

MONITOR

Vol. 28, No. 3

March 2010

Next Meeting
Tuesday, March 9
Computers and 911

Contents

Google-pedia – A Review	George Harding	1
Computer Performance Considerations	Gary Bently	2
OAG Joins the Facebook Generation	Mike Morris	5
Is It Time to Switch to 64 Bit Windows?	Brian K. Williams, PhD	8
Web Geeks Guide to Google Chrome	Ted Littman	12
From Steve Bass		15
Icon Clutter? Be a Groupie!	Bob Schwartz	16
Ask Mr. Modem		18
The DealsGuy	Bob Click	20
Creating a Wireless Network	Bob Rankin	24
More Than One Antivirus Program	Bob Rankin	25
Will You Outlive Your Flash Drive	Bob Rankin	27
Society News		30
The Lighter Side		31



Google-pedia – A Review

by George Harding

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 numbers are: ISBN-10: 0789738201,

ISBN-13: 978-0789738202. The price is \$30, \$24 with free membership

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:

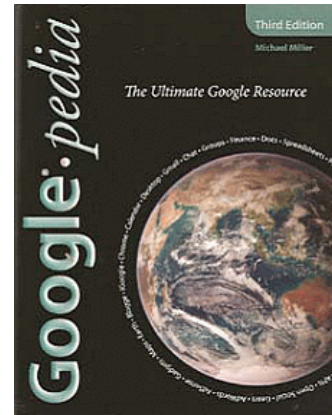
Periodically, usually every few weeks, their GoogleBot crawler searches the web for each page, tracks every link in the page and saves a copy of each page it encounters on its servers.

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 & 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.

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 (georgehardingsbd(at)earthlink.ne).

Computer Performance Considerations

by Gary Bentley

Editor, SouthWest International Personal Computer Club (TX)

When I evaluate what might be done to maximize the performance of a computer system, whether that be a system already in use or one I might be specifying for order (i.e., specifying the hardware with a particular level of performance in mind for the intended application) I look at several key factors.

The most critical factor is how much system RAM is available (if you are ordering a new system then you can also order faster RAM and be cognizant of addressing issues). I will state flatly that, all factors being equal, the more RAM available, the faster your computer system will operate. In the same vein, if you want to make full use of that system RAM, get an external graphics card with its own RAM so you don't force your system to share RAM with the video display. If you are specifying a new computer, get the fastest FSB (front side bus) speed you can afford with the micro-processor and then match the RAM bus speed to take advantage of that high bus speed. Don't let a computer maker fool you with a low system price while handing off old slow RAM to you when the motherboard and processor would support faster bus speed RAM. New systems will always use DDR RAM, so that should not be a consideration (and older systems will not be able to use it).

Don't be confused by discussions of virtual memory and page files. If you have a large amount of RAM (1 GB or more with Windows XP-3 or 4 GB with Vista, the OS memory hog of all time), your system will rarely need to page out process memory onto the hard drive paging file. You can check that in Task Manager (hit CTRL SHIFT ESC or CTRL ALT DEL or right click the Task Bar and select Task Manager) by looking at the Performance tab and the Physical Memory Total in conjunction with the Commit Charge. The Physical Memory Total is the amount of RAM you have in your system. The Commit Charge is the total memory allocated to programs and the operating

system. If the Commit Charge (Total or Peak) doesn't exceed the amount of RAM, then the hard drive pagefile is rarely if ever being used and your system should be running at full RAM speed without hard drive performance issues (except when loading the OS and starting an application, etc.).

You can also use Performance Monitor (Start, Administrative Tools, Performance) and look at the Memory, Pages Output/Sec parameter. Even if the amount of committed memory exceeds available RAM, if the actual Pages Output/ Sec is low or zero most of the time (quoting Microsoft) there is no significant performance problem related to available RAM. I doubt there would be any reason for the typical home user to require a 64 bit computer in order to utilize sufficient RAM.

The second most critical factor is the performance of the hard drive, i.e., the amount of utilization of your hard drive (present or anticipated for the application), the speed at which the drive platters rotate, and the speed of the interface to your hard drive. You never want to reach 50% of capacity of your hard drive. The more data you have on a hard drive the farther the disk drive read/write head has to move inward on the spinning platter to get to the data (on the average). This increases the seek time, the time required for the read/write head to position itself over the desired concentric data track on the spinning disk platter. So, use a hard drive with sufficient storage that you do not exceed 40% or so of the storage capacity (high performance server hard drives often are destocked or short stroked, i.e., limited to 40% or less so as to keep the data on the outer edge of the platters where it can be quickly reached).

Once the read/write head reaches a track then the rotational speed of the platter comes into play, introducing latency, the time required for the desired sector of the track to rotate into position beneath the head. How do you reduce latency? Get a hard drive that spins as fast as you can afford. Most desktop hard drives now spin at 7200 RPM (don't let them slip you a 5400 RPM drive on your desktop or your laptop!). If your drive has a slower RPM, you can increase performance by purchasing a 7200 RPM drive. Note that high performance server drives spin at 10,000 and 15,000 RPM, but those drives are expensive.

If you are evaluating a replacement drive (or specifying the hard drive in a new system), look at the access time parameter for the drive. This will generally be around 11 milliseconds for 7200 RPM desktop PC ATA/SATA drives. The access time will include seek time and rotational latency. As for the type of interface, ATA drives (which peaked at around 133 MB/sec interface performance, setting aside internal data rate of around 60 MB/s and PCI bus rate considerations) are no longer offered, so you will see SATA (serial ATA) drives in a new computer. I wouldn't bother attempting to replace an ATA drive in an old PC with a SATA drive. You would need a SATA controller card as well as SATA drive and you might as well just purchase a new computer.

The current SATA interface rate is 3 Gbps (the initial SATA interface was 1.5 Gbps), i.e., 3 gigabits per second. That translates to approximately 300 MB/sec. However, the actual rate that the read head can read the data off the spinning platter of the drive is closer to 100 MB/sec (the internal data rate). You therefore can benefit by having a

drive with a large cache memory, where a large amount of data has been read internally by the hard drive before the interface is accessed, at which time the interface can burst perform at the full interface speed of 3 Gbps/300 MB/sec. I note that even the expensive server grade SCSI and SAS drives have about that same external interface transfer rate, i.e., 300 - 320 MB/sec, so their increased performance is coming directly from the high rotational speeds (10 - 15 K) and fast seeks, giving access times of 3 - 5 ms vs. 11 ms or so for desktop SATA drives. Defragmenting your drive regularly will help keep the drive operating at peak efficiency.

A less critical factor is the speed of the microprocessor itself (FSB considerations aside as they relate to RAM access speed). A faster microprocessor or a dual or quad core processor will allow applications, their processes and threads to execute faster (to actually run the microprocessor instructions of which a program is composed) once the instructions and data reach the microprocessor.

So, if you have processing intensive applications like video or music (studio) production and editing (or scientific number crunching), faster and more core processors will speed things up considerably, but only if you have plenty of RAM and a high performance hard drive.

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 (bentley.gary (at) gmail.com).

