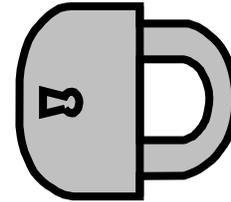




## Useful Bits & Pieces

By Lorrin R. Garson, PATACS



### Information on Security Issues

Having trouble staying awake? Would you like to have some sleepless nights? Here is a selection of Web sites devoted to security issues, the reading of which is certain to cause some level of anxiety and sleeplessness. Seriously, the value in monitoring these sites is that after awhile you get a sense of where security problems lay, which threats are critical, which are important, and which are hoaxes. Be constructively skeptical of facts and figures from Web sites of companies that sell security software.

- See <http://technet.microsoft.com/en-us/security> for the Microsoft Security TechCenter. Here you can read about the latest Microsoft security advisories, subscribe to security bulletins, and download tools to help with security problems.
- See <http://www.sophos.com/en-us/threat-center.aspx> for the SOPHOS Threat Center. This is good source of information on viruses, spyware, vulnerabilities, hoaxes and more.
- See <http://www.crime-research.org> for the Computer Crime Research Center's Web site. To quote

from this site "The mission of the CCRC is to research and warn of unlawful acts involving computer and information technologies, including computer crimes, internet fraud and cyber terrorism. We conduct researches in fighting child pornography and pedophilia in the Internet".

- See <http://usa.kaspersky.com/resources/knowledge-center/threatpost> for the Kaspersky Knowledge Center. This Web site contains readable information on a wide variety of security issues (crimeware, hacking, phishing, spam, etc.).
- See <http://www.symantec.com/threatreport/> for Symantec's Internet Security Threat Report.
- See <http://home.mcafee.com/virusinfo> for information on viruses from McAfee.
- See <http://www.securitynewsportal.com> for the SNP Security News Portal. This site provides information on a broad range of security threats against all kinds of devices and platforms. Read this and you'll be amazed at what goes on.

(Continued on page 2)

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- See <http://www.lonerunners.net/> and in particular <http://secdocs.lonerunners.net/> for a wide variety of papers and presentations on security issues. This site is rather esoteric.
- Finally, see [http://www.himss.org/asp/topics\\_FocusDynamic.asp?faid=623](http://www.himss.org/asp/topics_FocusDynamic.asp?faid=623) for a number of additional resources.

## Touching with Windows 8

By now you realize Windows 8 works best if you have a touchscreen computer. However, if you don't, Logitech offers three products that you may wish to consider to take advantage of "the world of touch" with Win 8, namely:

- Zone Touch Mouse T400 at \$50. This device is a traditional two-button mouse with a glass touch strip in the center to use where gestures in Windows 8 make more sense than clicking.
- Touch Mouse T620 at \$70. This mouse is for those who still want a traditional mouse, but want to use touch much of the time.
- Touchpad T650 at \$80. This rechargeable wireless device is for users who want to replicate the tablet experience as much as possible. It is somewhat similar to Apple's Magic Trackpad.

See <http://www.logitech.com/en-us/mice-pointers/mice> and <http://www.pocket-lint.com/news/48432/logitech-touchpad-t650-touch-mouse-t620> for more information

## Windows 8 with a Start Button

The lack of a Start Button in Windows 8 has frustrated many experienced users. However, there are a variety of work-arounds that will give you the Start Button back.

- See <http://windows8startbutton.com> for a free application that will restore the Start Button and make "desktop mode" as your default startup screen.
- See <http://classicshell.sourceforge.net/features.html> for Classic Start Menu that will give you a Start Button. It can be downloaded from <http://classicshell.sourceforge.net/>. This free program will make your Windows 8 Desktop function like Win-

dows 7/Vista, Windows XP, or even Windows 98 if you really want to go back in time.

- Polli Menu (at <https://www.pokki.com/windows-8-start-menu>) is another free application that gives you a Windows 7-like user interface to Windows 8.
- See <http://www.stardock.com/products/start8/> for Start8 (\$4.99) which will give you a Windows 7-like functionality. Object Desktop (\$49.95) is a more sophisticated user interface.

## Picking a UPS

If you don't have a UPS (uninterruptible power supply) for equipment that is sensitive to power fluctuations and outages, you may want to consider purchasing one or more. What kinds of equipment can be damaged by power glitches? Obviously PCs, servers, network equipment, external disk drives, audio/video equipment, etc. Your choice of a UPS is governed by how much power your connected equipment needs, how much runtime you need, and the price you're willing to pay. For example a typical PC with monitor draws 75-125 watts; the system isn't running at maximum performance during the time you are shutting it down so you need not buy a UPS for peak computer performance.

You can expect to pay \$50 to \$150 for an adequate UPS for a home computer. More expensive units tend to be more efficient in terms of power consumption for the UPS unit itself and many provide software to automatically shut down your computer and help you to monitor the UPS and its use. In general, you should select a UPS that will keep your equipment running long enough, say 10 minutes, to shut it down properly. Having a UPS of sufficient capacity to run equipment any significant length of time will be very expensive. APC (at <http://www.apc.com/products/family/index.cfm?id=29> and <http://www.apc.com/products/family/index.cfm?id=27&tab=models>) provides help for you to select an appropriate UPS, but keep in mind APC is selling equipment. In addition to providing backup power, UPSs provide protection against power surges and some units supply power conditioning.

## Linux and Open Source News

By Geof Goodrum, Potomac Area Technology and Computer Society [linux\(at\)patacs.org](mailto:linux(at)patacs.org)

### The Linux Game Tome Shuts Down

On April 16<sup>th</sup>, the online database of Linux-based games and entertainment programs, The Linux Game Tome at <http://happypenguin.org>, went offline after operation since 1995. The site featured a rating system and user comments, user forums, and searches by game type. Bob Zimbinski, the administrator since 1998, announced the shutdown on March 25<sup>th</sup> and that others were free to rehost the database, but the original site code was not maintainable and he would not be involved in new efforts. A dump of the database of over 2,000 games is still available for download at the old link, as are links to online forums where others are discussing efforts to create a new home for the database.

Although The Linux Game Tome was arguably the best single site to find Linux games, other sites worth checking include <http://www.icculus.org/lgfaq/gamelist.php>, <http://sourceforge.net/directory/games/os:linux/freshness:recently-updated/>, and <http://freecode.com/tags/gamesentertainment>.

