Only If You Want to Know
By Tom Coleman

April 2002, PC Update, Melbourne PC User Group, Australia
I think one of the most frustrating aspects of computing is that there seems to be so much that is just unknowable. I get dial help calls all the time from people who have this or that problem. You know the kind of thing... Windows can't find RUN.DLL or "Your program has terminated unexpectedly." or "Go to Jail. Go directly to Jail. Do not pass Go and do not collect $200."

There are two significant aspects to these problems. The first is that the user has no idea of the cause, and is trying to reconcile it with his or her particular view of computing. The other is that I have no idea of the cause, and many times I have no idea of what the user is talking about. I do not often resort to advising correct technique when wrist slashing but it has proved useful in the past.

Because I do not know the exact cause of the problem does not mean that I cannot fix it. Frequently these problems come under a general heading of "Old Windows Installation". Once Windows had been installed for a year or so it has had time to develop enough bad habits to be regarded as cranky. Adding and removing programs and modifying the configuration often makes things worse, sooner. Eighteen months or two years down the track and Windows suffered enough self-inflicted injuries to be regarded as no longer reliable.

First SIG
by Alan Raul

HARDWARE, not software, was the topic of the first May SIG and more specifically USB (Universal Serial Bus) hardware. USB is the most successful interface in the history of PC's. USB was introduced in 1996 and its growth is expected to increase substantially in the next few years.

We already connect mice, keyboards, printers, etc. to the USB port on our computers but now with USB 2.0 we can efficiently connect a vast amount of new peripherals. Some products that will incorporate this new faster technology include storage devices (such as external hard drives and CD burners), hubs, printers, scanners, digital cameras, PDAs, speakers and Web cams. A USB 2.0 drive enclosure was shown which can accommodate

CLUB CALENDAR

June 2nd

1 pm
Early SIG.

Dining Room, Bill Avery
Main hall, Alan Raul

2:30 pm

Paul Galis

"Heat Effects on Computers".

in this issue...

Only If...

For example, recently I tidied up a Windows installation that was loading just over 600 fonts at start up; far too many fonts installed. Another used to reboot if you opened My Computer when Windows Explorer was running. Many have developed a five-minute startup habit.

Defend Yourself

Windows does these things - it is the nature of the beast. If it was a car, no one would buy it. Either you bail out of Windows or you defend yourself against the worst of its idiosyncrasies. The average computer user cannot afford hand holding, so you need to practice a little self-defence. But, you do not need a black belt in computing diagnostics to save yourself a lot of problems. What follows is a general waffle about some of the techniques that will help keep you out of trouble and may solve some problems, even if you don't know what the problem is.

Disk Full?

Once your hard disk is more than 90% full you can expect all sorts of file finding, file saving and file using problems. These can occur when a program, any program is running, and you will have no hint of the reason. Windows uses some of the available empty space in your hard disk to create a swap file and to do various housekeeping tasks. Once the hard disk starts to get full, Windows runs out of space to do these odd jobs and resorts to techniques that it's not very good at, and often stuffs up. Other programs can stuff up too, because often they also need spare disk space for temporary file activities.

Uninstalling programs, emptying the recycle bin, doing a disk clean up will help, but these are all part of the routine self discipline that you wished you would exercise. Dumping all of the .TMP, .BAK, .CHK, .$$$ files can also help. So too can running SCANDISK.

Generally SCANDISK goes ahead and does its thing and leaves you alone. Once in a while it will tell you it had found some "lost clusters" or something else odd, and asks you if you want to save or delete it. All too often users say to save it. So, this often useless and/or unrecoverable data is saved as files named file0001.chk or file0002.chk, and so on. If you had said delete it, the space used would have been returned as available disk space. If you have any files with a .CHK extension you would usually be no worse off by deleting them.

What is going on here is to do with the dreaded File Allocation Table. The famous FAT of song and story. There was a time when you had to sacrifice a chicken before you were allowed to look at the FAT. But even that amount of computer voodoo was too much for Windows users so it is largely ignored these days. The FAT is a file storage management system that keeps track of all of the sectors on your disk. Once in a while it gets its sums wrong and some sectors become lost. They are no longer allocated to files, nor to blank space. They have disappeared, fallen off the back, vanished. SCANDISK finds them and offers to save them as a file or as blank space, as we have already discussed. It used to be that saving them as a file enabled you to hunt through the file in case it contained important data that may otherwise be lost. These days no one knows how to hunt through a file for missing data and in best part of thirty years of computing I have never found anything useful in a .CHK file. Maybe I am just unlucky.

