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Contents

The Best Things in Life Are Free Lou Toracca 1
Use Tough Passwords 4
Ask Mr. Modem 5
Media Notes Bill Petitt 6
Let's Never Forget the First King: DOS Rick Smithr 9
Install Those Updates Marjie Tucker 10
If Your Computer Gets Wet … What? Bob Schwartz 12
The Computer as Crime Scene Michael Gemignani 12
Broadsides Ron Broadbent 14
FastStore Image Viewer 3.9 Charlotte Brown 15
Beneath the Surface: Jerry Goldstein 17
Foxit Reader Sharon Walbron 17
Is It Time to Switch to 64 Bit Windows? Brian K. Lewis, PhD 18
Googlepedia George Harding 20
News You Can Use 21
Society News 22

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The Best Things in Life Are Free

by Lou Torraca
President, The TUG, HI

The moon belongs to everyone,
The best things in life are free.
The stars belong to everyone,
They gleam there for you and me.

The flowers in spring, the robins that sing,
The moonbeams that shine, they're yours, they're mine.
And love can come to everyone,
The best things in life are free.

So goes the song, written in 1927, way before PCs were all the rage! Well, guess what, some of the best programs and utilities for your PC are also free, yup, I said free! I have been asked a lot of questions recently about some of them so I decided to do a list of the ones I use plus others I know about and have been tried and recommended.

Thinking about a new computer? Are you a bit techie? If so, you could save yourself some money as well as have the satisfaction of putting your own together by yourself. Not so inclined? You can still save on programs and utilities. Without further ado, here is a list for you to consider.

First for the techie who wants to put together his own PC—an operating system that is totally free.

What is Ubuntu?

Ubuntu is a community developed operating system that is perfect for laptops, desktops and servers. Whether you use it at home, at school or at work Ubuntu contains all the applications you'll ever need, from word processing and email applications, to web server software and programming tools.

Ubuntu is and always will be free of charge. You do not pay any licensing fees. You can download, use and share Ubuntu with your friends, family, school or business for absolutely nothing.

New versions are released every six months. That means you'll always have the latest and greatest applications that the open source world has to offer.

Ubuntu is designed with security in mind. You get free security updates for at least 18 months on the desktop and server. With the Long Term Support (LTS) version you get three years support on the desktop, and five years on the server. There is no extra fee for the LTS version, we make our very best work available to everyone on the same free terms. Upgrades to new versions of Ubuntu are and always will be free of charge.

Everything you need comes on one CD, providing a complete working environment. Additional software is available online.

The graphical installer enables you to get up and running quickly and easily. A standard installation should take less than 25 minutes.

Once installed your system is immediately ready-to-use. On the desktop you have a full set of productivity, internet, drawing and graphics applications, and games. Pretty neat isn't it? Download: http://www.ubuntu.com/

Now for everyone else, here are some really excellent programs and utilities you can have at no cost. (BTW, many of these free programs and utilities have a donation button where you can voluntarily help the developer with updates, new apps, etc. I suggest you try the app first and then if you really like it and decide to keep it, you can make a donation, however this is strictly a voluntary thing.)

First is the number one priority … anti virus. I've used both AVG and Avast for a long time and, knock on wood, have never had a problem. Both also have pay versions that include lots of other stuff, but I'll be listing all those types of apps as we go along.

To download AVG: http://free.avg.com/download-avg-anti-virus-free-edition

To download Avast!: http://www.avast.com/eng/download-avast-home .html

Both of these work well and provide you with protection from viruses, but do yourself a favor and read the information that both provide and follow the instructions—this applies, of course, to all programs, apps

and utilities!

Next, you need a firewall and the most popular and the one I use is Zone Alarm which for a free app, provides a lot of flexibility and prevents the bad guys from getting into your computer as well as making your computer invisible to anyone on the internet. To download the free version: http://www.zonealarm.com/security/en-us/zonealarm-pc-security-free-firewall.htm

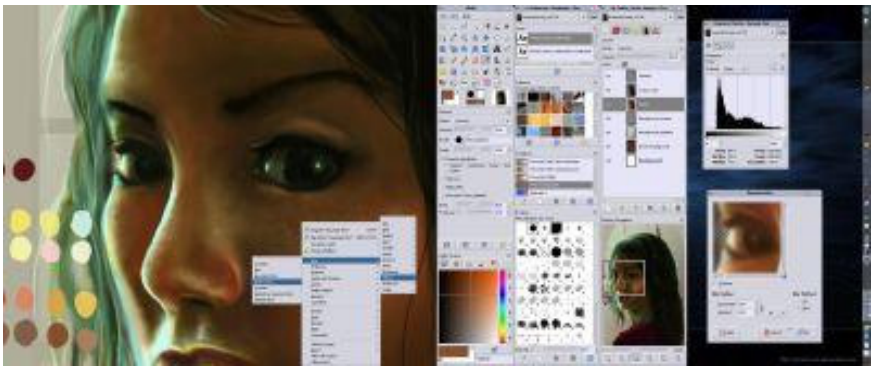
10 years of malware experience combined in one dynamic application. Ad-Aware–Anniversary Edition offers radically improved performance and efficiency, along with comprehensive malware protection. With real-time monitoring, threat alerts, and automatic updates you can rest easy knowing that you are protected. Download: http://www.lavasoft.com/products/ad_aware_free.php

SpyBot-Search and Destroy complements Ad-Aware. …if you see new toolbars in Internet Explorer that you didn't install, or you experience other problems, you may have spyware. This program helps prevent marketing companies from gathering information about your Web surfing and purchasing habits, and selling it to advertisers. Download: http:// download.cnet.com/Spybot-Search-amp-Destroy/3000-8022_4-10122137.html

Windows Defender is a free program that helps you stay productive by protecting your computer against pop-ups, slow performance and security threats caused by spyware and other potentially unwanted software. All 3 of these programs work to keep your PC running smoothly. I use them and they definitely make a difference.

Now you have your PC pretty well protected, how about productivity apps? No problem; OpenOffice.org 3 is the leading open-source office software suite for word processing, spreadsheets, presentations, graphics, databases and more.

It is available in many languages and works on all common computers. It stores all your data in an international open standard format and can also read and write files from other common office software packages. It can be downloaded and used completely free of charge for any purpose. Sounds like the big guys Office? It does and it also does pretty much everything that other guy does! Download: http://download.openoffice .org/



Next, a free program that rivals Adobe Photoshop□cand we know what that costs!

The name is a bit misleading but the program is spectacular! GIMP can be used to process digital graphics and photographs. Typical uses include creating graphics and logos, resizing and cropping photos, changing colors, combining images using a layer paradigm, removing unwanted image features, and converting between different image formats. GIMP can also be used to create

animated images using an improved layers method. The full capabilities of the GIMP extend much further, however, and include advanced image editing, manipulation, and professional graphics creation. It is often used as a free software replacement for Adobe Photoshop, which is the dominant bitmap editor in the printing and graphics industries. Download:
http://www.dphotojournal.com/download-gimp-photo-software/

To keep your system running at its best, CCleaner is a freeware system optimization, privacy, and cleaning tool.

It removes unused files from your system— allowing Windows to run faster and freeing up valuable hard disk space. It also cleans traces of your online activities such as your Internet history. Additionally it contains a fully featured registry cleaner. But the best part is that it's fast (normally taking less than a second to run) and contains NO Spyware or Adware! Download: http://www.ccleaner.com/ While you're there, I'd also recommend downloading their defraggler, another app which will help keep your system running smoothly. You can schedule daily, weekly or just manual defrags…it's pretty easy to use and does an excellent job.

Last, but not least, a program I can't live without. Yankee Clipper III, a powerful Windows clipboard extender/memory-now in its third generation. Handles Pictures, Richtext, URLs, etc—any size. Features printing, drag and drop, optional permanent storage of clippings. Familiar "Outlook" interface. Just a couple of its features: Saves past 200 text and RTF, 20 BMP and Metafile, and 200 URL clipboard entries. Has the ability to save and re-use "boilerplate" clippings. Simply right-click on the item and select "send to boilerplate." Unlimited boilerplate collections can be created.
Download: http://www.intelexual.com/products/YC3

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Also

Paint.NET is free image and photo editing software for computers that run Windows. It features an intuitive and innovative user interface with support for layers, unlimited undo, special effects, and a wide variety of useful and powerful tools. An active and growing online community provides friendly help, tutorials, and plugins.

