

TOGGLE

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Library News

- None announced before this month's meeting, however, disk Librarian Tom Stepanek has several copies available from past offerings, including the premium virus checker. Check it out!

UPDATE

Operating System

In *WUBI? What The Heck Is A WUBI?* the author discusses the Windows based Ubuntu Installer which allows you to install Ubuntu Linux from within Windows 98, 2000, XP, Vista, or Windows 7. WUBI automatically creates a dual boot option that lets a Microsoft Windows user try Ubuntu without risking any data loss due to disk formatting or partitioning.

In *Neat Things You Can Do With A Flash Drive* author Vinnie La Bash describes how you can run portable versions of such applications as Open Office, Firefox or Thunderbird. Increase memory by converting a flash drive using ReadyBoost which comes with Vista and Windows 7. You can use downloadable *Predator* to lock your computer when away from your desk. He even tells you how to put Windows 7 on a flash drive. Check it out.

In *Three reasons why Windows 7 isn't for everybody* the author counts down with 3. If Your PC isn't up to snuff, fuhggeddaboutit! 2. If your hardware or software demands XP, stick with that OS. 1. Don't try to fix what ain't broke. Many of you may have a computer with insufficient capacity or speed to take full advantage of the new operating system. An upgrade may require a new machine.

In *How Windows 7 Will Finally Kill XP* the author points out that Windows 7 seems much more compatible with programs and peripherals than Vista was so the move from XP will be easier.

In *Ask DACS* a column from Danbury Computer Society questions are asked and answered about moving directly from XP to Windows 7.

In *Windows Experience Index* author Sandy Berger says: "Inside of Vista and Windows 7 is a feature called the Windows Experience Index. This is a simple tool that gives you an easy-to-read assessment of your computer's performance." She then discusses this feature in some detail even suggesting that this might affect the purchase of a new machine.

In *Controlling System Restore* Vinnie LaBash gives you detailed instructions on how to adapt System Restore to your specific needs.

In *Windows 7, 64 Bit* author Brian Lewis goes into his usual detailed description of what he did to upgrade to the 64 bit version of Windows 7. His experiences may help you if you are contemplating the move to 64-bit Windows 7.

In *Password Protect Your Account* the author tells you how to create a password reset disk to be used in case your password becomes corrupted. He provides instructions for XP, Vista and Windows 7.

Hardware

In *Digital Memory Cards* the author describes three different memory cards, viz: CompactFlash, Secure Digital, and Memory Stick.



OPERATING SYSTEM NOTES & TIPS

WUBI? What The Heck Is A WUBI?

by Jum McKnight, LAC S, Dec 2009

The Windows-based Ubuntu Installer (WUBI) is a program that allows you to install and remove Ubuntu Linux from within Microsoft Windows (98, 2000, XP, Vista, or Windows 7). WUBI automatically creates a dual boot option that lets a Microsoft Windows user try Ubuntu without risking any data loss due to disk formatting or partitioning. Normally, installing Ubuntu or any version of Linux on a system that is also running Windows is intimidating and very risky. Total failure to boot Windows is a common result.

WUBI to the rescue: The WUBI installer is now included on every Ubuntu Live CD and easily installs Ubuntu INSIDE of Windows (all versions), and in the same partition (drive letter) as Windows if you like. The install process is like any other program installed in Windows. Installing this way is soooooo easy. Also, when you want to remove Ubuntu, you just go to Add/Remove Programs and remove it like any other program running under Windows.

Dual boot: After the installation, a new (dual boot) option screen appears right after power up, allowing you to select whether you want to run either Windows standalone or Ubuntu standalone.

Wow, what a great way to play with Linux/Ubuntu without the hassle of partitioning the hard drive and dealing with those messy dual-boot managers like GRUB or GAG. Yuck (Yes, those are real acronyms. Not the Yuck. It just means yuck.)

To start the process, you need an Ubuntu Live (Install) CD that you or a friend has downloaded and burned. You can also go to the Ubuntu website and have them mail you a free CD (10 weeks).

To install Ubuntu using WUBI, just insert the "Ubuntu Install CD" while Windows is running. Do not boot the CD. The CD should start. If not, go to My Computer, open the CD and click on wubi.exe. When you see the opening window, simply select "Install Inside Windows". After that you answer a few questions about what drive letter, and how much drive space you want to allow for Ubuntu. That's it!

I have tried this under XP and Windows 7 and it is flawless.

Notes:

- Hibernation is not supported when installing Ubuntu via WUBI (for either Windows or Ubuntu).
- Follow these links for detailed WUBI operating instructions:
<http://wiki.ubuntu.com/Wubi-Guide> and here: <http://help.ubuntu.com/community/Wubi>
- Ubuntu 32 can run under Windows 32 bit or Windows 64 bit.

Neat Things You Can do with a Flash Drive

by Vinny La Bash, <vlabash@comcast.net>
 Sarasota Personal Computer Users Group, Inc.

By now you're probably tired of reading about how much better Windows 7 is than Vista. Me too, so let's spend some time examining some of the things you can do with a flash drive other than mere data storage. A USB flash drive consists of a flash memory data storage device integrated with a USB (Universal Serial Bus) interface. USB flash drives are easily removable, and much smaller than a floppy disk. They are rewritable, and usually weigh less than an ounce. There is a wide range of storage capacities with the most common being from 2 GB to 32 GB. Higher capacities up to 256 GB tend to be pricey.

