

ACPCUG Newsletter

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November 2005

Akron-Canton PC Users Group

**From The DealsGuy
for November 2005,
by Bob (The Cheap-
skate) Click,
Greater Orlando Computer
Users Group**

Once, during a McDonalds show, I was a guard for the largest dinosaur skeleton (and the most complete) ever found, and Sue Henderson who discovered it. (McDonalds sponsored the recovery) I guess they knew better than to let me guard any of the food. I topped that when I worked the ASIS (American Society of Industrial Security) [<http://www.asisonline.org>] show covering all kinds of security. Colon Powell was one of the featured speakers. Exhibits took up about 700,000 sq. ft. and attendance was about 20,000, which was the best ever. I was assigned to the Videoprotein [<http://www.videoprotein.com>] booth whose owner and founder, Anthony Pugliese, is a collector of many unusual items. In 1991 he bought the 38-caliber Colt Special that Jack Ruby used to shoot Lee Harvey Oswald on live TV. Mr. Pugliese purchased it at an auction from Jack Ruby's brother who had

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acquired it from the FBI 20 years after the shooting and needed to raise money for legal fees. Mr. Pugliese paid \$75,000 and it is now valued at about seven million. While guarding that gun I met attendees from around the world who seemed to know the story.

Being stationed there prevented me from browsing the show much, but I did see some of the biometric lock products. Placing your finger on a pad or scanning your eye iris will open a lock, or initiate other functions if you like. There were also various security gates, special roll up doors and too many unique products to mention here. One company had a stranded steel cable to string around your property that, if breached, will tell you exactly where it happened and can even initiate camera action. Some cameras can detect motion and initiate a camera sequence to follow the action, also notifying the office of the activity. You could easily spend two days or more at that show. One evening the show rented Universal Studios for the attendees and my wife and I worked checking the attendees entering. Since there were drinks inside, we placed wristbands on people under the age of 21 to identify them as minors to bartenders. Food and drinks of all kinds were all free inside the park, and people could enjoy all the rides.

***Zio Corp. Is Acquired**

I'm sorry that the PDF file with the rebate forms for the Zio Corp. products were not posted on my Web site. It turns out that Zio Corp. was acquired by SmartDisk and I have to assume that everybody was very busy with whatever changes would take place. However, Zio has some of the rebate forms posted on their own Web site and I hope what was there would fill your needs.

***What's In Your Computer?**

Here is another data gatherer that sounds good. Bob Balogh writes a monthly column called "Window Pains" for Boca Bits, newsletter of The Boca Raton Computer Society Inc. and it is always a good one. In the May 05 issue, he wrote about Everest Home Edition 1.51 (version 2.20 at this writing) that will collect all the important information about your computer. I won't try to list all the information it collects here, but you can find out all about it at [<http://www.lavalys.com>]. Best of all, the home edition is free. Bob is not the only person who authors informative columns each month in Boca Bits and you can access their newsletter at [<http://www.brsc.org>]. You'll find it interesting.

***Punch Software**

I hope some of you took advantage of the rebates for Punch Software products. Punch products offer excellent tools for designing your home or for your remodeling project and I may have more offers in the future.

***What's a Skin Clock? An Edited Announcement Received in June Offering a Discount**

(Continued from page 2)

“Our company has released the personal assistant for Windows – Skin Clock. It is a personal reminder integrated with a new trendy tray clock. We would like to inform all user group people about a 25% discount as a part of our launching campaign.

Best regards,
Eugene Kryukov
[eugene@alcyonesoft.com]”

For immediate release

With Alcyonsoft You Needn't Choose Between Style and Functionality.
Skin Clock Has Plenty of Both.

June 23, 2005 - Alcyonesoft announces today the launch of its Windows integrated personal assistant. Skin Clock has become an advanced replacement for the standard Windows clock. Besides a choice of professionally designed skins for your new system tray clock, the program features personal notification service and time synchronizer. Just make your alarm centre know your appointment time or a report deadline and it will remind you what you have on the agenda. The only other thing your personal assistant needs to know is whether you prefer just a note, or a note and a pleasant chime, or should it launch any application for you.

"The idea of Skin Clock came from our customers," explains Eugene Kryukov, CEO of Alcyonsoft. Skin Clock is shipped with a portfolio of skins, ranging from neo-modern to futuristic to classic. By grading the hue of the clock panel you can easily integrate it into your desktop color scheme. You can synchronize your system clock with the internet time server. Alternatively, you can rely on automatic synchronization. Unbounded range of ways to customize your Skin Clock can be found in the Options menu.

Skin Clock v.1.0 Features at a Glance

- Highly customizable intuitive interface;
- System tray integration;
- A portfolio of skins for the time panel;
- Alarm centre with a choice of reminder options;
- Automatic and manual time synchronization.

Pricing and Availability

Skin Clock 1.0 runs under Windows 95/98/ME/NT/2000/XP/2003 server platforms and costs \$29.95 (USD) for a single-user license. Free technical support is extended to all registered users. A trial version is available as a free download at [<http://www.skin-clock.com/files/skinlock.zip>]. More information about Alcyonsoft can be found on the official website: [<http://www.alcyonesoft.com>].

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Product page link: [<http://www.skin-clock.com>]

E-mail: [eugene@alcyonesoft.com]

***Announcement For IntroWizard (Edited) They offer a discount.**

"Our company, IntroWizard, has released IntroWizard Flash Website Builder 1.0. This new wizard-style website designer is helpful for anyone who wants to create a professional-looking Flash website, but doesn't have any knowledge of HTML and Flash. Its special feature is the automatic text website creation for indexing the content of a Flash website in search engines. We also would like to offer all members of your user group a special discount - 15% off the purchase of IntroWizard Flash Website Builder 1.0 or Flash4D 4.4. This discount is only available until December, 2005. Please use the links below:

Discount 15% Off Links:

Buy IntroWizard Flash Website Builder v1.0:

[<http://www.introwizard.com/store/fwb-15off.php>]

Buy Flash4D, Flash Intro Builder v4.4:

<http://www.introwizard.com/store/f4d-15off.php>

Have an excellent day,

Adan Vielma

E-mail: [Adan@IntroWizard.com] "

Create Flash Websites in a Flash!

MCALLEN, Texas. - September 13, 2005: IntroWizard today announces the release of version 1.0 of IntroWizard Flash Website Builder. Using its point-and-click environment, you can build a website simply by selecting a design, typing in your content, and adding images.

Over 20 design templates help you to jump-start your website project with professional layouts. Once the layout is chosen, the Customize Website wizard guides you through all customization stages from defining the background color, title, slogan, width and height to specifying the website sections and entering content. Your website may contain up to 13 sections. A section contains its own text, which may be complemented by up to 4 images. The program lets you insert your own images or choose from the collection of 30 stock images included free.

You can integrate Flash plug-ins, such as Flash poll, chat box or guestbook, to add a level of interactivity to your website. To make the website visible in search engines, you can add meta keywords and descriptions to the website. Create a text website, a text copy of your Flash website. The text website lets you reach out to search engines, while enjoying the aesthetic benefits of the Flash technology. If you select to use the text website creation feature, then the text website is created automatically on the basis of the Flash website content.