### Featured Linux Software of the Month June 2013

The software described below can be downloaded at the links provided or copied onto a USB flash drive at the PATACS Fairfax meeting. However, please check the online package management tool included with your GNU/Linux distribution first, as installation is often just a click away.

**Ascii Design** – v1.0. <http://ascii-design.sourceforge.net>. Free GNU General Public License C++ source code for Linux and Microsoft Windows by Francesco Mondello. Ascii Design is a free program, based on the FIGlet engine, that enables you to create awesome ascii art text. You can create art based text for many types of decorations for web sites, e-mail, text files, etc. Ascii Design is able to use dozens of special fonts to create various styles of ascii art. Ascii Design requires the FIGlet engine (available in GNU/Linux distribution repositories and from <http://www.figlet.org>) and Qt4 libraries (available in GNU/Linux distribution repositories).

**Simutrans** – v1.1.2-2. <http://www.simutrans.com/en/>. Free Artistic License source code and executable packages by the Simutrans Team. Simutrans is an open-source transportation simulation game available for Windows, Mac, Linux and BeOS. Your goal is to establish a successful transport company and build the necessary infrastructure to transport passengers, mail and goods between cities, factories and tourist attractions. Planes, ships, trains, trams, trucks, buses, and monorails are at your disposal. But factories have contracts and passengers will only travel to their own destinations. Features include: Intelligent routing of vehicles, passenger, mail and freight; customisable engine with many different graphics; very flexible fine tuning of the economy by simple config files; network gaming for up to 14 players; you set your goal - suitable for anybody (even used for teaching); many languages available, many platforms; easy to create new graphics.

**snort** – v2.9.4.5. <http://www.snort.org>. Free GNU General Public License C source code for Linux, BSD and Microsoft Windows and executable packages for Red Hat Enterprise Linux, Fedora 17 and Centos GNU/Linux by Sourcefire, Inc. Snort is a network intrusion detection and prevention system. It is the most widely deployed technology of its kind in the world. It detects network attacks and intrusions using a variety of methods including rules-based detection, anomaly detection, and heuristic analysis of network traffic. Its rules language is open source and available to the public as well.

**Kernel Source** – v3.9. <http://www.kernel.org/>. Free GNU General Public License source code for all platforms by the Linux community.



## New Type of Search Engine Provides More Information With “Mind Mapping”

By Ira Wilsker

### Websites

<http://www.instagrok.com>  
<http://www.instagrok.com/brochure.pdf> (Brochure in PDF format)  
<https://www.techsupportalert.com/content/amazing-site-gets-you-speed-any-subject.htm>  
<http://dictionary.reference.com/browse/grok>

We are all aware of several of the major search engines including Google, Yahoo!, and Bing. These search engines, along with most of their other competitors, use a linear type of search results. With these search engines, the user simply types a search term, which promptly displays a linear listing of results, with little indication of how those results displayed are connected to each other. Many of the displayed results on these traditional search engines are not necessarily the “best” results for the user’s inquiry, as there are a variety of “SEO” or “Search Engine Optimization” tools and utilities designed to influence the search engines to manipulate the displayed results. The websites that used “SEO” appear higher up on the list than those that did not, an important and valuable consideration because most users do not scroll past the first few results that are displayed. Since the search engine results are manipulated, those websites displayed towards the top of the listings may not necessarily be the most relevant for the intended search.

Compare instaGrok versions				
	Anonymous	Registered	Classroom	Edmodo
Visual Interface	✓	✓	✓	✓
Full-Text, Custom Interface	✓	✓	✓	✓
Adult Explorer Limit	✓	✓	✓	✓
Customize & Share Concept Maps		✓	✓	✓
Search History		✓	✓	✓
Journal		✓	✓	✓
Student Dashboard		✓	✓	✓
File Archiving			✓	✓
Safe Content			✓	✓
Privacy Support			✓	✓
Extensive Assessment Integration			✓	✓
Price	Free	Free	\$35	\$35
Where you get started	Add User	Create a user account	Create a teacher account	Go to dashboard
	<a href="#">Get Started</a>	<a href="#">Get Started</a>	<a href="#">Get Started</a>	<a href="#">Get Started</a>

Learn about any topic by exploring connections between concepts/facts on an interactive concept map, which you can customize and share!

[Compare Versions](#)

[InstaGrok to Classroom](#)

Many consumers of search engine services are very visual, in that they may better comprehend data and information if presented in a logical graphic format showing interactions and relationships; a new search engine service instaGrok does precisely that. By entering a search term in the search box at the top of the page, [www.instagrok.com](http://www.instagrok.com) displays a graphical representation of the search results, clearly showing the relationships between the results, allowing the user to better find the results that he is seeking. According to the instaGrok website, “instaGrok presents each topic as an interactive visual interface, allowing the user to quickly grasp important concepts, key facts and relationships.” The term “grok” may appear to be some onomatopoeia from “Star Trek”, but it actually has a definition, according to the instaGrok website, “grok (v): to understand thoroughly and intuitively”.

Unlike the more traditional search engines, instaGrok filters the results based on a selectable “Difficulty Level” slider on the top of the results page which coincides with the academic level of the user, ranging from a basic elementary school level (left on the slider bar), to a high school level (middle), to a college or professional level of content (slider to the right). Graphically, this slider displays an “ABC’s blackboard” to an Einstein caricature, to indicate the level of the display. instaGrok sees itself as both a search engine and an educational tool, with features beneficial to individuals at all levels as well as features geared to classroom and academic use. The educational utilization of instaGrok is embedded on the mission statement, “Our mission is to help everyone discover the joy of learning and empower them to be lifelong learners. So we are dedicated to building innovative technology to enable engaging, safe and personalized learning.

Which innovative educational search engine:

- empowers differentiated learning
- provides personalized assessment
- builds 21st century research, curation and synthesis skills?

