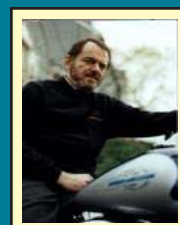


**NEXT MEETING, TUESDAY, APRIL 5:  
RIDING INTO THE FUTURE ON THE INFO iWay WITH  
INTERNET PIONEER AND TRAIL GUIDE, JOHN PATRICK**



# Directors' Notes

A meeting of your board of directors was held on Wednesday, March 9, 2011. Directors Attending: Richard Corzo (President, Richard DiFranco, Dave Green (Treasurer), Bruce Preston (Secretary), Jeff Setaro, Jim Scheef, Joseph Tobin, Annette van Ommeren, Andrew Woodruff; Guests: Charles Bovaird. The meeting was called to order at: 7:15.

The minutes of the Last Meeting were approved.

## Treasurer's Report

Balance on hand 2/1/11	\$5,386.13
Income	
Dues	\$581.05
Bank Interest:	<u>\$0.44</u>
Total:	\$581.49
Expenses	
Membership renewal letters	
& BlueHost (3 yrs.):	\$155.52
Resource Center	
(phone & security):	\$139.51
Newsletter (printing	
& postage):	\$131.36
Condolences (flowers for	
Joseph Tobin funeral):	<u>\$67.40</u>
Total:	\$493.79
Balance on hand 2/28/11:	\$5,473.83
Membership report 3/4/2011	
Total paying members:	161
with email addresses:	158
regular members:	105
regular w/mailed newsletter:	56
free mailed newsletter:	21
printed newsletters:	100
New members: Susan Dixon, Joseph	
Reilly, and Gilberto Rizzo	

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## Old Business

- General meetings
  - March 1: Exploring Windows 7  
Richard Corzo (preview: Jim Scheef; review: Bruce Preston)
  - April 5: John Patrick State of the Internet  
(preview: Rich DiFranco, review: Rob Limbaugh)
  - May 3: Jeff Setaro's Secure Computing  
(Preview: Bruce Preston, review: David Mawdsley)
  - June 7: Frank Kunst & Chris Milmerstadt of Fairfield County Bank Corp. - Safe Internet Commerce (oriented towards safe e-commerce activity etc.), Preview: Richard DiFranco, Review: TBD

Possible future topics:

- David Pogue - Patrick has tried contacting him. He'll try again.
- Cloud Computing for Home Users. Security, applications, data access, data storage, alternatives, markets, prices
- Future trends for communication services (TV, Internet, phone), costs, handhelds, PCs, etc. markets, prices, how we compare with other countries, effect on USA economy.
- Smart Computing. They offer a Presentation-In-A-Box.
- Through APCUG I've requested Norbert (Bob) Gostischa to speak in August on "Protecting Yourself and Your Identity Online." I requested an answer by June 1.
- Analog to digital recording - two variants - audiophile and musician
- Dave Mawdsley proposed What's New on the Internet segment for our meetings. Tabled - held in reserve.
- Curing a 'sick' PC - loading a PC up with a bunch of malware, a couple of viruses, etc. and going through the process of cleaning it up

## 2. Open positions

- Ahmad Asgharian is our new DACS editor.
- The membership chairperson position is still open.
- VP of Programs is also open.

3. DACS has signed up with Bluehost.com where we can work on a Drupal- or other CMS-based new website and dacs.org e-mail addresses have been set up for those that were interested. E-mail aliases are now set up there. The Website Committee had a Skype meeting to discuss our plans for the hosting service. The committee now has a forum in the DACS Community Forum (<http://www.dacs.org>)

*Directors' Notes, Cont. on page 3*

## Membership Information

*dacs.doc*, ISSN 1084-6573, is published monthly by the Danbury Area Computer Society, 4 Gregory Street, Danbury, CT 06810-4430. Annual subscription rates: \$45 to regular members, \$30 electronic access (included in dues).

## Postmaster

Send address changes to Danbury Area Computer Society, Inc., 4 Gregory Street, Danbury, CT 06810-4430.

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Managing Editor: Ahmad Asgharian  
Production Editor: Allan Ostergren

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Charles Bovaird	Richard Corzo
Richard DiFranco	Drew Kwashnak
John Lansdale	Rob Limbaugh
Bruce Preston	Jim Scheef
Joseph Tobin	Annette van Ommeren

DACS, its officers and directors assume no liability for damages arising out of the publication or non-publication of any article, advertisement, or other item in this newsletter.

The editors welcome submissions from DACS members. Contact Ahmad Asgharian ([dacseditor@dacs.org](mailto:dacseditor@dacs.org)). Advertisers, contact Charles Bovaird at (203) 792-7881 ([aam@mags.net](mailto:aam@mags.net))

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**Applications & Hardware to enhance *dacs.doc* are welcome.**



Patrick Libert  
APCUG Liaison  
[plibert@dacs.org](mailto:plibert@dacs.org)



Apple User Group



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**VICE PRESIDENT PROGRAMS:** Open  
**SECRETARY:** Bruce Preston • **TREASURER:** Dave Green

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## Committees

**NEWSLETTER:** Ahmad Asgharian: [dacseditor@dacs.org](mailto:dacseditor@dacs.org), (860) 567-9586

**PROGRAM:** Position Open

**WEB MASTERS:** Richard Corzo ([rcorzo@dacs.org](mailto:rcorzo@dacs.org)), (203)797-1518  
 Annette van Ommeren ([avanommeren@dacs.org](mailto:avanommeren@dacs.org)), (914)232-0149

