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

August 2012

General Meeting:
Tuesday, August 14, 7PM

General Meeting
Tuesday, August 14, 2012
at 7:00 PM

Microsoft Preview
of Windows 8 and Windows Phone

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

Windows 8 is Microsoft's newest operating system for the desktop, laptop and tablet market. The same operating system is being designed to go from business desktop to ultra-portable notebooks and tablets to high-end gaming PC's and home media centers. The new operating system will feature live touch tiles as found on Windows Phone mobile operating systems. Think of a touch tile as a form of a "super icon". On tablets, Windows 8 will be enabled for gestures with easy navigation. Microsoft will also discuss their latest software for smart phones, Windows Phone 7. Maybe we'll see a Surface too. Come to the meeting, bring a friend and see the Preview being done for TCPC by Leif Knutson and the helpful staff at Microsoft Store at Mall of America. 💻

NO MEETING IN SEPTEMBER. The meeting date falls on the anniversary of the 9-11 tragedy and we are honoring a request to take the evening off to allow members to attend events like the concert at Lake Harriet.. Intel will be here in October.💻

TC/PC is a Member of

Closing the door on Facebook

By Linda Gonse, Editor/Webmaster, ORCOPUG (Orange County PCUG), California, April 2012 issue, Nibbles 'n Bits, www.orcopug.org, editor (at) orcopug.org

So, you have been reading about more privacy concerns in Facebook. You have decided to close your account. But, unless you are aware of what this means and how to go about it, you may not actually close the account.

You should be aware, too, that you are not going to erase your existence in Facebook when you do close your account. Some people have the mistaken idea that after quitting Facebook their data will get old and vanish.

Know the facts. Familiarize yourself with Facebook's policies before you take steps to end your relationship.

There are two methods of closing a Facebook account. You can either deactivate your account or you can delete it. If you deactivate it, your account is closed immediately. Your information is saved as you left it in the event that you may want to return to it someday.

What's more, if you log into Facebook within 14 days of deactivating your account, it is automatically reactivated!

Deletion is another thing. Not so easy.

What does Facebook say about deleting the account?

If you do not think you will use Facebook again and would like your account deleted, keep in mind that you will not be able to reactivate your account or retrieve any of the content or information you have added. **If you would like your account permanently deleted with no option for recovery, log in to your account and then submit your request here.**

Prior to taking this option, you should delete any information you wouldn't be comfortable leaving behind. Note, too, that you are only submitting a request. The request goes into the system where it is regarded as a pending deletion request. Then what happens?

Once you have submitted a request to permanently delete your account, no further action is required on your end. Our system delays the deletion process in case you change your mind and no longer want to permanently delete your account. Note that logging in to your account again will undo a pending deletion request.

Once your account is permanently deleted, there is no way to undo this action. You will not be able to reactivate the account or retrieve any of the content or information you have added to it. (Source page: http://on.fb.me/HiYHzl)

You'll note that it does not say how long the deletion process is delayed, only that it will be.

Eventually, the account gets deleted. But, what actually happens when your account is permanently deleted? Here's what Facebook says. (The emphasis is mine.)

• **You will not be able to regain access to your account again.** (This should not be a surprise. That is the idea, right?)

• **MOST personally identifiable information associated with it is removed** from our database. This includes information like your email address, mailing address, and IM screen name. **SOME personally identifiable information MAY REMAIN,** such as your name if you sent a message to someone else.

• **Copies of SOME material (photos, notes, etc.) MAY REMAIN in our servers** for technical reasons, but this material is disassociated from any personal identifiers and completely inaccessible to other people using Facebook. (Source page: http://on.fb.me/ HE95ab)

Armed with this information and lowered expectations, you are now ready to close the door on Facebook.⌨   Go to Page 1

To 'Cloud' or Not To "Cloud," That Is the Question

Submitted by Joan Frerichs, CIACUG Board Member, www.ciacug.org, ciacug@ciacug.org

I'd heard of saving computer files to the "cloud," but I really didn't know very much about it until our April CIACUG meeting when David Williams provided members with a great deal of helpful information about how it works.

