



k-Byte
Front Range PC Users Group
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Front Range PC Users Group Newsletter

k-Byte



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Users Helping Users

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"I cannot give you the formula for success, but here's the formula for failure: Try to please everybody."

- Benjamin Franklin

State of the Group

by Rick Mattingly

We have a number of good presentations lined up for upcoming meetings. Please keep the ideas for presentation topics coming. Let us know what you would like to see.

We have also received some interest in forming a number of additional Special Interest Groups (SIGS). Members have expressed an interest in SIGS addressing the subjects of Microsoft Office products, Computer Aided Design (CAD) Computerized Mapping, and Desktop Publishing. If you have an interest in participating in a SIG addressing any of these topics please contact Rick Mattingly or Don Anderson. In addition, we could certainly use some volunteers to coordinate or assist with these SIGS.

Also, remember that if you have a computer-related question or problem which you need assistance with, stop by Data Service Center any Saturday between the hours of 9:00 AM—1:00 PM. A number of FRPCUG members are always on hand then to provide assistance. ☐

From The President

About k-Byte

Published bi-monthly, *k-Byte* is the official newsletter of the Front Range Personal Computer Users Group (FRPCUG): our mailing address is PMB 152, 305 W. Magnolia, Fort Collins, Colorado 80521.

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Submissions

Articles, letters and short items of interest on computer-related topics are welcome and encouraged. All items submitted for publication are subject to editing. Send your contribution to the editor via e-mail attachment or submit on disk. If you have questions about a submission, please contact the editor for information.

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Advertising

Classified advertising is free to members for non-business ads. See "Trading Post" for pricing for camera-ready display ads. Charges for ad makeup from sketches, etc., are available on request. Deadline for camera-ready and classified ads is listed in the Calendar of Upcoming Events. Deadline for ad-makeup is the same as for articles.

About FRPCUG

FRPCUG is an independent nonprofit computer society, open to anyone interested in MS-DOS, OS/2, or UNIX micro-computers. Its purpose is to provide an educational and scientific forum of mutual benefit for members of the micro-computer community. FRPCUG holds a monthly meeting and conducts various special interest groups (SIGS) and seminars. Members have voting privileges, subscription to *k-Byte* newsletter, SIGS and selected seminars. Annual dues are \$25 for individual/family membership and \$50 for corporate/group membership. ☐

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Trading Post

Free: 50 – 3.5" floppy discs. Call Paul Ostrof at 970-484-7680.

For Sale: Harmon/Kardon HK speakers. Came with my Dell computer and still unpacked - \$20. Call Paul Ostrof at 970-484-7680.



About Trading Post

k-Byte runs classified ads in Trading Post for three consecutive issues. Trading Post ads up to 10 lines (or 70 words) long are free to FRPCUG members: \$5 for non-members. To place an ad in Trading Post contact Will Horton at 223-2154 or email whorton@will-design.com.

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Specifications (Monthly rate)

Full Page (8 1/2" X 7")	\$30
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Business Card (2 3/4" X 1 1/2")	\$ 5

We offer a substantial discount for repeat ads and continuing contracts. For additional charge, we will design your ad for you. Contact Will Horton for information on this service at 223-2154 or email whorton@will-design.com.

FRPCUG Web Page

Online At

<http://www.frpcug.org>



February/March Meeting Reports

February Meeting Report

By Mike Meyer

4 2 people attended the February meeting. During the Announcements Period, President Rick Mattingly reminded the membership that a clinic on digital photography would be held on February 24th at the JYMIS office, beginning at 9 a.m. Doug Boicourt stated that the monthly HTML SIG meetings will resume in March. He also mentioned there was a slight problem with the FRPCUG bulletin board that would be corrected shortly.

During the Open Forum Period, Rick once again discussed the need for backing up your data files and critical system settings, as well as the best methods to do so. He and Glen York then discussed some recent news about the Software Business Alliance (BSA) programs to overcome the widespread problem of business software piracy. Other topics of discussion included occasional operational problems with earlier versions of Windows 95 and Norton; some aspects of business and home anti-virus programs; some junk mail (SPAM) issues; requests for notification of the receipt of e-mail messages; and a localized Windows ME issue.

Rick Mattingly was our principal speaker for the Main Program, which dealt with some of the intricacies of the Windows Help functions. He began with a discussion of certain differences between Windows 98, 2000, and ME, with respect to "User Friendliness". Also mentioned were some operational prob-

lems occurring as a result of "third party" software drivers. Rick demonstrated how to obtain information from the Help text files about specific programs, and using General Help for dealing with many fairly common problems.

Also covered was accessing Microsoft's Online Help (i.e., Knowledge Base and technical support information, including a "Chat function), as well as their product/program update capabilities. He also showed a few handy "short cuts" to save time getting to some of the important tools needed for diagnosing your problems. In addition, he covered the use of the task scheduling features, disk diagnostics (e.g., Defragmenter and ScanDisk), system information access, and removing file clutter resulting from Internet usage and failure to properly shut off the computer for some reason. The remainder of Rick's presentation dealt principally with questions and answers specific to the needs of individual

users, such as Video driver problems, BIOS settings, and hardware configuration issues. All in all, Rick did a great job of presenting a subject that many of us needed to know a lot more about, and he held everyone's attention while doing so.

Scribe's Corner

March Meeting Report

By Mike Meyer

3 7 people attended this month's meeting. During the Announcements Period, Rick Mattingly reminded the membership that they should update their e-mail addresses for the FRPCUG Membership Roster. He then provided a list of topics to be presented at the upcoming meetings.

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Doug Boicourt stated that the HTML SIG meetings will be resuming in April, rather than March, and new participants will be welcome. He added that a problem had been encountered with the FRPGUG web-site, related to the calendar date function, but hoped to have it fixed in the very near future.

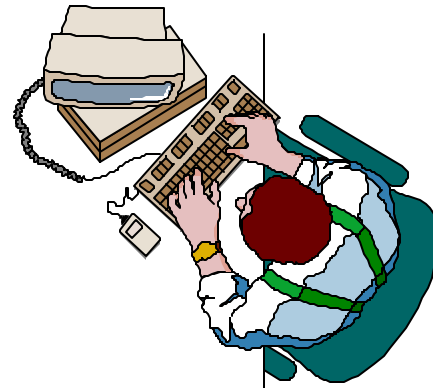
During the Open Forum Period, Rick, Glen York, and Chuck McJilton once again addressed the subject of viruses, anti-virus programs, and the importance of backing up your files. This subject has been a "Hot Topic" for several months. They also informed the membership about the important role played by the ISP in intercepting and trapping many incoming viruses ahead of time. Some questions from the membership then were addressed on related topics, such as the importance of deactivating an anti-virus program temporarily, before installing new or updated software, to avoid potential system complications; and, the topic of manual vs. automatic down-loading of the anti-virus database files provided by the software suppliers. Additional discussion dealt with the subjects of Internet "Cookies", potential causes of "line dropping" (e.g., modem peculiarities), loss of inter-relationships within a web-site, and the availability of programs to "clean up" a hard disk of un-needed files that may interfere with proper system operation (e.g., old DLL files).

