Second Cousin Twice Removed of Thirteen Things

Bob Hawes (ACGNJ)

As an old Vaudeville comedian might say, once for Va-grancy, and once for Disturbing the Peace. (Get it? Removed equals arrested). Searching the Internet, I was somewhat surprised to find that “second cousin twice re-moved” does actually describe a real familial relationship; but enough about that. This article isn’t about silly genealogy jokes. It’s about dual booting Windows XP and Ubuntu Linux; and as in my previous article (Son of Thirteen Things, in our September 2011 issue), we’ll be following my own personal version of the Thirteen Things list when we install Ubuntu. (Details about that list later). What’s more, we’ll be tying back into our title even further, because we’ll be doing it twice (on two different computers). So let’s get going.

Our first subject computer is a Dell OptiPlex 740 (OP74 from now on). It was given to my cousin and his wife by their church, after an equipment upgrade made it redundant. Unfortunately, the possibly overzealous removal of a lot of “confidential church stuff” beforehand had rendered its current XP operating system unstable, so it couldn’t be used as-is. Now, my professional policy has always been to avoid Dell machines like the plague. (Compaq and HP products as well). They’re just too proprietary. Not only would it be frustrating for me, but I probably wouldn’t be able to do the job as well as a technician who’d been trained in the esoteric twists and turns of those particular systems; but this machine was owned by close relatives. (Beloved close relatives, too). So I gritted my teeth and soldiered on. The first thing I did was use Clonezilla to make a backup image of whatever was left on its 80 GB hard disk. (Actually, it was also the second thing that I did, because I also made another Clonezilla backup, just in case). After that, having done all that I could to preserve what was left, I deleted everything from the hard drive. Then, I ran SpinRite on it, to make sure that the drive was in perfect shape. (It was).

Next, I tried a quick and dirty shortcut. I simply restored to this computer the Clonezilla backup of my own new Ubuntu 11.04 installation that I made last month (Son of Thirteen Things). As I’ve said before, this idea wouldn’t have worked for Microsoft’s current operating systems. (Unless the two motherboards are absolutely identical, which they certainly don’t seem to be). Linux is a lot more versatile, so there was a good chance that it would work here; and it did.

Afterwards, using GParted (the Gnome Partition Editor) to look at the results of my restore operation, I saw a 26.65 GB Ext4 operating system partition, a 2.0 GB swap partition, and 47.88 GB of empty space. (Remember, Clonezilla utterly and completely refuses to change the sizes of its partitions as it restores them; and for some reason, its authors seem to think that this is a good thing. I consider it to be a serious major deficiency, myself). Last month, I somehow forgot to mention that I was installing Ubuntu onto a 30 GB hard disk. Math fans among you will notice that those first two numbers don’t add up to 30, and that all three numbers don’t add up to 80, either. This shouldn’t surprise anybody. As I’ve said many times before, hard disk manufacturers consistently lie about the size of their equipment.

Anyway, I created a 45.63 GB FAT32 partition in that unallocated space, and gave it DATA as its volume label. This still left me with 236.21 MB of unallocated space at the very end of that hard disk. I did this on purpose, so that when I made a Clonezilla backup of this new arrangement (which I did right away), I’d be able to restore that backup to a different so-called 80 GB hard disk if necessary, even if the replacement disk turned out to be slightly smaller.

Continued on page 3
<table>
<thead>
<tr>
<th>Officers</th>
<th>Board of Directors</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>Director Emeritus</td>
</tr>
<tr>
<td>Paul Syers</td>
<td>Through 2012</td>
</tr>
<tr>
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<td>Through 2011</td>
</tr>
<tr>
<td>Evan Williams</td>
<td>Brenda Bell</td>
</tr>
<tr>
<td>Treasurer</td>
<td>Simon Grindlinger</td>
</tr>
<tr>
<td>Malthi Masurekar</td>
<td>Don McBride</td>
</tr>
<tr>
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</tr>
<tr>
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</tr>
<tr>
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<td>Arnold Milstein</td>
</tr>
<tr>
<td>Mike Redlich</td>
<td>John Raff</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special Interest Groups</th>
<th>Standing Committees</th>
</tr>
</thead>
<tbody>
<tr>
<td>C Languages</td>
<td>APCUG Rep.</td>
</tr>
<tr>
<td>Bruce Arnold</td>
<td>Frank Warren</td>
</tr>
<tr>
<td>Firefox Activity</td>
<td>Facilities</td>
</tr>
<tr>
<td>David McRitchie</td>
<td>John Raff</td>
</tr>
<tr>
<td>Genealogy</td>
<td>Financial</td>
</tr>
<tr>
<td>Frank Warren</td>
<td>Evan Williams</td>
</tr>
<tr>
<td>Hardware</td>
<td>Historian</td>
</tr>
<tr>
<td>Mike Reagan</td>
<td>Lenny Thomas</td>
</tr>
<tr>
<td>Investing</td>
<td>Membership</td>
</tr>
<tr>
<td>Jim Cooper</td>
<td>open</td>
</tr>
<tr>
<td>Java</td>
<td>Newsletter</td>
</tr>
<tr>
<td>Michael Redlich</td>
<td>Bob Hawes</td>
</tr>
<tr>
<td>Layman’s Forum</td>
<td>Publicity</td>
</tr>
<tr>
<td>Matthew Skoda</td>
<td>Gregg McCarthy</td>
</tr>
<tr>
<td>LUNICS</td>
<td>Trenton ComputerFest</td>
</tr>
<tr>
<td>Andreas Meyer</td>
<td>Mike Redlich</td>
</tr>
<tr>
<td>NJ Gamers</td>
<td>Vendor Liaison</td>
</tr>
<tr>
<td>Gregg McCarthy</td>
<td>Arnold Milstein</td>
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<td>Webmaster</td>
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<td>(908) 753-8036</td>
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<td>(973) 992-9002</td>
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**ACGNJ News**

**Editor**
Barbara DeGroot  
145 Gun Club Road  
Palmerton PA 18071  
Tel: (570) 606-3596  
bdegroot@ptd.net

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- Bruce Arnold barnold@ieee.org
- Jim Cooper jim@thecoopers.org
- Barbara DeGroot bdegroot@ptd.net
- Mark Douches pproblems@pobox.com
- David Eisen ultradave@gmail.com
- Bill Farrell wfarrell18124@aol.com
- Manuel Goyenechea Goya@acgnjdotnetsig.org
- Bob Hawes bob.hawes@acgnj.org
- Sol Libes sol@libes.com
- Malthi Masurekar malmthir@verizon.net
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- Gregg McCarthy greggmajestic@gmail.com
- David McRitchie dmcritchie@hotmail.com
- Andreas Meyer lunics@acgnj.org
- Arnold Milstein mrflark@yahoo.com
- John Raff john@jraff.com
- Mike Redlich mike@redlich.net
- Matt Skoda som359@aol.com
- Keith Sproul ksproul@nrc.rutgers.edu
- Paul Syers paul.syers@acgnj.org
- Lenny Thomas lenny.thomas@acgnj.org
- Scott Vincent scottvin@optonline.net
- Frank Warren kbbye@webwarren.com
- Evan Williams ewilliams@collaboron.com
than the original disk.  (This does, in fact, happen quite often).  That left over empty space was my own idea; but I don’t see how system administrators around the world can be using Clonezilla to deploy mass installations (as they definitely seem to be doing) if they’re not leaving a bit of “slop” at the ends of their images in this way.  I don’t believe its possible to procure a large quantity of hard disks that are completely and absolutely identical in size, even if you buy them from the same manufacturer at exactly the same time. (Manufacturers make “running changes” on their assembly lines all the time, and they certainly don’t appear to be concerned about maintaining such a close degree of output conformity).

