7:00 P.M. Tuesday (the 26th) at the Regional Center, 4801 Springfield Street, about one mile west of the Air Force Museum — click here for a map. All DMA meetings are free and open to the public. Plenty of free onsite parking, too. Also accessible via RTA bus route 11 — click here for a system map. Bring a friend!

CHROMECAST. NETFLIX. ROKU. And a host of others, all promising us "smart" television, delivered via the Internet. *But.* There are a host of "buts," beginning with fees. And although we can get rid of cable, users must maintain (and pay for) their Internet connections.

Streaming media technologies have been rapidly improving and the variety of devices can be very confusing. DMA President **Gary Coy** and Program Chairman **Jim Ullom** promise to cut through the technical jargon and demonstrate several models. They will show just how easily these devices can be installed and operated.

The Databus
Newsletter of the Dayton Micromonputer Association, inc.

Classic COMPUTERFEST T–shirts and branded merchandise from "way back when" will still be available at the summer picnic and this DMA meeting. Each item is a piece of DMA history — and so *reasonably* priced, too!

—Contents—

Save a tree — or at least a branch! If you are already a DMA member, and your membership does not expire this month, do not print page 11.

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 July Minutes will thus appear in this (August) issue of THE DATABUS, which comes out just before the General Membership Meeting at the end of the month.

Whooooops!

As noted above, all Minutes of Trustees' meetings must be approved by the Trustees at the following meeting. Last month's DATABUS accidentally printed Minutes for June that had not yet been approved, for the reason noted below. (Look under "Officers' Reports.") If necessary, we'll reprint the corrected June Minutes in a future issue of THE DATABUS.

Minutes of the Meeting of the Board of Trustees of the Dayton Microcomputer Association®, Inc., 7 July 2014

CALL TO ORDER

The meeting was called to order at 7:01 P.M. by Gary Coy, President. (Chairman Martin Arbagi was Acting Secretary in the absence of Debra McFall.)

Trustees Present

Martin Arbagi, Glady Campion, Gary Coy, Eric Ottoson, Ken Phelps, Wynn Rollert, Ed Skuya, Jim Ullom

Trustees Absent

Debra McFall (excused)

Visitors

Ken Bailey and Charles Rockett, both of Dayton Diode; Dave Lundy, Gary Turner.

SUSPENSION OF RULES

The Rules were suspended to permit Messrs. Bailey and Rockett to brief the Trustees about the activities of Dayton Diode, which has moved to new, larger quarters. There was some discussion of the possibility of DMA's renting unused space from Dayton Diode to store materials currently housed in our rented locker.

OFFICERS' REPORTS

President (Gary COY):

No Report

Vice—President (Ken PHELPS):

No Report

Secretary (Debra McFALL):

Debra had submitted the June Minutes in advance, because she knew she would be absent. However, no one had actually *printed* the Minutes. Accordingly, Jim Ullom moved to table ap-

proval until August's meeting. Eric Ottoson seconded, and the motion passed.

Treasurer (Glady CAMPION):

Glady presented the monthly financial report.

<div align="center">COMMITTEE REPORTS</div>

Audit (Glady CAMPION):

No report.

Bylaws Review (Grant ROOT):

No report.

Membership (Glady CAMPION):

We have 111 Regular Members, four Associate Members, no Student Members, and two Life Members for a total of 117. There were thirty–six attendees at our June Meeting, and we made $30 from the 50/50 raffle.

Net Administration (Ken PHELPS, Gary TURNER):

Ken is trying to get a handle on the network properties. He has mirrored the main DMA Web site.

Programs (Jim ULLOM):

This month's (July's) speaker will be Robyn Coy, giving a presentation on geocaching, which will be timely, as geocaching will be a feature of DMA's annual picnic in August. Robyn will try to register our event on a central geocaching Web site, in the hopes of attracting local players to the picnic, thereby introducing them to DMA. Another program Jim is considering is Bob Gosticha on computer security in August or September, and a talk on bitcoins.

Publications (Martin ARBAGI):

The DATABUS came out last month and was posted on the DMA Web site.

Nominations (Ed SKUYA):

Gary Turner has volunteered to run for Trustee.

<div align="center">OLD BUSINESS</div>

Picnic (Martin ARBAGI):

All plans are on schedule and tickets are for sale. Martin will buy food and supplies. It was not much of a chore last year. He will comparison shop. Gordon's Food Service is not necessarily the cheapest place to buy food, plates, etc.

Holiday Dinner (Glady CAMPION):

No Report.