One of the most useful things you can do with a flash drive is to run portable applications. Open Office, for example, is a free suite of programs that includes a word processor, spreadsheet, data manager, presentation tool, and drawing package. You can store the suite as a portable application, and run it on any computer that supports Windows. Firefox and Thunderbird are also available as mobile applications.

Having office applications, email, and an internet browser all pooled in a portable drive you can carry on a key chain is a powerful combination. If you want more go to <www.portableapps.com> for an open source platform that works with iPods and portable hard drives in addition to flash drives. The platform is not only free, but it's a full function site. You are not limited to a trial period or a limited function subset. There is no sign in requirement, and no necessity to provide even an email address. Go for it.

Everyone wants a faster system. With either Windows Vista or Windows 7, the built-in *ReadyBoost* feature can speed up your computer with a USB flash drive. *ReadyBoost* takes the storage space on a USB flash drive and converts it into an additional memory cache that supplements the main memory cache on your primary disk drive. It can do this because flash memory is faster than regular disk drives. It's faster because it has no moving parts, and you can get a noticeable improvement in response time. Implementing *ReadyBoost* is simplicity itself. Insert the USB flash drive into the USB slot on your computer and follow the configuration prompts.

If you work or live in an environment where other folks have physical access to your computer you can use your flash drive to lock everyone else out of your PC. There is no built-in utility like *ReadyBoost* for this, but you can download a free tool called *Predator* from <www.brothersoft.com> that provides this function. *Predator* uses a standard USB flash drive as an access control device. After performing a short installation and configuration process, your flash disk becomes a key that will lock and unlock your PC. When you leave your PC remove the USB flash drive. This causes the screen to go

blank while disabling the mouse and keyboard. When you ready to resume, put the flash drive back, and everything returns to normal. Move over, Mr. Bond, Predator is here.

All the preceding capabilities are very convenient, but how would you like to carry around a portable operating system? If you are willing to expend a little time and energy you can configure a USB flash drive to be a bootable Windows 7 drive. You will need a flash drive with a capacity of at least 8 gigabytes, and of course a Windows 7 installation disk. Start out by inserting your flash drive into its USB socket and inserting the Windows 7 installation disk in the optical drive. Please make a note of the drive letters. This is essential for successful installation.

Preparing the flash drive is the next step. Click on the Start orb and type: Diskpart

Pressing Enter opens a command window. (After typing a command at the command prompt always press Enter to execute the command.) At the prompt type: List Disk

You will see a list of all your hard drives, partitions, optical drives, card reader drives, and flash drives. Identify the optical drive that contains the Windows 7 installation disk and the flash drive you're working with. For this example we'll assume the flash drive is disk #4, also designated as G and the optical drive is disk #2, also designated as D.

At the command prompt type: Select Disk 4

Run the following commands:

- ◆ Clean
- ◆ Create
- ◆ Primary
- ◆ Partition Select Partition 1
- ◆ Active Format FS=FAT32
- ◆ Assign
- ◆ Exit

This series of commands erased extraneous material from the flash drive, created an active primary partition, and formatted it with the FAT32 file system. The next step is to copy the Windows 7 installation files to the flash drive.

At the command prompt type: Xcopy D:*.* /S/E/F G

In this example D is the drive housing the Windows 7 installation disk and G is the USB flash drive. The command copies the installation files to the flash drive, and when it finishes you have a bootable Windows 7 flash drive. The last thing you need to do to make this work is go into the BIOS and make the first bootable device the flash drive.

Carrying a flash drive around is obviously far more convenient than carrying a DVD, and has the additional advantage of being faster than a DVD. This procedure also works for Windows Vista, but why bother when Windows 7 is here?

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Three reasons why Windows 7 isn't for everybody

by Woody Leonhard (WindowsSecrets.com)

Despite these and other Win7 positives, there are at least three good reasons for Windows XP and Vista users to stick with their current OS:

3. If your PC isn't up to snuff, fuhgeddaboutit!

While Windows 7's hardware demands are less stringent than Vista's, there are zillions of PCs that simply can't handle Win7.

In my March 5 Woody's Windows column (paid content)*, I described how to convert any three- or four-year-old desktop PC into a Windows 7 wonder by bumping it up to 2GB of memory and sticking in a sufficiently powerful video card. I've retrofitted dozens of Windows XP desktops in this way, and the results are hard to believe. With a little bit of goosing and a couple of hundred bucks, those old PCs run Win7 much faster than they used to run XP.

* <[http://WindowsSecrets.com/links/\\$P20d/9e664bh/?url=windowssecrets.com%2F2009%2F03%2F05%2F07-Save-on-PCs-by-using-Win7s-Experience-Index](http://WindowsSecrets.com/links/$P20d/9e664bh/?url=windowssecrets.com%2F2009%2F03%2F05%2F07-Save-on-PCs-by-using-Win7s-Experience-Index)>

However, if you have a desktop machine or laptop that's more than a few years old, upgrading its hardware to support Windows 7 is likely more trouble than it's worth. Don't bother.

2. If your hardware or software demands XP, stick with that OS

The XP Mode built into Windows 7 Professional and Ultimate is a Virtual PC-based implementation of XP. XP Mode makes sense for large companies that want to get the benefits of Windows 7 but have to put up with hardware or software that runs only under Windows XP.