Mr. Bentley studied electrical engineering at the University of Texas, began working in the electronics industry in 1978 with GTE Network Systems (Lenkurt), then software engineering with various startups in the 1980's, designing and implementing, among other things, pre-Internet email communications systems multitasking on Intel platforms and MSDOS PC's. 1984 - 1986. Gary now provides Information Technology consulting services in the El Paso, Texas and Las Cruces, New Mexico areas. Gary has edited and contributed articles to the award-winning Southwest International Personal Computer Club monthly magazine, Throughput, since December, 2003.

Microsoft will provide Free Support via a 1-866 number, on a 24-7 basis, if your computer becomes infected with malware? For more information go to <http://blog.mir.net>

OAG Joins the Facebook Generation(s)! Part 2

by Mike Morris

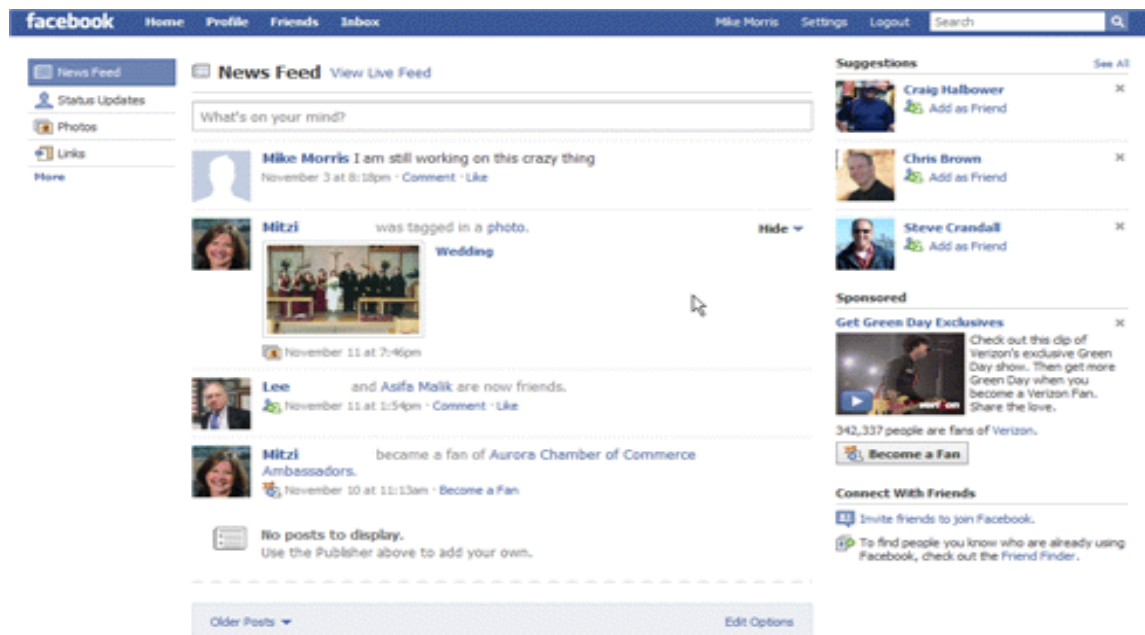
Front Range PC Users Group, Ft. Collins, CO

Hello again. This is the Old Analog Guy with Part 2 of my story about joining the Facebook generation. I need to warn you that I am a novice at this social networking phenomenon — just in case it isn't obvious.

In Part 1 I described the various privacy controls offered by Facebook. In this segment I want to (try and) describe (to the extent that I understand them) the two primary pages of a Facebook account:

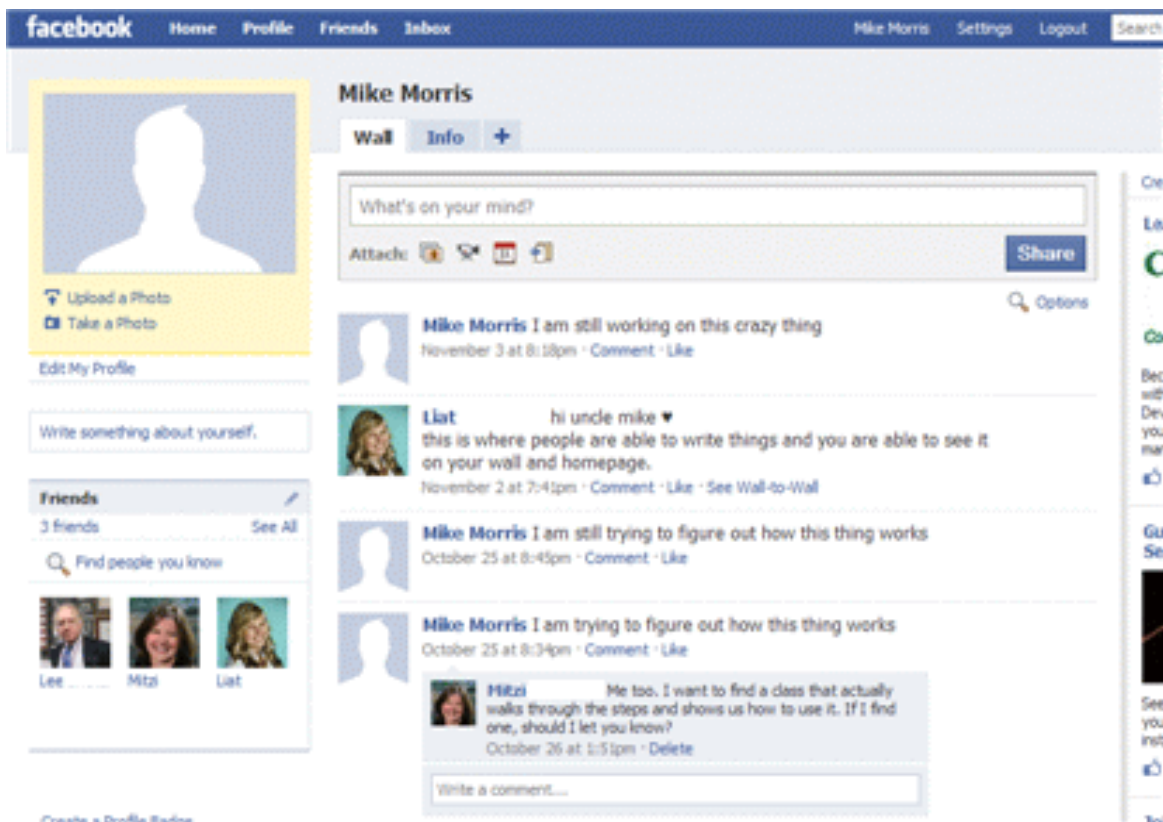
- Home Page (also known as News Feed, sometimes as Live Feed)

Here is a view of my Home Page:



- Wall (also known as Profile)

Here is a view of my Profile:



So . . . what is the difference?

Both have the “What’s on your mind?” field. Both have messages that I have posted and that “friends” have posted (although the list is not the same).

According to Wikipedia (<http://en.wikipedia.org/wiki/Facebook>): “A user’s Wall is

visible to anyone who is able to see that user's profile, depending on privacy settings." The Wall can include both text and attachments. Well ... OK, but that is an unsatisfactory explanation (to me) of the difference between the Home Page and the Wall.

