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MEGAPHONE

THE OFFICIAL NEWSLETTER OF THE CENTRAL MARYLAND USER GROUP

President's Message

Let's Dance

from Mike Kerwin

Well friends Mary and I are just back from a visit/business trip to Arizona. This was business for Mary, but we spent the weekend before doing some visiting and sightseeing. Among the sights was one of my favorite stores in the whole world: Fry's Electronics. I have written about this electronic mecca previously (October 2004), but now I have some good news to share – they have crossed the Rubicon. Whoops wrong story, that was Caesar; Fry's has crossed the Mississippi. In another five years or so, all of you may have the opportunity to experience this wonderland of electronic marvels.

I tell you this place is a true magnet for geeks. We drove past it several times before the urge overcame me and I dragged Mary in during the preliminaries to the Super Bowl (we really aren't big football fans).

So what is the big attraction? Well the stores are very large but the prices for many items are very reasonable, even cheap or free (after rebate). For example, we found a car charger for our Motorola cellphones for \$10, in red no less, while Verizon wants \$40 for a similar item in basic black. I bought another season of "Have Gun Will Travel" for \$35 vs \$43 locally. But the best bargains were part of the annual tax software hoe-down, hence the dance analogy.

Every year we are subject to mail offerings for the next year's version of our favorite tax software and every year the company hopes we will pay full price directly to them. Every year we play the waiting game for a better deal locally and our house is slowly filling up with software and hardware which we get for free by buying our tax program locally. This year the deals have not been too good here in Maryland. Oh one store offered a 256 MB flash drive and several offered a

couple of antivirus and anti-spyware titles, but this was much less than last year's offerings – so I waited. I had hoped to find a better deal in Las Vegas at the CES, but their Fry's let me down. This trip came up unexpectedly but proved truly fortuitous.

I called my son before we traveled and asked him to buy the local paper to scope out the deals at Fry's and sure enough, the timing was right. They were offering lots of free titles if purchased in conjunction with a tax program. When we walked into the store on Sunday after the ad had appeared on Friday we found several tables and racks full of the software titles advertised; none of the mad rush at CompUSA for the first 15 minutes after the door opening. They even made it easy by having special sheets listing all of the available titles in racks by the entrance. We browsed and soon discovered that we would need a cart to haul all of the goodies out. Getting the stuff home on the plane looked a bit daunting, as we wound up with two large plastic bags full of software. Fortunately many of the boxes were filled mainly with air; by opening the box, removing the cardboard fillers, and flattening the remaining materials we ended up with a single half-full plastic bag which easily fit in one of our suitcases.

So now the second set of dances begins – the rebate rumba. This gives me personal delight to fulfill the great American Dream of "something for nothing" and it provides an outlet for the lifetime supply of mailing labels I receive every other month. (We will be long gone to retirement housing before I put a dent in the labels I have accumulated just in the past three years, but that is another story.) I



Next General Meeting

Dave Methvin of PC Pitstop fame will discuss the Sony-BMG copy protection episode, and what it all means
Wednesday, February 15, 7:30 pm.....Florence Bain Senior Center

Next Windows SIG Meeting

Tuesday, February 28, 7:00 pm.....Florence Bain Senior Center

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am good at reading the fine print, slicing off box flaps, and peeling UPCs off the box bottoms.

Mary claims it keeps me off the streets at night, but she is happy to participate in the final act which is dropping by the bank to deposit the rebate checks. These should arrive about the time our taxes are due so we will have a little something extra to buy groceries with after the IRS gets its share.

I have not divined how the companies can stay in business while giving away their products; it just does not fit a profit-motivated, capitalistic system to my way of thinking. But, I am glad to participate, though I realize that not everyone follows through as I do. I even know one of those who usually skips the process and just pays the bills as they come due and I am sad to relate that he is my son. Where did I go wrong in setting the example for the next generation to follow?

I am now in the midst of working through all of the forms and boxes and proofs of purchase and the most important step of all – copying the documentation before sealing the originals into a stamped envelope and dropping them in the US Postal Service box. My only fear is that some associate of Jerry Seinfeld's nemesis, Newman, gets hold of my missives and makes them go missing. If you decide to follow this path yourself, please don't forget to make a copy before mailing; in my experience, about 10% of my submissions are returned with the claim that I missed some required proof. I have gotten very good at writing replies along with copies to the store and the local Attorney General's office and sometimes the Better Business Bureau in the home city of the software company. Just call me Dead Eye as I rarely miss and my PC has the notches to testify to my record.

OK you may wonder what software would beckon to make the effort worthwhile. One title is always an anti-virus program. I know that Comcast offers McAfee for free, but I have long preferred Norton for this important function and that was reinforced by our last talk with Marc Seidler, the Computer Doctor.

