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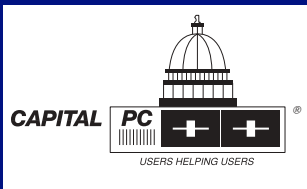
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and much more...

**CPCUG
General Meeting
TechTalks**

CPCUG General Meeting TechTalks are held monthly, usually on the second Monday of the month. They are free to both members and non-members, but only members are eligible for door-prize drawings. Details about upcoming General Meeting TechTalks are on page 4.



Digital Video User Group (DVUG), a Special Interest Group of the Capital PC User Group

by Merrill Hessel

Are you thinking about or have you recently purchased a digital camcorder? Do you want to edit or produce quality video with good sound and excellent images? The Digital Video User Group is the place to come. You'll learn about techniques, low prices for equipment, and how to make and edit video programs, put them on DVDs, or tape for broadcast on local cable channels.

About two years ago the DVUG was started by five energetic people who were video producers, camera people, studio directors, and video editors. They found that with the proliferation of digital camcorders and non-linear editing software (NLE) at an affordable price and usable with low-priced fast computers, there was no place for home or professional users to get together to network and develop or enhance their skills.

It doesn't matter whether you have a PC or Mac. And the DVUG meetings and Web site (www.dvug.org) cover topics for home users as well as for profes-

sionals. The meetings are designed to include all aspects of cinematography including "Introduction to Digital Video," "Giving Video a Cinema Look," "Basics of Sound Editing," and "Working with Sound and Music."



Standing-room-only crowd at DVUG's tour of the Discovery Channel Editing Facilities

The culmination of this past season was a tour of the Discovery Channel editing facilities.

At most of our meetings, time is set aside for attendees to bring short clips of their own videos so the audience can critique and learn from the videos that are presented.

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Register to Take a CPCUG Training Class

Most classes cost:
\$29-\$35 member fee
\$39-\$45 non-member fee

Classes Listed at
www.cpcug.net/trainingsearch.asp

Click *SEARCH CLASSES* to search by location

Two Training Centers: Annandale, VA, and Fort Washington, MD

Register for Annandale classes online at
www.cpcug.net/trainingsearch.asp
or by calling the CPCUG Office at 301-762-9372.

Register for Harmony Hall (Fort Washington) classes
online at www.pgparcs.com or by calling 301-203-6040.

*Note: Before registering for Harmony Hall courses for the first time,
you must visit a Prince George's community center to
register as a SMARTlink client (bring driver's license).*

Bring a Buddy at 1/2 Price Training Certificate



This certificate is good for one person to register for a 3-hour hands-on training class and “bring a buddy at half price” to the same 3-hour class offered by CPCUG at our training facility at the Annandale United Methodist Church, Room 305, 6935 Columbia Pike Annandale, VA 22003.

- 9 · To register or for more information call 301-762-9372 or visit www.cpcug.net/trainingsearch.asp (search by location and/or class title) or email training@cpcug.org.
- 9 · Mention code **MONBUD2** when registering and bring this certificate to the instructor on the day of the class.
- 9 · Class must be purchased by 2/28/2005.
- 9 · Certificate must be redeemed by 2/28/2005.
- 9 · Limit one certificate per person.
- 9 · No copies will be accepted. Present this page from the Monitor.



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**Get more
out of your
membership
in the
Capital PC
User Group—
Become a
VOLUNTEER!**

Contact a member of
CPCUG's Board of
Directors — all are listed on
this page. Most offer a choice
of e-mail or phone contact
information.



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Future SIGs

If you're interested
in starting a SIG,
please contact
CPCUG President
Dennis Courtney at
president@cpug.org.

The Internet SIG is
inactive. If you're
interested in helping
reactivate this
important SIG,
please contact Gabe
Goldberg at
gabe@gabegold.com.

CPCUG is looking for a few good men – and women. Can you donate a few hours each week to help improve our group? Call 301-762-9372!

Monitor is your publication. If you would like to discuss an idea for an article or column, please contact the editor at editor@cpcug.org.

Our style guide is at: www.cpcug.org/user/monitor/Monstyle.html.

Publication Submissions

Guidelines. Be sure to put each graphic (200-dpi TIF format preferred) and table in a separate file—*do not include text, graphics, and tables together in one file*. If you prefer to include everything in one file, please send each table and graphic separately *in addition*. Include your name, e-mail address, and day and evening telephone numbers at the top of your article so we can contact you if we have questions.

Submittal. Send articles as file attachments (Word or WordPerfect) to editor@cpcug.org, with copy to admin@cpcug.org. In the body of your message, include the names of files attached and the software formats of each. Or you may send articles in ASCII text format directly in the body of an e-mail message.

Conditions. Articles must be received at least 30 days before publication. All articles are subject to editing. Articles accepted for publication in the print version of the *Monitor* will also appear in the Internet Web pages of the *Monitor*.

Subscription Problems?

Please call (301) 762-9372 or send an e-mail message to admin@cpcug.org.

Address Changes. Please send change of address notices with current phone numbers to the Capital PC User Group, Attn.: Membership Director, 19209 Mt. Airey Road, Brookeville, MD 20833, or via e-mail to admin@cpcug.org. *Monitor* is not forwarded unless you have made special arrangements with your Post Office.

Renewals. One renewal notice is sent. You may renew your membership by sending your check for \$42 (\$78 for 2 years; \$110 for 3 years) along with your mailing label to the address above. Be sure to correct your mailing label if any of the information has changed, and always include your current phone numbers and membership number.

September 2004. *Monitor* (ISSN 1070-2792) is published periodically by the Capital PC User Group, Inc., 19209 Mt. Airey Road, Brookeville, MD 20833. Membership is \$42 (\$78 for 2 years; \$110 for 3 years), or \$60 per year for overseas members. Overseas members should make their checks or money orders payable to CPCUG in U.S. funds, drawn on a U.S. bank. Postage paid at Gaithersburg, MD. POSTMASTER: Send address changes to *Monitor*, Capital PC User Group, 19209 Mt. Airey Road, Brookeville, MD 20833.

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The Fine Print. Unless specifically stated otherwise, the opinions expressed in any article or column are those of the individual author(s) and do not represent an official position of, or endorsement by, the Capital PC User Group. CPCUG is an independent, nonprofit user group and is not affiliated in any way with any vendor or equipment manufacturer.

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CPCUG News & Events

General Meeting TechTalk Locations and Times

CPCUG General Meeting Tech Talks are held in Northern Virginia at Washington Gas in Springfield, or in Washington, DC, at the Martin Luther King Library. Directions to the current month's location are on page 34. General Meeting TechTalks held at Washington Gas begin at 7 pm. Those held at the Martin Luther King Library begin at 6:30 pm.

Two Training Locations!

Annandale, VA
UHU (Users Helping Users)
Classroom: 12 PCs on a LAN
Room 305
Annandale United Methodist
Church

6935 Columbia Pike
Annandale, VA 22003

**To register for classes, call
(301) 762-9372**

Fort Washington, MD
(HH) Harmony Hall
Classroom: 10 PCs on a LAN
Computer Room (2nd floor)
Harmony Hall Regional
Center

10701 Livingston Road
Fort Washington, MD 20744

**To register for classes, go to
www.pgparcs.com or call
(301) 203-6040. Note: Before
registering for Harmony Hall
classes for the first time, you must
visit a Prince George's
community center to register as a
SMARTlink client (bring driver's
license).**

Directions to both sites:
www.cpcug.net/directions.asp

Upcoming General Meeting TechTalks

Meeting location may vary; please check below

For up-to-the-minute details on General Meeting TechTalks, check
CPCUG's Web site: www.cpcug.org/user/comm/gen-meet.html.

Monday, September 13 (7:00 pm)

Topic: Virtual PC, InfoPath, and OneNote

Speaker: Geoff Snowman, Microsoft

Microsoft Developer Community Champion Geoff Snowman will demo three new Microsoft products. **OneNote** is a highly flexible tool that enables users to capture notes in whatever form makes sense to them — writing by hand, sketching, speaking, and more. **InfoPath** enables users to apply the power of XML (Extensible Markup Language, a new language standard allowing the creation of documents in which data is stored independently of the form in which it is presented). **Virtual PC** is a powerful software virtualization solution allowing you to run multiple PC-based operating systems simultaneously on one workstation, providing a safety net to maintain compatibility with legacy applications while you migrate to a new operating system.

Location: Washington Gas (usually in the large auditorium)
6801 Industrial Road, Springfield, VA

Directions: Industrial Road is in the Shirley Industrial Park. It meets
Backlick Road between the Beltway and Edsall Road.
See page 34 for detailed directions.

Monday, October 11 (7:00 pm)

Topic: Digital Photography Tips for Users

Speaker: Eliot Cohen

Eliot Cohen is well-known in the Washington, DC, area where his classes in digital photography and Photoshop are widely acclaimed. His classes through organizations such as the Smithsonian, Penn Camera, MBS, and Photoworks at Glen Echo Park are popular and highly praised. He has been a member of the faculty at the Corcoran School of Art and has taught digital techniques to the photography staff at the *Washington Post*. Eliot has also led workshops for the Maine Photographic Workshops and the National Park Service.

Eliot stays active as a photographer and illustrator for clients such as Fannie Mae, PBS, National Park Service, and USDA.

Location: Washington Gas (usually in the large auditorium)
6801 Industrial Road, Springfield, VA

See location details above.

Monday, November 8 (7:00 pm)

Topic: The Digital Home Experience

Speaker: Art Silverglate

IT professional Art Silverglate will present how digital networks allow home users to readily access a range of video, audio, data, and other services. He will address the rationale for establishing a home network, choices among home PC platforms, and technical issues such as wired and wireless digital media adapters, universal plug & play architecture, and device interoperability.

Location: Washington Gas (usually in the large auditorium)

President's Notes

Even though this issue will be out in the “back to school” time frame, I don’t want the summer to pass quite yet without a couple of notes about vacation. I really enjoy vacation time (who doesn’t?). It is an important part of my yearly calendar; a time when I can wipe all the cares about work out of my mind and renew my energies for another year.

I don’t necessarily need to go anywhere — I can get away from it all in my own backyard. Last year we went to Cancun for two weeks, but this year was spent primarily hanging around the house. Gone were the 10- and 12-hour days worrying about attending this meeting or that seminar. Working at home on my “honey do” list, all I had to worry about were the hours of the local hardware stores. That change in focus from the work world to the home world is something very important to keep me grounded in the reality of everyday life.

All of this rest and relaxation has given me time to wonder what my fellow CPCUGers do to stay out of the rut of the everyday grind. I wonder how many of our members use CPCUG events to help add a little spice to their lives? I know my association with CPCUG helped enrich my vacation.

During my vacation I spent some time with Merrill Hessel, a neighbor of mine who runs the Digital Video SIG. Merrill and I spent some time playing with a new GPS (global positioning satellite) toy he just purchased. I mentioned to Outreach Director Gabe Goldberg that I wanted to learn some of the more intricate parts of the digital camera I brought a couple of years ago.

Gabe had just the thing for me, an O’Reilly book on Digital Photography Hacks that needed a review. I’m only about half way through the book but I’ve already added a half dozen new tricks I can do with my digital camera. Finally, after talking with Training Director Padraic Collins, I decide to explore some digital video software that we might use in the future to create online classes. I even spent some time helping a CPCUG member set up QuickBooks for a new business they were starting.



CPCUG President Dennis Courtney enjoying his vacation by cooking up some burgers for friends on his backyard BBQ.

Although that all sounds like a very busy two-week “vacation,” it served its purpose by offering me that annual dose of renewal. I was doing what I wanted to do, on *my* time schedule, rather than what I am required to do on my work schedule. I was still busy but the amount of stress I would normally experience with that level of activity was completely missing (mostly due to my involvement with CPCUG).

CPCUG has a lot to offer to help you out of the daily grind — friendly people, weekly meetings, and an opportunity for creative outlet. All you have to do is show up and participate at a level you’re comfortable with. Give it a try, I think you’ll find it a great stress reliever.

Sadly, this will be *Monitor* Editor Susan Kousek’s last issue. The *Monitor* has improved both in quantity and quality under her stewardship. Although I have contributed a great deal to her stress level (I don’t think I met a single deadline for her) she handled it all with her trademark wry humor. We’ll miss Susan as *Monitor* editor, but have little doubt she will stay involved with CPCUG and add her considerable talents into the mix somehow. Thank you, Susan, you have been a joy to work with.

CPCUG President Dennis Courtney can be reached at president@cpcug.org.

Got a question,
have a problem,
need some help
with your
computer?

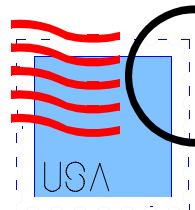
Another resource is CPCUG
Late Nite – held after most
Monday evening General
Meeting TechTalks at 9:00PM

“Late Nite” consists of smaller and more informal gatherings after each General Meeting TechTalk. In addition to a place for beginners and intermediate computer users to continue to learn how to get more out of their computers, it provides an opportunity to learn more about CPCUG, its benefits, its special interest groups (SIGs) and its training opportunities. Join us for fun, lively discussion, and computer talk. Experts are welcome to share their insights as well, of course.

Feedback



Feedback



Editor's Note

This is my last issue as *Monitor* editor. It's been just over a year, and 11 issues. I've enjoyed it immensely, learned a lot, and worked with many great people. I want to thank:

- the many contributors, especially those who faithfully sent articles for each issue,
- Barbara Conn, Tom Gutnick, and Gabe Goldberg for their help (often requested at the last minute) on each and every issue,
- all the members who read the *Monitor*, especially those who have e-mailed me with comments,
- and the CPCUG board for giving me the opportunity to edit the *Monitor*.

Susan Kousek, Editor
skousek@cpcug.org

Volunteers Needed for CPCUG Booth at NBC4's Digital Edge Expo

Volunteers are needed Sept 18 and 19 to staff the CPCUG booth at NBC4's Digital Edge Expo. Contact Gene Gaines at gene.gaines@gaineshgroup.com.

Be sure to stop by the CPCUG booth while you're visiting the Expo. And check the schedule (www.nbc4.com/digitaledgeexpo) for two CPCUG-sponsored events:

- a two-part session on PDAs presented by PalmOS SIG Chair Shawn Googins & Pocket PC SIG Chair Ray Wiley
- "Watch Teams Compete to Assemble PCs"

Save Money and Support CPCUG!

by Gabe Goldberg



Entertainment Books for 2005 discount coupon have arrived. So it's time for CPCUG (that means members and volunteers!) to help CPCUG raise much-needed funds by selling books to friends/ neighbors/colleagues — and buying books for themselves.

These books offer *hundreds* of discount opportunities on dining (usually two-for-one deals, buy one and get one free), travel (airline, hotel, car rental), shopping, sporting events, theater, movies, dry cleaning, auto repair, and much more.

The books are great — I've saved hundreds of dollars each year for many years. These are real discounts on everyday purchases, not requiring special, additional, or oddball expenditures.

The books are better than ever. The 2005 edition is \$10 less expensive than previous editions, and it includes four \$5 coupons for discounts at Safeway. It's easy to visit Safeway four times in a year, and that reduces the book's cost to \$5!

As always, CPCUG earns a percentage of our book sale revenues — and the more we sell, the higher the percentage earned.

Selling books isn't hard, they nearly sell themselves. We're selling two local editions: DC/VA and DC/MD, both \$25/copy.

Orders for out-of-town books (covering most major cities in

North America!) can be placed online with CPCUG receiving credit for such sales. The key to making sales is offering books early — and we can since we're among the first groups in the area to have books. Don't wait until people have already bought books to try to sell them.

Here's what to do: buy books for yourself and your family, and as gifts. Books will be available at many CPCUG meetings between now and January 1. Let me know by e-mail if you'd like to buy books so we can work out details.

Offer books to people you know. Let me know if you'd like to help sell.

Encourage people you know in other cities to buy books. It's simple, takes just a few steps:

- Visit www.entertainment.com support
- Enter CPCUG's Group Account Number, 534389
- Enter the zip code for the area for which you'd like to order a book
- Click Buy This Book
- Select quantity desired and proceed to checkout

Outreach Director Gabe Goldberg can be reached at gabe@gabegold.com.

