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On The Edge

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Maybe I shouldn't *ever* announce what I plan to write about in my next article. As I wound up my discussion of backup *media* in my December 2007 article, I mentioned that I intended to examine several backup programs next. Instead, I put that off last month to feature an important CD/DVD scanning program. This month, due to circumstances beyond my control, that backup article is still "under construction".

In its place, I've taken some things I wrote recently that just didn't fit in for one reason or another, and I've woven them together under the loose concept of "edges". Plus, I've added links to some marvelous videos I recently learned about through two of my favorite websites. In point of fact, there are two additional edges that I won't be addressing this month.

One is that we are all on the edge of a revolution in PC design. As of now, I plan to discuss this in my April 2008 article. The other is that for the first time in many years, it might be possible that Microsoft is on the Edge of Extinction. That, too, will be the topic of a future (possibly gleeful) article. For next month (March, 2008), I've got something different in mind; and the same might go for May and June. My article on backup programs could easily be postponed until September or later. So much for that promise of "next issue". Anyway, returning to the present, here's our first edge:

Edge One: The Cutting Edge

For one brief, shining moment I was out on the razor-sharp tip of the cutting edge of mass-produced computer technology. Anyway, that's my story, Officer. Let me explain:

In 1963, I got my own "personal" computer (I wasn't the only one - my cousin had one too). It was a mechanical kit called the Digi-Comp I, commercially manufactured by Education Science Research Incorporated in Montclair, New Jersey. It was made mostly from styrene plastic, but also contained a

few metal parts and (believe it or not) a handful of rubber bands. Looking somewhat like the model for an under construction apartment or office building (with most of the walls not yet installed), it had fixed and movable "floors".

Three of those floors acted as one-bit mechanical "registers", which could be interconnected in various ways. (Functionally, they were flip-flops, but they actually just slid from side to side). "Programming" and data input were both done by inserting (or taking out) hollow plastic pegs that looked a lot like one-inch-long pieces cut from soda straws. Their presence or absence affected the operation of vertical links that could transfer motion between the movable layers.

Output was read through three square holes cut into a plastic front piece. You'd see either a one or a zero through each hole, depending on the final position of each flip-flop. The whole thing was "clocked" by alternately pushing and pulling on a tab sticking out near the bottom of one side.

The Digi-Comp I could be set up to perform addition, subtraction, or various logical operations, and it could even play some very simple games. My cousin and I speculated about possible external mechanisms for moving that clock tab. (For instance, the back and forth sliding motion seemed tailor-made for connection to a teeny, tiny steam engine). Unfortunately, we never tried any of our wild ideas. I wonder if anybody out there ever actually rigged up some kind of "Rube Goldberg" power supply, like a wind-up spring or a hamster-wheel (it already *had* rubber bands). I hope so, and I wish I could have seen the results.

Recently, while doing Internet research to confirm my memories of the Digi-Comp I, I learned about its 1967 successor: the Digi-Comp II (which looked a lot like a pinball machine). It featured marbles rolling downhill and hitting or evading various movable obstacles (whose pivoting action provided the logical flip-flop functions). I couldn't find detailed technical specifications, so I don't



<http://www.acgnj.org>

Founded 1975

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have an accurate register count; but I did find a picture. There, I counted more than twenty rocker or gate looking objects. From that one view, I couldn't figure out how the Digi-Comp II was programmed. One possibility might have been to make or change the way the movable topside elements were ganged together mechanically. If such interconnections did in fact exist, they would have been on the underside, and thus invisible to me. Therefore, I was probably counting some or all of the actually available flip-flops more than once. Even so, the Digi-Comp II certainly had more capacity than the Digi-Comp I. As a kid, I would have loved something like that.

Well, that was fun (at least for me), but why did I bring it up here? Think about it. Years later, when the very first electronic computer kits came out, they couldn't really do all that much more. So a (mostly) serious argument can be made that the Digi-Comp I deserves a place in a complete and comprehensive history of the Personal Computer. After all, it was small and lightweight, it *was* a real programmable binary computer, and anybody who wanted to could buy one of their own. How could it fit the description better? On the other hand, nobody could really complain if it was omitted from a more condensed history. That's what I was working on when I produced these paragraphs, which were intended to be a somewhat humorous Heartwarming Reminiscence, introducing my *PC/OS Timeline* article. However, that article (which is also still "under construction") has grown so huge that it will probably have to be split into installments. Moreover, like a super-star, it really needs no introduction; certainly not a long-winded one like this. So I pulled it, and I'm using it here instead.

Edge Two: The Edge of Insanity

You may remember (or are possibly trying very, very hard to forget), I wrote a "Halloween Episode" for the October 2007 issue. It was mostly full of silly, spooky stuff. However, I included some darker material as well. Undoubtedly, the vilest, most despicable, most hideously evil monstrosity I touched upon was a so-called Software License Agreement. Some things are just too awful, though, even for Halloween, so I kept my comments brief. Hopefully, enough time has passed that I can now complete my thoughts on the subject without unduly offending the delicate sensibilities of our readers.

First, let me be *absolutely* crystal clear: I might or might not possess a boot floppy, which might or might not contain a program, whose name may or may not begin with a "G"; and which may or may not have been obtained from a certain company whose name may or may not begin with an "S". If there really was such a disk, I might or might not have recently made a few small changes to it, which I might or might not have written about in an article whose title might or might not have begun with an "H", and which might or might not have been published in a month that might or might not have begun with an "N".

Possibly in that same article, but purely coincidentally; and having absolutely nothing to do in any way at all with the hy-

pothetical subject of the previous paragraph, I might have planned to cite the common law of contracts. Then, I might have intended to examine the concept of consideration; and how I think it could apply to a document so convoluted that it is demonstrably impossible to comply with all of its provisions. I may actually do that someday, but not now. These paragraphs are as far as I got before the stench of brimstone became so foul that I had to stop.

As Monty Python used to say: "And now for something completely different": In the good old DOS days, there used to be a type of computer program known as a "utility". The concept was simple. A utility was a *tool*. You bought a copy, which you usually kept on a floppy disk. You then proceeded to use that one floppy disk in any way that you wanted. As long as you kept to that single copy, the program's author(s) never tried to interfere with your use. No more than a hardware store would sell you a pair of pliers, then tell you what you could squeeze with them. Or sell you a hammer, then tell you which nails you could hit with it, and what boards you could pound them into. Or sell you a chain saw, then tell you which Texans you could massacre with it. (That's a leftover from Halloween, referring to Tobe Hooper's 1974 monster-piece *The Texas Chainsaw Massacre*. As *The Wizard of Oz* **didn't** quite say in 1939: Pay no attention to that man behind the curtain. He's being silly). It's too bad that the corporations of today don't understand the utility concept, and it's too bad that I'm so intimidated by the possibility of draconian lawsuits that I can't be any clearer here.

I'm not the only one, either. Pamela Jones of www.groklaw.net was (and still is) a fan of Luciano Pavarotti. When he died in September of 2007, she wanted to pay him tribute by publishing links to two videos that she found on the net, thus sharing her love and sorrow with her own considerable audience. Unfortunately, she couldn't expose her site to the possibility of a copyright lawsuit. She'd have been just too tempting a target. Here's a link to what she posted instead (Copyright 2007, licensed under a Creative Commons License):

Luciano Pavarotti died today... A music-less tribute, thanks to copyright law:

<http://www.groklaw.net/article.php?story=2007090606152045>

If a knowledgeable paralegal like her can be intimidated, what hope do *I* have?

Edge Three: The Edge of Disaster

This section contains the aforementioned videos. The first two are actually last-minute additions. I found the first while surfing the Web on January 16, 2008. It's interesting, entertaining, and educational, plus it has an *intense* soundtrack. Even though it doesn't really fit with the other videos (because it isn't a comedy), it was just *too good* to leave out. It's a four-minute "making of" video, showing how three graphic designers re-created D-Day on a shoe string budget for the "Bloody Omaha" episode of a BBC series called Timewatch. (The BBC was so impressed by YouTube viewer interest in this video that they scheduled a repeat broadcast of the original show on BBC2; and it may soon be available in the US on

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the Smithsonian Channel as well. Look for Timewatch: Bloody Omaha on www.smithsonianchannel.com). As far as computer-club-relatedness goes, this might be the most on-target of all the videos. The cameras and computers used here weren't the kind only affordable by Spielberg and God. These days, *anybody* with readily available equipment and *talent* can do what these people did. From now on, talent will be the determining factor.

Richard Hammond presents Bloody Omaha (The Graphics)

<http://www.youtube.com/watch?v=WRS9cpOMYv0>

I ran across the second while surfing the Web on January 11, 2008. It's from political cartoonist Walt Handelsman's blog on newsday.com (Copyright 2007 Newsday). It's short, but it gave me a belly laugh, so I decided to share it with you. The link below doesn't run the video automatically. You'll have to click on the "Press Here to Start" sign.

Aging baby boomers struggle to stay young.

http://weblogs.newsday.com/news/opinion/walthandelsman/blog/2007/11/animation_baby_boomers.html

I found the third video through Brian Briggs' satire website (www.bbspot.com). He listed it as one of his Daily Links on November 15, 2007. It's from the CollegeHumor website (Copyright 2007, Connected Ventures, LLC), and is supposedly an unaired pilot episode for the TV series *24*, made in 1994. Even if you haven't seen *24*, you'll probably still get most of the jokes. I don't think I need to say anything further about this one:

Jack Bauer saves the world with AOL 3.0.

<http://www.collegehumor.com/video:1788161>

The other videos involve SCO, and are going to take some explaining. First of all, exactly what does SCO mean? Well, it depends. Up until 2001, SCO meant the Santa Cruz Operation (now sometimes called "old SCO"). After 2002, SCO has been used as a nickname by the SCO Group. These days, it's often difficult to tell which company a particular "SCO" reference is actually identifying. (Many people believe this confusion was deliberately intended). Here are the rules for *this* article: In this section (about the past), SCO by itself means the Santa Cruz Operation. In Appendix I below (about the present), SCO by itself means the SCO Group. Initially, I learned about most of what I'll be listing below from Groklaw, both about the companies themselves (through continuous lawsuit coverage), and about the existence of these fabulous videos (on December 7, 2007). However, while I owe Pamela Jones thanks for pointing the way, the links I'll be citing won't be hers. Instead, they'll be direct links to the sources. For starters, I got the following SCO historical information from Wikipedia, the free encyclopedia (www.wikipedia.org). A *whole lot more* than this happened, but I've cut out all but the bare minimum needed to set the scene for the videos.

In 1978, the Santa Cruz Operation (SCO) was founded by Doug Michels and his father Larry Michels, as a UNIX porting and consulting company. In 1993, SCO acquired two

small British companies and developed a separate product line that was named Tarantella.

In 1979, Novell Data Systems Inc. (later just Novell Inc.) was founded. In 1994, the Novell board hired a new CEO, who decided to streamline the company by shedding several divisions (including WordPerfect). Caldera Systems was founded at that time by Bryan Sparks and Ransom Love (with start-up funding from former Novell CEO Ray Noorda) to continue the development of some Linux-based products that were also being divested by Novell.

In 2001, SCO sold its UNIX divisions to Caldera Systems. After that the corporation retained only its Tarantella product line, and changed its name to Tarantella, Inc. (In 2005, Tarantella, Inc. was absorbed by Sun Microsystems).

In 2002, the Caldera board of directors brought in a new CEO. The company was renamed the SCO Group, and it started a series of controversial lawsuits. (In 2007, those suits were stayed because the SCO Group filed for bankruptcy). For additional information, see Appendix I below.

