

President's File

HERE WE ARE in month two of the HDACS transition. This may seem like a sudden change, but the board has been working on this for well over a year. Please don't look on this as the end of DACS. On the DACS side, we are shedding a heavy organizational structure to become more manageable. The corporate structure was



needed when we had hundreds of members. Now, our goal is to transition into a more flexible group as part of the Danbury Hackerspace.

Early in our planning, the board realized that we would need to refund unused dues. DACS is not a seasonal organization and people can join at any time of the year, so no matter when we pick, various members will be at different points in their "membership year". Once we reached an agreement with the Hackerspace, we stopped accepting dues payments, in January of this year, and picked March 31st as the last date of membership in DACS. Refunds will begin next week and will be completed by the end of May. Even with less than a hundred members, it takes time to write the checks and address envelopes. Hopefully those who paid using PayPal will be able to receive their refunds the same way, either into your PayPal account or as a credit to your credit card. We're working out the details.

Meanwhile we continue to plan our monthly meetings at Danbury Hospital. John Patrick returns this month; don't

—Jim Scheef, President

IN THIS ISSUE

DIRECTORS' NOTES	2
HELP LINE	3
BUCKY MILAM CARTOON	4
REVIEW: CRYPTOCURRENCY & BLOCKCHAIN	4
PREVIEW: JOHN PATRICK ON HOW ATTITUDE	
COULD CHANGE THE FUTURE	5
NOTES ON THE DACS TRANSITION	7
WORKSHOP NOTES	7
MAY CALENDAR	7
SECURING ANDROID	8
MUSE SCORE COMPOSITION FREeware	10
FUTURE EVENTS	12

Directors' Notes



Danbury Area Computer Society (DACs) Board Meeting Minutes Wednesday, April 4, 2018

The meeting was called to order at 7:07pm by the DACS President, Jim Scheef

In attendance were Board members Richard Corzo, Dick Gingras, Bert Goff, David Green, and Jim Scheef (President). Andy Woodruff was not present. Also present was Dave Mawdsley. The minutes were taken by Richard Teasdale.

(Names in italics denote responsibilities for actions.)

- The Minutes of the 3/13/2018 Board Meeting were accepted.

Reports

- Treasurer's Report:
 - o The March Treasurer's report was not complete at the time of the meeting. Bert indicated that it would be ready by early next week. The major expenses during the month were fees for renewal of web hosting and the SSL certificate. Repayments of unused members' dues will begin during the second half of April. To assist with this, Jim will provide an export of member expiration dates from CiviCRM.
- The Membership Report was provided by Jim.
 - o 69 paid-up members and 20 in-grace, for a total of 89. An estimated 40 people attended the April general meeting.
 - o The lack of a need for continued registration at general meetings was discussed. It was agreed that, with the exception of taking headcounts, registrations should be discontinued.
 - o It was agreed that the weekly e-mail should include a link to Meetup but should not refer to the newsletter.
- Press Coverage Report:
 - o David reported that the Press Release for the April general meeting went out as usual.
 - o The composition and timing of press releases were discussed. *Dick* agreed to assist Dave with composition.
 - o *Dick* recommended that the "mass mailing" appearance of the page footers on cover letters that go to press release recipients be changed.
- Webmaster's Report:
 - o Richard reported that the Join/Renew page on the website has been replaced with

Membership Information

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Postmaster

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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*)

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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
Linux	Linux Workshop
Desktop publishing and website design	Web Site Design Workshop
Mac and iPhone/iPad/iPod touch	Apple Workshop
Online/small business	Online Business
Single board computers	Single Board Computers
Smartphones & Tablets	Mobile Devices Workshop
Social media	Social Media
Video capture/processing	Video
Windows	Windows Workshop

a link to the Meetup page. Also, all newsletter pdf's stored on the site are now immediately accessible; the 3-month waiting time has been eliminated.

Old Business

- Programs:
 - April: The timing of the break was discussed and it was agreed that a break some time during the presentation, rather than at the end, is best.
 - May: John Patrick will speak about Home Automation. *Dick* will add missing contacts to CiviCRM in order to maximize press coverage of the event. Bert reported that this year, John will donate only a limited number of free copies of his book on the meeting topic. The Board agreed to raffle off at least some of the books at the meeting; *Dave* will issue tickets at the door.
- Preview: *Bert*.
- Review: *Andy*.
- Bert will provide snacks, and Richard T will provide beverages.
 - June: Brian Jackson will speak on the subject of Net Neutrality.
- Dave reported that he has spoken to the Hospital administrators and we are approved to use the Robilotti room.
- Preview: *Richard*.
- Review: *Jim*.
 - July: The concept of an intelligent assistants shoot-out or "shout down" was discussed. 3 assistants would be targeted for the competition: Alexa, Siri, and the Google Assistant. Since people familiar with each one would need to participate, *Jim* will send invitations to the DACS membership list, and ask Mike Kaltschnee to do similar at the Hackerspace.
- Cleanup of the Resource Center (RC):
 - Ideas for disposal of various DACS computing assets were discussed.
 - *Jim* will check with Mike Kaltschnee whether there is an interest in continuing to use the RC.

