



Brevard Users Group



June 2004



Prez Sez

By George Rymer



Windows SIG Update

The club purchased a KVM switch at last month's computer show in Orlando. If you don't know what that is, it's a switch that allows two computers to be connected to one Keyboard, monitor (Video), and Mouse.

In our case it connects to the projector instead of a monitor. At the press of a button we can now change from a notebook with Windows XP, to another one with Windows 98se in a few seconds, as opposed to a few minutes when we had to switch the cables.

This has really helped with the questions jumping back and forth between the two operating systems. It seems as soon as Chuck shows how to do something in XP, someone wants to know how it's done in 98. Now it's quick and easy, and the members will have all the answers.



Change Word Default Location

From the Internet

The question was how to change the setting that dictates the default location of where MS Word saves a document. That question was much easier to answer. In Word, you click on the "Tools" pull-down menu, then select "Options". This opens the Options window in which you click on the tab labeled "File Locations". On the "File Locations" display and the column labeled "File Types:", click on "Documents". Then click on the button labeled "Modify". This will open a window that allows you to select the folder to be used as the default for saving documents.



Ed doesn't use a keyboard, he talks to his computer by phone.



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**THE NEXT MEETING OF THE
BREVARD USERS GROUP
WILL BE ON**

**Wednesday, June 16th 2004
AT 7:00 pm
IN**

**the Melbourne Library
Visitors welcome!**

**Visit the BUG CLUB web site
for the latest schedule.
<http://bugclub.org>**

**There will be a drawing for Door Prizes!
You must be a member and present to win!**

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Secretary's Report

By: Joan Hefter

BUG MEETING
May 19, 2004

President, George Rymer, opened the meeting at 7:05 PM.

George spoke about the Tuesday, afternoon Glenbrooke Computer Meeting. There were 6 people from our club that showed up and 1 other person interested in Apple. Because of the poor turn out and the amount of work involved in putting it on, George decided to suspend the operation until there was more interest.

Our President also stated how the club is going for a non-profit status. It would be a huge help with saving on mailing newsletters and anyone donating equipment could write it off their taxes. George explained that it is an involved process and is being worked on.

The floor was then opened for any questions about computers or comments regarding the club. Chuck was on hand to help enlighten our members with their computer problems.

Our guest speaker was to be from Staples but due to a mix up they did not show. George frantically called for help and Dave Hixon and Ed McEwen offered help out. Dave, our 2nd Member at Large Officer, did a presentation on TEXT & TAGS for an HTML Web Page. Using notepad Dave showed us how the text was inserted with using a few simple codes for heading, paragraph, line breaks, color and fonts, etc. To learn more about it he suggested going to this web site:

<http://labrocca.com>.

It was a very informative presentation.

Ed, our Imaging SIG Leader, will speak another time on Digital Photography. Dave's presentation was so interesting we didn't want to switch.

There were three door prizes given away to our members, 50 CD cases, Version 4.0 FlipAlbum Program and a USB Retractable cord.



Treasurer's Report

By Pete Lehotsky



May 2004

EXPENSE

Newsletter

Mail Permit	\$150.00
Printing	\$89.58
Mailing	\$64.64
	\$304.22

INCOME

Dues	\$225.00
Disk Sales	\$6.00
Interest	\$0.00
	\$231.00

ASSETS

Checking	\$625.11
Savings	\$2,467.92
	\$3,093.03

Renewals:

Arnold, J	#1198
Cameron, E	#1058
Crowley, C.S.	#1054
Evans, R	#1010
Geist, J	#0905
Miller, G	#0965
Schamberg, L	#1057
Swigart, M	#1180



Visit the BUG Club Web Site at
<http://bugclub.org>
Got Questions?
Go to the Forum and Ask!

Random Acts of Kindness Event

*held at the Palm Harbor Library
April 29, 2004
by Dave "Doc" Dockery*

Another RAK is behind us. We were at the Palm Harbor Library a couple of days ago for another Random Acts of Kindness computer repair clinic. Thanks to all of the TBCS members who came out for the day to help us fix computers: Ron Kalmin, Chuck Vroman, Art Crofford, Joe Schmitt, Frank Bucca, and Bill De Lucia. Thanks also to Gene Coppola & Dana Dockery both from the Palm Harbor Library. Gene is the Director of the library and Dana (my wife) maintains the library's computers and networks. Dana assisted in the troubleshooting process occasionally.

Instead of writing a glowing review (which we so richly deserve <grin>) and telling you how great a time we all had (which we did), I wanted to use this space to address another issue.

Almost every computer that we saw at the clinic had viruses and spyware loaded on it. One of our patients was so sick that it would lock up completely within a minute or two. It took Art Crofford over an hour of frequent rebooting to regain control of the machine so that he could run a virus checker and a spyware checker.

From the standpoint of our computer clinics, this development means that we will have to allocate more time to service each computer (virus & spyware cleaning is more time-consuming than many of the other tasks that we perform). My experiences at this latest RAK leads me to make 4 suggestions to users:

1.

