



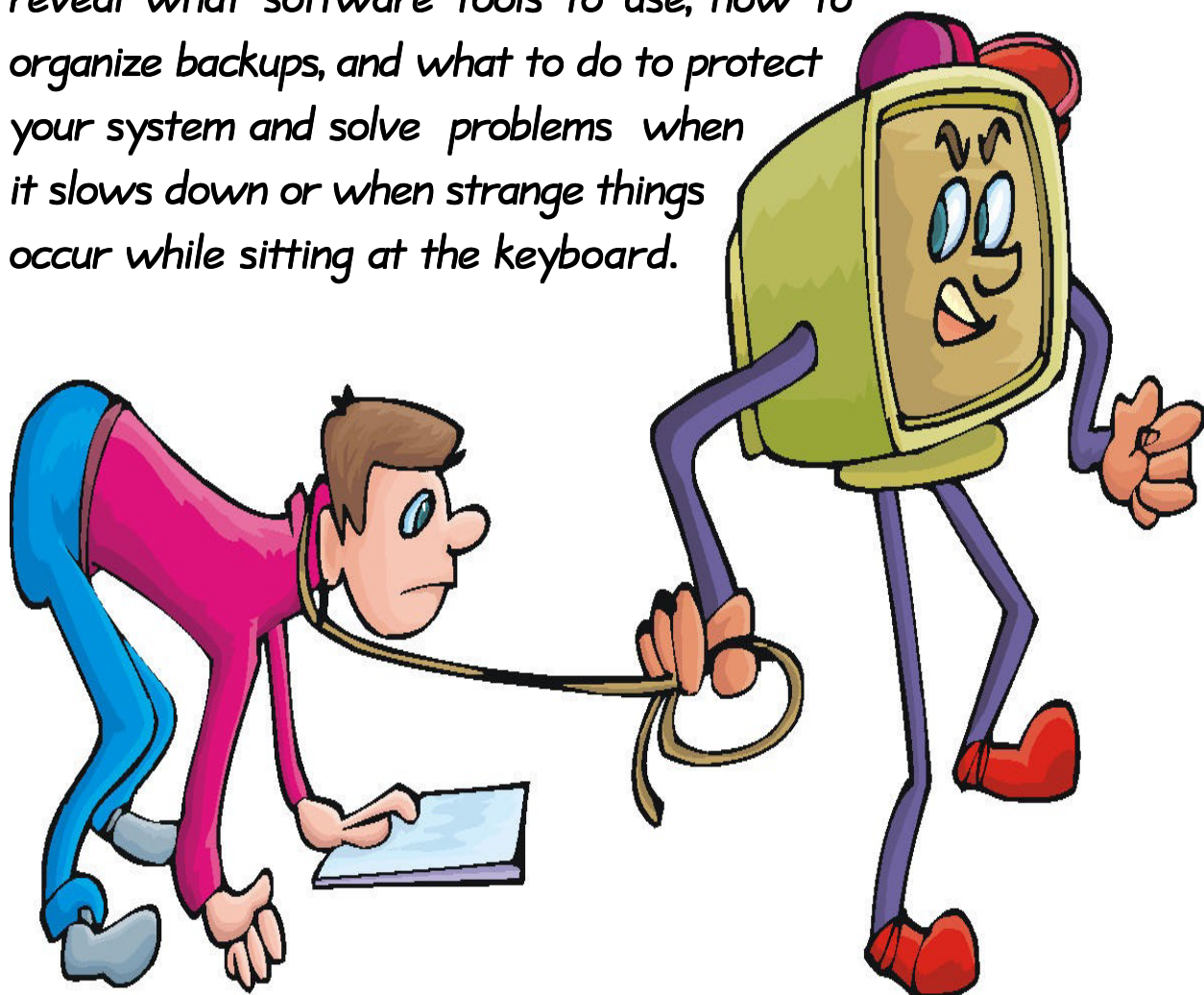
April 2006

Volume 17, Issue 4

*Are you in control of the operation of your computer system, or does your PC think it is the dominant party? Find out from*

## **The Mouse Whisperer**

*At our next meeting, DACS Program Director and veteran PC troubleshooter, Jamie Yates, will show you how to get back in control. Using his own computer as an example, he will reveal what software tools to use, how to organize backups, and what to do to protect your system and solve problems when it slows down or when strange things occur while sitting at the keyboard.*



# President's File



## PRESIDENTIAL RAMBLINGS

**O**h Yeah! It's April, baby! My whooping sticks have moved from the corner of my office to the corner of the family room, so they're closer to the car and the links.

Actually we've made the trek to the driving range a couple of times... It felt good to swing a club again. After not touching a club all winter I was feeling a little rusty, but after knocking a few hundred balls around the yard I'm feeling pretty good. The only thing I'm struggling with is my short game... That's going to take some time and practice to my "touch" back.

I can't wait to get out on the course, put a peg in the ground and then grip and rip it.

## Commentary - Children and the Internet

In recent weeks there have been several highly publicized cases on exploitation involving the internet. I thought this would be a good time to review the risks and talk about the steps you can take to protect your children while they're on-line.

According to the National Center for Missing and Exploited Children, the risks children face on-line include:

- **Exposure to inappropriate material.** Your child may be exposed to material considered to be sexual, hateful, or violent in nature or encouraging dangerous or illegal activities. Children could seek out such material but may also come across it on the web via chat areas, E-mail, or even instant messaging if they're not looking for it.

- **Exposure to child predators.** Your child might provide information or arrange an encounter, possibly risking his or her safety or the safety of other family members. In some cases child molesters have used chat areas, E-mail, and instant messages to gain a child's confidence and then arrange a face-to-face meeting.

- **Harassment and bullying.** Your child might encounter messages via chat, E-mail, or their cellular telephones that are belligerent, demeaning, or harassing. "Bullies," typically other young people, often use the Internet to bother their victims.

- **Viruses and hackers.** Your child could download a file containing a virus that could damage the computer or increase the risk of a "hacker" gaining remote access to the computer. This could jeopardize your family's privacy and safety.

- **Legal and financial.** Your child could do something that has negative legal or financial consequences such as giving out a family member's credit-card number or doing something violating another person's rights. Legal issues aside, children should be taught good "netiquette" which means to avoid being inconsiderate, mean, or rude on the Internet.

How can you protect yourself and family?

- Never give out personal information, such as your home address, school name, or telephone number in a public forum such as a chat room or newsgroup.

- Before sharing personal information with anyone make sure you're dealing with someone both you and your children know and trust.

- Do not post photographs of your children in public forums such as newsgroups or on publicly available web sites.

- Avoid listing your child's name and e-mail address in public directories.

- Find out if your children have a free web based, e-mail account, such as those offered by Hotmail or Yahoo. Ask them for their user ID and password. If they do have such an account, find out where they access those accounts. Is at school, the library, or at friends home? Ask them for their user name and password.

PRESIDENT'S FILE, Continued on page 4

## Membership Information

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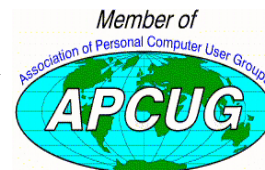
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## Technical Support

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## HelpLine

*Volunteers have offered to field member questions by phone. Please limit calls to the hours indicated below. Days means 9 a.m. to 5 p.m.; evening means 6 to 9:30 p.m. Please be considerate of the volunteer you are calling. HelpLine is a free service. If you are asked to pay for help or are solicited for sales, please contact the dacs.doc editor; the person requesting payment will be deleted from the listing. Can we add your name to the volunteer listing?*

**d** = day    **e** = evening

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## Directors' Notes

A regular meeting of your Board of Directors was held at the Resource Center on Monday, March 13, 2006. Present were Messrs. Bovaird, Berger, Corzo, Henderson, Leifels, Setaro and Yates. President Jeff Setaro presided and Secretary Lisa Leifels kept the record. Minutes of the last meeting held on February 13, 2006 were approved.

Treasurer Charles Bovaird reported current cash assets of \$12,797.40, consisting of total bank and postal accounts in the amount of \$12,724.38, plus postage on hand of \$73.02. Subtracting a liability of prepaid dues in the amount of \$5,523.00 left a net equity of \$7,274.40. He also reported that there are 333 members.