It started development as an undergraduate college senior design project mentored by Microsoft, and is currently being maintained by some of the alumni that originally worked on it. Originally intended as a free replacement for the Microsoft Paint software that comes with Windows, it has grown into a powerful yet simple image and photo editor tool. It has been compared to other digital photo editing software packages such as Adobe® Photoshop®, Corel® Paint Shop Pro®, Microsoft Photo Editor, and The GIMP.
http://paint.net/

There is also Sumo paint, a program that invites you to release your inner Picasso and have fun. It's user friendly and has lots of cool features. http://sumopaint.com/web/

Use Tough Passwords but Make Them Easy to Recall

You can see whether your current passwords are rated "strong" by using Microsoft's online Password Checker. I bet you'll be unpleasantly surprised by the results.

Test the strength of your passwords by entering them in Microsoft's Password Checker.
http://www.microsoft.com/protect/yourself/password/checker.mspx

Don't take your passwords to the grave

http://www.marketwatch.com/story/you-need-an-online-estate-plan-200972095500

Vini, Vidi, Tweeti

(*I came, I saw, I Tweeted*)

I would like to share a few thoughts with you this month about an activity that clearly marks the end of civilization as we know it: Twittering. *The New York Times* heralded Twitter as "one of the fastest-growing phenomena on the Internet." My doctor tells me to be leery of fast-growing anythings, so perhaps that's part of my concern. That being said, let's start with the basics:

Twitter is a free service predicated on the question, "What are you doing?" By composing short, 140-character messages, you can share with the world that you are standing in line at the Department of Motor Vehicles, eating a tuna sandwich, or watching your dog chase its tail. If compulsively posting such digital drivel is not enough of an incentive to get out of bed in the morning—which is, of course, another event you'll want to share with others—you can also follow the mundane activities of other peoples' uneventful lives—including neuron-numbing celebri-twits. At no time in the history of interpersonal communication has the phrase "Get a life" been more appropriate.

To get started with Twitter, go to twitter.com and click—well, "Get Started." Provide the information requested and in seconds you will be twittified. Congratulations! You passed Twitter's rigorous admissions screening. During the sign-up process, you will be asked to provide your email address and password, which are used to import your contacts. If you're less than enthusiastic about that prospect—as well you should be—obtain a free Gmail (www.gmail.com) or other disposable address and use that instead.

Next, create your personal profile in which you can reveal as much or as little about yourself, as you wish. Hint: Less is more. The final dreadful step is to build your network by importing email lists, contacts from Instant Messaging services, or you can locate unsuspecting friends and family members with the search engine at search.twitter.com. Search by entering your interests, quirks, fetishes and peccadilloes, which will produce a list of individuals who share similar disturbing characteristics that you can then elect to follow.

"Following" someone is akin to adding a person to a contacts list or as a Facebook friend, except the twirp (Twitter relationship) is a one-way street. Nobody sees your updates unless he or she chooses to follow you. I quickly discovered that lemming-like individuals will start following you shortly after you start following them. Creepy? Absolutely.

Once you begin stalking—excuse me, following others, their updates (called "tweets") will appear on the Web or in a Twitter feed to one or more designated devices. In the likely event someone gets on your nerves by posting too many senseless tweets (an oxymoron if ever there was one), you can remove or block the serial tweeter. There are many ways to post your own tweets, including logging into twitter.com and entering your life-altering updates into the field provided. Third-party applications are available to streamline this process and eliminate the need to visit the site on a recurring basis.

To thoroughly research this sociological phenomenon, I immersed myself in the twit culture (and I use the term loosely) for a period of two months. As a professional journalist for more than 25 years, I cannot adequately articulate the pride I felt as I typed ("twyped," in terminally cutesy TwitterSpeak), "Lilly coughed up a fur ball." I'm sure I'm not alone in thinking, "Pulitzer for Mr. Modem, at last!"

On the plus side, I found Twittering to be harmless—if you don't count the liquefaction of my frontal lobe into cerebral gruel. (A condition, some might argue, that predates my foray into the Twittosphere.)

As Twitter itself enthusiastically chirps, "With Twitter, you can stay hyper-connected to your friends and always know what they're doing," which begs the question, "Who cares?" During my Twitterfest, I learned that GomeZorb had the flu and stayed home from work—apparently to Twitter (a phenomenon known as social notworking), NeoPunk misplaced his iPod, and DrizYChick made oatmeal. Could it be any more exciting?

Why anybody would feel compelled to share the excruciatingly tedious minutia of their life is bewildering; why anybody would want to read it is even more puzzling. I am willing to concede, however, that perhaps I'm failing to grasp the bigger picture, so this is your opportunity to set me straight: Are you a-twitter over Twitter? If so, what positive impact has it had on your life, and if you have any heartwarming, inspirational, or socially redeeming tales of the tweet, email me at MrModem.Feedback@gmail.com. Deteriorating minds want to know.

For plain-English answers to your questions by email, plus great computing tips, subscribe to Mr. Modem's award-winning newsletter. Subscribe using Promo Code 1146 and receive a free month with your six-month subscription (28 issues!) To view a sample issue or subscribe, visit www.MrModem.com.

Media Notes

by Bill Petitt

Southeast Virginia Computer Group

Lots of Windows 7 news around the net these days. Like many of you, I've been using it for several months starting with the first beta candidates last year. If you haven't climbed aboard yet and want to try, check the last entry of my column and have at it.

Microsoft confirms Windows 7 family pack

Microsoft confirmed July 21st that it does plan to offer a "family pack" for Windows 7 that can be used on up to three PCs.

The software maker acknowledged the move as part of a blog entry. Microsoft will Sell the Windows 7 Family Pack with three licenses for $149.99 and the Windows 7 Anytime Upgrade for $79.99 to $139.99. Microsoft's Brandon LeBlanc said the Family Pack has extra features for home file sharing. LeBlanc also said WAU will let users upgrade to higher Microsoft Windows 7 editions as needs evolve over time.

The move was hardly a surprise, after Microsoft included references to the family pack as part of licensing terms in a test version of Windows 7 that leaked onto the Internet.

Windows users have been calling for a family pack since before Windows Vista, and Apple has. With Vista, Microsoft had a promotion for a time that allowed those who bought a copy of the Ultimate edition to buy up to three copies of Home Premium at a discount. Apple's family pack covers up to five machines.

Earlier in June, Microsoft ran a deal where people in the U.S. could order Windows 7 Home Premium for $49 and Professional edition for $99, but that deal has ended. A similar promotion in Europe is still going on, although it has sold out in some places. Those who bought Windows Vista Ultimate complained that so far Microsoft has yet to offer a discounted way for them to move to Windows 7 Ultimate, feedback that Microsoft has said it is taking under consideration.

Murdoch to Web users: Oh, yes, you will pay

In a move that makes him seem a bit like Dr. Evil wanting to be paid *one hundred billion dollars* for Austin Powers' ransom, News Corp. He will charge for all the online content associated with the newspapers and television stations he owns. It's a goal that some in the digital-media space will bill as ludicrous—and some as inevitable.

The Financial Times reported the news in early August, adding that Murdoch had spotted "some good signs of life" in the battered advertising market. He's already got most of *The Wall Street Journal*, which News Corp. purchased two years ago, behind a pay wall. But he also owns the rest of Dow Jones and Company, the Fox television and film empire, the *New York Post*, and the U.K.'s *The Times*. News Corp. is also a partner in Hulu, the joint video venture that offers a big chunk of Fox television content (as well as NBC and ABC) for free on the Web.

Robert Iger, the CEO of new Hulu partner Disney, said at a conference last month that he does not believe Web content needs to be offered for free, and that consumers will be willing to pay for it.

"We intend to charge for all our news Web sites," Murdoch said, according to the *Financial Times*. "If we're successful, we'll be followed by all media."