Anti-Virus scanners (a la Norton, McAfee, AVG, etc.) do NOT protect you from all the different types of malware trying to attack your computer. Also, many viruses are able to corrupt your anti-virus software so that it continues to say that you are not infected when, in fact, the viruses have taken over your computer. Most of the machines that we find viruses on are running anti-virus software. This means that you MUST run an online virus scan from time to time. Try using Housecall.

2.

You should be running a firewall - EVEN if you are using a dial-up connection instead of a broadband connection. A free firewall that I often recommend is ZoneAlarm.

3.

DO NOT, I repeat DO NOT download and install free software utilities (search tools, Comet Cursor, Bonzi Buddy, etc.) that are available over the Internet unless they come from a reputable source. Frequently, they come with spyware embedded in them. If you don't have anyone to advise you, then at least go out to Google and search on the name of the utility to see what others are saying about it.

4.

Make sure that you keep your Windows Operating System software up-to-date by downloading ALL of the critical updates available from Microsoft's website. It seems unfortunate to catch a virus because you didn't take the time to download free software that would protect you.

There's a wide variety of threats out there directed towards computers. It takes a little more computer savvy to protect your computer these days than it did a year ago. At TBCS, we're committed to educating our members so that you don't lose your data, and you don't need to drive your computer to an RAK clinic for repair.

Doc

*Reprint from: Bits & Bytes
Official Newsletter of the
Tampa Bay Computer Society*



Courting Disaster ?

By Ed Maxey

Is your computer running WindowsXP? If so, do you have a backup? If not and a worm or virus bombed your operating system would you not be SOL?

There is no need to court such disaster. You could restore your operating system in fifteen minutes if you had a backup USB2 external hard drive which could be accessed from DOS.

You'll need a system floppy with this in your CONFIG.SYS file:

```
device = USBASPI.SYS /w /v
device = USBCD.SYS /d:USBCD001
device = di1000DD.sys
```

You'll also need anAUTOEXEC.BAT something like this:

```
mscdex /d:USBCD001
mouse.com
ghost.exe
```

Now if your WindowsXP was wormy and wouldn't boot you could still boot the floppy. You would then soon be seeing all partitions; both external and internal. Ghost allows you to erase the internal OS and rewrite it from the external USB2 hard drive. You're back in business.

USBASPI.SYS searches for any USB devices it can find. This file and USBCD.SYS are contained in kxlrw40an.exe which can be downloaded from:

<http://panasonic.co.jp/pcc/products/drive/cdrw/kxlrw40an/driver/kxlrw40an.exe>.

This file and USBCD.SYS are in the F2h subdirectory created by kslrw40an.exe. USBCD.SYS generates USBCD001, the CD-ROM R/W driver, whenever a USB CD-ROM device is found.

Dil000DD.SYS enables communication between ASPI and DOS. It may be downloaded from ftp://ftp.dars.com.ru/support/dos_usb/mhairudos.zip.

The MSCDEX and mouse programs must be compatible with the DOS version of your floppy. They are readily available via your computer club or local computer store. The ASPI files will probably not recognize a USB mouse.

GHOST.EXE is a SYMANTEC product. GHOSTPE.EXE is a part of Norton System Works 2002 and is somewhat faster than earlier versions of GHOST.EXE.

You may also wish to include FORMAT.EXE and FDISK.EXE on your floppy in case you need to format the existing internal partition. If necessary you can delete the old partition and write a new one prior to copying the OS from the external hard drive.

What does one do if WindowsXP is their only OS? WindowsXP has no SYS command and hence can not make a DOS bootable floppy. The Ghost segment of Norton System Works 2000 will let you make a DOS bootable recovery floppy. This floppy was unable to find the external USB2 drive in this desktop.

However, deleting some of its files and replacing them as described above made this floppy work just fine.. Some worms and viruses destroy partitions. Some wreck the master boot record (MBR). FDISK.EXE and FORMAT.COM are then needed. A defective MBR may be rewritten by the command:

```
FDISK /mbr.
```

If GHOST then sees the internal hard drive the external backup can be copied onto it. If not FORMAT can be used to construct a partition on the internal hard drive which GHOST will see. FORMAT and FDISK must be compatible with the DOS version on the recovery floppy.

You will be amazed at how much better you sleep once you have both a recovery floppy and backup external hard drive tucked away in a safe place.

Better to be safe than sorry!

*Reprint from the February 2004 Newsletter
Northwest Arkansas Personal Computer User Group*



The Drive-by Attack!

(My personal experience and internet research)

by Jonathan Gerson

NTPCUG PC News newsletter,

Internet marketing companies are getting more obnoxious and unethical every day. The marketers have come up with some incredibly unethical, horribly annoying gimmicks.