On April 4<sup>th</sup>, Jamie Yates will present the topic of PC Maintenance. He will explain the steps he does to keep his computer running smoothly. On May 2nd, there will be a Home Automation presentation. Jamie is going to find out if the Home Automation presenter can also talk about HDTV. Jamie also contacted the FBI, and was added to their list of future presentations.

Howie Berger said that he spoke to the manager of Best Buy and they are interested in doing a presentation. Jamie said he would contact her to talk in more detail about this. Howie thought we could also go to their competitor Circuit City, and ask if they'd like to do a presentation.

Jamie asked for two board members to review the DACS website at least once a month to verify that the information is up to date and that all the links work properly. Sean and Lisa volunteered for this job.

Jamie requested that everyone on the board place the poster announcing the next general meeting in two different locations. Charlie reported that placing the posters at the local libraries has drawn in new members in the past.

Jamie will be attending the next Website Design SIG on March 21<sup>st</sup> to go over the changes he would like made to the DACS website. He thought that the website should say "Upcoming Meeting" instead of "This Month's Meeting." He would like the Meeting Preview and "What's News" to be updated immediately following the general meeting. Sean asked if we could add a join DACS area to the website.

The board voted and approved the officers that will take office as of April 1<sup>st</sup>, 2006. All current officers agreed to serve,

DIRECTORS' NOTES, Continued on page 5



- Find out if your children have an on-line journal, web log or personal web site. If they do ask them to show it to you.

- Never allow your child to arrange a face-to-face meeting with someone they've "met" on on-line without an adult family member's permission. If they do arrange a meeting, make sure the first meeting is in a public place, and be sure to accompany your child.

- Never respond to messages that are suggestive; obscene; belligerent; or threatening. If you or your child receives a message that is harassing, or of a sexual nature, file an abuse complaint with the senders ISP.

- Always remember people online may not be who they seem. Just because someone says they're a 12-year-old girl doesn't mean they are. They could actually be 40-year-old man.

- Any offer that's "too good to be true" probably is. Be careful about any offers involving you going to a meeting, having someone visit your home, or that ask you to sending money or credit-card information.

- Set reasonable rules and guidelines for computer use by your children and consider keeping the computer in the family room, rather than your child's bedroom.

- Make use of Parental Control or content filtering applications to help prevent access to inappropriate material. Parental Control or Content Filtering applications are not 100 percent effective, but do help reduce the chance of your child accessing inappropriate materials on-line.

### End Notes

For more information about protecting your children and teenagers on-line visit the Center for Missing and Exploited Children on-line at <http://www.missingkids.com>.

Only one new addition to my reading list for this month:

*Cobra II : The Inside Story of the Invasion and Occupation of Iraq* by Michael R. Gordon and Bernard E. Trainor

That's it for this month. Your questions, comments and book recommendations are always welcome. You can contact me by phone, my number is in the newsletter, or by e-mail at [jasetaro@mags.net](mailto:jasetaro@mags.net) or [jasetaro@yahoo.com](mailto:jasetaro@yahoo.com).

—JEFF SETARO

## Meeting Review

### Computer Aided Design and Visualization

By Jamie Yates

IT WAS ANOTHER Tuesday night at DACS, and our featured speaker was Scott Yates, an architect employed at H & R Design, right here in Danbury.

Scott started his presentation showing some examples of the areas that he works in: residential, commercial and specialty. The first project he discussed is the major renovation underway on his own house. He used it to show design, rendering and construction from the original small saltbox to what it is today. He displayed pictures of the original house, the new structure and the design drawings. He also showed 3D renderings of what the final house would look like. These renderings are used to enable clients, who can't visualize a structure from the detailed drawings, to see a conceptual view of the actual finished product.

Then he showed several other projects that were, are, will, or may be done in our local community, and explained how 3D renderings are generated. Some of these renderings were then overlaid with images of the project's physical surroundings to give the prospective client a view of how the project will look when finished. This is used so local community boards can see how buildings will appear when all the work is completed, and also serves as a marketing tool for developers.

One of the more interesting projects was a two-lot housing plan on Deer Hill Avenue in Danbury, where house renderings were done on an available site to show how they would fit in with their surroundings. The part that was most interesting was the fact that the house designs were just shells, like you would see on a movie set, with no interior floor plans. This is the reverse of the way a design is usually done, in which the floor plan is created and then the exterior is built around it.

Scott then showed some of the studio and multi-media room designs he has worked on around the world. He showed projects in Europe, Asia, South America and North America created for major corporations and individuals. This part of his presentation included some of the intricate detailing required to control and manipulate lighting, sound and video and showcased some of the leading edge electronics and mechanics involved. Included here were some animations used for demonstration purposes, including a virtual tour of a media control room. He also briefly discussed how both design and materials can be used to control the acoustic properties of a room.

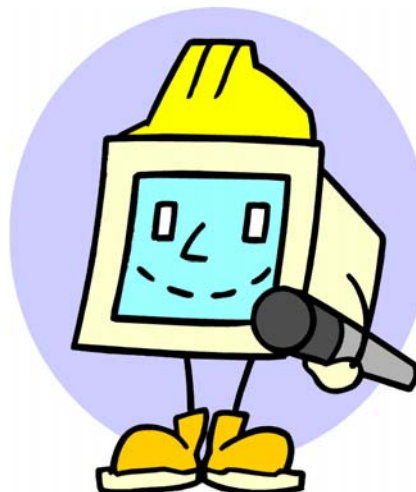
Throughout his presentation, he answered many questions from the audience about how the tools of Autocad were used and why. He also described other available design software and why some projects required significantly more sophistication than others.

He described where the industry is going and how future integration of function will allow a total package that can generate construction plans, models, renderings and schedules, and effortlessly adapt to design changes.

The presentation was very professional, and showed a detailed knowledge and understanding of the subject beyond what I think the audience would have imagined. Although it had to be cut short in overtime, I got the impression that all attendees now know a lot more about the architect's trade, what can be done with a computer in designing for the real world, and the complex process of moving a project from concept to completion.

You should have been there.

JAMIE is DACS VP for Programs.



## Meeting Preview

# One Person's View of Maintaining a System

By Jamie Yates

**T**HIS SHOULD BE fun - writing up my own meeting preview for the April 4 DACS General Meeting. The chosen subject is "One Person's View of Maintaining a System." I wonder how many superlatives I can get in. Here goes ....

It seems that during the Random Access segment of our General Meeting, we get a number of questions on how to maintain a system. What software should I use? How about back-ups? What options do I have to protect my system? How can I solve problems that may crop up when the system slows down or when strange things occur while sitting at the keyboard?

Well, let's find out.

As Vice President of Programs for DACS, I will be the guinea pig for the evening. I will describe what I do on my own system to keep it humming along, and when I may encounter a problem. Is my process perfect? No, but I'm sure I'll get lots of input from the audience. So I can improve my methods, since there are many different products out there and many good approaches to the subject. The only bad approach is no approach at all, and I'm sure none of you use that one. But according to statistics, that's the approach most people use.

I must admit, I am either the luckiest person on earth or pretty !?# good, since I haven't had a virus or spyware (to my knowledge), in over 20 years (knock on wood). It's not to say they haven't tried—but to borrow a phrase from Tom Cruise in Top Gun, "it's looking good so far."

I will go over my hardware and software configuration: system settings; software I use to protect my system and data; how, when and what I backup; what I read to keep current on what types of problems are floating around; where I go to research potential and real problems that may or do occur; and many more areas that I'm sure you will be interested in.

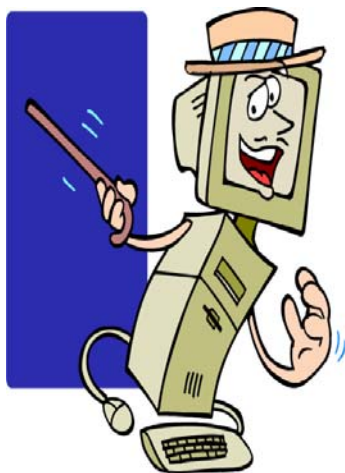
This presentation is based on Microsoft Windows, but many of the items apply whether you use a Mac or run Linux.

You gotta see this presentation. One of us may learn something, and you are bound to leave with some new ideas on what to do or what not to do.

