



THE BUG REPORT

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Play a joke on April Fools day before someone gets you first. Who played the first joke and the reason why the first day of April was designated still remains a mystery. Historians provide feasible explanations and professionals may be coming closer to discovering the origination of April Fools Day, however.

April 7

Klassic Specialties

If you've been around for awhile, Don Baker will not be a stranger to you. He keeps all of us up to date on the developments in the ink jet world, insofar as ink jet printers are concerned but in particular, the ink we use. There have been some major changes recently that have had a big impact on third party ink cartridges and Don will explain this to us: how it has affected him and how it affects us.

We will learn how to make our ink last longer and how important it is to use the proper paper for the task at hand. Did you know you can waste a good deal of ink if you are using the wrong paper for that which you are printing? It is an easy mistake and even easier to correct.

Insofar as paper and ink are concerned, there are constant

improvements as well as changes that won't help us a bit. Don will clarify this maze of information so that we can be sure we are getting the best results from our printers whether it be images, photos, or just plain text.

Be sure to attend to be up to date on the latest developments that will help all of us get the best results possible from our printers. And he tries to help us do that at an affordable cost.

Analyze your stock of ink, toner and paper that you have on hand. Don will bring with him only what has been ordered prior to the meeting. This is a perfect time to take advantage of his superior products and save shipping!

www.klassicspecialties.com





Greater South Bay PC Users Group

*A member of
Association of Personal Computer User Groups*



MEMBERSHIP

Membership is available for twelve months from the date of joining. Membership rates:

Individual	\$36.00
Student	\$18.00
Family	\$48.00
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GENERAL MEETING

General meetings are held at 7:30 p.m. on the first Monday of the month at the Salvation Army Facility, 4223 Emerald Street (at the corner of Emerald and Earl Streets), Torrance.

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President's Thoughts

By U. A. Garred Sexton

We have General Meeting programs set up for the next 3 months! On April 7th Don Baker, of Klassic Specialties, will bring us information entitled *Demystifying Inkjet Printing*. Don will address areas of significance as related to inkjet printing and today's marketplace. He is providing members with the bonus of 10% off paper and ink supplies without shipping cost if you order before April 4th via the web from: <http://klassicspecialties.com/> or by telephone: 1-800-786-9272.

His inventory for your particular printer is listed on his website. More details about ordering have been sent to you via e-mail. Don will bring your order to the meeting, thus saving shipping costs. Remember to use GSBUG in the DISCOUNT CODE box on the check out page. The \$6.50 shipping charge WILL automatically be added to your bill but WILL NOT be charged. (OEM cartridges are excluded from this offer.) If you have any questions please call Don Baker.

At the May 5th meeting Bob Hudak will make the following presentation: *Prepare for Hard Drive Recovery*.

When you lose control of your computer due to a virus or some sort of malware, or your O.S. becomes corrupted for one reason or another, be ready to fix the problem. Bob will explain the steps to take so that you will be prepared. Included topics will be: how to setup your hard drive, how to make backup image files, and easy steps to recover in a short order. Come and be prepared to take notes.

The June 2nd program, with Garry Sexton, will be *How to Set Up Your Secure Home Network* and will provide general information on WiFi and how to program your router.

The malware people must stay up nights thinking of ways to "do it to us." Now they are installing

their malware on memory devices before they leave the factory and the people who sell you or give you the devices do not know they are infected. Who would have figured that the digital picture frame would be a source of malware? There was a notice in the newsletter at the Consumer Electronics Show (CES) that the flash drives could be infected. To protect yourself, it is recommended that you scan a new memory device with your anti-virus program and/or spyware programs on first use. So far, I have not read how to remove malware from the digital picture frames. Information about this problem is beginning to show up in the newspapers.

Future Planning for Club Sigs

The results of the recent e-mail survey sent to you indicate that daytime SIGS would be attended, so future planning for scheduling SIGS will take into consideration the survey responses.

U.A. Garred Sexton

Internet SIG

Purpose: Fun and Learning.

