



The Cursor



Monthly Newsletter of the
Washington Area Computer User Group

Meeting Location:
Fairfax County
Government Center



Next Meeting:
January 20, 2007



Presidential Bits

January 2007 Meeting

By Paul Howard

Ah, the New Year – that wonderful time when we break all our vows about losing weight, exercising regularly, and backing up our computer data! As I write this, our colleagues Geof Goodrum and Bob Rott are attending the APCUG annual conference. We look forward to their reports of how better to provide services to our members, and about all the new tech toys on display at the Consumer Electronics Show, which follows the APCUG meeting in Las Vegas.

Did you get any new computer toys or technology items from Santa? Hope you'll share your thoughts and impressions with us at the InfoShare session at the beginning of our January meeting.

Our January 20th meeting has us back in Rooms 2/3 in the Fairfax County Government Center. This is our group's annual corporate meeting, where the election of officers takes place, which will quickly be dispensed with, barring any hanging chads. If you can't be present, please vote via email.

WAC member Bob Mason will be

demonstrating Microsoft's Vista, the latest rollout of the Windows operating system. Bob's warned us that we'll need to be careful around the hot new computer he'll be using for the demo. We understand that anyone coming within ten feet of the system will have to use duct tape to keep their socks from blowing off.

New Software

This week I installed Adobe Reader 8, the latest version of the Acrobat file reader family. I'd had lots of glitches with versions 6 and 7, and was fed up with their slow performance. As a result, I'd switched to the pdf reader product from FoxIt Software. Adobe Reader 8 seems to have gotten around the "slows" and the browser plugin is extremely quick in displaying files, so I'll be re-defecting back to the Adobe mothership.

I'm also enjoying RoboForm, which fills out forms and maintains passwords with secure encryption. I'd read some excellent reviews of this package, and was looking for a safe way to maintain the user IDs and passwords for the myriad of financial and other web sites I deal with on a regular basis.

Membership Bonus Offer Continues!

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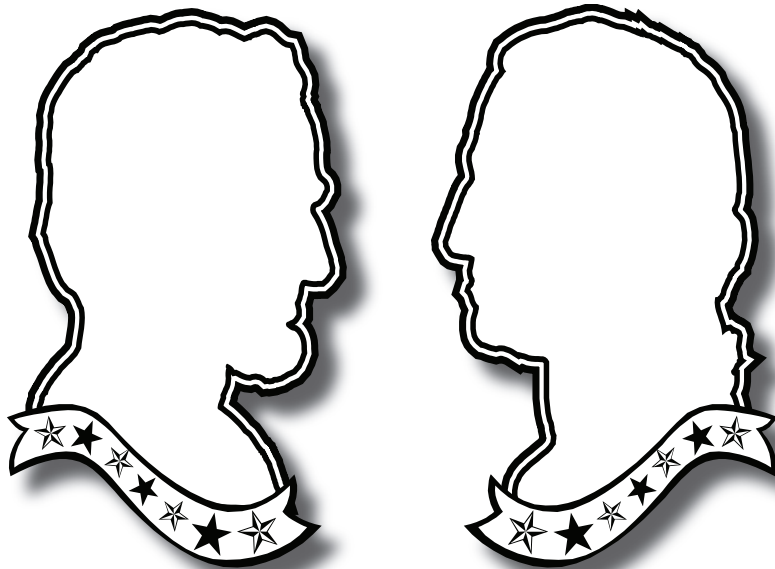
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Lloyd's Web Sites for January, 2007

by Lloyd Johnson, WACUG Member

<http://www.wacug.org/> is the URL for the Washington Area Computer User Group. Visit it for past issues of Web Sites with hyperlinks

1. Web Site aimed at improving the habits of **guys** – <http://www.bebetterguys.com>
2. For people with too much time on their hands – <http://www.DullMen.com>
3. National Register of Historical Places – <http://www.cr.nps.gov/Nr/travel/wash>
4. Specific tips for banishing stains (from glue to wine) – <http://www.a2zcarpet.com>
5. Sudoku Puzzle Online – <http://www.life.com/Life/sudoku/0,26379,00.html>
6. Meditation for People who can't sit still. Download Paul B. Farrell's book for free. Farrell is a financial columnist with Dow Jones Market Watch.com – <http://www.paulbfarrell.com>
7. Vintage posters. More than 30,000 Original movie, travel, fashion, political and other posters – <http://www.chisholmposter.com>
8. Browse PCWORLD.com Downloads library – http://www.pcworld.com/downloads/?tk=nl_hsxdlw
note; an underscore between l and h
9. Is this the next Utube? – <http://www.TinyURL.com>
10. Handwritten e-mail and word processing – <http://www.fontifier.com>



Happy President's Day!

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Yes, we are absolutely without shame - we'll do anything to get folks to pay their WAC dues. With payment, you'll receive a bonus "golden oldie" five pack of back issue software CDs. These are in addition to the three certificates you'll receive for current and future CD offerings. This offer expires when the CDs run out. Don't miss this chance to unearth the treasures of past issues of WAC's great software collections.

Annual dues - \$25 (includes 12 issues of the Cursor via download; certificates for 3 periodic software CDs.)

Printed Cursor Surcharge - \$12 for 12 monthly issues, mailed to your home.



NCTCUG

Visit our "sister" user group. The National Capital Technology and Computer User's Group meets the first and fourth Wednesday of the month. They meet in Carlin Hall in Arlington at 5711 South 4th Street. Visit their web site for more information, a map and directions:

<http://www.nctcug.org/>
Meetings start at 7:00 PM



GNU/Linux SIG

By Geof Goodrum

Recycling Home Electronics

The Holidays are over and you may well find yourself with various electronic devices, including PCs and components, that have been replaced. Several communities and companies in the area accept and recycle (or “eCycle”) electronic devices and parts.

The national source for information on eCycling is the US Government’s Environmental Protection Agency’s web site at <http://www.epa.gov/ecycling/>. The left side of the web page has a link for “Where You Live” with state-by-state guides to electronics recycling programs. The “Where Can I Donate ...” link has information on a number of national programs, including companies like Apple, Best Buy, Hewlett-Packard and Dell that have eCycling programs. Best Buy stores accept items such as used inkjet cartridges, cell phones, and rechargeable batteries (<http://communications.bestbuy.com/communityrelations/recycling.asp>). Dell provides free home pickup of Dell branded products and non-branded with the purchase of a new Dell system (http://www.dell.com/content/topics/segtopic.aspx/dell_recycling).