I suggest you bring anyone you know who has asked these types of questions, or who just keeps bugging you for suggestions and information—especially after *they* have a problem.

DACS meetings are held at the Danbury Hospital auditorium. Activities begin at 7 p.m. with casual networking, Random Access and a discussion of what's new in technology. There is a business session at 7:30, followed by a short break and the evening presentation at 8:00.

As a reminder, our General Meetings are free and open to the public so invite anyone you know who would be interested in this topic.



**Directors' Notes**, Continued from page 3

in addition to Sean Henderson, who will be the new Vice President of Marketing & Public Relations.

Richard Corzo asked if there was a PC running Windows XP and USB ports that could be used at the Macintosh SIG. Jeff thought we should investigate buying a laptop for the club that could be available to the SIGS and also used for the general meetings. Jeff suggested that we check the prices of laptops.

Jim Scheef reported that a new Netgear router has been purchased for the resource center. He will install it at the next Server SIG meeting.

—LISA LEIFELS

## New Members

From 1/19/2005 to 3/27/2006

Marie Sugar

### THIS IS YOUR LAST NEWSLETTER

If the membership date on  
your mailing label reads

**EXP 2/2006  
or earlier**

You need to renew your  
DACS membership  
**NOW**

SCIENCE  
HORIZONS  
INC.



## DACS Sends Judging Team to Science Horizons Fair

At 7:30 a.m. on March 11, seven DACS volunteers put on black Science Horizons tee shirts identifying them as science fair judges. Our assignment was to select four out of eight student projects for the afternoon "finals" competition. Each contestant's presentation was evaluated using uniform scoring criteria.

During lunch we talked about our great experiences during the morning session. All the DACS judges look forward to next year's fair with the hope that additional DACS members will join us in encouraging students in their scientific pursuits.

# What's News

March, 2006

By Jamie Yates

*The format of What's News is still evolving, so if you have any suggestions on changes or improvements please send an email to [vpprograms@dacs.org](mailto:vpprograms@dacs.org). Topics should be related to computers or electronics in general, and include a brief description, along with a URL that provides further details. Past segments can be found in our Newsletter archives.*

**Description:** Google upgrades desktop Software in moves that "amount to a new operating system," according to a Gartner analyst. Google Desktop 3 can collect your information and make it available to any other computer. Beware.

**Source:** InformationWeek; [www.informationweek.com/story/showArticle.jhtml?articleID=179102585](http://www.informationweek.com/story/showArticle.jhtml?articleID=179102585)

Google Pack is prepackaged free/fee software. Some Google's and some from other companies—<http://pack.google.com/>

**Description:** Siteadvisor—We test the Web to help keep you safe from spyware, spam, viruses and online scams – 475,000 to date

- Safe: We tested the site and found no significant problems.
- Caution: Our tests revealed some issues you should know about. (Example: a site tried to change our browser defaults, or sent a lot of "non-spammy" e-mail)
- Warning: Our tests revealed some serious issues that you'll want to carefully consider before using this site at all. (Example: The site sent us lots of spammy e-mail or bundled adware with a download).

**Source:** [www.siteadvisor.com/preview/](http://www.siteadvisor.com/preview/)

**Description:** Camino is a free native Mac OS X browser based on open-source Mozilla code and has now reached a stable 1.0 release. The awesome visual and behavioral experience that has been central to the Macintosh philosophy—Powerful web-browsing capabilities of the Mozilla Gecko rendering engine

**Source:** [www.caminobrowser.org/](http://www.caminobrowser.org/)

**Description:** What does a failing hard drive sound like? You can hear it here. There is also a contest about who can create the best mix using these sounds.

**Source:** From Hitachi: [www.hitachigst.com/hddt/knowtree.nsf/cffe836ed7c12018862565b000530c74/4b1a62a50f405d0d86256756006e340c?OpenDocument](http://www.hitachigst.com/hddt/knowtree.nsf/cffe836ed7c12018862565b000530c74/4b1a62a50f405d0d86256756006e340c?OpenDocument)

**Description:** Windows Live and Windows Live Ideas, all in Beta. Many new Internet-based functions such as Mail, Local, Safety Center, Favorites, Search, Expo (social network) and much more. Office live is now offering free domain name and web hosting, plus many small business applications.

**Source:** <http://ideas.live.com/>; <http://officelive.microsoft.com/>

**Description:** All about Skype and Skype interface products. Major VOIP player bought by eBay – 75,000,000 subscribers. Free computer to computer service – low land line price. Wireless and Bluetooth phones. Can show who is currently available online before call is made. Dual function wireless uses VIOP and POTS. Even a Wi-Fi version coming soon.

**Source:** [www.msnbc.msn.com/id/11078979/site/newsweek/](http://www.msnbc.msn.com/id/11078979/site/newsweek/); [www.skype.com](http://www.skype.com)

**Description:** Canon REALiS series projector. This new Canon projector is XGA (1024x768) and WXGA (1366 x 768) 3500 Lumens. Said to be the smallest and most affordable projector on the market (10.4 lbs and 4.5 x 8.9 x 13.2). Will ship in May, 2006. Cheapest model is \$4K

**Source:** <http://consumer.usa.canon.com/ir/controller?act=ModelDetailAct&fcategoryid=131&modelid=13029>

**Description:** Microsoft to kill off Front Page in Office 2007 release (by the way, it is now being called Office 2007 rather than Office 12). It will be replaced by SharePoint Designer and Expression Web Designer

**Source:** PC World, <http://blogs.pcworld.com/staffblog/archives/001460.html>

**Description:** Pandora. From the Music Genome Project. All music characterized by melody, harmony, instrumentation, rhythm, vocals, lyrics ... and more - close to 400 attributes. Select an artist or song and it plays similar songs. Vote up or down and it refines the songs it plays for you. You can create multiple Stations.

**Source:** <http://pandora.com/?cmd=tuner>

**Description:** Microsoft Windows Defender (Beta 2). Free program that helps protect your computer against pop-ups, slow performance, and security threats caused by spyware and other unwanted software. Features Real-Time Protection, a monitoring system that recommends actions against spyware when it's detected. New streamlined interface that minimizes interruptions and helps you stay productive. Uses automatic definition updates provided by Microsoft

**Source:** [www.microsoft.com/athome/security/spyware/software/default.aspx](http://www.microsoft.com/athome/security/spyware/software/default.aspx)

**Description:** Warning: Don't Touch That Mouse. Internet Cafe mice found to be more germ-laden than toilet doorknobs. Hard to believe but true. Shopping cart handles win.

**Source:** InformationWeek, [www.informationweek.com/news/showArticle.jhtml?articleID=180202476](http://www.informationweek.com/news/showArticle.jhtml?articleID=180202476)

**Description:** A new approach to prevent software piracy. Apple confirmed that it has embedded poetry in places in the OS that presumably would need to be accessed to hack it, which warns against piracy. The poem reads:

**"Your karma check for today:**

*There once was a user that whined  
his existing OS was so blind,  
he'd do better to pirate  
an OS that ran great  
but found his hardware declined.*

*Please don't steal Mac OS! Really, that's way uncool.*

*(C) Apple Computer Inc."*

**Source:** Leave to Apple warns software pirates. REALTECHNEWS, [www.realtechnews.com/posts/2704](http://www.realtechnews.com/posts/2704)

**Description:** For the person who has everything. Computers in the shape of a car. For only \$1800. Corvette, Lexus Mercedes, Pontiac, Mustang, etc. Can pick paint color, wheels and tires.

**Source:** [www.compucarllc.com/scripts/shopping.asp](http://www.compucarllc.com/scripts/shopping.asp)



## Circuit Rider

Version 3.9

By Jim Scheef

**S**ORRY I MISSED the last issue. Hey, it's ski season, but there are important things going on that we need to talk about.

### Net Neutrality

Right now all data traveling over the Internet is treated equally. You can attach any device, use any IP-based protocol, and still expect that your packets will arrive at their intended destination just as fast as anyone else's packet. Your packets are just as good as everyone else's packets. That's because from the very beginning, the economic model for the Internet has been that you pay a fixed amount for a connection to the net. Generally speaking, the amount you pay is determined by the size of the "pipe." A T-3 line that can carry 43Mbps is a faster pipe, and thus costs more than a connection from your cable company that is limited to 3Mbps. The telephone companies want to change this. They want to look at each packet going to your house to determine what type of data it contains and charge you more for certain applications—like voice over ethernet (VoIP) and Skype. They want to make these services more expensive, for obvious reasons. Once the precedent is set, the telcos will be able to decide what new applications can grow unfettered and which will be squelched based on their own parochial interests. New services, like IPTV, would be charged more so the telcos can get their piece of the action.

