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The Digital

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Twin Cities

PC USER GROUP

NEWSLETTER

Minneapolis & St. Paul, Minnesota USA • Vol. 32 No. 8 • May 2012

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

May 2012

**General Meeting:
Tuesday, May 8, 7PM**

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

[FBI: July 9 Hundreds of Thousands of Computers Will Lose Internet..... 3](#)

[Nibblers 5](#)

[Is Google Compromising Our Privacy? 7](#)

[Book Review: Going Pro. 8](#)

[TC/PC Calendar. 9](#)

[Streaming Media..... 10](#)

[What the Heck are Hiberfil and Pagefile?. 11](#)

[The Trouble with Terabytes..... 12](#)

General Meeting

**Tuesday, May 8, 2012
at 7:00 PM**

Microsoft Presents:

Windows 8 Preview and Windows Phone

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

Windows 8, which is under development, will be 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. Is Windows 8 overly ambitious to use the same operating system to cover all these platforms? Microsoft will also discuss their latest software for smart phones, Windows Phone 7. Come to the next general meeting, bring a friend and see the Preview being done for TCPC by the helpful staff of the Microsoft Store at the Mall of America. ☒

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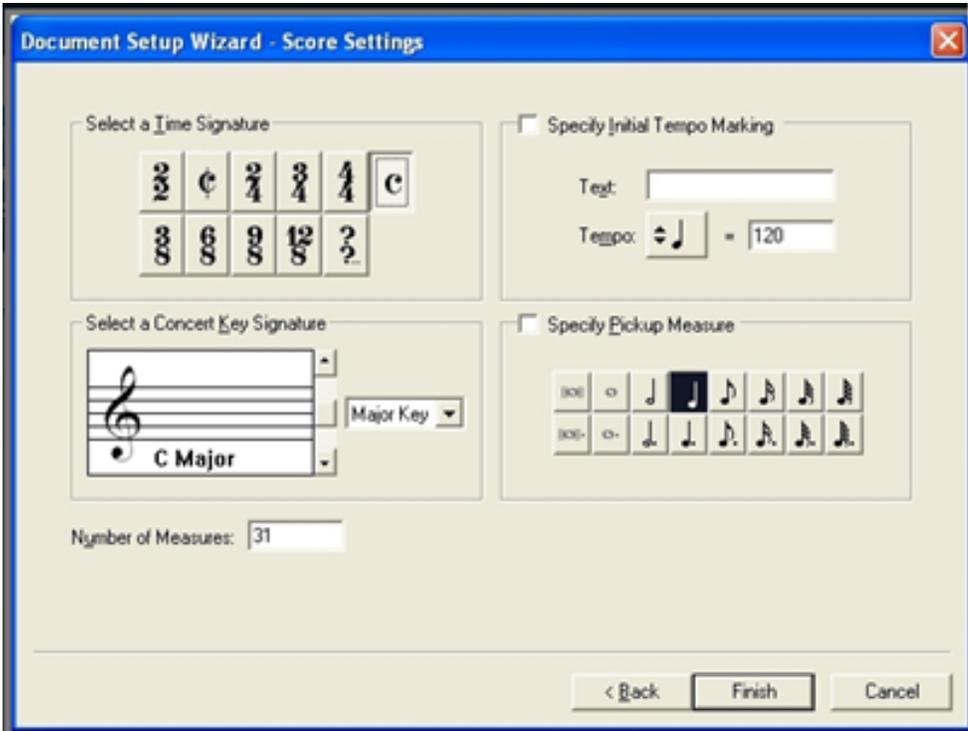
Application form inside back cover

Last Month's Meeting: Irv Elliott—Finale for Music Composition

By Sharon Walbran, SQWalbran (at) yahoo.com

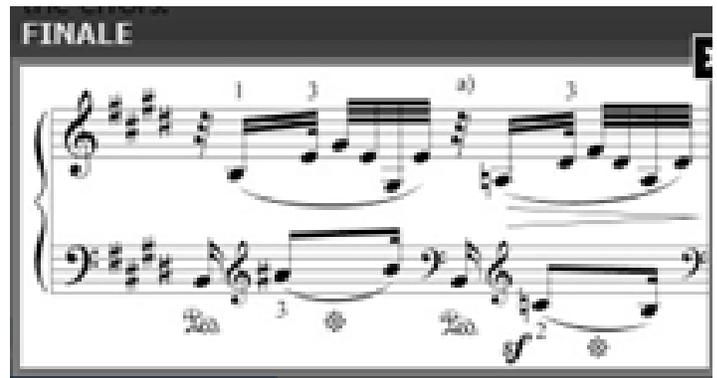
Irv Elliott showed us how he has composed music for a variety of different instruments using a program called Finale. Finale is a program used by professional musicians and composers to create

