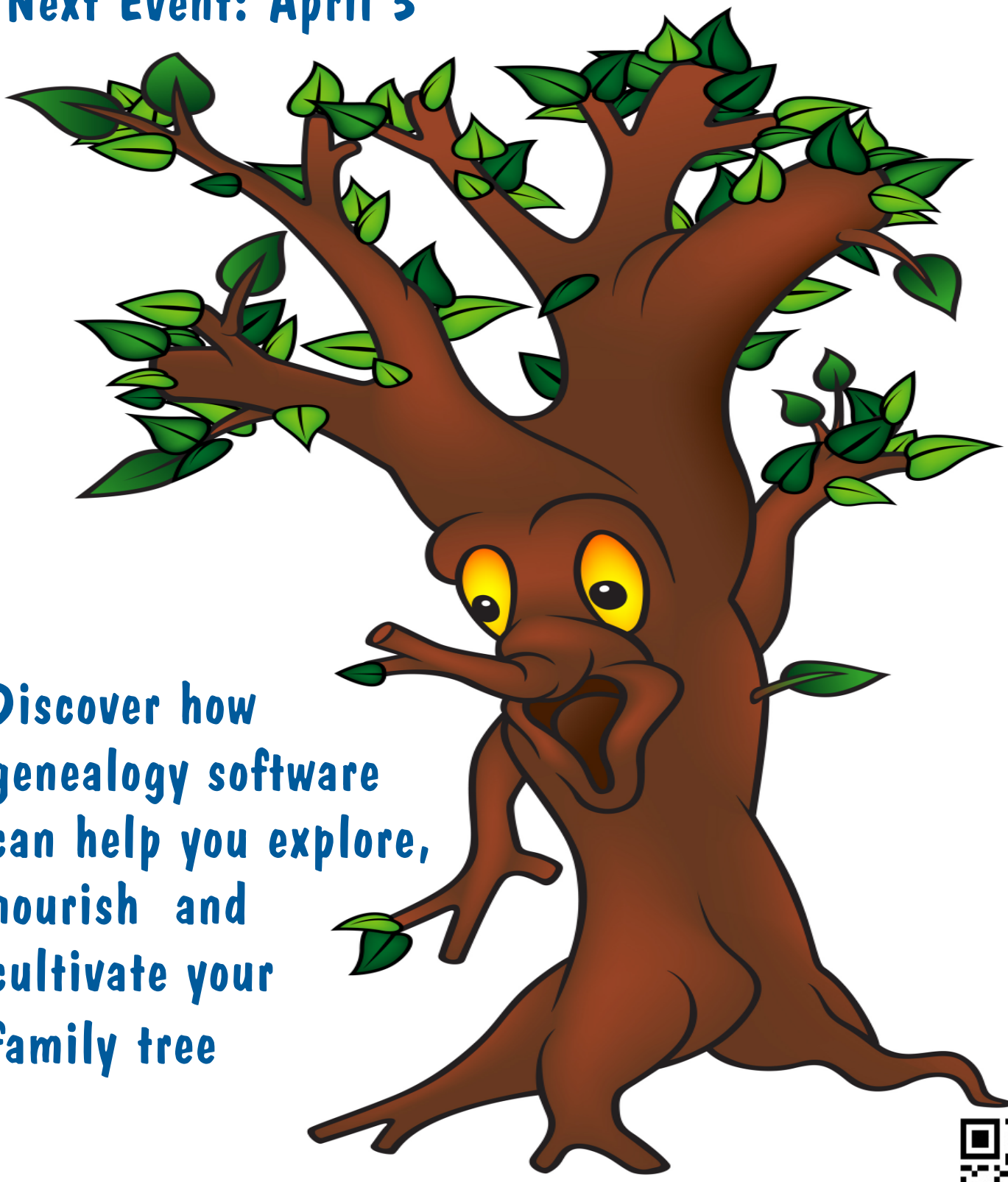
25 Years DACS

DACS.doc

A Computer & Technology Newsletter

April | Volume 26, Issue 4 | $2.00

Next Event: April 5



Discover how genealogy software can help you explore, nourish and cultivate your family tree

President's Letter

THE DACS 25TH ANNIVERSARY Banquet was a resounding success, thanks to Jim Scheef, who did most of the work organizing the event. He not only publicized the dinner and printed name tags for all attendees, he gave an oral history of DACS from his perspective. Then he invited all members to speak about how they came to join the group and their favorite experiences in DACS. Thank-you, Jim!

According to my dictionary the word ***society*** comes from the Latin word ***socius***, which means a sharing. I hope we can share our knowledge of computers more and more in the Danbury Area Computer Society. Always wear a name tag at our meetings, and make it a habit to speak to someone new each time we meet.

For our April general meeting John O'Donnell, a reference librarian at Danbury Library, will speak on genealogy.

On May 3rd John Patrick will tell us about the new version of his older book, "Net Attitude." He knows a lot of people in the hospital, which is why he would like to start at the earlier time of 6:30.

Last month I got an introduction to CiviCRM from Richard Teasdale when we sent press releases to over twenty news organizations. Wikipedia introduces the software like this:

"CiviCRM is a web-based, open source, internationalized suite of computer software for constituency relationship management, that falls under the broad rubric of customer relationship management. It is specifically designed for the needs of non-profit, non-governmental and advocacy groups, and serves as an association management system. CiviCRM is designed to manage information about an organization's donors, members, event registrants, subscribers, grant application seekers and funders, and case contacts. Volunteers, activists, voters as well as more general sorts of business contacts such as employees, clients, or vendors can be managed using CiviCRM."

DACS uses Civi to keep track of contact information for many of these groups, including news organizations in the Danbury area. We send out a press release each month, to publicize the general meeting and the speaker. If you are interested in helping us with this activity, please let me know.

Happy Spring!

—Dave Green

IN THIS ISSUE

DACS Community Forum

Ever wanted to ask a question and get an answer without waiting for the next general meeting? How about sharing news with other DACS members, or communicating with fellow participants in a SIG you attend?