One difference between the two pages is the list of "friends" on the left side of the Wall. If I click on a photo (or name) of a "friend" in that list, I am connected to that "friend's" Wall (not to that "friend's" Home Page). In fact, as best as I can determine, I can't connect to a "friend's" Home Page, only that "friend's" Wall. So here is how I see the difference between these two pages (based on my testing, with results potentially different if privacy settings are different):

- My Home Page is a collection of messages posted by me and my "friends." It is (apparently), only visible to me.
- My Wall displays messages posted by me (and, under certain conditions, my "friends") and is visible to those I allow access. The Wall is also a link to other "friends."
- If I post a message from my home page (News Feed), it will be displayed on both my home page and my Wall. It will not be displayed on "friends" Walls. It will be displayed on "friends" home pages (Live Feed but not News Feed)
- If I post a message from my Wall, it will be displayed on my Wall and on my Home page (both News Feed and Live Feed). It will not be displayed on "friends" walls. It will be displayed on "friends" home pages, but only on Live Feed, not News Feed
- If I post message to a "friend's" Wall from my computer (I click on the "friend's" name or photo that is displayed on my Wall), it will be displayed only on that "friend's" Wall (not on any other "friend's" Walls). It will not be displayed on that "friend's" home page (either News Feed or Live Feed). It will not be displayed on any other "friend's" home pages. It will not be displayed on my Wall or on my home page.
- If a "friend" posts a message to my Wall from that "friend's" computer, it will be displayed on my Wall and my home page (both News Feed and Live Feed). It will be displayed on that "friend's" home page (Live Feed but not News Feed). It will not show up on that "friend's" Wall, nor will it show up on any other "friend's" Walls or home pages.

Do you follow all that? I think I have the mechanics of using these two pages correct. However, as I said in my Facebook post, the logic of using two pages — especially the logic regarding what is displayed (or not displayed) on each page — still is not clear to me.

According to the Wikipedia article:

"One of the most popular applications on Facebook is the Photos application, where users can upload albums and photos. Facebook allows users to upload an unlimited number of photos, compared with other image hosting services such as Photobucket and Flickr, which apply limits to the number of photos that a user is allowed to upload.

Another feature of the Photos applications is the ability to "tag," or label users in a photo. For instance, if a photo contains a user's friend, then the user can tag the friend

in the photo. This sends a notification to the friend that they have been tagged, and provides them a link to see the photo.”

If you look at my Home Page, you will see that one of my “friends” “was tagged in a photo.” It wasn’t MY “friend” that did the “tagging.” It was a “friend” of MY “friend,” but I received notification, as did, presumably, all of MY “friend’s” “friends.” That message only appears on my Home Page, not on my Wall. Actually, I am not sure why it is displayed on any page of my Facebook account, since I have disabled everything in the “News Feed and Wall” privacy options and in the “Applications” (Photos is an “Application” which I have not installed) privacy options, and limited everything in the “Profile” privacy options to “Only Friends.” I suspect I don’t completely understand those privacy options.

I need to stop here. Just describing how this thing works starts short circuits in my brain — after all, I am an Old Analog Guy. I will try to describe, in Part 3, how you find “friends,” for those who need more friends, and for whom “old fashioned” telephone and email contacts are not sufficient.

I will end this story with references to some very interesting information on just how pervasive social networking has become—in all age groups of the population.

From the December 2009 issue of k-Byte, the newsletter of the Front Range PC Users Group, Ft. Collins, CO. <<http://www.frpcug.org>>

Is it Time to Switch to 64 Bit Windows?

by Brian K. Lewis, PhD
Sarasota PCUG, FL

In my February 2008 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 & 64 bit versions will be sold. There is 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/IIIe 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, its 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 Win 7 -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 computer’s 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 & 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 CPUs and AMD CPUs 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 CPUs 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 cannot 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.

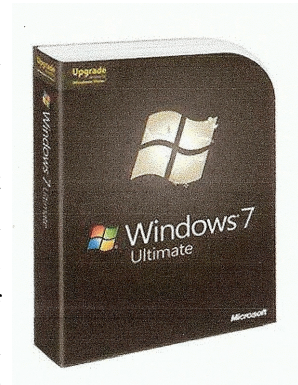
Another consideration is that any utility software that works at the hardware level must be 64 bit. This generally includes antivirus software and other anti-malware products. Those few manufacturers I have checked do have 64 bit versions of their applications available. This includes some which provide 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 h:m:d 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 m"e 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 M 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. bwsail@yahoo.com.



Web Geek's Guide to Google Chrome

Reviewed by Ted Littman

North Orange County Computer Club, CA

According to the publisher (Que), Google Chrome *"is the world's hottest new browser,"* and is *"a web browser for today's Internet and today's user."* Since this is a book review rather than one of the browser, my focus will be on the usefulness of the book.

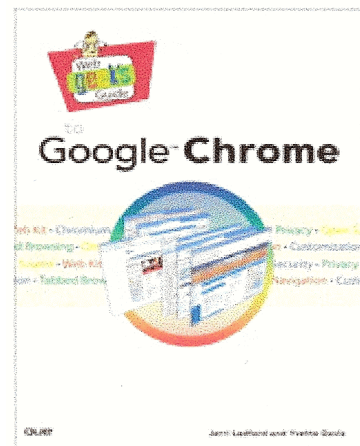
Authored by Jerri Ledford and Yvette Davis, the 249-page book was first issued in June 2009 and has a list price of \$20, but can be purchased for about 35% less from the publisher or the usual online discounters. For more information, visit the publisher's web site:

<http://www.infonn1.com/store/produ1.aspx?isbn=0789739739>

Content-wise, the book is divided into four parts following a six-page Introduction:

- Google Chrome and Browsing the Way It Should Be
- Tinkering Around Under the Hood
- Chrome for Power Users
- Appendices

The first three parts are divided into chapters of 6, 4, and 2 respectively and the three Appendices cover shortcuts, the non-Windows (i.e., Mac & Linux) user, and a glossary of terms used in the book.