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IntroWizard Flash Website Builder Benefits:

- Point-and-click technology of creating a Flash website;
- No need to fork out money to designers and programmers;
- No subscription fees or restrictions on the amount of websites you can create for yourself or your customers;
- Automatic text website creation to make a Flash website visible in search engines;
- Affordable price, only \$49.95.

Pricing and Availability

IntroWizard Flash Website Builder runs under Windows 95/98/Me/2000/XP and costs \$49.95 (USD). Registered customers are entitled to non-watermarked designs and technical support. A 15-day fully functional evaluation version of IntroWizard Flash Website Builder is available as a free download at

[<http://www.introwizard.com/trial/flash-website-builder-trial.exe>] (3.49 Mb).

For more information, please visit <http://www.introwizard.com>.

Product page link: <http://www.introwizard.com/flash-website-builder>

That's it for this month. Meet me here again next month if your editor permits. This column is written to make user group members aware of special offers or freebies I have found or arranged, and my comments should not be interpreted to encourage, or discourage, the purchase of any products, no matter how enthused I might sound. Bob (The Cheapskate) Click [bobclick@mindspring.com]. Visit my Web site at [<http://www.dealsguy.com>].

From The DealsGuy For December 2005, by Bob (The Cheapskate) Click, Greater Orlando Computer Users Group

Bob Evans, Editorial Director for Information Week magazine, wrote about one of the most asinine cases of the law dealing with criminals that you could imagine. I already knew about the arrest, but was unaware of the other circumstances. He wrote about an accused spammer who agreed to settle charges brought against him by the Federal Trade Commission for \$485,000, a small fraction of the \$5.9 million he is alleged to have bilked from trusting consumers. The FTC's problem with prosecution was the generous Florida bankruptcy laws that allow immense asset (homestead) protection. Bankruptcy laws in Florida have long been an attractive shelter for the wealthy to rid themselves of some debt while preserving multimillion dollar homes as a personal asset, although I don't know what changes the

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new bankruptcy laws will invoke. Who says that crime (in this case spam) doesn't pay! The article is located at: [<http://www.informationweek.com/showArticle.jhtml;jsessionid=CIB5ZHDNXSEI0QSNDBCSKH0CJUMKJVN?articleID=164900917>]

I read about a cell phone that never rings. That's because it is actually a four-shot pistol in disguise. They say it is a bit heavier than a cell phone though. I guess that means you should keep an eye on strangers NOT talking on their cell phones. My observance is that most people are talking on them most of the time. I hate that when they are next to us in a restaurant and they are talking as if the other person can't hear, or have it on speakerphone turned up loud.

***New Web Pages**

Some of you may know that user groups receive announcements on a regular basis for new products. Since most user group officers are already stretched to the limit performing tasks for their members, these announcements don't always get passed on so I have posted several pages of them on special announcement pages. Some of them sound interesting and if they offer us a discount, I try to use them in the column.

***Need A New Web Site?**

WebBuild Express sounds like a great tool for building your new Web site and Serre Murphy, president of Net Fulfillment Technologies Inc. was a vendor at the spring FACUG conference. I asked him for a deal for my readers. Below is information I have put together from their Web site. He is sending me a review copy so I should have some actual experience soon.

They say you don't have to know how to program or write HTML code to use WebBuild Express. Using it, you can easily organize your site and create menus and links to the other pages, and to other sites. Using the unique "Dashboard" feature, you can include special functions like hit counters and search windows in your pages. Other features enable you to create backup copies of your work and to export data to other WebBuild Express users. WebBuild Express is designed to be intuitive and easy to learn and if you've used a modern Word Processing program, you'll be capable of using this Web design software to start building your own sites immediately.

This product also has plenty of undo/redo options just in case you have a problem making up your mind about the design of your Web site. It has Paste Special capabilities, which can be valuable in the design of your site. WebBuild Express organizes your pages by "Application." An application is the collection of pages, images, and other files for a Web site. You can build as many Applications using WebBuild Express as you want and there is no limit on the number of sites you can have, or the number of pages you can have on each site. A page in WebBuild Express corresponds to each page you will have on the published site. Each page can have a title, which will

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appear in the browser's tile bar, and other information that is useful for getting the page listed by search engines.

You can preview a page at any time by clicking the Preview Page tool button (or selecting "Page Preview" from the "File" menu). Page Preview will launch your browser and display the page you are working on as it will appear when published. You can also view an entire site by choosing "Site Preview" on the "File" menu. Site preview creates the html code for all pages in your application and is useful for testing links between your pages. You can use the "Send to Server (FTP)" choice on the File menu to send the files you have published (see paragraph above) to a Web server by supplying the Internet address of the server, your user name, and your password.

Check their Web site [<http://www.nfti.net>] for more information. They are offering us a 25% discount from the MSRP of \$29.95 (already a bargain), making the final price just \$22.45 until January of 2006, saving you \$7.50. To download it at [<http://store.esellerate.net/nfti/store>], use the coupon code CPN8348901136, when it calls for it, to receive your 25% discount. Ordering it on CD-ROM will add \$10.00. All these features and tech support too! On behalf of my readers, I thank Mr. Murphy for this special offer.

***Announcement for SearchMyDisks 2.01.**

I'm pleased to inform members of Users Groups that 10-Strike Software releases SearchMyDisks 2.01 (formerly 10-Strike Disk-Pile). Please, find the press release for SearchMyDisks 2.01 below for your information. Please note, our summer discounts are still available and the cost of registering the program is 20 US Dollars. Exclusively for Users Group people we've arranged a RegNow 10% discount coupon: STRK-G4BI-GRP

Best regards,
Dmitriy Stepanov
10-Strike Software.

September, 2005; For Immediate Release

New disk cataloger and search engine helps PC owners find necessary CD or DVD in seconds.

SearchMyDisks (formerly marketed as 10-Strike Disk-Pile) is a handy software application that helps folks with large CD and DVD collection quickly find the disk that has a needed file, photograph, music track or movie clip. This is how the program works:

First, a person inserts every CD or DVD that needs to be indexed into the PC. The program will automatically scan the disk, cataloging its contents. In addition to that, the program will store the file structure of the

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disk, thumbnail images and EXIF tags for photographs, MP3 ID3 tags for MP3 tracks, file properties (avi, exe, dll, jpg, gif, bmp, png, tiff, psd, tga, pcx, and other files). It's also possible and advisable to create short descriptions for certain contents of the disk. Plus, the program offers an option to create a file tree that contains files and folders stored on different disks.

After the first step is completed, the program is ready to be used. If the need arises to find that track or photograph, a person simply enters the name of the file or other search parameter, like the name of song, performer or album, and SearchMyDiscs will show exactly what CD or DVD contains the desired data. No more trying to discern scribbles on the back cover, inserting and ejecting disks or endless browsing. Reports, for instance "My MP3 Collection," (text or HTML) can be built on demand.

