Amateur Computer Group of New Jersey NEWS

Dual-Boot Revisited, Part 1

Robert Hawes (r.d.hawes@hotmail.com), ACGNJ

In my previous article, I began a comprehensive examination of GParted (Gnome Partition Editor), as launched from a Linux-booting live CD. My standard of comparison was the floppy-booted DOS version of Partition Magic 8 (hereafter referred to as PM8). Last time, I used only specially created empty test partitions. This time, we'll still be using specially created test partitions; but they'll contain real-world data, from re-creations of some of the Linux/Windows XP dual-boot experiments that I originally performed more than a year and a half ago. For this article, I re-tested the same (now obsolete) releases of seven Linux distributions. In the original tests, five of them passed (one just barely), and two failed. This time, I didn't really care whether they worked right or not. I just wanted to examine the non-standard partitions that they created, so I could compare results obtained by PM8 and GParted. In my **next** article, I'll test the latest versions, to see if any got better.

As I write this, there have been two additional releases of GParted (just a week apart), so the current download is version 0.3.3-0. By the time you read this, there may have been several more. In any case, my tests were done using GParted LiveCD version 0.3.1-1 (hereafter referred to as GP31), so that's what I'm reporting here. When I wrote up my first dual-boot tests (for May and June, 2005 issues of ACGNJ NEWS), I **didn't** know about GParted. Then, it was about seven months old, was up to version 0.0.8, and **hadn't** yet made the Distrowatch Top 100. Now, it's number 37. This ranking is based on page hits, so it doesn't really say anything about actual use, but it's a good measure of open-source community interest in the project.

Last time, GP31 received a passing grade, but **neither** GP31 nor PM8 got an "A". Both turned up deficient in relatively mi-

nor areas; PM8 once, GP31 three times. (I won't repeat the details here, since they're included in my summation below). However, if GParted is going to replace Partition Magic as the partition manipulation utility that I depend on for personal and professional use, GP31 must to be shown to succeed in **major** areas where PM8 failed. That's why we're going back to the old dual-boot tests. Of the twenty-one distributions tested, seven produced at least one less-than-perfect (hereafter referred to as **bad**) partition that PM8 couldn't recognize. Three of the distributions that I counted as failures were extremely popular then, and are immensely popular now. I should emphasize that, at least in the initial "standalone" type of installation, **all** seven distributions booted and ran OK. It's just that the partitions they were running in did not measure up to Partition Magic's standard of perfection. To those of you who say; "As long as they ran OK, so what?" I advance the following analogy: A nuclear reactor built out of sub-standard materials will seem to be operating properly at first. Would you want one in your neighborhood?

Here's a list of the seven distributions, in **current** Distrowatch Top 100 order:

1. Ubuntu (then #2)
2. SUSE (now openSUSE, then #5)
3. Fedora Core (then #3)
6. PCLinuxOS (then #13)
13. Minislack (now Zenwalk, then #44)
29. PC-BSD (then not even #100)
97. Yoper (then #17)

Six have done well. It looks like the seventh is in real trouble. We'll start there, and then hop back up to the top of the list.

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ACGNJ News

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

Publisher

Associate Editor
Bill Farrell
(732) 572-3481
wfarr18124@aol.com

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E-Mail Addresses

Here are the e-mail addresses of ACGNJ Officers, Directors and SIG Leaders (and the Newsletter Editor). This list is also at (*http://www.acgnj.org/officers.html*).

Bruce Arnold	barnold@blast.net
Bill Brown	onlineauction@acgnj.org
Jim Cooper	jim@thecoopers.org
Barbara DeGroot	bdegroot@ptd.net
Mark Douches	pcproblems@pobox.com
Bill Farrell	wfarr18124@aol.com
Sol Libes	sol@libes.com
Malthi Masurekar	masureka@umdnj.edu
Gregg McCarthy	greggmc@optonline.net
David McRichie	dmcritchie@hotmail.com
Andreas Meyer	lunics@acgnj.org
Arnold Milstein	mrflark@yahoo.com
John Raff	john@jraff.com
Lela Rames	lrames@att.net
Mike Redlich	mike@redlich.net
Matt Skoda	som359@aol.com
Keith Sproul	ksproul@noc.rutgers.edu
Lenny Thomas	lennythomas@technologist.com
Scott Vincent	scottvin@optonline.net
Frank Warren	kb4cyc@webwarren.com
Evan Williams	nhpressgo@blast.net
Norm Wiss	cut.up@verizon.net

We finished Round One of the GP31/PM8 face-off last time, so now we begin Round Two.

The original 2005 dual-boot experiments recorded three rounds of tests: First, a "standalone" test in which each Linux distribution filled the entire 80 GB hard disk. Second, an "XP-in-front" test, where a 40 GB Windows XP bootable NTFS primary partition came first, then an 18 GB extended partition containing an 18 GB FAT32 logical drive (for common data storage), and finally 20 GB of unallocated free space. Third, an "XP-at-end" test, where the 20 GB of unallocated free space came first, then the 18 GB extended partition containing the 18 GB FAT32 logical drive, and the 40 GB Windows XP bootable NTFS primary partition came last. (Because we have a smaller hard disk now, the extended partition/logical drive combination will have to be reduced in size this time). Any and all of those previous tests which produced a bad partition will be repeated in **this** Round Two. As in 2005, please note that these tests don't take all that long to read about, but they actually took quite a few days to perform.

Round Two, Test One (Yoper):

Yoper (a.k.a. YOS) means **Y**our **Oper**ating System. This New Zealand based distribution recently completed transitioning from a mostly one-person shop to a multi-national project directed by a diverse development team. This probably explains their recent output slowdown, and thus their current ratings drop. A year and a half ago, I tested version 2.1. Their web site **still** lists 2.1 as their current stable version. However, they define "stable" in the same conservative way the Debian GNU/Linux project does: as utterly reliable. In other words, dull. All the flashy, fun stuff is considered **un**stable. After all, when you're on the cutting edge, you have to expect to bleed every once in a while.

Yoper version 2.1 was actually released in 2004. The only product they put out in 2005 was a "pre-release" version of Yoper Linux 2.2. Possibly due to their reorganization, they never officially did the final 2.2 release. In 2006, they began working on their Yoper Linux 3.0 Beta version, which looks to be a major re-design. From their developer web page, it seems to have been tweaked at least eight times so far. They announced a 645 MB 2.2 pre-release ISO CD image in 2005, and at least one 628 MB 3.0 Beta CD image in 2006. Unfortunately, there are no full install CD images currently available for download from their web site except for version 2.1 (which I already have). There's lots of stuff on their web site that an experienced beta tester could no doubt use to create any number of complete 3.0 hard disk installations, but that's **not** me. So, when we get to the Round Three tests, Yoper won't be appearing again (unless a new 3.0 CD image comes out).

Returning to Round Two; the Yoper 2.1 install CD does **not** provide any automatic partitioning options. For my 2005 standalone installation, I used the unintuitive manual utility from the CD to create a single Ext3 partition. PM8 got a partition table error when it tried to view that partition, so I used PM8 to create the partitions for the two (then successful) Yoper/Windows XP dual-boot installations. Thus, I only had

to re-do the standalone installation this time around. Previously, Yoper booted from the hard disk and ran just fine; but as I said before, I didn't really care if it worked or not this time. I just wanted to look at the newly created partition with PM8 and GP31.

Mysterious errors have this annoying habit of not repeating themselves in front of an audience, so I was a bit worried as I ran the install routine that everything would go smoothly this time; especially since (as I explained in more detail last time) I had to use a different "80" GB hard disk for these three new rounds of tests. (Note that neither the 2005 Maxtor hard disk nor the current Western Digital hard disk actually had a capacity of 80 **real** GB). So I was in the strange position of being relieved when I got the same error again. (I should have had more faith in screw-up-ism). Re-booted from its DOS floppy, PM8 saw a 76,316.6 MB yellow colored partition with a partition table error #108; otherwise unidentifiable as to type, just as in 2005. (Yellow is the color PM8 assigns to bad partitions. Error #108 means that the value recorded in the partition table for the end of a partition doesn't correspond to a valid cylinder boundary in that hard disk's physical and/or logical geometry. The creators of Partition Magic considered this to be such a serious condition that they designed it to do **absolutely nothing** further whenever it encountered this error). After re-booting from its Linux live CD, Gp31 saw a 74.53 GB Ext3 partition with **no** error flags. Did this mean that GP31 was better than PM8 because it correctly identified the type of partition, or worse because it didn't flag the partition table error?

As I watched GP31's operations progress during the Round One Shrink/Move/Grow tests (see the previous article for further details), a series of progress messages flashed on the screen. One said, in part; "for errors and (if possible) fix them". So I decided to see if GP31 could shrink the bad partition. I told GP31 to change the partition's size from 74.53 GB to 70.80 GB, leaving 3.72 GB unallocated, and it did. Then I re-booted to PM8, and PM8 saw a 72,504.3 MB deep purple Linux Ext3 partition, followed by unallocated space of 3,812.3 MB. Adjusting for the MB/GB shift, those are the right sizes, **and** that's the right color this time. Re-booting to GP31, I re-expanded the partition to fill the whole drive, then re-booted again into PM8 and found a deep purple 76,316.6 MB Linux Ext3 partition. That settled it. GP31 didn't identify the bad partition in a manner that I would have liked, but it **did** fix the error. Keeping "repeatable" in mind, I wiped the hard disk, re-installed Yoper 2.1 from scratch, and did everything else over again, with the exact same results. Clearly, GP31 had out-performed PM8 in Test One.

Round Two, Test Two (Ubuntu):

Ubuntu version 4.10 was actually released in late 2004. Versions 5.04 and 5.10 came out in 2005, and versions 6.06 and 6.10 came out in 2006. A trial development (Alpha) build of Ubuntu 7.04 was recently announced, but the final release isn't scheduled until well into 2007, so 6.10 is probably what we'll be looking at in Round Three.

In the 2005 tests, Ubuntu 4.10 got partition table errors in both the standalone installation and the XP-in-front installation. In

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addition, it messed up the XP part of that XP-in-front installation big time. It did so much damage that I didn't even bother trying the more delicate XP-at-end installation with Ubuntu back then. That meant I only had two installations to repeat for this test.

When I repeated the standalone installation, the gremlins finally got me. Oh, I got an error all right, but it wasn't the correct error, if you follow the logical absurdity. This time, PM8 got a partition table error #108. In 2005, it got error #110. Error #110 means that the partition table contains inconsistent size/sector information about the **entire** disk. This is a broader error than #108, and, indeed, one or more #108 errors might possibly be hiding under that #110 error. Partition Magic is designed to do absolutely nothing more if it encounters either one. Then **and** now, I got nothing further from PM8, so I looked to DOS FDISK. This time, FDISK reported two partitions on the Western Digital 80 GB hard disk I used now: 75,830 MB Non-DOS and 489 MB EXT DOS. It also reported a total disk space of 76,317 MB. In 2005, FDISK reported similar sized partitions for the Maxtor 80 GB hard disk I used then, but it reported a total disk space of only 13,655 MB. That inconsistent size information was no doubt part of the error #110. Clearly, Ubuntu liked the new WD hard disk better. Booted from the live CD, GP31 saw a 74.05 GB Ext3 primary partition and a 488.71 logical swap drive inside a 488.74 extended partition. After I used GP31 to shrink all three and expand them again, PM8 (re-booted from its floppy) read the whole disk just fine.