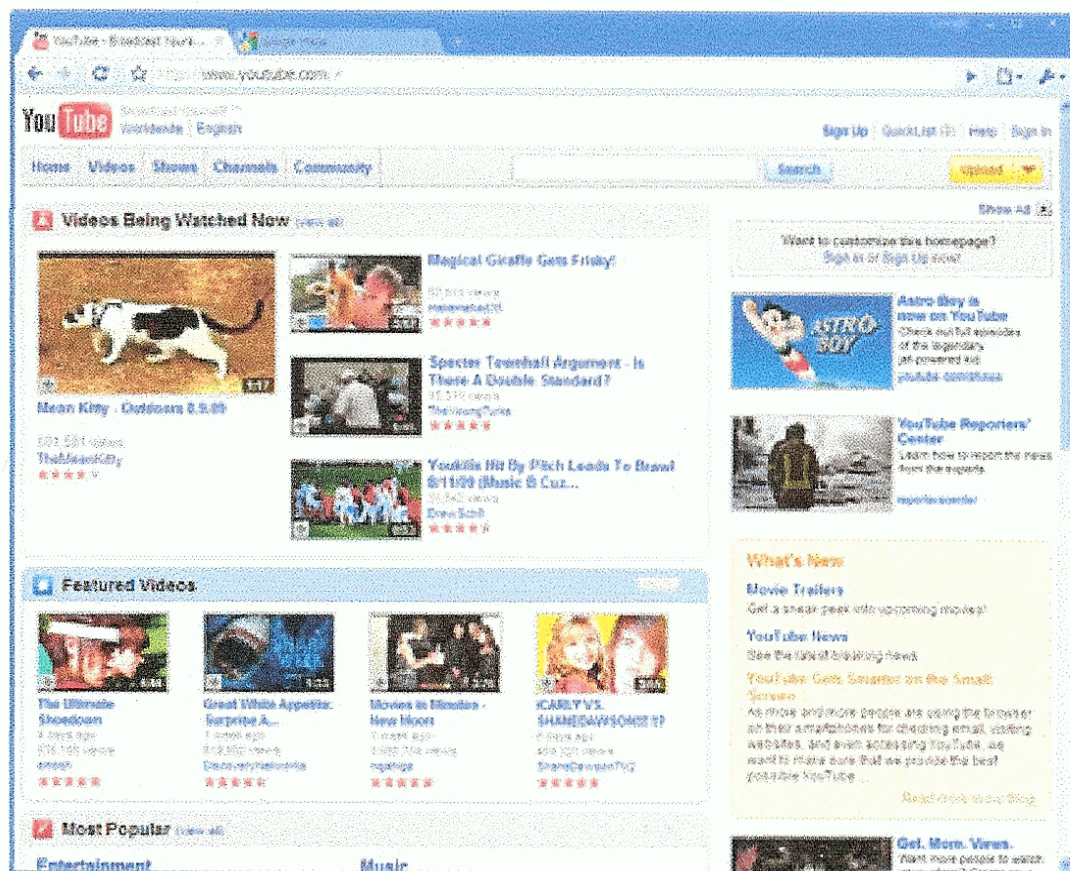


Web Browsers

Before I discuss the book, let's talk a bit about web browsers, the software programs that allow you to access the Internet with all its wondrous things. If you want to learn more about web browsers, read the Wikipedia article at: http://en.wikipedia.org/wiki/Web_browser. (Complementing browsers are the search engines of which Google is the dominant player with a 63% market share in the U.S. — see http://en.wikipedia.org/wiki/Web_search_engine.)

As you probably know, Microsoft's Internet Explorer (released in 1995 and now in version 8) is the leading web browser with about 65% of market-share, followed by Firefox, Safari, Opera, and others. These are free to users with support revenue coming from advertising and special services. The hot-shot folks at Google, who have been trying to replace Microsoft as the dominant company in the world of computing, introduced Google Chrome in late 2008 as its entry to challenge Internet Explorer. According to Google: *"Google Chrome is a browser that combines a minimal design with sophisticated technology to make the Web faster, safer, and easier. Use one box for everything — type in the address bar and get suggestions for both search and Web pages. Thumbnails of your top sites let you access your favorite pages instantly with lightning speed from any new tab. Desktop shortcuts allow you to launch your favorite Web apps straight from your desktop."*

(You can download Google Chrome 3.0 at: http://download.cnet.com/Google-Chrome/3000-2356_410881381.html?tag=mncol;txt and read the review by cnet. There



also is a 4.0 Beta version.) Cnet writes: *“Chrome is Google’s attempt to make the Web browser disappear and to focus on the applications and pages users are viewing, rather than on the border with its tools. Some of Chrome’s basic underpinnings are quite novel, but people will recognize other features as they exist in other, open-source Web browsers on the market today.*

Chrome is blazingly fast and is easily the quickest browser available. Based on Webkit, the same open-source engine that powers Apple Safari, Google’s Android mobile platform, and several other Web-browsing tools, Chrome’s interface is a drastic departure from other browsers. Instead of the traditional toolbar, Chrome puts its tabs on top. Moreover, the tabs are detachable: “tabs” and “windows” are interchangeable here. Detached tabs can be dragged and dropped into the browser, and tabs can be rearranged at any time. By isolating each tab’s processes, when one site crashes, the other tabs do not.”

Book Review

Since I never had tried Google Chrome, I read the book from cover-to-cover first and then downloaded the software. (FYI, I have been using I.E. 8 for the most part and occasionally Firefox 3.5.7.)

In the Introduction, the authors tout the claim that Chrome is the web browser of the future, but it can be used to advantage now. The book layout and contents are summarized and the special highlighted features described. The authors say that the audiences for the book are beginner and intermediate users. To help readers keep current, they claim to provide a web site with a blog where regular updates of Chrome and other Google applications are posted. (As of this writing, the link takes you to a GoDaddy.com-hosted page with the notation *“This web site is coming soon.”*)

Part I discusses why (the authors perceive that) Google entered the “browser wars,” compares Chrome with the major browsers, covers installation and initial usage, tells you what the “Omnibox” is and how to use it and how Chrome protects the user against a browser crash, and recommends safety measures to go beyond Chrome’s built-incapabilities.

Part II covers the ways you can customize (tweak) the open source browser to suit your personal needs and change its appearance if you don’t like its minimalist display.

Part III spends a lot of space on “tricks” for power users even though the authors claim the book is for beginners and intermediate users! Then, in spite of the hype, tells you how to fix the most frequently encountered problems. Well, Chrome is relatively new and we shouldn’t expect perfection up front, should we?

The Appendices has pages of keyboard shortcuts if you are proficient and prefer it to using the mouse, a brief comment on using Chrome with Linux or Mac operating systems — yes you can, and finally, a glossary of terms used in the book.

Here’s my assessment of the book. Considering all of the advanced material covered, the book is more likely to appeal to advanced computerists (especially if you do programming) rather than users at the lower end of the capability spectrum. Beginner and Intermediate users probably can get any help they need in installing and using Chrome from the significant free Help resources on the browser’s web site, even though

the book serves this purpose too. The book's figures all are in black-and white and many of the screen-shots are painfully small to view. The authors spend too much space providing historical perspective and technical details, interesting, but unnecessary to configure and use Chrome today; and, to convince you to switch from your present browser. For the majority of Internet users, I suspect that it will be a while before "minimalist" Google Chrome (even with its superior speed) becomes the browser of choice over its "kitchen-sink" competitors.

From the February 2010 issue of Orange Bytes, newsmagazine of the North Orange County Computer Club, CA.

From Steve Bass

I stopped using Acrobat because it was a bloated beast and a memory hog. Instead, I use Foxit Reader (http://download.cnet.com/Foxit-Reader/3000-10743_4-10313206.html?part=dl-116442&subj=dl&tag=button), a freebie that's small, loads fast, and does all I need: view, print, and search PDF files. My friend, Texas-based writer Michael McGown, countered with one even smaller: "I use SumatraPDF because it takes about 1% of the space of Acrobat and loads 500% faster — so it's good enough for my humble needs." Choose one or the other, and dump Acrobat with the free Revo Uninstaller.

Google Street Views: Amazing Mashups

Let's say you want to give someone directions to your house or office. In the old days (ha!), you'd send them a MapQuest or Google Maps link. Take a leap forward and use Virtual Turnpike. It makes use of Google's street views in an amazing way -- by stringing together the views.

