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PPCUG NEWS

A PUBLICATION OF THE PRINCETON PC USERS GROUP

Understanding Windows Vista
-
Preview of the new Microsoft Operating System

Paul Kurivchack

Monday, July 10, 2006, 7:30 p.m.

Microsoft expects to release Vista, the next generation Windows operating system, later this year. The speaker has been using the feature-complete Beta release for several months and will provide us with an introduction to its features.

Paul is the former President of the Princeton PC User Group. He has many years of experience in PC support at several companies where he is responsible for dealing with upgrading and remedying computer problems. Paul has a degree in Electrical Engineering from the College of New Jersey.

Lawrence Library Meeting Rooms 1 & 2
US Alternate Route 1 South & Darrah Lane, Lawrenceville, NJ

*Meetings of an organization at any of the facilities of the Mercer County Library System
in no way imply endorsement of its programs.*

In this issue:

Coming Schedule

August 14---Martin Mosho on How to Start a Successful
                  eBay Business
Sept. 11 -----John Goodwin on Building Your Own PC
Oct. 16 ------Vic Laurie on Searching the Web for Medical
Information
Nov. 13 -----Hank Kee on Wireless Network Security
Dec. 11 --------Member's Holiday Party

Minutes of the June Meeting

The meeting started at 7:30 p.m. by President Clarke Walker.

Joel May gave us a tour of some of the advance features of Microsoft's Excel.

Joel May by Clarke Walker

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Pictures from the June Meeting

by Clarke Walker, Clarke_Walker@yahoo.com
Member of the Princeton PC Users Group

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Help Wanted
Secretary
The group is in need of a Secretary to take minutes of the meetings. Also to read and respond to club email. Please see a Board Member for more information.

President's Message

For this issue I have included an article "Save the Internet" about legislature in Congress. Note that our Senator Frank Lautenberg is on the committee.

I hope everyone has an enjoyable 4th of July!

- Clarke Walker

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Link of the Month

Think you need a big engine that burns lots of gas to go fast with quick acceleration? Before you spend your gas money take a look at Ian Wright's electric car:

http://money.cnn.com/2006/05/04/technology/business2_wrightspeed/index.htm

Have you discovered a useful link? Then share it with the members of the P PC UG.

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Backup Awareness Month

by Ira Wilsker, iwilsker@apcug.net
APCUG Advisor; Columnist, The Examiner, Beaumont, TX

In case you had not heard, June is Backup Awareness Month. It is not a federally recognized holiday, nor is it one acknowledged by resolution from some governmental authority, but an awareness service of one of the largest manufacturers of hard drives, the newly merged Maxtor and Seagate.

Sure, Maxtor and Seagate will benefit if we all rush out and purchase a large capacity hard drive so we can backup our critical data in the event of a hard drive crash, or other tragedy that can damage or destroy our computers. This is really more of a win-win situation, as there is a very valid need for timely and comprehensive backups of our data. Lessons still unlearned from Rita, Katrina, and Wilma, as well as other countless disasters, fires, thefts, and other debacles should teach us that if we have a good backup of our files, we can easily survive a catastrophic data loss, and be back in operation promptly.

Imagine in any business or other commercial environment how much information is stored on hard drives. Hard drives are electromechanical devices, and as such will indeed fail at some time. Murphy's Law dictates that a hard drive will always fail at the most inopportune time. Now imagine what would happen to that business or organization if suddenly all of its critical information was gone. No accounts receivable; no accounts payable; no client lists; no purchase orders; no employee or student data; no payroll and tax records; no correspondence; no records of any kind; and a plethora of other potentially devastating losses. Next imagine the time and cost that a company would incur if it had to rebuild that amount of information from paper records, if the paper records indeed exist. Can you conceive the utter devastation that a company would suffer with a catastrophic data loss?

Data loss is not just a corporate or organizational threat, but a personal one too. On my home computer, for example, I have countless family photos, tax records, family financial information, archives of correspondence and other important documents, music, bookmarks, address books, email, and other information that would probably be irretrievable in the event of a complete hard drive failure. I really do not think that the IRS would accept as an excuse the fact that my hard drive crashed, losing my financial records.

We can backup our data in many ways without any substantial expense, or we can utilize sophisticated backup solutions. Backing up can be as simple as copying critical files to CD, DVD, flash drive, or other storage media, using the integral

copy function available on all computer operating systems. We can use software, such as NTI's Shadow or Backup NOW! to manage our backup functions to our chosen media, or we can use utilities such as Symantec's (Norton) Ghost, to make a bit by bit copy of our hard drive which can be copied to a new hard drive, making it a mirror image of the original, ready to go. Now that broadband internet connections are more of a rule than an exception, there are commercial services that will do online remote backup and storage at off-premise locations, secure and separate from the host or home location.

