PRESIDENT'S CORNER

March 12 – Michael Alloy Returns!

Michael will demonstrate a number of audio editing pieces of software. Many people have converted some old phonographs or tapes to digital format. And many times some editing of these recordings is necessary. Another use of audio editing is to add sound to slide shows. Usually an entire song isn't needed, just a sample. Michael will discuss these and many other topics.

April – December Meetings

I have asked that the other members of the Board of Directors each to come up with a meeting topic. One of the challenges that we face is to find out what you would like to see presented. Don't be surprised if members of the BoD speak to you directly to get your feedback on meeting topics. I will update this space when more information is available.

Michael

The New, The Best, and The Worst

Collected by Pim Borman
SW Indiana PC Users Group, Inc.

Needles, Haystacks and Processings

Finding the needle in a haystack is the proverbial example of an impossible task. Wrongly so. Spread the contents of the haystack out over a large area and get 1000 helpers to each check a small amount of hay. The needle will be found in less than no time. It is a basic example of parallel processing.

According to WIKIPEDIA (http://en.wikipedia.org/ wiki/SETI), as far back as 1960 astronomers were speculating that any intelligent life forms present in the Universe might be detected by electromagnetic signals reaching us from space. Some astronomers started a Search for Extra-Terrestrial Intelligence (SETI) on a limited scale that over the years grew to include multiple radio-telescopes searching more and more radio bands for significant signals.

The New, Best, and Worst - cont'd

It soon became clear that looking for intelligent signals amongst the enormous volume of recorded data was even worse than finding a needle in a haystack. Parallel processing to the rescue! With an untold number of personal computers worldwide, capable of Internet access and sitting idle most of the time, an enormous amount of potential processing power was going untapped. The University of California at Berkeley (UCB), with sponsorship of The Planetary Society, started project **SETI@home** in 1999 to put many of those computers to work. They found many volunteers willing to download a small program on their computers, running in the background, to analyze small chunks of radio-telescope data for signs of intelligence and return the results. As of now there are some 3 million contributors, but nary a sign of intelligent life yet. In any case, the enormous amount of computer processing by this project far surpasses what the best supercomputer might be able to do, at least until quantum computers will have been perfected.

The success of SETI@home inspired many other volunteer computing projects supporting worthwhile scientific causes. According to *The Economist* (12-8-2007) these include design of drugs against AIDS, search for new prime numbers, climate modeling and many others. It requires some snappy programming skills to send small chunks of a large problem to thousands of computers, provide them with the means to perform a set task, return the results, and combine the results for final evaluation before sending out a new crop of queries. That task has been made easier with a dedicated program, **BOINC** (Berkeley Open Infrastructure for Network Computing), made available by UCB. Over 40 BOINC projects are in operation, including many life sciences, Help Conquer Cancer, and Discover Dengue Drugs.

OFFICERS

President
Mike Young..(410) 551-4411
president @chesapeakepcusersgroup.org
Vice President
Mike Regimenti..................................(301) 509-6091
vice-president @chesapeakepcusersgroup.org
Treasurer
Karl Richmond..................................(410) 268-3860
treasurer @chesapeakepcusersgroup.org
Secretary (Acting)
Kris Johnson.....................................(410) 544-8706
secretary @chesapeakepcusersgroup.org
Publisher/Editor
Mike Regimenti..................................(301) 509-6091
editor@chesapeakepcusersgroup.org

CHAIRPERSONS

Programs Chairperson
Craig Barlow.......................................(410) 266-6829
programs @chesapeakepcusersgroup.org
Education Chairperson
Sam Shepherd....................................(410) 647-6077
education @chesapeakepcusersgroup.org
Membership Chairpersons
Margaret Duggan..............................(410) 647-2722
membership @chesapeakepcusersgroup.org
Public Relations Chairperson
Kris Johnson.....................................(410) 544-8706
pr@chesapeakepcusersgroup.org

SPECIAL INTEREST GROUPS (SIGS)

New Users Group
Sam Shepherd....................................(410) 647-6077
MidShore Computer Users Group SIG
Lee Wickline.......................................(410) 822-7207
mscug @chesapeakepcusersgroup.org
Technology SIG
Mike Regimenti..................................(301) 509-6091
internet@chesapeakepcusersgroup.org
Computer Refurbishing SIG
Fran Damratowski.............................(410) 544-7047
refurbishing@chesapeakepcusersgroup.org
Webmeister
Mike DeLucia.....................................(410) 721-2991
webmeister @chesapeakepcusersgroup.org

64 Bit Computing--Pros and Cons

by
Brian K. Lewis, Ph.D,
Member of the Sarasota Personal Computer Users Group, Inc., Florida
www.spcug.org

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 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 computers. 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 operati on 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 that 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

3

64 Bit Computing - cont'd

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 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 (Publishers 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.