Start by entering a street address and zip. When the map and view display, you can move the stickman to another spot on the map for another view. More fun is to click another spot on the map and a red destination point appears. Buckle up your seatbelt, click the Route button, and when it appears, click the Drive button.

And while I'm talking about Google maps, check out its Street View of the Pompeii Ruins. (Drag the yellow stickman onto the map.)

Windows 7 Keyboard Shortcuts

You know how many things you can do with the Windows key on your keyboard? And did you know that Windows Media Player has nifty shortcuts? I thought not. You'll get them all in Complete Windows 7 Shortcuts eBook, a free download.

For Fun

No animals were harmed in the making of Nolan's Cheddar. Warning for animal lovers: Stick with it. It's pretty disturbing for a while, but there's a happy ending (and don't forget, it's animated).

Steve Bass is the publisher and self-appointed Chief Content Officer at TechBite; he continues to experience the cool feeling of having his own newsletter. To sign up for TechBite's free Steve Bass Technology newsletter, head for the signup page at <http://www.techbite.com/>.

Icon Clutter? Be a Groupie!

An Icon Groupie, that is.

by Bob Schwartz

Is your desktop display so cluttered with icons that it is hard to find your program? Are you like me and have to try out many of these wonderful new free programs? And then let them lapse because either they don't fill a critical need, OR, something better comes along.

If so, help is on the way and, it is in your hands. There are several strategies that may work. First, you could group icons into groups of related ones with the most important ones on the periphery of each group as:

XXX XXX XXX

XXX XXX XXX

XXX XXX XXX

XXX XXX XXX

There is a problem here. When a new program is installed, you will have to enlarge a group. Pretty soon the groups get so large, there is no space between them and you are back at square ONE. One large FULL SCREEN. Reducing the size of the icons and the font won't work. There is just more clutter and it is harder to read.

There is another option that may work for you. Have you heard of Group Icons? A group icon is one icon that contains a number of (your) related icons within it. Common ones, for example, might be: Word Processing, Photo Processing, Utilities, Security Pgms, Backup programs, Media Play, etc. Titles are up to you.

To illustrate, the Word Processing group icon might be set up to contain Microsoft Word, Notepad, Word Pad, Corel Word Perfect, etc. Here, where we had 4 icons, now we have one!

How do you do it? It is amazingly easy. We will illustrate.

If you can find a blank spot on your cluttered desktop, right click and, on the menu showing, select NEW, and then FOLDER. Then, type the name you want for this group icon and hit ENTER. The group icon with the group name will appear on your screen. If you use Windows Explorer, this folder, that the group icon on the screen refers to, may be found under DESKTOP.

Now, all you have to do is to drag an icon you want to include in the group to the group icon and drop it (let go) ON the group icon. Keep doing this until all the related program icons have been dropped into the group icon.

Now create the next group icon and collect its icons. Then the next, etc. Pretty soon, your screen will be pretty scraggly. Now you can rearrange your desktop.

Pretty neat, huh? Your screen is neat, simple, well organized. If you need to take an icon out of a group, just click on a group icon, resize the group display to less than full screen size (middle block at the upper right of the screen, to show part of the main desktop display), click on the desired icon and drag it out of the group and drop it on an unused part of the main desktop screen.

If you are not happy with the appearance of the default group icon, the icon can be changed. But that is a challenge for you to explore and meet.

Last, for programs you want to keep but rarely use, you can delete the icon but not the program. The program will still be available via START/All Programs. Right click on the icon and select DELETE. If you want to delete the program, go to Control Panel and select ADD /REMOVE PROGRAMS and follow the instructions. Such pruning should be done periodically, e.g.monthly.

From the January 2010 issue of HAL-PC Magazine, newsletter of the Houston Area League of PC Users, Inc. Bob Schwartz is a HAL-PC member, retired EE, 14 patents, technical writer, active in civic affairs: President, Brays Bayou Association; Vice President, Marilyn Estates Civic Association; Correspondence Secretary with the Willow Waterhole Greenspace Conservancy. Contact him at bobx@hal-pc.org.



Facts and Foibles

Q. When I download files from the Internet, I can never find them after the download box closes. I'm sure I'm doing something wrong, but if you could straighten me out on this, I would appreciate it, Mr. M.

A. When you click a link to download an item, you are presented with a little download window, called a dialog box. In this first window, you are given a choice whether to Open or Save the item you are about to download.

If you choose Open, the file that you download will be opened and/or run (in the case of programs), once the downloading concludes. There are a variety of security-related reasons not to do this. Instead, I'd suggest always selecting Save.

Once Save is selected, you will be presented with a new window that asks where you want to save the file. My recommendation is to click the drop-down arrow next to Save in: and select Desktop.

Next, click the Save button and the downloaded file will be saved to your Windows Desktop. Saving a file to the Desktop means that you'll never have to go looking for it because it will always be right in front of you, on the Desktop. You can then move the file to another folder or work with it in any manner you choose.

Bonus Tip: If you download a program, the file you download will be named something like setup.exe. Once you install the application by double-clicking the .exe file, you can then delete the setup file you downloaded to the Desktop.

Q. Does using System Restore allow me to get back an important document that somehow disappeared? I'm also curious: If I create a document today and then use System Restore to go back to two days ago, will I lose the document I just created?

A. I'm sorry to be the bearer of bad news, but System Restore will not resurrect any documents. System Restore focuses on settings, not documents or data. Its purpose is

to return your system to the point it was when a selected Restore Point was created. It is not a data backup system, nor should it be thought of in that manner. If you do, you're destined to be disappointed.

Using your example, if you wrote a letter and saved it in My Documents today, then ran System Restore and turned back the clock to a date two days ago, your letter will still be located in My Documents. So if you're concerned that the letter will disappear because it didn't exist two days ago, it will not. System Restore protects you from system or settings changes that may cause problems. It has no effect on documents.

To run System Restore, click Start > Programs > Accessories > System Tools > System Restore, then select a date (called a "Restore Point") from the calendar that appears.

It's a good idea to create your own Restore Point before installing any new software or fiddling with your settings, just in case things take an ugly turn. You can create a Restore Point at any time by going to System Restore as described above. You'll see where you can create your own Restore Point.

Q. I'm using Gmail and often get emails with pictures within the messages, not as separate attachments. When I forward them, I hear back from recipients stating that they received no pictures. What am I doing wrong?

A. When forwarding photos that are embedded within an email, make sure you enable Rich Formatting in Gmail's Compose window before sending. Normally, you'll see "Plain Text" to the right of the formatting line. Click "Plain Text" and it will change to "Rich Formatting." Once you make the change, you can proceed to send the embedded photos.

Mr. Modem's DME (Don't Miss 'Em) Sites of the Month

GetHuman Database

We've all had the unpleasant experience of being verbally assaulted by endless layers of voice mail that tells us how important our call is, when all we want to do is connect with a customer service representative or tech support person. GetHuman.com provides the toll-free telephone numbers of hundreds of businesses and organizations, with instructions how to cut through the voice mail madness and actually speak with a live body.

