The Databus

Newsletter of the Dayton Microcomputer Association, Inc.

Volume VI, Number 8 (New Series), August 2016

—Contents—

40 ANNIVERSARY
1976-2016

DMA ▶

Post Office Box 4005
Dayton, Ohio 45401
Telephone:
(937) 222–4DMA
(937) 222-4362

Visit us at:

DMA1.org

Established in 1976 (we're celebrating our 40th anniversary all this year), DMA is a group of Dayton–area professionals and hobbyists in the field of computing and information technology. General membership meetings are usually on the last Tuesday of each month. DMA has a number of Special Interest Groups (SIGs) in areas ranging from digital investing and genealogy to the Linux operating system. Each SIG meets according to its own schedule. DMA is a member of the Association of Personal Computer Users' Groups (APCUG) and the Affiliated Societies Council (ASC). Click on any of the logos—including our own (top left)—to go to that organization's Web site.

ASC

apcug
An International
Association of Technology
& Computer User Groups

Submissions …

The Databus welcomes compliments, complaints, suggestions, and especially articles. We can accept articles in ASCII, or as attachments in Microsoft Word or Works, Open Office Writer, Word Perfect, or, yes, even WordStar (a word–processing program that goes all the way back to the early 1980s!). We can now also accept PDF files. Send articles to:

Editor@DMA1.org

All articles are subject to editing for spelling, grammar, usage, and space. Always retain a copy of your work, as The Databus cannot be responsible for loss. When articles are of roughly equal quality, those by paid–up DMA members usually receive preference.

All registered trademarks, for example: DMA, Adobe, Foxit, iPhone, Linux, or Ubiquiti, are the property of their respective owners. However, the Registered Trade Mark symbols (® or ™) have been omitted for better readability. The Editor occasionally inserts comments into articles. Such comments are usually in square brackets [like these] and are always preceded by the phrase: "Editor's Note."

The Databus is written and published by volunteers. We do not give professional advice on computer, network, or software installation, troubleshooting, security, or repair. If you need expert assistance, please seek the services of a competent professional.

August Meeting: *7:00 P.M., Tuesday, 26 July at T. J. Chump's, 7050 Executive Boulevard, Huber Heights (next door to Meijer's —click here for a map).*
Come at 6:00 P.M. if you want dinner.

Virtual Private Networks:
How They Work (for you)
...Presented by Gary Turner

VIRTUAL PRIVATE NETWORKS (VPNs) utilize a technology that creates a secure network connection over a public network such as the Internet or a private network owned by a service provider. Large corporations, educational institutions, and government agencies use VPN technology to enable remote users to connect to a private network securely. A few ways to use a VPN include:

- Access to your company's network while traveling;
- Access to your home network while travelling;
- Shield your browsing activity while using a public Wi-Fi connection;
- Access your Netflix, Pandora, Hulu, etc. accounts while traveling in countries where they are restricted;
- Downloading files faster through Bit-Torrent and other legal torrents.
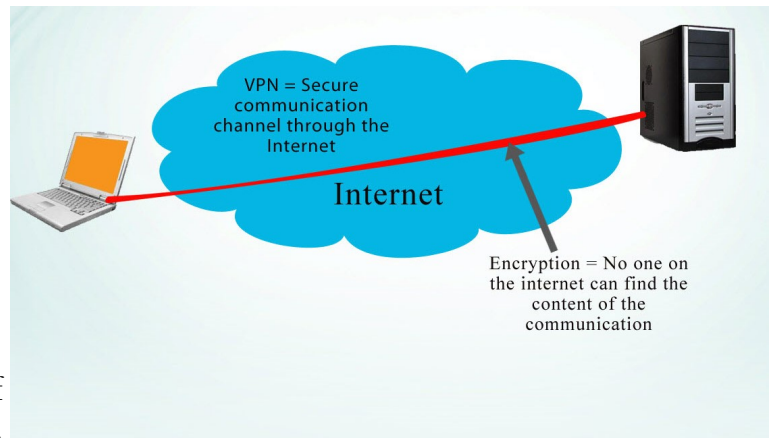
GARY TURNER is a charter member of DMA, has served as President many times, and as leader of several SIGs, including Amateur Radio and Linux. He has organized the Linux Installfests. Gary's contributions have been interwoven with the progress of DMA from its very beginning.　　　　　... TR