**MARKETING AND PR:** Position open ([pr@dacs.org](mailto:pr@dacs.org))

**APCUG LIAISON:** Patrick Libert ([plibert@dacs.org](mailto:plibert@dacs.org))

**MEMBERSHIP COORDINATOR:** CHARLES BOVAIRD: [aam@mags.net](mailto:aam@mags.net)

## 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**

Program	Name	Phone/E-mail
APL	Charles Bovaird	(203) 792-7881 ( e )
ASP.Net	Chuck Fizer	
C/Unix/ObjC	Kenneth Lerman	(203) 426-4430 (d e)
C#, VB	Chuck Fizer	<a href="mailto:cfizer@dacs.org">cfizer@dacs.org</a>
Electronics	Andrew Woodruff	(203) 798-2000 (d e)
Interface-Instrumentation	Andrew Woodruff	(203) 798-2000 (d e)
Adobe Web & DTP	Annette van Ommeren	(914) 232-0149 ( e )
SAS	Lewis Westfall	(203) 790-0229 ( e )
Statistics/Data Analysis	Charles Bovaird	(203) 792-7881 (d e)
SQL	Lewis Westfall	(203) 790-0229 ( e )
SQL Server, MySQL-5	Chuck Fizer	
Malware	Jeff Setaro	(203) 748-6748 (d )
VB.Net, Visual Basic	Chuck Fizer	

## Directors' Notes, Cont. from page 2

[/www.dacs.org/forum/](http://www.dacs.org/forum/)). Interested members may visit the "R&D" site at <http://dr.dacs.org> but please remember that this is pro-forma, much of the content is out of date etc.

4. DACS communications infrastructure update: Jim Scheef has not yet gotten the telephone line checked and serviced. Jeff has provided a router/DSL modem to test whether our existing equipment is the problem inside the Resource Center. Charlie Bovaird donated a replacement used telephone with speaker capabilities. It has been installed. Andy has cleared with Google that our use of Google Voice is within the license agreement; however it must be registered with an individual's name.

5. We'll be putting together a display on DACS at the Danbury Library for September. Various people have contributed ideas. The Marketing & Public Relations forum in the DACS forum will be the place to collect those. Andy and Jim will gather materials. Andy will get dimensions and photograph the display case.

6. We have consolidated our Facebook presence to <http://www.facebook.com/pages/Danbury-Area-Computer-Society-Inc/92713398983?v=wall>. It is a page, the group is gone.

7. Insurance policy renewal

## New Business

- 1) Election of officers. The candidates are: President: Richard Corzo, Secretary: Bruce Preston, Treasurer: Dave Green. As Richard was a candidate, Jim presided over the election. The slate was elected.
- 2) 2010 income report and 2011 budget. We will see if the standard reports that come out of QuickBooks will be sufficient to satisfy the board's needs.
- 3) Considering use of Comcast cable vs. existing DSL circuit. Bruce will investigate the possibility of getting cable internet service at a 501(c) 3 rate.
- 4) There was a distribution of feedback from website and [feedback@dacs.org](mailto:feedback@dacs.org). Drew will be added to the distribution list.

Adjourned at 9:05PM

—Bruce Preston

## Meeting Preview:

### John Patrick The Future of the Internet

by Jim Scheef

**J**OHN PATRICK IS returning on April 5 to bring us up to date on the state of the Internet. It has been said that PC technology changes every two years. It has also been said that Internet technology changes every two months. John will be telling us what the next year will bring us and how the Internet will be changing our lives in the coming year. How have social networks grown and how important are they? What is the effect of iPads and notepad computers in general?

John has been giving DACS an Internet update for many years. He was there at the beginning of the Internet With IBM and now with his own company Attitude LLC. Being a member of many Internet related groups, John



can see and may control the direction of the Internet.

John was a founding member of the World Wide Web Consortium at MIT in 1994, a founding member and past chairman of the Global Internet Project, a senior member of the Institute of Electrical and Electronics Engineers (IEEE), and a member of the Internet Society and the Association for Computing Machinery (ACM). He is a member of the Engineering Advisory Board at Lehigh University. John has been a business and technology advisor to numerous companies.

His book, *Net Attitude*, paints a vivid picture of the future of the Internet and the attitudes needed to capitalize on it. His new blog is called Health Discussions Forum (<http://healthdiscussions.net/>). He is pursuing a

doctoral degree in health administration through the University of Phoenix. Also he is a board member of Western Connecticut Healthcare, which includes Danbury Hospital and New Milford Hospital. His presentation on the future of the Internet will have a health care focus.

Take a look at John's Website [patrickweb.com](http://patrickweb.com). You can get a sense of how active John has been.

DACS meetings are held at the Danbury Hospital auditorium. Activities begin at 6:30 p.m. with registration and casual networking. The meeting starts at 7:00 p.m. with a question and answer period (Ask DACS), followed by announcements and a short break. The featured evening presentation begins at 8:00. The meeting is scheduled to adjourn at 9:30 p.m.



## Meeting Review

### Become a Windows 7 Power User

By Bruce Preston

**A**T THE MARCH 1<sup>st</sup> General Meeting, Richard Corzo described and demonstrated many of the features in Windows 7 that in many opinions have made it the best operating system that Microsoft has published.

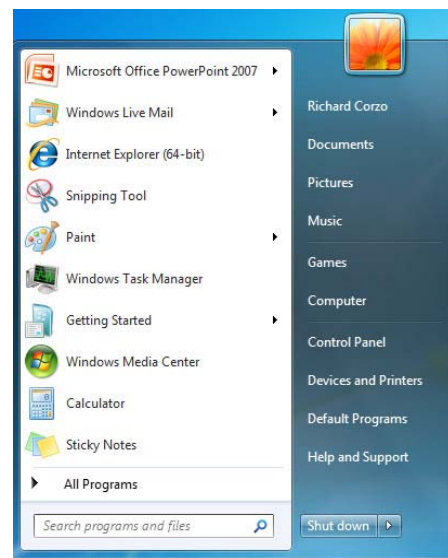
Richard warmed up with eye-candy - features that, while not critical to operating a computer, certainly can go a long way to making it a pleasant experience. First, he showed "Personalization" - adjusting the desktop theme, wall paper, and color schemes including the 'Aero Glass' option, whereby items behind the current window can be seen through the current window's frame. He included a visit to the Microsoft site that provides a wide selection of downloadable themes.