Our next Internet SIG meeting is Thursday, April 24th, 7:00 - 9:00 p.m.

We will investigate the *You Tube* site. Google paid \$1,650,000,000 for *You Tube*. It handles as many as 1 billion videos daily. Curious? Let's check it out at the SIG.

The remaining time will be spent surfing the Net so bring a favorite web site URL to share. The meeting will be held upstairs at Garry's home.

Tom Tucknott
SIG Leader

Internet Talk

**By Frank Chao
Member, GS-BUG**

This is the 102nd *Internet Talk* article for *The Bug Report*, a publication of the Greater South Bay PC Users Group (GSBUG). Liz and I have relocated to Tucson, Arizona in order to teach her mother to use a computer. Please note our revised contact information at the end of this article.

INTERNET CONNECTION OPTIONS

You basically have four ways of connecting your computer to the Internet:

- ADSL ("Asynchronous Digital Subscriber Line")
 - Cable Modem
 - Satellite
- or
- Wi-Fi from a 'hot spot.'

To compare the four ways I went to the following Web sites:

<http://webhostinggeeks.com/articles/broadband-internet/13033.php>

<http://www.high-speed-internet-access-guide.com>

http://www.boingo.com/wi-fi_industry_basics_1.html

Then I created the table on the next page.

For recurring costs I am assuming that you have to pay for your

Wi-Fi connection. If you hang out at a place where you can get free Wi-Fi, then this alternative is obviously the cheapest.

UNINSTALLING ANTI-VIRUS SOFTWARE

The problems with uninstalling anti-virus software can sometimes make you want to tear out your hair if you have any left!

I received this very informative e-mail message from Clyde Emery of GSBUG:

<Start of quote>
From: clyde emery
<ckeemery1@hotmail.com>
To: <fchao2@yahoo.com>
Subject: Uninstall Anti-Virus
Date: Wed, 13 Feb 2008
07:44:45 -0800

Frank,

Thanks very much for your articles in the GSBUG.

They are good, well-written articles. I always check to make sure I can uninstall software. Re: your article Feb. 2008 re free anti-virus software.

PC Tools uninstalls easily. Grisoft used to require going into *Windows Explorer*, and even then was sometimes difficult. I don't know about NOW. *Avast!* was very difficult to un-

install. Bob Hudak helped me, and was only able to uninstall by using a Linux program.

Just wanted to share this information with you.

Again, thanks for your articles. I always read them.

Clyde
<END OF QUOTE>

The ease of un-installation of PC Tools Anti-virus is a good reason for you to try it. Get your free copy at:

<http://www.pctools.com/free-antivirus/download/>

I am glad that Clyde reminded me to discuss the problems with un-installing antivirus software. Over the past 5 years, I have had problems with uninstalling many antivirus applications. Liz and I hope that in the future, the developers of antivirus software will put more effort into making their products less problematic to uninstall.

In the meantime, here are some additional words of wisdom: If you are having trouble uninstalling *Avast 4 Home Edition* antivirus, go to:

<http://www.avast.com/eng/avast-uninstall-utility.html>
or to: <http://www.softpedia.com/get/Tweak/Uninstallers/Avast-Uninstall-Utility.shtml>

(See *Internet* on page 5)

(Internet, From Page 4)