Virginia residents can find infor-

mation about local community eCycling programs at <http://www.deq.state.va.us/ecycling/collections.html>. Alexandria accepts electronics for recycling every Monday at a drop-off site on Wheeler Avenue at no charge to residents. Some communities charge fees for certain items. For example, Fairfax County collects electronics for recycling quarterly and charges \$10 for CRTs. However, the Fairfax County web site (<http://www.fairfaxcounty.gov/dpwes/recycling/mat-comp.htm>) lists a variety of organizations, including charities, that accept computers year round for reuse or recycling.

Similarly, the EPA site links to Maryland’s eCycling site (<http://www.mde.state.md.us/Programs/LandPrograms/Recycling/Special-Projects/ecycling.asp>), which, in turn, links to local community programs.

Now for the Bad News

With all of the marketing hype surrounding the release of Microsoft® Windows Vista™, potential users should also pay attention to deficiencies that others have reported.

“Vista’s EULA Product Activation Worries” by Mark Rasch of the leading computer security website SecurityFocus describes how fine print in the Vista End User License Agreement (EULA) requires that you send Microsoft information about your computer system in order to use Vista and gives Microsoft permission to disable your system. <http://www.securityfocus.com/columnists/423/>

“Surprises Inside Microsoft Vista’s EULA” by Scott Granneman of SecurityFocus also discusses gotcha’s in the Vista EULA, although Microsoft changed the terms of the li-

cence to address some of the issues after publication of the article (a remaining issue is the EULA prohibits transferring pre-installed Vista licenses to another computer later). <http://www.securityfocus.com/columnists/420/>

Symantec analyzed the new networking stack Microsoft created for Vista and suggests that it will be a source of stability and security issues as bugs get shaken out. <http://www.symantec.com/avcenter/reference/ATR-VistaAttackSurface.pdf>

Peter Gutmann of the Computer Science Department at the University of Auckland, New Zealand published a paper about the cost impacts on the computer industry of Microsoft’s Digital Rights/Restrictions Management (DRM) added to Vista for “premium content” (e.g. Blu-Ray and HD-DVD media). Gutmann states, “Providing this protection incurs considerable costs in terms of system performance, system stability, technical support overhead, and hardware and software cost.” http://www.cs.auckland.ac.nz/~pgut001/pubs/vista_cost.txt

Andrew Orlowski of The Register followed up with his own review of the Guttman paper and analysis of Vista’s DRM. http://www.theregister.com/2006/12/28/vista_drm_analysis/

While Vista finally enforces user accounts without administration privileges, a vulnerability has already been discovered and an exploit is available to malicious hackers. The eWeek.com story is online at <http://www.eweek.com/article2/0,1895,2076159,00.asp>

It’s worth noting that Vista has significant hardware requirements (e.g., one reviewer recommends 2

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GB RAM). GNU/Linux performs well on older hardware and won't force you to upgrade or replace your system. Perhaps it's time for a New Year's resolution to drop the Microsoft product chain and jump to GNU/Linux?

The Free Software Foundation has not been quiet, either, as attested by the following press release.

Press Release: BadVista.org: FSF launches campaign against Microsoft Vista

by John Sullivan — posted at 2006-12-15 15:51 last modified 2006-12-22 17:04

Boston, MA — December 15, 2006 — The Free Software Foundation (FSF) today launched BadVista.org, a campaign with a twofold mission of exposing the harms inflicted on computer users by the new Microsoft Windows Vista and promoting free software alternatives that respect users' security and privacy rights.

“Vista is an upsell masquerading as an upgrade. It is an overall regression when you look at the most important aspect of owning and using a computer: your control over what it does. Obviously MS Windows is already proprietary and very restrictive, and well worth rejecting. But the new ‘features’ in Vista are a Trojan Horse to smuggle in even more restrictions. We'll be focusing attention on detailing how they work, how to resist them, and why people should care”, said FSF program administrator John Sullivan.

The campaign will organize supporters into effective and unusual actions drawing attention to this daylight theft of computer users' rights, aggregate news stories cut-

ting through the Vista marketing propaganda, and provide a user-friendly gateway to the adoption of free software operating systems like gNewSense (<http://www.gnew-sense.org>) and Ututo (<http://www.ututo.org>).

Peter Brown, executive director of the FSF said, “Whilst Microsoft embarks upon its largest ever product launch, its marketing dollars will be spent in an effort to fool the media and user community about the goals of Vista. Our campaign will ask the important questions. Can you set yourself or your company free? Can you ever be free from Microsoft? As with our campaign against Digital Restrictions Management, we aim to demonstrate that technologists can be social activists, because we know the harm that Vista will cause”.

Among other harms, BadVista.org will focus on the danger posed by Treacherous Computing in Vista. Commonly called Trusted Computing in the industry, it is an attempt to turn computers from machines controlled by their user into machines that monitor their user and refuse to operate in ways that manufacturers don't authorize.

Supporters can sign up to receive more information and participate in the campaign at <http://badvista.org>.

The Free Software Foundation, founded in 1985, is dedicated to promoting computer users' right to use, study, copy, modify, and redistribute computer programs. The FSF promotes the development and use of free (as in freedom) software—particularly the GNU operating system and its GNU/Linux variants—and free documentation for free software. The FSF also helps to spread awareness of the ethical and political issues of freedom in the use

of software. Their Web site, located at www.fsf.org, is an important source of information about GNU/Linux. Donations to support their work can be made at <http://donate.fsf.org>. They are headquartered in Boston, MA, USA.

Linux CD of the Month

In addition to the monthly CD described below, WAC can provide CD-R and DVD±R media for any downloadable GNU/Linux operating system distribution (e.g. Fedora Core, Mandriva, Ubuntu, Debian, Knoppix). Please note that download versions of commercial distributions do not include official technical support or printed documentation.

Discs are available only by pre-order. Contact Geof Goodrum by phone (703-370-7649) or e-mail (linux@wacug.org) at least 48 hours before meeting day to order or for more information. Single CD-R discs are available with a \$3 donation; GNU/Linux distributions on multiple CD-Rs or single DVD±R are available with a \$6 donation.

