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Recurring Images

Bob Hawes (bob.hawes@acgnj.org)

Just a few months ago, I wrote three articles examining hard disk imaging software (in the October, November and December 2009 issues of ACGNJ News). Even after all that, I still left a few “loose ends” dangling. Now, for the fourth time in six month, we’re back on that subject again; but first, here’s a “humorous personal anecdote”.

(I should warn you, though, that it has absolutely nothing to do with computers).

On Sunday, February 14th, I called my Aunt for Valentine’s Day. At 90, she’s my oldest remaining relative; and for most of my life, her house has been the only other place where I feel completely at home. After we’d exchanged pleasantries, she told me that she hadn’t seen her cat since the previous Wednesday. Now, this was an indoor cat who never left the house; but maybe all the snow that was currently covering the world outside had been just too tempting to resist. As we said our sad good-byes and hung up, neither of us expected a good outcome. However, the very next day, she found the cat lounging in a pool of sunlight on the little table next to her side door. When she opened the door, it sauntered nonchalantly into the house as if nothing unusual had happened; much too “cool” to admit in any way that it had survived the last five days huddled somewhere in near-blizzard conditions.

Now (as Bill Cosby once segued), I told you that story so I could tell you this one. A few years ago, I had just left my car in the driveway that runs between my Aunt’s house and her neighbors’ house when the cat belonging to said neighbors came up to me and meowed. He walked away a few steps, then turned around and meowed at me again. So I followed him. He led me around to his kitchen porch, where he stood up on his hind legs and banged on the lower window of the storm door. However, there was some kind of cooking-type project going on inside, and they were making so much noise
Officers, Directors and Leaders

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ACGNJ News

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Tips for reviewers: Why does anyone need it? Why did you like it or hate it? Ease (or difficulty) of installation, learning and use. Would you pay for it?

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that they couldn’t hear him. So he went and got somebody who could bang even louder (which I did). Smart cat. If a kid named Timmy had been trapped in an abandoned mine somewhere, I’m sure he would have figured out a way to tell me that, too.

Speaking of kids named Timmy: A while back, there was a TV commercial in which Lassie got fed up with all the ways that Timmy kept getting into trouble. (My favorite was “kidnapped by circus folk”). So she went on the Internet and found herself a better family. This was a funny commercial; interesting, entertaining and well made. However, I’d guess it must have been a failure as an advertisement. Because I remember lots of details about it; but I have absolutely no recollection of what particular Internet product or service it was trying to sell. (Hah! By mentioning the Internet, I did, in fact, tie this “heartwarming reminiscence” in with computers after all).

Now for some technical content: As mentioned above, we’ll be re-examining drive imaging software, including Image for DOS and the Linux program FSArchiver. We’ll also see how to re-install GRUB (the Linux boot loader) to a hard disk’s MBR (Master Boot Record) if necessary; but first, we’ll revisit Clonezilla (booted from a Linux live-CD), which might not be as inflexible as I previously thought, and Ghost for DOS (booted from a floppy), which might not be as dead as I previously thought.

Clonezilla (and Ubuntu)

I’m writing this article using the Word Processor component of OpenOffice.org 3.1.1, installed on a Ubuntu 9.10 system running on a “10 GB” hard disk. However, this isn’t the first Ubuntu 9.10 system that I’ve used. It’s actually the third. I created the first in November 2009. To do so, I downloaded the relevant ISO image from the Ubuntu website, and used the Linux program K3B to burn it to a CD. Then, I booted from that CD and installed Ubuntu 9.10 to an empty “10 GB” disk. (I currently have three “10 GB” hard disks assigned exclusively for stand-alone operating systems. The quotes are there because none of them measures exactly 10 GB). For reasons I won’t go into here (but will likely work into another article someday), I found that I preferred working from my old 9.04 disk instead. So I made a Clonezilla backup of that new 9.10 system, then put the source hard disk “on the shelf”, just in case I might need it someday. When the presentation I gave at our December 18th, 2009 Window Pains Meeting required a 9.10 system, I restored that Clonezilla backup to an empty “40 GB” hard disk and installed it in a spare computer. (I made the remaining “30 GB” into a temporary FAT32 drive to hold my presentation’s data files). After the meeting, that hard disk was scheduled for re-use. (Although, as I write this, it hasn’t actually been overwritten yet). To make my third 9.10 system, I upgraded my 9.04 hard disk. That took a bit of creativity.

As I said earlier, I’m using three “10 GB” hard disks. (I’ve found this to be a versatile size for use as operating-systems-only drives). Their true capacities are 9.31 GB, 9.32 GB and 9.54 GB. Unfortunately, when I originally produced my Ubuntu 9.04 system (in May of 2009), I used the 9.54 GB disk. As I’ve noted in previous articles, that made it impossible to restore a Clonezilla backup of that installation to either of the smaller “10 GB” drives, because the Clonezilla developers just flat out refuse to include size changing capabilities. This policy makes absolutely no sense to me. Though Clonezilla can be used to back up a single computer, it’s designed for simultaneous transmission of a single image to multiple recipients. Even hard disks with the same model numbers may have different “lot” and/or “sub-lot” numbers, which could easily translate into slightly different sizes. (Not to mention possible “running changes” made on the assembly line, which might not even be documented on the disk labels). When ordering hard disks, there’s just no way a procurement officer can guarantee that they’ll all be exactly the same size.

I consider Clonezilla to be completely dependable for same-size backup and restoration; but if I was in charge of a large-scale deployment, I wouldn’t dare risk using it as it stands. (Because any target that was even the tiniest bit smaller than the master source image would fail). Yet the evidence suggests that responsible System Administrators are, in fact, using it all the time. They must have found a work-around, and I think I’ve figured out what it is. The difference between the 9.54 GB disk and the 9.31 GB disk is 0.23 GB. That translates to 235.5 MB. Thus, using GParted (the Gnome Partition Editor), I shrunk my Ubuntu 9.04 hard disk’s Ext3 partition from 9.09 GB to 8.79 GB (including a little “slop” to cover unexpected contingencies), and then moved my swap partition forward until it touched the now-smaller Ext3 partition again. That left 0.3 GB (307 MB) of unassigned space at the end of the 9.54 GB disk. Then, I made a backup with Clonezilla and restored it to the 9.31 GB disk. The result was an Ubuntu 9.04 system with about 70 MB of unassigned space at the end. It’s inelegant (that wasted space really irks me), but it worked! (Besides, if that extra space ever gets too annoying, I can always merge it back into the Ext3 partition by reversing my GParted steps above).

After that, I put my original 9.04 disk “on the shelf”, and upgraded my newly created duplicate to 9.10. Ubuntu Update Manager took two hours to do it. Downloading 1,452 files took about 50 minutes, and then installing them took about 55 minutes. Before-and-after “overhead” took up the rest of the time. In total, 323 files were added, 1,129 files were upgraded, and 98 files were removed.