Thinking that maybe Ubuntu had something personal against Maxtor, I did another full standalone installation in my only other currently available Maxtor spare, a 20 GB hard disk. I got another partition table error #108 from PM8, and smaller but proportionally correct partitions from FDISK, as well as the correct total disk space. As on the 80 GB disk, shrinking and re-expanding everything fixed the #108 error. Except for the sizes, I got nothing different.

In order to set up the **exact** same bootable XP-in-front partition layout over and over again in 2005, I made a multi-partition Ghost backup image of the entire Maxtor 80 GB hard disk just before I did the first dual-boot installation. Being a data packrat, I saved a copy of it on DVD (just like I saved the Linux ISO CD downloads). Since this WD "80" GB hard disk is 2.35% smaller than the 2005 Maxtor "80" GB hard disk, Ghost wanted to shrink everything proportionally. However, I overrode Ghost and re-directed all the shrinkage to the extended partition (and the logical FAT32 drive inside it). I booted from XP once (just to make sure it worked), then installed Ubuntu in the 20002 MB unallocated space at the end of the hard disk. According to the "rules of partitioning", I could also have created a small primary swap partition in that unallocated space (it would have been number four, the last allowable partition), but I didn't do it in 2005, so I didn't do it now. When prompted by Ubuntu's install routine, I just created a single Ext3 primary using the built-in manual partitioning utility.

In 2005, Ubuntu booted just fine, but XP didn't. Then, Ubuntu wasn't the only failure, because Fedora Core crashed spectacularly part way through each of its dual-boot installations. However, Ubuntu **was** the only dual-boot installation that seemed to have been installed correctly, yet XP **wouldn't** boot. This time, both Ubuntu and XP booted correctly. Instead of the hoped-for partition table error #110, I got another error #108. DOS FDISK showed three partitions: 40,006 MB NTFS, 16,308 MB EXT DOS (with a same size FAT32 logical drive inside it), and 20,005 MB Non-DOS, for a total disk space of 76,317 MB. In 2005, FDISK saw the right size for each partition, but reported only 13,655 MB total hard disk space (as in the standalone installation back then).

Before, I was angry with Ubuntu because XP didn't boot. In fact, even after Ubuntu was removed in 2005, the XP installation couldn't be fixed, and the whole hard disk had to be completely erased. Now, I was in the weird position of being mad at Ubuntu because it did better this time. (I **really** wanted it to produce that #110 error again). One odd thing did happen. After I used GP31 to shrink and expand the Ext3 partition (the only one on the hard disk created by Ubuntu), PM8 still got the error #108, and still couldn't read the disk. I had to boot back into GP31 and shrink and expand the extended partition (and its logical FAT32 drive) before PM8 could read everything correctly. Ubuntu should **not** have affected this pre-existing extended partition when it was installed. Obviously, it did.

However, we were **not** testing Ubuntu this time; we were testing GP31. Even though we didn't get to see a new kind of error, GP31 out-did PM8 once again in Test Two.

Round Two, Test Three (SUSE):

SUSE has gone through some changes in recent years. Before version 9.0 (late 2003), it was spelled SuSE. After 9.0, it was bought by Novell, and version 9.1 (early 2004) was the first Novell release. The version I tested in 2005 (SUSE 9.2) was actually released in late 2004. Versions 9.3 and 10.0 came out in 2005, and versions 10.1 and 10.2 came out in 2006. The name was changed to openSUZE with the third Alpha version of 10.2. (They did **five** Alpha versions, two Beta versions and one rc (release candidate) version before doing the official "Distribution Release"). They got the new name at just about the same time that Novell made its infamous deal with the devil. (Oops! I mean its controversial software patent agreement with Microsoft). The official openSUZE 10.2 release came right at the end of 2006, so that's probably what we'll be looking at in Round Three.

SUSE 9.2 installs from a 3.13 GB DVD, so its three installations each took a **long** time. During the standalone installation, I spotted something I missed all three times in 2005, which explained all my previous problems. In small print, near the bottom of the screen, the word "reiser" appeared, just for a few seconds. When I ran PM8, it saw a 1,027.6 MB brown primary swap partition and a 75,289.0 MB yellow primary Ext2 partition, just as before. Brown is the correct color, but (as I said previously) yellow is the color PM8 uses to highlight errors. Now forewarned, I wasn't sur-

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prised to see a 1.00 GB primary swap partition and a 73.52 GB primary **reiserfs** partition when I ran GP31. In each installation, then **and** now, I thought I had selected an Ext2 partition. Obviously, either I was wrong, or SUSE consistently overrode my choice. Since PM8 only knows about Linux Ext2, Ext3 and Swap partitions, there's no wonder it was fooled. In fact, it's amazing that it got as close as it did. Repeats of the XP-in-front and XP-at-end tests yielded similar results. So there really wasn't anything wrong with the SUSE-created partitions. The deficiency was in PM8. Therefore, GP31 - **definitely** won again in Test Three.

Round Two, Test Four (Fedora Core):

Fedora Core 3 was actually released in late 2004. Version 4 came out in mid-2005, and versions 5 and 6 came out in 2006. Fedora Core 7 is not expected much before mid-2007, so FC6 is probably what we'll be looking at in Round Three.

As in 2005, the FC3 standalone test installation went without incident. The XP-in-front dual-boot test went pretty much the same, too. I hit a whole bunch of bugs (which actually came up in cute little pop-up windows labeled "Bug"), and the installation eventually crashed due to an unhandled exception. This time, the XP-at-end dual-boot test failed less spectacularly, but quicker. As soon as the graphical part of the installer started, it hit two bugs. Then, it dropped back to the command line, displayed an "install exited abnormally" message, and finally another message telling me to reboot. It never even **tried** to set up a partition. It looks as if FC3 liked this hard disk even less than it liked the Maxtor disk.

As in 2005, PM8 reported a 101.9 MB Ext3 primary partition and a yellow 76,214.6 MB "Type 8E (Hex)" primary partition for the standalone test, and all previously existing partitions plus a single new 20,002.8 MB "Type 8E (Hex)" primary partition (also yellow) for the first dual-boot test. (Of course, the second dual-boot test got nothing this time). For the standalone test, GP31 reported a 101.94 MB Ext3 primary partition with a boot flag, and a 74.43 GB **unknown** primary partition with an lvm flag. For the dual-boot test, GP31 identified the new 19.53 GB primary partition as unknown with an lvm flag, too. This time, I couldn't use my shrink/expand trick, because GP31 won't let you even **try** to move or resize an unknown partition.

Since GP31's help system had not yet been implemented, I looked up "lvm" in Wikipedia, the free encyclopedia (*www.wikipedia.com*), and found that it means **l**ogical **v**olume **m**anagement; a method of allocating space on mass storage devices that is more flexible than conventional partitioning schemes. Lvm has been implemented in the Linux kernel since 1998, and the installer for Fedora Core is reported to be lvm-aware. Apparently, it installs it whether you want it or not. That flag should mean that GP31 is lvm-aware too, but I couldn't find any trace of "lvm" on the GParted web site, so I couldn't tell if those partitions were marked unknown because of lvm, or for some other reason. Both PM8 and GP31 let me down this time, so I needed a third opinion.

I remembered that the partition utility bundled with Minislack 1.0.1 displayed a long list of partition "type" codes (as it turned out, **ninety-one** total). Just to view that list, I booted the Minislack CD, which (conveniently) was designed to always wait at the command line for further orders. (It expects "setup", but you can enter any valid command that you want). When I launched CFDISK (version 2.12), I got an unexpected bonus. It read the hard disk, identifying hda1 as a 106.93 MB Linux Ext3 primary boot partition and hda2 as a 79,916.83 MB Linux LVM primary partition. Checking the "type" list, I found that a Linux LVM partition is, in fact, identified by the hexadecimal code "8E". So PM8 got it partly right and GP31 got it partly right, but CFDISK got it **all** right. Unfortunately, CFDISK isn't eligible for this competition (having previously created partitions that gave PM8 #108 errors), so **nobody** won Test Four.

Round Two, Test Five (PCLinuxOS):

PCLinuxOS preview version 0.81a was released in early 2005, followed by versions 0.9, 0.91 and 0.92. Version 0.93 was released in 2006, followed by **three** releases of version 0.93a (on different size CDs): "MiniMe" (299 MB), "Junior" (484 MB), and "Big Daddy" (685 MB). Chances are we'll be testing one of those last in Round Three.

PCLinuxOS 0.81a has no automatic partitioning options. As in 2005, I used its fairly intuitive "Disk Drake" utility to manually create one Swap and two Ext3 partitions for the standalone installation (accepting the default types and sizes provided). Since I used PM8 to create the partitions for both 2005 dual-boot tests, I only had to repeat the standalone test now. As before, PM8 got a partition table error #108 and couldn't view the drive. GP31 saw a 799.77 MB primary swap partition, a 4.69 GB extended partition containing two Ext3 logical drives (799.77 MB and 3.91 GB), plus 69.06 GB of unallocated space. Since I had lots of room to spare, I decided to have GP31 expand everything this time. Afterwards, PM8 could see an 894.21 MB primary swap partition, an 11,083.8 MB extended partition containing two 5,541.9 MB Ext3 logical drives, and 64,338.5 MB of unallocated space. So GP31 fixed the problems, and thus won yet again in Test Five.

Round Two, Test Six (Minislack):

Minislack Linux version 1.0.1 was released in 2005, followed by versions 1.1, 1.2, 1.3, 2.0 and 2.0.1 (with version 1.2, its name was changed to Zenwalk). Versions 2.1, 2.2, 2.4, 2.6, 2.6.1, 2.8, 3.0 and 4.0 were released in 2006. The last three releases came out in very consistent two month intervals. Since Zenwalk 4.0 is now more than a month old, a newer version just might be released in time for Round Three.

Minislack 1.0.1 also has no automatic partitioning. For the standalone installation (as in 2005), I used its CFDISK partitioning tool to create the swap partition and single Ext2 partition that it required. Since I used PM8 to create the partitions for both of Minislack's dual-boot tests in 2005, I only had to repeat the standalone test now. As expected, PM8 got a partition table error #108 and couldn't view the drive. GP31

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saw a 953.83 MB primary swap partition, and a 73.60 GB primary Ext2 partition. With no room to spare this time, I had GP31 shrink the second partition so that it could expand the first. Afterwards, PM8 could see a 1,466.8 MB primary swap partition and a 74,849.7 MB primary EXT2 partition. So GP31 racked up another win in Test Six.