No Charge—Free Parking—Guests Welcome—Bring a Friend

Minutes are usually published almost *two months* late. This is because the Minutes for, say, the July Board meeting must be approved by the Trustees at the following month's meeting—in this case, early August. The corrected and approved July Minutes will thus appear in this (August) issue, published toward the end of the month. The next Trustees' meeting will be on **12 September 2016** (the 5th is a holiday) at . Trustees' meetings begin at 7:00 P.M. and are open to all DMA mambers.

MINUTES

DMA Board of Trustees—Meeting of Monday, July 11, 2016

[Editor's Note: The usual date for Board meetings is the first Monday of each month. However, July 4th was a holiday.]

CALL TO ORDER

The meeting was called to order at 6:23 P.M. by Debra McFall. **Trustees present**: Martin Arbagi, Gary Coy, Pat Flynn, Debra McFall, Eric Ottoson, Ed Skuya, Gary Turner, Jim Ullom. **Excused:** Ken Phelps. **Others Present:** Glady Campion.

OFFICERS' REPORTS

President—Debra McFall

Tonight's meeting needs to be brief. The restaurant has informed us it's closing early.

Vice President—Gary Coy

No report.

Secretary—Glady Campion

Glady Campion presented the Minutes for the previous board meeting. Gary Coy moved the Minutes be accepted as corrected. Eric Ottoson seconded and the motion passed.

Treasurer—Pat Flynn

Pat presented financial reports for the past month.

COMMITTEE REPORTS

Audit—Glady Campion

The next review will be about transactions for 2016 and held sometime after January 1.

Account Balances:	
FifthThird Checking	$12,637.33
FifthThird Savings	11,221.74
Paypal	860.54
Everbank CD	5,000.00
Dayton Foundation	+78,038.60
Total	**$107,758.21**

Bylaws Review—Eric Ottoson

Eric tabled discussion on the bylaws changes until board members have taken time to review them.

Funding—Open

No report.

Membership—Glady Campion

As of last month's General Membership meeting, we had 71 Regular, 5 Associate, 0 Student, and 2 Life members for a total of 78. Attendance last month was 35 and the 50/50 brought in $28.

Net Administration Team—Ken Phelps, Gary Turner

No problems to report.

Nominations—Ed Skuya

Ed currently has five nominations for the three Trustee positions: Michael Brooks, Glady Campion, Gary Coy, Catherine Devlin, and Debra McFall. Eligibility still needs to be checked.

Programs—Jim Ullom

- July: Mark Camden will share his expertise with the Raspberry Pi and Scratch programming.
- August: Gary Turner has offered to do a presentation on Virtual Private Networking.

Publications—Martin Arbagi

Martin posted a DATABUS issue for June.

Publicity—Ed Skuya, Gary Coy, Debra McFall, Pat Flynn

Ed continues his efforts in posting to the *Skywriter* and *City Paper.* Jim Ullom provided contact information for Cox media.

OLD BUSINESS

Records Committee—Debra McFall, Glady Campion, Eric Ottoson, Wynn Rollert, Martin Arbagi

Debra will schedule a meeting.

Wright State Archives—Martin Arbagi, Glady Campion

Glady will talk with Martin about how to remove/block mailing addresses and roster information before sending the Databus collection to Wright State.

Next Board Meeting

The next Board Meeting will be 7 P.M. on Monday, August 1, 2016 at the Hustead Firehouse, 6215 Springfield Xenia Road (Route 68), Springfield OH. Feel free to join us for dinner, 6 pm at the Golden Jersey Inn, 6880 Springfield Xenia Road, Yellow Springs OH, about one mile south of the Hustead Firehouse.