Many users lack the courage to delete files. This is a personal problem that can be overcome by throwing money at it. Buying a larger hard disk does not overcome the lack of courage but it solves the problem in the short term.

One Solution

Many Windows problems can be overcome by reinstalling Windows. This can be fraught with danger if you have really major problems but it can be a painless way of overcoming quite a few otherwise unsolvable mysteries.

Most users will install or reinstall Windows from the CD. This is at times a slow and sometimes problematic way of doing it. If you have to install from scratch then you need to have a CD-

## * * * people helping people * * *

NAME	PROGRAM(S)	PHONE NO.	HOURS TO CALL
Bill Roch	Ami Pro	466-8440	anytime
Marvin Baxendale	MS Access	481-8392	evenings
Jim Kiraly	Win 98, Office 97, Quicken, Map Programs	556-0301(pismo)	anytime
Bob Ward	Win 98, DOS, Internet, Eudora	528-0121	evenings
Ray Miklas	Any PC hardware or software questions	541-5633	anytime

We could use more volunteers here. If interested, contact Bob Ward!

The Surf Board

by Dorothy Kirk
ibm/pcug, redding, ca.
kirk@snowcrest.net
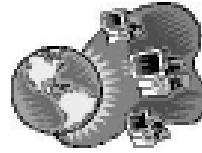
The last decade of the 20th Century was the warmest in the entire global instrumental temperature record, starting in the mid-19th century. All 10 years rank among the 15 warmest, and include the 6 warmest years on record. This warmth is unusual for the past century, but what about in the context of past centuries or millennia? Some people think that the situation is alarming, while others claim that it is a temporary thing or does not even exist. It is only through the reconstruction of past climate that we can truly evaluate the magnitude of this warming. And how much of it is the responsibility of mankind? What, if anything, can be done to mitigate it? Do we have any answers? How much is fact and how much is rumor and hearsay? This month's sites will not answer all of the questions, but a careful reading will provide you with solid basis of fact and history. As for speculation or conclusions, you're on your own!

A PALEO PERSPECTIVE ON GLOBAL WARMING http://www.ngdc.noaa.gov/ paleo/globalwarming/home.html — "NOAA's Paleoclimatology Program is working with scientists from around the world to study past climate in hopes of achieving a better understanding of the Earth's present and future climate. This site was developed to help educate, inform and highlight the importance of paleoclimate research; as well as to show how paleoclimate research relates to global warming and other important issues of climate variability and change."

EPA ON GLOBAL WARMING http://www.epa.gov/globalwarming/climate/ index.html — A very easy to use site with lots of information. There are discussions on climate, emissions, impacts, actions, trends, uncertainties, atmospheric change, and future. If you don't read any other of the sites listed in this article then at least read this one.

GLOBAL WARMING INFORMATION PAGE http://www.globalwarming.org/ The USA did not sign the Kyoto Global Climate Change Treaty. Gain insights into why from this site, especially in the political, economic, and science archives. There is much to-the-point information here.

GLOBAL WARMING: FOCUS ON THE FUTURE
http://globalwarming.enviroweb.org/ - How much of global warming is the responsibility of mankind? This site seems to blame it all on us — an attempt to manipulate your emotions through a mixture of fact and speculation? The site includes a slide show.

NCDC ON GLOBAL WARMING http://lwf.ncdc.noaa.gov/oa/climate/ globalwarming.html — How is global warming related to global warming? This and other frequently asked questions are answered by the National Oceanic and Atmospheric Administration.

GLOBAL WARMING: SIERRA CLUB http://www.sierraclub.org/ globalwarming/ This is the interpretation of global warming by one of the foremost environmental organizations in the USA, the Sierra Club. Of course, they emphasize what our responsibility is and will be in the future. The section on clean energy alternatives is very enlightening.

SAFEGUARDING THE WEB OF LIFE http://www.ucsusa.org/warming/ The Union of Concerned Scientist brings up some aspects of global warming that are not often discussed. For instance, what happens to our forest or the insect population? This organization does not stop at preaching doom and gloom but offers some practical solutions.