Round Two, Test Seven (PC-BSD):

PC-BSD 0.6 was my freshest download (barely a few days old) when I started the 2005 tests. It was released just **three** days after version 0.5a, and version 0.7 was released only two and a half weeks after 0.6. Before 2005 was over, versions 0.7.5, 0.7.8, 0.8, 0.8.1, 0.8.2 and 0.8.3 would be released. Versions 1.0, 1.1, 1.11 and 1.2 were released in 2006. Version 1.3 is due any minute, so it might be what we test next time in Round Three.

As a pre-version-one release, PC-BSD 0.6 was considered to be beta quality software, but it performed just fine in all three of my 2005 tests. My only quarrel with it was that PM8 got a partition table error #108 all three times. Even then, since BSD is a Unix-like operating system but is **not** Linux, I thought it likely that it created a different type of partition. Quoting my then-self, I said; "This time I think the partitions were right and PM8 was wrong." In these new tests, I proved that statement, but **not** with GP31.

Just like before, PC-BSD 0.6 only created a single partition for each of my three new installations. As in 2005, PM8 got a partition table error #108 (and thus couldn't see **any** details of the hard disk) for each one. For the standalone installation, GP31 saw a single 74.53 GB partition, of type **unknown**. In both dual-boot installations, GP31 saw the XP (39.07 GB NTFS) and extended (with15.93 GB FAT32 logical drive) partitions correctly, but the new partition created by PC-BSD was just a 19.53 GB unknown. Once again, I had to turn to my newly discovered "third opinion": CFDISK (version 2.12) on the Minislack 1.0.1 CD.

For the standalone test, CFDISK read the hard disk and identified hda1 as an 80,026.37 MB FreeBSD primary boot partition. It identified the smaller new partition made by each dual-boot test the same way. For completeness, I checked the CFDISK type list and found that a FreeBSD partition is hexadecimal code "A5". This time, both PM8 and GP31 failed to identify the new partitions. CFDISK succeeded, but it still isn't eligible for this competition. So, since it could at least **see** the individual partitions, GP31 barely squeaked by to win Test Seven.

Summation of Rounds One and Two:

In Round One, I discovered a new deficiency in PM8, and three deficiencies in GP31: PM8 can manipulate all NTFS partitions, but (at least when booted from DOS or Windows 95/98) it can **only** create NTFS version 3.0 partitions (the kind used by Windows 2000). GP31 can't recognize or manipulate FAT12 partitions. GP31 can't recognize or manipulate unformatted partitions (even those that GP31 itself created).

GP31 can **only** create or manipulate NTFS version 3.1 partitions (the kind used by Windows XP). It can identify a version 3.0 partition as NTFS, but it will get errors if it tries to manipulate one. This third deficiency in GP31 is the only really serious one from Round One. There are a lot of Windows 2000 installations still out there.

Round two highlighted a known deficiency in PM8, and turned up three new ones: PM8 can't do **anything** if it gets a partition table error #108. PM8 incorrectly identifies reiserfs partition as yellow Ext2 partitions. PM8 only partially correctly identifies Linux LVM partitions as yellow "Type 8E (Hex)" partitions. PM8 will get a partition table error #108 if it tries to identify a FreeBSD partition.

Round two turned up one minor and two major new GP31 deficiencies: GP31 displays partitions containing #108 errors as if they were good (but it **most definitely** knows how to fix them). GP31 identifies Linux LVM partitions as unknown (but at least it displays an "lvm" flag). GP31 identifies FreeBSD partitions as unknown.

Conclusions:

I was frustrated that I wasn't able to reproduce the "partition table error #110" conditions which Ubuntu gave me in 2005, but since those errors confounded PM8 completely, I can at least be assured that GP31 couldn't possibly have done any worse. So the omission of this particular test can't be counted against GP31. It might have won, or it might have tied, but it **couldn't** have lost.

Except for FAT12 partitions (which I may be the only person in the world still using) and NTFS partitions (which I avoid like the plague as much as possible), GP31 is the clear winner. It's undoubtedly as good or better than PM8 in most areas, and (while PM8 will probably never be upgraded again) GP31 can only get even better in the future.

The GParted live CD is **definitely** included in my computer toolkit from now on.

This round of tests also turned up an unexpected bonus: CFDISK booted from a CD. While I wouldn't trust it to create any new partitions (at least until I get an upgraded version that doesn't give PM8 #108 errors), CFDISK's purported ability to identify 91 different file systems could certainly come in handy. Those of you who read my two "Paranoid Computing" articles (in the May 2005 and April 2006 issues of the ACGNJ NEWS) know that I have my own dream version of Linux, which would require a new piece of hardware and is thus beyond my current capabilities. However, my experience here suggests a much simpler project that should be within my immediate reach; a boot CD containing my favorite Linux utilities (even though I've only got one at the moment). Or maybe I could create a dual-boot CD, containing my favorite DOS utilities as well. Maybe I could even post it on distrowatch. Hmm, "Bob Linux", I **like** the sound of that name. This could be the start of something big.

I'll come back down to earth and write up the Round Three test results next time. See you then. ▣

Changing Hard Drives

Richard Kennon (drtrdguy@volcano.net), Amador Computer Users Group (http://www.acug.net)

The time came when the bearings in my hard drive began to sing a little after running all day. So, being the wise person I am, I decided to replace it as a preventative measure. It turns out a job like that requires planning. I am not a planning person. I don't do planning. I am more spontaneous. That is a euphemism for "lazy." My grandmother used to tell me, "Lazy people work the hardest." Oh, how true.

First, I thought I was covered because I had a backup by Acronis True Image 8.0 — wrong! I had one main hard drive with one partition, "C:" and I had never dreamed of running with more than one partition. So, I bought a second hard drive to use for the backups. After the new main hard drive was installed by a professional, I brought it home and tried to restore the backup. It was then I learned you can't restore an Acronis backup to the active partition. When I tried, it wiped out everything. Back to the Pro for a new XP reload with two partitions on the new hard drive. It has gigabytes to spare. The two partitions were named "C:" and "F:" for whatever reason. The spare hard drive was renamed "D:" and the CD drive was renamed "E:". Go figure. I was able to restore my old C: drive contents to the new F: drive. So now I have everything on the new F: drive but my machine boots up on the new C: drive and I can't figure out how to utilize the new F: drive. Of course, real men don't ask directions, so I decided to slug it out on my own. I thought I saw a bright side to this as the old C: drive was cluttered with years' accumulation of garbage. I would start afresh!

The first thing to do is get back on the air, the Internet. So, I went to Outlook Express. First I had to call the ISP to find out how to reconnect. A nice lady walked me through the process, no sweat. Then I discovered I had no address book. Of course, it is on the F: drive. How to find it? After some searching on the web, I found out the address book is in files named, *.wab. Cinch! Just search the F: drive for *.wab files. Not there. Then I noticed the fine print that says it does not find hidden files. A click on "Advanced" led me to a box that allows finding hidden files. It turns out the hidden files are in a hidden folder so it was doubly challenging. It was relatively easy to copy these files and paste them in the same hidden folder in the new C: drive. Whaddayu know? It worked. The message files are empty but I can't think of a good reason to try to repopulate them.

Now, if I am on the air, it seems the next urgent step is to reestablish some protection. But, first, I downloaded SP-2 and a host of other Microsoft updates. I think I saw a note flash across the screen that said they sent 60 updates. Then came Microsoft Windows Defender (beta). However, apparently all it does is look for spyware. I am not clear on this so, since I subscribe to McAfee firewall and virus protection, I went to their site and downloaded all that. Now, I feel better.

I did do one bit of smart planning Ta-Da! I had simply copied all my Documents and Settings files and sub folders to the backup drive. Copying all this back to the new C: drive was a cinch and it saved all my valuable writings and pictures. Now if I could just find that great picture of Aunt Edith from two Christmases ago. If you ever transfer to a new computer or hard drive, do lots of this copying. Disk space is cheap and copying it back is so easy.

Finding the original software disks that were loaded years ago was not so easy. They were tucked here and there in many different convenient places. That is, convenient until you want to find them. I was mostly lucky and had to purchase a newer version of only one program. You see, I am neither a planner nor an organizer. You wonder how I have survived these many years? I am very lucky.

One other aspect of "afresh" I decided to try was going to Open Office instead of Microsoft Office. This is another ungood idea. Doctors warn against experiencing dual traumas like retiring and immediately moving to a retirement community. Adding this stress to the disk change stress was probably not a good idea. Besides, Outlook Express won't use the Open Office dictionary. I did find the old MS Office disk but I decided to try this as an experiment. So far so good but there are a number of features I don't like because I am used to the other features. I will keep with it for a while

In conclusion (this is what our pastor says ten minutes before the end of his sermon), you will be faced with changing computers and/or hard drives. As the weatherman and some politicians are fond of saying, "It is not if but when." I do not recommend my approach. I have spent many hours on it. Plan, plan, plan. Talk to some knowledgeable people and perhaps even search the Internet for help. Good luck.

PS. I sent a copy of this to Gene Barlow who sold me the Acronis program and this is his reply:

> "Acronis True Image has a cloning function that will copy your entire hard drive to the replacement hard drive in one easy step. When you are done, you simply place the new drive in the place of your old c: drive and it becomes your new c: drive. This feature of True Image would have had your old hard drive replaced in just a few minutes and with one easy step. Next time you need to do something with hard drives, send me a note and I'll try to help you do it quickly and with the least work possible."

Maybe the next time I will ask before! But, that would have transferred all the garbage, as well.

There is no restriction against any non-profit group using this article as long as it is kept in context with proper credit given the author. The Editorial Committee of the Association of Personal Computer User Groups (APCUG), an international organization of which this group is a member, brings this article to you.

From The DealsGuy

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

It was with sadness that I read the final issue of Blue Chip News, newsletter of the Saginaw Valley Computer Organization *http://www.svca.org*. Describing the end must have been tough for their long time editor Lynn Kauer to write since he has long been one of the faithful for the benefit of the members. I thought I even detected a tearstain on that page. The final bell rang when four long time volunteers moved away and nobody would step forward to replace any of them, and the same problem for some other long time volunteers who wanted to relax for a while. With too few members willing to help with the work, it became necessary to determine the group's future, and only 13 members bothered to show up for the final meeting. I feel that the no-shows were actually the real losers. Two SIGs will continue to run independently. I hope the members who couldn't find the time realize the error of their ways and revive the group. I had occasion to visit that group several years ago and it was a fun night. My meeting badge still hangs in my office; my name written on a 5¼" floppy.