So, having backed up my initial standalone Ubuntu system, I wiped the whole hard disk clean, and used Clonezilla again to do a test restoration of that backup.  (Just to make sure that it would work).  After that, I re-wiped the disk, then proceeded to create a standalone XP system.  (From an original install CD, with the network cable not connected).  While the Meddling Minions of Microsoft want everyone to create a single NTFS partition that takes up the entire hard disk, you don’t have to do that. Instead, I created a 20 GB FAT32 partition, and left the rest of the disk empty.  (As they come from the manufacturer, Dell computers contain a hidden “recovery” partition, in addition to the usual operating system partition. Since I’m not a member of the Secret Society of Dell Devotees, I didn’t try to reproduce that). My installation took 33 minutes.  Before doing anything else, I made an immediate Clonezilla backup. To do that, I had to shut down the computer, then reboot it from the Linux Live-CD containing Clonezilla. In addition, I had to reboot the computer once more after the backup was finished. I won’t be repeating these details again; but keep in mind that each time I mention making a Clonezilla backup below, the computer had to be rebooted both beforehand and afterwards.  Of course, I wasn’t anywhere near done yet.  For one thing, I still had to install Dell’s custom drivers for that particular PC.

First, though, I had to get them; and to tell you about that, I must confess that this particular computer project has been on the “back burner” for quite a while, ever since I ran into an “embarrassment of riches”.  Back in May, I went to the Dell website to look for available downloads.  Their instructions recommended that I search by “Service Tag”, but I didn’t know what that was. From its name, I figured it had something to do with on-line or “on phone” technical support, which I had absolutely no intention of getting involved with.  So I searched by Model instead, and found 112 Windows XP downloads listed for the OP74.  Girding my loins, I plunged in; but after 46 downloads (measuring a total if 1.8 GB), I ran out of steam, and put the rest off until another day.  Recently, while talking with Allan DeGroot (son of Barbara, our Editor), I just happened to mention this computer.  He informed me that I did, in fact, have a Service Tag, and what’s more, he told me exactly where on the OP74 case to find it.  After that, I revisited the Dell website, re-did my search, and got 21 downloads.  Much more reasonable. (Thank you, Allan). So I downloaded them to my main computer, and then burned them to a CD-RW disc.  (I had to make those downloads on my main computer because the OP74 didn’t have its anti-virus software installed yet).

Armed with that CD, I returned to the OP74, where I opened up Device Manager and saw four yellow “Other devices”: “Audio Device on High Definition Audio Bus”, “PCI Simple Communications Controller”, “SM Bus Controller”, and “Video Controller (VGA Compatible)”. There was only one Audio driver on my download list, and likewise only one for Video, so those two were obvious. There were three Chipset drivers, but only one said SMBus (sic), so that one was obvious, too. However, there were five files listed for Communication, and all were for the same internal modem. Closer inspection, though, revealed that one was an Application and two were Utilities. Of the two remaining drivers, one was dated November 2006, and the other April 2010. Furthermore, the newer one was four times bigger than the other. Being philosophically against bloatware, I chose the older, smaller one. Unfortunately, when I tried to use the XP “Update Driver” function (with my CD set as the software source), none of those drivers loaded. Sensing foul play, I copied the contents of the CD to a directory on the OP74 hard disk. Then, one at a time, I double-clicked on my four files.  As I’d suspected, each one was a self-extracting archive, which copied its contents to another directory, and then installed itself correctly.  Breathing a sigh of relief, I made another just-in-case Clonezilla backup.

Next, I installed the free version of Grisoft’s AVG (Anti Virus Grisoft) software, updated it over the Internet, and did a third Clonezilla backup. Then I ran the initial AVG virus scan.  (It took six minutes).  When it was finished (successfully), I installed two “oldies but goodies”, Adobe Acrobat Reader 5.0 and Winzip 8.0.  (I like those two programs better than their newer versions, and I also trust them more).  After that, I installed the newest Windows version of the Firefox web browser, and did a fourth Clonezilla backup. Then it was time for my two “biggies”, LibreOffice and Scribus; and the Windows versions of each of them unexpectedly required that I install another program, too. LibreOffice needed the Java Runtime Environment, and Scribus needed Ghostscript, the PostScript interpreter.  (Without it, Scribus wouldn’t have been able to print).  Because its anti-virus software was already installed and activated, I could make these last two unanticipated down-
loads directly to the OP74 computer. After all four programs had been installed, I made a fifth Clonezilla backup. Now I had a bit of cleanup to do. Previously, LibreOffice had left several hundred megabytes of redundant install files on the hard disk. I deleted them. (Notice that I waited until after they’d been backed up, though. Just in case they might actually turn out to still be needed). Following that mass erasure, I used XP’s built-in “Tools” to check the hard disk for errors, and then to defragment it. Finally, I tweaked a few Control Panel settings, then made a sixth Clonezilla backup.

OK. The XP installation was done. (At least until my cousin gets his hands on it, anyway). However, before continuing to our second Ubuntu installation, we need to take a seasonal digression. In 2007, 2008 and 2009, for our October issues, I wrote “Halloween Episodes”. Last October (2010), I couldn’t think of anything silly or spooky to say. It wasn’t until our December 2010 issue that I finally thought of something. (Too bad that was two months too late). I was writing about the high quality, long lasting storage media (from Delkin Devices, Inc.) that I’d used to make CDs for a club project. In their advertisements, Delkin stated that the National Institute of Standards and Technology (NIST), when testing longevity using accelerated aging procedures, had determined that Delkin Archival Gold CD-R disks would last for 300 years. I commented: “Note that those claims came from Delkin, not from me. If your 35th Anniversary Newsletter Collection CD only lasts 299 years, don’t go digging me up and complaining”. Having thus quoted myself here, we’ve now got a Halloween joke in this article. (Even if it’s a rerun). That makes this a “Halloween Episode”, too. So in that spirit, let’s talk about Ghost. (The computer program, though, not the phantasm).

I decided to use Ghost to make a self-booting “blow-out” DVD for this XP installation, in its current standalone state. (That’s a DVD with only one function: to completely replace the entire contents of a hard disk by overwriting it with a previous backup of a “known good” system). Back in the “good old days”, I regularly used Ghost for DOS (booted from a floppy disk) to back up Windows 98 SE and XP systems. When “creeping bloatware” caused most of my backups to come out bigger than 4.37 GB (the true capacity of a so-called “4.7 GB” DVD), I didn’t have a problem. By default, Ghost split its output into 2 GB sections. So I could spread the resulting file segments across as many DVD disks as necessary, and during a restoration, Ghost would prompt me whenever it wanted the next DVD. As long as I’d booted from a floppy, that is. If I tried to make the first DVD of a backup set bootable, Ghost wouldn’t let me eject that disk. It insisted that its source media had to remain in the computer. Supposedly, there was a way to make that first DVD removable, but I could never get it to work. (Not that I actually tried very hard or for very long. All of my computers have always had floppy drives.

