

\$3.00

(membership includes monthly subscription)

The Digital

VIKING



Twin Cities

PC USER GROUP

NEWSLETTER

Minneapolis & St. Paul, Minnesota USA • Vol. 31 No. 10 • May 2011

TC/PC Exists to Facilitate and Encourage the Cooperative Exchange of PC Knowledge and Information Across All Levels of Experience

May 2011

**General Meeting:
Tuesday, May 10, 7 PM**

[Last Month's Meeting..... 2](#)

[Word Tips 2](#)

[Calendar Dates 2](#)

[When Outlook dies,](#)

[Windows Live lives..... 3](#)

[IPv6 is Coming..... 5](#)

[Ganked by a nOOB 6](#)

[Nibblers 7](#)

[Your Computer's](#)

[Health Part 4..... 9](#)

General Meeting

**Tuesday, May 10, 2011
at 7:00 PM**

Wells Fargo

**Location: Summit Place
8505 Flying Cloud Drive
Eden Prairie, MN 55344**

Jim Grotz has arranged for a representative of Wells Fargo to give a presentation at the May meeting. With the advent of online banking all banks have had to beef up their security to ensure the safety and security of customer accounts. Banks have also added more online services. Come to the May meeting to learn about the behind-the-scenes security measures that Wells Fargo has initiated and the challenges they face in the ever-changing field. Have a chance to ask questions about identity theft and the security of your accounts, whether you bank with Wells Fargo or another bank. 



Mark your calendars! The November TC/PC Meeting will be held at the new Microsoft Store at the Mall of America.

TC/PC is a Member of



24-Hour Information • www.tcpc.com

Membership info page 19 • Application form inside back cover

Last Month's Meeting: Microsoft Store

By Sharon Walbran, SQWalbran(at)yahoo.com

At the April meeting Leif Knudson (mistakenly named Leif Erickson in the last newsletter. My apologies.) and Adam from the Microsoft Store at the Mall of America wowed us with some of the products and services they offer. They gave us a virtual tour of the store and brought with them examples of the new ultra-thin and ultra-fast laptops the store sells. These products have been optimized by the IT gurus at the store to remove bloatware on the machines and to set them up to load the operating system very quickly and to run programs at lightning speed. Besides hardware and OS optimization the Microsoft Store sells the full range of Microsoft software and offers help desk services and in-store classes and the chance to try out the products at stations around the store. The enthusiasm of Leif and Adam for the store and its products and services was contagious. They also handed out ten percent discount cards for purchases at the Microsoft Store to all members attending. There may be some discount cards available at the next meeting as well.

Thanks, Leif and Adam, for a terrific presentation.

Note, as announced on the first page of this publication, Leif has arranged for our November meeting to be held at the Microsoft Store where we can get up close and personal to those products and services. [Back to Page 1](#) 

Word Tips

Selecting an Entire Paragraph

If you are using the mouse, Word provides several quick ways to select an entire paragraph.

- First, you can simply triple-click anywhere within the paragraph. This is perhaps the fastest and most common method of selecting an entire paragraph.
- Second, you can move the mouse pointer to the left of the first character in any line of the paragraph you want to select. The mouse pointer turns into an arrow pointing up and right. Double-click the mouse, and the paragraph is selected.
- Finally, if you are using the style area, you can also move the mouse pointer into the style area to the left of the paragraph you want to select. Click once on the left mouse button, and the entire paragraph is selected.

If you like to use the keyboard instead of the mouse, you can select the current paragraph by pressing **CTRL+UP ARROW** (which moves the insertion point to the beginning of the paragraph) and then pressing **CTRL+SHIFT+DOWN ARROW**. [Back to Page 1](#) 

Copyright © 2011 by Sharon Parq Associates, Inc. Reprinted by permission. Thousands of free Microsoft Word tips can be found online at <http://word.tips.net>.