Mr. David Howard, the CEO of 1Vision Software (Loveland, Colorado), was the principal speaker for the Main Program. 1Vision has some neat products to help you keep track of your files and to make them available for use very quickly. These products are "1Disk" (\$29), "1Safe" (\$64), and "1Disk.Com" (no price provided) and are patented. They

are not available for retail sale at this time, but can be obtained through the 1Vision and Iomega products web sites.

Dave referred to these products as featuring a "Persistent File System". "1Disk" is the original product, and "1Safe" is the expanded version. "1Disk.Com" is being introduced for limited network applications. Not all the desired functions are available yet (e.g., monitoring network drives). These products will operate under Windows 95/98, NT, and 2000, but will not operate in DOS mode. They sometimes can have difficulties with conflicts with anti-virus programs (See previous remarks.) Dave then demonstrated the features of the "1Disk" product for the membership and answered many questions. There was no doubt that "1Disk" is a highly versatile product and lives up to its reputation as an exceptional file management tool. (Some of our members currently use the product and speak very highly of it.)

Last, but not least, Dave donated some copies of the "1Disk" and "1Safe" products for use as door prizes at next month's meeting.



Virus Software Tips

by Rick Mattingly

In this day and age it is downright foolish to not employ a virus protection software application on your computer system. It would appear that the number of lunatics who have nothing better to do than to create destructive code and inject it into the computer world mainstream are increasing exponentially.

However, some tips are in order for living with a virus protection application on your system.

1. Any virus application is only as good as the associated database of known virus threat signatures. No virus application can be expected to recognize and intercept a newly created virus that is not identified in the product's database. When choosing a virus application, first check to see how frequently the vendor updates and releases the database (dat) files for their product. After installing a virus application, faithfully update the product's database. Many products automate this procedure via the Internet so that the user does not forget this critical task.

2. When installing a virus application, use some constraint in the product's setup. Activating all available features may drag your system to its knees and make use of the system a miserable experience. As a rule of thumb, after an initial scan of the complete system, ac-

tivate only those features which monitor sources of data coming into the system, i.e., removable drive media and modem access. However, life on a Local Area Network (LAN) is a whole different ballgame and such considerations should be left up to the system administrator.

3. Before running any harddrive-intensive operation on a system with a virus application installed (such as tape backup, Scandisk, Defrag, etc.) turn off the virus monitoring first. In such cases, virus monitoring will definitely slow the operation to a crawl or cause it to fail completely! Rebooting the system upon completion of such operations will automatically reactive the virus application.

Definitely protect yourself from virus damage but do not allow the virus application to rule your life!



- Theme/screen saver installation is also supported by the WinZip Wizard. See online help ("Install Feature" topic) for complete information.

Other changes

- Zip and E-Mail adds a new feature to the Windows Explorer context menu. To use the feature, simply select files or folders in Explorer and choose Zip and E-Mail from the pop-up menu. WinZip creates a Zip file containing the selected items and attaches it to a new e-mail message. The Zip file is automatically deleted when your e-mail program no longer needs it. This feature requires that a supported e-mail application such as Outlook be installed.
- WinZip can automatically display the Zip comment when opening a Zip file that contains a comment.
- When the open Zip contains a comment, WinZip displays a new icon on the Classic interface status line. You can click the icon to view and edit the comment.
- Most of WinZip's major dialogs now have "What's This?" help. Click on the question mark in the dialog's title bar, then click on a control for quick information about how it's used.
- WinZip now displays an animated progress dialog during lengthy archive operations and can be minimized during such operations.
- The Miscellaneous tab of the Configuration dialog has several new options, allowing you to:
 - set the number of recently used files listed in the File menu,
 - enable or disable the theme/screen saver installer,
 - automatically show comments when opening Zip files,
 - enable or disable the animated status dialog used during long Zip operations, and restore
 - all warning messages that you have pre-

viously turned off.

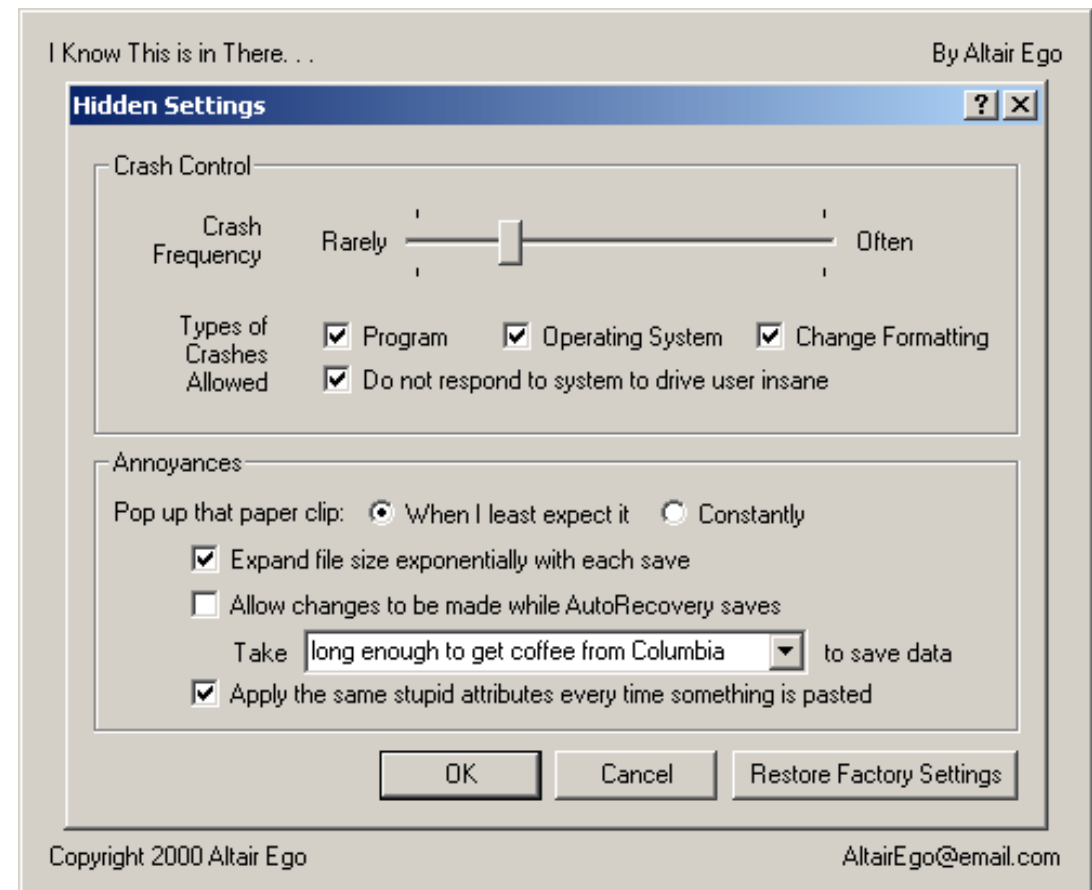
- A new option in the System tab of the Configuration dialog allows you to control whether dialogs are shown when you drag and drop files from Explorer onto an archive or a WinZip window.
- The list of recently used files in the Classic mode File menu has been enhanced:
 - The case and capitalization of files in the list adhere to the preferences you have selected for files in the main WinZip window.
 - WinZip no longer places in the list files that were automatically opened from the Windows temporary folder. This means that, for example, temporary Zip files created by opening e-mail attachments won't clutter the file list.
- A new button for Close Archive is available and can be added to the toolbar from the toolbar configuration dialog.
- If you click the View button and multiple files are selected, WinZip will perform the specified action on all selected files; previously, WinZip only performed the action on the first selected file. For example, if you click View when two .DOC files are selected, both documents will be opened.
- The WinZip Self-Extractor Personal Edition is now a 32-bit program exclusively and no longer supports creation of 16-bit extractors.
- WinZip's Windows extensions are now 32-bit Explorer Shell extensions only. The File Manager extension is no longer supported.
- The System tab of the Configuration dialog has an option to change WinZip's associated file types.
- Miscellaneous improvements to online help.