The Surprise

A few months ago, I started up my internet browser on my home computer (I have a dial-up connection) and was surprised to find myself looking at a page I wasn't expecting. Nooo, it wasn't an adult site, but Xupiter.com. It is more insidious than any adult site. Xupiter.com bills itself as a helpful search engine, similar to Google, Yahoo and others, but it does the following: Installs an Internet Explorer toolbar containing link buttons to the search engine at Xupiter.com Runs a task at Windows startup to download updates to the software and may launch pop-ups Periodically resets your home page and search settings to point to Xupiter.com Adds links pointing to xupiter.com to your bookmarks. When Xupiter.com replaced my homepage, naturally I manually changed the homepage back to what it was, but Xupiter doesn't give up easily. When I restarted the browser or performed other actions, it reverted back to Xupiter. Every time I tried to use the Address, Favorites or Search functions, I was unable to do so, and Xupiter.com reinstalled itself as my homepage again. Xupiter consist of a hidden program file, a plugin and a sneaky, very well hidden ini or inf file, and makes changes to you system registry. The plugin allows Xupiter to call home for the updates, and possibly report your search and browser use. (thus it is also spyware).

The Installation

Why, you ask, would I have installed such a program? Well here is that insidious part, I didn't. It was a "Drive-by!" Xupiter can be installed when you visit a web site or click on an advertising link. Applications that install in this manner are also referred to as "drive-by downloads." Xupiter is a browser plug-in that gets installed automatically on your computer when you visit

certain web sites. There is no comprehensive list of dangerous web sites of which I am aware. A pop up ad can also install Xupiter on your computer. Xupiter is downloaded to your computer as an Active-X control. An Active-X control is a small program or "applet" that lives on the Internet. It installs without your permission or knowledge.

Removal

OK, how do you get rid of this nasty program? First confirm that you have Xupiter by Start- Run- msconfig (Note: this utility does not exist if you are using Windows 2000). Look under the startup tab and see if it is running. Unchecking the box will have no effect because Xupiter just reloads itself at boot. Going to Xupiter.com and using their uninstaller is also useless because all the uninstaller does is to disable the tool bar, but leaves the program intact and spyware running. Are they nasty or what?!!

At the time, I was religiously running Lavasoft's Ad-ware version 5.83, a free program that removes spyware. It didn't see Xupiter. I then heard about and used Spybot 1.1, release 4 Search & Destroy by PepiMK Software, another free program (the programmer does takes contributions) that removes spyware. It worked. It found all kinds of stuff (in addition to Xupiter) that that Ad-ware 5.83 missed. Unlike Ad-aware, which doesn't give you any information about what it finds on your PC, Spybot provides you with a clear list of everything it's discovered. Simply mouse-over any item on the list, and you can find out where it came from, what it does, and what Spybot recommends you do—keep it or destroy it. You control what to remove. It also has a spyware update capability like the better anti-virus programs have.

Of course both spybot and anti-virus programs are needed to provide good protection. Since then, Ad-ware 6.0 came out. When I ran this new Ad-aware version it had a lot of bells and whistles that Spybot had including spyware updating and the choice of what to keep, save or destroy. It found more pieces of Xupiter in my registry that Spybot missed after I thought Spybot had flushed my computer of that !%#@\$ program. I now use Ad-aware 6 as my main spyware removal program. I run it every time I finish using the internet.

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Drive By Attack ... Continued from Page 6

Drive-by Download Prevention. OK, how do I prevent from getting a drive-by download in the first place? Security settings are a matter of personal choice, but on the IE menu bar, under tools internet options under the security tab (with Medium security selected for the Internet zone) under the Custom level button, you should change your activeX settings to: ActiveX controls and plug-ins... prompt, prompt, enable or prompt, enable, enable. If you were to set everything for prompt, IE will be asking all the time if you will allow this or that and drive you crazy. Then go down to your java settings and set for "high safety". Those are not the only security settings a user should make "as a matter of choice" but that should keep you from getting the Xupiter curse unless you accept a popup download and then it's your fault. Please note, do not rely on your network firewall if you have one. A co-worker at my office was hit by Xupiter about a month after me and we have a pretty hefty firewall running there.

What is Hijackware? Hijackware (e.g., Xupiter, Gator, Comet Cursor, Bonzi Buddy, Go Hip), places adverts from the software over the adverts on a site, robbing the site creators of revenue and taking away all control over who gets advertised to their customers. For instance, if the webpage had an ad for shoes, the hijackware would replace that ad with another company's ad for shoes or something else. If the web user clicks on the hijacker ad, instead of the website getting credit (read money) and the web user being sent to the legitimate webpage, the web user is sent (read hijacked) to the hijacker's paid sponsor's site. The revenues the original web site would have received is lost and the legitimate advertiser loses a potential customer. This latest evolution looks to be capable of actually destroying many web sites. These programs are in wide-spread usage among the internet users.

What is Spyware? Spyware is internet jargon for Advertising Supported software (adware). It is a way for shareware authors to make money from a product, other than by selling it to the users. There are several large media companies that offer them to place banner ads in their products in exchange for a portion of the revenue from banner sales. This way, you don't have to pay for the software and the developers are still getting

paid. If you find the banners annoying, there is usually an option to remove them, by paying the regular licensing fee. Why is it called "Spyware"? Most (not all) advertising companies also install additional tracking software on your system, which is continuously "calling home," using your internet connection and reports statistical data to the "mothership". While according to the privacy policies of the companies, there will be no sensitive or identifying data collected from your system and you shall remain anonymous, it still remains the fact, that you have a "live" server sitting on your PC that is sending information about you and your surfing habits to a remote location.