**instaGrok**

- finds age-appropriate educational content on any topic presented with interactive multimedia interfaces
- generates quiz questions based on student’s research activity and skill level
- supports creation of research journals and concept maps for learning assessment

**A+**

“This program is a great tool for students to use in their research. It is easy to use and provides a lot of information. I would recommend it to other students.” -Miss Wharton, Simpson Union HS

Like the more mainstream search engines, instaGrok can quickly find information on any topic, displaying the search results in real-time. The instaGrok graphical display shows relational results from web pages, images, videos, and forums, but, unlike its competitors, filters out spam, shopping sites, profanity, and pornography.

As an experiment, I entered several search terms into the instaGrok search box to examine the results. I entered “Lamar Institute of Technology”, which promptly displayed a graphical representation of the results, looking somewhat like an atomic structure or solar system; instaGrok calls this a “concept cloud”. In the most basic view (Difficulty Slider to the left), “Lamar Institute of Technology” was in the center or nucleus, and radiating from it were 10 “satellites”, each with terms such as “train”, “review”, “college”, “service”, “program”, and “school.” Clicking on the displayed term “train” opened a subset indicating some of the programs, costs, scholarship information, and other training information. On the right side of the window are a series of headers displaying key facts, websites, videos, images, and other links. Sliding the “Difficulty Slider” to the center (high school level), and then to the right (academic) displayed a similar number of satellite topics, but with greater detail and complexity as the slider was moved.

Clicking on the “Websites” button on the right side of the page opens a new display in a chart format with the headings “Like”, “Preview”, “Difficulty”, and “Concept Cloud”. In the “Like” column are two small icons, a push pin and a trash can; the push pin icon is to “pin” the results in a registered version (details below), while the trash can might be used to hide that particular selection. The

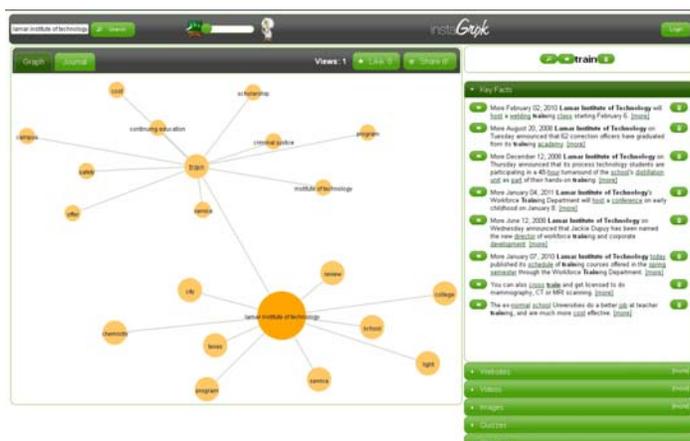
“Preview” column provides a summary of the content included in each website, while the “Difficulty” column utilizes an icon to show the reading level of the particular websites similar to the icons on the “Difficulty Slider”, with an “ABC blackboard” indicating that the website results are appropriate for elementary school level, a graduation cap and diploma indicates high school level content, and Einstein indicates college level content. The “Difficulty Slider” controls the levels of content displayed on this page. The “Concept Cloud” graphically displays how a particular website is linked to other websites.

While the initial search results are displayed graphically, on the top of the graphics display is a “Journal” tag, which when opened, appears to be a word processor like display, with common word processor controls and features. This journal feature allows the user to compile or report on what is found in the search process. Anyone can use the journal feature, printing or emailing the journal contents, but registration is required in order to save a journal on the instaGrok server.

(Continued on page 6)



Content	<ul style="list-style-type: none"> <li>finds educational content on any topic</li> <li>utilizes patent-pending semantic algorithms to analyze search results in real time</li> <li>retrieves content in multiple formats (webpages, images, videos, and forums)</li> <li>filters out non-educational content (spam, news, shopping sites)</li> <li>eliminates profanity and pornography</li> <li>uses crowd sourcing to rate the quality of each search result and improve relevance</li> <li>allows users to flag inappropriate content for removal</li> </ul>
Interface	<ul style="list-style-type: none"> <li>displays search results according to difficulty (school, high school and college)</li> <li>annotates each search result with a table of contents and concept word cloud</li> <li>provides definitions and contextual examples of usage for important concepts</li> <li>enables filtering of results according to themes (broad) and concepts (detailed)</li> <li>highlights interesting content from search results to encourage user exploration</li> <li>provides source notes and leads to explanatory articles with mouse-overs</li> <li>visualizes concepts and their relationships in an interactive concept map</li> <li>dynamically updates concept map as the topic is refined</li> </ul>
Assessment & Curation	<ul style="list-style-type: none"> <li>tracks website visited, concepts covered, and other students' activities</li> <li>organizes search history by queries and topics covered</li> <li>generates multiple-choice quiz questions from the websites browsed by the user</li> <li>includes link to the original source for each question</li> <li>creates editable research journal ("grok") to be curated by the student</li> <li>populates groks with websites visited, concepts covered</li> <li>displays students' groks to teachers, who can review and add comments</li> </ul>



(Continued from page 5)

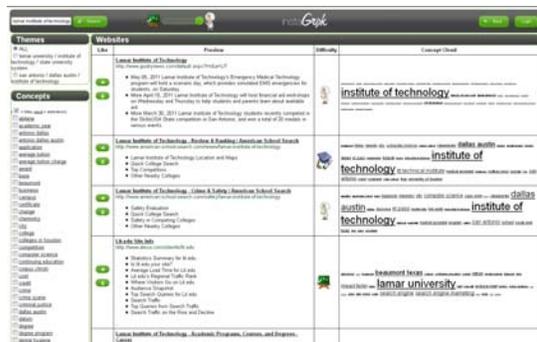
instaGrok offers four levels of service, two of which are totally free, and two of which are paid and intended for classroom or other academic use. The two free levels of service are “Anonymous” and “Registered” and differ in the number and level of services available. The free Anonymous level is available to everyone, and does not require any registration; instaGrok simple says, “Just use it!”. Anonymous users get the visual (graphical) interface, key facts, websites, quizzes, glossary, videos, and images, and can use the adjustable “Difficulty Slider”. The free “Registered User” level adds the ability to customize and share the graphical concept maps, and save search history and journals. In the headings on the right side of the page is an additional listing for registered users, “My Pins” which stores web links “pinned” (selected) from the websites displayed.