Another idea is to charge large web sites and others a premium for faster service. Their packets would then be "better" than yours in that they would get priority and your stuff might need a retry or two to get through. This is like a freeway, where Chevys are required to drive 45 mph in the right lane while Fords can drive as fast as they want, because Ford has a deal with the Highway Commission.

All this wouldn't be so bad, except that the Internet is a monopoly. While it is not

run by one company, we do not have competing Internets from which to choose where market pressures can decide what is "best." And over time, we have fewer and fewer choices of where we can get our Internet connection.

Cable companies are not required to share their wires with competing Internet service providers. On the DSL side, the telcos won a decision last year that allows them free reign on the pricing they offer to other companies like Mags Net.

The Telecommunications Act of 1996 is up for review, and many of the network providers smell a chance to raise revenues. Rather than improve service, they would rather just raise rates. The people charged with watching out for our interests, like the public utility commissions, are either

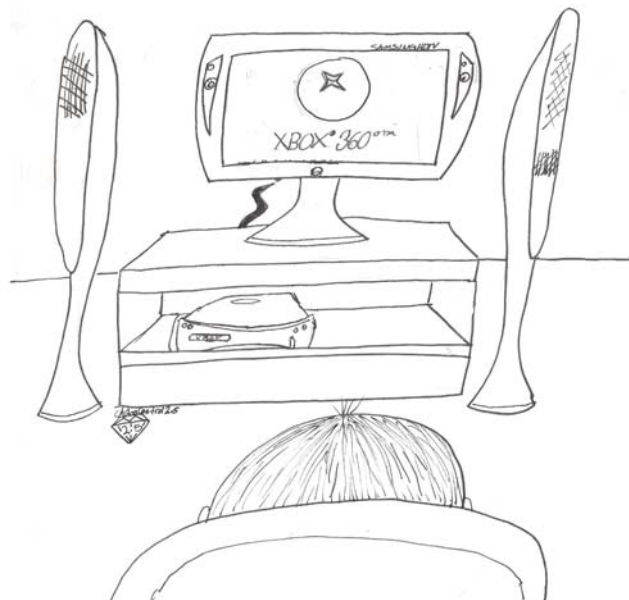
clueless, told to keep their hands off, or both. Congressional attempts to regulate the Internet so far have produced such well thought out bills as those attempting to prevent kids from seeing porn and more. Legislators who do not understand the technology yet are desperate to "do something" are perhaps the most dangerous of all.

So right now quite a few copies of Jack Abramoff are busy lobbying our Senators as the Senate Communications Committee mulls over whether or not to let the people with lots of money have their way. You need to make your voice heard now, during the hearing process and again and again as this bill winds its way through the legislative process. It would be best to stop it now. Call both of our Senators now; this is too important to wait. You can find an interesting article on this at <http://news.bbc.co.uk/1/hi/technology/4700430.stm>. Of course, the bloggers are all over this, so just type 'net neutrality' into your favorite search engine. Even Fox News has stories. The Center for Digital Democracy ([www.democraticmedia.org](http://www.democraticmedia.org)) is a great resource.

### Other stuff

I wish I had time and space for fun stuff – like the new services popping up to help you get porn for your Video iPod but these must wait for next month.

*Jim is past president of DACS.*



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Why Bill Gates can't get a new version of Windows out the door.

# Special Interest Groups

## SIG NOTES: April 2006

**Access.** Designs and implements solutions using Microsoft Access, and with SQL Server as a back-end to the database program.

**Contact:** Bruce Preston, 203 431-2920 (*bpreston@mags.net*).

Meets on 2nd Tuesday, 7p.m., at the DACS Resource Center.

**Next meeting:** Apr 11

**Advanced Operating Systems.** Explores OS/2, Linux, and NT operating systems. For info, follow link to Don's site on *dacs.org*.

**Contact:** Bill Keane (*wbk@mags.net*) 203-438-8032.

Meets 2nd Wednesday, 7:30 p.m., at the DACS Resource Center.

**Next meeting:** Apr 12

**ASP.Net.** Focuses on Web site/server application program development using Microsoft Visual Studio, C#, VB, Javascript and SQL Server programming tools. Session starts with a Random Access session, followed by a programming discussion with examples.

**Contact:** Chuck Fizer (*cfizer@snet.net*).

Meets 1st Wednesday, 4-6 p.m., at the DACS Resource Center.

**Next Meeting:** Apr 5

**Excel/Math.** Review of mathematics with emphasis on programming spreadsheets for business applications.

**Contact:** Charles Bovaird, 203-792-7881 (*aam@mags.net*).

Meets on 3rd Thursday, 7 p.m. at the DACS Resource Center.

**Next meeting:** Apr 20

**Digital Imaging.** All about digital cameras, retouching and printing.

**Contact:** Ken Graff at 203 775-6667 (*graffic@bigfoot.com*).

Meets last Wednesday, 7 p.m. at the DACS Resource Center.

**Next Meeting:** May 31

**Investment Strategies.** Discusses various investment strategies to maximize profits and limit risk.

**Contact:** Paul Gehrett, 203 426-8436, (*pgehr4402@aol.com*).

Meets 3rd Thursday, 7:30 p.m., Edmond Town Hall, Newtown.

**Next Meeting:** Apr 20

**Jobs.** Networking and discussion of the jobs search environment.

**Contact:** Charles Bovaird, 203-792-7881 (*aam@mags.net*).

Meets by e-mail.

**Next meeting:** TBA

**Linux.** Provides Help in installing and maintaining the Linux operating system. Also of interest to Apple owners using OS X.

**Contact:** Bill Keane (*wbk@mags.net*) 203-438-8032

Meets 3rd Wednesday, 7:30 pm at the DACS Resource Center.

**Next Meeting:** Apr 19

**Macintosh.** Focuses on all aspects of the Mac operating system.

**Contact:** Richard Corzo (*macsig@dacs.org*)

Meets 1st Thursday at DACS Resource Center at 7 p.m.

**Next Meeting:** Apr 6

**Microcontroller.** Investigates microcontroller applications from theory to hands-on implementation and member projects.

**Contact:** John Gallichotte, 203 426-0394, (*tlclotus@ieee.org*).

Meets on 4th Tuesday, 7:00 p.m., at the DACS Resource Center.

**Next Meeting:** In hiatus until further notice.

**Open Source Web Programming.** Focuses on open source tools for Windows and Linux.

**Contact:** John Lansdale, 914-533-2002.

Meets on 3rd Monday, 7:00 p.m. at the DACS Resource Center.

**Next Meeting:** Apr 17

**PC Maintenance.** Review of PC hardware and OpSys maintenance and use.

**Contact:** Charles Bovaird, 203-792-7881 (*aam@mags.net*).

Meets on 4th Thursday, 7 p.m. at the DACS Resource Center.

**Next meeting:** Apr 27

**Server.** Explores Back Office server and client applications, including Win NT Servers and MS Outlook.

**Contact:** Jim Scheef (*jscheef@telemarksys.com*)

Meets 2nd Thursday, 7 p.m., at the DACS Resource Center.

**Next meeting:** Apr 6

**VB.Net, Visual Basic-6.** Focuses on Smart Client Windows application development using Visual Studio, VB, C# and SQL Server programming tools. Starts with a Random Access session followed by Object Oriented discussions and programming with examples.

**Contact:** Chuck Fizer, 203 798-9996 (*cfizer@snet.net*) or Jim Scheef, 860 355-8001 (*JScheef@Telemarksys.com*).

Meets 1st Wednesday, 7p.m., at the DACS Resource Center, preceded 1 hour with a shared cost pizza snack.

**Next Meeting:** Apr 5

**Wall Street.** Examines Windows stock Market software.

**Contact:** Phil Dilloway, 203 367-1202 (*dilloway@ntplx.net*).

Meets on last Monday, 7p.m., at the DACS Resource Center.