The following eight videos (which comprise *The 2001 SCO Follies: Fiddler on the 425 Roof*) were posted on YouTube (which Google now owns) by user "motibloc", identified as "SCO Follies writer, video editor and archivist". (The original seventy-three minute recording had to be cut up into sections to satisfy YouTube's approximately ten-minute maximum submission rule). The rest of this paragraph was paraphrased from information posted on YouTube by motibloc him (or her) self: From 1985 to 2001, the Santa Cruz Operation hosted a Solstice party featuring a live musical show known as *The SCO Follies*. This was a fully scripted and produced satire skewering SCO management and the high-tech industry in general. It featured live action, musical numbers and videos. Planning for each show began in November of the previous year, with writing and production continuing into March for an April show date. These eight sequential videos of the *final SCO Follies* were recorded live at the Coconut Grove in Santa Cruz, CA on Saturday, April 21, 2001. That was shortly after Caldera purchased most of the Santa Cruz Operation. Thus, the show's theme was "change", with Caldera playing the Cossacks. The show opens with a "Dawn of Spam" sequence (adapted from Stanley Kubrick's classic 1968 film *2001: A Space Odyssey*). Ironically, the mood of the "Linux Company" finale was soon overturned, when the re-named and radically downsized "SCO Group" turned **against** Linux.

Now, here are some notes of my own: The opening is a bit slow. Even so, give it a chance. It's funny. Remember, this show was designed for an audience that intended to stay for the whole thing. Unlike a video designed for today's Internet, it didn't have to reach out and grab viewers before they could jump away to something else. As is only to be expected, there are some in-jokes that we just won't get; but most of them we will. (For instance, a response by "E-man" on Groklaw revealed that the 425 refers to the address of one of the SCO buildings: 425 Encinal Street). Also, these videos are a mix of pre-recorded clips and **live** performances, and sometimes it

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shows, as with a small microphone problem and a couple of flubbed lines. To me, that makes them even more endearing. The names in the middle lines below were made up by *me*, to make it easier to keep track of the content. I have no idea what the actual authors really named their scenes.

• Fiddler on the 425 Roof, Part 1 (09:54)
2001, Monty Python, Tradition

<http://www.youtube.com/watch?v=GSOKrjz0poU>

• Fiddler on the 425 Roof, Part 2 (10:22)
Tradition (continued), Apocalypse Now, SCO Café

<http://www.youtube.com/watch?v=bNpPb4zdkHI>

• Fiddler on the 425 Roof, Part 3 (09:52)
Pass It On, All Hands Meeting, Caldera (as hard rock)

<http://www.youtube.com/watch?v=as3mE1KEBTk>

• Fiddler on the 425 Roof, Part 4 (10:10)
Denial, HR (ER spoof), Caldera (as Copacabana)

http://www.youtube.com/watch?v=QSWE09L_8R8

• Fiddler on the 425 Roof, Part 5 (09:11)
Questions, Priceless, Let's Call The SCO Thing Off

http://www.youtube.com/watch?v=r5tq_8Ov6vE

• Fiddler on the 425 Roof, Part 6 (10:19)
Waiting For Godot, Changes, Lost, More Changes

<http://www.youtube.com/watch?v=gg3UdPttnL4>

Fiddler on the 425 Roof, Part 7 (07:29)
Tradition (reprise), We All Work in a Linux Company

<http://www.youtube.com/watch?v=ukRFku5nYjg>

• Fiddler on the 425 Roof, Part 8 (05:48)
The cast takes a bow, executives speak, credits roll.

<http://www.youtube.com/watch?v=xZwd5WgZDcY>

The first executive to speak in Part 8 was Doug Michels, watching as a large part of SCO (the company he'd co-founded almost a quarter century earlier) was handed over to others. He must have been a good sport, and a bit of a ham, too. That's his head in the Monty Python montage, and he **starred** in the pre-recorded Apocalypse Now segment as well. Perhaps he suspected there wouldn't be any 2002 Tarantella Follies in his future. The second executive to speak in Part 8 was Ransom Love, co-founder of Caldera Systems. He would be replaced as Caldera CEO in just over a year, and completely leave the company soon thereafter. Could he have known that there'd be no more Follies (Caldera *or* SCO) in his future, either? Both seem to have been good guys. I'd guess neither could have foreseen how the antics of their successors would permanently tarnish the images of *both* their creations.

Multi-part SCO Follies videos from several earlier years have also been posted on YouTube. I haven't viewed them yet, but I'm looking forward to it. For those who want more in-depth information about the SCO follies, here's a link to a blog dated April 25, **2003**, by Evan Hunt (who, among other things, played Tim, the lead character in the videos):

Unhappy Anniversary

http://ethanol.blogspot.com/2003_04_20_ethanol_archive.html

That takes care of the fun stuff. Now we get some technical content.

Edge Four: The Trailing Edge

Specifically, bad CDs and batch files; but first, we need a little recap. As part of my December, 2007 article, I wrote an expose of the shoddy, sub-standard blank CD disks being sold today (and listed some sources for the few **good** manufacturers). In my January, 2007 article, as I mentioned above, I recommended a *free* Internet download (Nero CD-DVD Speed 4.7.7.5) as a big step in the direction of solving that problem. I also said I'd written (*before* I knew about that download) two quick-and-dirty batch files, designed to test CD/DVD readability. Now, although we have a better solution, and no one will ever actually *need* to use my batch files; I've decided to print them anyway. The first should work on any release of DOS (MS or otherwise) that contains a version of XCOPY featuring the "/H" switch, and on Windows 9x versions up to and including ME. Here's the complete file:

```
@ECHO OFF
:STRT
CLS
ECHO Insert a CD and press Enter.
PAUSE > NUL
XCOPY S:\*.* NUL /H /S /E
PAUSE
GOTO STRT
```

When a batch file runs, the operating system's built-in interpreter processes the lines one by one, executing whatever command(s) each line contains. Yes! As written, my file *is* a continuous, never ending loop; but it's *not* like the legendary "Destructive DO Loop" from the old mainframe Fortran days. It's easy to break out of a batch file at any time, if you know the secret. I do, and this one was written just for me. Back when I wrote batch files for use by other people, I would have added an on-screen Exit option (probably using the CHOICE command); and maybe I'd have thrown in a few other bells and whistles as well. Now for a line-by-line analysis:

Line 1 turns the ECHO function off for all following lines, so the lines themselves won't be displayed on the screen as the batch file runs; just the results (if any) of the commands each line contains. Putting the "@" sign at the start of any line turns the ECHO function off for that one line only. In this case, it insures that the first line won't be displayed on the screen, either.

Line 2 is just a label, identifying this particular place in the sequence of lines. (I used STRT rather than START from programmer's force of habit. START is the kind of word that might possibly be reserved. You *don't* mess with reserved words). The colon (:) at the beginning of the line is what makes it a label.

Line 3 is a command to clear the screen.

Line 4 displays "Insert a CD and press Enter." on the screen.

Line 5 stops the batch file until a key is pressed. Normally, the PAUSE command also sends a message to the screen. Here,

Continued

because Line 4 already said everything I need, the “>” sign redirects that message to the NUL device instead, so it’s *not* displayed on the screen. (The NUL device can be very useful. Anything sent there just ceases to exist).

Line 6 is the whole point of this batch file: the XCOPY command. S:*.* is the source. (S: is my CD/DVD reader). NUL (the NUL device again) is the destination. The /H switch tells XCOPY to copy hidden and system files also. The /S switch tells it to copy subdirectories and their contents. The /E switch tells it to copy empty subdirectories, too. As it runs, XCOPY displays the name of each file it copies. When it finishes successfully, it prints a “File(s) copied” message; but if it has a problem, it stops and displays an appropriate error message. That’s what we’re looking for (and hoping *not* to find): an error message.

Line 7 stops the batch file again, so we can read whatever XCOPY reported. Here, I used the PAUSE command and nothing else, so it can display its own message (“Press any key to continue . . .”).

Line 8 sends the interpreter back to Line 2, so it will start processing again from Line 3.

I wrote and tested the first batch file on my Windows 98 SE machine. I was relatively satisfied with it there, so I moved it over to the XP machine. (Via floppy disk sneaker-net, since the 98 SE computer is no longer allowed to access the Internet; and thus *can’t* be connected to my current TCP/IP network). There, I got a shock. **Line 6 didn’t work!** The NUL device *does* still exist in XP (Line 5 worked as usual); but if you try to use it as the destination for an XCOPY command, you get; “Invalid drive specification” and “0 File(s) copied”. For some reason that’s incomprehensible to me, the Meddling Minions of Microsoft have decreed that NUL is no longer a valid destination for XCOPY. Out of curiosity, I verified that the COPY command *can* still use NUL as its target. Unfortunately for my batch file, the XP version of COPY can’t handle subdirectories, just like its DOS ancestors. Therefore, I had to stick with XCOPY, but use a different target. After being modified for XP, my second batch file grew to **eleven** lines. The first five lines are the same, so I won’t list them again. Starting with Line 6:

```
IF NOT EXIST C:\TEMP\NUL MD C:\TEMP
IF NOT EXIST C:\TEMP\TEST.XXX ECHO. >
C:\TEMP\TEST.XXX
XCOPY S:\*.* C:\TEMP\TEST.XXX /H /R /S /Y
PAUSE
ATTRIB -S -H -R C:\TEMP\TEST.XXX
DEL C:\TEMP\TEST.XXX
GOTO STRT
```

XP Line 6 uses the NUL device to determine the existence of a directory. In English, it says; “If the NUL device does not exist inside the TEMP directory on the C: drive, then the TEMP directory *itself* doesn’t exist. Therefore, use the MD

command to make a new C:\TEMP directory”. Thus, whether or not that directory existed before, it’s there *now*.

XP Line 7 creates a new target file, but *only* if it doesn’t already exist. Normally, the ECHO command with a period **directly** afterwards (**no** space in between) would display a blank line on the screen. However, the “>” sign redirects that line (really just four bytes: two signifying a carriage return and two signifying a line feed) to a file named TEST.XXX in the C:\TEMP directory. If that file doesn’t exist, it will be created. (If a file by that name **already** exists, the system will attempt to overwrite it. In the case of this batch file, that might lead to an “Access is denied” message. Therefore, the IF NOT EXIST statement was included, to insure that possibility can **never** occur).

XP Line 8 is the XCOPY command from old Line 6 with the destination changed to the new file. The switches have also changed. The /R switch lets XCOPY overwrite read-only files. The /Y switch tells it to overwrite the target file without asking for permission each time. The /H and /S switches are the same as before. The /E switch was removed because the target is now a *file*. An empty subdirectory just couldn’t be copied to it.

XP Line 9 stops the batch file, so we can see if XCOPY reported an error, just like old Line 7. When tested on a known bad CD, I expected something like the message I got from 98 SE: “The system cannot read from the specified device.” Instead, I got: “File creation error - Data error (cyclic redundancy check).” Different target, different error, different message, I guess.

XP Line 10 insures that the System (S), Hidden (H), and Read-only (R) attributes are *not* set on TEST.XXX. (If even one was set, Line 11 *wouldn’t* work).

XP Line 11 deletes TEST.XXX. (If I don’t stop the test cycle by breaking out of the loop, it will be created anew by Line 7).

XP Line 12 is the same as old Line 8, sending the interpreter back to Line 2.

Note that unlike the NUL device, the XP target (being a file) *actually exists*. Therefore, if I accidentally picked a filename that some *other* program was already using, that program’s data (or settings, or whatever) will be destroyed when I run my program. Even if I did an exhaustive search and couldn’t find any other program using that filename right now, there’s no guarantee some programmer out there might not decide to use that name tomorrow. There’s a routine I could add that would insure that I *never* overwrote an existing file, but it can easily grow very long and complicated; and no matter how elaborate it got, it would always have to include the fail-safe option to abort *my* batch file if an unused filename couldn’t be found. So I’d wind up with a giant batch file which *still* couldn’t guarantee that it would always run when I needed it. Therefore, I had to ignore that idea and just gamble on choosing an unusual filename. Furthermore, there must always be enough free space left on the hard disk to contain the **largest** possible target file. That would be 4.37 **GB** for a single-layer DVD, and twice that for a double-layer disk. Turns out, the NUL device is **nothing** to sneeze at. (A joke has been made.