For the typical home or small-business user, however, XP Mode is a pain in the neck. My advice? If the Windows 7 Upgrade Advisor (which you can download from the Microsoft Windows 7 site <[http://WindowsSecrets.com/links/\\$P20d/3d4b16h/?url=www.microsoft.com%2Fwindows%2Fwindows-7%2Fget%2Fupgrade-advisor.aspx](http://WindowsSecrets.com/links/$P20d/3d4b16h/?url=www.microsoft.com%2Fwindows%2Fwindows-7%2Fget%2Fupgrade-advisor.aspx)> indicates that your XP setup isn't compatible with Windows 7, either upgrade the machine's software and hardware or give up on running Win7 on the system. Life's too short.

1. Don't try to fix what ain't broke

By far the most-compelling argument for staying with Windows XP or Vista is this: The Windows you have now does everything you need, and you aren't overly concerned about rootkits or other nearly invisible malware hosing your machine. In this case, there's no compelling reason to go out on a limb with Win7.

Replacing your operating system is slightly simpler than performing a self-administered brain transplant, but it's still no walk in the park. In the vast majority of cases, upgrades to Windows 7 go in smoothly, with a few minor irritations -- maybe you can't find the install CD for an old program, for example, or you forgot to write down a password.

But in a small percentage of cases, the Windows 7 installation doesn't go well at all. As they say, stuff happens. Any upgrade could potentially become calamitous, and Windows 7 isn't immune.

If the thought of upgrading your system makes you lose sleep, hey -- don't worry. Better the devil ye ken, eh?

How Windows 7 Will Finally Kill XP

By Preston Gralla, Computerworld

Microsoft's been trying to retire Windows XP for years, but Windows 7 will finally do the job.

First off, it's no secret that Vista hasn't been embraced by enterprises <www.pcworld.com/businesscenter/article/158993/report_vista_the_least_popular_windows_os_ever.html?Tk=rel_news>, many of whom have treated it like the plague. That's unlikely to be the case with Windows 7. One reason: Vista wouldn't run properly on a fair number of PCs in enterprises when it was initially launched because the hardware wasn't high-powered enough.

Today that's no longer the case. Enterprises have gone through at least one round of hardware refresh since the Vista launch, and so now virtually all of their PCs will run Windows 7.

The same thing holds for printers and other peripherals. One of Vista's biggest problems was that too many peripherals wouldn't run with it.

Again, though, that's no longer true. Enterprises have newer peripherals now than they had years ago. Newer peripherals will work with Windows 7, because it was designed to work with Vista-compatible hardware.

In addition, the Windows 7 beta has been quite solid and stable -- so much so that Gartner has been <<http://mediaproducts.gartner.com/reprints/microsoft/vol5/article2/article2.html>> telling businesses that they don't need to hold off until Windows 7 SP1 to plan for deployment -- they can start planning at launch.

Given all that, Microsoft will be able to move enterprises <www.pcworld.com/businesscenter/article/158168/xp_users_plan_your_windows_upgrade_right_now.html?Tk=rel_news> toward Windows 7 and away from XP, ultimately allowing

the company to kill XP.

Windows 7 will run on netbooks, which Vista can't do. Because Vista can't power notebooks, Microsoft has had to keep XP alive for the large and growing netbook market. But when Windows 7 ships, Microsoft will have Windows 7 installed on netbooks, not XP. That also will let it kill XP more quickly.

The upshot? Windows 7 will do something that Vista couldn't -- kill XP.

Ask DACS

Moderated and reported by Jim Scheef, November 2009
Danbury Area Computer Society, Inc.

Ask DACS is a Question and Answer session before the main presentation at the monthly General Meeting. We solicit questions from the floor and then answers from other audience members. My role as moderator is to try to guide the discussion to a likely solution to the problem.

Q: A while back I set up the "Windows Spell Checker" on WinXP with Word 2003 so that it would check spelling when filling in forms in Internet Explorer. Now I would like to do the same on another machine but do not remember how.

A: After some stumbling, it appears that there are several add-ins or extensions that perform this magic. One is at <<http://ie7pro.com/spell-checker.html>>. There are many others that are found by searching for "spell checking in IE". A member noted that some of the browser toolbars provide spell checking. Another member said that most browsers other than IE provide spell checking by default. This is the case in Firefox 3.5 (which I use), Opera and probably others.

Q: Has anyone migrated from WinXP directly to Windows 7? How did you do it and how well did it work?

A: There is no way to upgrade WinXP "in place" directly to Win7. In my opinion this is a penalty from Microsoft for skipping Vista. The quasi-official way is to copy your files to an external drive, install Win7 which wipes out everything on the internal drive and then reinstall all of your applications and copy back your data files. This brute force technique will not migrate registry settings or email and similar data that is not stored in the My Documents folder.

Searching after the meeting, I found three official Microsoft methods. A video on how to use the User State Migration Tool (USMT) is at <<http://technet.microsoft.com/en-us/windows/dd671583.aspx>>. Another tool is the Microsoft Deployment Toolkit (MDT) which is at <<http://technet.microsoft.com/en-us/windows/ee410767.aspx>>. Both of these copy user settings to a temporary file that must

be saved on external media (CD or external hard drive) and then migrates all this to the new Windows installation which can be on the same or a different computer. The MDT is claimed to migrate “user data, custom applications and drivers”. Long ago I tried to use the USMT to migrate from one Win2k domain to another Win2k domain and this failed. The “consumer” solution is Easy Transfer <<http://windows.microsoft.com/en-us/windows7/products/features/windows-easy-transfer>>.