music and used by the leading music schools to teach students to compose music. Using Finale, you can select the key and the tempo and start putting together music using a MIDI keyboard or other input device. The Finale program “writes” the music using standard staff notation and will add capo chords. It has replaced the staff paper and pencil and eraser as the way to compose music in any genre. As you complete parts of the composition you can play it back and then make changes. This program is not for the rank beginner. You have to have some background in music to use



it. Also it is not for the cheapskate. Prices I saw were \$350 for the academic version and \$600 for the professional version, with a free 30-day trial available. But if you want to join the ranks of musicians like Wynton Marsalis this is the program for you. Thanks, Irv, for showing us a side of computer usage that may be totally new to our members. And thanks for the free entertainment! Who knew we had such talent in our midst?

As an added bonus, Jim Grotz and Jack Underleider demonstrated how to do some deep data mining on the web using search engines. Jim has been busy gathering data on the health care industry to put together evidence of fraud and Jack has been a great resource for how to use the web to get the data he needs. Among some great tips, he showed us how to look for patterns in the naming of data files on websites. For example, if you find links to data for each year from 2007 to 2011 but don't see data for earlier years you can look at the link for each year's data to see a pattern, such as 2007stats.pdf, then, if you are looking for data from 2003 you can try editing the address link to be 2003stats.pdf. One of the sources he uses for historic documents is www.archive.org. Thanks, Jim and Jack, for giving us real-world tools for using the computer. ☐



FBI: Hundreds of Thousands of Computers May Lose Internet on July 9

By Ira Wilsker

WEBSITES:

http://www.fbi.gov/news/stories/2011/november/malware_110911
<https://forms.fbi.gov/check-to-see-if-your-computer-is-using-rogue-DNS>
<http://www.dcwg.org>
<http://www.dcwg.org/detect> **DETECT IF COMPUTER IS AT RISK**
<http://news.yahoo.com/hundreds-thousands-may-lose-internet-july-181324701--finance.html>
<https://www.techsupportalert.com/content/how-check-if-your-computer-has-been-infected-wide-spread-dns-hack.htm>
<http://www.techsupportalert.com/content/how-change-dns-server.htm>
<http://www.techsupportalert.com/content/how-find-best-dns-server.htm>
http://www.fbi.gov/news/stories/2011/november/malware_110911/DNS-changer-malware.pdf
https://en.wikipedia.org/wiki/Domain_Name_System
<https://code.google.com/p/namebench> **FIND FASTEST FREE DNS**
<https://use.opendns.com> **HOW TO RESET DNS ON ANY OPERATING SYSTEM**
<https://developers.google.com/speed/public-dns/docs/using> **HOW TO RESET DNS ON ANY OPERATING SYSTEM**

In case you have not heard the news, on July 9, 2012, hundreds of thousands of computers will lose access to the internet. This is not some hoax or urban legend, but a fact announced by the FBI. Following the arrest of an Estonian hacker group which had made millions of dollars from a fraud scheme that infected millions of computers worldwide with a "DNS Changer" malware that redirected legitimate commercial transactions to a series of scam websites. These cyber crooks created a sham company called "Rove Digital" to receive the revenues of the scam. DNS is an acronym for a Domain Name Server, which serves somewhat like an internet phone book, which converts web addresses, also known as domain names (such as www.theexaminer.com), into an IP (Internet Protocol) address ([theexaminer.com](http://www.theexaminer.com) is really 50.116.108.205). By changing the Domain Name Server accessed by an infected computer, it is like replacing an authentic phonebook with a purloined one that has the correct names, but intentionally different phone numbers. Dialing a correct phone number will intentionally connect you to someone who pretends to be the person whom you called, and that person is a crook; this is what the DNS Changer malware does to an infected computer. As many as 500,000 American computers may have been infected by this DNS Changer malware, as were an estimated 4 million other computers around the world. In addition to modifying the computer's DNS, the malware also made the infected computers vulnerable to a variety of other malware. The rogue servers were hosted in Estonia, New York, and Chicago.

This scam was very lucrative to the Estonian hackers who made an estimated \$14 million in illicit fees. According to the FBI, this cyber-gang started infecting computers with the DNS Changer malware in 2007, successfully infiltrating millions of computers owned by individuals, businesses, schools and colleges, and government agencies, including NASA. The malware was able to penetrate many of the antivirus products in use, and prevented the installed antivirus and operating system software from updating, which would have likely enabled the antivirus software to detect and kill the DNS Changer. Since the security software would not be updated, there would be no protection from the thousands of new viruses, worms, and Trojans that appear every day, which allowed those computers to become infected with countless additional malware programs and other threats. According to the FBI, "They were organized and operating as a traditional business but profiting illegally as the result of the malware. There was a level of complexity here that we haven't seen before." Since DNS Changer redirected the unsuspecting victims to rogue internet servers, the crooks were able to manipulate the destination of the web connections. In one example of how this scam worked, the FBI said, "When users of infected computers clicked on the link for the official website of iTunes, for example, they were instead taken to a website for a business unaffiliated with Apple Inc. that purported to sell Apple software. Not only did the cyber thieves make money from these schemes, they deprived legitimate website operators and advertisers of substantial revenue." The FBI announced the arrest of the "Rove Digital" Estonian hackers on November 9, 2011.