If you have never had your computer "crash," be destroyed in a fire or flood, be struck by lightning, or stolen, you have been exceptionally fortunate, or, perhaps, you haven't been computing very long. After spending many painstaking hours of inputting data, contact lists, medical histories, financial information, etc. on our first computer, we experienced a crash that lost all of that data forever. Many times you toss or shred the paper trail thinking your information is safe forever. How naive can one be? It can be an "oops moment," or it can be devastating. We had to consider ours an "oh phoo moment" and move on with life and start over, and that is disconcerting, to say the least. If you have business information and customer lists on your computer, it can put you out of business temporarily, at the very least.

If you've been backing up your files to an external hard drive, what if that is destroyed in a fire? If you've been religiously backing up your data to disc times two, putting one in the fire safe (not very safe) and taking one to an off-site location, that gets time-consuming and cumbersome. The easy solution….back it up to the "cloud."

If you are a non-business user, there are several cloud servers that give you a certain amount of free storage, and it was pointed out that it is a good plan to review the sites to see what they have to offer and then choose a couple that you feel fit your needs and you are comfortable with probably being around for the long-term. There have been servers that have "disappeared" in the past without ample warning for users to recall their data. Thus, it's a good plan to save the same data on more than one cloud server. If you are a business user or require more space than the free allotment, there will be a charge. With some servers you can increase your allotment by "recommending" their service to others, and if they should decide to sign on with that service, you may then be allowed additional storage space. The next step is to set up your accounts, organize your files, save your files to the clouds and then synchronize your pc, your laptop, your iPad, etc. so that any changes you make to any of your saved files will automatically be updated on all your

Cloud Computing

Having secure access to all your applications and data from any network device

devices. That's a time-saving plus. Also, you are able to access those files in the cloud from any web-based hardware that has access to the internet. You can also share data files, photos, etc. with friends and family. Be sure to remember, or write down, your user names and passwords.

Following are some links to websites for comparison purposes:

20 Clever Apps and Services That Make Great Use of the Cloud
http://bit.ly/JydzyV

Comparison of online backup services
http://bit.ly/5P003Z

Cloud Drive Comparison
http://rww.to/j2FUhI

The "Top Best Cloud Storage Companies" Reviewed!
www.thetop10bestonlinebackup.com/cloud-storage

15 Best Free Online Data Storage & Backup Services
http://bit.ly/rQGb1p

Listed below are some of the free cloud storage servers and the amount of free storage:

DropBox	2 GB	www.dropbox.com
Windows Skydrive	7 GB	skydrive.live.com
BOX	5 GB	www.box.com
Google Drive	5 GB	drive.google.com
SugarSync	5 GB	www.sugarsync.com
ASUS Webstorage	2 GB	www.asuswebstorage.com/
Wuala	5 GB	www.wuala.com/
Apple iCloud	5 GB	www.icloud.com
Amazon Cloud	5 GB	www.amazon.com/clouddrive
Google Music		play.google.com/music

You might also be interested in checking out the following:

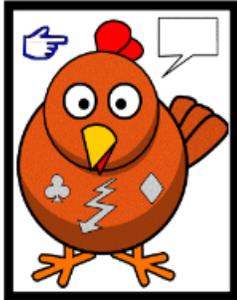|	
TonidoSync	www.tonido.com
LiveMesh	download.cnet.com/Live-Mesh-2011/
Social Folders	socialfolders.me
Insync	ww.insynchq.com/
Teradesk	www.teradesk.net

Now, get organized and SAVE, SAVE, SAVE (TO THE CLOUD). It can keep you safe and sane. ⌨

OpenClipArt

By Cal Esneault, President, Cajun Clickers Computer Club, LA and leader of many Open Source Workshops & SIGs, May 2012 issue, Cajun Clickers Computer News

OpenClipArt is a large compilation of clip art in which images have been released to the public domain (unless specifically stated otherwise), and thus are free to use without any restrictions. Numerous collections are available for free download at *OpenClipArt.org*. The larger sets of images are in compressed file format (.zip, .gz, .bz2). You have to unpack the compressed files by double clicking on the downloaded package to extract images (note: Windows users may need to install the 7ZIP program to access .gz or .bz2 files).