Is Spyware illegal? Even though the name may indicate so, "spyware" is not an illegal type of software in any way. However there are certain issues that a privacy oriented user may object to and therefore prefer not to use the product. This usually involves the tracking and sending of data and statistics via a server installed on the user's PC and the use of your Internet connection in the background.

What's the hype about? While legitimate "adware" companies will disclose the nature of data that is collected and transmitted in their privacy statement, there is almost no way for the user to actually control what data is being sent. The fact is that the technology is in theory capable of sending much more than just banner statistics - and this is why many people feel uncomfortable with the idea.

On the other hand ... Millions of people are using advertising supported "spyware" products and could not care less about the privacy hype, ... in fact some "spyware" programs are among the most popular downloads on the Internet. Be aware that some of these "adware" programs will not work if the "spy" portion of the program is removed.

To quote an old TV Police program: "Let's be careful out there."

Jonathan Gerson



Picture and Video Files — Size Matters

Timothy Everingham (teveringham@acm.org),
TUGNET and ACM SIGGRAPH

You may have gotten a bunch of spam that try to sell you something because they are telling you that size matters. However even though they may be trying to con you, in regards to the size of picture, graphics, and video files size does matter. Some of it is because it is related to image size.

However, when you try to compress files there is a point where you start to lose something. First, understand that each little pixel or time interval is represented by bits of data. You may have heard 8, 16, 24, 32 bit color. The number of bits represents the color of each pixel. On an 800x600 image you have 480,000 pixels (800 multiplied by 600). Multiply the color bit depth to get the size of the image representation (800x600x24 bit equals 11,520,000 bits). Divide by 8 for the number of bytes (1,440,000).

It gets worse with video because you have to multiply by frames per second and number of seconds (at 30 frames per second it would be 41 MB per second or 2.4 GB per minute).

If you have a lot of large image or video files to transfer through a dial up connection, you have problems. You might figure you will save and send a smaller image and blow up later. The problem is when you go to smaller image size you lose detail. Then when you blow it up, it gets blocky.

The same goes for video files—the smaller the file size the less detail and nuances are in the file. This really shows up when you take a small image and try to project it using a good LCD projector.

So if you want to project it, show it on a large monitor, or print it out large you need to keep the image size up. This is one reason there is so much hype on the amount of megapixels a digital camera has.

How do we get a small file size of images? We use compression algorithms, a.k.a. codecs (compressor/decompressor). There are lossless and lossy compression algorithms. How can there be lossless compression? Nature is filled with patterns and uniform things, which is what we take images of. If we record info about the pattern instead of each pixel, a lot of file space is saved.

For example, a person in your image is wearing a blue sweater. Instead of recording every pixel individually you record this area of the image in blue. The Tiff image format (.tif) uses only lossless compression techniques, so it is a good format for something you may wish to edit later.

With lossy compression you lose some detail, but a lot less than if you just shrank the image. One regularly used lossy compression technique is color palette reduction. With 24 bit color you have 16 million colors available. However, there are far less colors in an image. It takes less space to analyze which colors are in an image, create a custom color table that represents all the color in the image in less than 24 bits, write the color representation of the pixels with the custom table code, and include a copy of the table in the file. This can be used as a lossless technique, but usually it is taken one step farther. In the analysis of the image it is detected how often each color is used and ranked. As the compression rate increases, the number of colors that are less used are converted to colors that are close but are widely used in the image. This compresses the size of the color table, which decreases the bits per pixel representation of a color. The blending to nearby colors increases areas of the image that can be described as having one color (this is a situation of compression techniques complementing each other).

Some formats start out using only lossless compression techniques but as the level of compression increases they start to use lossy compression. Common formats that use a combination of lossless and lossy compression are GIF (.gif) and JPEG (.jpg). Remember, once you lose image data using a lossy technique you will not have it anymore unless you still have the original or a lossless copy. The compression methods discussed so far are referred to as spatial compression because they reduce the file size by compacting the description of the visual area (space) of an image.

Video is made of sequential images. This means we can also use temporal compression, which compresses the file using analysis of the differences and similarities of the frames. Usually the first frame in a sequence is compressed just like a still image, but in following frames only the changes are recorded.

Periodically or when there are major changes, a new initial frame (keyframe) is produced, followed by more recording of differences. These compressions can be

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Picture & Video Files ... Continued from Page 8

lossy or lossless. Using only lossless compression may be impractical because of the limitations of your computer or hard drive speed/space, but keep lossy compression at a minimum.

For a video DVD, MPEG-2 format uses both lossy and lossless compression techniques, so it is better to achieve the file using the DV codec it was originally imported in from your video camera and writing that file to a data DVD or CD.

Be aware that some compression techniques and settings are better for some types of video than others. If you have a talking head with a static background you can compress it greatly without much degradation, but if there is fast action or panning, you have to be more picky on what codec to use.