Since there are likely millions of computers still infected with the DNS Changer malware, the sudden shutdown of those rogue servers would have prevented the victims from accessing many of their favorite websites. In order to allow the infected computers to continue to access the internet, but actually reach their intended websites, the FBI arranged for the rogue servers to be temporarily replaced with legitimate servers, such that the victims' internet access is not disrupted. It is these temporary replacement internet servers that will be shut down on July 9, meaning that anyone who still has a computer infected with DNS Changer as of that date may lose internet access.

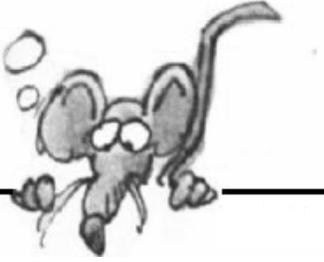
In order for users around the world to determine if their computers are infected with the DNS Changer malware, a consortium of academic, governmental, and private organizations created the DNS Changer Working Group (DCWG), which initially administered the servers that replaced the illicit Rove Digital servers. The DCWG consists of representatives from Georgia Tech, Internet Systems Consortium, Mandiant, National Cyber-Forensics and Training Alliance, Neustar, Spamhaus, Team Cymru, Trend Micro, and the University of Alabama at Birmingham. The website for the DCWG, www.dcwq.org, is hosted at the Georgia Institute of Technology, under a research grant provided by the Office of Naval Research. The DCWG provides a quick method for users to determine whether or not their computers are infected with the DNS Changer malware. According to the DCWG, there are still 350,000 computers infected by the DNS Changer malware that are using the clean servers maintained by the DCWG which replaced the Rove Digital servers.

In order to quickly and safely test if a computer has been hijacked by the DNS Changer malware, the DCWG has created 11 international servers which will report back to the user if his computer is indeed hijacked by DNS Changer; in the U.S. the link for this test is www.dns-ok.us. The test can be run from any browser, and nothing is downloaded or installed on the computer during the test; it is simply a test to see if the computer is connecting to a correct IP address. The results are almost instantaneous, with a "DNS Changer Check Up" result displayed in an IP graphic; if it is green, the user is possibly free of the DNS Changer malware, but the green graphic does not certainly prove that the computer is clean. When the green display appears, it also says, "Your computer appears to be looking up IP addresses correctly! Had your computer been infected with DNS changer malware you would have seen a red background. Please note, however, that if your ISP is redirecting DNS traffic for its customers you would have reached this site even though you are infected." If the display is red, then it is likely that the computer is one of the many that have been compromised by DNS Changer.

For the computer that is "red", it will be necessary to clean the DNS Changer malware and then reset your DNS. Most of the current anti-spyware products such as the free versions of SuperAntiSpyware (www.superantispyware.com) and the free version of MalwareBytes (malwarebytes.org/products/malwarebytes_free) can detect and remove the DNS Changer malware, but it will still be necessary to reset your DNS in order for the internet to properly function on your computer.

Almost all ISP's (Internet Service Providers) offer telephone support that will help the user reset the DNS to the ISP's preferred DNS server. Gizmo's TechSupportAlert has instructions and links on how to find the best DNS server for you (techsupportalert.com/content/how-find-best-dns-server.htm), as well as detailed instructions on how to change or reset the DNS settings on your computer (techsupportalert.com/content/how-change-dns-server.htm).

Google has a free DNS utility "Namebench" at code.google.com/p/namebench that can help the user find the fastest free DNS, with instructions on how to change your DNS at developers.google.com/speed/public-dns/docs/using. Another excellent DNS service, OpenDNS, has simple but detailed instructions on how to change your DNS at use.opendns.com. If you use Google's Namebench to find the best combination of DNS for your computer and connection, you can use those DNS on your computer by following the instructions given on Google or OpenDNS on how to change your DNS settings; while the default DNS listed on the Google and OpenDNS instructions are excellent and totally adequate, there may be some performance improvement by using the DNS recommended by Namebench. You can always change them again later. If you enjoy or depend on the internet, it is imperative that you go to www.dcwq.org/detect and see if your browser is connecting to a legitimate DNS. If the results are "green" you are likely (but not certainly) safe from the DNS Changer Trojan, and can probably continue to use the internet after July 9. If you are "red" you must clean your computer of the DNS Changer malware and reset your DNS as instructed above. Regardless of "green" or "red" results, it is always a good practice to periodically scan your computer with a good third-party utility such as SuperAntiSpyware or MalwareBytes to verify that nothing slipped by your security software. Failure to check your computer prior to July 9 may mean no internet for you on July 10.  [Go to Page 1](#)