It's possible to organize CDs and DVDs into special groups (i.e. images, music, data) and one disk may belong to multiple groups. Second, SearchMyDiscs will store information on hundreds of disks without hogging all that disk space or system resources. A few megabytes will do. Finally, there is the "Borrowed Disk" feature that makes it possible to distinguish between the disks that are loaned out and the ones currently on the shelves. Plus, the program can search through zip, rar, arj, cab, sfx archives to find a file.

SearchMyDiscs 2.01 is available at <http://www.10-strike.com/searchmydiscs/> for free download. The cost of registering the program is 20 US Dollars.

System Requirements:

A standard PC with Windows 95/98/ME/NT4/2000/XP

Download:

<http://www.10-strike.com/searchmydiscs/searchmydiscs.zip>

Buy:

<http://www.10-strike.com/order.shtml>

That's it for this month. Meet me here again next month if your editor permits and check the new announcement pages on my Web site. This column is written to make user group members aware of special offers or freebies I have found or arranged, and my comments should not be interpreted to encourage, or discourage, the purchase of any products, no matter how enthused I might sound. Bob (The Cheapskate) Click [bobclick@mindspring.com]. Visit my Web site at [<http://www.dealsguy.com>]..

The Insiders' Guide to Craigslist

by Richard O. Johnson, TUGNET, CA

rj@theskillspool.org

If you're not using craigslist, it's time you joined the crowd. This phenomenally successful community bulletin board serves over ten million online users in a single month, and, except for modest fees in three cities for help-wanted ads, all its services are without charge.

If you're one of the uninitiated few, you use craigslist by posting your needs or interests in any of various categories, like jobs, for sale, services, housing, personal, etc., or by reading and acting on posts submitted by others. The craigslist for this area is at <http://losangeles.craigslist.org>.

Beyond its imperfect documentation, craigslist support is in practical terms non-existent (understandably so, in view of its enormous popularity and its staff of just eighteen). That's one of the reasons for writing this Guide.

Posting

Posting is straightforward. You just find the prominent "post to classifieds" link (it's at the upper-left corner of the main page), drill down to the appropriate category, and fill out the simple form.

The first page to which posters are directed will invite them to create an account. You don't really need an account, but it'll take only a minute or so to set up, and can make things a lot easier. So do get that account.

Should the need for which you posted be met right away, that's the end of it. In most cases, however, you'll want to re-post. Without re-posting, your post will stay up (in Los Angeles) for between 10 and 30 days, depending on the category, but you don't want to wait nearly that long. Posts appear in chronological order (last submitted on top), and readers will typically stop perusing after about two days' worth of posts.

(You can always edit your post, but editing won't move it up as will re-posting.)

Another way to improve your response rate is to post in more than one category. But don't do that before reading about craigslist's...

Restrictions

Craigslist is replete with rules and regulations. Trouble is, they're not particularly easy to find, they're not all in one place, and, worst of all, some of the most crucial ones are not published at all (until you're found to be in violation, and by then you may be "blocked")!

If you want to see what rules are written down, find the craigslist Terms of Use, Frequently Asked Questions, and General Posting Guidelines. But bear in mind that other unstated rules may bear equally on your submissions. Here are the most important craigslist rules:

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You may not post "essentially the same item" before deleting the old item. This applies even when posting in a different city or category. So if your post lends itself to more than one category, you need to alternate the categories. (You may possibly be able to get around this restriction by using different email addresses.)

Craigslist confuses this issue by appearing at one point to sanction posting "in multiple categories." This suggests that in some circumstances such multiple posts may be accepted. So if you want to try it, go ahead. The worst that can happen is that your second post will be refused.

You may not post the same item more than once in 48 hours. This rule is not strictly enforced. That is, if you delete and re-post your Thursday noon post at 8 am Saturday, chances are there will be no problem. But it's unwise (and really unnecessary) to post as often as daily.

Your post may not contain a link "to a commercial website or auction." This is an example of a rule I haven't been able to find anywhere, until I was blocked for violating it! Note that craigslist does not define what makes a website "commercial." My listing on the web of free summer shows, that contained a small link to my organization, was deemed to be "commercial." You'll be safe if you don't link to any website, but instead invite the reader to email you for more information (very easily done--see below). Linking to a webpage without any links on it is also safe.

Posting Tips

Craigslist makes it easy as pie for its users to respond to your posts. If you want phone calls, simply include your phone number in the writeup. If you want emails, craigslist will "anonymize" your email address, never to be seen by responders. These folks will click on a link to respond, and that response will go to craigslist, and then to you.

Each anonymized email response will refer to the unique number for that particular post. So if you're running several similar posts, you can easily track your responses to see which ones are most effective.

The body of your post can be either in plain text or HTML. If you choose plain text, craigslist will automatically convert any Web addresses starting with `http://` to links (but exercise care before including a Web address--see above). You can't otherwise mix plain text and HTML (don't add a few HTML tags to a plain-text submission).

You can add photos or other graphics to your post, in one of two ways.

If your post is under the heading of "for sale/wanted," you'll be invited to add a picture from your hard disk. Otherwise (providing you're submitting in HTML), you can add graphics with the `` tag. See craigslist's FAQ for more details.

How Best To Post

The following assumes you're using Windows, and have postings suit-

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able for several categories. (You can adapt these guidelines to other circumstances.) Performing these steps will reduce the re-posting process to about a minute a day, while giving you maximum exposure.

Compose your posts. If possible, create an entirely different post for each category. If sufficiently different, posts promoting the same transaction may display simultaneously without a problem.

Create your account, by using the link on the "post to classifieds" page.

Create three bookmarks for your browser. One will be your account page, another will be the craigslist post page, and the third will be the browse page (the craigslist main page for your locality), for reviewing others' posts.

Submit your posts.

Wait two or three days.

Open your account page. Decide which post you'll want to re-run. Click on that post.

You'll be given two choices, Edit and Delete. If you want to re-run the post in exactly the same category, choose Delete. Then go back to your account page, click on the deleted post, and you'll be able easily to re-run it.

If you want to re-run the post in a different category, click on the Edit button, to bring up your "raw" post. Then using Ctrl-A and Ctrl-C, copy that raw post to the Windows clipboard. Go back to your account page and delete the post. Finally, open the post page that you've bookmarked [step 3 above], and post in the appropriate new category.

Wait a day, and repeat steps 6 through 9.

If you're promoting the same transaction in several different categories, it may be to your advantage to stagger the posts. To this end you'll want to keep one or more initial posts for a longer interval than the others.

Browsing Tips

Here are two tips for using craigslist to take advantage of others' posts.

A little known source of great bargains consists of offers on craigslist to sell unwanted gift cards. This situation stems from the fact that many holders of gift cards either paid nothing for them, or paid well below the face value. For example, DiscoverCard distributes merchant gift cards at half price through its "Cashback" program.

To secure such a bargain, visit your bookmarked "Browse" page, and execute the "for sale" link. Then in the keyword search box, enter "gift card" (with the quotation marks), and pick out the offers that appeal to you. Don't hesitate to bargain with the seller for a lower price. (Aim at no more than 50% of face value.)