September, 2000 Bits of Bytes newsletter



Yesterday scientists in the USA revealed that beer contains small traces of female hormones. To prove their theory they fed 100 men 12 pints of beer each and observed that 100% of them lost all sense of reasoning and sense of direction, started talking nonsense, became illogical and couldn't drive.

Thanks to Brad Kell



I Know This Is In There by AltairEgo
From the March 2001 issue of the I/O Port Newsletter

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Demystifying Graphic File Formats

by Ben Luna, Coastal Area Users Group, Corpus Christi, TX

When an image is saved to a specific file format, you are telling your applications how to write the image's information to disk. The specific file format you choose depends on the graphics software application you are using (e.g., Adobe Illustrator, Freehand, Adobe Photoshop) and how and where you will use your image (e.g., the Web or a print publication.)

Graphic file formats can be broadly categorized into bit-mapped formats and vector formats.

Bit-mapped Formats

This format is a representation, consisting of rows and columns of dots, of a graphics image in computer memory. This is sometimes called raster graphics. The value of each dot, whether it is filled or not, is stored in one or more bits of data. The density of the dots, known as the resolution, determines how sharply the image is represented. This is often expressed in dots per inch (dpi), or simply by the number of rows and columns, such as 640 by 480. To display a bit-mapped image on a monitor or to print in a printer, the computer translates the bit map into pixels for monitor screens, or ink dots for printer. Programs that manipulate bit-mapped images are called paint programs.

Following are descriptions of some

commonly used bit-mapped file formats:

BMP: The Bitmap file format is used for bitmap graphics on the Windows platform only. Unlike other file formats, which store image data from top to bottom and pixels in red/green/blue order, the BMP format stores image data from bottom to top and pixels in blue/green/red order. This means that if memory is tight, BMP graphics will sometimes appear drawn from bottom to top. Compression of BMP files is not supported, so they are usually very large. When saving a file to the BMP format, add the ".bmp" file extension to the end of its file name.

GIF: The Graphics Interchange Format was originally developed by CompuServe in 1987. It is one of the most popular file formats for Web graphics and for exchanging graphics files between computers. It is most commonly used for bitmap images composed of line drawings or blocks of a few distinct colors. The GIF format supports 8 bits of color information or less. In addition, the GIF89 file format supports transparency, allowing you to make a color in your image transparent. (Please note: CompuServe GIF87 does not support transparency.) This feature makes GIF a particularly popular format for Web images.

GIF is a "lossy" file format. It reduces an image's file size by removing bits of color information during the conversion process. The GIF format supports 256 colors or less. When creating images for the Web, be aware that only 216 colors are shared between Macintosh and Windows monitors. These colors, called the "Web palette," should be

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More Windows-like interface

- When you click the right mouse button on a file in the archive contents list, the context menu now displays any associated actions for the type of file selected. For example, right-clicking on a .DOC file (Microsoft Word document) might display "Open", "Print", and "New". As in Explorer, hold down the Shift key while clicking the right mouse button to add an "Open With ..." choice to the menu. This menu item allows you to choose the application you wish to use to open the selected file.
- Inclusion of subfolders when adding, updating, etc., is now automatic and mirrors Explorer's treatment of subfolders. You no longer have to check the "Include subfolders" checkbox; instead, WinZip determines when to include subfolders using the same logic that Explorer does.

Specifically:

- 1) When individual files are added, WinZip does not look in subfolders for files with the same name.
 - 2) When a folder is added, WinZip always adds the contents of all its subfolders, just as Explorer always copies all subfolders when you copy a folder.
- The "Include subfolders" option in the Add dialog box is still available if wildcards (* or ?) are used in the filename field. This allows you to, for example, zip all *.DOC files in a folder tree with a single operation.
 - WinZip automatically stores the same path information that is copied when using drag and drop or copy and paste in the Windows Explorer.



- Optional new "Explorer-style" toolbar buttons are available. These Internet Explorer-like buttons are simpler in style than the traditional WinZip toolbar buttons and optionally appear in gray, changing to full color when the mouse pointer is on them.
- WinZip now displays a tooltip when a Zip file is selected in Windows Explorer. The tooltip shows how many files are in the archive and displays the archive comment, if there is one. If "View as Web Page" is enabled in Explorer, the information will instead appear in the description area of the Web page. The Windows Desktop Update (Active Desktop) must be installed and WinZip shell extensions enabled in order to use this feature.

- When you click the right mouse button on a file in the archive contents list, the pop-up menu now displays only file-related actions such as Extract. This is more consistent with general Windows conventions. Use the Actions or File menu for archive-related actions like Virus Scan.
- Under Windows 98 and Windows 2000, WinZip menus now display small icons corresponding to the menu items' toolbar buttons. Desktop theme and screen saver support.

- WinZip can install desktop themes and screen savers contained in Zip files. To use this feature, simply open a Zip file containing a theme or screen saver and click the Install button. WinZip will extract all necessary files to the appropriate folder(s) and then run the required system theme or screen saver support application to complete installation.

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WINZIP 8.0

a review by Dick Immig, P*PcompAS

WINZIP has been around ever since Windows appeared on the screen, and because it has earned a reputation as a great easy to use utility, it has become the accepted standard. It is now in Version 8, and Nico Mak, the originator, has found quite a few new improvements to add to the already impressive package. I have been using version 6.3 for a couple of years, but curiosity finally got the better of me and I downloaded version 8.0. I was pleasantly surprised.

I thought everyone knew about ZIP files, but I have discovered from working with people who are new to computers that many of them have never even heard the word before. ZIP files were introduced quite a few years ago by Phil Katz (and others) who developed a way to compress text files by using some nifty algorithms that sharply reduced the size of the file.

Remember that this was in the days when 1400 bps modems were the wonder of the computing world, and you stored all your files on 360 k floppy disks. To ZIP your file you dutifully typed a DOS command that averaged something like 30 characters. The introduction of Windows soon did away with that, and now you can compress and decompress your files with a few simple clicks. There are still some variations of compressed files such as the ARC, LZH, etc., files hanging around and they are easily handled by WINZIP.