Calendar Dates

Saturday, May 7, 9-12, Systems on Saturday

Tuesday, May 10, 6-7 PM, Picture Perfect SIG

Tuesday, May 10, 7-8:30PM, General Meeting, Wells Fargo

Saturday, May 14, 9-12, Linux on Saturday

Saturday, May 21, 9-12, MS Office (including Access)

Saturday, June 4, Systems on Saturday

Saturday, June 11, Linux on Saturday

Tuesday, June 14, 6-7 PM, Web SIG

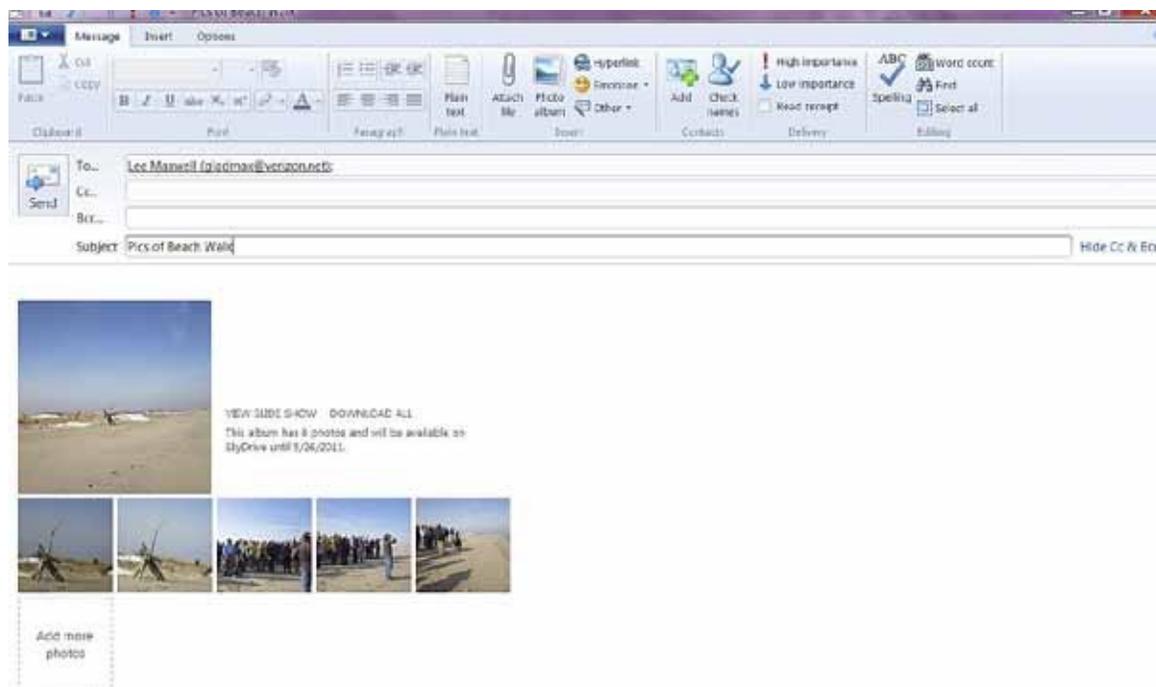
Tuesday, June 14, 7-8:30PM, General Meeting, TBA

Saturday, June 18, MS Office (including Access)

[Back to Page 1](#)

When Outlook dies, Windows Live Mail lives

By Jo Grazide, Leader, Word Processing Workshop, Brookdale Computer Users Group, New Jersey, March 2011 Issue, Bug Bytes, <http://bcug.com>, gio520 (at) gmail.com



Screenshot of Windows Live Mail showing message window with attached photo images.

All screenshots: Jo Grazide

I had been using and enjoying the features of Microsoft Outlook 2007 since 2007, never imagining that one fine day I would log in only to see a message saying something to the effect that Outlook was in use and that I had to close a "pst" file, or face the consequences. In fact, MS Outlook simply stopped. I was unable to move appointments, open an email, or do anything that I was accustomed to in order to make my activities on the computer enjoyable and efficient.

For lack of a better option, I decided to turn to Windows Live Mail (WLM), a part of the Windows Live Essentials suite that was already installed on my system along with my favorite photo management program and even my antivirus app.

Since this was already present, I didn't have to do much, except launch it. It happily grabbed my mail downloads from Gmail and politely asked me if I wanted it to be the default email program. I said "Yes!"

I was pleasantly surprised. I use Gmail but I was pleasantly surprised. I use Gmail but only for the convenience of having an online calendar and email program that I could access from any computer. As far as WLM, I would say the only real inconvenience is the loss of my Outlook calendar, but I can manage using the online Google calendar whenever I'm on my desktop.