<div align="center">NEW BUSINESS</div>

Storage Locker (Glady CAMPION, in the absence of DEBRA MCFALL):

We've raised $354.00 thus far from sales of surplus merchandise (mostly T–shirts) stored in the locker. Once all this merchandise is gone, we can probably reduce the size (and thus the rent) of the locker needed.

Board Meetings (Glady CAMPION):

The next (August) Board meeting will be at the same place: Tsao's Chinese Restaurant, 3989 Col. Glenn Highway in Beaver Creek.

—Caller ID … the Invention of the Century?—

By Jack FISCHER, Director/Communications, The Computer Club, Inc., Florida
March 2014 issue, *The Journal*
www.scccomputerclub.org/
jafischer (at) juno.com

M Y NOMINATION FOR THE "INVENTION OF THE CENTURY" is Caller ID. I know of nothing as empowering as looking at that TV or device–screen and deciding whether to answer the phone, or just let it ring!

It must be frustrating to those trying to sell me an air conditioner or a security alarm or whatever, but it certainly feels good from my side. I figure if it is someone who *really* needs, or wants, to get in touch with me, he (or she) will leave a message on my answering machine. If he merely hangs up, it suggests that I don't need whatever it is he's offering.

Telephones have certainly changed. Remember the black, Western Electric instrument, where the phone company charged extra if we had more than one?

Today, it seems that everyone, from the President's encrypted Blackberry to my neighbor who hangs one on a string around his neck, has one that communicates, takes pictures, plays music and apparently protects us from Global Warming.

Not me, of course. I have an old rudimentary one that I keep in the car to call AAA when I run out of gas, or from the cellphone lot when meeting someone at the airport.

Happy Computing, Jack.

[EDITOR'S NOTE: Sorry — I couldn't resist including this one! It's so funny … and true. I too have an old-fashioned "clamshell" telephone, using it mostly as a walkie–talkie to communicate with my wife when we're in one of those gigantic superstores that are ½ mile from one end to the other.

By the way, there's a Web site, NoMoRobo.com that cuts robotic telephone calls off after one or two rings. I don't know how the technology works, but it does not block robotic calls from, say, your doctor reminding you of an appointment, or from your kids' school telling you that the place has been shut down because of snow. It took me two minutes flat to set everything up through my provider's Web site. (My family has a cable land line through Time–Warner.) NoMoRobo's Web site walks you through the whole procedure.

Of course, if there's a human being at the other end, NoMoRobo doesn't work. That's what call blocking is for.]　　　　　…**YDB**

(July Trustees' Minutes, Continued from page 3)

VOLUNTEER OF THE QUARTER

Debra McFall will be Volunteer of the Quarter.

ADJOURNMENT

Eric Ottoson moved adjournment at 8:10 P.M. Jim Ullom seconded. Passed unanimously.

Respectfully Submitted,

Martin Arbagi, Acting Secretary

—Two Factor Authentication: Proof of Identity—

By Phil SORRENTINO, Staff Writer, The Computer Club, Inc., Sun City Center, FL
March 2014 issue, *The Journal*
www.scccomputerclub.org/
philsorr (at) yahoo.com

WHEN YOU WALK UP TO A TELLER IN A BANK and request information about your bank account, the teller may ask you to authenticate yourself by providing a picture form of identification. But if you have been going to this bank for many years and she is familiar with you, she may just give you the information. In truth, your face and her knowledge of you have provided the necessary authentication for her to respond to your requests. Authentication is much easier in the real world than it is in the software and computer–network world.

Authentication is the act of proving one is really who one says he or she is. In the computer world, we all experience this every time we sign on to one of our accounts or websites. Typically we are asked for a User Name and a Password. The correct User Name and Password combination proves, to the software requesting these items, that we are who we say we are. Of course, we could give our User Name and Password to a friend, something we rarely want to do because then he would be able to authenticate himself as the owner of our account. "Hacking" occurs when someone or some software program attempts to guess your Password after acquiring your User Name, maybe from some public information source. (Remember, User Names are available all over the Internet.) This is a form of brute force "hacking" of an account. And unfortunately, there are many other, more sophisticated, ways of hacking into an account.

So, more formally, "Authentication is the act of confirming the truth of an attribute of a datum or entity, which might involve confirming the identity of a person or software program, or ensuring that a product is what its packaging and labeling claims to be."