Attribute	Broadband Satellite	DSL	Wireless	Cable Modem
Recurring Costs for the Internet Connection	Disadvantage: Highest cost of all four methods of connecting to the Internet \$50 to 120 dollars per month	Advantage: DSL is lower in cost any other mode of Internet access. \$20 to \$50 dollars per month	Disadvantage: High cost since one-time and subscription plans to hotspot service is higher than DSL or Cable Modem access	Advantage: Costs vary depending on desired speed of connection but recurring costs are lower than Wi-Fi and Broadband Satellite. \$30 to \$60 per month
Initial Upfront Costs for the Internet Connection	Disadvantage: Highest initial cost of all 4 methods of Internet connection.	Advantage: DSL modems are in the \$50 to \$120 range but many DSL providers provide them for free.	Advantage: This is the lowest cost alternative since most laptops now have Wi-Fi capability already.	Advantage: Cable modems are in the \$50 to \$120 range but my cable companies provide them for free.
Availability	Advantage: Available anywhere with exposure to southern sky. Only available connection in most rural areas.	Disadvantage: Available only in hotspots and in a few metropolitan areas.	Disadvantage: Available only in hotspots and in a few metropolitan areas.	Advantage: Available wherever cable television service is available.
Speed	Disadvantage: Speeds are now as fast as for the other methods of connecting to the Internet 512K to 1.5 MBPS	Advantage: Speeds are now as fast as available for cable modem competitors 512K to 9MBPS	Disadvantage: Speed depends on the hotspot's actual connection to the Internet which will vary from 384K to 2MBPS	Advantage: Highest connection speeds are available 512K to 10MBPS
Throughput Degradation with Loading with Additional Customers	Advantage: Dedicated bandwidth for each customer	Advantage: Dedicated bandwidth for each customer	Disadvantage: Degrades with customer loading	Disadvantage: Degrades with customer loading

(See Internet on page 6)

(Internet, From Page 5)

download and run "aswClear.exe."

If you are having trouble uninstalling AVG antivirus, download the latest version, then double-click on it. When provided with various options, select 'repair/replace previous version,' after completing the installation. Go to Windows 'Add/Remove Programs' and remove the latest version which should leave quietly without putting up a fight.

See <http://forums.vnunet.com/message.jspa?messageID=798650> and <http://help.lockergnome.com/security/uninstall-Windows-XP-ftopict1023.html> for additional advice on this "re-installation / repair / remove" method of uninstalling AVG Antivirus.

If you are having problems with removing Norton Antivirus, download the Norton Removal Tool from <http://service1.symantec.com/SUPPORT/tsgeninfo.nsf/docid/2005033108162039>

If you are having problems with removing McAfee Viruscan, go to google.com type in "McAfee hard to remove" and try the various procedures that those before you have attempted.

Good luck.

Liz and I have never had any problems with McAfee Viruscan but we often hear about the epic struggles of other "supplicants."

In the meantime, I will keep holding my fake rabbit's foot.

WI-FI AS A COMMUNITY SERVICE ??

In her travels around Arizona, Liz found an elderly lady who installed a Wi-Fi access point and placed it in a window so that that her neighbors can access the Internet for free.

I am sure that this action violates her contractual agreement with the cable modem provider since almost all state that you cannot share your cable modem connection with any household other than your own.

However, her deliberate sharing of her Internet connection does point to some interesting issues.

This lady stated to Liz that she just wanted to help out some of her less-fortunate neighbors, since cable modem service was too expensive for them.

Also, please note that most DSL and satellite-based Internet services also forbid connection sharing of any kind with households other than your own.

HOW TO CONTACT ME:

If you have any questions or problems, I can be contacted by the following methods:

1. Send me e-mail at: fchao2@yahoo.com

2. Send "snail" United States Postal Service (USPS) mail to

Frank Chao
405 E. Wetmore Rd. #117-484
Tucson, AZ 85705-1792

Or sell your computer and take up macramé instead!!



Tip From Smart Computing

Bad Gift Emporium

Admit it. At least once in your lifetime you've received a particularly bad gift. Maybe it was that stuffed giraffe you received from Aunt Martha on your tenth birthday or the samba lessons from your ex-girlfriend. We've all been there.

If you're looking for a place to commiserate, this is it. In the Bad Gift Emporium you can get an idea of what some others have gone through in the interests of being nice.

Just as the site name implies, these are the worst of the worst. Hideous tapestries, gaudy necklaces, and even our old friend Chia Pet make an appearance. If you can't get enough of the treasures here, submit your own.