First Impressions

When you first use WLM, you are obligated to establish a connection with your ISP (Internet Service Provider). Since I use Gmail/Verizon/Hotmail/Yahoo, I can add these by going to the accounts Tab, clicking on the Email icon and adding an account. Since I sync everything on Gmail's server, there is no need to do this. In fact, it gets kind of confusing when lots of email accounts are listed, at least for me. So I stick to my Gmail account and things have been going smoothly.

Tabs and Ribbons

Cosmetically, the interface is clean, uncluttered and easy to understand. You start with a Quick Access Toolbar and tabbed ribbons familiar to those of us using current MS Office apps. The tabs are: Home/Folders/View and Accounts. Let's take a peek at each.

The Home tab is where you compose, create Photo emails, mark as junk, and for those Calendar challenged like me, an opportunity to add a message to that calendar. This may be the workaround I need. Anything to save typing! You will see a sign in request on the right side. You don't have to be a member of Hotmail or Windows Live or sign in. I do so under my Hotmail name, as this allows the computer to sync and recognize my name on many other sites, such as Facebook, Windows Live Mesh, and others too tedious to mention here. I am a social networker, and am comfortable with such arrangements, but you don't have to subscribe to these. The email program will still work for you, happily. I really like the Photo email option. In the example shown above, notice how the pictures I chose are inserted as an album, and also that a picture tools and a photo album tools ribbon is provided. Even though that may be considered overkill on Microsoft's part, it is still handy in case you want to do a bit more work before sending your pictures out.

Also useful is the View ribbon. Here you can change the layout of your screen. My favorite button here is the Account color – among others, you can change your theme to Fuchsia or Smoke. Other colors you can use are Lime or Twilight. Someone must have had a sense of humor when they wrote this app. But you can use a different color for multiple accounts, so there is a reason for this virtual rainbow.

The Accounts ribbon is one I hardly go to. Anything here is handled elsewhere. In fact, IMAP folders or Newsgroup is a bit beyond what I need in my email program, so I leave these alone.

Summing Up

In using WLM, there is little to worry about. It will download your messages, keep your appointments once you enter them, and handle your contacts. In fact, it handles contacts only too well. I was happy to see that it has the uncanny ability to find and list my Facebook contacts as well as the ones imported from MS Outlook. It won't list their emails or any unavailable information, but it does three things I like. It gives me a picture of the friend from their Facebook profile, a link to their online Facebook page, and whether they are currently there. So even if I'm not online, I can quickly get to their page and see what my fellow networkers are up to. LinkedIn also seems to be important enough to be included in this feature.

No Calendar sync

A quick mention of the Calendar – since it does not sync with Google calendar, unless I have a lot of time to re-enter my appointments, Google will have to be my source of information. I have read recently that Yahoo Mail will sync with WLM and Google, but have not had the time to really investigate this. With the way that the Internet is combining profiles and individuals' information, it would just be one more intertwining of online information. Perhaps in time there will be a better way to do this.

I will miss MS Outlook. But I will not miss the fact that one fine day it just stopped working, gave me strange error messages, and was unwilling to be reinstalled properly. I know that there are always more options, and WLM is a fine option. Being downloaded from the Internet, it is always up to date and free. Try it if you want to use a local email program with lots of features and an uncomplicated interface. [Back to Page 1](#) 

IPv6 is Coming

By Cal Esneault, President and leader of many Open Source Workshops & SIGs,
Cajun Clickers Computer Club, Louisiana, April 2011 issue, Cajun Clickers Computer News,
www.clickers.org / <http://cccclinuxsig.pbwiki.com>, cjesne (at) bellsouth.net

Canonical (Ubuntu Linux) and Google recently announced they would participate in a 24-hour trial of IPv6 on June 8, 2011, along with Facebook, Yahoo, and others. This means that some of the big names in open source software will be involved with the new Internet Protocol, version 6 (IPv6) which will be needed to replace the current Internet Protocol, version 4 (IPv4).