WinZip 8.0 includes significant enhancements for all WinZip users, whether novice or advanced. The new Zip and E-Mail feature zips documents and folders and attaches the Zip file to

an e-mail message without leaving Explorer. The greatly enhanced Wizard can now create and update Zip files, as well as extract and install from MIME and similar encoded files (great for e-mail attachments). Improvements to the WinZip Classic interface make it more windows-like than ever; for example, an optional Explorer-style toolbar is available, and when creating or updating an archive, WinZip automatically stores the same subfolders and folder information that Windows Explorer would use for a similar copy operation. And installing those very popular desktop themes and screen savers from Internet downloads has always been a difficult and cumbersome process, but WinZip's new automatic theme and screen saver installer makes it easy. Details on these and many other enhancements follow.

Enhanced WinZip Wizard

- WinZip Wizard functionality has been extended to allow you to create and update Zip files from the Wizard. After the initial Welcome panel, the Wizard displays a new Select Activity panel; from here, you specify whether you want to unzip/install, update an existing archive, or create a new archive. Like the existing Unzip/Install Wizard, the new Add Wizard is designed to make the most common operations easy and convenient.
- The Wizard can now extract and install from MIME and other encoded files. This makes processing of e-mail attachments from online service such as AOL and CompuServe easier for Wizard users.
- The Wizard now supports automatic installation of desktop themes and screen savers (see below for more information).

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used when creating GIFs for the Web because colors that are not in this palette display differently on Macintosh and Windows monitors. When saving an image to the GIF format, add the ".gif" file extension to the end of its file name.

PCX: Originally developed by ZSOFT for its PC Paintbrush program, PCX is a common graphics file format supported by many graphics programs, as well as most optical scanners and fax modems. When saving an image to the PCX format, add the ".pcx" file extension to the end of its file name.

TIFF: Tagged Image File Format is a standard file format for storing images as bit maps. It is used especially for scanned images because it can support any size, resolution, and color depth. When saving an image to the TIFF format, add the ".tif" file extension to the end of its file name.

Vector Graphic Formats

The other method for representing images is known as vector graphics (or object-oriented graphics.) With vector graphics, images are represented as mathematical formulas that define all the shapes in the image. Vector graphics are more flexible than bit-mapped graphics because they look the same even when they are scaled to different sizes. In contrast, bit-mapped graphics become ragged when they are shrunk or enlarged. Programs that enable the user to create and manipulate vector graphics are called draw programs. Images stored as vectors look better on monitors and printers with higher resolution (bit-mapped images always appear the same regardless of a device's

resolution.) Another advantage is that images in vector graphics often require less memory than bit-mapped images. Almost all sophisticated graphics systems, including CADD systems and animation software, use vector graphics.

Following are descriptions of some commonly used vector graphics file formats:

EPS: The Encapsulated PostScript file format is a metafile format; it can be used for vector images or bitmap images. The EPS file format can be used on a variety of platforms, including Macintosh and Windows. When you place an EPS image into a document, you can scale it up or down without information loss. This format contains PostScript information and should be used when printing to a PostScript output device. The PostScript language, which was developed by Adobe, is the industry standard for desktop publishing software and hardware. EPS files can be graphics or images of whole pages that include text, font, graphics, and page layout information.

JPEG: Like GIF, the Joint Photographic Experts Group format is one of the most popular formats for Web graphics. It supports 24 bits of color information, and is most commonly used for photographs and similar continuous-tone bitmap images. The JPEG file format stores all of the color information in an RGB image, then reduces the file size by compressing it, or saving only the color information that is essential to the image. Most imaging applications and plug-ins let you determine the amount of compression used when saving a graphic in the JPEG format. Unlike GIF, JPEG does not support

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A Safe Surfer

by Linda G. Christensen

So, you think you're a safe surfer Well, so did I! Boy, was I wrong!

These days it takes a lot more than just an up-to-date anti-virus application to make sure you are safely traversing the Internet. After years of no SPAM to speak of, I suddenly (as in overnight!) was getting 5 to 25 per day! Yes, my job does require more time on the net than some of you and multiple mailboxes to oversee but this was unbelievable. One day I got 13 copies (yes, a Baler's dozen!) of the dreaded "HaHaHa" virus too!



I was getting r-e-a-l tired of deleting all this garbage and more than a little concerned as to why I was being targeted. Trust me, I knew that this was not just a fluke. I knew someone was aiming for me and I was very worried about what kind of problems I may not be aware of too!

Well, now I know. After talking to some of my most respected fellow surfers, I was sure I needed to look into installing a "Firewall." A firewall is an application that monitors all Internet activity, both in and out of your system. What you do not know can hurt you Big time!

I don't have the space to go into all the details but I suggest that everyone that

gets on the net check it out for themselves. I found a gem of a program called "ZoneAlarm" that immediately I had "spyware" on my machine that was signaling every time I was online. This resulted in automatic SPAMming. With ZoneAlarm in place not one SPAM and the only "HaHaHa" these days is from me when I think of how I stopped the attacks. There are some reviews of ZoneAlarm at: <http://www.epinions.com> and more great info at: <http://www.grc.com> (the folks that make SpinRite and other great products). You can download ZoneAlarm at <http://www.zdnet.com> - fast and easy. The site for ZoneAlarm, <http://www.zonelabs.com>, is so busy taht it is often overloaded. BTW, the cost to protect your personal system with ZoneAlarm is \$0.00! How's that for a deal?

Please, look into this. Ignorance is not bliss when your private files are being invaded.

February, 2001 issue of the Fox Valley Computer User Group newsletter



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those items stay available after the program is closed and the resources used by that item are not freed. Yes, this is the way they designed it. I suspect it's a crude hack to make programs appear to load faster.

With 16-bit applications (anything that will run in Windows 3.1 or DOS), none of the system resources used are freed up until all such programs are closed. Microsoft says this is for compatibility purposes. My guess is that it's laziness: rather than program in a way to tell if the resource is still needed, Microsoft leaves it open. Microsoft also says that closing a program before it has a chance to completely start up can strand resources and reduce the level of free system resources. If you're finding that you have regular problems with low system resources, as I have, first check the programs that are always running; then check the programs you use regularly.

Internet browsers are notorious for using and not freeing up system resources. But you might find that one browser works better for you than others. You can also try out replacements for your programs -- for example, Calypso -- leaves me more free resources than Eudora Pro, and offers better features in the bargain.

November, 2000 Bits of Bytes newsletter



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FREE Internet Discussion Group

JYM Information Systems and the Barnes & Noble Book Store on South College Avenue in Fort Collins are sponsoring a monthly "Internet Safari" discussion group. This group meets at 7 PM in the Barnes & Noble Book Store the first Monday of each month.

This is an open discussion and we examine current issues involving the Internet, how to use the Internet and subjects raised by those present. This group is open to the public without cost or obligation. This is a good chance learn how others are using the Internet.

