

The NCTCUG Journal

www.nctcug.org

May 2003

Volume 26 Issue 3

Keeping Up

By Paul Howard (NCTCUG)

I've been feeling like that commercial ... "Help — I've fallen and I can't get up"! Oh, and I have the 800 pound technology gorilla sitting on my chest.

On March 14th, I spent much of the day on my computer, doing web site maintenance. Later that evening, as I got my last emails of the day, before shutting down, I noticed that the applications seemed to put up a Windows frame, with nothing in the center — transparent, in other words. I could look right through to the desktop. Things also seemed sluggish. I wrote it off to memory leaks, and shut down, forgetting that I really hadn't noticed some of the typical memory leak symptoms since getting this Athlon 2100+ in August, using WinXP rather than Win95 SR2.



The next day, I couldn't get WordPerfect to boot. It popped up an error message window, offering to fix a file problem. Suffice it to say that it didn't work. Windows Explorer, and PowerDesk, a file manager I use as an Explorer replacement, would work, but only after hard drive thrashing for about two minutes. Over the last two weeks, about five other applications also won't work, including

(Continued on page 14)

Inside



Understanding CD-R & CD-RW Technology	
Part 3: Creating Different Types of CDs	page 2
AOL Scam Alert: Pass This On To All Your AOL Friends	page 5
Mailwasher: SPAM Prevention	page 6
What's A UPS... And I Don't Mean United Parcel Service?	page 7
Prevent Problems By Cleaning Windows' Registry	page 8
A Computer Adventure — Final Chapter	page 9
BugBear Warning — A Dangerous Computer Worm	page 11
Disk Investigator	page 13
Selections From The Deals Guy	page 12

Understanding CD-R & CD-RW Technology

Part 3: Creating Different Types of CDs

By John C. Lee - Thousand Oaks Personal Computer Club

Reprinted from the July 2002 Nibbles & Bytes, Journal of the 1000 Oaks Personal Computer Club, via User Friendly, Los Angeles Computer Society

Part III of the article will cover the discussion of the procedures you can follow to create different types of CDs, including Audio CD, Data CD, Multisession Data CD, CD Extra CD, Mixed Mode CD, Digital Audio Extraction, Rewritable CD and Bootable CD. You can access these CD Layouts by clicking the arrow next to the NEW menu on the Easy CD Creator window, except the Rewritable CD, which is from the DirectCD program.

Audio CD

Audio CD uses the Disk-at-Once writing method. The audio tracks or/and audio files are written onto a complete disk in a single session without pausing. Audio data cannot be added later, even if there is remaining space left. The source input can be one or a number of audio tracks from one or several music CDs. It can also be one or a number of audio files from the hard drive such as WAV, MP3 and WMA files, or a combination of audio tracks and audio files. If the input audio tracks are from several source CDs, then you will be prompted each time to insert the CD, in which the audio track to be recorded resides.

The output to the destination CD-RW drive with a CD-R or CD-RW disk always will be audio tracks in CD-DA format, which can be played in all CD-ROM, DVD or audio CD players. If the source inputs are audio files from the hard drive, they will be encoded and also recorded to destination CDs in CD-DA format.

In some instances, you may want to store audio files on a CD with their own formats (such as WAV, MP3 and WMA) instead of CD-DA format, in which case you should treat these files as data files and use Data CD program to record them to a destination CD (also see Digital Audio Extraction in Part II).

You can record audio files or tracks from a source CD-ROM, DVD or hard drive to the destination CDRW drive, or you can use the Image File to read and record on a single CD-RW drive (see Image File Recording in Part II).

Data CD

As in Audio CD, Data CD also uses the Disk-at-Once writing method. The file data is written onto the disk in a single track and a single session. One difference is that the Audio CD can comprise of a number of audio tracks per session, while the Data CD can comprise only one track per session. But a Data CD track can contain one or a number of data files or/and folders.

The source input can be one or a number of data files or folders from one or several data CDs or/and from the hard drive.

The output to the CD-R or CD-RW disk will be in either ISO 9660 or Joliet format. Both of these two formats can be read on CD-ROM or DVD drives. Joliet format is the default format in Easy CD Creator program and should be used if you want to retain long file names (see Data and Audio File Formats in Part II).

You can record data files from a source CD-ROM, DVD or hard drive for the destination CD-RW drive, or you can use the Image File to read and record on a single CD-RW drive (see Image File Recording).

Multisession Data CD

Track-at-Once writing method is used with the Multisession Data CD when writing data to a disk one track at a time. More tracks can be added later if there is enough space left on the disk. But make sure that the CD is not closed after each session except the last session. As in Data CD, the source input to each track can be one or a number of files or folders from one or several data CDs or/and from the hard drive.

The output to the CD-R or CD-RW disk and the Image File recording to a single CD-RW drive are as discussed in the Data CD section.

CD Extra CD

A CD Extra CD is a 2-session CD that contains both audio files (tracks, WAV, or MP3) and computer data. Many music CDs are created as a CD Extra CD to provide music CD tracks in the first session and a music video in the second session all on the same CD.

The first session contains the audio files, so a home or car stereo CD player or a CD-ROM can play them. The second session contains data intended for your computer's CD-ROM drive. The CD Extra uses the Session-at-Once writing method.

In the lower left pane of the CD Layout in the Easy CD Creator main window, you will see two folders: one audio and the other data. Open the first folder and add audio tracks to be recorded. Then open the second folder and add data to be recorded. Both sessions will then be recorded one after the other.

The input and output in the audio session are the same as in the Audio CD, and those in the data session are the same as in the Data CD. Image File recording can also be used for creating CD Extra CD.

Mixed Mode CD

A Mixed-Mode CD is a single session CD (using Disk-at-Once method) that contains both computer data and audio tracks, and is typically used for entertainment and educational programs. Data is written to the first track on the CD followed by one or more audio tracks. Mixed-Mode CDs are used with CD-ROM or DVD only and cannot be played in home or car stereo CD players, because stereo CD players always look for audio tracks to play at the start of the first session.