Images are generally available in .svg vector format or common bitmap formats. *LibreOffice* programs load all file types, but MS Office programs will not load .svg files. Vector graphic files have the advantage of being editable (can add, delete, change, or move primitive components). The best way to edit them is to install the open source vector editor *Inkscape*. However, a limited web-based editor Imagebot is available at the *OpenClipArt* site. Here you can see a chicken cartoon to which I have added several objects using *Imagebot*. Modified images can be saved to vector or bitmap formats.

Once you have downloaded the images, you can "insert" them into the appropriate document just as you would for any picture. With *LibreOffice* (or *OpenOffice.org*), a better way is to link the images to the *Gallery*. For example, in *LibreOffice*, find the small bar directly under the main top panel that has 5 small dots.
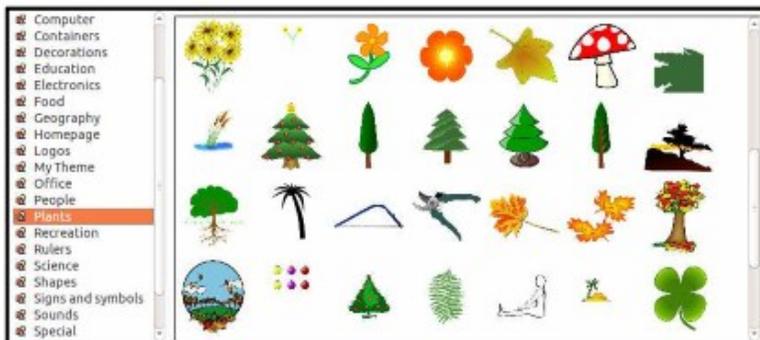
Double-click on it to show the gallery (close *Gallery* with a subsequent double click). You can click and drag on this bar to increase the viewable area. The following illustration shows the word-processor *Writer* with the *Gallery* showing between the menus and the text editing area. *LibreOffice* comes with only a few basic images (background, bullets, ruler, etc.). To add more, click on the New Themes button, give it a new name under the General tab, and then go to the Files tab and link the folder with your images via Find Files.

In my example, "small set" is my new theme name. Once the folder is added, it appears in the drop-down list and small thumbnails appear for each image. To add an image to the document, click on it and simply drag it to the appropriate spot.
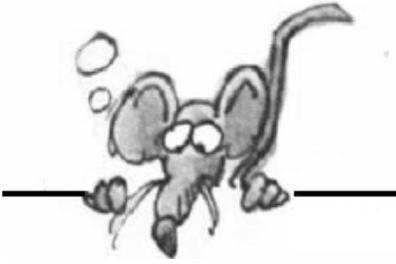
For *Linux* users, many package managers will load main *OpenClipArt* collections for you and put images into *OpenOffice.org* or *LibreOffice*. Below is a screenshot of the Gallery that was automatically prepared on my copy of *LibreOffice* on Ubuntu 11.10.

MS Office clipart is generally stated to be for personal or non-commercial use. For other purposes, you are directed to read the EULA or contact Microsoft. Since Microsoft artwork can be from third parties, permission to widely distribute may get complicated. *OpenClipArt* images have the advantage of being public domain with no restrictions (unless specifically stated). This open source set is a valuable resource readily available for cross-platform use. Check it out at *openclipart.org*. New images are added weekly, and there are groups of special topic images (sports, people, seasons, etc.).