PC Mover <www.laplink.com/pcmover> is a third-party tool that claims to be “The Easiest Way to Move to Windows 7!” One member said he plans to try it so we should follow up on this question at the December meeting.

Hopefully, these newer tools are easier to use. Note that if there more than one user on a machine, the USMT must be run for each user. Good luck.

Because this process is fraught with trouble, there are many tutorials on how to make the jump. I suggest that you read several to get an idea of what is involved and be sure to watch the Microsoft videos.

Another technique is to convert your entire current Windows installation to a virtual machine so that you can run it under Win7. One tool to do this is Acronis(R) True Image Home 2010 <www.acronis.com/homecomputing/products/trueimage/> that can backup and disk to a VHD (virtual hard drive) file. This file can then be opened and run under Microsoft Virtual PC 2007 <www.microsoft.com/windows/virtual-pc/default.aspx>. This does nothing to migrate you to Win7 but does preserve all of your old installation and makes it available under Win7. Naturally this requires some hard drive space.

Q: What experience have others had with device drivers under Window 7?

A: One member stated that Win7 has been able to use most drivers compatible with Vista. Where he has had trouble is with external print servers that network-enable regular parallel and USB printers. Another member reminded us about the Windows 7 Upgrade Advisor <www.microsoft.com/windows/windows-7/get/upgrade-advisor.aspx> (also on the Win7 install DVD), a Microsoft tool that checks the applications and drivers on your current machine for Win7 compatibility. This would seem to be an obvious first step. Many people reported trouble with video drivers.

Q: How can I record streaming video for playback later?

A: The software required to do this depends on the format of the incoming video. One member suggested CamStudio <<http://camstudio.org/>>, an open source program that claims to be “able to record all screen and audio activity on your

computer and create industry-standard AVI video files and using its built-in SWF Producer can turn those AVIs into lean, mean, bandwidth-friendly Streaming Flash videos (SWFs).” Another member recommended Format Factory <www.formatoz.com/>, an open source program to convert video file formats (but does not record streaming video).

Q: I bought an external hard drive that comes with software to do “continuous file backups.” The software significantly slows down my computer. The drive is a Western Digital MyBook USB/Firewire external hard drive. Has anyone used one of these and how well does it work?

A: [Unfortunately at the end of the question, the recorder ran out of space so I can only report what I recall from memory.] The discussion centered on other backup software solutions that perform scheduled backups rather than continuous. This would eliminate the Western Digital software that is slowing down the computer. There are many such programs including the Acronis software mentioned above.*

Disclaimer: Ask DACS questions come from members by email or from the audience attending the general meeting. Answers are suggestions offered by meeting attendees and represent a consensus of those responding. DACS offers no warrantee as to the correctness of the answers and anyone following these suggestions or answers does so at their own risk. In other words, we could be totally wrong!

* I bought a similar external drive that came with its own software to do things that I found inconvenient. An alternative solution, which I use, is to disconnect the external drive except when I want to back up files--like overnight.

- TOGGLE Ed.



Windows Experience Index

by Sandy Berger

Inside of Vista and Windows 7 is a feature called the Windows Experience Index. This is a simple tool that gives you an easy-to-read assessment of your computer’s performance. To access this feature, click on the Start button and choose Control Panel. In Windows Vista, choose the Classic View. In Windows 7 choose one of the icon views. Then click on Performance Information and Tools. You will be given a snapshot of your computers performance.

The report is divided into five categories: processor, memory, graphics, gaming graphics, and hard disk. Each one of these has a score that indicates your computer’s performance in that area. A Base Score is given in bold letters. You need to be aware that the base score is not the average of the scores, but rather, it is the rating on the slowest component. So if your gaming graphics score is 2.2, your overall score will be 2.2 even if all of the other subscores are higher. The base score is given in this manner assuming that your computer can only be as fast as the slowest component.

Currently the scores for a computer running Vista range from 1 to 5.9. The scores for Window 7 computers range from 1 to 7.9. They do not go all the way up to 10 because Microsoft is allowing a little leeway for the added performance levels of future hardware components.

Don't be shocked if your computer has a low base score or low subscores. Microsoft says that a score of 2 is adequate for basic computer tasks like email and word processing. Graphics-intensive software like Photoshop and games should have a score of 3 or higher.

If you use your computer for heavy duty computing including media center for multimedia like recording HDTV programs, then subscores in the processor, memory, desktop graphics, gaming graphics, and hard disk categories are all important and should be at least a 3.

In most cases, inexpensive computers will have the lowest score in the graphics category. This will be more important in a laptop computer because you cannot easily upgrade the graphics card later. In a desktop computer, you can always add a better graphics later, if you choose to do so.

To give you an idea of how these scores stack up, here's the scoring of my one-year-old dual-core, 64-bit computer that was recently upgraded to Windows 7.