Ghost

By my count, this is my fifty-seventh article for the ACGNJ News. (Since I don’t usually include small stuff, that count
Recurring Images, continued

could actually go higher). In previous articles, I’ve men-
tioned my desire to create some kind of searchable database
to hold all of my articles (including the small stuff). I have-
n’t actually done anything about it, though; but my memory
isn’t what it used to be, and I really need something. Case
in point: In Something Spooky? (my “Halloween” article for
the October 2009 issue of ACGNJ News), when reporting
the results of a DOS-floppy-booted Ghost 2002 backup of
an Ubuntu 9.04 hard disk, I said; “It gave me a “success-
fully finished” message in not much more than a second,
and produced an output file measuring just 6,258 bytes. I
tried my hardly-ever-used Ghost 2003 floppy, and got an
output file of 5,720 bytes. Opening both files, I confirmed
that each contained an empty Ext2 partition. Since my
source disk contained an Ext3 partition, my conclusion was
that Ghost for DOS can only recognize Linux Ext2 parti-
tions. Faced with an Ext3 partition, it couldn’t read the
contents, so it ignored everything and simply created an
empty output file.”

A reasonable conclusion, except for something I’d forgot-
ten: In Thirteen Things?, (my article in the May 2009 issue
of ACGNJ News), I wrote; “I’d been afraid that this move
to Linux might be the final nail in Ghost’s coffin, but my
floppy-booted version of Ghost 2002 recognized the Ext3
and Swap partitions just fine, and produced a 1.6 GB image
file named U804BU01.GHO.” So last May, Ghost could
back up an Ubuntu 8.04 Ext3 partition just fine; but last Oc-
tober (only five months later) it couldn’t back up an Ubuntu
9.04 Ext3 partition. Therefore, whatever went wrong in Oc-
tober wasn’t Ghost’s fault. It had to have been that 9.04
partition. Could it be that Ghost still lives?

Now, there’s a historical precedent for suspecting that
Ubuntu’s “use entire hard disk” install option could have
produced results that just aren’t up to Partition Magic’s
standard of absolute perfection. Here’s what I wrote in my
very first article for this club (Linux Dual Boot Experi-
ments, in the May 2005 issue of ACGNJ News), after I did
a stand-alone Ubuntu 4.10 installation to an “80 GB” hard
disk; “Partition Magic 8 reported a partition table #110 er-
ror, so it couldn’t view the drive. DOS FDISK reported a 76
GB Non-DOS partition (with 100% usage) and a 500 MB
extended DOS partition (with 4% usage). It also reported
a total disk space of only 13,655 MB, so the drive’s size
information had obviously been compromised. This is
probably what messed up Partition Magic. Something here
is definitely not right, but the system booted and everything
worked, so Ubuntu passed.” Later in that article, Ubuntu
4.10 failed miserably during its “Share The Drive With XP”
test, corrupting the entire hard disk. (See Linux Dual Boot
Experiments itself if you want further details).

To test my suspicion, I created a new Ext3 partition using
Partition Magic 8 (booted from a floppy) on a spare hard
disk, and copied a 1 GB file into it. Next, I created a new
Ext3 partition using GParted 0.4.5 (the version that came
with Ubuntu) on another spare hard disk, and copied that
same 1 GB file into it also. Then, I backed them both up
with Ghost 2002. I got a 1 GB output file for the Partition
Magic disk. (The 1 GB file I used was an already com-
pressed archive, so it couldn’t be shrunk much further). For
the GParted hard disk, I got a 5,792 byte output file (as be-
fore, containing an empty Ext2 partition). When I tried to
view the GParted hard disk with Partition Magic, I got a
partition table #110 error, just like five years ago. This par-
ticular error involves incorrect or inconsistent reporting of
the number of sectors on the hard disk. That would cer-
tainly explain the wildly inaccurate total disk space
reported in 2005. This time, though, DOS FDISK reported
the size correctly. Whatever has gone wrong now isn’t as
obvious.

In the past, I relied on the “mystic healing powers” of
Gparted’s size-changing function to fix various partition ta-
table errors. This time, since GParted had created the
problem, I didn’t have much hope; but I tried anyway.
Using GParted 0.5.1 (the newer version that came on the
latest release of System Rescue CD), I shrunk the erroneous
partition by 200 MB. Afterwards, though, Partition Magic 8
still got that #110 error, and Ghost 2002 still only copied an
empty Ext2 partition to its backup file.

However, there’s also a historical precedent for a different
explanation. What if some genius committee altered or en-
hanced the Ext3 specifications? Microsoft did it at least
three times with NTFS (version 1.4 for NT, version 3.0 for
Windows 2000, and version 3.1 for XP). Plus, I don’t know
what they may have done for Vista or 7 (and I have abso-
lutely no intention of ever finding out). Maybe some
 meddling Linux minions messed with the structure of Ext3.
That would make GParted right, and Partition Magic and
Ghost wrong. In the future, I might dig up some older
GParted versions and see if any of them are compatible.
For now, though, things don’t look good for either Ghost or
Partition Magic.

FSArchiver

In Wrap It Up, (my article in the December 2009 issue of
ACGNJ News), I described backup and restore operations
using FSArchiver; but I pretty much ignored its
size-changing capabilities. Now, I’m going to restore a “10
GB” hard disk backup image to a smaller target. To make
sense here, I’ll have to repeat some information from De-
cember, but not too much. If you need more details, please
refer to Wrap It Up.

First, I connected an empty “6 GB” hard disk and an “80
GB” hard disk (containing my back-up files) to my com-
puter (they came in as sda and sdb, respectively). Next, I

Continued on page 5
booted from the System Rescue CD, and ran the startx command to start the graphical desktop. Then, because FSArchiver will bomb if it’s not given something to overwrite, I ran GParted and used it to create an empty Ext3 partition (sda1) in sda. (For Wrap It Up, I made sda1 an FAT32 partition. When we get to GRUB below, I’ll explain why that wasn’t such a great idea.) Next, in the already opened terminal window, I ran the following commands:

- mknod /mnt/dest
- mount /dev/sdb1 /mnt/dest
- fsarchiver restore /mnt/dest/fsatest2.fsa id=0,dest=/dev/sda1

These created the /mnt/dest directory, mounted sdb1 (the first partition in sdb, containing my back-up files) as that directory, and launched the program to restore the image file fsatest2.fsa to sda1. Aside from the annoying lack of a progress indicator or even a simple “running” message, everything went smoothly. Unfortunately, FSArchiver doesn’t back up or restore either the Linux swap partition or the MBR (Master Boot Record). We’ll skip the swap partition this time, but we’ve got to tackle the MBR, because we can’t boot without it.

GRUB

This month, I finally learned how to install GRUB to a hard disk with an already existing operating system. The instructions printed below are a distillation of information obtained from three different sources: Boot with GRUB, a May 1st, 2001 article by Wayne Marshall that I found on the Linux Journal website. Restoring GRUB, a January 11th, 2010 article by Jesse Smith that was published in the Questions and Answers section of Issue 336 of DistroWatch Weekly; and (of course) the results of my own trial-and-error fumbling. For copyright acknowledgment purposes (and for your further reference, if necessary), links to those two external sources have been provided below. (DistroWatch Weekly is on my own personal “must read” list).

Boot with GRUB by Wayne Marshall

http://www.linuxjournal.com/article/4622

DistroWatch Weekly Issue 336


Since I’m one of those reactionary Neanderthals whose computers still include floppy disk drives, I wanted to make a GRUB boot floppy. However, GRUB also comes on System Rescue CD, which we’ve already booted from. So, as soon as our image restoration has been successfully completed, it makes a lot more sense just to continue working in the Terminal window, by entering the following command:

- grub

This starts GRUB, which then provides us with a new command prompt of its own (grub>), where we enter the following commands:

```
  find /boot/grub/stage1
  root (hd0,0)
  setup (hd0)
  quit
```

The first line finds where the GRUB files are located (on the target hard disk, not on the live CD). The second line sets GRUB to use that location. (The parenthetical expression isn’t necessarily what I typed above. It’s whatever GRUB displayed in response to the first command). The third line sets up GRUB in the MBR of hd0 (or whatever location GRUB returned). GRUB uses its own hard disk names. In this case, hd0 is equivalent to sda, and hd0,0 is equivalent to sda1 (the first partition in sda). After the setup command finishes running, the fourth line exits GRUB, and returns us to the terminal window’s regular command prompt. Now we can shut the computer down, and then reboot from our newly restored 6 GB drive.