**Next Meeting:** Apr 24

**Web Design.** Applications for designing and creating Web sites.

**Contact:** Anna Collens, 203-746-5922 (*acvo@annagraphics.com*).

Meets 3rd Tuesday, 7-9 p.m. at the DACS Resource Center.

**Next Meeting:** Apr 18

## SIG News & Events

**ASP.Net.** The ASP.Net SIG meeting had interesting random access questions. The quest on what are postbacks seemed to have people in a quandary. Talking about postbacks leads into other browser issues like how do I encode javascript. Our scribe extraordinaire Claude Prevots captured these notes.

In the life of Michelangelo Buonarroti we saw the agony and the ecstasy of the creative process. Software engineering also has its moments of elation and vexation. Innovation is not easy, but we saw Chuck present details of his current effort to construct his new application ZipBack and make it run perfectly despite some rough edges.

Our session began with a discussion of postBack. We have in postBack an interaction between a browser on the client machine and a page on the server machine. Postback is a Boolean property and thus can be true or false. If postback is false, the client will get the page from the server. An associated condition is viewState which keeps a record of the page and enables it to be re-rendered. Event handlers must be implemented.

With the new application, zipBack, the client browser does not go to the server via postback. It is possible to test a calculation without engaging a postback process at the server, but rather to use a synthetic one. A method buttonCalc is used. We had the fascinating show of a work in progress.

*SIG Notes, Continued on page 15*



# April 2006

## Danbury Area Computer Society

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9	 <p>7:00 PM Board of Directors</p>	 <p>7:00 PM Access Bruce Preston 203 431-2920</p>	 <p>7:30 PM Advanced OS Bill Keane 203 438-8032</p>	 <p>7:00 PM Server Jim Scheef 860 355-0034</p>	14	 <p>DACS.DOC Deadline</p>																																																																																				
16	 <p>Opensource Web Program. 7:00 PM John Lansdale 914-533-2002</p>	 <p>Web Design Anna Collens 203 746-5922</p>	 <p>7:30 PM Linux Bill Keane 203 438-8032</p>	<p>7:00 PM Math Charles Bovaird 203 792-7881</p> <p>7:30 PM Investment Paul Gehrett 203 426-8436</p>	21	22																																																																																				
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## Texas Hold-Em an Evolutionary Approach, Part 4

By Richard Ten Dyke

IN THE GAME of Texas Hold-Em, each player holds only two 'hole' cards. The rest of the cards, five of them, are laid face up on the table for all players to use to build the best poker hand. Since all players use the same five cards, the question a player has to ask is whether his two cards mesh better with the table cards than those of his opponents.

What I mean by using the term 'mesh' is how the combination of his hole cards and the cards on the table make a good hand. Being able to use both hole cards is better than using only one. Over time, I suppose, a player can get really good at making judgments about the quality of a hand.

But as we discussed, it would take a very long time for a computer to be able to use experience to come up with all of the rules and factors needed to make such judgments, even if it could be done. Today, we look at a better way.

We develop a value, 'q' (for quality) which measures the probability that a particular two-card combination of hole cards will win against a randomly drawn pair of cards in the same circumstances. We calculate a "q" value for each round of betting. Later on, we can discuss how to use that information. For now let's just discuss how we get it.

Let us also work backwards, starting with the 'q' to be calculated at the final round of betting when all five table cards are showing. Call this q4, since it will occur at the fourth round of betting. This value will represent the probability that a particular hand with two hole cards and 5 table cards would win against a randomly drawn pair of hole card that an opponent might have. A q4 value of 0.95, or 95 percent, would say that there is a 95 percent chance of winning against the random opponent.

Now, back up one step to the 'turn' when 4 table cards are showing. We can

calculate a value, 'q3' which represents that same idea but for the third round of betting. We are now evaluating against a randomly drawn pair of hole cards held by an opponent plus a randomly drawn fifth table card, called the 'river.'

Similarly, the value 'q2' is calculated for the second round of betting, called the 'flop' when three table cards are showing.

Finally, the value 'q1' is calculated pre-flop, at the first round of betting, when no cards are on the table and each player is betting on only the two hole cards.

These four values, q1, q2, q3 and q4 are calculated for the same set of players' hole cards for each round of betting. Each q value is determined by simulating a number of deals at each betting stage and counting the number of wins and losses. The number of simulated games can be varied, and the greater the number the greater will be the accuracy of the predictions. I have used numbers from 20 to 1,000 in each case, and have settled on using 100 as a reasonable compromise between speed and accuracy.

We have calculated q values for 120 separate hands, and the results make for fascinating study. Consider that it is a good strategy to fold a bad hand as soon as possible; but knowing when you have a bad hand is a bit of a challenge. Pre-flop, for example, an Ace-Queen is a topnotch combination and is a sure stay, although not a sure winner. On the other hand, two-six unsuited (of different suits) is a very poor bet, but not a sure loser. The q1 statistics show that there is only a very weak correlation between the so-called value of a hand at that point in the betting and the final result. This is because there is only a very weak correlation between the values q1 and q4 for any hand. At pre-flop your poor two-six combination has almost as

good a chance of being a winner as the Ace Queen.

Figure 1 shows the plot of q1 against q4. The q4 result is on the vertical axis, and the q1 and q2 values are on the horizontal axis. It shows 120 points clustered between q1 values of 40 and 60 percent, with a few outliers outside of that range. The q4 values range from 0 to almost 100 percent. A q4 score of 100 implies an almost certain winning hand, probably four of a kind or a straight flush. Note that there are only 4 out of 120 values with a q1 score of 70 or over, and indeed, three of the four show q4 values of better than 70.

But if you were to play the game based on the q1 scores, and always waited for such a good pre-flop before you bet, you might as well be at the slots, because you will be constantly be putting money in the pot and never getting anything back. Yet, there are quite a few hands with relatively poor q1 scores where the q4 shows a value over 70.

This says very clearly that the q1 score is poor in predicting a win or loss in a game. But we can also look at the relationship between q2 and q4. These results are shown here in Figures 2.

Figure 2 shows a completely different story. The q2 value, calculated when there are three table cards showing, is a much better predictor of q4, the final score. With eyes only, without fancy statistical analysis, you can see the relationship, with the points grouped along a line going from the lower left to the upper right. Let's say that you choose to stay in the game with a q2 of 66 or better. Now you will be staying about a third of the time, and you will definitely increase the chances of ending up taking home the money.

We do not show the q3 vs. q4 plot for lack of space and time, and because the story is the same. As you would expect, q3 is better than q2 as a predictor of final outcome, but only marginally. The second round of betting, after the flop, appears to be the best time to fish or cut bait, but we will have to wait and see on that point.

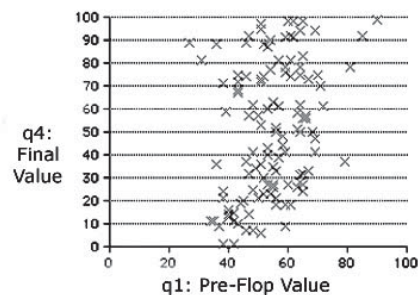


Figure 1: q1 vs. q4

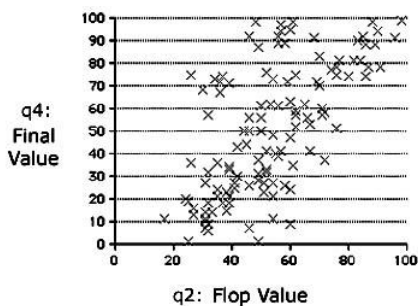


Figure 2: q2 vs. q4

Our q values will eventually play a big role in developing a betting strategy, but looking ahead, something should be obvious: a betting strategy that is based only on hand values is a loser. A smart competing player can simply keep raising until you fold. A programmed method for playing the game must employ deception just as a real player would. In fact, hand evaluation and betting strategy may be two different animals entirely, and it may be necessary to separate the two. Since this series of articles is being done in real time, and since I haven't yet figured out how to do this, it may take more than a month for this to work out; so part 5 will come along, but only when it is ready.