64 Bit Computing - cont'd

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. He can be reached at bwsail at yahoo.com.

This article has been provided to APCUG by the author solely for publication by APCUG member groups. All other uses require the permission of the author (see e-mail address above).

Chesapeake PC Users Group

5

New Technology Terms

by
Sandy Berger, CompuKISS
www.compukiss.com
sandy(at)compukiss.com

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

Words, words, words….In the fast-moving world of technology, new words and phrases are constantly introduced. In order to keep up with the times, you need to learn about the current terminology. This need not be a drudgery. In fact, it can be fun to see what new words and abbreviations are popular. Check these out and you can wow your friends next time computers and technology become the subject at the 19th hole or the neighborhood cocktail party.

SSD (Solid-State Drive)

This is a type of memory that you will be hearing more and more about in the future. It is a type of flash memory that has no moving parts. Some small laptop computers are appearing using SSDs for storing data instead of hard drives. Because SSDs have no spinning disks like the ordinary hard drives, they offer improved battery life for laptop computers. They also have better data access speeds than hard disks.

404

You may recognize this as a common message on the Internet. It indicates that the requested page could not be found. This may mean that the page has temporarily or permanently moved and is not currently available. However, recently the term 404 has come to have another meaning. It refers to someone who is totally clueless. From the error message "404 not found", this has become a slang term meaning that the person's brain could not be located. If you decide to call your spouse a 404, make sure that he or she has not read this column or you'll be in big trouble.

Crowdsourcing

Using the skills of a wide variety of people to do a job or perform a task is called crowdsourcing. The people who perform such a function are often found on the Internet. Although these people can be paid, often they are often volunteers.

Geotagging

This is technology built into a digital camera or part of a camera add-on device that is able to tag each photo with the exact location that the picture was taken. Photos can then be sorted based on where they were taken. They can also be plotted on maps.

HDMI
(High-definition Multimedia Interface)

This is a newer audio and video interface that is often found on televisions, DVD players, video game consoles, video cameras, and other video equipment. This type of connector replaces older standard connectors like composite video, S-Video, component video, and DVI. HDMI carries both audio and video in one cable. It supports digital rights management systems. HDMI cables can be very expensive in comparison to older audio and video cables.

One Laptop per Child (OLPC)

Led by Nicholas Negroponte, this is a non-profit organization whose mission is to design, manufacture, and distribute affordable laptop computers to children around the world. The laptops were initially called the "$100 laptop", but the final build

New Technology Terms - cont'd

cost almost $200 each. In 2007, the One Laptop per Child organization started distributing these laptop computers to children in developing countries. The laptops are bright green and white portable computers with special features like a sealed keyboard. They are called XO computers.

SEO (Search Engine Optimization)

Search Engine Optimization is the process of tweaking a website to improve the volume of traffic that is produced by search engines. The idea is to give the website a higher ranking in the search engines thereby producing more traffic to the site. SEO includes using keywords and website design to get higher rankings with search engines.

Skype

This is an online service that allows users to make telephone calls over the Internet. The software is free and there is no charge to call the computers of other Skype users. Your computer must have a microphone in order to use Skype. With the addition of a webcam, Skype callers from computer to computer can also place video calls where they can both see and talk to each other. Skype also allows you to call landlines and cell phones for a fee. Skype has other services such as instant messaging and file transfer.

FTW

This stands for "For The Win". You may remember it being a part of the game show "Hollywood Squares" where a certain square would be selected "For the Win." It is also used in some online games like World of Warcraft. It is now a popular term that usually projects a boast, as in "I did it FTW." It is often used ironically and sarcastically.

Bot

A bot computer is one that has been infected with some type of malware that allows the computer to be controlled by an outside entity. Millions of computers are bots that are now under the influence of malware distributors who use these computers to send out spam, attack other computers and websites, and carry out scams and identity theft. The computer owner is usually unaware that their computer has been compromised since this activity is performed in the background.

BotNet

A series of bot computers, sometimes as large as millions of computers is called a BotNet. The BotNet does the bidding of some entity that has compromised the computers and taken control of them by installing some type of malware.

Zombie

This term that means the same thing as a Bot. It is a personal computer that has been infected with a virus that allows an outside force to control it. Such a computer can be used to send out spam or attack other computers without the owner's knowledge. Millions of computers today are zombie computers. They are part of a Zombie Network of computers that are controlled by hackers.