Entertainment Books Available at CPCUG Booth at NBC4 Digital Edge Expo

Pick up your copy of the *Entertainment* book at the CPCUG booth while you're attending the NBC4 Digital Edge Expo. Only \$25. Save money with the coupons in the book and help CPCUG at the same time!



Rich's Ramblings

by Rich Schinnell

Cleaning Your System Unit

As I write this, we are in the throes of hot weather and maybe it's about time we all take a look at our computer ventilation fans.

If you've had your computer for a while, like a year or two, you might want to open it up to clean out the dust bunnies and cat/dog hair that have accumulated inside. Even with the cleanest of houses or offices, your computer can draw in a lot of dirt, rug fibers, and dust. This will eventually build up on your ventilation grates and fan blades — not good for proper cooling of your system. Open it up at least twice a year to check the air flow paths for blockage. Similar to looking under your bed once in a while to see the dust.

Reduced air flow over critical components, i.e., CPU and hard disks, can shorten their life. Make sure fan blades are not blocked or covered with dust. After shutting your system off and removing the power cord, open the case and inspect the system for dust. A vacuum cleaner can be used but very carefully. Some are so powerful they can damage your wiring or vacuum up components. Using a high volume vacuum cleaner on small fans can damage them. A small clean artist's paint brush is handy and, used with care, will take care of most of the fan dirt buildup. Don't use Windex or an alcohol- or ammonia-based liquid cleaner as they could damage components or wiring in your system. Some vendors tout compressed air cans that just move the dirt around. Used properly, these will work but I would not do it in the computer room because you're just moving it around and when you turn your

system back on, back it will come. Preventative maintenance of your system should make it more reliable and give it a longer life.

Garbage In Garbage Out

I read on Bulletin Boards where a user complains their computer locks up or has to be re-booted quite often. Then I read further and find they have many installed programs for pop-up blocking, advertising banner removal, etc. — it's no wonder they have trouble. Having these programs installed is not a bad thing, but many free programs are not as well-written as they should be. Interference with other programs happens often. If your computer runs too slow or you have lock-ups, check for programs running in the background.

By default the hard disk indexing program is running on Windows XP (Home & Pro) and keeps a database index of all the files on your computer. Each time you search for a file or program, it kicks in and gets it to you real fast — but at a price I believe is not good. Anything that takes CPU time away from what you're doing that does not improve the security of your PC is not a good idea. I know there are some who don't agree with me and are running all kinds of utilities they just have to have. Well, go for it! My record on the lack of BSD (Blue Screen of Death) and freeze-ups is pretty clean. I don't remember the last time I had to pull the plug on a PC that locked up.

Back in the olden days, there was a program by Borland called Sidekick which was probably one of the most famous TSR (Terminate & Stay Resident) programs around. It was also the most prevalent reason for computers going off into Never

Land. SideKick was a real neat program, when it worked and did not freeze up your computer. In fact, many help desk staffers' first words to anyone who called for help was "You aren't using SideKick, are you?" Nuff said.

The closer to a "virgin" system you can operate, the less aggravation you will endure. I recommend an anti-virus program like Norton AntiVirus and a firewall like Zone-Alarm. I keep my system running pretty much without all the add-ons. With the new update Service Pack 2 to Windows XP, I think many will appreciate the improvements. Once you get it configured the way you want, it might be a good idea to create a restore point. START | PROGRAMS | ACCESSORIES | SYSTEM TOOLS | SYSTEM RESTORE is the location of the system restore program.

Periodically, if your system is set up just the way you want it and everything is working fine, go in and turn off system restore via the properties of "My Computer" SYSTEM RESTORE tab. Then you might want to consider cleaning out your temporary Internet files in OPTIONS for Internet Explorer. Make sure to clean out the offline files also. This will remove many temporary files so that IE will run faster. Then empty your Recycle Bin and run a disk defragmenter. I recommend the program VOPT. They have a 30-day evaluation version which does everything that the paid registered version has. Almost the best \$40 I have spent. I have been using their program for quite a few years and never had problems using it. After you have de-fragmented your drive, make sure that you turn the system restore back on and create a restore point.

continued on page 20

Top Ten Web Security Tips for Programmers

by Michael Smith



All data-driven Web sites are potentially vulnerable to hackers, whether written in ColdFusion or another language. Fortunately

a few simple steps can make your site much more secure.

1. Have an Error Handler

By default ColdFusion displays a detailed error message when there is a problem in your code. Yes, I know your code has no bugs in it, but what if the hacker deliberately creates an error by manipulating URL parameters or faking out a form submit? If they can create an error and see the error message they may see your datasource and table names to help them create a SQL injection attack (see tip 6 for more on this). To protect your error messages from prying eyes, add a CFERROR tag in your application.cfm to catch all errors and display a harmless message to users and hackers alike. I like to e-mail myself a copy of the error message so I can either fix it or be warned a hacker is on my site.

In your application.cfm use:

```
<CFERROR type="EXCEPTION"
template="error_exception.cfm"
mailto="michael@teratech.com">
```

And in your error handler file error_exception.cfm use this code:

```
<CFMAIL to="#error.MailTo#"
from="info@teratech.com"
subject="ColdFusion Error in
#error.Template#">
    Address: #error.RemoteAddress#
    Template: #error.Template#
    Date: #error.DateTime#
    Message: #error.Diagnostics#
</CFMAIL>
```

If you want to be extra careful you can also trap for the

REQUEST type for CFERROR after the EXCEPTION type. This is a backup error handler for sites with high user interface requirements. You might also turn off the setting for show the full path to error messages in the CF Admin. You can't be too careful. Also don't give more information in error messages than you have to. For example on a logon screen don't say "the userid is correct but password wrong" because that gives extra information to hackers. Just say "logon denied."

2. Prevent Cross-site Scripting

Cross-site scripting is where a hacker changes your URL, FORM, or COOKIE parameters to either create an error or to view unauthorized information. Changing URL parameters is just a matter of editing the URL line in the browser. Changing hidden form fields is a bit harder. Here is how the hackers do it — save the HTML of your posting page on their server, edit the hidden form fields, edit the FORM ACTION parameter to point to the submit page on your server and then submit the page from your browser. In the past this has been used to change the price for an online store item from \$100 to \$1, causing great losses for the Web site. (Of course it is bad security design to put such data in the form anyway — the less you expose the better). Fake form submits can also bypass any client-side validation that you are doing on the form fields submitted. What to do? Protect your URL and hidden FORM variables from outside manipulation. For URL variables you can use the free functions URLEncrypt

and URLDecrypt from CFLib (www.cflib.org is a library of ColdFusion functions that you can use in your code). URLEncrypt will let you display your URL variables as one big coded string (sort of like the big URL strings you can see on Amazon.com) and decrypt them on the receiving page back into individual URL variables.

For Form fields use a Checksum field so that you can prevent them from being changed.

In calling page:

```
<input type="hidden" name="ID"
value="#GetBouquets.BouquetID#">
<input type="hidden" name
="checksum" value="#hash
(GetBouquets.BouquetID)#">
```

In the submit page:

```
<CFIF hash(FORM.ID) neq
FORM.checksum>
    Bad Form<CFABORT>
</CFIF>
```

The hash() function gives a checksum for a string, so if the string is changed the hash of it will change too. For multiple hidden fields, first combine them into one string, then hash that. It doesn't matter how long the string is, the hash function always returns 32 characters.

I also suggest you validate all URL and FORM parameters with the CFPARAM tag. This tag not only provides a default value, but also checks data types. If you want to make sure a URL parameter is supplied, just leave out the DEFAULT parameter of CFPARAM and an error will be thrown if the URL variable is missing:

```
<CFPARAM NAME = "URL.ID" type
= "numeric">
```

continued on page 22

Linux Report – Linux: Is it for You?

by Cliff Bailey

I originally had in mind writing something that might have been rather boring. It was to be a piece about word processing and other office applications on Linux, but I just couldn't get into it. Luckily a friend rescued you. He told me about his Windows XP being unbootable and what you are about to read came to me out of the blue.

Anyway, there I was listening to a rant about his computer and really got how we are all hypnotized by software marketers. My guess is that his computer had come down with a virus. A really nasty one. And he has the latest in anti-virus software. It got me to thinking. If the software he's using is so great, then why should he have to buy other software to protect it? If I wrote software that required other software to protect it, my clients would demand a refund.

So now comes Linux. Our Linux system has been running for six years with nary a virus. We don't have viruses or spyware. We don't need to buy virus and spyware protection software. We just use the computer to cruise the Internet, send and receive e-mail, do word processing and programming. Pretty cool, huh?

Yes, I think hypnotized is the right word. How else could we think that it's a good idea to buy software that we then need to buy software to protect? But, this isn't about software slamming. It's about choice. We as users have choices today that we didn't have just a few years ago. Although we use Linux, I also have a PDA. With it I do things that I used to do only on a PC (like writing these articles). It's small, portable and doesn't crash — ever. I like that a lot.

The market is working to provide us with more choices. And today Linux is definitely one of those choices. Is it ready for "the masses"? Well, that depends on you, dear user, and your expectations. If you expect Linux to be just like Windows, then you will be constantly frustrated. If you accept that it is a totally different system and are willing to learn a few new things, then life will be sweet.

Linux is a Unix-like operating system. Like Unix, Linux is command-line driven. Sure there is a graphical (X) display, but underneath that is the command line. If you are command-line averse (think DOS), then Linux is probably not for you. Even though you can now do almost everything in Linux from the graphical display, there may come a time when you need to open a command-line window and type a command or two.

I mention this at the request of a reader who really likes Linux. But he found that it can be more difficult to set up than Windows. I have found these difficulties come from how Linux deals with peripherals (video cards, PDAs, modems, printers, scanners, and such). Companies that make these peripherals always write drivers for Windows. They don't always write Linux drivers. This has changed dramatically in the last two years with more and more companies writing Linux as well as Windows drivers, but it's still not *all* companies.

I know we've talked about this before, but it bears repeating lest you become frustrated when you find that the new Xtra Special Printer you just purchased will not work with your Linux system. It had Windows drivers. Doesn't

that count? Well — no. Actually there is a project afoot to enable Windows drivers to work with Linux, but it's still in the works. I'll let you know when it is ready for prime time. I want you to be happy, not frustrated, with your Linux system.

Another difference today between Linux and Windows is with the installation and maintenance of third party software. With Windows you pop in a CD that contains the new software, answer a few on-screen questions, and magically the software is installed. Software installation can also be that simple with Linux. It could also be that you need to open a command window and type a few commands to install that new software. I rather enjoy that sort of thing, but if you don't or you don't have a friend who does, then you will be frustrated and I don't want that.

For me this has been a boon. I like getting in there and finding out how things work. To me this is a challenge, like solving a puzzle. So, for me, there is no downside. I get to muck about with new software and I get a system that always works. Life is good. So, if that is a good description of who you are, then why not give Linux a try? All you might lose is your boredom. What you have to gain is a system that always works!

Cliff Bailey is the president of the Glitch DC SIG, where he is a Linux advocate. During the day he is a personal/executive coach working with people to have the life they have been dreaming of. And he also works with small businesses to keep their computers running smoothly and encourages them to switch to Linux (with some success). He can be reached at cbailey@myexcel.com or (703) 237-4174.

Why You Need a Viable Backup Strategy

by Robert Simanski

Hard drives fail. Operating system files become corrupted. Viruses and spyware can render a computer useless. These are facts of life for personal computer users. It's not a question of whether disaster will strike, but when. When these disasters happen, usually the only solution is to replace or reformat the drive.

A sound, viable backup strategy is not a "nice to have" extra. It is a necessity, especially if you depend on your computer to earn your livelihood. With a strategy that includes a recent full system backup and daily differential backups of new and changed files, you can reformat the drive, install a bare-bones Windows setup, and restore everything else from your backups in a couple of hours. The only data you will lose is whatever was created since your last backup. Without a viable backup, you will have to reinstall and reconstruct everything from scratch and you will very likely lose important data.

Unfortunately, very few computer users have a sound backup system in place, and many of those who do fail to use it. The usual rationale goes something like this: "I'll just back up my working files to a removable disc. If I have to reinstall the operating system and application software, I'll use the original discs."

This argument might have been valid in simpler times, but it doesn't hold water today because of the complexity of recent Windows operating systems.

Experience has shown me that any viable backup system must meet the following criteria:

1. The media must have suffi-

cient capacity to back up my entire system. In a worst-case scenario, I should only have to use two media.

2. The system must allow for easy backup of all new or changed files between full system backups.

3. The backup must be able to run unattended.

4. The media must be affordable enough to allow for multiple redundant backups. There are two reasons for this: 1) Backup media themselves can fail. 2) If a file that is used infrequently becomes corrupted, and I don't know when the corruption occurred, I may need to go back two or three backups to restore an uncorrupted version.

5. The system must be sufficiently simple and automated so that I will use it.

Until a few years ago, about the only viable and relatively affordable option for individual computer users was a tape backup system. Unfortunately, a tape backup is a hard sell because it adds several hundred dollars to the cost of the system without adding any new functionality. This, of course, doesn't make it any less necessary.

Today, there are two other affordable options that not only meet most, if not all, of my criteria, but also add other functionality: External USB hard drives and DVD writers. I still intend to stick with tape for my own use, but let's look at each of these three options in detail:

Tape Drives

Tape drives are still the only one of the three options that meet all of my criteria. The most common types are Travan drives

previously distributed by Seagate and now handled by Certance. A Travan 40 drive has a nominal capacity of 40 GB of compressed data or 20 GB of uncompressed data. This, however, assumes a compression ratio of 2:1, which is unrealistic when it comes to backing up an entire system because most program files are already highly compressed. A compression ratio of 1.5:1, which yields 30 GB of compressed data, is more realistic.

In any case, a Travan 40 drive has more than enough capacity to back up most users' systems, including my own. For many users, a Travan 20 drive, with a realistic capacity of about 15 GB of compressed data or 10 GB of uncompressed data, would be sufficient.

A Certance internal ATAPI Travan 40 drive that connects to the IDE controller on the motherboard sells for about \$320, while a Travan 20 drive sells for about \$200. Travan 40 tapes cost about \$50 each while Travan 20 tapes cost about \$40 each or \$110 for a three-pack. I recommend starting out with three tapes in addition to the one that comes with the drive and adding more as needed. You also need a tape cleaning cartridge, which costs \$30 on Certance's Web site (www.certance.com), and use it once a month. Finally, I recommend Stomp BackUp MyPC software, which is far superior to the TapeWare application that comes with Certance Travan drives. Costco sells it for about \$50 and usually offers a good rebate.

A Travan 40 system with three extra tapes and a cleaning cartridge costs about \$550, while a Travan 20 system costs about

\$400. I recommend building up to seven tapes if possible. Depending on how heavily you use them, the tapes should be replaced after one or, at most, two years.

Some people shy away from tape backup drives because of previous poor experience with them. I've run into some problems with them myself. However, there are three steps you can take to greatly improve their reliability:

1. Use the tape cleaning cassette once a month. It only takes about 30 seconds.

2. Retension the tape every time that you use it. If the tape has not been used for at least 30 days, retension it four times. Many so-called tape failures are due to poor tensioning.

3. Remember to initialize each tape before you use it the first time. This is something like a quick format. (Recent Travan tape formats are formatted at the factory and cannot be reformatted.) When you are asked to name the tape, give it the same name as the label that you will put on the tape itself (see below).

Let's assume you will do a full system backup every Friday and differential backups of new and changed files on the other days of the week. Here is a backup plan based on seven tapes:

1. Label four tapes as follows: Week 1, Week 2, Week 3, and Week 4.

Do a full system backup every Friday. Configure your backup software to overwrite whatever is on the tape when it does a full backup. Do a differential backup of files that are new or changed since the last full backup on the other days. Configure the software to append these backups to the tape in the drive.

Because the differential backup will back up everything that has changed since the last full backup, each differential backup will be

larger than the previous one. However, if you should have to reformat your hard drive and restore everything, you'll only need to be concerned with two backups, the full system backup and the last differential backup.