Seagate/Maxtor have published some "best practices" (www.backupawareness.com/bestpractices.html) defining the tasks necessary to insure the ability to recover our precious data. These practices can be summarized by the following tips (details on the website):

Develop a backup schedule – Make it routine, and not a task that we have to remember to accomplish. Most modern backup software and utilities either backup in real-time (NTI Shadow), or can be scheduled at predetermined times (NTI Backup NOW!).

Back up everything – it is not necessary to waste time sorting data, as the speed of backup utilities, hardware, and hard drives, as well as the large capacity of new hard drives, make it unnecessary to determine what to backup

Give yourself room to grow – The rule of thumb listed on the site recommends that the minimum size of backup drives (or other media or storage solutions) should be at least double the current size of the hard drives being backed up.

Back up automatically – Referred to in the industry as "Set it and Forget It", is a viable adjunct to backing up on schedule. Some real-time off-site backup services use a high speed internet connection to automatically back up all new data to an external location. Many software utilities are almost transparent, and perform backups automatically, and unattended.

Rotate backups – Use more than one drive or other system for backup. There are always risks that the backup itself can be damaged or otherwise flawed, and there is safety in redundancy. It is a good practice to store at least one current backup physically away from the location being backed up such that a catastrophe (fire, flood, etc.) at the host will not destroy the backup. It is also a good idea to be able to take a backup with you in the event of a crisis, such as when I took my external hard drive with a current backup of all of my files, when I evacuated from Hurricane Rita. With this external drive, I could also access critical files form another computer if needed, prior to returning home.

Don't procrastinate – Do not put off until tomorrow what you must be doing today. The complete Murphy's First Law of Computing is, "A properly backed up hard drive will never fail, but the first time that you do not have a current backup, your hard drive will always fail at the most inopportune time." Sadly, all too many of us learn the importance of a backup immediately after our hard drive fails, as we come to the realization that all is lost.

June should not really be backup awareness month; every month should be backup awareness month!

Useful Websites:
http://www.backupawareness.com
http://www.ntius.com
http://www.symantec.com
http://www.backupawareness.com/bestpractices.html

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SAVE THE INTERNET

by Bob Hewitt, rsh1916@juno.com
Editor, The Journal of the Sun City Center Computer Club, FL

Current legislation in both houses of congress threatens to change the internet as we know it.

The House Commerce Committee approved the COPE bill 42-12 after voting down an amendment by Democrat Ed Markey of Massachusetts to guarantee net neutrality-- the principle that net users should be able to access any web content they want, post their own content, and use any applications they chose without restrictions or limitations imposed by their internet service providers. The Communications Opportunity, Promotion and Enhancements Act now awaits action on the house floor

where it faces little opposition.

Subsequently, Markey filed a bill of his own H. R. 5273 known as the Network Neutrality Act which would open broadband networks and innovation, foster electronic commerce and safeguard consumer access to online content and services. That bill has been referred to the House Commerce Committee which had defeated his amendment to the COPE bill.

Senator Ted Stevens of Alaska, Chair of the Senate Commerce Committee, has introduced a massive, 135-page bill called the Communications, Consumer Choice and Broadband Deployment Act of 2006.

The COPE act, about to be considered by the full house, would limit FCC authority to prevent abuses of market power by the few broadband ISP's in control of the "last mile." The Stevens bill goes even further. It would eliminate it altogether.

The House strips the FCC of any power to create net neutrality rules, limiting it to enforcing its Broadband Policy Statement by case-by-case complaints. The Stevens Bill removes the ability of the FCC to even adjudicate complaints about violations of the four principles.

The four principles of broadband policy are:

Consumers should be able to:
  1-Access all legal content,
  2-Use all legal applications and services of their choice,
  3-Attach any device to the network that won't harm the network,
  4-Enjoy competition.

The Miami Herald says companies such as Verizon and Comcast have already announced plans to create a two-tiered Internet, where some websites and services would travel up the 'fast lane' –for a fee, of course---and the rest of the web would be relegated to the "slow lane"

"Universality is essential to the web," says its inventor, Tim Berners-Lee. "It loses its power if there are certain types of things to which you can't link."

Currently internet providers do not voluntarily censor the web as it enters your home. This levels the playing field between the tiniest blog and the most popular website.

It is up to us—computer people---to keep it that way. It is a vital matter to us but has not been getting any media attention. One way to get around that is to let our Senators in Washington know where we stand. I have done so and hope we can generate a wellspring of attention by generating a torrent of emails telling of our desire for continued Internet Neutrality. You can find you Senator's email address at http://www.webslingerz.com/jhoffman/congress-email.html

The Senate Commerce Committee is scheduled to consider the bill June 8.