SKEPTICISM.NET http://www.skepticism.net/faq/environment/ global_warming/ As the name of the site implies there is some skepticism in the world about global warming. They point out disagreements and controversy in the political and scientific arena. There are scads of articles on anything to do, pro or con, pertaining to global warming.

Yahoo.... Opt Out!

by Bob Ward

Here's an interesting e-mail that came across my computer the other day. If you use Yahoo or have a myYahoo account then read on...

I found out about another Yahoo ploy to track our web habits and Yahoo has already placed a "web beacon" on our computer for those of us who are signed up with Yahoo. Yahoo is using the web beacon to track you around the net & see what you are doing.

If you want to opt out of this new marketing ploy by Yahoo, click on the following link http:// privacy.yahoo.com/privacy/us/pixels/ details.html

About halfway down the page, on the right side and in bold, you'll find "Outside the Yahoo! Network." There's a tiny little link that lets you opt-out of their electronic snooping.It says, "Please click here to opt-out."

When you opt out, a window opens that says: "You have opted out successfully. If you would like to cancel your opt-out request, you may do so by clicking the button below." Do *not* click the button again, or you will sign back up for the "web beacons." You will see the screen that says "you have opted out successfully" and that is your confirmation.
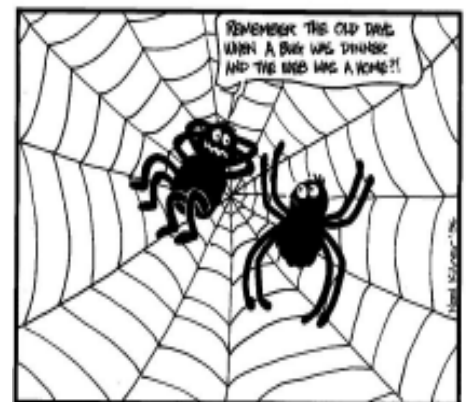
I can remember the old days when a bug was dinner and the web was a home

First SIG

any size 3 1/2 hard drive. This will provide you with a simple backup solution as well as having SCSI speed without any hassles. A portable USB 2.0 flash drive was shown from DiskOnKey.com which can be purchased in sizes from 8MB to 256MB. It has a built-in CPU and is a floppy replacement as far as I am concerned.

USB 2.0 is the next generation USB interface technology which is also referred to as "Hi-Speed USB." USB 2.0 is 40 times faster than its predecessor, USB 1.1, and is backwardly compatible with all USB 1.1 devices. The table below shows the speed differences between the two USB standards and the competing Firewire standard. It's rumored that the next jump in Firewire will be 800 Mbps.

USB 1.1 = 12 Mbps = 1.5 MB/sec
Firewire = 400 Mbps = 50 MB/sec
USB 2.0 - 480 Mbps = 60 MB/sec

USB 2.0 devices are available now as well as support for most major operating systems. USB 2.0 will work with Microsoft Windows 98 and above. Macintosh users are not left out as it's included with the Mac OS X. USB 2.0 has already appeared on Intel, ASUS and other major motherboard manufacturers. Gateway was one of the first out of the gate with USB 2.0 support included with their 700 XL computer which was released in January 2002. USB 2.0 capability may be added to most PC/MAC computers via a USB 2.0 PCI card or a USB 2.0 PCMCIA Cardbus on a laptop computer. Like its predecessor, USB 2.0 is Plug-n-Play and provides hot-swapping capability.

Another new USB standard, USB on-The-Go, will come to market in 2002. It's intended to connect portable devices without the need for a PC host. USB on-The-Go will be used on such devices as PDA's, portable digital music players and mobile phones.

As you can see, the USB interface will continue its reign as the most successful interface in the history of PC's. So what will your next USB 2.0 device be?

Only If...

ROM drive that works when the computer starts. Your best bet is to use a startup floppy containing the necessary CD driver files. This means Windows 98 or higher. With Windows 95 you needed to set up the CD driver in the CONFIG.SYS on the floppy and have it installed by MSCDEX in the AUTOEXEC.BAT. All a bit beyond the average user but simple enough in practice. All you need is a little curiosity.

There is a more functional way of installing Windows that is quicker and offers long term convenience. All you need is some spare hard disk space. What follows applies to all versions of Windows from '95 on, only the name of the folder/directory will be changed to suit the version you are using. I will discuss this exercise using Windows 98 as an example.

Copy It All To the HDD

The Windows CD has a folder named \WIN98 that contains all of the installation files. You will need to create a folder on one of your hard disks; any disk providing it has enough room on it to hold these files. Let's call this folder \W98SETUP.