7

It's Not Just Entertainment Any More

by
Gene Komaromi,
Member of the Computer Club of Green Valley, Arizona
http://gvcc.apcug.org/
genek6(at)gmail.com

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

In the past, we've commonly thought of computer games, especially those played on game machine platforms, as pure entertainment. Times have changed and many games have become educational as well as physical training devices.

Learning has become fun for both kids and adults. Here's some information that will keep you ahead of the digital gaming curve.

DS - Handheld Games for Senior Citizens Nintendo has a hot selling hand held video game machine called the "DS" for "Double Screen." The device opens with two visible screens, one is a display screen and the other is a "Touch Screen" which serves as the controller interface. The DS has a series of games designed with "older" users in mind. They are Brain Age, Big Brain Academy and Flash Focus.

All three have been recommended by AARP, and Brain Age has been shown to improve mental performance in independent tests. Brain Age and Big Brain Academy have a series of games, practice exercises and tests that are designed to improve and

8

evaluate cognitive skills, and best of all "they're fun." They chart and graph improvement and will keep records for several individuals.

Have you ever had a problem with that vision test on your driver's license exam? Then Flash Focus was made for you. It too has games and exercises, but instead of improving your brain they improve your eyes.

Wii Want to Play

The hottest new gaming console is the Wii, another product from Nintendo that has games designed for the older kids, real older kids. The game controller is a little motion sensitive device that straps on the user's wrist. Participants interact with the game by moving their arms.

In the Detroit area, aerobic classes and movies have been replaced by Wii in many senior citizen centers. "Bowling" seems to be one of the most popular games. I've played it, and yes, it's exactly like the real thing. The motion of your arm, as you approach a virtual bowling alley, allows you to curve the ball and add some spin. Wii bowling leagues are springing up all over the country. Nintendo is about to release an exercise program for the Wii that uses a floor pad as a controller.

This article has been provided to APCUG by the author solely for publication by APCUG member groups. All other uses require the permission of the author (see e-mail address above).

Moving on to Vista – Part 4

by

Neil Stahfest, Librarian, Tacoma Area PC User Group, Washington
www.tapcug.org   ncstahfest(at)msn.com

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 for it to run Vista well. The first is RAM (random access memory). I don't think 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 wont 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 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 creating 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 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 the 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 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 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

9

E-Mail Responsibilities

by
Bob Schwartz,
Member of HAL-PC, Texas,
www.hal-pc.org

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

E-mail is a very valuable method of almost instant communication. However, many people operate under an illusion that it is private. It is not. Once sent, it is effectively broadcast to the world. So one should NEVER send anything that they might regret. Once it is sent, it is now in other people's hands. The recipient may or may not care as much about controlling your e-mails distribution as you do.

Just suppose you send something clever about someone you know to a friend or acquaintance and they bring it up on the screen. Then, they take a break and go to coffee, leaving it on the screen. Another person passes by, snoops, and sees the e-mail. They also think it is clever, and make a copy of it and send it to someone they know, etc.

Or, the employer records all e-mail traffic passing within their company, which they have every right to do, since the equipment is theirs.

Worse yet, some people send messages that they believe are benign and strictly business, yet some self-anointed "god" thinks otherwise.

Yet even sneakier are viruses that can unknowingly, by you, forward your e-mails elsewhere; or, police and other snoops tapping your connection. There are innumerable ways by which your "private" traffic can go public.

So, the BOTTOM LINE is: compose your messages with care, check the addressees listed, and review the message before pressing the "SEND" key.

Oh, by the way: do not think that once sent and "deleted", that the file is gone from your computer. When you "delete" a file, this DOES NOT ERASE THE FILE. All this does is change the first letter of the file name in the directory. The file, in all its glory, remains untouched on the hard drive, which is why it is so easy to recover it. Technology has provided a variety of means to recover and reconstitute "deleted" files.

To conclude, e-mail is a tremendously valuable means of almost instant communication. Just make sure that you use it carefully, thoughtfully and wisely.

Bob Schwartz is a HAL-PC member, retired EE, has 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.