The DACS Community Forum (*http://www.dacs.org/forum/*) is another benefit of being a DACS member, and it's open 24/7. Once you register there you'll be able to post questions, answers, and comments. You can even set up an RSS subscription to be notified of updates to the forums.

Try out the DACS forum today!

Membership Information

dacs.doc, ISSN 1084-6573, is published monthly by the Danbury Area Computer Society, 65 Legion Rd, New Milford, CT 06776. Annual subscription rates: $60 to regular members, $40 electronic access (included in dues).

Postmaster

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

Editorial Committee

Managing Editor: Richard Teasdale
Production Editor: Allan Ostergren

Contributors

Charles Bovaird, Richard Corzo, Drew Kwashnak, Lisa Leifels, Dave Mawdsley, Bruce Preston, Jim Scheef, Annette van Ommeren, Andy Woodruff

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 Richard Teasdale (*dacseditor*@dacs.org). Advertisers, contact Charles Bovaird at (203) 792-7881 *(aam@mags.net)*

Copyright

Nonprofit groups may request permission to reprint articles from *dacs.doc* or *http://www.dacs.org* by sending e-mail to *dacseditor@dacs.org*. Reprinted articles shall credit the copyright holder and a copy of the final publication shall be mailed to:

Danbury Area Computer Society, Inc.
65 Legion Rd,
New Milford, CT 06776

Member of apcug
An International Association of Technology & Computer User Groups

2015 Newsletter Contest apcug First Place

Dick Gingras APCUG Liaison
rgingras@dacs.org

Apple User Group

Officers

DACS GENERAL NUMBER: (203) 744-9198
PRESIDENT: David Green *dacsprez@dacs.org*
VICE PRESIDENT PROGRAMS: *vpprograms@dacs.org*
SECRETARY: Bert Goff • **TREASURER:** Bert Goff

Directors

dacsboard@dacs.org

Richard Corzo	(203) 797-1518	*rcorzo@dacs.org*
Richard Gingras	(203) 426-1780	*rgingras@dacs.org*
Bert Goff	(860) 355-8895	*bgoff@dacs.org*
David Green	(203) 797-8682	*dgreen@dacs.org*
Cathy Quaranta		*cquaranta@dacs.org*
Jim Scheef	(860) 355-0034	*jscheef@dacs.org*
Andy Woodruff	(203) 744-9588	*awoodruff@dacs.org*
Tom Zarecki		*ZareckiT@wcsu.edu*

Committees

NEWSLETTER: Richard Teasdale: *dacseditor@dacs.org*,
PROGRAM: *vpprograms@dacs.org*
WEB MASTERS: Richard Corzo (*rcorzo@dacs.org*), (203) 797-1518
Annette van Ommeren (*avanommeren@dacs.org)*, (914) 232-0149
PRESS RELEASES: Dave Green (*dgreen@dacs.org*)
APCUG LIAISON: Dick Gingras (*dgreen@dacs.org*)
MARKETING: Cathy Quaranta *(cquaranta@dacs.org)*
MEMBERSHIP COORDINATOR: JIM Scheef: *(membership@dacs.org)*
RESOURCE CENTER: (203) 748-4330 • **WEB SITE:** *http://www.dacs.org*

HelpLine

Our former telephone HelpLine has been replaced by our web-based DACS Community Forum at *http://forum.dacs.org*. We have topic-specific forums where DACS members can post questions. Questions may be answered by Workshop leaders or other DACS members. If none of the categories fit your question, just post it to the Ask DACS forum.

Topic	Forum
.NET Programming	ASP.Net and C#VB.Net Workshop
Digital cameras/scanners/image processing	Digital Imaging Workshop
Content Management Systems	Drupal Workshop
Linux	Linux Workshop
Mac and iPhone/iPad/iPod touch	Apple Workshop
PC maintenance	PC Maintenance Workshop
Smartphones & Tablets	Mobile Devices Workshop
Virtual machine software	Virtual Computing Workshop
Desktop publishing and website design	Web Site Design Workshop
Windows	Windows Workshop

Directors' Notes

Danbury Area Computer Society (DACS)
Board Meeting Minutes
Wednesday, March 2, 2016

The meeting was called to order at 7:10pm. Dave Green chaired the meeting.

In attendance were board members Richard Corzo, Bert Goff (Secretary & Treasurer), Dave Green, Jim Scheef, and Andy Woodruff. The minutes were taken by Richard Teasdale.

- The Minutes of the 2/3/2016 Board Meeting were accepted.

Reports

- The Treasurer's report for February was reviewed and discussed.
- Membership committee: Jim reported that there are 96 current members + 14 in-grace, making a total membership of 110. 45 newsletters are being distributed, of which 26 are for current members, and 19 for promotional purposes. Jim emailed a spreadsheet, in which a monthly history of the stats is being accumulated.
- Marketing committee: No report.
- Press Coverage: Dave reported that a press release for the March general meeting was sent out on February 16.
- Website: Richard C. reported that:
  - o Annette van Ommeren created a documentation page for how to make postings to the website. Dave Mawdsley has been given website update access to post meeting notices, etc., in his role as leader of the Linux workshop.
  - o A category entitled *DACS News* was added to the *About DACS* menu.

Old Business

- Staffing Predicament
  - o Andy: An ad has been posted on Craig's List for volunteers interested in DACS leadership positions.
  - o Andy agreed to write versions of a similar ad for distribution via Meetup and to the DACS membership. He will incorporate suggestions from Jim, based on an ad used for similar purposes by the Appalachian Mountain Club.
  - o "End Planning" for DACS: Dave circulated a draft dissolution amend-

Directors' Notes, *Cont. on page 11*

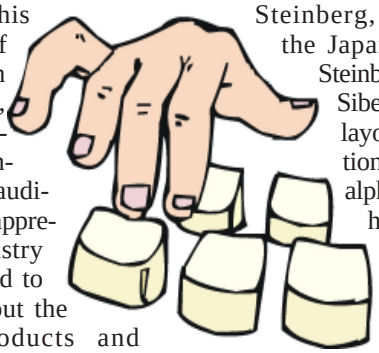
March Meeting Review

Music Notation Software

By Andy Woodruff

MUSIC NOTATION software is the software application for music composition. A composer can write musical notes in a music notation application and then print professional looking music scores.