As “proof of concept”, I created a temporary CD-RW disk, using my Ghost for DOS 2002 floppy as the CD boot image, and transferring the files from my Partition Magic 8 (PM8 from now on) floppy to the CD itself. This way, after the CD booted, Ghost and its associated files would be located on the A: drive (which would be virtual, not physical); and PM8 and its associated files would be located on the S: drive. (Years ago, I decided that S: would be the drive letter assigned to the first CD drive. For the finished “blow out” disk, I’ll think about changing it; but for this temporary test disk, I didn’t bother). Then I turned on the OP74 and fed it my CD. That’s when the Gremlins got me. My temporary disk did boot from the CD drive, but it didn’t detect that drive. So it wasn’t mounted as the S: drive, like it was supposed to be. Thus, no S: drive, no PM8. I’d intended to use PM8 to create an FAT32 partition on the hard disk, in the unallocated space following the 20 GB XP partition. That would give me a target drive to store the files created by Ghost as it backed up the XP partition. (That’s a bit tricky, but it is doable, if you know what you’re doing). Fortunately, my Ghost boot floppy (and thus its A: duplicate) contained a copy of FDISK. So I was able to use that non-graphical utility to create my target partition. Then, as instructed by FDISK, I rebooted the computer.

However, The Gremlins weren’t through with me yet. Since I did have an A: drive, and I’d managed to create a target partition without PM8, I could still run Ghost to back up the XP partition; but when I did, I got a surprise. On the “Select source partition(s)” screen, the hard disk’s two partitions were both displayed; and I selected the XP partition. On the “File name to copy image to” screen, though, when I clicked on the drop arrow in the “Look in:” box, the virtual floppy drive (A:) was there, the XP partition (C:) was there, but my new partition (which should come in as the D: drive) wasn’t there. So, no target, no backup. The Gremlins had defeated me. Now, I blamed the inability of my test CD to detect the OP74 CD reader on a bug in VIDE-CDD.SYS (my DOS CD driver). Likewise, I felt that Ghost’s ability to detect my new partition in one area of the program; but its inability to detect that same partition in another area, was caused by a bug in Ghost itself. I thought that the first problem might be fixable, I feared that the second problem was unfixable, and I suspected that the root cause of each problem was the same: Both the hard disk and the CD drive in the OP74 machine were SATA (Serial Advanced Technology Attachment) devices.

Among my equipment, I have a SATA CD/DVD drive, and a SATA Blu-ray drive. (Each, in its own way, has taken me on some interesting adventures). I don’t own any SATA
hard disks. This was my first experience with one of them, and up until that trouble with Ghost, I hadn’t really noticed anything different. I didn’t think that I could fix that Ghost problem, but I thought I might have a shot at fixing the CD problem, by searching the Internet for a newer DOS CD driver; and I found one.

Now, my old driver (VIDE-CDD.SYS) was dated 2/17/1998. This new driver (UIDE.SYS) is dated 7/21/2011! (While in real time it’s not quite literally true, I’d say that this new file does, indeed, qualify as an “up to the minute” driver). So I copied UIDE.SYS to my Ghost boot disk, edited CONFIG.SYS so it was loaded instead of the old driver, and re-burned my CD-RW disk. Then I booted the OP74 from that disk; and everything worked fine. I really can’t understand how an updated CD driver could have fixed Ghost’s ability to detect a second partition on a hard disk (not on a CD), but apparently it did. I’ll just have to accept this as one of those weird, inexplicable things that sometimes happen, and move on.

At the time I created the backup files for my “blow-out” DVD, the “Properties” box for the XP C: drive listed 5.53 GB of “Used space”. Subtracting 1.4 GB (the size of the Windows swap file, which Ghost doesn’t back up), that left 4.13 GB of files remaining. (Since the true size of a DVD is 4.37 GB, at least I didn’t have to worry that my files wouldn’t fit on a single disk). Anyway, here’s what I did: First, I booted from my CD, accessed the S: drive, and started Ghost for DOS can’t access such drives, so that’s why I had to use the DATA partition as an intermediary. Although I now had the files for it, construction of that partition was just a place holder. It would be deleted after I booted the OP74 from that disk; and everything worked fine. I really can’t understand how an updated CD driver could have fixed Ghost’s ability to detect a second partition on a hard disk (not on a CD), but apparently it did. I’ll just have to accept this as one of those weird, inexplicable things that sometimes happen, and move on.

As my last step, I rebooted into XP, and used Windows Explorer to move the two Ghost output files from DATA to the computer’s external 2 Terrabyte USB Expansion Drive. (The first file measured 2 GB, the second measured 0.67 GB. From 4.13 GB to 2.67 GB. That yielded 65% compression. Not too bad). I apologize for not mentioning that USB drive sooner. Because Clonezilla can access it directly, I’d previously used it to hold all of the backups that I made for this project. Ghost for DOS can’t access such drives, so that’s why I had to use the DATA partition as an intermediary. Although I now had the files for it, construction of that “blow-out” DVD itself would have to wait for a while, because Ubuntu was next in line; but thanks to this operation, Ghost still lives! (At least for a little while longer, anyway).

I booted the computer from the Ubuntu 11.04 CD, told it to install itself in that 15 GB of unallocated space, and told it to dual boot with XP. The initial installation took 27 minutes; but after the computer ejected the CD and rebooted, it went directly into Ubuntu, without displaying a dual boot selection screen. Right away, I used Synaptic Package Manager to download two programs that Ubuntu hadn’t initially added by default: GParted and StartUp-Manager. First, I ran GParted. It displayed a completely filled hard disk, containing the 20 GB XP partition, the 39.27 GB DATA Partition, a new 14.06 GB Linux Ext4 partition, a new 0.93 GB Linux Swap partition, and the 325.33 MB NTFS partition that I’d created earlier with PM8. As planned, I used GParted to delete that NTFS partition, thus giving me my “slop”. All good so far. Then I ran StartUp-Manager. I noted that its “Timeout in seconds” was set to 10, its “Display Resolution” and “Bootloader menu resolution” options were each set to 640x480, and its “Default operating system” box was set to Ubuntu.

Furthermore, when I clicked on the drop arrow next to that box, I saw that XP was, in fact, included as an alternate choice. Having thus verified that everything seemed to be set correctly, I made an eighth Clonezilla backup, to preserve what I had.

Accordingly, when the OP74 rebooted, I stared intensely at my monitor. (Looking for clues, perhaps?). I noticed that the light on the monitor glowed green as the initial Dell BIOS message was displayed. Then it turned amber for about ten seconds, and then it turned green again as Ubuntu booted. How about that! My intense staring had, indeed, unearthed a real live clue. Apparently, the computer actually was displaying the dual boot screen like it was supposed to; but it was displaying it in a form that was incomprehensible to my monitor. It looks like Ubuntu’s default resolution setting had betrayed me. (640x480 is my usual preference for a “plain vanilla” display. So if I’d been asked, that is what I would have chosen). Running StartUp-Manager again, I changed both its resolutions to 800x600; and I also increased its timeout from 10 to 30 seconds. Then I rebooted, and this time the screen was visible.
I gave it a good workout, alternately booting XP and Ubuntu. When I got tired of that, I started Ubuntu’s Update Manager, and installed the 214 updates that I found there. That took 21 minutes. Then I made a ninth Clonezilla backup.

