TOGGLE

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In *Making Your Computer Easier to Use* the author discusses aids to users with various disabilities, saying: ¨This article gives an overview of these features and links to some helpful sites for people interested in making the tools work for them.''

In *Tablets: Comprehensive random musings* the author who has owned more than a dozen different tablet computers discusses do's and don'ts and recommends the best features to look for. A pretty comprehensive discussion of things to look for if you are considering buying a tablet computer.

In *Good Enough* the author discusses one of the cheaper tablets that he bought for the grandkids.

In *The Demise of the Digital Camera* the author discusses the current crop of cell phones that have photo taking capability and seem to be taking over the low-end camera market. He then discusses current trends in the camera market.

Operating System

In *WMIC: the best command line tool you've never used* the author says: ''Some people say command line tools are obsolete, out of date, no longer necessary when you can ''point and click,'' instead. But the reality is very different. Every version of Windows sees the command line given new powers and abilities, and if you don't explore these then you really are missing out. '' Read! Learn!

In *holy cow! is this a virus?* .the author learned about Microsoft}s Malicious Software Removal Tool and tells you about it and adds: ''The Malicious Software Removal Tool does not use an installer. Typically, when you run the Malicious Software Removal Tool, it creates a randomly named temporary directory on the root drive of the computer. This directory contains several files, and it includes the Mrtstub.exe file. Most of the time, this folder is automatically deleted after the tool finishes running or after the next time that you start the computer. However, this folder may not always be automatically deleted. In these cases, you can manually delete this folder, and this has no adverse effect on the computer.''

General Interest

In *Extending the Life of Your XP PC* the author goes into some detail about things you can do to your XP machine if you want to keep using it rather than upgrade to later versions of Windows.

HARWARE NOTES & TIPS

Making Your Computer Easier to Use

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In these days when almost everyone is using a computer, there are many features of operating systems and software that can help users with physical limitations. Microsoft has enhanced its features in this area, both in Windows 7 and recent versions of Microsoft Office. This article gives an overview of these features and links to some helpful sites for people interested in making the tools work for them. In Windows 7, the accessibility tools are found in the Ease of Access Center (Start - Control Panel - Ease of Access Center). These tools are designed to help people who have problems with vision, hearing, and dexterity.

Low Vision and Blindness

For the person who finds the computer display hard to read, changing a few settings in the Ease of Access Center can make life easier. You can select a High Contrast theme which shows either white text on a black background or all bold black text on a white background for all text, including toolbars and ribbons. This feature is especially useful for users with conditions like macular degeneration. The Magnifier tool enlarges the portion of the screen where the mouse pointer is located, a lifesaver when trying to read small text in a document or on a webpage. Like other tools, it can be pinned to the taskbar for easy access. Other settings let you remove unnecessary background images or animations, make the flashing cursor thicker and more visible when typing, and sharpen the appearance of window borders to make them easier to see.

A person who is blind can work with a Windows computer through a combination of the Narrator and Voice Recognition tools using speakers and a microphone. Narrator reads text aloud as it appears on the screen and describes things like error messages. The Voice Recognition tool, introduced in Word 2010, translates the user's speech into text on the screen. It does need initial setup, involving training the tool to understand the user's vocal patterns. Another tool, Audio Description, gives oral narration of the action in videos.

Limited Dexterity

A number of tools are designed to assist the person with limited finger dexterity. Turning on the Mouse Keys lets you move the pointer on the screen using the arrow keys instead of the mouse. Sticky Keys let you press keystroke combinations, such as Ctrl+Alt+Del, one key at a time. Toggle Keys play an alert sound when you press the Caps Lock, Num Lock or Scroll Lock keys, saving you from unanticipated results like a sentence in all caps. Filter Keys can be set to ignore unintentional keystrokes, such as several in rapid succession or holding down a key for an unusually long time.

The Voice Recognition tool, besides assisting blind users, is also useful either for those with limited dexterity or inadequate typing skills. The on-screen keyboard lets the hunt-and-peck typist click letters on a keyboard displayed on the screen. For those who have trouble maneuvering a mouse, one solution is to develop the habit of using keyboard shortcuts in place of mouse clicks. Searching the Internet will provide lists of standard keystroke shortcuts; you can also create your own. Windows'Ease of Access Center also has features that can help. One option lets you hover the mouse pointer over a window to open it, rather than clicking. Other settings for the mouse use can be found in the Control Panel - Mouse. Here you can change the speed of the mouse click and create a trail of pointer images behind the moving pointer to keep it in view. You can also change the shape and size of pointer icons.

Hearing Loss

Although computers are more visual than auditory, users with hearing loss need a few tools to assist them. In the Ease of Access Center, you can change alerts in many programs from sound to a text alert or a flash on the screen. Another setting displays text captions for spoken dialogue in multi media programs.