To get to an Internet address, we usually type in a name, such as *Clickers.org* or *Google.com*. Software then goes to a distributed database from a Domain Name Server (DNS) and uses a table to translate this into a 32-bit numerical identifier. The identifiers are split into four 8bit segments. Since 8 binary digits (bits) can span the range from 0 – 255, we sometimes see these addresses as the decimal equivalents separated by periods. For example, 192.168.1.2 is a typical address for our internal networks when using routers. If we use the last “block” (last 8 bits), we could theoretically have 256 computers in this network. The total number of distinct addresses in IPv4 is $256 \times 256 \times 256 \times 256 = 4.3$ billion. When the Internet first started, no one could conceive that more than 4 billion addresses would be needed, but the need for each home network and each mobile phone to have an address is straining that concept. Recently, the last big “blocks” were issued to area centers for distribution. The problem is not as bleak as it may seem since many addresses can be issued temporarily, some early users took more than they really need and can give some back, and only one address is needed for a private network which handles many computers within its structure. Some believe that we will run out of freely available addresses by the end of 2011, and that new addresses will have to wait for an old one to be freed up.

Internet designers have been working on the new IPv6 protocol to solve issues with the old system. It will have 128-bit addresses which will provide for a possible of 340 trillion, trillion, trillion addresses (3.4×10^{38}). This at first seems silly today since each person on earth could have trillions of addresses, but it becomes more reasonable when you realize that any electronic device in your home (which will soon be a computer) and any device in a factory or automobile could have a unique address for control purposes. Also, it is hoped this will be sufficient for a very long time so that the change will be permanent in even our grandchildren's lifetimes.

The addresses for IPv6 will be split into eight 16-bit units. Since the decimal number for each unit is large ($2^{16} = 65,536$), the addresses will be in hexadecimal notation (a = 10, b = 11, ... , f = 15). An example address might look like fe80:0:0::200:f8ff:fe21:67cf where fields are separated by a colon, leading zero's can be omitted, and blank fields can be represented by multiple colon marks. There will be a protocol which allows current IPv4 addresses to be contained within the new IPv6 address. If all works as hoped, we won't care since our DNS resources will fill in numbers for us when we type in *Clickers.org*, etc., just like it happens today.

Modern operating systems (Windows, Mac OS, Linux, BSD) have already been configured to allow for IPv6 protocol. However, your current router and your ISP (Internet Service Provider) equipment may not be ready. In complex computer networks, all of the interactions between equipment and older software are not sufficiently known. Therefore, the test on June 8 will be the first of probably many to debug the issues which will have to be addressed. A similar situation was envisioned when we moved into the 21st century (known as the Y2K issue, where ambiguity between dates could occur since early software only used the last two numbers for years).

In that case, the situation was handled well and none of the dire predictions about airplane crashes and business shutdown came to pass. It did, however, take a lot of work and effort to prevent chaos. Will IPv6 be a big event, or just a problem for computer professionals? We don't know yet, but open source folks are in there with everyone else to help keep our systems functioning. [Back to Page 1](#) 

Ganked by a nOOb

By Vinny La Bash, Regular Contributing Columnist, Sarasota PCUG, Inc., FL , April 2011 issue, Sarasota PC Monitor, www.spcug.org, labash (at) spcug.org

If you find the above phrase meaningless, you haven't experienced the online social networks where you can have the most fun. We're not talking about Facebook or Twitter. Ditto for other social network sites like MySpace which these days looks like Empty Space.

If you're not playing one of the more popular Massively Multiplayer Online Role Playing Games (MMORPG), you may be missing out on one of the most interesting and fun-filled experiences you can have with a computer. MMORPG is a genre of web based role-playing games in which a very large number of players interact with one another within a virtual game world. You're certainly not alone in this world. It could be inhabited by dozens, hundreds, and in some cases thousands of players. One game, World of WarCraft (WoW) has over a million players.

Most MMORPGs need only a PC to connect to an online server to play. Others require a game console. After storing some basic information about the player, the action starts.

In a MMORPG you the player create and control a character represented by an avatar which you direct to explore, solve problems, and find items necessary to complete tasks which take you closer to achieving the ultimate objective of the game. Other tasks may be part of the game such as building and destroying things, fighting opponents, interacting with other characters, assembling tools, earning or otherwise acquiring the local currency, and so on.