NIBBLERS

By Jeannine Sloan

Paint Tip

Paint S**elect** has some useful tools: Click on the icon arrow for a menu tools. **Rectangular** or F**ree Form.** Rectangular draw around your object, Top to Right, to bottom. Now you can move it, size it, rotate it, or crop it. Use the Free Form to select around irregular objects. Great for separating pieces of an object. Click on **Transparent Selection** and it will enable a transparent background so you can work in **layers.** Working with layers you can join objects together by overlaying them and having the bottom layer show through. Each time selecting the object you want to move. When done, Select the rectangular tool and draw around the combined objects. Use the **Crop** tool. Copy/ save, move, re-size etc.
From J D Yearous

The Myth of Megapixels

A megapixel is one million tiny colored dots in a photo. It seems logical that more megapixels would mean a sharper photo; however, your mastery of lighting, composition and the camera's controls — are far more important factors. Read more: http://tinyurl.com/7f6k674

That's No Phone. That's My Tracker

The device in your purse or jeans that you think is a cellphone — guess again. It is a tracking device that happens to make calls. Let's stop calling them phones. They are trackers. Read article here: http://tinyurl.com/88yx5bx

What the Internet Actually Looks Like

Article and more graphics here: http://tinyurl.com/873rsny

Keyboard Quick Keys

Keyboard Quick Keys are quick way to insert special letters or symbols that are not on your keyboard. They usually involve use the Ctrl or Alt key and a few numeral key strokes. So, be sure to have your numeral pad on. For instance Alt+0162 will print a cent (¢) sign. No need to type out cent or degree (Alt+248).
Contributed by J. D. Yearous

Fonts

When writing you next document, letter, etc., using **Times New Roman,** instead, consider using **Book Antiqua. Times Roman** was designed for columns. The letters are spaced closer and are designed slightly compact so more words would fit into newspaper columns from 5-6 columns per page.
Book Antiqua, the letters are styled the same but are "rounder" and the spacing between letters is "whiter". or a little wider. The difference is hardly noticeable but the readability is better. So if your default font is **Times New Roman,** try resetting it to **Book Antiqua.**
Contributed by Jay Dee Yearous

Hide/Show the Ribbon
Hold the Ctrl key, tap the F1 key, release Ctrl key. This will toggle the ribbon size.

Windows RT
Windows RT (RT stands for runtime), known during development as Windows on ARM, will be a version of the Microsoft Windows operating system for ARM devices such as Tablet computers accessed via a touch-screen interface. It will officially only run software available through the Windows Store or included in Windows RT including Microsoft Word, Excel, PowerPoint, and OneNote as standard. Microsoft will only be selling the operating system to device manufacturers so consumers will only be able to get it pre-packaged with a device, similar to iOS.
http://en.wikipedia.org/wiki/Windows_RT

Changing the Default Save Location
By default, MS Word opens Documents folder when you press CTRL+S for first time. If you think this is irritating you, you can change the default file location to some other place where you normally store your documents.
1. Click on File
2. Click on Options
3. Click Advanced in the left side of the window that appears
4. In the right part of the window, scroll down to the button that says "File Locations"
5. Select Documents and click on Modify
6. In the Save File dialog box that appears, enter or select the new path and click on OK to close the Save File dialog box.
7. Click OK to close the window.

Cyber Security
The two most important steps to maintaining cyber security are studying /implementing dependable information and then to stay informed on the newest developments in the security arena.
Download – Study – Implement: http://www.nsa.gov/ia/_files/factsheets/Best_Practices_Datasheets.pdf
Stay Informed: http://www.nsa.gov/research/publications/index.shtml

How to Open .eml Email Attachments
Ever get an email attachment with the extension .eml and you cannot open it? Here's how:
Save it to your hard drive. Open Windows Explorer and browse to the file.
Right click on it and choose "open with", then choose Internet Explorer.
http://www.worldstart.com/how-to-open-eml-files-as-email-attachments/print/

Improve Wireless Signal on Win 7
http://tinyurl.com/d2k2msa

Watermarks in Word 2007/10

Sometimes when you create a document in Microsoft Word you need to add a watermark that shows in the background. Here's how:

1. With your Word document open click on the Page layout tab on the Ribbon.
2. Then click Watermark in the Page Background section.
3. Here you can choose one from the gallery that fits the needs of your document.
4. Click on the one you want to use and it will show up in the background.

Travel Tip

Modern TVs usually have a USB port on the back. When the TV is playing you can use that port to charge your gadgets.