What follows may seem a bit confusing but if you try it as a practical exercise it is pretty simple. It's a bit like trying to explain how to change gears in a manual car. Simple from behind the wheel but terrible in the lounge room.

First create the W98SETUP folder on the hard disk. Next, open the WIN98 folder on the CD. Then (assuming you are using Windows Explorer to do this) select Edit from the menu, and Select All. This will highlight all of the files AND folders in the WIN98 folder on the CD. Now deselect all of the folders in the WIN98 folder. You do this by holding down the Control key and left clicking the folders, one at a time. This will remove the highlight. Now drag all of the (still selected) files at once, into the W98setup folder on your hard disk. You finish up with a copy of all of the files, from the WIN98 folder on the CD, being copied to the W98SETUP folder on the hard disk.

For Reinstallation

Now all you need do is change into the \W98SETUP folder and double click the Setup file. You should have closed all other programs before running Setup. All you have to do is follow the prompts.

The Setup may detect that a Windows folder already exists and offer to install windows in a folder called Windows.000. Change this and install to the original Windows folder. Later in the installation you will almost certainly get a number of prompts about the file to be installed is older than the one already on the hard disk. You should not install the older file. This will help retain your previous settings.

Featured Speaker

Paul Galis of South Bay Engineering, Inc., Gardena, CA, will provide the featured presentation entitled "Heat Effects on Computers". South Bay Engineering specializes in the design and manufacture of PC Cooling Systems.

Mr Galis will discuss computer heat-related problems including those resulting in "Illegal Operation" errors, "General Page Fault" errors, Computer Slow Downs and Random Lock-ups, and the well- known "Blue Screen of Death."   South Bay Engineering produces complete cooling systems designed to drastically reduce the number of system errors and computer lock ups caused by overheating internal components.

The 2COOLPC, 2COOLPC-PLUS and 2COOLPC TURBO systems to be described by Mr Galis are ducted computer cooling units designed for tower personal computers and server applications. The 2COOLPC ducting units take the cooler air inside your PC case and applies the cool air directly to the hot system components that need cooling the most. This includes the CPU, motherboard, system RAM, power supply, all of the slot-mounted cards and the hard drives.

Cooling systems manufactured by South Bay Engineering have been reviewed and endorsed by a number of organizations and publications.

Only If...
continued from page 4

If it turns out that this reinstallation of Windows does not fix your problem then you will have to start over again but this time install all of the older files to the hard disk. This will take out most of your previous settings and cause much inconvenience setting things up again. It will, however, fix many problems.

The short-term convenience of the above method of installing Windows is that it is much faster than doing a complete installation from a CD. The long-term convenience is that Windows puts a note to itself in the Registry telling itself where it was installed from. That is where it expects to find any files for subsequent updates and modifications. You may never again be asked to install the CD in the drive when you add hardware or modify the system. Windows will simply go to the W98SETUP folder, find the files and install them. If ever it does ask for the CD you just point it at the W98SETUP folder.

If you have two hard drives and one is on the Primary IDE port and the other on the Secondary IDE port the installation will go faster if you have the Windows folder on the Primary and \W98SETUP on the Secondary. You see, you can read and write to separate IDE ports but you can only either read or write to the same IDE port. This can be extended to any intensive read/write operation. Put the source and the target on separate IDE ports (controllers) for faster performance.

Other Culprits

Sometimes your problems are caused by other programs or files that Windows loads and not by Windows itself. For the most part these are loaded at startup and you see little or nothing of this happening. There are a couple of ways that you can take a look at some parts of this process. Just because you can see what is going on does not mean that you will make much sense of it. This is where a healthy curiosity comes in handy. However, if you want to have a look around here are a few things you can do.

Go to Start|Run and type in SYSEDIT, then press {enter}. This gives you a look at a number of files that are part of the system and the Windows startup procedure. If you enter MSCONFIG you get to look at a slightly modified view of the same files plus a couple of others including the startup. They are the files that Windows loads at startup. You can remove files from startup but only if you are sure they are no longer required.

If you are just browsing around do not alter anything. If you are not sure whether you've altered anything then do NOT save changes on the way out.