He then moved on to the Start Menu, and responded to the question "Where did everything go?" The W7 Start Menu is dynamic: W7 keeps track of the user's

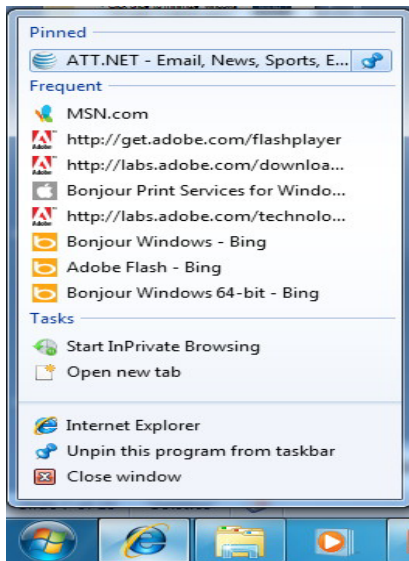
activity and adjusts the items first offered based upon frequency of use. He pointed out that you may adjust how many items are retained, and you may also 'pin' an item, such that it is always there. This pin capability showed up several times during the presentation (look for it behind the right-click). For example, you may pin documents to an application in the start menu—this is known as a jump list. Of course, you can still get at all of your applications the old-fashioned way: just click on "All Programs" and the list appears as before, although on the left over the original list.

Two crowd pleasing features demonstrated were the "Aero Snap" feature and Win-Tab. Snap is a mechanism whereby dragging a window to a side edge of the desktop causes it to resize to half width. It is most useful when you snap two applications. I like to use it with Windows Explorer, as one window can be focused on a

source location and the other on a target folder location. It then becomes a simple matter to drag-and-drop files - much easier than the multi-click sequence of locate/copy/locate/paste etc. Win-Tab may be thought of as the running application Rolodex. Previous releases of Windows supported a pop-up window that showed



Windows 7 Start Area



Internet Explorer Jump List

the icons of running applications, but no hint as to what document was attached to the instance of the application. Using the combination of the Windows key and the Tab key now gives you the current window content of the application, and you may scroll through them until you find the one of interest.

The optional "Quick Launch" toolbar has now been integrated into the Taskbar - via the mechanism of pinning.

"My Documents" has been re-designed, in that it replaces the catch-all "My Documents" with a collection known as Personal Folder for such things as Documents, Downloads, Music, Photos and Videos, etc., with the addition of Libraries. A library appears to be a folder, but it is actually a collection of links to folder(s) that could be on a shared location - another computer, file server, external drive or NAS (Network Attached Storage). It is no longer necessary to remember where things are. This is especially useful in a home situation, where you may share multi-media objects throughout the household.

But perhaps you don't know even the name of something that you want—in that case, the new improved Search functionality comes in. W7 indexes files such that search can find them quite rapidly. The search isn't restricted to just all or part of the name of a file, it also is aware of the content of many file types, be it plain text or embedded such as within a spreadsheet or rich-text document. You may control what types of files the indexing mechanism examines. Search is also aware of application functionality — my first exposure to it was when I needed to locate the administrative snap-in that configures data connections. I did a search on "configure odbc"

and it immediately located the appropriate wizard.

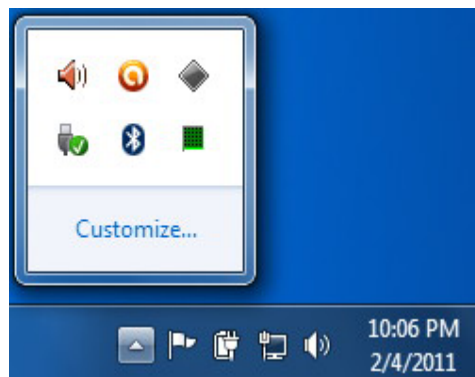
Richard then continued to the far right of the task bar to what used to be called the "System Tray" - the location of the clock and all of those other mini-icons that appear like weeds whenever you install a program. This has been renamed to the "Notification Area", and now is intended to only display alerts to change of conditions (arrival of an e-mail, announcement that updates are ready, WiFi availability, etc.). The other less active items are still there, but they are relegated to a roll-up list that may be displayed by clicking a little chevron to the left. Again, if there is something that you really want to always be displayed, you may pin it.