(Continued from page 23)

dows Explorer, find the file, and drag it to your desktop to create a shortcut. In Win98, you can then drag it to the right side of the system tray to have it run every time you boot up. (Note that this uses some resources, too.) This will give you a constant check. The icon changes colors as the resources change: green if you've got plenty, yellow if you're getting low, and red if you're in the danger zone. With this icon in the system tray, you can start checking which programs use the resources. Start with a clean boot. Then float your mouse pointer over the resource meter and note the resources available. If you're under 75%, it's a good idea to start checking your system. Click on the Start button, then Run, and type in "msconfig.exe." When the window opens, click on the Startup tab. You'll get a list of programs -- the checked items run every time you boot your computer, and usually put an icon in the system tray. You should go through this list carefully and uncheck those you don't want or need. Many are added automatically when you install a program. Real Audio, for example, runs a program to help it start up quickly. WordPerfect adds several items to the tray when you install it.

Virus programs and other utilities are usually running in the background. But you might find programs you don't need, or that you no longer use. Sometimes you'll find duplicates, which are

rarely unnecessary. If you uncheck these programs one at a time, then reboot, you can see what each individual program uses. Once you've cleared out this list, reboot and check your resources again.

Check Out Your Programs

Then open a program, and when it's completely open, check the resources again. As you open more windows in the program, keep checking resources. You may be surprised at how much of your system is used. In my case, Eudora Pro was using 20% of my system resources, an astonishingly large amount. It turned out that Eudora opens the inbox, outbox and trash folders when it runs, and every message in these folders uses some resources.

I have a bad habit of not cleaning out my inbox, which contributed to the problem. In the end, because the latest Eudora upgrade doesn't solve the resource problem and costs as much as some other programs, I tried alternatives, and changed to Calypso, an excellent shareware mail program which uses about 5% of resources.

Problems in Windows Itself

Finally, note that system resources are not always freed up when a program closes, due to apparently sloppy programming practices in Windows. Windows frequently puts off initializing things a program needs, like fonts, until they are requested. Once requested,

(Continued on page 25)



HARNESS THE SUN FOR YOUR LAPTOP

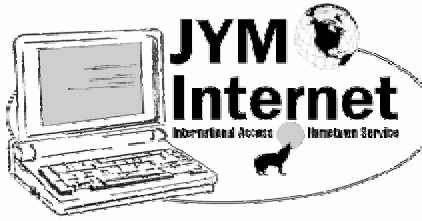
If you're really into mobile computing, you might find yourself bringing your laptop completely off the power grid occasionally. Naturally, those batteries you packed are going to run out sooner or later (probably sooner), so you'll need some kind of mobile recharging solution.

Believe it or not, technology exists that allows you to recharge your computer on a sunny day using solar power. A company called Jade Mountain makes solar panels for your laptop. Get more details at: <http://www.jademountain.com/laptopchg.html>

Topica TipWorld
<http://www.topica.com/>



SunCatcher Solar Charger



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transparency.

Use JPEG for scanned photographs and naturalistic artwork with highlights, shaded areas, and shadows. The more complex and subtly rendered the image is, the more likely it is that the image should be converted to JPEG.

JPEG, like GIF, uses a "lossy" compression technique, which changes the original image by removing color information during the conversion process. The JPEG file format supports millions of colors. In theory, JPEG was designed so that changes made to the original image during conversion to JPEG would not be visible to the human eye. Most imaging applications let the user control the amount of lossy compression performed on an image, so you can trade off image quality for smaller file size and vice versa. Be aware that the chances of image degradation when converting to JPEG increase proportionally with the amount of compression you use. When saving a file in the JPEG format, add the ".jpg" file extension to the end of its file name.

Use the JPEG file format for images with only a few distinct colors, such as illustrations, cartoons, and images with blocks of color, such as icons, buttons, and horizontal rules.

PICT: The Picture file format is for use primarily on the Macintosh platform; it is the default format for Macintosh image files. The PICT format is most commonly used for bitmap images, but can be used for vector images as well. Avoid using PICT images for print publishing. The PICT format is "lossless," meaning it does not remove informa-

tion from the original image during the file format conversion process. Because the PICT format supports only limited compression on Macintoshes with QuickTime installed, PICT files are usually large. When saving an image as a PICT, add the file extension ".pct" to the end of its file name. Use the PICT format for images used in video editing, animation, desktop computer presentations, and multimedia authoring.

PNG: The Portable Network Graphics format will likely be the successor to the GIF file format. PNG is not yet widely supported by most Web browsers. Netscape versions 4.04 and later, and Internet Explorer version 4.01 and later, currently support this file format. However, PNG is expected to become a mainstream format for Web images and could replace GIF entirely. It is platform independent and should be used for single images only (not animation.) Compared with GIF, PNG offers greater color support and better compression, gamma correction for brightness control across platforms, better support for transparency, and a better method for displaying progressive images. When saving an image to the PNG format, add the file extension ".png" to the end of its file name.

CGM: The Computer Graphics Metafile is a format developed by several standards organizations. CGM is supported by many PC Software products. When saving an image to the CGM format, add the file extension ".cgm" to the end of its file name.

DXF: The Data Exchange File is a format developed by Autodesk. Almost all PC-based CAD systems support DXF.

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not with RAM.

What Causes the Problem

When Windows is running, what you see and do are built from a collection of objects that, together, make up the Windows experience. All these objects have to be tracked -- their location in memory, their status (open, checked, maximized, etc.), their menus, and much more -- so they can be displayed when necessary, closed, or restored without trampling over anything else in your Windows session.

Windows 3.1 was notorious for running out of system resources. Windows 95 changed how these items are handled, and Windows 98 uses the same scheme.

Technical Discussion

Briefly: Windows has five areas, or "heaps," that store information about system resources. User32.dll, which manages user interface functions like window creation and messages, uses a 16-bit heap and two 32-bit heaps. One of the 32-bit heaps stores a WND window structure for each window in the system. The other stores message queues, windows classes, etc. GDI32.dll, the graphical device interface, holds the functions for drawing graphic images and displaying text. It uses a 16-bit heap and a 32-bit heap.

Why You Have a Problem

The point here is that this space is lim-

ited, and everything you run on the computer uses some of it. When your system slows to a crawl, the odds are good that you have a system resources problem.

My problems with system resources began with an update to Eudora Pro, my e-mail program. (This falls under the heading "Free Updates Aren't Always a Good Idea"). It took me a while to realize that I had upgraded Eudora about the time the problems started. When the light bulb lit, I went to a Eudora newsgroup to search for comments. (Hint: it's easier to search for this kind of thing at Deja News (www.deja.com/usenet/). I quickly discovered complaints about the system resources used by Eudora, along with suggestions on increasing the resources available.

A search on the Web turned up more suggestions. It quickly became clear that this is a common problem, since I found pages at Compaq, Adobe, PC Magazine, and other sites discussing how to cope.