Music notation applications can typically also play audio from the scores. The applications are fundamentally designed to produce musical scores based on treble, bass, or other clefs that indicate musical pitches; these applications can also produce outputs based on tablature clefs that show fingering but not pitches.



Chris Aher began this meeting with a review of several music notation software applications, including both commercially-available and open-source options. Several audience members expressed appreciation for Chris's industry review, because it is hard to independently learn about the history of some products and companies.

The most widely-used systems are Finale and Sibelius. Chris personally uses Finale. Finale was developed by MakeMusic in Minnesota, and MakeMusic was purchased in 2013 by a private equity firm, LaunchEquity Acquisition Partners. The new owner moved the company to Colorado and replaced many people on the development team. Chris expressed concern that these changes may be to the detriment of product quality.

The other widely-used system is Sibelius. Its developers intended that it would be easier to use than Finale. The development company was purchased by Avid Technology, which laid off the original development team in 2012, transferred the development unit from London to the Ukraine, and hired a new team. Many users are concerned about the skill and effectiveness of the new software team. Chris pointed out that Sibelius is now only available on a lease basis, i.e. with a monthly subscription; Finale can still be purchased outright.

The makers of Finale and Sibelius also both offer low-cost versions with fewer options.

Chris described another music notation software application called Notion. This product is sold by Presonus, a Japanese company that makes high-end audio tools. Notion is an entry-level application. It is available as an iPad application.

Chris also mentioned an application called Overture but dismissed it as quite expensive.

There is a free open-source alternative, called MuseScore. An audience member spoke of good results with MuseScore, but Chris said its audio playback quality is not at the same level as that of Finale.

Chris also spoke about a new music notation software application under development by a German company called Steinberg, which is owned by the Japanese company Yamaha. Steinberg hired the entire original Sibelius team, after the Sibelius layoff. The team's new notation application is currently in alpha testing but does not yet have a public name.

Many composers and musicians are concerned about the future of the Finale and Sibelius products, and they are enthusiastic about the upcoming Steinberg offering. Chris suggested that potential purchasers might wait to see this product before deciding what to buy. "Things are changing so fast!"

All the well-known applications are available for both PC and Mac. MuseScore is the only well-known application that is also available for Linux.

Chris uses Finale, and he demonstrated it with an overhead projector. He described his use of this application for preparation of parts for a choir that he directs. He set up a new file in Finale; he used a mouse to enter musical notes on the page; he copied and pasted a section; he automatically transposed a section of existing notes to a different key, by use of a pull-down menu; and he used the application to play audio from notes that he had entered. The application appeared easy-to-use and stable. Chris compared a musician's use of a music notation application to a writer's use of a word processor.

One does not need to be a composer to have use for a music notation application. A musician can use the application to rewrite an existing printed part. Or the musician can enter a section of notes into the application in order to have the application play these notes, as an aid toward music practice. An audience member talked of practicing his singing in this manner. Another audience member said he uses a music notation application to transcribe notes that he hears on a recording, in order to create written music.

Chris mentioned that one can exchange music between applications with xml files. One can enter finger numbers and figured bass notation. Up to four layers can be used in Finale, in order to enter complex notes or rhythm patterns on top of one another.

These applications have some limitations. For instance, one can enter words for choral music, but the applications do not sing! Also, if a slur is added across notes and then a carriage return is added, the slur will typically need to be repaired.

Chris has a background in both music and software. He studied music composition; worked for Steinway as a piano technician; worked as a professional musician; and worked as a systems and network engineer. He now works as a digital music and video producer.

Let's join heads!

Do you have a special technology interest you would like to share or learn more about? Join a DACS workshop or start one. You don't have to be a nerd or a guru—just have a curiosity for what's out there and an interest in sharing or discovering with others like you. Just send an e-mail to *dacsprez@dacs.org*, or talk to one of our officers at the next meeting, and say something like "I want to start a workshop!" or "Wouldn't it be nice if we had a workshop on…?"

Meeting Preview

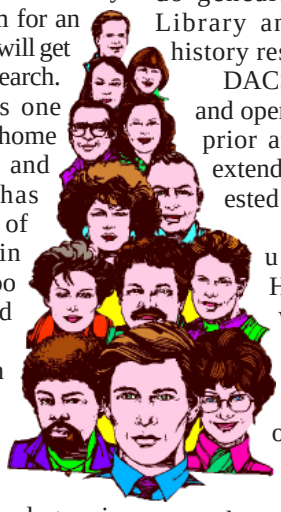
Introduction to Genealogy

By David Green

Tuesday, March 1, 2016, 7:30 PM
Danbury Hospital Robilotti
Conference Center
Presenter: Chris Aher

CURIOUS ABOUT YOUR family history, but don't know where and how to start? Need guidance about doing research and what resources to choose? Join John O'Donnell, librarian and genealogy researcher from Danbury Library, on April 5 at 7:30 pm for an introduction to genealogy. You will get a solid foundation for your research.

Genealogical research is one of the most popular uses for home computers and the internet, and information technology has brought about an explosion of interest in family history in recent years. There are now too many genealogy-focused websites to count.



John O'Donnell was born and raised in Brooklyn, close to Ebbets Field, and was a Brooklyn Dodgers fan until the team moved to California. He has an undergraduate degree in history from Iona College and a master's degree in history from Brooklyn College. He has a deep interest in the history of World War Two. He attended Southern Connecticut State University for his masters degree in library science. He has worked at Danbury Library as a reference librarian as well as being in charge of the Local History Room for 19 years. He is also an adjunct business librarian at Western Connecticut State University. He has been helping people do genealogy research at Danbury Library and doing his own family history research as well.

DACS General Meetings are free and open to the public. Members and prior attendees are encouraged to extend invitations to anyone interested in this topic.