W7 has dropped some of the applications that previously were bundled, such

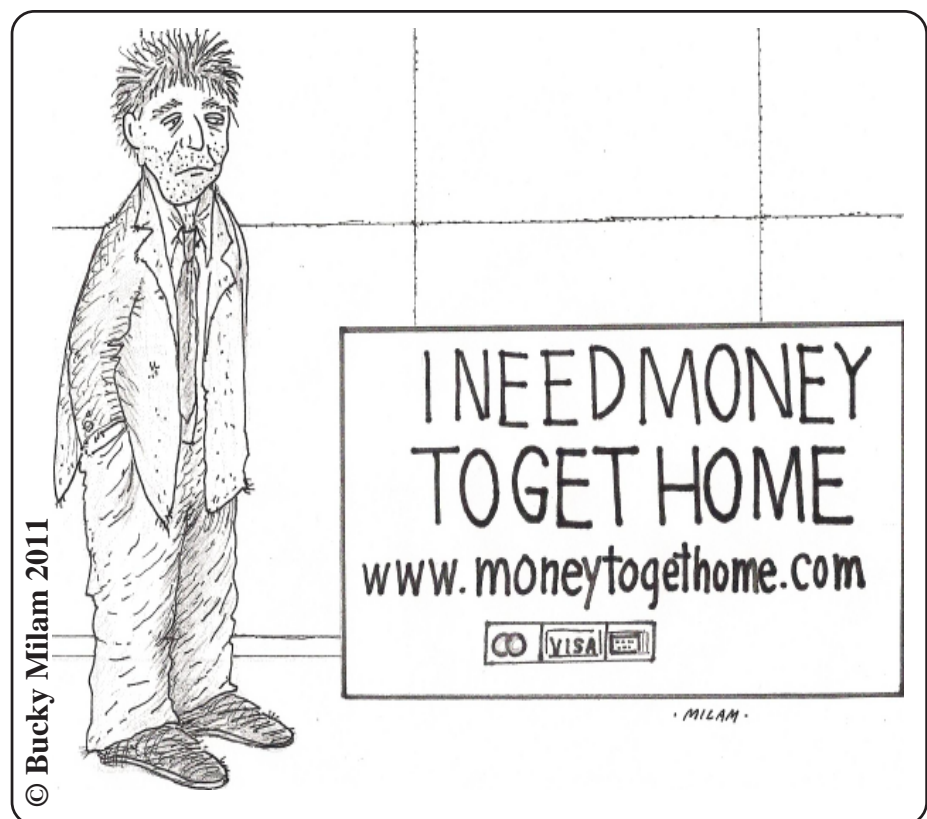
as Outlook Express, and replaced them with a suite of downloadable applications that are in the collection known as Windows Live. These applications are not Windows 7 specific—they run on Vista as well. The suite contains such things as Live Mail, Live Messenger, Live Photo Gallery, etc. One unspoken advantage of this is that they may be updated much more readily than if they were bundled with the OS.

Networking has been available since pre-Windows 95, starting with Windows 3.11 (also known as Windows for Workgroups), and has always been a bit of a black art to configure and maintain. Microsoft has recognized this and responded by creating multiple network profiles that configure the network connection based upon the location. The three profiles are: Home, Work, and Public. In simplistic terms a Home network permits essentially unrestricted access to resources between members of the group. The Work configuration is the classic permissions based sharing as most often seen in a business environment. Public is tightly clamped down; it essentially provides access to the Internet, and that's about it.

Richard responded to questions from the audience throughout the presentation, and had we not run into the hospital's curfew we probably could have gone on for an additional hour. I heard an attendee ask "When are we going to have session 2?" and hope that the answer will be "Soon."



Windows 7 Notification Area





# Special Interest Groups

## SIG NOTES: April 2011

**Access.** Designs and implements solutions using Microsoft Access database management software.

**Contact:** Bruce Preston, 203 431-2920 ([bpreston@dacs.org](mailto:bpreston@dacs.org)).

Meets on 2nd Tuesday, 7p.m., by virtual connection.

**Next meeting:** April 12 (check Website for technical details)

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

**Contact:** Chuck Fizer ([cfizer@dacs.org](mailto:cfizer@dacs.org)).

Meets 1st Wednesday, 4-6 :p.m. and 6-8 p.m. in a virtual session. (Note change below)

**Next Meeting:** April 6 at DACS Resource Center

**Drupal.** Covers all things on Drupal, the open source content management system (CMS).

**Contact:** Jim Scheef ([jscheef@dacs.org](mailto:jscheef@dacs.org)).

Meets on the second Thursday at 7:00 p.m. at the DACS Resource Center, or go to the DACS Community Forum (<http://www.dacs.org/forum/>) within the Members-only area.

**Next meeting:** April 14

**Digital Imaging.** Digital cameras, retouching and printing.

**Contact:** Ken Graff at 203 775-6667 ([graffic@bigfoot.com](mailto:graffic@bigfoot.com)). Meets last Wednesday, 7 p.m. at the DACS Resource Center.

**Next Meeting:** April 27

**Jobs.** Networking and jobs search

**Contact:** Charles Bovaird, 203-792-7881 ([aam@mags.net](mailto: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:** Jim Ritterbush, [linuxsig@dacs.org](mailto:linuxsig@dacs.org)

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

**Next Meeting:** April 20

**Mac.** Focuses on all aspects of the Mac and iPhone operating systems.

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

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

**Next Meeting:** April 6

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

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

Meets irregularly, announced by e-mail.

**Server.** Explores Back Office server and client applications, including Win NT Servers and MS Outlook. SIG is on hiatus and presently merged into the Drupal SIG.

**Contact:** Jim Scheef ([jscheef@telemarksys.com](mailto:jscheef@telemarksys.com)), or go to the DACS Community Forum: <http://www.dacs.org/forum/>, within the Members-only area

**VB.Net.** Focuses on Smart Client Windows application development using Visual Studio, VB, C# and SQL Server programming tools.

**Contact:** Chuck Fizer ([cfizer@dacs.org](mailto:cfizer@dacs.org)) or Greg Austin, 845 494-5095 ([greg.austin@ryebrookpba.org](mailto:greg.austin@ryebrookpba.org)).

**Next Meeting:** April 6

**Web Design and DTP.** Learn about Adobe software for web, graphics and desktop publishing.

**Contact:** Annette van Ommeren ([avo@annagraphics.com](mailto:avo@annagraphics.com)).

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

**Next Meeting:** April 19

## SIG News & Events

**Access.** Designs and implements solutions using Microsoft Access Relational Database Management System, often in conjunction with Visual Basic for Applications (VBA) and perhaps discuss entry-level Microsoft SQL Server. Meetings range from Q&A to small projects to occasional long-term projects. Tables, queries, forms, reports and code demonstrated during the session are distributed to participants for future reference. Meetings are conducted virtually - you attend from home or office. Bruce establishes a webcast of his screen using Mikogo, and a conference call using Skype; both are free services.