In late 2007, well before the market collapse last fall, Murdoch had said pretty much the opposite, claiming that a free and ad-supported model would be more beneficial than a subscription model for *The Wall Street Journal*.

Presumably the new paid-content strategy wouldn't apply to News Corp.'s digital-only assets, like social network MySpace.

What Do You Need to Do to Get Ready for Windows 7?

Maybe you're one of those cutting-edge types who's chomping at the bit to install Windows 7 when it's released. Maybe you're already using the release candidate, and want to know what you should do when the final version comes out. Maybe you're planning to get a new computer for Christmas, and anticipate buying one with Windows 7 installed. Maybe you're perfectly happy with your Vista machine at home, but your company is one of the 40 percent or so that are planning to upgrade to Windows 7. Whatever the situation, you might be wondering now whether there's anything you need to do in order to get ready for the new OS.

If you plan to keep your current hardware, the first thing to do is make sure it has the specs to run Windows 7. If it's running Vista, you can be pretty certain that it will. If it's running XP or Linux, check out the system requirements checklist on the Microsoft website:

http://windows.microsoft.com/systemrequirements

If you plan to use Windows Virtual PC with XP Mode on Windows 7 (which allows you to run XP applications that aren't compatible with Windows 7), be aware that you'll have to have a processor with hardware virtualization capabilities. That means Intel VT or AMD-V. Even if the processor itself is capable, some hardware vendors ship some of their lower end computers with virtualization turned *off and* they don't provide any way to turn it on. And if your computer does support VT/AMD-V, it will probably be turned off by default and you'll need to turn it on in the BIOS (Setup) settings.

As with Vista, if you want to use the Aero glass GUI, you'll need a video card that's capable of it. That means a card that supports DirectX 9 or above with a WDDM driver.

If your hardware passes the test, next you need to consider what operating system you're running now. If you're using Vista with SP1 or SP2 installed, you have the option to do a direct in-place upgrade, installing Windows 7 over the current OS so that you don't have to reinstall your applications. It's the fastest and easiest way to get Windows 7. In the past, I always recommended a clean installation, but I've tried in-place upgrades of Vista to Windows 7 on several machines and have been pleasantly surprised. I haven't yet experienced any of the problems that used to plague upgrades. That said, I still personally prefer a clean installation.

If you're running XP, an even older version of Windows or a non-Windows OS, or if you're running Vista and for some reason can't install a service pack (I had one computer on which the SP installation failed no matter what I tried), you'll need to do a clean installation of Windows 7. The good news is that, in my experience, the installation goes quite a bit faster than that of Vista or XP. The bad news is that you'll have to reinstall your application programs. But you can use the free User State Migration Tool to migrate application settings (along with your data) so you don't have to reconfigure everything from scratch. Here is a walk-through on how to use it:

http://www.microsoft.com/downloads/details.aspx?familyid=E263796C-C7E4-44D6-96DD-32E821C88A25&displaylang=en

If you buy a new computer with Windows 7 installed, you can transfer the files and your operating system settings from your old computer by using the Windows Easy Transfer feature. You can also use this to transfer your files and settings when you migrate from the Windows RC to the retail version. Easy Transfer is built into Windows 7. Read here about how it works:

http://www.technospot.net/blogs/windows-7-easy-transfer-files-users-settings/

Speaking of the RC, exactly when do you need to be prepared to switch over to the "real thing?" Although the release candidate won't expire until June 2010, you're probably going to want to upgrade to the final version before that. Beginning March 1, 2010, the computer will start "reminding" you—by Shutting down every two hours. That could be pretty annoying, so make plans to make the change prior to that date. Another element in preparing for Windows 7 is to determine which edition you want/need. With Vista, the only way to get both the common business features (EPS encryption, ability to join a domain) and desirable consumer features such as Windows Media Center was to buy the Ultimate edition. With Vista, you may not need to go that far. Now every edition contains all the features of the ones below it on the price scale, so Windows 7 Professional (which replaces Vista Business) has both the business and consumer features mentioned above.

The only reason to shell out the extra bucks for Windows 7 Ultimate is a need for BitLocker full disk encryption (which is a very nice feature for protecting the data on laptops that get lost or stolen), DirectAccess (a replacement for the traditional VPN, but which works only with Windows Server 2008 R2), the UNIX based applications subsystem and other enterprise level features like BranchCache and Applocker. For the vast majority of individual users, the Pro edition will do everything you want and more. For a detailed comparison of the features in each edition, see:

http://www.sevenforums.com/tutorials/14422-compare-windows-7-editions.html

How are you preparing for the release of Windows 7? Will you install it as an upgrade to Vista? Will you install it in a dual boot configuration with Vista, XP or some other OS? Will you wipe your drive and do a clean installation? Will you buy a new computer that comes with it pre-installed? If you're using the release candidate of Windows 7 now, when will you switch to the final version? Or will you just go back to Vista? Which edition do you plan to buy? What features influenced your decision?

Windows 7: How to Get It Early

Microsoft released the ready-to-ship version of its Windows 7 operating system to software developers and IT professionals on August 6th, raising the question as to when consumers will be able to get their hands on a copy—be it via download, shrink wrap, or preinstalled on a new PC.

Starting today, MSDN and Technet subscribers can download a "release-to-manufacturing" (RTM) copy of Windows 7 in English, according to Microsoft's The Windows Blog:

(http://www.microsoft.com/windows/windows-vista/discover/blog.aspx?p=3669648c-b0c8-49d0-9c37-34757e06bec4).

Versions in other languages will be available October 1.

Microsoft's Volume License (VL) customers with a Software Assurance license will be able to download Windows 7 RTM in English starting Friday, with editions in other languages coming "in a few weeks." VL customers without an SA license can also grab an RTM copy early, although they'll have to wait until September 1.

If you buy a new computer with Windows 7 installed, you can transfer the files and your operating system settings from your old computer by using the Windows Easy Transfer feature. You can also use this to transfer your files and settings, when you migrate from the Windows RG to the retail version. Easy Transfer is built into Windows 7. Read here about how it works:

http://www.technospot.net/blogs/windows-7-easy-transfer-files-users-settings/

Haven't Heard Your Name Called Yet?

If you're not a developer, IT pro, or volume buyer, how can you get your hands on a copy before the official October *22* launch?

Beta testers who participated in Microsoft's Technical Beta Program—an invitation-only affair—can grab a free copy of Windows 7 Ultimate via the Microsoft Connect beta software site.

For rest of us, the remaining options are limited. You could order Windows 7 now, of course, but it won't arrive until sometime near October *22.* Or you could stroll the Internet's dark alleyways and download a pirated copy of Windows 7 RTM, but we're not recommending that option. Recent reports indicate that Win 7's final code was leaked to several file-sharing sites in July.

Well, that's enough for this month. I'll be heading North to New Hampshire and the Albany area in September hoping to find some cooler weather but I'll be able to crank out another column before I go. See you then.

Let's Never Forget the First King: DOS

by Rick Smith
Channel Islands PC Users Group, CA

Oh where, oh where has my little DOS gone.
Oh where, oh where can it be,
with its life cut short and windows cut long
Oh where, oh where can it be?

Some might say that I'm losing it, but you cannot lose what you never had.

Where has DOS gone? Some might say it's still around in the various forms of Linux. Others might say it's buried deep in Microsoft operating systems waiting to be called out by a powerful wizard to cast potent spells with a command prompt. But most of us just believe that it's just lost, never to found again. Like a lost pet that you once had affection for, once it's gone you seem to remember only the good times and seem to forget all the problems that it caused you.

DOS does that to people. There are still a few of you "old-timers," and you know who you are! Those who sit at the doughnut table at club meetings and reminisce about the "good ol' days" when all you needed was a Northgate keyboard and a monochrome screen to have absolute power over your world. You know what I'm talking about. Way back when people spoke about computers with fear and awe. They were things better left to experts and shady government entities. The quickest way to kill a conversation in those days was to talk command line technobabble. It always made everyone in the room feel uncomfortable that they couldn't understand you, like you were speaking a different language.