**RICHARD TEN DYKE** has previously contributed to this newsletter on the topic of *Digital Photography and computer creativity*. He is retired from IBM and can be reached at [tendyke@bedfordny.com](mailto:tendyke@bedfordny.com). All opinions are his own, and he welcomes comments

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## Different Strokes

### More on Office Alternatives

By Jim Scheef

**B**ELIEVE IT OR NOT, I had more material for my presentation at the February General Meeting that I did not get in—or plain forgot about—so here it is.

#### More on OpenOffice

I believe I mentioned a book on StarOffice/Open Office. That book is *StarOffice 6.0 Office Suite Companion*, by Solveig Haugland and Floyd Jones, published by Sun Microsystems Press. While the current version is StarOffice 8, this book gave me a good start using OpenOffice 2.0, which is what I demonstrated. If you will recall, StarOffice is the 'for pay' version of OpenOffice is published by Sun Microsystems, Inc. StarOffice includes a few additional features for its \$69.95 download price.

Another book is *Point & Click OpenOffice.org*, by Robin Miller, published by Prentice Hall. This book is newer (2005) and specifically covers OpenOffice, so it might be a better choice. I have not seen it, so I can't say for sure.

There is a "portable" version of OpenOffice. Portable means that it can be installed on a USB "thumb drive" and run without installation on a host PC. This and a bunch of other portable applications can be found on [www.portableapps.com](http://www.portableapps.com).

The last thing on OpenOffice is pure fun. There is a Star Wars game embedded in OpenOffice Calc as an "Easter egg" — which means that it's hidden for you to find. You can find information on this and other Easter Eggs at [www.eggheaven2000.com](http://www.eggheaven2000.com).

#### ThinkFree Office update

The ThinkFree web site now gives you 30Mb of free online space to store documents (up from 20Mb). I find this application extremely interesting, even compelling. It is capable, works well and is available on any computer with a fast Internet connection that will allow you to run Java. This may not be true in places where you need it

most, like the computers in a public library. (I'll check this point in a few area libraries, because now I'm curious). Unfortunately, it is still limited to Internet Explorer, so Mac and Linux users will have a difficult time.

#### Yet another alternative

Is OpenOffice still too complex and bloated for your tastes? Try AbiWord, another free word processing program. AbiWord is not part of a suite and, naturally, there is a portable version. The web site is [www.abiword.com](http://www.abiword.com). AbiWord has its own document file format which uses XML. To answer your next question, yes, it can open Microsoft Word doc files and can write files in rich text format (which Word can read). Like

OpenOffice, AbiWord has versions for Windows, Mac and Linux. So far, that's all I know about it, but I intend to give it a try.

#### Thanks for your comments

I really appreciated the comments I received after the presentation, especially the complimentary ones <blush>. If I promised more information on something that is not covered here, please let me know ([jscheef@dacs.org](mailto:jscheef@dacs.org)). And let Jamie Yates, our program chairman ([vpprograms@dacs.org](mailto:vpprograms@dacs.org)), know what you would like to see at future general meetings.

JIM is past president of DACS.

We've added a new feature to the  
DACs General Meeting

### What's News?

A 15-minute summary of the latest happenings in hi-tek, along with hints at what to look forward to in coming months. Right after Ask DACS.

Just another reason to come to the meeting. If you wait to read about it in [dacs.doc](http://dacs.doc), it will already be history.



# Cache Accounting

## What Does a Cache Do For a Computer?

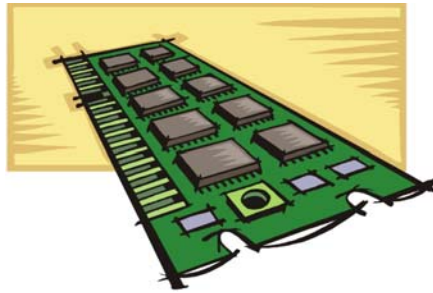
By Brian K. Lewis, Ph.D.

A CACHE (pronounced “cash”) is a form of memory storage that generally operates faster than RAM memory or the time required to access a hard drive. The cache is smaller, faster memory that stores copies of the data from the most frequently used memory locations. Computer processors (CPUs) utilize both internal and external caches. You will also find references in the specifications of hard drives, CD & DVD drives to caches of various sizes. In order to see how these caches benefit computer operations we’ll look at the operation of the internal caches on CPUs.

Before looking at the cache function, you need to have some understanding of the architecture of a CPU. Much of the internal structure of a CPU is composed of registers that hold small bits of information and also can be used in manipulating information. As one example, the Intel Pentium 4 processors have 128 registers. Some registers hold instructions, others hold data, others have memory addresses and others are arithmetic manipulators. The instructions are found in the program code and they tell the processor what to do with the data. The processor loads instructions from memory and then loads data that is manipulated based on the instructions. So the registers hold data to be processed, the results of calculations, or addresses pointing to the location of other data. The processor can act on data in registers almost instantaneously. However, the registers are far too small to hold all the data required. Instead, instructions and data have to be read from or written to RAM.

If the program code were always loaded directly from memory and all the data were written directly back to memory and then to the hard drive, the overall process would be quite slow compared to what we normally see. It is the use of

caches that greatly speeds up the total process so the processor isn’t stalled waiting for either instructions or data. The



fastest cache is the one that is part of the processor and is referred to as the L1 cache. It can operate at the same speed as the processor. So if you have a 30-gigahertz (GHz) CPU, the L1 cache also operates at 30 GHz. Thus data can be

accessed in one clock cycle. This cache is generally 128 kilobytes (KB) in size or smaller, although the Pentium 4 has an internal cache of 16 KB plus an internal Trace cache of 150 KB.

The following diagram displays the relative relationship of the RAM memory and the components of the caches in the CPU body:

### RAM Memory

L2 Memory Cache  
L1 Instruction Cache  
Fetch Unit  
Decode Unit  
Execution Unit  
L1 Memory Cache

The components within the box run at the same rate as the internal CPU clock. The next cache in distance from the processor is the L2 cache. In older CPUs this was totally external to the processor. In most cases, the L2 cache is now integrated on the CPU chip. The data path in these processors is 256 bits wide allowing for the transfer of more bits per clock cycle than the older processors that had 64 or 128 bit paths. The data path between the CPU and the external RAM is usually 64 bits or 128 bits wide. In a system with an 800 MHz bus, the real clock rate is 200 MHz, but transfer occurs in 4 blocks per clock cycle. This gives an effective transfer rate of 800 MHz or 6.4 GB/second. Still considerably slower than the transfer rate within the CPU.

The theory of using caches is that instructions and data in the cache will be the next set of information requested by the CPU for processing. If the requested information is in either the L1 or L2 cache, it will not be necessary to go to RAM. Thus it can be accessed at the internal clock rate. If it is present, it is referred to as a “hit”; otherwise it is a “miss”. (Logical, right?) Now, the bigger the memory cache, the better the chances of finding the data required by the CPU. However, there is a catch to this. The bigger the cache, the more time that is required to find the data. This is referred to as the “latency” time. In an ideal setup you would have a single cache with a high hit rate and a low latency. This is very difficult to achieve in practice. Consequently, we have two caches, a small one with low latency and lower hit rate combined with a large cache with higher hit rate and high latency.

Now that we’ve reviewed the architecture, we need to see how all this works. Let’s start with the Fetch unit that is used to load information from memory on demand from the processor. It first checks the caches to see if the required instructions or data are there. If not, it will load the information from system RAM. This information is then passed to the Decode unit. Note that when I refer to information it can either be instructions or data.

If the information is a program instruction, the Decode unit will figure out what that particular instruction does. It does that by consulting a ROM memory that exists inside the CPU called microcode. Each instruction that a given CPU understands has its own microcode. The microcode will “teach” the CPU what to do. It is like a step-by-step guide to every instruction. If the instruction loaded is, for example, add a+b, its microcode will tell the decode unit that it needs two parameters, a and b. The Decode unit will then request the Fetch unit to grab the data present in the next two memory positions, which fit the values for a and b. After the Decode unit has “translated” the instruction and grabbed all the data required to execute the instruction, it will pass the data and the “step-by-step cookbook” on how to execute that instruction to the Execute unit. There is an exception to this in the newest Pentium 4 processors. In these processors the L1 Instruction Cache has been relocated to after the Decode unit. It now contains the translated instructions and is referred to as the Trace cache.

*Cache, Continued on page 15*



# Just Desserts

*A fancy-food ball  
to benefit*

## Voice for Joanie



Saturday, April 29, 2006

7:00 P.M. - 11:00 P.M.