New Business

- Dissolution of the DACS Corporation:
 - Jim intends to contact the CT Secretary of State for guidance about dissolving the corporation.
 - A plan for shutdown of CiviCRM is needed.
 - Jim has removed some of the DACS forwarding e-mail addresses; others remain to be removed.
- *Richard* will remove the Google Voice phone number from the website. *Richard T* will contact Allan Ostergren to remove it from the newsletter.

The meeting was adjourned at 8:52 pm.

—Richard Teasdale

April Meeting Review

Cryptocurrency & Blockchain

By Richard Corzo

ON SOMEWHAT SHORT NOTICE longtime DACS friend and multiple past presenter Mike Kaltschnee gave us an informative presentation on a current topic of keen interest, cryptocurrency and the blockchain technology on which it's based. Mike is co-director of Danbury Hackerspace. We've been hearing about the money people have made (and lost) by investing in cryptocurrencies, so it was timely and welcome to hear what this technology was all about.

Bitcoin is probably the most well-known cryptocurrency. It was developed to be a decentralized cash payment system that was not controlled by a government or other central authority. Although in the past a currency might have been backed by gold, government-issued currencies can be manipulated by their governments to pursue their economic goals. Bitcoin and other digital cryptocurrencies are "mined" by solving complex algorithms which require huge amounts of computing power, thereby limiting the quantity of cryptocurrency created.

Mike showed a chart of Bitcoin's value since 2012 starting at a value of a few hundred dollars, peaking at above \$19,000 last year and dropping back down to around \$8000 at the time of the presentation. Other cryptocurrencies of note are Ethereum, Ripple, Bitcoin Cash, and Litecoin. There are now futures and shorts for those who want to bet on cryptocurrencies. Some early investors are now billionaires, but the investment is incredibly risky.

There is a limit of 21 million bitcoins, with 12 million currently in existence. Cryptocurrencies like Bitcoin require specialized hardware, mainly GPUs (Graphics Processing Units). You can buy the mining rigs on the internet. Mike tried to give us a flavor of the mining algorithm that solves a mathematical puzzle to generate another bitcoin. It requires a massive amount of electricity, so people have set up rigs in places like Washington State, where hydroelectric power provides cheaper electricity.

Where can you spend bitcoin? Mostly small merchants, but some better known like Overstock, Expedia, and Newegg. Some websites and companies like Wordpress.com, Subway, Reddit, and even Microsoft take them. Exchanges like Coinbase, Binance, Bitstamp, and Livecoin

are places where you can buy cryptocurrencies, and there are sites that rate the exchanges. You may also want to maintain a digital wallet to store your Bitcoin. You have to make sure you don't lose your PIN or password. The IRS considers virtual currency as property and is taxed accordingly. Your accountant can advise you.

Blockchains are what underlie cryptocurrencies. A blockchain is a digital ledger of records arranged in blocks. The blocks are linked together cryptographically using a hashing function, forming an unbroken chain. The blockchain is a decentralized data structure, accessible by everyone, but immutable by any one party. Blockchain can be used for tracking cryptocurrencies, encrypted messaging, proof of ownership including real estate, and

authenticated voting. Mike showed a nice chart from a website that did a great job of explaining how blockchain works. Blockchain relies on three key components: private key cryptography (to verify identity), a distributed network with a shared ledger (to prevent fraud), and an incentive to service the network's transactions, record-keeping, and security (mining to create coins).

What are the risks of blockchain? It involves a large amount of data that can take hours or days to update. There has to be continued interest in maintaining the blockchain. It may be subject to hacking, fraud, and endpoint vulnerabilities. It depends on the security of the keys, and not losing PINs. There are also risks involved with the vendors and applications involved in handling the blockchain or cryptocurrency.

The original paper on Bitcoin from Satoshi Nakamoto is at <https://bitcoin.org/bitcoin.pdf>. Needless to say, Mike's talk generated lots of audience questions toward the end.



May Meeting Preview

It's All About Attitude - How It Could Change the Future, by John R. Patrick

by Bert Goff

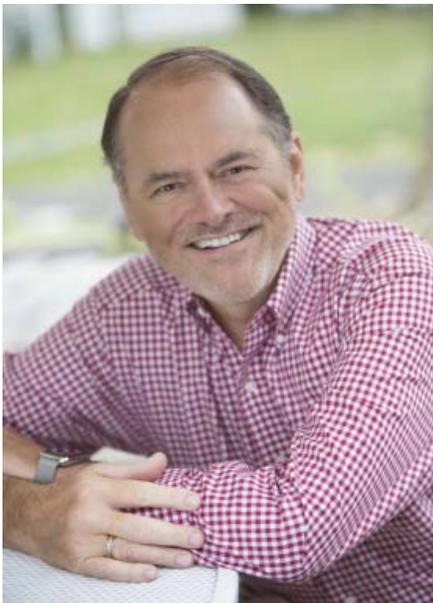
Date: May 1, 2018, 6:30 p.m.
Danbury Hospital Auditorium

Presenter: John R. Patrick

Note: This event is scheduled at 6:30 PM - an hour earlier than usual.