January 2007

Linux Documentation Project

- 20070116. Freely distributable How-To and Guide documentation in HTML (web browser) format by multiple authors. The goal of the Linux Documentation Project (LDP) is to create and distribute the canonical set of free GNU/Linux documentation. While GNU/Linux applications and utilities may come with their own documentation, LDP documentation fills in the numerous gaps. The hundreds of existing LDP documents present both overviews and details of the GNU/Linux Operating System,

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System Administration, Hardware, Networks, Servers, GUIs, Programming, Language Support, etc. Not every important topic is currently covered so LDP is seeking new authors to fill in the gaps.

Looking Glass – v1.0. Free Sun Microsystems Binary Code License Java executables by the LG3D Development Team. Project Looking Glass is an Open Source community project sponsored by Sun Microsystems. Using Java Technology, Looking Glass is a 3D desktop and application environment available for GNU/Linux, Sun Solaris and Microsoft Windows operating systems featuring scrolling panoramic background images, 3D windows and 3D user interface. A demo CD Viewer application is included, but LG3D runs existing applications without 3D enhancements. The LG3D Mega-bundle Installer installs LG3D and all the necessary components including JRE and Java 3D. Default installation does

not affect an existing Java installation. LG3D requires a modern GNU/Linux distribution, 1.4 GHz or faster CPU, 512MB RAM, 3D accelerated graphics card with at least 32MB VRAM and driver support for OpenGL (1.3 is highly recommended). 24bit display depth is required in order for the X11 integration work correctly; Nvidia devices you must use driver 1.0-8756 (or later).

OOo Label Templates - v1.0x. Free GNU General Public License document templates from World-label.com. This is a collection of over 50 table-based label templates including CD, DVD, mailing, address, Avery Sizes, round label templates and many other types in both US letter size and A4 size. The layout allows for easier adjustment of the template if there are printer alignment problems. Setup time is very quick. Designing and printing labels from these templates is easy. These templates will work with any Office Suite compatible with the Open Document Format (ODF) standard, including OpenOffice.org 2.x.

GNU/Linux Distribution Updates - Security and bug fix monthly updates for Fedora Core 6.

Kernel Source - The latest versions of 2.4 and 2.6 kernel source code for all platforms.



Should You Upgrade to Vista?

By Brian K. Lewis, Ph.D., of the Sarasota PCUG, Florida
<http://www.spcug.org>
bwsail at yahoo dot com

As regular readers of this column know, I have been using the beta version(s) of Vista and writing about my experience. I'll grant you that I haven't covered every aspect of the Vista experience. However, it is difficult to touch on everything in an operating system as massive as this. The best I can do is pass on comments on the parts I use frequently. As to the answer to the upgrade question – it's "maybe". I'll give you some of the pros and cons related to my experience.

In deciding whether or not to upgrade you need to determine if your hardware is adequate to run Vista. The system I am using has 768 MB of RDRAM, a 1.2 GHz Intel processor, and an NVIDIA GeForce 2 MMX video card (a correction from previous articles) and an 80 GB hard drive. Frankly, I don't think you would want anything less. A faster processor combined with 1 GB of RAM would be the minimum in most situations. You will also need a DVD drive, as Vista will be sold on DVDs only. From what I have learned it appears that Microsoft will produce only one DVD, but it will contain all the consumer versions of Vista. When you pay for the Vista Basic version and start the installation, the product key that you have to enter tells the setup program which version to install. Then if you decide you need to upgrade to a version with more bells and whistles, you get a new product key that un-

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locks and installs the upgrade version you paid for. I've already seen some comments on the web that the hackers will be paying for Vista Basic and then will hack the DVD to install the Ultimate version. Let's hope not!

So if you have sufficient hardware then you can go to the next step. What is there about Vista that's better than XP? (Note that if you are still running Win98 or WinMe, plan on upgrading. Both Vista and XP are vastly superior to either of these older, non-supported operating systems.) One thing I found that I really like is Vista's ability to go to the Internet to find device drivers for hardware. It did this very successfully for my sound system. I also installed an external hard drive that usually requires me to dig out the manufacturer's disk to get the necessary drivers. XP frequently forgot the driver and would have to reinstall it whenever I plugged the drive into the USB port. When I plugged the drive into a USB port on my Vista computer, there wasn't even the usual found new hardware notice. So I went looking and in "Computer" I found the hard drive identified and was able to access the file on it. So I just went ahead and did a complete backup. Vista's backup software found the drive and did the complete backup in the background while I continued working. This process did not work with my Epson scanner. Vista did some searching and then said I needed to visit the manufacturer's web site to see if software was available. So you can see that this Internet process doesn't work with all hardware.

Another thing I like in Vista is the added security. I don't like that the firewall is only a one-way blocker, but

the scheduled daily parasite check is valuable when you have a cable or DSL connection to the Internet. I don't find the User Account Control (UAC) system to be intrusive as some others have reported. Even when I am working in the Administrator account it is not a problem. I think having to enter a password to carry out operations that affect the system/registry is a good idea. It is one more barrier for any malware to overcome. In addition, when I am working in User mode and want to install a new application, I don't have to remember to right-click the install file and select "Run As". Instead, when I double-click the file I get a permissions window with the Administrator name and a box to enter the password. Much easier and much quicker way to get on with the installation.

I also like the change that has been made in the Start/All programs menu. It keeps you from having to search through multiple columns of programs to find the one you want. Scrolling through a single column list is something I find easier to do. For new computer users, the use of an icon in place of a "Start" button may not be intuitive. However, placing your cursor on the icon does cause the word "Start" to pop up just above the icon. One of the interesting little facets is the speed with which informative small windows pop up when you place your cursor on an icon. There is really no apparent delay, which is quite helpful.

Another change I like is that there is a search box in every directory window. You don't have to go back to the Start menu to initiate a search. Also, your searches can easily be saved. You have the options in each window to select files to burn to a CD/DVD, e-mail, or print. These

selections are made using a menu across the top of the window.

When it comes to CD/DVD burning there is one aspect I don't like. That is that the default mode calls for formatting the CD or DVD so that it functions like a removable drive. Microsoft refers to this as the "Live File System". The problem with this is that the CD/DVD may not be readable in other computers. Their warning implies that the "Live File System" can be read in computers using the Windows XP operating system. However, I found this to be inaccurate, at least as far as the beta versions were concerned. It may be different in the final release version.