You only need a web browser and an inexpensive microphone for voice. (See links on the Access SIG page [www.dacs.org](http://www.dacs.org) for details.) New participants are requested to contact Bruce prior to the meeting to go over configuration requirements and conduct a test session. Meetings are held on the second Tuesday of the month, starting at 7:00PM. Bruce may be reached at 203-431-2920 or [bpreston@dacs.org](mailto:bpreston@dacs.org).

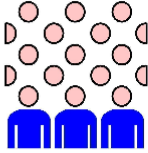






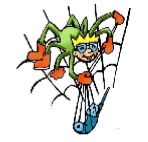


**C#VB.Net Virtual meeting.** The ASP.Net SIG meeting time was used to pursue C# coding of an Access SIG example program. We had a request to emulate a psychological testing application recently written in Access by Bruce Preston. The object of this exercise was to show how the code might be developed in C# and contrast it with VBA, the coding tool used in Access. Also, converting the database from Access to SQL Server was another aspect of the transition from Access to C#/SQL Server.

After assessing the application, we had a few application concept revisions to implement. Most significant was the idea that the application should be expanded to handle multiple psychological tests, multiple examinees and a capability to interrupt an examination session with the ability to continue it at a later time. These changes were reflected in a revised database schema that required additional tables and relationships among them. We also, embellished on the reporting mechanism, with the thought of only producing a report relevant to the score of

*SIG Notes, Cont. on page 9*

# April 2011

## Danbury Area Computer Society

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday																																																																																				
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# Back to Basics

## A Brief History of Data Storage & a Brief Explanation of the Binary System (Part 2 of 2)

By Ron Hirsch

**I**N PART 1 OF THIS article, I introduced you to the binary system. In part 2, I'm going to give you a brief history of the primary way that data is stored in your computer. Remember, we are not going to use light bulbs, but we are going to use something which has two states. The light bulbs in part 1 had an on or off state. The use of magnetic material will now be substituted. And, even though it is not necessarily done as I will note, it may be simpler to think of a magnetic situation where something is magnetized to be a south pole, or a north pole. Since this represents 2 states, it qualifies as a binary device to store and access values.

### Magnetic storage arrives

Some of the earliest magnetic devices were floppy disks, which were really floppy, unlike the floppy disks you may remember, which were 3.5", and were encased in a hard thin plastic case. The early 8" floppies used a thin sheet of plastic, which had a layer of very fine iron based coating placed onto it. Floppy disks are actually similar to the old audio record disks we used to play in the past. If you remember, these records had a fine spiral groove on them, and a special needle in a cartridge at the end of a tone arm, that rode in that spiral track, and produced sound based on small "bumps" and holes at the bottom of the groove. When vinyl LP records came along, they managed to get more music in the same space, by making the grooves smaller, and the needle finer.

Well, the floppy discs stored bits of data in a similar fashion, except the groove was an electronic groove, and the "bumps and holes" were magnetized "spots". And the arm was a very lightweight floating arm with a magnetic reading or writing device on the end, which would read or write the all the magnetic spots, which are bits of

information, which can then be converted into numbers or characters, as applicable.

Needless to say, the arm reading or writing all this magnetic info cannot really be allowed touch the surface, but must float just above it. If it touched the surface, it

could scrape off material, and cease to function properly. And each magnetic bit must be sufficiently isolated from its neighbors, so that the magnetic sensor in the floating head can reliably read each bit at a rapid pace. Sounds like a tough task, considering that the number of magnetic "spots" on the old floppies did reach into the millions. As time

marched on, smaller floppies arrived, bringing the size down to 3.5 with improved mechanical and electrical specifications.

### The hard drive starts to come of age

When my company got its first computer, an IBM 32, the IBM rep told us that the built in storage capacity of 4 MB would be enough to last us for many years. We believed that story for about 1 week after we got the IBM 32. In addition, not only was the storage capacity very little, but the built in & non interchangeable monitor was so small, that it bordered on being useless. So we called IBM, and they agreed to take the unit back, and sell us an IBM 34, which did have more storage, and a better display. And not too much later, we again moved upward and went for the model 36. In that era of the late 70's and early 80's, cooling the computer, which was a huge monster, required that it be housed in its own small specially air conditioned room, which we constructed.

Now, needing more memory storage space, we purchased IBM's latest hard drive package, which was the size of a large refrigerator, and came with a single 64 MB

platter. And, it could accept a number of additional 64 MB platters. These platters were the size of large pizza. I don't recall the cost of each platter, but the total unit, including the platters was many thousands of dollars.

Later on, in the mid-late 1980's the cost for a 30 MB hard drive for use in a personal computer had come down to about \$300. When my first personal computer, the IBM PC AT, had the 30 MB hard drive fail one week after the one year guarantee expired, it cost me about \$300 (plus labor) to have a new unit installed in my machine. I stayed with the same 30 MB size, as the store representative said I'd never need any more than that. In retrospect, that size drive would only hold about 5-10 images from a digital camera in current times.