DACS IS VERY PLEASED to have John R. Patrick return for another of his future focused presentations. This time he will share his recent research and his crystal ball looking ahead while weaving a theme through his books covering Net Attitude, Health Attitude, Election Attitude, and his newest, Home Attitude, plus a hint at upcoming Robot Attitude. Please bring your questions on these areas, more details below. John looks forward to responding to questions and a lively discussion with attendees. *Please note that the meeting will begin at 6:30 PM, an hour earlier than usual.*

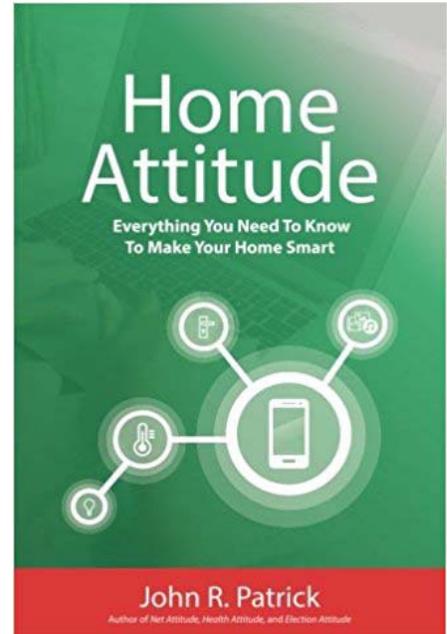
John Patrick believes many opportunities and problems have their roots in attitude. He also believes the solutions and ways forward are based on attitude. In his revealing talk, John will offer a positive perspective on how an attitude change can reap major improvements. These concepts will be emphasized using illustrations from his recent books:



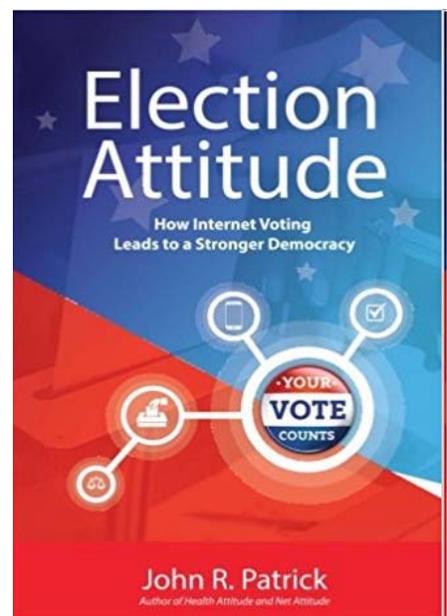
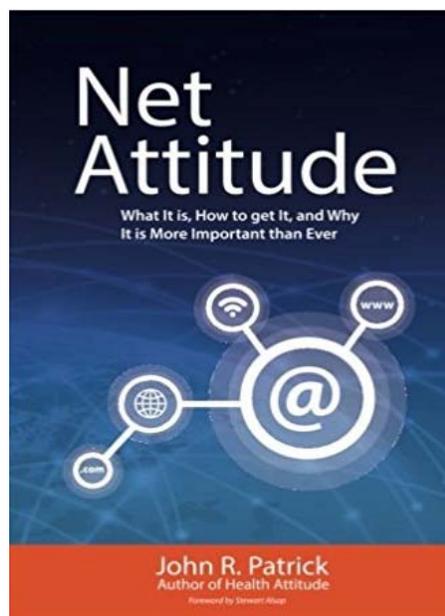
John R. Patrick is president of Attitude LLC and former Vice President of Internet Technology at IBM. John has degrees in electrical engineering, management, law, and health administration.

- We have had the Internet available to us for decades, yet many websites frustrate us and fall short of meeting our rising expectations. Reason: lack of a net attitude. Some websites offer a couple of clicks experience, and at others we click and nothing happens. With a strong attitude, much more is possible, including Internet voting, improved healthcare, homes which mirror our lifestyle, and websites which make our lives simpler.
- Our healthcare system is not affordable, and in a global comparison, is not as safe as it could be. John describes how attitude changes by patients, providers, payers, and policymakers can result in a healthcare system which is safe and affordable. The savings from the attitude changes could easily make it possible to have healthcare for all Americans.
- In each of the elections of 2012 and 2016, 100 million people who were eligible to vote did not. In most cases, the attitude problem was not with the potential voters, but with technologists and election officials who resist change to our 150-year-old voting system. Technology exists to make it easy to vote, and the increased participation can strengthen our democracy.
- Although building materials have changed somewhat over the years, most houses, apartments, and condos work the same way they did decades ago. We flip a switch, turn a door lock knob, or turn the dial on a thermostat. Technology is now available

to automate many things in our homes. By applying a home attitude, it is possible to have a smart home which has enhanced security, reduced energy use, and many conveniences.



Reminder:
this special event starts at 6:30 PM - an hour earlier than usual!
Come ahead for best seating



Workshops

Workshop Notes: May 2018

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: Check dacs.org. **Workshop Suspended**

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: May 16.

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 member gathering sharing ideas on creating an online source of income.