This is not the first user group to shut down recently for the same reason, and the abundance of free-riders assures that it won't be the last. Some groups are still doing well even though they also have some long time workers who cannot get replaced. I have long heard the refrain about the Internet replacing user groups because it has every thing a computer user needs to know, but I don't buy that statement. Nobody from the Internet is going to stand in front of you trying to explain something so you can better understand it, and answer your questions in the process. Nor will anybody from the Internet stop by and help fix your problem computer for free. Yes, there are some people who could read the answers on a Web page and know exactly what to do, but I am not one of them and many other people are not that capable either without friends to help. Most important though, the friendship and camaraderie of a user group is irreplaceable.

I know my opinion will be mostly ignored because freeloader members are what they are, but that type of member should think about all the answers and information they get at a meeting or presentation, and consider giving back instead of just taking. Try it, you might enjoy it, and there are lots of ways to give back.

Be Aware!

I now use mostly new product announcements and have not tried any of them. These are their own words, but I have severely edited them to fit, and reworded a few places, so do check for better information on their Web sites. Hopefully you already knew that. Check for policy statements.

A New Dictionary For Your Pocket PC

LingvoSoft has released the new LingvoSoft Dictionary 2007 for Pocket PC. The latest dictionaries are available to provide instant bi-directional translations between English and French, German, Italian, Polish, Spanish, Turkish and Russian, and are faster than before. The 2007 dictionaries are fully compatible with the most popular MS Office application letting users translate any word found in an Internet Explorer webpage. Speaking versions speak their translations aloud using the most sophisticated TTS (text-to-speech) technology available. A synonym search and full usage information for every translation that includes part of the speech, gender, comment, transcription and sentence examples rounds out the improvements.

User group members get a 25% discount on any LingvoSoft software title at *http://www.lingvosoft.com*.. Simply enter certificate code "MY8UZPF7M4" in the 'Add Gift' field of the shopping cart and click the "Add Gift" button. (Deal good until March 2007)

Find out more about the new and improved LingvoSoft Dictionary 2007 for Pocket PC here:

http://www.lingvosoft.com/info/software/Pocket-2007/?refid=16179

LingvoSoft Dictionary 2007 is core component of a complete language solution called LingvoSoft Suite *http://www.lingvosoft.com/info/software/Suites/?refid=16179*.

http://www.lingvosoft.com/?refid=16179

A New CD/DVD Label Maker

Acoustica Inc. has released Acoustica CD/DVD Label Maker Version 3.x, which now supports LightScribe Direct Disk Technology™. LightScribe Direct Disc Labeling is a new technology that offers users a simple, no-hassle way to burn professional, silkscreen-quality labels on CDs and DVDs. Using the same laser that burns data in their disc drives, users burn their data as always, flip the disc over, reinsert it into the drive and burn a precise, iridescent label with their desired text and graphics using the same laser that burns the data. No printer, permanent marker or adhesive labeling is required.

Acoustica CD Label Maker can automatically import track information directly from iTunes play lists, or from dozens of play list file types, can import track information from CD-Text, FreeDB, and MusicBrainz, and can directly read track/file information from MP3 or data CDs and DVDs. Its auto-track formatting allows you to format your tracks layout in a variety of styles, including circular and spiral text, with a single click. You can also hide and show specific tracks fields (title, artist, genre, etc.) or hide/show tracks listings altogether with a single button click or menu selection. It prints on over 500 stock sticker labels and CD jewel case templates. Acoustica CD/DVD Label Maker also supports direct-to-CD printing on more than 70 printers.

A free 7-day trial is available for download at *acoustica.com/cd-label-maker/download.htm* System Requirements: PentiumII-400, Win 98/NT/2K/ME/XP, 128 MB Ram, Printer. Requires less than 250 MB of hard disk space.

LightScribe Requirements: LightScribe-enabled drives and LightScribe media

Pricing: US Price $21.95, but computer club member receive a 20% discount when they enter COMPUTERCLUB in the coupon box. All versions include lifetime support.

continued

Tour the World with World Wind

Rob Rice (articles@isp.com), Computer Club of Oklahoma City (http://www.ccokc.org/)

Lots of folks are familiar with Google Earth the free downloadable virtual globe program. Yet, I am finding that many have never heard of NASA'S World Wind. World Wind is developed at the NASA Ames Research Center and is an open-source competitor to Google Earth. While it has been around for several years, it is a fascinating piece of software that can keep you glued to your monitor for hours on end.

Like Google Earth, this free program maps the earth by superimposing images obtained from satellite imagery and United States Geological Survey aerial photography over a 3D globe. Once the 60 megabyte program has been downloaded and installed, you are treated to a true-color image of the entire Earth from space upon opening the program. The globe can be manipulated with your mouse. Use the mouse wheel to zoom from satellite altitude down to any place on earth. Hold the left

Continued

DealsGuy, *continued*

Remote Administration and Monitoring Software

V.A.P. Software has released version 6.0 of Net Control 2, remote administration and monitoring software for classroom, office, and home networks. Starting at only $45 for the Home Edition, Net Control 2 enables you to control networking machines remotely using the keyboard and mouse, manage files, send messages (text, graphics, sound), and share any desktop with users. Version 6.0 introduces Desktop Recorder. It lets users record a sequence of actions taking place on the desktop and adds voice instructions to the record.

Users can transfer large files (above 1MB) much faster because version 6.0 has a special mode of transferring files. The "Remote Desktop" feature is extended in the "View One Control All" mode so you can view screenshots of all remote machines. Click on a screenshot and it will activate a Remote Desktop session for the selected machine. When "Autoconnect at startup" mode is selected, Net Control 2 Client opens the connection automatically at startup. Check our site at *http://www.netcontrol2.com/nc2.html* to learn about other new and enhanced features.

Net Control 2 v.6.0 runs under all versions of Windows (95-2003) and costs $99 (US) for a Standard Edition license that allows the installation of administrator components on 1 machine and user components on up to 10 user machines. User group members get a 20% discount on Net Control 2 by using the coupon code: VADI-63DT. For other types of licenses, please refer to *http://www.netcontrol2.com/fulllist.html*. Licensed customers are entitled to premium technical support by email. Further information is available from *www.netcontrol2.com*. Direct download link: *www.netcontrol2.com/getfile.php?id=232600.exe* E-mail: netcontrol2.com.

Protect Your Images With Your Own Watermark

Watermark Factory announces version 2.53 of image protection tool, packed with new effects and image processing technologies. This update allows you to use a Vista-compatible product version as soon as you migrate to the new operating system. New features allow working with EXIF and IPTC information. Watermark Factory v2.53 helps you create a visible protection without destroying the overall aesthetic impression of an image. You can create a smart-looking text or a logo watermark and integrate it into your image. Once your watermark is created and saved, easily retrieve it and use it again with just a couple of mouse clicks.

Watermark Factory allows adjusting opacity and offers shadow, embossing and engraving effects. As for a logo, you can emboss the image and make it opaque to different degrees. The anti-aliasing technology implemented in the program will render your watermark crystal-clear quality. Three modes of positioning allow the user to tune the watermark placement to the image size and margins, and set a desired tilt angle.

Watermark Factory v2.53 runs under Windows 95/98/XP/NT/2003/VISTA platforms and costs $69 USD for a single user license and $149 USD for a business license. User group members receive a 30% discount on the new version of Watermark Factory v2.53 by using the discount coupon SBE-KX6U. Free technical support and minor upgrades are extended to all registered users. A free trial version is available for download at *www.watermarkfactory.com/download/WatermarkFactory_setup.EXE*.

Product page link: *http://www.watermarkfactory.com*

Voice Mail: 1 (206) 984-1843

Fax: 1 (206) 984-2378

Postal address: Pacific Business Centre: Sibental, P.O. Box 34069 #381 Seattle, WA 98124-1069, USA

That's it for this month. Meet me here again next month if your editor permits. I'll have other new announcements on my Web site page. This column is written to make user group members aware of special offers or freebies I have found or arranged, and my comments should not be interpreted to encourage, or discourage, the purchase of any products, no matter how enthused I might sound. Visit my Web site at http://www.dealsguy.com.

button and move the mouse to rotate the globe and the right button to tilt it.

The Landsat satellite imagery and Shuttle Radar Topography Mission data allows one to experience Earth terrain in 3D, just as if you were flying low over the landscape. Visit any place in the world.

But as they say on TV, "Wait! There's more!" World Wind also comes with virtual globes of the Moon, Venus, Jupiter, Mars and the Sloan Digital Sky Server, which allows you to explore outer space.

A variety of views are available. Below is a summary from the World Wind website:

Blue Marble: World Wind has a full copy of the Blue Marble, a spectacular true-color image of the entire Earth as seen on NASA's Earth Observatory: the Blue Marble. Put together from data of a variety of satellites such as MODIS and Terra, the Blue Marble can be seen in all its glory at 1 km per pixel resolution.

Land Sat 7: Using World Wind, you can continue to zoom past Blue Marble and reveal the extremely detailed seamless mosaic of LandSat 7 data. LandSat 7 is a collection of images from 1999-2003 at an impressive 15 m per pixel resolution. It includes other color bands such as the infrared spectrum. Users will be able browse these different sets as they become available. Any changes and updates are automatically inherited by World Wind.
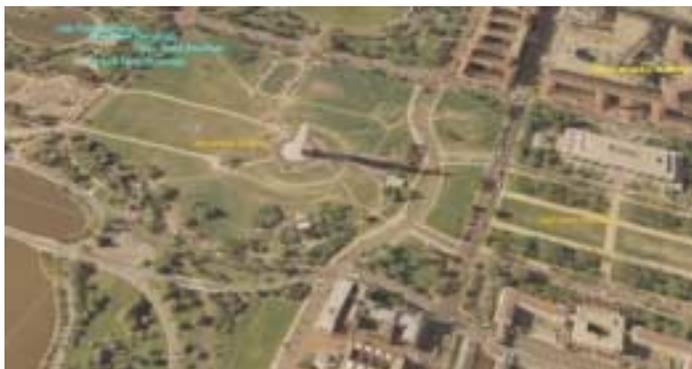
LandSat 7's resolution makes it possible to see your own city, neighborhood, or landmarks in your vicinity. Seeing the whole globe like this puts the world in context with scientifically accurate data. The complete LandSat 7 data set is too large to fit on a single machine so World Wind only downloads what you see and stores a compressed copy on your computer for later viewing.

SRTM

Combining LandS at 7 imagery with Shuttle Radar Topography Mission (SRTM) Data, World Wind can display a dramatic view of the Earth at eye level. Users will literally be able to fly across the world in any direction.

In addition, World Wind can exaggerate these views so a user can easily pick out the details.

NASA SVS

Goddard Space Flight Center (GSFC) has produced a set of visually intense animations that demonstrate a variety of subjects such as hurricane dynamics and seasonal changes across the globe.

World Wind can take these animations and play them directly on the world. Anyone can immediately grasp where the event is taking place as World Wind rotates automatically into view.

MODIS

Moderate Resolution Imaging Spectroradiometer or MODIS produces a set of time relevant data that's updated every day. MODIS catalogs fires, floods, dust, smoke, storms and even volcanic activity.