Continued

Please laugh). If I were to add an on-screen “Exit” option to this version, I’d also change the position of three of the lines. I’d move XP Line 6 up above the “STRT” label, because it really only needs to be run once, **before** the loop is started. Similarly, I’d move XP Lines 10 and 11 into the exit routine, **outside** the loop. They also need to be run only once, to get rid of the no-longer-necessary (and possibly quite large) target file **after** the loop has ended.

I certainly consider the NUL device problem to be a bug in the XP version of XCOPY; and there’s a **second** bug, which is also present in the 98 SE version. I know from personal experiences that even with the /H switch set, XCOPY *doesn’t* copy every hidden and system file from one hard disk to another. While I can’t prove it, I strongly suspect that this could happen with CDs and DVDs as well; and these tests won’t be valid unless *every* file is copied from each disk being tested. I think those missing hard disk files might contain information Microsoft just doesn’t want us to know about, except that a drag-and-drop operation in Windows Explorer *will* copy them all. I can’t say if this /H switch problem happened accidentally (due to incompetence, sloppy programming and inadequate testing), or on purpose (due to arrogance, maliciousness and mean-spirited big-brother-ism). Either way, I’m glad we now have a different (and *better*) solution available to test our CDs and DVDs.

Appendix I: SCO Lawsuits

The SCO Group (*not* old SCO) is involved in many lawsuits, both inside and outside the United States. Groklaw has been tracking them all. These are *just* the big three. Each has been given its own history page on www.groklaw.net. (See the links below, copyright 2003-2007 by Pamela Jones). These cases revolve around who now owns UNIX. (Everybody agrees, at least, that AT&T sold it). Here’s a quick, *extremely* simplified timeline:

(Important things to note: The Santa Cruz Operation (old SCO) was a *UNIX* company. Caldera Systems was a *Linux* company. In 1995, the Santa Cruz Operation purchased certain UNIX assets from Novell. Exactly *what* old SCO acquired, and what Novell still retained, would eventually become crucial issues. Despite its name, the SCO Group is *not* the Santa Cruz Operation. In 2001, while still doing business as Caldera, the soon-to-be-renamed SCO Group bought a large part of old SCO, but that was only property. They *didn’t* buy the company itself. Sun Microsystems did, in 2005).

March 6, 2003: SCO sued IBM, claiming that SCO owned UNIX, and charging that IBM had taken SCO’s proprietary UNIX code, and added it to IBM products *and* to Linux.

August 4, 2003: Red Hat (a premier Linux company) sued SCO over that Linux claim (which SCO has *never* substantiated, not even a tiny little bit).

January 20, 2004: SCO sued Novell, when Novell publicly claimed to own the UNIX copyrights.

April 6, 2004: The Red Hat case was stayed pending resolution of the IBM trial.

September 14, 2007: With the Novell case running strongly in Novell’s favor (and the IBM case going IBM’s way as well),

SCO filed for bankruptcy protection, causing *all* outstanding litigation involving SCO to be automatically stayed.

November 27, 2007: The U. S. Bankruptcy Court (in Delaware) lifted the automatic stay of the Novell Lawsuit, allowing it to proceed (in Utah).

January 11, 2008: A 4-day Bench Trial of **SCO Group v. Novell, Inc** was scheduled for April 29, 2008 in Utah U.S. District Court.

SCO Group v. International Business Machines, Inc

1081 Actions (so far), Utah U.S. District Court

groklaw.net/staticpages/index.php?page=20031016162215566

Red Hat, Inc v. SCO Group

72 Actions (so far), U. S. District Court of Delaware (Wilmington)

groklaw.net/staticpages/index.php?page=20031017044328636

SCO Group v. Novell, Inc

485 Actions (so far), Utah U.S. District Court

groklaw.net/staticpages/index.php?page=20040319041857760

Additionally, if you’re interested, here’s the SCO Group bankruptcy timeline:

The SCO Group, Inc. Voluntary Petition for Chapter 11 Bankruptcy

310 Actions (so far), U.S. Bankruptcy Court for the District of Delaware

groklaw.net/staticpages/index.php?page=SCO-BK-timeline

These cases have dragged on for almost **five years** now, so it’s quite possible that nothing significant will change before the April 29th trial in Utah. On the other hand, things are still proceeding in the Delaware bankruptcy court. So it’s also possible that something huge could take place just *one day after* this issue’s deadline. If that happens, I apologize in advance. The best I can do is to make sure we’re as up to date as possible when (at the *very* last minute) I submit this article to the Editor.

Appendix II: More Copyright Paranoia

In the next-to-last paragraph of Edge Four above, I made a small joke about the NUL device. It was, in fact, *such* a small joke that I thought it might be missed completely unless I called further attention to it. So I followed it with this parenthetical expression; “(A joke has been made. Please laugh)”. Funny, huh? The trouble is, I didn’t make that up myself. It’s paraphrased from a Doonesbury cartoon I remember reading around thirty years ago.

In an effort to give complete credit, I went to www.doonesbury.com to see if I could locate the original comic strip. Unfortunately, in order to do a comprehensive search of the archives, you have to pay for “Premium” service; or sign up for “Free Limited Access” (which, after seven days, magically turns into a slightly cheaper but still **paid** membership). I wasn’t about to do either, just to possibly cite the source for one single joke.

So here’s the best I can do: The idea (if not the exact words) for that parenthetical expression was copyrighted some time in the 1970’s by G. B. Trudeau and/or the Universal Press Syndicate. I hope that’s good enough. **Don’t** sue me, Garry! Please!! ☹

From The DealsGuy

Bob (The Cheapskate) Click (bobclick@mindspring.com), Greater Orlando Computer Users Group

I've used FedEx twice and it was a complete disaster. The first time, a few months ago, they delivered the packages I sent my son to the wrong house, which was actually unoccupied, but the tracking said it was delivered. Luckily he found them three days later when checking that house (he owns it).

I recently sent two more packages to my son's home. I tracked the packages on the Web site and when it showed the packages on the truck for delivery, I called to make sure their gate was open that day. They live a quarter-mile back from the road with a gate at the entrance. The package was not delivered that day, but at 6:46 PM the tracking showed it would be delivered the next day. At 8:30 PM the next night and no change with the Web site tracking, I called FedEx to see why it was not there and was told they had no way to communicate with the driver, but the package would not be delivered that late. My son closed the gate.

FedEx called me the next morning to give an approximate delivery time, but discovered that the delivery was actually made the night before at 9:06 PM. My son hurried to look, but the packages couldn't be found. My son's house is not visible from the gate at night because it's back down the drive, so obviously with the gate closed, the packages were left beside the road, but there is a large sign on the gate with the address and phone number to call. Why can't they communicate with their driver? They said that because I didn't request a signature, I am out of luck. Actually, they are out of luck from now on with my money. I submitted a claim anyway.

*Problem Resolved

Last month I mentioned a reader had tried the free Advanced WindowsCare Personal (from my November column), but in order for it to fix the problems, he needed to upgrade to the pay version, so he stopped there. I later received a message from Ira Wilsker telling me it worked fine without upgrading, and that he had demonstrated it to their group. My proofreader also tried it with no upgrade demand, so I downloaded it and it removed what it found without upgrading to the pay version. I don't know where my reader went wrong, but he's going to try it again. Sorry for the mixup.

*No Operating system? What's a Hypervisor?

I saw this article www.informationweek.com/articleID=202401578 about using servers without operating systems. This doesn't affect home users, but could it in the future? I found it interesting.

I severely edited the items below so thoroughly check their Web sites for full information. I have not tried them.

*A Firefox Add-on

iMacros for Firefox was designed to automate online activities within the Firefox web browser. With iMacros, users can create macros to automatically check the same sites every day, remember passwords, complete web forms, and upload or download files, among other activities. They say, "Whatever you do with Firefox, iMacros can automate it." Notable

examples include stockbrokers who create macros to extract online stock quotes, shoppers who use them to automatically compare prices at online stores and website owners who use them to get daily downloads of their page rankings.

iMacros for Firefox allows users to share macros and scripts in a way similar to how they share bookmarks on the many social book marking websites. After creating a new macro, users can use just one click to share it with their friends as a link, or by distributing the link via e-mail and social book marking websites. Also, by embedding it in a website or by blog for public access. Script sharing is now so popular that iOpus has even created a special site for script-sharing on del.icio.us.

The iMacros for Firefox software is free for personal and commercial use. Users may opt to upgrade to the business version with guaranteed response times and advanced features. Additional information and the software download link are available online at <http://www.iopus.com/imacros/firefox>. Alternatively, the software may be downloaded directly from the official Mozilla site for extensions at <https://addons.mozilla.org/en-US/firefox/addon/3863>.

*Help For Your Video File Conversion

Video Mobile Converter v1.0 supports digital video files in the following formats: .AVI (audio video interleave), .ASF (advanced systems format), .MOV (QuickTime movie), .MPG/.MPEG/.MP4 (moving pictures experts group) and .WMV (windows media video). Once you choose a video, Video Mobile Converter loads the video and lets you define how much video to convert. Users also have control over the video and audio quality during the conversion process. Users control the height and width of the video, its frame and bit rate as well as its overall quality. Users also control the sample rate, bit rate and overall quality of the video's converted audio, along with the option of splitting video files during the conversion process enabling very large video files to become smaller and more easily managed.

Lastly, Video Mobile Converter can output the converted video in the following formats: .3GP and .3G2 (for use on 3G network mobile devices that use GSM or CDMA network protocols), .MP4 (for use on mobile devices, such as iPods classic, iPod nano, iPod touch, iPhones, cellular phones and other mobile devices), and .PSP (for use on Sony PlayStation Portables).

Video Mobile Converter v1.0 runs under all versions of Microsoft Windows, including Vista and costs \$29.95 (USD) for a single-user license. User group members get a 20% discount. For some reason they didn't respond to my request (possibly because of the holidays) for the special ordering procedures so, you can e-mail Michael Kaba at sales@geovid.com. Licensed users are entitled to the fully functional copy of the software, and free updates. Further information, as well as a free, fully functional evaluation copy is available from www.videomobileconverter.com.

For more information: www.geovid.com.

Download at [/download/videomobileconverter.exe](#) (9.3 MB)

Continued

Slimming Down PowerPoint

Cass Lewart (rlewart@monmouth.com), ACGNJ

If you ever worked with PowerPoint, and who hasn't, you realize how quickly PowerPoint files grow. What starts as a medium sized file of a few hundred kilobytes turns into a monster after you start adding pictures to your presentation. A large PowerPoint file of 10 Mb or more runs slowly during presentation, and what is worse, can not easily be emailed as an attachment as many ISPs reject files exceeding 10 Mb.

New versions of PowerPoint contain built-in utilities to slim down the files but the results are not always consistent. One can of course resize one by one all pictures in a presentation but it is a slow process.

After getting a PowerPoint file of over 10 Mb which I wanted to email, I did a Google search and came up with an interesting product which does the job effortlessly. It is a commercial product from Ontra Presentations in New York City. The program is called PPTshare File Compressor. A single user

license costs \$40. A free trial version can be downloaded from www.pptshare.com and used for up to 10 compressions.

If you value your time the license fee is a bargain. I found that size reduction depends on the presentation content. Presentations containing high resolution pictures can be reduced by up to 90%. Files containing mostly text and low resolution pictures can be reduced by about 50%. Some PPT files, which were manually optimized, can be reduced only slightly.

Remember that you never get something for nothing. A high resolution image in a PowerPoint presentation, which did not belong there in the first place, will be converted to a lower resolution. You will probably not notice any degradation during a normal slide presentation. You will only notice some degradation if you start zooming in on individual slides.

The program runs on Windows 98, 2000, XP and Vista. ☐

DealsGuy, continued

*Help For Your Web Site

Our software package, SeoAdministrator, is a popular professional tool for webmasters and SEO specialists. We released a new module called "Site Analyzer" that will be of interest to all webmasters including those who look after personal websites. The new module helps you to keep a website free of errors such as broken links. Regular use of Site Analyzer will ensure that problems are quickly and easily spotted so they can be fixed. Download a free demonstration of our easy-to-use tool [here](#).