2. Label two tapes as follows: Offsite 1 and Offsite 2. Use them on months that have a fifth Friday. Configure your backup software to not reset the archive bits for these backups, so that your differential backups will not be affected. Store the most recent Offsite backup tape off-site, such as in your safe deposit box, and rotate the two tapes.

3. Keep the remaining tape as a spare for emergency use, such as when you run out of space for your differential backups.

External USB Drives

External USB drives are available in just about any capacity that you might need. I bought an external 120 GB Maxtor drive to see if it would work as an alternative to a tape drive for my backup system. I've just done a test backup using the drive and it seems to be fine.

It took me a while to figure out how to make it work, primarily because there seem to be some bugs in the Dantz Retrospect Express 5.6 software that comes with the drive. Unfortunately, the software cannot be updated. I would have to pay for an upgrade to the latest version. I wasn't about to do that because I already had BackUp MyPC on the system.

One problem is that Windows XP sees the drive as a fixed drive, not a removable one. Neither Retrospect nor Stomp BackUp MyPC see it as a backup device. The secret, I found, is to configure the software to back up to a file and place that file on the external drive. By backing up to a file, you can store multiple backups on the drive because you can name each one incrementally.

There are several potential drawbacks to this method in relation to a tape backup system:

- If the drive fails, you've lost everything. However, you could mitigate this risk by rotating two or more drives. At today's prices, it still might be cheaper than a tape-based system.

- Offsite storage might be a problem. The drive that I bought is about the size of a CD-ROM drive. I wouldn't want to try to put it in my safe deposit box. However, I'm sure that there are smaller alternatives that would serve the purpose.

- I would not recommend using this method with any Windows operating system earlier than Windows 2000. The backup files can get quite large and could exceed the maximum size allowed by the FAT32 file format system used by Windows 98 and ME. The NTFS system used by Windows 2000 and XP supports much larger file sizes.

If you decide to go this route, I have two suggestions:

1. Make sure that you have an available USB 2.0 port. The older USB 1.1 interface is much too slow for this purpose. If your system didn't come with USB 2.0, spring for an add-in controller card, which should cost between \$50 and \$80. The more expensive cards will have other niceties, such as one or more Firewire ports and a network interface.

2. The drive is likely to come formatted for FAT32. Reformat it for NTFS before using it.

Startup costs for a good-sized drive and BackUp MyPC should be between \$150 and \$170. Add \$50 to \$80 for a USB 2.0 controller card if you need one.

DVD Writer

DVD-Recordable discs have a capacity of 4.77 GB of uncom-

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Reboot

CPCUG's Active Computer Recycling Program

10 Volunteers
Working 1 or 2 or more
afternoons a month

Have hardware to donate?
Have a few hours a month
and want to help?

101 Fleet Street
Rockville, MD

Hours for donation drop-off:
Mondays 2:00 - 6:00PM
Wednesdays 10:00AM - 4:00PM

Contacts:

Gerry Rosenkrantz
g.rosenkrantz@att.net

Dave Barry
davbar20852@yahoo.com

O'Reilly Books Available for Review by Gabe Goldberg

Thanks to the generosity of O'Reilly & Associates, one of the leading publishers of computer and networking books, CPCUG is well stocked with titles. We'll have books at the next several meetings — we'll raffle some to members, think of other creative ways to distribute some, and make some available to people who will review them for the *Monitor*. We always need product and book reviewers — it's easy to get computer products and books to review, much harder to find people who'll exercise a product or read a book carefully, then share thoughts with fellow members. But doing that is a contribution that helps your fellow members, and it's what user groups are all about. If you're interested — and it's really not hard, and it's fun, and you can get writing guidelines and editing help if you wish — contact Ken Rothermel at reviews@cpcug.org.

The Complete Elevator Speech Workshop:

How To Get the Results You Want When You Have Only 30 Seconds To Talk

Workshop Leader: Bob Bailey, ebiz

Picture this:

- You are at a networking event.
- There's a roundtable of self-introductions going on.
- You are next! *What do you say?* Will you be remembered?
- Will you get the results, contacts, and action you want?
- Or will your introduction fade into the background, like so many others?

At this interactive workshop, led by former software developer, marketing manager, and sales manager Bob Bailey, you will give your elevator speech, get immediate feedback, learn techniques to improve your presentation skills, and have an opportunity to rework your speech and present a new and improved version.

- ***Get results rather than disappointment at networking events.***
- ***Attract the people who can help you in your business.***

Bob Bailey has the knowledge and experience to help high-tech business executives deliver polished, focused, powerful presentations. His knowledge of technospeak enables him to help the high-tech speaker translate technical jargon into language that is technically meaningful yet persuasively effective. Bob is outstanding at creating analogies, translating features into benefits, and making it meaningful for the audience.

Attendee Limit: 12 – because all registrants get personal coaching!

Saturday, November 6, 2004.

Check-in: 12:45 pm. Starts promptly at 1:00 pm; ends at 3:30 pm.

Location: Inter-American Development Bank (Annex Building)
1350 New York Avenue, NW, Room B-302
(SE corner of 14th St & New York Ave, NW)
Washington, DC

Advance registration and payment required. Sorry, No walk-ins.
Registration: Contact Karen at the CPCUG office, 301-762-9372

[If you get voice mail, please leave a message with your name, phone number, name of the workshop, and best day/time to return your call.]

Fee: \$79 until November 2

Late registration: \$99 (Late registration closes when all slots are filled or noon the day before the event, whichever is first.)

For more info go to:

www.cpcug.org/user/entrepreneur/Workshop-ElevatorSpeech.html

Organized by CPCUG's Entrepreneurs and Consultants SIG

"Thirty seconds to get across what you do for the world? Bob Bailey's Elevator Speech Workshop helped me pack a lot more meaning into that brief time slot. Bob creates a friendly, supportive atmosphere in which even the most nervous would-be public speaker can make progress.

"Well worth the money. Thank you, CPCUG!"

Suzanne Harris, President, Magnificent Publications, Inc., March 12, 2004

The Whole World in My Hand

A Database in the Hand is Worth...

by Tom Gutnick

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Labor Day rolls around again, and I continue in my quest to make my own life as unlabored as possible. If you've been following

this column, you know my Palm-powered handheld has helped make my life more ordered. Up to now, I've been discussing the Palm's built-in software, but now let's expand our horizons....

When I got my first Palm about five years ago, my professional life was that of a "road warrior," and my ultimate goal was to replace my Day-Timer completely, which meant not only storing addresses and calendar entries on the Palm, but also finding a way to deal with the many scraps of paper I had carried around. Let's consider what was on those scraps:

- A list of the good radio stations I've found on the road. (This makes it easy to set the radio presets in the rental car instead of hunting across the dial.)
- A list of restaurants I want to try in other cities
- Dial-up access numbers for my Internet Service Provider
- A record of airline flights, car rentals, and hotel stays, to make sure I get my frequent flyer credits

I quickly zeroed in on a Palm-based database program as my solution. There are a number of good (and not-so-good) database programs available. My favorite is HanDBase. I consider Smart List To Go (previously called ThinkDB) to be a strong contender. For a more complete list, refer to the PalmSource Expert Guide on Databases at www.palmsource.com/interests/databases/ (which was written by me!). Although most software I run on my Palm is freeware, HanDBase is one I paid for — and that has paid for itself many times over. (Most of the packages run \$30-\$60, although there is even a decent freebie.)

Using HanDBase is in many ways like using Microsoft Access under Windows. (I'm describing HanDBase here, but the other good packages are quite similar, both in terms of what they can do and how they do it.) I found it sufficiently intuitive that I just started using it, figuring it out as I went along instead of reading the comprehensive manual. You start by creating a database (more precisely, a relational "table") and defining the fields (or "columns") which make it up. Each field has a name and a field type. Field types include text, integer and floating-point numbers, pop-ups (with preset values you can select), checkboxes, date, time, even images. Special field types allow you to link multiple databases together or do calculations. Depending on the field type selected, you may also specify a maximum length, and how much of the field to display on the screen. You can use the default tabular display of the database, or you can use an optional forms generator to get fancy.

Calculated fields are useful. I used to keep a notebook in my car to track my gas mileage. Now I use HanDBase instead: I've designed a database in which today's date is automatically filled in; then I enter odometer reading, gallons purchased, cost, plus any comments I care to make. HanDBase automatically calculates miles driven since the

previous fill-up, and then miles per gallon and cents per mile.

The ability to link databases is extremely powerful. I created an application for a friend who works as a visiting nurse and was tired of lugging around a heavy laptop. One table had basic information on each patient; another table had names, addresses, and phone numbers (for the patient, emergency contact, lawyer, etc.); the final table got the details of each visit — services performed, materials used. So Tammy always had complete information on all her patients in the palm of her hand — and when she did a HotSync operation back at the office, all the data got moved into the MS Access database used for the office billing application.

I've created other linked databases too:

- When job hunting, to keep track of all the activities and contacts associated with each potential employer.
- To keep track of the maintenance activities (repairs, warranty adjustments, routine services) on the family cars. I like having all the details in front of me when I'm chiding the service manager.

As you can see, the right software can give you infinite possibilities. That's why my new proverb is, "A database in the palm is worth a paper organizer in the briefcase."

Tom Gutnick is president of Sunny Banana Information Technology Consulting, and a Palm Powered Software Champion. He teaches classes on the use of Palm handhelds, and provides both individual and organizational consultation for their effective implementation and use. He can be reached at tag@sunny-banana.com or (703) 786-5541.

Book Review: *Programming ASP.NET*

Building .NET Web Applications with Visual Studio

Reviewed by Ranjit Sahai

Microsoft Visual Studio now seamlessly supports the development of Web applications. If you began building database-driven Web pages to run on Microsoft Internet Information Server in the mid- to late-nineties, you likely began writing in a text editor IDC/HTX (Internet Database Connector) code. Then there was the Microsoft Visual InterDev development environment for writing Web applications in ASP (Active Server Pages) and Microsoft Visual Studio for writing Windows applications in Visual Basic or Visual C/C++.

With the release of the .NET Framework, Microsoft has merged its Windows desktop and Web development platforms through the Common Language Runtime (CLR) environment that supports both in a consistent manner.

The book *Programming ASP.NET*, Second Edition, specifically targets developers of Web applications and Web services using Microsoft Visual Studio. The book presents code samples in both C# and VB.NET. Whether you're new to Visual Studio .NET or to Web development for Microsoft Internet Information Server with the .NET Framework, this book will serve as an excellent introduction to the Visual Studio development environment and a reference to Web development specific controls, forms, functions, and tools.

You will need some background in programming in order to understand and derive value from the extensive snippets of code sprinkled throughout this book. The first two chapters introduce the .NET Framework and Visual Studio.NET. The next three

chapters introduce the concept of events and controls in ASP.NET.

Event-driven controls, though a way of life in Windows desktop or any Graphic User Interface (GUI) platform programming, are new to ASP.NET. Whereas classic ASP programming was linear or procedural, ASP.NET programming is primarily event-driven where most events are handled by the Web server. Some of the common events an ASP.NET developer will write code to handle include: BubbleEvent, CheckedChanged, Click, DataBinding, Init, ItemCreated, ItemDataBound, Load, PreRender, SelectedIndexChanged, TextChanged, and Uload.

The bulk of the remaining book provides details on specific topics such as Web Forms, debugging and error handling, validation, data binding and data grid for linking to and writing database powered applications, custom and user controls to help you extend the .NET Framework for your specific problem domain, and Web services for programmatic access to functions and services you wish to make available to other programs.

The last three chapters discuss application scalability, performance, security, and deployment related issues. The book includes two appendices: Relational Database Technology is a crash course in relational database concepts; Bug Database Architecture is a review of the tables and columns in the Bug Database used as an example in the database chapters of the book.

If you've been meaning to discover ASP.NET programming and learn how it is significantly

different from and more powerful than classic ASP programming, you will find that information in this book. It is a good reference to the various topics and controls you will use when writing Web applications and Web services.

About the Book

Programming ASP.NET, Second Edition, was written by Jesse Liberty and Dan Hurwitz and published by O'Reilly (www.oreilly.com) in September 2003 at a list price of \$49.95 and has 990 pages.

Ranjit Sahai is a licensed professional engineer and president of RAM Consulting Corporation (www.ram-corp.com), an engineering and technology solutions company based in Dulles, Virginia, with an additional office in Baltimore, Maryland.

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Letters to “Late Nite”

Hosted by Marty Shinko



Q04IX.0: How widespread is the problem of “spyware” software?

A0: It's a problem attracting significant attention. I've seen it mentioned in magazines as diverse as *Computing in Science & Engineering* (published by the American Institute of Physics) and *Dr. Dobb's Journal* (a magazine for professional programmers), as well as being mentioned in the *Washington Post*, and it came up at the last two Late Nite sessions after recent CPCUG General Meeting TechTalks.

Q04IX.1: What is the problem with spyware, other than that it surreptitiously reports on your web browsing activities to some unknown sponsors?

A0: The problem is that spyware software also slows down your computer, because each spying organization tries to load its own copy of some spyware software. The software doesn't check if there are any other copies running (each copy may have its own “sponsor” to report back to, anyway), so some users can have 20 or 30 such programs running simultaneously, monitoring every keystroke and mouse click. Having that many programs running at once uses lots of resources and slows things down a lot (especially since every keystroke activates each one). Every program requires a context switch and takes a time slice of CPU time.

Spyware software may also be badly written, so that it doesn't release the RAM (memory) that it's no longer using. This is called a “memory leak” and that alone can cause Windows 98 software to become unstable and crash after a few days of continuous running.

Q04IX.2: How can I get rid of any spyware on my computer?

A0: There are many software products that can clean spyware software off your computer; two mentioned by Jerry Pournelle in *Dr. Dobb's Journal* are Spybot Search and Destroy and Ad-aware. Both are free (Ad-aware is free for non-commercial use only; Spybot S&D is supported by voluntary contributions), and Mr. Pournelle suggests using them both.

Q04IX.3: How large is Spybot Search and Destroy software, and where can I get it?

A0: Spybot Search & Destroy software is about 4.2 MB (it took about 17 minutes to download it over a dial-up connection).

When contacting me about a question appearing in my column, please refer to the question number.

Every question is numbered in the form Q'YR'MO.seq#, with a 2-digit year, and Roman numeral month. The answers will have a code for the responder, e.g., A0 = Marty Shinko.

The site for Spybot Search and Destroy software is www.safer-networking.org. It directs you to a mirror site, www.hestia-online.net/spybot/download; I downloaded it from that location.

According to Paul Dubois, be wary of using a Google search to find Spybot Search and Destroy. He wrote that “evildoers are gaming Google, trying to misdirect your search for this program into commercial alternatives or worse.”

Also, several “Trojan” software entities contain the text “spybot” in their names; you don't want to download some Trojan software that Google finds by mistake.

Q04IX.4: How large is Ad-aware software, and where do I get it?

A0: The site for Ad-aware software is www.lavasoftusa.com,

but it directs you to an alternative site to get the free version. I selected that link and got it from the www.download.com site. Ad-aware software is about 2.1 MB.

Q04IX.5: How can I change the security settings of my browser software?

A0: If you're using Microsoft's Internet Explorer software (version 6), select TOOLS | INTERNET OPTIONS..., then select the SECURITY tab.

Every different browser software can be different, of course.

Q04IX.6: My browser software keeps displaying the message “Scripts are usually safe. Do you want to allow scripts to run?” What does it mean by “usually”?

A0: The HTML (computer language) used for describing Web pages was designed for “static” Web pages, and scripts are needed to add interactive features. That's what they're usually used for, but they can also be abused and used to mislead and thwart the user.

One way to think of Web pages is that the server computer on the Internet sends your computer the data it needs to draw a “poster” or “flyer page” on your computer. The server sends all the data needed to draw the page, then it's done — it moves on to serving someone else. The poster or display can be bigger than what you can view on the screen at once, so you might need to scroll up and down and right and left to see the whole thing, but it's all sent at once so it's all there. Basically that “poster” stays the same, no matter where you scroll or where you move the mouse pointer. That's what makes it a “static” page.

continued on page 16

“Late Nite” continued from page 15

Some of the images displayed might be animated, and loop through a few different views, but again that’s all done independently of where you move the mouse pointer, so that would still be considered a static page.