World Wind produces an easily customized view of this information and marks them directly on the globe. When one of these color coded markers are clicked, it downloads the full image and displays them.

MODIS images can download publication quality material at a resolution of 250 m per pixel. A new fresh set of images can be downloaded every day.

World Wind also has a "tour mode" to automatically skim through any number of samples.

GLOBE

World Wind is capable of browsing through and displaying GLOBE data based on any time the user wants. For example, a

Continued
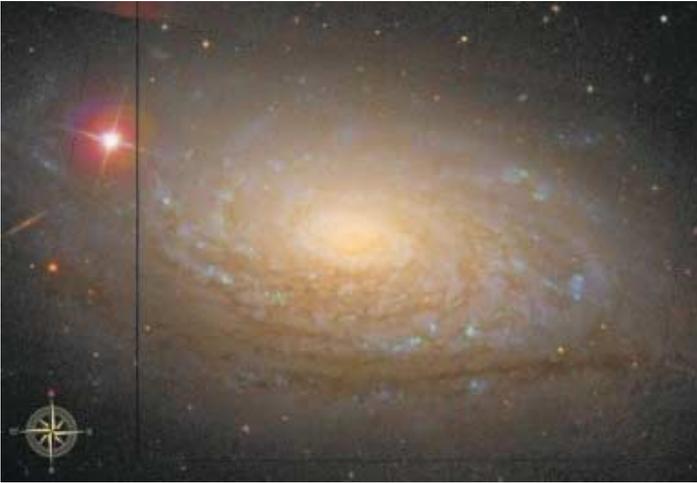
user can download today's (or any previous day's) temperature across the world.

You can view rainfall, barometric pressure, cloud cover, or even the student GLOBE samples themselves. Each sample comes with a temperature scale

Country & (USA) State Borders

World Wind has a complete set of borders that traces every country and state. As you zoom into the world, the boundaries become more precise

You can observe where mountain ridges and rivers have formed the political boundaries of today.

Place names

World Wind has a full catalog of countries, capitals, counties, cities, towns, and even historical references. The names update dynamically, by increasing in number as the user zooms in. This prevents too many names from cluttering up the screen. It's likely that you'll find your own town no matter how big or small it is in World Wind.

Visual Tools

World Wind comes with a variety of visual guides that help the user's experience such as latitude and longitude lines, as well as extremely precise coordinate data.

These helpers can be toggled on or off any time and are viewable with any of World Wind's other features turned on.

Landmark Set

World Wind has the capability to display actual 3d models of landmarks on the Earth. This helps to see the world in context to places a user may have been to. Those landmarks that do not have 3D models for it yet have place markers similar to how MODIS displays places of interest.

World Wind is an incredible and highly addictive program that anyone with a high speed Internet connection should not be without. Give NASA'S World Wind a try and you won't be sorry you did!

Minimum system requirements:

    Windows 2000, XP, or 2003

    3D graphics card

    Internet connection

    Sorry, no support for Linux or Macintosh yet

    Microsoft .NET 1.1

    Microsoft DirectX 9.0c

    700 MHz or higher CPU

    128 MB RAM

    1 GB disk space (World Wind's cache size is 2 GB by default; you must reduce the size of your cache)

With the minimum configuration, performance and functionality may be less than expected.

Recommended configuration

    1.4 GHz or higher CPU

    256 MB of RAM

    DSL/cable connection or faster

    3 GB of disk space

World Wind Home Page: *http://worldwind.arc.nasa.gov/index.html*

World Wind Wiki, "A knowledge base about NASA's World Wind that anyone can edit":
http://www.worldwindcentral.com/wiki/Main_Page.

World Wind Forums: *http://forum.worldwindcentral.com/*

Video Card Compatibility List
http://www.worldwindcentral.com/wiki/Video_Card_Compatibility

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Laptop Desk — Accessory Provides Comfort & Ease of Use

Gabe Goldberg (gabe@gabegold.com), APCUG Advisor; Capital PC User Group (http://www.compukiss.com)

It's the rare simple device that hitches a ride on multiple trends simultaneously. How simple? Three moving parts. Which trends? First, folks downsizing living quarters as their nests empty; second, increased use of laptop PCs as primary, only, or secondary computers; and third, laptop computers operating hotter as they become ever more powerful. The device? The Laptop Desk from LapWorks.

It's an elegantly simple laptop stand. My wife calls it, "a seemingly insignificant piece of plastic, which I love". Before she had it, she was constantly trying to find things to put under her computer to prop it up. She tried books of varying sizes, pieces of wood, parts from other office equipment, TV remotes, whatever came into view. None of them worked and the laptop's utter flatness drove her crazy.

Now, she takes it everywhere she takes her laptop. "It's great!", she says. She props it up at varying angles, depending where she's working...on her lap, a table, a desk, wherever she moves, and she moves around a lot. Folding flat and sliding into the laptop case, it's not in the way when she's on the move. It allows customizing the keyboard angle for easy typing. And because of the elevation, our cats no longer walk across or lie down on laptop keyboards.

The stand consists mostly of two sturdy hinged plastic pieces with raised rubber pieces that hold the laptop in place. A smaller third piece fits into slots providing five different elevation options.

The hinged pieces, rippled in design with raised rubber pieces, hold the laptop in place and allow air to circulate underneath it. So the computer's heat is well-vented, avoiding discomfort from resting the laptop on your lap or major damage to the computer.

Three models of The Laptop Desk are available: the UltraLite, for newer/lighter laptop computers; the Laptop Desk 2.0, for heavier PCs; and the Laptop Desk 1.0, a simpler version not providing elevation, intended for human-lap use only.

Costing less than $30, the Laptop Desk is a handy addition to portable PC computing. And unlike most computer accessories, it needs no assembly or installation, doesn't require reading instructions, and includes no software that will become obsolete.

Manufacturer: LapWorks

http://www.laptopdesk.net

Retail: About $30

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Safeguarding Your Data

Mindi McDowell, U.S. Department of Homeland Security, US Computer Emergency Readiness Team

When there are multiple people using your computer and/or you store sensitive personal and work-related data on your computer, it is especially important to take extra security precautions.

Why isn't "more" better?

Maybe there is an extra software program included with a program you bought. Or perhaps you found a free download online. You may be tempted to install the programs just because you can, or because you think you might use them later. However, even if the source and the software are legitimate, there may be hidden risks. And if other people use your computer, there are additional risks.

These risks become especially important if you use your computer to manage your personal finances (banking, taxes, online bill payment, etc.), store sensitive personal data, or perform work-related activities away from the office. However, there are steps you can take to protect yourself.

How can you protect both your personal and work-related data?

Use and maintain anti-virus software and a firewall: Protect yourself against viruses and Trojan horses that may steal or modify the data on your own computer and leave you vulnerable by using anti-virus software and a firewall (see Understanding Anti-Virus Software and Understanding Firewalls for more information: *us-cert.gov/cas/tips/ST04-005.html*; *us-cert.gov/cas/tips/ST04-004.html*. Make sure to keep your virus definitions up to date.

Regularly scan your computer for spyware: Spyware or adware hidden in software programs may affect the performance of your computer and give attackers access to your data. Use a legitimate anti-spyware program to scan your computer and remove any of these files (see Recognizing and Avoiding Spyware for more information: *http://www.us-cert.gov/cas/tips/ST04-016.html*).

Keep software up to date: Install software patches so that attackers cannot take advantage of known problems or vulnerabilities (see Understanding Patches for more information: *http://www.us-cert.gov/cas/tips/ST04-006.html*). Many operating systems offer automatic updates. If this option is available, you should turn it on.

Evaluate your software's settings: The default settings of most software enable all available functionality. However, attackers may be able to take advantage of this functionality to access your computer. It is especially important to check the settings for software that connects to the internet (browsers, email clients, etc.). Apply the highest level of security available that still gives you the functionality you need.

Avoid unused software programs: Do not clutter your computer with unnecessary software programs. If you have programs on your computer that you do not use, consider uninstalling them.

Consider creating separate user accounts: If there are other people using your computer, you may be worried that someone else may accidentally access, modify, and/or delete your files. Most operating systems (including Windows XP, Mac OS X, and Linux) give you the option of creating a different user account for each user, and you can set the amount of access and privileges for each account. You may also choose to have separate accounts for your work and personal purposes. While this approach will not completely isolate each area, it does offer some additional protection.

Establish guidelines for computer use: If there are multiple people using your computer, especially children, make sure they understand how to use the computer and internet safely. Setting boundaries and guidelines will help to protect your data (see Keeping Children Safe Online for more information: *http://www.us-cert.gov/cas/tips/ST05-002.html*).

Use passwords and encrypt sensitive files: Passwords and other security features add layers of protection if used appropriately (see Choosing and Protecting Passwords and Supplementing Passwords for more information: *www.us-cert.gov/cas/tips/ST04-002.html*; *www.us-cert.gov/cas/tips/ST05-012.html*). By encrypting files, you ensure that unauthorized people can't view data even if they can physically access it. You may also want to consider options for full disk encryption, which prevents a thief from even starting your laptop without a passphrase. When you use encryption, it is important to remember your passwords and passphrases; if you forget or lose them, you may lose your data.

Follow corporate policies for handling and storing work-related information If you use your computer for work-related purposes, make sure to follow any corporate policies for handling and storing the information. These policies were likely established to protect proprietary information and customer data, as well as to protect you and the company from liability.

Dispose of sensitive information properly: Simply deleting a file does not completely erase it. To ensure that an attacker cannot access these files, make sure that you adequately erase sensitive files (see Effectively Erasing Files for more information: *http://www.us-cert.gov/cas/tips/ST05-011.html*).

Follow good security habits: Review other security tips for ways to protect yourself and your data: *http://www.us-cert.gov/cas/tips/*.

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Shopping for Free and Open Source Software

Bill Wayson (bwayson@gmail.com), Channel Islands PC Users Group (http://www.cipcug.org)

By the time you read this, the holiday shopping season will be over and many of you will be trying to figure out what to put on your new computer. It seems fitting, then, to make a few suggestions of programs you will find in your Web browser-based shopping center, the Mall of Free and Open Source Software, or the Mall of FOSS. All of the suggestions made here are suitable not only for users of Linux and BSD, but also for Windows diehards. In some cases, other operating systems, such as the Mac and Solaris are supported. So fire up your computer and head on out to the Internet highway. Oh, and you can leave your credit card at home, for the goods at the Mall of FOSS are priced most attractively: free.

Screensavers

The holidays are really meant for the child that resides in all of us, and all children want to have fun. So spice up your PC with some fun items. Start by stopping at the Really Slick Screensavers Web site at *http://www.reallyslick.com/*. Here you will find out-of-this-world, mesmerizing screen savers that range from "psychedelic" to "nauseating." One includes great sound effects. They all perform best with hardware-based video acceleration, but that should not be a problem with recent hardware. Once you see these, you'll never go back to the flying Windows or pipes again.