There are two paid versions of instaGrok which are intended for teachers and classroom use at all levels, and these paid versions are each \$35 per calendar year. These paid “Classroom” and “Edmodo” versions add a “Teacher Dashboard”, suppress any advertising (no ads appear on these paid versions), enhanced “safe content” displays, and priority technical support. The “Teacher Dashboard” allows the teacher to monitor the search results and progress of the students, view students’ journals, and evaluate quiz results from the quizzes integrated into the search function and displayed on the right side of any search results. The “Edmodo” level of registration integrates instaGrok into the established and popular Edmodo teacher - student collaboration software already used by many teachers.

instaGrok is an interesting alternative to the more traditional search engines, while it also integrates well into academic environments at all educational levels. The graphical interface takes some minimal experience to become familiar with it, but is easy to master. For those looking for a change from the major search engines, instaGrok is worthy of a try.

## Microcenter Clinics

See <http://microcenter.com/site/stores/instore-clinics.aspx> for the latest news on these free clinics.



Student	Time Age	Journal	Query	Sites Visited	Quiz
student1	0h		• phytonynthesis		1 / 1
	1d		• gravity	<ul style="list-style-type: none"> <li>NASA - Gravity Probe B: The Relativity Mission</li> <li>Blom Center - The universe as a story</li> <li>NASA - Gravity Probe B: The Relativity Mission</li> <li>Overview of the Force of Gravity for Ron Kurtus - Succeeded in Understanding Physics: School for Champions</li> <li>Force - Center of Gravity</li> <li>Blom Center - The universe as a story</li> </ul>	0 / 0
	1d		• dolphins		0 / 0
	1d		• zebras		0 / 0
	2d		• photo		0 / 0
student2	1d		• gravity • gravity earth	<ul style="list-style-type: none"> <li>Overview of the Force of Gravity for Ron Kurtus - Succeeded in Understanding Physics: School for Champions</li> <li>Nutrition accessible, white pants, socks, gravity, and other ways of saving life on Earth</li> </ul>	1 / 1
	1d		• graphs		0 / 0
	1d		• phytonynthesis		0 / 0
student3	2d		• physics	<ul style="list-style-type: none"> <li>Physics I Need to Know I PPS</li> <li>Physics I Need to Know I PPS</li> <li>Microphysics - Physics Biography</li> </ul>	0 / 0
	2d		• gravity	<ul style="list-style-type: none"> <li>SPSscience - Chemical and Quantum Gravity</li> <li>Gravity</li> <li>What is gravity?</li> </ul>	0 / 0
	13h		• graphs	<ul style="list-style-type: none"> <li>Active - Graphs videos, photos and facts - Graphs.competitions</li> </ul>	0 / 0

## Shopping Note

See the (box) of the Amazon banners on the PATACS.ORG home page? Click, order, and the club receives a 4% referral commission on purchases.

Also, see and click on the banner for O'Reilly at <http://patacs.org/vendrecpat.html>.

Discounts of hard copy (print) and ebooks (use Discount Code DSUG)

O'Reilly provides print books for club door prizes, and ebooks for our speakers.

## Windows Q & A April 2012

**Data Backup, System Restore, Disk Image, System Recovery, System Repair**

**By Mary Phillips, Secretary, Icon Users Group, MO**

**April 2011 issue, The ICON-Newsletter of the Interactive Computer Owners Network**

**www.iconusersgroup.com mary@iconusersgroup.org**

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Q1. What are the differences between Data Backup, System Restore, Disk Image, System Recovery Disc and System Repair Disk?

A1. Data Backup – Making copies of personal data files that may be used to restore the originals in case of data loss or simply to restore data from an earlier time. Backed up folders/files may include Documents, Pictures, Music, Videos, and/or Downloads – files it could be difficult or impossible to replace.

Options for backing up your data depends on the hardware you have available and the amount of information you need to back up – DVD's, flash drives, external hard drives or online storage in the "cloud". An external hard drive may provide the most flexibility because they are relatively inexpensive and can hold large amounts of information.

In Windows 7, in the Control Panel, click on Backup and Restore. In this window, you have four main options: Backup, Restore from the Backup, Create a System Image and Create a System Repair Disc.

- ✓ 1. Choose Set up Backup and click on the Backup Destination. In the picture below there are two choices: DVD RW Drive (D:) and My Book (K:). Click Next.
- ✓ 2. What do you want to back up? If you choose Let Windows choose, Window will back up data files saved in Libraries, on the desktop, and in default Windows folders.

It will also create a system image (described later) which can be used to restore your operating system AND data files in the case that your computer quits working.

Backup for my computer took approximately 2530 minutes, was 49 GB and was saved in a folder automatically Mary-PC. (See below)

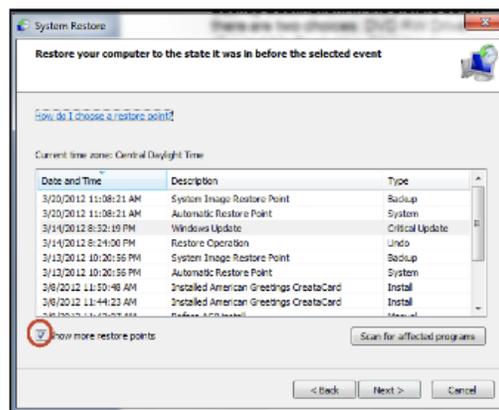
Backups are created in sets; the folder "set" in Mary-PC folder, is named Backup Files 2012-03-20 110818. It contains 8 compressed folders that can be opened and individual Files retrieved.

System Restore involves Windows system files, programs, registry settings, and most drivers. It does nothing with personal files, such as e-mail, documents, or photos.

Windows creates what are called Restore Points or "date and time specific snapshots" automatically unless for some specific reason the feature has been turned off. Users can also create restore points manually. The benefit of a Restore point is that it allows the user to "roll back" the system settings and installed programs to a date before a problem existed. Sometimes an update will create a problem or a piece of malware makes things go haywire. Those are good times to use System Restore. A system restore can also be undone if it doesn't fix a problem.

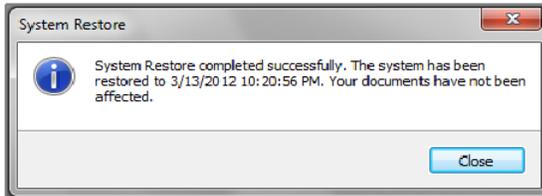
System Restore automatically recommends the most recent restore point created before a significant change, such as installing a program. However, you can and choose from a list of restore points if you check in the box beside Show more restore points (Win 7).

