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Dat-A-Whirl (Part One)

Bob Hawes, ACGNJ

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This is the second time in three months that I've patterned my title after an amusement park ride. (The first was Data-Go-Round, in our December 2010 issue). Like a Merry-Go-Round, a Tilt-A-Whirl also goes round and round without really getting anywhere; but it does so in a much more complicated and chaotic fashion. That makes it a more fitting metaphor for this month's article, too.

As I begin writing this, there are thirty-two days to my deadline. You'd think that would be plenty of time, wouldn't you? In actual fact, it's going to be close. I'll probably need every single one of those days if I'm to accomplish all of my objectives. Exactly what are those objectives? Well, in Stage One, I have to make temporary back up files for the seven "partitions" on the removable "320" GB data hard disk used by my main computer. Each of those "partitions" measures from 41 to 43 GB in size, and they're currently all pretty full. (As I've explained before, those are really seven drives in two partitions. One physical drive located in one primary partition, plus six logical drives located in one extended partition, all in one hard disk possessing a true total capacity of 298 real GB. As I've also explained before, Operating Systems actually interact with various types of drives, **not** with partitions. However, in computer parlance, "drive" has been used to describe a number of different things, while "partition" has been used to describe just one thing. Thus, even though it's totally wrong, the word "partition" has supplanted the word "drive" in popular usage. Therefore, I guess I'll have to go along with the majority from now on).

Once I've made those seven temporary backups, I have to do seven temporary test restorations. (After all, a backup isn't a backup unless you **know** that it can be successfully restored if necessary). While I'll need to preserve my seven backups for a little while longer, I won't have to save those restorations. I can wipe out each one just as soon as I've verified that it's good. Only after all seven restorations have tested good can I proceed to Stage Two: running SpinRite (my hard disk testing program) on each of my seven data partitions. Last month, I estimated that it would take 16 to 17 hours to test each one of them. (I also said that I didn't write down whether or not I'd tested my 320 GB data hard disk when I first got it two years ago. Now, just a little bit too late to fix my previous article, I've found written confirmation that I did, in fact, test

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ACGNJ News

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it; and that it tested perfectly). Only if SpinRite finds that all seven partitions currently residing on that disk are **still** in perfect condition can I proceed to Stage Three: figuring out some way to easily, regularly and thoroughly back up all of that data. Well, those are my plans, anyway. We'll see what actually happens.

Stage Zero, Gathering My "Tools"

So what are my options for Stage One? To hold backup files for the estimated 260 GB of data in my seven partitions, I really have only one viable target: my "One Terabyte" USB Expansion Drive. (It has a true capacity of 931.51 GB, and only 155.11 GB of that is currently in use). While I don't yet have anything that I would consider to be a real backup program for data, I do have those drive imaging programs that I've examined recently. Of them, which do I know for a fact can write their output files to a USB hard disk? Clonezilla (CZ), Image for DOS (IFD) and Image for Linux (IFL). Which do I think can probably write to a USB hard disk? FSArchiver (aka File System Archiver, or FSA) and Partimage (aka Partition Image, or PI). When I first tested PI (in Hold That Ghost, my article for the November 2007 issue of ACGNJ News), I described how I mounted a DVD so that PI could access it. Surely, if I could do that, I can figure out a way to let FSA and PI access a USB disk. (Anybody out there who thought "Don't call me Shirley" should be both proud and ashamed of themselves).

Finally, which can't write to a USB disk? That would be Ghost for DOS. Since IFD can do it, it is possible. However, IFD boots TBOS (TeraByte Operating System, pronounced tee-boss), its own proprietary DOS version; and all the IFD connectivity functions seem to be built in. Thus, I can't "borrow" their USB driver, and I haven't found a corresponding driver for MS-DOS 8 (my Ghost boot floppy's current operating system) or FreeDOS 1.0 (my only current alternative). So for now, anyway, Ghost for DOS bites the dust.

That gives me only five imaging programs (CZ, FSA, IFD, IFL and PI) to use on seven partitions. Now, I could just double up on two of them; but I really should take this unexpected opportunity to look at some other programs that I haven't tested before (even though they involve the dreaded "W" word). So I downloaded trial versions of Image for Windows 2.61 (IFW) and Acronis True Image Home 2011 (ATI). Norton Ghost for Windows (GFW) is up to version 15.0, but they don't seem to have a trial download. However, I still have my GFW 9.0 CD from 2004, when their misleading advertisements made me think it also contained the final release of Ghost for DOS. (Actually, it didn't. They just threw in a complete copy of their previous CD (Norton Ghost 2003), which did contain both DOS and Windows versions). The IFW download was 6.9 MB, the ATI download was 159.3 MB, and the GFW 9.0 CD contains files totaling 466.7 MB; but that last figure is

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misleading, because a lot of that total is "extra" stuff that Symantec Corporation (the manufacturer) added as filler. Hardly anybody ever uses most of those files. (Though I will admit that they do come in handy if you need them). Now I've got eight imaging programs (ATI, CZ, FSA, GFW, IFD, IFL, IFW and PI) to use on those seven partitions. Since IFD and IFL are pretty much identical as far as user options are concerned, I'm going to let IFL sit this one out. If all the others work right, that's OK. If not, I've got a "pinch hitter".

However, before I could even start Stage One, I needed to find a target for the test restorations that I'll have to perform for each of the seven test backups. Unfortunately, I didn't currently have an empty hard disk that was big enough to receive any of my seven partitions. Therefore, I had to clear a disk that was already in use. In Data-Go-Round, I mentioned an almost full 80 GB IDE hard disk (true capacity 74.53 GB) that I'd recently removed (for safe keeping) from my multi-use external case. (That case was originally designed to hold an internal IDE CD/DVD drive, but it also works with any IDE hard disk just fine). I couldn't immediately erase that disk, though. I had to copy its files elsewhere first; and for that, too, I had only one viable destination: my "One Terabyte" USB Expansion Drive again. So I created a directory there named WD80 73G, and copied my files into it. (In case you were wondering about that name, Western Digital was the maker Centinued below left

of that 80 GB disk; and its files totaled just over 73 GB). This brings us to another of my "must have" utilities, which I don't think I've ever mentioned by name before: MD5summer.exe. That's right! MD5summer.exe. A Windows program. Now, there are other MD5 sum generators out there; but this one is so much better that there's really no comparison. In fact, if I hadn't been able to run it under Ubuntu through Wine (the Windows emulator), I might have had to cancel my move to Linux altogether. (Perish the thought). That's how vital I consider this program to be. Its author is Luke Pascoe from New Zealand. (His website is *www.md5summer.org*). He's released MD5summer under the GNU GPL (General Public License), but so far he's only created Windows versions. (Oh well, maybe someday).