I mentioned the Ubuntu dual boot screen almost six and a half years ago, in the first article that I ever wrote for this newsletter (Linux Dual Boot Experiments, in our May 2005 issue). There, Ubuntu (release 4.10) failed some of my tests. However, I liked the dual boot menu. It was just about the only part of that Ubuntu installation about which I had something nice to say.

Two years later, in Dual Boot Revisited, Part 3 (in our May 2007 issue), I praised the Ubuntu dual boot screen once more, calling it “functional, clean, uncluttered, and even elegant”. Again, Ubuntu (release 6.10 this time) failed some of my tests; but here’s my point: Back then, for both of those versions, no matter what other problems Ubuntu might have had, its dual boot menu came up without any problems. Now, in the first dual boot system I’ve created since that time, it didn’t. It seems that while most of the Ubuntu developers were laboring mightily to fix what was wrong, one or more others were sticking their huge hairy hands where they didn’t belong, and messing up something that used to work properly.

In response, allow me to cite Hawes’ Law of Diminishing Intelligence: There is nothing that works so well that some Transcendent Genius can’t “improve” it to the point where it doesn’t work at all. What more can I say?

In the very first paragraph of this article, I mentioned my own personal version of the Thirteen Things list. After that, I wrote; “Details about that list later”. Unfortunately, we’re going to have to reinterpret that “later” to mean “next month”. (Our second dual boot computer will have to wait until next month, too). That’s because we’ve passed the 4000 word mark, and thus should wrap things up. So I’ll just say that I successfully added all the programs from that list to the OP74, and then made a tenth Clonezilla backup. Besides, if you absolutely can’t wait, I also gave details about that list in last month’s article, Son of Thirteen Things. (You can find it in our September 2011 issue). Right now, I really think it’s time to stop. I’ve got a bad feeling that if I don’t, the What’s all this, then? Policeman from Monty Python might arrest me for “Loitering with intent to pontificate, blather, or otherwise cause grievous literary boredom”. So: See you next month.

Music— Capture it, Organize it and Enjoy it - Part 2
Phil Sorrentino, Sarasota Personal Computer Users Group, Inc. (http://www.spcug.org)

Last month we discussed the History of digital music and how it is created. Now it’s time to organize that Music and create a Music Folder so that it can be the repository of all the music you Rip, purchase, or convert from analog sources; basically your Music Library. There are many ways of organizing the Music folder with sub folders. Before we do that it is probably worth a review of the data that is kept with each music file to see if it can be of any use in determining the organization of these folders. What data? you say. Well along with the actual music, in each music file, there is data that describes the music part of the file. This type of data is called metadata.

So, metadata is data that describes other data (in this case the music). The music metadata is called ID3 Tag Data and is defined by the ID3v2 specification. ID3 Tag Data includes descriptive items such as: title, artist, album, track number, genre, year, copyright, stereo, length, composer, rating, etc., as well as album cover art graphics. ID3 Tag Data is created when the original MP3 data file is created. The ID3 Tag Data is not easily modified unless you use an ID3 Tag Editor like MP3Tag, which was discussed in the March 2010 issue of the Monitor. (In short, MP3Tag allows the user to modify the ID3 Tag Data that is created along with the MP3 file when a tune is initially created, or ripped from a CD.) The reason that ID3 Tag Data is important is because Music players, like Windows Media Player (WMP) and iTunes use the ID3 Tag Data to organize and present your music library. A music tune will show up according to the ID3 Tag Data, which may not be where you think it should show up if you are only looking at the file name. This will probably not be a problem if all of your tunes come from CDs or are downloaded, but if you convert any from vinyl or tape to MP3, the ID3 Tag Data may not be what you think it should be. Also, if you want to change where particular artists show up, you might have to change the ID3 Tag Data for that artist. Some CD compilations of tunes have the artist as “Various Artists”, which will put that tune under “V”, probably not where you would expect to find it. So, it’s good to have an ID3 Tag Editor so you can make any changes to the ID Tag Data to put the tunes in the places you want them. Once the tunes that need changes to the ID3 Tag Data are changed, the library will be presented as you expected, typically artists or songs alphabetically arranged, although, you can also view the library based on other items such as Genre, Album, Year, or even Rating. Rating is a number that you give to a tune, typically one to five. The Rating can then help you find a tune or present a specific view of your music library. (For example, you could show all the tunes with a rating of 4 or better.)

So the ID3 Tag Data determines how the music library will be presented, but we still may want to organize the
under-lying folders for convenience. This is not necessary, but it might allow the music to be viewed easily (using Windows Explorer), without using a Music Player. When CDs are Ripped, they are put into folders for the Artist, with the Album being a sub-folder. You might continue this and just put all the Artist folders into a Music folder. Then, it would be easy to find any tune with just the Artist and Album names. This is in general a very good way to organize your Music Folder. The only difficulties that might arise are those associated with converted tapes and disks, but you will just have to see how best they can each fit into your overall scheme. A simpler, but less desirable scheme might be just one Music Folder with every tune included. The tunes would then be alphabetically arranged by the file name. This can lead to one very big file, but for small Music Libraries, this may be acceptable. You could even create separate music Folders for specific music genres, like Music-Big Band, Music-Country, Music-Pop; it’s really your choice.

Playlists are next. Now that we have a Folder organization for our Music Folder, we can take advantage of that organization to find tunes to include in Playlists. Playlists are just as you would expect, they are lists of tunes to Play, without any manual intervention. Playlists can include as many tunes as you would like, only limited by the number of tunes in your library. You could easily create a playlist that would last all day. Playlist files are another file type. The original playlist file type is M3U. WMP can be set to use M3U but prefers another Microsoft file type, WPL. M3U has a very simple file structure which is just a text list of files. WPL is a little more complex and probably a little more capable and written in HTML. Both work fine and it is impossible to tell which is being used without looking at the file types. If you have no reason to prefer one over the other, use your Music Player’s default type. (Either file can be modified using Notepad, not Wordpad or Word, if necessary. Notepad is a simple text editor that does not include any formatting information.) This should not be undertaken lightly. Modifying a file with a text editor should only be done with great caution, and only by a person who is confident of the file structure. An error in the file structure may make the file non-useable, so do this only if absolutely necessary. Once you have decided on the Playlist file type, or just accepted to use the default, you can start to create Playlists. Just think of a theme and then find all the tunes that support that theme. Using WMP, playists are easily created by showing the Library in any view, such as by Artist, and then dragging-and-dropping the tunes for the Playlist over to the Playlist pane on the right side of the screen. After you have all the tunes in the list, give it a name and save it and that’s all there is to it. While you’re at it you might want to create a Playlist for each Artist so that you can review all of the tunes for that specific artist. In this case, the artist is the theme. You might even like this playlist for “an evening with a Sinatra, or Elvis, or the Beatles”.