It booted just fine. Even though this hard disk was made as a just a throw-away experiment, it does contain my complete Ubuntu system, and it even has a little room left over. I could probably use it for day-to-day operations if I had to, as long as I didn’t try to store any of my data files on it.

So far, I’ve found two idiosyncrasies in GRUB. The first can occur when you’ve started the program and you’re at the grub> prompt. If NumLock is on and you hit the keypad’s Enter key, it works just like the main Enter key; but if NumLock is off, it writes a capital W on the command line instead. The second can occur if you created an FAT32 partition for sda1 and then overwrote it when you restored your backup file. You’ll get a “File not found” error when you run the “find /boot/grub/stage1” command. That’s because GRUB identifies your restored partition as a Type 0xb partition (FAT32 L) rather than a Type 0x83 partition (Linux N) like it should. In effect, it’s trying to communicate in the wrong “language”, so it can’t read the contents of sda1 correctly. Apparently, when FSArchiver “overwrites” your FAT32 partition, it doesn’t overwrite whatever GRUB reads as it’s trying to identify partitions.

Image for DOS

In New Blood (my article for the November 2009 issue of ACGNJ News), I made a prediction based on highly un-rigorous math: “...making IFD DOS 8 boot floppies could become impossible in roughly fifteen days”. That would have been on or about October 28th, 2009. The most recent Image for DOS version (2.53) was released on Jan 24,
2010, just about three months later; and guess what? It’s still possible to make a DOS 8 boot floppy that runs Image for DOS. Boy, did I ever blow that prediction. The Transdimensional Intergalactic Union of Prognosticators, Prophets and Seers is going to revoke my “Swami Hat” for sure. Luckily, I’ve now got some replacement candidates:

**Appendix I: The Hats Came Back**

In my *July & August Revisited* article (in our September 2009 issue), I offered a prize in *Appendix III: A Contest*. That prize was “a brand new, pristine, never been worn TCF 1998 purple hat”. I also said: “I can’t guarantee that this is the last one ever. (Twice before, we thought that we’d given away the last one, but then another turned up). However, given all the closet cleaning we’ve been doing lately, there just can’t be many more ‘nooks and crannies’ left where another one could be hiding”. I should have known better than to say something like that, because I obviously couldn’t have counted all of the nooks and crannies in all of the houses belonging to all of our members. While nobody’s won the contest yet, we now have a lot more prizes. That’s right! One of our members recently discovered a box containing another twenty-five of them. Two years ago, we uncovered three boxes in our back room. (Though one of them wasn’t completely full). We gave them out as “Tenth Anniversary” souvenirs at TCF 2008, and had some left for 2009. Now, we’ve still got 26 to give out in 2010, too. I don’t have an exact count, but a conservative low-ball estimate would be that at least eighty hats weren’t given out in 1998. Did anybody get a hat that year? Or could it be possible that somewhere out there a mad scientist is breeding them? (Cue the eerie violin music, and lay in a long sinister laugh on top).

**Addendum**

*The Cat Came Back* is a comic song written by Harry S. Miller in 1893. It was first commercially recorded in 1924, and it has come back many times since, including a TV performance by Rowlf the Dog on The Muppet Show (circa 1980). I felt it appropriate to use a twist on its title for this section’s heading, since my Aunt’s cat did come back.

See you next month.

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**The Best Free Software According to Gizmo**  
*Ira Wilsker*

In these tough economic times, many of us are finding it difficult to afford new software for our computers. Locally and on line we can shop and sometimes find some deals on software, but if money is especially tight, some of us would choose to do without. Alternatively, there has always been a huge assortment of free software or “freeware” available that can adequately accomplish almost all computing tasks. While there are some mega-sites such as download.com and tucows.com that each carry thousands of software titles, many of which are freeware, there are also some lesser known websites that provide comprehensive information and reviews about freeware. One recent find that has now become one of my favorites is Gizmo’s Freeware Reviews, at techsupportalert.com.

Upon accessing the Gizmo website, the user is greeted with a graphical menu containing 20 categories of software, including cleanup, educational, games, Linux, security, programming, security, system tools, and a dozen others. In addition to free software, Gizmo offers additional categories of information in its navigation window on the left side of the main page. These additional categories include the Best Tech Websites, How-to Guides and Tutorials, Freeware Updates, Security Advice Wizard, and Video Tutorials, as well as some housekeeping functions.

Since I am very concerned about cyber security, I chose to open the Security link from the front page graphical menu, one of the 20 possible selections. I was greeted with a list of about two dozen Gizmo articles on security software and related topics. Ranked in order of number of hits, and indication of the popularity of each topic, the first security article is “Best Free Antivirus Software”, which has had nearly 1.4 million hits. Opening the antivirus article, the user is greeted with a non-technical explanation of antivirus software, followed by a discussion of what Gizmo has determined as the best of the many free antivirus utilities. Gizmo awarded Avira AntiVir Personal Edition its top pick, narrowly beating out Microsoft Security Essentials, which is actually Gizmo’s personal choice. Each review is hyperlinked to a section farther down on the webpage, called the “Quick Selection Guide” which summarizes the pros and cons of each recommended product, download links, file size, latest version, 32 and 64 bit compatibility, installation tips, a discussion forum, and online help. The other recommended antivirus products are Avast!, and a-squared Free.

For those who might need help in deciding which security products would be most appropriate for their personal circumstances, Gizmo offers a “Security Advice Wizard” at techsupportalert.com/secwiz where the user selects his operating system, and answers some simple questions about internet habits and personal computer skills. Upon completing the wizard, Gizmo makes a recommendation of an antivirus product and a firewall. I tried the wizard using a variety of operating systems and levels of experience, and the wizard arrived at reasonable recommendations for each. The user
who follows the wizard’s recommendations will likely be well served by its picks.

In addition to information and reviews on software products, Gizmo also offers a wide selection of other helpful services and information. One I found exceptionally useful and interesting was a listing of PowerPoint slides and presentations, under the heading “Easily Find PowerPoint Slides and Presentations Using This Site” at techsupportalert.com/content/easily-find-powerpoint-slides-and-presentations-using-site.htm. I do a lot of PowerPoint presentations in a variety of settings and to different audiences, and often have some difficulties coming up with material. Gizmo may be of great help locating material, and one such resource linked on Gizmo is Slidefinder, at www.slidefinder.net. Available in 23 languages, Slidefinder has proven to be an outstanding resource, capable of locating individual slides and complete presentations on thousands of topics. One of the most frequent PowerPoint presentations that I do is on identity theft; entering the term “identity theft” in the search box displayed Slidefinder’s limit of 1000 items. Scrolling over the displayed slides (20 per page), opens a larger image of the selected slide and also displays any notes integrated with the slide. A link to the full PowerPoint file is also displayed, and a simple right-click on the file name and selecting “Save Link As” will download the complete file. The primary source of the PowerPoint slides and files are hundreds of universities from all over the globe, as well as government agencies, organizations, trade associations, and other sources.