<http://gethuman.com>

Hulu

View TV episodes, full-length films, and video clips. Most major networks are represented, as well as cable, so if you missed a favorite show or forgot to set your DVR to record it, you can probably find it here. Hulu has thousands of TV shows and full-length films, with hundreds more being added each week.

<http://www.hulu.com>

PhotoShop Online

Some of the best photo-editing features of the world-famous (and very expensive) Adobe PhotoShop program are now Web-based and free! You can also post your photos to your own gallery or browse the galleries of others. Adobe Flash Player is required,

but have no fear, you'll be prompted if you need it.

www.photoshop.com

For plain-English answers to your questions by email, plus great computing tips, subscribe to Mr. Modem's award-winning WEEKLY newsletter. Subscribe using Promo Code 1640 and receive TWO free months with your 12-month subscription! To view a sample issue or subscribe, visit www.MrModem.com.

The DealsGuy

by Bob (The Cheapskate) Click

Greater Orlando Computer Users Group

I often check <http://www.giveawayoftheday.com> to see what's free that day and if it looks interesting, I sometimes downloaded things just in case I might need them some day, but it often takes me a while to get smart. I saw a good Windows tune-up program offered that I liked the other day and it was something I planned to use immediately. Suddenly I noticed a short paragraph on the download page telling me that I should not only download it within the time limit to get it free, but I should install it during that time and then run the activation file so it would be fully activated. Looks like I'll be deleting several files that I downloaded for future use. At least that oversight didn't cost me anything.

By the way, if you like those limited time offers, here's something else you might like to check occasionally. Like the others, these deals are only good for 24 hours, so each day when you check, the product will be different. Start checking <http://www.software-dod.com> daily when you have some spare time and see if they might have anything you like.

Help from Google for Your Job?

I've said before that Louis Vitale of Macon Users Group <http://www.maconusersgroup.org> is one of my favorite authors; I never miss reading his column. A while back, he wrote about asking his nephew why he uses Google a lot. His nephew astounded him when he said that Google helps him make his living. Want to know how? He told Louis that he works for a roofing contractor writing job estimates and all he has to do to obtain the measurements for a house's roof is "Google" that address for the information and do the calculations to estimate the price of it's roof. I was astounded to read that because I was uninformed about that capability in Google Earth. Louis then went on to mention how much fun he had that evening exploring Google's capabilities, even way into the wee hours.

For that matter, I was surprised when my grandson called me Christmas Eve to get my house address so he could use Google to get a map for driving to my house from where he was in Florida; and in the process, he mentioned being able to see my house and the flag flying. I do have a 25' flagpole in my yard and he would not have known that. This high-tech stuff continues to astound me.

A Unique Way That Modern Technology Affects Ranchers

I read an article in *Information Week* that certainly opened my eyes to the strategy some ranchers must use to avoid criticism for their use of water for irrigation. Many

ranchers need irrigation to grow their crops, but the human race also needs water for human consumption, and water is becoming scarcer all the time. So, the ranchers need a compromise which they can do by refining their irrigation technology. It certainly made sense when I read about this technology that has been in use for a while, but now they're refining it to save water even "during" the irrigation. I think you'll find it interesting. <<http://www.informationweek.com/news/mobility/showArticle.jhtml?articleID=221601558&queryText=Chris%20Murphy>>.

What If the Medication Doesn't Work?

Who knows what might lead to your demise, but how about an impressive way to be presented when the time comes. Another of my favorite writers was Pim Borman and I wish he was still writing "The New, The Best, and the Worst." In the last column that he wrote when his user group disbanded, one item was about a personalized casket for the deceased's eternal life. They will actually decorate the casket according to the way you lived your life. For example, a firefighter's casket might have a fire engine and ladders decorating the sides, a chemist might have the glass items for his trade or a doctor might have a stethoscope or other medical apparatus engraved on the sides.

The Web site <<http://www.artcaskets.com>> states: "Whether bold and vivid or soft and subdued, Art Caskets are as unforgettable as the life they commemorate." I can't say if the mourners would be impressed, but it's your funeral, isn't it? Thinking further, what if the deceased was a former Madam? Wow! Would that funeral be "adults only" if the casket was inscribed accordingly? Don't laugh; during recent excavations in the city of Pompeii, archeologists noted that there was a certain male organ depicted over the doorway to one of the shops, so that occupation is certainly nothing new. Anyway, I enjoyed that personalized casket item in the last column Pim wrote. "The DealsGuy" inscribed on the side of my "discounted" casket will do just fine.

Just in Case You Wondered

Many people may be somewhat suspicious when they receive e-mails that you are asked to read, or other ones containing items such as a greeting card you click on to view it, and other catchy things. I never click on them because I've known people who got a virus when they clicked to see a so-called greeting card. Of course, that's not always the case, but bad things are possible.

Anyway, if someone sends you an invitation to try Dropbox, it's actually something you might want to look into. Of course, you should check closely to see where that URL is really taking you, but an invitation to Dropbox could be something that interests you. It's actually a place to store your files on the Web and they can be shared with others if you desire. In your home, a thief could steal your personal files or worse yet, you might have the backup well hidden, but you can't "hide" it from a fire. Dropbox is also handy to sync your files between two machines, and I'm told there are other uses such as linking Dropbox to your machine. Dropbox is good for Windows, Linux and Mac.

Several members here use it, like it and suggested I use it in my column. The Dropbox invitation you were sent is also a way for the sender to earn benefits from Dropbox if you decide to use it, they just didn't mention that, but if it looks interesting, you'll also be helping the friend that recommended it. There is a free version allowing

you to store up to two gigabytes of files, and share them with others if you like. Larger storage will cost you so if you're curious; check <[http://www .dropbox.com](http://www.dropbox.com)> to look further into the many features.

On the other hand, in the case of Dropbox, you're dependent on somebody else's server to keep your stored files, not to mention staying in business. Mine aren't that important that they need to be kept secret, but you're the judge of yours. I also have a backup in a fireproof safe.

Need a Coloring Book?

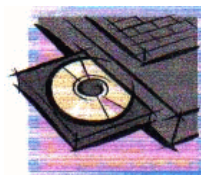
Star Coloring has launched Animals Coloring Book, a computer-based educational development program aimed at children 4-13 years old. The website based activity course is a perfect choice for parents who want to familiarize their kids with computers without exposing them to violent computer games and the dangers of the Internet. Animals Coloring Book features 25 three-dimensional pictures that strike an innovative balance for different skill levels. With a clear 3D interface, the artistic puzzles are guaranteed to keep a child occupied for a long time.

Animals Coloring Book offers kids an opportunity to develop their artistic abilities without getting messy with real paint. Once Animals Coloring Book has been opened, there is a simple tip for every tool and button (e.g. how to clear the picture, how to return to the previous color, etc). The program features nine basic colors and a palette for blending them, so it's possible to achieve almost any color. The 3D objects and landscapes look much more attractive than those of common coloring programs.