Now you’re ready to take advantage of all that music entertainment, laboriously stored in the Music Folders. One last item to consider is using your music on other machines on your network. If you don’t have a home network now, you probably will in the future. For simplicity and convenience it makes sense to have only one Music Folder, kept on your main computer (acting as a Music Server), and to use it on every other machine on your network. This way there is only one Music Folder to be backed-up. WMP can easily be set up for Sharing Media. Select Tools-Library-Configure Sharing…, and check the Share Media check box. Then choose the devices, on the network, to Allow sharing of music. This will allow other machines to use the media in the Server’s Music Library. By the way, all of the music in your Music Library can also be used on any of the portable MP3 music players, like Apple’s iPod or SanDisk’s Clip. WMP provides the ability to “Sync” your music to a portable device. Briefly, to share a Playlist, plug your device into a USB port and choose Sync on the Selection Bar, choose the playlist and select Sync. (Obviously, the memory in the portable device must be large enough to hold all the tunes in the playlist.) Recorded music is only about 133 years old if we consider Edison’s invention in 1877 as its practical beginning.
On the morning of October 22, 2007, my family, like many others in northern San Diego County, awoke to the threat of wildfires moving into urban areas. Though we were under mandatory evacuation orders, the need to leave was not urgent, so we were able to pack up our four cars over several hours. All the irreplaceable and important items we could fit were loaded, including photo albums, computer cases, external hard drives and my collection of 35 mm slides. We headed up to Orange County to stay for a few days, and fortunately had a house to return to.

Though our neighborhood was never really threatened, the experience left an impression on me. I’ve owned a digital camera for 11 years, and all of the 40,000 digital photos I had taken in that time were easily transported with us on a single external hard drive. Because I also kept a backup of these files in another geographic location, I was even less concerned about their safety. My collection of 7300 slides taken over 32 years was a big concern, however, since they occupied two large boxes and were the only copies I had.

Though I already owned three film scanners at the time, I had never gotten around to starting the scanning process, as I was still searching for that elusive perfect scanning method. I spent more time researching scanning options after the fires, bought a fourth scanner (a PrimeFilm 3600u film scanner) and outlined my new scanning plan in the film scanning presentation I gave to our group in 2008 (which can be viewed at www.uchug.org/Presentations/Slide%20Scanning.pdf).

Three years have passed since then, and I’ve only scanned a few slides. Unfortunately, I’ve found dealing with these thousands of slides is a daunting task. I’d found a scanner that provided good results, but with a scan time of 1 to 4 minutes each, I’d need to spend the equivalent of 3 to 12 work weeks (of 40 hours each) to complete the task. I could hire out the job, but even Costco’s photo services would charge $2100 to scan all my slides. Faced with a large cost in either time or money, I wound up doing nothing, and so my slides still sit in film form, vulnerable and degrading over time.

Fortunately my procrastination has managed to be beneficial, as there are now new film scanning devices available with much shorter scan times. One of these is the Wolverine Data F2D300 35mm film to digital converter (www.wolverinedata.com). It appears to contain the guts of a digital camera, so it captures the image quickly all at once, rather than in a slow scan. It does not even require a computer, storing the photo files in a small internal memory or a removable SD memory card.

The unit is powered from an AC adapter and cable. The cable has a small connector on one end (for the scanner) and a USB connector on the other. The scanner can be powered from AC by plugging the cable USB end into the power adapter, or the unit can be powered from any USB port by using only the cable.

Operation is simple, with only four buttons on the top of the unit. The control menus and the image to be scanned are displayed on a 2.4” LCD display on the front of the device. The scanner can be set to scan slides, negatives and black & white (negatives, I presume).

Two plastic scanning trays are provided. One tray holds up to four slides in their cardstock or plastic mounts; the other holds strip negatives (up to six 35 mm images). The trays have a hinged cover with magnetic latches to hold it closed. The slide tray is easy to load; the negative tray requires more effort to align the film’s notches with pegs on the tray’s base. A loaded tray is inserted into an opening on the right side on the scanner near the base and then protrudes out the other side. The tray is shifted to allow each slide to be scanned. Detents in the tray help index the tray for each slide or negative, but you can also use the display to make sure the tray is lined up in the scanner correctly. It is best to place the slide or negative in the tray so that the image in the display has the correct orientation, but there is also a menu selection to flip or mirror the image before scanning. The brightness of the image can be adjusted to some degree before scanning through an adjustment to the internal LED backlight. The brightness can be set to one of seven levels from -3 to +3 (+3 being the brightest, and 0 assumed to be nominal). By some degree, I mean that the “camera” inside the device also appears to have an automatic exposure feature that compensates for the brightness adjustment at times. This means that a change in the brightness setting does not always result in a visible change to the resulting image.

To scan, the OK/COPY button is pressed once; the scan takes only a couple of seconds. The unit then displays a save/edit menu. A second button press saves the captured image to either the internal 25 MB memory or a memory card in the external SD memory card slot. I have only tried a 2 GB SD card in the slot, though the product’s box says it is also compatible with SDHC (though this is the only documentation that indicates SDHC capability). The save/edit menu also allows the image to be rotated 90 degrees in either direction (for portrait vs. landscape orientation), though it appears it only changes to portrait mode on the scanner’s display. All of my saved images remained in landscape orientation.

The scanner claims a 7.3 megapixel image, which was confirmed by the 3312 x 2208 (nominal) image files I captured. The files are saved in JPEG format with fairly strong compression; the typical image file size is 1.4 to 1.8 MB. The scans I made were of good resolution, with no noticeable compression artifacts. The unit I tested appeared to crop the slide slightly, so the slide mount was not at all...
visible. I made scans of slides and color negatives and both came out well.

To copy the photo files to a computer, you can simply remove the SD card. The unit must be connected to a USB port on a computer (through the power/data cable) to copy any files stored in internal memory. The scanner can be set to provide a slide show of stored images on its LCD screen. The unit can also display on a TV with a display cable (which is not included), per the documentation.

Overall, I found the unit I tested worked well, providing a reasonable image very quickly. Even allowing an average of 10 seconds per slide to scan (to allow for tray loading), I could scan my entire slide collection in only 20 hours. This would give me a good quality copy of all my slides in a short period of time. I could then use my high-resolution PrimeFilm scanner on only the select few slides where a better quality scan might be needed in the future.

The only suggestions for changes or improvements to the Wolverine Data F2D300 I found are:

- Provide a JPEG compression adjustment, so that images can be saved at higher quality. The high JPEG compression is my main gripe about the unit.
- Provide a way to disable the automatic exposure feature, so the brightness adjustment works better.
- Provide a way to set the date and time in the JPEG file, so it can be set to reflect when the original photo was taken. The unit currently saves the JPEG files with a timestamp from an internal clock that starts from 1/1/2008 at 12:00 PM each time the device is powered on.

Overall, I found the Wolverine Data F2D300 to be a good value. While I’d prefer it saved images with a lower compression, or ideally with a lossless compression like PNG, its ability to scan so quickly makes it useful when there are a lot of slides or negatives to scan. It may not scan with the highest resolution, but it is definitely among the fastest.

Chapter 2 - When Two is not Better Than One

The Wolverine Data F2D300 unit I used for this review was loaned to me by a member of my user group who won it at the 2011 Southwest Computer Conference (it was donated to the conference by Wolverine Data). After seeing how well it worked and how quickly it could scan slides, I purchased one for myself.

Unfortunately, my unit did not work quite as well as the borrowed one. Instead of cropping the slide image slightly, my scanner had a slightly wider view, so that the rounded inside corners of the slide mount are barely visible. This is not a problem in my estimation; I actually prefer this, so I can crop it myself later if desired. Unfortunately, the images captured are also slightly out of focus. The problem cannot be seen on the scanner display, but is apparent when viewing the images full-screen on a computer display. The files captured by the borrowed scanner are noticeably clearer by comparison.