File size matters because it limits what you can use the file for. If you just want a small file you can send to a friend's dial up connection or have friends using a dial up connection view via a website. A small file is good. However for printing large photos, for a large computer display or to project on a screen, small files are not good. Use only lossless compression techniques on things you want to achieve or edit later because it keeps your options open. Keep your archival file large and make smaller copies of it for other purposes. It is fortunate that hard drive and DVD and CD blank prices have come down a lot so doing this does not cost a fortune, but not planning ahead on image size and which compression techniques to use can cost you not being able to fully use your precious digital photos and videos.

Timothy Everingham is Vice Chair of the LA Chapter of ACMSIGGRAPH and part-time press in the areas of high technology, computers, video, audio, and entertainment/media.

Visit <http://home.earthlink.net/~teveringham>. 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.



Hints and Tips For Beginners

George Skarbek

Tips For Absolute Beginners

I have found that many users do not read the basic manuals, in fact most don't and even relatively experienced users occasionally miss a very handy shortcut method.

When you are using Explorer, File Manager or any other Windows product to mark some files in a sub-directory or folder as Windows refers to subdirectories, to copy, move or delete them, the following conventions apply to all Windows programs.

- * Clicking once on a file marks it by highlighting it
- * Clicking on another file, will mark it, and will deselect the first.
- * By holding the Control key when clicking, all the previously selected files remain selected.
- * By holding the Shift key down when clicking, all files between the last highlighted file and the current file that is being selected will also be highlighted.
- * Both Shift and Control clicking can be used in the same session. An example of this use would be if you wanted to delete all but two or three files from a folder that contains very many files.

This is achieved by:

- * click once to highlight the first of the files to be deleted
- * scroll down to the last file
- * hold the shift key down and click on the last file to mark the lot
- * release the shift key and scroll until you see a file that you wish to keep then holding the Ctrl key click on it. This will unmark just this file and leave the others marked.

To delete the marked files just press the Delete key. In Windows 95/98/NT and 2000 if you hold the shift key down when you press the Delete key, the files will be deleted, rather than going into the Recycle bin and then having to be deleted from there.

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Hints & Tips ... Continued from Page 9

In Windows Explorer, to sort by date just click on "Modified" heading. This helps you to quick find the recent files or, click on Size to find all the large files. Clicking a second time will reverse the sort order.

If these headings are not visible, but other headings are, then extend the Explorer window to the right. If no headings are visible below the line which reads: Contents of... then click on View and select and Details.

Reprinted from: PC Update, the magazine of Melbourne PC User Group, Australia



Files & Folders - Part 1

*Les J. Kizer
Greater Tampa Bay PCUG
Mid-Hudson Computer UG*

Prologue

One night at a board meeting we discussed the information most needed in each SIGs. When it came to the beginner's SIG, two subjects need repeating over and over again: 1) files and folders, and 2) cut, copy and paste. Having taught these for several years in SeniorNet, here is a beginning toward filling the bill for "files and folders."

Definitions: Throughout I have defined terms by using bold titles. I also use two other words to have a distinct meaning: **Characters** refer to the keys one can press on the keyboard. **Bytes** refer to the data as handled by the PC and placed on storage media, such as floppies, hard disks and CDs.

As we use a computer, we are using an operating system and application programs that are stored in files. Let's also realize that the operating system, application programs as well as their users created, alter and delete files as needed.

And When PCs Arrived

When PCs arrived on the scene, the traditional file-name methodology continued with one minor modification.

File Name: A file name is combination of a filename and extension separated by a single period.

Filename: The real filename remained eight characters.

Extension: To further conserve disk space, the filetype was reduced from four to three characters and called an "extension." Like the filetype, the file extension defines the use of the file: control data, graphics, music, a program, text, etc. Unlike the rigid control over filetypes, rigid control over the extensionnames was lost; however, we live quite well by gentlemen's agreements.

There are numerous cases of one file extension being used by several applications; Microsoft word processors are an excellent example where .doc files cannot be shared among all Microsoft programs that produce .doc files.

128-Character File-Name: Along the way, Windows began allowing a 128-Character file name. The 128 characters include both the filename and the extension. At the same time file names were extended to 128 characters, periods and blanks (spaces) were also allowed.

Remember that the period defines the boundary between a filename and its extension. The extension is now the first three bytes after the last period in a file name. For example, let's use the file name: **Today is 01.30.2004 in Tampa FL**. In this case, the extension is **200** because the first three characters following the last period are **200**.

Under the hood, the practice of an eight-byte filename plus a three-byte extension continues today. As a file is saved to disk, the operating system converts the 128-character file name we see to an eight-byte filename with a three-byte extension. The operating systems create a correspondence table to associate these two file names. On my PC, the file name **Today is 01.30.2004 in Tampa FL** in the Explorer became **TODAYI~1.200** in MS DOS.

Although we can use both upper and lower-case characters in a file name, there is no difference between an upper and lower-case character when the file is saved to disk. Saving the file named **ABC.TXT** will try to overlay a file named **abc.txt**. (Thank goodness for warning messages.)