Accessibility Features in MS Office 2010

Microsoft Word, Excel, and PowerPoint 2010 have new features to help make documents, spreadsheets, and presentations more accessible to those with limitations. One is the Accessibility Checker. This tool diagnoses a file for any areas that might make it difficult to view or use. The author of the file can review the list and make any changes he feels are needed. Another new tool is Mini Translator, which translates a word or phrase from another language into English when the mouse points to it. Clicking the Play button lets you hear the word or phrase pronounced. Another feature new to Office 2010 is the ability to add text descriptions to shapes and images for those who can't view them. Enlarging text in Word 2010 is easy with the zoom slider in the right bottom corner and a new full screen Reading View option which enlarges and sharpens document text. PowerPoint 2010 has added the capability to add closed captions to audio and video and embed them in a slide presentation.

Windows is compatible with many third party assistive software programs and devices. MS Office 2003 -2010 users can turn documents into Talking Books by downloading the ''Save As Daisy'' add-in. Go to http://resourcefulness and search for and download/install ''Save As DAISY for Office (your version).'' Then install a DAISY-compatible digital talking book reader, such as the free AMIS reader: www.DAISY.org/amis/download.

Versions are available for Office 2007/2010 and for Office 2003 with the Office 2007 compatibility pack installed. Other requirements are listed at the sourceforge.net website.

The number of options to increase accessibility to a computer can be overwhelming. This overview will make you aware of some of them, but only you can decide which ones you want to try. You can complete a short questionnaire in the Ease of Access Center to help with your decision. A few of these tools have a learning curve that can be greatly reduced by watching the video tutorials (some close-captioned) and reading support documents located at: www.microsoft.com/enablewww.lvcg.org/products/office. Most can also be accessed directly from links in the Ease of Access Center. Fortunately, the support and setup tutorials for most of these tools are numerous and well done. More information can be found by searching ***www.microsoft.com/accessibility***.

Tablets: Comprehensive random musings

by Frank Ramsey, newsletter editor, Akron Canton PC Users Group, Ohio
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Those of you who know me understand I have fallen in love with tablets. They are sweet in my mind.

This doesn't mean that all tablets are created equal.

I thought it was time for some random musings on what I've found in the tablet markets.

My tablet journey has consisted of 16 tablets with something like 10 different models.

I've owned: Apple iPad 1, Apple iPad 2 (2 of these), Apple iPad 3, (all 9.7"), Samsung Galaxy Tablet 8.9 (4 different ones, all 8.9") a Sony S Tablet (9.7"), an Asus TF101 (10.1"), an Acer A500 (10.1"), a Toshiba AT305 (10.1"), an Acer W500 (10.1"), and a Google Nexus 7 (7").

I've also spent significant time with Lenovo's ThinkPad Tablet (10.1").

Of the tablets I've experienced, 4 have run Apple iOS, 10 have run Android of various versions (2.2, 3.1, 3.2, 4.x, 4.1 and 4.2) and 1 runs Windows 7/8.

I currently have 4 tablets, 2 iPads, the Nexus 7 and the Acer W500.

Don't buy a cheap tablet

My first suggestion is don't buy a cheap tablet. You'll be sorry. You'd be better to wait till you can afford the $200 price of a Google Nexus 7 than spend $100 on a low end tablet.

Why, you ask? The low end tablets are under-powered and have very limited storage. And they typically use resistive touch screens. Without getting into the dynamics, resistive touch screens are not as sensitive or responsive as the capacitive touch screens used on higher end tablets.

With the Google Nexus 7 selling for $200, buying something less expensive to save a few bucks will only bring on frustration.

That brings another observation. Buy a general purpose tablet, not a reader.

Amazon and Barnes and Noble both sell very good tablets in the Amazon Fire and Nook Tablet. However, all these are intended to lock you into their store. You buy your books and applications only from them, unless you root the device. We'll talk about rooting a little later.

Given the Google Nexus 7 is available for 200 bucks, pass on the Amazon and Nooks and go for it as a fantastic general purpose tablet.

Customizability

By this I mean your ability to change how the tablet looks and works. This should be more than just changing your wallpaper.

iOS limits the customizability to what Apple feels you should do. Changing the wallpaper and organization of the applications is about all you can do. Even when jailbroken, you cannot perform a lot more extensibility on iOS.

Android allows a lot more customizability. You can change the wallpaper including live wallpapers that change while you view. Android also allows you to change the default keyboard and other input methods and select alternate launchers. What's a launcher? Basically a launcher is the method you interface with the tablet. Think of this as the look and feel of the screens.

Overall, Android allows more extensibility than iOS.

Applications

Applications written for tablets typically use higher resolutions.

Applications written for phones use lower resolutions.

I know, duh! Right!

Screen Size

I like to hold the tablet in one hand in a vertical position and use my other hand to navigate on the tablet.

Given this, I find the traditional sized tablets of either 9.7" or 10.1" too big, bulky and heavy to hold comfortably in one hand for very long.

My favorite tablets are the smaller sized ones. 7" is a good size for personal viewing of videos. It can be a little too small when viewing web sites. The 8.9" form factor is about perfect in my opinion; videos are great and web sites show clarity.