Another very beneficial section of the Gizmo website is the “Hot Finds” at techsupportalert.com/view/hot. This selection displays software deals, mostly free, offered by the commercial software publishers for a limited time. As I type this, some of the commercial software being offered for free includes PC performance enhancing utilities, anti-malware utilities, backup utilities, graphics editors, and many others. Frequently checking this list may provide the user with an occasional gem of commercial software either free, or at a ridiculous low price, such as a recent offer (now expired) for a top rated $30 anti-malware product available for the paltry sum of 99 cents (I purchased 6 copies).

Many users sometimes need some help with accomplishing some computer tasks, or may even find some tasks that may need to be performed that they may have been unaware of. Gizmo has a “How-to Guides and Tutorials” section at www.techsupportalert.com/tutorials, with over 50 topics listed. The most widely used tutorial “How to Make Vista Run Faster” has been viewed over 300 thousand times. Other tutorials cover different browsers, backing up critical files, improving performance, creating a bootable rescue CD, how to reduce spam, and many other helpful and useful tutorials and other valuable information. I subscribed to both the RSS feed and email alerts so I can always be promptly informed of any new articles and software added to Gizmo. Stop by www.techsupportalert.com and see what treasures that you might find.

The DealsGuy

Bob (The Cheapskate) Click, Greater Orlando Computer Users Group

I often check http://www.giveawayoftheday.com to see what’s free that day and if it looks interesting, I sometimes downloaded things just in case I might need them some day, but it often takes me a while to get smart. I saw a good Windows tune-up program offered that I liked the other day and it was something I planned to use immediately. Suddenly I noticed a short paragraph on the download page telling me that I should not only download it within the time limit to get it free, but I should install it during that time and then run the activation file so it would be fully activated. Looks like I’ll be deleting several files that I downloaded for future use. At least that oversight didn’t cost me anything.

If you like those limited time offers, here’s something else you might like to check occasionally. Like the others, these deals are only good for 24 hours, so each day when you check, the product will be different. Start checking.

*Help From Google For Your Job?

I’ve said before that Louis Vitale of Macon Users Group http://www.maconusersgroup.org is one of my favorite authors; I never miss reading his column. A while back, he wrote about asking his nephew why he uses Google a lot. His nephew astounded him when he said that Google helps him make his living. Want to know how? He told Louis that he works for a roofing contractor writing job estimates and all he has to do to obtain the measurements for a house’s roof is “Google” that address for the information and do the calculations to estimate the price of it’s roof. I was astounded to read that because I was uninformed about that capability in Google Earth. Louis then went on to mention how much
fun he had that evening exploring Google’s capabilities, even way into the wee hours.

For that matter, I was surprised when my grandson called me Christmas Eve to get my house address so he could use Google to get a map for driving to my house from where he was in Florida; and in the process, he mentioned being able to see my house and the flag flying. I do have a 25’ flagpole in my yard and he would not have known that. This high-tech stuff continues to astound me.

*How Modern Technology Affects Ranchers*

An article in Information Week certainly opened my eyes to the strategy some ranchers must use to avoid criticism for their use of water for irrigation. Ranchers need irrigation to grow their crops, but the human race also needs water for human consumption, and water is becoming scarcer all the time. So, the ranchers need a compromise which they can do by refining their irrigation technology. It certainly made sense when I read about this technology that has been in use for a while, but now they’re refining it to save water even “during” the irrigation. I think you’ll find it interesting. [informationweek.com/article=221601558=Chris%20Murphy](http://informationweek.com/article=221601558=Chris%20Murphy).

*What If The Medication Doesn’t Work*

Who knows what might lead to your demise, but how about an impressive way to be presented when the time comes. Another of my favorite writers was Pim Borman and I wish he was still writing “The New, The Best, and the Worst”. In the last column he wrote when his user group disbanded, one item was about a personalized casket. They will actually decorate the casket according to the way you lived your life. For example, a firefighter’s casket might have a fire engine and ladders decorating the sides, a chemist might have the glass items for his trade or a doctor might have a stethoscope or other medical apparatus engraved on the sides. The Web site [http://www.artcaskets.com](http://www.artcaskets.com) states: “Whether bold and vivid or soft and subdued, Art Caskets are as unforgettable as the life they commemorate.” I can’t say if the mourners would be impressed, but it’s your funeral, isn’t it? Thinking further, what if the deceased was a former Madam? Wow! Would that funeral be “adults only” if the casket was inscribed accordingly? Don’t laugh; during recent excavations in the city of Pompei, archeologists noted that there was a certain male organ depicted over the doorway to one of the shops, so that occupation is certainly nothing new. Anyway, I enjoyed that personalized casket item in the last column Pim wrote. “The DealsGuy” inscribed on the side of my “discounted” casket will do just fine.

*Just In Case You Wondered*

Many people may be somewhat suspicious when they receive e-mails that you are asked to read, or other ones containing items such as a greeting card you click on to view it, and other catchy things. I never click on them because I’ve known people who got a virus when they clicked to see a so-called greeting card. Of course, that’s not always the case, but bad things are possible.

Anyway, if someone sends you an invitation to try Dropbox, it’s actually something you might want to look into. Of course, you should check closely to see where that URL is really taking you, but an invitation to Dropbox could be something that interests you. It’s actually a place to store your files on the Web and they can be shared with others if you desire. In your home, a thief could steal your personal files or worse yet, you might have the backup well hidden, but you can’t “hide” it from a fire. Dropbox is also handy to sync your files between two machines, and I’m told there are other uses such as linking Dropbox to your machine. Dropbox is good for Windows, Linux and Mac.

Several members here use it, like it and suggested I use it in my column. The Dropbox invitation you were sent is also a way for the sender to earn benefits from Dropbox if you decide to use it, they just didn’t mention that, but if it looks interesting, you’ll also be helping the friend that recommended it. There is a free version allowing you to store up to two gigabytes of files, and share them with others if you like. Larger storage will cost you so if you’re curious; check [http://www.dropbox.com](http://www.dropbox.com) to look further into the many features.

On the other hand, in the case of Dropbox, you’re dependent on somebody else’s server to keep your stored files, not to mention staying in business. Mine aren’t that important that they need to be kept secret, but you’re the judge of yours. I also have a backup in a fireproof safe.

*Need a Coloring Book?*

(Their announcement was edited by me to shorten it.) Star Coloring has launched Animals Coloring Book, a computer-based educational development program aimed at children 4-13 years old. The website based activity course is a perfect choice for parents who want to familiarize their kids with computers without exposing them to violent computer games and the dangers of the Internet. Animals Coloring Book features 25 three-dimensional pictures that strike an innovative balance for different skill levels. With a clear 3D interface, the artistic puzzles are guaranteed to keep a child occupied for a long time.

Animals Coloring Book offers kids an opportunity to develop their artistic abilities without getting messy with real paint. Once Animals Coloring Book has been opened, there is a simple tip for every tool and button (e.g. how to clear the picture, how to return to the previous color, etc). The program features nine basic colors and a palette for blending them, so it’s possible to achieve almost any color. The 3D objects and landscapes look much more attractive than those of common coloring programs.
The original music creates a fairytale atmosphere and sound effects make the process of coloring almost real. The auto-save feature ensures that the coloring will be safely stored after each session. Simple mistakes are impossible when working with Animals Coloring Book, which is always in full-screen mode. Animals Coloring Book is compatible with both Windows and Mac OS X and costs US$19.95 (all updates are free). User group members will receive a 20% discount by using the coupon code ‘DealsGuy’ when ordering. Further information on the product, as well as a free trial edition, is available at http://starcoloring.com/coloring-books/animals-coloring-book.