Few applications allow us to define the extension while saving a file; however, by using the Explorer, the file extension can be renamed to a longer name; however, the renamed file is not as easy to open. That is: renaming the extension of a Quicken file makes the file invisible to a Quicken program.

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Files & Folders ... Continued from Page 10

Hint: Do not rename filenames to something more meaningful; however, good advice is, even though you can do it, do not mess with the extensions assigned by the programs you use.

Avoiding Conflicting File Names

With the advent of the PC, partitioning was not needed. Why? With only one user per PC, each user would have total knowledge about everything going on in the small PC system. This vision ranks along with the Bill Gates' statement, "Nobody will ever need more than 640K of memory."

However, the clashing of eight-byte file names presented a nightmare in an uncontrolled file naming environment. IBM allowed as many companies and people would be writing programs for the PC, not just Microsoft. To manage this situation, directories were invented to separate groups of files from each other. Each directory, like the previous partitioning, could have a file with an identical file name as a file in another directory. Whether the file contents were identical did not matter.

Microsoft changed the name "directories" to "folders" when Windows was released. Although the two are identical, time has shown that folders is a better name.

Folder: A folder is a filename under which other folders and files may be assigned. The rules for folder names are identical to the rules for naming files: 128 characters, upper and lowercase, with numbers and a select list of special characters, including periods.

Each release of operating systems seems to increase the number of special characters one can use. Rather than look them up, if a file name with special characters fails, then start eliminating special characters from the file name. Like files, the operating system reduces folder names to eight bytes when creating the folder on the hard disk. Folders do not have an extension.

The storing of files, folders and file names (long or short) is a disk space management technique that is stored on the hard disk. Storing everything on the disk drive allows the disk drive to be physically moved from one PC to another without losing any data or folders.

For locating a file on disk, the operating system uses a concatenation of the folder name followed by the file name. In a strange sense, the directory plus the file name together identify the file being accessed.

Hint: Name your folders and files with names that indicate their contents.

Next Time; How to define and use folders.

A Bit of History

The original disk drives, like everything else in the evolution of computers, had small and expensive beginnings. Disk space was expensive but not as expensive as memory. To reduce costs, a few early computers even used disk space as memory.

To save space, a file naming convention was developed using an eight-character filename and a four-character filetype. On a single disk drive, each file needed a unique name; no two files could have the same file name.

File Name: A file name is combination of a filename and filetype separated by a single period. Alphabetic characters and numbers are used without blank (space) characters. For example: filename.filetype as aa.txt. Some special characters were allowed.

Filename: The eight-character filename hopefully alludes to the contents in the file.

Filetype: The four-character filetype defined the use of the file: control data, a program, text, etc. The filetypes were rigidly controlled.

As the physical size of hard disks increased, the limitation of the file naming convention became increasingly restrictive. How many eight character names can you invent that somehow describe the contents, say, of all your files?

At about the same time, uncontrolled, undisciplined *human beings*, like ordinary programmers, secretaries, stock brokers, managerial types and other ignorant forms of low life, began directly putting files onto hard disks. Several things were done; however, the end result was to divide a physical hard disk into a number of partitions. Each partition appeared as though it were an entire physical hard disk; these are often referred to as a virtual hard disk. Partitions were then assigned to each low-life for that person to manage their own eight-character file names.



HOW TO USE A CD-RW AS A HARD DRIVE

By Rev. Michael Gabby, CAUG
Reprint from the Coastal Area Users Group NL

At the October meeting of CAUG, Brian Jacobs asked me about the possibility of using a CD-RW as a 700 mb floppy. Somewhere in the back of my memory, I remember that I have done this before.

A little about how data is written to a CD. Data files are written on a CD by fitting the data into the recording blocks originally intended to be used for audio recording. The resulting 'track' then has to be organized to be seen by the computer as files in a File System. This is done in one of two fundamentally different ways: the ISO file system, or the UDF file system.

The ISO File System:

ISO is the original method, and the one used in pressed CD-ROMs, such as the Windows XP CD-ROM. In this system, all the files to be written are selected, then written to the disk as continuous tracks, together with a Table of Contents (TOC) which defines where the data of a file is to be found in the track. Together, these files and TOC form a session. If the disk has not been filled, it can be put back into the writer, and a further session written. The TOC for the new session will link back to the previous TOC, so that all the files on the disk appear as being on a single CD.

The UDF File System:

This is a quite different approach, in which a CD-RW disk is first formatted into packets which then behave very much like the sectors of a hard disk. While the file system can be used in disks organized in tracks, as with the ISO system, and is also used on DVD disks, the term "UDF" will be used here in the sense of it using this packet writing base on CD-RW disks. Files can be written to a series of packets as an individual operation, and, later, those of a file can be selectively erased or updated. Therefore, such a CD is described as behaving as a "giant floppy" (or very slow, small hard disk). When UDF is implemented, files can be dragged and dropped to and from the CD in Windows Explorer, just as to and from a hard disk; or, to give another example, the CD

can be selected as the drive to use in a "Save As" dialog in a program.

There are three major third party providers for UDF formatting.

- 1. Each perform similar functions;
- 2. Each are incompatible with each other and
- 3. CDs can not be read on a computer that do not have the program that created the files installed.