I don't propose to go into the ins and outs of these files here. Any one of them is worth two or three pages of this magazine just to get started. Maybe some other time. The idea here is to point you in the right direction - the rest is up to you. There is no magic bullet. You have to do the reading, ask the questions and get involved. Many people would like to know more about computers, but only those who want to know will succeed.

Getting Rid of Junk in the Swap File (Is This A Good Idea?)

by Bob Thomson

Toggle, May, 2002, newsletter of (T)acoma (O)pen (G)roup

Fools Rush In

You old timers will remember the WWII song "Fools Rush In Where Angels Fear To Tread!" The implication was that those who don't know any better do things that older and wiser folks, through experience, learned not to do. Well, I'm supposed to be one of the older and wiser ones in our user group but only the older part rang true the other day.

Zeroing The Swap File

In the general Q&A discussion period at the April 2002 meeting Ray Mills happened to mention that your Swap File gets full of junk and can get quite large because, usually, it is sized automatically by Windows to handle whatever is needed—sometimes 'way more than is needed. An excessively large Swap File may slow down your computer operations. He suggested that the Swap File be cleared out every so often, particularly if you are going to defragment your hard drive, because the Swap File does not get cleared out automatically during a defrag operation.

To clean out the Swap File, go to My Computer/Control Panel/System and click the Performance Tab. In the screen panel which is presented click on Virtual Memory button. You will now be presented with the choices to a) "Let windows determine the size of your Swap File", b) Set the size of your Swap File yourself, or c) Disable your Swap File. The advice Ray gave was to, temporarily, set your swap file to zero or disable it, and reboot your computer.

When you try to do this, you will also be presented with a WARNING that you shouldn't do this since you may disable the ability of your computer to restart. "Pshaw!" said Ray, go ahead an do it because you are going to put it back to the default condition almost immediately.

Upon Rebooting the swap file will be zeroed. Now go again to the My Computer/Control Panel/System area select the Performance Tab then Virtual Memory and click on the choice a) "Let Windows Determine the Size of your Swap File." Windows will then re-create the Swap File and assign the minimum size to it.

My Disaster and Recovery

I hadn't really noticed any slow-down in my computer's operation, but I thought I would try out this procedure. Without thinking about it, I proceeded with the steps to disable the Swap File.

Unfortunately, I have some start-up programs which load while windows is loading (you probably do, too) and which REQUIRE the swap file be greater than zero or they won't work. Such a program is Norton Antivirus and, in fact, since it could not find a swap file it shut down my computer; that is it wouldn't let my computer start at all and posted a message to that effect followed by System Halted!—the condition to which the warning had referred.

I was completely unprepared for this. It took me a good hour, maybe more, before I recovered enough of my sanity to get the machine to load Windows in SAFE MODE (which doesn't load the start-up programs) and go to My Computer/Control Panel/System area select the Performance Tab then Virtual Memory and click on the choice a) "Let Windows again Determine the Size of my Swap File." This command re-creates the Swap File upon reboot. Thus I was able to reboot with everything enabled and to use my computer again. Whew!

What Was Left Unsaid

What SHOULD have been said at the beginning is this: "Before disabling it or setting the Virtual Memory to zero, first either run msconfig and disable the start up programs, or restart in SAFE MODE before rebooting with a zero swap file." Then the programs that require that the Swap File be present won't even try to start and interfere with the process. You can then proceed to safely zero out the Swap File, then restart and re-create a clean Swap File of minimum size.

Oh? Didn't I Mention That?

When made aware of the problem I encountered when I zeroed the Swap File, Ray Mills commented that his computers are all set up to have no programs running when they start up. With no programs running in the background there is nothing that will try to access the Swap File and, not finding it, shut down his computers when they try to boot up. Consequently, he didn't think to mention it.

Did Resizing The Swap File Help?

So far, since zeroing and resizing my Swap File, I have not noticed any difference in machine performance. If you decide to zero out your swap file, just keep the points discussed above in mind and take appropriate action. If you are satisfied with the speed with which your computer operates now, leave well-enough alone. Remember the old adage: If it ain't broke, don't fix it!

TIPS WIN 98 -- TIPS WIN 98 -- TIPS WIN 98

To turn off the Recycle Bin's delete confirmation prompt:
Right-click the **Recycle Bin**
Select **Properties** from the context menu, and select the **Global** tab
Make sure that the check box for **Display delete confirmation dialog box** is unchecked

Change Icon spacing on the desktop
Right-click on the desktop
Choose **Properties** from the popup menu. On the **Appearance** tab look in the **Item** list box. Once you find **Icon Spacing (Horizontal)** and **Icon Spacing (Vertical)** you can choose different values.