Have the "Check Engine" Light In Your Car Turned off For Free

Go to an Advanced Auto Parts or Autozone store and they'll clear it for free. Yes, really. When you go to the counter at one of the stores mentioned above, tell them you need a check-engine light cleared. They'll ask if you officially give them permission to do so, you say yes. The guy then grabs a handheld computer, goes out to your car, plugs in, punches a few buttons, bleep-bloop-boop-bleep, done. Check engine light is now gone. While you're there, buy a new gas cap, as it's probably what caused that light to come on in the first place. If interested in doing this please read the complete article: http://tinyurl.com/c56hoyx

DRM Free ebooks

DRM-free and available to purchase from Torbooks.co.uk and Panmacmillan.com, as well as through other retailers! http://torbooks.co.uk/

Autographed ebooks

"…authors will autograph ebooks, pose for photos with fans, and include the autographed photos in the fan's ebooks…" http://www.prweb.com/releases/2012/8/prweb9783997.htm

Email Photos Come Through As Blue Squares and a Question Mark or a Red X In a Box

This occurs when the sender forwards or sends a message and the photos did not come with the original message. There is nothing you can do other than ask the sender to try sending it again.

Effective Permissions for Files and Folders in Windows

Whenever you create a new file or folder, the Windows operating system will assign it a set of default permissions. These are called as **Effective Permissions**. It grants users specific user rights that will allow the user or user group to read, modify, delete, etc. the object. The minimum permission is the Read permission. Read more here: http://tinyurl.com/9f5kv5s

Use Word's Go To Feature To Browse Common Elements

Word's Go To feature has two modes of navigation. You can use it to access an element once, or you can browse common elements, one by one. Find out how: http://tinyurl.com/d53g58v

Thanks again to Jeannine for all your hard work!

Meetings start at 7:00 PM (9:00 AM on Saturday) unless otherwise noted. *Meets at Edina Executive Plaza.*

August

September

sun	mon	tue	wed	thu	fri	sat
			1	2	3	4
5	6	7	8	9	10	11 Linux and Open Source on Saturdays 9:00—Noon
12	13	14 General Mtg 7:00 PM Summit Place Microsoft-Windows 8 6-7PM Web SIG	15	16	17	18 Windows & MS Office (including Access) 9:00-Noon
19	20	21	22	23	24	25
26	27	28	29	30	31	1
2	3	4	5	6	7	8 Linux and Open Source on Saturdays 9:00—Noon
9	10	11 NO MEETING!!	12	13	14	15 Windows & MS Office (including Access) 9:00-Noon
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30					[Go to Page 1]	

Microsoft Warns "Kill Desktop Gadgets Now!"
by Ira Wilsker, iwilsker@sbcglobal.net

WEBSITES:
https://technet.microsoft.com/en-us/security/advisory/2719662
http://support.microsoft.com/kb/2719662
http://windows.microsoft.com/en-us/windows/downloads/personalize/gadgets
http://widgets.yahoo.com
http://windowssecrets.com/top-story/kill-those-vista-and-win7-gadgets-now/
https://www.techsupportalert.com/content/web-browser-windows-desktop-gadget.htm
http://go.microsoft.com/?linkid=9813057 **Fix It Utility - Kills Microsoft gadgets**
http://go.microsoft.com/?linkid=9813056 **Fix It Utility - Allows Microsoft gadgets**
https://www.blackhat.com/html/bh-us-12/bh-us-12-briefings.html#Shkatov

Ever since I purchased a new Vista-64 computer several years ago, I have enjoyed using several of Microsoft's desktop gadgets and Yahoo!'s desktop widgets. In recent years I have written several columns here in the Examiner extolling the joys of widgets and gadgets, and where to find them. For those who may not be aware of the vernacular, widgets and gadgets are small utilities that can be placed on a Windows or Mac desktop and provide the user with current information of some kind. Yahoo! offered over 6000 free widgets, and Microsoft offered thousands of gadgets. According to Yahoo!, "Yahoo! Desktop Widgets brought your favorite information from across the web right to your desktop in the form of "widgets" or apps. Yahoo! Desktop Widgets enabled you to get all your personalized updates in one place, neatly organized along the main screen of your Windows® or Mac ® computer. The Desktop Widget Gallery website included over 6,000 widgets to choose from across news, sports, entertainment, travel, music, games, photos, videos, travel and more!" Microsoft gadgets were very similar to Yahoo!'s, but obviously intended for Windows computers. Generally, widgets and gadgets are loaded when the computer is booted, and appear on the desktop on a full-time basis.