Site Analyzer, Developed by by FlamingoSoft of Vancouver, BC, is designed to automate the vital web management task of monitoring and improving web site performance. Site Analyzer performs comprehensive scans of a specified website and alerts web managers to a range of common problems including broken links, faulty image links, errors in HTML code and missing meta tags using a variety of report formats. Site Analyzer can also create sitemaps in both human and machine formats ready for uploading. The link vendor will be able to see which pages are "overloaded" with external links and perhaps suspend link sales on those pages. System Requirements: Windows 95/98/ME/2000/XP/Vista.

Priced from \$70 (Standard) to \$150 for Expert edition, we are offering this great software to user group members at 50% discount (\$75 instead of usual price of \$150) which includes lifetime support and free upgrades. Use this link usd.swreg.org/cgi-bin/s.cgi?s=1613&p=1613seo&y=3&d=0&q=1&t= for the 50% discount. Check their Website URL for full info: <http://www.seoadministrator.com/>.

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*Easier Way To Remove USB Devices

USB Safely Remove enhances the native Safely Remove function in Windows and enables you to remove and unplug any USB removable device in one mouse click or hotkey. It can give correct names to the devices, lets you rename them and find out what application or process is locking the USB device, preventing it from safe removal. It's easy to unplug the wrong one by mistake because many of them have the same name. Unlike the native Windows option, USB Safely Remove shows all USB devices currently plugged into the computer and lets you remove any of them and gives correct names to the devices on its menu. The software is primarily aimed at those users who have more than one USB device.

USB Safely Remove 3.2 runs under Windows 2000, XP, 2003, Vista and is available immediately for \$20 (US) from SafelyRemove.com. User Group members can purchase the program at a 25% discount. Use the coupon code: CUG25 on the Buy Now page. Licensed users get unlimited functionality without nag screens, free technical support by e-mail and free lifetime upgrades. More information on the product, as well as a free trial copy is available from <http://safelyremove.com/ug>.

Download link: <http://safelyremove.com/usbsafelyremovesetupug.exe>

That's it for this month. I'll have more new product announcements on my Web site (most not offering a discount). Meet me here again next month if your editor permits. 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 Cheap skate) Click. Visit my Web site at <http://www.dealsguy.com>. ☐

Bot-Nets

Brian K. Lewis, Ph.D. (www.spcug.org), PCUG (bwsail at yahoo.com)

Keeping your computer safe while connected to the Internet is becoming more and more difficult. The “attackers” are becoming more sophisticated and are sharing more ways to get their software into your computer. Business Week recently ran an article on the major security problems expected in 2008. Unfortunately, most of them arrived long before the new year started. We have been warned for years that it was possible to recruit unprotected computers into networks that could be controlled by an external source. This recruitment network problem has gotten much worse over the past few years. It is estimated that 7% of the computers connected to the Internet have been infected with a Botnet program. So what is a “Botnet”?

A robot or “bot” software program allows a computer to be remotely controlled without the knowledge of the computer’s owner. When you have a number of “bot” controlled computers it is referred to as a “botnet”. All of the computers in the botnet carry out commands issued by the network controller. Just one example of what can be done with a botnet is the sending of spam. The controller can easily have 100,000 computers in its network. So the botmaster will contract to send out one million e-mail messages. The network can then send ten messages from each of the compromised computers. With the constant connection to the Internet using cable or DSL the computer owner will have no idea that his/her computer has been the source for ten spam messages.

Now you might say that the idea that someone can control 100,000 computers in a botnet is ridiculous. However, as of October 2007 a major Internet security service had the IP addresses of over 12 million computers that were infected with bot software. There is also a newer threat called the Storm Worm botnet that has infected millions of computers just this year. In addition to its computer recruiting ability, it has built-in defenses that are preventing security services from analyzing it. In an E-Week article it was noted that “.. Storm worm is sending DDoS attacks to not only the researchers looking into it but to anybody on their subnet, within 5 seconds of (their) initiating efforts to fight it or examine it”. A DDoS attack is a “distributed denial of service” which can bring down a computer system or network by overwhelming it with messages. A very large volume of messages are sent by the botnet in a very short period of time. It is estimated that the Storm net controls over one million computers. This would make it the most powerful supercomputer in the world, exceeding the computing power of all previous computers.

People frequently wonder why anyone would want to produce viruses, worms and other kinds of Internet attacks. Years ago it was primarily because “they could do it”. Today, it has become a real source of financial gain. Let’s take a look at one financial resource created by controllers of botnets. On many web pages you find ads of various types that are sponsored by Google. When these ads are clicked, the advertiser pays Google who, in turn, pays the owner of a web page, usually 80% of the fee. So the botmaster sets up a web page and contracts with Google to display ads. Then, using the botnet,

sends commands to the computers in its net to click on the ads. This results in payments to the botmaster. So even with a small botnet of say 5-10,000 computers, the botmaster can easily obtain \$15,000-\$20,000 per month in fraudulent payments. When you consider that the known botnets all have more than 100,000 compromised systems, you get a better idea of the scale of the fraud involved. This type of click fraud has been estimated to make up 5-20% of the payments made by search companies.

Another use of large botnets is extortion. The botmaster can send an e-mail to a corporation warning that a DDoS will take place at a specific time unless a payment is made. As I mentioned earlier, spam e-mail contracts are also a source of revenue for botmasters. As these networks proliferate, the sale of the IP addresses of robotically controlled computers is also favored as an income source.

So far it would appear that the only persons affected by botnets would be corporations. However, if your computer is infected, everything you do can be reported to the botmaster. Bots can incorporate “keylogger” software. That will record keystrokes, especially any related to passwords, user names or other desirable information. Another function of bot software is screen capture. It can record an entire screen and transmit the data to the botmaster. A compromised computer can also be used as a base for finding other unprotected computers to be recruited into the net. Another consideration is that the largest number of computers are those in the hands of private individuals. So you may be a major part of the problem if your computer is infected by a bot.

Once a computer has been compromised, the bot software is usually designed to hide and protect itself. For example it will search for and disable any other malware located on the computer or its associated network. It may also hide itself by means of a rootkit. It may also block updates of any anti-virus or anti-spyware software. It may even fake the process so the user believes that an update has taken place. One of the most common modifications involves changes to the Windows host file or by changing the location of the host file and altering the registry.

There are also some traps on the Internet that can lead a user to download bot (Trojan) software without realizing it. Phishing e-mail can lead to web pages that have automatic download links for bot software. Web pages can be hijacked and links added to lead the viewer to web sites that contain “free” software links that are actually hidden bot programs. Bot programs are incorporating “social engineering” functions which serve to entice users to unknowingly download malware. People are the weakest link in the security chain. E-mail, web pages, instant messaging, social contact web sites are all used by bot malware as a means of collecting information and linking to compromised computers.

Many times the actions of a computer user are governed by visual clues. An attacker may take advantage of this by providing false visual clues on a web page or a pop-up. If the dialog box or pop-up is intrusive the user may click

Continued

Evaluating Your Anti-Spyware Program

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For many years the most acute danger to your computer was some kind of destructive virus. Today the danger has shifted from software that is programmed to destroy files, corrupt programs, and disable systems to something more insidious, and perhaps even more treacherous. This threat comes in two broad categories known as Spyware and Trojan Horses.

Spyware started out as a stealth program surreptitiously installed on your system to track your web surfing habits. The developers of spyware didn't want to damage your computer. They wanted only to sell you something. That may be annoying, but there is nothing criminal about it.

A Trojan Horse is a program that pretends to be something other than what it really is. For example, a screensaver could be designed to install a program that will take over your system to forward spam to other machines. Trojan Horses have been used to initiate denial of service attacks, where the target such as a bank, credit card service or other high profile web site becomes so saturated with external requests that it cannot respond to legitimate traffic.

When selecting an anti-spyware program, start out by selecting one with a comprehensive signatures database. The best anti-spyware programs have databases that can recognize more than 750,000 different kinds of spyware and Trojan Horse programs. Read the documentation or call the company. This is important.

The best signatures database won't do you any good if it isn't updated frequently. The bad guys never seem to rest. They

release new poison daily. Don't buy any solutions that require manual updates. You have better things to do. Insist on automatic updates.

Another important capability is active monitoring of your system. Wouldn't you rather prevent a malicious program from installing rather than removing it after the damage has been done? Avoid any program that removes infections found only after conducting a manual scan. This probably means avoiding some otherwise adequate free programs. There's an old saying about getting what you pay for. The best anti-spyware programs prevent spyware and Trojan Horses from ever being installed on your system.

Go for a program that allows you to customize your scans. We don't all use our computers in the same way. Some people require more comprehensive scans than others. If you are constantly browsing the internet, you are likely to benefit from a daily scan that checks active memory, system folders, the registry, and all hard drives. If you rarely use the internet or find yourself visiting the same six sites over and over, a weekly scan may be all you need.

You should be able to schedule unattended updates and scans. Your machine should be yours to use as you wish. Any decent anti-spyware program should be able to run in the background unattended, and not require interrupting your activities. The program should work according to your preferences, not the other way around. Choose a program that permits unattended maintenance and administration.

Continued

Bot-Nets, *continued*

inappropriately just to get rid of the intruder. This can lead to the download of a bot.

So how do you know if you've been infected? The easiest way to tell is related to how you have been protecting your computer from infection. Do you have all of the following?

- a. hardware firewall.
- b. software firewall that checks both incoming and outgoing messages.
- c. anti-virus software that is updated at least daily.
- d. anti-spyware software that you either run weekly or that runs in RAM constantly.
- e. keep your Windows software patches up to date.

If you don't use any of these safety mechanisms, then your machine is almost 100% guaranteed to be compromised. Even if you have taken all of these precautions, you can still be infected. However, the most effective mechanism for dealing with bots is to prevent their getting into your computer. So you have to keep the software up to date and you have to use it.

Ideally, your firewall hardware/software combination should keep you invisible on the Internet. Bot programs are constantly searching for unprotected computers with open ports. You may not be aware that your computer has over 64,000 ports that can be used for communication. The most common usage are the ports in the lower range, under 1,024. However,

some bots use high end ports (>60,000) for transmission of commands. One place you can check your computers port and its invisibility on the Internet is www.GRC.com. The Gibson Research site provides a free port scan and much good information on interpreting the findings as well as how to protect your system.

Ideally the anti-virus and anti-spyware software would be able to find and remove any bot software that made its way onto your computer. However, this software needs to know the "signature" of the malware in order to identify it. So the producers of the malware are always a step ahead of the good guys. The security services have to find and disassemble the new malware before they can devise the protection against it. So it is up to the user to keep the security software as current as possible to reduce the chances of infection. Like it or not, security on the Internet is a never ending battle.

Dr. Lewis is a former university and medical school professor of physiology. He has been working with personal computers for over thirty years, developing software and assembling systems.

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Saitek Optical Photo Mouse

Make Your Personal Computer More Personal

Jan Fagerholm ([pcc4me\(at\)netscape.net](mailto:pcc4me(at)netscape.net)), Mouse Maven, Assistant Editor and VP Membership, www.pcc.org

The Bullet Points: The Saitek Photo Mouse is a desktop optical USB mouse that you can insert your own photos into. The photo area is illuminated. The mouse features 3 buttons and a scroll wheel.

What's in the Box: Mouse, User Manual with photo cutting template.

The Review: A mouse review? Hey, don't laugh – it's a perfectly good mouse that, as it happens, you can customize to make it a personalized desktop accessory. The photo part is the novelty, but first let's see the mouse.