Summer Picnic—Martin Arbagi

The picnic is scheduled for Saturday, August 27 at Indian Riffle Park, shelter #3. There will be electric power, but no Clearwire internet. Tickets are still $5 and available from Martin, Glady, or Pat. Suggestions for activities included geocaching and drones.

NEW BUSINESS

Dayton Mini Maker Faire

The event will be held at Carillon Park, from 9:30 A.M. to 5:00 P.M. on Saturday, July 16, 2016. Sponsored by *Make* magazine and several local organizations, there will be nearly fifty technology-related exhibits. Our own Dayton Diode will be burning fractal designs onto wood using high voltage.

ADJOURNMENT

Jim Ullom moved to adjourn at 6:55 P.M. Gary Coy seconded and the motion passed.

*Respectfully Submitted,*

Glady Campion,

Secretary

# A Typical DMA Trustees' Meeting

Nominations for the Board of Trustees are now open! See Ed Skuya or any current DMA Trustee or officer at the meeting this Tuesday! Requirements: you must be at least 21 years of age and a DMA member for one year.

Have a business card? Are you a DMA member?

ANY PAID–UP MEMBER of the Dayton Microcomputer Association is entitled to a *free* business card–sized advertisement in THE DATABUS. Send a good–quality image to Editor@DMA1.org, or give your business card to **Martin Arbagi,** the Editor, at any DMA meeting. We can embed a link to your Web site (if you have one) in the image of your card. Under weird IRS regulations, your site may not include discount coupons for DMA members, although discount offers may be included in the advertisement *itself.* See the example below right, which includes a member discount.
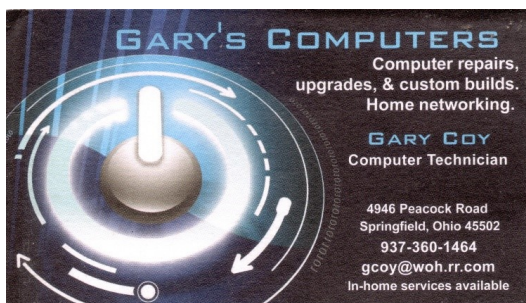
10% Discount to DMA members!
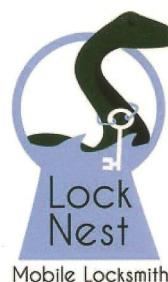
WANTED: Typist (on PC)

Contact: **WYNN ROLLERT** (DMA Member)

ACCURACY: Important

(937) 256–1772 … at any time

SPEED: Not as Important

Back to Basics ...

—PDF File Type: What and Why?—

By Phil SORRENTINO, Contributing Writer, The Computer Club, Florida
http://scccomputerclub.org / Philsorr.wordpress.com
philsorr (at) yahoo.com

THE PORTABLE DOCUMENT FILE (.pdf) file type has been around since 1993, when Adobe Systems made the specification available to all, free of charge. However, .pdf was initially a proprietary format, controlled by Adobe, until it was officially released as an Open Standard in 2008. Since then it has been controlled by a committee of volunteer experts who are part of the International Organization for Standardization. The .pdf file type was developed as a way to share documents that would include text, formatting, and inline images, among computer users of different types of computers from different companies. (Apple, Dell, IBM, Sun—anyone remember DEC?). The .pdf standard endeavors to present documents in a consistent manner that is independent of application software, hardware and operating system. The .pdf file type, by its very nature, and name—portable—was intended to be a file that could be a complex of text, graphics and so on, and be easily shared by people that didn't have the same hardware or software. So, the real benefit was that the file would look exactly the same when displayed on all different types of computer systems.