The three UDF programs are: InCD (Nero), DirectCD (Roxio), and DLA (RecordNow). If you are interested in playing with UDF, the following link is for DLA:

http://dl1.easy.co.jp/rndx45_e/splash/regist.html

DLA (Direct Letter Access)

DLA is a program that allows you to write files directly to a CD-RW in much the same way that you copy files to a floppy diskette or removable drive.

As with a floppy, you must format the CD-RW using the DLA formatter. This is done in right clicking on the CD-RW and click "format" DLA lets you read and write your files directly to your CD with any software application DLA provides a file system based on UDF v1.5 and writes data to the CD-RW disc using packet writing technology. This file system gives you drive letter access to your CD-RW drive.

The DLA formatted CD-RW will turn a 700 mb CD-RW into a 503 mb floppy; there is a "bit" of overhead in this UDF.



Excerpt From C-Net News.com

Nearly 100 million PCs are likely to be replaced this year, with 120 million being swapped out in 2005, according to data research firm Gartner released Thursday.

The volume of replacements in the next two years will surpass the number of units replaced in the run-up to Y2K in 1998 and 1999, Gartner said. In 2004, replacement units will drive global shipments to 186.4 million—an increase of 13.6 percent over 2003.



IF OPERATING SYSTEMS WERE LIKE BEERS...

*From the Internet
Author unknown*

DOS Beer

Requires you to use your own can opener, and that you read the directions carefully before opening the can. Originally only came in an 8oz can, but now comes in a 16oz can. The can is divided into eight compartments of 2oz each, which have to be accessed separately. Soon to be discontinued, although a lot of people are going to keep drinking it after it's no longer available.

Macintosh Beer

At first came only in a 16oz can, but now comes in a 32oz can. Considered by many to be a "light" beer. All the cans look identical. When you take one from the fridge, it opens itself. The ingredients list is not on the can. If you call to ask about the ingredients, you are told that "you don't need to know." A notice on the side reminds you to drag your empties to the trashcan.

Windows 3.1 Beer

The world's most popular beer. Comes in a 16oz can that looks a lot like Mac Beer's. Requires that you already own a DOS Beer. Claims that it allows you to drink several DOS Beers simultaneously, but in reality you can only drink a few of them, very slowly, especially slowly if you are drinking the Windows Beer at the same time. Sometimes, for no apparent reason, a can of Windows Beer will explode when you open it.

OS/2 Beer

Comes in a 32oz can. Does allow you to drink several DOS Beers simultaneously. Allows you to drink Windows 3.1 Beer simultaneously too, but somewhat slower. Advertises that the cans won't explode when you open them, even if you shake them up. You never see anyone drinking OS/2 Beer, but the manufacturer (International Beer Manufacturing) claims that 9 million six-packs have been sold.

Windows 95 Beer

Windows 95 Beer looks a lot like Mac Beer but tastes more like Windows 3.1 Beer. It comes in 32oz

cans, but when you look inside, the cans only have 16oz of beer in them. Most people will probably keep drinking Windows 3.1 Beer until their friends try Windows 95 Beer and say they like it. The ingredients list, when you look at the small print, has some of the same ingredients that come in DOS Beer, even though the manufacturer claims that this is an entirely new brand.

Windows 98 Beer

Brewed as a new improved version of Windows 95 Beer, it tastes the same but comes in different packaging. The manufacturer has removed some of the old Windows 95 ingredients which caused consumers to have headaches, and have added new ingredients (mostly stabilisers) which cause new and improved headaches for people who didn't previously have headaches.

Windows NT Beer

Comes in a 32oz cans, but you can only buy it by the truckload. This causes most people to have to go out and buy bigger refrigerators. The can looks just like Windows 3.1 Beer's, but the company promises to change the can to look just like Windows 95 Beer's. Touted as an "industrial strength" beer, and suggested only for use in bars.

Windows 2000 Beer

Known as NT-Lite, it is an industrial strength beer adapted for the individual consumer who wants the advantages of NT but without having to go out to crowded bars. Comes in 32 oz cans but, cans can now be bought separately and contains no DOS Beer ingredients.

Windows ME Beer

A celebration beer brewed purely to take advantage of the marketing opportunities presented by the new millennium. Most people consider it a repackaged version of Windows 2000, but the promised extra fizz has caused severe cases of indigestion and led many to return to Windows 2000 beer.

Windows XP Beer

Not so much a Beer as an alco-pop or alcoholic soft drink. It has bright packaging with child-friendly soft edges and it claims to integrate all the advantages of Windows 2000 Beer with all the advantages of those

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OS Beers ... Continued from Page 13

snacks which normally accompany Windows Beers. In order to open it you have to phone the manufacturer who will send you a ring for the ring-pull. It reports back to MS the type of snacks you eat with the beer. Appealing to new consumers who like a sugary beer that talks back, but is highly irritating to older Windows Beer consumers.