Contact: Steve Harkness (onlinebizsig@dacs.org)

Meets second Monday in Brookfield, or by Webinar.

Next Meeting: Check dacs.org.

Single Board Computers Workshop. Explores small cheap computers like Raspberry Pi, Arduino, Netduino, Beaglebone, and more. Meets at 7:00 p.m. on the 3rd Thursday at the DACS Resource Center.

Contact: Jim Scheef (860-355-0034)

Next Meeting:

Video Workshop. Explores all aspects of video capture and production, including both inexpensive and professional choices for cameras and editing software.

Meets 3rd Thursday of certain months, typically at 7:00 pm at the Resource Center. Check the Calendar for details.

Contact: Andy Woodruff (awoodruff@dacs.org)

Next meeting: Check dacs.org

Web Development/Design Web Development/Design This workshop is looking for a new moderator. Being a workshop leader is a great way to share information, learn new techniques, promote your business, and interact with like-minded people. Extensive web knowledge is not required, but a willingness to open a topic for discussion and enjoy the contributions and feedback from the attendees. Meets every 3rd Tuesday of the month, but repeating date can be changed if needed. **Workshop Suspended**

Notes on the DACS Transition to a Meetup

By Mike Kaltschnee
Co-founder Danbury Hackerspace

It's great to be working with Jim Scheef to transition DACS from a non-profit to a Meetup. Jim deserves a lot of credit for taking the transitional President job: be sure to thank him when you see him, along with the rest of the board for their service!

I was around for the early days of computer groups in the 80's, and one of the greatest things about the meetings were the people I met, the connections I made. We want to continue this with a networking part of each meeting, where people can meet, learn, and share with others.

Another great part of user groups was the Special Interest Groups, or SIGs. We will continue the main DACS meetings at the Danbury Hospital, and also the remaining Special Interest Groups at the Danbury Hackerspace. We host a number of awesome Meetups at the Hackerspace, which are similar to SIGs, and many of them are free and open to the public.

Danbury.IO - Software developer and web developer meetup that covers a variety of topics (www.Danbury.IO).

Danbury AI Group - Monthly meetings on the topic of Artificial Intelligence (www.Meetup.com/DanburyAI).

Danbury Engineers of Robotic Platforms - A group of people discussing and building robots (www.Meetup.com/Danbury-Engineers-of-Robotic-Platforms).

Danbury Inventor's Group - The old group is being brought back with monthly meetings on inventing, prototyping, and intellectual property (www.Meetup.com/Danbury-Innovators-Group).

Tech and Manufacturing Entrepreneur Meetup - A private meetup for entrepreneurs starting, building, and running companies.

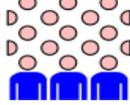
We also run events like the Danbury STEAM Fair that gets thousands of attendees, with classes on topics like 3D Design & Printing, Intellectual Property, Starting a Business, Crowdfunding, and more. You can see the schedule of events online at www.DanburyHackerspace.com/Calendar.

We're also looking for ideas for the future of DACS, meeting topics, speaker suggestions, and more. Feel free to reach out to me by email: mike@danburyhackerspace.com.

I look forward to seeing you at the next DACS meeting!

May 2018

Danbury Area Computer Society

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday																																																	
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Securing Android

By Dick Maybach

YOUR PC REMAINS at home behind locked doors, accesses the Internet through a firewall, and has its software updated regularly, but none of this is true of your Android device. If you haven't thought about its security, you are overdue to begin. We obtain PC software updates directly from the software vendors, e.g. Microsoft issues these for Windows. Google releases monthly security updates for Android, but the only end users that get them are owners of Google Nexus and Pixel devices. All others receive them through their device vendors and usually get them much later, if at all. To see the date of your last security update, go to Settings, then About phone (probably the last item). Figure 1 shows the lower part of the resulting screen. (This is for a Motorola G4 using Android 7; screens on other configurations may differ.)

This shot was taken in November and shows that the latest security update had been made in June, which was not reassuring (although I did receive the September update later in November). Many security professionals believe that keeping software

up to date is the most important security measure, more so than using anti-malware software.

That your Android phone is subject to damage and loss, probably runs on software with known vulnerabilities, and lacks protection from Internet aggressors are beyond your control, but there are things you can do to reduce your risk.

Be sure your phone is protected by going to Settings then Security and enabling screen lock; a password here is more secure but less convenient than a PIN. Don't use None or Swipe, as these make your device fully accessible to anyone who picks it up. I don't care for the Smart Lock features as they unlock your phone for extended periods. Making passwords visible isn't as dangerous as it sounds, as it displays the only last character you enter and only for only a short time. I find it greatly reduces errors when entering passwords. I haven't encrypted my entire device because all my sensitive data is encrypted separately. Figure 2 shows the upper portion of the security screen.

Sanitize your browser favorites, espe-

cially if you sync them with your PC over the Internet. Review all your favorites. (With Firefox, open the menu, select Preferences, then Security, and finally Saved Logins...; for other browsers check the Internet.) Delete any, such as banks, that are sensitive, and the next time you log into one with a password, your browser will offer to save it. Select "Never for this site," or the equivalent.