*(Continued on page 8)*



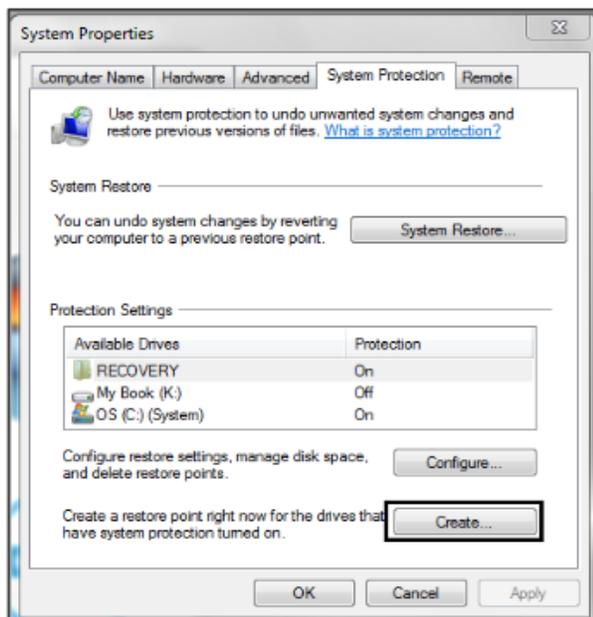
(Continued from page 7)

In Windows 7, go to the Control Panel, click on Backup and Restore, click on the link recover system settings to select a restore point. Then you'll see the window below.



To create a restore point manually in Windows 7, do the following:

- ✓ 1. In the Control Panel, click on System—System Protection. At the bottom of the window, click on the Create button.
- ✓ 2. Type a description, like “Before Sample program installation”. Click Create and System Protection creates the restore point.



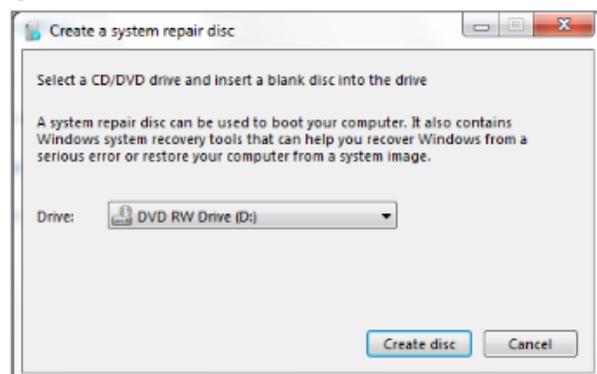
In Windows XP follow this path: All Programs—Accessories—System Tools—System Restore.

- ✓ 1. Choose whether you want to 1) Restore the computer to an earlier time, or 2) Create a restore point. Click Next.
- ✓ 2. If you chose Restore a computer to an earlier date, on the calendar, the dates in bold are the dates that restore points were created. Click on the preferred date. Click Next.
- ✓ 3. If you chose Create a Restore Point, you then will need to give it a description. Click Next and the restore point will be created.

**System Image**—A system image is an exact copy of a drive. By default, a system image includes the drives required for Windows to run. It also includes Windows and your system settings, programs, and files. You can use a system image to restore the contents of your computer if your hard disk or computer ever stops working. When you restore your computer from a system image, it's a complete restoration—you can't choose individual items to restore, and all of your current programs, system settings, and files are returned to the condition it was in when the System Image was created.

Although this type of backup includes your personal files, it is recommended that you back up your files regularly using Windows Backup so that you can restore individual files and folders as needed. When you set up Windows Backup, you can let Windows choose what to back up, which will include a system image, or you can select the items that you want to back up and whether you want to include a system image.

**You will need to create the System Repair Disc to use with the System Image disks.**



*(Continued from page 8)*

**System Recovery Discs** – Return your computer to its original purchased condition. The manufacturer most often provides an option to create these disks the first time you turn on your computer. When you click on Create System Recovery Discs, you need to have CDs or DVDs ready.

You will end up with a series of CDs (a bunch!) or several DVDs (mine took two DVDs.) These disks are created from a special partition on the hard drive and usually can be created only once. However, the manufacturers are happy to sell you a set of Recovery disks or the technology store where you buy your computer will offer to create the recovery disks for you.

On the good side, System Recovery Discs come in handy in an emergency. Just feed your PC the System Recovery Discs, and your PC regresses into the same machine you originally brought home from the store.

On the bad side, however, you'll lose every program, photo, and file you've stored on that PC since you bought it. System Recovery Discs only care about returning your PC to its original, first purchased, condition. Everything else is swept away. So you'd need to reinstall and get updates for every program added since you bought the computer.

**System Repair Disc** – In the Backup and Restore window of Windows 7, Microsoft built a System Repair Disc option that works quite differently from the PC manufacturer's System Recovery Discs. (Creating the System Repair Disc takes only a few minutes and it only takes up 142MB of space so a CD will work fine. Label the CD as Repair Disc Windows 7 32 or 64 bit.)

When your PC no longer runs properly, insert Windows 7's System Repair Disc into your PC, and press the On switch. Instead of returning your PC to its original condition, the System Repair Disc offers several menu options: Startup Repair. This examines Windows 7's most integral files, then repairs any missing or damaged files that may be keeping Windows 7 from starting.

**System Restore**. Just like the normal System Restore option, this restores your PC's system files to an earlier point in time, hopefully fixing any recently developed problems. It doesn't affect your personal files, like e-mail, documents, or photos. There's one key differ-

ence between this version of System Restore, though: When run from the System Repair Disc menu, System Restore doesn't have an undo option. (However, you can run System Restore again and choose a different restore point, if one exists.)

**System Image Recovery**. If you've created a "System Image" in Windows 7's backup options, this option returns your PC to the condition it was in when you made the System Image backup. It's truly a lifesaver, but only if you create System Image disks regularly.

**Windows Memory Diagnostic Tool**. Designed to ferret out hardware problems, this examines your PC's memory for errors.

**Command Prompt**. This lets techies dig deep into Windows' internal crevices. It's designed for people comfortable typing in commands, not moving around a mouse.