UNIX Beer

This very heavy beer comes in 32oz cans, and has been around for years, rumour has it that it was originally brewed as a hoax by a couple of bored workers, only for them to find that some people actually liked the stuff. It tends to be drunk only by freaks or eccentric academics, often with beards; and drinkers of it do not like drinkers of any other beer. In its basic form it doesn't look particularly impressive, but with the addition of a magic ingredient named "X", it can be converted into an all-singing all-dancing beer on a par with the others. Many other varieties exist, with a huge range of flavours and (often unpronounceable) ingredients. It must be stressed, however, that even then it is strictly an acquired taste.

Linux Beer

A mass-market version of Unix beer enjoyed by those who find Windows Beer indigestible. Lighter than the traditional Unix brew, it may look unimpressive but is stronger and cheaper than Windows Beers. Is catching on because it stays free from harmful viruses for longer. Has a penguin logo showing that it's cool to drink Linux Beer rather than eccentric.

AmigaOS Beer

AmigaOS Beer is not unlike Unix Beer. No longer brewed commercially, the recipe is kept alive by enthusiasts. The container is no longer manufactured and must be bolted together from old sawn-up cans. It is enjoyed by beer preservation enthusiasts who consider it a safer brew than any of the new-fangled Windows Beers. Many AmigaOS Beer drinkers would switch to Linux Beer except that they've already invested time in sawing up old cans to make new containers for their AmigaOS Beers.

VMS Beer

No longer sold commercially in any great quantity. Some older consumers have a stockpile of this now obsolete but once very popular brew and limited supplies can apparently still be obtained. For many years a competitor against UNIX Beer, it ultimately lost out against Windows Beer and most VMS Beer enthusiasts are reduced to consuming VMS-type Beer which lacks the bite of the original. A Lite version existed in the form of DECMate Beer.

PRIMOS Beer

An obscure historical beer which never really took off except at colleges which could not afford UNIX Beer or VMS Beer. Cheap, but not very satisfying except among a hard-core of consumers, it quickly vanished into obscurity.

CPM Beer

An early beer which required the consumer to hold onto two small opened cans and drink from the cans alternately. Despite the small capacity, each can took a long time to drink. Similar early beers included BBC Beer, Apricot Beer and DECMate Beer.

OS/4000

An "own-brand" of beer consumed by employees of its manufacturer who were once not permitted any other brand. Sold only to the manufacturer's employees, it lacked the ingredients necessary for commercial success. When competitors' beers became available within the factory, OS/4000 Beer became a minority beer against early rivals such as CPM Beer, BBC Beer, VMS Beer and SunOS brand UNIX Beer.



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NEW LOCATION!

Special Interest Groups

WINDOWS SIG

Meets 7:00 PM Thursdays
1st & 3rd Thursday at Eau Gallie Library.
All Other Thursdays at Melbourne Library on
Fee Avenue.

BEGINNERS SIG (Newbies)

Meets at 6:30 pm. The 2nd and 4th Thursdays,
at Fee Ave. Library, before the Windows SIG.

***** NOTICE *****

The 2:00pm meeting at Glenbrooke Retirement
Community Club House has been canceled due
to lack of participation.

IMAGING SIG

Meets at 7:30 PM the second and fourth
Thursdays, after the Windows SIG, at the
Fee Ave Library in Melbourne.

NEWSLETTER SIG

Meets twice a month on the Saturdays before
and after the BUG monthly meeting.

Members interested in helping develop the
newsletter are welcome.

Place is Jim Townsend's home
call 728-5979 for directions.

TINKERS SIG

Meets on most Sundays at Bob Schmidt's house.
Call 952-0199 to verify meeting and directions.

BUG Club Information

BUG E-MAIL LIST

To be included in the BUG E-Mail roster,
send an E-Mail to George Rymer at:
grymer@cfl.rr.com.

We will need your full name, E-Mail address and
your BUG membership number. You will then
receive notices and updates on BUG activities,
special events, changes to schedules, etc.

BUG Officers

Meets the second Wednesday of the month at
the Fee Ave. Library, in Study room 1
Time 6:00 pm to 7:00pm

Sponsorship Rates

	4 Months	8 Months	12 Months
Full Page	\$ 160.00	\$ 305.00	\$ 440.00
Half Page	\$ 85.00	\$ 162.00	\$ 232.00
Qtr Page	\$ 45.00	\$ 86.00	\$ 123.00
Bus Card	\$ 25.00	\$ 48.00	\$ 68.00

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Meetings:

Are held at the Melbourne Library on Fee Ave. the third Wednesday of the month at 7:00 PM.



Membership:

Is by application and payment of \$25.00 annual dues. Membership is for 12 months from receipt of dues and includes a year's subscription to the newsletter.

Mentor Program

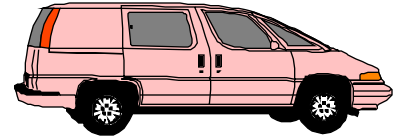
John McNeil 723-5550 AutoCad

Al Buchanan 728-2789 Works 6.0

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Bill Ranck. 676-7908 Word Perfect

Rex Cummings 242-9601 Netscape



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Attn: Treasurer

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& e-mail to the Newsletter at jimtownsend@earthlink.net

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