I also like the eTrust Pest Patrol to be active on my machine as I do a lot of surfing and I like good sidekicks to protect me from nasty intruders. Both of these titles provide regular updates of the prevention files, but the license extends year by year – a very reasonable method to keep the companies in business in theory. At the end of every year they try to get me to re-subscribe for a fee, but I prefer to install the next year's program for free. We also picked up a File Shredder, for when we sell/donate our old computers; a Resume Writer, to help our friends and relatives with job searches; some legal forms which Mary may be called upon to use when she puts on her white wig and black robe; and the new version of Quicken (which still doesn't keep track of outstanding rebate submissions yet).

If you have stories about great deals on PC

stuff, be sure to share them with me at the meeting. Oh, and by the way, Microsoft is threatening to release the next version of their operating system in 2006 – Vista. When the title is released, we can expect some stores to combine it with loads of free stuff. With WinXP we got a portable DVD player, a PDA, and lots of software (some of which got passed along to CMUG raffles). When Vista arrives, a prudent suggestion is to buy the software immediately to get the goodies, but wait six months before installing. That way the bugs will be identified and patches will be available for downloading during installation.

Meeting Business

Let me wrap up with some CMUG business, and then I have to get back to the rebate forms. Thanks to HCC Professor John Lafferty who gave an interesting presentation touching on several current Internet topics, including phishing and Netcraft's Anti-Phishing Toolbar (<http://toolbar.netcraft.com>) at our January meeting. Thanks too for his arranging the use of a room at the community college. We'll be back at the Bain Center this month, and hopefully the renovations there went smoothly.

This month our old friend Dave Methvin from PC Pitstop (www.pcpitstop.com) will tell us about the recent Sony/BMG copy-protection scandal and the user reaction that caused Sony to back-off.

I hope to see you at the meeting.

Digitally,

Mike



Upcoming Meetings

Here's is what we have planned for the next few meetings. To suggest a meeting topic (especially if you can suggest a possible speaker for the topic), please talk to me at the meeting, or via email at cdlots@yahoo.com.

- Andrew Rein

March 15: Our own Art Silverglate will speak on "Building vs Buying Your Next PC"

April 19: Vic McGonegal, from Computer Seniors of America (www.computerseniors.org), will talk a bit about his organization, which is an "entryway to cyberspace for the mature citizen." He'll discuss the philosophy, principles, and operations of a volunteer-staffed computer school, where they try to make the complex, simple and fun.

May 17: Andrew Rein & David Johns on converting analog audio to digital (LPs to CDs, for example) using computer or non-computer techniques.

Deals from the DealsGuy

by Bob Click, Greater Orlando Computer Users Group

When I wrote about being unable to reboot until I removed the flash drive I had plugged in, I forgot where I had read the tip indicating that possibility for boot failure. John Pearce of Pikes Peak Computer Application Society in Colorado Springs turned out to be the source of that great tip that kept me from pulling my hair out. He had a similar boot failure problem and wrote about it in their August 2005 newsletter (page 3). A member also had that problem whose comment was published in their September 2005 issue (page 3). You can access the Bits of Bytes newsletters at <http://ppcompas.apcug.org> from their newsletter archive. Their editor, Greg Lenihan, has been publishing a great newsletter for some time now with several well-qualified technical authors helping their members. You won't be sorry if you browse through a few issues.



Another Disappointing Cruise

Last year I wrote about taking a cruise in December 2004 on Holland America's Zaandam, and my frustrations. I was surprised at the amount of feedback I received, even from folks who had taken the same cruise and agreed with my frustrations. In December 2005, we gave Carnival a try since they had a seven-day cruise that fit perfectly into a time we had off, and it left from Tampa, only an hour and a half drive to board. We had never tried Carnival and the Miracle (the ship) was less than two years old. I won't go into much detail, but we will not take another Carnival cruise. The ship was beautiful, and while we didn't have any rough seas, our ride was smooth. However, I could write a book about all the things we were disappointed with compared to other cruises we have taken, although we have no complaints about our cabin attendants or dinner servers. They were great.

Don't get me wrong, I doubt we could take any cruise without enjoying ourselves, but many things were disappointing, especially the usually lukewarm food. Also, they kept that ship very cold, including our cabin, and we had to wear sweatshirts or sweaters all the time, or sit on deck in the pool areas. Our complaints fell on deaf ears. We were not the only people who complained and some told us they had even caught colds. There were blow dryers in the rest rooms instead of paper towels and we

rarely saw an attendant there. Most of the entertainment used audience participation, and when we boarded, nobody greeted us and showed us to our cabins. We had to find them ourselves. First-time cruisers were really lost when they boarded. They did have two very outstanding song and dance shows that week that were superb, but that was where superb entertainment ended.

One night after a show featuring a hypnotist using about 25 volunteers from the audience, the newsletter listed Country & Western music in one of the clubs so we went there. When the listed time came, somebody went up on stage and plugged in a tape and that was our C & W band, not even a DJ. Best I stop right here as I could fill your newsletter with other complaints. One of the adult comedians was not bad, I guess, but you could hardly hear their sound system.