When you create a Mixed-Mode CD, the lower left pane of the CD Layout contains a data and an audio folder. First add files and folders to the Data CD Layout folder; then add the tracks, WAV or MP3 files to the Audio CD Layout folder. When you click Create CD icon, recording will start with the data track and finishes with audio tracks, all in one session.

The input and output for the data track are the same as in the Data CD, and those for the audio tracks are the same as in the Audio CD. Image File recording can also be used for creating Mixed Mode CD.

Digital Audio Extraction (Ripping)

Digital Audio Extraction is a reverse process to audio CD recording. It converts one or a number of audio tracks of a music CD on the CD-RW drive to audio files (WAV, MP3 or WMA) on the hard drive.

On the Easy CD Creator window, you select the audio tracks that you want to convert to audio files from the music CD you place in the CD-RW drive. When you click the highlighted Extract icon, the Extract dialog box shows up where you can select the audio file format, the folder where the file is to be located in the hard drive and the sound quality bit-rate.

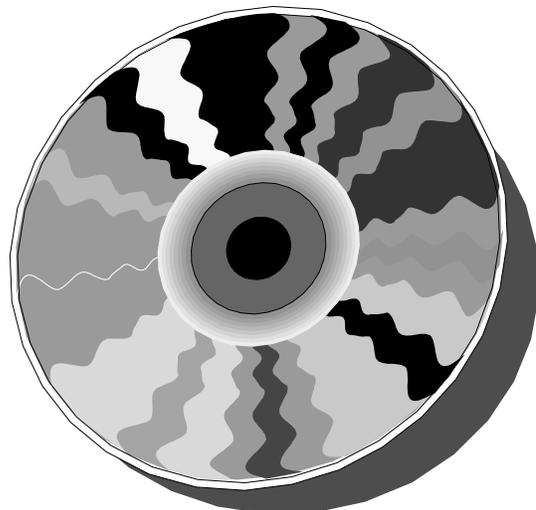
Rewritable CD

Rewritable CD is created using the DirectCD program. The CD-RW disk must first be formatted before it can be used as a re-writable CD (see DirectCD in Part II). It uses packet-writing technology to write small chunks of data called packets to the CD-RW disk. Some CD space (roughly 100MB) is used up by the file system. So in a 650MB disk, only about 550MB is usable space for writing data.

The rewritable CD in a CD-RW drive acts as a removable drive with an accessible drive letter. It can perform the following functions:

Write or Send data to the CD-RW disk from the PC or Read data from the disk to the PC.

(Continued on page 4)



(Continued from page 3)

Erase file or folder data and send to the recycle bin, which frees up the space for rewriting.

Copy or Move files or folders to the CD-RW disk from any recognized drive (such as a floppy diskette drive, Zip drive, CD-ROM, DVD or another hard drive) or vice versa.

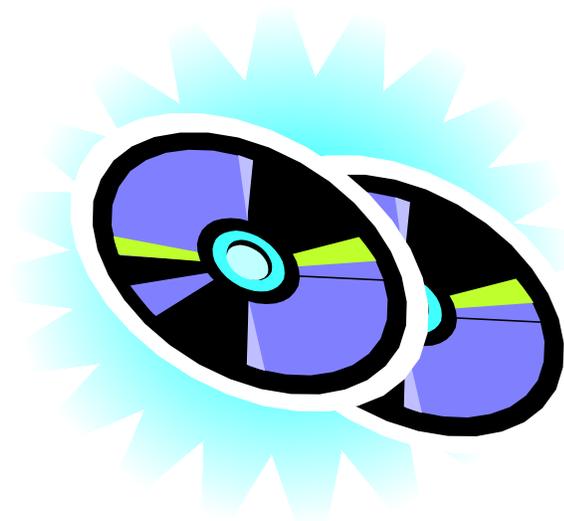
Provide an option for Data Compression on the rewritable disk.

Bootable CD

A bootable CD is a CD from which a computer can be started up because it contains all the operating system software the computer needs to run. A bootable CD contains a bootable image, a file that is an exact representation of a bootable floppy disk or hard disk.

Easy CD Creator creates a bootable CD by copying the contents of a bootable floppy disk to a CD. Windows operating systems usually have provision for you to make a Start-up (bootable) diskette, which can be used to copy a bootable CD on the Easy CD Creator program.

To use a bootable CD, you have to enable Bootable CD-ROM support in your system BIOS settings.



Windows XP Tips & Tricks

Blair Jones, NCTCUG

These are a few things I've learned lately because I "had to". Usually because something was annoying me! So I searched various tips & help sites on the 'net and came up with a few solutions.

Taskbar Buttons For Open Program Windows

Do you open a bunch of windows using the same program – several web sites in separate windows, for example, or several documents in your word processor?

When you minimize them, and the buttons appear on the taskbar, each program's set of windows can be grouped under a single button for that program, rather than having a slew of little tiny buttons you can't read. To see what's in each group, left-click on the button and the list of windows will pop up.

To group, or ungroup, similar taskbar buttons, just right-click at a vacant spot on the Taskbar, Select Properties, and Check or Uncheck Group similar taskbar buttons. You may prefer the lotsa-buttons option instead of grouping – give it a try both ways.

System Tray Icons

Do you find that there are too many icons showing in the system tray – that little area at the right end of the taskbar? Hide some of them!

Right click on a vacant spot of the Taskbar

Select Properties
Check Hide inactive icons
Click on the Customize button

In the dialog box, choose one of three options for each application, current or past -- Hide when inactive, Always hide, or always show.

There will be a little white arrow at the edge of the System Tray to allow you to see all the icons if you want to see what's there.

(Continued on page 16)

AOL Scam Alert

Pass This On To All Your AOL Friends

By Steve Bass, Pasadena IBM Users Group

We all know someone—friends and relatives—who use AOL, and I suggest you consider forwarding this message to them. As you'll see, it's not a hoax but a real-life scam.