Storage

The presence or lack of expandable storage probably isn't too big a deal for me. Tablets typically come with some built-in memory ranging from 2 GB to 64 GB or more. The more storage, the more stuff you can store on the tablet. Another duh, right?!

I don't use my tablet to listen to music. Waste of good hardware in my opinion. I carry either an iPod or Sansa device to listen to music. That's what they were made to do and they do it very well. Music typically takes lots of storage; removing it saves a lot of space on the tablet. I find 16 GB a decent amount of internal storage. That's enough to store 10 or so movies for viewing on long flights.

Books and applications typically don't take a lot of storage, so 16 GB is a decent amount. Sure, you'll not be much of a pack rat with 16 GB. Larger amounts of storage allow you to get sloppy.

Expandable storage can be used to back the device up, which we all should do, right?

Device memory

Here you have to watch. It's pretty easy to find the amount of storage. Much more difficult to find the amount of memory in the device. My experience is: If the device has 512KB or less, stay clear. It's going to run out of memory and slow down.

iPads and most higher end tablets have at least 768KB memory. Some have 1 to 2 GB. The more memory, the more applications. On a duh roll, aren't I!

CPU

Again, here you may have to search to find them specs on the tablet.

The best tablet experience also has fast multicore CPUs. Didn't know tablets come with multiple cores on their CPUs, eh? Well it's true.

Quad core tablets are all the rage. The Nexus 7 uses a quad core CPU and it's fast and responsive.

Dual core tablets are normally responsive, but there may be times you experience a lag because either you don't have enough memory or enough CPU to do the task you're asking for.

My suggestion is get at least a dual core CPU running at least 1.0 gHz.

Battery Life

iPads have better battery life. Before you get ready to argue with me, this is my column with my observations so I can write what I feel. So there! However, this is backed up by a number of independent studies.

Why you ask? iOS is a single tasking operating system. The application that runs is in the foreground. Other applications simply pause. This saves battery life.

Android allows applications to run in the background. You may find the features performed by the background applications useful, but they do affect your battery life.

Screen Resolution

The more expensive tablets come with better screens. Currently iPad 3/4 and the Nexus 10 have the highest pixel count screen.

Can you see the difference? Absolutely. This truly is a time when more is better!

What price do you pay for the increased screen resolution? You will pay a price in battery life as the more pixels to be changed, the more power that it takes.

You may not see much difference when watching movies, although you can see the difference on the iPad 1 and iPad 2 with their lower resolution screens pretty easily.

Select a tablet that has at least 800x600 resolution. If you can afford it, go for 1280x800 (720p) resolution.

Cameras

Tablets have built-in cameras, sometimes multiple ones, front and back.

They can be useful if you're Skypeing with someone. You will probably not use the cameras for much, although the higher resolution ones (5 megapixels and up) take great pictures.

An Android tablet running Ice Cream Sandwich (Android 4.0) typically has a panoramic view allowing you to have a scene that pans a wider area, much like a wide angle lens. It's a unique feature that you might find useful. There are multiple applications available to edit the photos on the tablet.

Application Stores

Applications written for tablets typically take advantage of a tablet's higher resolution screen.

The Apple Store has more applications than Google Play and more that take advantage of a tablet's higher resolution screen.

Having said this, you will find both stores have selections in almost whatever type application you desire. Lots of games, utilities, weather updates, etc.

Without jailbreaking, iOS applications can only be downloaded from the Apple Store.

Android tablets can download from the Google Play store, the Amazon store and other locations. You don't need to root the device to enable installation from other than the Google Play store, however.

Rooting/Jailbreaking

Both refer to the same thing, but on different platforms. You root an Android tablet and jailbreak an iPad. So what is rooting/jailbreaking? Basically it's removing the limitations the hardware vendor placed on you.

Jailbreaking an iPad means you can install applications from places other than the Apple Store. Additionally you can customize the iPad interface somewhat. Not as much as Android allows, but you can add things like a mouse driver.

Rooting an Android device allows more control over the hardware. Typical things you can do include over or under clocking the CPU (running the CPU faster or slower than rated). Note: you don't really need to under clock as the Android OS does a pretty good job of slowing the CPU down when it's not required. Another thing rooting does is allow for total backups. I know, you mean you cannot back up everything about an Android tablet without rooting? Sad but true. While email accounts typically are synced with your Gmail account, application settings are not.

Do you need to jailbreak or root the tablet to enjoy it? Absolutely NOT! I used to jailbreak/root a device soon after acquiring it. Now I'm not finding the need to jailbreak/root it. Just enjoy the tablet, is my current view

Expandability

By this I mean accessories, cases, hardware add-ons, etc. iOS takes the cake here hands down. There are simply more add-ons available that use the Apple Dock connector. Radios, speakers, video games, even piano keyboards.

Apple has complicated this with the iPad 4. The Apple Dock connector was changed from the 30-pin one that has been standard. This immediately obsoleted many of the hardware accessories out there. Yes, there is an adapter from the old to new Apple Dock.