Read the Fine Print

Have you seen the latest scam in rebates? It was on the news recently that some people had applied for certain rebates and when they did not arrive in a couple of months they found that in the fine print the rebate could take up to four years to be processed. The TV station was working to help those folks.

Say Hello If You're in Town

I'll be working a few days of the Photo Marketing Association International Convention here in Orlando at the Orange County Convention Center. If you plan to attend, I would like to see you; let me know ahead of time so I can arrange it when I have time off. You will see all the big names in the computer industry at that show February 26 thru March 1 and it will take you some time to see it. You won't be sorry you attended. More info at www.pmai.org.



Windows SIG February 28 Meeting

The Windows Special Interest Group (SIG) meets on the 4th Tuesday of each month. The SIG focuses on using and maintaining Windows, all platforms. We take questions, present tips and techniques, demonstrate freeware/shareware and even feature some web topics using a little trickery.

If you have a suggestion or a topic for the SIG, please email me at mikes_line@hotmail.com.

Remember that the meetings are now at the Florence Bain Senior Center, and begin at 7 pm. See the CMUG website at www.millkern.com/cmug for maps and directions.

- Mike Hayes



Home Bookkeeping Software

Here's an announcement I received, which I have edited for space purposes.

Home Bookkeeping New Version

October 18, 2005 - Keepsoft Software announces the release of the new version of Home Bookkeeping. The main use for Home Bookkeeping is analysis of your accounts, expenses and incomes. First, open one or several accounts, specifying the currency to be used in each case. Then, you can start keeping your expenditure records, noting the category of expenses each time you withdraw money from the accounts. Mark your debtors and creditors and plan your incomes and expenses. It gives you a complete picture of your finances movement. It presents a report containing exhaustive information on your expenditure items.

Transfer money from one account to another. Copy or move from one user to another any data regarding expenditure items. One can clear, synchronize or compress his/her database and export any record to a considerable number of formats. Privacy and security are ensured since every user can protect his/her username with a case sensitive password. A variety of backup option features ensure that information is safe. The built-in handy search engine will get any data on current expenditures.

Pricing and Availability: Home Bookkeeping runs under Windows 9.X/Me/2000/XP and costs \$29.95 (USD) for individual users and \$49.95 (USD) for commercial users. We offer all members of your group a 20% discount through April 2006. Registered customers are entitled to free updates and lifetime technical support. A 30-day fully functional evaluation version of Home Bookkeeping is available as a free download at www.keepsoft.com/download/hbk4.exe (3.8 MB).

Product page URL: www.keepsoft.com/hbk.htm
Contact: Pavel Kozlovsky
E-mail: public@keepsoft.com
Web: www.keepsoft.com

Interested In A Jukebox?

And here's another announcement, this one for a music player. I've also edited this for space.

WinJukeBox 2.0

December 26, 2005 - WinJukebox Software announces the release of WinJukebox v2.0. The core functionality of an on-demand music player has been extended with play list management and music updates. The program also features automatic volume balancing and a smart track overlap. If you want your tune played, punch its track number and

wait your turn. The jukebox window also shows the tracks popularity chart. When the on-demand queue is empty, the auto playback mode switches to a list of new downloads or a top popularity list. Also added is track repeat control, so that most ardent guests don't inflict their tastes on others.

The Jukebox window has an attractive texture skin. It shows the play list queue and the popularity chart. The Manager window shows various available play lists and allows controlling Jukebox playback and changing its settings. The program's settings help customize the interface and manage the music menu and playback. On entering a tune number, for example, the Jukebox window can show original messages in your native language. The settings allow automatic downloading of new tracks from bookmarked sites with optional traffic limits. As for playback, the program offers the repeat control, volume level normalization, and custom track overlap.

WinJukebox v2.0 runs under Windows 98/2000/2003/ME/XP, and costs \$24.95 USD for a personal user license, and \$49.95 USD for a family license. The company also offers different types of business licensing (commercial \$59.95, noncommercial \$49.95, and educational \$39.95). We will offer all user group members a 10% discount on the latest version of WinJukebox v2.0 until 8/31/06 as a "special discount from DealsGuy." When ordering, enter the code CPN7798973196 in the coupon field on the shopping cart and checkout page. If necessary, contact PRContacts@WinJukebox.com. All registered users are entitled to free lifetime support and minor updates.

WinJukebox v2.0 is available at <http://winjukebox.com/download/winjukebox.exe>.
Product page link: <http://winjukebox.com>
Contact: Oleg Filimonov
E-mail: support@WinJukebox.com

Be aware that I have not tried either of these products.

That's It for This Month

Meet me here again next month if your editor permits. Be sure to check the new announcement pages on my website (www.dealsguy.com). This column is written to make user group members aware of special offers or freebies I have found or arranged, and my comments should not be interpreted to encourage, or discourage, the purchase of any products, no matter how enthused I might sound.