Once you've made a deal, be sure you meet the seller at the store, to verify the amount of credit remaining on the card.

Craigslist has joined forces with Google Maps at

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www.housingmaps.com, to help you better locate available housing throughout the country. You'll be able to specify your price range, and you'll see at a glance whether there's a picture or pictures of the property. Once you make your preliminary selection, you'll be taken to the original craigslist post.

Richard Johnson is a writer and editor, and founder/administrator of FREE FOR ALL The Skills Pool, a 29-year-old membership organization (<http://theskillspool.org>). He is a volunteer with TUGNET HelpContact for assistance with Internet Explorer, Outlook Express, and Gmail. He welcomes feedback, at rj@theskillspool.org.

There is no restriction against any non-profit group using this article as long as it is kept in context with proper credit given the author. The Editorial Committee of the Association of Personal Computer User Groups (APCUG), an international organization of which this group is a member, brings this article to you.

The New, the Best, and the Worst Collected by Pim Borman SW Indiana PC Users Group, Inc.

swipcug@sigecom.net

Hard Drive Too Small?

If you think a 500 GB is still not big enough, help is on the way, in what seems to be an obvious way. If you think of a room filled with people all stretched out on the floor, you can cram in a lot more folks if you have everybody stand up, right? As it turns out, the magnetic elements on current hard drives are lying down on the job, but now several manufacturers, including Hitachi and Seagate, have figured out a way to make the lazy critters stand up on the disk and squeeze them closer together. It must be easier said than done, considering how long it took to implement this technology, but now Seagate is announcing a new 2.5" minidisk, named Momentus, that will hold 160 GB, 20% more than the highest-capacity 2.5" drives currently available. It sounds like magic, and the name, Momentus, suggests that Harry Potter had something to do with it. The new disks will be shipped early next year. Seagate anticipates that regular hard drive capacity will jump to 2500 GB (2.5 TB) in 3-5 years. (PC Magazine, 8/9/05)

How Much Is That Program in the Windows?

In the good old days, when you purchased the latest version of MS-DOS you were free to install it on as many computers as you owned, and many a copy was shared with friends and neighbors as well. That has changed, as we all know, and many expensive programs can now only be installed on a single computer, whether we like it or not. Large commercial programs used in the business world have usually been licensed per seat, based on the number of computers the program was installed on. Some small engineering companies that obtained a single copy of expensive Autodesk and used it on multiple computers were fined and lost their use of the program when they got caught.

As CPUs have been getting faster, computer productivity has gone up, to the benefit of the users. Although most providers have increased their license fees to some extent as the programs improved, fees have mostly continued to be charged per seat or per CPU.

Now the trend to faster computers is to increase the number of CPUs on a single chip instead of making single ones faster, and some software companies want to charge their fees on a per CPU basis. They are mainly concerned about the many back-room computers used as servers dishing out data over computer networks to employees. Oracle and IBM have been in the forefront of the pricing battles, but seem to be compromising on an individual basis. Microsoft has unexpectedly taken the side of the users and licenses its software at the same cost for single-core or multiple-core processors. That may have something to do with the threat of Linux and its Open Source programming model that is looking more and more attractive to many businesses as the cost of Windows-based software keeps increasing. (The Economist, 7/16/05, thanks to Louis Ritz)

Too much security?

Recently I had occasion to help someone straighten out the connections between their computers and the router. The router had been set up by an expert, using all its available security features. Unfortunately, he left behind a jumble of notes about procedures and passwords that seemed to be incomplete or wrong. In the end all we could do was reset the router and start over again. That made me think about how much security we really need.

Most of us live in homes with maybe two locks on the front and back doors, possibly with an added bolt for extra security at night. That will keep most amateur burglars out, but a determined crook will find a way to get in anyhow. So be it, unless you live in a big city apartment where it is smart to live behind a steel door with multiple locks set in a reinforced frame.

The same goes for routers. To keep occasional snoopers out of your network takes only a few simple changes to be made on the router's access page.

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Replace the default password needed to access the set up screen with a secure one that is easy to remember (an old street address is good, as it contains letters and numbers). Also change the default user name, if your router lets you.

On the wireless access page change the SSID name to a secure one.

On the same page uncheck the option to broadcast the SSID name.

Forget about all the other security options, including WEP or WPA encryption, unless someone could have good reason to spend lots of time and talent guessing your setup information and ruin you in doing so. Just because it can be done doesn't mean anyone will actually go to the trouble! Just make sure to write down the user name, password and the SSID. And if you forget anyway, it only takes a few minutes to reset the router all over again.

Windows Tips and Tricks

The June 28, 2005 edition of PC Magazine carried a large number of Tips and Tricks for Windows, mostly contributed by PCM's lead analyst Neal Rubenking whose articles and advice I have been following almost as long as I have been using computers. Try to get hold of a copy to see for yourself. Here are some that caught my eye.

If an error message indicates that a system file is missing or corrupted you may be able to recover it from the Windows disk. You DID get one when you bought your computer, did you? Else ask the manufacturer for one - you paid for it! Insert the Windows system disk and select Search from the Start menu. Use the name of the file you are looking for, but replace the last character of the extension with an underscore, e.g. Notepad.ex_ instead of Notepad.exe. Make a note of where you found it and then use some good, old-fashioned DOS command to expand that file and install it on your hard drive where it belongs. Use Start...Run and in the window that pops up type (for this example, assuming your CD ROM is labeled D :) expand D:\Setup\Notepad.ex_ C:\Windows\Notepad.exe and that should do it. In some cases the missing file is stored in a compressed CAB file. You can find out by repeating the search with the full file name. If found, open the CAB file in Windows Explorer and simply drag the missing file to its location on your hard drive.

Another handy tip concerns access to Windows in its Safe mode, such as might be required to remove a virus infection. The manual tells you to hit F8 or DEL (depending on the make of your computer) during start up, right after the initial boot sequence completes, but before Windows starts loading. In practice, there is only a fraction of a second during which you must do this, and it may take many repeats before you finally get it right. With a USB keyboard it is impossible to do at all, since the keyboard won't be active yet at the required moment. If you miss and the system boots up in the full-fledged Windows mode, press Start...Run and type msconfig followed by the Enter key. Choose the BOOT.INI tab and check the /SAFEBOOT box. Now XP will reboot in Safe mode until you repeat the procedure and uncheck the box.

Recovered Printer Cartridge

The other night I set out to print a first birthday picture of our black-and-white Cocker Spaniel, Bonnie. As the picture emerged from the printer, an older HP-812C, the top half looked OK but the bottom half was faded red. Clearly, one or two of the three colors in the color cartridge were depleted. Just because of such happenings, I always keep an extra cartridge on hand, in the refrigerator to keep it fresh. That may have been a bad idea.

I installed the spare cartridge, aligned it, and printed out the picture. The black snout of the dog came out looking distinctly bluish. Back in the image editor I darkened the black parts of the image and printed it out again. Same result, distinctly bluish. Continuing the next evening, a test page indicated that the yellow color of the cyan-magenta-yellow cartridge was not printing. I used the printer's utilities to clean the cartridge and to prime the inks, without luck. I took the cartridge out and carefully cleaned the print head with 90% pure rubbing alcohol, still without success.