<http://badgiftemporium.com>

Article

Moving on to Vista – Part 4

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

Windows Vista is a resource hog. A year ago, when I reviewed *Vista* for TAPCUG, my advice was to not upgrade an existing computer and buy *Vista*, wait and get it with a new computer. Today I stand by that advice. There are no new major programs that require *Vista* to run. If you're content with the way your existing computer(s) run with *Windows XP* there is no real reason to upgrade.

When you do buy a new computer there are several features you should look for to run *Vista* well. The first is RAM (random access memory). I don't think

Many people don't partition their hard disks

any manufacturer is selling a new computer with *Vista* with less than 1 megabyte of RAM but if you really want *Vista* to work well with large applications (Microsoft *Office*, video editing software, many games) try to get 2 gigabytes of RAM. You won't be sorry. There is no point in installing more than 4

gigabytes of RAM. *Windows* cannot access memory above 4 gigabytes.

The other issue is a video card. *Vista* wants at least 128 megabytes of memory for video. For best results, the memory should be installed on the video card. Some computers steal the video requirements from your computer's RAM. It works but the card will run slower. 256 megabytes of video card memory is even better.

Many people don't partition their hard disks; I do. I suppose it goes back to the days when larger hard drives started to appear and our computer operating system couldn't recognize and use the larger space. Of course all that has changed now, *Windows* can recognize almost any hard drive size most of us will install. When I had to partition my hard drive, to fully utilize it, I discovered other benefits. Its easier to make a backup copy of a smaller hard drive. If I create a partition for just my photographs, and I only need to make a new backup of my pictures, I can just backup the partition containing the pictures and not everything else. A faster and easier process. I can also install another operating system: *Windows XP* or maybe Linux, on my computer by creat-

ing a separate partition and run it using a simple process called dual booting.

So I wanted to partition the hard drive that came with my laptop to use some of the excess space to store a backup copy of drive

Vista has a new built-in Disk Management utility

C. I bought a new copy of *Partition Magic*. I've used this program many times to partition drives on other computers. Unfortunately I discovered that *Vista* doesn't like *Partition Magic*. A trip to Symantec's home page showed that they have no updates for *Vista*. As I was wondering how I would solve this dilemma, I discovered that *Vista* has a new built-in Disk Management utility and one of its functions will partition hard drives.

To use it you first have to get to the Disk Management window. From the start button, go to the control panel. Click on 'System and Maintenance' and scroll down to 'Create and format hard
(See *Vista*, page 10)

Article

64 Bit Computing--Pros and Cons

By Brian K. Lewis, PhD
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In July 2005 I wrote an article for the *Monitor* on using the 64 bit version of *Windows XP*. My conclusions at that time were that most users should wait the arrival of Microsoft's next operating system before leaping into 64 bit computing. So *Vista's* 64 bit version (*Vista x64*) has now been here for about a year, should you be considering a change from your 32 bit processor to a 64 bit processor? I'll lay out some of the pros and cons of this so you can make a decision.

First, let's consider why 64 bit processing is in the future of computing. To do this we need to consider some very basic information on how computers function. As most of you are well aware, computers process information as either a 0 or a 1. Or in the really old days of computing, these were switches that were either 'on' or 'off.' Each value constitutes one binary 'bit' or instruction. A central processor with a 32 bit instruction set can process 32 bits per clock cycle. Thus if you have a CPU that runs with a 2 GHz (2 billion cycles per second) clock cycle, it is processing 64 billion bits per cycle. That's the theory, in practice

there are limitations which may reduce the actual processing speed. Anyway, a 64 bit processor could handle twice the number of bits per second as a 32 bit processor. Again, because of other limitations, the actual processing speed advantage is less.

There is another major advantage to 64 bit computing and that is the size of the address space or the amount of memory that can be used. For a 32 bit processor, working memory is limited to 2 raised to the 32nd power (2^{32}) or 4 GB of memory. A 64 bit processor can address 16 Exabytes of RAM. That's, 2 to the 64th power (2^{64}) or 16 Million Gigabytes! At the present there are no machines that support this much RAM. For one thing the cost of that much memory would be excessive. So manufacturers are generally limiting motherboards and chipsets to 128 GB of RAM or less as *Vista x64* can only address up to 128 GB of RAM. The maximum RAM is usually greater than the 4 GB limitation of the motherboards designed for 32 bit processors.