Saitek makes a full line of PC accessories, including a wide selection of pointing devices with different talents. The Saitek Photo Mouse is a perfectly good medium-sized USB optical mouse that fits my hand well and performs better than most optical mice that I've used. It tracks well on a variety of surfaces, which not all optical mice do. The ultimate test is to place it on a mirror, and even here it tracks accurately. The only surface that it is flaky on is those artificial wood grain coatings common to student desks and conference tables, but, hey, every other optical mouse I have has the same problem. Put a piece of plain paper under the mouse and it works fine.

OK, the gimmick here is the ability to place your own photograph in the illuminated area where you may gaze upon it to your heart's content. This part is strictly manual labor with an assist from the paper template for fitting the photo. Being a deep dish computer geek, I find reverting to "cut and paste" using paper and scissors real, um, 20th Century, y'know? The User Manual refers to an EPS template that can be down-

loaded from their Web site, but I can't locate it. Undaunted, I scanned the paper template into Photoshop and made a mask out of it. Opening the desired photo, then pasting the template mask into the photo made it possible to resize / orient the image for best cropping in the mouse-shaped template. Beats the buttons off the User Manual's advice for the paper template that, "you may have to try [printing the image] a few times before the subject appears exactly where you want it."

The Photo Mouse is as much a designer item as a mouse, and is pleasingly crafted in modern silver and black, with a blue LED in the scroll wheel and a white LED illuminating the photo area. There are 5 teflon pads on the underside which help it move smoothly on less than perfect surfaces. The cord is 4.5 ft. long and reaches my floorbound tower machine easily. Its ovaloid shape arches my fingers sufficiently to prevent inadvertent mouse clicks, a problem with mice that are too small or too flat. In other words, its function matches its form, so you will keep it after the novelty wears off.

Photo Mouse makes a good gift for the modern techno-intense family. Its fit and functionality takes it beyond its novelty value: in the long run it's a very usable mouse. Get one for yourself, then be generous: treat other computer-using members of your family. They may like it so much that they'll put your picture inside...

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Evaluating Your Anti-Spyware Program, *continued*

It's also important that an unattended scan can quarantine infections without requiring intervention from you. Why do some anti-spyware programs ask if you want to remove infections? Of course you do! Of all the features in anti-spyware programs, that is the dumbest.

There are innumerable derivations and iterations of spyware being created. This makes it difficult for even the best anti-spyware programs to catch and destroy them. If you open the Processes tab in Windows Task Manager, you will observe the Process Manager in action. You will see a list of objects running on your system. Some of them are applications like word processors. Others are mysterious entities that don't provide a clue as to what they do, but you can't run Windows effectively without them. Among them would be Windows Explorer, Internet Explorer, Media Center, Windows Mobile Control Center, and many others.

Beyond shutting down a process or resetting its priority, there isn't much a non-specialist can do with this feature. Clever programmers can create spyware that won't show up in the Process Manager. Any decent anti-spyware program has to have its own built-in process manager that will recognize, track down, and eliminate malevolent software that may not even be in the signatures database.

Anti-spyware programs should be able to monitor programs that load when Windows starts up. There are many very sophisticated spyware programs that do not show up in the Process Monitor or in Control Panel's Add/Remove section. If your anti-spyware program lacks this capability, find another one.

Assuming your anti-spyware program has the capabilities mentioned above, it is an excellent choice for individuals. However, businesses or organizations with multiple computers will require even more. Whoever is in charge of PCs will not have time to manually monitor or administrate individual machines. It is simply impractical in a large organization for support staff to visit every workstation, apply updates, schedule scans, and ensure that infestations are removed. If this applies to you, look for a program with a centralized administration console. This capability has the unfortunate drawback of being quite expensive, but the time saved generally justifies the cost.

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FBI Asks “How Aware Are You of the Dangers of the Net?”

Ira Wilsker (Iwilsker(at)apcug.net), APCUG Director

As regular readers may know, I frequently lecture on computer security topics, and have written numerous columns on security topics over the years. While many of us surf the net oblivious to the online threats that face us, many others are aware of the threats, and sadly, many have learned of the threats the hard way. The online threats that we face on a regular basis have not been lost on our federal government leadership.

FBI Director Mueller recently gave a speech at Penn State University where he warned about the cyber threats that we all face. He started his speech talking about the recent World Series, where the tickets for the Rockies’ home games were initially unavailable online because some hacker had made the website inaccessible. He referenced the cyber attack against the country of Estonia last spring, where a coordinated attack from computers around the world, “... shut down banks and emergency phone lines, gas stations and grocery stores, newspapers and television stations, even the prime minister’s office.” Director Mueller went on to explain the effect of a similar attack here in the United States, “If we lose the Internet, we do not simply lose the ability to e-mail or to surf the web. We lose access to our data. We lose our connectivity. We lose our intellectual property. We lose our security. What happens when the so-called ‘Invisible Man’ locks us out of our own homes, our offices, and our information?” This brings up the question, “...given the growing presence of the web in our personal and professional lives, how aware are you of the risks of attack via the Internet?”

In his speech, Director Mueller was poignant in describing the situation that is facing us online. There were several key points in his speech that require some additional discussion. One point he made was, “The growing intersection of terror and the web.” He described the case of Younis Tsouli, who went by the screen name “Terrorist 007”, who was an al Qaeda webmaster. Taking advantage of most of the contemporary online threats that we all face, Tsouli broke into servers to get the data bandwidth he needed to carry out his nefarious schemes, and used “phishing” (authentic appearing but counterfeit websites to steal personal information), to steal credit card and personal information. With purloined credit card numbers and personal information, he managed to purchase over \$3 million worth of deadly supplies and equipment for terrorists. Tsouli also created a website “You bomb it” patterned after the popular “YouTube”, which he hoped would become a centralized website for terrorists to exchange information. Director Mueller explained that local internet service providers could unknowingly run a server that is helping terrorists, and that we, as the innocent victims of identity theft, could end up financing terrorist activities.

Another threat facing us, according to Director Mueller, is “The rise of bots”, where networks of computers are unknowingly taken over for nefarious purposes. One of the most common ways of taking over a computer is to plant a type of Trojan on the computer referred to as a “zombie”, which effectively makes the infected computer a zombie under the

control of persons unknown. According to recent security statements, some “bots” consist of over a million infected computers. It is well known in cyber security circles that the many variants of the Storm Worm, which is still spreading to infect countless computers, mostly through email attachments, has created millions of zombies. While many of these bots are currently being used to spread spam email, generating riches for the “bot masters” or “bot herders” who sell their purloined capacity, there are more dangerous uses of bots. It is important to note that owners of zombie infected computers are unaware that their computers are infected, and are a component of an illicit bot spreading spam and chaos to other computers. Director Mueller stated, “Once under their thumbs, these networks can wreak all kinds of havoc, from shutting down a power grid to flooding an emergency call center with millions of spam messages.”

“Hackers are using sophisticated techniques to steal sensitive intelligence, scientific research, and communications data.” This is what the Director is calling “the invisible man” where an unknown cyber intruder oversees everything on a network, including what people are typing, and reading any files stored on a computer or on a network. Since most cyber intruders will never leave any indication that they have viewed your files, stolen your passwords, and copied your critical and confidential data, you will never even know that you have been victimized and your data has been compromised. Once victimized in this manner, you will never know how much damage has been done, maybe until it is too late.

The federal government is actively fighting international cyber terrorists, and contemporary news accounts are rife with stories about criminal and espionage cyber attacks from China, Russia, Iran, Iraq, and other unfriendly countries. Despite governmental attempts to secure our computer infrastructure, much of the responsibility falls upon us individually. We must accept responsibility for the safety and security of our own computers. As has been appealed many times in this column before, we absolutely must have updated defenses in play on our personal computers. Antivirus, anti-spyware, and firewall software are imperative on our computers; after all, it is the personal computer that is the target of the zombie Trojan, and it is millions of personal computers like your and mine that make up these huge bots that can wreak such havoc.

For those who would be interested in seeing what a cyber attack warning might look like, an unofficial Israeli website that disseminates anti-terrorism information, the “DEBKAFfile”, has recently posted such a warning about a massive upcoming cyber attack on the US (www.debka.com/headline.php?hid=4723). I am typing this prior to the date of this next alleged “cyber jihad” attack on the United States (November 11, Veterans’ Day) and you will certainly be reading this column after that date. I hope that this warning, as have many other such warnings, turned out to be false. In fact, several security authorities such as McAfee, and Computerworld magazine, have argued that the DEBKAFfile warning is a hoax, and that the

Continued

Connected or Discombobulated?

Ramblings by Judy Lococo (judy(at)thorobred.win.net), Director, Kentucky-Indiana PCUG, www.kipcug.org

Everywhere you look today, someone is always talking about “connectivity” and how our new, improved world demands it. The more I see of this phenomenon, the less I think we are connected. The Internet and identity thieves have made us a nation of anonymity, and paranoid anonymity at that. We are electronically connected, but are losing the ability to look into people’s eyes, read their body English, listen to the voice inflections, and interact one-on-one with another human being.

It’s even impossible to keep up with all the acronyms! WiFi, DSL (I remember ADSL), URL, etc., have become entrenched in our lives so much that we no longer flinch when we hear one of them. And they keep stacking up at warp speed, so that even the nerdiest of us has to visit a website occasionally to find out what one means.

The morning newspaper used to be a shared experience at the breakfast table. Now it’s read online with only the parts that a reader prefers coming across the screen, and you don’t discuss your opinions with the rest of the family, nor listen to theirs. You no longer have to scan through the business section to find the crossword puzzle. You don’t have to pore through the sports pages to find automobile tires. IOW (another TLA), you don’t even have to talk to a soul without being considered rude.

Going to an office is not nearly as important as it once was. Now employees can work an 80-hour week at home, without health insurance or retirement benefits. But you can work in jeans or sweats, so there’s considerable savings on wardrobe.

The chat rooms are so rampant with predators that parents are restricting their children’s surfing, and rightly so. But these chat rooms are yet another example of not connecting with a

real, live, breathing person, only an image, which may or may not be accurate.

Email has replaced letter writing to the extent that I have to wonder if script handwriting will also be obsolete soon. Remember calligraphy? Have you seen any within the last three years? Will the dictionary of the future have “u r 2” as a come-back phrase? Will schoolchildren even be taught English grammar or typing?

And, of course, how could I not mention the answering machines, voice mail, and all other means of not speaking to people who are trying to contact you. If you reach a person on the first attempt, are you supposed to believe that person is not busy? Is this why nobody bothers to answer their phone any more, only return phone calls? If all one does is return phone calls, what happens when the one you’re calling also only returns phone calls?

As if all the time spent behind a monitor isn’t enough, our automobile windows are now designed to keep others from seeing you. So if there is actually a person around who is considerably higher up on the social ladder than you are, you have to roll your window down for them to see you!

I have to admit, I’m just as guilty as the rest of the world of spending too much time on email and INet (look it up already..). It is a lot of fun to laugh at a joke that somebody forwards, or follow a link to a YouTube video. I am not addicted, but afraid of what will I will have to face if I don’t check it daily. I guess you could say I’m not connected, I’m tethered.

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FBI Asks, *continued*

information presented is unreliable. Another publication, Government Computer News, also belittled the warning, but the column that said that had the subtitle, “Don’t cancel your day off yet” (www.gcn.com/online/vol1_no1/45386-1.html). This cyber attack warning is but one example of what Director Mueller is warning about.

Since the antivirus and anti-spyware on our computers can be compromised or neutralized by a zombie that slips through our defenses, it is a good idea to perform a free online security scan from one of the many available. My two personal favorites are Trend Micro’s Housecall (housecall.antivirus.com), and Microsoft’s online OneCare at safety.live.com (click on the shield in the middle of the window). A successful scan by either or both of these services will likely indicate that your computer is clean of viruses, worms, Trojans, spyware, and zombies. Make sure your firewall is installed and updated. As I complete most of my security presentations, I close with the expression, “Practice safe HEX.”

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Back Issues Needed

The editor is attempting to build a CD containing all issues of ACGNJ News in pdf format, but our collection is incomplete. We’re hoping some faithful reader has been hoarding them and will be willing to lend them to us just long enough to scan them. We promise to return them quickly. Thanks Joseph Gaffney, who loaned his collection for scanning. Below is a list of what we still need.