It started when my mother recently received a beautifully done AOL message. It's the kind of thing you read about but rarely get to see firsthand.

The message she received was from the AOL Billing Services Team. She forwarded it to the accounting department—moi—because I pay for her account (she has me to blame, I know). Read the message here:

<http://www.pibmug.com/files/aolletter.jpg>

It took a minute to figure out something wasn't right.

Telltale Clues

For one thing, the e-mail header showed that the AOL Billing Services Team was blind copying her using version AOL 5.0. (<http://www.pibmug.com/files/aolheader.jpg>) You'd think they could use a more current version, right? There's more: The return address was Remindin-you@aol.com and the subject line had a misspelling.

I followed the Billing link in the message. At first glance I saw an AOL Welcome box. (<http://www.pibmug.com/files/aolwelcomescreen.jpg>) Take a careful look and you'll know why I was suspicious. Yep, lots of misspellings.

I went along with the game plan and clicked OK. Now I was staring into what looked like a remarkably authentic credit card payment form. Even if you didn't click the other links, you HAVE to see this one. It's worse than a loan application.

<http://www.pibmug.com/files/aolcreditcard.jpg>

Is It Really You?

To make sure it's really you, they also want your Social Security Number, date of birth, driver's license number, and mother's maiden name. With that, the scammers can get to "identity theft" heaven before you shut down your PC for the night.

But they're not finished. How about throwing in your AOL screen name and password, something even novices know AOL wouldn't do. To add a level of legitimacy, they warn you that, "For your safety, please do not download any files from strangers. AOL will never ask you to download anything."

Who Is?

I went to <http://www.samspade.org>, my favorite Web examination site, and backtraced the Billing link. (The site was closed by Hypermart so it now leads to an error page.) It's an obfuscated URL: <http://www.aol.com-billing:july-2002@072002.hypermart.net> that leads to <http://072002.hypermart.net>. It works because any characters before the @ sign are ignored. And all it took was a quick web search with Google.com to find locations loaded with AOL scamming files. You can view one site here:

<http://www.pibmug.com/files/aolhypermart.jpg>

I contacted one of AOL's security people I met years ago because of a story I did about AOL. Unfortunately, I never heard back from him. I also sent a message to abuse@hypermart.net and they responded in four days.

AOL Protection Strategy

Forward this to a buddy using AOL. They need to know that the best AOL protection strategy is to be alert to constant scams. You know, if it looks like a duck, smells like one, and occasionally quacks, there's a good chance it is one.

If you're unsure about a billing question, it's best to call AOL's billing services directly at 800-827-6364, or their Screen Name/Password line at 888-265-8004.

Steve Bass is a Contributing Editor with PC World and runs the Pasadena IBM Users Group. He's also a founding member of APCUG. Check PCW's current edition at www.pcworld.com/resource/toc/index.asp and sign up for the Steve Bass online newsletter at www.pcworld.com/bass_letter.

This article is brought to you by the Editorial Committee of the Association of Personal Computer User Groups (APCUG), an international organization to which this user group belongs.

Mailwasher: SPAM Prevention

By Linda Moore

Reprinted from North Texas PC NEWS October 2002

Like a lot of Internet users, I have been battling SPAM since 1994, when I first started using news-groups and e-mail. Up until March of this year, all I could do was complain and groan. SPAM is not just a nuisance; it is also a threat to my computer system, since viruses can be contained not only in attachments but also in Word documents and graphics.

Then I discovered *Mailwasher*, (<http://www.mailwasher.net/>). There are some 225 anti-spam software programs on ZDNet but Mailwasher gets the highest approval ratings and is the only program, which allows the user to block/blacklist the spam before it is ever downloaded to the user's computer.

When I started using Mailwasher, I was receiving between 25-30 SPAM e-mails per day. The email messages, which really worried me, were written in an oriental script and they always contained attachments. Obviously, filters are useless for this type of e-mail. Now, I am able to blacklist these oriental script e-mail messages and now I'm getting 3-5 SPAM messages. It also is the only package that allows the user to blacklist, block and bounce unwanted SPAM on the ISP's e-mail server, prior to the e-mail being downloaded to your computer. You can designate an e-mail address as one that is a friend or one that you want to blacklist. Any blacklisted message will be deleted and bounced back to the sender.

Mailwasher designates e-mail messages as normal, possible SPAM, probable SPAM, blacklisted, or virus. Several times, when I have received virus-laden e-mail, Norton AntiVirus 2002 would spring into action. Although Mailwasher can detect some viruses, every user should still use an up-to-date anti-virus program.

Another time, I got an e-mail message and the subject was "Darling", so I tried to preview it to see

what it was. Well, the e-mail message could not be previewed. Then I discovered that I could not close that window, so I went to the Windows Task Manager and shut down Mailwasher. Then I re-opened Mailwasher and blacklisted that message. When I first started using Mailwasher, I downloaded the latest beta version. Much to my surprise, I found the code rock solid and no error messages, unlike some retail software, which costs hundreds of dollars. Mailwasher provides the user with maximum flexibility and control over what gets downloaded to their computer. Mailwasher is freeware/donation software. A \$20 donation/payment will make you a registered Mailwasher user. Mailwasher is exactly what the doctor ordered. It's the best \$20 that I have ever spent.

The Mailwasher Support team provides excellent technical support, should you need any, and they welcome user's comments and suggestions for enhancements to Mailwasher.

Currently, Mailwasher will work on any Windows OS and any e-mail client with a POP3 email server. The developer is working on software for hotmail, AOL and other web e-mail, as well as, a server version of Mailwasher.



What's a UPS... And I Don't Mean United Parcel Service?

By Chuck Roberts, Washington Area Computer User Group (WACUG)



Reprinted from "The Cursor" July 2002

Summer is one of the worse times for your computer for two reasons. First, in the Washington area with the heat and the humidity, major demands are made for electrical power to run our air conditioners and keep us comfy. You usually aren't aware, but during the summer, the voltage in your home is sometimes reduced to meet the heavy demands for electrical power. Most household appliances can accommodate these 'brown outs' of power, but your computer is much more susceptible. The first component that is impacted is the monitor.