In other words, Authentication involves verifying the validity of at least one form of identification. As it turns out, practically, there can be three forms of authentication, called *factors.* Now, two-factor authentication requires the use of two of the three authentication factors. These factors are:

✓ Something only the user knows (*e.g.,* password, PIN, pattern);
✓ Something only the user has (*e.g.,* ATM card, e–mail account, mobile phone); and
✓ Something only the user is (*e.g.,* biometric characteristic, such as a fingerprint).

(These factors are so important for authentication that they are identified in government documents in the standards and regulations for access to U.S. Federal Government systems.) Some security procedures now require *three–factor authentication*, which involves possession of a password, and a physical token, used in conjunction with biometric data, such as a fingerprint, or a voice-print, or a retinal scan.

Two–factor authentication is not a new concept. When a bank customer visits a local automated teller machine (ATM), one authentication factor is the physical ATM card that the customer slides into the machine ("something the user has"). The second factor is the PIN the customer en-

(Continued from page 5)

ters through the keypad ("something the user knows"). Without the corroborating verification of both of these factors, authentication does not succeed.

Another example is when you use your credit card for a gasoline purchase and you have to enter your ZIP code to confirm the charge. You must provide a physical factor (something you own), the card, *and* a knowledge factor (something you know): your ZIP code. These examples show the basic concept of a two–factor authentication system: the combination of something the user knows and something the user has.

"Something only the user knows" is termed a *Knowledge factor* and is the most common form of authentication used. In this form, the user is required to prove knowledge of a secret in order to authenticate, typically, a password, PIN, or a Pattern. All of us are familiar with the password which is a secret word or string of characters. This is the most commonly used mechanism for authentication. Many two-factor authentication techniques rely on a password as one factor of authentication. A PIN (personal identification number), is a secret series of numbers and is typically used in ATMs. A Pattern is a sequence of things, like lines connecting the dots on the login screen of a cell phone or tablet.

"Something only the user *has*" is termed a *Possession factor.* A key to a lock is a good example. With today's computer systems your email account or your phone or a swipe–card is used as a possession factor.

"Something only the user *is*" is termed an *Inheritance factor.* Historically, fingerprints, a biometric method, have been used as the most authoritative method of authentication. Other biometric methods such as retinal scans are possible, but have shown themselves to be easily fooled (spoofed) in practice.

Two-factor authentication is sometimes confused with "strong authentication", but these are fundamentally different processes. Soliciting several answers to challenge questions may be considered strong authentication, but, unless the process also retrieves "something the user *has*" or "something the user *is*," it would not be considered two–factor authentication.
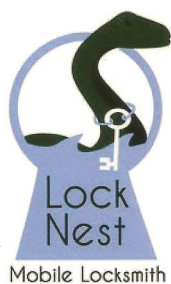
(Continued from page 6)

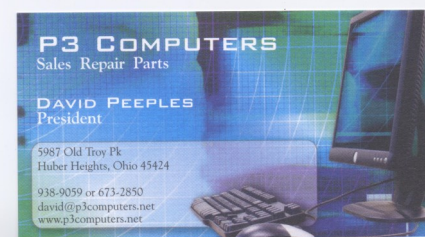Two–factor authentication seeks to decrease the probability that the requester is presenting false evidence of his/her/its identity. The more factors used, the higher the probability that the bearer of the identity's evidence is truly that identity. These systems ask for more than just your password. They require both "something you know" (like a password) and "something you have" (like your phone or e–mail account). After you enter your password, you'll get a second code sent to your phone or e–mail, and only after you enter it will you get into your account. It is a lot more secure than a password only, and helps keep unwanted snoopers out of your accounts.

Many well–known systems employ two–factor authentication. Some of these are: Amazon Web Services, Dropbox, Facebook, Google Accounts, Microsoft/Hotmail, Paypal/e–Bay, Twitter, and Evernote. The two–factor authentication will typically be employed when you are using a different computer, or a computer from a different location, when trying to access one of your accounts.

Most of these two–factor implementations send you a six digit code via a text message for you to input when you receive it. This six digit code becomes the second factor to be used with the original password. This definitely adds an extra step to your log–in process, and depending on how the account vendor has implemented it, it can be a minor inconvenience or a major annoyance. (And it also depends on your patience and your willingness to spend the extra time to ensure the higher level of security.) But in the long run the use of a two-factor authentication improves the security of your private information, no doubt something we all want.   …**YDB**

—Trustee Nominations Open—

WE HOLD ELECTIONS FOR THREE POSITIONS on the DMA Board of Trustees at our Annual Meeting every September. The nominations are open from May through the end of August. Candidates must be 21 and regular or associate DMA members in good standing for at least twelve months prior to the September elections. No experience necessary! See ED SKUYA or *any* of the other Trustees at the picnic or the August general membership meeting.