Processor: 6.0
Memory: 6.0
Graphics: 3.8
Gaming Graphics: 3.4
Hard Disk: 5.9
Base Score: 3.4

My computer retailed last year for about \$500 and would currently be selling for less. I do everything on this computer including running as many as 10 programs at once, working with Photoshop, playing movies, and recording TV. My point is that even though the scores can go as high as 7.9 on a Windows 7 computer, you don't need extremely high scores to have a very useful computer.

This index is a good way to pinpoint slower components that may be worth upgrading. For example, my computer's scores tell me without a doubt, that if I were to purchase a high-end graphics card for my computer, I could almost double its base score and speed its performance.

While this little tool is a great way to score your own PC, it also excels at letting you see how the computer you may be thinking of purchasing stacks up against the others. Most stores that sell computers have a demo running in the store. If that is the case, you can pull up the Windows Experience Index on any computer that you are thinking of purchasing.

You can also use it to compare computers. This tool is not perfect, but it does give you a fairly accurate assessment. While you will still have to compare things like the amount of memory, hard drive size, and cost, you won't have to understand as much about the processors and other components. And best of all, you won't have to rely as much on the salesman in the store.

Although I still feel that computers could be made easier to use, the Windows Experience Index is one example of how the newer operating systems are at least making computers easier to understand.

Sandwich Computer Group Editor's Note:

It would be a good idea when buying a new computer to know what the Windows Experience Index is before purchasing. I would recommend a 3 or greater even if you are only going to do basic tasks.



Controlling System Restore

by Vinny La Bash, <vlabash@comcast.net>
Sarasota Personal Computer Users Group, Inc.

Did a shareware application you were enamored of turn out to be an unmitigated disaster? Perhaps a device driver installation, system update or modification to a registry key went bad, and your system wandered into an alternate universe. Windows has a utility called System Restore that takes a picture, called a Restore Point, of your system before certain types of operations are started. System Restore is a very handy feature that allows you to go back in time to erase actions you have come to regret. If a problem occurs you can revert back to the way things were, and all is well again.

System Restore, for all its utility and convenience, has its drawbacks. Some argue that if there is not enough free disk space, System Restore will fail to create a restore point, so an unsuspecting person may discover that there is no restore point available when trying to put things back to normal. There is also no way to make a permanent restore point that will not get deleted after a time when automatic restore points need the disk space. This could be a predicament if a problem is intermittent.

It is possible that System Restore may be responsible for your disk drive running out of room. While today's super-sized drives make that less likely than a few years ago running out of disk space could still happen, especially if you load up your system with videos. You can reduce that likelihood even further by configuring System Restore properly.

The snapshots we talked about in the first paragraph are taken by a built-in program called the Volume Snapshot Service (VSS). There is no way to access this utility in the standard Windows Graphical Utility Interface (GUI). This means you can't get to it with a menu option. You need to open

a Command Prompt window with elevated administrator privileges.

Click on the **Start** orb located down at the bottom left corner of your screen, select **All Programs**, and open the **Accessories** folder. Right click on the **Command Prompt** icon, and then select **Run as Administrator** from the menu. That will open up a Command Prompt window with enough authority to configure System Restore.

Before doing any configuration, let's take some time to understand how System Restore works. You can do this with the vssadmin tool. At the Command Prompt type **vssadmin /?** (Press Enter after typing a command.)

You see a list of all the commands supported by the utility. (Note: Shadow copy = Restore Point)
Enter the command **vssadmin list shadows**
This displays a list of all the restore points currently on the system.

The **list shadowstorage** command displays the amount of disk drive space currently being used to store restore points, how much space is set aside to accommodate restore points, and the maximum permitted size for restore points.

To see what's available on your own system, at the Command Prompt type:

```
Vssadmin list shadowstorage
```

Take a few minutes to understand the way the information is displayed. If there is enough free disk space you can store up to 64 restore points before Windows automatically starts deleting old restore points to accommodate new ones.

Making backups is an essential task, but there is no reason why Windows should be allowed to consume every available byte of storage with System Restore points. The default settings allow Windows to run amok but you can reset the maximum value with the **resize shadowstorage** command.

Here is an example:

```
Vssadmin resize shadowstorage /for=c: /on=c: /maxsize=12GB
```

The **/for=** switch specifies the disk drive where the storage space is to be resized.

The **/on=** switch tells Windows where to save the Restore Point.

The **/maxsize=** switch tells Windows how much space it can use for Restore Points.

If you don't specify a maximum size you are giving Windows permission to do anything it wants. The minimum

size is 1GB. I have seen references stating that the minimum size can be as low as 300MB, but I could not verify that information.

After entering the resize command the system needs to be restarted to take effect. Configuring System Restore points won't solve every problem you may have with Windows, but it will give you more

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Windows 7, 64 Bit

by Brian K. Lewis, Ph.D.*

Sarasota Personal Computer Users Group, Inc.

Well, I finally did it. I bit the bullet and installed the 64 bit version of Windows 7 in place of the 32 bit Vista that came with my computer. I even managed to do it without disturbing either of my Linux versions that are on the same hard drive. I did end up with a very large file that I didn't expect to get that is labeled "Windows.old". More about that later. The version of Win7 that I installed was the Home Premium Upgrade. So here's how it went.