The second reason, which actually begins in late spring and continues through the summer, is the unexpected afternoon thunderstorm. These afternoon summer surprises can cause problems in two ways:

One, the power suddenly goes off in the middle of your computing session and two, a lightning strike nearby produces a voltage surge that can fry your PC or delicate peripherals.

In data centers and server farms across the country, this problem is addressed by installing a device between the computer and the wall outlet called an *Uninterruptible Power Supply* or UPS. The simplest way to describe the way a UPS works is to state that it stores electrical power in a battery that will convert the battery power (DC power) to AC to power to your PC (or any connected electrical device) for a limited amount of time.

You would use this time to immediately stop what you are doing, save any work in progress, close all your running applications and then quickly shut down and power-off your computer. The rest of the house may be pitch black because of no power, but you would have time to shut-down and power-off.

While many PC users invest in surge suppressors, they are not aware of the existence of UPS's and especially the fact that a UPS also provides protection against power surges.

Obviously, different PC's require different amounts of power. Newer PC's with lots of memory, hard drives and powerful processors use much more power than older less powerful PC's. So you need to select the UPS that is right for your system.

In my house with multiple PC's, I have a UPS for each system. I also connect low power peripheral devices into the same UPS. Devices like AC powered external CD-R/RW drives, Zip Drives and other items.

I have my computers on my home network, so I also have a cable modem, a router, and multiple hubs/switches all connected to my UPS's.

I have learned to analyze the market and purchase wisely. My first UPS finally died about 18 months ago. The battery had finally failed and required replacing. I was surprised to discover that I could buy a new UPS for le\$\$ than repairing the one I had! You live and, hopefully, you learn!

As a result, the new UPS's I purchased have consumer replaceable batteries.

While I hardly recommend using a UPS instead of a surge suppressor, I cannot recommend a specific brand or model. I will provide you with some URLs where you may find more information on UPS models, features and prices. Remember, you need to select a UPS that fits your system requirements so it will provide time for you to save work in progress, close open files and power down your computer.

I have seen UPS's for sale at both Microcenter in Fairfax, and at CompUSA.

Use the following links to learn more about UPS's and user ratings of various UPS products:

<http://www.pcguides.com/ref/power/ext/ups/>
<http://www.sysopt.com/userreviews/products/ups.html>
<http://www.apc.com/>
<http://www.mgeups.com/indexus.htm>
<http://www.championups.com/>
<http://www.tripplite.com/>

Prevent Problems By Cleaning Windows' Registry

By Ira Wilsker, Golden Triangle PC Club

From the I/O Port Newsletter, Tulsa Computer Society

Most Windows users are unaware that there are a pair of vital files, "system.dat" and "user.dat", utilized by Windows to track all of the critical information about their computers and software. These files are also responsible for tracking and loading device drivers, as necessary. They compose the "registry", and are common, and similar, in all versions of Windows from 95 to XP, including 98, ME, NT, and 2000.

If the registry is damaged, corrupted, or contains significant data errors, a variety of problems will likely occur. These problems could be slow loading of Windows, failure to exit or shut down properly, or a variety of conflicts and lockups. Windows 95 lacked an easy method to make simple repairs to its registry. The registry could be manually edited, at some risk, utilizing the built-in "Regedit" utility, but Regedit is almost useless at finding and fixing registry errors. To provide a simple, but somewhat inadequate, method of detecting and repairing some registry errors, Microsoft made available for free download a utility "RegClean". The final version of RegClean 4.1a is almost impossible to find on the Microsoft website. It is still available from <http://www.download.com>. Type "RegClean" (no quotes) in the search box at the top right of the page, and us-

ing the pull down menu, search in "Downloads". Download RegClean 4.1a, and install it. I recommend running RegClean weekly, and letting it repair any errors it finds. While designed for Windows 95, RegClean works to some extent on later versions of Windows. While fast and easy to use, RegClean is very limited in the types of repairs it makes, and should not be relied upon for total maintenance of the registry.

Microsoft made several improvements with Windows 98, one of which was the inclusion "Scanreg", that Win98 requires be run under DOS. Win98 also makes a daily backup copy of the registry at boot, another reason to shutdown the computer at the end of the day. By default, Win98 keeps the five most recent copies of the registry as a backup, which can be restored with Scanreg. While capable of repairing a corrupted registry, restoring a previous copy of the registry, or optimizing the size of the registry by packing the information together, it is not capable of deleting or repairing obsolete or erroneous entries, or entries left when programs were deleted. With Windows 98, Scanreg can be run by going to START - SHUT DOWN - REBOOT IN MSDOS MODE, and at the prompt type "scanreg /fix" (no quotes) to repair the registry. Instead of the "/fix" suffix, the user can enter "/opt" to optimize or compress the registry, "/restore" to replace the current registry with an earlier one (this is especially handy in recovering from a variety of crashes and major problems), and "/" for a list of options and help.

The ScanRegW in Windows ME is similar, but unlike Windows 98, the ME version of ScanRegW is run from Windows, a major convenience. With a typical Windows interface, the ME version of ScanRegW is intuitive and easy to use. I recommend that ME users run ScanRegW with the "/fix" suffix at least monthly.



(Continued on page 10)

A Computer Adventure — Final Chapter

By John Hoffmann, CAUG

I usually buy a new computer about every four or five years. Then I order the cutting edge stuff even though the prices at first are outrageous. Anyway, I am at the front edge of technology for a while and definitely on the short side of technology at the end of a buying cycle.

Cable modem would become available soon and it was just about time for a new computer. I use the computer for word-processing, Internet browsing plus e-mail. I also do graphics, sometime using three programs simultaneously, and I use a C++ compiler and the Microsoft programs like Excel and Access. Therefore, I wanted a fairly elaborate computer setup.

