



The Databus

Newsletter of the Dayton Microcomputer Association®

Volume II (New Series), Issue 9

September 2011

September ... Annual Business Meeting

**Tuesday, September 27
7:00 P.M., 4801 Springfield
Street**

**All DMA General Meetings are
free and open to the public —
bring a friend!**



BUSINESS MEETINGS need not be dull. DMA's annual business meeting, held traditionally at the end of September, is a chance to have *your* voice heard in the affairs of *your* club. Interested in what the Special Interest Groups (SIGs) are doing? Want to hear committee chairmen's reports and vote for Trustees?

Just to add a bit more zest to the meeting, we'll also have a discussion of favorite Web sites.

As usual, we'll meet at the **Miami Valley Educational Service Center — Regional Division, 4801 Springfield Street**, about a mile west of the Air Force Museum. There's plenty of free parking available. Click [here](#) for a map. And again as usual, the Pizza SIG will meet afterward at the Donato's on Airway Road, a short drive away. Click [here](#) for a map.

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The Dayton Microcomputer Association[®], Inc.

Post Office Box 4005
Dayton, Ohio 45401



ESTABLISHED 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 geneology to the Linux operating system. Each SIG meets according to its own schedule. DMA is a member of APCUG and ASC. (Click on any of the logos — including our own — to go to that organization's Home Page.)

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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 even WordStar! No PDF files, please. Send e-mails to:

Editor@DMA.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 receive preference.

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**The Miami Valley Educational Service Center —
Regional Division
4801 Springfield Street,
about a mile west of the
Air Force Museum — site
of our June
meeting. Parking is free.
Click [here](#) for a map.**

Where are the Minutes?

Minutes for the September and October Board of Trustees' meetings will be in THE DATABUS for October.

There's no "I" in Twtter.com: How to Outsmart "Typosquatting."

[EDITOR'S NOTE: I use Open DNS, a security program for routers, which is free for use on home networks. Recently, the *Open DNS Newsletter* featured an article on a new Internet threat called typosquatting, which attempts to take advantage of typographical errors you make while on line. This article is, in part, a pitch for Open DNS, but it also contains safety tips even for those who don't use Open DNS.]

AS AN OPENDNS USER, you probably know that OpenDNS offers a hugely popular feature called automatic typo correction (ever typed Yahoo.cmo but ended up at Yahoo.com anyway?). The service works by automatically, correcting top-level domains (.com, .net, .edu, etc.) to make sure you get where you're going on line. Well, due to an increasingly popular phenomenon called typosquatting that uses real registered domains, there are still typos we can't fix, some of which are much more dangerous than a dead end. Typosquatting is what happens when someone registers a domain that's nearly identical to that of a popular brand in an effort to capture typo traffic: Twtter.com and Twitter.com, for example. Even worse, these copycats often use identical branding to make their sites look similar to their popular *doppelgängers* and fool visitors into providing personal information.

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Continued on the next page.

In the case of Twtter.com, the Twitter.com imposter, the site's entire function is to get your contact information. A very appealing offer is presented: answer two survey questions and get what is, by all accounts, an awesome prize: an iPad2. It's unclear what will happen with your personal information once it's in the wrong hands — it could range anywhere from being used to send SMSs to your cell phone that you get charged for, or simply selling your e-mail address.

So what can you do to protect your home?

- **Use OpenDNS:** It's the only service that will automatically correct common typos in TLDs, and help ensure you end up at the Web site you want.
- **Watch the address bar:** Legitimate Web sites rarely do redirections like Twtter.com. Keep an eye on what the site is doing and note suspicious redirections.
- **Don't share your personal information:** If a Web site offers you a chance to win a prize simply for providing personal information or taking a survey, be skeptical.

Know what to look for, and you can outsmart much of the bad stuff. Finally, use OpenDNS and tell others to do the same.