In short, the System Recovery discs return your PC to the state it was when first purchased, scrapping all your data while along the way. The System Repair disc, by contrast, offers tools to help bring your ailing PC back to life, keeping all your valuable files safe.

When in major trouble first try your System Repair, as it may solve your problem. Only use the System Recovery Discs as a last resort, as they wipe out everything you've created since buying your PC.

What should I do about System Restore if I get a virus? If you know that your system is infected by a virus, you should temporarily turn off System Restore. Otherwise, the virus could be saved along with other system files in a restore point and reintroduced to your system during a restore operation at a later date.

To turn off System Restore in both Windows 7 and XP, press and hold the Windows key and press the Break key to bring up the System Properties dialog box. Then, click on the System Restore tab, select the Turn Off System Restore check box, and click OK. In

Win 7, as soon as you do, you'll see a confirmation dialog box warning you that turning off System Restore will delete all existing restore points. Click Yes to continue.

## Windows 8 - The Basics

By Howard Lewis, Program Coordinator, Midland Computer Club, MI  
 January 2013 issue, Bits and Bytes Newsletter  
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With Microsoft's release of Windows 8, there are a number of significant changes in the interface. Many people say that this is the biggest difference in the Windows interface since the release of Windows 95 in 1995 (which is forever in the world of technology). Part of the rationale for the change in the interface is to make a consistent interface between PCs, laptops, tablets, smartphones, etc. With this article, I will introduce some of the major concepts in the Windows 8 interface and will delve into some of the basic usage issues.

Knowing that many of the current applications are desktop specific, Microsoft has two different types of interfaces built into Windows 8. The primary interface is the Start screen which is shown when Windows 8 is first started (Figure 1).

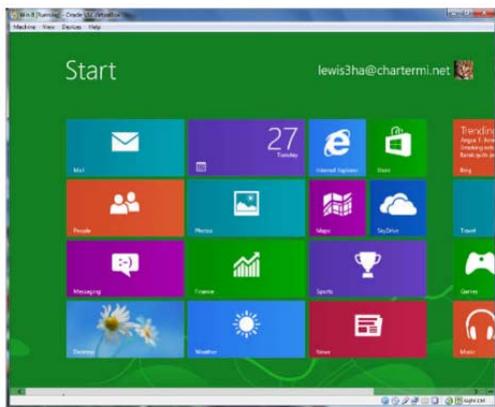


Figure 1 - Windows 8 Start Screen

(figure1)

The Start screen contains Tiles which will launch Windows 8 specific apps. One of the unique things about these tiles is that they can be "live". In other words, if you have a weather app running in Windows 8, the current temperature for a specific location will be displayed live. The same will be true of stock, sports scores, news, etc. The interface is designed for a touch interface, but can easily be navigated with a

keyboard and mouse. The second interface is the Desktop screen (Figure 2). The Desktop screen looks (and is) very much like the very familiar Windows 7 interface. The one major difference is that the Start menu is missing (replaced by the Start screen).



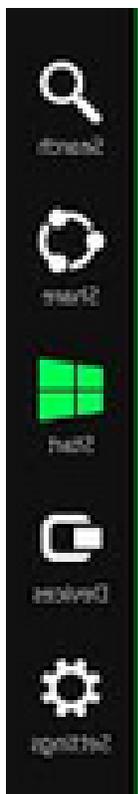
Figure 2 - Windows 8 Desktop Screen

(figure2)

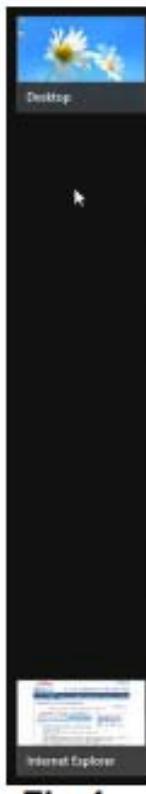
Almost all applications that have run under Windows versions since Windows XP will run in this mode. Most current Windows users will feel very much like they are working in Windows XP, Vista, or Windows 7. At this point, I probably spend 80% of my time in the Desktop. The default Start screen tiles include a tile (lower left Tile in Figure 1) to directly access Desktop mode for easy access. Any Windows applications not designed for Windows 8 will automatically run in Desktop mode. The major changes (and focus of this article) is the Start screen.

Those who are familiar with smartphones and using a touch device will probably have no problem navigating the Start screen interface. The problem is for those of us who are desktop- or laptop-centric. If you are using a mouse, the key focal points should be the corners of the screen.

Both the upper-right and lower-right corners bring up what is called the Charms bar (Figure 3) and it will be located on the right side of the screen. This bar includes Search, Share, Start, Devices, and Settings.



(figure3: Charms Bar)



(fig4 App Switcher)

All of these things were incorporated into the Start menu on previous versions of Windows. The Charms bar is available from both the Start screen and the Desktop.

The upper-left corner brings up the App Switcher bar (Figure 4). This bar will be located on the left side of the screen. The App Switcher displays all apps that are currently running in either the Start screen or the Desktop and makes it easy to switch between various apps. The lower-left corner will allow you to switch between the Desktop and Start screens. The App Switcher is only available from the Start screen.

When you are on the Start screen or in a Windows 8 app, there are two other bars of interest, one at the top of the screen and one at the bottom. One or both of these bars will appear when you right-click in an app or on a tile. Both of these bars are app/Tile specific, but in certain apps the top bar is called the Places bar (Figure 5) and the bottom one is referred to as the App Menu (Figure 6).

The Places bar allows you to specify information specific to an app, whereas the App Menu allows you to specify certain properties for a tile or app. All of these bars are dynamic and change depending on the focal point of Window 8.

A couple of other important points that have perplexed various users. Windows 8 was originally designed for the computer to not normally Shutdown and therefore would not be turned off. Most modern devices (tables, smartphones, etc.) run using very low power processors, so they can run for 10+ hours without being connected to power, plus they also go to sleep very easily to conserve battery. Many people from the desktop/laptop world are used to turning their computers off periodically and will want to continue to do Shutdowns. To accomplish this, simply go to the Charms bar, Settings, Power. From here you can shut down or restart the computer.