1985: June, July, August, September

1984: August

1976: January, February, March, April (pamphlet-size booklets)

1975: All issues except #1 (June). These are also pamphlet-size booklets.

If you can supply any of these missing issues (or scanned images or good clear copies), please contact the Editor by email (bdegroot@ptd.net). Those who supply missing issues will receive a free copy of the resulting CD as our thanks for your help. ☐

The New, The Best, and The Worst

Pim Borman ([Swipcug\(at\)gmail.com](mailto:Swipcug(at)gmail.com)), SW Indiana PC Users Group, Inc (<http://swipcug.apcug.org/>)

Disruptive Open Source Programs

The prestigious British weekly news magazine, *The Economist*, carries a 14-page special report on Innovation in its October 13th, 2007 issue. As you might expect it is about innovation in entrepreneurship, not the kind associated with the name Edison and symbolized by a light bulb. Besides, Edison did not invent light bulbs but only improved them to make them practical and marketable.

Of the different kinds of entrepreneurial innovation the articles discuss, a particular one caught my attention. Referring to Clayton Christensen, author of *The Innovator's Dilemma - When New Technologies Cause Great Firms to Fail*, The Economist writes: "... even successful firms can get into trouble by trying to please their best customers. Because there may be only a handful of highly profitable, high-end buyers who want and can afford more features and better performance, firms can invest heavily in trying to deliver what this elite group wants, even though the resulting products may end up being beyond the reach of the majority of customers." That opens the door to producers of "inferior" but perfectly adequate, lower priced products to compete successfully and to delegate the incumbents to market niches. Christensen calls this "disruptive" innovation, as opposed to innovation due to product improvements or novel marketing techniques. As examples he mentions how personal computers took over most of the tasks of IBM's mainframes and Digital Equipment's mini-computers and how Nucor's highly efficient mini-mills outdid US Steel's blast furnaces.

Another such disruptive innovation that comes to mind is the development of Open Source software in competition with expensive, overly elaborate programs currently in use by the majority of computers in the Western world. Most users of MS Word never use, or even know or care about, its many arcane features and could save themselves a lot of money by using the free OpenOffice.org's Writer that has most of the same features. Even simpler, but perfectly adequate text processors are available for free, such as Abiword. The OpenOffice suite also includes perfectly adequate offsets for most users of MS Excel spreadsheet, PowerPoint presentation manager, Database, and Drawing programs. Recently IBM announced that it would open up its Corel Office suite, and in particular the powerful Lotus spreadsheet program, to the Open Source community and participate in Open Source program developments.

Firefox already has taken over a large corner of Microsoft Internet Explorer's browser market, based on its simplicity, ease-of-use, and the perception that it is less susceptible to virus attacks. The Thunderbird email program is giving MS Outlook Express a run for its money with easy plug-in access to spell checkers in multiple languages and the expectation of greater safety in everyday use.

Most of the powerful image manipulation features provided by the expensive Adobe Photoshop program are available for free in The Gimp, another Open Source program free for the downloading. Many free programs are available to convert documents back and forth to PDF format, long the carefully

preserved domain of the expensive Adobe Acrobat program. There are long lists of other Open Source programs capable of performing just about any function required by users, including an excellent simple checkbook and bookkeeping program, GNUCash and a good genealogy program, GRAMPS. Interestingly, almost all Open Source programs run just as well in Linux, without the need to invest in the performance-hogging, malware-susceptible, expensive MS Windows operating systems, Vista in particular.

Open Source programs, including the Linux operating system, are making only slow inroads in the Western world, especially the USA, due to the overwhelmingly strong marketing legacy exerted by Microsoft. The rest of the world, in which the USA seems to occupy an ever-diminishing niche, is less overwhelmed by Microsoft and mostly can't afford its expensive, excessively complex products. Open Source programs are widely used in Asian countries like India and China, and stand to gain further in features and reliability due to inputs from highly capable local programmers. Those countries are only now entering the computer age with literally billions of potential computer users about to acquire their own systems. There is no question what software those new computers will use. Meanwhile, in the Western world Open Source programs have found early adaptors amongst government offices at several levels with limited financial resources for software, that have growing needs for use in computers that are already available at low cost.

It may take some time, but the advance of Open Source software is unstoppable because it makes perfect sense. Smart major computer companies, such as IBM and Sun Microsystems, recognize this and have decided to switch, rather than fight. Microsoft, mostly dependent on software sales, may well end up being disrupted like the lamplighters of long ago. Tux, the Linux mascot, might paraphrase the Borg, the StarTrek cyborgs that "assimilated" whole planet populations: "You WILL Be Disrupted... Resistance is Futile." (Thanks to Louis Ritz for The Economist)

Thermal Color Printing

Thermal printers, still used in cash registers, have been around for about 50 years. They print in black-and-white on special paper using rows of heaters to activate the ink. They are sturdy, small and inexpensive since the only moving parts are there to advance the paper.

Scientists at Zink Imaging have developed heat-activated inks in the three complementary colors, cyan, magenta, and yellow, needed to generate full-color images. The dyes used are expected to be stable over time and are still being improved. A hand-held printer will be available by year-end. 2x3 inch sheets of paper will sell for about \$2.00 per 10-pack. Expensive still, but a promising development. Over time the prices are certain to come down. (Chem.&Eng. News, 9/10/2007)

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Microsoft Office 2007 Review

Lynn Page (newsletter(at)crug.com), Crystal River User Group, Florida (www.crug.org)

Microsoft's Office 2007 is the perfect suite of applications and is suited to all types of users. Office will aid you in being more productive and allow your documents, spreadsheets and presentations to be professional and attractive. Different versions of Office 2007 include different applications, from the Basic version with Word, Excel, and Outlook, to an Enterprise version including everything. This variety of suites may seem overkill but it provides an Office suite in complexity and price range for anyone. I have been using Microsoft Office Professional since Office 95. The only version that I skipped was Office 2000 and I still used it on the CRUG computers. After finishing my last Word 2003 class in late November I upgraded to Office 2007 Professional. It includes Word, Excel, PowerPoint, Outlook, Access and Publisher.

I personally use Word and Outlook extensively and also use Excel and Access for particular tasks and PowerPoint for meeting presentations and classes. Because of my love of Microsoft Word I don't often use Publisher. I tend to try to use Word, if at all possible, but find myself occasionally needing to use Publisher for those tasks that are very graphically oriented.

I will be reviewing Office 2007 in steps through CRUG's monthly newsletters. This month I discuss the Office suite in general and Outlook 2007. In following months I will take a deeper look at Word, Excel, PowerPoint and Access. In November we published a review of Publisher 2007 so I will not discuss that application.

The Ribbon

The first thing you notice with Office 2007 is the completely new user interface. The new Ribbon interface is really attractive and provides a totally new look. After the initial shock and adjustment period I found the Ribbon quite intuitive. It gives past users the chance to improve productivity but will really benefit new users. No more searching through layers of drop down menus to find commands.

The new Ribbon interface which replaced the drop down menus and toolbars in Word, Excel, PowerPoint and Access can seem confusing at first, as anything new can be. But the Ribbon provides quick access to program features. It organizes commands into logical groups on tabs relating to a type of activity. Some tabs appear only when needed like the Picture Tools tab, shown when a picture is selected. When a picture is selected a new tab appears at the far right with Picture Tools above the line of tabs.

When a tab is selected the Ribbon becomes a graphical presentation of the program commands in that group. This means that commands are readily available and noticeable. It is easy to see things you may never have known existed or just thought were too much trouble to find.

The main Outlook application window does not use the new Ribbon interface. However, the Ribbon is used in Outlook's content creation windows. I wish that Microsoft had carried the Ribbon interface through all Office applications.

The biggest problem I had with the Ribbon interface was finding the old File drop down menu commands. The new Office Button replaces the File drop down menu and Options dialog. Clicking the button at the top left of the application window opens a new drop down menu. From the menu you can create a new document, open an existing document and save or print the current document. It also provides a list of recently accessed documents. The Options dialog box is accessed from the menu.

File Formats

The default file formats for Word, Excel, and PowerPoint are XML formats but it is easy to select the option to maintain compatibility with Office 2003 applications. The new file name extensions add an "x" or an "m" to the file name extensions used in earlier versions of Office. The "x" signifies an XML file with no macros, and the "m" signifies an XML file containing macros.

The XML file formats reduce file size, offer ease of information transfer between applications and automate formatting changes across libraries of documents. For individual users like me the compatibility with Office 2003, on my desktop computer, can outweigh the loss of some new features. I select the file format depending on how and where I will use a particular file. And I have downloaded and installed the file converters on my Office 2003 computer so I can open Office 2007 files.

Office XML Formats automatically compress files using zip compression to store documents. To open a file, it is automatically unzipped. When you save a file, it is automatically zipped again. XML files are modular with different data components separate allowing files to be opened even if a component within the file is corrupted. This can be a true life saver when working with a complex document. Another advantage of Office 2007 new formats is protecting privacy by controlling personal information. Just Remove hidden data and personal information before sharing a document.

Save as PDF

Now you can save as a PDF or XPS file right from most 2007 Office applications. You do have to download and install the add-in. This little bit of time and effort is well spent. Although I was surprised that it was not an integral part of Office 2007.

I use PDF for the email newsletters and sharing many files. So the ability to convert and save my Office documents to PDF without an additional application was one of the most important features in Office 2007 for me. I like to use PDF because it ensures the file remains as I created it when viewed online or printed. Another benefit is that the file and data in it cannot be easily changed.

You can save your files in PDF but still need a PDF reader installed on your computer to view it. And after you save a file as PDF, you cannot use Office applications to make changes directly to the PDF file. Unless you have a PDF application on your computer you will need to make changes to the original

Continued

file in the Office 2007 application program where you created it and save the file again as PDF.

To save a file created in Word, Excel, PowerPoint, Outlook, and Access, click the Microsoft Office Button, select Save As, and then click PDF or XPS. Type a name for the file and click PDF in the Save as type list.

The Publish as PDF or XPS dialog box contains a section for optimization. Here you choose depending on whether file size or print quality is more important. For high print quality, click Standard (publishing online and printing). If print quality is less important than file size, click Minimum size (publishing online). Make any option selections and then click Publish in the Publish as PDF or XPS dialog box.

Publisher 2007 does not have the new Ribbon interface. So to save as PDF in Publisher 2007, click Publish as PDF or XP on the File drop down menu. Type in a name in the File name list, and click PDF in the Save as type list and save as with other Office applications.

Easy Formatting

I appreciate the ease with which Office 2007 aids in formatting documents so that they are professional looking. Choosing formatting options has never been easier. Included with the new Ribbon interface are features letting you see different formats before actually making a change. Mouse over a formatting option, such as font, size, color, highlight or style and the selected text changes so that you immediately see the effect. Click to make the change or move the mouse pointer away to continue without making a change. With Quick Styles and Document Themes, you can quickly change the appearance of text, tables, and graphics throughout a document to a preferred style or color scheme.

Themes and Styles

It is easy to format an entire document with a professional look by applying a theme. Each document theme has a set of formatting choices including colors, fonts and effects. Word, Excel, and PowerPoint contain predefined document themes, but you can create custom themes. After creating a personalized document, you can save it as a custom document theme. Document themes are shared across Office programs so Office documents can have a uniform appearance.

Styles are another important method for creating unified documents. In Word 2007, you can apply a specific style quickly in the Styles group, or choose a set of styles that work together to create a document designed to suit a specific purpose. A set of Quick Styles can include styles for different heading levels, body text, and title. The style colors and formats in each set are designed to be used together to create an attractive professional document. Again you see the effect of changing a style set by mousing over its name in the Quick Styles gallery.