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# Ask DACS

March 2006

Bruce Preston, Moderator

**W**E WELCOME QUESTIONS FROM the floor at the start of our General Meetings. In addition, members who are not able to attend the General Meeting may submit questions to [askdacs@dacs.org](mailto:askdacs@dacs.org). We will ask the question for you and post the reply in *DACS.ORG*. Please provide as much information as possible since we can't probe during the session.

**Q. It is becoming more and more common to have web-casts on the internet, running from half an hour to several hours. They include PowerPoint presentations, audio, video, etc. I would like to save the entire web-cast. Is there a way to save them?**

A. First, you need to know which streaming video format they are using. You might be able to do a right-click/Save As, but it is unlikely. Best bet is to contact the web master and ask if it can be downloaded.

**Q. After my wireless mouse has been in use for a while, it seems to get a mind of its own – it slowly drifts across the screen. Sometimes there is a very long delay between clicking and something happening. I've run Spybot S&D and AdAware, the later reports 14 things and then locks up.**

A. We've seen it when the battery in the mouse gets low. Have you tried putting fresh (or recharged) batteries into it? A simple test would be to connect a wired mouse to the computer – this would isolate whether the problem is in the mouse or some software interference. As for getting the things reported by Spybot S&D or AdAware, Webroots Spysweeper (from [www.webroot.com](http://www.webroot.com)) is highly recommended. It is an annual subscription. We've seen it at Circuit City for \$20, and on their site at \$39 for a 2-year subscription. Another thing to try is to boot your machine in Safe Mode (right after power on; before you get the Windows logo, press F8 several times. You will get a character-mode screen – select Safe Mode and continue). Then run your anti-spyware program in Safe Mode. Safe Mode prevents most things from loading at startup, thus giving the clean-up tool the ability to remove it since it isn't running.

**Q. What happened to the free Microsoft Anti-Spyware (beta)?**

A. The original beta needed to be replaced last December with a new release. Since then, it has been rolled into the (also free) Microsoft Windows Defender, which is listed as being at beta level 2. Various press releases from Microsoft state that it will remain available as a free utility, but it is expected that the full-featured product will be part of the Microsoft OneCare subscription offering. (Press Release: [http://www.microsoft.com/presspass/press/2005/may05/05-13\\_Windows\\_OneCarePR.mspx](http://www.microsoft.com/presspass/press/2005/may05/05-13_Windows_OneCarePR.mspx)). Be that as it may, for now you may download Windows Defender from this site: <http://www.microsoft.com/athome/security/spyware/software/default.mspx>. Note that as with several other new Windows plug-ins from Microsoft, you must pass the Genuine Windows validation, which will require that you accept an Active-X control that examines your machine to verify that you have a valid (not bootleg) copy of Windows. Note that it is a beta – there are bugs. For example, it is reported that it identified Symantec Anti-Virus Enterprise Edition as spyware and deleted it from client machines.

**Q. I know about cleaning up the hard disk, watching for anti-virus updates, spyware, etc. However, is there maintenance for network hardware devices as well? For example, I have a cable modem, router, etc. Is there something I should do with these other than occasionally dusting them off?**

A. Modems, routers, etc. often have 'firmware' updates. There is software in the device that is 'burned' into an electronically programmable read-only memory. (EPROM). Bug fixes or product enhancements may be made. For example, my router originally only supported port forwarding of only 8 service ports to client machines. This functionality is

to permit routing calls from outside your site to different machines within your network – for example you might set up port 80 to route to a machine that is running a web server. A firmware upgrade increased the size of the port forwarding table to 24. Typically, the firmware is usually delivered as a .ZIP file. You download it and unpack it onto the hard disk of your computer. You then use the browser interface in the device to go to the Firmware Update mechanism, which will ask you for the location of the upgrade file on your machine. It will then read the file and install it.

**Q. I went to install a second hard drive in my desktop machine, and when I opened the case, I found that the internals of the machine were coated with a layer of dust. Is this harmful, and if so, how should it be removed? I've heard that using a vacuum cleaner can be dangerous. Is that true? Is canned air better?**

A. A vacuum cleaner can generate a static charge, which if discharged into a circuit board component on the machine could cause damage. Some say that using canned air can cause a problem in that it could blow dust into a socket. Canned air is also very cold, some don't like the thermal shock that may happen if the very cold air hits a hot component. Leaving the dust on the devices can interfere with cooling as it can act as an insulator. I have seen video cards fried because dust built up within the fan on the video card's GPU to the point where the fan wouldn't rotate. What I use is a small vacuum adapter that slips onto the vacuum cleaner's hose – it is plastic and presumably won't discharge static. It is commonly sold for cleaning sewing machines—here's a link—<http://store.yahoo.com/sewingwarehouse/vacat.html>

**Q. What is the difference between 6-wire and 4-wire USB cables?**

A. Standard 6-wire USB cables have a male "A" end, and on the other end either a female "A" end (for use as an extension cable), or the device itself. The A-type connector is rectangular, about a 6:1 aspect ratio. If the cable has a "B" end (almost square, with two adjacent corners chamfered off) it is most usually used for plugging into a printer. Lately, 4-wire cables known as "Mini-B Flat DCUP" have



appeared—these are used for connecting to digital cameras. They have an “A” connector on the other end. During the discussion, it was asked if you were referring to the more common 6 and 4 wire Firewire variants. Firewire is more commonly seen with digital video cameras and external hard drives.

**BRUCE PRESTON** is president of West Mountain Systems, a consultancy in Ridgefield, CT specializing in database applications. A DACS director, Bruce also leads the Access SIG. Members may send tech queries to Bruce at [askdacs@dacs.org](mailto:askdacs@dacs.org).

#### SIG NOTES, Continued from page 8

We have a session to remember, an exercise of craftsmanship emerging from this exciting display of finesse in software engineering.

After a pizza break, the C#VB.Net session continued with the concepts of zipBack as they relate to postback. The Hex Edit/Dump utility was discussed and it remains subject for further investigation for the next meeting in April.

**Server and Networking.** The March meeting was devoted entirely to installing the new router in the Resource Center. The router is a Netgear FVS318v3, a business-grade router—and my favorite for several years for homes and small business using either cable or DSL. During the meeting, we migrated from the old router to the new one with only a momentary loss of connection to the Internet.

One of this router's features is the ability to create virtual private networks (VPNs) to make the networks at two locations work as if they were one, and I've been using this feature for several years to link my home office network to a location in Danbury.

The April meeting will be devoted to VPNs—what they are, how they work, and how to set one up on the new router. While we are exploring routers, you are invited to bring in your home router. We'll take a look at how you have it configured and, if needed, offer suggestions on how to improve the security of your home network. Here's your chance to find out if that router you bought is actually doing its job.

The next meeting of the Server and Networking SIG will be Thursday, April 13th at 7pm in the DACS Resource Center. See you there.

#### Cache, Continued from page 12

The Execute unit will finally execute the instruction. On modern CPUs you will find more than one execution unit working in parallel. This is done in order to increase the processor performance. For example, a Pentium 4 CPU with six execution units can execute six instructions per clock cycle. In theory it could achieve the same performance as six processors with just one execution unit. After the processing is over, the result is sent to the L1 Memory cache. From there it can be written to RAM or sent elsewhere.

Modern processors have another feature called the “pipeline”. This is the capability of having several different instructions at different stages of processing in the CPU at the same time. On Pentium III processors the pipeline was 11 stages—each a unit of the CPU. The latest Pentium 4 processors have 31 stages. With the greater number of stages, fewer transistors are required per stage, resulting in a higher clock rate. O.K., so what's the value of stages in the pipeline? After the Fetch unit sends an instruction for decoding, it grabs the next instruction. This can be sent on as soon as the first instruction is sent to the Execution unit. If an instruction has to be processed by all 11 (or 31) stages, it takes the most time, while other instructions might require fewer stages. Only when the first instruction is finished processing can it be sent out, but others that required processing by fewer stages might immediately follow. The consequence of this is that multiple instructions can be processed simultaneously. This greatly increases the overall processing throughput.