Scripts are instructions embedded in HTML that describe the Web page. They tell your computer to display things slightly differently, depending on where you put the mouse pointer. Scripts allow Web pages to be more dynamic, with things like drop-down menus and pop-up windows, and informative status line messages, and page content that varies with the time of day, etc. All this is good stuff, and is usually harmless.

However, it is possible to do harmful things with scripts, like displaying fake links on the status line, or even jumping to another URL on the fly (i.e., “hijacking your browser”). Scripts can contain directives that run part of the script as soon as a Web page is finished loading, and those directives could make it difficult for you to regain control of your Web browser software. That should only happen at malicious sites (or incompetently programmed sites), so “usually” scripts are safe.

Q04IX.7: Suppose I just visit a Web page and don’t “click” on anything. Is it possible to get a computer virus just by visiting a web page?

AO: The short answer is YES, which is why you need to change your security settings to be as high as you can get away with for what you’re doing (if you set them too high, you won’t be able to interact with some Web pages, such as those set up for shopping over the Internet).

With JavaScript, you don’t even have to “click” on something to cause an action, because it has an

event handler, `onMouseOver`, that can activate a script just by having the user pass the mouse pointer over a link or image. It has another event handler, `onLoad`, that is triggered when the HTML document has finished loading — no user interaction required.

JavaScript can cause your browser to jump to another URL anywhere on the World Wide Web simply by executing the directive “`window.location = ‘new URL.’`”

Q04IX.8: How widespread is the problem of Web browser software being hijacked?

AO: “Ask The Computer Guy” (the *Washington Post*, 7/4/04) recently addressed browser hijacking and mentioned vulnerabilities in Internet Explorer software. They suggested two anti-hijack tools (there are others): HijackThis and CWShredder are both free downloads at www.spywareinfo.com/~merijn/downloads.html.

They also suggested changing browser software and described Mozilla Firefox browser software as “fast, easy, safe — and free.”

Q04IX.9: How large is Mozilla Firefox software, and where can I get it?

AO: Mozilla Firefox software is about 5 MB (a 20-minute download over a dial-up connection). It’s available at the site www.mozilla.org/firefox.

Q04IX.10: How can I examine the HTML used to create the web page I’m viewing?

AO: While running Microsoft Internet Explorer software, select VIEW on the Menu bar, then select SOURCE. This opens Notepad software, running in a separate window. Alternatively, you can position the mouse pointer on an area of the page that doesn’t contain an image or a link and use the right mouse button to display a menu list that includes VIEW SOURCE (which runs Notepad software when selected).

If neither of these are available

or don’t seem to work, you can try selecting FILE on the Menu bar and then SAVE WEB PAGE (available under Juno software) or SAVE AS... under Internet Explorer. This will create a text file, which can then be examined separately using Notepad software.

If you use the right mouse button on a link or an image, you get a different menu list that doesn’t include VIEW SOURCE as an option. Instead you can examine the “Properties” of the link or image. The properties of an image show you where the image file came from; the properties of a link show you where it links to.

Don’t expect to make much sense of the HTML as a whole on an intricate web page. I find that viewing the HTML source is useful to examine the hypertext link under an image. I can get the name of the file used to create the image from the image properties, then use the EDIT and FIND... feature of Notepad software to find that filename in the HTML source, in order to check where the link leads before clicking on it (but I only go through all this trouble if I’ve become a bit suspicious).

Q04IX.11: In the response to question Q04VII.5, what did you mean by “apparently blank locations on a web page could be hiding invisible images that link to other web sites, some URL reference associated with the unseen graphic image file (and there are some data constructs where only the server at the site that sent you the image can translate the screen coordinates where you clicked into link information)”?

AO: Be aware that HTML also allows the display of “transparent” images, which could appear as blank areas on the screen, or could overlay or surround other text or images being displayed on the screen. Clicking on an appar-

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Microletter #146

by Paul Shapiro

... dedicated to the dissemination and exchange of information mostly for users of IBM PC-compatible personal computers.



Getting Caught Up

Every once in a while I get so wrapped up in things that I don't see the world

passing me by. Such was the case when my son Bruce visited from California and gave me the gift of a DVD player (for our Golden Wedding Anniversary), something I have really never considered worth having. [Why not a Laptop, I could really use that!]

Ah, ignorance.

Why would I want another gadget with better sound and video quality when my hearing, eyesight, memory, and mobility are all deteriorating?

Now I can say why I would want a DVD player or recorder. It does things I want to do but never knew were possible. Looks like I have been burying my head in the sand writing these Microletters.

The Player is extremely easy to connect, one double connector cable for the sound, one single connector cable for the video, which must be turned on before using the player. What happens after it is turned on was enough to keep me away from my computer for a while, which does not happen often. And until now I have almost quit watching television.

First I tried a movie. I clicked on a thumbnail and the movie began. Being direct access there was no need to wait for a tape to wind to the proper position, as with a Video Recorder. I clicked on the Play button with my remote control. As the Cast whizzed by, I backed up the play position to before that portion, then pushed Play again until the Cast appeared

on the screen, then quickly pushed the Pause button. The picture froze. Not like in a VCR in which the picture "shakes." Instead I could have backed up in slow motion, by examining one frame at a time.

With the picture "frozen" I was able to see clearly the list of all the performers. I pushed Play again to continue with the movie, then later pushed Stop and removed the DVD CD.

Next I inserted the CD with all one hundred pictures taken at our anniversary party. One at a time they flashed up on the screen, which is bigger than my computer screen, with sparkling clarity. I could look around various scenes and see things I ordinarily miss.

A downside is that I cannot examine more than the first folder on a CD. That means that in the future I must put everything into the root of a C: drive if I want to use the Player to show all the pictures. For that I can go back to my computer and a freeware program slideshow [<http://hjem.get2net.dk/lpj/>] which will just plow through all folders and files as well as permitting sorts by name or date/time. Now that I know this I can prepare slides on CD for player use. Some players permit video tape input.

There are DVD recorders (no computer required) as well as computer units that handle DVD, CD-R, and CD-RW, as well as video tape. Not knowing what my unit cost, I checked the Sunday ads and found it selling for under \$50 at places like Best Buy, Circuit City, and CompUSA. That seems like quite a good price for getting the "new" (to me) capabilities. By the time you read this I will have a DVD recordable disk drive.

Let Your Computer Read Your File Aloud

This should not be a new concept if you have been reading these columns. In late 2002 I wrote about the program Read-Please2002. Recall that in several different voices, male and female, it would read aloud for you to hear a text file. Now along comes the latest free read PDF (portable data format) reader program, Version 6, downloadable free from Adobe. It includes an option to read aloud your material. It is quite easy to use.

With the VIEW | READ OUT LOUD option you have a choice of "reading out loud" for the current page or from the current page to the end of the document. I didn't try it with a whole *Monitor*, but I did with a few selected pages.

So it was quite interesting to hear myself talking back to me as it read the downloadable version of a recent Microletter. The voice was even more monotonous than my own, but I could sit back and listen. I even spent a while listening to the Editor's remarks.

Capturing Part of a Screen

Rather than copy (or Select, as Adobe does), to place graphics or text on the clipboard, I have found a nifty freeware program called "Print Screen," not to be confused with what results when you press the keyboard key of that name.

Get this freeware Print Screen program at www.gadwin.com/printscreens.

It will transfer a rectangular portion of a screen and place it immediately into a new .jpg graphic file. This simplifies multiple extractions from a file. I keep the extractions in a folder

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September 2004

All meeting and class times are tentative. Check your e-mail and CPCUG website at www.cpcug.org before attending. Please see CPCUG Meeting Sites on the inside back cover for location codes.

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October 2004

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Viable Backup Systems

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pressed data. Assuming a reasonable compression ratio, you should be able to back up about 6.5 GB of data to a single disc.

This means that most people would have to use two discs for a full system backup. Rather than sit there waiting to change the disc, I would create two different backup jobs in your software and divide your folders between them. That way you could back up one set each day. If you have two or more partitions on your drive, such as one for programs and the other for your working files, this will make it even simpler.

I don't have a DVD writer, but I have set up systems with Plextor DVD writers and BackUp MyPC. I've had mixed success with this. First, the small test backups that I have set up have worked with DVD-Recordable discs but not with CD-Recordables, even though the drives will write to them. Second, I have had to go into DEVICE MANAGER | PROPERTIES for the IDE channels used by the drives and change the Advanced Settings from "DMA if available" to "PIO only," which may have an adverse effect on the overall performances of the drives. This is necessary because of an incompatibility between BackUp MyPC and certain VIA and Intel IDE controllers.

One disadvantage of DVD-Recordable discs is that they can only be used once. However, at a cost of between \$1 and \$2 for a full backup, this should not be a deterrent. The problem comes in with daily differential backups. I have not done any tests with DVD-Rewritable discs, so I don't know how well they would work for this purpose, and I would be reluctant to spend \$1 a pop for a differential backup to a DVD-Recordable each day. It might

work if I could do it by finalizing the session but not the entire disc, so that I could get several differential backups on one disc.

Good DVD writers such as the Plextor are selling for about \$200 these days, and good-quality DVD-Recordable discs seem to be about \$1 each in quantity. Add \$50 for BackUp MyPC, bringing your startup cost to about \$300.

Backing up to a DVD would be my last choice because of the drawbacks that I've mentioned. However, I believe that this may become the method of choice in the near future, when the next generation of discs will have much greater capacity.

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Robert E. Simanski, an Accredited Business Communicator, is the owner of Business Pro Services, Sterling, Virginia. His company provides on-site computer support for home, home-office, and small-office users. He can be reached at (703) 404-8665 between 12 noon and 8 PM on most days or by e-mail at rsimanski@yourpubpro.com.

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Rich's Ramblings

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Most programs I refer to in my articles are on my Web page on www.cpcug.org. Find member pages — I'm listed there.

External Hard Disk

I bought an external USB/Firewire 160 gigabyte hard disk. It works via the USB 2.0 port and via the 1394a Firewire port. USB 2.0 is a bit faster than the existing Firewire ports. The Western Digital external device is pretty small, not much bigger than a regular hard disk, but includes all the cables and external power supply that you need to set it up.

The USB 2.0 passes data at a maximum speed of 480 megabits (notice it's bits, not bytes) per second. The Firewire is a bit slower at 400 megabits. This is pretty slow when you consider it takes 8 bits to make a byte (or better described as one character) and therefore the transfer speed for us humans is 50 megabytes per second for the Firewire and 60 megabytes per second for USB 2.0. Remember this is the maximum speed, not the average speed, so it is really slower than a regular hard disk to another regular hard disk file transfer.

If you're looking for a big hard disk to be portable, they're sold in sizes from 120 to 250 gigabytes, which should be big enough for most people. Available at CompUSA and other computer retail stores. They even have versions with multiple memory card readers as part of the external package.

Rich Schinnell is retired from CPCUG, USN, and Vitro Corporation and is enjoying his retirement by continuing to support some local small business's computer networks and systems. He can be reached at schinnel@cpcug.org or via his Web page at schinnell.org. A last resort is his home phone number at (301) 949-9292.

Digital Video User Group (DVUG)

continued from cover

DVUG meetings are free to the public and held the third Tuesday of each month, excluding July, August, and December. The DVUG Web site, www.dvug.org, has a map of our meeting place at Bethesda Chevy Chase Services Center 2nd floor near the Bethesda Metro. Parking is available in the county garage below the Center.

At the September meeting, we will have a nationally known expert who will talk about "Lighting for Video, Film and Stage." You may want to bring your digital and still camera friends for this one.

You can obtain DVD copies of several of our past meetings for \$7.00 each. Checks should be payable to the Capital PC User Group and the request mailed to: DVUG, 8113 Whirlwind Court, Gaithersburg, MD 20882:

May 18, 2004: Merrill Hessel — "Basics of Sound Editing on a Computer"

April 19, 2004: William Jenkins — "Working with Sound and Music on Your Computer"

March 16, 2004: Tom Hoopengardner — "How to Give Videos a Cinema Look and Other Tricks"

Feb. 17, 2004: Cintia Cabib — "Resources Available to Independent Filmmakers for Video Distribution"

Discovery Channel Tour

About 90 people came to the Discovery Channel Post Production Facilities in Silver Spring, MD, on June 15 for the tour arranged by the DVUG. The staff were great hosts and went out of their way for us. We visited some of the more than 50 video edit booths, several sound edit booths,

a small production studio, and a library with over 160,000 tapes of programs (600,000 more are stored off-site). Most of the operation goes seven days per week with two to three shifts. The computing power is amazing as shown by the picture of the computers and disk arrays. Each of the 50 edit booths has its own dedicated computer and array of



Computers and disk arrays at Discovery Channel

disks (about 8 removable 90 GB disks each) in a central area outside the booths. Redundancy and backup are keywords. The editing booths are set up to use various AVID products for their non-linear video editing

systems. High Definition TV is the future of the Discovery Channel's broadcasting focus, and many of the booths are set up with HD



Discovery Channel sound editing booth

plasma screens several feet across. There are 13 Discovery broadcast channels: Discovery, Animal Planet, TLC, Discovery Health, etc. Over 5,000 hours of programming goes through this facility each year, with each program checked against 62 quality criteria and edited as necessary.

After the tour, the staff answered questions for the group. Probably the question of most interest was "How can I get a job with Discovery?"

Merrill Hessel is chair of the Digital Video User Group/SIG and produces and edits the CPCUG "Observing Technology" show for Cable Television. He can be reached at dvug@meral.com.

"Late Nite" continued from page 16

ently blank location on a Web page could be risky. The blank area could be a hidden, invisible image that links to some URL reference that the HTML associates with the unseen graphic image file, and that reference could even be a link to some other Web site.

HTML even allows some special ways to construct data for Web pages (e.g. "map" files that can't be retrieved from the server) where the screen coordinates of where you clicked can only be translated into link information by the server at the site that sent you the image — completely hiding the link from the user, until the user selects it.

TTFN,

- Marty Shinko

Marty Shinko has been involved with the CPCUG since the early 1990s, as a volunteer instructor and advocate for beginners. He's used computers for over three decades, from PCs to supercomputers. His interests include sub-atomic physics, astronomy, epistemology, mathematics, engineering simulation and computer modeling, satellites, brain psychology, sailboating, amateur radio and robotics. He can be reached via e-mail at mshinko.cpcug@juno.com or phone at (301) 253-1743, or come to the CPCUG General Meetings and meet in person at the "Late Nite" sessions after the meetings.

O'Reilly Book Discounts

CPCUG members get a 20% discount when ordering direct from O'Reilly. Log in to Member Specials at www.cpcug.net to get the discount code.

3. Remove Dangerous characters

Some characters can be used by hackers to inject dangerous SQL, HTML, or JavaScript code into your site, e.g., a SCRIPT tag or an onClick event. You can easily prevent this kind of problem by scanning and removing dangerous characters from all URL and FORM variables in your application.cfm using the REReplaceNoCase() function. Typical characters to remove include: ()<>/. The SafeText function from CFLib is also useful to allow some HTML but not the dangerous stuff.

4. Prevent Fake Form Submits

As I mentioned in Tip 2, hackers can submit fake forms from their server to your submit pages. To prevent this, check the referrer Web page using the CGI variable CGI.HTTP_REFERER. If it is in the same domain as your site, then all is okay. Test for this either in each submit page or once in your application.cfm file like this:

```
<CFIF not (CGI.HTTP_REFERER
contains "http://www.mysite.com/")>
  <CFABORT>
</CFIF>
```

Note that because the CGI.HTTP_REFERER comes from the browser, it can be hacked, so the above test will not stop the determined hacker, only the casual one!

It is also a good idea to protect CFINCLUDE and CFMODULE files from being run standalone — they may do bad things or generate error messages when run this way. One easy method is to use a common file-naming or subdirectory convention for all includes and modules. Then in the application.cfm, test the CGI.script_name to see if it contains this string. The CGI.script_name variable gives you the URL path and file name of the current CFM

file being run. This method is especially important when coding using the Fusebox methodology, because the site structure and certain file names will be known without seeing your source code. In a Fusebox application only the index.cfm file needs to be run. Here is how you can protect the includes files in this case:

In Application.cfm:

```
<CFIF CGI.SCRIPT_NAME contains
"index.cfm">
  <!-- ok to run --->
<CFELSE>
  <CFABORT
SHOWERROR="Protected page">
</CFIF>
```

Alternatively place included files or cfmodule files outside the webroot.