Android tablets have suffered and continue to suffer special connectors which limits the reusability of devices. Even power connectors can be unique to a tablet. Android allows Bluetooth connectivity for keyboards and mice while iOS only supports Bluetooth keyboards. Both support Bluetooth headphones.

As previously discussed, iPad does not support additional memory, while many Android tablets allow you to use a SD or microSD card for additional storage.

I do encourage protecting the tablet with a case and possibly a screen protector.

There are a lot of different cases available. I prefer those that allow you to have the tablet vertically and horizontally. They're called 360 rotatable.

I also like cases that allow the tablet to be detached and protected. Not a lot of these are available in the 9.7" or 10.1" tablets. The 7" tablets have a number of better options.

Screen protectors are available for almost any tablet. Some will say if the tablet has Gorilla glass (a type of glass that resists scratches) you don't need a screen protector. Personally I prefer a screen protector on every tablet, as the screen protector can improve readability in bright light situations.

Manageability/Backups

How do you manage the tablets?

iPad makes it easy. iTunes is the universal answer. You transfer music, movies, and applications within iTunes. You back up the device using iTunes. You restore to a new device using, yes, iTunes.

Android doesn't have an iTunes. Most of the manageability is drag and drop. Want to copy an application to the device? Drag the install file from your laptop to the device. Need to copy a movie? Same thing, drag and drop. Music? Ditto!

Backup of an Android tablet requires an application. Yes, you can ''mount'' the tablet's internal storage on your laptop and copy the files from the tablet to the laptop.

Without rooting the Android tablet, backups do not include application settings. Want to preserve your high score or customized settings on your favorite game? The only way is to root the tablet and run a program like My Backup Pro or Titanium Backup Pro.

Whew! Are you as tired as I am?

You've probably noticed a lack of Windows tablets? Ok, the Acer W500 is a Windows tablet and it's currently running both Windows 8 and Android Ice Cream Sandwich.

I simply cannot afford a Windows Surface tablet. They do look very interesting. The main claim to fame seems to be the ability to run Microsoft Office. Hmmmm, is this enough to sell a $500 device? Stay tuned!

We've been through a lot and hopefully you have a better idea about tablets and some pointers on what to look for when shopping for a tablet.

What other things might you find?

Good Enough

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I have an iPad and it's great to help keep the grandkids' interest when we go out to eat, or on long drives in the car. But, for long trips such as when we go to San Diego's Sea World I really did not want to take it. It is big to carry and there is the danger of breakage with such trips. So I have been looking at some of the smaller (and cheaper) tablets. I basically just wanted something I could put some movies on for them and a few games would also help. I saw what I thought would be just right from Buy.com -- a 7" AGPTEK TP10A for $84. It had the Android 4.0 operating system. The processing speed I knew would not be fast, but it could take a micro-SD card up to 32GB. With that I could put lots of movies and kids TV shows on it.

So I brought it and have been pretty happy with it so far. I made having this tablet into a show and tell by asking members to bring their tablets for the September meeting. I got to see the Google's Nexus 7" tablet and the Asus with keyboard set up, and one other.

Some of the other things about mine - 1080P HD high definition video display, support for AVI, WMV, MP4, MKV, RM, RMVB, FLV, MOV, and 3GP. It even has HDMI output ability. I brought an HDMI mini cable, hooked it up, and son-of-a-gun it looked great on a 24" TV.

There is not a lot of volume coming from the little speaker in the back so I bought a portable speaker that plugs into the headphone port. It works well and, of course, the tablet can play the usual music formats. With one front 0.3 Mega pixel camera and MIC you can make video calls.

It's listed as having 8GB, but I did look before buying it and knew it would only have about 512MB of free space with the operating system and apps they put on it. First thing of course was to get Angry Birds on it. The grandson loves it.

There is Wi-Fi built-in it, and I've always said the iPad's Wi-Fi is not very good. I took it to a restaurant with free Wi-Fi and the iPad found three available connections. The AGPTEK found eight, including the coffee house across the street.

Remember the low cost of $84. I brought the warranty (it will cover me when I take it on trips) for $13, the Micro-SD card cost $28, a holder cost $30 (a very good padded one), the speaker $9, and finally a HDMI cable was $9. So I've doubled the initial cost, but it is still far cheaper than other tablets, and it suits my needs. And, most important, the grandkids love it!

The Demise of the Digital Camera

Jerry Schneir, Member, Los Angeles Computer Society, CA, www.lacspc.org, editor (at) lacspc.org

I probably should have used one more adjective in the title, inexpensive, so that the title would have read The Demise of the Inexpensive Digital Camera. You only have to look around you at any party or gathering and see that the majority of the picture taking is being done by the guests with smart phones. Relatively few cameras appear at these gatherings, so you might ask why? What has happened? What is happening to fuel this dramatic change?

By some estimates, smart phones account for over 50% of the cell phones in use today, and those smart phones all have built in cameras. And within the last couple of years, the cameras in those smart phones are getting much, much better. To prove my point you only have to look at two new products to be announced, one from Nikon and the other from Nokia, one a camera company the other a phone company.