I went shopping around the Internet and got the idea to have a computer built. I did not want to mess around with power or motherboards so the bare-bones approach appealed to me. A lot of companies wanted to sell what they had in stock but I wanted to specify all components by manufacture and model. I finally found a company in California that would do that and guarantee the computer for one year. I approved a few minor, equivalent component substitutions after some back and forth conversations.

I bought the new computer in early 2001. These were the early days of the Pentium 4 CPUs. I requested an Intel motherboard (I don't think third party Pentium 4 motherboards were available yet) and the more expensive and faster Rambus memory. This way, all the "working" parts were Intel or Intel-sanctioned and although rather new, I hoped to avoid incompatibility problems.

Everything was looking good. I filled up the remaining three empty PCI slots with add-on cards I wanted on my computer. The two USBs were also in use. The computer was loaded up; I think I would call it a workstation.

Cable modem became available in mid-2001. I upgraded the Windows 98 SE to Windows XP Home Edition in 2002.

Everything was still looking good as the warranty ran out. Then, I found my computer had shut down overnight (I normally keep it on all the time and use an UPS). A reset usually restarted the computer until one day it would not restart. It would try to startup for about 15 seconds and then shut down. The two case fans would not run although the power supply fan worked fine.

Computer repair is not my thing so I got some professional help. Initially the repair man just reset the boards and the computer would run OK—fine for one week at which time it would not startup. Time for some serious testing. Diagnostic tests on components checked out OK. It was hard to repair a computer that would run sometimes. The Intel motherboard has lots of shutdown routines to protect the board. These appeared to be halting the startup.

The repairman dug into the specifications of the Intel 850GB motherboard and found out I did not have an Intel-approved power supply. I originally specified a 300-watt power supply remembering that power requirements were being lowered to reduce heat in components. Power supplies usually come with the case. After viewing the case on the Internet, I approved what was suggested—all I knew about cases was that they should be ATX certified. Intel requires a minimum power of 250 watts and loaded up computers should have 300 watts (or greater) of power. The Intel approved power supply has a separate 12-volt lead that feeds a voltage module.

(Continued on page 10)



(Continued from page 8)

There are several fine third party utilities that make registry repair a simple and reliable process. I recently obtained a copy of Registry First Aid version 2.0 from Rose City Software at <http://www.RoseCitySoftware.com/Reg1Aid>. Available as a free trial download (full error detection with repair recommendations, but limited automated repair function), or as a fully functional registered version (\$21), I was amazed at what Registry First Aid found on my computer. As I had recommended, I ran Microsoft's RegClean 4.1a weekly, and Scanreg /fix at least monthly. I have also periodically run registry-cleaning utilities such as System Mechanic, and Power Cleaner, each of which routinely found and repaired registry errors. What amazed me was that Registry First Aid found over 700 registry errors that all of the other utilities missed! It found obsolete references to long deleted programs on my computer, all of which I thought I had properly deleted using the Add/Remove or uninstall utilities. It found references to programs, files, fonts, drivers, hardware, and other items that I no longer had on my computer, and allowed for their automatic deletion. What was even more impressive was the ability of Registry First Aid to also repair registry errors, instead of simply deleting them. When I built my computer it had one hard drive; now it has four drives. I had used a utility to move program files and data from the original smaller drive, to a newer and faster hard drive. That utility was supposed to have changed the relevant registry settings, but it obviously did not; Registry First Aid caught over 400 such errors in the registry, searched all four of my drives, and recommended a selection of repair options. Simply, I found that Registry First Aid is the best registry repair utility I have ever used. It was fast, considering how much it had to go through, and appeared very thorough. After running the program, I ran Microsoft's Scanreg /opt to recompress my registry. My computer clearly booted much faster, and when shut down, it closed quickly. Registry First Aid is compatible with all versions of Windows from Windows 95 to Windows XP.

It performs its job in five steps. First it scans the registry for invalid or bad entries, or other errors, then reads the hard drive or drives in an attempt to locate the files or data necessary to repair the errors. At this stage the user has the opportunity to select from a

(Continued from page 9)

The final repair solution was to install an Intel-approved power supply that delivers 350 watts of power. The various diagnostic testing cost more than the power supply. I have no idea why the old power supply performed well for over a year.

Everything is working fine now. The repair guy solved a challenging problem. He is a CAUG member, recommended by a CAUG member..

I wrote a nasty-gram to the company that assembled my computer. They could not know I would load up the computer but surely missed the boat by installing a power supply that was not Intel-approved. This might be considered a subtle miscue but it failed my computer. I have had no response from them yet. They are making noise like a turnip.

In spite of one serious problem, I would do it all over again.

John Hoffmann is leader of the Digital Camera SIG and also does the cover page artwork for this newsletter. Email: mhoffmann@stx.rr.com

This article is brought to you by the Editorial Committee of the Association of Personal Computer User Groups (APCUG), an international organization to which this user group belongs.



choice of repair options for each error found, if repairable, using the pull-down listing embedded with each error. No special skill was necessary to determine the best choice, and the correct repair was made. A backup of the old registry is saved, and then the repairs are made. I recommend that users download the free trial version from <http://www.RoseCitySoftware.com/Reg1Aid>, and try the program. If you have other repair utilities, I suggest running them first, followed by Registry First Aid, and see how many more errors it can detect and repair. If you are as impressed as much as I was when I first tried it, you should seriously consider registering it for \$21, and utilizing all of its repair functions. You will likely find that your computer runs better, as mine does now.

BugBear Warning — A Dangerous Computer Worm

By Ira Wilsker, Golden Triangle PC Club

I started writing this week's column on freeware utilities. I just checked my email again, and so far, I have received over 40 copies of the highly dangerous and recently released BugBear computer worm, also being referred to as the Tanatos worm. According to reports published in recent days in the computer media, BugBear has surpassed the infamous Klez in becoming the fastest spreading computer worm or virus in history. Trend and Panda, two major providers of free online virus scans, each now report that nearly 20% of computers infected with malicious code now have the BugBear worm. The Helsinki based antivirus and computer security firm F-Secure rates the BugBear worm as the worst current computer security outbreak. Symantec, publisher of the popular Norton AntiVirus rates the threat as "severe". McAfee considers the risk as "high".