- Bob (The Cheapskate) Click
bobclick@mindspring.com



A USB Primer

by Brian K. Lewis, via APCUG

By now most computer users are familiar with the term USB or Universal Serial Bus. This connection port on your computer is designed to replace the older serial, parallel and PS2 ports. Probably within a year you won't find any new computers with these older ports. They will have only USB. In this article, I'd like to pass along some useful tips about USB ports and hubs which could reduce or eliminate problems in dealing with them.

USB ports have a number of advantages over the old system of parallel/serial ports. They do not require I/O memory space or individual IRQ lines. Anyone who has had to work with older computers and operating systems will remember the problems of trying to prevent IRQ conflicts when connecting external devices such as scanners or modems. How many times did the sound card manage to steal an IRQ that you had to have for another device?

USB also allows for automatic device configuration and hot-plug capability. The hot-plug (or hot-swap) function means that you don't have to power down the computer and go through a restart when you want to connect a new device. In instead you simply connect or disconnect the USB cable. The computer will recognize the device and connect to the proper driver. That is assuming this isn't the first time you have used the device and that the driver has already been installed. You commonly have to install drivers for external hard drives, printers, scanners, card readers, etc. You generally don't have to install drivers for mice and keyboards that connect to the USB ports.

Next, consider that USB operates at three possible speeds: low speed or 1.4 megabits/second, full speed or 12 megabits/second, and high speed or 480 megabits/second (mbps). Low speed and full speed can be used with either USB 1.x or USB 2.0 hosts. The high speed can be used only with USB 2.0. The host is the computer that provides the USB connections. For USB 2.0 operation, the host computers "root port hubs" must support USB 2.0. That means the computer must have USB 2.0 drivers that are supported by the operating system. Windows XP (service pack 1.0) and Windows 2000 both support USB 2.0. The root port hubs are the USB connectors on your computer and are usually connected to the motherboard. You can also identify them in the Device Manager where they will show under the USB Host Controller.

Hubs and Power

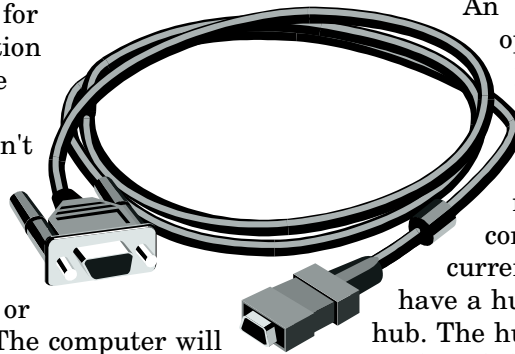
Although the USB specifications indicate you can daisy-chain up to 127 devices from one port, this is not likely to happen because of the power drop that occurs over long connections. You can get external hubs that allow you to connect 4 – 7 devices to a single root port hub. The external hubs are repeaters that relay transaction information from the computer to a device connected to the hub's port. There is a catch to this as well. Some USB 2.0 hubs will decrease their maximum output if you have a USB 1.x device attached to a port. This means that any USB 2.0 device attached to the hub may not function, or will function at a lower speed. I learned this the hard way with an external USB 2.0 hard drive. I thought the problem was the drive, but it was the hub. I had a USB 1.0 card reader attached to the hub and as a result the current output to each port was reduced to the point that it was not sufficient to run the drive. This occurred even though the hub and the drive had external power supplies.

An ample power supply is necessary to operate USB devices. Root hub ports can provide 5 volts and up to 500 milli-Amps (mA) of current. The USB power specifications state the USB ports should provide between 100 mA and 500 mA. Devices connected directly to the computer are able to obtain the maximum current. So let's take a situation where we

have a hub connected to the computer's root port hub. The hub is receiving 500 mA of current at about 5 volts. If the hub's only power source is the USB cable (ie, it doesn't have it's own power supply), then output from each of its four ports will be only 100 mA. This is referred to as a "bus-powered" hub because it receives its current solely from the USB bus in the host computer. However, if the hub has its own power supply and is receiving at least 1.6 Amps from this supply, then it can provide a 500 mA output at each port. In this case, the hub should be able to support high-speed USB 2.0 devices.

Plugging and Unplugging

On some computers you will find an icon in the system tray that is a "hardware disconnect". In this instance, you need to double click the icon and wait for it to permit you to disconnect the hardware device. This icon does not appear with all USB devices. Since installing SP2, I haven't seen this icon in my system tray. There are some reports of computers with SATA drives showing this icon. Since the SATA drive is supposed to be hot-swappable like USB devices, I'm not surprised that the icon shows up. However, with my Seagate SATA drive, I still don't see this icon. That may be because my motherboard doesn't support the hot-swap





function even though it supports SATA drives. [Ed. Note: I've seen the "hardware disconnect" icon on Win2000 and older PCs. Part of its purpose is to finish writing any buffered data to a USB drive, including a flash drive. Double-clicking the icon flushes the buffers and then you get an "Okay to remove device" message.]