In this case, here's how MD5summer worked: The opening screen featured a directory tree for my computer. Under Ubuntu, all mounted hard disk partitions are displayed as subdirectories of the "media" directory. (I'm sorry, but explaining **un**mounted disks and/or other operating systems is beyond the scope of this article). Below that tree were three buttons: "Create sums", "Verify sums", and "About". In this case, I chose the subdirectory corresponding to my 80 GB hard disk, then pressed "Create sums". That brought me to the "Create list of files to sum" screen, which contained two display areas. On the left was "Folders:" (although it actually displayed **both** directory names and file names), and on the right was "Number of Items:" (which also in-

cluded a file counter). At the bottom left were four buttons: "Select <u>All</u>", "<u>C</u>lear List", "A<u>d</u>d", and "Add <u>recursively</u>". At the bottom right were two buttons: "OK" and "Cancel". In my case, I pressed "Select All", "Add recursively" (which also added all the contents of every subdirectory selected), and "OK". That brought me to the "MD5sums: Generating..." screen, which contained three display areas. First on the left was an unlabeled area only about a quarter inch wide. Next to that was "File", and on the right was "MD5 Hash". At startup, all of my selected filenames were displayed on the left, with a white circle preceding each one (occupying the space provided by that unlabeled area). As the program ran, the screen scrolled downward. One at a time, each white circle was colored amber as the checksum for its associated file was being calculated. When that was done, the circle was colored green, the newly generated MD5 sum was displayed on the right, and the circle on the following line was colored amber as my calculations continued.

Before I started, my file browser informed me that my hard disk contained 950 files in 31 directories, totaling 73.1 GB. When MD5summer finished (58 minutes and 38 seconds later), it produced a 58.7 KB output file made up of 950 lines, each of which contained a checksum and a filename (including its complete directory/subdirectory path). When prompted, I named that file WD80_73G.MD5. After that (as I indicated two paragraphs above), I copied all the files

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convenient to have them contained in their corresponding backups. This way, the proper file will **already** be present in each test restoration, ready for use). Before I describe that process, however, maybe I'd better talk a bit about names first. When I first began using Ubuntu regularly, I had quite a bit of difficulty figuring out which partition was which. That's because Ubuntu, or maybe Gnome (the desktop environment), or maybe Nautilus (the file browser), or maybe even Linux itself (I'm not sure what the true culprit was) hid their real names from me. (The primary partition was sdb1, and the six logical partitions were sdb5 through sdb10). Instead, they were identified **only** by their sizes. Thus, I saw three instances of "41.8 GB Filesystem", one of "43.1 GB Filesystem", and three of "43.2 GB Filesystem"; and counting down from the top didn't work, either, because they weren't in numerical order. On the other hand, Windows used the familiar "letter-colon" system, which it inherited from DOS, and which can be traced even further back to CP/M (Control Program for Microcomputers). I needed identifiers that I could actually write inside my partitions. That way, they would always be the same, no matter what changeable nomenclature was applied from the outside. I found that in the optional volume labels. I'd used them on my hard disks a lot back in the good old DOS days, but hardly at all recently. As I've mentioned in previous articles, I gave my data partitions volume labels that matched the drive letters originally assigned to them by my

(including my new checksum file) from my 80 GB hard disk to the new WD80 73G directory in my One Terabyte USB Expansion Drive. That operation took about 1 hour and 55 minutes. (Unfortunately, or maybe I should say "fortunately", copy operations **don't** display an exact *hh:mm:ss* counter when they've completed their operations). After that, I went into the new WD80 73G directory and double-clicked on its WD80 73G.MD5 file. That started MD5summer and brought me directly to the "MD5sums: Generating..." screen; but this time in "Verify sums" mode. The screen was pretty much the same as described above, except that in addition to the circles and filenames on the left, all of the previously calculated checksums were also displayed on the right at startup. As the program ran, the screen scrolled downward as before. One at a time, each white circle was colored amber as the checksum for its associated file was being re-calculated, and then compared to the earlier version. This time, the circles were colored green if their comparisons matched, or red if they didn't. Obviously, I didn't want any red circles; and luckily, when MD5summer finished (67 minutes and 10 seconds later), I didn't get any. That cleared my 80 GB hard disk for re-use, and I could proceed to Stage One at last. Or could I?

Before I actually made my first backup, though, I had to create MD5 checksum files for each of my seven data partitions. (They're what I'll use to verify that each test restoration came out correctly. So it will be much more

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old Windows XP SP2 system. After that, for instance, Windows identified the last logical partition as "K_DRIVE (K:)", Ubuntu identified it as "K_DRIVE", and only Linux low level partition-specific utilities identified it as sdb10.

Getting back to MD5summer, D DRIVE (Linux name sdb5) contains 14,811 files in 551 directories, totaling 41.4 GB; and its MD5 sum file was created in 39 minutes and 48 seconds. E DRIVE (Linux name sdb6) contains 31,427 files in 79 directories, totaling 41.3 GB; and its MD5 sum file was created in 46 minutes and 31 seconds. F DRIVE (Linux name sdb7) contains 57 files in 3 directories, totaling 42.0 GB; and its MD5 sum file was created in 29 minutes and 37 seconds. (The G: and H: drives in my old XP system were virtual CD drives, so there weren't any corresponding G and H hard disk labels). I DRIVE (Linux name sdb8) contains 87 files in 3 directories, totaling 40.4 GB; and its MD5 sum file was created in 28 minutes and 45 seconds. J DRIVE (Linux name sdb9) contains 149 files in 14 directories, totaling 33.5 GB; and its MD5 sum file was created in 23 minutes and 45 seconds. K DRIVE (Linux name sdb10) contains 73 files in 4 directories, totaling 37.6 GB; and its MD5 sum file was created in 26 minutes and 59 seconds. L DRIVE (Linux name sdb1) is a special case, formatted in the NTFS file system, and occupying the position that would usually be the C: drive in an XP setup. Because that XP C: drive was actually located on a completely separate hard disk, this partition was assigned the

higher drive letter L, even though it's actually the first partition on the disk. It contains 11,171 files in 1,797 directories, totaling 35.8 GB; and its MD5 sum file was created in 37 minutes and 13 seconds.

Stage One, Backup 1 of 7 (Image for DOS)

Finally ready to actually begin Stage One, I decided to proceed in Linux name order, starting with sdb1 (L DRIVE); and using IFD to back it up. After I booted IFD from its floppy, my total backup time was 1 hour, 48 minutes, 12 seconds. However, that included a byte-for-byte comparison. The time for output file creation only was 54 minutes, 35 seconds. Looking on my USB Expansion Drive, I found 17 sequentially named files: 16 measuring 2 GB each, and the last measuring 1.3 GB, for a total of 33.3 GB. (In our November 2009 issue, in New Blood, I gave extremely extensive descriptions of both backup and restore operations as performed by IFD. Since that information is still readily available, I'm saving space in this article by not repeating it here).