NIBBLERS

By Jeannine Sloan

Find Out More about Ebook Formats And DRM

This is a great resource if you have or are planning to use ebook readers and/or ebook reader apps! An introduction and FAQ for this blog is here: <http://apprenticealf.wordpress.com/>
Dedmed ebooks should not be uploaded to open servers, torrents, or other methods of mass distribution.

- This post explains about the various eBook formats, DRM and you – a guide for the perplexed. <http://tinyurl.com/3wve2et>
- This post talks about Windows specific tools and issues surrounding eBook DRM removal. <http://tinyurl.com/423njde>
- This post talks about a nice drag and drop all-in-one Mac OS X specific tool. <http://tinyurl.com/4tqlfxb>
- This post has links to downloading a zip archive of ****all**** of the tools, as well as a comments area for getting your problems/questions answered. <http://tinyurl.com/4cu5e3c>

Recommended by Jim Matson

Formatting

Formatting in a text document includes things like font and size, line spacing and additional space between paragraphs. Other things are included in the 'formatting' category but this article will be limited to those four.

In Word 2010 the Home tab contains groups called 'Font' and 'Paragraph'. These groups contain tools icons for the most often changed attributes of fonts and paragraphs. However, there is a dialog box for each available by left-clicking on the little arrow icon in the bottom right corner of each group.

By accessing the dialog boxes formatting can be fine-tuned to include automatic space between paragraphs, increased or decreased line spacing with paragraphs, strike through or double underlining, etc.

In the bottom left corner of the dialogs is a button labeled 'Default' or 'Set as Default'. Left-click this to make these changes permanent to the underlying template.

Image Wrangling In Word 2010

Choose any option in the Wrap Text list *except* In Line with Text to make your picture a floating image that you can keep anchored on the page. Read complete article with illustrations here:

<http://tinyurl.com/d99qktg>

To do this

Copy formatting from selected text.
Apply copied formatting to selected text.
Single-space lines.
Double-space lines.
Set 1.5-line spacing.
Add or remove a line space preceding

Press

CTRL+SHIFT+C
CTRL+SHIFT+V
CTRL+1
CTRL+2
CTRL+5
CTRL+0(zero)

Security is Taken Seriously

Here is just one example of the extremes financial institutions and corporations go to to ensure the security of their transactions. It makes for interesting reading.

<http://www.usatoday.com/tech/news/story/2012-03-25/visa-data-center/53774904/1>

Microsoft Office Ribbon: Search Commands:

Although many users consider the Ribbon easier to navigate than the menus of previous versions, anyone can find themselves searching in vain for a particular feature from time to time. Enter Search Commands, which is a plug-in for Office 2007 and Office 2010. The free software lets you search for those features by keyword. Visit <http://office.microsoft.com/en-us/office-labs> to download it.

From Smart computing magazine, Contributed by Linda Nelson

Add the Date

Hit Alt-Shift-D (or Control-Shift -D on a Mac) to add the date automatically in a Word document.

Conform Fonts

Get the font size and style of text that's been pasted into a document from another source to match the surrounding text of the existing document. Here's how: Highlight the non-conforming text then hit Control-Spacebar.

Change Case

Instead of retyping everything to change from lower case to Title Case or to UPPERCASE, just highlight the text you want to change, click the down arrow on the case button, and then choose which case you want.

Sometimes Two Browsers Are Better Than One

Sometimes the best thing to do for managing tabs is to simply use two web browsers, or two separate application windows of the same browser.

To launch another browser app window right now, use the shortcut keystroke CTRL+N.

Using Two Separate Browser Apps Can Help Protect Your Privacy

For example let IE's only site loaded be Facebook, then use your other browser of choice for everything else. Whatever Facebook does in IE stays there and won't place any cookies or otherwise in the other browser you're using.

Excerpted from PCMech ezine

Thanks, Jeannine.

[Go to Page 1](#)



Is Google Compromising Our Privacy?

By Sandy Berger, CompuKISS, www.compukiss.com , sandy (at) compukiss.com

Recently Google announced consolidating the privacy policies for all of its services. These include about 60 different services like the popular Google search engine, the Google-owned YouTube video website, Gmail, and the Android operating software for mobile phones. Because of the scope and popularity of these services, this move got the attention of everyone from state and federal representatives to advocacy and security groups. But more than anything else, it left consumers with a throbbing headache as they pondered how this would affect them and if they should be concerned enough to stop using Google services.