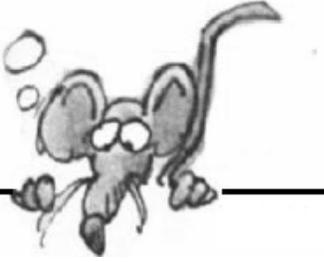
There are games which require you to make moral choices which will affect the outcome of the game. For example, you are leading a team of specialists in an attempt to rescue a large group of people from an imminent natural disaster. Because of the circumstances, which are no one's fault, you can succeed only by leaving an important member of your party behind to ensure the success of the rescue. However, the team member will almost certainly die in the process, and he or she could be crucial to the success of an even more important operation further along in the game.

Some academics devote time to study games that require players to work with currency of one form or another. There is one game that uses bottle caps for money in the context of its virtual world. Characters designed by players have developed sophisticated economies within games, at times with mechanisms to exchange online currency for real money. These "synthetic economies" bear an eerie resemblance to our own world which is remarkable considering that the most popular games have players who come from all parts of the globe. These "synthetic economies" evolve from players of different cultures which means they may be tapping into something fundamental about human nature.

All this has been made possible through the world wide penetration of broadband internet connections. MMORPGs have gained enormous popularity not only in America but in South Korea, Taiwan, and China. Playing a MMORPG might mean you could be a member of a team that is truly international, requiring levels of continuous cooperation from individuals that most governments haven't been able to pull off.

Many of these games require a monthly subscription fee to play but many of them don't. Simply search on "Free MMORPG Games" and your search engine will bring up dozens of these games that you can play for free. Use them to get a sense of how to play before committing any cash to the most popular ones. Don't neglect to go to http://www.mmoglossary.com/mmorpg_terms/1/index.html to get familiar with common game terminology before traveling to an unfamiliar world.

The better you understand the virtual world, the more you can enjoy the experience. Make an effort to understand at least some of the vocabulary. "Ganked" is a combination of two words, **gang kill**, which refers to a group of experienced players ganging up on a new, greenhorn player and killing off his character for amusement. nOOb is a way of referring to a new, inexperienced player. It's a variation of "newbie", but has the additional meaning of clueless. That's why it's spelled nOOb to make it resemble boob, a real dummy. Therefore if you're "*Ganked by a nOOb*" you've experienced the ultimate indignity of MMORPG playing. [Back to Page 1](#) 



NIBBLERS

By Jeannine Sloan

Suspicious e-Mails and Identity Theft

The Internal Revenue Service has issued several recent consumer warnings on the fraudulent use of the IRS name or logo by scamsters trying to gain access to consumers' financial information in order to steal their identity and assets. When identity theft takes place over the Internet, it is called phishing.

<http://www.irs.gov/newsroom/article/0,,id=155682,00.html>

Topic suggested by Ed Aubitz

Computer and Office Technology Recycling

All brands of office technology products are accepted for recycling, regardless of whether the equipment was purchased at Staples. Dell® branded office technology items are accepted for free at Staples stores nationally. All other brands of computer monitors, desktop and laptop computers, printers, scanners, all-in-ones and fax machines are accepted for a \$10 fee. The recycling fee is charged to cover handling, transport, product disassembly and recycling. Smaller computer peripherals such as keyboards, mice, and speakers accepted at no charge.

<http://www.staples.com/sbd/content/about/soul/recycling.html>

Converting Books for the Kindle

Kindles read the MOBI format quite nicely and it is very easy to convert to the MOBI format. Downloading a copy of the excellent open source application Calibre and using that to manage all your non-Amazon purchases on your Kindle. From within Calibre you can convert from many formats into MOBI (including from ePub to MOBI).

From the How-To-Geek ezine

Use Google Chrome as Your Default PDF Reader

Start by right-clicking on any PDF file, and heading to the "Open with" item on the menu. If you don't see this, you can usually hold Shift and right-click, and it will be there.

This will bring up the Open with dialog, which lets you choose what to open your PDF files with, but sadly Google Chrome isn't listed—but no matter, you can just click the Browse button.

If you know where Google Chrome was installed just browse to that location—otherwise, you can right-click on the Chrome shortcut, head to Properties, and then Shortcut. You'll see the location in the Target box (best bet is to copy and paste the full path).

Once you've selected chrome.exe and clicked the OK button, you're done. That's it. Now when you double-click on your PDF file, it'll launch straight in Chrome.