Stage One, Backup 2 of 7 (Clonezilla)

Then, I proceeded to back up sdb5 (D DRIVE), using CZ. After I booted CZ from its Linux live-CD, my total backup time was 2 hours, 34 minutes, 33 seconds (and that's without a byte-for-byte comparison). Looking on my Expansion Drive, I found 21 sequentially named files: 20 measuring 2 GB each, and the last measuring 108.3 MB, for a total of

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that menu, I chose System. That launched a sub-menu con-

taining GParted, which confirmed that my sources were

the real commands that mounted that drive "behind the

was actually hiding something very important from me).

The SRCD live-CD doesn't do stuff like that. I had to type

So I entered the same commands that I'd used successfully

for PI in Hold That Ghost, back in 2007. (The first com-

40.1 GB. In Hold That Ghost, and (to a lesser extent) in Something Spooky? (in our October 2009 issue), I gave fairly detailed descriptions of CZ operations. Due to space considerations, I won't be repeating any of that here, either.

Stage One, Backup 3 of 7 (Partimage)

My next two backup imaging programs are both included on System Rescue CD, another Linux live-CD. SRCD boots to a command line rather than to a Graphical User Interface. So I had to enter the startx command to launch the GUI, which starts with a terminal window already open. However, before I could use it, I had to verify the names of my source and destination drives. That's because the newer peripheral drivers (which begin every name with an "sd", not just SCSI devices, like in the "good old days") are not as predictable as the older drivers (which began IDE names with an "hd"). In the course of my research for this article, I booted Linux at least a dozen times. Just once, my hard disk names were reversed, so that my USB drive came in as sdb1, while my data drive came in as sdc1, 5, 6, 7, 8, 9 and 10; but even that once was too much. The old "hd" drivers were absolutely dependable.

So each time now, I had to run GParted (the Gnome Partition Editor) first, to verify the drive names, before I could use those names to specify source and target. I did that from the SRCD menu, which is accessed either by clicking on the little icon in the bottom left hand corner of the screen, or by right-clicking on an empty area of the screen. From

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be used instead. To be fair to the SRCD people, this information was displayed as the live-CD booted; but in the sdb6 (E DRIVE) and sdb7 (F DRIVE), and my destination background, and easy to miss. (In fact, I didn't see it there was sdc1. Now, the CZ live-CD had displayed a menu of all until after I'd already found out about ntfs-3g from another source). To my mind, it should have been displayed in a available drives, and let me choose the one that I wanted to mount as my destination for file creation. Then it generated much more emphatic way, such as the electronic equivalent of a giant flashing red neon sign; and maybe a recording of the "red alert" siren from Star Trek playing along with it, as scenes". (I didn't know it at the time, but by doing that, CZ well. I wasted a lot of time trying to use various commands to change my file and/or directory access permissions bethe required commands into the terminal window manually. fore I stumbled upon this annoving bit of command line trivia. Once I did, I entered the following commands. (The first unmounted sdc1, and the second used the new command created the target directory, and the second command mand to re-mount it as read/write; and that's right: it's umount, not unmount).

umount /dev/sdc1

ntfs-3g /dev/sdc1 /mnt/dest

PI can be launched from the SRCD menu, or from the command line. This time, I used my mouse to bring up that menu, then I chose the System sub-menu as above. There, going several lines below GParted, I clicked on Partimage instead. PI opened a second terminal window, and filled it with a colored display that **looks** like a graphical interface. However, it's **not**. It didn't help that the mouse pointer also staved visible, and could be moved around inside that new terminal window; but clicking on anything had absolutely

mkdir /mnt/dest

mount /dev/sdc1 /mnt/dest

mounted sdc1 as that directory).

Then I got caught in a booby trap, because my USB Expansion Drive (which Seagate, its manufacturer, had formatted in the NTFS file system) came up mounted as read-only. When I tried to create a file there, it bombed; and it took me quite a while to figure out why. It seems that the mount command, which (presuming that it was typed in accurately) has always worked properly for the past forty-two vears (ever since UNIX was created), now doesn't work correctly for NTFS partitions. The command ntfs-3g must

no effect, because this is a text mode interface. Thus, it has to be navigated from the keyboard, using the Tab and arrow keys. On the first screen, I selected sdb6 as the "Partition to save/restore". I typed in "/mnt/dest/E-PI-SRTEST1" as the "Image file to create/use", and I selected "Save partition into a new image file" as the "Action to be done". Then I pressed F5 (Next). A second screen came up, listing further options; but I accepted all default entries, and pressed F5 again. Then I had to hit "OK" twice more before PI actually started. My total backup time was **2** hours, 38 minutes, 48 seconds. When I looked at my USB drive, I found 20 sequentially named files: 19 measuring 2 GB each, and the last measuring 556.8 MB, for a total of 38.5 GB.

Stage One, Backup 4 of 7 (FSArchiver)

Since I could proceed to FSA without rebooting, my USB drive was still mounted, and I didn't need to repeat any of my earlier commands. So I just entered the following in my terminal window. It's very similar to what I used the last time I tested FSA (in *Wrap It Up*, my article in our December 2009 issue). The only new addition was -s 2000, which split the output file into 2 GB file segments, like the other programs did.

fsarchiver savefs -s 2000 /mnt/dest/F-FSA-SRTEST1.fsa /dev/sdb7

Unfortunately, I got the following error message:

oper_save.c#1032,filesystem_mount_partition(): cannot mount partition [/dev/sdb7]: filesystem may not be supported by either fsarchiver or the kernel

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creation time of the first file from the completion time of the last file gave me a duration of 2 hours, 13 seconds. That's as close as I'm going to get to my total backup time.

Stage One, Repeat Backup 1 (Image for DOS)

This still left me without a backup of sdb7 (F_DRIVE), however. So I made it with IFD. After I booted from the IFD floppy and ran IFD again, my elapsed time was 1 hour, 5 minutes, 32 seconds. This time, I didn't check off the "Validate Byte-for-Byte" option, so that's the actual time it took for IFD to make its backup. Looking at my USB Expansion Drive, I found 21 sequentially named files: 20 measuring 2 GB each, and the last one measuring 649.3 MB, for a total of 40.6 GB.