### Hard drives continue to grow in capacity

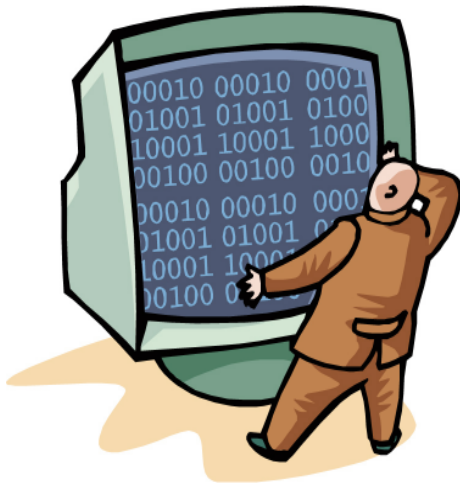
When I had my 30 MB hard drive, it was actually 240 million bits. I could not imagine that many magnetic spots being available on that rapidly spinning disk inside the case. To me, that was unbelievable then. And to have all the storage capability, and to read and write from the drive at millions of bits per second; how could this be possible?

I moved on with a new computer every 4 years or so. And every machine had a bigger hard drive, and it needed it. The Windows operating system needed more and more drive space. And the programs also needed more space. And the hard drives started adding more platters inside the case. Each platter had its own read and write head, and the rotational speed continued speeding up to make things perform faster. And, the price per megabyte of space continued to drop. It seemed as if there was no limit. And how could these complex mechanical monsters continue to get better and cheaper?

### Check out this comparison

My original IBM 30 MB drive cost about \$10 per MB, which is \$10,000 per GB. Today's hard drives are selling for about \$90 for a 1 terabyte drive, which is 9 cents per GB. In other words, storage space in the early days was 100,000 times more expensive than today. And, the size has shrunk dramatically. Current 1 TB drives are smaller than my old 30 MB IBM drive.

Here are some numbers which are hard to believe, but are true. The magnetic "spot" which is one bit on a hard drive has continued to shrink in size. That spot has gotten down to one millionth of an inch in diameter! And the rate at which bits are read





from and written to has reached into the hundreds of million per second! This is inconceivable. Fortunately, the hard drive doesn't know that, and it continues to purr along anyway.

And, the power drain is much less for today's 1TB drive than the old 30 MB IBM drive. And, the statistical failure rate is claimed to have the drive run continuously for many years with no missed bits. I challenge this statement. In the course of my computer activities, I've had at least a dozen hard drives fail. And in recent times the failure rate has been high. In the past year, I've had 4 hard drives fail in 3 different machines. At the work they are doing, and the specs they are seeking, I'm not surprised. Fortunately, in every failure case, the drive was the C system drive, where I use True Image weekly. And, I always keep new spare drives around. **So, a quick change out, and an image restore, and that machine is back in business.**

### Just how big is a terabyte (TB)?

A terabyte is 1 followed by 12 zeroes, or 1 trillion bytes. If you started counting at a rate of 1 count per second, to reach 1 trillion, you would have to continue counting for about 30,000 years.

### What does the future hold?

In the past, it was always felt that since the magnetic hard drive is a "mechanical" device, it would ultimately be replaced by a nonmechanical component. Holographic storage seemed to be a potential medium. It had no moving parts, had virtually unlimited capacity, and looked promising. But, it has yet to meet its expectations. The newest kid on the block is SSD. This stands for Solid State Drive. You probably already use such devices, as this approach is used in digital camera memory cards, and flash drives. They have now been designed to have larger capacities and packaging/interface to be interchangeable with current magnetic hard drives.

The pricing is still much higher than magnetic drives, about 10 times as high, but this should drop rapidly in the next few years. Their performance can actually run circles around their magnetic counterparts. And, with no moving parts, they should last almost forever. Some manufacturers have already started building them into their high end models.

**RON HIRSCH** is a member & contributing editor at the Boca Raton Computer Society, Florida. This article appeared in the October 2010 issue, *Boca Bits*; [www.brcs.org](http://www.brcs.org); [Ronhirsch1439@comcast.net](mailto:Ronhirsch1439@comcast.net).

### SIG Notes, Cont. from page 6

the person taking the examination. I would say that the database design and the stored procedure development constitute about 50% of the current effort. If the application were to be expanded, then more emphasis might likely be applied to the C# coding of the program using the SQL database.

The C#.Net program resembled the Access VBA program in functionality. It should, as it essentially was performing the same basic task. This is a good thing, because it allows a programmer the opportunity to see and contrast the differences between C# and VBA. One of the basic objects we use in our C#/VB and ASP.Net applications is the DbObject. This object is a minified, simplified and easy to use object that allows the programmer to access SQL Server databases. It has no knowledge of Access, ODBC, Oracle, or other databases; it only provides accesses to SQL Server. Since it is simple, the programmer does not need to spend a lot of time learning the Microsoft behemoth do it all database access drivers, and can concentrate on the application at hand. Of course, if your development concept is to be able to change your database mind at will, then you will have the learning curve to contend with. In this application, we make all database accesses through the use of stored procedures. The underlying SQL Command objects have a built-in query analyzer that pretty much safeguards the database from surreptitious and stealthy viruses. I mention this because the C# programming model we implemented can be easily morphed into a Web application where stealth could become an issue. Mentioning the programming model we used reflects on the interaction between user input and database transactions. This is one of the techniques that automatically provide program suspension and later restart capabilities mentioned earlier.