First I downloaded the Windows Upgrade Advisor so I could check on the compatibility of the hardware and software I was using under Vista. Then I ran the advisor for info on upgrading to 32 bit Windows 7 and a second time for info on upgrading to 64 bit Windows 7. The first item on each report was "upgrade options". My options for the 32 bit upgrade were that I could do a standard upgrade to any 32 bit version of 7. My only option in order to move to a 64 bit version was to do a custom install of 7. That confirmed earlier information I had obtained from Microsoft and other sources on the Net. In any case the upgrade advisor did not recognize my Brother fax or my Verizon broadband card. All of my other hardware was recognized. Only in a few instances was it indicated that a software upgrade would be needed for the drivers to work with Win7. My ZoneAlarm fire wall was specifically targeted as being not compatible, so I would need a new version there. All in all, it looked like everything would work, providing I downloaded a few new versions of some of my software and some updated drivers.

Since I was going to be changing from a 32 bit Vista to the 64 bit Win7, I thought that new version would overwrite my old files. Accordingly, I did a complete backup to my external drive using Acronis. There was also one major change I needed to do before I installed Win7. My computer came with a recovery partition placed ahead of the Windows Vista partition. Since I had a complete recovery CD, I didn't need

or want the recovery partition. So I booted the computer with "Gparted" and used it to empty and then move the recovery partition to after the Vista partition. That of course, destroyed the multi-boot loader setup. To correct that problem I booted with the Ubuntu live CD and restored the multi-boot loader. Now I was finally ready for the Win7 installation.

After booting with the Win7 64 bit installation disk, my first choice was the selection of language. Then came the choice to either upgrade or select custom installation. When I selected custom installation I found that all of the Vista files, including my data, would be saved and placed in a folder called "Windows.old". It's a very good thing I had a large partition for Windows (149 GB) as the Win7 installation plus the old Windows files took up almost 60 GB of drive space. The installation software did check the drive to see if the space was adequate, but some advance warning would have been helpful. I can imagine some situations where the available space might not be sufficient. As it turned out, I could have formatted the entire partition, which would have removed all the Vista files and the data files. Then I could have followed with the Win7 installation. For those that haven't installed Win7 and wish to move to the 64 bit version, this is an option.

The actual installation of Win7 took about one hour. However, I had to keep a close watch on the process as the install program never told me to remove the installation CD. Since it did reboot the computer several times I had to be sure it didn't restart the installation CD. Instead it needed to use the restart files it put on the hard drive. Somewhere along the way it would have been very helpful to have instructions telling the user when to remove the CD.

Windows update advisor had told me that it did not recognize the broadband modem that I had been using under Vista. So as part of my preparation for the upgrade to Win7 I checked the Verizon web site for drivers compatible with Win7-64. Then I downloaded the file and copied it to my external drive. After the Win7 installation was complete I installed the Verizon software so that I would be able to get an Internet connection. It went quite smoothly.

With Win7 running, the first package I downloaded and installed was the Avast! anti-virus software. Their latest version is Microsoft certified for Win7. The next step was to update all the ASUS drivers. On their web site they had a complete set of drivers for my computer and Win7. The only problem being that I couldn't just get a CD with the drivers to use for an update. I had to download them all, individually. There were several hundred megabytes in total. Some of the individual files were more than 49 megabytes in size. Now if you have a cable connection with a 12 megabit/second download speed it wouldn't be a problem downloading these files. In my case the maximum speed was 2 megabits and more commonly the speed was around 750 kilobits/second. You're absolutely right, I spent time over several days getting these

files downloaded and installed. I didn't wait for this process to be completed to install my other working software. Then on to OpenOffice and Gimp, both in 64 bit versions. That's when another problem surfaced.

The Win7 installation automatically setup my Brother multi-function printer and fax. However, it did not setup the scanner. So as far as Gimp was concerned I didn't have a scanner. So back to the Brother web site. I had to download software to remove the drivers that Microsoft installed and another 49 MB package of Brother software. After getting that installed, Gimp still didn't recognize my scanner. So I had to remove and reinstall Gimp. That didn't work either. Since the 64 bit version is a beta (unfinished) version I tried the 32 bit version. It also told me I didn't have a scanner. So, I'll have to do some work to find out what the solution is to this particular problem. I know there is a Twain driver installed and have located it. This is what Gimp usually uses. Oh well, just a little more work to do.

Another little quirk surfaced the first time I booted into Windows 7. It loaded a boot menu listing both Win 7 and Vista with an option to select which one I wanted to run. Since Vista was no longer really available I went ahead with Win7. Then I had to do some searching on the Microsoft site to find the instructions to remove the Vista boot option. You can do the removal from the Microsoft boot loader manually or download a third-party program (EasyBCD) which is then used to edit the boot loader file. Since I use Grub, a Linux program, as the boot loader for both Ubuntu and Windows, I really didn't need a second boot loader menu popping up.

While I was investigating the boot loader problem I also researched how to remove the Windows.old file. I had tried selectively removing parts of it and kept getting the message that only the TrustedAdvisor could remove the files. I never did find what was meant by the "TrustedAdvisor", but Microsoft did have instructions for removing the Windows.old file. It has to be done using the "Disk Cleanup" function and selecting "Clean up system files". Then you have an option to remove previous Windows installations. The instructions warn you that none of the files will be recoverable once you do this. So you want to wait a week or two before removing this folder.