In essence there are three steps in dealing with this problem. First you have to learn the extent of the problem. Windows 9x includes a tool, the Resource Meter, which shows the percentage of User, GDI, and System resources available (the system resource figure is a combination of the other two, although it always seems to match the lower of the other two numbers).

Resource Meter is rsrcmtr.exe in the C:\Windows directory. You can open Win-

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TIP OF THE WEEK: GET BETTER CD-R BURNING

So you're trying to record music from an audio CD to a CD-R, only to see it stop halfway through the process. You repeatedly try to get it to record, but it won't complete the process. Frustrating, yes, but fortunately, there is a common troubleshooting fix.

The most frequent cause for CD-R recording errors is a buffer underrun, which means that the CD-R writer runs out of data while recording to the disc. Newer CD-R drives have larger buffers that can help prevent this problem. If you have an older drive, try creating an image of the CD on your hard drive first, then copy to CD-R from that. The hard drive is more likely to be able to keep the drive supplied with data, whereas a CD-ROM drive might not, so you're more likely to get a successful burn.

ZDNet Help & How-To
<http://www.zdnet.com/zdhelp>



Freeing System Resources

by Tom Anderson, Sacramento PC Users Group, October 2000

You've probably gotten the warning from Windows: "Ninety percent or more of your system resources are in use. Close programs now or your computer will explode." Your initial reaction, like mine, might have been: "I've got plenty of memory and hard drive space. What's going on?"

Unfortunately, this somewhat cryptic message has very little to do with RAM and hard drive space. It refers to small areas of Windows memory that are used to keep track of open windows and other objects on the screen, like fonts, listboxes, timers, menus, and so forth.

I learned far more about this subject than I wanted recently, when my system kept collapsing because the system resources kept disappearing. The Microsoft Web site has surprisingly little on the topic, but a search in newsgroups and another at Google yielded the information I needed. I was surprised, though, to find an astonishing amount of misinformation as well. Far too many references, on supposedly well-informed sites, referred to system resources as RAM, and recommended closing applications to free up more RAM. While closing applications can help system resources, the problem is

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GEM: The graphics file format used by GEM-based applications. GEM is a graphical user interface (GUI) developed by Digital Research.

HPGL: Hewlett-Packard Graphics Language is one of the oldest file formats. Although it is not very sophisticated, it is supported by many PC-based graphics products.

IGES: Initial Graphics Exchange Specification is an ANSI Standard for three-dimensional wire frame models. IGES is supported by most PC-based CAD systems.

PIC: This is a relatively simple file format developed by Lotus for representing graphs generated by Lotus 1-2-3. PIC is supported by a wide variety of PC applications.

WMF: The Windows file format is used for exchanging graphics between Microsoft Windows applications. WMF files can also hold bit-mapped images.

The debate over which format is better still surfaces once in a while. My opinion is that each format has its place, just as the native format of the various paint-and-draw programs. One format may be better than others in terms of quality; at other times, another format may be better in terms of size. Best way is to take the time to view and store your images in different formats and select the one optimum for your needs, storage capability, and ease of use.

Ben Luna's experience includes writing manuals for computers and software. Email him: akosiben@netscape.net

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.



A Definite Whoops!

The National Westminster Bank admitted last month that it keeps personal information about its customers -- such as their political affiliation -- on computer. But now Computer Weekly reveals that a financial institution, sadly unnamed, has gone one better and moved into the realm of personal abuse.

The institution decided to mailshot 2000 of its richest customers, inviting them to buy extra services. One of its computer programmers wrote a program to search through its databases and select the customers automatically.

He tested the program with an imaginary customer called Rich Bastard. Unfortunately, an error resulted in all 2000 letters being addressed "Dear Rich Bastard".

The luckless programmer was subsequently sacked.

SureThing CD Labeler

By Martin Riggerbach, TCS Member

There are some programs out there that try to do everything, including making your breakfast. SureThing CD labeler is not one of these Swiss Army Knife programs. The SureThing CD labeler is a program created for one purpose- labeling CD's and jewel cases, and other media like Zip and Jaz disks, audio cassettes, video cassettes, and Sony MiniDiscs.

It supports all popular labels including Avery, Neato, Memorex, CD Stomper and Stick-It. The program is geared to do one job better than any other program of its kind on the market.



Being able to print is no good if you don't have anything worthwhile to put on the label. MicroVision Development: SureThing CD labeler has it covered. The program comes with a browseable background and clipart library, as well as the ability to import files. You can also scan directly to the program or import directly from a TWAIN source, meaning you can create exact copies of the original CD or put a family picture

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SCIENTIST CLAUDE SHANNON DIES

Date: Wednesday, February 28, 2001

Claude Shannon, 84, a mathematician and computer scientist whose theories became a basis for modern mass communications networks, died Feb. 24 after battling Alzheimer's disease. Dr. Shannon envisioned communications through binary code -- the ones and zeroes used by computer to represent words, sounds and images. In 1948, he outlined a series of mathematical formulas that could reduce communication processes to binary code -- known as bits.

He also calculated ways to send the maximum number of bits through telephone lines or other modes of communication. The invention of integrated circuits years later allowed his theories to be put to practical use. Today, they are the core of the technologies that deliver the Internet and its various trappings, from music to video to e-mail, via a phone line.

[SOURCE: Washington Post (B06), AUTHOR: AP Writer]
(<http://washingtonpost.com/wp-dyn/metro/obituaries/A81-2001Feb27.html>)

Thanks to Glenn York

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MEMBERS

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hard drive.

Step 2 Make sure you have all of the installation disks for all of the programs you use. You'll need to install them all over again after you install the Windows operating system.

Step 3 Find the Startup floppy disk you created when you first installed your current Windows system. If you do not have such a disk, create one now. Do that by going to the Control Panel and following the instructions found in the "Add/Remove Software Programs" folder and then clicking on the START DISK tab.

Step 4 Now comes the scary part. Insert the Startup floppy into your A: drive. You must then reboot the computer to go into the pure DOS operating system mode. This means that Windows will not be allowed to run. If you were using Win98, select the option that puts you into DOS. If you were using WIN Me, select the option that says "Minimum Boot". In both cases you will wind up getting the A:> prompt. Then type "format C:" and press Enter.

Follow the instruction you see. Don't go to this step unless you are not only sure you've done everything in steps 1, 2, and 3, but that you understand what you have done and why you have done it.

Step 5 Use the Startup floppy to again



restart the computer in DOS mode. This time you will select the option that allows you to boot from the CD-ROM. This command in effect loads the CD-ROM drivers so that you can use your CD-ROM drive with your Windows program CD-ROM disk. Insert the Windows disk into the CD drive. Change the A:> prompt to the prompt that identifies the CD drive and type in "SETUP". The computer will go through some automatic gymnastics such as SCANDISK and will finally bring you to the Windows setup program. Now just install Windows, remove the Startup floppy from your A: drive, and reboot your computer. Windows will be installed on your hard drive.