General meetings are usually held at Danbury Hospital and again in April will be in the Robilotti Conference Center, across the hall from the hospital auditorium. There is plenty of free parking in the guest parking garage adjacent to the auditorium. (Go to *www.dacs.org* to find directions and parking information).

In a eureka moment, Rodney reinvents "green computing".

There are Many Ways to Join DACS

An easy way to join DACS is to attend one of the monthly general meetings. General meetings are normally held on the first Tuesday of each month at Danbury Hospital. Or join right on our Website via the PayPal link, where you may also pay by credit card without a PayPal account.

General meetings are always free to the public, but only members benefit fully from DACS' many other events, activities, and publications. As a member you become part of a dynamic computer group in the Greater Danbury Area.

You will receive a subscription to *dacs.doc*, our award-winning monthly newsletter, packed with news and information pertinent to computer users of all levels. In addition to interesting feature stories, the newsletter contains a monthly calendar of events and a recap of the the previous general meeting and last month's workshops. Members may also post questions to the DACS Community Forum.

Members may also attend the monthly workshops, where topics relating to computers, peripherals, software, and operating systems are discussed. Workshops meet throughout the month at our Resource Center in downtown Danbury unless mentioned otherwise in the calendar. Occasionally, special topic sessions are also offered to members.

Individual/Family Memberships

Annual membership dues are $40.00 for individuals or for each family living at the same address. Annual memberships which include a printed newsletter are available for $60.00 a year.

Workshops

Workshop NOTES: April 2016

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

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

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

Next Meeting: Apr 12

Drupal. Covers all things on Drupal, the open source content management system (CMS) .
Contact: Jim Scheef (*jscheef@dacs.org*).

Go to the DACS Community Forum - (*http://www.dacs.org/forum/*) within the Members only area.

Next meeting: Look for future announcements.

Jobs. Networking and jobs search

Contact: Charles Bovaird, 203-792-7881 (*aam@ mags.net*). Go to DACS Community Forum (*http://forum.dacs.org for job listings*.

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

Contact: Dave Mawdsley, *linuxsig@dacs.org*
Meets 3rd Wednesday, 7:30 p.m. at the DACS Resource Center.

Next Meeting: Apr 20

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

Contact: Charles Bovaird, 203-792-7881 (*aam@ mags.net*).
Go to DACS Community Forum (*http://forum.dacs.org*).

Online Business Workshop. Informal gathering of members sharing ideas on creating an online source of income.

Contact: Steve Harkness (*onlinebizsig@dacs.org*)
Meets second Monday in nearby Brookfield, or by Webinar

Next Meeting: Apr 11

Single Board Computers Workshop. Explores small cheap computers like Raspberry Pi, Arduino, Netduino, Beaglebone, and more. Meets 3rd Thursday at the DACS Resource Center.

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

Next Meeting: Apr 21

Social Media: Master the basics of Facebook, Twitter, LinkedIn, and Instagram.

Contact: Tom Zarecki 914-548-4948; email *tomZshow@gmail.com*.

Meets on the 4th Wednesday of the month at 6:30pm, usually at the DACS Resource Center, but check the monthly schedule.

Next Meeting: On hiatus until May

Video Production. Explores all aspects of video capture and production including how to create good video using smartphones and tablets as well as using professional cameras and equipment. Meets on the 4th Tuesday or 4th Thursday of the month at 6:30 pm, typically at Charter Communications in Newtown.

Contact: Andy Woodruff (awoodruff@dacs.org)

Next meeting: Check dacs.org

Web Design and DTP. The website design Workshop will be on hiatus starting November 2015 until April 2016. No meeting in November, and hope to start up again in April.

Next meeting: Check dacs.org

Workshops News & Events

Apple. In March we covered Microsoft Office 2016 for Mac and I shared my experience with the new 4th generation Apple TV.

Office 2016 for Mac is available as a one-time purchase or as part of an Office 365 monthly or yearly subscription. In the past the Mac Office software followed the Windows edition by about a year. So there was Office 2008 for Mac following Office 2007 for Windows, and Office 2011 for Mac followed Office 2010 for Windows. However there was no Office for Mac following the release of Office 2013 for Windows, so Office 2016 for Mac is kind of a catch-up release for Mac users. For a change it's coming out in the same year as the Windows version.

Office Home & Student 2016 for Mac includes Word, Excel, PowerPoint, and the OneNote note taking application. Office Home & Business 2016 for Mac and the subscription plans add Outlook, the e-mail, calendar, and contacts application in the Office suite.

Someone asked how to enter a sharp, flat, or natural (music notation) symbol, whether it was in Word or another Mac app. It turns out it can be entered from the same input keyboard that allows you to insert emoji characters. You just need to search for the symbol name.

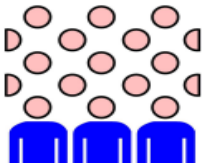
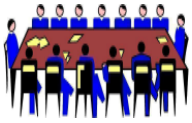
The other topic was the new Apple TV which I had recently purchased. I already had the 3rd generation model, so I was a bit skeptical about whether I really needed the new one. It now has its own App Store, with many of the same apps as the previous model, plus many more, including a large assortment of games. I was pleasantly surprised to find that a number of iPad/iPhone apps were also available as Apple TV apps. If you purchased an app for your iOS device, you don't have to purchase it again for the new Apple TV.

The box itself looks identical to the previous model except it is taller and heavier. However the new Siri remote is quite different from the previous Apple TV remote. The Siri remote has a touchscreen surface that replaces the D-pad (up/down/left/right directional pad) of the previous remote. Both have a Menu button that takes you up one level in the Apple TV interface, but the new one also has a Home button that takes you directly to the top-level home screen. The Siri remote also has a volume up and down button that can control your TV or audio/video receiver volume. Finally, there is a Siri button that either summons Siri to respond to your request, or can allow dictation into a search box.