I was ready to give up on the cartridge and buy a new one when one more possibility occurred to me. I double-bagged the cartridge in two ZipLoc bags and immersed it for 20 minutes in a pan of hot tap water. That did the trick, Bonnie printed out just fine. From now on no more storing of color cartridges in the refrigerator!

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AdSubtract, Good Bye!

For years I have used AdSubtract to block nuisance ads while browsing. These days ads are no longer just nuisances, as some are harmful and require stronger counter-measures. I still have AdSubtract on my older system, but its update button is no longer active. A Google search indicates that Intermute, AdSubtract's parent, has been acquired by Trend Micro. AdSubtract has been combined with TrendMicro's SpySubtract Pro to form Trend Micro Anti-Spyware 3.0, which is only compatible with Windows XT or 2000.

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Legal Bytes: Trolling for Wi-Fi - Is It Legal?

by John Brewer

Computer Club of Oklahoma City eMonitor, October 2005

Local area networking has experienced a profound change in recent years. Wired networks are still the norm but wireless networking is popular at homes and businesses. There are several issues worthy of exploration regarding this topic and this column will explore these issues in some detail in this and future columns. One issue is the legality of accessing an "open" wireless network and the other issue is the necessity to protect a wireless network.

Wikipedia states that "wardriving" involves the use of an automobile and a Wi-Fi-equipped computer, such as a laptop or a PDA, to detect Wi-Fi wireless networks. It is also known as "WiLDing" (Wireless Lan Driving), originating in the U.S. with the Bay Area Wireless Users Group (BAWUG). It is similar to using a scanner for radio. Many wardrivers use GPS devices to measure the location of the network, find and log it on a website. For better range, antennas are built or bought, and vary from omnidirectional to highly directional. Software for wardriving is freely available on the Internet, notably, NetStumbler for Windows, KisMac for Macintosh, and Kismet for Linux.

Wardrivers make identification and access of wireless networks a sport, but is the sport legal? Is there a clear-cut answer or does it depend on the facts?

A recent Florida case provides some guidance. A Florida man, sitting in his SUV and using a laptop, was accessing wireless networks in a residential neighborhood. The St. Petersburg Times reported the matter and made the observation that "a drive through downtown St. Petersburg shows how porous networks can be. In less than five minutes, a Times reporter with a laptop found 14 wireless access points, six of which were wide open. I'll guarantee there are tons of people out there who have their wireless network being exploited but have no idea. And as we see more people utilizing

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wireless, we'll see more people being victimized." The Florida man was indicted and convicted.

"Wireless fidelity, or 'Wi-Fi,' has enjoyed prolific growth since catching on in 2000. More than 10-million U.S. homes are equipped with routers that transmit high-speed Internet to computers using radio signals. The signals can extend 200 feet or more, giving people the ability to use the Web in the back yard of his Crescent Heights home, but also reaching the house next door, or the street."

The expansion of Wi-Fi hot spots is part of this phenomenon. With a wireless-capable laptop, it is possible to access the Internet at places called "hot spots," and they are everywhere. Some charge for access but many provide free access. There is an inherent risk in this technology. The router that provides the wireless access point has an identifiable internet protocol (IP) address. Anyone accessing the Internet through that router will appear to be authorized to use that IP address. Someone with a nefarious intent can create a possible legal nightmare for the person responsible for that IP address. The ability to look through the IP address and identify the computer behind the DHCP server is more difficult.

A recent case in Michigan involved the unauthorized access of an unsecured Wi-Fi network at a Lowe's home improvement store to steal credit card numbers. A 20-year-old and a friend stumbled across the network while cruising around in a car in search of wireless Internet connections – wardriving. He was convicted.

An emerging threat is the "evil twin" attack. A person with the proper equipment sets up a local hot spot and overpowers the Wi-Fi network. Any computer user who accesses the bogus Wi-Fi network is then at risk by the evil twin. The Wall Street Journal has reported an evil twin setup at a technology conference in London. Hackers set up evil twins that infected other computers with viruses and gathered information on the users.

It is apparent that security is an important issue in a wireless network. The original standard was called WEP (wired equivalent privacy). WEP is a form of encryption, but the level of encryption is relatively weak. An improved form of encryption for wireless networks uses AES (advanced encryption standard). AES is strong encryption.

There are ethical issues in accessing a wireless network unless one has specific authority. Is it similar to a form of electronic trespass? Does it constitute a form of theft from the internet service provider? One can argue both sides of these questions easily.

The next column will investigate the legal issues of these questions in more depth. In the interim, owners of wireless networks should consider the security of their networks. Improvements can be made to the wireless network fairly easily. A company by the name of Force Field Wireless has

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some excellent suggestions regarding wireless security. See www.forcefieldwireless.com. Some of the tips are:

Enable WEP. Make sure you use the largest WEP key size that the equipment supports.

Change the SSID (Service Set Identifier) to something non-descriptive. Do not give a name, address, or any other useful information to potential hackers. Do not use the default SSID.

Change the default password(s) on the access point. The default passwords of most network equipment are well known and could allow an intruder to gain access to the access point.

Disable Broadcast SSID. If the access point supports "closed system" or allows one to "disable broadcast SSID," use this feature. This will make the network essentially invisible to almost all scanning methods.

Update the firmware and drivers on access points and wireless cards. It is always wise to use the latest firmware and drivers on access points and wireless cards. Manufacturers commonly fix known issues, security holes, and enable new features with these updates.

Enable MAC-based filtering. This feature limits access to unique wireless cards.

Turn off access points when not in use.

Try to position access points in the center of the house or building. This will minimize the signal leak outside of its intended range.

Prudent use of security features in a wireless network can prevent misfortune.

John Brewer practices law in Oklahoma City, is a member of the Governor's and Legislative Task Force for E-Commerce, and enjoys issues relating to eBusiness and cyberspace. Comments and questions are welcome and can be emailed to johnb@jnbrewer.com.

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Expect the Unexpected When Traveling Abroad

By Lynn L. Kauer, Editor

Saginaw Valley Computer Association

llkauer@chartermi.net

My wife and I recently went on a river cruise from Vienna, Austria starting with the Danube River. As we continued our trip on the Danube through Germany, we connected with the Main River that allowed us to travel over the mountains and connect with the Rhine River. The trip ended in Amsterdam in the Netherlands (Holland). This trip was for a period of three weeks and was on a boat that only held 150 persons, including the crew. We are more accustomed to the 'big' ships with upwards of 2,400 passengers plus crew containing all the amenities like an onboard shop to download the photos from the digital memory cards onto CD's. I knew that this service would not be available on the riverboat and became a bit concerned with respect to what I would do if I 'filled' all of my digital storage.

My camera is a Sony DSC-F717 and uses "Memory Sticks" for digital storage. (Other cameras may use Secure Digital, Compact Flash Cards or XD cards depending on the manufacturer.)