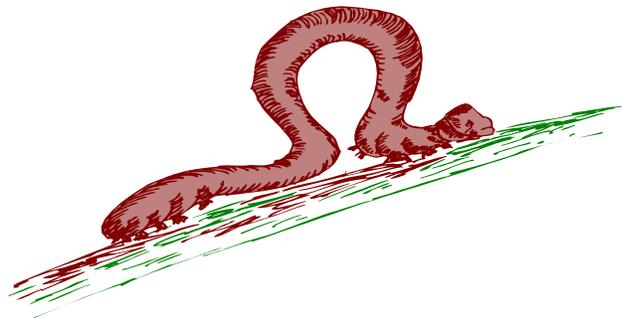
This new worm, or piece of code, is written in the common and popular C++ language, and combines the worst of the Badtrans virus, the Klez worm, and a backdoor Trojan into one extremely dangerous program. Capable of destroying both antivirus software and firewall protection on an infected computer, this nefarious program can also spread rapidly through a network to all computers connected, and through email utilizing its own integral mail program.

Just like the Klez, which until the recent introduction of the BugBear, had been the most rapidly spread virus or worm, BugBear targets the highly publicized security holes in Microsoft's web browser Internet Explorer versions 5, 5.5, and 6, as well as Microsoft's popular email programs Outlook and Outlook Express. Despite the fact that Microsoft released a heavily promoted patch to close these holes about a year ago, and is included in "Windows Update" integral in all versions of Windows since Windows 95 (click on START – WINDOWS UPDATE while online, and download the customized and free "Critical Update" compiled by Microsoft), millions of Windows users have never installed the patch. Now, in exchange for their complacency, these users are at extreme risk of having their per-

sonal information stolen by hackers. There is a real chance of having their identity stolen (referred to in law enforcement as "Identity Theft"), private or confidential information accessed, credit card and banking information compromised, and any files on the hard drive available to a hacker to read, modify, or delete at will.

The BugBear, just like the Klez, Yaha, and similar variants, can be activated by simply opening an email containing the malevolent code, or allowing the infected email to appear in the preview pane of any of the unpatched versions of Outlook or Outlook Express. With email programs other than the Outlook series, opening the attachment containing the worm will infect the users' computer. Once infected, antivirus and firewall utilities will be crippled, with no indication of that fact being noticeable by the user. BugBear will then attempt to replicate itself both by repeatedly emailing itself to addresses in the user's address book (the idea of beginning an email address with "!0000" to prevent this is a HOAX), using a variety of subjects, email content, and attachments, as well as sending itself out over a network to all computers so connected. Using the popular human engineering technique of sending the infected emails to addresses in the victim's address book, the malignant messages will appear to be from a person known to the recipient. Multiple references to the worm are written to the registry and ".INI" files, ensuring that BugBear is loaded each time the computer is booted. There are no clearly visible indications to the user that a computer is infected. Once installed on the victim computer, a utility to capture the user's keystrokes is activated, enabling a hacker to see

(Continued on page 13)



Selections From The DealsGuy

Bob Click, Greater Orlando Computer User Group

I enjoy all the feedback from my personal comments in the column. When I wrote about my experience with spyware on a friend's computer, I was surprised at how many people e-mailed to say how many spies they found on their own machine when they installed Ad-Aware, and many had over a hundred. Some even asked me where to get Ad-Aware and I thought that was pretty common knowledge. People must not be paying enough attention because I read about Ad-aware in many newsletters.

Heard about Turbo Tax lately? It looks like Intuit took lessons from Microsoft with their "product activation" scheme, but Intuit uses a third party software called SafeCast (by Macrovision) to keep track of the computer it is installed on, although it continuously works in the background. It sounds like there have been problems, but their tech support doesn't have much patience. I read about a guy who had hard drive problems. He replaced his HD and that one also became defective. He really got an attitude from their tech support. If you want to know more, go to [<http://www.extremetech.com>] and you'll see lots of information about it if you do a search. The article I read was "TurboTax, So What Should I Do Now?" It also had a list of other products that use the same product activation scheme.

Everything You Wanted To Know, And Also Things You Never Wanted To Know

Ever wonder what your computer was really made of? There are plenty of ways to find that out, but Paul Witheridge of Sarnia Computer Users Group gave me this little program that will capture your interest. Best part of all, it can run from a floppy. Download it at: [<http://www.aida32.hu/aida-download.php>]. Also see [<http://www.aida32.hu/aida-features.php?bit=32>] (left column) for a description. Then unzip it to put it to the test. In fact, I did put it on a floppy and, although it runs a bit slow, it works gathering so much information about your machine that you will be astounded. When browsing the information, it even takes you to the Web sites. Best of all, it's freeware. Be prepared to spend a lot of time to interpret stuff the first time you run it. Actually, I understood little of the information, but you might.

This column is written to make user group members aware of special offers I have found or arranged, and my comments should not be interpreted to encourage, or discourage, the purchase of products, no matter how enthused I might sound. Bob (The Cheapskate) Click [Bobclick@mindspring.com]. Visit my Web site at [<http://www.dealsguy.com>] for past columns. Also, I keep adding interesting articles (taken from user group newsletters) to my "Articles of Interest" page for viewing or downloading.