Each .pdf file encapsulates a complete description of a document, including text, fonts, graphics, forms, annotations, outlines, and other information needed to display the file. .pdf files can also contain links, buttons, audio, video, and business logic; and where security is important, they can be password protected. So a .pdf file can be a pretty large one. (When I was almost finished with this article I saved it as a .doc and a .pdf. The .doc was 36KB, and the .pdf was 106KB. I also looked at a PowerPoint presentation, 127 slides with lots of graphics; it was 11.5MB saved as .ppt, and 32.4MB saved as .pdf. Finally, I saved a fairly large Excel spreadsheet (125 rows, with columns that went out to column AT, with quite a few calculations within the spreadsheet), which was 157K saved as .xls and 475 KB as .pdf. So from that limited testing it looks like the .pdf will be about 3 times the native applications size.)

.pdf files can easily be viewed on your computer using a free PDF Reader from Adobe called "Acrobat Reader DC." A mobile "Acrobat Reader DC" App is also available, free, for your Smartphone or Tablet. And for Windows 10 users who are also Microsoft Office owners, PDFs can now be created from the Office Apps: Word, Excel, and PowerPoint. (By the way, you may have seen a reference to an .xps file type along with .pdf. The .xps file type is Microsoft's alternative to .pdf. It was introduced with Windows Vista but never attracted much of a following. Of the two, the .pdf format is the preferred choice.) [EDITOR'S NOTE: Native conversion (that is, conversion from within the parent program) of Microsoft Office files to .pdf format was available long before Windows 10!]

At this point in computer evolution, .pdf files can be opened by just about every major operating system (Windows 7, 10, OS X, iOS, Android, Linux) and can be used by many different applications. In addition, the majority of modern web browsers (Chrome, Edge, and Firefox) allow .pdf files to be read without the use of an external application, making them easy to use in web applica-

(Continued from page 8)

tions. (Though the literature doesn't give these internal PDF readers much of a good review; and advice on how to replace the internal PDF reader is easily found.) Also, Mobile Operating Systems (Android, iOS) are including PDF readers, making the .pdf format almost universally useable. (This can't be said of any other file type; even though we all may be familiar with Microsoft's Word format (.doc), this format can only be used by a limited number of applications.)

There are hundreds of file types on a typical computer. You can inspect and change the association between a file type and the program that uses that file type, using the Control Panel. (Remember, "Default Programs," followed by "associate a file type or protocol with a program?" So, you have to have a program on your computer that knows how to use the .pdf file type. If you are having trouble opening a .pdf document, you probably don't have a program that knows how

APCUG's 2016 International Technology Conference
Palace Station Hotel and Casino, Las Vegas
October 21, 22 & 23, 2016
For more information, please go to: www.apcug2.org

... or click anywhere
on the graphic above!

to use the .pdf file type, on your machine. If this is your situation, consider getting the free Adobe Reader, from the Adobe website, http://www.adobe.com

Normally, .pdf files cannot be modified by the user, making these files perfect for use by an "end user," *i.e.,* someone who needs the content of the file without being able to modify the file contents. In other words the file was not intended to be changed once it was created or "published." So, originally there was no way to change a .pdf file without using the very expensive PDF Creator software from Adobe (or less expensive PDF creation software from Foxit). How-

Click anywhere on the DMA Calendar (below) to go to the original at DMA1.org.

Dayton Microcomputer Association
Events for September 2016
For additions or corrections, contact Dave Lundy
For details, such as location and contact info, please select Text type display.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 Genealogy SIG *postponed to Sept. 8 due to holiday*	2	3 3:00-5:00pm Classic Computers
4	5 DMA Board of Trustees *postponed to 9/12 due to holiday* Labor Day	6	7	8 6:30pm Genealogy SIG *special date*	9	10
11	12 7:00pm Dayton Diode Mtg. 7:00pm DMA Board of Trustees *special date & new location*	13 7:00pm Investment SIG	14 7:00pm Dayton Dynamic Languages Users Group	15 7:00pm Linux SIG	16	17 3:00-5:00pm Classic Computers
18	19 7:00pm Apple-Dayton SIG	20 How-To SIG on hiatus til further notice	21	22 Autumnal Equinox	23	24
25	26	27 7:00pm DMA Main mtg.	28	29	30	

ever, there are situations where it makes sense to change the contents of a received .pdf file, like "if you need to fill in some information on a PDF form."