Although the camera is capable of taking photos at five mega pixels (2,560 x 1,020 JPEG image size), I adjust the settings downward to (2,048 x 1,536 JPEG image size). I also adjust the setting to 'fine' mode instead of 'standard' mode. This allows me to save approximately 80 photos on a 128MB stick instead of only 50 if I were to shoot at the five-mega pixel setting.

I own ten 128MB plus three 256MB memory sticks. Doing the simple math, they are capable of storing 1,280 photos. While it may seem like a lot, it really is not. I used almost all of their storage capacity on our last two-week trip to the Mediterranean while visiting Italy, Greece, Turkey and Croatia.

On that trip, we sailed miles off the coast and there was no opportunity to take photos until we landed ashore. On the river cruise we would be traveling through the scenic vistas of three countries plus having stops along the way. I was concerned with having enough storage because we would be traveling for three weeks.

After the first day I quickly learned that there are a lot more things that one should worry about than digital storage. Some of the things contained in this article will surprise you and hopefully give you some insight as to what you should think about when traveling abroad whether on ship, train, bus or car.

RESOLUTION

As stated above, I lower the resolution to approximately three mega pixels on my camera. One of the passengers had a camera like mine. As we

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chatted, he told me that he had recently purchased the camera for the trip and was finding it easy to use. He previously owned a 35-mm film camera. We somehow got on to the subject of storage and I asked him how many 'sticks' he had. His reply, "Just the one that came with the camera. I can get all of the photos on the stick that I expect to take while traveling. I can get almost 800 photos on the stick."

This is when I learned that the salesperson had changed the resolution on his camera to the lowest possible setting. In other words—Internet resolution. When I asked him if he intended to make prints he replied, "Oh yes. But none larger than 8 x 10." He was the type who knew everything about everything so I found a way to let him snap away and disappeared into the crowd.

I also bumped into another poor fellow who really had a problem. He bought his camera real cheap in a pawn shop a week before the trip. The camera stored everything on a permanent chip inside the camera. The salesperson had told him that all he had to do was to go into any photo store and they would be able to transfer his photos to a CD with no problem. At this point, only three days into a sixteen-day cruise, his camera was full. Worse, he could not find a store that could provide the service for him.

Onboard the 'big' ships the service is readily available for a fee. On the riverboat, they had no provisions for this service. The crew attempted to help him by downloading the photos onto their computer but they too bumped into a brick wall. He never received the instructions or the CD that contained the necessary software with which to unload the photos to a computer. His photo shooting days ended early.

POWER

As stated earlier, I was concerned with having enough storage space for photos. (Incidentally, I shot almost 1000 photos.) The first option I thought about was to get an adaptor that would allow me to download the photos onto a laptop computer. However, this idea was short lived because carry-on luggage space is limited. International flights limit the passenger to one piece of carry-on luggage and the size is restricted. Secondly, carrying laptops through airport security is a royal pain. Therefore, I decided that I would become a 'selective' photographer and not try to capture every photo opportunity I saw.

When traveling in Europe one must keep in mind that 110-volt power is not available. All of the electrical power in Europe is 240-volt and not all of the plugs are the same from country to country. My first purchase was to buy a transformer to adjust the voltage for a 110-volt external battery charger. It's about the size of a small flashlight, costs less than \$25 and allows me to use it in any country.

This is where I bumped into the first problem. I didn't read all of the in-

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structions that came with the transformer. The first occasion I had to use it was while in the hotel in Vienna. That is where I learned that the voltage was 240-volt and 50-cycle. The instructions clearly stated to not allow it to be plugged into the outlet for more than an hour or it would become over-heat and possibly damaged. Therefore, I plugged the transformer into the outlet and let the battery recharge for shorter periods.

When we boarded the ship the only outlet available was in the bathroom. There were two outlets available. One noted for use with an electric razor only—110-volt. The other outlet was for 240-volt appliances. I used the 240-volt outlet with the transformer for one hour time periods to recharge the camera batteries without a problem.

Alas, two of our shipmates were not so lucky. One plugged his charger into the 110-volt outlet and failed to pay attention to the time. Two hours later, when he entered the cabin, he found his charger smoking. The problem is the 50-cycle current. It burned it up. The other shipmate was less fortunate. He plugged the cord into his camera to recharge the battery. It also caused damage to the built-in charger and he now had a dysfunctional camera. I make it a practice to never use the camera to recharge the battery unless it is absolutely necessary.

INTERNET CAFÉ'S & KEYBOARDS

While in our hotel in Vienna I found a computer, that one could rent for Internet access. The rental rate for Internet access was three euros for fifteen minutes. This means \$4.95 per quarter hour or about twenty bucks an hour.

Because of the committees Crystal and I are involved in, we wanted to know what the latest information was. This is when we learned that attachments do not get transmitted overseas. This was very frustrating because we attempted twice later in different cities with the same result.

The interesting thing I learned on the first attempt was when I tried to send an e-mail to the sender that had the attachment. When I typed the message a lot of the letters were mixed up. For example, the S key would be displayed as a "&", the "P" key would display as an "X" and the "R" key would come up as a ">". The keyboard layout doesn't match that of ours!

When I got it cleaned up and attempted to send it I received an error message that I had been logged off meaning that I had spent five bucks for nothing. This wasn't unique to the hotel's computer. It was common at other sites as well. The result was that we were out of contact with anyone online for a month because things just don't interface as we expect them to.

I had bumped into the keyboard layout problem a couple of years earlier in England but it wasn't as complex as being in Germany. Imagine what it would be like in China or some other remote country. The connection

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speeds were a step back in time. While some sites boasted cable and broadband access, the speed was similar to 56KB modems. I should have realized what the speed differences were as almost every home had an antenna on the roof!

HOW DO YOU SPELL RELIEF?

What does one do when they get sick in a foreign country? You call your doctor, right? Nope! Our shipmate had quadruple bypass surgery a couple of years earlier. About half way through the trip, he got a sore throat and a severe cold. He failed to bring medication along to take care of this condition. This became a big problem for him.

Since the time differential was six hours, and he got sick on a weekend, he was unable to contact his doctor in the states. He sent a fax to his doctor's office to learn that the office staff turns off the machines when they leave work. Thus, for us it was noon and his doctor's office was already closed because it was 6:00pm.

While ashore he tried to make a phone call but his doctor's answering machine told him to call another number in the event of an emergency. The other number had a message to the effect, "the doctor is not in right now. Please leave a phone number where he can contact you." Since we were 'at sea so to speak' there was no way for the doctor to call back.

After two days, the ship managed to contact his doctor who faxed a prescription to the ship via a satellite link while tied up in port. However, when he took it to the pharmacy, the pharmacist refuse to fill it because it was written in English and not from a doctor recognized as being in Germany. So, what's the point? When traveling abroad try to anticipate the unexpected for medications that may require a prescription.

In my case, I became ill during the second week having caught the 'cold' of the fellow trying to contact his doctor. My only alternative was to talk to a pharmacist for some 'over the counter' medication. It didn't work very well.