From PCMech ezine

Using 32 bits Programs on 64 bit OS

If you have a program from, say, Windows XP that isn't working in Windows 7 64-bit you'll likely be able to fix the problem with this quick tweak. Click on the Start Menu and type "Action Center" in the run box. Hit enter to load the Action Center and then click on the Program Compatibility link in

the lower left corner. These Windows will ask you what isn't working correctly and list programs that have compatibility issues. You can then pick which previous OS to emulate.

From the How-To-Geek ezine

New Toshiba Hard Disks Self-Encrypt When Stolen

Toshiba has announced the successful completion of the first set of self-encrypting hard disk drives (HDDs) in the world. The popular Japanese consumer electronics firm has engineered these HDDs to automatically invalidate confidential data when connected to an unknown host.

<http://tinyurl.com/3vc9tm8>

Contributed by Ed Aubitz

Municode.com

Municipal Code Library: Is a free service that covers the vast majority of city ordinances for all 50 states.

This library is laid out in simple point-and-click style (meaning not the typical 'mountain of PDFs' style of downloading) and is also searchable on a per-city level. <http://tinyurl.com/3pgkfrw>

From PCMech ezine

Qwiki

If you want to look at the web in a whole new light, try www.Qwiki.com. This online encyclopedia has all the facts and information you need, but it presents them in a unique visual format that will keep you coming back for more.

From Computer Tips ezine

DocX Viewer

DocX Viewer. It's a free utility for opening and viewing newer Word documents, even if you don't have Word or a Word-compatible word processor. You can open and view Word documents in DocX Viewer and then copy the text into your old edition of Word or a word processor of your choice for saving and editing. Read more:

<http://tinyurl.com/26kkkj>

Another Acronym: FISMA

Federal Information Security Management Act (FISMA) protecting the Nation's Critical Information Infrastructure. Our Vision: To promote the development of key security standards and guidelines to support the implementation of and compliance with the FISMA

<http://csrc.nist.gov/groups/SMA/fisma/index.htm>

From ETC News Network ezine

Amazon Kindles Enthusiasm of Library Crowd

Amazon wants people who love to haunt library stacks to love its Kindle e-reader too. The company will make Kindle books available to borrow through libraries later this year.

<http://tinyurl.com/42vfc37>

From TechNewsWorld ezine

Fix It Club

Learn how to repair or recycle household items that you might otherwise throw away.

<http://www.fixitclub.com/>

Full Books

An index of thousands of books, free for you to read.

<http://www.fullbooks.com/> [Back to Page 1](#)



Your Computer's Health, Part 4 – Comprehensive Computer Maintenance

By Greg Skalka, President, UCHUG (Under the Computer Hood User Group), CA
March 2011 issue, Drive Light, www.uchug.org, president (at) uchug.org

People need computers. Computers need maintenance. Unless you want to gamble with your email, continued access to the Internet, your finances and the other things we have come to depend on from our personal computers, you should consider some preventative maintenance. Even if you are unconcerned about a temporary loss of computer use, if you use it to access your financial accounts, you could be risking those assets and your financial reputation by failing to maintain your computer's resistance to viruses and malware.

Just as a car requires maintenance to provide reliable transportation, a computer needs regular care to insure it can safely and reliably negotiate the Information Superhighway. The concern is not only for making sure the computer works when you need it to and does not lose valuable information, but it also must protect you from attacks by information thieves. Neglecting basic computer maintenance can increase the risk of problems resulting from hardware and software failures, and can leave you open to theft of your identity and finances.

Since I must provide the maintenance and IT support for all the computers and users in my household, I've developed a basic process for computer care that provides a lot of protection for minimal cost and effort. It has evolved over the years, as computers and the threats to their well-being have changed, and has allowed me to prevent any serious computer problems from occurring. There is nothing you can do to completely prevent problems like hard drive failures, but you can take steps that will insure against the loss of data and allow you to be computing again soon.