This application presents questions to the examinee. Each question is comprised of two contrasting profiles stacked one above the other. The examinee can respond to either profile and each profile has one of two possible answers. The answers are designated values 1 through 4. 1 and 2 refer to a response in the upper profile while 3 and 4 refer to the response in the lower profile. Since only one answer is valid and acceptable, then a number 1 through 4 can capture the examinee's response. Bruce Preston smartly collected the examinee's responses using grouped radio buttons. The group only permits one of the 4 radio buttons to be selected at a time. The numeric value assigned to the radio button then suffices as the response, and the value is then written into the database. However, there is another consideration, and that is when none of the radio buttons are selected for a question. This can happen, for example, when the examinee skips a question. In this case, there will be no response record written for the question. In other words the test results would not be complete, and the application could not yet render an examinee score. Another consideration is that the examinee cannot undo a response once it is made. Of course, the response can be changed but it cannot again be anything or unselected. I mention this because, the state of the radio buttons need to be changed by the program in code as well as by the examinee. The program will need to erase or unselect any radio button selection when a first time test-taking examinee moves to another question, particularly when the question hasn't yet been answered. Interestingly, the radio button clicked event gets fired when either the user or the program changes the button from selected to unselected. In this case, where the program changes the radio button state; the Clicked event code should not be executed. This phenomenon is not an issue with VBA and Access, but is manifest in C#.

The source C# Code and the SQL Server 2008 database files are available. Let me know if you want a copy.

**Drupal.** Our meeting this month became a meeting of the Website Committee. First, I demonstrated how I use SSH to download and install modules to a Drupal site on a shared host. In an SSH session to the host account, I use the 'Wget' command to transfer the module file directly from *Drupal.org* to the remote host, eliminating the need to download to your PC first and then upload to the host. Next, we looked at a part of the Administration module that creates a special administer role that when assigned to a user, gives that user all permissions, just like the original admin account. This makes it much easier to share admin duties with several people. Last, I showed how we can use CCK (Content Construction Kit) to create a "SIG base" page. Instances of the SIGs can then use Taxonomy to create a menu using Taxonomy Menu.

The next Drupal SIG meeting will be Thursday, April 14<sup>th</sup> at 7 p.m. in the DACS Resource Center.

March, 2011

*Moderated and reported by Dave Mawdsley*

**W**E WELCOME QUESTIONS FROM the floor at the start of our General Meetings. The role of moderator is to try to guide the discussion to a likely solution to the problem. 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.doc* and on *dacs.org*. Please provide as much information as possible, since we can't probe during the session.

**Q- from email: – URGENT, I've had so much trouble with the search feature in windows 7.**

**A: Jim Scheef:** Windows Search indexes everything on the machine, so it requires some horsepower and a fast disk. Is the hardware new and powerful enough to run Windows Search, and did Win7 come preinstalled? I had to remove Windows Search from a laptop, because the machine ground to a crawl.

**Dave:** I'd suggest that you study 3 tutorials on this subject. Here's the link to the first of the 3: [http://www.windowsnetworking.com/articles\\_tutorials/Exploring-Windows-7s-New-Search-Features-Part1.html](http://www.windowsnetworking.com/articles_tutorials/Exploring-Windows-7s-New-Search-Features-Part1.html) (what looks to be a space in the URL is an underscore.) For Part2 and Part3, just replace Part1 in the URL with Part2 or Part3. Basically, for Windows Search to work properly, the correct Windows Search settings must be set, and then the Index has to be rebuilt to use the changes. Rebuilding the Index can take a long while. Until it's properly done, Windows Search isn't probably very useful in the default setting. The tutorials are very comprehensive, with step-by-step instructions.

**Q: When I visit the 'New York Times' it loads very slowly. The status line indicates it is loading ads. Is there a way I can speed it up?**

**A:** If you want to control ads, try using Ad Block or No Script to control the perhaps dozens of ads that try to load on a typical page. Try also just reloading the page, as reloads usually limit the ads somewhat. One user suggested using the Google Chrome or Mozilla Firefox web

browser instead of Microsoft's Internet Explorer. Another person suggested that their speed on the Internet may be faulty and should have it checked with an online tool such as SpeedTest.net. Noted also was that the tool usually reports download speeds as faster than upload speeds. You will have to contact your ISP to have them fix it if the speeds test poor.

**Q: How can you tell if a computer has a keylogger?**

**A:** One technique is to start Windows, and just as the desktop paints, use CTRL + ALT + DELETE to bring up the Task Manager. I then look in the process list to see if something other than Windows-related processes shows up. Things not associated with known software are things to check. In general, keyloggers are totally hidden and are sometimes completely legal if installed on a company computer used by an employee. Some parents also install them to watch their children's activities (Perhaps a questionable practice). A technician might be needed to investigate the computer for a keylogger if your anti-virus program or Malwarebytes Anti-Malware don't pick it up.

Another approach is to use a Live-CD with a Linux operating system that runs in memory that lets you examine the hard drive while it's not running Windows. Kaspersky or F-Secure have a Live-CD that runs a small Linux operating system this way, and which also has a free on-board anti-virus product that can scan the disk. Hopefully, they have similar tools that can search for rootkits. One tool

can be obtained from [http://www.f-secure.com/en\\_EMEA-Labs/security-threats/tools/rescue-cd](http://www.f-secure.com/en_EMEA-Labs/security-threats/tools/rescue-cd). Read the page, and particularly the user's guide, and then burn an iso image file to the disk from the download using a CD burner. The CD is then used to boot the computer and do an anti-virus scan (requires that you boot from the CD and that your computer has an Internet connection which the anti-virus product can use to update the definitions files).

**From Drew Kwashnak:** Most Linux users know how to use Live-CDs this way. If you need to get some help on this, come to the Linux SIG of DACS. Most Linux users started with Live-CD's and went on from there.

**Q: I've got a drive that spins okay in an external container but I can't read the drive. It comes from an old computer with a questionable power supply. The external container works fine with another drive. Any suggestions?**

**A:** Lots of discussion from the audience about replacing the power supply, trying the drive as a second drive in a newer computer, trying the external drive in a second computer, etc. A suggestion before putting the drive in another computer: be sure to create a restore point before proceeding, and then check with the BIOS settings to see if it can recognize the second drive.