Members of the Committee:

John McCain - Arizona	John Sununu - New Hampshire	Maria Cantwell - Washington
Conrad Burns - Montana	Jim DeMint - South Carolina	Frank Lautenberg - New Jersey
Trent Lott - Mississippi	Daniel K. Inouye - Hawaii	E. Benjamin Nelson - Nebraska
Kay Bailey Hutchison - Texas	John D. Rockefeller IV - West Virginia	Mark Pryor - Arkansas
Olympia Snowe - Maine	John F. Kerry - Massachussetts	David Vitter – Louisiana
Gordon Smith - Oregon	Byron L. Dorgan - North Dakota	George Allen - Virginia
John Ensign - Nevada	Barbara Boxer - California	Bill Nelson - Florida

How big is a 300 GB hard disk?

by Jim Sanders Moore, editor@noccc.org

Editor, Orange Bytes, North Orange County Computer Club, www.noccc.org

I recently acquired a 300 GB hard disk for $110 after rebates. When I look at that 3.5 inch hard drive that is one inch high and easily held in my hand, trying to put those 300 Giga bytes of storage in perspective is a little tough. I thought about the first Z80 CPM system I built in 1977 from a Cromemco kit that I had to solder together. It used 8 inch floppy disks that held 128,000 Bytes.

The diskettes were easy to damage and it was a good idea to keep them in storage boxes. I made some good money selling the SRW Computer Products plastic storage boxes at a great ACP Swap Meet discounted price of $2.00 each. They were designed to hold 10, but you could get 2 or 3 more in if you were careful! I wondered how many floppies that would be, so I punched the numbers into the calculator. 300,000,000,000B/128,000B = 2,343,750 diskettes. I don't know how to visualize that, but I did calculate that it would take $468,750.00 worth of those boxes to store them all. I then remembered that the average price at that time was about $3.50 a diskette. Again the calculator, 2,343,750 diskettes x $3.50 = $8,203,125.00. Wow! That is a number that I don't want to think about if I am talking about a hobby.

Another way to wrap your mind around huge numbers is to start small, with something that you can relate to, and work your way up. Now we know that one byte equals one character of the alphabet. The common 10 point type has 10 characters per inch. So, if we have 120 characters/bytes in a row, we have one foot. There are 5,280 feet in a mile. So 5,280 x 120 gives the number of character or bytes that would be on a mile long ticket tape that was being printed with 10 point type, an answer of 633,000 bytes. Compared to the 300 Giga bytes on the hard disk, 633,600 bytes is not much. To find out how much, we need to take the 300,000,000,000 byte capacity of the hard disk and divide it by 633,600 bytes in a mile. The answer to that math problem is the equivalent of 473,485 miles of ticker tape.

To put that into perspective, let's take the circumference of the earth (nominally 25,000 miles) and divide that into our answer. So, 473,485 / 25,000 = 18.93. If we could find a big enough roll of ticker tape, printing all the information on that hard disk would wrap around the equator of the earth 18.93 times. That sounds impressive, but how many people can really visualize that. Besides, I don't know anyone who has a big enough ticker tape printer. Another thought, that ticker tape would be 3,000 miles short of stretching from the Earth to the Moon and back.

But let's try it with regular 8.5 inch x 11 inch paper. Again, standard printing would be 10 point type, 10 bytes per inch, and 6 lines per inch. Most people leave at least a half inch margin all the way around the page. So that means each line will be 7.5 inches, or 75 bytes, and there will be 60 lines per page. So each page will use 75 bytes x 60 lines, or 4,500 bytes. First, let's take 1 of the 300,000 megabytes on the disk and see how many pages that represents. 1,000,000 / 4,500 = 222.2 pages. We still have 299,999 megabytes left and, using them, the total number of pages comes out to 66,660,000 pages.

That is also a little hard to imagine, so let's see how many reams of paper that is. Take 66,660,000 pages, divided by 500 sheets per ream = 133,320 reams of paper. Again, a little hard to visualize.

A lot of things have their volume given in cubic feet. That's 12 inches x 12 inches x 12 inches or 1,728 cubic inches, or 1 cubic foot. I measured one case of paper at 11.25x9x17.5 inches, or 1,771 cubic inches. Let's be generous and round that off to one cubic foot. So at 5,000 sheets, or ten reams per case, we divide the 133,320 reams that we came up with by 10 to get 13,332 cases, or that many cubic feet of space.

Stipulating that an average house is 1,400 square feet with eight foot high ceilings, then the average house has 11,200 cubic feet of space, ignoring the walls. If you filled up your house, wall-to-wall, floor-to-ceiling, with cases of printed paper, you would still have 2,132 cases left over. If you are in better shape than I am, there is still room to get one car in that two car garage. That's 10'x20'x9' = 1,800 cubic feet, so that still leaves us with 332 cases of paper. We could take all of the junk out of the other half of the garage, lay down a two foot thick layer of paper and put all the junk back in on top of it. That's how much the 300 Giga byte disk holds! So, unless you are planning on taking out a home improvement loan, don't buy that 400 Giga byte disk.