Workshops,, *Cont. on page 11*

April 2016

Danbury Area Computer Society

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Mar 2016 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31			May 2016 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		1	2
3	4	5  **General Meeting** 6:30 PM	6  **Board of Directors** 7:00 PM	7	8	9
10	11  **Online Business Workshop** 7:00 - 8:30 PM *onlinebizsig@dacs.org*	12  **Apple** 7:00 PM Richard Corzo *applesig@dacs.org*	13	14  **Membership Committee** 7:00 PM Jim Scheef 860-355-0034	15	16  **DACS.DOC Deadline**
17	18	19  **Web Design** Annette van Ommeren 7:00 - 9:00 PM *avanommeren@dacs.org* On hiatus - check Website	20  **Linux** 7:30 -9:30 PM Dave Mawdsley *linuxsig@dacs.org*	21  **Single Board Computers Workshop** 7:00 PM Jim Scheef 860-355-0034	22	23
24	25  **PR & Marketing Committee** 6:30 - 8:30 PM	26	27  **Social Media** Tom Zarecki 6:30 - 8:00 PM *tomZshow@gmail.com* On hiatus until May - check Website	28	29	30

Security Matters

Internet Privacy

By Dick Maybach

MANY OF THE ENTITIES that handle Internet traffic have little regard for maintaining our privacy. ISPs typically record the sites we visit and store our e-mail. Search engines keep histories of our searches and the sites we visit. Social media sites and Internet vendors collect as much data as about us as they can. Many make it available to both commercial and government entities. As recent headlines have shown, these data are often stored with minimal attention to security. For example because of Edward Snowden, we know that the NSA stored the data it collected unencrypted, on computers that had the means of copying it to portable media, and allowed maintenance staff to access to this equipment and to carry storage devices in and out of the facility. We know about Snowden because he disclosed what he had learned; we don't know how many others have quietly sold data to the highest bidder, and neither do their employers.

The point I'm trying to make is that the only one concerned about your privacy is you. The rest of the world will pry to the extreme limits of the law, and beyond, to profit from whatever it can find out about you. So what can you do? Actually, quite a bit, but there are trade-offs between the degree of privacy and convenience. I can describe some of the tools I've found to be helpful and the inconvenience they introduce; you will have to decide which to use.

Protection While Browsing

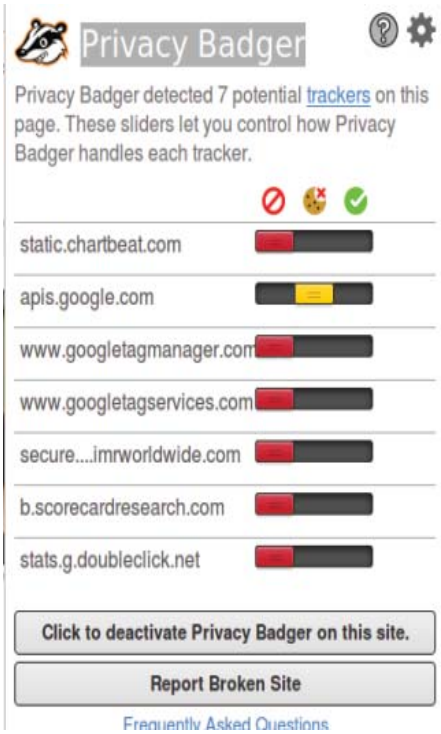
Certainly browsing the Internet exposes you to risk, as you often connect to sites about which you know little. I prefer using the Firefox browser, because it has some very useful add-on that help you protect your privacy, including BetterPrivacy, HTTPS-Everywhere, NoScript, and Privacy Badger.

Better Privacy (*https://addons.mozilla.org/en-us/firefox/addon/betterprivacy/*) protects against flash-cookies. These Local Shared Objects (LSOs) are pieces of information placed on your computer by a Flash plug-in that track your Internet use. BetterPrivacy lets you list and manage these Flash-cookies, e.g., to remove those objects automatically on browser exit. I use this as an "install and forget" add-on, and I've never found it necessary to disable it.

HTTPS Everywhere (*https://www.eff.org/https-everywhere*) is a Firefox, Chrome, and Opera extension that encrypts your communications with any website that offers https service. It's a result of a collaboration between the Tor Project and the Electronic Frontier Foundation. This hides your communications from any parties between you and the site, just as though you were talking to your bank. This too is an "install and forget" add-on.

NoScript (*https://noscript.net/*) disables JavaScript, Java, Flash, and other plug-ins, and as a result, seriously disables many sites. I start by enabling it everywhere, and disabling it, often just temporarily, only for those sites I trust and need.

Privacy Badger (*https://www.eff.org/privacybadger*) is available for Firefox and Chrome. It checks for tracking on every site you visit, and blocks it either completely or partially, depending on how each particular site behaves. You can click on the Privacy Badger icon to can see what action it's taking at the current site, as shown in the screen-shot below, which shows that cookies are blocked for *apis.google.com* and no content at all is accepted from the other six (see below).



Note the Frequently Asked Questions at the bottom of the shot. Clicking on this will display information about what Privacy Badger does. By the way, the Avast antivirus extension blocks the installation of Privacy Badger and other extensions. Internet Explorer can also disable tracking, but only for specific sites. Interestingly, Privacy Badger identifies 11 trackers at *https://www.microsoft.com/en-us/* and blocks cookies from the 10 of these it considers harmful.

E-mail Protection

E-mail has much in common with postcards, in that everyone who handles it can see the contents. The only way you can safeguard your e-mail is to encrypt it, and the standard methods are Pretty Good Privacy, *https://www.symantec.com/products-solutions/families/?fid=encryption*, and its open-source variant Gnu Privacy Guard (GnuPG), *https://www.gnupg.org/*. Both of these adhere to the OpenPGP standard, *http://www.openpgp.org/*. (Also see *https://en.wikipedia.org/wiki/Pretty_Good_Privacy*.) They use public key encryption; that is, there are two keys, a public one and a private one. Files can be encrypted with either, but can be decrypted only with the matching one. You distribute your public key freely and carefully protect your private key. Your correspondents use your public key to encrypt messages to you, which only you can decrypt because only you have the matching private key.

