was taken in France in 1826 by Nicéphore Niépce, using a process known as heliography (sun writing), which took eight hours of exposure to record the image. During the following 25 years, photographic technology improved to the point that countless Union and Confederate soldiers were forever immortalized, and worldwide distribution of battle scenes and the aftermath of war became commonplace. The widespread international travels of early photographers has today provided us with contemporary images of days long past. If today's children and college students would just spend a fraction of their online time viewing accurate historical images, rather than keeping up with their friends on Facebook or Tweeting, then maybe they would have a greater appreciation of where we came from and how we got here. Fortunately for us today, the internet makes enormous libraries of authentic images available to all, and many of these images are so profound that just maybe they can fracture the status quo, and develop insight of the past.

The Crimean War (1853-1856) is broadly considered the first major international conflict that was photographed, the most notable Crimean battlefield photographs were taken by Roger Fenton during the spring of 1855. The best known of his photographs show the infamous "Valley of Death" made famous by the "Charge of the Light Brigade". The Library of Congress purchased 263 of the 360 known Fenton Crimean images, and has them available for viewing online at www.loc.gov/pictures/collection/ftncnw. In one famous Fenton photograph at the Library of Congress (lcweb2.loc.gov/service/pnp/cph/3g00000/3g09000/3g09200/3g09217v.jpg), the image taken in early 1855 shows the road traversed by the Light Brigade, which is strewn with thousands of spent cannon balls. The sheer volume of cannon balls on the road bears mute testimony to the horrors and carnage through which the "Gallant 600" British cavalry charged Russian forces during the Battle of Balaclava on October 25, 1854. Fenton did not show the traumatic damage that cannon balls do when they strike human flesh; those images would become common just a few years later in the United States.

Fast forward just a few years, and the people and the carnage of the War Between the States were widely photographed by many photographers. Countless photographers took individual portraits of soldiers on both sides, often proudly displaying their personal weapons; thousands of these portraits still exist today in homes, private collections, and museums. Many of these images are available for viewing online. Other photographers, the best known of which is Mathew Brady, took thousands of battlefield photographs, many of which show the grotesque carnage of the freshly killed of both sides, and the horrible wounds of those who did not immediately succumb to their injuries. Mathew Brady alone took over 10,000 such photos, many of which still exist today, many of those are available for viewing online. To many, the images taken by Mathew Brady and Alexander Gardner of the mutilated human bodies and bloated horse carcasses from the Battle of Antietam, which were

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widely presented in shows and printed in the newspapers (often as woodcuts), demonstrated the acute brutality of war. One of my favorite online collections of Civil War photographs is "Original Photographs of the Civil War" online at www.mikelynaugh.com/VirtualCivilWar/New/Originals2/index.html. This collection shows landscapes, battle scenes, executions, casualties, embalming, officer portraits, enlisted men's portraits, and other scenes, all of which clearly show a microcosm of the Civil War. Other comprehensive online Civil War collections are available for viewing at the websites of the Library of Congress and the National Park Service, as well as many local historical societies.

The settlement of the American West was documented by photographers, many using much of the same equipment as used in the Civil War. While there are many websites that display old west photographs, many of the more comprehensive collections are at university websites, including Brigham Young University (www.lib.byu.edu/dlib/historic_photos) and Washington State University (www.wsulibs.wsu.edu/masc/mascphoto.html). Some websites, such as Old-Picture.com (www.old-picture.com) have detailed collections of old photos, including Indians, early aircraft, photos from states sorted by state, historical series sorted by date, "American Life" sorted by date, and a variety of other collections.

World Wars I and II were well covered by photographers, with millions of images available online. One of my favorite collections of World War II photos is the Pacific War collection compiled by the Denver Post and online at blogs.denverpost.com/captured/2010/03/18/captured-blog-the-pacific-and-adjacent-theaters. This collection of several dozen images shows the carnage at Pearl Harbor, the battles of the Pacific, the bodies of soldiers killed in action, dramatic images of men in battle, and exciting images of aircraft and ships in action. Brigham Young University has a very personal collection of WWII photos at http://www.lib.byu.edu/dlib/wwiiheslop.

Other city newspapers have compiled extensive collections of images of local interest, many of which have national ramifications. One excellent example of a city newspaper publishing archival photos is the Columbus (Ohio) Dispatch, which has a large collection of city images online at www.dispatch.com/live/content/multimedia/history/index.html. Many of the Dispatch images are compiled in about two dozen slideshows sorted by category or event. Some of the categories include sports events through the years, Oktoberfest, state fairs through the years, holidays, sensational crimes, and other groups of images. This is an excellent way for the people of today to visually get a functional grasp of history, and how we got to today.

Today's youth, many of whom had never been exposed to the visual realities of history, should view these images. Some of the images simultaneously display both the bravery and cruelty of man (the Crimean Valley of Death images), the hideous cost in lives of war (Antietam photos), proud moments in history (Columbus Dispatch old football photos), abject horror and suffering (Andersonville prison survivors from the Civil War), innocent civilian carnage (a dead family in a car hit by bomb fragments near Pearl Harbor), and other valuable learning experiences that a person may have by viewing the images and thinking about them.

I would like to encourage all students to spend some of their Facebook and Twitter time viewing these images; maybe then they will garner a better appreciation of history.