Stage One, Restoration 1 (FSArchiver)

Before venturing into unknown Windows territory, I decided to perform test restorations of the four backups that I'd already made. I proceeded in Linux name order, starting with the sdb1 (L_DRIVE) backup that I made using FSA. (I didn't restore the earlier sdb1 backup that I'd done with IFD; but I also didn't delete it from my USB drive yet either, "just in case"). In preparation, I removed my Ubuntu boot drawer and my data drawer from my computer, inserted the drawer containing my spare 80 GB target hard disk, connected my USB expansion Drive, and booted from the SRCD live-CD. Once at the desktop, I ran GParted as

I changed the end of the command to sdb6, and then re-ran it; and I got the same error message again. I got a fairly similar message in Wrap It Up, when I tried to back up sda5 (which was a Linux swap partition). At the time, I thought that FSA just didn't want to back up a swap partition. That assumption did make sense, because no imaging program should ever really want to make an image of a Linux swap partition. Like the Windows swap file, a Linux swap partition (and the information contained therein) is totally useless once its associated operating system has stopped running. Now, though, it seems more likely that FSA actually can't handle any logical partition. In order to test this new theory, I changed the command as follows, to make it back up my only non-logical drive: sdb1 (L DRIVE): fsarchiver savefs -s 2000 /mnt/dest/L-FSA-SRTEST1.fsa /dev/sdb1

Then it ran. So I guess that FSA is even more "not ready for prime time" than I'd previously thought. In addition to this newly discovered deficiency, it still hasn't advanced to the point where it gives any sort of progress indication. Not even a simple "running" message on the command line. As I noted in *Wrap It Up*, if it wasn't for the way my drive indicator lights began flashing like crazy, I wouldn't even have known it was running. The cursor just sat there empty until FSA finally finished. Then, it displayed a "successfully processed" message, but no "elapsed time" indicator. When I looked at my USB drive, I found 17 sequentially named files: 16 measuring 2 GB each, and the last measuring 84.0 MB, for a total of 32.1 GB. Subtracting the

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before, verifying that my USB disk came in as sdc1, and my empty target disk came in as sdb. While in GParted, I created an FAT32 primary partition on my target disk, which came in as sdb1. (From previous experience, I knew that FSA would bomb if I didn't give it something to overwrite). Then I entered the following in my terminal window. (That third line is very similar to the restore command I'd used previously, in *Wrap It Up*).

mkdir /mnt/dest

ntfs-3g /dev/sdc1 /mnt/dest

fsarchiver restfs /mnt/dest/L-FSA-SRTEST1.fsa id=0,dest=/dev/sdb1

As before, FSA gave absolutely no progress indication on the screen as it ran. This time, I got a book and sat like a lump in front of the computer, reading (and occasionally glancing at the screen). A change in the sounds coming from the hard disks alerted me that something was happening. I saw the "successfully processed" message appear, and I noted the time according to my wrist watch. Thus, the following FSA restore time is as accurate as it's possible to measure manually: 43 minutes and 30 seconds. Then, I shut down my computer, removed the SRCD live-CD, disconnected the USB drive, re-inserted the drawer containing my Ubuntu operating system, and re-started the computer. After Ubuntu booted, I accessed the newly restored partition

on my spare hard disk, found the MD5 sum file, and double-clicked on it. 39 minutes and 0 seconds later, MD5summer finished with no errors. So that's one down, three to go. (Be aware that I did also have to do all of the drawer and CD removals and re-insertions described above for each of the other three restorations. I'm just going to omit most of those details below).

Stage One, Restoration 2 (Clonezilla)

Next up was sdb5 (D DRIVE), made by CZ. In its "Select mode" menu, CZ offers two options involving restoration: restoredisk ("Restore an image to local disk") and restoreparts ("Restore an image to local partitions"). Because Ghost for DOS (my standard for all comparisons) had no problem restoring the backup of any single partition to an entire hard disk, I tried the "local disk" option first; and since CZ can restore the entire contents of a full hard disk backup to a completely empty target disk, I left my spare 80 GB disk totally unallocated. Unfortunately, when I got to the "Choose the image file to restore" menu, the name of my backup just wasn't listed as one of the available choices. I guess that CZ can differentiate between a "whole disk" and an "only some partitions" backup, and refuses to list the latter when in restoredisk mode. To my mind, that's a sign of "less than flexible" thinking on the part of the CZ developers; but, after all, it's their program. They can write it any way they want, and (if I decide to keep using it), I'll

Continued above right

partition, and replaced it with a logical partition, which came in as sdb5. Then, CZ ran. My total restore time was 1 hour, 32 minutes, 44 seconds. Running the MD5 sum file under Ubuntu, my total compare time was 43 minutes, 42 seconds, with no errors. Two down, two to go.

Stage One, Restoration 3 (Partimage)

Next up was sdb6 (E_DRIVE), made by PI. So I booted from the SRCD live-CD once more, and ran GParted as before. After verifying that my USB disk came in as sdc1, and my target disk came in as sdb5, I used GParted to **delete** sdb5. Then, I created an FAT32 primary partition in its place, which came in as sdb1. (Because I knew that PI would **also** bomb if I didn't give it something to overwrite). Then I entered the following commands in my terminal window. (I used **mount** because I wanted to see if I **could**, in fact, read NTFS partition sdc1 **without** using **ntfs-3g**).

mkdir /mnt/dest

mount /dev/sdc1 /mnt/dest

partimage

That third line launched PI from the command line. The only difference from before was that, instead of opening a second terminal window, PI took over the existing window instead. On the first screen, I selected sdb1 as the "Partition to save/restore". I typed in "/mnt/dest/E-PI-SRTEST1.000" as the "Image file to create/use", and I selected "Restore partition from an image file" as the "Action to be done". have to adjust to doing it their way. So I went back and changed to restoreparts mode, and this time my backup was listed, so I selected it, and then proceeded. Unfortunately, I soon got an error message:

Error! No unmounted partitions are found! To use Clonezilla to save or clone a partition, the source partition must be unmounted!

Obviously, this message was written with backup operations in mind, but its meaning is clear enough. CZ wants there to be an unmounted partition in my target drive. In other words, when doing a partition restoration, CZ does need something to overwrite. So I ran GParted, and created a single primary partition, which came in as sdb1. I then proceeded as before, until I got a different error message:

Failed to restore partition image file /home/partimage/D-CZ-SRTEST-2010-12-27-06-img/sdb1 * to /dev/sdb1! Maybe this image is corrupt!

Well, that was some progress, anyway. At least this error message actually applied to the restore operation that I was trying to perform. Or did it? Note that star (which they put there, not me). Right before it, they displayed a file name ending with "sdb1"; but a correct transcription of my backup's name would have ended in "sdb5". Could CZ be trying to tell me something? Forget about any degree of flexibility. Let's try "rigid" thinking on the part of the CZ developers. So I went back to GParted, deleted my primary

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Then I pressed F5 (Next). A second screen came up, listing further options; but I accepted all the default entries, and just pressed F5 again. Then I had to hit "OK" once and "Yes" once before PI started. My total restore time was 32 minutes, 4 seconds. (Be assured that time value is not a typo). Running the MD5 sum file under Ubuntu, my total compare time was 50 minutes, 37 seconds, with no errors. That short restore time bothered me so much that I re-did it all over again, this time mounting sdc1 using the **ntfs-3g** command. (My working theory was that maybe that one time **wasn't** too fast. Maybe those previous restore times for FSA and CZ were too slow instead, possibly because ntfs-3g somehow demanded more "overhead"). However, my second restore time was 33 minutes, 28 seconds. Almost as fast as before, and still (as you'll see in a minute) just a tiny bit faster than IFD as well. My second MD5 compare time was 48 minutes, 56 seconds. A tad faster, but similar to before. Imagine that. Both times, it took MD5summer significantly **longer** to read this partition than it took PI to write it. How counter-intuitive. I can't explain these anomalous PI times; but then again, I don't have to. They're repeatable **and** verifiable. So they'll just have to be accepted "as-is". Weird! Anyway, that's three down, and one to go.