On the flip side, though, it gave you an incredible feeling of power, that you, and you alone, could master the savage beast and control your own destiny. Neh Ahh Ahh Yahh. (Sometimes I think all those comic books I read have permanently warped my thinking.) But really, didn't you feel special? That you and you alone, could master something that would make others wince and shirk away. You didn't have to be popular at school. You didn't have to be good looking. You didn't have to be wealthy. You did not have to have any of those things that everyone else needed to be important. You had knowledge.

And knowing the secrets of the PC universe, did you use that knowledge to gain wisdom or for greed? I think most of you, unfortunately, like me, used it for personal greed. We gave ourselves over to the dark side of the force and used our skill to enrich ourselves financially. But eventually as we all grew older, and some of us wiser, we started using or skills to teach and help others, which led you to me, to read these words and words of others in this tome. You all became a band of brothers forming the fellowship of the DOS.

And just! And just as your powers were at their peak, everything came crashing down like the Jedi of old. A new power rose in the universe to supplant the old ways. Windows came rushing down like a wind from heaven with trumpets blazing and fire and smoke billowing up in great clouds. And when this behemoth came to rest, its great weight crushed the last vestiges of DOS underneath its feet.

A new group came forth to rule the PC world. A group of men, and, yes, women, too, who knew nothing of the old ways but were formed from clay in the new ways. These new acolytes grew up in the ways of the PC, each having their own since they were young.

Gone was command prompt. In was the mouse. The wizards of old became legend. And after time they have become forgotten to be remembered by only a few at computer club meetings. There are still a few prophets preaching to us not to forget the old ways. I saw one at last month's meeting giving a history lesson at the club meeting. But they are old and feeble now with most of their words echoing on deaf ears.

So I say to all today! Remember the DOS! Don't let the old ways die, as you never know when you will be called upon as I have this week to use my skills again. Fortunately. I have not been found wanting as I was able to vanquish the beast with my skill at the command prompt. I have beaten down one enemy, but more are waiting to attack.

So be on your guard, be ready, and be faithful to the cause. Put away your mice as they are no use against such foes. Operate your PC only with the keyboard and keep yourself ready for the fight. For it shall come. It shall come.

This article has been obtained from APCUG with the author's permission for publication by APCUG member groups; all other uses require the permission of the author (Rants (at) vcmail.net).

Learn a Language — Free

These old foreign service courses may not be the latest thing but they still work if you want to learn.
http://fsi-language-courses.org/Content.php

Install Those Updates

by Marjie Tucker
Newsletter Editor, Mountain Computer User Group, GA

Are you taking every precaution to safeguard the data on your computer? If you answer "yes" because you have turned on the Windows Firewall and use anti-virus and anti-spyware software, that's great. However, you may be forgetting something very important - installing software updates.

Software usually contains bugs that are not found until the general public uses it. Because of this, all companies including Microsoft and Apple periodically make updates available to fix the bugs that have appeared. Many viruses and worms are written specifically to take advantage of holes that appear in operating systems and other programs. If you don't install the latest updates to your computer, those holes will remain and your data will be vulnerable to the malware.

Both Windows XP and Windows Vista have the ability to automatically download the most important updates as they are posted. To ensure that this is happening on your computer use the Control Panel to go to the Windows Security Center and make certain that the Automatic Updates are turned on. If Automatic Updating shows a green On color, then the updates will be downloaded. If the function for Automatic Updates is disabled, use the setting available to turn it on.

When the updates have been downloaded to your computer, you are notified of their presence. This usually occurs with a small golden icon in the lower right-hand corner of your taskbar that reads "Updates are ready for your computer." If you click on the icon and give permission, the update will install immediately, usually in the background so you can continue working. After it is installed, you may be asked to give permission for your computer to reboot.

However, if you tell the computer not to install this update, the message that it is available may stay on your computer permanently, as it waits for you to click that it can now be installed. If you see the gold icon on your taskbar, check to see if you have updates waiting right now so you can protect your computer.

There May Be Additional Updates

Sometimes there are optional updates available that won't be downloaded automatically. For that reason it's a good idea to check the Microsoft Update website periodically. The easiest way to check is to use the link you can find on your Start Menu.

That link will take you directly to the Microsoft Update site where you can choose between the Express or Custom method of installing available updates. Custom is preferable so you can determine if there are any updates you don't want to install.

Click on the Custom button and then wait while the Microsoft site compares your computer's software against the Microsoft database. Eventually you will see a list of updates that are missing from your computer. Any High-Priority (important for security) updates will already be selected to be downloaded. However, you need to look at the Optional Updates to choose the ones you want to include. Click on Software, Optional and choose all that are shown. You should need all of these. If any Hardware, Optional updates are shown, you should be a little choosier. If your hardware is working properly, you may want to skip these driver updates. But if you are suffering any hardware problems, these updates may solve your problems.

After you have chosen the updates you want to download, click on Install Updates at the top of the screen and the download will begin. This may take quite a bit of time, depending on the number and size of the updates being downloaded. This would actually be a good time to take a coffee break or make that important telephone call.

You can view a list of the updates you have installed on your computer at the Add or Remove Programs location on your Control Panel. At the top of the screen you will see a small box labeled "Show Updates." Click in that box and all your Microsoft updates will be displayed.

This screen is very useful if you encounter difficulty after installing an update or service pack. You can always find the update and uninstall it through this screen.

You can also easily see if your computer contains the latest Windows Service Packs by looking at the Properties of My Computer. Right-click over the My Computer icon and choose Properties. The most recently installed Service Pack will be listed on this screen.

Don't Forget Your Anti-MalWare Programs

Of course, it's also critical to constantly update your anti-malware programs. Viruses, worms, and spyware are constantly being developed and these protection programs work hard to provide fixes. When possible, also set these programs for automatic updates and regularly perform a manual update just to make certain that you don't miss any patches or new program features.

And, Remember Your Other Software

We've spent most of our time talking about Microsoft software. Your other programs, such as Adobe Reader and Java also receive regular updates. Look at the settings for those to be sure they are updating automatically. This is especially important if you have any difficulty while working with a program. The solution may be a simple as installing the latest patch.

Apple Software Updates

Apple also frequently releases updates that you can download and install. To check your Mac for patches, use the Apple menu and choose Software Updates.

You can also set your Mac to get Automatic Updates by choosing System Preferences from the Apple menu. Choose View and Software Update. One of the choices is Automatic and you can also choose a time for the computer to check the Apple website.

Stay Secure

Remember to set your operating system and programs for Automatic Updates, install those updates, and periodically check the websites manually to ensure that you have all the latest patches. This is an easy and inexpensive way to help protect your data.

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If Your Computer Gets Wet…What?

by Bob Schwartz

Houston Area League of PC Users, TX

What to do if something wet spills on your electronic device or it falls into wet whatever? The following is not guaranteed but represents years of experience.

Quick, unplug it! Unless there is a likely shock hazard. Look up the instructions (best to do this when you buy it). Find out if there is any prohibition against using ALCOHOL. Alcohol can dissolve some materials.

There are generally two items to have handy. One is distilled water to first wash off and dilute any spill, especially anything that might be conductive. The second is alcohol,
90+% isopropyl (rubbing) alcohol. Ethyl alcohol or ethanol – 90% - will work too. Alcohol has an affinity for water. Rinsing the item first with the distilled water and then with alcohol will dilute, pick up water, carry it away, and evaporate quickly. The higher percent alcohol 90% vs 50% have a greater affinity for water.

Time is important. You do not want water to soak into an otherwise insulating medium, especially water that contains something conductive like salt. It will leave a conductive residue that will short out portions of the device. That is why you want to rinse first with distilled water to carry away any conductive residue and then the alcohol to remove the water film. Most tap water has dissolved minerals that remain after the water evaporates, hence the distilled water to rinse these away.

After, and I repeat AFTER, the above cleaning, you can use very modest heat to help dry out the item. You can use a hair dryer at some distance. Make sure you don't heat the item any hotter than is comfortable to hold. Some plastic materials deform at relatively low temperatures.