My computer maintenance philosophy involves three basic computer maintenance principles I call the three up's: setup, backup and cleanup. Setup requires that each computer be configured as much as possible to make maintenance easier and operations safer. This can involve not only your computer's hardware and software, but your home network's hardware and configuration as well. Backup provides a reliable way to safeguard your computer's data and configuration, allowing you to recover easily from most any problem with minimal data loss. It can not only prevent information loss resulting from hardware failures, but can also protect your computer's configuration from alteration during the installation of questionable software. Cleanup involves regular maintenance activities performed to prevent hardware problems, keep your software running smoothly and repel cyber attacks. Implemented appropriately, these three aspects of computer maintenance can keep bad things from happening to your computers and the information they contain.

Setup

A thoughtfully conceived computer setup is the foundation on which the other two maintenance activities are based. For best effect, it should be implemented on your computers when they are first put into service. To make the backup and cleanup operations easier, I always - Partition the main physical hard drive into separate partitions for each "Function" - Provide a second physical hard drive for each computer for backup storage I typically create 7 to 8 partitions on the primary hard drive, each allocated to a particular function. One will contain only the operating system, another only data and others programs of different types. For best results, this must be done before any applications are installed, so that the OS can remain separate in its own partition.

These partitions can be created by Windows in most cases, but I prefer the versatility of a partition management program such as Acronis Disk Director. The OS partition is the only primary partition, with the remaining partitions consisting of logical drives in a secondary partition. A typical partition set for a Windows 7 computer with a 1 TB hard drive might be:

120 GB - OS (operating system and drivers only; no programs installed here if possible)

50 GB - APPS1 (utility and system programs, like firewalls, anti-virus, anti-malware and browsers)

22 GB - GAMES (games)

50 GB - APPS2 (office and productivity applications, including email clients and financial apps)

100 GB - DATA (user data, such as documents, email, photos, source audio / video files and config files)

50 GB - APPS3 (mapping and misc. applications)

50 GB - APPS4 (multimedia applications, like photo / audio / video editors, scanning and VoIP software)

477 GB - LOCAL (scratch or working partition, for work in progress or temporary backup storage)

I never store anything in the My Documents folder created by Windows, as it is on the OS partition. I instead create folders in each partition to help organize files and programs, so I can avoid having to resort to using search to find things. If a desktop computer can accommodate it, I always install a second physical hard drive in the case for low-cost backup storage. For laptops and small desktops, I provide a dedicated external hard drive (eSATA or USB 3.0 preferred) for backup files. To protect my most sensitive personal and financial files, I never store them on a computer, but instead keep them on a hardware-encrypted external USB hard drive.

I also configure my computer and home network for maximum security. All security functions available in your router should be enabled. I configure my network's router for strong wireless security, and prefer to use a wired connection when possible. I don't allow sharing of drives or resources on my computers, but instead use stand-alone network drives to share files and network printers to share printing capabilities. Each computer runs a software firewall (I like ZoneAlarm), an antivirus and several anti-malware programs. I try to keep the cabling between my computer and network devices neat and labeled. It is often good to add an additional fan to some computers for improved cooling. I've found placing a laptop on a laptop cooler allows better airflow to the bottom and keeps it cooler (even without running the extra fans). I run my primary desktop computer on a low-cost UPS (uninterruptable power supply), so if the power goes out while computing, I have extra time to shut down properly and avoid data loss.

Backup

If you use computers long enough, you will have a hardware failure, the most common and devastating of which is a hard drive failure. To avoid the loss of my data, I make reliable backups of my computers as often as is reasonable.

Only you can decide how often your backups should be made, based on how much data you want to gamble with. Backing up more often puts less of your recent data at risk, but is less convenient and takes time. It is easier to strike a reasonable balance between risk and time with your hard drive partitioned and segregated.

You can back up the more critical user data partition more often than the others, and with only user data in it, the backup file is created much faster. All partitions should be backed up periodically, and it often helps to label the backup files you make with source and date in the file name, and to maintain a backup log (text file).

If a computer hard drive fails, I want to be able to put in a new drive and be running again as soon as possible, with minimal data loss. To do that, I make image backups of each hard drive partition, rather than simply copy the files. There are several backup applications that can do this; the one I prefer is Acronis True Image. I make my partition image backups on the second internal hard drive or the external hard drive, so a hard drive failure does not result in the loss of my backups along with the primary data. I only make my backups while running the bootable CD version of True Image, so that I am familiar with the program when tragedy strikes. If a primary hard drive fails, I can replace the drive in my computer, boot from the Acronis True Image CD and restore all primary drive partitions from the backup files on the secondary or external drive to the new drive. I might have lost a few of my most recent files (created since the last backup was made), but I can be running again the same day.