You can change the formatting method to "Mastered". This is the usual way you burn a CD/DVD by copying all the files for that disk at one time. CD/DVDs formatted for the "Live File System" can have files added by "dragging and dropping". You can also add and erase files. However, on a non-rewriteable disk the file is still there even though it is not accessible. Frankly, there are other burner software programs that I prefer. The third party programs also work much faster than the Vista application.

In Windows XP when you have a file folder open you can move or copy a file that has been selected. When you click on the move or copy icon on the right side of the window you get a browse window which allows you to select a destination either on your local computer or a computer on your network. Vista does not have this function. To move a file or files, you must first select them to be copied. Then you have to go to the destination window and select paste

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from the right-click menu with your mouse. Then it's back to the original window to delete the files you have copied to the new location. If that sounds like a roundabout procedure, well it is. The XP procedure is cleaner, faster and easier.

Networking is another area where there have been some improvements made. However, if you have a network with both XP and Vista computers, there are still some bugs that have to be worked around. The Windows Help files have eliminated the references related to networking with XP computers. There are no references to the fact the new Internet protocol, IPv6, needs to be installed on XP computers for them to be networked with Vista computers. I couldn't even find the web page reference in the Help file that give me the details on installing IPv6 on XP computers. Again, this may be changed in the final version or the current build I'm using may not need to have IPv6 installed on the XP computers. But that is something I haven't be able to determine.

The biggest drawback I see to Vista is the pricing. The \$99.95 upgrade for the Home version is the same as with XP Home. Except, this lowest cost upgrade gives you only Vista Home Basic. This version has fewer capabilities than does XP Home. The version of Vista that comes closest to matching XP Home is Vista Home Premium and it carries a premium price; \$150.00 to upgrade. Vista Home Basic lacks the Windows Media Center, DVD video software, and wireless networking provisioning. This latter capability, if available, would provide automatic configuration of laptops in WiFi hotspots. Vista Home Basic does not allow for scheduled back-

ups and does not include backup to a network device. Neither Basic nor Premium allow for image-based backups. They also do not support motherboards with two processor sockets. How this will play out with the Intel Core 2 Duo processors, I really don't know. Vista Home Basic also does not have the new Aero graphic interface. That is found only in the Home Premium, Business and Ultimate versions. Unfortunately I can't tell you about the Aero interface as my computer doesn't support it.

Vista Business is the next higher priced version. It is \$199.99 for the upgrade. Although it has the image-based backup capability and wireless networking provisioning, it lacks Media Center capability and as well as the Movie Maker and Video production capabilities. You would have to obtain third party software for these functions if you have a need for them.

So if your only interest in using a computer is for e-mail, web surfing, word processing, then you might be satisfied with Vista Basic. However, you would be just as well off to stick with XP Home for the time being. If you are running a small business from your home you would probably be quite satisfied with Vista Home Premium. So who would need Vista Business or Ultimate? The business version might be useful in a small business with a wired or wireless LAN or where employees require laptops with wireless functions. It also has integrated Fax & Scan software. However, if you needed the Movie Maker, Media Center, or video production capability, then you would have to move up to Ultimate. That has an upgrade price of \$259.00.

If you are concerned about the se-

curity of Windows XP and the frequent security patches Microsoft has to release, then you can consider that Vista is more secure. That doesn't mean it will never need security patching. Quite the contrary. Any OS, especially one as complex as Vista will have hackers attempting to find its weak points and that will result in the need for security patches.

My concluding thoughts on this are that you will eventually have to move to Vista, unless you want to try an alternate OS such as a Linux version or a Macintosh OS. There are emulator programs for both Linux and Macintosh that permit you to run most Windows software. If you aren't one that always needs the "latest and greatest", then you might consider waiting until you purchase a new computer with Vista pre-installed. I certainly wouldn't recommend that anyone rush out and upgrade as soon as Vista hits the market. Wait a while, possibly until the first patches are available or further reviews of the final market version are available. There also may be some "street pricing" that will lower your cost of upgrading. Vista appears to be an improvement over XP, but for the average user, it is not a "great leap forward".

Dr. Lewis is a former university & medical school professor. He has been working with personal computers for more than thirty years. He can be reached via e-mail:.

There is no restriction against any non-profit group using this article as long as it is kept in context with proper credit given the author. The Editorial Committee of the Association of Personal Computer User Groups (APCUG), an international organization of which this group is a member, brings this article to you.

Microsoft Vista — The Next Operating System Features:

By Bob Mason WAC Member

Breakthrough Security: Windows Vista is engineered to be the most secure version of Windows yet. The new features in Windows Vista help to give you the control and confidence you need to get the most out of your PC. Windows Vista contains a number of new security features that, taken together, are designed to make Windows Vista-based PCs more secure and your online experiences safer. The improvements are designed to help you have:

- A PC protected from viruses, worms, spy ware, and other potentially unwanted software
- A safer online experience for you and your family
- An understanding of when your PC is unsafe, and the control and guidance to help improve your security

Powerful Search & Organization: Windows Vista gives you more flexibility when you search and organize your files. New controls, like the Instant Search box and Enhanced Column Headers, make it simple for you to manage large amounts of on-screen data any way you want. With Windows Vista, you no longer have to remember where you store every file. Instead, to find a file, you need to only remember something about it, such as a word contained within a document, the artist of a song, or the date a picture was taken. Powerful, integrated desktop search capabilities help you find just about anything on your computer quickly, without having to search for it by browsing through folders. For example, in the new Start Menu, it is

as simple as typing a word, a phrase, a property, or any part of a file name into the embedded Instant Search box to instantly find the file that you want.

Enhanced and Enriched Windows Internet Explorer 7: Windows Vista enhances the Internet Explorer experience. The upcoming release of Internet Explorer 7 not only adds important new security and privacy features, but also makes everyday tasks easier through features such as tabbed browsing, inline search, and shrink-to-fit printing. Internet Explorer 7 also provides new tools to give you direct access to information you want, with built-in support for web feeds known as Really Simple Syndication (RSS). RSS is a technology you can use to have information sent to you, so you don't have to look for it. Through RSS subscriptions, you can automatically receive feeds (lists) of headlines from Internet sites. Internet Explorer 7 discovers these feeds on sites and allows you to preview and subscribe to them. Once you subscribe, Internet Explorer 7 systematically consolidates headlines from each feed into one list. This lets you quickly browse new information from various sites without having to visit each site separately.