Data-protection agencies and lawmakers around the globe requested Google delay this implementation so they could review the new procedure but Google did not comply. The new privacy policy went into effect March 1, 2012.

Although Google states that this new privacy policy is aimed at making Google services easier to use, it doesn't take a rocket scientist to figure out that their primary aim is to target users with advertising that is relevant to their interests, making Google's ads more valuable. The aggregation of information from different areas enables Google to target the interests of their users more accurately. For instance, if you search for gardening information with the Google search engine, play videos of how to plant seeds on YouTube, and get brochures of the latest horticultural offerings in Gmail, Burpee and other seed and plant companies may be willing to pay Google more to blanket you with their ads.

If you are interested in gardening you might actually be happy to see ads for gardening tools and seeds, but this is not really the point. The point is that we are putting private information about ourselves in the hands of others. The problem lies in two areas.

First are the unintentional consequences. As we recently saw in the proposed SOPA and PIPA legislation, even acts made with the best intention can backfire creating more harm than good. When you add that to the fact that technology is moving at the speed of light, we are becoming more and more data-dependent, and new ways to manipulate data are being invented every day, it gets a little scary.

Second, and possibly even more disturbing, is that power and money can corrupt even the most honorable people and companies. History tells this story over and over again. Google's informal corporate motto is "Don't be evil." Yet it was recently found that Google was circumventing the users' privacy settings in the Safari web browser. Even though the Safari browser was set to refuse tracking cookies, Google was adding hidden code that allowed it to implement browser cookies from third-party ad sites that Google operates. When this was made public, Google stopped the practice. But, other devious practices could be revealed or be implemented in the future. Believe me, this is only the tip of the iceberg.

Although Google's current proposed aggregation of data may be somewhat benign, what it will empower them to do in the future is problematic. With the use of data from mobile devices Google will be able to track our physical locations and actions. With data from our consolidated online profile they may be able to foresee our every move.

If you want a prediction of what this type of unseen tracking can do, check out the movie called "Antitrust." It was produced in the year 2000 when Microsoft was the big, bad, corporate entity. It shows what can happen when a company gets too much power, too much technology, and too much money. When you watch the movie, remember to add ten years of technology to the mix. In the year 2000 they didn't have the mobile technologies and data-tracking capabilities that we have now. If you watch this movie and really ponder how large and powerful Google has become, the throbbing in your head may become a much larger headache. ☹ [Go to Page 1](#)

Book Review: Going Pro

By Tanya Mattson, Librarian, Computer Users of Erie, Pennsylvania

March 2012 issue, Horizons, www.cuerie.com, faith6860 (at) verizon.net

Going Pro is well written by Scott Bourne and Skip Cohen. Both are influential professional photographers that have expanded their blog and webcast, Going Pro2010, into a book. The knowledge and insight in this book is tremendous.

My husband and I listen to Scott and Skip's podcasts, and I had been waiting for when the book would be published. The book was more than I anticipated. It starts out with finding oneself as a photographer, finding ones niche, (i.e. wedding, portrait, commercial, etc.) how to use social media for business... It is a wealth of information and a treasure trove for anyone who, even if they are not looking into going into photography, to use as a reference.

The authors write like they talk – clear, concise, helpful. Tips and ideas on how to elevate photography, marketing and actually make money in not only this industry but also in this economy. When Going Pro arrived it was tough to put it down. There is a wealth of valuable tips, and gorgeous pictures in the pages of this book.

This book is a sort of manual, it shows how to harness social media and market oneself. It is an online marketing guide for photographers to grow from amateur hobbyist to professional status. The book gives beginners (and pros) the tools they need in easy step-by-step and concise directions on how to get the edge on the market for themselves.

Don't get the wrong idea- this is not a manual on how to take a picture, but how to make a picture and a photographer marketable. The book assumes that the reader knows how to use the gear, have a good understanding of composure, lighting, editing. The focus of this book is on how to get noticed in the competitive and overflowing (overwhelming) photography industry.

The online marketing hints alone is worth the price of the book. (\$29.99), and would also be applicable for other businesses. While it is tailored for photography, the insight and guides given for online marketing is gold. In this day and age, that is priceless – it seems more and more of the world and our lives are going 'online.'

To some the book may seem to be written for only 'newbie's,' for only new photographers. While those new in the industry, anyone trying to make a living from photography will find that the advice and recommendations are nothing less than vital. Not only working with one's workflow, the speed bumps that are on the way, but also how to deal with clients. These are the ways to work not harder, but actually smarter.