I also like to make backups of the OS and application partitions right before installing new programs. If I don't like a program soon after installing, I'll simply restore the OS and application partition with the last backup files made, sending my computer back in time to a point before the installation. I like this better than using any of the uninstall methods, which often leave behind files and registry entries to clutter my drives and slow performance.

It is a good idea to periodically transfer backup files to external drives or other removable media, in case a computer power supply failure takes out both internal physical drives. Transferring these backups to another physical location (perhaps at least once a year) provides cheap protection for your data should your computer be stolen or you lose your home from fire or other disaster.

For protection of my most sensitive financial files stored on a small external hard drive, I maintain another two identical drives as backups. I copy the new files to these backup drives weekly, and store them in a fire

safe or off site. To insure adequate backups, it is best to develop a schedule for making each of your backup types and stick with it.

Cleanup

The final piece of the computer maintenance puzzle is cleanup. This involves the periodic maintenance required to insure your computer continues to run safely and efficiently. Just as with backups, you should establish a schedule to follow to insure the proper maintenance is performed. Most of the required maintenance is done to the computer software, but there are also a few hardware maintenance items that should not be neglected.

To protect your computer from the external threats of viruses, spyware and other malware, the installation of good antivirus and anti-malware software is required. Although it seems the risk from viruses has diminished, running antivirus software and keeping its virus signatures updated is still important. Only one antivirus program should be installed on a PC, as conflicts can result from multiple programs. There are many good programs to choose from, some of which are free. I presently use the one that comes with ZoneAlarm Internet Security Suite.

There are also plenty of choices available for anti-malware software, with many excellent ones available for free non-commercial use. More is better with anti-malware software. Since they typically don't run in the background, many different programs can be installed and used separately without conflicts. Since some work better on different threats than others, having a variety of anti-malware programs in your arsenal will provide the best detection and elimination of these threats. It is best to update your threat definitions and run your antivirus and anti-malware software at least once a week, preferably on a set schedule. I presently run Webroot Spy Sweeper, Safer Networking Spybot - Search & Destroy, Lavasoft Ad-Aware, Malwarebytes Anti-Malware and Microsoft Windows Defender.

Your computer is like a living organism that starts out quick and vibrant, but becomes slow and develops ailments with age and use. The OS, applications and hard drive storage combine to form something like a nervous system. To detect and prevent the equivalent of computer headaches, nervous breakdowns and Alzheimer, some basic system maintenance should be performed regularly. Your hard drives should be scanned for bad sectors and other drive errors and defragmented periodically. Operating system updates should be applied as they become available, to improve operation and close security holes. As your computer gets older and slower, running a registry cleaner or PC tune-up suite can clean out your OS and improve performance.

Ultimately, however, your computer may reach the point after a few years where "the body is willing but the mind is weak." If your hardware is too good to replace but performance has been greatly diminished, a computer reincarnation may be appropriate. If you partitioned your hard drive as I described and have kept your early backup files, you can restore your computer's performance to its early days with no more effort than would be required to set up a new computer.

To give your computer a second life, simply restore your OS and all application (non-data) partitions, using backup files created soon after you got the PC. Having a backup log to refer to will help you pick a point in time that will minimize the reinstallation of applications. Your data should remain on its partition unaltered.

After restoring, you will need to apply all OS updates since that backup time and reinstall applications added since, but you will soon be running again with a computer that feels much younger. You can also use this opportunity to upgrade to a larger hard drive with little extra effort.

The final cleanup item to remember is your computer hardware. All computers should be opened up periodically so that dust can be vacuumed out or blown out with canned air. This also applies to laptops, though you may want to avoid disassembly, and only blow air into ventilation inlets and outlets. This will help your computer keep its cool and last much longer.

By following the three "ups" of computer maintenance, setup, backup and cleanup, you can keep your computer's performance at maximum with a minimum of effort, while protecting your data, finances and identity. By using a regular schedule of maintenance, little bits of time over its useful life spent taking care of your computer can keep it out of intensive care. Better Ups than OOPS. [Back to Page 1](#) 