In Excel you can apply several formats in a single step ensuring cells have consistent formatting by using a cell style. The cell style defines formatting characteristics, like fonts, font sizes, number formats, cell borders, and cell shading. Cell

styles are based on the document theme so switching to another theme changes the cell styles.

PowerPoint has Quick Styles for graphics including edges, shadows, line styles, gradients, and 3-D perspectives. Quick Styles are displayed in a thumbnail in the Quick Style galleries. Mousing over a Quick Style thumbnail shows how the Quick Style affects the SmartArt graphic or shape. SmartArt Styles affect an entire SmartArt graphic, but Shape Styles affect only the selected shape.

Outlook 2007

I have used Outlook for my primary email since I first used Office 95. The benefit of having one location for email, contacts, calendar and notes made the choice easy. Then as the security improved through each successive version it was impossible to even consider anything else.

Outlook 2007 has everything required to manage time and information. When first opening Outlook 2007 it doesn't look as different as the other Office applications. You still see the multiple pane window used in Office 2003. Outlook does not have the new Ribbon interface so you still use the drop down menu system in the main application window. A new addition in right hand pane is the To-Do Bar. I really like this feature. I always had Outlook open to the calendar but with Outlook 2007 I open Outlook to Mail and can still see my appointments on the To-Do Bar. It includes a Date Navigator, Appointments section, Task Input Panel and task list. I leave all of these on but you can turn anything except the task list off. This provides additional space for your tasks. The default To-Do bar gives a view of the current month and upcoming appointments and tasks. I find this sufficient for my use but you can resize it to see more than a single month.

Although the Ribbon interface is not used in the main Outlook 2007 window it is used in sub or working windows. So when composing a new message or appointment you see a window with Ribbons.

I use Bcc a lot so the message is sent to that recipient, but their name is not visible to other recipients. It is a nice practice to get into so that you are not spreading friends email addresses around to others. I would have liked the Bcc box to be visible in the default Outlook settings or at least a box to add Bcc. However it is not difficult to add. While creating a new message select the Options tab and in the Fields group click Show Bcc. This is also where you can select to show the From field if you want it to show when creating a message.

A useful new feature in Outlook 2007 is Instant search. Outlook uses the Windows Vista search technology so search results show as soon as they are found while the search is still running. Instant Search is available through a search box at the top of each Outlook task (Mail, Calendar, Tasks, Contacts, etc.). The Search utility is so quick and accurate that I might not have to create as many mail folders.

However, I doubt that my use of Outlook's Folders or Categories will change. With Outlook 2007 it is still easy to create folders to organize email messages. I like to keep email sorted

Continued

SIG News

C/C++ Programming

Bruce Arnold (barnold@ieee.org)

<http://home.earthlink.net/~barnold2002/Acgnj/index.html>

This group is devoted to programming languages in general and C, C++, and C++ for Windows programming in particular. Each month a small but hopefully useful program (complete with source code) is presented for discussion.

January: Ship Guru - A Package Shipping Utility

The subject for January was a utility for packing shipping containers. It uses the latest C++ compiler in Microsoft's Visual Studio 2005. Here are the details of this utility.

This program takes as input a list of boxes to be shipped in a container. It then iterates a large number of possible locations for the placement of the boxes while calculating the volume of the container. When the program finishes, the dimensions of the smallest container is displayed along with the packing efficiency. The ideal is 100 percent.

For example: 5 boxes dimensioned 3x4x4 will fit in a 9x4x10 container with a packing efficiency of 66.7 percent.

The program demonstrates a number of tools as well as Monty Carlo iteration techniques.

Our [download site](#) has code and programs from most of our meetings.

Our next meeting February 19. ☐

Java

Mike Redlich (mike@redlich.net)

<http://www.javasig.org>

The Java Users Group covers beginner, intermediate, and advanced level Java programming. Primary focus is on developing useful/practical applets and applications, but can include topics such as Java I/O, JavaBeans, Reflection, object-oriented programming and software design issues. Meetings are held the second Tuesday of the month starting promptly at 7:30 PM.

January 8: Exploring Ajax Platforms for Eclipse: RAP & ATF — reprise of Barry Burd's presentation from October 2007. "This presentation differs from the one I gave in October because, this time, I'm prepared."

February 12: To be announced ☐

LUNICS (Linux/Unix)

Andreas Meyer (lunics@acgnj.org)

<http://www.acgnj.org/groups/lunics.html>

LUNICS is a group for those who share an interest in Unix and similar operating systems. While we do quite a bit with Linux, we've also been known to discuss Solaris and BSD too. We generally meet on the first Monday of the month at 8 PM at the Scotch Plains Rescue Squad. See the web page for directions and more information. *Next meeting February 4.* ☐

Web Dev

This SIG is intended to be an open forum for all Website Development techniques and technologies, to encourage the study and development of web sites of all kinds. All languages will be considered and examined. Anyone interested please contact the Chairperson in charge. The current project is a CMS for the club. Anyone interested in starting a new project, come to the meeting and announce / explain. Provide as much detail as possible. One can also send projects to the ACGNJ Newsletter editor for inclusion in the next volume.

WebDev should be an all-encompassing development and examination forum for all issues, applications, OS, languages and systems one can use to build Websites. We currently have two Web dev languages .NET and Java as SIGs but the other languages and OS need to be investigated, examined and tested; Windows, Linux, UNIX, DEC, Vax, HP etc. Intel-PC, Motorola-MAC etc. *Our next meeting February 13.* ☐

Main Meeting

<http://www.acgnj.org/groups/mainmeet.html>

Mike Redlich (mike@redlich.net)

February 1: Computer Crimes, Phil Frigm

March 7: Using Slingbox on Different Devices, by David Eisen ☐

Window Pains

John Raff (jraff@comcast.net)

<http://www.acgnj.org/groups/winpains.html>

Our intent is to provide the members with Windows oriented application discussions both Microsoft and Linux style. The presentation will be directed toward the more heavy technological level of attendee, although newbies are welcomed.

February 15: Overview of Windows Vista (part 2), Bruce Arnold

March 21: Performance Tuning, TBD (Geek Squad or MicroCenter) ☐

Investment Software

Jim Cooper (jim@thecoopers.org)

http://www.acgnj.org/groups/sig_investment.html

The Investment SIG continues with presentations on how to use analysis programs TC2000 and TCNet. Large charts are presented on our pull down screen and illustrate the application of computer scans and formulas to find stocks for profitable investments. Technical analysis determines buy points, sell points and projected moves. Technical analysis can also be used on fundamentals such as earnings, sales growth, etc.

We're no longer focusing on just Telechart -- if you are using (or interested in) Tradestation, eSignal, VectorVest -- or just in learning how to select and use charting and technical analysis, come join us !!

Our next meeting: February 14. ☐

in separate folders. That way I can easily back up my critical email more frequently. I also use categories to organize my mail, calendar, contacts and tasks. Assigning contacts to categories makes it simpler to select recipients for a particular email. I generally like to individually select recipients for most of my email. However I still use email distribution lists occasionally.

Categories

The new Color Categories give a visual way to distinguish items from one another. I still prefer defining my own categories but appreciate the new color coding of each category. This makes it easy to locate information. Add the same category to email, calendar, and task items to easily locate all items in that category. The color coding makes it easy. To assign a category just select an item, right click it, point to Categorize and click the Category. When you need to find the information, you can search and sort by Category.

.Security

Even though Outlook 2007 contains junk email and phishing protection I still use a security application that scans my email for viruses, spam and phishing. However, the Outlook 2007 junk email filter sorts out most unwanted email and contains new protection against phishing. Messages caught by the junk email filter are moved to the Junk E-mail folder. So remember to review the messages in the folder occasionally to be sure

that they are not legitimate messages. If they are, move them back to the Inbox by marking them as not junk or dragging them to any folder.

When you open or preview a message, the computer downloads the external content so any pictures can be displayed or the sound played. Junk email senders often use the downloading of external content to verify a email address as valid so they can add it to their spam list.

Another way Outlook protects you is by disabling links within email messages. You have the choice to approve them. Outlook also warns you from within the email message of potentially malicious sites. The default settings block links to external content like pictures or sounds, in HTML messages. The links are references to an external location on the Internet. When images and other suspicious content are prevented from loading you can choose to allow it. Just click the warning message at the top of the message to see options for downloading the attached pictures and managing other security settings.

outlook6w graphic If you click Change Automatic Download Settings from a suspicious email message, the Trust Center opens so you can define which types of content to permit. The strictest settings are on by default. The Trust Center is also accessed from the Tools drop down menu. The Trust Center shows security and privacy settings for Office 2007 programs.

Continued on page 22

SIG News, *continued*

Layman's Forum

Matt Skoda (som359@aol.com)

<http://www.acgnj.org/groups/laymans.html>

We meet on the second Monday of the month (no meetings in July and August) to discuss issues of interest to novice users or those who are planning to get started in computing. Watch our Web page for updates and announcements. ☐

Mobile Devices

David Eisen (ultradave@gmail.com)

Our next meeting February 20 ☐

Genealogy

Frank Warren (kb4cyc@webwarren.com)

<http://www.webwarren.com/kb4cyc/gensig.shtml>

Genealogy SIG is for genealogists interested in computers and computer users interested in genealogy, and is a forum to assist members in furtherance of both. We meet at 8 PM on the fourth Thursday each month. We do not meet in November or December. In addition to our Web page, we also have an electronic mailing list. Messages to the list should be addressed to gensig@webwarren.com. To subscribe, include the line "subscribe gensig" in the body of the message.

Due to work schedule conflicts, the SIG Leader cannot make the meetings. If anyone else would like to pick up the baton, carry the banner, help the SIG along, please let us know. ☐

DotNet

Manuel J Goyenechea

<http://www.acgnjdotnetsig.org/about.html>

<http://www.acgnjdotnetsig.org/index.html>

Firefox Activity

Firefox@acgnj.org

This SIG is intended to be an open forum for **all** FireFox and Mozilla techniques and technologies, to encourage the study and development of web sites of all kinds. All the browsers will be considered and examined. All are encouraged to "think out of the box" about new web site design. All members and guests are invited to check out the design concepts and voice their opinion. **Meeting third Monday of the month at 7 PM. Next meeting February 18.** ☐

NJ Gamers

Gregg McCarthy (greggmc@optonline.net)

<http://www.NJGamers.com>

www.lanparty.com

The next Friday Night Frag will be February 8, 6 p.m. to Saturday 12 noon — 18 hours for 5 bucks!

BYOC - Bring your own computer

BYOF - Bring your own food.

and if you don't like sitting on metal chairs... BYO chair! ☐

Guru Corner

If you need help with any of the technologies listed below, you can call on the person listed. Please be considerate and call before 10 PM.

Software

HTML	Mike Redlich	908-246-0410
	Jo-Anne Head	908-769-7385
ColdFusion	Jo-Anne Head	908-769-7385
CSS	Frank Warren	908-756-1681
	Jo-Anne Head	908-769-7385
Java	Mike Redlich	908-246-0410
C++	Bruce Arnold	908-735-7898
	Mike Redlich	908-246-0410
ASP	Mike Redlich	908-246-0410
Perl	John Raff	973-560-9070
	Frank Warren	908-756-1681
XML	Mike Redlich	908-246-0410
Genealogy	Frank Warren	908-756-1681
Home Automation	Frank Warren	908-756-1681
Operating Systems		
Windows 3.1	Ted Martin	732-636-1942

Discount Computer Magazine Price List

As described by the DealsGuy

	1 yr	2 yr	3 yr
Computer Games	\$10.95	20.95	29.95
Computer Gaming World	14.95	28.95	41.95
Computer Shopper1	16.97	32.95	47.95
Dr. Dobbs Journal	15.95	30.95	
Mac Addict	10.97		
Mac Home Journal	15.97	29.97	
Mac World	12.95		
Maximum PC	9.95	18.95	27.95
Microsoft System Journal	21.95	39.95	
PC Gamer	12.95		
PC Magazine (22/44/66 Issues)	25.97	48.95	68.95
PC World	16.95		
Wired	6.00	12.00	17.00

These prices are for new subscriptions and renewals. All orders must be accompanied by a check, cash or Money Order. Make payable to Herb Goodman, and mail to:

Herb Goodman, 8295 Sunlake Drive, Boca Raton, FL 33496

Telephone: 561-488-4465, e-mail: hgoodman@prodigy.net

Please allow 10 to 12 weeks for your magazines to start. For renewals you must supply an address label from your present subscription to insure the correct start of your renewal. As an extra service I will mail a renewal notice about 4 months prior to their expiration date. I carry more than 300 titles at excellent prices — email for prices. ☐

ACGNJ MEMBERSHIP APPLICATION

Sign up online at <http://www.acgnj.org/membershipApplication.html> and pay dues with PayPal.