When you plug a USB device into either a hub or a computer port, there is an initial identification process referred to as the "configuration" step. During this configuration process the device can not draw more than 100 mA. If it does, the process will fail and it will appear that the device failed to work. The configuration process identifies the device, its drivers, and its power requirements. Only after this process is complete will the device be able to draw more than 100 mA current. Since this process is not instantaneous, some time must be allowed by the user before attempting to use the device. In addition, this configuration may not occur if the device is plugged into the computer before the computer is turned on and booted. In these cases, it may be better to connect the USB device after the computer is fully operational. Most of the time, the computer will identify and configure the device during the bootup.

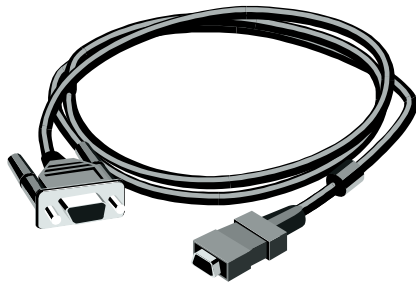
Troubleshooting Info

Microsoft has a knowledge base article on troubleshooting USB problems (#310575; see <http://support.microsoft.com/kb/310575/en-us>). Typically the problems relate to drivers or power problems. However, they also point out that high-speed devices should be connected with high-speed cables only. The low speed cables may distort the signal as a result of their reduced amount of shielding.

Another really complete source of troubleshooting information can be found at USBman (www.usbman.com). This has references for operating systems going all the way back to Windows 95, up to Windows ME, 2000, and XP. Let me note, thought, that anyone who hasn't dumped Windows ME should seriously consider doing so as soon as possible. WinXP is such a tremendous improvement over ME and will really make your computing experience much more enjoyable. My computer hasn't locked up or crashed in more than six months, probably longer. I really don't keep track anymore.

High Speed

So what devices are typically high speed and require USB 2.0? Let's start with external USB hard drives. Seagate has a very interesting technical paper on external hard drives. In this paper they state that most 2.5" external drives require 1000 – 1100 mA during the start-up cycle and then can function at the 500 mA maximum current available from the USB port. They also state that most USB ports can support up to 700 mA on a continuous basis. This is something I have not found elsewhere. Consequently, my recommendation is



Norton Frustration

A month back Staples had a "free after rebates" ad for McAfee Internet Suite. I took the bait and bought it. Norton had been bugging me to renew again at full price and I balked. So I followed all the rebate directions and, lo-and-behold, I did get all my money back!

So now to install it. McAfee doesn't like any other anti-virus program to be in the same computer with it, so now to get Norton out. Easy. Go to Program Add/Delete. There was Norton and into the recycle bin it went. But McAfee still insisted that Norton was there and so wouldn't install. Our son, Eric, stopped by. "Hey, Dad, let's have a look. Norton always leaves footprints." And so it did. A cruise around with Windows Explorer showed six lines with the Norton word in them. Delete them all – but McAfee insisted there were more.

At the last CMUG meeting I raised my hand and asked for help. Art said that Norton was famous for this, that it could put down multiple references.



that when looking for an external drive, pick one with its own power supply. I wouldn't want to depend on one that drew all its power from the USB bus.

Other high-speed devices include laser printers, scanners, and multi-function printers. All of these should have their own power supply. Other devices that operate at full-speed and don't need external power are blue-tooth adapters and card readers. This is only a partial list of what is available in USB devices. Just remember when you are looking at them that the term full-speed does not mean 480 mbps, instead it is the slower 12 mbps.

Brian K. Lewis, Ph.D., is a former university and medical school professor. He has been working with personal computers for more than thirty years. You can email him at bwsail@yahoo.com.

This article originally appeared in the Sarasota PC User Group's newsletter, PC Monitor, for which Dr. Lewis writes a regular Tech Talk column (see www.spcug.org). It comes to us via APCUG, the Association of Personal Computer User Groups, of which CMUG is a member.





“Try Symantec or Update,” he suggested. Windows Explorer didn’t see any Symantecs but “Update” bought up hundreds of references! I spent the time to peruse this collection and, whaddaya know, there were several files called something.nav for Norton AntiVirus, big ones. I killed those but still McAfee insisted that Norton was still resident.

I faced up to Regedit and tried a search there. Hey, hey, Symantec appeared in a couple of spots. Delete. Delete. But still no go.

Yesterday I popped into Staples for a Turbo-Tax that I’ll need anyway and saw their tie-in Norton (free after rebate). OK, so I’m chicken. I bought the combo. If you can’t beat ‘em, you might as well rejoin ‘em. And the free McAfee? It’ll go to a neighbor who just got a new, clean computer.