Visit www.starcoloring.com

Book Review: Windows 7 Secrets

Reviewed by Ken Blake (ken (at) kjblake.com), Tucson Computer Society (www.azcts.org)

There’s nothing at all secret about the great majority of what it contains. However, some of the things discussed in the book are marked with an icon containing the word “secret.” Are these secrets? No, not at all; they are meant to be, as it says in the preface, “little-known facts.” Something isn’t a secret just because it’s little-known; moreover, not all of the items marked “secret” are little-known and worse, not all of them are 100% accurate. My view is that the word “secrets” is just exaggerated advertising, and completely inappropriate.

Emblazoned on the paperback front cover of the book, in all caps, is the sentence “DO WHAT YOU NEVER THOUGHT POSSIBLE WITH Windows 7!” Everybody may not agree with me, but that kind of advertising, especially overstated advertising, on the cover of the book is a major turnoff for me.

The book is enormous, containing 1009 pages of text in 26 chapters, and a large index that brings the total to 1054. Although I might have presented some of it in a slightly different order than what these authors did, the organization is generally well done. But some of these chapters have nothing to do with Windows 7, and as far as I’m concerned don’t belong in this book at all.

For example, chapter 10 is about Windows Home Server. Windows Home Server is a completely different operating system that if you run at all will run on a different computer in your home network, and it’s been around since well before Windows 7. It’s an excellent product and I run it myself, but this book is not where a description of it and help in using it belongs. Chapter 14 is about Zune, another Microsoft product that has nothing to do with Windows 7. Chapter 18 is about the Windows Mobile Smartphone, a hardware product. Chapter 21 is about Windows Live Mail, a software product that doesn’t come with Windows 7. Chapter 13, Digital Videos and DVD Movies,” also is largely about software products that are not part of Windows 7. Much the same is true of chapter 23, “Your Life in Sync—Windows and Live Services.”

Are these topics important and worth talking about and including in the book, even though they are not part of Windows 7? Arguably, yes and apparently the authors think so. On the other hand, I think someone who buys a book should get what the title promises he will get, and not other things as well.

Some people may be glad these non-Windows 7 topics are included, but others (me, for example) will feel that they just make the book more expensive as well as bigger, heavier, and containing more to read. My view is that this sort of stuff simply doesn’t belong here—not unless the title of the book is dramatically changed, so purchasers get what they expect to get.

Windows download link: (14.2 MB) http://download.starcoloring.com/win/animals_coloring_book.exe
Mac OS X download link: (19.2 MB) download.starcoloring.com/mac/animals_coloring_book.dmg.zip

That’s it for this month. I’ll have some more new product announcements on my Web site that didn’t offer discounts. 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 Cheapskate) Click. Visit my Web site at http://www.dealsguy.com.

Download starcoloring.com/mac/animals_coloring_book.dmg.zip
Oddly, in the font used for the text of the book the “7” of “Windows 7” is slashed, but in the fonts used for headings and other things, it’s not. It’s not a serious complaint, but slashing the “7” is unusual in the USA, and the inconsistency of its use is mildly annoying.

Throughout the book, whenever a particular feature is talked about, it’s described as wonderful, and an improvement over what it was in previous versions of Windows. I’m a big fan of Windows 7, and I think that it’s the best version of Windows ever, but I don’t think that everything about it is wonderful. If I had my druthers, some things would be done differently.

Some of the things described may be good for some people, but not for others, depending on what other software they use, and upon their style of working. The tone of the authors in describing many things reads like unmitigated advertising, rather than honest description and evaluation.

Here’s an example of the kind of sentence I’m talking about: “Microsoft has dramatically enhanced the capabilities of the taskbar.” I know some people who like the Windows 7 changes to the task bar (Quick Launch icons are now on it together with the other icons, not on a separate toolbar) and others who hate it. Personally, I don’t have strong feelings about it either way, and I certainly wouldn’t describe it as “dramatically enhanced.”

So, putting behind me the negative views I stated above, and turning to the quality of the book’s contents, let me begin by stating that I generally like the book very much. It is thorough, reasonably complete, and by and large accurate (but not perfect—such books are never perfect). It explains things very well.

And in several instances, it told me things about Windows 7 that, despite my experience with it, I didn’t know. For example, it told me how, in Windows Explorer, to add folders to the Favorites list in the Navigation pane. This was to me a very useful tip and I was glad to have learned it.

The touch support for the screen is described in the book. This was new to me, primarily because my hardware doesn’t support it, but it was interesting to read about it.

I was very glad to see that in the chapter on Windows security, the authors recommend against Norton and McAfee anti-virus (the two worst choices, in my view) and for ESET NOD32, the product I think is best. However, I was very disappointed to see they consider Windows Defender to be adequate anti-spyware protection, and do not recommend installing any third-party antispyware programs.

Unfortunately the book has its share of errors. Most of the errors are minor misstatements, rather than being terribly significant, but still they are errors. Here are few examples of things that are clearly wrong, and some things that are wrong in my opinion:

1. It says, “A full version of Windows 7…cannot be used to upgrade an existing version of Windows to Windows 7.” That is not correct.

2. It says “Peek at Desktop is enabled by mousing over a new glass rectangular area found in the lower rightmost corner of the screen.” The “new glass rectangular area” is at the end of the task bar, and will be at the lower right corner of the screen only if the task bar is at the bottom of the screen. Since the task bar will be on whichever of the four sides of the screen you choose to have it on (just as in previous versions of Windows), what the book says about where it is not correct.

3. It says “Like a certain demonic creature, the notification area goes by many other names. If you see references to such things as ‘the system tray’… these are referring to… what’s now simply called the notification area.” The word “now” is a misstatement. It was actually always called the “notification area,” even way back in Windows 95 “System Tray” wasn’t its former name, just an informal name for it, both in the past and today.

4. Talking about Windows Explorer, the book says “So My Documents is replaced by the Documents library in Windows 7.” Yes, it’s true that what used to be called “My Documents” is now more simply (and better, in my view) called “Documents,” but that didn’t begin in Windows 7; it was also true in Windows Vista.

5. The book says “The Office 2007 ribbon has proven wildly popular with users…” I can’t prove that that statement is wrong, but my experience with Office 2007 users is that the great majority don’t like the ribbon interface at all.

6. It states “Throughout the years, all Windows versions have shared a common problem: they degrade in performance over time and boot more slowly the longer the computer is used.” These authors are far from alone in having this opinion, but it’s one with which I strongly disagree. I’ve run almost every Windows version since 200 and never experienced this. My view is that those who experience it do so because they used their computer poorly, not because of Windows slowing down on its own.

7. It states “boot-up speed, of course, is a primary concern.” I strongly disagree with this statement. My personal view is that the attention many people pay to how long it takes to boot is unwarranted. Assuming that the computer’s speed is otherwise satisfactory, it’s hardly ever worth worrying about. Most people start their computers once a day or even less frequently. In the overall scheme of things, even a few minutes to start up aren’t very important. Personally I power on my computer when I get up in the morning, then go get my coffee. When I come back, it’s...
Book Review: Windows 7 Secrets, continued

done booting. I don’t know how long it took to boot and I don’t care.