The Nikon S800c combines a camera with Wi-Fi capability, even internet browsing. It will not be long before a phone is added to that device. Nokia on the other hand created a phone, the 808c Nokia PureView Pro which combines a phone with new digital technology. It dispenses with the usual scaling/ interpolation model of digital zoom used in virtually all smartphones, as well as optical zoom used in most digital cameras, to vary the magnification and field of view. This new technology which is already in use by Sony in some of their more advanced cameras (Sony NEX F3), allows zooming without any lens elements changing positions. And amazingly enough, the results are really fantastic.

More and more camera manufacturers are equipping their cameras with the ability to transfer images from the camera to a phone, iPad type device or a computer directly, no wiring required. As phone manufacturers start to incorporate this new technology into their phones, the need for people to have both a smart phone AND a camera diminishes. Many manufacturers, aware of the missteps of Kodak in failing to recognize the change in technology (film to digital) and the eventual destruction of the company, are moving quickly to rearrange their product offerings.

What will be showing up in the marketplace are more mid to high end cameras with fewer and fewer low end cameras. The reasoning is pretty simple, the camera phones, as good as they are getting, are still a very long way from producing images as good as those from the mid to high end range of cameras. If you take a close look at the camera offerings of today you may note the changes that are taking place right now.

Digital SLR cameras are moving in two price directions, up and down. Canon/Nikon/Pentax/Sony are locked in a battle in both the high end professional/ semi professional/dedicated

amateur lines at one end and the beginner/intermediary dSLR camera lines. However, this is an area that has fragmented greatly; new camera designs along with new technology are resulting in smaller and lighter cameras capable of producing results equal to that of their bigger cousins. I can hear the verbal challenges now to that statement, but I am noticing more and more pros/semi-pros using this newer technology and reaping the benefits of fewer backaches from the lighter, pounds lighter equipment. These stark changes were brought about by the mirrorless interchangeable lens cameras. In some circles these are referred to as CSC (compact system cameras) or ILC (interchangeable lens cameras) or EVIL (electronic viewfinder interchangeable lens cameras). Cameras in this mirrorless grouping are the Fuji X-Pro 1, the Sony alpha and NEX family of cameras, the Nikon J1/Vi cameras, the just announced Canon EOS M cameras, the micro four-thirds (mFT) line of cameras such as the Olympus OM-D5 and Panasonic GX1, and of course the entirely different Ricoh line of interchangeable lens AND sensor cameras.

In addition to those camera groupings another new collection of cameras has appeared, the large sensor fixed lens cameras such as the Canon G1 X and the Sony RX 100 along with the Fujifilm X10 and X100. I can see some questions arising about what constitutes a large sensor. To my way of thinking, sensors in the size range of 1/1.7 and larger meet that criterion, but just barely. But wait, the camera companies are also introducing more mid- to high-end point and shoot cameras such as the Panasonic FZ200, Pentax X5, Canon SD500, Nikon P7700, and Fuji SL300.

But if you look, you will see relatively little effort or money being spent on the inexpensive line of cameras, those retailing for $200 or less. What you are seeing is product renaming with a change in camera color but very little in the way of any new features. What also appears to be happening here is that as the new models appear the older models are marked down substantially. As an example, Olympus Pen LP-2 was $550 or more. It can now be had for about $300 while the even older version, the LP1 is still around and going for a bit under $300 and those are prices with the kit lens. The Fuji S4500 came out at about $300, but today it can be bought for under $200 and it came out in January of this year.

The economic downturn of the last few years certainly has played a part in the changing face of digital photography, making it less lucrative to introduce middling to low cost cameras and to focus on the mid to upper range of cameras with special features, such as better video, longer zoom ranges, great low light and high ISO ability. You will also be seeing a move away from the traditional CCD sensor to the CMOS and BSI-CMOS type sensor since these are far better suited to video and low light photography.

One other very bad thing is happening and that is the increase in camera complexity. I hear it almost every week from my students, I cant understand the manual (if there is even one included), there is no index or the index is vastly incomplete, the booklet uses abbreviations without ever defining them, they seem to assume I know something when I do not, they dont explain a feature or how to use that feature. I have long maintained that the instructions are written by people whose native language is NOT English and may not even be photographers.

This is a most interesting period in photography. Image quality and the ability to use high ISO settings or shoot in dim light has never been better. Cameras, at least the mid to high price cameras, have more features and generally perform much better. The next five years will see very significant changes in the photographic landscape, stick around, you may even like what you see.

OPERATING SYSTEM NOTES & TIPS

WMIC: the best command line tool you've never used

by Mike Williams found at betanews.com

Some people say command line tools are obsolete, out of date, no longer necessary when you can ''point and click,'' instead. But the reality is very different. Every version of Windows sees the command line given new powers and abilities, and if you don't explore these then you really are missing out.

Take the WMIC command, for instance. It has astonishing scope and a huge set of features: the program can return useful information about your system, control running programs and generally manage just about every aspect of your PC -- all from the command line or a convenient shortcut.