5. Stop Unauthorized Data Mining

As I mentioned in Tip 2 on cross-site scripting, hackers can change the values of URL or FORM parameters to view other people's data. For example if you have a parameter UserID=5 in your page's URL variables, then they might try running the page with UserID=4 to see what data they can see. Again the fix is to prevent users from changing sensitive parameters by using check sums or encryption. However don't get carried away and protect all parameters, because some may be used by other sites linking to you. A classic example is the book ISBN on Amazon's site — most of their URL is one long encrypted string but the ISBN is left in plain text so that other sites can link to books on Amazon's site.

6. Validate Parameters and Prevent SQL Injection Attacks

One way hackers can hurt your site is by running bad SQL in your queries by typing the extra SQL into URL or FORM parameters that you use in your CFQUERY

statements. A little-known feature of SQL Server is that you can run two SQL statements from one CFQUERY by separating them with a semi-colon. Hackers exploit this by injecting extra SQL via URL parameters.

For example, suppose you have a CFQUERY in page.cfm that contains the following SQL:

```
SELECT * FROM EMP WHERE ID =
#URL.USERID#
```

And normally the page is run like this:

```
http://myserver/page.cfm?USERID=7
```

This will cause the following SQL to be run in your CFQUERY:

```
SELECT * FROM EMP WHERE ID=7
```

Now the hacker adds extra SQL commands on the end of the URL variable:

```
http://myserver/page.cfm?USERID=7
%3BDELETE%20FROM%20CustomerTable
```

(The %3B and %20 are how you encode a semi-colon and space in a URL string.)

This will cause the following SQL to be run in your CFQUERY:

```
SELECT * FROM EMP WHERE ID=7
;DELETE FROM CustomerTable
```

This will run both SQL commands and delete all your records from the table CustomerTable!

Other attacks use the vertical bar character | to run VBA functions in Access. One of the most dangerous VBA functions is shell(), which will run any command string in a shell on your server. Just think what a FORMAT command might do to your server! In SQL Server, the similar xp_cmdshell function is equally dangerous and can be turned off in the SQL Server admin.

To prevent SQL injection hacking, use <CFQUERYPARAM> on all SQL parameters. It is used to validate the data types of SQL parameters inside CFQUERY tags. Here is an example to make things clearer:

```
<CFQUERY name="getFirst"
DATASOURCE="cfsnippets">
SELECT * FROM EMP WHERE ID
=
<CFQUERYPARAM value="#
URL.USERID #"
CFSQLType="CF_SQL_integer">
</CFQUERY>
```

In this code the URL.USERID will only be allowed to be an integer and any hanky panky with semi-colons and bad extra SQL will generate an error (that you can catch, of course). A side benefit of using CFQUERYPARAM is that your queries will run faster because SQL Server or Oracle will be more likely to use a cached query plan instead of recalculating the query plan from scratch.

Note that some programmers use the ColdFusion val() function to protect numeric parameters, but CFQUERYPARAM also works with other datatypes and unlike val it generates an error when the data type is incorrect. Also the other tips above on removing dangerous characters and encrypting URL Variables help to prevent SQL injection attacks, but these should only be used in addition to CFQUERYPARAM and not instead of it.

7. Use Server Side Validation to Backup Client Side Validation

As I mentioned above in Tip 2 on cross-site scripting, fake form submits can be used to remove or modify any client side validation you use on your site. While I recommend using client side validation (such as CFFORM, JavaScript and _ field name validation) to make the user interface better, I do not rely on it for security. For that purpose I use Server side validation to back up client side validation. For example, if you have a field that must be a date, use this code on your submit page:

```
<CFIF isdefined("FORM.MyDate")>
<CFIF not isdate(FORM.MyDate)>
```

```
Bad date <CFABORT>
</CFIF>
</CFIF>
```

Alternatively you could use the CFPARAM statement:

```
<CFPARAM NAME="FORM.
MyDate" TYPE="date">
```

8. Harden Your Logon Code

You may have password-protected areas of your site for admin or members only. Be sure the "front door" of your logon screen is strong. Require hard passwords from your users such as ones with more than eight characters and requiring numbers as well as letters. The Password-Check function at CFLib can help you with this task by verifying the length and type of characters in a password. If you need an easy-to-type random password, check out MakePassword at CFLib. It will create a password with random characters without the confusion between lower case L and the number 1, etc. Once all your users have strong passwords, consider making them change them every six months to further protect your login. Also don't store passwords in your database, in case a hacker gets a copy of your user database. Instead, store the hash of the password instead of plain text by using the hash() function. Here is how to use this in your logon screen:

```
<CFQUERY NAME="CheckPerson"
DATASOURCE="UserData">
SELECT PasswordHash FROM
SecureData WHERE UserID=
<CFQUERYPARAM
VALUE="#UserID#"
CFSQLType="CF_SQL_CHARVAR"
> </CFQUERY>
<CFIF Hash(Form.Password) IS
NOT CheckPerson.PasswordHash>
<CFLOCATION URL=
"unauthenticated.cfm">
<CFELSE>
<CFLOCATION URL=
"authenticated.cfm">
</CFIF>
```

For a really secure login

consider timing out the login for an hour for a particular user id after three failures at logging in. This prevents hackers from automatically trying thousands of common passwords via an automated submit program.

9. Prevent Timeout Client/Session Backdoors

When you are using client or session variables to protect secure areas of your site, there is the problem of your users leaving their machines logged in while they go to lunch. A hacker could see the open browser and steal confidential data. For this reason it is wise to use a short time-out of ten minutes. Normally I handle this in my code rather than changing how long the session or client variables exist — partly because it is easy for me to control and customize for each user, but also so that while I log out the user automatically I can still offer them the chance to re-enter their password and not lose any data that is stored in their session. Also I suggest that you make the associated session/client cookies CFID and CFTOKEN automatically delete after the browser closes. Otherwise a hacker may open the browser and use the history feature to go to your secure pages if the user forgot to log out! Here is the code to make CFID and CFTOKEN to expire immediately on browser close.

```
<CFCOOKIE expires="NOW"
name="CFID"
value="#cookie.cfid#">
<CFCOOKIE expires="NOW"
name="CFTOKEN"
value="#cookie.cftoken#">
```

This keeps the current cookie names and values but makes sure that they disappear when the browser closes.

10. Avoid Trojan Horse Uploads

Some sites let you upload

continued on page 24

Web Security Tips

continued from page 23

graphics or other files. Hackers can use this feature to upload program files if you are not careful and then run them from your Web site. Or they might try to overwrite critical system files with the use of ../ paths. To prevent this, always store uploaded files outside your webroot and strip out any path information from file names. Also be careful if you use CFCONTENT to display files where the filename is given via a URL parameter. The page can be misused to send back your source code if a hacker gives the path and name of your CFM files instead of a graphic. Again, storing displayed files outside of webroot helps, as does validating that the parameter filename does not contain any path such as ../.

What Security Means

Security is difficult because a hacker needs only one window to be open to get in while you must close all the holes. Assume bad things will happen and code for them! Security is a way of thinking — “How can they get in to this page?” Finally realize that more knowledge is power — don’t keep security tips secret! The more people who know how to secure their site, the less hackers can get in.

Michael is president and founder of TeraTech, a 15-year-old Rockville, MD-based consulting company that specializes in ColdFusion development and training. TeraTech is a Macromedia Consulting Partner and winner of the CFDI award for best consulting company two years in a row. TeraTech runs the CFUN conference and MDCFUG. Michael has been programming for over 25 years and has been coding in ColdFusion since version 1.5. You can visit TeraTech’s web site at www.teratech.com and reach Michael at michael@teratech.com or (301) 424-3903.

Microletter continued from page 17

(“Captured Screens”). There is an option to cancel once the selection is viewed. A sequentially numbered title is inserted automatically, better changed to a more easily remembered one.

This program captures a rectangular section of the screen



Sample of a Gadwin PrintScreen capture of a DOS screen

to a file, printer or e-mail, and permits designating a hot key of your choice (including the PrintScreen key itself; I am using CTRL + <F12>). You can select the current window or full screen as well. The program doesn’t distinguish between originating programs and can be used with both Windows and DOS screens. It is possible to choose the output as a .jpg, .bmp, or .gif file, among others.

The way it works is that, after downloading and setting up the program, you click on the resultant desktop shortcut icon that you let it create and a small window appears in the upper right corner of the screen with an enlarged version of the area you have selected by dragging the mouse.

Here is another example of using Gadwin PrintScreen to

copy part of a *Monitor* PDF file from the CPCUG Web site.



Sample of a Gadwin PrintScreen capture of a portion of a PDF file

What is so nice is that you can do this with any screen. That’s what made it possible to visit the CPCUG Web site, find a PDF file, and then take a clip directly from the screen, without need of a download. Of course anything on the screen is acceptable; it does not have to be from a PDF file.

Here is an example of a clip from a the www.cpcug.org Monitor Archives page.



Sample of a Gadwin PrintScreen capture of a portion of a PDF file

You can always scan, copy, or use a digital camera with macro feature to capture material. This PrintScreen program sure makes it easier.

Paul Shapiro can most quickly be reached at Internet e-mail address paul.shapiro@gmail.com, as well as by regular phone (240) 643-8729.

If you are having problems with your computer hardware or software, why not give the

CPCUG Helpline a call?

See page 29.

MEMBERS ONLY





Special Interest Groups (SIGs)

The Capital PC User Group has Special Interest Groups (SIGs) that meet throughout the Washington, DC, metro area. By attending SIG meetings, you can learn a computer-related subject of your choosing, continue to learn after mastering the basics, share your knowledge with others, and gather with peers in social/networking environments.

Access (Microsoft)

- Monthly, third Wednesday, 7:00PM
- Veterans Affairs Medical Center (adjacent to the Washington Hospital Center), 50 Irving Street, NW, Washington, DC (use Emergency Room Entrance), 4th floor, IRM Room, 4C106a
- URL—www.cpcug.org/user/access/
- E-mail announcement list: [accesssig-l hosted at cpcug.org](mailto:accesssig-l@cpcug.org)
- E-mail discussion list: [accesssigd-l hosted at cpcug.org](mailto:accesssigd-l@cpcug.org)
- Contact—David Kiasi, d: (301) 350-4752, David.Kiasi@appalt.com

Sign up for our meeting announcement and vibrant discussion lists where you can get insight and suggestions for solving your Access problems.

Act!

- 1st Sunday of every month 3:00-5:00PM
- **Note Location:** Harbour Square Cooperative Library, 500 N St, SW, Washington, DC
- Contact—Rick Shaddock Rick@CICorp.com, 703-486-2222

ACT! SIG meetings are a place for users to discuss and share their use of ACT! and to ask and answer questions of other ACT! users at all levels of expertise.

Our meetings are designed to give ACT! users the opportunity to learn more about using specific features of ACT! and the many products that seamlessly integrate with ACT!, and to meet other ACT! users in the Washington, DC, area. We will be performing demos of new versions of ACT!, offering solutions to technical support issues, and suggesting tips to increase user productivity.

Our SIG creates a forum to learn from other ACT! users and industry specialists, encourages the exchange of ideas about ACT!, and creates an opportunity to keep abreast of the latest business solution developments.

Beginners (and Beyond)

- Usually monthly, at "Late Nite" following General Meetings/TechTalks, usually second Monday, 9:00PM
- Same location or meeting room as the General Meeting
- URL—www.cpcug.org/user/beginner/
- E-mail announcement list: [beginsig-l hosted at cpcug.org](mailto:beginsig-l@cpcug.org)
- E-mail discussion list: [beginsigd-l hosted at cpcug.org](mailto:beginsigd-l@cpcug.org)
- Contact—Marty Shinko, d/e/w: (301) 253-1743 or mshinko.cpcug@juno.com

Marty Shinko is coordinating the Beginners (and Beyond) SIG for computer beginners and intermediates. He'd also be interested in hearing from those who work with beginners.

Not exactly a beginner, but also not an expert? This SIG may be just what you've been looking for, a place for those no longer beginners to continue to learn how to get more out of their computers. And as computers evolve, the issues facing beginning computer users change.

Join us for fun, lively discussion, and computer talk. Experts are welcome to share their insights as well, of course.

How You Can Help

- Primary contact person
- Alternate contact persons
- Representative to attend CPCUG Board of Directors meetings
- Contact person at General Meetings
- Reporter to write SIG update reports for *Monitor*
- Moderator for e-mail discussion lists

To help in any of these or other capacities, contact Marty by calling (301) 253-1743, sending him a message via e-mail at mshinko.cpcug@juno.com, or meeting him during Late Nite following most General Meetings.

Clipper

- Monthly, last Thursday, 7:00PM
- Meets at different local restaurants—subscribe to the Clipper e-mail announcement list to learn current

month's location

- E-mail meeting announcements, monthly: To subscribe, send an e-mail request to SIG Chair Naseem Saab at Naseem_Saab@DPS-Consulting.com
- www.DPS-Consulting.com/Clipper
- Contact—Naseem Saab, (703) 713-6900, Naseem_Saab@DPS-Consulting.com

The Washington Area Clipper Users Group (WACUG) became the Clipper SIG of the Capital PC User Group. The mission of the Clipper SIG is (1) to form a presence for Clipper programmers/consultants in the Washington, DC, area, (2) to help newcomers to the Clipper world appreciate and learn about the power of the language. If you need a Clipper programmer/consultant, we maintain a list of Clipper SIG members specializing in Clipper and Clipper-to-Windows conversions. Send an e-mail with the job description and requirements to Naseem Saab at Naseem_Saab@DPS-Consulting.com for distribution to the mailing list.

Delphi

- Monthly, first Wednesday, 7:00PM (except no meeting in July)
- Inter-American Development Bank, 1350 New York Ave, Washington, DC
- Luncheon meeting—usually third Thursday, 11:30AM (Pentagon City Mall near movie theatres)
- URL—www.cpcug.org/user/delphi/
- E-mail announcement list: [delphisig-l hosted at cpcug.org](mailto:delphisig-l@cpcug.org)
- E-mail discussion list: [delphisigd-l hosted at cpcug.org](mailto:delphisigd-l@cpcug.org)
- Contact—Thomas Miller (703) 503-5600, tmiller@bss-software.com

Meeting Notes

If you know of other Delphi developers, please let them know about our meetings. We have presentations, technical discussions, contests, door prizes, leads, and fun.

Digital Video

- Monthly (except July, August, and December) free meetings, third Tuesday of each month, 7:30PM
- usually Bethesda Chevy Chase Services Center (BCCSC) Multipurpose Room. *Check the Web site for verification.*
- URL—www.dvug.org
- Contact—Merrill M. Hessel, (301) 840-1258, dvug@meral.com

Typical Agenda

7:30PM	SIG Business
7:40	Demo
8:00	Presentation
8:25	Video clips
9:00	Adjourn

Digital Camcorders are selling like hotcakes. But what do you do once you have taken the video? Put it into your computer and massage it, add titles, add music, and then improve your technique!

The Digital Video SIG of the Capital PC User Group (also known as the Digital Video User Group, DVUG) has an exciting program and opportunities for those interested in video. The group focuses on all aspects of the revolution in the production of digital videos, such as:

- Digital nonlinear editing system set-up and use
- Digital cameras
- Digital color correction
- Digital video authoring of DVDs
- Special effects and use of such software packages as Adobe After Effects
- Digital sound editing, sweetening, filtering of hum and extraneous noises, and other effects
- Digital lighting
- 3D effects

Upcoming Meetings

Tuesday, September 21, 7:30 pm
Bethesda-Chevy Chase Services Center

Nationally known expert Bill Robertson, Vice President of R & R Lighting of Silver Spring will be our featured speaker. He worked for the National Theatre, 10 years at NBC News, and has done lighting for over 15 features and commercials. He will discuss "Lighting for Videos, Film and Stage." You may want to bring your digital and still camera friends for this one.