Web Browsers

Is your gift recipient still using Internet Explorer? Head on over to *http://www.mozilla.com/* to get Firefox for him or her. Firefox is a great Web browser with such features as tabbed browsing, configurable security, extensions that provide additional features, and themes that change the look and feel. Firefox version 2.0 was released Oct. 24. Or you can shop for a newer browser, Flock, at *http://www.flock.com/*. Flock is based on the same page rendering engine, Gecko, that the Mozilla family of browsers is built around. But Flock focuses on sharing and connecting with other people online, with enhanced support for blog posting, RSS feed integration, photo posting on Yahoo Flickr, and saving your bookmarks on the Internet for sharing between all the computers you use.

Instant Messaging

Maybe your giftee spends time in the world of instant messaging. If so, get Gaim, a multi-protocol instant messaging (IM) client, from *http://gaim.sourceforge.net/win32/*. Gaim will work with several different protocols, including AIM, MSN, Yahoo!, Jabber, ICQ and others, so it could become the only IM client anyone needs. If someone prefers the more traditional Internet Relay Chat (IRC), consider getting Xchat (*http://xchat.org/windows/*) or Kvirc (*http://www.kvirc.net/*) for them.

Juice Receiver

Has someone on your holiday giving list complained about using iTunes on Windows? That person may enjoy receiving an open source replacement, Juice Receiver, available at *http://juicereceiver.sourceforge.net/*. It has access to many of the same podcast indexes that iTunes provides, as well as a number of indexes that it does not.

Bittorrent for File Swapping

If you have diehard computer geeks on your list, they most likely share files with their friends. The standard file-swapping protocol is bittorrent, and you will find bittorrent clients for them at *http://www.bittorrent.com* and *http://www.getazureus.com/*. Perhaps they have always wanted to create their own dynamic Web site but have balked at the price of commercial Web server software for Windows or the Mac. If so, head over to the XAMPP for Windows store at *http://www.apachefriends.org/en/xampp-windows.html*. XAMPP for Windows will give them everything they need to build a robust, full-featured, dynamic Web site, and it is ready to go out of the box.

CLAMAV

Does anyone on your list need or want to try a different virus scanner? The shop at *http://www.clamwin.com/* has the open source scanner, CLAMAV for Windows, available for you to give. They'll be getting a GUI-based virus scanner, free and automatic signature updates, and scheduled virus scanning.

Outlook Alternatives

The shops at *http://www.mozilla.com/thunderbird/* and *http://shellter.sourceforge.net/evolution/* offer alternatives to the Outlook e-mail client. The former site has Thunderbird, an easy-to-use product of the Mozilla project, while the latter provides Evolution, which sports additional support for calendaring and Microsoft Exchange e-mail servers.

GIMP

Moving on to applications, if there is one on your gift list who does any sort of work with images, ranging from doctoring photographs to graphics for a Web site, you owe it to them to stop off at *http://www.gimp.org/windows/* and pick up a copy of the GIMP. Somewhat mischaracterized as the "Poor Man's Photoshop," the GIMP provides a large range of image processing tools and plugins, as well as a framework for writing custom plugins. With the GIMP, they'll be able to do just about anything they'd ever want to do to their pictures.

Audacity

Or maybe you are looking for something for someone who is into sound recording, someone who perhaps was a Mr. or Miss A/V in high school? They undoubtedly would really enjoy receiving the Audacity sound recorder, editor, and writer. Look for it at *http://audacity.sourceforge.net/*. This powerful program literally will turn a PC into a full-featured sound recording and production studio. Pair it with a professional-quality sound card, and it is hard to beat at any price.

DVD-Capable Media Players

Many of those on your gift list also want to be entertained, and maybe they'd like to watch a DVD while working at their computers. A couple of DVD-capable media players they

Continued

Fun with Freeware

Cary Quinn (cary.quinn@gmail.com), Pikes Peak Computer Application Society, (http://ppcompas.apcug.org/)

Here are a couple of utilities I have been using lately to correct a couple of bumps in the road to a positive Windows experience.

OverDisk v0.11 beta (freeware)

http://users.forthnet.gr/pat/efotinis/programs/overdisk.html

Elias Fotinis, a programmer from Greece, is one of those programmers you often find on the net who in their spare time writes little apps and utilities to solve some personal issue they might have getting the operating system, or some other program, to work the way they want it to.

One of the programs he has written is a disk space monitor called Overdisk. It basically scans a drive or folders of your choice and tells you how much space is being taken up by the files therein. One special difference with Overdisk though, is the way it graphs that data to your screen.

Instead of representing the files as a pie chart, or bar graph, Overdisk shows a breakdown of folders and files as a series of concentric rings, as if you were looking down onto the disk itself and seeing the files laid out below. But it's even better than that.

When you mouse-over a particular section of the chart, a tooltip window will appear to give you more information about that particular folder (size, number of subdirectories, and the number of files); and if you click on a specific point of the chart you can drill down to get the same information for individual files. Clicking on the center of the chart takes you back up the directory path, or you can click on the tree view on the side of the screen to better select a particular folder to view.

I find this utility most useful when trying to identify what parts of a drive need to have a cleanup, or which folders I need to prioritize for backups.

Continued

Shopping for Free, Open Source Software, *continued*

would like can be found at http://www.mplayerhq.hu/ — which offers the MPlayer media player — and *http://www.videolan.org/* — which offers the VideoLAN VLC player.

Office Applications

Chances are the computer users on your holiday gift list use traditional applications such as word processing, spreadsheets, presentations, and the like. There are several gifts in this category that you cannot go wrong with. OpenOffice.org is possibly the most popular open source office application suite available. The latest version, which can be found at *http://www.openoffice.org/*, is highly compatible with Microsoft's Word, Excel, and Powerpoint formats, and all but the most complex of documents can be shared in both directions. OpenOffice.org also supports out-of-the-box export to PDF and Flash formats.

OpenOffice.org is certainly not the only option in this arena. The Abiword word processor from *http://www.abisource.com/* is a mature product offering a range of features. Since it is a lightweight user of computer resources, it runs well on older hardware that might bog down under OpenOffice.org, Microsoft Office, and Vista.

GNUmeric, from *http://www.gnome.org/projects/gnumeric/*, is a nice, mature spreadsheet program that has all the options and features your giftee wants for the spreadsheet work. If someone would like something to help create pretty, Visio-like organizational and flow charts, stop over at *http://dia-installer.sourceforge.net/* and pick them up a copy of DIA, a diagramming tool.

PDFCreator, Scribus

Do your giftees need to produce PDF documents? If so, they'll be grateful to receive PDFCreator, which is available at *http://www.pdfforge.org/*. PDFCreator works with any application that prints to the Windows printing system, making it easy to create not only PDF documents, but PNG, JPG, TIFF,

BMP, PCX, PS, and EPS as well. Or maybe they want to create professional-looking documents like brochures, booklets, or newsletters. For them, take a trip to *http://www.scribus.net/* and get them Scribus, a desktop publishing system with many of the same page layout and formatting features you expect to find in the more expensive commercial systems. Scribus also runs on the Mac.

Web page design

Do you have a Web designer on your giving list? He or she might like to receive Nvu (pronounced n-view, and found at *http://www.nvu.com/*), a WYSIWYG Web page editor that will remind you of Dreamweaver. With its integrated FTP client, it may be all an e-designer would need. Perhaps they prefer to develop their Web pages from scratch (or someone on your list might like to get an advanced text editor). If so, stop off at *http://notepad-plus.sourceforge.net/uk/site.htm* and pick them up a copy of Notepad++, which is what Windows' Notepad might be if it consumed strong steroids. It will give your recipient syntax highlighting, auto-completion, WYSIWYG markup, bookmarking, zooming, multi-document viewing, and much more.

I hope this gives you some ideas about which stores to look at for your holiday gift-giving needs. And do not forget the most important person on your holiday gift list: you! If anything here looks interesting as you read about it, make sure to get yourself a copy. The great thing about all the stores offering FOSS software gifts is that they always have a great two-for-the-price-of-one sale going on, the perfect holiday sale.

There is no restriction against any non-profit group using this article as long as it is kept in context with proper credit given the author. The Editorial Committee of the Association of Personal Computer User Groups (APCUG), an international organization of which this group is a member, brings this article to you.

Buying an HDTV?

Bob Elgines (Elginesz@rraz.net), Colorado River Computer Club

Three things are necessary for true High Definition (HD) Television (TV): an HDTV, HD receiver (or tuner) and HD programming. All TV stations will be capable of HD by 2007.

New HDTVs are here and will be required starting in 2009; but, of course, there will be converters available. The standard for Antilog TV was 525 lines per frame vertically. The old mandates of FCC requirements were first 2004, and then 2007. There are many HDTV models out there and some of the description of their characteristics are confusing. Hopefully I can clear up a few items of concern.

First, let us consider the three **types** of TV screens or TV monitors:

LCD – Cheaper in price.

- They can be wall mounted;
- 37" weighs about 50 to 60 pounds;
- Sizes up to 52"; 4" to 5" thick;
- 160 degree view angle (with decreasing contrast);
- Lasts 10 to 20 years;

The thinnest, lightest sets and have minimum reflection of lights in the room.

PLASMA – Moderate in price.

They can be wall mounted;

42" weighs about 85 to 90 pounds;

Sizes 42" and up; 4" to 5" thick;

170 degree view angle (contrast good thru-out);

Lasts 10 to 20 years;

Better color accuracy and displaying the deepest black, but screen's shiny surface can produce reflections of room lights and static images can "burn-in", producing a ghost image.

DLP – (digital light processing).

Moderate in price for size;

Not wall mounted;

42" weighs about 45 to 60 pounds;

Sizes 42" and up;

8" to 15" thick;

160 degree view angle (contrast good thru-out);

Lasts 8 to 10 years (bulb or lamp);

Some viewers may notice a "rainbow effect" on the edges of bright objects on the screen. DLP is used in most new projectors.

Second, lets discuss **resolution** (pixels are the number of dots per line), the higher the resolution the better the picture, or higher quality. The old Standard Digital TV format is 720 (Horizontal) x 480 (Vertical). The new HDTV formats are 720 and 1080, but most HDTVs also allow using the 480 standard. There are not many things out there for the 1080 "i or p" format. Where "p"= Progressive – draws lines on screen from top to bottom, and is considered the best for high speed movement without blur. Whereas "i"= Interlace – draws odd lines from top to bottom then even lines from top to bottom.

1024 x 768 pixels, 1366 x 768 pixels, and 1780 x 720 pixels all fall under the 720p format and many 720p-HDTVs accept the 1080i format.

1920 x 1080s fall under either the 1080i or 1080p format and most accept the 720p format.

Screen size is measured diagonally. Therefore, if you now have a 32" TV, you will most likely want a 37" to 42" for your replacement. That way you will have basically the same height, but of course it will be wider.