Dayton Microcomputer Association
Events for September 2014
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 DMA Board of Trustees *postponed til 9/08* Labor Day	2	3	4 6:30pm Genealogy SIG	5	6 3:00-5:00pm Classic Computers
7	8 7:00pm DMA Board of Trustees *postponed from 9/01* *Special Location* 7:00pm Dayton Diode Mtg.	9 7:00pm Investment SIG	10 7:00pm Dayton Dynamic Languages Users Group	11	12	13
14	15 7:00pm Amateur Radio SIG 7:00pm Apple-Dayton SIG	16 7:00pm Software Development SIG	17	18 7:00pm Linux SIG	19	20 3:00-5:00pm Classic Computers
21	22	23 Autumnal Equinox	24	25	26	27
28	29	30 7:00pm DMA Main mtg.				

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

DMA Picnic tickets are on sale! Shelter 3, Indian Riffle Park, Kettering (click <u>here</u> for a map), Saturday, 23 August, Noon — ??, rain or shine. (Food served at 1 P.M.) $5.00 (cheap!) See Martin ARBAGI or Glady CAMPION. Checks, cash, or major credit cards accepted.

By Jove, Harrington — this doesn't seem to be Indian Riffle Park !

You and your 🌑☄☠☹⊠ time machine …

- ✓ **Games (including geocaching) and lots of door prizes — everyone wins!**
- ✓ **Electricity and power strip with surge suppressor will be available.**
- ✓ **DMA supplies burgers, brats, hot dogs, buns, condiments, soft drinks, and bottled water.**
- ✓ **Bring snacks (chips, salsa, etc.) or covered dishes (salads, desserts, etc.) to share.**
- ✓ **NO glass bottles, alcoholic beverages, or pets, please.**

E STABLISHED IN 1976, 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 photography and genealogy to the Linux operating system. Each SIG meets according to its own schedule. DMA is a member of Association of Personal Computer Users' Groups (APCUG) and the Affiliated Societies Council (ASC). Click on any of the logos — including our own — to go to that organization's Web Site.

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

We have a new Web Site!

DMA1.org

Submissions ...

T HE 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 1980s)! No PDF files, please. Send e–mails 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.

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

DMA Membership Application/Renewal

PLEASE ALLOW UP TO THREE WEEKS FOR APPLICATION PROCESSING AND INTERNET SET–UP

Name: _____ Birth date:_____/_____/_____
                                                                mo. day year

Associate Name: _____ Birth date:_____/_____/_____
                                                                mo. day year

Address: _____

City: _____ State: _____ Zip: _____

Phone: (Home) (_____) _____-_____ (Work) (_____) _____–_____x_____

I wish to have my name and address published in the club roster: YES ❑ NO ❑

E–mail address: _____@_____

Name of DMA member who recruited me: _____ (only new regular memberships)

Are you a current or recent DMA Member? Yes q No q Change of Address only? q Today's date: _____/_____/_____

If you are renewing, please give your Membership Number (from your membership card) _____

Type of Membership

Application is for: New Membership ❑ Membership Renewal ❑ Associate Membership* ❑

If applying for free student membership, please give school name and student ID number: Available only for students under 22 years old. (Student Members *cannot* vote in DMA elections.)

School Name: _____ Student ID#: _____

* A family or associate membership is an additional membership for a member of your immediate family or someone else who is living in the member's household. If this is a family or associate membership, give name of regular member:

Dues/Fees (Dues and Fees are subject to change without prior notice):

Membership (one year — New or Renewal)	1.) ❑ $25.00	❑ Cash
Family or Associate Membership (must live at same address as regular member)	2.) ❑ $12.50	❑ Check
Free Student Membership for students under 22 yrs of age. (Student Members *cannot* vote in DMA elections.)	3.) ❑ FREE	Check # _____
Please assign me a user ID for E–mail and Usenet news access one–time setup fee for new E–mail accounts.	4.) ❑ $10.00	
Total — Lines 1 and 2 (+ 4 if checked)	5) $_____	

Make your check payable to Dayton Microcomputer Association, Inc. (DMA), and then send the check and application to:
    PO Box 340402
    Beavercreek, OH 45434–0402

DMA Use only: Membership # _____
Exp. Date: _____/_____/_____
Processed by: _____
REV: 25 November 2013