- Jack Fogarty

Editor’s Addendum

Glenn Reynolds at the blog Instapundit had a post on February 1 that dealt with a related problem (www.instapundit.com/archives/028365.php):

PIECE O’CRAP ALERT: So the Norton Internet Security 2005 on my laptop expired, and instead of just renewing, I foolishly “upgraded” to Norton Internet Security 2006. I’ve reinstalled several times, but it won’t update. When I try, it tells me that LiveUpdate isn’t installed. When I try to install LiveUpdate, it tells me that it’s already there and won’t install. Various visits to their support site have wasted a lot of my time, but left me right where I started. I’m ditching Norton and switching to something else—my time is worth more than their crappy product. Any recommendations? I need antivirus and firewall. Don’t care about spamblocking, adblocking, or parental controls.

UPDATE: At a reader’s suggestion, I downloaded and ran the Symantec “Intelligent Updater” program, which seems to have fixed the problem. Apparently you only get the “not terribly bright updater” bundled with the main program... We’ll see how this works.

The other thing I’ve noticed from the email is that *every* program out there has *somebody* who hates it.



Sony BMG – Shame on You!

by John Brewer, via APCUG

[Ed. Note: since Dave Methvin will be speaking to us this month about the Sony-BMG copy protection issue, I thought it made sense to run this article, which provides some background on the case.]

Computer users may have noticed the recent brouhaha about Sony music CDs. Is there a valid issue or simply a lot of heat with no real threat?

The issue developed from the desire of Sony-BMG to copy-protect its music CDs. If the music CD is played in a personal computer, and the “accept” button is clicked, then software known as XCP is installed. XCP reportedly uses “rootkit” technology. Wikipedia states that a “rootkit is a set of software tools frequently used by a third party (usually an intruder) after gaining access to a computer system. These tools are intended to conceal running processes, files or system data, which helps an intruder maintain access to a system without the user’s knowledge. Rootkits are known to exist for a variety of operating systems such as Linux, Solaris and versions of Microsoft Windows. The rootkit concept is the dominant controversial aspect of the 2005 Sony CD copy protection controversy, which has made the previously obscure concept of a rootkit much more widely known in the technology community, and to the general public.”

The technical issues seem to be rather complicated, but a survey of the articles available on the Internet is disturbing. Apparently, rootkits install a backdoor to the computer and are difficult to remove. Apparently, there is a patch available that may or may not remove the Sony software. Personally, this author thinks the only alternative is to avoid Sony CDs or to avoid playing any Sony CDs on a personal computer. The music industry is very serious about copyright violations and may think that the “end justifies the means” in this particular matter.

The following is a portion of a Sony response dated November 18, 2005:

You may be aware of the recent attention given to the XCP content protection software included on some SONY-BMG CDs. This software was provided to us by a third-party vendor, First4Internet. Discussion has centered on security concerns raised about the use of CDs containing this software. We share the concerns of consumers regarding these discs, and we are instituting a mail-in program that will allow consumers to exchange any CD with XCP software for the same CD without copy protection and receive MP3 files of the same title. We also have asked our retail partners to remove all unsold CDs with XCP software from their store shelves and inventory. Please click here for exchange program details.

Our new initiatives follow the measures we have already taken, including the voluntary suspension of the manufacture of CDs with the XCP software. In addition, to address security concerns, we provided to major software and anti-virus companies a software update, which also may be downloaded at <http://cp.sonybmg.com/xcp/english/updates.html>. We will shortly provide a simplified and secure procedure to uninstall the XCP software if it resides on your computer.

[Ed. Note: I can’t find this letter online, but here is an updated version dated December 4, 2005: <http://cp.sonybmg.com/xcp/customerletter.html>.]

Sony sounds like it is trying to respond in a responsible manner. However, this type of response is also an attempt to institute damage control. Sony has been sued by





the Electronic Frontier Foundation and the Attorney General for the State of Texas regarding this practice.

EFF filed its complaint in a California state court on November 21, 2005. The EFF website states ([www.eff.org/ IP/ DRM/ Sony-BMG/](http://www.eff.org/IP/DRM/Sony-BMG/)):

By including a flawed and overreaching computer program in over 20 million music CDs sold to the public, Sony-BMG has created serious security, privacy and consumer-protection problems that have damaged music lovers everywhere.

At issue are two software technologies: SunnComm's MediaMax and First4Internet's Extended Copy Protection (also known as XCP), which Sony-BMG claims to have placed on the music CDs to restrict consumer use of the music on the CDs, but which in truth do much more, including monitoring customer listening of the CDs and installing undisclosed and in some cases hidden files on users' computers that can expose users to malicious attacks by third parties, all without appropriate notice and consent from purchasers. The CDs also condition use of the music on unconscionable licensing terms in the End User Licensing Agreement (EULA).

After a series of embarrassing public revelations about security risks associated with the XCP software, including warnings issued by the United States Government, Microsoft and leading anti-virus companies, Sony-BMG has taken some steps to respond to the security risks created by the XCP technology. Sony-BMG has failed, however, to address security concerns raised by the MediaMax software or the consumer privacy and consumer fairness problems created by both technologies."