So the question becomes, why do computers need any amount of memory even close to any of these figures? The answer relates to how people use their com-

puters. A lot of users, and I'm one of them, open more than one application at a time. This can have a definite effect on the speed of operation of the computer. When you open an application in either *Windows XP* or *Vista*, the operating system sets aside a 4 GB memory space for the application, drivers and other required information. So each application that is open has its own 4 GB memory space. It is a rare personal computer that has 4GB or more of RAM. In fact, *Windows XP* can not address more than 4 GB of RAM and it uses almost one GB for its own components. So how is this handled?

The solution to the requirement for very large RAM space for each application is called "Virtual Memory." The computer stores much of the required information for an application on the hard drive. It then moves data back and forth between RAM and the hard drive as it is needed. A paging table is used to track the locations of data on the hard drive and in RAM. So, even when you open only a single application, a large part of it will be stored on the hard drive or in "virtual memory." When information on the hard drive is needed, the paging table remaps

it to RAM memory and also moves data from memory to the hard drive. Because read/write access to the hard drive is much slower than read/write access to RAM, the overall processing time is much slower. If you are simply doing word processing or writing e-mail, then the speed difference is not really noticeable. If you were doing calculations using a large spreadsheet while setting up a *Power Point* presentation with complex graphics, then you would probably notice a slight slow down in the overall operation of your system.

So the primary advantage of 64 bit computing is the tremendous increase in address space. This advantage is also present when running 32 bit software on a true 64 bit machine. Running 32 bit software on *Vista x64* is referred to as running on the *Windows on Windows64* or *WoW64*. By utilizing the added address space of x64, the time required for loading, unloading and switching processes can be greatly reduced or eliminated. This can also eliminate the frequent hard drive cycling that is referred to as "thrashing," which can occur in a 32 bit system.

If you decide to move to a 64 bit system, just be sure to add plenty of RAM. Certainly you should have a minimum of 8 GB. The motherboard should also have a system bus designed to work with a 64 bit processor. Otherwise the bus can become a major bottleneck. In fact, you really should not try to upgrade a 32 bit machine by installing *Vista x64*. To really be successful, you

should buy a machine which is designed from the ground up to run *Vista x64*. Also, the upgrade version of *Vista x64* will only upgrade the 64 bit version of *Windows XP*.

That brings us to the "cons" about *Vista x64* and 64 bit computing in general. 64 bit processors have been available for four or five years for desktop computers. However, when we relate this to machines with *Windows* operating systems, the big problem is slowness of the adoption

So the primary advantage of 64 bit computing is the tremendous increase in address space.

of 64 bit hardware and software by manufacturers. One example is the lack of device drivers for peripheral hardware. So just what do you need drivers for? The one that affects most people is the printer driver. Operating systems don't always include a printer driver because of the great variety of makes and models. Although I know that many HP printer drivers are delivered along with the 32 bit *Windows OS*. However, this is not true for the 64 bit version. If a 64 bit driver is available for your printer you may have to download and install it yourself.

With *Windows Vista*, you not only must have a 64 bit driver, it must be a "signed" driver or *Vista* will reject it. A signed

driver contains a digital signature or a certificate in the program code which meets Microsoft's requirements and is from a company that has a license (Publisher's Identity Certificate) from Microsoft. You may have already encountered an "unsigned driver" message when you tried to install software or drivers. In *Windows XP* and 32 bit *Vista* you were able to continue the installation in spite of the lack of the signed driver. In *Vista x64* this is not possible. *Vista* will discontinue the installation after advising you of the lack of the signed certificate.