Windows Sidebar and Gadgets: As you use your computer to access more information, perform more tasks, and interact with more software applications, you increasingly face information overload. You open a web browser just to check the weather, open an application to view your calendar, and open a calculator program to simply add numbers. You need simple, specialized, and lightweight mini-applications that put information and tasks at your fingertips no matter what

you're doing. Windows Sidebar boosts your personal productivity by providing instant access to gadgets with a wide variety of engaging, easy-to-use, and customizable mini-applications that offer information at a glance and provide easy access to frequently used tools.

Spectacular Performance: Windows Vista is designed to help make you more productive as you work with your PC throughout the day with new features like Sleep, Windows Super Fetch, Windows Ready Boost, and Windows Ready Drive. Windows Super Fetch helps manage memory to get the most out of available RAM while Windows Ready Boost helps make PCs more responsive by using flash memory devices (like USB thumb drives) to boost performance. Windows Ready Drive takes advantage of new hybrid hard disks, hard disks with integrated flash memory to help improve battery life, performance, and reliability. With Windows Vista, your system is ready when you are.

Valuable Backup Innovations Windows Vista provides valuable new innovations to help ensure you never lose information that is important to you. Windows Vista offers multiple layers of backup and restore protection from hardware failure, user error, or other issues. These innovations include system restore enhancements, a new feature called Windows Backup, and a related feature: Previous Versions, based on the Volume Shadow Copy technology which was first introduced with the Windows Server product family. These features are presented in a single, unified Windows Backup and Restore Center.

Enhanced Networking Features: Windows Vista includes new networking features that make your network easier to set up, easier to

use, and more secure and reliable. Connect wirelessly to your company's network, share an Internet connection and printers, copy files between computers, or enjoy your favorite entertainment around your home. Whether at home, a small business, or a large enterprise, Windows Vista makes connectivity easier so you can focus on what matters to you. Windows Vista puts you in control of your network experience with the Network Center, the central place for all your networking needs. Network Center informs you about the network your computer is connected to and verifies whether it can successfully reach the Internet. It even presents this information in a summary in the Network Map so you can immediately see your connectivity to the network and Internet. If a PC on the network loses Internet connectivity, you can graphically see that the link is down, and then use Network Diagnostics to help determine the cause of the problem and get a suggestion for a solution.

Window Side Shows: If you use a laptop computer, you know that starting up your laptop just to check a message or find an address or phone number isn't always practical. Windows Vista Sideshow technology enables laptop manufacturers to include a secondary or auxiliary display in future laptop designs.

Speech Recognition: Speech Recognition in Windows Vista empowers you to interact with your computer by voice. It allows you to significantly limit your use of mouse and keyboard while maintaining or increasing productivity. You can dictate documents and e-mail messages in mainstream applications, fill out forms on the web using voice commands, and seamlessly manage

Windows Vista and applications by saying what you see. Speech Recognition is fully integrated into Windows Vista and is built on top of the latest Microsoft speech technologies. It has unparalleled voice recognition accuracy that improves with use as it adapts to your speaking style and vocabulary. Speech Recognition supports multiple languages and includes a new human-sounding speech synthesizer.

Help & Feedback: With a number of features to streamline problem resolution, Windows Vista is designed to provide better self-help and improve centralized tools for support professionals. Windows Vista itself detects, diagnoses, and helps you respond to common problems. But when incidents that require support do occur, Windows Vista provides centralized support tools and resources to quickly diagnose and resolve issues.

Remote Assistance: With Remote Assistance, you can get help from a support professional or other trusted user, even if that person is in a remote location. With your permission, Remote Assistance allows a trusted helper to share control of your computer and help you resolve issues. In Windows Vista, Remote Assistance is greatly enhanced, featuring faster performance and the ability to assist users whether they are at home, on the road, or at a remote location. Remote Assistance is now a standalone application, providing markedly faster startup and connectivity, and has been optimized to use less network bandwidth.

Windows Update: Windows Update helps to keep your computer up to date and more secure by providing Microsoft Windows Vista software updates. You can configure Windows Update to automatically download and install updates for you. You can essentially set it and

forget it. In Windows Vista, the capabilities of Windows Update are extended beyond the features available in Windows XP and make updating easier and less disruptive.

Experience Memories: Windows Vista lets you handle your digital memories in a truly intuitive way. It's the center for your digital memories, where you can import your pictures, organize and find them, make basic corrections, and save them to CD or DVD. It's also your photo gallery, with a virtually endless number of photo albums and a variety of ways to share pictures with your friends and family. With Windows Vista, your photos and the tools you need are all in one place. Whether you're working with photos or video, editing or e-mailing your pictures, or putting together a slide show for your next party, you will have the tools to get it done and more quickly and easily. With Windows Vista you can import your camera to your computer, find your pictures easily and share them with friends and family with e-mail, prints or even slideshows on your TV.

Experience Music the Way You Want it To Be: With Windows Vista, your entire music collection creates the soundtrack to your life. Use Windows Media Player 11 to enjoy a seamless connection to your portable devices, satisfy a new musical URGE, and keep your growing digital music collection organized. Or really crank things up and change the way you see and listen to your music by soaking it all in with Windows Media Center in Windows Vista and your Xbox 360. Windows Vista is digital music in a whole new way, yours.

Experience Unique Data Backup

See *Vista System Features* page 10

and Security: Automatic data backup capabilities and powerful security features are just a couple of the robust tools you'll come to depend on so you can focus your mind on business issues, not technology issues. Best of all, Windows Vista Business doesn't require any special technology expertise. Whether you're working on critical business applications, updating important customer information, or migrating to a new PC, you'll have peace of mind knowing that your data is backed up and protected. Vista offers ingenious new ways to back up data and restore files and settings. And it provides centralized security features to help you manage, monitor and configure security-related preferences and settings from a single location.