Stage One, Restoration 4 (Image for DOS)

Last up was sdb7 (F_DRIVE), made by IFD. I wanted to try IFD with a completely empty target disk, so I deleted

the existing partition and left my spare 80 GB disk totally unallocated. Then, I booted from the IFD floppy and tried to restore my partition; and it worked! My elapsed time was 37 minutes, 18 seconds. (I also didn't check "Validate Byte-for-Byte", so that's my true total restoration time). Running the MD5 sum file under Ubuntu, my total compare time was 33 minutes, 40 seconds, with no errors. That's four down, with Windows to go. However, before I could proceed into Windows World, there was one more thing I had to do. I do have an existing removable drive drawer for Windows; but I didn't want to unnecessarily "taint" it by installing programs on it that I don't intend to keep. (Even though it is already "polluted" by XP). So I pulled IFL off the "bench", and used it to make a backup of that drive. Then, I restored that backup to a spare 40 GB hard disk. (At 37.27 real GB, it was just slightly too small to be used as the target for my data partition restorations; but it had plenty of room to be a "stunt double" for my XP drive).

Here, let's take a time check. As I'm typing this, it's now 19 days to my deadline. Therefore, from the time I first started, it's taken me fourteen days to get this far. That's more than a third of my originally available time gone, and I'm only a little more than halfway through Stage One. In my defense, I must say those were a particularly busy two weeks, containing Christmas Eve, Christmas Day, New Year's Eve, New Years Day; and, I seem to recall, wasn't there something else? What could it have been? Oh yeah, right, that's it: a humongous blizzard! Furthermore, this article itself has also grown humongous. At this point, it's over five and a half thousand words long. Even though I've now decided to put Stage Three off until next month, it could still wind up being a record breaker. If I can ever get it done, that is. So I'd better "get on the stick".

Stage One (Abrupt Conclusion)

I did finish Stage One and Stage Two on time. Really, I did. As you'll see next month, I actually finished with time to spare, five days before my deadline; and furthermore, I did exceed 10,000 words: 10,043 (containing 47,144 characters) according to MS Word, and 10,269 (containing 57,110 characters) according to my word processor of choice, OpenOffice.org. Consulting Abiword (another Linux word processor). I got a clue as to what those character count differences might be. Abiword said; "Words: 10,271. Characters (with spaces): 57,112. Characters (no spaces): 47,146. However, note that its totals don't quite match the others, either. As to the difference in total words, my working theory for the past few years has been that OO.o and Word count hyphens and underscores differently; but I've never been able to "nail it down" for sure. Oh, well, maybe someday. As for now, it just makes more sense to split this article in half, rather than to go for the record. (Oh, well, maybe someday on that, too).

See you next month. 💻

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Book Review — Windows 7: The Definitive Guide The Essential Resource for Professionals and Power Users

Reviewed by Elsie Smith (lcms (at) pacbell.net), PC Community, CA (www.pcc.org)

This is the kind of how-to book that anyone-regardless of skill level-can read from cover to cover and walk away with a wealth of knowledge about the subject at hand.

This book provides everything you need to manage and maintain Windows 7. You'll learn all of the features and enhancements in complete detail, along with specifics for configuring the operating system to put you in full control.

Bestselling author and Windows expert William Stanek doesn't just show you the steps you need to follow, he also tells you how features work, why they work, and how you can customize them to meet your needs. You'll also learn why you may want to use certain features of the operating system and when to use other features to resolve any problems you are having. Learn how to squeeze every bit of power out of Windows 7 to take full advantage of its features and programs.

When asked about the user level, Stanek replied: "This book doesn't focus on a specific user level. This isn't a lightweight beginner book or a book written exclusively for developers or administrators. Regardless of whether you are a beginning, power user, or seasoned professional, many of the concepts in this book will be valuable to you. And you'll be able to apply them to your computer regardless of which edition of Windows 7 you are using."

* Set up, customize, and tune Windows 7-Optimize its appearance and performance, install software - what has changed and what you need to know, customize your hardware, and install printers, scanners, and faxes

* Manage your files and data-Search your computer more efficiently, secure your data, share and collaborate, and get the most out of optional programs such as Windows Live Mail

* Master your digital media-Create media libraries, manage digital pictures and videos, make DVDs, and create movies

* Get connected and start networking-Set up a home or small-office network, conquer Internet Explorer, and master on-the-go networking

* Protect your computer-Keep your family safe while on the Internet, navigate the computer security maze, and configure Windows 7's protection features

* Manage and support Windows 7 systems-Configure user accounts, disks and drives, troubleshoot and handle

Windows 7: The Definitive Guide, continued

routine maintenance, and resolve advanced support and recovery issues

* Learn advanced tips & techniques-Manage the Windows boot environment, explore Group Policy, and much more

Product Information

Windows 7: The Definitive Guide

The Essential Resource for Professionals and Power Users

By William R. Stanek

O'Reilly Media, Inc.

http://www.oreilly.com

800-998-9938

List Price: O'Reilly Media: \$59.99

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PCmover

George Harding (Georgehardingsbd (at) earthlink.net), Tucson Computer Society, AZ (www.aztcs.org)

Laplink has had PCmover available for many years. Its purpose is to successfully transfer your data and programs from an old computer to a new one. The data part of the transfer is easy enough, in fact, Microsoft has an application called Easy Transfer that will do that part. However, to transfer the programs part is difficult. You usually have to install the original programs on the new computer, and then update them as necessary, which may take a long time

The PCmover process has been adapted to include the tricky process of upgrading from XP to Window 7. As you probably know, Microsoft requires you to do a "clean" install (format the hard drive, then install) if you are running XP, then reinstall and update all your programs. I tried the PCmover process in an update from XP to Window 7. Overall, I would say it was a remarkable success. Before you start doing an upgrade, it's wise to run Microsoft's Upgrade Advisor, available at Microsoft's site.

The first step, of course, is to make at least one complete backup of your system – not just the data files, but the entire partition in which XP is running. Some tech people even advise making two complete backups and having them verified by the backup software. The next step is to download and install PCmover. You can download it at *www.laplink.com/PCmover*. Once downloaded, you install it just like any other application. Laplink advises that you turn off any screen savers and power-saving settings. For laptops keep the power plug in. Your computer must stay awake during the entire procedure. They also recommend disabling anti-virus, spyware and similar applications because they probably won't be transferred correctly; you'll have to reinstall them after the upgrade.