Besides finding ones niche, customer service is addressed. And the old tenets are true. Customer service is key. Always be professional. (That means especially online) Strive to provide not only the best, but the highest quality experience for each and every client. Word of mouth travels so much faster at 4G speed.

It may seem so someone not having read the book that these are basic ideas that many would generally know. But they are interpreted in the new, fast moving, online age we are moving towards. It helps when two such brilliant authors and photographers explain what seems to be complex ideas – using social media to market – into a palatable language all can understand. This is the book that was sorely needed, and wonderfully delivered.

They have the combined industry experience for at least 30 years. In addition, there is advice from many of the industry's 'giants' such as Bambi Cantrell, Kevin Kubota, Tamara Lackey, and Jeremy Cowart just to name a few. If you are like me, I already follow the GoingPro blog and listen to the podcast. Why did I want this book? A couple of reasons; it is a manual and a ready reference that can be taken where and whenever I need it.

Going Pro is well written for photographers that are ready to make the move to professional' status. It is really hard to find the information that one needs out there to take something one really loves and make it a viable career business can be intimidating and difficult to grasp on its own. This industry so much more so with all the rapid changes. The steps and roads one needs to follow are described in detail. Learn how to build your brand that is unique to you, how to use Twitter and Facebook as powerful social media tools that they are and create interest in that brand. How to network, and last, but not least, how not to let business run your life, but how you run your business.

Even if you just want to learn about blogging, blog linking, Twitter & Facebook Do's and Don'ts, this is a practical guide that will be invaluable to anyone looking to build a successful business. The book is great a quick reference guide. Everything one needs is in the book, lists of resources to get one started in each area of business. This is one of the best financial investments and aspiring pro photographer or someone looking into doing business on the web. It should be on the must read textbook list of any photography or Business School/College.

Going Pro is published by Crown Publishing and list for \$29.99, but is available on Amazon.com for \$18.74. Get your copy now, and start moving towards the life and business you always dreamt of.  [Go to Page 1](#)

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

May

June

sun	mon	tue	wed	thu	fri	sat
		1	2	3	4	5
6	7	8 General Mtg Microsoft- Window 8 7:00 PM Summit Place 6-7PM Pic Perf SIG	9	10	11	12 Linux and Open Source on Saturday* 9:00-Noon
13	14	15	16	17	18	19 Windows & MS Office (including Access) on Saturday* 9:00—Noon
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9 Linux and Open Source on Saturday* 9:00-Noon
10	11	12 General Mtg 7:00 PM Summit Place 6-7PM Web SIG	13	14	15	16 Windows & MS Office (including Access) on Saturday* 9:00—Noon
17	18	19	20	21	22	23
24	25	26	27	28	29	30 Go to Page 1

Streaming Media

By John Somers, member, ICON Users Group, MO, March 2012 issue, The ICON – Newsletter of the Interactive Computer Owners Network, www.iconusersgroup.org, Jesomersmail (at) mail.com

“Streaming” is listening to music, watching a TV program or movie as it is being delivered to you over the internet. The technology is very difficult (say geek intensive) but it works and well for many of us and is an alternative to cable or satellite delivery of the signals. Several years ago Bill Gates said famously or infamously, “The internet, who needs it!” And this year Steve Jobs said, “We are in the post PC era”. More and more people use the internet and communicate over smart phones and tablets and do not use computers as we know them. Smart phones and tablets are indeed computers but without a large monitor and a keyboard.

Streaming of music began in the mid to late 90’s as personal computers became more powerful and the networks connecting them became capable of supporting faster data rates. As these trends continued, it became possible to stream TV programs and eventually movies. This is different from buying or renting a TV program or movie which is downloaded to your computer for you to watch at your convenience. The driving force is us—we do not want to be tethered to the radio or TV stations schedule or have to go to a movie theatre or to a store to buy a DVD. We want to watch what we want when we want it. Time shifting has become more sophisticated compared to the days of the VHS or Beta (remember them?) Netflix recommends 5 Mb/s or more for the best audio and video experience.

First, the sources. (And I will write only about common and legal methods/sources of content, not about illegal/pirated sources of content—mostly or completely off-shore now and clearly violating copyright.)

All the websites listed in this article are .com’s unless another domain is listed. (Example: Pandora.com)

MUSIC: Pandora, Spotify, 8tracks, Deezer, fizey, Grooveshark, Last.fm, Mflow, MOG, Pandora, Qriocity, Rhapsody, Slacker, Thumbplay, we7, WiMP and Zune are among the streaming music sources. This list is probably not complete as things change practically daily. Pandora and Rhapsody are among the best known. Pandora is free but you get ads. There is a paid version (\$3.50/month) without ads. You get to choose your artist or genre or composer or song and they deliver that or similar material to you. It is also available on many automobiles and on tablets and smart phones as well as computers. For details of how each of these services work and if you need to download a player, and whether they are free or pay I refer you to their websites. Which, if any, you choose, is a very personal choice: what works for you. Your computer will understand the format as all send MP3’s and other common music formats. Only Microsoft uses Windows Media Audio files for music but Zune (Microsoft’s service) streams in MP3, AAC, MP4, mp4, mov, and WMA formats.