I have widgets (Yahoo!) and gadgets (Microsoft) currently running on all of my computers, some are the same on all computers, and some are different, depending on the intended use of that particular computer. On my desktop PC, running Windows 7-64, I have several widgets and gadgets that I frequently utilize. Probably the widget that I utilize more than any other is the excellent Yahoo! widget "TV Navigator", which displays continuously updated localized TV listings, and is fully customizable for TV provider (cable, satellite, off the air, etc.), favorite shows, integration with various calendar and reminder utilities, and other useful features. I also have a Wunderground gadget that displays current local weather conditions and forecasts, a gadget that shows the ever changing daily deals from my favorite "deal of the day" websites, a gadget that provides a near real-time display of current stock quotes and news, and a gadget that displays the real-time workload on each of the cores of my quad-core CPU chip as well as memory utilization. While I currently have all of these gadgets and widgets running on my desktop, and continue to use them and enjoy them, I will probably have to digitally kill them in the next few days.

At the Black Hat USA 2012 hackers conference, there will be a public presentation by two hacker experts on how to take over a computer running gadgets, and this exploit will become instantly available to anyone According to the Black Hat program website (www.blackhat.com/html/bh-us-12/bh-us-12-briefings.html#Shkatov), "We have you by the Gadgets, July 26; We will be talking about the windows gadget platform and what the nastiness that can be done with it, how are gadgets made, how are they distributed and more importantly their weaknesses. Gadgets are comprised of JS, CSS and HTML and are applications that the Windows operating system has embedded by default. As a result there are a number of interesting attack vectors that are

interesting to explore and take advantage of. We will be talking about our research into creating malicious gadgets, misappropriating legitimate gadgets and the sorts of flaws we have found in published gadgets."

Gadgets and widgets use a type of push technology, which allows content providers to continuously send data to your desktop. While the technology is proven and well established, with countless millions of users, the same push technology used by the providers has been discovered by hackers, crackers, and other miscreants, allowing them to directly access a computer with widgets and gadgets installed and running. A simple analogy would be something akin to listening to your kids playing in the front yard, and having the door open; with the door open, you can hear the kids, and watch them as desired, but while your front door is open, burglars can enter your house and steal your possessions. In a simplistic way, that is the problem with widgets and gadgets; since our firewalls and other protective barrier software allow the widgets to receive data via this open door, miscreants and crooks may now be coming in as well through that open door. Microsoft, in security advisory 2719662 dated July 10, 2012, "Vulnerabilities in Gadgets Could Allow Remote Code Execution" is warning users to kill any widgets and gadgets that may be running, and possibly never run them again. This advisory and related knowledgebase apply to all computers running Windows 7 or Windows Vista (support.microsoft.com/kb/2719662). Microsoft has shut down its extensive library of gadgets, and no longer allows any to be downloaded from Microsoft, but several third parties still offer gadgets for download.

According to Microsoft, " An attacker who successfully exploited a Gadget vulnerability could run arbitrary code in the context of the current user. If the current user is logged on with administrative user rights, an attacker could take complete control of the affected system. An attacker could then install programs; view, change, or delete data; or create new accounts with full user rights. Users whose accounts are configured to have fewer user rights on the system could be less impacted than users who operate with administrative user rights."   In order to kill all of the gadgets (from Microsoft or third parties) that may be running on a PC, and prevent them and any others from ever again loading (unless explicitly re-enabled by the user). Microsoft has released a free "FIX IT" utility (go.microsoft.com/?linkid=9813057) which can stop any of the Microsoft gadgets (and sidebars) that may be running on a Windows 7 or Vista computer, and prevent any gadgets from ever loading, thus closing and locking the door. If at some future date, the user wants to re-allow gadgets for some reason, another "FIX IT" utility (go.microsoft.com/?linkid=9813056) can resurrect the gadgets. Individual gadgets can be uninstalled by right clicking on an empty spot on the desktop, clicking on "Gadgets" and then right clicking on a gadget, and selecting "Uninstall".