Experience Productive Sales & Marketing Tools: In business, the tools you use every day to support your sales and marketing efforts are crucial. You have a lot to do to generate new business while you keep your current business, maintain up-to-date sales information, keep your essential records safe, build a tight connection with your customers and partners, and handle a range of customer interactions whenever the need arises and no matter where you are. Windows Vista Business helps you meet your sales and marketing goals by helping you stay connected to your customers and partners and increases your sales and marketing teams productivity with an improved user interface design that makes it easy for you to find what you need fast. Additionally, Vista Business deploys the latest technologies to help keep your data secure and your computers running smoothly. Windows Vista Business provides the tools to help you work the way you want to, with more flexible ways to access your information. Vista Business can keep you in tune with your business and a

step ahead of the competition

Vista Versions: Vista will be released in five versions:

- **Vista Home Basic:** The minimum capability system. No "Aero" 3D interface! Includes Parental Controls, Photo Gallery, Windows Defender, and Enhanced Search capabilities. You won't gain much by abandoning XP. The cost is expected to be \$99 for upgrades and \$199 for the full install version.
- **Vista Home Premium:** This is the minimum recommended version for most users. You get all of the features of the Home Basic version as well as music, video, and most productivity apps, the "Aero" 3D interface, the new Media Center, DVD playback, authoring, CD/DVD burning, and faster game performance. The cost is expected to be \$159 for upgrades and \$239 for the full install version.
- **Vista Business:** Windows Vista Business was created to meet the computing needs of small business owners like you. With tools that help you manage your IT needs, you can focus on what's truly important-maintaining and growing your business. Includes Business Backup, Meeting Space, Web Server, Fax and scan, but no Media Center. The cost is expected to be \$199 for upgrades and \$299 for the full install version.
- **Vista Enterprise:** This version is only provided to volume-license customers! It includes all of the Business features plus hardware encryption, a virtual PC for legacy apps, runs Unix apps, and has multi-language support. Price will vary by the number of licenses purchased.
- **Vista Ultimate:** This is the "No Holds Barred" version and includes all of the Home Premium and Business features as well as "BitLocker" drive encryption, and a number of

"downloadable" things not yet disclosed. The cost is expected to be \$259 for upgrades and \$399 for the full install version. This is the version that will be demonstrated at the January WACUG meeting!



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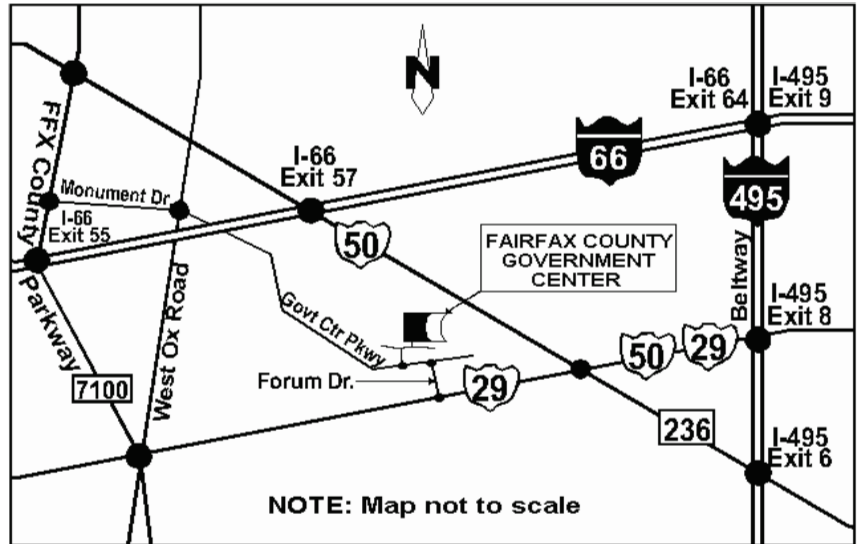
Next WAC Meetings: • Feb 17 • Mar 17 • Apr 21 • May 12 • June 16

Call (703) 370-7649 for the latest meeting information or Visit our Web Site at:
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VistaVexes

The Windows Vista Pains'n'Gains Page

Written by Jan Fagerholm,
Assistant Editor, PC Community
Hayward, California
<http://www.pcc.org>
[jan-f\(at\)pacbell.net](mailto:jan-f(at)pacbell.net)

OK, so I've suffered through the betas and RC1 and RC2 (Release Candidate = not quite done yet), and now through two succeeding RTMs (Release To Manufacturing = the finished product) So what's the final version of Windows Vista finally like? Is it worth the pain of upgrade?

I'm not going to spend much time telling you how pretty the Aero interface is, or how cool the Flip3D task switcher is – the computer press has already given lots of space to these features. I intend to relate some experiences with hardware and software that I have encountered. I'll sometimes talk about the new features, as these are the reasons for upgrading to Vista, but I'll mainly be focusing on the stumbling blocks, as these are the reasons that you may want to wait until the problems that relate to you are resolved. If you went through the XP changeover five years ago, you are in for a similar experience with Vista.

I've previously written bits about Vista and done Vista presentations for PCC, and now hope to provide you with some insights gained from experience with the final version of Vista. I plan to submit a "pains & gains" column on Vista to PCC News over the next few months as it makes its way into the marketplace and on to your desktop. What I can offer here is some real-world expe-

rience with hardware and software support, as well as a perspective gained from a programmer's view of the workings of Vista and how it affects you through the interface, as well as a comparison to other OSs that I regularly use, Linux and Macintosh OSX.

I am an unabashed Linux geek, so what am I doing messing with Vista? I tell myself that I need to know Vista because my Windows clients are going to ask me about it, and I need to give them a better answer than Microsoft's marketing department will give them. I participated in the beta program and even re-joined MSDN (Microsoft Developers Network) for the carrots they offered, one of which was a downloadable .ISO image of the final RTM version when it was released to MSDN on Nov. 17th. There is some real-world pain involved with upgrading to Vista, and I'd like to relate some of these experiences, for you shall certainly share my pain if you decide to go with Vista the minute it hits the street.

First, a bit of background on Vista: five years in the making, yet still rushed to finish on time. The Upgrade Install bug in the Nov. 8th RTM release, which destroyed existing XP installations, was fixed and the RTM was re-released on MSDN on Nov. 17th. This RTM version is the one that is going to computer manufacturers so they can preinstall it on the computers they sell.

After all this introduction, let's get on to some hard information. Bear in mind that I am talking about the final version of Vista, not the beta or RC versions.