TV Programs and Movies: some commercial, some not. Zune, Netflix, Atom.com, blip.tv, Break.com, Citytv.com.co, DaCast, EngageMedia, Flickr, iFilm, imeem, Metacafe, MoboVivo, Multiply, MyVideo, Openfilm, Phanfare, Qik, Revver, RuTube, ScienceStage, sevenload, showmedo, Tudou, Twango, U-verse, Veoh, Vahoo Video, Youku, and YouTube are among sources for streaming video on-line.

I want to emphasize the commercial ones with commercial TV programs and movies and those most used: Netflix, Hulu, and HuluPlus, and Amazon. You can also get TV in Win7 with Media Center set for TV. Some networks are increasingly moving you to their site for the TV programs (CBS on Hulu for example). Disney-ABC, NBC and Fox own Hulu. Netflix is an independent company which began renting DVD’s by mail and more recently began streaming. You may be aware of the upset when they tried to separate the DVD service and the streaming and charge more for streaming.

Hulu free gives you the latest 5 episodes of your favorite TV programs. For \$7.99 monthly (HuluPlus) you get the full season and sometimes more than one season. Movies are the current ones and many older ones (Some services claim 10,000.) You get to choose. It’s not the manager of your local Cineplex choosing. Once released on DVD they become generally available if the service has negotiated rights to the flick or to the studio’s films. There clearly is conflict between Netflix, Hulu and Amazon and other streaming services and the studios. The movie companies are terrified about what happened to the music industry and only grudgingly cooperate.

How do you get the signal from your router/wireless access point to your TV and what equipment do you need? The simplest way is by registering your device with the service using your Xbox, Playstation 3, Wii, Blu-ray DVD player, smart phone, or other internet/wireless enabled device. Yes, you can use a computer and the HDMI output on your computer to the HDMI input on your TV. You can also use an Ethernet cable network or route the signal through a power line network. If you want to see other internet material on your big

screen TV (using it as a giant monitor), you need a “smart” TV. Remember the signals on the internet are different from those on your cable/satellite/or over the air TV station, and a “brain” is needed for the conversion automatically. Some Smart TV’s are wireless enabled, and Sony and Samsung make wireless adapters for their TV’s. I presume other manufacturers do so also.

Amazon now has two forms of video access: Amazon Instant Videos and (Amazon) Prime Instant Video. The former provides rental or purchase of videos which may be watched by streaming or downloaded to your computer and watched later. Prime Instant Video provides unlimited streaming of thousands of movies and TV shows without commercials if you are a Prime (\$79/yr.) member. Not all videos in the Amazon Instant Video store are in the Prime instant video catalog. Videos in the Prime Instant Video catalog can only be watched by streaming and are not available for downloading. There is a great deal of information on the Amazon site. Start on the upper left side of the home page where it says “Instant Video” and on the following page on the right side below “Start Your one Month Free Trial” is “Help and FAQ’s.” Click there and on the following page in the middle in blue is a link “Amazon Instant Video” and then on the next page in the middle is “Watching Videos” which gives several choices depending on whether you will be using a computer or an internet connected device. When you (tired yet?) go to your choice, you will get details of connection methods and possibilities.

The easiest way to connect is the HDMI cable from computer to TV and there are adapters to convert the business end of the HDMI to composite cables (3 cables, Red and white audio and yellow video) if your set requires those connectors.

Roku, a streaming device, available for about \$50 from roku.com has comprehensive connection directions. The Roku XD/S has HDMI and component output for high fidelity video on new and older televisions.

Nintendo has just announced that Hulu and HuluPlus can now be streamed on the Wii (they previously just had Netflix) but you will need to download an “app” from their website.

Redbox and Verizon have announced they will start a streaming service, no details yet.

I will mention iTunes since everyone knows them. They stream radio stations, podcasts, and iTunes University (lectures from many U’s; there is a huge list on their site) but not TV programs or movies. Those are rentals. If you rent a TV program or movie from them, it is downloaded to your machine (not streamed). You have it for 30 days, but once you start watching you only have 48 hours (TV) or 24 hours (movie) to watch it. From iTunes.com, download iTunes 10.5 for Mac/PC.