I called the support number provided with the product (Irvine, CA area code) and was quickly connected to tech support. The person I spoke with confirmed that the focus problem could not be corrected by any adjustment, and that they would provide me with an RMA number to return it. Since I purchased it from Costco (online), I elected to save the return postage that I presumed I would need to pay, and instead returned it to Costco (at a store). I then ordered another F2D300 scanner.

My second slide scanner was a keeper. The image was slightly clearer than even the borrowed scanner. Like the borrowed scanner, the image was slightly cropped, but this new one also had the image shifted down slightly. I am dismayed that this product does not appear to be very consistent between units in image quality, but at least I got one that I am happy with on the second try. I’m not interested in rolling the dice again. Now I can get my slides digitized before the fire season this fall.

**Batch Image Converting with FastStone**

*Constance Brown (constanceb (at) camug.com), Canton/Alliance/Massillon Computer UG (www.camug.com)*

Last week I started a new blog where I am posting articles for quick reference with a special emphasis on free software. Our 6:00 special interest groups, also known as SIGS, are focusing on a range of free software this year. In May we discussed information on how to use FastStone to prepare a picture for print. Some of you may wish to review that information. Visit www.stepcotraining.wordpress.com and look at the May archives. As we discussed in the SIG and on the blog, commercial prints must be 300 dpi or more. However, email and websites present pictures entirely differently. In both cases you will want the smallest size picture possible that shows up attractively on a screen.

Using 72 dpi is perfectly acceptable in these cases. A small picture size is also desirable. Let us take a look at some ways FastStone gives us the capability of resizing to smaller print sizes.

Often I wish to send or post several pictures at the same time. In order to do this quickly, I use “batch image convert” in FastStone. First I select all the pictures I wish to post to my web site, Facebook, or send via email. I like to copy all of these to one folder which, for sake of illustration, we shall name Web Selections May 2011.

Then I create a folder inside the one I just created which, in this example, I will name Web Ready May 2011.
In this case there are three things I wish to accomplish: 1) Renaming each picture so that I lose no data from my original picture, 2) Resizing my picture for the purpose I wish to use it, and 3) Placing the re-sized pictures into their own folder. All three things can be accomplished quickly with FastStone. I will highlight all the pictures inside the folder titled Web Selections May 2011. Now I will click on Tools in the menu or on F3 and select Batch Convert Selected Images. The right half of the window that opens shows the images I have selected. Underneath this listing I can select the output format. When I am posting to the web I always use jpeg, not jpeg 2000. Underneath the output format, I can choose the output folder by browsing to the folder I have already created—Web Ready May 2011.

Next I check the box titled, Use Advanced Options and click on the Advanced Options button. I check the box titled Resize and select a size. Using the drop down menu, I can pick a standard size. Usually 640 x 480 pixels is very good for email or Facebook.

Sometimes I need to resize based on a predefined side. To do that, click on the radio button titled Resize Based on One Side. Using the drop down menu, you can choose to have the long side or the short side of the picture resized to whatever you choose. This is really convenient when you are working with both portrait and landscape pictures. You can choose for the long side to be 640 pixels. That makes all the prints of a challenge. Not anymore! Suppose you just finished a photo shoot for your grandparents’ 50th anniversary. The family wants to order photos and you need a contact sheet so they can select the photos they want. Voila!

Click on Create in your tool bar and select Contact Sheet Builder. You need to pay attention to all three tabs. The first one lets you select pictures from multiple folders. FYI, the name that is automatically assigned to the contact sheet is the name of the first folder that you select from which to pull pictures.

The second tab lets you determine background color, how many thumbnails you want to place on the page, and whether you wish to start a new page when you pull from a separate folder.

The third tab lets you preview the sheet you created. By the way, the output format is pdf, one of the file types that anyone can open if they have a free pdf reader.

Another option you will discover when you click on Create is the Slide Show builder. This is probably the easiest builder you will find anywhere. Just select the pictures by clicking Add File or Add Folder (perfect if you have your pictures organized), select a background color, select Loop if you want the slide show to play over and over again, choose to stretch small images if you wish—probably a good idea, either show or not show text (depends on how you have named the files), select from 156 transition effects or click on the three little dots and select ALL so that the effects change from pictures to picture, browse to the music file you wish to play while the slide show runs, and select the quality and size of the pictures. Standard sizes are available at the click of the button and should be the same, if possible, as the screen you will use to view the show. Remember that projectors have size limits. If your projector has only an 800 x 600 and you will be presenting to a group using it, make the pictures for the slide show that same size.

Much more is available in this program, including cloning (copying from one part of a picture to another), shadow and highlight adjustments, as well as color, general lighting, and histogram adjustments, adding text to pictures, shrinking pictures to extremely small sizes or enlarging them beyond the size the camera actually took while maintaining excellent quality, special effects, and more.

I am pleased to tell you that you can download an excellent tutorial by visiting http://www.faststone.org/FSIVTutorial.htm.

The folks at faststone.org who continually improve this software are doing a fabulous job. I believe that this one piece of software will accomplish 85% of what the average user wants. Oh yes, it is also available as a portable program that operates from a flash drive. Now you can take the program on vacation and use it from the computer in your Favorite hotel without installing it on any computer!
Stickies: Another Useful Utility

Phil Sorrentino, Sarasota Personal Computer Users Group (http://www.spcug.org)

Here is another great free utility, especially for those of you who have a lot of little yellow “Post-it” notes stuck all over the edge of your monitor. The utility is called “Stickies” and it is exactly what it sounds like it is. Stickies lets you put little yellow “Post-it-like” notes any place on the monitor. Not just stuck to the frame, but an actual area on the monitor screen. The Stickies notes look like this, on my blue desktop background:

As I’ve said in the past, utilities are usually small programs that are intended to do a specific task or a small range of tasks. These tasks are usually designed to help manage and/or tune the computer hardware, Operating System (OS), or a particular software application. This utility is intended to help the users of the computer. There are many times that you need to remember something for a short time and you want to keep it right up front so it doesn’t get lost. This is where Stickies can help. Stickies are small note like areas you create, on the desktop, that can be brought to the front of any application just by clicking the Stickies icon in the Notification Area on the Taskbar. They are dismissed from being on the application just by clicking anywhere on the screen that isn’t in one of the Stickies. (Clicking inside a Stickie allows you to add text to that note.) You can put the notes in one corner of the screen or you can spread them around to call attention to different things. You can even place them on top of each other in an overlapped fashion. This would allow you to use the least amount of screen space. This would be a good way, for those of you who have “too many” icons on the desktop, to store your Stickies. This way the Stickies would take up only a small portion of the screen.

Stickies can be downloaded from the developer’s site at: http://www.zhornsoftware.co.uk/stickies. This home page has a detailed description of Stickies and a list of its features. (Choose Download to get to the download page.) A few of the outstanding features are as follows. Stickies works with XP and Vista. (No need for Stickies if you use Windows 7 because Windows 7 comes with its own “Stickie-Note-like” gadget.) Stickies appearance (fonts, colors, styles) can be customized. Stickies can be easily resized. The Stickies program is small, writes only to a single text file, and does not alter the registry. Stickies can even be set up so that they are not seen until a specific date and time, so they can be used as a reminder. Stickies has a comprehensive list of features, but it basically provides a very good computerized version of “Post-it Notes”.