Use a password manager that stores its data in an encrypted database and use a non-trivial password for it. I like KeePass2Android Password Safe by Croco Apps, as it uses the same database as KeePass, KeePassX, and KeePassXC, which are available for Linux, OS X, and Windows. You can transfer the database file among all your devices. Because it's encrypted, you could sync it using a cloud service, but I prefer not to so expose it. Keep all your sensitive information here, passwords, PINs, account numbers, passport numbers, etc. Figure 3 shows Firefox on a site's login page with KeePass2Android active.

To get to Figure 3, I opened KeePass2 and selected the Adafruit entry. Then when I launched Firefox and opened the Adafruit location, it displayed a keyboard icon in the bottom menu bar. I selected this and then selected the KeePass keyboard, which added a second lower-menu bar. Now placing the cursor in the Username box and tapping the User button (in the second lower-menu bar) causes KeePass to



Figure 1. About Phone Screen



Figure 2. Settings/Security Screen

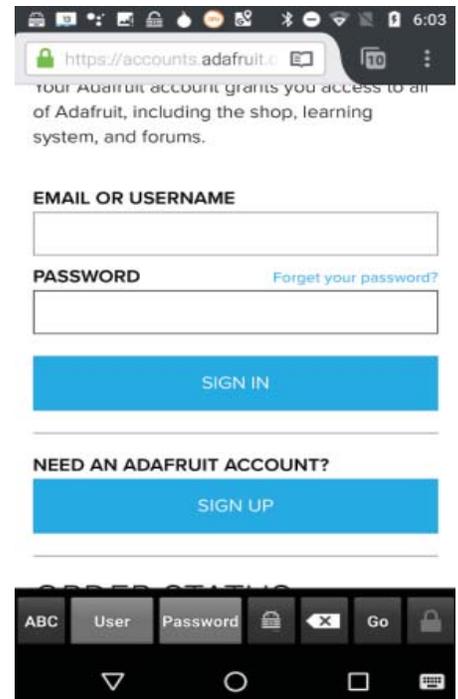


Figure 3. Web Login Page with KeePass2Android Running

enter the name in that box. Then placing the cursor in the password box and tapping the Password button does the same for the password. (Of course, I had previously entered the Adafruit information, its URL, my username, and my

password, in KeePass.) All this takes longer to describe than to do.

Be careful when using public wi-fi, as with readily-available software anyone on the same network can view every packet you send and receive. Fortunately, Tor is available for Android, and you should use it whenever you access the Internet using a public wi-fi hot spot. Install the app "Orbot: Proxy with Tor" from Everyone, which will ask that you install "Orfox; Tor Browser for Android," also from Everyone. Orbot is a proxy that enables access to the Tor network, and Orfox a secure browser that uses Tor. When you use these, a wi-fi snoop will see only encrypted packets and won't know where they are going or from where they are coming. Figure 4 shows the opening Orbot screen. (While we're considering networks, don't ever set your device up as a portable hotspot, which makes it a server.)

Because of its vulnerability, an Android device is not a safe place to store data. Don't keep anything in it, unless its encrypted, that you wouldn't write on a post-it stuck to the roof of your car. Encrypt anything sensitive, such as passwords and banking information, and as soon as it's convenient, copy your new data to a PC. Although it's not a security issue, be cautious about purchasing copyrighted items encumbered with Digital Rights Management (DRM) features. Some can be used only on a single device, which means if your phone is lost or damaged, you also lose these. See my December 2017 article (available at <http://www.bcug.com>) for sharing data among Android devices and computers.

Every app you install adds potential security vulnerabilities, and many consume

resources even when they appear not to be running. Their icons clutter your screen, making it difficult to find other apps, and their files fill your storage space. Your device can become less usable with each visit to the Play Store. Google is a large, technically competent organization, with procedures that ensure that Android is a high-quality, secure product. However, this isn't necessarily true of app developers, whose competence is unknown. Google performs security audits on all Playstore apps, and your risk of installing malware is just 0.05 per cent if download apps from only there, compared to an overall infection rate of 0.71 per cent. That an app is popular doesn't mean it's well-designed or safe. Take a disciplined look at your app collection and remove all you don't use regularly. This is one of the most important security measures you can take.

Some apps add considerable risk. For example, some checkbook programs require linking to a bank account, and anyone now accessing your phone could potentially also access your bank account. If you really need this feature, you must secure your phone with a secure password, e.g. one that is long and difficult to guess, which of course will make using the device less convenient.

If you keep your Android data synced with your home computer, you can be casual about backing it up. Nevertheless, backing up may be good insurance if it also backs up your installed apps, since if you lose your phone, you could reinstall them on a new one.