Next, you run PCmover. You will need a serial number in order to run the program, which you should get when you download the program. The next screen of the program shows several choices for method of migration. You should choose the Windows 7 Upgrade Assistant method.

You can choose to migrate all users or only chosen ones. You'll usually choose all. Next, you'll be presented with a list of all your hard drives and partitions. You'll only want to migrate the partition/drive which has XP. Next you can exclude certain file types. You probably won't want to transfer the listed types, but it won't hurt anything if you do transfer them.

PCmover, continued

Next is a scan for applications. You'll get a list of all the applications on your computer. I got 112 in my list. You may deselect any of these which you don't want to migrate. I left them all checked.

The next step creates the list of applications you have chosen, and then asks you what name to give it and where to save it. You should save it on a different drive/partition from the one you are migrating, or on an external hard drive. You can give it any name you want. I called mine "upgrade."

Now, PCmover creates the Moving Van, the file that contains all the info to be migrated and saves it where you specified. This may be quite a large file. Mine was over 7 MB.

Now you upgrade to Windows 7 by selecting the Custom method. This will take a while, but your input will not be needed. Once complete, you reinstall PCmover on the upgraded computer, run it, find the Moving Van file and let PCmover migrate your applications and data. This transfer may take quite a while.

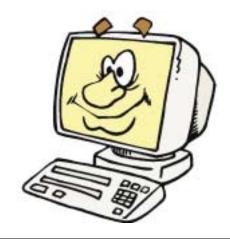
When completed, you should have all your applications and data that you wanted migrated available and working in Windows 7. There may be some of your applications that do not work in Windows 7. I had a few, but the problem was with Windows 7, not PCmover.

Continued above right

I found this migration assistant to be easy to use and quite effective to migrate applications and files

- About: PCmover
- Vendor: Laplink
- www.laplink.com
- Price: Ranges from \$20 to \$60 for a single license

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Mac Tips

Ernie Cox, Jr. (Ecoxjr (at) cox.net), Computer Club of Green Valley, Arizona (http://gvcc.apcug.org)

Mac New Administrator Password

On a Mac computer, over time you may get tired of using the "Admin Password" and want to change to a new one.

Go to System Preferences and click on "ACCOUNTS." An "Accounts" window will drop down. Click on the lock at the bottom left hand side of the window. You must know the old password to open the lock. When the lock opens, click on the name with "Admin" under it. Next click on "Password." Just to the right is "Change Password," click there.

A window will drop down for you to fill in the current password and new password. You must know the old password and verify the new password after writing it in.

Click on the words "Change Password," a window will drop down telling you that the password will be changed. If you want to change the administrator name along with the password, you will have to log out of the old name and then log into the new name on start-up to use the new account.

Once you have done the new log in, you must go to the My Account column. At the bottom are plus and minus signs.

Click on the old name with Admin and then click on the minus sign to delete the old name Admin. From there, you will log out and then log back into the new name Admin.

Quick General Mac Tips

Forgot your admin password? Dig up your OS X install disk and insert it into your Mac drive. Restart your Mac, while holding down the "C" key. Select your lingo. In the menu bar, select "Utilities" and then select "Reset Password." Be sure to follow the directions, and you will be in business.

Perhaps your **DVD or CD is stuck** in the drive and won't come out after pushing the "eject" button. Try holding down the "E" key and "Command/Apple" key to eject the disc. If that doesn't work, shut down the computer, restart and hold down the "Ejection" key, (top right) on startup of your computer.

Changing colors and size of a photo can be done in either iPhoto or Preview. These programs are good for beginners and for people who don't have higher-grade programs. Preview can be used to put titles, type and other art into your pictures.

If you are having **trouble sending large files** (10, 12, 15 MB size), you might try using a program called "YouSendIt" (*www.yousendit.com*). It's free for the first 2 GB.

Apple Mail Tips

1. You can mail someone a photo by firing up iPhoto and either dragging the selected image into Mail, or using iPhoto's Share > Email command. But there's quicker, easier way that bypasses iPhoto. In Mail, choose Window > Photo Browser. A floating window will appear instantly, showing the complete contents of your iPhoto library. Find the picture you want, drag it into a message window, and you're done.

2. If you receive mail in "plain text," you can decide what font, size, style and color the messages will use. You can extend the same courtesy to others. Mail uses "Rich Text" by default for outgoing messages, but you can change this by choosing Mail > Preferences, clicking the Composing icon on the toolbar, and then choosing Plain Text from the Message Format menu. (To change the format for an individual message, choose Format > Make Rich Text, or Format > Make Plain Text.)

3. If you encounter problems sending or receiving mail, you can find out exactly what's wrong by choosing Window > Connection Doctor. Mail will check each of your incoming and outgoing account connections, and display a

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optical drive, open Disk Utility. Then click the disc's name in the list on the left (one level below your optical drive), and click the New Image button. A dialog appears where you can name your disk image and choose where it's saved. In the dropdown for Image Format, choose DVD/CD Master.

Click Save, and Disk Utility will create a disk image that ends with a .cdr extension. This is an exact copy of the optical disc in your drive, so you can double-click the image to mount it, and it's just like you've mounted the disc itself. To burn a copy of the disk image to another optical disc, open Disk Utility, click the Burn button, navigate to the disk image you just created, and click Burn.

Computer Backups

You never know when you might lose some of that good stuff on your computer and need to restore it. So, back it up. There are a number of ways to back up your computer, several of which have been written about many times: Time Machine, external hard drives, websites and Apple's Mobile Me. Now there's another way—your iPhone/iPad/iPod [device]. There's an application [app] named Phone View that can be purchased for \$20. Phone View can let you use your device as an external drive for storing files. Then Phone View makes it easy to search your device and transfer any piece of info back onto your computer should something be lost or accidentally deleted from your computer. The pictures will be smaller than originals because iTunes makes them smaller for the device. window with a plain-English description of any problems found, usually with advice for fixing them.

4. If you sent a message to multiple email addresses, and later realized you forgot to include someone, you don't have to go to the trouble of opening the message in your Sent mailbox, copying its contents, and then pasting the text into a new message. Instead, select the message, choose Message > Send Again, and replace the existing recipients with the new one(s). The subject and message contents remain the same as before, although they can be edited if you like.

5. Attachments in messages you've received or in copies of outgoing messages in your Sent mailbox can eat up a lot of disk space. For IMAP or Exchange accounts that impose a storage quota this can be a significant worry. Mail can remove attachments from stored messages. If you've already saved a copy of the attachments elsewhere, using this feature is a good idea.

Locate one or more messages with attachments and choose Message > Remove Attachments. Behind the scenes, Mail duplicates the message (omitting attachments) and deletes the original one.

Back-up

It's a smart idea to make a backup of important software discs, like those for your personal use (for example Mac OS X and extra applications discs). With the disc in your

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Bing — How's It Doing? Linda Gonse, Orange County PC Users Group

Google is one of the smartest, most innovative companies in the world, but in its core business — online search — it's being routinely shown up by Microsoft's third-place search engine, Bing.