When I arrived home and found myself unable to sleep in a bed. The first night was spent dozing on the recliner. The next morning I met with my doctor and took the medication I had purchased with me.

He pulled out the instructions from the package and exclaimed, "Everything is written in German. Why don't they write in a generic language in English so that we could understand what they are telling us?" I replied, "Doc, we were in Germany. How many 'over the counter' medications in our country are written in German." He looked at me with a sly grin and realized the folly of what he had asked.

From now on, when we travel abroad we will take some of the 'over the counter' medications that we use from time to time with us. We found aspirin a bit difficult to find as it was 'blended' with other unpronounceable things. The rule to follow is the same as going to a cheap party—BYOB

(Bring Your Own Bottle). In this case, BYPM (Bring Your Own Medicine).

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Indexing the Web: Spiders, Web Crawlers & Bots

By Brian K. Lewis, Ph.D., Sarasota PC Monitor

Sarasota FL PC Users Group

www.spcug.org

Have you ever wondered how search engines such as Google manage to get the answers to your queries so rapidly? How could they search the web that fast, I mean usually less than one second to find the words you ask for? Well --- They don't. Actually the searching goes on constantly, 24/7. And, the mechanism they use is just a modification of what you use for browsing the web.

Although you may have heard about spiders, web crawlers and web bots, they don't actually traverse the web any more than does your web browser (Internet Explorer or Firefox or whatever browser you use). Instead they download web pages that are then scanned and the significant words added to an index.

To simplify the terminology, I will refer to all the web searching programs as "spiders". (It takes less space and is easier to type.) These spiders are programs designed to find web addresses (URL's) and to download the pages. Some also do the indexing of the words on the page. However, Google uses a separate indexing program and stores the downloaded pages for future reference. Now if a single spider were being used to locate and download pages, the task would really be impossible. Sergey Brin and Lawrence Page, the originators of Google, published a paper while they were graduate students at Stanford that utilized three spiders. Each spider kept about 300 connections open simultaneously. With four spiders they could download about 600 pages per second. This paper referred to the prototype that became the commercial Google enterprise. Even with the prototype system they were able to download and index 24 million pages in a week. Their current methodology is proprietary and so is not public, but it is probably a significant improvement over their prototype system.

We can use the original Google system as a model of what could be used by search engines to prepare the index and database of web pages that you access when you send a query. The first step is to send a list of URLs to the spider to download. This is done by a server that maintains a list of URLs. The spider will download pages and also follow any hyperlinks to other pages. Addresses of pages that were linked to the original search

list are also sent back to the server to be checked to see if they were already on the list. If not, they are added to the URL lists. Not every spider uses a URL server. The spider will continue crawling the web until it reaches a dead end or a page with no further links.

As I mentioned earlier, a spider isn't just working with one page, but has hundreds of connections open to different pages. Given that there are billions of pages on the Web, even with thousands of spiders collecting information, only a small fraction of the entire web is scanned. Some web sites, such as those with news or rapidly changing information are visited hourly. Every spider has a re-visitation policy that determines how frequently a page will be revisited and checked for changes.

There is another general policy that is usually programmed into these spiders. That is called the " politeness" policy. This is used to prevent the overloading of web sites. After all, there is a finite limit to bandwidth and it would be possible to overwhelm a web site with visits from multiple spiders in a short period of time. This policy provides for an interval of time to elapse between accesses by a spider. This time interval seems to vary from 20 seconds to 3-4 minutes. This would be the case where multiple pages need to be downloaded from a single server. Revisiting indexed and stored web sites occurs at less frequent intervals.

However, even this politeness policy is sometimes inadequate. Frequent visits by spiders may result in complaints being sent back to the owner of the spider. So it is also possible to enter code on a web page which asks the spider to not access or download a page or pages. This can be done by the addition of meta tags in the page header or by a robots.txt file placed in the root directory for the web site. This is especially appropriate for game pages. These pages use a dynamic format that changes when pages are viewed or links are followed. When a spider downloads these pages the game program may respond as if a very high-speed player were logged on. This can create problems for the program and may result in crashing the game server. So we now have the robot exclusion protocol being used by owners of web pages that do not want their pages included in the search engine indexing.

In the original Google system the web pages were sent to another program referred to as the indexer. This program sorts through every word on the page and stores them in a database. The exceptions are the simple words such as a, an, the. However, simply entering the words into a database is not sufficient. They have to be identified to the particular page from which they came, the location on that page and a relative ranking in importance. The frequency with which they appear on the page as well as the position on the page may be used in determining the weight or relative rank. Words in the title or near the top of the page may be ranked as more important. So the storage of the words include the URL, and a calculated weight in an encoded format.

The word database is then indexed to speed the retrieval of the information. This is usually done by the building of a Hash Table. Hashing evens out the alphabetical sections so that it takes no longer to find a "z" than it does a more popular letter like "m". It also separates the index from the actual entry for the word. This improves the efficiency of the storage of this information. The indexing and the Hash Table also speed the overall retrieval of the information. The complete web page is also stored in a separate location. Once the indexing process is completed, the information is available for your query.

Given the size of the web and the continuing changes to web pages, the spider's search is never ending. It may also be one where we will never have every page indexed. One other aspect of the size of the web and the time required for the crawling process is that broken links will always occur. If a page is not re-visited frequently, it may still be in the index and the database long after it has been removed from its server. Another situation may be where the URL has changed and the new location has not yet been crawled. So, the process is not perfect by any means.

The other aspect of searching the web is the design of the query you want to submit to a search engine. As I'm sure you know, you can simply list a few keywords in the search engine and hope you will get a useful result. Many times you will also get results that have no relationship to the information you are seeking. In some of these cases, you need to try the advanced search or learn to use Boolean operators. Those most frequently used are:

AND – all the terms joined by "AND" must appear in the pages or documents.

OR – at least one of the terms joined by "OR" must appear in the pages or documents.

NOT – the term or terms following "NOT" must appear.

Quotation marks – Words between quotation marks must appear as a phrase.

Followed By – one of the terms must be followed by the other.

Near – one of the terms must be within a specified number of words of the other.

Generally, search engines can use these Boolean operators to provide results more closely aligned to the topic you are trying to locate.

Like everything else related to computers, web indexing and searching are not static technologies. The search engine companies are researching "natural language" queries such as those handled by "Ask Jeeves". Currently, these queries can accommodate only relatively simple phrases. However, there is heavy competition to develop an engine that can work with much more complex queries. Another area that is being pursued is "concept-based" searching. This would use a form of statistical analysis to determine if the page fit your query. And, as you may have read, Google

has plans to put the content of the world's libraries on the web.

Just imagine what it would be like if we didn't have these search engines to help us find information on the web. So good searching and I hope you find what you are looking for.

Dr. Lewis is a former university & medical school professor. He has been working with personal computers for more than thirty years. He can be reached via e-mail: [bwsail at yahoo.com](mailto:bwsail@yahoo.com).