"PDF to Word" conversion websites like "PDF Converter," "PDF to Word" or "PDF Online" are Web sites that advertise they will do the conversion for free. (Google "free pdf to word" and you'll see many possibilities.) Also, you could try "free document converter" found at www.hellopdf.com. I haven't any experience with these, but the literature claims they work as indicated. And, for those of you who need to do a lot of these conversions, Adobe offers "Adobe Acrobat DC" by subscription for about $15/month or you could buy it outright for around $200. There must be a large enough number of people who need to convert .pdf files to .doc files because when I Googled "pdf to word," I was pointed to many Web sites that could supposedly help me in my quest. There even was a YouTube video that indicated that you could upload a .pdf file to Google drive, (yes, you'll probably need a Google Drive account), and then download it as a Word (.doc) document. When I tried it on a pretty simple PDF, the conversion didn't seem to preserve a lot of the formatting, so it didn't look as though it would be acceptable at all, on a more complex document. I haven't had the occasion to need to convert a document, but if the situation ever arises I'm sure I'll be able to get it done. So, when all is said and done, the PDF standard is deeply ingrained in modern computing because it allows a single file to provide a display that looks the same on all different types of computers.   ...TR

—Musings of an Apple Tyro—

By Lorrin R. GARSON, Potomac Area Technology and Computer Society
February 2016 issue, PATACS Posts
www.patacs.org
newslettercolumnist (at) patacs.org

MacKeeper Users Exposed

IF YOU USE MACKEEPER, you may want to get rid of this particular bit of scareware. KrebsOnSecurity (see http://krebsonsecurity.com) reports that 13 million MacKeeper users have had their usernames, passwords and other information breached. At best MacKeeper is controversial but more likely it is simply intrusive, hard-to-get-rid-of malware. See http://bit.ly/1Idph3f for information on how to eliminate MacKeeper from your computer.

Apple Magic Mouse Disconnecting

If you query Google or Bing about Apple's Magic Mouse's disconnecting you will find many descriptions of problems and solutions. Let me relate my recent experience with my mouse's frequently (every 10 minutes or so) disconnecting from my iMac computer. Fortunately, I also use a Magic Track Pad so I can reconnect the mouse without too much drama, but the disconnects are still very annoying. Since my iMac uses a Bluetooth keyboard and track pad, it seems logical that the disconnects are related to the mouse and not Bluetooth *per se.* In searching for a solution I stumbled on to the suggestion: "just remove the battery cover and use the mouse without it". That did the trick. If I put the cover back on, disconnecting resumes. I also found a suggestion that slightly bending the battery cover solves the problem. Perhaps the cover interferes with Bluetooth transmission or bending the cover prevents the batteries from being intermittently disconnected. Neither explanation is very compelling.

(Continued from page 12)

It's just plain weird! I wonder if the new Magic Mouse 2 has the same problem, but there is no battery cover to manipulate on this device.

Microsoft Windows Turns 30

Microsoft introduced the Windows operating system in November 1985, which was an important milestone in the development of computer technology. See http://bit.ly/1QRjyBo for an excellent historical overview. Also see http://bit.ly/1mrQJ3i for an extensive discussion in Wikipedia.

USB Turns 20

While on the topic of birthdays, the ubiquitous USB (Universal Serial Bus) is also celebrated. See http://bit.ly/1lWR4eu for an interesting story of how this standard came to be.

Much Faster Memory and Storage Coming

Intel and Micron have developed a new technology called Optane (not related to octane or any other hydrocarbon), which can be ten times denser than DRAM and 1,000 times faster than current flash storage. This technology is based on memory cells in a three-dimensional configuration called 3D Xpoint. When will memory and storage devices show up with this technology? Probably late 2016 and it will be comparatively expensive. See http://bit.ly/1OAVPRk and http://zd.net/1Pb7sRR.