Another frequent question is how to close a Windows 8 app (Desktop apps close in the normal manner by clicking the "x" in the upper-right corner of the window). Most Windows 8 apps are designed to run in the background at all times, much like an iPad, etc. Since Windows 8 apps don't have an "x" in the upper-right corner to close the app, you close the app by taking the cursor to the top edge of the screen where the cursor will change to a hand. Now click and drag to the bottom of the screen. This will close the app.

In future articles, I will cover various shortcuts and tips for making Windows 8 even easier.



Figure 5 - Places

(figure 5)



Figure 6 - App Menu

(figure 6)

## Create Safe Passwords

By Sandy Berger, CompuKISS [www.compukiss.com](http://www.compukiss.com) [sandy \(at\) compukiss.com](mailto:sandy@compukiss.com)

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Using passwords correctly is one of the best ways to protect yourself and your computer. If you use the same password for everything, read this article and make some changes as soon as possible.

Just about everyone can relate to the frustration of trying to make an online purchase or to access information at a website and not being able to remember your user name and password. If you are over 50 and have that problem, you may attribute it to senior memory loss. That, however, is not really the problem. Even younger folks forget passwords. It is because so many websites and web services require passwords. When written down, my list of passwords spans 12 sheets of double-column letter-sized paper.

Obviously if you use a different password for each website, you will have pages of passwords, as well. Yet, if you're like many others, you may use the same password for all of your websites. A recent Washington Post survey show that 30% of respondents said they use the same password for different websites including banking, social networking and shopping sites. This is a very risky practice.

We are constantly bombarded with news about stolen passwords. Recently 6 million passwords were stolen from LinkedIn. Recently more than 400,000 email addresses and passwords were stolen from Yahoo and posted online. It is obvious that if people use the same password at numerous websites, it was only time before hackers would use those passwords to try to access different websites.

BestBuy recently confirmed that hackers are using credentials stolen from other sites to make purchases at their online retail site. The same thing is happening at other retail and banking sites.

So the first rule of thumb is to use unique passwords for any e-commerce or banking websites. The second rule is to never use commonly used passwords. What are the most common? Although different research on this produces different results, several passwords are always in the top 25 most common. If you think you are being unique by choosing the word "password", you are wrong. It is usually the most commonly used password choice. This is often followed by 1234,

123456, 1234567, 1234567, 111111, 123abc, and query. Anyone who uses "letmein" as a password has many like-minded friends. It is usually on the top password lists along with other simple words like baseball, football, michael, jennifer, and monkey. Seems like everyone is a dreamer as indicated by other popular passwords like harley, mustang, master, and superman.

It is also a known fact that hackers can use words from a dictionary to perform an automated attack to "guess" your password. So you don't want to use plain words, even in combination. Hackers now also use rainbow tables which are alphanumeric combinations of words and numbers. They also have common substitutions included. So using a zero instead of the letter "o" or an eight instead of the letter "B" is not always enough to keep your passwords safe. Some of these tables also have symbols, but using a password with one or more symbols is still much safer than one without any symbols.

A really safe password will use a combination of uppercase and lowercase letters, numbers, and symbols that do not spell out any words. The length of the password is also very important. To give you an example of that, let's consider a password that includes letters and numbers, but no upper and lower case combinations and no symbols. If the password has six characters there are 2.25 billion possible combinations. A ten character password will have 3.76 quadrillion possible combinations. Every time you add a character, you make the password exponentially more difficult to break.

If all this makes your head spin, remember that you can use simple passwords at websites that require passwords, but have none of your personal information. These sites usually also require an email address. So if you open a Gmail or other email account and use that specific email address only for this type of website, you don't have to worry about compromising your security.

You should, however, be very careful with passwords for banking and e-commerce websites where your personal information and/or credit card numbers are stored. Use strong passwords for these sites and have a different password for each site.

## Windows 7 Live

By Dick Maybach, Member, Brookdale Computer Users' Group, NJ

January 2013 issue [www.bcug.com](http://www.bcug.com) n2nd (at) charter.net

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Over the years, Microsoft has named several offerings "Windows Live," and the name again returned with Windows 7. However, much of it is available as a no-cost download, rather than being bundled with the installation DVD. To confuse matters further, some PCs are delivered with all or a portion of it installed. Despite this rather off-hand treatment of it, Windows Live can be a valuable addition, one that you may use every day. In this article, I hope to introduce you to what it can offer, but like any complex service, making effective use of it will probably require some study.

Unfortunately, because the service is changing, most of the books and Internet articles on it are out of date. They can be helpful, but you must read with care.

The programs available in a package called Windows Live Essentials and include:

- *Mail* – an e-mail client that replaces Vista's *Windows Mail* and *Outlook Express* from earlier versions,
- *Photo Gallery* – a much improved version of Vista's Photo Gallery, that lets you edit, organize, and publish your pictures,
- *Movie Maker* – provides similar capabilities for movies,
- *Messenger* – a descendant of MSN Messenger that provides access to instant messaging, chat, and social media networks such as Facebook,
- *Family Safety* – allows parents to limit their children's Internet access, and
- *Writer* – lets you create and manage blogs.

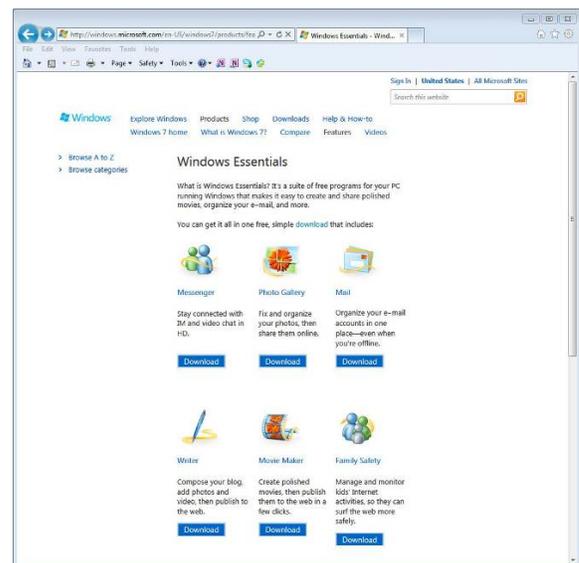
The cloud services, which become available when you sign up for a *Windows Live* account, are:

- *Sky Drive* – which provides a generous seven Gbytes of storage without charge, for your own use or to share with others and

- *Wordpress* – which is a blogging host that replaces Spaces, a similar service earlier provided by Microsoft.