Third, let's discuss other concerns such as inputs and outputs (most sets come with stereo sound speaker systems):

HDMI – latest version is 1.3, this is a connector that requires a special cable and is not usually included with your TV. This could be used for 5.1 or 7.1 surround sound systems, video games such as X-Box, HD-Cable boxes, HD-DVD players, etc.

Component – One to three inputs are provided, used to connect DVD Players, games, etc.

Cable Slot – latest version is 2.0, used for Cable Simm Cards. Most cable companies are not interested, but new FCC mandates starting next year, 2007, may change this. Also some companies are considering including the Cable Card internally.

Tuners - Usually two tuners are included, one NTSC (we are now using Antilog & Digital TV, also called Standard TV) and one ATSC (this is the new HD digital TV tuner, required for HDTV). Stay away from a TV listed as "HD-ready", it does not have an ATSC tuner.

Continued

Fun with Freeware, *continued*

Taskbar Shuffle (free, but accepting donations)

http://www.freewebs.com/nerdcave/taskbarshuffle.htm

From the home of the nerd cave, comes a pretty nifty little tool that answers a minor nit I have had with the Windows Taskbar for a while—why you cannot drag and drop the programs listed on the taskbar to better arrange your programs to your preference. With Taskbar Shuffle, you can. That seems pretty simple, and it appears to work quite seamlessly within the OS. The utility leaves an icon running on your system tray that you can use to turn it on or off, or close it down completely. I've been using it for a few months, and haven't noticed any conflicts with other windows or programs that have caused me to want to shut it off.

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The New, the Best, and the Worst

Collected by Pim Borman (swipcug@sigecom.net), SW Indiana PC Users Group (http://swipcug.apcug.org)

What Is Web2.0?

Usually when major computer-related improvements are forthcoming, they are hyped long before they actually become available. Have you heard about Vista? I thought so.

Surprisingly, a major improvement in the Internet Web protocol, Web2.0, seems to have sneaked in through the back door. And yet, Web2.0 is to the old Web what the telephone was to the telegraph. With the traditional Web, you send a message, such as a request for a street map, to a Web address ("*www.mapquest.com*") that gets translated into a numerical Internet Protocol address by a Domain Name Server. The addressed site responds to your message and the connection is broken. To send a follow-up message ("zoom in") the wholeprocess must be repeated. Slow-slow-slow.

With Web2.0 the connection, once established, remains open until you close your browser window. This allows an immediate back-and-forth communication as if the distant Web site were located on your own computer. It allows you to go to Google Earth and seamlessly scroll and zoom the maps to your heart's content (provided your Internet connection is fast enough). It also makes it possible to provide application programs, such as an Office Suite similar to Microsoft Office, on a Web server to be made available via a Web2.0 connection. Several providers are moving in that direction, including Google and Microsoft. News sites can provide live hyperlinks whereby when your pointer hovers over a headline a summary of the news pops up on the screen. The possibilities are endless.

Happily, the user doesn't need to do anything to benefit from this new technology. The Internet servers provide all the programming that any major Web browser can understand. Enjoy!

How Broad Is Your Broadband Connection?

Not nearly as fast as you would like it to be, right? If you have a cable connection and the kid next door is online playing Doom, or Bully, or whatever, you're sharing online access and your connection probably crawls. Not much you can do about that. But you can minimize some other delays.

One of these is the time it takes your browser to connect to the site you want to address. If you type an Internet address such as "*swipcug.apcug.org/index.htm*", a Domain Name Server (DNS) provided by your Internet Service Provider (ISP) translates it to the corresponding numerical Internet Protocol (IP) address. Unless the entry has been cached after having been used before, the lookup procedure may take some time.

OpenDNS is a new, independent, and free Domain Name Server that claims to be faster than many ISP servers, mostly by using a very large cache. In addition it keeps track of known phishing sites and blocks them with a warning message. It will also try to correct misspellings and still provide the intended Web site, or suggest possible sites you might be looking for. When I intentionally typed "*swipcug.apcug.NET* (instead of the correct *.ORG* domain) I got a choice of four possible sites with the correct one first on the list. Simple instructions for replacing the default DNS addresses of your ISP with the OpenDNS addresses can be found at *http://welcome.opendns.com/* (read Steve Bass in *PCWorld, November 2006)*

 If you want to check the download and upload speeds of your broadband connection you can use SpeakEasy at *http://www.speakeasy.net/speedtest/* As I am writing this, on Friday at 10:45 pm, my connection speed with Sigecom to Chicago is: Download Speed: 3866 kbps (483.3 KB/sec transfer rate), Upload Speed: 347 kbps (43.4 KB/sec transfer rate), about as good as it gets in my experience. Speeds to Seattle are similar.

Buying an HDTV?, *continued*

Summary: It boils down to what you think looks and operates the best for your situation. Ask questions and check out the specification of the unit you wish to buy. If you are upgrading your cable or satellite service to HDTV, be sure to ask for "hi-def", not digital. Good luck!

SIG News

C/C++ Programming

Bruce Arnold (barnold@blast.net)

http://www.blast.net/barnold

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

January: Clip1 Version 1.10 . - a Print Screen Utility for C++ Version 7 and Visual Studio 2005. New Bells and Whistles added to the original.

- A menu bar has been added to replace the functionality of the buttons.
- If needed, the clipboard is automatically copied after 2 seconds.
- A "Rubber Band" algorithm now allows selecting (cropping) part of the image.
- The image may be copied back to the Clipboard for emailing, etc.
- Picture files may be "Dropped" on the GUI. (Graphical User Interface)
- A Help button (menu) has been added for user instructions.
- As earlier, the GUI image can then be printed with a variety of options. ⌨

Java

Mike Redlich (mike@redlich.net)

http://www.javasig.org

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

February 13: Developing Amazon Web Services with Java. With ten services launched, Amazon Web Services provides developers access to inexpensive, scalable web-based business solutions and infrastructure. Amazon.com opened its technology and product vault in 2002, via Amazon Web Services, to allow developers the ability to construct powerful applications using the resources the company spent ten years and over $2 billion developing. Jinesh Varia, Evangelist for Amazon Web Services, looks at real world examples of how developers have utilized Amazon Web Services' open APIs to develop exciting, profitable businesses. Jinesh will also demonstrate the newly launched Amazon Elastic Compute Cloud (Amazon EC2) which allows developers to build a virtual computing environment in minutes and only pay for computing usage. This session will also explore other innovative integrations of Amazon Web Services such as Amazon Simple Storage Service, Amazon Simple Queue Service, Amazon Mechanical Turk. ⌨

Web Dev

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

WebDev should be an all-encompassing development and examination forum for all issues, applications, OS, languages and systems one can use to build Websites. We currently have two Web dev languages .NET and Java as SIGs but the other 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 February 14*. ⌨

DotNet

Jim Wong

http://www.jimw.net/acgnj/

Meetings are postponed until further notice.

Online Auction

Bill Brown (onlineauction@acgnj.org)

Due to overwhelming response to a seminar held on April 7, the membership decided to form a permanent group. The group will meet on the *first and third Wednesdays of the month*.

These are the eight topics for discussion. We will cover all types of online auctions, as members chose. The general format of the meetings will be from 7:30 to 10 PM. The first 45 minutes will be to discuss the topic for the evening. A short break will be taken, the remainder of the time will be for specific questions to the topic followed by general questions and bull session. During the entire time, online presence will be established and examples will be given on screen.

1. Getting Started: Different Auctions Registering. Buyer account, sellers account Navigating websites.

2. Buying and selling. An overview of searching, sniping, snuffing.

3. Finding things to sell Gnoming, Clearance, Bargain Bins, Flea Markets, Garage Sales, Solicitation

4. Listing an item. Choosing a category, Setting a Price. Buy it now strategies

5. Maintaining your sales. Revising and re-listing.

6. Collection and payment follow ups.

7. Packaging, shipping, Inventory management.

8. Going further. Ebay express, stores ⌨

PHP?

Anyone interested in a new PHP SIG (Interpreted Script Programming Language), please get in touch with John Raff (*jraff@comcast.net*). PHP is a widely-used general-purpose scripting language that is especially suited for Web development and can be embedded into HTML. If you are new to PHP and want to get some idea of how it works, try the introductory tutorial (*http://us2.php.net/tut.phpv*). ⌨

Genealogy

Frank Warren (kb4cyc@webwarren.com)

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

Genealogy SIG is for genealogists interested in computers and computer users interested in genealogy, and is a forum to assist members in furtherance of both endeavors. Meetings usually focus on genealogy more than on computers. We meet at 8 PM on the fourth Thursday of the month, but we do not meet in November or December. In addition to our Web page, we also have an electronic mailing list. Messages to the list should be addressed to *gensig@webwarren.com*. To subscribe, include the line "subscribe gensig" in the body of the message. *Next meeting February 22* ⌨

Layman's Forum

Matt Skoda (som359@aol.com)

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

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

NJ Gamers

Gregg McCarthy (greggmc@optonline.net)

http://www.NJGamers.com

www.lanparty.com

The next Friday Night Frag will be January 12, 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!⌨

FireFox Activity

Firefox@acgnj.org

This SIG is intended to be an open forum for **all** FireFox and Mozilla techniques and technologies, to encourage the study and development of web sites of all kinds. All the browsers will be considered and examined. Meeting third Monday of the month at 7 PM.

January 22: The first meeting of the FireFox Activity was led by David McRitchie to discuss, argue and kick around many concepts and ideas. Web2 is definitely in the mix. 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. ⌨

Investing

Norm Wiss (cut.up@verizon.net)

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. *Our next meeting: February 8.* ⌨

LUNICS (Linux/Unix)

Andreas Meyer (lunics@acgnj.org)

http//www.acgnj.org/groups/lunics.html

LUNICS is a group for those who share an interest in Unix and similar operating systems. While we do quite a bit with Linux, we've also been known to discuss Solaris and BSD too. We generally meet on the first Monday of the month at 8 PM at the Scotch Plains Rescue Squad. See the web page for directions and more information. *Next meeting February 5.* ⌨

Window Pains

John Raff (jraff@comcast.net)

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

This meeting is a combination of the older PC Symposium, PC User Group and Random Access Session which are now defunct. The intent is to provide the members with Windows oriented application discussions both Microsoft and Linux style. The presentation will be directed toward the more heavy technological level of attendee, although newbies are welcomed.

February 16: Macros for MS Word and MS Exce, presented by Paul Natanson.

March 16: Overview of Podcasting ⌨

Main Meeting

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

Evan Williams (nhpressgo@blast.net)

February 2: Ins and Outs of Wireless Connections, by Mark Douches.

March 2: VoIP Overview, Vonage ⌨

Best Choice Investment Activity

Norm Wiss (cut.up@verizon.net)

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

This is a new event to ACGNJ. They will be using the Best Choice software for real-time trading. This new investing group had been previously meeting in South Amboy and has been in existence for almost a year. They are expected to join ACGNJ as members. *The group meets the first and third Tuesday of the month from 10:30 AM to 2:30 PM* at the Scotch Plains Rescue Squad building. ⌨

Guru Corner

Jo-Anne Head (tinarock@aol.com)

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.