Check the Web site, www.dvdug.org, for information on the next meetings and directions. For any questions, or to be added to the e-mail list, send a message to Merrill Hessel at dvug@meral.com.

Entrepreneurs and Consultants

- Monthly free meetings, usually third Saturday, 1:00PM

- Occasional workshop "extras" (varying fees)
- usually *Cleveland Park Library*, 3310 Connecticut Ave, NW, Washington, DC
- URL—www.cpcug.org/user/entrepreneur/
- E-mail discussion list: conent-l hosted at cpcug.org
- Contacts—Barbara Conn, d: (202) 508-1494, e/w: (202) 452-7428, bconn@cpcug.org; Marie Pinho, d/e/w: (703) 569-6080, mpinho@cox.net

Typical Agenda

1:00	Welcome
1:05	Accounting Tips/Tax Updates, Jina Etienne, CPA
	Main Presentation
2:40	Q&A
2:55	Closing announcements
3:00	Door Prize Drawing (when available)
3:00	Informal queries, conversation, networking

Silver Sponsor — Results Software

Results™ is an integrated customer relationship and business management software package (www.Results-Software.com).

Upcoming Events

Saturday, September 11, 1:00-3:15 pm

Note date change: 2nd Saturday!

Cleveland Park Library

"Re-Engineer Your Sales Process"

Speaker: Ken Smith, Principal of Sandler Sales Institute & Founder of Professional Achievement Group Inc.

Do you feel your sales process isn't as effective in today's technology marketplace? Are you finding more pressure on price? Are you frustrated by the endless "stalls" of prospects? And, does it seem as if some of your new prospects have heard it all before?

If any of this sounds familiar, then join us to hear Ken Smith present new approaches for professional selling and client development. Ken has worked extensively with those in the technology, professional services, and financial industries. His presentation will address the following:

- Why conventional sales approaches for technology and professional services are no longer as effective
- Why traditional selling tactics often turn you into an unpaid consultant
- How to deal with the "think it overs" and the "maybes" that never become clients
- How to qualify prospects quickly by helping them discover why they should, or should not, do business with you

- What self-limiting beliefs and outlooks can keep you from achieving the sales success you deserve.

Ken will also present a systematic sales process that is repeatable, predictable, and more powerful than the approaches used by your competition.

Ken Smith is a sales force development expert specializing in executive sales consulting and sales productivity training. An enthusiastic speaker, he informs, entertains, and motivates presidents, CEOs, other senior managers, and sales professionals. Ken began his sales career the hard way, selling books door to door. He has also been a #1 account executive for NCR Corporation, selling computers and software. At CBSI he quickly became the company's top sales executive. After taking the position of executive vice president of sales and client development, he grew the company's sales revenues annually by 50 to 100 percent. Ken believes, however, that his greatest accomplishment has been helping others achieve their professional and personal goals.

Located in Rockville, MD, Ken and his associates work with individuals, and their growing companies, to assist them in achieving high levels of performance. Ken provides the training, support, and ongoing coaching necessary to help his clients achieve their potential and the success they deserve.

October 16 — Topic to be announced

November 20 — Topic to be announced

December 11 (note date change – 2nd Saturday) — Year-End Financial Planning for Small Business Owners

Meeting Notes

The Entrepreneurs and Consultants SIG is for computer consultants and entrepreneurs using computers. Our monthly meeting presentation topics are varied, and we welcome everyone. Attendees include business owners, independent computer consultants, managers of entrepreneurial entities within larger companies, new graduates, career changers, and those transitioning from a one-person consultancy to a business with full-time employees.

For the most up-to-date information about the activities of our SIG, including any meeting date, time, location, and topic changes, please subscribe to our conent-l LISTSERV list at www.cpcug.org/list/lwgate.cgi/CONENT-L/subscribe.html.

At many meetings there are handouts. To ensure we have handouts for all attendees, please register for each meeting via our Web form: www.cpcug.org/user/entrepreneur/meet-reg.html.

Future Meetings

If you have an idea for a topic or speaker, please send an e-mail message about it to bconn@cpcug.org.

GLITCH DC SIG

GLITCH DC SIG (Gay and Lesbian Information Technologists of Washington DC, Inc.). Diverse group of men and women of all ages, all fields, from main frame programmers to novice users.

- Meets second Sunday of each month for brunch and technical presentation, 11:00AM
- Dupont Italian Kitchen, upstairs dining room, 17th and R Streets NW Washington, DC.
- URL—www.glitchdc.org
- Contact: Wallace Dickson, (202) 265-0591, wdickson@wdn.com, or Cliff Bailey, (703) 237-7486, cbailey@myexcel.com
- Special events announced via mailing list at glitchdc-announce@yahoogroups.com
- Jobs are listed via mailing list at glitchdc-jobs@yahoogroups.com

Investment

- Monthly (except August), third Wednesday, 7:30PM
- Bethesda Library, 7400 Arlington Road, Bethesda, MD
- URL—www.cpcug.org/user/invest/
- E-mail meeting notices, monthly: To receive, send your e-mail request to skatz@highstream.net with your name and e-mail address.
- Contacts—Andy Thompson, Thompson01@erols.com or e/w at (301) 270-6790. For information on Investor's FastTrack mutual fund and stock data base and software sessions, contact Ferd Hassler (301) 718-6253 or Carl Berninger at cberninger@mindspring.com.

General meeting program schedule:

- 7:30 pm FastTrack session
- 8:15 pm Q & A session; Investment SIG business
- 8:30 pm Main presenter
- 9:30 pm 'Market Watch' (if no outside speaker)

Our meetings have two components. Each meeting begins with a 45-minute discussion related to FastTrack software which is widely used for analyzing and tracking mutual funds and individual stocks. At 8:15 pm the Investment SIG formally begins and our typical agenda consists of an initial 10-15 minutes of questions, answers, SIG business, and CPCUG concerns. Then we have a main presentation(s) lasting 60-90 minutes addressing issues related to fundamental

or technical analysis of stocks, mutual funds, bonds, or trading methods such as options and market timing. The topic of technical analysis indicators is frequently visited.

After the main presentation, if the speaker is from outside the group, there is a 'Market Watch' discussion by our members. The meetings are free and open to the public.

We also have a library for our members. If you have any suggestions for future Investment SIG meeting topics, or if you have something ('non-commercial') you would like to present at a meeting, please e-mail Andy Thompson (above).

Microsoft Office

- Usually monthly, fourth Wednesday (except November and December), 7:00PM
- American Speech-Language-Hearing Association (ASHA) at 10801 Rockville Pike, Rockville, MD
- URL—www.cpcug.org/user/comm/sig-supp.html#office
- Contact—Marie Parker, d: (301) 897-5700 X4220, Mparker@ASHA.org

If you are interested in joining a group where you can exchange ideas, get answers to your questions and concerns, and increase your knowledge of Word, PowerPoint, and Excel, and the integration of these three applications, then this SIG is for you.

PalmOS

- Monthly, day varies, 6:30PM
- Usually at American Psychological Association, 750 First Street, NE, 6th floor, Executive Office Suite, Washington, DC
- URL—www.interpug.com/dcpug/
- Contacts—Shawn Googins, d: (301) 496-5774, theoophile@yahoo.com; Craig Simpson, d/e/w: (301) 942-3921, macshimidh@earthlink.net, icq#58070639; Frank Sokolove, frank.sokolove@verizon.net.

Pocket PC

- For date, time, and location, send e-mail to Ray Wiley (see below)
- URL—www.cpcug.org/user/pocketpc
- E-mail announcement list: [pocketpc-l hosted at cpcug.org](mailto:pocketpc-l@hosted.at.cpcug.org)
- E-mail discussion list: [pocketpcd-l hosted at cpcug.org](mailto:pocketpcd-l@hosted.at.cpcug.org)
- Contact—Ray Wiley, d: (703) 682-5325 or rainman@gokatgo.net

The Washington Area Pocket PC Users Group, a Special Interest Group of the Capital PC User Group, meets to discuss topics relating to the Pocket PC platform.

If you're interested in learning how a Pocket PC can help you at work and play, please join us at our next meeting. Current Palm users are highly encouraged to attend!

Robotics (Provisional SIG)

- Usually the 3rd Thursday of each month
- Time: 6:30-10 PM: 6:30-7:30 SIG admin, 7:30-8:30 presentation, 8:30-10 workshop
- Location: Pangborn Hall, Room 303, Catholic University of America 620 Michigan Avenue, NE, Washington DC 20064
- Contact—Janet Lathan, (240) 393-1464, janetlathan@comcast.net; Ann Dorsey, (240) 888-8295, a.dorsey@deskpilot.com

<http://admissions.cua.edu/visit/map.cfm>

<http://welcome.cua.edu/maps.cfm>

http://tour.cua.edu/default4.cfm?Building_Id=39

The purpose of the CPCUG Robotics SIG is to sponsor activities on robotics for CPCUG and its communities.

Activities will include informational meetings, workshops, demonstrations, and competitions.

Upcoming Events

Thursday, September 16, 6:30-10:00 PM SIG Meeting

All meetings will be held in Room 303 of Pangborn Hall, Catholic University, as noted above.

Seniors

- Monthly, first Saturday, 10:00AM-NOON
- Bedford Court - 3701 International Drive Silver Spring, MD [Directions: Take Georgia Avenue north from Beltway to third traffic light past intersection with Connecticut Ave, and turn right on International Dr to the tall building two blocks east. We meet in the Activities Room on the ground floor.]
- E-mail discussion list: [seniorsig-l hosted at cpcug.org](mailto:seniorsig-l@hosted.at.cpcug.org)
- Contact—Paul Shapiro, paul.shapiro@gmail.com. When not online, he can be reached at (240) 643-8729.

The Seniors Special Interest Group meetings are open to all. They help attendees get more from their personal computers. We'd like member participation in arranging SIG programs, and, need you to help get the word out about the Seniors SIG. The Seniors SIG is for everyone, from beginner to expert.

CPCUG members and visitors are welcome and encouraged to attend our meetings whenever possible.

Statistics

- Monthly (except June through August), usually second Wednesday, 12:30PM
- 1800 M Street, NW, South Tower, Third Floor, Room S3031, Washington, DC—first-time attendees should contact Charlie Hallahan at hallahan@ers.usda.gov or (202) 694-5051 to have their names put on the admittance list
- URL—www.cpcug.org/user/sigstat/
- E-mail meeting announcements, monthly: To subscribe, send e-mail to Charles Hallahan, hallahan@ers.usda.gov
- Contact—Charles Hallahan, e/w: (703) 532-2930, hallahan@ers.usda.gov

SIGSTAT is the Special Interest Group in Statistics for the CPCUG, the Capital PC User Group, and WINFORMS, the Washington Institute for Operations Research Service and Management Science.

All meetings are in Room S3031, 1800 M St, NW from 12:30 to 1:30. Enter the South Tower & take the elevator to the 3rd floor to check in at the guard's desk.

First-time attendees should contact Charlie Hallahan, 202-694-5051, hallahan@ers.usda.gov, and leave their name. Directions to the building & many links of statistical interest can be found at the SIGSTAT Web site, www.cpcug.org/user/sigstat/.

Upcoming Meetings

Wednesday, October 13, 12:30 pm
R for the Non-S Experts. Speaker: Mike Fleming

Wednesday, November 10, 12:30 pm
ODS Statistical Graphics. Speaker: Linda Atkinson

Wednesday, December 8, 12:30 pm
PROC MIXED - Part 7: Generalized Linear Mixed Models. Speaker: Charlie Hallahan

Our Web Pages

The SIGSTAT pages, at www.cpcug.org/user/sigstat/, contain an extensive set of links to Web pages of interest to statisticians. Each month we'll look at some sites relevant to that month's demo.

Virginia SIG

- Monthly, third Monday, 7:00PM
- Washington Gas, 6801 Industrial Road, Springfield, VA
- Jurisdiction for inclement weather cancellation: Fairfax County
- URL — www.cpcug.org/user/vasig/
- E-mail announcement list: virginiasig-l hosted at cpcug.org
- Contacts—Luis Garcia, d: (202) 606-9848, e/w: (703) 425-6902, lgarcia51@yahoo.com

7:00PM Open Forum and General Information

7:45 Presentation

8:45 Q&A

Meeting Notes

The main presentation can be on any general computer utilization issue: hardware, software, Internet, training, and so forth.

CPCUG Member Benefit: Computer Magazines at Great Prices

	1 YR	2 YR	3 YR
Computer Games	\$10.95	\$20.95	\$29.95
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Prices are for new subscriptions and renewals. All orders must be accompanied by a check or money order payable to Herb Goodman and mailed to:

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561-488-4465
hgoodman@prodigy.net

Please allow 10 to 12 weeks for your magazines to start. For renewals, you must supply an address label from your present subscription to insure the correct start of your renewal. As an extra service you will be mailed a renewal notice about four months prior to the expiration date.

Inactive SIGs

The following SIGs are not active at this time. If you are interested in helping start up of any of these SIGs, please contact president@cpcug.org:

- Internet
- OS/2
- Project Management
- Visual Basic
- Windows
- WordPerfect

New SIGS

If you are interested in starting a new SIG (or re-activating an inactive SIG), please contact president@cpcug.org.

CPCUG Training

continued from back cover

CPCUG UHU (Annandale, VA)

October continued:

- 12 – Intro to Macromedia Flash MX
- 16 – Intro to MS Word (9:00 am to noon)
- 19 – Intro to MS Access, Part 2
- 23 – Intro to Crystal Reports, Part 1 (9:00 am to noon)

Please check the CPCUG Web site, www.cpcug.net/trainingsearch.asp, for the November schedule.

Registration information can be found on the back cover of this issue.

CPCUG Harmony Hall (Fort Washington)

November:

- 2 – Intro to MS Excel (48561)
- 4 – MS Word: Form Letters, Mail Merge & Labels (48562)
- 9 – Intermediate MS Excel (48563)
- 11 – Basic Computer Keyboarding & Mouse Skills (48574)
- 16 – Organizing Files & Folders Using Windows Explorer (48570)
- 18 – Digital Imaging using MS Photo Editor (48564)

Registration information can be found on the back cover of this issue.

HELPLINE

The CPCUG Helpline listing is for CPCUG members only. Volunteers provide assistance on listed subjects during the times and days outlined.

Membership has its privileges. Please be prepared to give the Helpline Volunteer your membership number. Please do not ask for assistance outside the stated

times. If you reach voice mail, leave a message — many people screen calls or otherwise prioritize their time. Some volunteers have provided e-mail addresses so that you can contact them if you have trouble getting in touch by phone.

If you would like to volunteer your services in any area, please contact the *Monitor* editor at

editor@cpcug.org, providing your membership number, subject(s), phone number and/or e-mail address, days/times.

CPCUG is looking for a Helpline coordinator. If you are willing to help, please contact CPCUG President Dennis Courtney at president@cpcug.org.