How might this work? Let's suppose you need to know the model of the motherboard used in your PC. You could poke around in a system information program, but it's easier to open a command window (elevated, on Windows Vista or 7 -- click ''Start,'' type ''CMD,'' right-click the link to cmd.exe and select ''Run As Administrator'') and enter the command:

wmic baseboard get product,manufacturer

-- and WMIC will then give you the answer right away.

Or maybe you're wondering if your BIOS needs an update. How old is it, anyway? Restart your PC and one of the boot-time messages might give you a date, but again it's easier to enter something like:

wmic bios get name

-- and let WMIC tell you more.

System Information

The program can also provide details on many other aspects of your system. Commands like:

wmic product list brief

wmic service list brief

wmic process list brief

wmic startup list brief

will list your installed software, services, running processes and Windows startup programs, for instance.

Obviously these details can be found elsewhere, but one advantage of WMIC is that it can save its output for reference later. Use the command:

wmic service get /format:hform > c:\folder\services.html

-- and WMIC will create a formatted HTML page detailing your running services (replace ''C:\folder'' with an appropriate path for your system). If you have PC problems a few months later you can then look back at this record and see what's changed.

Uninstall Automatically

WMIC isn't just about reporting on system information, though. Use the appropriate CALL command and it can also carry out a variety of useful maintenance tasks.

Do you regularly have to uninstall and reinstall particular programs, for instance? Doing this manually via Control Panel is tedious, but WMIC can automatically uninstall many applications with a single command. To see how, enter:

wmic product get name

-- and look for the name of the program you'd like to remove. Then enter the name as it appears in that list, in a second command, like this:

wmic product where name=''windows live writer'' call uninstall

-- and your specified program will be uninstalled automatically, without you even seeing the uninstall program. (Which is convenient, but also risky as there probably will be no chance to cancel your action, so use this with extreme care.)

Process Management

WMIC can, say, also close all the instances of a particular program. So if you want to shut down all Internet Explorer windows, for instance, then the command:

wmic process where name=''iexplore.exe'' call terminate

-- would do the trick, closing every instance immediately. (Though again, beware, programs closed in this way probably won't prompt you to save files you're working on, so use the command carelessly and data may be lost.)

Or maybe you'd prefer to optimise your system by setting your process CPU priorities? WMIC can handle that, too. Entering:

wmic process where name=''notepad.exe'' call setpriority 64

-- will set every running Notepad process to the Idle priority, for instance (see MSDN for the numbers to use to set other priorities).

This is barely scratches the surface. WMIC can also give you useful information about your PCs user accounts, change the Start mode of particular services, retrieve useful information from your event logs, change a static IP address, reboot or shut down a PC, and a whole lot more.

And best of all, you can even apply the commands to a remote system by applying the NODE switch and a network name, like:

wmic /node:steve-pc service list brief

There's a huge amount of power on offer here, then. See the Tech-Wreck InfoSec Blog for more great WMIC examples, then open a command window and try a few for yourself.

Ediror's Note: wmic can also be entered as a command from the C:\> prompt yielding wmic:root\cli> after which commands can be entered.

holy cow! is this a virus?

by Linda Gonse ORPCUG
as seen in UCHUG DRIVE LIGHT April 2013

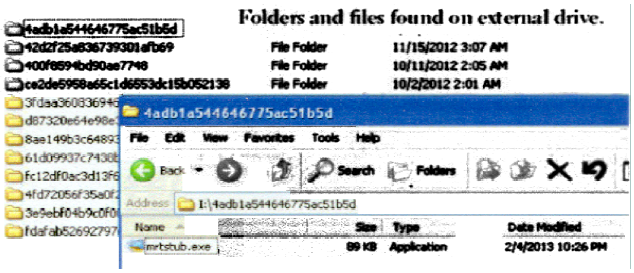
I recently added a second external hard drive to my computer system. I use one for backups of InDesign files and the other one for Acronis True Image system backups.

As I browsed through the files I'd saved to the drives, I ran into something peculiar. Both drives had folders with names that were long strings of random letters. And each folder contained one file: mrtstub. exe at 89KB on the Iomega drive, and MPSigStub.exe at 227KB on the Seagate drive.

Fearing these might be malware or a virus, I quickly did a Google search. Interestingly, the search turned up conflicting opinions in different forums. Some people said it was a virus and highly dangerous, some said the folder and file(s) inside were benign, some said the files were leftover from when

Microsoft Malicious Software Removal Tool (MRT) was run and had not been deleted automatically, and some said Windows created them.

Although I only found one file in the folders, other people have seen as many as four at one time: mrtstub.exe, mrt.exe._p, MRT.exe, and $shtdwn$.req.



I found a link to information about the Malicious Software Removal Tool at ***http://support.microsoft.com/kb/890830#Faq***. In particular, it gave instructions on how to remove the Malicious Software Removal Tool.