Make Your Own PDF Files
by Paul Witheridge

I'm currently Shareware Librarian of the Sarnia Computer Users' Group and a Past President. I'm in my 14th year with SCUG and am a semi-retired computer consultant.

One of today's biggest computing irritations is competing standards! While there are standards out there for such things as e-mail, file transfer and Internet protocols, and HTML coding for web display, someone is always "pushing the envelope" (to be polite) or "ignoring them" (to be blunt). Document sharing is an example. Many think that Microsoft Word is the standard for documents but it is only one in a field of word processors. At one time, they simply pretended each other didn't exist and if you created a document using one word processor, you couldn't share it with others who were using a competitive product. Now, at least the major brands provide the ability to convert between formats but often at the expense of some of your painstaking efforts to create that Beautiful Format. Enter Adobe and the Portable Document Format (PDF). If you can create (or "export to") a PDF file with your word processor, you can produce a "stand-alone" document that anyone can see or print exactly as it was created fonts, pictures, whatever but without the program that created it! Catch? Of course there's a catch! First of all, you need the Acrobat Adobe Reader to see/print these. Yes, it's free; but it is a few megabytes in size and usually has to be downloaded and installed. But how to create the PDF in the first place? Are we still somewhat at the mercy of the Adobes, Microsofts and Corels? Read on!

There are two freeware (free for non-commercial, home use) programs that can enable you to create (and read) standard PDF files (as well as postscript files):

> **MakePDF**
> <http://www.lexacorp.com.pg/soft/makepdf22.zip> - a freeware utility for converting the postscript translations from GhostScript to a Portable Document Format file.
>
> **GhostScript** (ftp link <ftp://mirror.cs.wisc.edu/pub/mirrors/ghost/AFPL/gs703/gs703w32.exe>), a free postscript interpreter which translates p postscript documents

NOTE: If the version numbers change, the above links will become outdated.

If you visit the Lexacorp site first, there is a link there to GhostScript as well as to MakePDF. Stuart also offers several other MAKEPDF tips and tricks at <http://www.lexacorp.com.pg> After downloading both of these, install GhostScript by double-clicking the GS703W32.EXE file. Then simply unzip MAKEPDF21.ZIP into the folder of your choice (no installation needed). I must assume that the reader can do this using their favourite compressed file unpacker.

Define a printer

Then, you need to define a printer that can produce postscript output such as the HP Laserjet III PostScript in your selection of printers. You do not need to have this printer connected, you merely need to add/install it as if it were installed and configure it to send output to a .PRN file. Here's how:

In Windows, click Start|Settings|Printers and then double-click 'Add Printer'. Choose 'Local Printer' and click 'Next'. Now select the printer you'd like, making sure that it can produce postscript. The HP Laserjet III PostScript is an obvious choice but other manufacturers are available on the list you'll see. After selecting one, you'll be asked where to output your data and this is where you will choose 'FILE:' and then click 'Next'. Most likely you will not want this to be your default printer, but this option is always available later if your needs should change. Click 'Next' and then 'Finish' and you will most likely be prompted to insert your Windows installation CD in order to retrieve the necessary driver files. After the printer driver files have been copied, you will be prompted for a PRN filename (in case you wanted to print a test page). You can click 'Cancel' to skip this step. Did you know that you could also rename this printer installation to something more helpful like PostScript Creation? Right click it and rename! Once the process is complete to this point, you will have an additional printer option whenever you wish to "print" a document from any application you are using. When choosing this new option you have just installed, you will be asked for a file-name and destination folder since the output will not be a "hard copy" on paper, but a .PRN file on your computer. We now need to create a way to easily send these PRN files created by your newly installed postscript-capable (phantom) printer driver to MAKEPDF which will use GhostScript to finally create the PDF file.

One way to provide this "connection" is to add a shortcut in your SendTo links that will appear when you right-click a file in Windows Explorer (or other file manager) and select 'Send To'. Open your \Windows\SendTo folder and right-click a blank spot. Click new|Shortcut and insert a command line similar to the following, but insert the proper path for your installation of MAKEPDF in place of the square bracketed portion.
C:\[Utils]\MAKEPDF.EXE

Click 'Next' and then name it MakePDF or whatever you like. Click 'Finish' and you're done. Now you can right-click any PRN file created by your phantom printer and then choose

Make PDF

SendTo|MakePDF to create your PDF file. You could also create a shortcut on your desktop in the same way and just drag and drop PRN files onto the icon.