GnuPG is available for all the popular personal computer operating systems. However, it is a command-line program and is much easier to use if accessed a graphical front-end, such as the EnigMail add-on (*https://www.enigmail.net/home/index.php*) for Thunderbird, Mozilla's e-mail client. To encrypt a message, just click on the padlock icon, which will change from open to closed as shown in the screen-shot below (screen-shot 1).

When you click Send, you will see the unencrypted form of the message and a window asking for your passphrase. GnuPG passwords are stored in an encrypted database called a keyring, which requires this passphrase for access. The received message looks normal, although you may have to enter your passphrase to unlock it. Depending on your settings, the system will remember a passphrase for a fixed time – or perhaps for as long

as you are logged on (Screen-shot 2)

Anyone reading your message without decrypting it will see only the image on scxreen shot 3.

Once you have e-mail encryption set up and (here's the tough part) have convinced those with whom you correspond to do the same, it's very easy to use. I discussed e-mail encryption in more detail in my July 2014 article (available at *http://www.bcug.com/*).

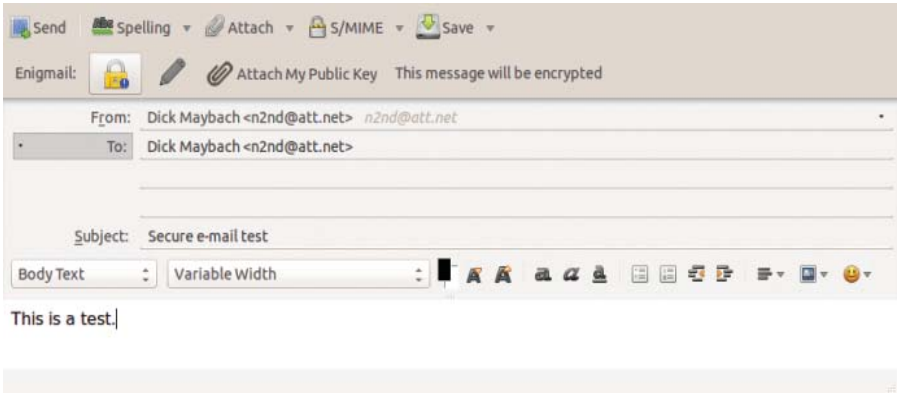
Protection at Wi-Fi Hot Spots

At home your PC is probably protected by a firewall in the cable modem provided by your ISP, but you have no such protection when you operate at a Wi-Fi hotspot. Indeed, widely-available software lets anybody using the same hot-spot capture all the traffic on it. You thus need extra protection, and I consider Tor (*https:/www.torproject.org/*) to be essential here. It encrypts all your communication over a virtual private network and is available for Windows, OS X, and Linux. A snooper at a hot-spot sees only an https link to a node on The tor network; not only is he prevented from reading your packets, he doesn't even know with whom you're communicating. Your packets remained encrypted until they reach the exit node, which doesn't know where you are, nor does the machine with whom you're communicating. I discussed Tor in more detail in my June 2014 article.

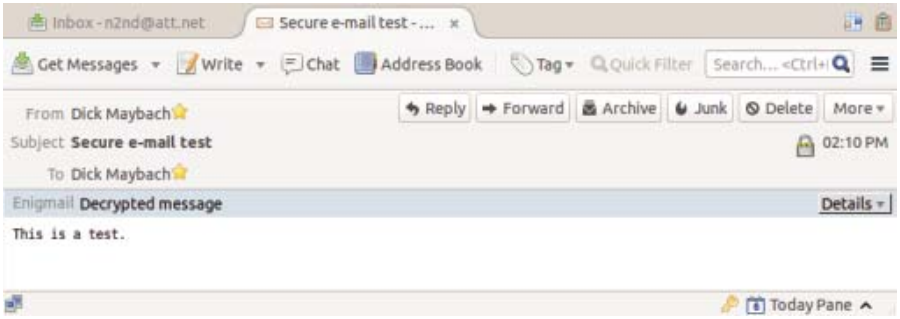
If you use Thunderbird for e-mail, you can of course use EnigMail to encrypt your messages. For additional protection you can use the TorBirdy (*https://addons.mozilla.org/en-us/thunderbird/addon/torbirdy/*) add-on. This routes all your e-mail, both sent and received, over the Tor network. It protects you against hot-spot snoops, but of course leaves you vulnerable to those in other parts of the network.

Protection at Insecure Computers

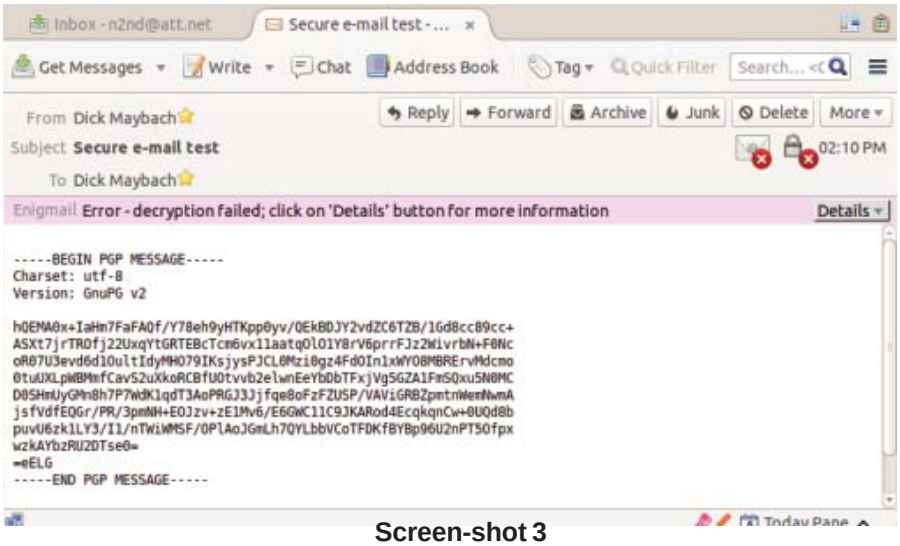
You must careful when using a borrowed PC, either a friend's or especially one at an Internet cafe. Even if these are free of malware and are connected to secure networks, they often store passwords, Internet browsing history, and e-mail by default. If you must do something non-trivial, such as banking or e-mail, you should use a live USB memory stick with a secure operating system such as Tails, (*https://tails.boum.org/*). This doesn't use the