Remember the order: (1) rinse with distilled water (2) rinse with alcohol (3) warm gently with hair dryer or warming oven.

For items immersed in flood waters, the above approach can be tried but the outlook is not promising. Generally the conductive flood waters have had time to soak into the various insulating materials and are almost impossible to remove. Still, it may be worth a try, especially if you have the time and possible success is worth the effort. Distilled water and alcohol are not very expensive. Most circuit boards are coated with varnish to resist moisture. In this case, wash repeatedly with distilled water. Use a soft brush to remove any remaining film such as mud. Then, the alcohol followed by the dryer. Using the dryer prematurely can "set" the offending material to the point that it may be almost unremovable. So save it for the very last step after you are sure things are clean. Your efforts may save part if not all of the equipment.

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The Computer as Crime Scene

by Michael Gemignani

Houston Area League of PC Users, TX

When most folks think of criminal activity, the computer is not the first thing that comes to mind. But computers are arguably one of the most powerful instruments of crime in history. A poor sucker who robs a bank may get a few thousand dollars. He will almost invariably be caught and may wind up spending decades in jail. But a cybercriminal who causes billions of dollars in damage (witness the conficker worm), or who manages to steal millions of dollars electronically, may not even get caught and, if caught, is not liable to spend a much time in prison as the low tech robber. Computers offer the opportunity for theft and vandalism on an unprecedented scale. Some feel that the next world war may not be fought by soldiers with guns and bombs but by hackers who try to destroy a nation's power, utility, economic and

communication capabilities.

However, we do not have to think in terms of grandiose acts or international plots for a computer to be associated with criminal activity. The fact is that even seemingly innocent activity can get a user in trouble with the law.

Suppose, for example, that pornography, or worse, child pornography, was found on your computer. Many companies will fire an employee if they find pornography on a computer that the employee uses at, or for, work. If child pornography is found, the computer user is subject to harsh criminal penalties. But one need not even download pictures to be subject to prosecution.

The relevant federal statutes are sections 2252A and 2256 et seq. of chapter 110 of Part I of Title 18, which is the United States Criminal Code. Child pornography basically involves the depiction of someone under age 18 engaging in sexually explicit activity.

It is not required that someone actually have downloaded child pornography. The law applies if someone attempts to violate the provisions against possessing child pornography. Thus, if the FBI were to established a decoy website that purports to provide child pornography, as some allege has already happened, someone clicking on the website could trigger an investigation and possible prosecution. Lest you think such language is overly broad and therefore unconstitutional, be aware that the Supreme Court of the United States has already ruled the statutes to be constitutional in their entirety as written.

I am not by any means defending the loathsome trade in child pornography. Nor do I seek to defend those who deliberately seek out child pornography. However, as is well-known to those who do not exercise appropriate caution, malware can play all sorts of tricks on a computer, including downloading images that the user would ordinarily avoid completely, usually without the user's knowledge. If a worker is provided a computer by his or her employer, the computer may already have illicit files stored on the hard drive and the new user may be none the wiser.

What of it, you might ask? Surely the police would understand that it was not the current user but, rather, the previous user or malicious software that downloaded the illegal files. But suppose such files were found on your own computer. How would you prove that you were not the one who downloaded them? If child pornography were found on your hard drive, how could you convince someone that you were not the one who put it there? Indeed, if someone at work wanted to get you fired and the person had the requisite expertise, he could put incriminating files on your hard drive and then let it be known to your superiors that he had observed you downloading pornography on the job.

The saving grace in all this, if there is one, is that one is presumed innocent until proven guilty. Hence you would not be required to prove that you did not download the files. Rather, the police would be required to prove that you did, and this might be quite difficult, particularly if your computer were found to be riddled with malware, or it could be shown that someone had hacked into your machine, or that your machine had been used by others.

Even if the charges were dropped, or never even filed, because they could not prove that you downloaded the illicit files or even knew about them, you would still suffer unimaginable emotional trauma, legal expenses, and the probable loss of your job. Moreover, the failure to prosecute would not be the same as exoneration. You would still be under the cloud of having the material found on your machine. Mere pornography can get you fired. Child pornography can get you five to twenty years in prison.

Detective stories often feature someone poisoning another's food or attempts to frame someone for a crime. Now we have the added possibility of poisoned computers destroying lives or being used to frame others for crimes they did not commit. Hope it does not happen to you.

The Rev. Dr. Michael Gemignani, an attorney and Episcopal priest, is also a former professor of computer science who has written extensively on legal issues related to computers. Although he is now retired, he enjoys writing and speaking about computer law and security.

Broadsides

Compiled by Ron Broadhurst
Space Coast PC Users Group, Inc., FL

Turn Off Indexing to Speed up XP

Windows XP keeps a record of all files on the hard disk so when you do a search on the hard drive it is faster. There is a downside to this and because the computer has to index all files, it will slow down normal file commands like open, close, etc. If you do not do a whole lot of searches on your hard drive then you may want to turn this feature off:

1. Open My Computer.
2. Right-click your hard drive icon and select Properties.
3. At the bottom of the window you'll see "Allow indexing service to index this disk for faster searches," uncheck this and click ok.
4. A new window will pop up and select Apply to all folders and subfolders.

It will take a minute or two for the changes to take effect but then you should enjoy slightly faster performance.

Correcting System Hang at Startup

If your system hangs about 2 or 3 minutes at startup, where you can't access the Start button or the Taskbar, it may be due to one specific service (Background Intelligent Transfer) running in the background. Microsoft put out a patch for this but it didn't work for me. Here's what you do:

1. Click on Start/Run, type 'msconfig', and then click 'OK'.
2. Go to the 'Services' tab; find the 'Background Intelligent Transfer' service. Disable it, apply the changes and reboot.

Change the Start Menu Style to Classic

Does the new Windows XP Start menu take up too much space on your desktop? You can easily change the look back to the Windows Classic Start menu by following
these steps:

1. Right–click the Start button, and then click Properties.
2. Click Classic Start menu.
3. Click the Customize button to select items to display on the Start menu.

By default, selecting the Classic Start menu also adds the My Documents, My Computer, My Network Places, and Internet Explorer icons to your desktop.

Display Your Quick Launch Toolbar

1. Right-click an empty area on the taskbar, click Toolbars, and then click Quick Launch.
1. Easy as that your Quick Launch bar appears.
2. To add items to your Quick Launch toolbar, click the icon for the program you want to add, and drag it to the Quick Launch portion of the taskbar.

Keep Your Favorite Programs near the Top of the Start Menu

Do you have a favorite program that you frequently use? Elevate its priority on the Start menu by putting it at the top of the list. This ensures that the program will remain on the Start menu and cannot be bumped by other programs, even if you use the others more frequently.

Right-click the link to your favorite program on the Start menu and select Pin to Start Menu. Your program will be moved permanently to the top part of the list, just below your browser and e-mail programs.

Change out Your Pointer Scheme

Tired of seeing your pointer as an arrow or an hourglass all the time? Windows XP offers a number of alternative pointer schemes, such as Dinosaur, Ocean and Sports:

1. Open the Control Panel, double-click Mouse, and select the Pointers tab. (If you start in Category view, select Appearance and Themes, then click Mouse Pointers under "See Also").
2. Next to Schemes, click the down arrow and select a scheme to preview its pointers.

Click OK to apply the scheme to your desktop.

Create a Personal Screen Saver

For a great way to put your digital photos to work, try creating a slide show presentation for use as a screen saver.

1. Right–click an empty spot on your desktop, and then click Properties.
2. Click the Screen Saver tab.
3. In the Screen saver list, click My Pictures Slideshow.
4. Click Settings to make any adjustments, such as how often the pictures should change, what size they should be, and whether you'll use transition effects between pictures, and then click OK.

Now your screen saver is a random display of the pictures taken from you're my Pictures folder.

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FastStone Image Viewer 3.9

by Charlotte Brown
President of the Canton/Alliance/Massillon Users Group, OH

If you want a really simple but powerful basic photo program, look no farther than FastStone Image Viewer 3.9. This is the program that I encourage my students to use in the beginning of their picture enhancing journey. When you want to do more things than Image Viewer offers, you can add another program. Many of the programs that help you through the next steps are also free. Working through the basics into more advanced techniques is not as overwhelming as jumping into the middle of a professional program and wondering how to do simple things such as cropping, adjusting light, changing to sepia or grayscale, or even converting to other file formats.