Be sure Google Play Protect is operating by going to the Google Play Store app, selecting the menu (the icon at the left of the menu bar), and then Play Pro-

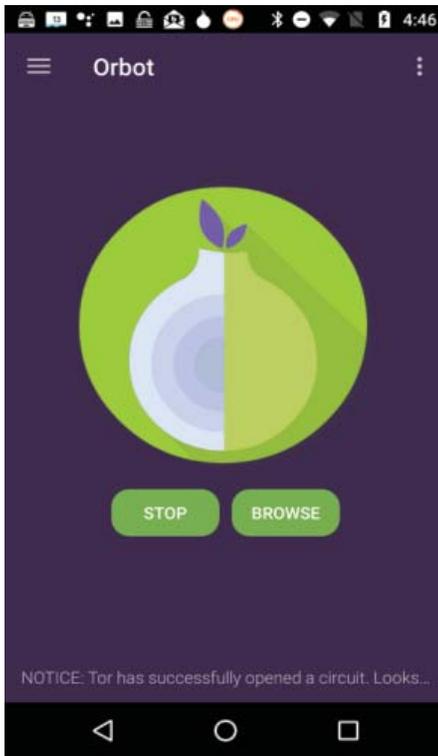


Figure 4. Orbot Opening Screen.

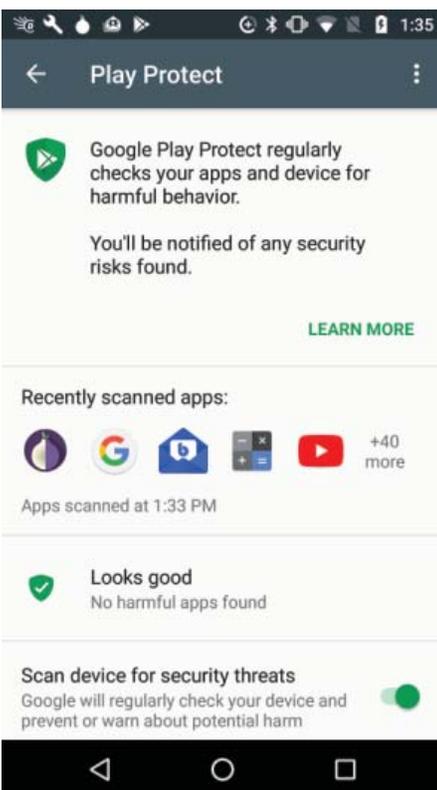


Figure 5. Google Play Protect Screen.

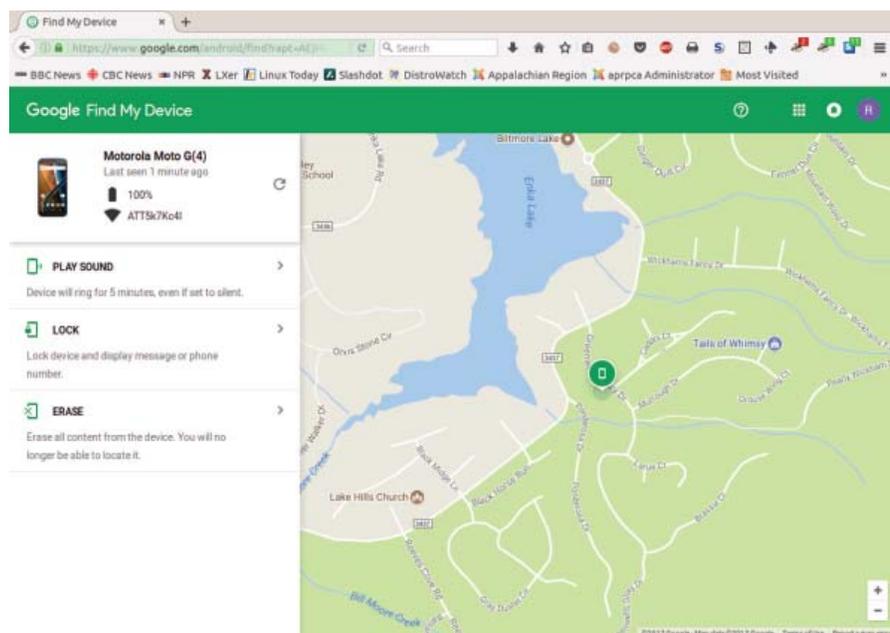


Figure 6. Google Android Device Manager

text; the Scan device for security threats item should be turned on. See Figure 5.

This checks apps as you download them and periodically scans your device for threats. I don't think other anti-virus programs are needed. Android is less vulnerable than Windows, although "less vulnerable" is not the same as "invulnerable." If you keep your device synced with your home PC, and protect any sensitive data with encryption, you haven't much at risk. That an anti-virus vendor would like to sell you an app doesn't mean you need one.

If your device is lost, you can use Google's Android Device Manager service to help you find it and to safeguard its data. Go to <http://www.google.com/android/devicemanager> and log in with your Google password. The eventual result will be the screen in Figure 6 (*next page*).

This shows you the location of your lost device and gives you the options to have it make some noise (in case its misplaced), lock itself (if you expect to get it back), or wipe its memory (if you think it's gone forever). The last two won't get your phone back, but they will prevent whoever

has it from using it or accessing your data. Note however, there is no way to undue the last.

With these few simple precautions you can significantly reduce the risks of using your Android device. For more information on Android security see <http://source.android.com/security/>.