The Malicious Software Removal Tool does not use an installer. Typically, when you run the Malicious Software Removal Tool, it creates a randomly named temporary directory on the root drive of the computer. This directory contains several files, and it includes the Mrtstub.exe file. Most of the time, this folder is automatically deleted after the tool finishes running or after the next time that you start the computer. However, this folder may not always be automatically deleted. In these cases, you can manually delete this folder, and this has no adverse effect on the computer. holy cow! is this a virus?

I also learned that MRT is not a substitute for a resident antivirus for various reasons: 1. MRT only removes malware AFTER infection, it doesn't BLOCK malware like an antivirus does; 2. MRT is designed to target a small set of malware only, while an antivirus takes care of most malware in the wild; and 3. MRT can only detect actively running malware - an antivirus can also detect dormant malware.

Microsoft's Knowledge Base (http://support.microsoft.com/kb/890830) also said a new version of the Microsoft Malicious Software Removal Tool is released every month. After you download the tool, the tool runs one time to check your computer for infection by specific prevalent malicious software (including Blaster, Sasser, and Mydoom) and helps remove any infection it finds.

This KB article contains information about how you can download and run the tool, and what happens when the tool finds malicious software on your computer.

Even though I did not intentionally download the Removal Tool or run it, I read that Windows Update may do that when it downloads automatic updates. Further, it uses the largest hard drive on the system to create the temp folders; and in my case, the external hard drives are the largest with each being 2TB.

The upshot of this was I checked each file's Properties and confirmed Microsoft had signed them. Then I deleted the folders and files manually and nothing bad happened. In the future, I'll disconnect the external drives before downloading or installing Windows Update.

Extending the Life of Your XP PC

by Dick Maybach
Brookdale Computer Users' Group, NJ

When you first got your PC with Windows XP it was blazingly fast and its hard disk was huge. But now, maybe 10 years later, it has slowed, perhaps drastically so, and its disk is nearly full. The cause of the disk-space shortage is probably obvious, you've stored thousands of photos, songs, and documents, and installed many programs. But what about the speed? Unlike you and me, electronic hardware doesn't slow down as it ages.

Hopefully, you've kept your software, especially your antivirus program, up to date and have avoided downloading files from questionable sources. If not (or if someone who uses your PC is less careful), run a full virus and malware check and update Windows and all your applications before you try anything else.

At the time you bought your XP PC, 500 Mbytes of RAM was plenty, but the patches and enhancements you've added over the ensuing years means that the XP you now use is much different than the XP you originally bought. In particular, 500 Mbytes of RAM is now woefully inadequate. To check your RAM use, simultaneously press the *Control, Alt,* and *Delete* keys, select the *Task Manager* button on the Window that pops up, and then select the *Performance* tab.

I did this on my laptop and, as the screen-shot shows, found that with no applications running except for my virus checker, it was using about 814 Mbytes of RAM (see the *Commit Charge* box). Fortunately, this PC has 1 Gbyte of RAM (as shown in the *Physical Memory* box). Note also that the Commit Charge limit is nearly 2 Gbyte. The second Gbyte is provided by the swap file; when Windows needs more memory than you have physical RAM, it moves some data from RAM to a swap file on your hard disk to make room. If this happens more than occasionally, the situation is called *thrashing;* which results in Windows slowing to a crawl as it continually moves data from RAM to disk and back again. If your XP PC has only 500 Mbytes of RAM, it will begin thrashing as it boots, and will be frustratingly slow. The only fix for this is to increase RAM to at least 1 Gbyte. Removing programs,

defragging, and other such measures will not improve the situation at all, despite what fraudulent TV ads say.

Instead of adding RAM, you could switch to Linux, although for an old PC you will have to use a lightweiKht distribution, such as Xubuntu. (Mainstream Linux distributions, such as Ubuntu, require modern display rontrollers.) The only difference between these and the mainstream cousins, such as Ubuntu, is that the displays are simpler; that is, you lose some of the visual bling that the software vendors think you want; both types support all the same applications. The screen-shot below shows Xubuntu's resource on the same laptop as above.

Note that only 210 Mbytes of RAM are in use, compared to XP's 814 Mbytes. Linux thus provides a way to extend the useful life of old PCs by many years. This approach is especially attractive for laptops, whose hardware is difficult to upgrade.

If you want to keep using XP, you have little choice but to increase the amount of its RAM. Beyond this there are other steps you can take, although their effects on performance will be much smaller. Before you do any of the following, *back up your entire PC*. If you haven't already, use your favorite antivirus software to get rid of any malware, use Microsoft Update to bring the system up to date, and update the drivers. Then look at the installed programs with the sequenre *Start(R) Control Panel(R) Add or Remove Programs*. Highlight each in turn to see how much disk space it occupies; how often you use it, and the date you used it last. Ask yourself if you really need it, and if not click the *Remove* button to remove it. This will free disk space and may speed up your PC if the program has a module that resides in RAM. As the screen-shot shows, I haven't used Adobe Reader for over five years and I could recover 86 Mbytes of disk space by removing it.

You can clean up a drive with the following sequence: Double-click on *Computer(R)* right-click on the desired drive(R) select *Properties*(R) click on the *Disk Cleanup* button.