FastStone Image Viewer has powerful capabilities of batch converting images from one format to another, for example, from jpg to png. It also allows for batch renaming and resizing, batch watermarking and dpi adjustments and more. To keep things simple, let me walk you through the process of taking only 1 picture at a time through a series of adjustments to make the final print.

I always use 3 windows when working with FastStone Image Viewer. This is the default setting. The upper left window allows you to browse through Windows Explorer to the folder containing your photos. Double clicking the folder opens thumbnails of the files in a large window on the right. When you click on a picture to select it, you see a large thumbnail in the lower left-hand window. Look over my shoulder as I browse to **Pictures** and double click the folder inside that I have named Christmas 08. Large thumbnails of all the picture files in that folder now appear in the large window. I will select a file titled Jayden. Now Jayden's picture appears not only in the window on the right but also as a large thumbnail in the lower left hand corner.

The first thing I do is click File > Save As. I rename the file as JaydenP and use the drop-down menu by File Type to select png. Then I click Save. The new file appears in the large window with all the other thumbnails. It is much bigger than the original jpg. It is now in a *lossless* format, allowing me to make all kinds of changes without losing any of the information originally captured by the camera. I could choose to work with tiff to accomplish the same capabilities. Png files allow me to cut out transparent areas if I wish and the file size is smaller.

Let me insert something that will interest those of you who are doing more advanced work. The rest of you can skip to the next paragraph! When I double click the picture, it fills my entire window. Moving the mouse to the right side of the screen brings up information about the picture. One of the tab choices is Histogram. That provides me with information about the lighting. Here is a little tip. If you double click the

original jpg or you decide to save as tiff instead of png, the tab titled EXIF will give you all the camera information captured when you snapped the picture: date and time, make and model of camera, ISO setting (much the same as film speed in the olden days), the aperture setting, shutter speed, focal length, and whether or not the flash fired.

Now let me return to the really simple process of working with JaydenP, my png file. I click on Edit on the menu bar, and then click on Resize / Resample. Now I can choose to size my picture by number of pixels, percentage or print size. In this case I want to make a color print so I will click on the radio button titled Print size. Next I will select 300 dpi by using the drop down menu or hand entering the numbers. Remember that digital cameras were developed for digital viewing. Most digital camera settings take pictures at 72 dpi. When you resize to 300 dpi, you have a much clearer picture that has a slimming effect on your subject that is much more flattering!

In this case my picture is portrait, not landscape, so I will choose 5 x 7. I put a check mark in the selection box titled Preserve Aspect Ratio so I don't create distortion effects similar to those created by convex or concave mirrors! I notice that the photo will not be exactly 5 x 7. One thing to remember is that digital pictures are not the same scale as film pictures. In this example, my picture turns out to be 5.25 x 7. I click OK. Now I am back to the 3 pane original window and my picture is still selected (blue frame around it). Now I click on the cropping tool. I check the Paper Ration to make sure it says 7 x 5 and has a check mark by Flip Ration so that I get a 5 x 7. A dotted line around the picture shows that the program is suggesting an even crop from both sides. After looking at the picture carefully, I decide I want the entire crop to come from the left side. When I move the mouse onto the picture, it becomes a 4-sided arrow. I click and drag the dotted outline to the right as far as I can and click Crop followed by Close. The picture is still selected in the main work area.

Now I click on the Red Eye control on the toolbars below the menu bars. The picture pops open in a new screen. I like to use a zoom ration of 200%. Then I click in the middle of the eye and draw a circle that covers the entire eye. I can click in the middle of the circle I have drawn, hold down the mouse, and move the circle to fine-tune its location. Then I click Remove Red Eye. Whoosh! It is gone. The program takes me back to the mail work are with the three windows.

I click once more on Edit. This time I chose Enhance Colors. The picture opens in a full screen with controls at the bottom for adjusting brightness, contrast, gamma, red, green and blue levels, hue and saturation. You can create some wild looks here. I brighten the picture slightly and make a small color shift to enhance the reds. I click on "Hold Down to See Original Image" to make sure I like the adjustments I have made. When I am satisfied, I click OK. Once again I click on File > Save As. This time I rename the file Jayden 5x7 and select the type as jpg. All my changes hold. The picture is still 300 dpi. The size will be perfect with no surprise cropping by the photo lab.

The program allows for so much more: adding text, straightening a picture before cropping, creating slide shows, and things I haven't yet explored. I downloaded the newest version this week. There is now an 83-page manual you can download to learn from clear directions and screen shots how to take advantage of this marvelous program. The manual was written by Bill Westerhoff who has written tutorials on other free photo products as well as Photoshop Elements 3-7.

I suppose you now are wondering about the price. First of all you need to know where to get the program. Go to www.faststone.org. There is no charge to download this program. You will be encouraged to give a donation keep the developers encouraged to work on future enhancements. If you decide you like the program as well as I do, you will want to help them. There is no set fee, so whatever you choose to give is up to you.

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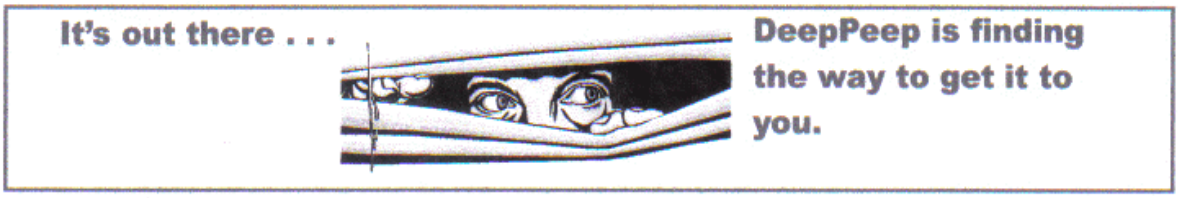
Beneath the Surface:
DeepPeeping the Web

by Jerry Goldstein
Vice President and Newsletter Editor, The PCUG of CT

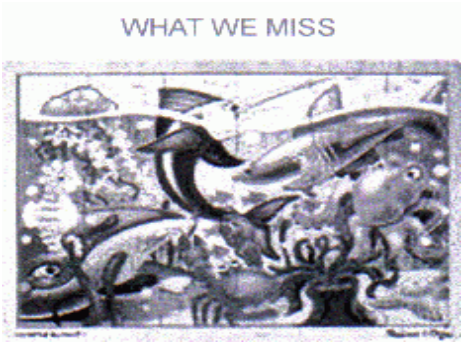


Last summer Google announced it had passed the one trillionth mark in its list of known and searchable Web pages.

If you think Google does the best job of searching the World Wide Web you will be in for a big surprise. By 'big' I mean a search engine that goes way beyond standard search engines like Google, which only look at the surface of the Web compared to the vast, deep, and so far uncharted depths of the Web. I say "you will be in for a big surprise" because a deeper search engine is only in it's initial research stages.

Standard search engines only skim the surface of the Web. Kind of like you're looking over the surface of the ocean, instead of looking into its vast undersea life. The plan is to create a search engine that will open 90% of the Web to searches.

A study at the University of Utah is trying to find a way. The study searches typed text rather than the hyperlinks that the present search engines use. A beta version of DeepPeep is available at: http://www .deeppeep.org/.



We have a long way to go but eventually almost the entirety of the Web will be searchable. Web pages exist already that tell you the best taxi fare, flight schedules, and shopping catalogs. DeepPeep wants to give you access to this information. A whole new way of searching has to be worked out first.

Scientists have said that 90% of what we know was discovered in the last 50 years. DeepPeep is working out a way to get that knowledge to you.