Hardware

	Scott Vincent	973-539-8169

Software

HTML	Jo-Anne Head	908-769-7385
	Mike Redlich	908-246-0410
CSS	Jo-Anne Head	908-769-7385
	Frank Warren	908-756-1681
ColdFusion	Jo-Anne Head	908-769-7385
Java	Mike Redlich	908-246-0410
C++	Bruce Arnold	908-735-7898
	Mike Redlich	908-246-0410
ASP	Mike Redlich	908-246-0410
Perl	John Raff	973-560-9070
	Frank Warren	908-756-1681
XML	Mike Redlich	908-246-0410
e-Commerce	Rick Elbanna	800-323-7575
Genealogy	Frank Warren	908-756-1681
Networking	Scott Vincent	973-539-8169
Home Automation	Charlie Huffsmith	732-549-1734
	Frank Warren	908-756-1681

Operating Systems

WindowsNT	Scott Vincent	973-361-5793
Windows95	Rick Elbanna	800-323-7575
Windows98	Rick Elbanna	800-323-7575
Windows3.1	Ted Martin	732-636-1942
	Charlie Huffsmith	732-549-1734

Macintosh

Mac O/S	Keith Sproul	(732) 821-4828

Discount Computer Magazine Price List

As described by the DealsGuy

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

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

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

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

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ACGNJ MEMBERSHIP APPLICATION

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

Dues

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

Mail this application and your check to:

AMATEUR COMPUTER GROUP OF NEW JERSEY, INC., P.O. BOX 135, SCOTCH PLAINS, NJ 07076

☐ New Member ☐ Renewal   ☐ Address Change

First Name _____ Last Name _____ Phone _____

Mailing Address _____ E-Mail _____

City _____ State _____ Zip _____ URL _____

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

Other Local Computer Groups

Princeton Macintosh User Group: 7:15 pm 2nd Tuesday, Jadwin Hall, A-10, Washington Rd, Princeton, (609) 252-1163, *www.pmug-nj.org*	**NY/NJ/CT Relational Database User Group:** Corporate and independent users. (212) 839-0125	**New York PC:** 3rd Thurs, 7 pm, PS 41, 116 W 11th St. For info call hotline, (212) 533-NYPC, *http://www.nypc.org*
Computer Education Society of Philadelphia: Meetings & Workshops at Jem Electronics, 6622 Castor Ave, Philadelphia PA. *www.cesop.org/*	**Brookdale Computer Users Group**: 7 pm,3rd Friday, Brookdale Community College, Bldg MAN Rm 103, Lincroft NJ. (732)-739-9633. *www.bcug.com*	**NJ Macintosh User Group**: 8 pm, 3rd Tuesday, Allwood Branch Library, Lyall Rd, Clifton NJ. (201) 893-5274 *http://www.njmug.org*.
PC User Group of So. Jersey: 2nd Mon., 7 pm, Trinity Presb. Church, 499 Rt 70 E, Cherry Hill, NJ. L. Horn, (856) 983-5360 *http://www.pcugsj.org*	**Hunterdon Computer Club:** 8:30 am, 3rd Sat, Hunterdon Medical Center, Rt 31, Flemington NJ. *www.hunterdoncomputerclub.org*, (908) 995-4042.	**NY Amateur Computer Group:** 2nd Thurs, 7 pm, Rm 806 Silver Bldg, NYU, 32 Waverly Pl, NYC. *http://www.nyacc.org*
Morris Micro Computer Club: 2nd Thurs., Bill Traywick, (201) 635-5393	**Central Jersey Computer Club**: 8 pm, 4th Friday, Rm 74, Armstrong Hall, Trenton St. College. Rich Williams, (609) 466-0909.	**NJ PC User Group:** 2nd Thurs, Monroe Rm at Wyckoff Public Library, 7 pm. Maureen Shannon, (201) 853-7432, *www.njpcug.org*
Philadelphia Area Computer Society: 3rd Sat, 12 noon Main Meeting, groups 8 am-3 pm. Upper Moreland Middle School, Hatboro PA. (215) 842-9600. *www.pacsnet.org*	**Fairlawn Computer Club**: Last Monday, Fairlawn Senior Citizen Center. Joe Mathias (*fair.lawn.computer.club@juno.com*)	**Princeton PC Users Group**: 2nd Monday, Lawrenceville Library, Alt Rt 1 & Darrah Lane, Lawrenceville, Paul Kurivchack (908) 218-0778, *http://www.ppcug-nj.org*
Workshop, Hands-On: 2 P.M. to Midnight on last Saturday of the month. First United Methodist Church, Church and Atlantic Streets (one mile from GSP exit 117A), Aberdeen NJ. Bring your project, computer and extension cord. For information call Burke Mawby, (908) 566-7445.		

Classified

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

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Radio and TV Programs

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

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

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

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

MarketPro Shows

http://www.marketpro.com/

June 3-4: NJ Convention Center, Edison

June24-25, Meadowlands Expo Center Secaucus
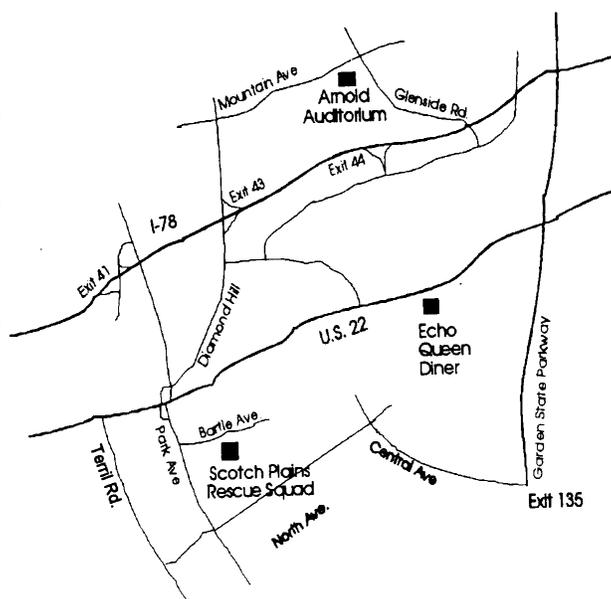
Directions to Meetings at Scotch Plains Rescue Squad, 1916 Bartle Ave., Scotch Plains NJ

From New York City or Northern New Jersey

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

From Southern New Jersey

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

From I-78 (either direction)

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

From US 22 Westbound

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

From Western New Jersey

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

Free Up Megabytes of Disk Space

Vinny La Bash (vlabash@comcast.net), Sarasota PCUG (http://www.spcug.org)

Look in your Windows folder and count how many folders you have that start with "$NtUninstall". They are all related to various patches, updates and service packs for XP. Those $NtUninstall folders are created when you install a Microsoft Service Pack, a hot fix, or certain security updates. Some of these folders could date back almost to the day you first installed your computer.

Their names are in blue, and all are marked as hidden and read only. If you don't see them in the Windows folder, open the Tools menu, and select Folder Options from the drop down menu. After the Folder Options dialog box appears, activate the View tab, then left-click the Show hidden files and folders radio button. Click OK to close the dialog box and the hidden folders should appear. If nothing happens close down Windows Explorer and restart it. You don't need to restart your computer; simply open Windows Explorer again.

Why should you do this? If you're getting low on disk space and the usual remedies haven't freed up enough space, these folders could be the culprits that are chewing up valuable storage area. If you have had Windows installed for more than a year and you are conscientious about keeping your system up-to-date, useless folders are probably tying up gigabytes of data. Enough of them can have the side effect of noticeably slowing down virus and spyware scans. It also takes longer to defrag your disk drive. An accumulation of unnecessary or extraneous data on your system will eventually affect system performance and in extreme cases cause drive errors.

The files in the $NtUninstall folder provide instructions on how your computer uninstalls a Windows update. Each folder has a specific name ending in the name of a particular Windows modification. If you were to go to add/remove programs and select a Windows update to uninstall, the information on how to run this process would come from the corresponding $Ntuninstall folder. You can safely delete all these folders if you have no plans to uninstall any of the related patches. As updates and patches accumulate, these types of folders will continue to grow and take more disk space.

One solution is to delete only those folders older than three months. Chances are, if you haven't uninstalled a Windows update after three months, you won't ever do it. Alternatively, once you've made a backup or disk image of any "$NTUninstall" files, you can delete the files from the hard drive immediately, because you can always restore them from backups, if you need them.

One thing Microsoft should have done is tuck these folders away in a sub-folder someplace so you don't have to scroll through them every time you want to locate something in the Windows folder. I've seen machines with over one hundred of these folders. Then again, you could mark them as hidden.

There is no restriction against any non-profit group using this article as long as it is kept in context with proper credit given the author. The Editorial Committee of the Association of Personal Computer User Groups (APCUG), an international organization of which this group is a member, brings this article to you. ⌨

ACGNJ MEETINGS

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

Tuesday, January 30. 2007
Board of Directors Meeting

Friday, February 2
8 P.M. - Main Meeting, Evan Williams (*nhpressgo@blast.net*).

Monday, February 5
8 P.M. - Lunics (Linux/Unix). Andreas Meyer (*lunics@acgnj.org*)

Tuesday, February 6
10 A.M. - Best Choice Investing, Norm Wiss (*Norm.wiss@acgnj.org*)

Wednesday, February 7
7:30 P.M. - Online Auction, Bill Brown (*onlineauction@acgnj.org*)

Thursday, February 8
8 P.M. - Investing, Norm Wiss (*cut.up@verizon.net*).

Friday, February 9
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 12
8 P.M. - Layman's Forum, Matt Skoda (*som359@aol.com*), 908-359-8842.

Tuesday, February 13
7:30 P.M. - Java, Mike Redlich (*mike@redlich.net*) 908-246-0410.

Wednesday, February 14
7 P.M. - WebDev SIG, Evan Williams (*nhpressgo@blast.net*)

Thursday, February 15
8 P.M. - Dot Net , Jim Wong, no meeting.

Friday, February 16
8 P.M. - Window Pains, John Raff (john@jraff.com).

Monday, February 19
7 P.M. - Firefox Activity, David McRitchie (firefox@acgnj.org)

Tuesday, February 20
10 A.M. - Best Choice Investing, Norm Wiss (*Norm.wiss@acgnj.org*)

Tuesday, February 20
8 P.M. - C/C++ Users, Bruce Arnold (*barnold@blast.net*), 908-735-7898

Wednesday, February 21
7:30 P.M. - Online Auction, Bill Brown (*onlineauction@acgnj.org*)

Thursday, February 22
8 P.M. - Genealogy SIG, Frank Warren

Tuesday, February 27
Board of Directors Meeting ⌨

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