From the discussion, the drive is probably no longer readable. Note that if you really have to get data off the drive, you may need to use Drive Savers at <http://www.drivesaversdatarecovery.com/>; but be prepared to spend some serious change if you use their services.

**Q: I'm looking for software. I'm using Wide Mesh Beta which is a cloud package. It keeps two directories in separate computers in sync over the Internet. On March 31<sup>st</sup>, the package is being discontinued and I need a replacement package. Microsoft is turning off that package at that time. The upgrade doesn't work on Windows XP. It**

*requires that all computers be either Vista or 7 in the mesh. Any suggestions?*

A: Drop Box has packages that work in multiple Windows environments, Mac and Linux, which should do the same. However, be prepared to pay if you need more than 2GB. PogoPlug at [pogoplug.com](http://pogoplug.com) is an inexpensive way to move files from one computer to another using a private cloud over the Internet but

which doesn't have the simultaneity you require.

**Q: Is there a way to recover a Windows 7 password?**

A: There are a number of Live-CD tools that can be downloaded, burned to make an iso CD, and then used to boot to a small Live-CD Linux operating system to blank out the Administrator password. They are

successful tools for use with Windows XP, Vista and 7. A search on Google for 'NT Password' should turn them up. Once the Administrator account has its password blanked, just restart Windows and log in as 'Administrator' leaving the password field blank. Once up and running, you can then go into the user accounts and reset the passwords to what you want.

## Hardware Review

### Plustek Film Scanner

*By George Harding*

**P**LUSTEK HAS COME out with a film scanner that is compact in size and efficient in operation. It connects to a PC by USB and is powered from a regular power outlet. It comes with two CD-ROMs, one for installation of the device drivers for the scanner and a couple of pieces of software that can be used after you do your scanning. The other CD-ROM is the installation disk for Silverfast, software to help you make your scan and to modify the result if necessary.

Also in the box are two strip holders, one for slides, the other for negative film. These are easy to use and durable. More may be obtained from Plustek, the manufacturer. A padded bag is included, which allows you to safely carry your scanner when required. The scanner illumination is by LED, which means less power usage and lower heat emanation.

Installation takes awhile and requires a restart. It also takes hard disk space of some 400 MB. The result is an easy-to-use application that scans either slide or negative film. The scans are stored as TIFF format files by default, although you can also save as JPG or PDF. The use of TIFF saves

the pixel information even with repeated opening and saving, whereas each such action with JPG causes some loss of data.

When you start Silverfast, five separate windows open. The largest is the prescan window. You can use it to size the scan properly and adjust certain aspects of the image before the final scan.

The two strip holders are designed to hold either slides or negative film. The slide holder has four slots and the negative film holder has six openings. The scanner has two openings on either side of the box, into which you slide the holder. There are appropriate indents in the holder so that you can tell when a slide or section of film is properly centered for scanning.



The output size can be adjusted for printing, for use in documents or on a web page. The resolution can be selected from 72 to 7200 dpi. The effect of higher resolution is two-fold. First, higher resolution produces larger files. Second, higher resolution requires longer scan times. I found that 150 dpi is adequate for normal scanning.

There are adjustments available for different types of film, for example, Kodak, Fuji,

Polaroid and so on. There are, in fact, many more adjustments available than I could try out! The Silverfast software is a photographer/graphic artist's "dream come true."

Learning how to productively use the software is a challenge. There are several tools to help with this. Each window has a Quick Time icon, which represents a QT movie illustrating briefly how to use that Window's tools.

The product comes with a 450-page manual and there are several helps on the Silverfast web site.

There is no automatic advance from one slide/film to the next. It is strictly a manual operation. However, this is probably what you want, since you may want to make adjustments to the prescan before the final one.

**GEORGE HARDING** is treasurer, Tucson Computer Society, AZ, [georgehardingsbd@earthlink.net](mailto:georgehardingsbd@earthlink.net). It appeared in the December 2010 issue, TCS eJournal, [www.aztcs.org](http://www.aztcs.org), and is distributed for reprint by user groups.

### Plustek Film Scanner

Manufacturer: Plustek

Website: [www.plustek.com](http://www.plustek.com)

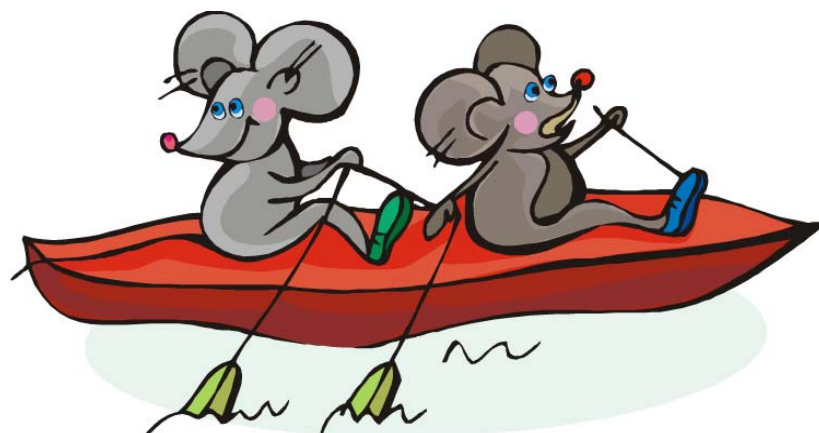
Price: \$349 MSRP

Works with Windows 2000, XP, Vista, 7 and MAC.



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[www.voiceforjoanie.org](http://www.voiceforjoanie.org)

# Future Events:

**April**

John Patrick  
On the Internet

**May**

Secure Computing  
Jeff Setaro

**June**

Frank Kunst and  
Chris Milmerstadt  
Safe Internet  
Commerce

**July**

TBA