Once Stickies is downloaded and installed, a yellow note-like Icon will be present in the Notification Area of the Taskbar. Double-clicking this icon will put a new Stickie note on the desktop. A single click of this icon will bring all of the stickies to the front, meaning they will be displayed on top of any application that is being shown. The Stickies can be moved around the monitor by dragging the top of the Stickie. Text can be inserted into a new Stickie just by clicking, in the Stickie, where you want to enter text. The size of the Stickie is dependent on the text in the Stickie. As you add text the Stickie will be lengthened to show all of the text. If you remove text, the Stickie will be shortened, so that only the text is displayed (and not just empty space). At any time, you can make the Stickie wider by moving either of the vertical edges by hovering over the edge until a double arrow is displayed and then left-clicking and dragging the vertical side outward (or inward to make the Stickie narrower). As the vertical sides are moved, the text moves around so it just fits into the Stickie.

A Stickie has a yellow note icon in the upper left corner and a trash can icon in the upper right corner. Clicking on the yellow note icon toggles between “always on top” and “remain on bottom”. Clicking on the trash can closes or deletes the Stickie. All of the controls for each Stickie are displayed by right-clicking the title bar (the space between the yellow note icon and the trash can icon) of the Stickie.

If Border is checked, the Stickie will have a dark-line border around a yellow background. If it is not checked, the border will be missing. To give the Stickie a title, select Set title and a Title box will be displayed for you to enter the title text. Font and Color can be changed by selecting Set Font or Set Color, similar to those controls in word processing applications. Transparency can be set from 0% to 90% so that things below the Stickie can be seen (the higher the percentage, the lighter the Stickie color is and the easier it is to see through the Stickie). Select “Always on top” for a constant reminder, where by the Stickie is made to stay on top of applications that are in use. Select “Sleep for” to use the Stickie to become active some time in the future to remind you of some event. Stickies is a great way to organize some of the things around your computer screen. I have found Stickies to be a great help in simplifying this area. I am now down to one notebook, a few pens and pencils and only a few Post-it Notes around the monitor frame. Now, I am using Stickies to store most of my temporary notes to myself and to other computer users.

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Image Resizer

Lynn Page, Crystal River UG (www.crug.com)

If you upgraded from Windows XP to Vista or Windows 7 you may miss the XP Powertoy Image Resizer. It was great when you needed to quickly create different size images of a photo. Maybe you need a small image to email or a special size for desktop wallpaper.

There are many reasons to create a particular size image. Images can be resized in a photo editor. My choice is Corel Paint Shop Pro Photo. I use it to edit and size my digital photos. But then if I want a special size edited photo it is quicker to use Image Resizer. Download from imageresizer.codeplex.com.

Image Resizer is a clone of the Image Resizer Powertoy for Windows XP. To use Image Resizer locate the photo or photos in Windows Explorer. Select the photos to resize and then right click on the selection.

In the resize Pictures dialog box select from the predefined sizes. To specify a custom size click the Advanced button. The advanced area also contains two other selections. Toggle them on or off. I recommend leaving the Resize the original pictures unchecked. You don’t want to inadvertently resize a large image to 854 x 480.

The new images are saved indicating a size.

SIG News

C/C++ Programming

Bruce Arnold (barnold@blast.net)
http://acgnj.barnold.us/index.html

This is a forum for discussion of programming in general, beginning and intermediate level C, C++, C-Win programming, hardware, algorithms, and operating systems. We demonstrate real programming in a non-intimidating way, presenting complete code for working programs in 3-5 sheets of paper.

September: The subject for this month was an extremely simple version of the Travelling Salesman Problem. The program uses a “Command Box” which is similar to a “Dos Box” and does not use any of the Windows Graphic libraries. It is very easy to understand. The code uses the C++ compiler in Microsoft’s Visual Studio 2008 and may also be compiled using the free C++ Express compiler.

The algorithm takes as input a list of town names and their corresponding coordinates in latitude and longitude. But, where do you get the numbers? If you enter a location in Google Maps (maps.google.com) and then right-click on the balloon marker to select “what’s here?”, Google puts the numbers in the search bar. They can then be pasted into this program. For example: Fanwood, NJ = 40.641638,-74.383407 degrees.

For details and sample code, visit our Website. Our next meeting October 18.

Mobile Devices

Brenda Bell (mobdevsig@acgnj.org)

The Mobile Devices SIG meets the second Wednesday of alternate months, 7:30PM at SPRS in Scotch Plains, NJ.

The Mobile Devices SIG focuses largely on current-generation cellphones and smartphones (such as Blackberry, Android, iPhone) which bridge the gap between basic cell phones and traditional computers, and how they can help you manage and organize your life.

Our membership ranges from those who have recently acquired their first, basic cellphone to those who develop applications for today’s modern smartphones, iPods, and ultraportable computers.

While we expect to spend much of our time investigating the built-in features and specialized applications available to modern smartphones, if you bring your basic (or multimedia) cell phone, iPod, or other mobile device with questions on how to use it, where to find applications, or what features they have, we are always happy to help! Meet and greet and plan where this event goes. Bring all your ideas, PDAs, fancy phones, etc. Our next meeting October 12.
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 novices 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 an open forum for all FireFox and Mozilla techniques and technologies, to encourage study and development of web sites of all kinds. All 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. Next meeting, October 17.

NJ Gamers
Gregg McCarthy (greggmajestic@gmail.com)
http://www.NJGamers.com

The next Friday Night Frag will be October 14, 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!

LUNICS (Linux/Unix)
Andreas Meyer (lunics@acgnj.org)
http://www.lanparty.com

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 October 3, November 7.

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

Intended to provide members with Windows oriented discussions, Microsoft and Linux style. Directed to more technological level of attendee, but newbies are welcomed.

October 21: Brian Welch will present on the iPad

Main Meeting
http://www.acgnj.org/groups/mainmeet.html
Mike Redlich (mike@redlich.net)

October 7: Bruce Arnold will present on “Things I like about Windows 7”. A demonstration of Windows 7 including a comparison to Windows XP and Windows Vista. Topics include "Look and Feel", "General", "Behind the Scenes" and "Technical Links".

Web Dev
Evan Williams (ewilliams@collaboron.com)

Meeting on alternate months, 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. 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 other languges and OS need to be investigated, examined and tested; Windows, Linux, UNIX, DEC, Vax, HP etc. Intel-PC, Motorola - MAC etc. Our next meeting November 9.

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

October 11: “Technical Overview of Gradle”. Project automation is essential to the success of software projects. It should be straight-forward, easy and fun to implement. There is no one-size-fits-all process for builds. Therefore, Gradle does not impose a rigid process over people. Finding

Hardware Activity
Mike Reagan (hardware@acgnj.org)

This group is dedicated to repairing, refurbishing and/or recycling older computers. Ten people attended the first meeting, so there is still a market for this type of event. Although we looked at some of the older equipment stored in the back room, most of our time was spent in 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. If you have a hardware problem, bring it in and we can all help fix or demolish it. (No guarantees either way.)