Buying a New Windows PC

By DICK MAYBACH

Reprinted from the August 2011 issue, BCUG Bytes, Brookdale Computer Users Group, New Jersey

www.bcug.com

n2nd (at) charter.net

[EDITOR'S NOTE: This article isn't your usual "Buyers' Guide for new PCs." Check Mr. Maybach's tips on RAM. The salesman may try to sell you as much RAM as possible, but if you buy the 32-bit version of Windows, you may be wasting money. The 32-bit Windows can't use more than 4 GB of RAM, and that *includes* RAM mounted on your separate video card, if you have one. Then why not buy the 64-bit Windows? You may again be wasting your money — read on!]

SOONER OR LATER, you'll be looking for a replacement for your PC. What requirements must the hardware satisfy? This article will assume you will be using the Windows 7 operating system, although almost any PC that supports Win 7 will also support any Linux distribution. If you purchase your PC from a well-established vendor, it will arrive with Windows already installed and well checked-out. However, most of us keep our PCs for several years,

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which means that their performance should exceed what is needed today. Software vendors know that to sell new versions of their products, they must add new features, and these require more from the hardware. Moore's Law, which says that integrated circuit performance doubles every eighteen months, has been true for thirty years and shows no signs of changing in the near future. As a consequence, six years from now, PCs will be eight times as powerful as today's models, and software designers know and depend on this. Buying a barely adequate PC means that it may not adequately run any software that wasn't on it when it was delivered.

Let's begin by looking at what hardware Microsoft recommends as a *minimum* for Windows 7.

- 1 gigahertz (GHz) or faster 32-bit (x86) or 64-bit processor
- 1 gigabyte (GB) RAM (32-bit) or 2 GB RAM (64-bit)
- 16 GB available hard disk space (32-bit) or 20 GB (64-bit)
- DirectX 9 graphic\s device with WDDM 1.0 or higher driver

We see that the first choice is between a 32-bit and a 64-bit processor. At present, most home applications are available only in 32-bit form, and while these will run in a 64-bit environment, doing so provides little advantage, except that 64-bit CPUs can handle more RAM. (See the RAM discussion below.) This will probably change, perhaps as early as the next release or so of Windows. You might be tempted to go for a 64-bit processor, thinking that you will be able to upgrade to Win 8 or 9; however, don't forget Moore's law. When the time comes to upgrade, you will certainly find that your PC is hopelessly underpowered. A 32-bit processor is the correct choice, unless you have special requirements.

Processor clock speeds can now exceed 3 GHz, but processor architecture also greatly affects its computing rate, with the result that clock speed is not as good an indication of computing power as in the past. Indeed, AMD has stopped using clock speed to characterize its processors. Manufacturers achieve higher performance by putting several processors (called *cores*) on a single chip. Get at least a 2-core processor and preferably a 4-core one. You may not see much advantage initially, but Windows slows down as the number of updates increase, and you probably will add new applications, which become more resource-hungry with each release. Note the important difference between multi-core processors and multiple processors. The former are single packages with more than one computing component; the latter are multiple packages, each with its own stacks, cache memory, and input/output. Only the Professional, Enterprise, and Ultimate versions of WIN 7 can make use of more than one processor, although all 32-bit versions of WIN 7 can use up to 32 cores.

Finally, consider getting a CPU with a Intel-VT or AMD-V supported and enabled. Without this, you can't run Windows Virtual PC.

<https://www.microsoft.com/windows/virtual-pc/default.aspx>

RAM is cheap, which means you should get as much as you can use. However, a 32-bit processor can access a maximum 4 gigabytes of memory, and memory includes not

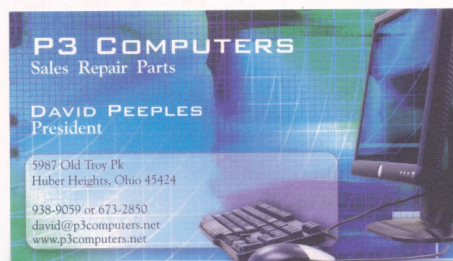
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only RAM, but also video RAM. If you have a high-end graphics controller with 1 GB of video RAM, your processor can use only up to 3 GB of RAM. Remember though, that many people use just a video controller on their motherboard, and such units use regular RAM for video storage. Once your system fills RAM with data, it begins to use swap space on your hard disk, and this drastically slows performance. I recommend you install as much RAM as your processor can address: 4 GB if you use an integrated video controller, perhaps somewhat less if you have a separate one. You can see a problem developing here; because the recommended RAM is at the limit of what the processor can see. To use more RAM, you have to use a 64-bit CPU and operating system, which is why I think that we will soon see a move to this configuration.