So, having complained about a number of things, what’s my overall view of this book and do I recommend it? Yes, I recommend it! Despite my list of its errors and points on which I disagree with the authors above, those points represent only a small portion of the book. Although I would have preferred it without the non-Windows 7 sections included, the book’s description of Windows 7 is thorough and most of it is accurate and well-presented. Moreover, the value of whatever information is in a book like this disappears if the information within it is hard to find, and that’s not a problem here. The book contains a very good and large (40 pages) index.

Authors: Paul Thurrott, Rafael Rivera
Publisher: Wiley Publishing, Inc. www.wiley.com
Price: $49.99, $31.49 @ Amazon

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Back up and Restoring Files

Ron Hirsch (Ronhirsch1439 (at) comcast.net), Boca Raton Computer Society (www.brcs.org)

If I had to pick a single area where most computer users are extremely lacking, it’s in the area of backing up and preserving the documents and other items that they generate during the course of their computer activities. Most people just dismiss the subject with “Oh I don’t really have anything of importance, and even if I do, I can always redo it easily.” These people may only use their computer for the Internet and e-mail. But, redoing your address book and bookmark listing can be a task in itself.

And, if you use a program such as Quicken or Money, you have lots of financial info that would be a real job to rebuild if all your files were lost. I reminded a friend about backing up his Quicken stuff, and he said that he really didn’t have to, as Quicken always backs things up automatically, which it does. But it backs things up onto the same hard drive, into a different folder. So, about 6 months later when his hard drive failed, his backup was worthless, and he was a very unhappy person.

What Does Backup Really Mean?

Backup is the generation of duplicate files, often onto a removable medium, for all the things that you have generated on your machine. Generally, these are files that you have produced, not the program files which came on the CD. These duplicate files must be stored on something which can be separated from your machine, and definitely separated from your internal system hard drive.

Since most people have only one hard drive, it does not make good sense to backup onto that same drive. And, if you have your main drive partitioned into say a C and D drive, you will still lose your backup if the drive fails. If however, you have a second hard drive on your computer, you are much safer storing your backups there.

There are online services which offer “online backup” at a small cost, or no cost. This can offer access from another computer, when you might need that data. But I personally don’t want my private data et al on an online computer, where it is possibly subject to being hacked or having that operation go out of business.

NOTE: This article is only discussing backup of your personal files and data — it is not addressing a complete backup of your system drive, including your operating system (probably Windows). That is a separate topic which will be covered in another article.

The backup media should be stored in a place where they will not become lost, stolen, or damaged. When I was in business (many years ago), we backed up all our files every day, with a rotating system of seven tapes. Copies were stored in a fireproof safe, and periodically, we placed a current copy in our safety deposit box at the bank. Just putting copies on the shelf doesn’t protect against their loss in case of a fire. Obviously, most users don’t have to go to such extremes. But, for important information, it’s a good idea to periodically put a backup copy into a secure and fireproof place, such as a home safe, or safety deposit box.

In order to be able to follow and use the material in this article, you must be conversant with using Windows Explorer, or a similar file manager. If you are not familiar with using a file manager to copy files and add new folders and subfolders, I would suggest that you bone up on this subject first, and then get back to this article.

What Do I Have to Do First

First of all, the typical user who has programs in which files are saved, generally has no idea where they are. So, the first thing to learn is just that. When you are in a program such as Quicken, your files are generally saved in the same folder as the Quicken program. Other programs may use the My Documents folder, My Files folder, the Documents and Settings folder, or a special folder that the program has set up to store things.

I personally set my own folders for storing things. And, fortunately, most programs allow the user to specify where
things are stored. In WordPerfect, I have a master folder set up, name WPWIN. Under that I have about 56 subfolders for all the categories that I have defined. There is a folder named “BocaBits”, which holds all the articles I’ve written for this publication. One of the main advantages of having your personal files organized in a master folder is that they are easier to copy to a backup medium. Just copy the main folder, specify to include the subfolders (if that is needed), and everything underneath will be copied. This is far easier than having to locate many different folders, and copy from each one individually.

Remember, using subfolders is a must. Some years back, one of my friends stored all his files for all his programs in the same folder, with no subfolders. Finding a file to use was almost like looking for a needle in a haystack. And, name your files using descriptive long filenames which all operating systems since Windows 95 can use. Which is easier to find “Letter to Jack re the new building.doc” or “let2jreb.doc”?

Here are some steps that I would suggest users consider — change the names to suite your desires.

• Add a new folder on your C: drive, and call it “All My Stuff” (without the quotes.)

What Medium Should I Use to Back Things Up?

In the “olden days”, the choices were fairly limited. Floppy disks and tapes were about it. These days, those two media are not the ones of choice. Floppies have limited storage space, and most people don’t have a tape drive, nor should they bother to get one these days.

The two choices that I would recommend are external USB drives, which many people have or flash drives which many people also may have. If you’re not familiar with these devices, you should become familiar — they are very inexpensive now and are perfect for backing up purposes, transporting, and archiving files. Or you can use a ZIP disk, if you have a ZIP drive, or use a CD rewritable disk.

To “burn” a CD, you must be familiar with this process. If you have a recordable or rewritable drive on your machine, there should be a software utility to handle copying files. Usually this utility is on the CD that came with your hardware. But, it’s possible the utility wasn’t loaded at the factory. Check through the manual or help files to learn more about this.

Remember, once you get into the habit of backing things up, you can feel more comfortable about not losing lots of time and effort trying to reconstruct things. And, when you get a new computer, your new machine can take the backup medium you used, and copy it all (as desired) onto the hard drive of the new machine.
One More Recommendation to Save Your “Stuff”

One area that most users don’t bother to consider, is the use of an uninterruptible power supply (UPS). These units plug into your wall outlet, and then the computer and monitor plug into it. Many don’t feel that this is of any value to them, but I’ll bet that they’ve had a crash during a power blink. The primary use of such a device is to keep your computer and monitor running when there is a power failure, either an extended one, or momentary power blink. The purpose of a UPS is not to allow you to keep working for an extended period when the power goes off, but to allow you to save your work, and shut down in an orderly fashion. Or, when the power “blinks”, your system doesn’t crash, and you lose the work that you have on screen. Even a one tenth of a second blink can wipe out what you’re working on. And, if you haven’t just saved it, you’ve lost it.

Furthermore, all computers should be connected via a high end surge protector to protect against line fluctuations and power surges. A UPS is also about the best protection you can use. UPS units are available for not much more than the cost of a good surge protector. Check Costco for some good values. A capacity of 300-500 VA is a reasonable range for most home computers. As a minimum, you need to have your computer and monitor connected via the UPS. Without a monitor, your computer isn’t good for much.

Happy backing up — try it. The day will definitely come when you’ll be glad you did. And once you get to be an expert at it, you can impress your friends by teaching them.

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Diagnosing RAM Errors in Vista

Vinny La Bash (vlabash (at) Comcast.net), Sarasota Personal Computer Users Group, Inc., FL (www.spcug.org)

There is nothing useful that can happen in your PC without RAM. That’s why it’s essential to have high quality, reliable memory chips installed on your equipment. Defective RAM shows up as application errors, messages that your operating system is not quite right, and stop errors which bring your system down hard and unexpectedly.

Testing your machine’s RAM with Vista’s Windows Memory Diagnostic will either find your problem or assure you that your RAM is in tip-top condition.