STEP 6 Install your applications and all of your backup data files saved in steps 1 and 2. For computer novices, you now have the opportunity to manage your hard drive more efficiently. Create folders in various categories so that as you install each application it will have a logical home as opposed to just plopping it on the hard drive at random. For example, you know that you will have a lot of game applications, so create a new folder named GAMES and install all future games in the GAME folder. Get the idea? Keep in mind, these instructions are to install the OEM version of Windows. They do not apply to the Windows version upgrade.

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on a picture album CD. In addition to all that, it also gives you the ability to create text art on the fly within the program.

The program is amazingly simple to use, but if you ever have a problem there is a very comprehensive help section covering almost everything you could ever want to know about the program and links to Internet help.

In order to use the program, you need at least a 486 running 9.x or NT, 8 MB of RAM and 10 MB free hard disk. I would also suggest a CD burner (copier) and a color printer although black-and-white will work too.

With the program you also get a little plastic labeler to make your CD labeling much easier. The program can be ordered through MicroVision's Web site for \$39.95. For more information and the free demo please visit the MicroVision Development's Web page.

I am very impressed with this program. I installed it and had a labeled CD within minutes that looked great. The whole process is simple, straightforward and fun to use. Can you imagine having professional looking, labeled CD's stacked up on your computer desk instead of all those CD's identified only by cryptic messages in marker pen? That sounds like progress to me.

TCS Journal - February 2001



Reformatting An Existing Hard Drive

By Chuck Blaney, P*PCompAS

My daughter called from Las Vegas and said that her computer was hopelessly in trouble. She is a computer novice so she didn't have much on her computer to lose. I suggested to her to reformat her C: drive, install Windows ME and start over again on the right foot. To help her, I sent the following instructions that I developed step-by-step to make sure I did not leave out any detailed information.

Many people think that they can format a hard drive until they actually try to do it. Perhaps these instructions will help some club members, especially our novice brothers and sisters. Reformatting your hard drive will erase all of your existing applications and will remove your existing operating system. In effect it is like starting from scratch and the computer becoming reborn with nothing on it.

Step 1 Back up all of the data files of your various applications before you begin this process. There are various programs and devices to do this such as floppies, tape drives, zip drives, CDROM-RW, etc. You will have to copy them back into their respective folders as the last step in this process. Remember when you reformat, you will lose all folders, files and data on the

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Inkjet Printer Tips

by Sol Libes—Amateur Computer Group Of New Jersey, Inc.
www.acgnj.org

Manufacturers of ink jet printers caution users to use the power switch on the printer to turn it on and off. Do not use the switch on a power strip to power down your printer. The printer relies on its internal circuitry to properly position the print heads. Shutting the power off at a source outside of the printer may be detrimental to the print heads or the ink cartridge.

Paper makes a difference in how your document looks. Whether it is text or a graphic the quality of the paper you put into your printer is important. Copy paper is made for copiers. It has surface qualities appropriate for the electrostatic process copiers use to place the toner on the paper. Inkjet printers require a better grade of paper with a surface that will capture and hold the ink that is sprayed from the nozzles. Inkjet papers will also have a smoother surface and contribute less to clog up your printer. Spend a little more for inkjet paper. You will see a difference in the quality of your output.

Inkjet printers can adjust the quantity of ink used to form the characters or figures. They use terms like Econofast; Normal; or Best; to differentiate the quality of output. When you are in the dialog box, look for a button marked Properties, click on that and you will find the area where you can choose which mode to use. Econofast will save ink and be quite a bit faster. Best will lay down a lot more ink and will be

much slower. The Best mode, combined with photo grade papers in newer printers, gets pretty close to what you are used to seeing when you get your film back from a photo processor.

Reprinted from the Orange Bytes newsletter of the North Orange County Computer Club



WINDOWS INSIDER—MARCH, 2001
by Valerie Ryan

YOUR FLOPPY DISKS COULD GROW 20-FOLD

Remember when floppy disks could store only 1.44 MB of data? Oh, that's right, they still do. That is, unless Matsushita Kotobuki Electronics Industries' new product pans out. (If you haven't heard of them, they make Panasonic products.) The company recently announced the development of a new floppy drive that increases the capacity of a standard 2HD floppy disk to 32 MB, more than 20 times its normal storage! The drive connects to a Universal Serial Bus (USB) port and doesn't require an outside power source.

How do they do it? According to a PC World Online article, "To increase the data capacity of a standard floppy, Matsushita's FD32MB system employs zone bit recording--a system used to encode data onto hard disks and optical disc systems that more efficiently uses the space to record data."

The drive is expected to go on sale in Japan tomorrow for less than \$87.

Topica
<http://www.topica.com/>

Calendar of Events

— **IMPORTANT NOTICE** —
FRPCUG meetings are held at the Fort Collins Senior Center. Check below for directions to the Senior Center.

April General Forum Meeting

We will meet at the Fort Collins Senior Center on Tuesday, April 3 at 7:00 pm.

Meeting Agenda

7:00 - 7:15 *Announcements*
7:15 - 7:45 *Open Forum*
7:45 - 8:00 *Nomination of Officers*
8:00 - 8:15 *Break*
8:15 - 9:30 *SnagIt & Camtasia* – Rick Mattingly will give a presentation of these very useful software products from TechSmith.

May General Forum Meeting

We will meet at the Fort Collins Senior Center on Tuesday, **May 1** at 7:00 pm.

Meeting Agenda

7:00 - 7:15 *Announcements*
7:15 - 7:45 *Open Forum*
7:45 - 8:00 *Break*
8:00 - 9:30 *Adobe Acrobat*— A presentation on the powerful document publishing package from Adobe. Acrobat PDF files are now all over the Internet. Come see what it's all about.

See you at the meetings!

Directions

The Fort Collins Senior Center is located at 1200 Raintree Drive. This site is situated at the northwest corner of the Shields and West Drake intersection, on the north side of the Raintree Shopping Center. Check the marquee at the main entrance for directions to the specific meeting room.

Up-Coming SIG's, Seminars and Meetings

Board Meeting

FRPCUG's executive board meets on Wednesday of the week following the General Forum Meeting at 7:00 p.m. All members are welcome and are encouraged to attend. These meetings are held at the offices of JYM Information Systems: 311 S College Avenue in Fort Collins.

LINUX SIG

This SIG, supports LINUX and other non-Windows operating systems for PC compatible hardware. This includes all distributions of LINUX, the BE Operating system, and OS2. These meetings are held at the offices of JYM Information Systems: 311 S College Avenue in Fort Collins. For more information contact Chuck McJilton at 493-2987 or email linuxsig@jymis.com.

Northern Front Range Netware Users Group

NFRNUG meets at 5:30 pm on the second Wednesday of each month at the U.S. Fish & Wildlife building, 2101

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Refilling Printer Ink Cartridges

by Herb Menzel, Santa Barbara PCUG

At a recent computer show the "refill printer ink kits" caught my eye. I thought, what could be difficult in filling printer ink cartridges? Before the days of ball point pens, every grammar school classroom had a quart bottle of ink that was used to fill ink wells. When the kids got bored they would catch flies, dip them in an ink well and let them walk on a sheet of paper to see what kind of art they would create. But that is part of another story.