This procedure was implemented to try to stop "rootkit" malware from installing itself in the heart of the operating system – the kernel. Rootkits are able to hide within the computer by altering register keys and processes. By blocking the installation of unsigned device drivers Microsoft is hoping to reduce the rootkit problem.

A driver is also needed for your graphics cards. Both ATI and NVidia released 64 bit drivers for their newest cards in December, 2007. There is considerable doubt that they will produce 64 bit drivers for any of their older cards. Another reason why you have to consider new hardware when you are thinking of transitioning to a 64 bit OS. Other hardware that needs 64 bit drivers include scanners, sound cards, modems, serial ATA (SATA) / RAID and just about any other hardware peripheral. So you may need to update all of your hardware in order to get 64 bit drivers.

Also, since the graphics drivers have only appeared almost a year after *Vista*'s debut, other hardware manufacturers may still be working on drivers. You definitely need to do your homework if you are considering the purchase of an x64 system.

Software is another area that is slow to take advantage of the extra processing capacity of *Vista* x64. Although, as I mentioned earlier, x64 can run 32 bit software it is done in an emulation mode. The 32 bit application can not take advantage of the wider data path that is available in x64. Although there is some advantage due to the added memory in an x64 machine, the software is not using the hardware to full advantage. Just as happened when computers shifted from 16 bit processors to 32 bit processors, there was considerable delay before manufacturers moved solidly into the 32 bit realm.

So what applications are currently most likely to have 64 bit applications that can use the full capacity of x64?

- Applications for creating digital content in computer-aided design and digital video editing.
- Applications that require mathematical precision and floating-point performance.
- Applications that involve large, high-performance databases.
- Vision acquisition and analysis applications with large amounts of data moving directly into memory at rapid rates.

I suspect it will still be several

years before 64 bit computing will be the mainstream for personal computers. So, unless your requirements are similar to the above list, I would suggest you stick with 32 bit systems for a while longer.

Dr. Lewis is a former university and medical school professor of physiology. He has been working with personal computers for over thirty years, developing software and assembling systems.

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disk partitions,' at the very bottom of the window. You will see what appears to be a table of every disk and partition installed on your computer. Among other things you'll see the capacity of each disk and the free space available. Select the hard drive that you want to partition and right-click on it. You need to free up empty space on the hard drive so on the drop down menu. Select 'Shrink Volume' and specify the amount of space you want to free up in the Shrink Dialog box. The free space will appear in the Disk Management window as a black bar and be labeled as 'Unallocated.'

Now you are ready to create your new partition. Right-click on the "unallocated space." From the menu select 'New Partition.' Then you just follow the wizard

that appears to select the size and type of partition you want to create and format it. It may sound complicated but if you follow the steps listed above it's easy.

Windows assigns drives (hard drives, DVD drives, etc) in alphabetical sequence so if drive letters C, D and E were already used your new partition will be labeled drive F. Typically, when you buy a computer from a company such as Hewlett Packard, drive C will be your hard drive, drive D will be a partition labeled 'Recovery Drive' (used to restore your computer to "factory condition" in the event of a catastrophic crash) and drive E will be a CD/DVD drive.

It's a cosmetic thing but I like to group all my hard drives and partitions together. You can use the 'Disk Management' window to re-label your drives. Just select one of the drives, right-click on it and select 'Change drive letter and paths.' When you left-click on 'Change drive letter and paths,' press the 'Change' button and pick a new letter to label the drive. I usually start by re-labeling the Recovery Drive "R" to make the letter "D" available for a new hard drive or partition. Then I re-label the CD/DVD drive "Z." When this is done, all the letters from D through Q are available for hard drives, hard drive partitions and flash drives.

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The Bug Report

The Greater South Bay PC Users Group

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Torrance, CA 90505

April 2008						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 SIG Meetings Digital Imaging Daytime Hardware	2	3	4	5
6	7 General Meeting	8 SIG Meetings Digital Imaging Daytime Hardware	9 Board Meeting	10 SIG Meeting Linux	11	12 Newsletter Deadline
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