The original music creates a fairytale atmosphere and sound effects make the process of coloring almost real. The auto-save feature ensures that the coloring will be safely stored after each session. Simple mistakes are impossible when working with Animals Coloring Book, which is always in full-screen mode. Animals Coloring Book is compatible with both Windows and Mac OS X and costs US\$19.95 (all updates are free). User group members will receive a 20% discount by using the coupon code 'DealsGuy' when ordering. Further information on the product, as well as a free trial edition, is available at <[http://starcoloring.com /coloring-books/animals-coloring-book](http://starcoloring.com/coloring-books/animals-coloring-book)>. Visit <www.starcoloring.com>

Windows download link: <http://download.starcoloring.com/win/animals_coloring_book.exe> (14.2 MB) Mac OS X download link: <http://download.starcoloring.com/mac/animals_coloring_book.dmg.zip> (19.2 MB)

That's it for this month. I'll have some more new product announcements on my Web site that didn't offer discounts. Meet me here again next month if your editor permits. This column is written to make user group members aware of special offers or freebies I have found or arranged, and my comments should not be interpreted to encourage, or discourage, the purchase of any products, no matter how enthused I might sound. Bob (The Cheapskate) Click <[bobclick at bellsouth dot net](mailto:bobclick@bellsouth.net)>. Visit my Web site at <<http://www.dealsguy.com>>.



Creating a Wireless Network

by Bob Rankin

Here's a typical scenario... Let's say you have a computer in your living room, and it's plugged directly into your cable or dsl modem. But you just got a second computer or laptop, which you want to use (and go online with) at the other end of the house. Instead of running 50 feet of thick, ugly cabling all through the house, connect that second computer wirelessly. Now you want to share a printer, so that both computers can print to it. Place that printer anywhere in the house, no wires needed, if you have a printer that can connect wirelessly.

To make all this possible, all you need is a cable/dsl modem with a wireless router built-in, or you can buy a wireless router and plug it into your modem. The router broadcasts a radio signal that enables two-way communication between the router and devices equipped with wireless network adapters. As mentioned before, those devices can be desktop computers, laptops, printers, iPods or mobile phones.

Wireless networking allows all those gizmos to share both files and an Internet connection. If your computer doesn't have a wireless adapter built-in, you can easily add one that plugs into a USB port.

So what's the difference between wired and wireless networking? None really, except that the wires aren't there. If you pretend that the devices on your wireless network are connected with an invisible wire, it's all the same. Only a few demanding applications, such as real-time playback of high-definition video, still need a hardwired network which can transfer data at higher speeds.

Wireless Network Security

A router can also control access to the wireless network, so that only your family or staff can use it. Access control in a wireless router is turned off when the router arrives from the factory, allowing any device with a wireless adapter to connect to the router and other devices with which the router communicates.

That can be good, or not. When I first got high-speed Internet, the company supplied a wireless network router. I never thought about checking the settings, because I wasn't using any wireless devices. But soon after, I did notice people parking in front of my house for 20 or 30 minutes at a time. I couldn't figure out why, but finally it dawned on me... they were mooching off my wireless internet signal.

The first thing you should do is configure your router to allow access only to authorized users. This can be done in a couple of ways.



You can enable WEP or WPA encryption on the router and create a “network key” or password that will be required of any device that attempts to log on to the network. This is a flexible, open way to manage access to a wireless network. You can give the password to visitors if you want them to have access. You can change the password any time you like. But hackers can, with considerable effort, divine any password.

Another security method is to allow only a known group of devices to have access. Often, this is done using the MAC address built into most digital devices. A list of MAC addresses can be stored in the router, and it can require each device to identify itself by its MAC address before allowing it access. The downside of this scheme is that visitors cannot log themselves onto the network. The system administrator would have to add the MAC address of a visitor’s computer to the router’s list.

The router is not the only security checkpoint on a wireless network. Each computer connected to a wireless network must be configured to share files stored on it, and/or printers and other devices attached to it. This computer-level security is a second line of defense against hackers, and it also gives each user on the network control over his or her data and local devices. Sharing is controlled through your computer’s operating system; in Windows, “File and Printer Sharing” is the module to look for. You can also right-click on a device or file folder’s icon to change its sharing properties.

A wireless network can be quite secure if it is properly configured to allow access only to authorized users. But if you don’t take the time to change the default settings of a wireless router, your network will be wide open to anyone within its broadcast range.

From TOURBUS Vol 15, Number 57, 27 Jan 2010. To subscribe go to: <http://internettourbus.com/tickets.html>

More Than One Antivirus Program?

by Bob Rankin

"I'm not sure which anti-virus program is installed on my computer. I think I might even have more than one. How can I find out which one I have, and is it good to have multiple anti-virus programs?"

Is It Okay to Have Multiple Antivirus Programs?

Multiple antivirus programs Often when you buy a new computer, it comes with a trial version of Norton, McAfee or some other commercial antivirus software. When that free trial is about to expire, the program starts to nag you about upgrading to a paid version, which can be expensive. That's when some users start looking for a free antivirus alternative. There are some excellent free antivirus programs, but a common mistake is to install that freebie without removing the old one. Some users also think they'll be more secure if they install a second antivirus package.

In most cases, having more than one antivirus program running on your computer is bad news. Antivirus programs consume memory and processing power, as they scan the stream of data, emails, web pages and downloads that enter your computer. So it makes sense that having more than one antivirus scanner will slow down your computer.

But there's another potential problem, sometimes antivirus programs can fight with each other, since they both want to be the final arbiter is good and evil on your computer. One might even think the other **is** a virus, and attempt to quarantine it. You may see slowdowns, lockups or experience random restarts.

My advice is to pick ONE antivirus tool and stick with it, at least until you decide to replace it with another. I've compiled a list of some excellent Free Antivirus Programs, which I use and recommend over the paid-for security suites on the market. If you want to study them further, the independent reports at AV Comparatives will show you how various antivirus programs compare in terms of effectiveness.

Which Antivirus Programs Do I Have?

If you're not terribly tech savvy, you might not even know which antivirus program is installed on your computer, if you have more than one, or none at all. To find out if you have antivirus protection, click the Start button, then open Control Panel and click on Security Center. If there is a red light next to Virus Protection, you have no antivirus protection, and fixing that should be Job One. If you see a green light, you're good, probably.

Taskbar antivirus icons Now let's find out if you have one or multiple antivirus programs installed. First, check out the little icons in the taskbar on the bottom right of your screen:

Click on the little white arrow to expand the list if needed, then run the mouse pointer over each one without clicking. As you do so, the name of each program will appear in a little popup as shown above. Antivirus programs should clearly identify themselves. Look for names such as AVG, Avira, Avast, BitDefender, Eset, F-Secure, G Data, Kaspersky, McAfee, Norton, Panda, or Trend Micro. There could be others, but those are the most common and popular ones at present.

If you find more than one, go to Control Panel, Add/Remove Programs, and uninstall the anti-virus program(s) you don't want to keep. You'll need to restart your computer to finish the removal process. When you're done, make sure your one remaining antivirus program is up to date and run a complete scan to check for nasties.

Will You Outlive Your Flash Drive?

by Bob Rankin

A flash drive contains a circuit board populated with transistors; usually one transistor per bit of storage capacity, although newer (and more expensive) transistors can store multiple bits. To store data on a flash drive, an electrical current changes the charge of a transistor from one state to another, representing either a zero or one, on or off bit. The design of the transistor is such that it remains in a given electrical charge state for many years. So your data stored on a flash drive won't fade away in any time frame that you're likely to worry about.