There are a few other clever tricks the more advanced user can perform either by defining a new filetype (see end of this article) or using macros in your word processor or creating a custom printer port or having your PDF sent directly to your e-mail client but you can read about those in Stuart McLachlan's (author of MAKEPDF) Readme text file that comes with MAKEPDF. Most of us will be quite happy with a shortcut in the SendTo folder!

Using MAKEPDF

The first time you send a PRN file to MakePDF, you will be asked if you want to locate the GhostScript program. Click 'Yes' and browse your way to the GSWIN32.EXE file which, if you used the default location will be in the C:\GS\GS7.03\BIN folder. [Note that there are two similarly named ex-ecutable files at this location. The one with the 'C' is for command-line operation.] Single-click the GSWIN32.EXE file and click 'Open' and this path will be saved in a MAKEPDF.INI file for future reference and you won't have to repeat this step.

MakePDF will now open and you will see the path and filename of your (input) PRN file and the same path but different file extension for the output PDF file. Unless you want the PDF file to be put somewhere else or have a different name, you can accept the default offering.

There are options offered, most of which I usually ignore; but here is a brief explanation of them as I under-stand them:

Delete Input File - deletes the PRN file after it has been translated to save collecting large numbers of these intermediate files.

Lower Case Output - produces a PDF filename with all lower case letters for feeding to other applications which may require that.

Sticky Output Directory - use this if you want the folder you set in 'Output Filename/Directory' ALWAYS to be the destination of your PDF files.

View Output File - check this if you want Acrobat Reader to open your new PDF as soon as it's created.

Auto-Exit on success - check this to if you want Acrobat Reader to open your new PDF as soon as it's created.

No Messages - all message boxes are suppressed. I wouldn't recommend this for the beginner.

Choose the version of PDF file you wish to create and after a few seconds, you will see a confirmation dialogue box that the process has been successful. NOTE: In case your intended recipient has an older version of Acrobat Reader, it may be best to create an older version PDF. The resulting PDF file you have now created can be double-clicked to be opened in Acrobat Reader and it will appear exactly as you created it in your original application and anyone with Acrobat Reader can do the same. And print it! But the Reader does not allow editing, just reading and printing. This can be a very good thing when you don't want your document altered by others!

For The Advanced User

For the more adventurous, (once you are comfortable that you have every-thing working) you could even establish a new filetype (change PRN to some-thing completely new that is not already registered on your computer) so that a simple double-click on files of that type will start MAKEPDF and open them. This involves first avoiding any of the extensions already listed in Start|Settings|Folder options|File Types and then in there creating a 'New Type' and specifying a command line similar to the following to open those files: "[C:\Utils]\MAKEPDF.EXE"

%1 /D /V1.2 /OC:\My Documents\PDFfile.PDF again, inserting the proper path for your installation in place of the bracketed portion.

NOTE: If you have difficulty with Acrobat Reader opening PDFs with a double-click, I've found that a reinstall of Acrobat Reader usually solves this.

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.

Flat

Printed in the February 1999 issue of the I/O Port Newsletter

A Computer salesman, computer hardware engineer and a programmer were driving in a car. The car gets a flat. The three get out and try to solve the problem: Computer saleman says "Clearly we need a new car". "No", says the hardware guy, "lets just rotate the tires with the spare until the problem is fixed". But the programmer says "Let's just get back in, drive for a while and see if the problem goes away". Then they put in the call to tech support, and the engineer calls back two weeks later and says, "I've driven my car 500 miles, and I can't reproduce your problem, so I closed out your service call."

... and Bill Gates says, "Let's close all the windows, get out, get back in, and see if that fixes it."

Linux Sig

Thursday, June 6th 6:30 PM
Topic: *To be announced. Check our web page*

club information

HARD COPY is a monthly publication of SLO BYTES PC User's Group located in San Luis Obispo, California. Information in this Newsletter is derived from both our own membership and other PC User Group Newsletters. The purpose of this publication is to inform our members of meetings and provide information related to the use of IBM PC's and compatible computers.

Membership: Dues are $25 per year. Full membership entitles you to our monthly newsletter, full use of the public domain software library software drawing at the end of the meetings.