Screen-shot 1



Screen-shot 2



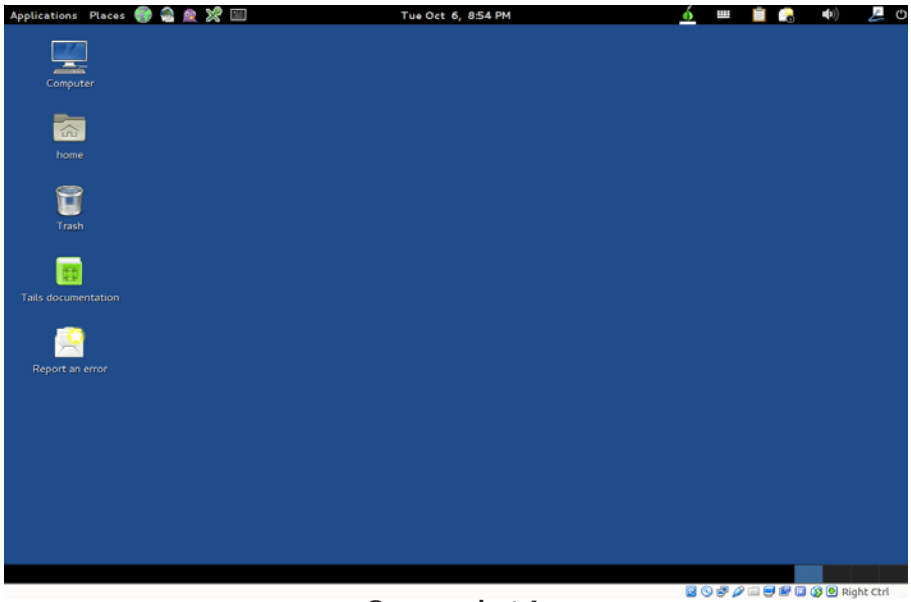
Screen-shot 3

PC's hard disk at all, so it will neither be affected by any malware there, nor leave any traces of your activities. It uses Tor to access the Web, and thus prevents snooping from the network. Finally, when you exit, it wipes RAM. You can enable persistent storage to create an encrypted volume on the memory stick where you can store documents as well as Internet favorites, e-mail and e-mail addresses, and passwords. If you lose the memory stick and have used a good password, a finder won't be able to access your data. Tails has a virtual keyboard, which you can use if you suspect that the PC on which it's being used has hardware to record keyboard activity. You would use the virtual keyboard to enter passwords for example.

Yes, Tails is Linux — but as the screen-shot shows, its graphical interface should be familiar to almost any computer user. The most commonly-used applications are available on the menu bar at the top, and the rest reside in the Applications menu. As always though, you should experiment with it at home before you really need it.

Internet Privacy, *Cont. on page 10*

***Internet Privacy**, Cont. from page 9*



Screen-shot 4

Social Networks

Remember that anything you disclose will stay on the Internet and will be available to friends, enemies, relatives, employers, and all others, forever. Please use common sense. If on Facebook you talk about your new Porsche, your art and antique collections, and your upcoming three-week vacation to Spain, you shouldn't be surprised to return to an empty home and garage. Similarly, that hilarious picture of you spilling beer down your shirt may not be quite so funny if it shows up years later while you are running for public office.

Smart Phones

We have been discussing how to improve privacy when you use your PC, but I believe that smart phones are by far the bigger threat. While most PCs access the Internet through firewalls that are part of the router supplied by an ISP, cell phones typically connect directly to public networks and are always on. They allow tracking not only of their users Internet use, but also their geographical location. Yet, far fewer privacy and security tools are available for them and malware apps abound. Owners should review their uses of these devices, and the apps that are running on them, with respect to the associated potential loss of privacy. They will probably decide that some uses are better done from the relative security of a PC and some apps should be deleted.

Protecting your privacy isn't difficult, nor need it significantly hinder your Internet use. It just requires that you learn to use the right tools and keep your wits about you.

Dick Maybach *is a member of Brookdale Computer Users' Group, NJ (www.bcug.com; n2nd (at) att.net).*

This article appeared in the January 2016 issue, BUG Bytes, and is distributed for reprint by APCUG member user groups.

Peripherals

Continuous Ink Supply System (CISS or CIS)

by David Kazmer

THERE IS AN OLD marketing strategy of "Give them the printer and sell them the ink" that is starting to be challenged by alternate methods of using inks. The transition between ink cartridges and imbedded ink printers (described later) is the Continuous Ink Supply system. There are many of these on the market and each is designed for a particular make, model, and technology of printer. Not all printers have a CIS made for them. Most are by third-party manufacturers but a few are starting to be made by the printer OEM's as they are finally recognizing the demands of the public.

Basically, the systems consist of larger ink storage containers external to the printer which should be easy to access for adding bulk ink; a delivery system sometimes including small hose sets; and hardware to fool the printer into thinking that you are using the correct (smaller) OEM ink cartridges.

I have had a CIS for my Brother printer for nearly two years and after the initial slightly awkward installation the system has been running just fine. This system uses extra large cartridges that extend out of the ink cartridge compartment, beyond the front of the printer and have refill openings (plugged) on the top, which are reasonably easy to access. The cartridges are designed to plug directly into the printer ink slots and the mechanism to fool the printer into thinking that I am using OEM ink is a small curved piece of plastic to trip the ink door sensor. If the door is detected as being open, the printer will not work. The installation comes with detailed and illustrated instructions.