Flash drives are not as easily damaged as magnetic or optical media. There are no delicate moving parts in a flash drive such as read/write heads, spindle bearings, or disks of magnetic or optical media spinning at thousands of RPMs to collide, strike dust

particles, etc. Yes, a cheaply made keychain USB flash drive's case may break if dropped or otherwise abused, and that may be the end of the flash drive's usefulness. But a digital camera's memory card is a flash drive, too, and it is so well armored and sealed you can drive a car over it or drop it in water and it will still work.

Can You Wear Out a Flash Drive?

If you just write data to a flash drive, unplug it from the computer and put it in a drawer, its memory will probably last longer than yours. The age of a flash drive isn't what's important. It turns out the crucial factor in flash drive longevity is how many times data is written to a particular storage block.



There is a limit to the number of times a flash drive's transistors can be switched from one electrical state to another; eventually, it will become impossible to write data to an exhausted transistor. In one hands-on test, this limit was found to be over 90 million write operations! Interestingly, the data already on the tested flash drive could still be read even when writing new data to it was no longer possible. Data was not lost.

I wouldn't consider that the final answer to the question of how long a flash drive will last. I've seen other people quoting an upper limit of 1 million write cycles per block, and cautioning that data loss could happen after 10 years of storage. Given that they're a pretty cheap form of storage, I'd personally err on the side of caution and move my data to a newer device every few years.

Flash Drive Quality

Flash drives can be purchased at dirt-cheap prices online. But you should take care that you get what you pay for. Look for a drive with a warranty of at least one year, as this is some indication of how much faith the manufacturer has in their own product. Some popular and well-respected brands are Sandisk, Kingston and Lexar.

Defective flash drives discarded by manufacturers are often scavenged and sold cheaply. Such a drive may be labeled as a 64 GB capacity, and your computer may even identify it as that size. But in fact, all but a handful of the bytes on the defective flash drive may be unusable. Fortunately, there is a free, easy way to determine the true capacity of any flash drive.

H2testw is a free, tiny utility that writes test data to a directory on your flash drive, reads it back, and verifies that what was written is what is read back. It's safe to use H2testw on a flash drive that already has data on it; no existing data will be overwritten or altered. But those untouched parts of the flash drive may contain defective transistors, so it's a good idea to run H2testw on an empty drive, after quick-formatting the drive. The site is in German but the "download" buttons are in plain English. Just click the first one, then the one on the next page, and your download should start. You can select English or German during the program's

startup.

*From TOURBUS Vol 15, Number 57, 11 Feb 2010. To subscribe to this free newsletter go to:
<http://internettourbus.com/tickets.html>*

Society News

Planning Meeting Minutes

Feb. 2, 2010

by Mike Lavelle, secretary

Steve opened the meeting at 7:00 pm. All board members who were expected to be there were there.

The first item was a review of the January meeting. Everyone seemed to agree that the presentation was a very good program. At times it was a little lengthy but still, Charles did an excellent job. Thank you, Charles.

Arpad was asked if he was ready for his presentation on Windows 7. He said he was ready to go and even with his late work schedule, he should be at the meeting by 7:00 pm.

As of Feb. 2nd, there is no program or meeting place for March.

Everything is ready for the newsletter printing on Feb. 13th. All that is left is the purchase of paper and a can of air to clean one of the printers. Steve agreed to take care of these items.

A cabin has been reserved for the August Picnic. It is the same cabin as last year.

A permanent location is needed for the monthly meetings. A program chair is also needed. It is time to form a nominating committee to round up candidates for the upcoming election. All four officers and a board member at large are up for election.

There was talk of increasing the number of computer stores where our newsletter is available. Paid advertisers are needed to defer the cost of producing the newsletter. Hopefully, there will be a plan in place by March to present to the members.

Everything is set for the IRS; the paperwork for the 2009 fiscal year will be filed in July or August.

The meeting was closed at 8:30 pm.

General Meeting Minutes

Feb. 9, 2010

Help's Half Hour was let by Jack Baly. Topics of interest this month included MSconfig for controlling startup, change of language in MS Office 2007, Register fixers and MS Internet Explorer.

The club has two additional members; one is new, the other is a return. Starting next month, a membership card will be required to get door prize tickets. Forgetters will also be expected to make a donation to the jar.

There is no program scheduled as yet for next month. A program chair is needed. A nominating committee is needed. There were no immediate volunteers.

There will be no Dig SIG meeting next month because the leader is on vacation.

The August Picnic was announced.

Snowbirds are urgently requested to inform the membership chair about their schedule. Returned newsletters to members who have turned off their mail are costly to the club.

The presentation was given by Arpad Kovacs who gave us an introduction to Windows 7. Arpad worked from a logically organized set of Power Point Slides. Features and benefits were compared with older Windows versions. A set of short videos supplied by Microsoft rounded out the presentation. A question and answer period at the end demonstrated the interest of our members in this subject.

Help's Half Hour

Led by: Jack Baly

Transcribed by: Jan Rothfuss

Q: Office 2007 user when in contacts, his English alphabet has disappeared. How can he get it back to English?

A: May have to try re-installing the program. He may be able to check with Microsoft. Perhaps a repair or a restore might put it back. Sometimes an update can cause things like this to happen.

Q: When running Windows XP, there are many other programs that start up when booting up. How can I stop some of them from running?

A: Try msconfig which will allow you to turn off the items under the StartUp tab. There are other hints under www.pcworld.com where you will get lots of help.

Q: Recently she lost her ability to complete downloads.

A: Sometimes there is a 'click' to request Active X.

Q: When trying to do a Windows update, he now has two icons.

A: You may be able to check the properties. If they are both the same trash one.

Q: Does Office 2007 work on an XP machine?

A: Yes, it should.

Q: A member was trying to clean up his PC, using the Tango and running CCCleaner. He was then looking into the tools to clean the registry.

A: Be sure to make a backup of your registry files. SuperAntiSpyware might help, too.

The Lighter Side

Hardware, n.: The parts of a computer system that can be kicked.

PICNIC Problem In Chair, Not In Computer (aka: There's a screw loose somewhere between the computer and the chair)

Any sufficiently advanced technology is indistinguishable from magic. —Arthur C. Clarke

Machines don't save you from more labor, they save your employers from *paying* for more labor.

A computer lets you make mistakes faster than any other invention, with the possible exceptions of handguns and Tequila. –Mitch Ratcliffe

At the source of every error blamed on the computer you will find at least two human errors, including the error of blaming it on the computer.

If it aint broke, fix it till it is.

Arguing with an electrical engineer is like wrestling with a pig in mud, after a while you realize the pig is enjoying it!

User n.: A programmer who will believe anything you tell him.

I think there is a world market for maybe five computers. –Thomas Watson, chairman of IBM, 1943

I cannot conceive that anybody will require multiplications at the rate of 40,000 or even 4,000 per hour. –F. H. Wales, 1936

Elephant, n.: a mouse with an operating system.

The definition of an upgrade: Take old bugs out, put new bugs in.

All computers wait at the same speed.

Does the information superhighway have rest stops?