So now I have been running the 64 bit version of Windows 7 for several weeks. Is it better than Vista? In some respects, yes, but overall it is much the same. It does start quicker and it, so far, shuts down without any real delay. One change is that Win7 tells you what, if any, software is preventing or delaying the shutdown process. In my case the Verizon broadband software always slows down the shutdown process. At least now I know what's holding up the process.

Another change that I like in Win 7 is ability to select a window by mousing over the icons on the task bar. When I have multiple pages open in an application, it is much easier

to find the page I want then having to pick them from a list. I guess this is part of the Aero interface. I also understand that both this change and the one in the previous paragraph may have been present in the 32 bit versions of Vista Ultimate.

Microsoft keeps touting the improved security in Windows 7. However, I am not convinced, especially where the firewall is concerned. I tried it against Gibson Research Shields Up software. It did indicate that the incoming ports were all stealthed. That means that they don't even appear to exist as far as random probing from the Internet is concerned. That is very good, but just what would be expected of any good firewall. The problem occurs with outbound signals. I used the Gibson Research Leaktest application and the firewall failed. This small program sends out an FTP signal to the Gibson site. If the site responds, then the firewall has failed. The Windows firewall requires that you set up a rule for blocking every outbound application you want to control. You really don't know what might be involved with a Trojan or parasite program and what port they might be using. Therefore this individual rule requirement is ridiculous and makes outbound control very unlikely to ever be useful.

I have always used the ZoneAlarm free firewall in the past. However, when I tried installing the latest version I received an error message telling me I needed to install SP-1 for Vista. Apparently ZoneAlarm has not updated this version for use with Windows 7. Too bad. I also tried the Win7 version of the PCTools firewall. It's outbound protection is no better than Windows even though I tried to block the Leaktest output from ports 0 to 1024. It still failed. So be warned. You may not be as secure as you would like to be when running Windows 7 connected to the Internet. At least until ZoneAlarm updates its free version.

All in all, Win7 seems to be better in some respects than Vista. However, it still is no match for Ubuntu. So my main OS will remain the 64 bit version of Ubuntu. Now, if you are planning on upgrading from XP or Vista to Win7, my recommendation is to go for the 64 bit version. All of the Windows upgrade packages have both the 32 bit and the 64 bit versions. If you have doubts about whether or not your computer can run the 64 bit version, check it with the Microsoft Update Advisor. Then you'll know what you need for the upgrade. The upgrade process to 64 bit is really not difficult and I think you'll like the result.

**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@yahoo.com.*

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Password Protect Your Account

by Kathy Frey, frey58@cox.net, 625-5326

If you password protect your account for your Windows operating system, then you should create a password reset disk. It takes very little time and is easy to do. In Windows XP, Windows Vista and Windows 7, these first steps are the same.

1. Click Start
2. Click Control Panel
3. Click User Accounts

After you have the User Accounts window open, select the account for which you want to make the password reset disk. (Make a reset disk for each account.)

- ♦ In Windows XP, on the left under Related Tasks, click on Prevent a forgotten password to start the Forgotten Password Wizard, and then click Next. Follow the wizard. You can use either a floppy disk or a USB drive for the reset disk.
- ♦ In Windows Vista, on the left click on Create a Password reset disk, then follow the wizard. The Password Reset Disk is essentially a small file that can be used to reset your password, even if you have changed your password since creating the reset disk.
- ♦ In Windows 7, click on Create a password reset disk. If no media is installed, you will get a message that indicates you need a removable media, such as a floppy disk or a flash drive. Otherwise the password reset wizard comes up, and you again will need to follow the screens.

After creating your reset disks, store them in a very safe place, since the information can be easily used by anyone to reset the password and gain access to your account.

There are other ways to change the passwords in all three operating systems, but the above is an easy and quick way to have that extra safety net in hand.



HARDWARE NOTES & TIPS

Digital Memory Cards

by Jason Mills, Durham Personal Computer User's Club,
Oshawa, Ontario, Canada

Digital cameras are designed to capture images via an electronic image sensor. They utilize a form of removable storage called flash memory, one of the essential digital camera accessories. Flash memory is a non-volatile (no power consumption) EEPROM (Electronic Erasable Programmable Read-Only Memory) type that can be re-used and re-programmed. It offers fast access time for reading information and images.

A flash memory stores information in a number of memory cells, made from floating-gate transistors. It is made with a card case durable enough to withstand pressure, temperature and water. It can be inserted into a camera compartment. Images are taken and processed automatically. It has a range capacity of 128 megabytes to a number of gigabytes. More pictures can be stored in a high capacity memory.

Below are a few examples of flash memories.

CompactFlash

CompactFlash is a 50-pin digital camera memory card. It is used in many applications to interface with PCs, PDAs and printers. Type I and Type II, are the 2 physical sizes available. Some cameras accept only Type I. Type II is much thicker and has a higher capacity. One common Type II card is the MicroDrive memory card. It also has a built-in controller chip. This allows higher transfer rates on cameras with larger internal buffers.

CompactFlash was built something similar to Intel's NOR-based flash memory. It became the oldest and most inexpensive format in the market today. It is available in 512 MB (megabytes) to 100 GB (gigabytes) capacity. 1 GB and 16 GB are two of the popular choices in North America and Europe.

CF memory cards are the most desirable types because of its rugged design. It withstands more physical damage as compared to other portable storage devices. It lacks the write protection switch that other devices have in common.