DICK MAYBACH is a member, Brookdale Computer Users' Group, NJ. This article was published in the January 2018 issue, *BUG Bytes* (www.bcug.com; [n2nd \(at\) att.net](mailto:n2nd@att.net)), and is reprinted by permission for APCUG member groups.

Sound Technology

MuseScore: Music Composition Freeware

By JOHN KROUT

MUSESCORE IS A FREEWARE project hosted on SourceForge. It is available for Windows 7 and up, MacOS 10.7 and up, and Linux and BSD. The URL is <https://musescore.org/>.

MuseScore uses standard music notation, i.e., treble clef, bass clef, time signature, key signature, quarter notes and so forth. I had a thorough and long-lasting education in standard music notation in grades 2 through 12, so the notation is still familiar to me, decades later.

When I first downloaded and installed MuseScore in 2012, I had one particular use in mind. I had a brand new smart phone, an iPhone 5, and I wanted to compose a ringtone, specifically the fight song of Washington-Lee High School in Arlington, my alma mater. The song has been in use for a very long time (W-L started playing football against George Washington High School in Alexandria in the late 1920s). I performed it for two years in the W-L marching band back in 1969 and 1970, and I have remembered the melody ever since.

Broadly, MuseScore works somewhat like a word processor: you can write music, save and retrieve music files, do edits, cut & paste, copy & paste. You can print your sheet music.

Additionally, MuseScore will play the music, and it lets you assign voices to notes. It comes with a considerable assortment of instrument and vocal sound files to use as voices. MuseScore can play the resulting arrangement through your computer speakers. It can also record the arrangement to an MP3 file, which is precisely the file required for Android ringtones, and can record to the M4A format used by iPhones; you must change the file extension to M4R for an iPhone to recognize the file as a ringtone file.

I composed the W-L fight song from my memory. It involved about 8 measures. I created a bit of harmony, and assigned a flute voice, a trumpet voice, and a tuba voice. Note that, for a ringtone, the low frequencies are weak due to the tiny size of speakers in the smart phone. It sounded

great on the computer speakers, but the tuba part sounds very weak when the phone rings.

I stay in touch with a dozen or so of my 665 high school classmates via phone. I assigned the ringtone to their incoming calls.

In 2017, I found another interesting use for MuseScore.

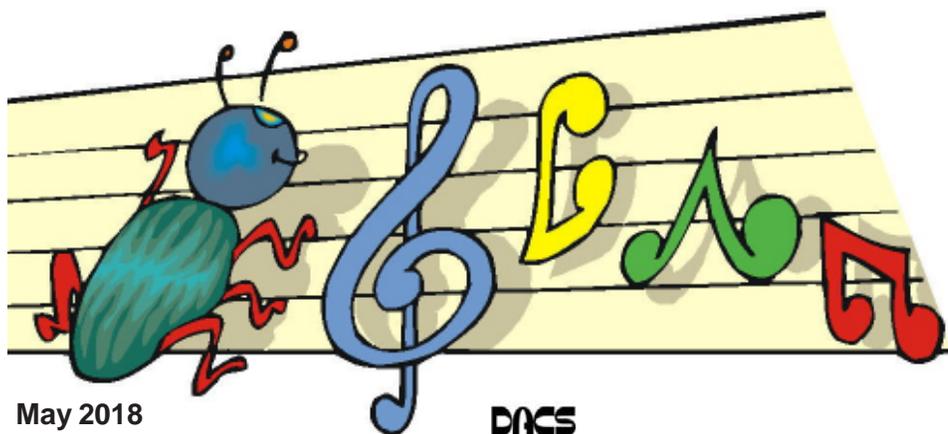
My youngest child's high school has for several years offered a crowdsourced choir performance in the annual December choir concerts. It is called Community Choir, and its members are teachers, parents, alumni, and anyone else who wants to sing. No course credit or academic grades are involved, just three evening rehearsals and a performance in front of a big audience, 500+, mostly parents and siblings of current choir students and some families of the Community Choir adults. The school's choir director chooses three songs for the Community Choir to perform. At the first rehearsal, he hands out the sheet music for the volunteer choir to take home.

In December 2017, I volunteered for Community Choir, for several reasons. First, I missed performing music. Second, after all my experiences in school playing piano, clarinet, oboe and guitar, I had not tried singing since elementary school; over the decades I realized that singing was the one skill I missed the most. Finally, my daughter was about to relocate to Georgia with her husband, so it was my last chance to surprise her.

When the director handed out the sheet music, I decided I would do what I had done for most of my K-12 years: take it home and practice. But, unlike with musical instruments, I had no idea how to hit the correct pitch for a note on the page.

This is where MuseScore came in handy.

I transcribed my parts in the sheet music into MuseScore. The first two songs were about 92 measures each, with a lot of repetition that could be realized fairly rapidly through copy & paste. That



transcription process alone made me very familiar with the structure of each song. Then I assigned a MuseScore male voice to the notes in each song. I did not include the lyrics. I just wanted to hear the notes, so I could hit them accurately for practice.

MuseScore played each song, and I sang along by reading the lyrics in the original sheet music.

It worked. Practice made me a lot more confident that I could perform the material.