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Network Your Home or Office Internet

By Ira Wilsker, APCUG Director; Columnist, The Examiner, Beaumont, TX; radio & TV show host

WEBSITES: <http://www.homeplug.com>

On my weekly radio show (KLVI 560AM 1-3pm Saturdays) I am frequently asked questions about connecting an internet source to a home network, such that several computers can simultaneously share the internet connection. This type of home networking is typically only practical if there is a broadband source, and generally impractical if the source is dialup, and a voice phone line is to be shared for internet access.

Basically, there are three good options available, and each has its relative advantages and disadvantages, and varies in terms of cost effectiveness based on individual circumstances. The three basic methods or technologies available for home or small office networking are wired, wireless, and "homeplug".

Wired networking is a viable choice if it is practical to run a network cable between computers. The cable, which can be relatively inexpensive if purchased in bulk from electronics or home/hardware stores, but somewhat pricey if purchased in pre-cut sections at retail stores. Cable can be run through an attic, suspended from cup hooks along a ceiling, run along baseboards, or other methods that comply with appropriate safety and electrical codes. Other than running the cable, the installation of the network is fairly simple, and requires readily available and generally inexpensive hardware, manufactured by countless companies. A device called a router is connected to the broadband input, and the computers are connected via network cable to the router. Most wired routers come with a floppy or CD with simple configuration utilities that allow the network to be setup and functioning within minutes of connection. Wired routers can be purchased from discount stores, electronics stores, office supply stores, and a variety of other sources. Since almost all contemporary computers, both desktop and notebook, come with an integral network connector, generally

no other hardware is required other than the router and cable. In terms of security, wired is generally the most secure method of networking. Many of the inexpensive wired routers include some type of hardware firewall to protect the network from intrusion, but it is still generally a good idea to have a software firewall on each computer.

One of the most popular methods of home or small office networking is wireless, often referred to with its industry standard designation, 802.11, with a letter suffix, such as an "a", "b", or "g". The suffix indicates which version of the standard hardware complies with in terms of frequency, and bandwidth. Generally, the least expensive and most widely used type is the 802.11b, which shares the same 2.4 GHz digital frequencies of many cordless phones and other household electronics, which may possibly cause some interference with the wireless connection. Under ideal conditions, 802.11b can transfer data at a rate of up to 11 megabytes per second (Mbps). The newer 802.11a and 802.11g standards offer higher transmission speeds, and will likely encounter less interference from household appliances, but some interference is always a risk.

To connect computers to a wireless network requires a wireless router, and a device called an "access point" for each computer. The main advantage to a wireless network is the ease of installation, and the flexibility of not being connected to a wire while surfing the net. The wireless router is connected to the broadband input, and an antenna on the router broadcasts the signal to the access points. Range is a function of building construction and interference, but at typical household and small office distances and construction, a single router is typically adequate. Users should be sure to follow the instructions included with the router in terms of placement in order to maximize the signal. Many wireless routers include some form of hardware firewall, but again a software firewall on each computer is generally recommended. "Access Points" are generally small devices that attach to a computer either through a USB port, or to the network input on the computer. As they are radio transceivers, placement will affect performance. It is imperative to note that unless the integral encryption and other security options offered by the router and access points are implemented, there can be some serious security issues with wireless connections, in that it is easy for unauthorized persons to access the network.

Wireless routers and access points are readily available wherever electronics are sold, including discount stores, warehouse clubs, office supply stores, and other retailers. As the technology has been improving, prices have been plunging. Some provisos are in order at this point; first, be sure that whatever wireless hardware is purchased, be sure that it is compatible, in that the suffix "a", "b", or "g" match, although much of the hardware available today will work with any standard, often listed as "a/b/g". A second proviso is the "weakest link" factor, in that a wireless (or any other network) connection is only as fast as the slowest segment. If a broadband

connection is running at 2Mbps, a faster wireless connection may be wasted unless files or hardware (such as printers or video) are being shared among the network. It should also be noted that many of the new home theater devices now coming on the market utilize the same wireless interconnectivity and hardware as computers, and may require the newer and faster standards of connectivity.

There is a third technology available for home and small office networking that is still in its infancy, but holds a promising future, and most of the major networking hardware manufacturers such as Belkin, Linksys, GigaFast, IOGear, Netgear, and others are producing compatible hardware. This technology is called "Homeplug" (www.homeplug.org) that can safely utilize the existing household electrical wiring as an already wired network. Homeplug compatible hardware is priced about the same as wireless, but is not yet as readily available as traditional wired or wireless hardware, but it may be worth the effort to shop for it. The standard, which meets UL and other safety requirements, is possibly the easiest to configure, has a 14Mbps bandwidth, and is more secure than wireless. To connect broadband to Homeplug, the broadband input is plugged into a Homeplug input device (similar to a router), and that device is then simply plugged into a standard wall electrical outlet. Any computer in the home, as well as many of the newer entertainment devices, are then connected to any other electrical outlet in the house via an adapter that connects to the computer with a traditional USB or network plug. In terms of security, the broadband signal does not typically pass through the household junction box, making it extremely difficult for neighbors and others to access the connection or network. As with all other forms of networking, a software firewall is still necessary on each computer.

If a user is bearing the cost of broadband, and has more than one computer in the home or office, then one of these networking technologies may be a useful method to connect those computers to the internet.

There is no restriction against any non-profit group using this article as long as it is kept in context with proper credit given the author. The Editorial Committee of the Association of Personal Computer User Groups (APCUG), an international organization of which this group is a member, brings this article to you.



Packed House for Database Overview by Bryon Palitto of Palitto Consulting.

Note: Meeting Place:
 North Canton Public Library
 185 North Main Street
 North Canton, OH 44720
 I-77 Exit (Portage) turn *EAST*.

From Rt.77, take the Canal Fulton/North Canton Exit (Portage St.)

Head east on Portage St. (If traveling north, you will turn right. If traveling south, you will turn left.)
 Follow Portage for approximately 1 1/4 miles to a sign that reads: "All thru traffic bear left."

Do not bear left. Continue straight on Portage until it dead-ends at Ream St.

Turn left on Ream. The Library is the 2nd building on your right. Small amount parking alongside and more across the street at rear of building.

Upcoming Computer Shows:

Peter Trapp: **NO SHOWS** scheduled yet (Ohio nor N.Y.) for
 year 2005 Trapp website down (11/05/05)

Contact ACPCUG Newsletter Editor:

New e-mail address: acpcugnews@yahoo.com

Club Officers area code 330, unless noted otherwise			
President	Frank Ramsey (2007)	699-4711	aframsey@yahoo.com
VP, Community Liaison	Rick Lubinski (2005)	928-7179	lubinski@bright.net
Secretary	Walt Ruthenburg (2006)	283-7867	wruthenburg@usa.net
Assistant Treasurer	Murray Davis (2006)	440-248-0021	murray5050@yahoo.com
Treasurer	Jim Albright (2005)	923-8686	jra823a@netscape.net
Newsletter Editor	Art McRowe	666-3189	acpcugnews@yahoo.com
VP, Software Evaluation	Dave Bohm (2007)	762-6745	bohm320@aol.com