With your system up and running, close all applications before launching the diagnostic tool to prevent data loss. Click on the Start orb, select Control Panel, and click the System and Maintenance icon. Select Administrative Tools, and from the right pane click on the Memory Diagnostics Tool icon. An alternate way of starting the tool is to click on the Start orb, type Memory in the Start Search text box, and then click the Memory Diagnostics Tool icon.

When the dialog box appears left click on the portion that starts with Restart now. The dialog box will close and your computer will restart. Eventually the Windows Memory Diagnostic Tool’s dialog box will appear and the test will begin automatically.

Watch the white progress bar as the test advances through its various stages. You will be able to track progress as the tool repeatedly writes information to memory and then reads the data to verify that nothing changes from the write to the read.

The default is a standard memory test, but there are two other types of memory tests available to you depending on how much time you want to devote to testing, and how thorough you wish to be. Pressing the F1 key will bring up the Options screen.

Locate the Test Mix section and choose either the Basic or Extended mix. The Basic mix runs a decent basic test, but is superficial in comparison to the Extended mix. Up to eight hours can be required for the Extended mix, so don’t run it unless you have exhausted all other options.

Each test mix was designed with certain default cache settings which are optimized for that particular test mix. You can change the defaults and create a custom mix of your own, but unless you have an advanced level understanding of how memory works and is tested, you are probably better off leaving the default settings alone.

Some analyses use the cache on the microprocessor to see if the microprocessor is retrieving data properly from the memory modules. Other tests disable this cache to force the microprocessor to access all its data directly from the memory modules.

The tests are run twice, but by pressing the Tab key you can access the Pass Count section and specify how many times you want to repeat the tests. Make your changes and save them by pressing F10.

Messages will appear on the Status area if problems are found. If you wish to do other things while the tests are running, you can because if problems are found the Windows Memory Diagnostic Tool will reroute data around the trouble areas and allow Vista to restart without crashing. When you return, look in the notification area to access the test re-
results. The System Event Log also stores the test results. Look under MemoryDiagnosticResults.

What if Vista won’t boot? Start the system and continually press the F8 key until the Windows Boot Manager appears. The Windows Memory Diagnostic option is at the bottom of the screen and you can select it with the arrow keys.

If it’s impossible to get to the Boot Manager, run the tool from the Vista installation disk. Follow instructions until the Install Now prompt appears. Look for and select the Repair Your Computer option. You will find the Windows Memory Diagnostic Tool on the System Recovery Options menu.

The Windows Memory Diagnostic Tool is an excellent utility, but it sometimes delivers a false positive. In addition, many knowledgeable people believe that hardware based testers are superior. Regardless, the utility is an excellent diagnostic instrument provided it is used with those limitations in mind.

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**SIG News**

**Hardware Activity**

Mike Reagan (hardware@acgnj.org)

This group is dedicated to repairing, refurbishing and/or recycling older computers. On May 28th, ten people attended the first meeting of the ACGNJ Hardware Activity; showing that there is, in fact, still a market for this type of event. One guy even came all the way from the Bronx! Although we did look at some of the older equipment stored in the back room, most of our time was spent in “random access”: talking about past experiences and planning for the future. Hopefully, we can establish a viable long-term schedule of projects, and keep the interest of those who attended this inaugural meeting. **Our next meeting March 25.**

**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.

**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.

**Our next meeting March 15.**

**NJ Gamers**

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http://www.NJGamers.com

www.lanparty.com

The next Friday Night Frag will be March 12, 12 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!

**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 as well. We meet on the first Monday of the month at the Scotch Plains Rescue Squad. See the web page for directions and more information.

**Our next meetings March 1, April5.**
C/C++ Programming
Bruce Arnold (barnold@ieee.org)
http://acgnj.barnold.us/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.

February: Air Cards are extremely popular these days especially with the advent of Netbooks. They combine the features of a Wireless Network Card and a Modem to communicate directly from PC to Cell Phone Tower. They provide Internet access, browsing, and file transfer without the normal land-based Internet provider. They can be built into the laptop or plugged-in via a USB or PCMCIA port.

That's good but there is a "down side". A friend has an Air Verizon Card at a cost of $60 per month, and he is only allowed to download 5 Gigabytes! There is a surcharge if he goes over that. Another plan costs $40 per month but only allows data usage of 250 Megabytes. Other phone companies have similar costs. So here's the problem: how do you keep track of your usage in order to control your cost?

The object of this program is to collect data about your network send and receive usage. The program displays a real-time account of current daily network activity and the total usage during the current month. At the March meeting I graphed the historic data that has been collected.

If you don't have an AIR CARD, the application can monitor network traffic on your computer. The above screen shot shows that my local network has transferred over 400 MegaBytes of data today. The bar graph is a speedometer showing the instantaneous speed of the network.

Our download site has code and programs from most meetings. Our next meeting March 16.

Web Dev
Evan Williams (ewilliams@collaboron.com)

This SIG is an open forum for all Website Development techniques and technologies, to encourage study and development of web sites of all kinds. All languages will be considered and examined. Anyone interested please contact the Chairperson. 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. 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 March 10.

Java
Mike Redlich (mike@redlich.net)
http://www.javasig.org

The Java 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.

February 9: Technical Overview of the Facebook API
March 9: Victor Grazi from CreditSuisse will present Java Concurrent Animated, a series of animations written in Java that illustrate each of the components in the Java concurrent library.

Main Meeting
Mike Redlich (mike@redlich.net)

March 5: Bob Hawes: A survey of "Cool/Fun/Useful Websites" (adding NEW stuff to what he did at last June's Window Pains Meeting).

Investment Software
Jim Cooper (jim@thecoopers.org)

Our next meeting: March 11.

Window Pains
John Raff (jraff@comcast.net)
http://www.acgnj.org/groups/winpains.html

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

March 19: Don McBride: How to Publish on YouTube.

March 2010 ACGNJ News
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.

<table>
<thead>
<tr>
<th>Software</th>
<th>Name</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTML</td>
<td>Mike Redlich</td>
<td>908-246-0410</td>
</tr>
<tr>
<td></td>
<td>Jo-Anne Head</td>
<td>908-769-7385</td>
</tr>
<tr>
<td>ColdFusion</td>
<td>Jo-Anne Head</td>
<td>908-769-7385</td>
</tr>
<tr>
<td>CSS</td>
<td>Frank Warren</td>
<td>908-756-1681</td>
</tr>
<tr>
<td></td>
<td>Jo-Anne Head</td>
<td>908-769-7385</td>
</tr>
<tr>
<td>Java</td>
<td>Mike Redlich</td>
<td>908-246-0410</td>
</tr>
<tr>
<td>C++</td>
<td>Bruce Arnold</td>
<td>908-735-7898</td>
</tr>
<tr>
<td></td>
<td>Mike Redlich</td>
<td>908-246-0410</td>
</tr>
<tr>
<td>ASP</td>
<td>Mike Redlich</td>
<td>908-246-0410</td>
</tr>
<tr>
<td>Perl</td>
<td>John Raff</td>
<td>973-560-9070</td>
</tr>
<tr>
<td></td>
<td>Frank Warren</td>
<td>908-756-1681</td>
</tr>
<tr>
<td>XML</td>
<td>Mike Redlich</td>
<td>908-246-0410</td>
</tr>
<tr>
<td>Genealogy</td>
<td>Frank Warren</td>
<td>908-756-1681</td>
</tr>
<tr>
<td>Home Automation</td>
<td>Frank Warren</td>
<td>908-756-1681</td>
</tr>
</tbody>
</table>