Article Submission: Deadline for submission of articles is the 15th of each month. Articles should be provided in ASCII format without any type of formatting from your wordprocessor including tabs, indents, extra spaces, or highlighting. We prefer articles on disk but will accept hardcopies if necessary.

Disclaimer: Neither SLO BYTES PC User's Group, its officers, editors, or contributors to this newsletter assume liability for damages arising out of this publication of any article, including but not limited to the listing of programming code, batch files and other helpful hints.

Reprinting of this Newsletter: Articles from this newsletter may be reprinted by other user groups if credit is given to both the author and newsletter from which it was taken. Reproduction of articles with a specific c Copyright notice is prohibited without prior permission from the original author.

Advertising: Commercial advertisers, request ad packet from Bob Ward. Members may advertise personal computer equipment or software for free. Submit your ad to Bob Ward.

Direct all correspondence and newsletter submissions to:

BOB WARD, SECRETARY
2100 Andre Ave.,
Los Osos, CA. 93402
(805) 756-2164

Member of

APCUG

meeting times

GENERAL MEETINGS are held the 1st Sunday of each month. Our meeting location is the San Luis Obispo I.O.O.F. Hall on Dana Street.

The general meeting starts promply at 2:30 p.m.

Special Interest Groups (SIGS) meet at 1:00 p.m.—2:15 p.m.

slobytes website

WWW.SLOBYTES.ORG

slobytes officers

R. Miklas (Pres)   rmiklas@bigfoot.com
G. Kuncir (V.P.)   gkuncir@charter.net
B. Ward (Sec.)   slobytes@surfari.net
M. Baxendale (Tres) marvin@surfari.net
B. Ward, editor   slobytes@surfari.net

treasurer's report

May 20, 2002

OPERATING FUND

Beginning Balance	$2426.58
Income	
Membership Dues	275.00
Expenses	
Newsletter Copying	40.12
Postage	68.00
New Balance	$2,593.46

SAVINGS ACCOUNT

Beginning Balance	$349.79
Balance	$349.79

Welcome
New Member
Les Meyer
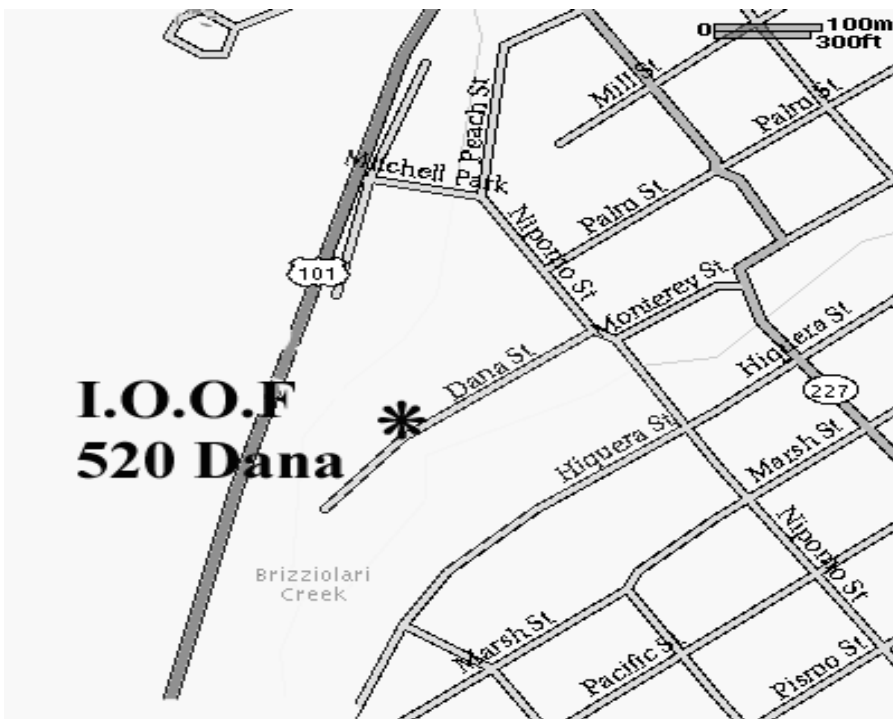
I.O.O.F
520 Dana

Next Meeting
Sunday
June 2nd

1:00pm

Early SIGS

2:30pm

Heat Effects on
Computers