	US/CANADA	FAMILY OF MEMBER (No Newsletter)	Dues	FOREIGN	STUDENT	SENIOR CITIZEN (Over 65)
1 Year	\$25	\$10		\$55	\$20	\$20
2 Years	\$40					
3 Years	\$55					\$45

Mail this application and your check to:
AMATEUR COMPUTER GROUP OF NEW JERSEY, INC., P.O. BOX 135, SCOTCH PLAINS, NJ 07076

New Member Renewal Address Change

First Name _____ Last Name _____ Phone _____

Mailing Address _____ E-Mail _____

City _____ State _____ Zip _____ URL _____

What topics would you like to see covered at club meetings? _____

Other Local Computer Groups		
Princeton Macintosh User Group: 7:15 pm 2nd Tuesday, Jadwin Hall, A-10, Washington Rd, Princeton, (609) 252-1163, www.pmug-nj.org	Linux Users Group in Princeton: 7 pm, 2nd Wednesday, Lawrence Branch Mercer Library, Rt#1 & Darrah Lane, Lawrence NJ http://www.lugip.org	New York PC: 3rd Thurs, 7 pm, PS 41, 116 W 11th St. For info call hotline, (212) 533-NYPC, http://www.nypc.org
Computer Education Society of Philadelphia: Meetings & Workshops at Jem Electronics, 6622 Castor Ave, Philadelphia PA. www.cesop.org/	Brookdale Computer Users Group: 7 pm, 3rd Friday, Brookdale Community College, Bldg MAN Rm 103, Lincroft NJ. (732)-739-9633. www.bcug.com	NJ Macintosh User Group: 8 pm, 3rd Tuesday, Allwood Branch Library, Lyall Rd, Clifton NJ. (201) 893-5274 http://www.njmug.org .
PC User Group of So. Jersey: 2nd Mon., 7 pm, Trinity Presb. Church, 499 Rt 70 E, Cherry Hill, NJ. L. Horn, (856) 983-5360 http://www.pcugsj.org	Hunterdon Computer Club: 8:30 am, 3rd Sat, Hunterdon Medical Center, Rt 31, Flemington NJ. www.hunterdoncomputerclub.org , (908) 995-4042.	NY Amateur Computer Group: 2nd Thurs, 7 pm, Rm 806 Silver Bldg, NYU, 32 Waverly Pl, NYC. http://www.nyacc.org
Morris Micro Computer Club: 7 pm 2nd Thurs., Morris County Library, Hanover Ave, Morristown NJ, (973) 267-0871. http://www.morrismicro.com	Central Jersey Computer Club: 8 pm, 4th Friday, Rm 74, Armstrong Hall, College of NJ. Rich Williams, (609) 466-0909.	NJ PC User Group: 2nd Thurs, Monroe Rm at Wyckoff Public Library, 7 pm. Maureen Shannon, (201) 853-7432, www.njpcug.org
Philadelphia Area Computer Society: 3rd Sat, 12 noon Main Meeting, groups 8 am-3 pm. Upper Moreland Middle School, Hatboro PA. (215) 764-6338. www.pacsnet.org	NJ Computer Club: 6:15 pm, 2nd Wednesday except Jul & Aug, North Branch Reformed Church, 203 Rt 28, Bridgewater NJ. http://www.njcc.org	Princeton PC Users Group: 2nd Monday, Lawrenceville Library, Alt Rt 1 & Darrah Lane, Lawrenceville, Paul Kurivchack (908) 218-0778, http://www.ppcug-nj.org

Classified

FREE TO MEMBERS. Use our classified ads to sell off your surplus computer stuff. Send copy to Classified, ACGNJ NEWS, P.O. Box 135, Scotch Plains NJ 07076 or e-mail to the editor, bdegroot@ptd.net. Classified ads are free to members, one per issue. Non-members pay \$10. Send check payable to ACGNJ Inc. with copy. Reasonable length, please.



<http://www.apcug.net>

Radio and TV Programs

Computer Radio Show, WBAI 99.5 FM, NY, Wed. 8-9 p.m.

Software Review, The Learning Channel, Saturday 10-10:30 p.m.

On Computers, WCTC 1450 AM, New Brunswick, Sunday 1-4 p.m. To ask questions call (800) 677-0874.

PC Talk, Sunday from 8 p.m. to 10 p.m., 1210 AM Philadelphia. 1800-876-WPEN, Webcast at <http://www.pctalkweb.net>.

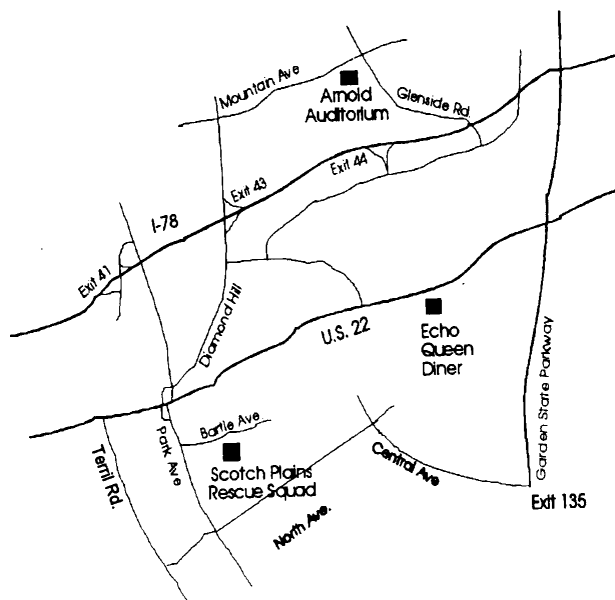
MarketPro Shows

<http://www.marketpro.com/>

November 10 & 11: NJ Convention Center (Raritan Center), Edison

November 24 & 25: Meadowlands Expo Center, Secaucus

December 15 & 16: Meadowlands Expo Center, Secaucus



Directions to Meetings at Scotch Plains Rescue Squad, 1916 Bartle Ave., Scotch Plains NJ

From New York City or Northern New Jersey

Take Route 1&9 or the Garden State Parkway to US 22 Westbound.

From Southern New Jersey

Take Parkway north to Exit 135 (Clark). Stay on left of ramp, follow circle under Parkway. Bear right to Central Avenue; follow to Westfield and under RR overpass. Left at light to North Avenue; follow to light in Fanwood. Right on Martine (which becomes Park Ave). Right on Bartle Ave in middle of shopping district. Scotch Plains Rescue Squad (2-story brick) is located on the right. Do not park in the row next to the building — you'll be towed.

From I-78 (either direction)

Take exit 41 (Scotch Plains); follow signs to US 22. Turn right at light at bottom of hill and use overpass to cross Rt. 22. Follow US 22 Westbound directions.

From US 22 Westbound

Exit at Park Avenue, Scotch Plains after McDonalds on the right, diagonally opposite Scotchwood Diner on the left, immediately before the overpass. After exiting, turn left at the light and use overpass to cross US 22. Bear right at bottom of ramp to continue south on Park Avenue. Turn left at the second light (a staggered intersection). Scotch Plains Rescue Squad (2-story brick) is on the right. Do not park in the row next to the building — you'll be towed. We meet on the second floor, entering by the door at the right front of the building.

From Western New Jersey

Take US 22 Eastbound to the Park Avenue exit. The exit is about a mile past Terrill Road and immediately past the overpass. Exit onto Park Avenue South and follow the directions above to the Rescue Squad building. ☐

As another security precaution Outlook does not allow you to receive or send files of certain types as attachments. These types of files could potentially introduce a virus. This can be a problem if you want to send or receive a blocked file. When that is necessary change the file extension to one not blocked. Then add instructions in the message about renaming the file to the original file extension. Another option is to zip the files before attaching them.

Preview Attachments

Another neat addition in Outlook 2007 is the ability to preview attachments in the Reading pane right along with email text. If you subscribe to RSS feeds you can also read them within Outlook. To preview an attachment in a message without opening it, click it in the Reading Pane.

Conclusions

After a month of using Office 2007 I am very impressed with the suite of applications. I have not used all of the separate applications in depth but did open some of my files in each program. Converting to the new XML format or maintaining compatibility with Office 2003 was simple.

The new Ribbon interface in most of the Office 2007 applications is not only attractive but extremely user friendly. It provides an easy to understand grouping of commands in tabs. The graphic display of the commands provide for ease of use. Beyond the look of the new interface Office applications

themes and styles make it a straightforward task to create attractive and professional looking documents. The new features allowing for quick preview of formatting changes before applying them is a superb tool. Now with a simple movement of the mouse you can see your file with an all new look.

Office 2007 offers improvements in computing security by easily allowing you to remove personal data from your documents prior to sharing them. Or use the Mark as Final command to make a document read only so others cannot modify it.

Another of the many improvements that I specifically want to mention is the ability to save documents from Office within applications to PDF. This feature is a true benefit to all users. Although I have PDF file generation applications on both of my computers it is still a time savings to create a PDF file right in Office. I was disappointed that I had to download an add on to get this capability.

I think that Office 2007 is a great suite of office applications and that with the various versions available it should be accessible to most.

This article has been provided to APCUG by the author solely for publication by APCUG member groups. All other uses require the permission of the author (see e-mail address above). ☐

ACGNJ MEETINGS

For the very latest news on ACGNJ meetings visit the ACGNJ Web Page (<http://www.acgnj.org>)

Tuesday, January 29

7 P.M. - Board of Directors meeting.

Friday, February 1

8 P.M. - Main Meeting, Mike Redlich (mike@redlich.net).

Monday, February 4

8 P.M. - Lunics (Linux/Unix). Andreas Meyer (lunics@acgnj.org)

Friday, February 8

6 P.M. to 5 A.M.- NJ Gamers. Gregg McCarthy (greggmc@optonline.net), 732-721-6507. Break 8 to 10 P.M.

Monday, February 11

8 P.M. - Layman's Forum, Matt Skoda (som359@aol.com), 908-359-8842.

Tuesday, February 12

7:30 P.M. - Java, Mike Redlich (mike@redlich.net) 908-246-0410.

Wednesday, February 13

7 P.M. - WebDev SIG, Evan Williams (tech@evanwilliamsconsulting.com)

Thursday, February 14

8 P.M. - Investing Software, Jim Cooper (jim@thecoopers.org).

Friday, February 15

8 P.M. - Window Pains, John Raff (john@jraff.com).

Monday, February 18

7 P.M. - Firefox Activity, David McRitchie (firefox@acgnj.org)

Tuesday, February 19

7:30 P.M. - C/C++ Users, Bruce Arnold (barnold@ieee.org), 908-735-7898

Wednesday, February 20

7:30 P.M. - Mobile Devices, David Eisen

Thursday, February 21

8 P.M. - Dot Net, Manuel J Goyenechea

Tuesday, March 1

7 P.M. - Board of Directors meeting.

Monday, March 3

8 P.M. - Lunics, Andreas Meyer (lunics@acgnj.org)

Friday, March 7

8 P.M. - Main Meeting, Mike Redlich (mike@redlich.net). ☐

All meetings, unless otherwise noted, are at Scotch Plains Rescue Squad, 1916 Bartle Ave., Scotch Plains, N.J.
Directions and map inside back cover.