Two other Microsoft services, *Skype* video conferencing and *Hotmail*, are related to these, but so far offered separately, although both can easily be accessed while using Messenger.

You can download the programs from <http://windows.microsoft.com/en-US/windows7/products/features/windows-essentials>. Note on the screen-shot below that you can download the individual programs or everything at once.



You probably already have a Windows Live account. If not, or to make changes, go to <https://account.live.com>.

Set up *SkyDrive* by tapping the Windows key, typing "sky", and selecting Microsoft SkyDrive. Follow the instructions and you will find the new directory SkyDrive in your home folder. Anything you place in it

(Continued on page 14)

(Continued from page 13)

will be available to your other PCs that also have SkyDrive installed. You may see references to Mesh in some documentation, a service that allowed you to synchronize folders among PCs, but this was discontinued in the 2012 version of Essentials. Instead, just place any folders to be synchronized in your SkyDrive folder. However, if your PC came with Essentials installed, you may find Mesh in it. The first time you run SkyDrive on a PC, it will take you to the Microsoft Live Web page (<https://account.live.co>), where you will log into your account. After this, running SkyDrive will just open the Directory, and you will have to go to the SkyDrive Web page (<https://skydrive.live.com>) to make changes in your account. Note that the files in the SkyDrive directory reside on every PC, as well as in the cloud. If you aren't connected to the Internet, you still can access them, but they won't be synchronized until you connect. To share files and directories with others, go to the SkyDrive Web page, right-click on the file or directory, select *Share*, and enter an e-mail address. You will be led through composing an e-mail message to them that will include a link to the item or items to be shared. By default, the *Recipients can edit* option is selected, which allows those recipients who have a Microsoft account to be able to sign in and edit the file or folder. If you are just sharing photos, you probably should disable this option. A second option requires your recipients to sign in with a Microsoft account before they can view the file or folder. This helps prevent your recipients from giving third parties access to your files or folders by forwarding the link to them. The choice in selecting this option depends on trade-offs among privacy, trust, and how much bother you want to impose of your recipients.

Start *Messenger* by tapping the *Windows* key, typing "mes", and select *Windows Live Messenger*. It provides access to social networks such as Facebook and LinkedIn and provides for the exchange of instant messages. To make it useful you must provide the log-in information for your social networks and enter the contact information of those with whom you want to communicate. There is a trick to using Messenger – the menu bar is hidden by default; tap the *Alt* key to make it visible.

Start *Mail* by tapping the *Windows* key, typing "mail", and selecting *Windows Live Mail*. This client program can provide access to any e-mail provider that allows POP access. (Most do.) I find it much more convenient than logging in to each account separately with a browser, since the messages from all your accounts show up in a single *Live Mail* window.

*Windows Live Writer* is a blog editor that works with many blog services. If you don't already have a blog account, the program will lead you through the steps to create one on *Wordpress*. Then, just start *Writer* and begin composing.

*Windows Live Family Safety* lets you protect your family by controlling Internet access and computer use. It allows you to block Websites, manage contact lists, limit computer time, and get reports on activity. For it to be effective, each user must have their own account and you must disable the guest account. Properly setting it up will take some time and will probably cause some frustration for your family. An alternate approach is to keep your PC in an area of the house where you can see the screen.

I discussed *Photo Gallery* and (very briefly) *Movie Maker* in my December 2012 BCUG Bytes article, available at <http://www.bcug.com>.

The functions of these programs aren't unique, as there are many alternatives. The Windows Live Essentials programs advantages are that they are free, easy to use, and are updated along with your other Microsoft software. A big plus is that Microsoft provides seven Gbytes of free cloud storage, a larger amount than the two to five Gbytes available with most other free services. A big disadvantage is their poor documentation. You will probably have to do some experimenting and perhaps some Web searches to make good use of them, especially since much of the available material describes earlier versions with different features.



## Flag Day June 14

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**Please send your change of address to the club address as soon as possible to avoid missing issues.**

***Thank You!***

## Upcoming Meetings

May - 35th anniversary of the club's founding in 1978.

Arlington General meeting and Technology & PC Help Desk meetings will return to Carlin Hall in June. Board meeting to Carlin Hall in July. (June BOD meeting location TBA)

### **OPCUG & PATACS Meeting, June 15, 2013**

Abandon the Good Ship Windows 8?

Presented by Lorrin Garson

Microsoft Windows 8 has become a controversial operating system, largely because of its new user interface. Windows 8 focuses on the emergence of an operating system suitable for use on a wide variety of hardware platforms—including desktop systems, laptops, tablets, etc. Is Windows 8 a foundering vessel? Is this a propitious time to consider migrating from Windows to another environment? What alternatives are there? What are the pros and cons of operating systems commonly used on home computers? What factors should be considered in switching from one computing realm to another? How much effort and anxiety is there to change?

### **OPCUG & PATACS Meeting, July 20, 2013**

Using the Internet for Genealogy Research, Presented by Ken Maniha

## TEMP-RETURN SERVICE REQUESTED

### **Arlington Meetings**

Returning to Carlin Hall in June! —  
(check the PATACS.ORG web site for news!)

Meetings are at Carlin Hall, 5711 S. 4th St.,  
Arlington VA: East off of Carlin Springs Rd, just  
south of Arlington Blvd/Route 50. See website for  
directions to post-meeting pizza gathering.

### **General Meeting**

1st Wednesday (6/5) 7pm

### **Technology and PC Help Desk (SIG)**

4th Wednesday (6/26) 7pm

### **Board of Directors**

3rd Monday (6/17) 7pm LOCATION TBA

### **Fairfax Meetings**

(with OLLI PC User Group)

Osher Lifelong Learning Institute (OLLI)  
4210 Roberts Road, Fairfax VA 22032  
<http://www.patacs.org/fairfaxmeetings.html>

### **General Meeting**

3rd Saturday (6/15) 12:30pm

### **Online-Only Webinar**

2nd Wednesday (6/12) 7-9pm  
<http://www.patacs.org/webinarpat.html>