Important to remember: not all services carry all content (programs, movies), and not all devices other than computers (and Roku?) will display all content. Check their websites before plunging in. Apple TV and Google TV seem to be especially limited but other devices may be also. The bottom line is that the power of computers, the capacity of operating systems, and the capabilities of the networks have improved to the point that streaming has become possible for almost everyone.  [Go to Page 1](#)

What the heck are hiberfil and pagefile?

By Linda Gonse, Editor/Webmaster, Orange County PCUG, California

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One day while purging unnecessary and unused files on my Windows XP computer, I spotted two massive files on the C:\ drive that perplexed me. One was hiberfil.sys at nearly 3.5 gigabytes! And, the other was pagefile.sys at 2 gigabytes!

I did not delete them right then and there. First, I checked them out on Google. As it turns out, both of the system files serve a purpose.

Hiberfil.sys is a file the system creates when the computer goes into hibernation mode. Windows uses the file when it is turned back on. If you don’t need hibernation mode and want to delete the file you need to turn the hibernation option off before Windows will allow you to delete the file.

The file size depends largely on the size of active RAM in the computer as the contents of the file are basically a RAM image. That explains why the file was so large. My computer has 4G of RAM — although it only recognizes 3.25 gigabytes.

I couldn't see a need to have hibernate enabled on my computer so I disabled it by unchecking the Enable Hibernation box in Power Options in the Control Panel. (The procedure for turning hibernation off is significantly different between Windows XP and Vista.)

The next time I rebooted, though, my UPS scolded me for not having hibernation enabled. The UPS unit used that as storage space in case the power goes out and battery power has to kick in.

I was careful to research pagefile.sys before taking any kind of action that might compromise it.

Good thing, too. Pagefile.sys is the virtual memory file Windows uses. Typically, when installed, Windows sets the size of the file at around 1-1/2 times the physical memory size. However, the size may vary depending on the amount of free disk space when the file is created and other factors. The default size generally works fine but it can be changed. Windows uses this file for its normal operation, but if you really need the space you can delete it after turning the virtual memory option off. Just be aware that this can cause extreme instability in Windows — even causing it to stop working. Yikes!

Back in the old 3.11 Windows days, a file like this was called a swap file. Windows used the hard disk space even then to simulate extra memory. A swap file helped when printing large documents, among other uses.

Not surprisingly, experts advise leaving pagefile.sys alone and to look elsewhere for files to delete! ☹

[Go to Page 1](#)

The Trouble with Terabytes

By Diane Fahlbusch, President, ICON PC User Group, NY

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Technological advances, different materials and cost efficient manufacturing have made it possible for computers to leap from standard 20 GB hard drives of a decade ago and the 200+ GB drives of yesterday to breaking through the gigabyte ceiling affordably in a relatively short period of time. Now having a 1 terabyte drive is passé as 2 TB, 3 TB and even 4 TB drives are becoming commonplace. However, there are some things to be aware of before making the leap.

No, I will NOT wax poetic about my personal opinion of larger drives, including the “Scarlet O’Hara” mindset of maintenance, indiscriminate saving of files and the time for security scans. (For that you can read “*The Lurking Dangers of Larger Hard Drives*” in the June, 2010 issue of **The ICON Graphic**.) Instead, you will need to consider whether your current computer actually knows what to do with all that storage space.

Not so long ago almost all computer operating systems used the partitioning scheme called the “Master Boot Record” (MBR). Unfortunately, the computer will not be able to recognize anything over 2.2 TB. So that larger drive can be installed, but the additional storage space will be useless. The MBR scheme is common on all Windows operating systems through Windows XP, as well as other operating systems from that time period. Windows Vista and the Mac OS X Leopard ushered in the new GUID partition table (GPT) which allows them to recognize the larger drives. Windows 7 and Vista users can use the larger drives as SECONDARY drive without worrying about whether it is a 32 bit or 64 bit version. But for anything larger than a 2 TB drive to be used as the PRIMARY drive, the computer MUST be running the 64 bit version of Windows 7 or Vista.

The systems boot-up firmware must be checked as well. There are many computers using a newer operating system and the GPT partition system, but still using the BIOS firmware. This will need to be updated to the new UEFI firmware, which has become the new industry standard. Check with the terabyte drive manufacturer to see if they offer a firmware update. Of course that updated firmware is useless if the motherboard cannot run the firmware, so again, check with the manufacturer’s specifications. Some will work, but you must use a different connection, such as the PCI-Express card slot.

Most newly manufactured computers ARE equipped with 64 bit operating systems, the GPT partition system AND UEFI boot-up firmware. So if you are thinking about running amok in terabyte land, these are some things to know about before upgrading, or buying that new computer. Remember **new** just means that it has not been used by anyone – it does not necessarily mean that it has the latest technology. ☹

[Go to Page 1](#)