Next meeting October 27

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) Tradeestation, eSignal, VectorVest -- or just in learning how to select and use charting and technical analysis, come join us !!
Our next meetings: October 13.
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

<table>
<thead>
<tr>
<th>Software</th>
<th>Name</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows 3.1</td>
<td>Ted Martin</td>
<td>732-636-1942</td>
</tr>
</tbody>
</table>

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>
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</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>
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<tr>
<td>Dr. Dobbs Journal</td>
<td>15.95</td>
<td>30.95</td>
<td>35.95</td>
</tr>
<tr>
<td>Mac Addict</td>
<td>10.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mac Home Journal</td>
<td>15.97</td>
<td>29.97</td>
<td></td>
</tr>
<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>Time</th>
<th>Location</th>
<th>Contact Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linux Users Group in Princeton</td>
<td>7 pm</td>
<td>2nd Wednesday, Lawrence Branch Mercer Library, Rt1 &amp; Darrah Lane, Lawrence NJ</td>
<td><a href="http://www.fugip.org">http://www.fugip.org</a></td>
</tr>
<tr>
<td>New York PC</td>
<td>3rd Thurs</td>
<td>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>
<td></td>
</tr>
<tr>
<td>Computer Education Society of Philadelphia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meetings &amp; Workshops at Jem Electronics</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Hunterdon Computer Club</td>
<td>8:30 am</td>
<td>3rd Sat, Hunterdon Medical Center, Rt 31, Flemington NJ.</td>
<td><a href="http://www.hunterdoncomputerclub.org">http://www.hunterdoncomputerclub.org</a>, (908) 995-4042.</td>
</tr>
<tr>
<td>Central Jersey Computer Club</td>
<td>8 pm</td>
<td>4th Fri, Armstrong Hall, College of NJ. Rich Williams, (609) 466-0909.</td>
<td></td>
</tr>
<tr>
<td>NJ PC User Group</td>
<td>2nd Mon</td>
<td></td>
<td></td>
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<tr>
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<td>2nd Mon</td>
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<td></td>
</tr>
<tr>
<td>NJ Computer Club</td>
<td>6:15 pm</td>
<td>2nd Wednesday except Jul &amp; Aug, North Branch Reformed Church, 203 Rt 28, Bridgewater NJ.</td>
<td><a href="http://www.njcc.org">http://www.njcc.org</a></td>
</tr>
<tr>
<td>NJ Macintosh User Group</td>
<td>8 pm</td>
<td>3rd Tuesday, Allwood Branch Library, Lyall Rd, Clifton NJ.</td>
<td><a href="http://www.njmug.org">http://www.njmug.org</a></td>
</tr>
<tr>
<td>PC User Group of So. Jersey</td>
<td>7 pm</td>
<td>2nd Mon, 7 pm, Trinity Presb. Church, 499 Rt 70 E, Cherry Hill, NJ.</td>
<td></td>
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Radio and TV Programs

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Radio Show, WBAI</td>
<td>99.5 FM</td>
<td>NY, Wed. 8-9 p.m.</td>
</tr>
<tr>
<td>Software Review, The Learning Channel,</td>
<td>10-10:30</td>
<td>Saturday</td>
</tr>
<tr>
<td>On Computers, WCTC 1450 AM</td>
<td>1-4 p.m.</td>
<td>New Brunswick, Sunday</td>
</tr>
<tr>
<td>PC Talk, Sunday from 8 p.m. to 10 p.m.</td>
<td>1210 AM</td>
<td>Philadelphia. 1800-876-WPEN, Webcast at <a href="http://www.pctalkweb.net">http://www.pctalkweb.net</a>.</td>
</tr>
</tbody>
</table>

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

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.
Secure a Wireless Network

We secure a wireless network to stop people without permission from using it. It’s harder to secure a wireless network than a classic wired network. This is due to the fact that a wireless network can be accessed from anywhere inside the range of its antenna. If you don’t secure a wireless network from hackers, you might lose the service, or your network could be used to attack other networks. To secure a wireless network from hackers, just follow these simple tips:

1. **Strategic antenna placement**: Position the access point’s antenna in a place which restricts the range of its signal to go further than the required area. Do not place the antenna next to a window, but in a central location of the building.

2. **Use WEP**: WEP stands for Wireless Encryption Protocol. It’s a customary technique for encrypting traffic on a wireless network to block access by hackers.

3. **Change the SSID, disable broadcast of SSID**: SSID stands for Service Set Identifier. It is the recognition thread utilized by the wireless access point to allow authorized users to open connections. For every wireless access point arranged, select an exclusive and unique SSID. Also, disallow the broadcast of the SSID. Services will be provided as usual, but the SSID will not appear in the listing of offered networks.

4. **Disable DHCP**: By doing this, the hackers will have to decode the TCP/IP parameters, subnet mask, and IP address in order to hack your wireless network.

5. **Disable or modify SNMP settings**: Change the private as well as public community settings of SNMP. You can also just disable it. Otherwise the hackers will be able to utilize SNMP to get significant info regarding your wireless network.

6. **Utilize access lists**: For additional security of your wireless network, if your access point supports this feature, employ an access list. An access list lets you determine precisely which computers are permitted to access your network. Access points which use access lists can employ Trivial File Transfer Protocol (TFTP) in order to download updated lists periodically and steer clear of hackers. See page: [http://tinyurl.com/28rz3lg](http://tinyurl.com/28rz3lg)

Clean Up Your Email

EmailSTRIPPER is a free program for cleaning the “>”, unwanted carriage returns, and other formatting characters out of your emails. It will restore “forwarded” or “replied” emails back to their original state so they’re easier to read. It’s simple to use, and best of all it’s FREE!

[http://www.papercut.com/emailStripper.htm](http://www.papercut.com/emailStripper.htm)

### ACGNJ MEETINGS

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

**Monday, October 3**
8 P.M. - Lunics, Andreas Meyer (lunics@acgnj.org)

**Tuesday, October 4**
7 P.M. - Board of Directors meeting.

**Friday, October 7**
8 P.M. - Main Meeting (paul.syers@acgnj.org). Bruce Arnold will present on “Things I like about Windows 7”.

**Monday, October 10**
8 P.M. - Layman’s Forum, Matt Skoda (som359@aol.com), 908-359-8842.

**Tuesday, October 11**
7:30 P.M. - Java, Mike Redlich (mike@redlich.net), 908-246-0410.

**Wednesday, October 12**
7:30 P.M. - Mobile Devices, Brenda Bell (mobdevsig@acgnj.org)

**Thursday, October 13**
8 P.M. - Investing, Jim Cooper (jim@thecoopers.org).

**Friday, October 14**
6 P.M. to 5 A.M. - NJ Gamers. Gregg McCarthy (greggmc@optonline.net), 732-721-6507. Break 8 to 10 P.M.

**Monday, October 17**
7 P.M. - Firefox Activity, David McRitchie (firefox@acgnj.org)

**Tuesday, October 18**
7:30 P.M. - C/C++ Users, Bruce Arnold (barnold@ieee.org), 908-735-7898

**Friday, October 21**
8 P.M. - Window Pains, John Raff (john@jraff.com). Brian Welch will present on the iPad.

**Thursday, October 27**
8 P.M. - Hardware, Mike Reagan (hardware@acgnj.org)

**Tuesday, November 1**
7 P.M. - Board of Directors meeting.

**Friday, November 4**
8 P.M. - Main Meeting (paul.syers@acgnj.org).

**Monday, November 7**
8 P.M. - Lunics, Andreas Meyer (lunics@acgnj.org)

**Wednesday, November 9**
7:30 P.M. - WebDev, (webdev@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.