Bing is a surprisingly fast-moving, innovative product and it's forcing Google to play catch-up time and time again. For all of Bing's new ideas, it hasn't translated into big gains in users. The latest numbers from comScore show that 63 percent of searches in the U.S. are performed on Google, but just 13 percent are done on Bing. (Source: CNN.com, *http://bit.ly/adxP61* August 2, 2010, by Jay Yarow, Business Insider)

Bing still handles a small slice of Web searches in the United States, 12.7 percent in June, compared with Google's 62.6 percent, as measured by comScore, the Web analytics firm. But Bing's share has been growing, as has Yahoo's, while Google's has been shrinking. (Source: nytimes.com, *http://nyti.ms/ bqBtST* August 1, 2010, by Claire Cain Miller and Ashlee Vance, New York Times)

35th Anniversary Newsletter CD Now On Sale Handbrake Beta .09 Transform DVD to MPEG Release Orange County IBM PC Users' Group Amateur Computer VEW Group of New Jersey 1 \$8.00, includes postage HandBrake 0.9.4 is an open-source, GPL-licensed, multiplatform, multithreaded video transcoder, available for MacOS X, Linux and Windows. Founded 1975 \$7.00 if you pick it up at a meeting HandBrake is a video transcoder that takes your movies and 35[#] Anniversary Newsletter Collection transfers them to a format that's useful on your computers, m 1. Number 1 Breugh Warne 15. Sumber media centers, and portable electronic devices. It converts Depyrger 1875-3218 by ACGHL Get yours al fights for most any video formats to a handful of modern ones. today! There's an old proverb in the video encoding world: **Back Issues Still Needed** "Speed, size, quality: pick two." It means that you al-Our collection remains incomplete. Below is a list of wavs have to make a trade-off between the time it takes missing newsletters. Anyone who lends us one of to encode a video, the amount of compression used, and these (or supplies a good clear copy) will receive the the picture quality. Well, this release of HandBrake renext CD as our thanks. fuses to compromise. It picks all three. http://handbrake.fr/downloads.php 1975: #2 and #3 (dates uncertain) 1976: January 1984: August 1985: June, July, August, September.

SIG News

C/C++ Programming

Bruce Arnold (barnold@blast.net) http://www.blast.net/barnold

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. Sample code is posted on our Web page after each demonstration.

January: HostShell - A Shell Program to Manipulate the HOSTS Virus and Spyware Protection. Object: To provide extra user features for the HOSTS file obtained from

http://www.mvps.org/winhelp2002/hosts.htm

The HOSTS file is part of the Internet software on all computers, but the standard file provides no extra protection. From Wikipedia: Specially crafted entries in the hosts file may be used to block online advertising, or the domains of known malicious resources and servers that contain spyware, adware, and other malware. The above web site provides a system that blocks approximately 20,000 bad web sites.

For details and sample code, visit our Website. *Our next* meeting February 15. ⊒

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 curent-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, PDAa, fancy phones, etc. *Our next meeting February 9.*

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 noviceusers or those who are planning to get started in computing. Watch our Web page for updates and announcements. \square

FireFox Activity

Firefox@acgnj.org

This SIG is intended to be 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, February 21.*

NJ Gamers

Gregg McCarthy (greggmajestic@gmail.com)

http://www.NJGamers.com

www.lanparty.com

The next Friday Night Frag will be February 11, 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.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, February 7, March 7 💻

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.

February 18 : Donald McBide on Web TV

Main Meeting

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

Mike Redlich (mike@redlich.net)

February 4: Bob Hawes on FSF Compliant GNU/Linux Distributions.

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. 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-encompasing 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 langages 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 9.* ■

Java

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

February 8: Android 101 — This month's meeting will feature Barry Burd providing a technical overview of Android. This presentation will cover fundamentals of the Android operating system, the app development lifecycle, and tools you can use to publish your app. We'll cover everything from Cupcake (Android 1.5) to Gingerbread (the brand-new Android 2.3) and beyond.

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 of the ACGNJ Hardware Activity; so there is still a market for this type of event. One guy came all the way from the Bronx! 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 February 24 💻

Investment Software

Jim Cooper (jim@thecoopers.org)

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

The Investment SIG continues with presentations on how to use analysis programs TC2000 and TCNet. Large charts are presented on our pull down screen and illustrate the application of computer scans and formulas to find stocks for profitable investments. Technical analysis determines buy points, sell points and projected moves. Technical analysis can also be used on fundamentals such as earnings, sales growth, etc. We're no longer focusing on just Telechart -- if you are using (or interested in) Tradestation, eSignal, VectorVest -- or just in learning how to select and use charting and technical analysis, come join us !!

Our next meetings: February 10. 💻

Guru Corner

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

Discount Computer Magazine Price List

As described by the DealsGuy

you can call on the person listed. Please be considerate and call before 10 PM.			1 yr	2 yı	2	
all before 10 PM.			Computer Games	\$10.95	20.95	29.95
	Software		Computer Gaming World	14.95	28.95	41.95
			Computer Shopper1	16.97	32.95	47.95
HTML	Mike Redlich	908-246-0410	Dr. Dobbs Journal	15.95	30.95	
	Jo-Anne Head	908-769-7385	Mac Addict	10.97		
ColdFusion	Jo-Anne Head	908-769-7385	Mac Home Journal	15.97	29.97	
			Mac World	12.95		
CSS	Frank Warren	908-756-1681	Maximum PC	9.95	18.95	27.95
	Jo-Anne Head	908-769-7385	Microsoft System Journal	21.95	39.95	
Java	Mike Redlich	908-246-0410	PC Gamer	12.95		
Java		908-240-0410	PC Magazine (22/44/66 Issues)	25.97	48.95	68.95
C++	Bruce Arnold	908-735-7898	PC World	16.95		
	Mike Redlich	908-246-0410	Wired	6.00	12.00	17.00
ASP	Mike Redlich	908-246-0410	These prices are for new subsorders must be accompanied	by a check,	cash or	Money
Perl	John Raff	973-560-9070	Order. Make payable to Herb			
	Frank Warren	908-756-1681	Herb Goodman, 8295 Su FL 33496	nlake Driv	ve, Boca	a Raton,
XML	Mike Redlich	908-246-0410	Telephone: 561-488-4465, e- <i>igy.net</i>	mail: <i>hgood</i>	dman@p	orod-
Genealogy	Frank Warren	908-756-1681	Please allow 10 to 12 weeks	for your ma	igazines	to start.
Home Automation	Frank Warren	908-756-1681	For renewals you must supply present subscription to insure			
	Operating Systems		newal. As an extra service I v about 4 months prior to their			
Windows 3.1	Ted Martin	732-636-1942	than 300 titles at excellent pr			