Yahoo! has also taken down its extensive library of widgets, and no longer allows any of the widgets to be downloaded. To stop any Yahoo! widgets from loading (if you are using any) simply stop the Yahoo! Widgets control utility from loading when the computer boots by using any startup manager or Microsoft's built-in Msconfig utility to stop the widgets from loading by unchecking the box adjacent to "Yahoo! Widgets" in the list of startup programs. Msconfig can be accessed by clicking on start - run - type "msconfig" (without the quotes) - OK, and then clicking on the "Startup" tab. Stopping the widgets utility from loading will block the "push access" via that route. For maximum security, the widget utility itself can be uninstalled by going to the system utility "Add / Remove Programs" and uninstalling the Yahoo! Widget utility. Once uninstalled, it possibly may never be able to be reinstalled, as Yahoo! no longer offers it for download.

In the informational blog, "Windows Secrets" (windowssecrets.com/top-story/kill-those-vista-and-win7-gadgets-now), Woody Leonhard warns, "What you need to do before next Thursday (July 26) ... Microsoft invented a poison pill, disguised as a fixit in MS Support article 2719962. You'll find two Fix it buttons halfway down the page: one to disable the Sidebar and gadgets, and another to enable them (which might be useful if Microsoft provides an actual patch for the vulnerability). ... Do it now, while you're thinking about it. The fixit doesn't take much time, but a system reboot is required to

enable it. Warn your friends: this could turn into something nasty very quickly." I will be killing all of my widgets and gadgets because it is only a matter of (short) time that the bad guys will be attacking computers with this vulnerability, if they are not already doing so. I will shed a tear, because I will really miss my pet widgets and gadgets that I have become so attached to. RIP my dear widgets and gadgets; you will sorely be missed by those of us who have enjoyed your companionship for so many years. Goodbye widgets; goodbye, gadgets.🖥

The Transitional Operating System
By Berry F. Phillips, Member, ccOKC (Computer Club of Oklahoma City)
May 2012 issue, eMonitor, www.ccokc.org, wijames (at) sbcglobal.net

The Operating System (OS) is the most important piece of software on your computer.

From a user perspective, the OS provides the interface with which the users interact. Behind the scenes, an operating system carries out many additional functions. The OS recognizes drives and communicates between applications and the processor. The OS manages a directory of files, and manages resources such as fonts and system sounds. Without the operating system nothing happens! In this article we will explore what we can expect from operating systems of the future.

When the OS evolved from command-line interfaces to graphical user interfaces, many tasks that computer users routinely carried out became much easier and user friendly.   The graphical user interface or GUIs made possible by the invention of Xerox PARC was the major step toward making the computers accessible to the average computer user not just computer geeks.

In recent years, the standard GUI began to show signs of age. Hardware and software have become increasingly complex. To the rescue, came the wizard--a simple piece of software that converts complicated tasks into an automated procedure. In the future, you can expect to see more wizards incorporated into operating systems.

As various kinds of media were formerly separate--such as mail, television, radio, and telephony--converge on the desktop, expect operating systems to evolve to deal with these seamlessly. Operating systems in the future will easily operate these multiple systems which will be merged with the operating systems in the future.

The ideal OS is one that we never have to think about. It will function as an obedient Victorian era servant who knows our wishes better than we do. We will see voice activation and instruction continue to develop and be integrated into future operating systems. Jeeves, our OS butler, may well take care of most of our commands.

I am speaking to my OS, "Write me an article for the Computer Hysteria column for the eMonitor." Nothing is happening. Well, if my OS cannot do that I will try something else. "Fix my supper and clean my apartment!" Nothing is happening. I guess I will have to wait for future developments of the operating system. 🖥