I parted with the price of a refill kit and happily calculated how much money I would save over purchasing complete cartridges. Little did I realize that money was not the only cost of refilling cartridges. When I saw the surgical gloves in the kit I got the first clue that not all of the ink would find its way into the cartridges. That clue would soon come to pass. After handling the syringe that is used to fill the cartridges, I realized that it would be a two handed operation. To avoid knocking over an ink bottle, I stabilized it in a coffee mug with a paper towel. The kit contained a small size drill with a plastic handle. Drilling a hole to insert the syringe took a little patience, but before long the drill broke through the cartridge top. The kit had a supply of tape tabs to seal the ink exit ports. That seemed simple enough. I spread a



newspaper on my desk and proceeded to fill one of the cartridges. All went well until the ink seeped around the tape at the exit port. Before I knew it, ink soaked through the newspaper and onto my desk pad.

Lesson #1: always do the filling in the sink.

Lesson #2: don't rely on the tape tabs to seal the exit ports. I tried several ways of covering the exit ports and ended up wrapping the cartridges in plastic wrap. After filling a cartridge, I sealed the fill hole with a tape tab. I found that did the job. I have filled enough cartridges to break even on the cost of new cartridges and I still have

plenty ink to fill more cartridges so I'm saving money. Would I buy another refill kit? NO! If money is a major concern when operating an ink jet printer, one might consider refilling ink cartridges. However, one must remember that no matter how careful one uses the ink, some of it is going to spill and even gloves some of the ink will get on one's hands. So unless you have lots of time and don't mind getting your hands and sink messy, forget about refilling ink cartridges. Just pay the shot of new cartridges. It's much easier on the nerves.

February, 2001 Bits of Bytes newsletter



FRPCUG Membership Application

Name: First _____ M.I.____ Last_____

Home Address: _____

City: _____ State:____ Zip:_____

Business (optional): _____

Business Address: _____

Date: _____ Mail Correspondence To: Home____ Business____

Daytime Phone: _____ Evening Phone: _____

E-mail Address: _____

Personal Interests

In the following list of items, place an X in the box for each item you are especially interested in and circle the items you are most looking for help or information about:

- | | | |
|--|--|---|
| <input type="checkbox"/> Word Processing | <input type="checkbox"/> Desktop Publishing | <input type="checkbox"/> Databases |
| <input type="checkbox"/> Spreadsheets | <input type="checkbox"/> Communications | <input type="checkbox"/> Internet/WWW |
| <input type="checkbox"/> Modems | <input type="checkbox"/> Printers | <input type="checkbox"/> Hard Disk Management |
| <input type="checkbox"/> Managing Windows | <input type="checkbox"/> Accounting/Home Budgeting | <input type="checkbox"/> Games and Entertainment |
| <input type="checkbox"/> Educational Multi-Media | <input type="checkbox"/> CD-ROMs | <input type="checkbox"/> Upgrading Your System |
| <input type="checkbox"/> CAD | <input type="checkbox"/> Programming | <input type="checkbox"/> MIDI & Music |
| <input type="checkbox"/> Graphics & Art | <input type="checkbox"/> Virus Protection | <input type="checkbox"/> On-Line Services (AOL, etc.) |

What else should we know about your interests and needs? _____

<p>Membership in the Front Range PC Users Group is \$25 per year for individuals and \$50 per year for companies.</p> <p>Mail your completed application and payment to: FRPCUG, PMB 152, 305 W. Magnolia, Fort Collins, CO. 80521, or join in person at the monthly meeting on the first Tuesday of each month. Payment may also be</p>	<p>made at the help session at Data Service Center, 324 Remington, every Saturday morning.</p> <p>For additional information:</p> <p>Contact the FRPCUG Web Page at http://www.frpcug.org.</p>
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(Continued from page 14)

Oakridge Drive in Fort Collins. NFRNUG meetings are open to any users that are involved with Novell networking products and integration of other networking products into the Novell environment (Unix, NT, Mac, etc.). Contact Jim Stephens at 303-541-3376 or jcsteph@concentric.net or contact Chuck Kluko at 970-663-4770 or c.kluko@ix.netcom.com for further membership information. Yearly dues are \$000.00 (yes, FREE) with pizza and pop served at 5:00 pm prior to meeting. Saturday labs and training sessions open to NRFNUG members only, space is limited.

Rocky Mountain Internet Users Group

Meets on the second Tuesday of 'odd' months at NCAR in Boulder. Meetings start at 7:00 pm, but members are encouraged to arrive at 6:30 pm for informal networking and refreshments. NCAR is located in Boulder at 1850 Table Mesa Drive. For more information see the RMIUG Web site at: <http://www.rmiug.org/>.

Telecommunication SIG

The Telecommunications SIG covers topics related to computer communications hardware and software including modems, xDSL, networking, ISDN and the Internet. The meetings are held at 7:00 PM on the third Thursdays of each month at the offices of JYM Information Systems: 311 S College Avenue in Fort Collins. For more information contact Chuck McJilton at 493-2987 or email telecomsig@jymis.com.

Web Design SIG

If you're an HTML author/WEB page designer, or would like to learn, contact SIG coordinator Doug Boicourt at 495-6949 or e-mail db@jymis.com for the date and location of the next SIG meeting.

Internet Safari

This free Internet discussion group meets the first Monday of each month at the Barnes and Noble book store 4045 S. College. This group covers any topics and questions relating to using the Internet and is open to beginners and experienced Internet users. Meetings start at 7:00PM. For more information call JYM Information Systems at 416-9286 or email info@jymis.com.

Upcoming FRPCUG Meetings

Along with presentations of new hardware and software, we will certainly continue to present tips, hints, solutions, as well as what is new with Public Domain and Shareware offerings. If you have ideas for presentations which you would like to see at future General Forum meetings or seminars, please let us know. We would appreciate the input and opportunity to improve your meetings.

Know of a another computer-related meeting in our area? Please let us know so we can post it here.



April 2001

Sun Mon Tue Wed Thu Fri Sat

1	2	3 FRPCUG General Forum Meeting 7:00PM	4	5	6	7
8 Palm Sunday	9 HTML SIG Meeting 7:00PM	10	11 FRPCUG Board Meeting 7:00PM NRFNUG Meet- ing 5:00PM	12	13 Good Friday	14
15 Easter	16	17	18	19 Telcomm SIG 7:00PM	20	21
22	23	24	25 RIBUG Meeting 7:00PM	26 LINUX SIG 7:00PM	27	28
29	30					

May 2001

Sun Mon Tue Wed Thu Fri Sat

		1 FRPCUG General Forum Meeting 7:00PM	2	3	4	5
6	7	8	9 FRPCUG Board Meeting 7:00PM NRFNUG Meet- ing 5:00PM	10	11	12
13 Mother's Day	14 HTML SIG Meeting 7:00PM	15	16	17 Telcomm SIG 7:00PM	18	19 Armed Forces Day
20	21	22	23 RIBUG Meeting 7:00PM	24 LINUX SIG 7:00PM	25	26
27	28 Memorial Day	29	30	31		