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The Mouse from Hell
Hardware Review…or Sort of

by Ann Moore, commuter@cox.net
Member of Topeka PC Users Club, www.topekapcusersclub.org

Several months ago, I sent the following e-mail to "Answerperson" concerning a tragedy in my life:

"Dear Answerperson,

When I started my computer this morning, my mouse showed no sign of life. Its heart (red light) did not flicker nor did it feel warm to my touch. It was stone cold dead. I tried to revive it by performing an uninstall-reinstall, to no avail. A check of outlets and wiring found them intact. How do I determine the cause of death? There were no early signs of malfunction. If it were an animal, I could have a necropsy performed. Must I disassemble it to determine the cause of death? I cringe at the thought of disemboweling my friend. My mouse was not extraordinary in any way – it was not wireless nor was it ergonomic, just a simple mouse that I loved and cherished. Every day for four year, I held this inanimate object in my hand, caressed it, and knew every curve and indentation intimately. We were as one.

I have accepted the fact that I must now lay it to rest, but where? Is there a cemetery for computer mice? Should I have it cremated or do I put it in a box and bury it in my backyard under the lilac bush? What will become of my dear friend? Is there a computer mouse heaven? This has never happened to me before and I am devastated. Please no cards or flowers. There will be a memorial fund set up in the name of "Ann's Mouse" and donations may be sent to commuter(at)cox.net"

Answerperson offered his deepest sympathy and suggested that I put my sorrow behind me, go on with my computing and find a new mouse. I visited Best Buy in search of a replacement and found no sympathy there. Their only concern was to sell me a very expensive replacement. In my vulnerable state, if the clerk had shown a little compassion, I might have purchased a more expensive model but because his attitude was cold and unfeeling, I left the store with one of their cheapest models. There is an old adage: "You get what you pay for," and that is exactly what I got – in spades.

I doted on my new mouse, showering it with an abundance of TLC. I never mistreated it by applying any unnecessary pressure, jerking or pulling. In spite of all my efforts to maintain a close personal relationship, it soon became apparent that we were not compatible. The erratic behavior of the mouse became noticeable following surgery on my right shoulder. I was forced to change the mouse settings to accommodate my left hand and the mouse began to balk at every command. Although I moved it around very slowly, it would take off and race around the screen leaving me breathless in my attempt to keep up with it.

In October, I purchased a new LDS 19-inch monitor and the mouse went ballistic. It refused to leave the confines of its colorful, soft pad. Trying to reach the far corners of my monitor with my cursor became almost impossible. The mouse resisted my every effort to control its actions. Every day was a tug-of-war and I was losing my patience. I had serious work to do and no time to play games. I needed a good reliable mouse. I decided that this obnoxious, malevolent, detestable little rodent had to be eradicated. It was time to go cordless.

Completing a jubilant trip to Best Buy, I came home with a Logitech cordless mouse. I could hardly wait to start using it. What a different a cord makes! This Logitech moves like a cream and is a pleasure to work with. It takes me everywhere I went to go. Truly, a match made in heaven. I am certain that I have found a new reliable friend.

What do I do with this evil, malicious, wicked little devil that made my life a living hell? No sad songs or mourning for this monster. I had visions of snipping off its tail to make it impotent, then dropping it on the floor and stomping it to death. I even considered calling "The Terminator." What I will do is wrap it up in colorful paper and donate it to the club for a prize at the next Christmas party. I am hoping it will fall into a strong masculine hand that will teach this contemptible, spiteful, despicable creature how to behave in the presence of a lady.

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Selection from The New, the Best, and the Worst

Collected by Pim Borman, swipcug@sigecom.net
Website Editor, SW Indiana PC Users Group, Inc., http://swipcug.apcug.org/

Wi-Fi Progress

In just a few years, as equipment cost dropped to affordable levels, wireless connections between computers in households have become commonplace. Several IEEE standards assure interoperability between different makes of equipment. The most popular standard today is 802.11g, capable of connecting at speeds up to 54 megabits per second (Mbps). It is backwards compatible with the older 802.11b which operates at up to 11 Mbps. A third standard, 802.11a, operates at up to 54 Mbps and uses a different frequency range to minimize interference with other equipment. It is not often used.

The IEEE has almost completed work on a new standard, 802.11n, that should increase the transmission rate to a maximum of 540 Mbps. In anticipation of the new standard, several wireless connection providers have been marketing new products that provide faster connections over greater distances. According to *PC World* (February 2006) Netgear's $180 RangeMax 240 Wireless Router and $100 Notebook Adapter can connect at close range at about the same rate (100 Mbps) as a standard wired 10-100 Ethernet connection. The router has 3 antennas and transmits over 3 non-overlapping bands within the allotted 9.4 Mhz frequency band to achieve this performance.

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