(The link above includes additional background, and information about the December 28 settlement agreement.)

The Attorney General of the State of Texas has also filed litigation regarding the same spyware from Sony. The Web site for the AG addresses the litigation, in a news release dated November 21, 2005 ([www.oag.state.tx.us/ oagNews/ release.php?id=1266](http://www.oag.state.tx.us/oagNews/release.php?id=1266)).

Texas Attorney General Greg Abbott today sued SONY-BMG Music Entertainment as the first state in the nation to bring legal action against SONY for illegal "spyware." The suit is also the first filed under the state's spyware law of 2005. It alleges the company surreptitiously installed the spyware on millions of compact music discs (CDs) that consumers inserted into their computers when they play the CDs, which can compromise the systems.

The Attorney General's lawsuit alleges the New York-based company violated a new Texas law protecting consumers from the hidden spyware. The company accomplished this by using new technology on certain music CDs to install files onto consumers' computers that hide other files installed by SONY. This secret "cloaking" component is installed without the knowledge of consumers and can cause their computers to become vulnerable to computer viruses and other forms of attack.

"SONY has engaged in a technological version of cloak and dagger deceit against consumers by hiding secret files on their computers," said Attorney General

Abbott. "Consumers who purchased a SONY CD thought they were buying music. Instead, they received spyware that can damage a computer, subject it to viruses and expose the consumer to possible identity crime."

SONY insists on its Web site that it has recalled all affected CDs. However, investigators for the Attorney General were able to purchase numerous titles at Austin retail stores as recently as Sunday evening.

According to SONY's Web site, the company recently distributed millions of CDs across the nation on 52 CDs by various artists. These CDs contained embedded files used for copy protection – or XCP technology. The files prompt consumers to enter into a user agreement to install SONY's audio player. By opting into the agreement, which Sony represents is the only way a consumer can listen to these CDs on a computer, the consumer is unaware that SONY secretly installs files into the computer's Microsoft Windows folders. Consumers are unable to detect and remove these files.

SONY-BMG claims on its Web site that this XCP technology merely prevents unlimited copying, is otherwise passive and does not gather personal information about a computer user. However, the Attorney General's investigation into this technology revealed that it remains hidden and active at all times after installation, even when SONY's media player is inactive, prompting concerns about its true purpose.

The Attorney General's lawsuit also alleges that a phantom file is installed to conceal the XCP files from the user, thus making it difficult for the user to remove the files from his or her computer.

Moreover, recent news accounts allege that newly created viruses that exploit this phantom file have been spreading. A user unfamiliar with installation – and removal – of this technology may be vulnerable to new security risks and possibly identity theft.

Because of alleged violations of the Consumer Protection Against Computer Spyware Act of 2005, the Attorney General is seeking civil penalties of \$100,000 for each violation of the law, attorneys' fees and investigative costs.

Sony-BMG – shame on you!

John Brewer practices law in Oklahoma City, is a member of the Governor's and Legislative Task Force for E-Commerce, and enjoys issues relating to eBusiness and cyberspace. Comments and questions are welcome and can be emailed to johnb@jnbrewer.com.

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This article comes to us from APCUG, the Association of Personal Computer User Groups, an international organization of which CMUG is a member. The article originally appeared in the December eMonitor, the newsletter of the Computer Club of Oklahoma City (www.ccokc.org).



How Much Is 300 GB?

by Jim Sanders, via APCUG

I recently acquired a 300 GB hard disk for \$110 (after rebates). When I look at that 3.5-inch hard drive that is one inch high and easily held in my hand, trying to put those 300 gigabytes of storage in perspective is a little tough. I thought about the first Z80 CPM system I built in 1977 from a Cromemco kit that I had to solder together. It used 8-inch floppy disks that held 128,000 bytes.

The diskettes were easy to damage and it was a good idea to keep them in storage boxes. I made some good money selling the SRW Computer Products plastic storage boxes at a great ACP Swap Meet discounted price of \$2.00 each. They were designed to hold 10, but you could get 2 or 3 more in if you were careful! I wondered how many floppies 300 GB would be, so I punched the numbers into the calculator.

$300,000,000,000 / 128,000 = 2,343,750$ diskettes. I don't know how to visualize that, but I did calculate that it would take \$468,750 worth of those boxes to store them all. I then remembered that the average price at that time was about \$3.50 a diskette. Again the calculator, $2,343,750$ diskettes \times \$3.50 = \$8,203,125. Wow! That is a number that I don't want to think about if I am talking about a hobby.