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Foxit Reader: A Short Review

by *Sharon Walbran*
Twin Cities PC User Group, Minneapolis-St. Paul, MN

A Worthy Alternative to Adobe Reader

When one of my clients was concerned about hacker threats to Adobe Reader last winter I went in search of alternative software. I found the free version of Foxit Reader at http:// www.foxitsoftware.com/pdf/reader/

It's well worth a look! Here are just some of the advantages:

Small Size. The file is about one-sixth the size of the latest free version of Adobe Reader and takes seconds to download and install. The small footprint is great for older computers or those short on hard drive space. There is also a U3 version for flash drives.

Speed. It starts up fast and runs fast. No delays while splash screens load. Printing is also speedy.

"No surprises." Foxit Reader will remind you of Adobe Reader—same interface, menus, and toolbars so the transition is painless.

Open multiple files in tabbed format. If you like the ability to open several web pages on tabs in Mozilla Firefox you'll like the tabbed format of Foxit Reader as well. View several PDF files at a time and switch between them easily by clicking the tabs.

Mark up and leave comments on PDF documents. You can insert text boxes with comments right in line with text in the PDF document or draw arrows and graphics or highlight text. This is very helpful, especially when you are collaborating on a document with others.

Take it for a test run. You will not be disappointed.

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Is It Time to Switch to 64 Bit Windows?

by Brian K. Lewis, PhD

Sarasota PCUG, FL

In my previous article comparing 32 bit and 64 bit computing, I was still advising caution for those wishing to upgrade. Today every new computer is capable of running a 64 bit operating system. As a result there are many voices saying if you have the capability to run a 64 bit operating system, you should take advantage of it. Microsoft had previously indicated that Windows 7 would be available only in a 64 bit version. However, they now say both 32 and 64 bit versions will be sold. There some speculation in the computer industry that Windows 8 may only be 64 bit. So it appears to be time to reconsider the move to a 64 bit operating system (OS). There are many advantages for 64 bit over 32 bit, but in order to better understand them, we need to take a brief look at how these will affect your decision.

To start with we should recall a little history. In the early days of personal computing the processors instruction sets were designed for 8 bit "words." This was the data size that could be used to express a single character. A bit is either a "1" or a "0." Eight bits were then referred to as a "byte" and that was considered a computer "word." In those days the CPUs we had were the Intel 8080, the Zilog Z80, Motorola 6800, and the MOS Tech 6502. These were all 8 bit processors with 8 bit data paths. The Apple I/II/IIe and Commodore Pet all used the 6502. IBM designed the first x86 CPU which was called the 8086 and it was a 16 bit processor. However, when IBM produced their first personal computer in 1981 it used their 8088 processor which was an 8 bit version of the 8086. The next step was to the 16 bit processor with the 80286 processor in 1984. The software changes rapidly followed this advance. The change to 16 bit processing allowed the central processor and the data bus to transfer data in increasingly larger sizes, referred to as double words. The 32 bit processor arrived in 1989 followed by the 64 bit in 2005. As this history shows, the 64 bit computer is just one more generational step in processing power. In addition, a computer "word" is now considered to be 16 bits, not 8 bits. So a 64 bit processor can handle a quadruple word (4x16). Naturally, the increase in the width of the CPU/data path does increase processing speed.

Every time the hardware has changed, there has been a delay while the software manufacturers play catchup. Applications have to be rewritten to take advantage of the hardware changes including the new instructions in the CPU instruction set. Only then can the application take advantage of the added processing power. Although Windows has been available in a 64 bit form since XP was released, it adoption has been quite slow. Many software manufacturers did not make 64 bit versions of their applications. This coupled with the limited acceptance of Vista has markedly slowed the shift from 32 bit to 64 bit. Another factor in this process is the development of 64 bit drivers for peripherals such as printers, scanners, graphics cards, wireless modems, network cards, etc. Microsoft has also indicated that Windows 7 will not install 64 bit drivers unless the software is "Microsoft Certified". Some manufacturers have obtained certification for some of their 64 bit drivers. For example, my Brother multi-function machine has a certified driver for 64

bit Windows. If you don't have a 64 bit certified driver, your peripheral will not work under Windows 7. Neither Vista64 nor Win7-64 will accept 32 bit drivers. Something to check out before you pop for a 64 bit OS. However, if you are buying an upgrade version of Windows 7, several of them are supposed to come with both the 64 bit and 32 bit versions in the box, but not in the OEM versions. This specifically applies to the Home Premium, Professional and Ultimate versions (as of this writing and may be subject to change by Microsoft.).

Another advantage of a 64 bit processor is in its memory management. By now I would hope that everyone understands that the 32 bit generation of computers can address a maximum of 4 gigabytes of RAM. This is the maximum number of addresses that can be handled and is calculated from 2^32 or two to the thirty-second power. This includes addresses needed by the system as well as the data. A 64 bit processor can address 2^64 addresses or roughly ten billion more than the 32 bit processor. The catch here is that both the hardware manufacturers and Microsoft have imposed limitations on the addressable memory. Generally, new personal computers are limited to 128 GB of memory or less. Some manufacturers configure their laptops for a maximum of 4 GB of RAM. Windows OS software is also highly variable in its limits. Some versions of Vista limit addressing to as little as 8 GB (Home, Basic, and Premium). It is expected that these limits will be raised in Windows 7. For the present, these levels should be more than adequate for most people. If not keep in mind that it is the Ultimate versions of Vista and Windows 7 that have the maximum addressing ability.

The next thing to consider is the software compatibility. Just because you have a new operating system, no one really wants to have to upgrade all their software from 32 bit to 64 bit. For that reason both Intel CPU's and AMD CPU's are not true native 64 bit processors. They are, in fact, hybrids. By this I mean that they allow 32 bit code to run in an emulation mode. Consequently, 64 bit Windows has an emulation mode, Windows on Windows, which allows 32 bit software to be run. WOW intercepts system calls to the operating system made by a 32-bit application and switches the CPU to 32 bit mode. It can switch the CPU between 32 bit and 64 bit as needed. This also allows the 64 bit AMD/Intel CPU's to run a 32 bit OS. The only true 64 bit, non-hybrid operating systems for PC's are found in Intel's Itanium processor (IA64) and the various 64 bit versions of Linux. Systems using these CPUs will give you all the benefits of 64 bit computing, but require all 64 bit software. Windows WOW64 also allows for some 32 bit software to run on the IA64 CPU by converting 32 bit calls to 64 bit.

Windows XP, Vista and Win7 contain large numbers of dll files. These are system libraries, many of which are loaded into memory when the computer is booted. In the 64 bit OS, these libraries can not be used by 32 bit software so instead, there are duplicate libraries written in 32 bit code included in Windows. Microsoft has devised a system so that these libraries can co-exist on the hard drive and in RAM without overwriting the files or accessing the wrong file so that 32 bit code can be run under the 64 bit OS. Sounds good, doesn't it? Yes, it does work, but with some caveats. Adding an emulation layer does slow the overall processing of software instructions. Also, there is an increase in the amount of memory (virtual memory included) needed for the additional 32 bit libraries that are loaded along with the 64 bit dlls at boot time.

There are other problems, but to a somewhat lesser extent as it affects fewer software applications. Some 32 bit applications still use 16 bit loaders. Since Windows 64 does not support ANY 16 bit code, these applications will not run, unless Windows can transparently substitute an installer with 32 bit code. Hopefully, all 32 bit software will eventually have 32 bit loaders or be replaced with 64 bit code. Additionally, some 32 bit software requires the use of 32 bit drivers. These drivers will not run on any 64 bit Windows platform. So until the drivers are available in a 64 bit form, these applications can't be used with Windows 64.

Another consideration is that any utility software that works at the hardware level must be 64 bit. This generally includes anti-virus software and other anti-malware products. Those few manufacturers I have checked do have 64 bit versions of their applications available. This includes some which provide free utility applications. This is just one more item that should be checked before you decide to move to a 64 bit OS.

If you decide you want to upgrade to the 64 bit version of Windows 7 when it is available, then you have several more things to consider. No matter which 32 bit Windows version you are currently using, you will have to do a "clean" install of the 64 bit version. That means backing up your data to an external medium and formatting your hard drive or at least a part of it (one partition). You can install Windows 7 in a new partition and dual boot with it and your current Windows version. Or you can install the new version in the space reclaimed from your old version. Either way you will have to reinstall software and drivers. Then you can restore your data. Only if you upgrade to the Windows 7 32 bit version from Vista can you do an "in-place" upgrade. If you are still running XP you have no choice but to do a clean install to convert to the 64 bit version. Of course, if you buy a new computer with the 64 bit Windows 7 installed that reduces your problem to just installing applications and data from your old computer.