Washington Area Computer User Group (WAC) Meetings

WAC Meetings May 17 12:30 PM to 3:30 PM at the Fairfax County Government Center, 12000 Government Center Parkway, Fairfax, Virginia. You do not need to be a member to attend. For more information on WAC meetings and events, call the WAC AnswerLine (voice) at (703) 370-7649. Also see WAC's Web Site at

<http://www.wacug.org/>



(Continued from page 11)

user names, passwords, credit card numbers, and any other information or data entered. A “backdoor Trojan” is activated allowing access to the infected machine, the downloading of the keystrokes by the hacker, and unrestricted access to all files and documents on the computer. Since BugBear itself is transparent, and not apparently destructive, the user will likely never know his computer is infected, and outsiders can access his computer remotely. Anti-virus software will still appear to be loaded and updated, and firewalls will appear to function, but in reality they will be useless.

What is a shame is that this infection is easily preventable. Properly updated Microsoft files have significant immunity to the infection. Frequently updated antivirus software offers excellent protection, but only if updated with the BugBear information prior to the infection. Practicing “safe hex” and deleting suspicious emails and attachments before they can appear in a preview pane can greatly reduce the chance of infection.

The free online scans available at housecall.antivirus.com and www.pandasoftware.com can detect and kill Bugbear. Most major antivirus publishers, including Symantec (Norton), F-Prot, and Panda have free utilities available for download that can detect and kill BugBear.

Since BugBear is written in the common C++ language, it is likely that some wicked programmers may modify the code, and create variants to get around the protections offered by recently updated antivirus software, just as what happened with many variants of the Klez worm.

It is a darn shame that I have to do so many columns on the topic of high-tech vandalism, but BugBear is especially insidious. I hope that next week, I can write my column on the topics I originally planned, rather than warning all of you about some new danger.

Ira belongs to, the Golden Triangle PC Club, has a radio show and writes a column for the examiner, and is on the Board of Advisors for APCUG as well as a faculty member of the Lamar Institute. You can email him ira@apcug.org

This article is brought to you by the Editorial Committee of the Association of Personal Computer User Groups (APCUG), an International organization to which this user group belongs.

Disk Investigator

By Robert A Lewis, Dayton Microcomputer Association, Inc. Dayton, OH

Here's a new utility that members might find useful. Disk Investigator is freeware. Download at <http://www.theabsolute.net/sware/dskinv.html>

Disk Investigator
Latest version: v1.2
FREEWARE -
(Only 0.5 Mb)

*Discover all that is hidden on your hard disk
— (for Win95, Win98, WinME, WinNT,
Win2000, WinXP).*

What is Disk Investigator? Disk Investigator helps you to discover all that is hidden on your computer hard disk. It can also help you to recover lost data.

Display the true drive contents by bypassing the operating system and directly reading the raw drive sectors. View and search raw directories, files, clusters, and system sectors. Verify the effectiveness of file and disk wiping programs.

Undelete previously deleted files.

This article is brought to you by the Editorial Committee of the Association of Personal Computer User Groups (APCUG), an International organization to which this user group belongs.



(Continued from page 1)

plugging in the Dazzle Flash media card reader in the USB port. That results in no recognition of the Dazzle's existence, or of the additional two drives that should appear when the USB connection is made. I ran out on the 16th, and bought a Maxtor 120 Gig drive, which had a \$40 rebate offer from CompUSA.

Then, I started thinking (always a dangerous pastime). I wanted to be sure that I had at least one working computer while I went through the process of installing the new HD and reinstalling Win XP and all my software. I decided to upgrade the old computer I had that was afflicted with a virus several months ago that nothing could eradicate. Despite the attentions of Norton Anti-virus, and a download from Norton's web site of a mini-app designed specifically to kill this critter, if I went to the Internet, that pernicious virus would pop back up.

I bought a new motherboard with a Duron 1.3 Gig processor, 256 meg of memory, and Windows XP Home from GT Computers, a screwdriver shop in Herndon that has a second outlet in Springfield. I bought another Maxtor drive, this one 60 Gig, with a \$20 rebate from Office Depot, added another 128 megs of memory from the old computer, and proceeded with the XP install. It went fine, and the system works ok — but there's an anomaly that's serious enough so I'm going to have to start over again.

The computer has the new 60 Gig HD, a CD-R, CD-RW, and an internal IDE ZIP drive. I can read files from all the drives, haven't installed the software for the burner yet. But guess what the system shows as the "C" drive? Yup, it's the Zip drive! It boots fine, and operates ok for everything I've tried. But the computer has the Zip designated as "C" and in at least one instance, where I had a ZIP cartridge in the drive during new software installation, a bunch of stuff got written to the ZIP drive, rather than to the hard drive.

Despite the ministrations of several of the NCTCUG crew at our last meeting, while the drive letter of the ZIP could be changed, the HD is still designated as "F". Arrrrrgh!

Gee Whiz — now I'll have to start over again, reformat the HD, reload Win XP, download the 4 hours worth of updates and patches. And then, load all the software.

After that, I'll have to tackle the new PC and try reformatting and reloading Win XP and software on it — or put in the new Maxtor drive, if I can't get the original 80 Gig drive to work. And I haven't done my taxes yet, where I have to face the vagaries of the new Intuit TurboTax copy-protection scheme. Funny how having a computer was supposed to save time with all our household record keeping tasks! At this rate I might have to file for an extension.

During the last NCTCUG meeting, I was able to find where one option was hidden within Windows XP to make computer use a tad faster. Would you like to avoid moving your mouse pointer when selecting the default option in a window? Under XP, go to Control Panel, Mouse, Pointer Options tab, and check "Automatically move pointer to the default button in a dialog box." Then you can click the left mouse button, or bash the enter key. Guaranteed to get 50% more miles to the gallon on your mouse or trackball.

I mentioned at Pizza SIG that the dearth of new (as opposed to "repeat") TV shows had caused me to rent some videos last weekend and two of them had been in black and white. That was quickly pounced on, and the gang collectively thought they'd seen those movies, and they were in color. (Silly me — one was Ronin, with Robert DeNiro — took place in France, so I thought maybe it was supposed to be "film noir.")

Yet another example of being bitten by technology — I swapped a new set of cables for the component video output of the DVD player, still got B&W. Changed out that cable, and used an S-VHS connection — color returns. But, is it the DVD component outputs, or TV inputs? Pull everything apart, and drag the player into the family room, and hook it to that TV.