Though I mentioned this previously, it's worth mentioning again because it will affect everybody. Vista has

a new security feature called "User Account Control" that is intended to protect the system from "unauthorized changes" that can affect the system or other user's settings, particularly from malware and spyware. It does this by popping a dialog in your face every time something tries to write to certain system or user folders. It also does this whenever you attempt to do a normal software installation even if you are logged in on an administrator account. It came up during installation of Microsoft, Adobe and Corel software. In the case of Adobe and Corel software, it also made the installation fail, even though I told it to allow the changes during installation. Installation of this software did not succeed until I turned off User Account Control. To turn off User Account Control, go to Start -> Control Panel -> User Accounts -> and click the link for "Turn User Account Control on or off". Once you have turned it off, Security Center will complain that it is off, and penalize you by reminding you it is off every time you log on to the system, but this is a small price to pay for normalizing the system.

Among the hardware that you can expect to lose with Vista is the ubiquitous Creative Sound Blaster Live! 5.1 series of sound cards. Vista has a two-channel audio driver for the card, but you lose 5.1 surround sound and the game port. Thus, I not only lose 6-channel capability of my \$100 5.1 Surround speaker system, I also lose the use of my \$120 Microsoft Force Feedback Pro joystick. Creative's Web site says they do not plan Vista support for the Live! 5.1 series of sound cards – I must upgrade to at least a \$150 X-Fi card to get back both of these

Vista Vexes continues next page

capabilities. I am NOT pleased, as I have Live! 5.1 cards in two of my computers.

Judging from manufacturers' Web sites, many scanners are going to be abandoned under Vista as well. This is similar to what happened when XP came out. (i.e. The manufacturer chose not to write an XP driver for the scanner.) My HP ScanJet 6300C doesn't work in Vista, and HP's Web site is depressingly silent about scanner support in Vista. Of the twenty or so different scanners of different make that I have plugged into Vista, none of them over two years old would work.

Printer support, on the other hand, is quite good. Judging from the printer database, it looks like almost everything that works under XP will also work in Vista. The Vista drivers are as rudimentary as XP's though -- you will need to get the manufacturers' drivers for high resolution printing in many cases.

Early returns are in on Vista. Many of the developer forums that I belong to are abuzz with Vista experiences, from installation (or failure thereof) to device support (or failure thereof). I intend to relate more of these in upcoming articles.

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The New, the Best, and the Worst

Collected by Pim Borman,
Webmaster, SW Indiana PC Users
Group, Inc.
<http://swipcug.apcug.org>
swipcug(at)sigecom.net

Watch the Back Door!

Many an afternoon I see a school bus stopping in the neighborhood to unload students toting enormous bags of expensive text books on their backs. It always irks me because it seems so unnecessary. The heavy backpacks put an unhealthy strain on the students' spines, and the expensive books put a severe strain on family budgets, especially if there are several children of school age. (Public school students must pay for their text books in Indiana, in case you're not from around here.)

It would be so much easier if the students used inexpensive, functional notebook computers with the textbooks stored on CDs. Ideally, classrooms should be equipped with permanent, networked units for common use so that the students can leave their own computers at home to minimize damage and loss during transport. After all, most colleges already require that students have a computer, so why not start in high school, or even earlier?

Cost shouldn't be a problem. A fully functional computer running free Linux and Open Source software can cost less than a year's worth of textbooks. Acceptance will be harder to come by, with expected resistance from book publishers about to lose a highly profitable and captive market. Microsoft may not be happy either. Teachers may have to be retrained, and administrators, having been weaned on MS Windows,

may oppose the use of what many still regard as a second-best operating environment.

Often necessity is the father of invention. Third World countries, only now entering the world of computing, are the most likely to introduce revolutionary progress in low-cost personal computer productivity. My own computer, equipped with all the latest bells and whistles, sits idle for more than 99% of the time. In a Third World classroom, or maybe a small office, it could easily support a dozen or more terminals and monitors if provided with the right, free software. History would repeat itself, since time sharing of computers was first introduced in the 1960's when mainframe computers were also unaffordable for individuals. Students will only need inexpensive dumb terminals and bare-bones monitors. In England an organization calling itself Ndiyo (Swahili for "yes") is working on this approach. It makes full-fledged computing available to many at low cost.

An alternate approach called "One Laptop Per Child", initiated by academics at MIT, aims to provide specially designed laptop computers at a cost of less than \$100 per unit to millions of children in poor countries. The computing experience is less advanced than with the time sharing approach, but having your own computer, no matter how primitive, has a strong psychological advantage. I can testify to that. My first introduction to computers was via a Telex terminal connected to a time-sharing mainframe that I used for scientific modeling work. It was useful and interesting, but not nearly as captivating as running my own simple programs in Sinclair

See *The New* next page

The New from previous page

Basic on my own first (\$100) Timex-Sinclair computer.

An essential part of introducing computers to Third Worlders (and not only school children) is the availability of free software in the form of Linux and the OpenSource programs to do just about anything productive that computers are capable of. This in turn will grow and mature the Linux/OpenSource technology to the point where it may well return to the West through the back door as an attractive, low-cost alternative to expensive and bloated Microsoft Windows and Office programs. (Based in part on an article in *The Economist*, 9/23/2006, thanks to Louis Ritz)

A South-African dotcom millionaire, Mark Shuttleworth, is financing the development of a totally free distribution of desktop Linux and all the necessary software. Called Ubuntu ("Humanity to Others"), it is already preferred by many Linux users. It is totally free. Even the CDs on which it is distributed are mailed to you free for the asking (www.ubuntu.com). Although possibly intended for use in Third World countries, Ubuntu is also rapidly gaining followers in the US. What did I just write about the back door?

What Is Web2.0?

Usually when major computer-related improvements are forthcoming, they are hyped long before they actually become available. Have you heard about Vista? I thought so.

Surprisingly, a major improvement in the Internet Web protocol, Web2.0, seems to have sneaked in through the back door. And yet, Web2.0 is to the old Web what the telephone was to the telegraph. With the traditional Web, you send

a message, such as a request for a street map, to a Web address ("www.mapquest.com") that gets translated into a numerical Internet Protocol address by a Domain Name Server. The addressed site responds to your message and the connection is broken. To send a follow-up message ("zoom in") the whole process must be repeated. Slow-slow-slow.