Chesapeake PC Users Group

The New, Best, and Worst - cont'd

Impressive as the computer power may be that is being exerted on these projects, there is still room for significant improvement. The short history of the PC not only includes a dramatic improvement in CPU processing speed, but also in auxiliary components that speed up graphics performance. In response to the extreme image rendition requirements of computer games, fast graphics cards have become available that use special processing chips and hardware to relieve the load on the Central Processing Unit. Rendering the millions of pixels that make up a screen image is perfectly suited to parallel processing, a task for which the graphics chips are optimized. Further adapting these chips to participate in general purpose programming may be a way to increase the parallel processing power of a desktop computer anywhere from 10- to 50-fold. NVIDIA and AMD, the largest graphics-card manufacturers, are working on it. Nvidia has already set up a product line for non-graphics applications and is developing a specialized programming language to go with it.

Next time you hear complaints that something is like finding a needle in a haystack, tell them it's easy: many hands make light work.

Foxit Reader For PDF Files

ACROBAT READER IS NOW AT VERSION 8 AND HAS BEEN GETTING MORE POWERFUL BUT ALSO MORE CUMBERSOME WITH EACH SUCCESSIVE ITERATION. STEVE BASS (*PC WORLD, JANUARY 2008)* FOUND A FREE PROGRAM, FOXIT READER AND PRINTER, THAT IS COMPACT, FAST, AND INCLUDES SOME NICE EXTRA FEATURES. I ESPECIALLY LIKE THAT IT ALLOWS SEARCHING ALL THE PDF FILES IN A DIRECTORY FOR KEYWORDS. I TRIED THAT ON A DIRECTORY WHERE I KEEP ALL THE NEWSLETTER FILES SINCE 2000 AND GOT ALMOST INSTANTANEOUS RESULTS. IMPRESSIVE! THE PRINT FUNCTION WORKS JUST FINE. FOXIT ALSO HAS MORE SOPHISTICATED TOOLS FOR ANNOTATING AND WRITING PDF FILES AND FORMS, BUT ADDS EVALUATION MARKS TO THE OUTPUT UNLESS YOU BUY THE FOXIT PRO VERSION ($39). YOU MAY NOT NEED THAT, SINCE THERE ARE SEVERAL OTHER (FREE) WAYS TO CREATE PDF FILES, INCLUDING OPENOFFICE.ORG WRITER AND MS OFFICE 2007 (WITH A SPECIAL DOWNLOAD FROM MICROSOFT). MY EPSON SCANNER CAN SCAN IMAGES AND ALSO OUTPUT THEM AS PDF FILES. BUT AT $39 FOXIT IS A BARGAIN COMPARED TO ACROBAT 8 STANDARD AT $299.

DOWNLOAD FOXIT READER AND PRINTER FREE FROM HTTP://WWW.FOXITSOFTWARE.COM/. LINUX VERSIONS ARE ALSO AVAILABLE.

Vista – Part 4- cont'd

listed above its 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.

Its a cosmetic thing but I like to group all my hard drives and partitions together. You can use the Disk Management window to relabel 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 drive "R" to make the letter "D" available for a new hard drive or partition. Then I re-label the CD/DVD drive drive Z. When this is done, all the letters from D through Q are available for hard drives, hard drive partitions and flash drives.

This article has been provided to APCUG by the author solely for publication by APCUG member groups. All other uses require **11**

The Next Regular Meeting will be at
The Severn River Middle School

Wednesday
March 12th, 2008

Meeting will be held in the large meeting room.
It starts at 7:00 P.M. with club business
and a short discussion period.

Michael Alloy
presents

Sound It Out
with
Audacity

How to Find: Severn River Middle School

SRMS is close to the Arnold, MD campus of the Anne Arundel Community College. From Annapolis and parts south, take Rte 2 (Ritchie Highway) north about 3 miles from the intersection of Rt. 50, **turn right on College Parkway**. At the first light, turn left on Peninsula Farm Road. (Of course, if you are coming from points North, you would turn left on to College Parkway) about a half-mile down the road the large SRMS school building, set back off a large two level parking lot, will be visible on your right. Park here and go to the main entrance. Signs will be posted to direct you to the **Large Group Room** where we will be meeting.

How to find: The Technology SIG, A ChPCUG Special Interest Group**

The meetings are held at the SRMS in the Library.

Chesapeake PC Users Group

1783 Forest Drive #285
Annapolis, MD 21401

FIRST CLASS

INSIDE THIS VERY ISSUE!
President's Corner
The New, Best, and Worst
Moving to Vista - Part 4
That's Entertainment
Email Responsibilities
Secretary's Desk
... and a little more!

Note: *The date above your name on the mailing label is the expiration date of your membership. Contact the Membership Chairman (page 2, column 2) to update.*

Proudly Affiliated with

NASA FEDERAL CREDIT UNION
w w w . n a s a f c u . c o m

apcug