Member	Phone	Days	Time	E-Mail
ACCESS				
ACCESS SIG Discussion List Scott Mohnkern	301-738-0097	M - F	www.cpcug.org/list/lwgate.cgi/ACCESSSIGD-L/subscribe.html 9:00a-4:00p	scott@mohnkern.com
ACCESSIBILITY (Adjustments for)				
Vivian Buc	703 370-6981	All	9a - 9p	veb8899@fastmail.fm
ADOBE PAGEMAKER				
Lisa Connors	301-527-0650	Tue - Thur.	7:00p-9:00p	lamc8@comcast.net
ADOBE PHOTOSHOP				
Sam Odio	888-282-2846	All	All	sam@odioworks.com
ALPHA FOUR				
Guy Durant	202-529-6744 202-529-6744	All	8:00a-11:00a 9:00p-11:59p	
APL LANGUAGE				
Frank Ditto	304-725-3283	All	12:01p-11:59p	fditto@shentel.net
APPLE Macintosh (Hardware, Networks, OS, Software)				
Phil Marchetti	301-404-2210	Mon-Sat	10:00a-7:00p	Phil@MarchettiAssociates.com
ASSEMBLY LANGUAGE				
Walter Nissen	440-243-4980 Near Cleveland	All	Reasonable	wnissen@tfn.net
ASTRONOMY				
Walter Nissen	440-243-4980 Near Cleveland	All	Reasonable	wnissen@tfn.net
BASIC LANGUAGE				
Walter Nissen	440-243-4980 Near Cleveland	All	Reasonable	wnissen@tfn.net
BROTHER'S KEEPER				
Alta Oben	703-938-5831 703-938-5831	Mon-Fri Sat-Sun	6:00p-10:00p 9:00a-10:00p	alta@cpcug.org
BUILD YOUR OWN				
Chip Dodge Sam Odio	703-425-7038 888-282-2846	All All	Reasonable All	sam@odioworks.com
BUYING DECISIONS				
Sam Odio Robert Simanski	888-282-2846 703-404-8665	All All	All 6:00p - 10p	sam@odioworks.com rsimanski@yourpubpro.com
C LANGUAGE				
Wayne Dernoncourt Scott Graham	301-437-2745 301-593-2744 301-593-2744	Mon-Fri Mon-Fri Sat-Sun	9:00a- 6:00p 6:00p-9:00p Reasonable	wayned@cpcug.org sgraham@scoabar.com
Walter Nissen	440-243-4980 Near Cleveland	All	Reasonable	wnissen@tfn.net

Member	Phone	Days	Time	E-Mail
C++ LANGUAGE				
Keith Bennett	301-840-1161	All	8:00a -9:00p	kbennett@cpcug.org
Scott Graham	301-437-2745	Mon-Fri	9:00a- 6:00p	sgraham@scobar.com
	301-593-2744	Mon-Fri	6:00p-9:00p	
	301-593-2744	Sat-Sun	Reasonable	
Walter Nissen	440-243-4980	All	Reasonable	wnissen@tfn.net
	Near Cleveland			
COMMUNICATIONS - DATA/ MODEMS				
Walter Nissen	440-243-4980	All	Reasonable	wnissen@tfn.net
	Near Cleveland			
COMPUTING - GENERAL				
Walter Nissen	440-243-4980	All	Reasonable	wnissen@tfn.net
	Near Cleveland			
Sam Odio	888-282-2846	All	All	sam@odioworks.com
DBASE				
Guy Durant	202-529-6744	All	8:00a-11:00a	
	202-529-6744	All	9:00p-11:59p	
DELPHI/PASCAL				
Richard Maley	301-840-1554	Mon-Fri	9:00a- 5:00p	75127.17@compuserve.com
Dennis Courtney	202-623-2884	Mon-Fri	9:00a- 5:00p	dennisc@iadb.org
DOS				
Walter Nissen	440-243-4980r	All	Reasonable	wnissen@tfn.net
	Near Cleveland			
Henry Winokur	301-320-2104	All	Reasonable	henwin@atlantech.net
DOS Communications Packages				
David Chessler	301-229-3984	All	7:00p-10:00p	
Eudora (3 and 4)				
David Chessler	301-229-3984	All	7:00p-10:00p	
Eudora 5				
Robert Simanski	703-404-8665	All	6:00p - 10p	rsimanski@yourpubpro.com
EXCEL				
Scott Mohnkern	301-738-0097	M - F	9:00a-4:00p	scott@mohnkern.com
Arquilla Ridgell	301-946-3041	Mon-Wed-Fri	7:00p-9:00p	clockone@aol.com
		Sat-Sun	6:00p -9:00p	clockone@aol.com
FOXPRO				
Guy Durant	202-529-6744	All	8:00a-11:00a	
	202-529-6744	All	9:00p-11:59p	
GGEOWORKS				
Herb Fredricksen	301-840-2056	All	2:00p-11:00p	
HARDWARE - GENERAL				
Wayne Dernoncourt				wayned@cpcug.org
Sam Odio	888-282-2846	All	All	sam@odioworks.com
Robert Simanski	703-404-8665	All	6:00p - 10p	rsimanski@yourpubpro.com
HD TV/Home Theatre				
Rodolfo La Maestra	703-690-6336	Mon-Sat	Reasonable	rodolfo.lamaestra@verizon.net
HTML (Hypertext Markup Language)				
HTML SIG Discussion List				www.cpcug.org/list/lwgate.cgi/HTMLSIGD-L/subscribe.htm
Harold Goldstein	301-854-0388	All	Reasonable	mdbiker@goldray.com
Walt Houser	301-299-0593	All	7:00p-10:00p	houser@cpcug.org
Scott Mohnkern	301-738-0097	M-F	9:00a-4:00p	scott@mohnkern.com
Sam Odio	888-282-2846	All	All	sam@odioworks.com
INTERNET - NOT CPCUG.ORG				
Walter Nissen	440-243-4980	All	Reasonable	wnissen@tfn.net
	Near Cleveland			
INTERNET - BASICS				
Vivian Buc	703 370-6981	All	9a - 9p	veb8899@fastmail.fm
Paul Shapiro	240-643-8729	All	9:00a-9:00p	paul.shapiro@gmail.com

Member	Phone	Days	Time	E-Mail
INTERNET - CPCUG.ORG (cpcug.org subscribers only)				
Scott Mohnkern	301-738-0097	M-F	9:00a-4:00p	scott@mohnkern.com
INTERNET E-MAIL				
David Chessler	301-229-3984	All	7:00p-10:00p	
INTERNET EXPLORER				
Walter Nissen	440-243-4980 Near Cleveland	All	Reasonable	wnissen@tfn.net
Robert Simanski	703-404-8665	All	6:00p - 10p	rsimanski@yourpubpro.com
ISO-9000				
Edward H. Jentsch	301-279-0134	All	Reasonable	ejentsch@cpcug.org
JAVA (SUN)				
Keith Bennett	301- 840-1161	All	8:00a -9:00p	kbennett@cpcug.org
LAN (See also Networking)				
Wayne Dernoncourt				wayned@cpcug.org
LINUX				
Cliff Bailey	703-237-4174	Mon-Fri	10:00a-8:00p	cbailey@myexcel.com
LOTUS APPROACH				
David Littlefield	202-723-9527	Mon-Fri	8:00a-10:00p	
MATHCAD				
Roland deWit	301-299-4697	Mo,Tu,We,Fr	7:00p-9:00p	
MATHEMATICA				
Roland deWit	301-299-4697	Mo,Tu,We,Fr	7:00p-9:00p	
MEMORY MANAGEMENT				
Henry Winokur	301-320-2104	All	Reasonable	henwin@atlantech.net
MICROSOFT OFFICE				
Scott Mohnkern	301-738-0097	M-F	9:00a-4:00p	scott@mohnkern.com
MOZILLA				
Cliff Bailey	703-237-4174	Mon-Fri	10:00a-8:00p	cbailey@myexcel.com
NETSCAPE (3 and 4)				
David Chessler	301-229-3984	All	7:00p-10:00p	
NETSCAPE COMPOSER, Ver 4.01				
David Littlefield	202-723-9527	Mon-Fri	6:00p-10:00p	
NETWORKING/LAN				
Sam Odio	888-282-2846	All	All	sam@odioworks.com
Robert Simanski	703-404-8665	All	6:00p - 10p	rsimanski@yourpubpro.com
NOVICE (Beginner)				
Walter Nissen	440-243-4980 Near Cleveland	All	Reasonable	wnissen@tfn.net
Sam Odio	888-282-2846	All	All	sam@odioworks.com
Robert Simanski	703-404-8665	All	6:00p - 10p	rsimanski@yourpubpro.com
Henry Winokur	301-320-2104	All	Reasonable	henwin@atlantech.net
NUMBER THEORY				
Walter Nissen	440-243-4980 Near Cleveland	All	Reasonable	wnissen@tfn.net
OLX and other Off-line Readers				
David Chessler	301-229-3984	All	7:00p-10:00p	
OPENOFFICE				
Cliff Bailey	703-237-4174	Mon-Fri	10:00a-8:00p	cbailey@myexcel.com
ORACLE				
Michael Shunfenthal	703-866-9729	Mon-Fri	7:30p-9:30p	
OS/2				
Keith Bennett	301-840-1161	All	8:00a -9:00p	kbennett@cpcug.org
C. Patrick Zilliacus	301-384-0972	Sat-Sun	12:01p-9:00p	

Member	Phone	Days	Time	E-Mail
OUTLOOK				
Vivian Buc	703 370-6981	All	9a - 9p	veb8899@fastmail.fm
Scott Mohnkern	301-738-0097	M-F	9:00a-4:00p	scott@mohnkern.com
PARADOX AND PAL FOR DOS				
Ron Hicks	703-528-1009	All	Reasonable	ronhicks@cpcug.org
PERSONAL EDITOR II				
Walter Nissen	440-243-4980 Near Cleveland	All	Reasonable	wnissen@tfn.net
C. Patrick Zilliacus	301-384-0972	Sat-Sun	12:01p-9:00p	
PKZIP				
David Chessler	301-229-3984	All	7:00p-10:00p	
PRINTERS - GENERAL				
Henry Winokur	301-320-2104	All	Reasonable	henwin@atlantech.net
PVCS VERSION MANAGER 5.2				
Edward H. Jentsch	301-279-0134	All	Reasonable	ejentsch@cpcug.org
QBASIC (IN MS-DOS)				
Paul Shapiro	240-643-8729	All	9:00a-9:00p	paul.shapiro@gmail.com
QUICK BASIC 4.5				
Paul Shapiro	240-643-8729	All	9:00a-9:00p	paul.shapiro@gmail.com
QUICKBOOKS				
Dennis Courtney	301-570-9334 202-623-2884	Mon-Fri Mon-Fri	6:30p-9:00p 9:30a-5:30p	dennisc@cpcug.net
QUICKEN				
Robert Simanski	703-404-8665	All	6:00p - 10p	rsimanski@yourpubpro.com
SATELLITES, EARTH				
Walter Nissen	440-243-4980 Near Cleveland	All	Reasonable	wnissen@tfn.net
SMALLTALK				
Cliff Bailey	703-237-4174	Mon-Fri	10:00a-8:00p	cbailey@myexcel.com
SQL				
Dennis Courtney	301-570-9334 202-623-2884	Mon-Fri Mon-Fri	7:00p-10:00p 9:30a-5:30p	
STUFFIT				
David Chessler	301-229-3984	All	7:00p-10:00p	
Timeslips (DOS and Windows)				
David Chessler	301-229-3984	All	7:00p-10:00p	
TROUBLESHOOTING - GENERAL				
Wayne Deroncourt				wayned@cpcug.org
Walter Nissen	440-243-4980 Near Cleveland	All	Reasonable	wnissen@tfn.net
Robert Simanski	703-404-8665	All	6:00p - 10p	rsimanski@yourpubpro.com
Henry Winokur	301-320-2104	All	Reasonable	henwin@atlantech.net
UBASIC LANGUAGE				
Walter Nissen	440-243-4980 Near Cleveland	All	Reasonable	wnissen@tfn.net
UNIX				
Scott Graham	301-437-2745 301-593-2744 301-593-2744	Mon-Fri Mon-Fri Sat-Sun	9:00a- 6:00p 6:00p-9:00p Reasonable	sgraham@scobar.com
Scott Mohnkern	301-738-0097	M-F	9:00a-4:00p	scott@mohnkern.com
UTILITIES				
Walter Nissen	440-243-4980 Near Cleveland	All	Reasonable	wnissen@tfn.net

Member	Phone	Days	Time	E-Mail
VIDEO CONFERENCING				
Paul Shapiro	240-643-8729	All	9:00a-9:00p	paul.shapiro@gmail.com
VMWARE				
Cliff Bailey	703-237-4174	Mon-Fri	10:00a-8:00p	cbailey@myexcel.com
WEB SEARCH ENGINES				
Harold Goldstein	301-854-0388	All	Reasonable	mdbiker@goldray.com
WINDOWS 3.1				
Guy Durant	202-529-6744	All	8:00a-11:00a	
	202-529-6744	All	9:00p-11:59p	
Henry Winokur	301-320-2104	All	Reasonable	henwin@atlantech.net
WINDOWS 95				
David Chessler	301-229-3984	All	7:00p-10:00p	
Henry Winokur	301 320-2104	All	Reasonable	henwin@atlantech.net
WINDOWS 98				
Walter Nissen	440 243-4980	All	Reasonable	wnissen@tfn.net
	Near Cleveland			
Sam Odio	888-282-2846	All	All	sam@odioworks.com
Robert Simanski	703-404-8665	All	6:00p - 10p	rsimanski@yourpubpro.com
Henry Winokur	301 320-2104	All	Reasonable	henwin@atlantech.net
WINDOWS ME				
Henry Winokur	301 320-2104	All	Reasonable	henwin@atlantech.net
WINDOWS NT - SYSTEM POLICY EDITOR				
Ron Hicks	(703) 528-1009	All	Reasonable	ronhicks@cpcug.org
WINDOWS 2000 PROFESSIONAL				
Sam Odio	888-282-2846	All	All	sam@odioworks.com
WINDOWS XP				
Vivian Buc	703 370-6981	All	9a - 9p	veb8899@fastmail.fm
Sam Odio	888-282-2846	All	All	sam@odioworks.com
Robert Simanski	703-404-8665	All	6:00p - 10p	rsimanski@yourpubpro.com
Henry Winokur	301 320-2104	All	Reasonable	henwin@atlantech.net
WINFAX PRO				
Howard Weeks	301 924-0400	Mon-Fri	2:00p - 6:00p	
WORD				
Vivian Buc	703 370-6981	All	9a - 9p	veb8899@fastmail.fm
Edward H. Jentsch (ver 6.0/7.0)	301 279-0134	All	Reasonable	ejentsch@cpcug.org
Arquilla Ridgell	301-946-3041	Mo,We,Fr	7:00p-9:00p	Clockone@aol.com
	301-946-3041	Sat-Sun	6:00p-9:00p	Clockone@aol.com
Robert Simanski ('97-2003)	703-404-8665	All	6:00p - 10p	rsimanski@yourpubpro.com
Henry Winokur (ver 6.0/7.0, '97-2003)	301-320-2104	All	Reasonable	henwin@atlantech.net
WORDPERFECT				
WordPerfect SIG Discussion List				www.cpcug.org/list/lwgate.cgi/WPSIGD-L/subscribe.html
Arquilla Ridgell	301 946-3041	Mo, We, Fr	7:00p-9:00p	clockone@aol.com
	301 946-3041	Sat-Sun	6:00p -9:00p	clockone@aol.com
WORDPERFECT (5.1 & 6.0 DOS)				
Wayne Deroncourt				wayned@cpcug.org
WORDPERFECT (DOS & WINDOWS)				
Howard Weeks	301 924-0400	Mon-Fri	2:00p- 6:00p	
WORDPERFECT (DOS-ALL)				
David Chessler	301-229-3984	All	7:00p-10:00p	
WORDPERFECT (WINDOWS 7-9)				
David Chessler	301-229-3984	All	7:00p-10:00p	
WORLD WIDE WEB				
Harold Goldstein	301-854-0388	All	Reasonable	mdbiker@goldray.com
Walt Houser	301 299-0593	All	7:00p - 10:00p	houser@cpcug.org
Scott Mohnkern	301-738-0097	M-F	9:00a-4:00p	scott@mohnkern.co

September Internet Special for Capital PC User Group Members

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Millkern is proud to provide
Internet service to
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Directions to Washington Gas September 13 General Meeting TechTalk

The September CPCUG General Meeting
TechTalk will be held at:

Washington Gas
(usually in the large auditorium)
6801 Industrial Road
Springfield, VA 22150

Directions:

Industrial Road is in the Shirley Industrial Park. It
meets Backlick Road between the Beltway and
Edsall Road.

By auto from I-495 Beltway Inner Loop (North):

Take I-395 North.
Continue with I-395 directions.

By auto from I-395:

Take Exit 2, Edsall Road (Route 648) West.
Turn left at end of road onto Backlick Rd (Rt 617).
After approx. .4 mile, turn left on Industrial Road
traffic light.
Enter the Washington Gas parking lot on the right
after passing the sign with white lettering on black
background, at the "Payment Depository" sign.

*Please see page 4 for details on
upcoming General Meeting TechTalks.*

By auto from I-495 Beltway Outer Loop (South):

Take Exit 5, Braddock Road (Route 620) East.
After approx. 1.8 miles, turn right on Backlick
Road (Route 617) .
After approx. .7 mile, turn left on Industrial Road
traffic light.
Enter the Washington Gas parking lot on the right
after passing the sign with white lettering on black
background, at the "Payment Depository" sign.