I have already pre-ordered a 64 bit version of Windows 7. So, you see, I have answered the question I posed in the title of this article. When it arrives, in October, I will be installing it, then testing drivers and applications. You probably won't see any of my experience until the December Monitor. In the meantime, I have obtained a 64 bit version of the Linux OS, Ubuntu. Over the next few months I will be installing and testing it on my computer. So you will be seeing more about 64 bit computing. I hope it will help you as the entire industry continues to move into a fully 64 bit era. Just think, the next move, in a few years, will probably be to 128 bit 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. www.spcug.org. This article has been obtained from APCUG with the author's permission for publication by APCUG member groups; all other uses require the permission of the author (bwsail (at) yahoo.com).

Information?

Your cell phone company will charge you $1 to $1.75 for its information service. The trick is to not use your cell phone company's 411 service. When you need to find a number, dial one of the free 411 services instead.Try either of these numbers and you won't be charged any fee:

(800) FREE411 or (800) 373-3411 Sponsored
(800) GOOG411 or (800) 466-4411 Sponsored by Google

Googlepedia

by George Harding

President, Tucson Computer Society, AZ

This book is the greatest! If you are interested in anything Google, this is the place to go to find out about it.

This is a Que book, the 3rd edition, by Michael Miller, who is a prolific author for Que. He's written some 80 non-fiction how-to books, mostly about computer-related subjects.

The book has over 700 pages, including a comprehensive index, a very complete Table of Contents, 46 chapters and 3 appendices.

I suspect that a 4th edition is not far off, because Google is constantly developing new tools that you will want to know about.

The best known Google tool is the Web Search engine. In the olden days, say five years ago, there were several search engines, all of which produced a list of results that contained many duplicates and may not even have produced something useful to you.

Google took a new approach to produce search results that do not have duplicates, are up-to-date and are sequenced by probable usefulness to you. They do this by the following process:

Periodically, usually every few weeks, their GoogleBot crawler searches the web for each page, tracks

every link in the page and saves a copy of each page it encounters on its servers.

Google creates an index to each of the saved pages, storing every important word on each page.

Once a search of the pages is complete, the results are ranked by methods known only by Google.

The rankings are displayed on the search results page in order by what is likely to be the most important to you, to the least likely. There are many techniques to making a successful search, and these are described fully in the book. Using quotes or operators can significantly improve the accuracy of your search.

What's most interesting, though, is all the other services provided by Google. I suspect you, like me, are not aware of many of these:

GOOG-411. Search for businesses by voice from your cell phone. Dial 1-800-GOOG-411 to try it out.

Google Desktop. Create a home page environment that has just what you want on it.

Google Docs. Word processing, spreadsheet and presentation documents on the web, sharable with others.

Google Earth, Sky and Mars. Tools to explore these areas.

Google Gmail. An email portal.

Google Groups. Create and join specific discussion groups.

Google Maps. View maps and driving directions.

Google Notebook. Store web information you come across.

Google Reader. Display articles and headlines from blogs and RSS feeds.

Google Scholar. Read and search scholarly journals and articles.

Google Transit. Plan your trip using public transportation.

Google News and Web Alerts. Be advised of new material that meets your criteria.

And more…

Each chapter tells you about a Google service and how to use it. Each description is described simply to begin with, but continues with more details about how to make use of special features. You can easily be an expert user of any of their tools through this book.

All of these services came out of the Google Labs, which is essentially an R and D facility. It is constantly on the search for new, useful tools for users. One recently announced service is Google Voice that gives you free phone calls within the US, but also forwards calls to your cell phone and land line and transcribes voice messages into email.

I found this book fascinating, because it opened my eyes to all the things that are available from Google. It will take me some time to learn about the ones in which I'm interested.

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News You Can Use

pcworld.com — How Much Does It Really Cost to Own a Smartphone?

Concerned about the long-term expense of owning a smartphone? You should be. But we found that, among the most popular smartphones on the market today, there isn't a big difference in the total cost of ownership. http://www.pcworld.com/article/168486/how_much_does_it_really_cost_to_own_a_smartphone.html

pcmag.com — How to Choose the Best Web Browser

Today's Web browsers are faster and more feature-rich than ever before. If you're not sure which one you should use, our look at the most popular options will help prep you for prime surfing.
http://www.pcmag.com/article2/0,2817,2350275,00.asp

ZDnet — The decade's 25 biggest tech flops slideshow

After nearly 10 years of working at CNET, executive editor David Carnoy looks back at the most hyped tech products that didn't pan out as planned—or just flat out bombed.

ComputerWorld — Domain-name wars: Rise of the cybersquatters

Trademark owners say cybersquatting on the Web has gone too far -- and they're pushing back...
http://www.computerworld.com/s/article/9134605/Domain_name_ wars_Rise_of_the_cybersquatters

From the July and August 2009 issues of Diablo Blue*, newsletter of the Diablo Valley PC Users Group, CA.*

Society News

Planning meeting Minutes

by Steve Staub

Present: Bob Avery, Arpad Kovacs, Dan Rothfuss, Sally Springett, and Steve Staub.

Our planning meeting started with a review of the July presentation on digital photographic possibilities. Mike LaVelle did an excellent job presenting a slide show on what can be done at the computer. Basically if you can think it you can do it on the computer. Again, thanks Mike.

We then discussed our Aug. meeting which is our picnic. Everything is ready for the following week and our picnic.

Picnic Review: Our cook, Al Saia, and myself got to the cabin about 3 pm. Al got the fires going and I set up the inside. Everything went soothly all afternoon and evening. We had 25 members and spouses attend. We had plenty of excellent food thanks to everyone who brought a dish. I want to thank two people, Sally for getting us the cabin and Al for sitting in the hot sun being cooked along with the meat. (Al's father ran a diner in Buffalo and some of his traits rubbed off on Al.)

I'm now changing hats and putting on membership chairman's hat. I got a little behind in thanking our members who renewed and our new member, Wayne Wood, who joined in April. The following members renewed: Marlys Whitcomb, Beverly and Richard Cronkite, Roger Delthony, Bernice Blake, Dennis MacMahon, Ralph Squire, Irwin Wiener, Roger Kreger, Philip Mendola, Ron Matteson, Floyd Matteson, Richard Billiski, Claude Fedele, and James McGrath. The next six are our Ohio members Jim McBride, Tim McBride, Bill Forsberg, Curt Eckertson, John Kiley, and Renee Holt. To all, thank you for being a member of our club.

Reminder—it would be appreciated if members would check their expiration dates.

The Lighter Side

Here's a response that one of my colleagues sent to resolve an issue:
Thank you for contacting Technical Support,
Regarding your login issue is now resolved and you will be able to access the course in which you are enrolled. Sorry for this incontinence it has caused and thank you for your patience.
Technical Support

My Brother: "Before you start writing in Word, you have to set the margaritas."

Me: "Do you know any programming languages?"

My Friend: “Sure. I know .com, .net, and .org.”

My grandfather has recently started a course called “Computers for the Terrified.” He's nearly eighty and, although he used to be an engineer within the British Royal Airforce, is completely stuck when it comes to computers.

He came back from his first evening at this course. When asked how it had gone, he replied, “Yes, it was really good. I really enjoyed it, but I really couldn't get to grips with my mole.”

I stopped for a second, completely puzzled, until I realised he was talking about the mouse.

Tech support: “Now, press the up arrow.”
Customer: “I don't see any up arrow.”
Tech support: “It's above the rest of the arrows at the lower left.”
Customer: “All I see above the arrows is an 'I' with a funny little hat on it.”
Tech support: “Press that!”

Our last receptionist called me to complain that the keys on her new keyboard were hard to push. She asked me to install a program to “soften up her keyboard keys.”