Battery Pack for iPhone 6 and 6S

Apple now offers a battery pack, which Apple calls "Smart Battery Case." The price is $99. Apple claims up to eighteen hours of Internet use and twenty hours of video playback time. You may find various references to this accessory being called "the hump" because of its shape. See
 http://apple.co/1YmplVA.

Expect Greater Threats to OS X and iOS

Apple devices now account for 13.5% of global smartphone shipments and 7.5% of global PC shipments, thus attracting cybercriminals and other miscreants. Symantec has published a report that predicts an increased number of attacks on Apple devices (see http://symc.ly/1NXurRm. Their conclusions are as follows:

- A significant number of attacks are attributed to nuisance applications such as adware and potentially unwanted or misleading applications.
- Symantec reported that the amount of Mac OS X malware has been trending upwards over the past five years, but such malware is still small in terms of overall numbers.
- The amount of iOS malware discovered remains quite small. Many threats are designed to take advantage of jailbroken phones, thus allowing root access to the iOS file system and manager.

Keep in mind that Symantec is not an impartial bystander. The company is in the business of selling software to protect against malware.

Vulnerable Routers

If you're thinking of buying a new router, you may want to think twice about buying it from Ubiquiti. To quote from Krebs Security (http://krebsonsecurity.com) in an item entitled "The Lingering Mess from Default Security" (November 15, 2015), "Last week, researchers in Vienna, Austria-based security firm SEC Consult released data suggesting that there are more than 600,000 vulnerable Ubiquiti routers in use by Internet service providers (ISPs) and their customers. All are sitting on the Internet wide open and permitting anyone to abuse them for these digital shakedowns. Also see http://bit.ly/1NXuDju. Fortunately, Ubiquiti routers are not very popular in the U.S.   ...TR

Dayton Microcomputer Association Membership Form

Today's date _____/_____/_____

[ ] *NEW*   Please credit the DMA member who recruited me: _____

[ ] *RENEW*   Contact information below is new [ ] Y [ ] N

Home Address _____

City _____   State _____ Zip _____

Home Phone _____-_____-_____

Skills & interests you might share with DMA _____

What you hope DMA will provide _____

TYPE OF MEMBERSHIP

[ ] *REGULAR*

Name _____   Birth date _____/_____/_____

Email _____   Mobile Phone (_____) _____-_____

[ ] *ASSOCIATE*   Family Associate memberships are available to those in the immediate family of a Regular
member and living at the same address. Name of Regular member _____

Name _____   Birth date _____/_____/_____

Email _____   Mobile Phone (_____) _____-_____

[ ] *STUDENT*   Free memberships are available to students under 22 years of age who are enrolled full-time
in a program of higher education.

Name _____   Birth date _____/_____/_____

Email _____   Mobile Phone (_____) _____-_____

School _____   Student ID# _____

[ ] *SHELL ACCOUNT*   A shell account on the DMA web server provides file storage, hosting of a personal
non-commercial website, @dma1.org email alias (forwarding address), all for a one-time fee of $10. A username
must be 8 alpha characters. The usual default is last name and first initial, no caps or punctuation. DMA reserves
the right of final decision on all usernames: 1st choice _____   2nd choice _____

DUES AND FEES

Regular membership	$25.00 x [ ] 1yr [ ] 2yr [ ] 3yr $_____	
Family Associate membership	$12.50 x [ ] 1yr [ ] 2yr [ ] 3yr $_____	
Student membership	FREE	$___0.00
One-time setup fee for Shell account	$10.00	$_____
Total...		$_____

Note: $10.00 fee will be charged for any returned checks

Make your check payable to: **Dayton Microcomputer Association**
Mail check and application to: **PO Box 4005**
                                                 Dayton OH 45401-4005

DMA use only

Member# _____   Exp _____/_____   [ ] Cash [ ] Check# _____   Proc by _____

Member# _____   Exp _____/_____   [ ] Cash [ ] Check# _____   Proc by _____

Member# _____   Exp _____/_____   [ ] Cash [ ] Check# _____   Proc by _____

Revised Apr 7, 2016