I can recover almost 22 Mbytes of disk space by performing the checked operations. You may gain some speed by disabling some of the visual display effects. Navigate *Start(R) Control Panel(R) System(R) Advanred* tab (R) in the *Performance* box click on *Settings* and uncheck everything except

The following will recover an impressive amount of disk space, but do it only if you have a recent back-up that you know to be good. Move to the directory <I>C:\Windows</I> and make the hidden items visible by clicking on <I>Tools</I> (in the menu bar), selecting Folder Options, selecting the <I>View</I> tab, and the selecting the <I>Show hidden Files and folders</I> item. You will find a large number of directories whose names begin and end with $ and include ''Uninstall'' somewhere in between. These allow you to back out of patches, but it is most unlikely you will ever have to do this, especially if your system is running well. (My laptop had 339 such folders, occupying over 250 Mbytes.) You can delete them and recover the space, but be very careful not to delete anything else, in particular, directories whose names begin and end with $ but don't include ''Uninstall.'' It would be prudent not to empty the Recycle Bin for a few days, until you're sure you haven't broken anything.

CCleaner (http://www.piriform.com/CCLEANER) is a clean-up tool with a good reputation. It takes a more aggressive approach than does the disk cleanup procedure discussed above. There is a free version, but read the installer screens carefully as it will install a Google toolbar unless you uncheck the appropriate box. The first time you run the program, click on the Analyze button to see what it will do; the screen-shot below shows the effect on my laptop. (I had earlier performed the Windows Disk Cleanup described above.)

It claimed to find almost an additiona1 83 Mbytes of disk space that could be freed, although it removed only about 80 Mbytes. The program also includes tools to clean up the registry, uninstall programs, manage system restore points, and wipe disk drives, and will also show what programs run at startup. For more information see http://www.howtogeek.com/113382/how-to-use-ccleaner-like-a-pro.9-tips.tricks/. Finally, a different company has developed an add-on, CCEnhancer (http://singularlabs.com/software/ccenhancer/). On my laptop, this add-on allowed CCleaner to find 10.7 Mbytes of additional files. However, CCEnhancer requires .NET 3.5, which uses several hundred Mbytes; if you don't already have this installed, forget about CCEnhancer as what it can recover is only a small fraction of the space .NET will occupy.

I haven't mentioned defragging because I've never found that it improves performance by any detectable amount. I'm not saying it's a bad idea, just that you shouldn't expect any performance change.

Also consider a hardware approach to increasing disk space. In particular, USB hard disks are inexpensive and easily installed on both desktops and laptops, and although they are much slower than internal hard drives, they are entirely satisfactory for storing data that you don't access frequently.

From the Septembec 2012 issue of, BUG Bytes, newsletter of the Brookdale Computer Users' Group, NJ.

Help Lines

HARDWARE HELP	Advisor No.
Reformat Hard Disk, FDISK	2, 4, 5
Install Hard Drive, CD-ROM/RW	2, 4, 5
Install Video Card	7
Partitioning Hard Drives	2
Internet/Intranet	6, 7
Audio Cards	4
MPs Files, WMA Files, WAV Files	3, 4
Burning CD's	3, 5
Homesite	7
Net Objects	7

SOFTWARE HELP	Advisor No.
Win 95/98/ME/2K/NT/XP	2, 3, 4, 7
Win 7	4, 7
Microsoft Word	2, 7
Microsoft Excel	4
Microsoft PowerPoint	4
WordPerfect	1, 7
Norton/Symantec AntiVirus	2, 3, 6, 7
Norton System Works	2, 7
CompuPic / CompuPic Pro	3, 7
Winzip, WinRAR	6
Ccleaner	3, 4
Outlook, Outlook Express	2
Internet Explorer	2, 7
RegSeeker	3, 5
Instant Messaging	2
Installing Software after Reformatting	5
Deleting Files; Wiping	6

ADVISORS

Name	Phone	Hours
[1] Fred Shelton	(253) 752-0120	Variable
[2] Bob Henkel	(253) 537-6732	8A-8P any day
[3] Tom Stepanek	(253) 922-7939	7-9P Mon-Fri
[4] Carl Tenning	(206) 824-3843	6-9P Mon-Fri
[5] Oclad Wesley	(253) 212-0352	6-9P
[6] Bob Thomson	(253) 752-5582	Variable
[7] Ray Mills	(360) 692-7568	6-9P Mon-Sat

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:_____ Sponsored by:_____

Member's Name:_____

Address:_____

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

Home Phone: (____) _____ Work phone: (____) _____ E-Mail Address _____

TACOMA MEETING

When: **Mon 10 Jun 2013 -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

TOG BOARD MEMBERS

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

Corporate Sponsors:

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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!

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.

Program Presentation

Carl Tenning will present a program on **Five Lesser Known Web Browsers** namely:

Sea Monkey, K-Meleon, Pale Moon, Luna Scape and Net Surf.

Carl credits TechRepublic for the information.