Other caches found in computers are not associated with the processor. One such type of cache that you use frequently, probably without being aware of it, is the web page cache managed by your web browser. When you visit a web page, it is downloaded to your computer. If you visit that same page within a few days, your browser pulls the page from its temporary cache, compares it with the current page on the web server and updates only the changed portions. This speeds up the appearance of the page on your computer. For example, my home page is Yahoo.com. The major part of this page doesn't change from day to day, so the downloading of the page is limited to those parts that have actually changed. This allows the page to appear on my screen quite rapidly.

## FREE CLASSIFIEDS

**DACS members may publish noncommercial, computer-related classified ads in *dacs.doc* at no charge. Ads may be placed electronically by fax or by modem, or hard-copy may be submitted at our monthly general meeting. Fax your ads to Charlie Bovaird at 203 792-7881.**

**Leave hard-copy classifieds with Charlie, Marc, or whoever is tending the members' table at the meeting.**

So in CPU processing, the use of caches has greatly increased the speed of data handling. The same is true of caches used elsewhere in the computer. In all cases they are short-time storage of information. Luckily, you don't have to have a complete understanding of caches to use your computer. Let the computer do the work!

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

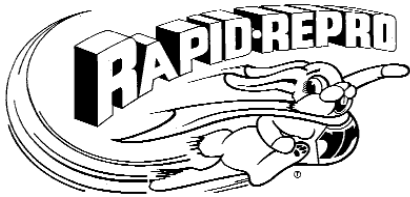
This article was provided by the Editorial Committee of the Association of Personal Computer User Groups (APCUG), an international organization of which this group is a member.

Are you up to your nose with computer questions? DACS Special Interest Groups may have the answers. If not, let us know, and we'll try to create a new SIG that helps fulfill your special needs.



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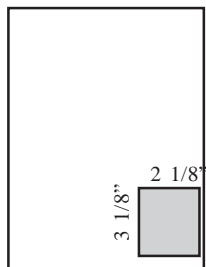
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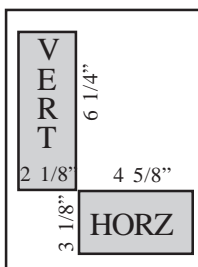
THE NEWSLETTER OF THE DANBURY AREA COMPUTER SOCIETY, INC.

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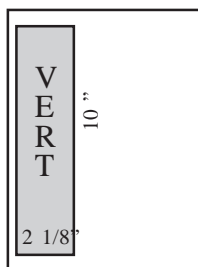
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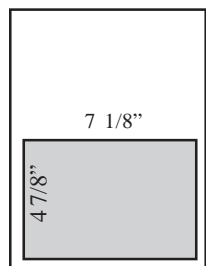
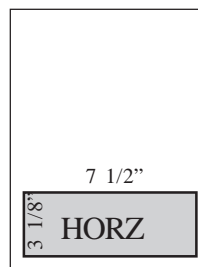
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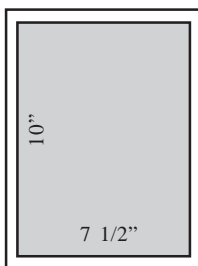
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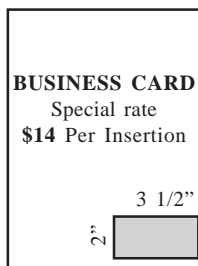
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We sponsor or participate in community support projects by collecting, repairing, and redistributing used computer equipment and software to community service providers such as schools, libraries, and patient/client support groups. DACS members provide pickup, refurbishing, installation, and training assistance as needed. Firms or individuals with equipment to donate should leave a message on the DACS Infoline (203-748-4330). or send an email to [recycling@dacs.org](mailto:recycling@dacs.org).

The Voice for Joanie program was created in 1992 through the initiative of DACS member, Shirley Fredlund. This program provides computer-assisted speech for victims of amyotrophic lateral sclerosis ("Lou Gehrig's Disease"). DACS members have contributed volunteer time and technical assistance since the program began. Voice for Joanie and DACS have earned national computer industry recognition and financial assistance for this vital collaboration.

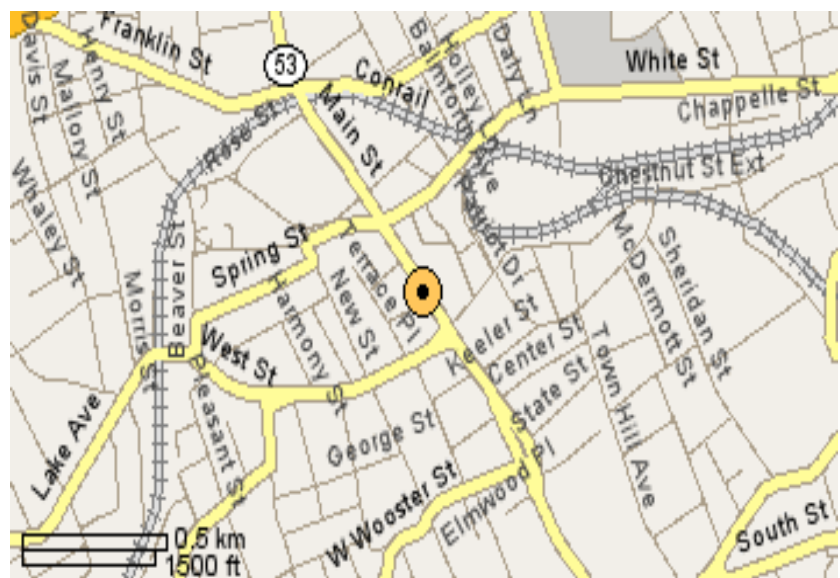
Our general meetings are held on the first Tuesday of each month in the Danbury Hospital Auditorium at 7 p.m. These meetings are open to the public. The main presentation is scheduled from 8-9:30, preceded by casual networking, announcements and Random Access, an informal question and answer session. A free product raffle is often held at the conclusion of the main presentation.

In addition to the general meeting, DACS sponsors many special interest groups (SIGs) where members can learn and share information about a specific topic. Each SIG plans its own meeting schedule and program topics.

Our newsletter, *dacs.doc* is published monthly for our members, and mailed to arrive before the general meeting. It features articles written by members and others on timely topics including product and software reviews, issues and trends in personal computing and "how-to" articles on sound, video, digital photography, etc. In addition, each issues includes the calendar of meetings, announcements on SIGs and other DACS events. *dacs.doc* has won numerous prizes over the years for its design and content.

Through its activities, DACS offers numerous opportunities to network both professionals and computer hobbyists. Our Special Interest Groups are an excellent way for members to both learn and share application or hardware knowledge. Any DACS member can form a special interest group on any topic where there is interest. Most SIGs meet in our Resource Center in downtown Danbury.

If you have concerns, requests, or suggestions regarding DACS or its programs, please contact [dacsprez@dacs.org](mailto:dacsprez@dacs.org). DACS officers and board members' phone numbers are listed on page 3 of *dacs.doc*.



The DACS Resource Center is in Ives Manor, Lower Level, 198 Main Street, Danbury, CT 06810 (203-748-4330).



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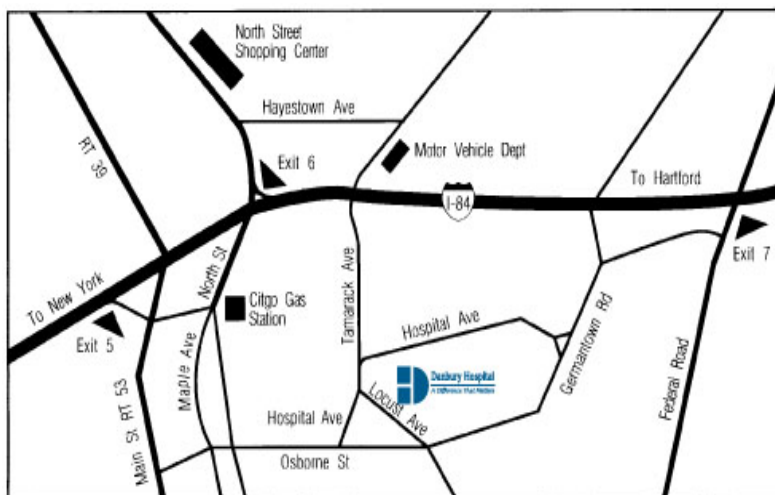
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