The school is a combined program including grades 6 through 12, and I attended all the concerts while my daughter was a student there during 2004-2011. For most of that time, I led a volunteer team of parents that shot photos, video and recorded audio of the concerts, and made DVDs and audio CDs of the concerts for music department fundraisers. After my daughter graduated, I continued to attend the concerts simply because, with free admission, they are the best entertainment value in town.

The final song was the Hallelujah Chorus from Handel's Messiah. It is both more complicated and more familiar. Roughly 116 measures, I have heard it performed every December at the school since 2004. It too is crowdsourced but on a grander scale. The choir director not only includes the Community Choir and all high school choir students, but also invites all choir alumni/ae to come up and sing, so the group is enormous, literally overflowing the stage.

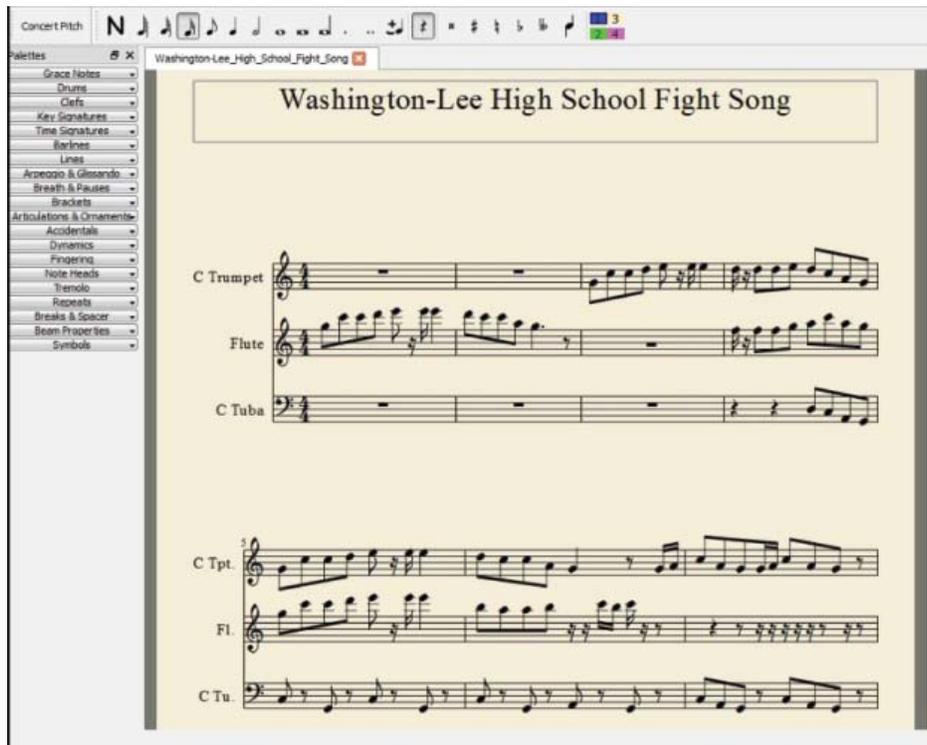
My first public music performance since 1971 happened on December 19, 2017. It was fun.

This type of practice at home has its limits. I did not transcribe the other voice parts, just the one I was trying to learn. That is important. One of the songs was a round (AKA rondo), where the entrance timing is different for soprano, alto, tenor and bass. Hearing all the parts is useful for practicing the precise rondo entrance points. Likewise, I did not transcribe the accompaniment. For two of the three songs, that was a piano part.

All the parts and the accompaniment were on the sheet music I was given. I was not sure I had time to transcribe all the parts into MuseScore. Maybe next year.

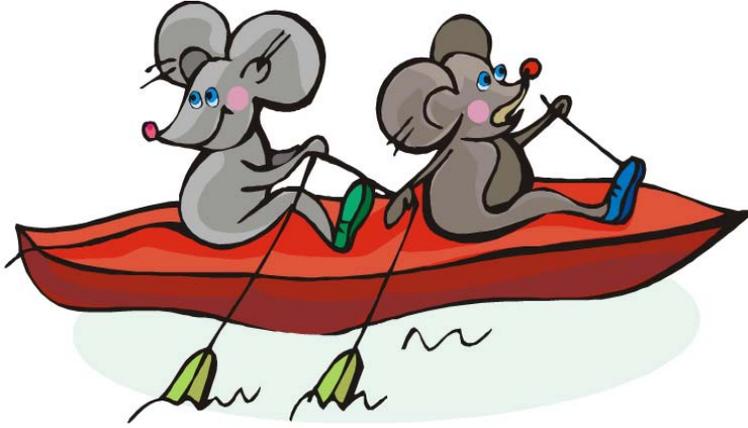
JOHN KROUT is a former president of WAC, one of the predecessor organizations of PATACS. John lives across the street from a house once occupied by a military family including a young Jim Morrison, who later became the singer for the Doors. One of John's favorite photo subjects is performing musicians. Among those musicians is Jorma Kakounen of Jefferson Airplane and Hot Tuna, who once visited John at home. Jorma graduated from Wilson High School in DC; his dad was a career diplomat

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June 5

Net Neutrality
Brian Jackson

TBA

TBA