Another way to wrap your mind around huge numbers is to start small, with something that you can relate to, and work your way up. Now we know that one byte equals one character of the alphabet. The common 10-point type has 10 characters per inch. So, if we have 120 characters/bytes in a row, we have one foot. There are 5,280 feet in a mile. So $5,280 \times 120$ gives the number of characters that would fit on a mile long strip of paper (say, a ticker tape) that was being printed with 10 point type; the answer is 633,600 bytes on this mile-long ticker tape. Compared to the 300 gigabytes on the hard disk, 633,600 bytes is not much. To find out how much, we need to take the 300,000,000,000 byte capacity of the hard disk and divide it by 633,600 bytes in a mile. The answer to that math problem is the equivalent of 473,485 miles of ticker tape.

To put that into perspective, let's take the circumference of the earth (nominally 25,000 miles) and divide that into our answer. So, $473,485 / 25,000 = 18.93$. If we could find a big enough roll of ticker tape, printing all the information on that hard disk would wrap around the equator of the earth 18.93 times. That sounds impressive, but how many people

can really visualize that. Besides, I don't know anyone who has a big enough ticker tape printer. Another thought, that ticker tape would be 3,000 miles short of stretching from the Earth to the Moon and back.

But let's try it with regular 8.5 inch x 11 inch paper. Again, standard printing would be 10 point type, 10 bytes per inch, and 6 lines per inch. Most people leave at least a half inch margin all the way around the page. So that means each line will be 7.5 inches, or 75 bytes, and there will be 60 lines per page. So each page will use 75 bytes x 60 lines, or 4,500 bytes. First, let's take one of the 300,000 megabytes on the disk and see how many pages that represents. $1,000,000 / 4,500 = 222.2$ pages. We still have 299,999 megabytes left and, using them, the total number of pages comes out to 66,660,000 pages.

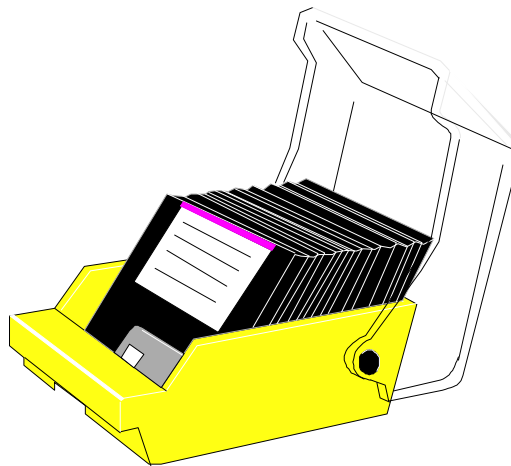
That is also a little hard to imagine, so let's see how many reams of paper that is. Take 66,660,000 pages, divided by 500 sheets per ream = 133,320 reams of paper. Again, a little hard to visualize.

A lot of things have their volume given in cubic feet. That's 12 inches x 12 inches x 12 inches or 1,728 cubic inches, or 1 cubic foot. I measured one case of paper at 11.25x9x17.5 inches, or 1,771 cubic inches. Let's be generous and round that off to one cubic foot. So at 5,000 sheets, or ten reams per case, we divide the 133,320 reams that we came up with by 10 to get 13,332 cases, or that many cubic feet of space.

Stipulating that an average house is 1,400 square feet with eight foot high ceilings, then the average house has 11,200 cubic feet of space, ignoring the walls. If you filled your house, wall-to-wall, floor-to-ceiling, with cases of printed paper, you would still have 2,132 cases left over. If you are in better shape than I am, there is still room to get one car in that two car garage. That's 10'x20'x9' = 1,800 cubic feet, so that still leaves us with 332 cases of paper. We could take all of the junk out of the other half of the garage, lay down a two foot thick layer of paper and put all the junk back in on top of it. That's how much the 300 gigabyte disk holds!

So, unless you are planning on taking out a home improvement loan, don't buy that 400 gigabyte disk!

This article comes to us via APCUG, the Association of Personal Computer User Groups, of which CMUG is a member. Jim Sanders is the editor of Orange Bytes, the newsletter of the North Orange County Computer Club (www.noccc.org). He can be reached at editor@noccc.org.

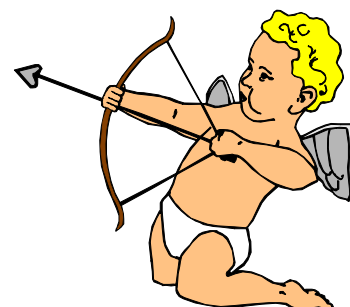


CMUG MEGAPHONE

George Coffin
8652 Open Meadow Way
Columbia, MD 21045

Meeting:
Wednesday, February 15, 7:30 pm
Dave Methvin on the Sony-BMG case

(Note that our meeting is back at the
Florence Bain Senior Center)



CENTRAL MARYLAND USER GROUP

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General meetings are held the third Wednesday of every month at 7:30 pm at the Florence Bain Senior Center, near the Harpers Choice Village Center in Columbia MD. The number there is 410-313-7213.

Membership in the user group is currently \$25 (cheap!). Membership includes a monthly subscription to the CMUG Megaphone, a membership directory, full access privileges to the Website, and drawings for free and review software at meetings.

www.milkern.com/cmug