Operating Systems

| Windows 3.1    | Ted Martin    | 732-636-1942 |

Discount Computer Magazine Price List

As described by the DealsGuy

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

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.
### Other Local Computer Groups

<table>
<thead>
<tr>
<th>Group Name</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linux Users Group in Princeton</td>
<td>7 pm, 2nd Wednesday, Lawrence Branch Mercer Library, Rte 1 &amp; Darrah Lane, Lawrence NJ, <a href="http://www.lug.org">http://www.lug.org</a></td>
</tr>
<tr>
<td>New York PC</td>
<td>3rd Thurs, 7 pm, PS 41, 116 W 11th St. For info call hotline, (212) 533-NYPC, <a href="http://www.nypc.org">http://www.nypc.org</a></td>
</tr>
<tr>
<td>Computer Education Society of Philadelphia</td>
<td>Meetings &amp; Workshops at Jen Electronics, 6622 Castor Ave, Philadelphia PA. <a href="http://www.cesop.org">www.cesop.org</a></td>
</tr>
<tr>
<td>Brookdale Computer Users Group</td>
<td>7 pm, 3rd Friday, Brookdale Community College, Bldg MAN Rm 103, Lincroft NJ. (732)-739-9633, <a href="http://www.bcatug.com">www.bcatug.com</a></td>
</tr>
<tr>
<td>NJ Macintosh User Group</td>
<td>8 pm, 3rd Tuesday, Allwood Branch Library, Lyall Rd, Clifton NJ. (201) 893-5274, <a href="http://www.njmug.org">http://www.njmug.org</a></td>
</tr>
<tr>
<td>PC User Group of So. Jersey</td>
<td>2nd Mon., 7 pm, Trinity Presb. Church, 499 Rt 70 E, Cherry Hill, NJ. L. Horn, (856) 983-5360, <a href="http://www.pcgusnj.org">http://www.pcgusnj.org</a></td>
</tr>
<tr>
<td>Linux Users Group in Princeton</td>
<td>7 pm, 2nd Wednesday, Lawrence Branch Mercer Library, Rte 1 &amp; Darrah Lane, Lawrence NJ, <a href="http://www.lug.org">http://www.lug.org</a></td>
</tr>
<tr>
<td>Hunterdon Computer Club</td>
<td>8:30 am, 3rd Sat, Hunterdon Medical Center, Rl 31, Flemington NJ, <a href="http://www.hunterdoncomputerclub.org">www.hunterdoncomputerclub.org</a>, (908) 995-4042.</td>
</tr>
<tr>
<td>NY Amateur Computer Group</td>
<td>2nd Thurs, 7 pm, Rm 806 Silver Bldg, NYU, 32 Waverly Pl, NYC. <a href="http://www.nyacc.org">http://www.nyacc.org</a></td>
</tr>
<tr>
<td>Central Jersey Computer Club</td>
<td>8 pm, 4th Fri, Rm 74, Armstrong Hall, College of NJ. Rich Williams, (609) 466-0909.</td>
</tr>
<tr>
<td>NJ PC User Group</td>
<td>2nd Thurs, Monroe Rm at Wyckoff Public Library, 7 pm. Maureen Shannon, (201) 853-7432, <a href="http://www.njpcug.org">www.njpcug.org</a></td>
</tr>
<tr>
<td>Philadelphia Area Computer Society</td>
<td>3rd Sat, 12 noon Main Meeting, groups 8 am-3 pm. Upper Moreland Middle School, Hathboro PA. (215) 764-6338, <a href="http://www.pacsnet.org">www.pacsnet.org</a></td>
</tr>
</tbody>
</table>

### 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](http://www.pctalkweb.net).

### 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.
These ideas are compiled from years of accumulations from various magazines, books, on-line sites and my own personal experience. I claim neither originality nor ownership to any of its contents. My only intent is to share the various “tips, “tricks” & “hints” in hopes of helping & maybe enhancing your computing experiences. They are all intended for anyone who uses a PC. It is for beginners as well as advanced users. Enjoy and use as you will.

Defragmentation Explained

Fragmentation is caused by creating and deleting files and folders, installing new software, and downloading files from the Internet. Computers do not necessarily save an entire file or folder in a single space on a disk; they’re saved in the first available space. After a large portion of a disk has been used, most of the subsequent files and folders are saved in pieces across the volume.

When you delete files or folders, the empty spaces left behind are filled in randomly as you store new ones. This is how fragmentation occurs. The more fragmented the volume is, the slower the computer’s file input and output performance will be, and there will be a significant degradation in performance.

Defragmentation is the process of rewriting non-contiguous parts of a file to contiguous sectors on a disk for the purpose of increasing data access and retrieval speeds. Because FAT and NTFS disks can deteriorate and become badly fragmented over time, defragmentation is vital for optimal system performance.

In June 1999 the ABR Corporation of Irvine, California, performed a fragmentation analysis and found that, out of 100 corporate offices that were not using a defragmenter, 50 percent of the respondents had server files with 2,000 to 10,000 fragments. In all cases the results were the same: Servers and workstations experienced a significant degradation in performance.

How to Set XP to Display the Shutdown Menu When You Press the Power Button

By default, when you press your computer’s power button, the system shuts down. That can be a problem if it gets pressed accidentally. You can configure XP to instead display the shutdown menu, giving you the option to choose whether to shut down, restart, etc. Here’s how:

• Right click an empty spot on the desktop
• Select Properties
• In display properties dialog box, click the Screen Saver tab
• Near the bottom of the dialog box, click the Power button
• In Power Options Properties dialog box, click the Advanced tab
• At the bottom of the page, under “When I press the power button on my computer,” select “Ask me what to do.”

This article has been obtained from APCUG with the author’s permission 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)

Monday, March 1
8 P.M. - Lunics, Andreas Meyer (lunics@acgnj.org)

Tuesday, March 2
7 P.M. - Board of Directors meeting.

Friday, March 5
8 P.M. - Main Meeting, Paul Syers (paul.syers@acgnj.org).

Monday, March 8
8 P.M. - Layman’s Forum, Matt Skoda (som359@aol.com), 908-359-8842. No meetings in July or August.

Tuesday, March 9
7:30 P.M. - Java, Mike Redlich (mike@redlich.net) 908-246-0410.

Wednesday, March 10
7 P.M. - WebDev SIG, Evan Williams (ewilliams@collaboron.com)

Thursday, March 11
8 P.M. - Investing, Jim Cooper (jim@thecoopers.org).

Friday, March 12
6 P.M. to 5 A.M.- NJ Gamers. Gregg McCarthy (greggmc@optionline.net), 732-721-6507. Break 8 to 10 P.M.

Monday, March 15
7 P.M. - Firefox Activity, David McRitchie (firefox@acgnj.org)

Tuesday, March 16
7:30 P.M. - C/C++ Users, Bruce Arnold (barnold@ieee.org), 908-735-7898

Friday, March 19
8 P.M. - Window Pains, John Raff (john@jraff.com).

Thursday, March 25
8 P.M. - Hardware, Mike Reagan (hardware@acgnj.org)

Tuesday, March 30
7 P.M. - Board of Directors meeting.

Friday, April 2
8 P.M. - Main Meeting, Paul Syers (paul.syers@acgnj.org).

Monday, April 5
8 P.M. - Lunics, Andreas Meyer (lunics@acgnj.org)

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