Take 15 minutes trying to figure out how to get the DVD's "component video input" to display on the screen. This TV has an option buried several layers down in the channel setup menus to skip inputs you don't have anything connected to, so when you hit the appropriate button on the remote control, it only toggles between active inputs. Thought that was a good idea at the time — after all, why toggle through three inputs when you only have a VCR connected to the TV, in addition to the regular an-

tenna input. (You remember "antenna?" That was before "cable" or "satellite dish" — I'm one of the 15% of US households that doesn't have "cable" — I get my signal off the air, with a subversive "antenna" in my attic!)

Much cursing later, I determined that this TV also displays the component video output from the DVD as B&W. So I dragged the DVD player, still under warranty to Circuit City, hoping, that since prices have dropped so significantly since I bought my unit in mid 2001, I might get handed this year's model, rather than go through the agony of repair... "Repairs generally take two weeks, Mr. Howard."

Tune in again next time, kiddies!



NCTCUG Information

NCTCUG, Post Office Box 949, Arlington VA 22216

Club Information call: 301-577-7899

Web Site: www.nctcug.org

Officers and Directors

All officer terms expire 2003

President	Jim Rhodes	703-931-7854
1st VP	Ron Schmidt	301-577-7899
2nd VP	Roger Fujii	703-280-1243
Treasurer	Paul Howard	703-860-9246
Secretary	Roger Arnold	301-946-7770

Director: term expires

Bob MacFarlane	2004	703-533-0259
Blair Jones	2004	202-362-7344
John Keys	2004	703-451-0896
Nick Wenri	2004	703-759-3938
Fred Cook	2003	703-921-1749
JJ Davies	2003	703-379-9222
Sy Fishbein	2003	703-536-5894
Dean Mires	2003	301-931-2400

Article Submissions

Articles, helpful hints, and other items of interest to readers of the NCTCUG Journal are always welcome and will be published as soon as possible after submission. Priority is given to members' contributions. Items may be submitted via modem to the BBS or on diskette. Submissions to the BBS should be uploaded to the Newsletter Conference and a message left for the Editor. Files should be straight ASCII, unformatted, with C/R only at end of paragraphs; no indents for paragraphs should be used. Preferred format for diskettes is MS-DOS 3 1/2 720k or 1.44Mb. Diskettes in other formats may be submitted but there will be a considerable delay in processing. If absolutely necessary, items may be submitted in hardcopy only but these will also meet with delay.

Membership Policy

The National Capital Tandy Computer Users Group, Inc. is a non-profit [501-c(3)] organization founded in 1977 to educate users of all Tandy computers and MS-DOS compatible computers. Membership dues are \$25.00 (U.S. Funds) per year, with a \$5 surcharge for international mail. Membership in NCTCUG includes membership in all SIGs, access to the BBS and software libraries, and subscription to the Journal published 10 times per year. Applications may be obtained at any club meeting, by downloading from the BBS, by calling one of the officers or board members, or by writing to the club. A sample newsletter, membership application and related information may be obtained by enclosing \$1 and mailing your request to Jim Rhodes, 201 S. Kensington Street, Arlington VA 22204.

Advertisement Policy

Members' advertisements: Ads are accepted from members for non-commercial purposes at no charge. Copy should be sent to the Editor in the same format as article submissions. Commercial Advertisements: Ads are accepted from commercial advertisers at the rate of \$60 per full page, per appearance, with discounts for multiple insertions. Smaller ads are priced accordingly. Payment for ads must be made in advance of appearance. Advertisers must supply a permanent address and telephone number to the editor.

Reprint Policy

Permission to reprint articles from the NCTCUG Journal is given to school, personal computer club, and nonprofit organization publications, provided that: (a) NCTCUG Inc. receives a copy of the publication; (b) credit is given to the NCTCUG Journal as the source; (c) the original author is given full credit; and (d) the article author has not expressly copyrighted the article. Recognition is one means of compensating our valued contributors

Newsletter Staff

Editor
Blair Jones 202-362-7344
bjones44@bellatlantic.net
Exchange Newsletter and
Articles Editor
Ron Schmidt 301-577-7899

COMPUCENTER BBS

Is no longer in operation. It has been replaced by the 'compucenter' mailing list at <http://groups.yahoo.com/>

If you are moving

Please send your change of address to the club PO box as soon as possible to avoid missing issues.

Thank You!

(Continued from page 4)

Have You Been Annoyed By The “Report Error” Box?

You know the one – it allows you to send some information on the crash to Microsoft.

Just because WindowsXP is by default set to report application errors doesn't mean you have to keep it that way.

You can disable it!

Right click on the My Computer icon on the desktop
Select Properties / Advanced

or

Open Control Panel
Click on System.
Click on the Advanced tab

Click on the Error Reporting tab

Check Disable error reporting, or specify programs.

I haven't actually done this (yet), but I am thinking about it.

NCTCUG, Inc.
P.O. Box 949
Arlington VA 22216



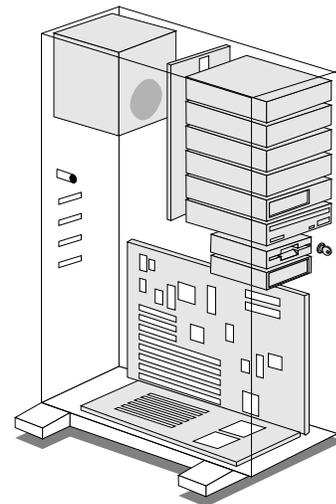
May 2003

1st Wed. (5/7) 7 p.m.
Virginia General Meeting

4th Wed (5/28) 7 p.m. Internet SIG

3rd Monday (5/19) 7 p.m.
Board of Directors

All meetings are at **Carlin Hall**, 5711 S. 4th St.,
Arlington VA: East off of Carlin Springs Rd, just south of
Arlington Blvd/Route 50.



First Class