Adding bulk ink is very easy and lasts so long that I almost forget to check the level, maybe monthly. The CIS manufacturer suggests to keep the ink level over one third full just to avoid any sensor problems. I now buy Brother-compatible ink in bulk and save money. I purchased a box set of four colors of bulk ink and have only needed to add ink rarely. After about two years I still have most of the ink. The bulk

ink can also be bought one color at a time, to suit your needs. In any case you should

be very careful when handling bulk ink supplies. Mistakes can have disastrous potential, so thin rubber gloves, lots of newspaper, and a roll of paper towels are suggested for first-time users.

The market for printers is headed away from cartridges and toward imbedded ink supplies, which is simply an OEM built-in method of using bulk ink in the printer. Epson was the first manufacturer to produce a model, with HP also getting into the market. Brother has just released their own model in India, but not yet available in the U.S. The technology is still leading-edge. The prices for embedded-ink printers are presently slightly higher than standard models, but we should have been expecting that

David Kazmer *is a member of the SCV Computer Club, California (www.scvcomputerclub.org; scvcomputerclub (at) gmail.com).*

This article was published in the February 2016 issue, ***Dataline****, and is reproduced by permission.*

Shop at Amazon Smile

and Amazon will make a donation to the Danbury Area Computer Society, Inc.

amazonsmile
You shop. Amazon gives.

Directors' Notes*, Cont. from page 3*

ment to the DACS by-laws. The draft was discussed and *Jim* and *Dave* will form a committee to refine the amendment. Some necessary revisions were pointed out by other board members.

Programs

o Richard C. will follow up with Best Buy to determine whether they can supply a speaker for April. If not, *Dave* will approach the Danbury Library's genealogy speaker. Another possibility is to use a video from APCUG's YouTube channel.

o Andy is working on arrangements for John Patrick's presentation at the May meeting.

o Bert reported that the owner of Computer Troubleshooters (Brookfield), Rick Van Akin, is willing to speak and will follow up with him for the June meeting.

- Jim reported that 17 tickets have been sold or given for the 25th Anniversary Dinner. The event has been publicized to the membership by e-mail, and non-members whose e-mail addresses are known will also be solicited.
- Renovation of the Resource Center

o Dave is awaiting a reply from Russell's Carpet re possible donation of used commercial carpeting that is still in usable condition.

o Andy, Dave, and Richard T. are available to do painting.

o Other needed renovation tasks were discussed.

- Andy contacted the director of Ridley-Lowell about their interest in supplying interns to work with DACS. The prospects were not encouraging but Andy will speak with her again.

New Business

- Election of Officers

o President: Dave Green was nominated by Jim Scheef and seconded by Richard Corzo. No other candidates were nominated. A vote was taken and Dave was elected to the position, 4 votes in favor, none opposed.

o Secretary: Bert Goff was nominated by Richard Corzo. No other candidates were nominated. A vote was taken and Bert was elected to the position, 4 votes in favor, none opposed.

o Treasurer: Bert Goff was nominated by Richard Corzo. No other candidates were nominated. A vote was taken and Bert was elected to the position, 4 votes in favor, none opposed.

- Snacks for April general meeting: *Bert* volunteered to make arrangements.
- Andy moderated a discussion of issues in the relationship between DACS (specifically the Video workshop) and Charter Communications.
- Andy reported on a meeting of himself, Bert, Sean Henderson, and Mike Kaltschnee with the Mayor of Danbury. The main topic was how DACS could support the Mayor's technology goals for the city. Other subjects discussed included a technology hardware show, promotion of social media, and plans for universal, low-cost internet access for Danbury

The meeting was adjourned at 9:30 pm

. —*Richard Teasdale*

Workshop Notes, *Cont. on page 6*

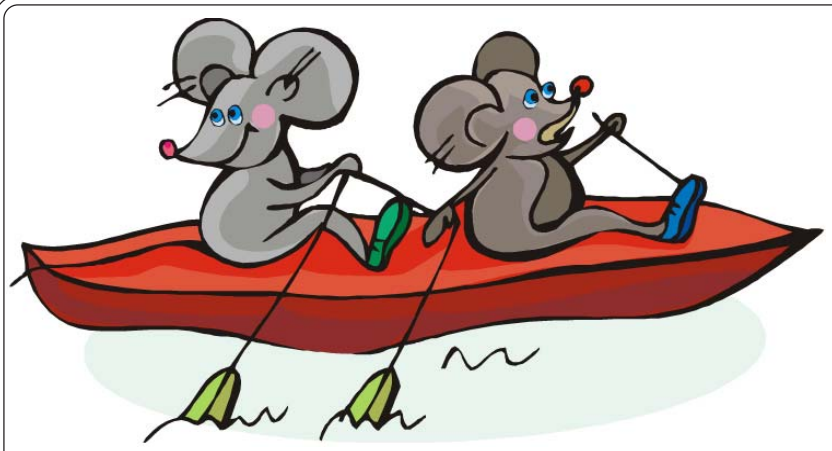
I am not really a gamer, but I was curious enough to try a pinball game I found in the Apple TV App Store. It wasn't clear to me how to work the flippers with the remote. I tried tapping and clicking on the touch surface, but eventually discovered that I could flip the right flipper by swiping right and the left flipper by swiping left. I eventually found a settings panel in the game that explained this, and there was another panel in case you bought an MFi (made for iPhone) game controller. It also turned out that the same game showed up on my iPad so I could play it there.

I am gradually being won over by the new Apple TV. I knew about the Plex TV app that's available on iOS and other devices like Roku and TiVo. It allows you to browse and view videos and other media that reside on your computer. I also discovered a nice app called Tangent for browsing your Instagram feed. I would just like to see a few more apps that are available on the Roku but not yet on the Apple TV, such as the Spotify streaming service. If you subscribe to Apple Music, that is of course available on the new Apple TV.

—*Richard Corzo*

dacs.doc

Danbury Area Computer Society
65 Legion Rd
New Milford, CT 06776



When you come to the next DACS meeting, why not bring a friend?

Voice for Joanie

Help give the gift of speech
Call Frank Ruiz
at 203 770-6203
and become a
Voice for Joanie
volunteer
www.voiceforjoanie.org

Future Events:

April 5 Genealogy Software	**May 3** John Patrick
June 7 TBA	**July 5** TBA