Secure Digital (SD)

Secure Digital is one of the non-volatile memory card formats widely used in digital cameras, computers and mobile phones. The slim and compact design is just about the size of a postage stamp. A decoder software of SD enables you to play music and video clips.

SD cards are supported by the older MultiMediaCard (MMC). They have a transfer rate of 10-2- Mbytes. They support at least three of the transfer modes. These include the One-bit SD mode (separate data channels, commands and transfer format), Four-bit SD mode (use reassigned and extra pins) and the SPU mode (subset of the SD protocol use with microcontrollers).


Memory Stick

A memory stick is a kind of digital data storage launched by Sony in October 1998. It is designed for small digital products because of its compact design. The 8 MB memory stick is available in 4, 8, 16, 32, 64, and 128 MB storage sizes.

This type has a maximum data transfer rate of 20 MHz with a 10-pin connector type. An Erasure Prevention Switch can set lock to eliminate accidental erasing or recording of data. It also has original serial protocols for compatibility issues. It includes a family of Memory Stick PRO, Memory Stick Duo, Memory Stick Micro (M2) and Memory Stick PRO-HG.



Help Lines

SOFTWARE HELP	Advisor No.	HARDWARE HELP	Advisor No.	
Win 95/98/ME	2, 3, 4, 7	Reformat Hard Disk, FDISK	2, 4, 5	
Win 2K/NT/XP	2, 3, 7	Install Hard Drive, CD-ROM/RW	2, 4, 5	
MS Word	2, 7	Install Video Card		
MS Excel	4	Deleting Files, Wiping	6	
MS PowerPoint		Internet/Intranet	6, 7	
WordPerfect	1, 7	Audio Cards	4	
QuickBooks	8	MP3 Files, WMA Files, WAV Files	4	
Norton/Symantec AntiVirus	2, 3, 6, 7	Burning CD's	3, 5	
Norton System Works	2, 7	Partitioning Hard Drives	2	
CompuPic/CompuPic Pro	3, 7	Net Objects	7	
Winzip, WinRAR	6	Homesite	7	
JV Registry Cleaner	3	MS Access		
Outlook, Outlook Express	2			
Internet Explorer	2, 7			
Netscape Navigator	7			
Instant Messaging	2			
Installing Software after Reformatting	5			
Ccleaner	3			
Easy CD DA Extractor	3			
ADVISORS	PHONE		HOURS	
Fred Shelton [1]	(253) 752-0120		Variable	
Bob Henkel [2]	(253) 537-6732		8A-8P anyday	
Tom Stepanek [3]	(253) 922-7939	7-9P Mon-Fri		
Carl Tenning [4]	(206) 824-3843	6-9P Mon-Fri		
Oclad Wesley [5]	(253) 503-7833	6-9P		
Bob Thomson [6]	(253) 752-5582			
Ray Mills [7]	(360) 692-7568	6-9P Mon-Sat		
Sandee Gimblett [8]	(253) 952-3538			

Tacoma Open Group for Microcomputers (TOG)

New Member Application/Existing Member Change of Address Form

For **Tacoma Open Group** annual membership, send form (if needed) & **\$25** to Bob Henkel., 10613 25th Avenue E., Tacoma, WA 98445.

Make checks payable to TOG

Please print or type.

Date: _____

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Member's Name: _____

Address: _____

City: _____ State: _____ Zipcode: _____ Plus Four _____ Country: _____

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TACOMA MEETING

When: **Mon 11 Jan 2010 -7:00 PM**
Where: SE Tacoma Community Centre
1614 99th Street E.
Tacoma, Washington

From I-5 take Exit 127 (Hwy 512) to
Portland Ave., north on Portland to 99th,
left over tracks. Building is on south side.

Future Dates: 2nd Monday of Month

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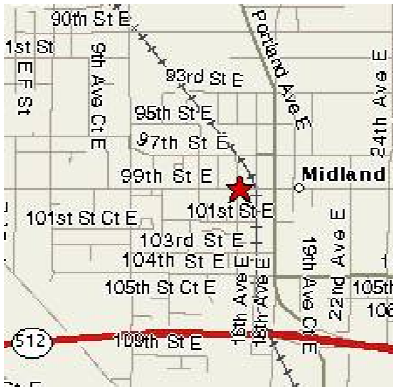
Deadline: 15th of this month to appear
in next months' issue, if room

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How To get To The Meeting

For those readers still unfamiliar with how to find our meeting place we have reproduced the map showing its relationship in Tacoma to Portland Ave S. and the 512 Freeway. The 512 Freeway can be entered from I-5 in Tacoma on the west or from Hwy 167 in Puyallup on the east. Proceed to Portland off-ramp and turn north to 99th Street. Some folks in the middle of Tacoma may prefer to take Portland southbound to 99th. At 99th turn west over the tracks and there you are!



TOGGLE

Tacoma OPEN Group for Micros
1808 Lenore Drive
Tacoma, WA 98406-1920

Change Service Requested

PROGRAMS

This Month's Meeting

This will be a regular monthly meeting. Meeting discussions are always interesting and the ever-popular Q&A (Question & Answer) period is sure to pique your interest, come up to your expectations and tickle your fancy. Come and share your own experiences, problems and discoveries.

It's a new year and even though a formal program has not been announced for this month, we are sure to kick it off with a problem-solving session and discussions of interest to all.

Come and bring your problems and discoveries to share with us all.