I recommend at least a 2000-GB (2-TB) hard disk. You do not want to run out of disk space and have to port all your software and data to a new one. Faced with this, most home PC users would decide to purchase a new PC. A competent PC shop can do this for you, and while the cost is reasonable, it will certainly exceed any savings you realized by skimping on the original disk size.

Most home PC users will find that the minimum video controller specified by Microsoft is adequate, but if you play action games or have specialized needs, such as photo editing or computer-aided design (CAD) [... or heavy-duty desktop publishing — Editor] you probably need a separate high performance video card, perhaps one compatible with DirectX 10 or 11. Graphics cards have faster processors than those mounted on motherboards and their video RAM is separate from that on the motherboard. You will have to do some research into the recommendations of your software vendors, not just for what you now use, but also for what you may soon install. However, replacing your video controller is much easier than changing disks, so you can upgrade later if needed. Pay attention to the connector for the display; although VGA is still common, many high-performance controllers use Digital Visual Interface (DVI), High-Definition Multimedia Interface (HDMI), or Display Port.

Besides the basics above, you also need some peripherals, and the most important of these is the display. You will probably follow the recommendations of the PC vendor, but consider getting a larger one than standard. As we age, our vision dims and blurs, and more visual real-estate allows us to magnify images, which makes computer time more comfortable. Be a little careful here, and be sure the display interface is compatible with your video controller. Of course, you need a read-write DVD drive, and you may want to get one that handles Blue-Ray. If you have a pile of diskettes, you may also want a floppy drive, but the need for these is fading fast. Get as many USB ports as you can (version 2.0 or later), and at least two should be on the front panel. If you run out of ports, you can add USB hubs, but the result is a tangle of cables, power cords, and power supplies. (This will happen anyway,



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but try to avoid making it worse.) Keyboards and mice are cheap commodities and are easily upgraded. Current PCs use USB ports to communicate with keyboards and mice, so you may not be able to transfer these from your old system.



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Dayton Microcomputer Association						
Events for September 2011						
For additions or corrections, contact Dave Lundy						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 6:30pm Genalogy SIG	2 7:00pm Dayton Diode TRS	3 3:00-5:00pm Classic Computers
4	5 DMA Board of Trustees postponed due to holiday. Labor Day	6 6:30pm Dayton Diode 7:00pm Amateur Radio SIG on James Hill Further notice	7	8	9 9:00am-9:00pm Ohio LinuxFest Core/LD Linux Basics, Hack-A-Thon, OpenCom, & Early Penguin Track	10 8:30am-8:30pm Ohio LinuxFest
11 Ohio LinuxFest LD Testing	12 7:00pm DMA Board of Trustees "Special Date"	13	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 7:00pm Software Development SIG	21	22	23 Automated Equinox	24
25	26	27 7:00pm DMA Main SIG	28 3:30pm 22nd Annual Fall Joint LVC S. Advanced Persistent Threats, by Bill Kilgallon	29	30	

[Last Month](#) [Next Month](#)



Click anywhere on the DMA Calendar (above) to go to the Calendar of Events on the main DMA Web site.

DMA Membership Application/Renewal

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

Name: _____ Birth date: ____/____/____
mo. day yearAssociate 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 ☐ No ☐ Change of Address only? ☐ Today's date: ____/____/____

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

Type of MembershipApplication 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.) ☐ \$25.00Family or Associate Membership (must live at same address as regular member) 2.) ☐ \$12.50Free Student Membership for students under 22 yrs of age. (Student Members *cannot* vote in DMA elections.) 3.) ☐ FREEPlease assign me a user ID for E-mail and Usenet news access one-time setup 4.) ☐ \$10.00
fee for new E-mail accounts.

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:

DMA Use only: Membership # _____

PO Box 340402
Beavercreek, OH 45434-0402

Exp. Date: ____/____/____

Processed by: _____

REV: 26 June 2011

Click [here](#) to pay your dues using PayPal. Simplified Membership Form, too!