With Web2.0 the connection, once established, remains open until you close your browser window. This allows an immediate back-and-forth communication as if the distant Web site were located on your own computer. It allows you to go to Google Earth and seamlessly scroll and zoom the maps to your heart's content (provided your Internet connection is fast enough). It also makes it possible to provide application programs, such as an Office Suite similar to Microsoft Office, on a Web server to be made available via a Web2.0 connection. Several providers are moving in that direction, including Google and Microsoft. News sites can provide live hyperlinks whereby when your pointer hovers over a headline a summary of the news pops up on the screen. The possibilities are endless.

Happily, the user doesn't need to do anything to benefit from this new technology. The Internet servers provide all the programming that any major Web browser can understand. Enjoy!

How Broad Is Your Broadband Connection?

Not nearly as fast as you would like it to be, right? If you have a cable connection and the kid next door is online playing Doom, or Bully, or whatever, you're sharing online access and your connection probably crawls. Not much you can do about

that. But you can minimize some other delays.

One of these is the time it takes your browser to connect to the site you want to address. If you type an Internet address such as *swipcug.apcug.org/index.htm*, a **Domain Name Server (DNS)** provided by your **Internet Service Provider (ISP)** translates it to the corresponding numerical **Internet Protocol (IP)** address. Unless the entry has been cached after having been used before, the lookup procedure may take some time.

OpenDNS is a new, independent, and free Domain Name Server that claims to be faster than many ISP servers, mostly by using a very large cache. In addition it keeps track of known phishing sites and blocks them with a warning message. It will also try to correct misspellings and still provide the intended Web site, or suggest possible sites you might be looking for. When I intentionally typed *swipcug.apcug.NET* (instead of the correct *.ORG* domain) I got a choice of four possible sites with the correct one first on the list. Simple instructions for replacing the default DNS addresses of your ISP with the OpenDNS addresses can be found at <http://welcome.opendns.com/> (read Steve Bass in *PCWorld*, November 2006)

If you want to check the download and upload speeds of your broadband connection you can use SpeakEasy at <http://www.speakeasy.net/speedtest/> As I am writing this, on Friday at 10:45 pm, my connection speed with Sigecom to Chicago is: Download Speed: **3866** kbps (483.3 KB/sec transfer rate), Upload Speed: **347** kbps (43.4 KB/sec transfer rate), about as good as it gets in my experience. Speeds to Seattle are similar.

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Buying an HDTV?

By Bob Elgines, Editor, Colorado River Computer Club, AZ
<http://www.crccaz.com/>
Elginesz(at)rraz.net

There are three things necessary for true High Definition (HD) Television (TV): an HDTV, HD receiver (or tuner) and HD programming. All TV stations will be capable of HD by 2007.

New HDTVs are here and will be required starting in 2009; but, of course, there will be converters available. The standard for Antilog TV was 525 lines per frame vertically. The old mandates of FCC requirements were first 2004, and then 2007. There are many HDTV models out there and some of the description of their characteristics are confusing. Hopefully I can clear up a few items of concern.

First let us consider the three **types** of TV screens or TV monitors:

1. **LCD** – Cheaper in price; they can be wall mounted; 37” unit weighs about 50 to 60 pounds; sizes up to 52”; are 4” to 5” thick; 160 degree view angle (with decreasing contrast); lasts 10 to 20 years;

The thinnest, lightest sets and have minimum reflection of lights in the room.

2. **PLASMA** – Moderate in price; they can be wall mounted; 42” unit weighs about 85 to 90 pounds; sizes 42” and up; are 4” to 5” thick; ; 170

degree view angle (contrast good thru-out); lasts 10 to 20 years;

Better color accuracy and displaying the deepest black, but screen’s shiny surface can produce reflections of lights in the room and static images can “burn-in” and produce a ghost image.

3. **DLP** – (digital light processing); Moderate in price for size; not wall mounted; 42” unit weighs about 45 to 60 pounds; sizes 42” and up; are 8” to 15” thick; 160 degree view angle (contrast good thru-out); lasts 8 to 10 years (bulb or lamp); a “rain-bow effect” that some viewers may notice on the edges of bright objects on the screen. DLP is used in most new projectors.

Second, lets discuss **Resolution** (pixels are the number of dots per line), the higher the resolution the better the picture, or higher quality. The old Standard Digital TV format is 720 (Horizontal) x 480 (Vertical). The new HDTV formats are 720 and 1080, but most HDTVs also allow using the 480 standard. There are not many things out there for the 1080 “i or p” format. Where “p”= Progressive – draws lines on screen from top to bottom, and is considered the best for high speed movement without blur. Whereas “i”= Interlace – draws odd lines from top to bottom then even lines from top to bottom.

1024 x 768 pixels, 1366 x 768 pixels, and 1780 x 720 pixels all fall under the 720p format and many 720p-HDTVs accept the 1080i format.

1920 x 1080s fall under either the 1080i or 1080p format and most accept the 720p format.

Screen size is measured diagonally. Therefore, if you now have a 32” TV, you will most likely want a 37” to 42” for your replacement.

That way you will have basically the same height, but of course it will be wider.

Third, let’s discuss other concerns such as inputs and outputs (most sets come with stereo sound speaker systems):

1. **HDMI** – latest version is 1.3, this is a connector that requires a special cable and is not usually included with your TV. This could be used for 5.1 or 7.1 surround sound systems, video games such as X-Box, HD-Cable boxes, HD-DVD players, etc.

2. **Component** – One to three inputs are provided, used to connect DVD Players, games, etc.

3. **Cable Slot** – latest version is 2.0, used for Cable Simm Cards. Most cable companies are not interested, but new FCC mandates starting next year, 2007, may change this. Also some companies are considering including the Cable Card internally.

4. **Tuners** - Usually two tuners are included, one NTSC (we are now using Antilog & Digital TV, also called Standard TV) and one ATSC (this is the new HD digital TV tuner, required for HDTV). Stay away from a TV listed as “HD-ready”, it does not have an ATSC tuner.

Summary. It boils down to what you think looks and operates the best for your situation. Ask questions and check out the specification of the unit you wish to buy. If you are upgrading your cable or satellite service to HDTV, be sure to ask for “hi-def”, not digital. Good luck!

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