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2 Years	\$40				
3 Years	\$55				\$45
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	Other Local Computer Groups	
Princeton Macintosh User Group : 7:15 pm 2nd Tuesday, Jadwin Hall, A-10, Washington Rd, Princeton, (609) 252-1163, <i>www.pmug-nj.org</i>	Linux Users Group in Princeton: 7 pm, 2nd Wednesday, Lawrence Branch Mercer Library, Rt#1 & Darrah Lane, Lawrence NJ http://www.lugip.org	New York PC: 3rd Thurs, 7 pm, PS 41, 116 W 11th St. For info call hotline, (212) 533-NYPC, http://www.nypc.org
Computer Education Society of Philadelphia: Meetings & Workshops at Jem Electronics, 6622 Castor Ave, Philadelphia PA. <i>www.cesop.org/</i>	Brookdale Computer Users Group: 7 pm,3rd Friday, Brookdale Community College, Bldg MAN Rm 103, Lincroft NJ. (732)-739-9633. www.bcug.com	NJ Macintosh User Group: 8 pm, 3rd Tuesday, Allwood Branch Library, Lyall Rd, Clifton NJ. (201) 893-5274 http://www.njmug.org.
PC User Group of So. Jersey: 2nd Mon., 7 pm, Trinity Presb. Church, 499 Rt 70 E, Cherry Hill, NJ. L. Horn, (856) 983-5360 http://www.pcugsj.org	Hunterdon Computer Club: 8:30 am, 3rd Sat, Hunterdon Medical Center, Rt 31, Flemington NJ. <i>www.hunterdoncomputerclub.org</i> , (908) 995-4042.	NY Amateur Computer Group: 2nd Thurs, 7 pm, Rm 806 Silver Bldg, NYU, 32 Waverly Pl, NYC. http://www.nyacc.org
Morris Micro Computer Club: 7 pm 2nd Thurs., Morris County Library, Hanover Ave, Morristown NJ, (973) 267-0871. http://www.morrismicro.com	Central Jersey Computer Club : 8 pm, 4th Fri- day, Rm 74, Armstrong Hall, College of NJ. Rich Williams, (609) 466-0909.	NJ PC User Group: 2nd Thurs, Monroe Rm at Wyckoff Public Library, 7 pm. Maureen Shannon, (201) 853-7432, <i>www.njpcug.org</i>
Philadelphia Area Computer Society: 3rd Sat, 12 noon Main Meeting, groups 8 am-3 pm. Upper Moreland Middle School, Hatboro PA. (215) 764-6338. <i>www.pacsnet.org</i>	NJ Computer Club: 6:15 pm, 2nd Wednesday ex- cept Jul & Aug, North Branch Reformed Church, 203 Rt 28, Bridgewater NJ. <i>http://www.njcc.org</i>	Princeton PC Users Group: 2nd Monday, Lawrenceville Library, Alt Rt 1 & Darrah Lane, Lawrenceville, Paul Kurivchack (908) 218-0778, http://www.ppcug-nj.org

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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.



The Association of Personal Computer User Groups

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.

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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.

Member of

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.

February 2011

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.

Premiere Elements 8

Louise Maye Huddelston (editor (at) hal-pc.org), HAL-PC (www.hal-pc.org)

Premiere Elements 8 is the companion software to Photoshop Elements 8, — this is the video editor and "movie-maker" software. If you like to take videos or make slide shows with effects, music and more advanced direction, this is what you need. You can buy Premiere bundled with Elements or separately. This review is about Elements. Premiere 8 has serious problems that have been traced to conflicts with Realtek Audio drivers and Nvidia graphics driver installation software. Suggestion: download the free 30 day trial version to test compatibility with your PC.

I am having an issue with some of the rendering and converting to certain formats while I can render and upload to YouTube. The troubleshooting is a complex series of tests and definitely pushing my patience, as it will probably take me more than a few hours.

I found this software absolutely intuitive and even as a total novice to video production, I made several A/V productions and I was very happy. Not perfect, but I could to do some cool things with sound and transitions that were beyond my usual slideshows with Photoshop Elements. There is Instant Movies, to process a video clip for you with pre-packaged templates, based on one of several themes — a life-saver.

Auto Analysis is a new feature that takes in image content (including face recognition) and allows you to do Smart Tagging of various aspects, including video quality, date, subject and much more.

Help: As far as help goes, the tutorials are somewhat limited unless you pay for the Plus Membership. There is excellent help online and I had occasion to use it.

Remark: I have heard that some users have crashes, freezes, etc. I think this is not so much the program but the user's computer resources – mediocre operator, insufficient RAM and/or CPU speed.

I expected that I would be able burn a DVD in the AVCHD format and then play it on a Blu-Ray player. I discovered that Premier Elements 8 does not support burning AVCHD format DVDs! Most competitive software will burn AVCHD format DVDs. More successful results from Microsoft's Movie Maker Live, which is free.

Another cool technology from Adobe stable in Premiere 8 is "**Object Tracking**". You have to use it to believe it! You select a person/moving object in the video & drop a clip (rain, lightening, bird etc) on the object.

General: Contacting Adobe support is another exercise in patience. Send them an e-mail, wait 2-3 days for a response is canned, wait another 2-3 days for another response. If you're in any kind of hurry, forget it. Adobe support just isn't the quality it used to be. Bottom line, for the money Premiere is the best video editor I have tried.

The practical value of Premiere 8 is the incredibly rich feature set, the sophisticated, yet simple user interface, and the wealth of content, add-ons, and tutorials. Just put it in a sufficiently powerful engine!

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ACGNJ MEETINGS

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

Tuesday, February 1 7 P.M. - Board of Directors meeting. Friday, February 4 8 P.M. - Main Meeting, Paul Syers (paul.syers@acgnj.org). Monday, February 7 8 P.M. - Lunics, Andreas Meyer (lunics@acgnj.org) **Tuesday, February 8** 7:30 P.M. - Java, Mike Redlich (mike@redlich.net) 908-246-0410. Wednesday, February 9 7:30 P.M. -WebDev, (*webdev@acgnj.org*) Thursday, February 10 8 P.M. - Investing, Jim Cooper (jim@thecoopers.org). Friday, February 11 6 P.M. to 5 A.M.- NJ Gamers. Gregg McCarthy (greggmc@optonline.net), 732-721-6507. Break 8 to 10 P.M. Monday, February 14 8 P.M. - Layman's Forum, Matt Skoda (som359@aol.com), 908-359-8842.

Tuesday, February 15

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

Friday, February 18 8 P.M. - Window Pains, John Raff (*john@jraff.com*).

Monday, February 21 7 P.M. - Firefox Activity, David McRitchie (*firefox@acgnj.org*)

Thursday, February 24 8 P.M. - Hardware, Mike Reagan (*hardware@acgnj.org*)

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

Friday, March 4

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

Monday, March 7

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

Wednesday, March 9

7:30 P.M. - Mobile Devices, Brenda Bell (mobdevsig@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.