Keep Updated!

Capital PC User Group meeting plans may
change after the *Monitor* has gone to press. To
get the latest information about meetings and
special events (including topics, when available,
and date, time, and location changes), bookmark
and check www.cpcug.org/user/comm/.

Late Nite

The Beginners (and Beyond) SIG, also
known as "Late Nite," immediately follows
the General Meeting TechTalks when
held at Washington Gas.
Bring your questions! "Late Nite" begins
at approximately 9:00 pm.

CPCUG Mailing Lists



The Capital PC User Group maintains many mailing lists for distributing and sharing information. A mailing list is a list of people's names and e-mail addresses used to send certain messages or announcements to a

group of people simultaneously who have a common interest in the message contents. You can join and leave the list as your needs dictate. Electronic mailing lists are a logical extension of bulletin board systems like the late CPCUG Membership Information eXchange (MIX). They provide very much the same functionality as the MIX did without requiring dialing into a separate message server. If you have access to the Internet and e-mail you can get started exploring mailing lists right away!

To make using LISERV (the trade name for the most popular mailing list management software in the world) easy for even the the newest user we have installed a Web-based gateway to these lists. From this gateway, users can get information about the various lists that are available. They can subscribe to, unsubscribe from, and set personal preferences (subscription options) for any of the lists that are open to the public. To reach this gateway go to our Web site at www.cpcug.org and select the "Mailing List" option from the main menu. Some of the lists are for information distribution only (no individual posting allowed), and others are open for posting (discussion lists). Most of the list owners maintain archives of messages, and those archives that are available can be read via the gateway at CPCUG's Web site.

You can retrieve a manual and other information about the workings of LISERV from:

www.lsoft.com/info/default.asp?item=manuals

Below is a compilation of some of the most popular of CPCUG's current e-mail lists.

- ACCESSSIG-L** (CPCUG Access SIG Announcement List)
- ACCESSSIGD-L** (CPCUG Access SIG Discussion List)
- BEGINSIG-L** (CPCUG Beginners SIG Announcement List)
- BEGINSIGD-L** (CPCUG Beginners SIG Discussion List)
- CONENT-L** (CPCUG Entrepreneurs and Consultants SIG Discussion List)
- CPCUGCAL-L** (CPCUG Event Calendar Distribution List)
- CPCUGGEN-L** (CPCUG General Discussion List)

- DCPUG-L** (CPCUG PalmOS SIG Discussion List)
- DELPHISIG-L** (CPCUG Delphi SIG Announcement List)
- HTMLSIG-L** (CPCUG HTML SIG Announcement List)
- HTMLSIGD-L** (CPCUG HTML SIG Discussion List)
- JAVASIG-L** (CPCUG Java SIG Announcement List)
- JAVASIGD-L** (CPCUG JAVA SIG Discussion List)
- MIX-L** (CPCUG Member Info. eXchange Discussion List)*
- MMSIG-L** (CPCUG Multimedia SIG Announcement List)
- MMSIGD-L** (CPCUG Multimedia SIG Discussion List)
- MONITOR-L** (CPCUG *Monitor* Announcement List)
- NETSIG-L** (CPCUG Internet SIG News List)**
- OFCSIG-L** (CPCUG MS-Office SIG Announcement List)
- PMSIG-L** (CPCUG Project Mgm't SIG Announcement List)
- POCKETPC-L** (CPCUG Pocket PC SIG Announcement List)
- POCKETPCD-L** (CPCUG Pocket PC SIG Discussion List)
- SCIFAIRD-L** (CPCUG Science Fair Discussion List)
- SENIORSIG-L** (CPCUG Seniors SIG Announcement List)
- SENIORSIGD-L** (CPCUG Seniors SIG Discussion List)
- TRAIN-L** (CPCUG Training Program Announcement List)
- TRAIND-L** (CPCUG Training Program Discussion List)
- VBSIG-L** (CPCUG Visual Basic SIG Announcement List)
- VBSIGD-L** (CPCUG Visual Basic SIG Discussion List)
- VIRGINIASIG-L** (CPCUG VA SIG Announcement List)
- WPSIG-L** (CPCUG WordPerfect SIG Announcement List)
- WPSIGD-L** (CPCUG WordPerfect SIG Discussion List)

* MIX-L – CPCUG members only. Send e-mail to David Chessler <chessler@cpcug.org> to subscribe.** NETSIG-L cannot be subscribed to or signed off from cpcug.org as it is hosted on AOL. To subscribe to NETSIG-L mailings, send e-mail to:

LISERV@LISTSERV.AOL.COM containing the line:

SUBSCRIBE NETSIG-L <firstname> <lastname>

To subscribe to any list, send an e-mail message to LISTSERV@CPCUG.ORG. Include in the message the line **SUBSCRIBE <listname> <yourfirstname> <yourlastname>**. Do not include the angle brackets. No entry in the subject line is necessary.



The software for maintaining the mailing lists, LISERV®, has been made available through a generous donation from L-Soft International, Inc. The Web-based gateway,

LWGate, is a perl script written by © 1995 David W. Baker, dwb@netspace.org. This program is free software under the terms of the GNU General Public License as published by the Free Software Foundation.

10 Reasons To Join CPCUG

Capital PC User Group (CPCUG) membership entitles each member of your family living in your household to all CPCUG membership benefits—

1. Helpline—a great way to get help from experts for your hardware, software, and Internet questions and problems at no additional cost. The Helpline Directory is updated and published in the *Monitor*, the magazine of the Capital PC User Group.

2. Mail delivery of a print copy of our award-winning magazine, the *Monitor*, with its practical tips for computer users; technical articles; regular columns; CPCUG-member-authored reviews of software, hardware, and computer-related books; CPCUG event calendar; and special interest group (SIG) and Training Program information.

3. Computer education and training classes, seminars, workshops, discussions, and labs at low member rates—some are even free to members while others are for members only.

4. Assistance from CPCUG Build Team mentors in specifying and building your own computer. CPCUG's popular "Build" Workshop gives participants the knowledge and confidence to select appropriate components to build and later upgrade their own computers without additional paid assistance. This workshop is only \$75 and is only available to CPCUG members.

5. Discounts on software, hardware, and training are periodically made available to members of our user group. [If you take advantage of several discounts available only to CPCUG members, your membership pays for itself.]

6. Internet service options available only to CPCUG members at competitive rates through our Internet domain cpcug.org.

7. Access to new member-only e-mail distribution lists being created to supplement our more than 30 public discussion and announcement lists. List subscribers can ask and get answers to computer hardware and software questions, and stay informed about CPCUG activities and Training.

8. New software and/or computer reference books—available without charge to members who review them for our magazine, the *Monitor*. You'll also get a byline in the *Monitor* and become a member of our product review coordinator's team.

9. Member-only door prizes—available at some General Meetings, some special interest group (SIG) meetings, and at occasional seminars. [This benefit has more than paid for the annual membership fee of many active CPCUG members. Software prizes have included Lotus Domino Go Webserver, MS Office Professional, and Adobe Photoshop. Hardware prizes have included Hewlett Packard Pocket PCs and Palm handhelds.]

10. Opportunities to develop and/or enhance leadership and management skills, while building your professional network, by volunteering with CPCUG.

The biggest benefit of all may be that by becoming active in the Capital PC User Group you become part of a very helpful community of computer users and IT professionals who are truly "Users Helping Users."

Before you know it you will also become a "User Helping Users."

The Capital PC User Group, Inc. (CPCUG), a nonprofit 501(c)(3) educational organization established in 1982, provides a forum for sharing information, experience, and resources among computer users, from novice to advanced. Although the group serves primarily the Washington, DC, metropolitan area, members are found around the world.

Membership Form

Mail to: Capital PC User Group, Inc.
19209 Mt. Airey Road
Brookeville, MD 20833

Call to (if paying by credit card): (301) 762-9372

Fax to (if paying by credit card): (301) 762-9375

Name _____

Address _____

City/State/ZIP _____

Telephone (Evening/Weekend) _____

Telephone (Day) _____

E-Mail Address _____

Member Number _____

New Membership 1 year—\$42 Outside the
 Renewal 2 years—\$78 United States,
 Change of Address 3 years—\$110 \$60 per year

Payment method: Check VISA MasterCard

Card Number _____

Expiration Date _____

Signature (required for credit cards): _____

List my name in the next Membership Directory? Yes No
Name and address information from this Membership Directory may be very occasionally made available to computer-related businesses, most often on a one-time basis to vendors desiring to announce their General Meeting presentations. If you do not wish to be included in the directory, mark the "No" box above.

Please check this box if you would *not* wish to receive a monthly e-mail message with current CPCUG training and meeting topics. We are considering using this means of keeping the membership informed of scheduled events and changes more rapidly than is possible via the *Monitor* magazine.

Your membership starts with the first *Monitor* magazine mailed to you. It may take 4–6 weeks before you are included on the mailing list or receive your membership card. Please be patient.

Five dollars of the membership fee is for a subscription to the *Monitor*.
902w

Capital PC User Group, Inc. *A Resource for Technology Users and IT Professionals*

Phone: (301) 762-9372

Fax: (301) 762-9375

E-Mail: admin@cpcug.org

Snail Mail: 19209 Mt. Airey Road
Brookeville, MD 20833

URL: <http://www.cpcug.org/>

President: Dennis Courtney
president@cpcug.org

Events Calendar:

<http://www.cpcug.org/user/comm/cal-6mon.html>

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To advertise in this space, please
contact the
Monitor editor at
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New Millkern Services for CPCUG.ORG members

DSL

Millkern is now able to provide DSL at speeds up to 3.0 MBPS through Covad throughout the United States. We've negotiated for competitive rates for CPCUG.ORG members. For additional information see www.millkern.com/dslnow.

Web Accelerator

For users who rely upon dial-up, we are now offering Slipstream software as an add-on service to cpcug.org members. Speed up your connection as much as five times faster than dial-up for the low fee of an additional \$4 a month.

For information on how this software works see www.millkern.com/docs/webaccel. To sign up, fill out the application at www.cpcug.org/apps/cpcugaddapp.html.

CPCUG Meeting Site Abbreviations & Addresses

1800 M = 1800 M St., NW, South Tower, 3rd Floor, Room S3031, Wash., DC

APA = American Psychological Assn, 750 1st St., NE, 6th Floor, Executive Office Suite, Wash., DC

ASHA = American Speech-Language-Hearing Assn, 10801 Rockville Pike, Rockville, MD

AUMC = Annandale United Methodist Church (see UHU Annandale, VA)

BCCSC = Bethesda Chevy Chase Services Center, 4805 Edgemoor Lane, Bethesda, MD: 3 locations on the 2nd Floor: Rooms A & B; Room C; and Multipurpose Room

Bedford = Bedford Court, Activity Center, Senior Living Community, 3701 International Dr, Silver Spring, MD

BLib = Bethesda Library, 7400 Arlington Road, Bethesda, MD

CESC = Carver Educational Services Center, Auditorium, 850 Hungerford Dr., Rockville, MD

CPL = Cleveland Park Library, 3310 Connecticut Ave. NW, Large Mtg Rm, Washington, DC

CU-P = Catholic University of America, Pangborn Hall, Room 303, 620 Michigan Avenue, NE, Washington, DC

DIK = Dupont Italian Kitchen, upstairs dining room, 17th and R Streets NW Washington, DC.

HH = Harmony Hall Regional Center, 10701 Livingston Rd., Ft. Wash., MD

HSCL = Harbour Square Cooperative Library, 500 N St, SW, Washington, DC

IADB = Room B-300, Inter-American Development Bank, 1350 New York Ave., NW, Wash, DC

IVL = Interstate Van Lines (Community Room), 5801 Rolling Road, Springfield, VA

KL = Martin Luther King Jr. Library, 901 G St., NW, basement auditorium, Room A-5, Washington, DC

MS = Microsoft Corporation, 5335 Wisconsin Ave, NW, 5th floor, Washington, DC

PC = Pentagon City Mall Eatery

Reboot (computer recycling) = 101 Fleet St, Rockville, MD

Teaism = Teaism Restaurant, 400 8th St, NW, Wash., DC

UHU = Annandale United Methodist Church, Room 305, 6935 Columbia Pike, Annandale, VA

VAMC = Veterans Affairs Medical Center, 50 Irving St., NW, 4th Floor, IRM Room, 4C106a, Wash., DC

WCC = Washington, DC Convention Center, 801 Mt. Vernon Place, NW, Washington, DC

WELib = West End Library, 2nd Floor, Large Meeting Room, 1101 24th Str, NW, Washington, DC

WGas = Washington Gas, 6801 Industrial Rd., Springfield, VA

Keep Updated!

Capital PC User Group meeting plans may change after the *Monitor* has gone to press. To get the latest information about meetings and special events (including topics, when available, and date, time, and location changes), bookmark and check www.cpcug.org/user/comm/.

CPCUG Training

UHU Annandale
Annandale United Methodist Church (AUMC),
Room 305
6935 Columbia Pike, Annandale, VA 22003

\$29 CPCUG & AUMC members. \$39 non-members.
All classes 6:00-9:00 pm, except where noted. Register online at www.cpcug.net/trainingsearch.asp or call CPCUG (301) 762-9372.

September

- 2 – Introduction to MS Access, Part 1
- 4 – Basics of Computers for Very Beginners (9:00 am to noon)
- 7 – How to Make the Most of Your PDA
- 9 – Digital Imaging
- 11 – Windows Maintenance and Computer Troubleshooting (9:00 am to noon)
- 14 – Introduction to MS PowerPoint
- 16 – MS Word: Form Letters, Mail Merge & Labels
- 18 – Introduction to MS Word (9:00 am to noon)
- 21 – Planning & Publishing an Effective Web Site
- 23 – Open Lab Time
- 25 – Intro to Crystal Reports, Part 1 (9:00 am to noon)
- 28 – Organizing Your Files & Folders Using Windows Explorer
- 30 – Introduction to MS Access, Part 2

October

- 2 – Basics of Computers for Very Beginners (9:00 am to noon)
- 5 – Introduction to MS Access, Part 1
- 7 – How to Make the Most of Your PDA
- 9 – Windows Maintenance and Computer Troubleshooting (9:00 am to noon)

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Harmony Hall Regional Center
Computer Room, 2nd Floor
10701 Livingston Road
Fort Washington, MD 20744

\$35 Residents & CPCUG members. \$45 non-residents.
All classes are 6:00-9:00 pm. Register online at www.pg parks.com or call Harmony Hall (301) 203-6040. Please note: Before registering for Harmony Hall classes for the first time, you must visit a Prince George's community center to register as a SMARTlink client (bring driver's license). SMARTlink class numbers, where known, are listed.

September

- 7 – Basics of Computers for Very Beginners (48550)
- 9 – Vocabulary of Computing
- 14 – Intro to Windows XP Operating System (48551)
- 16 – Basic Computer Keyboarding/Mouse Skills (48569)
- 21 – Organizing Files & Folders using Windows Explorer (48568)
- 23 – Windows Maintenance and Computer Troubleshooting (48552)
- 28 – Searching the Internet (48553)
- 30 – Personal Disaster: Recover & Backup Techniques (48580)

October

- 5 – Introduction to E-mail (48554)
- 7 – Shopping, Traveling and Auctioning on the Internet (45555)
- 14 – Introduction to Microsoft Word (45556)
- 19 – Introduction to Home Networking (48558)
- 21 – MS Word: Flyers, Calendars & Graphics (48576)
- 26 – Intro to Windows XP Operating System (48559)
- 28 – MS Word: Templates, Tables & Tabs (48560)

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Capital PC User Group, Inc.
19209 Mt. Airey Road,
Brookeville, MD 20833

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Membership Benefits

1. Helpline for PC and Internet questions
2. Award-winning *Monitor* magazine
3. Economical classes at member rates
4. Mentors for computer specification/building
5. Discounts on software, hardware and training
6. Internet service options through CPCUG.ORG
7. Access to members-only e-mail lists
8. Free software and books for review writers
9. Valuable door prizes at some events
10. Opportunities to enhance leadership skills