

February 2004 Volume 20 Number 2

PPCUG NEWS

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Monday, February 9, 2004

Turbo Tax

Joel May

It's easy to prepare your income tax forms these days. Just answer a series of questions and the software will take care of the rest. You can even file your return and get an instant refund electronically. Joel May will demonstrate the process using Turbo Tax by Intuit and also will discuss the pros and cons of the differences between that program and several alternatives.

Joel has spent most of his adult life teaching, first at the Graduate School of Business of the University of Chicago and, subsequently, at the School of Public Health of the University of Medicine and Dentistry of New Jersey. He holds a BS degree in Economics from Albright College and an MBA and PhD in Economics from the University of Chicago. He's been using computers since 1961, the Internet since 1974, PCs since 1979, and the World Wide Web since 1994.

At:

Lawrence Library

Meeting Rooms 1 & 2

US Alternate Route 1 South & Darrah Lane, Lawrenceville, NJ

Meetings of an organization at any of the facilities of the Mercer County Library System in no way imply endorsement of its programs.

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Programs have yet to be scheduled for several of this year's meetings. Please consider sharing with us something that do with your computer, a program that you use often, or a piece of hardware that makes your computer life easier. One evening could consist of four separate twenty-minute segments by four different members. The club's laptop can be made available for you so you don't have to carry your home unit to the meeting.

Another way to help with the programs would be to suggest a topic that you would like to know about a future meeting.

Coming Events:

March 8, 2004 - Pinnacle Studio - Jenna Battistini

April 12, 2004 - eBay - Scott Marshall

About PPCUG

General Meetings

Second Monday of the month at the Lawrenceville Library, Alternate Route 1 and Darrah Lane.

7:00 PM: Social Time / Tech Corner

7:30 PM: Meeting comes to Order

7:45 PM: Featured presentation

For information about upcoming meetings or joining PPCUG, see our web site:

<http://www.ppcug-nj.org>

Board Meetings

Board meetings are open to all members. Notice of an upcoming meeting will be posted on the web site.

Board Members

President:

Clarke Walker 609-883-5262

Vice-President:

Tom Carman 732-828-6055

Secretary:

Don Arrowsmith 609-883-9874

Treasurer:

Paul Kurivchack 908-218-0778

Members-At-Large:

Al Axelrod 609-737-2827

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Hospitality:

Bill Hawryluk 609-655-0923

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Paul Kurivchack 908-218-0778

Newsletter Editor:

Don Arrowsmith 609-883-9874

Program Coordinator:

Sol Libes 609-520-9024

Web Master:

Don Arrowsmith 609-883-9874

Annual Dues

Dues are \$30 per calendar year with a mailed newsletter or \$20 per year with online access to the newsletter. New members pay \$2.50 or \$1.75 per month times the number of months remaining in the current year.

President's Message

Clarke Walker

Well you know the Holidays are over when the Tax Forms arrive. Or now-a-days you get a reminder to use eFile. And by the time you get this newsletter you will have received your W-2 statements. So are you ready to complete your tax return?

At our February meeting Joel May will talk to us about Turbo Tax. Then we won't have any excuses not to get our return in the mail the next day. Oops, I meant eFiled.

To follow up from my presentation last month, here are some links to Windows Hints and Tips that you may want to check out:

<http://www.microsoft.com/windowsxp/expertzone/>

<http://www.microsoft.com/windows/windowsmedia/community.aspx>

<http://www.microsoft.com/technet/treeview/default.asp?url=/technet/itcommunity/>

<http://communities2.microsoft.com/home/console.aspx?siteid=34000003>

May 2004 bring you a 2003 refund,

Clarke



Treasurer's Report

Paul Kurivchack

The current bank balance is \$4255.61. Below is a table of expenses and income for 2002 and 2003.

Expenses:	2003	2002
Newsletter Printing	\$396.77	\$495.38
Newsletter Postage	\$288.60	\$346.80
Hospitality	\$161.61	\$215.79
Capital Expense	\$1,328.24	\$0.00
NJ Treasurer Report	\$25.00	\$15.00
TCF Parcel Pickup	\$34.82	\$18.97
Insurance	\$446.00	\$355.00
Post Office Box	\$44.00	\$32.00
Misc. Postage	\$0.00	\$17.95
Misc. Expense	\$16.94	\$3.58
Misc Printing	\$8.90	\$14.78
APCUG Dues	\$0.00	\$50.00
Group Sponsor Dues	\$50.00	\$110.00
Total Expenses	\$2,800.88	\$1,675.25
Income:		
Dues	\$2,287.50	\$1,399.70
TCF Parcel Pickup	\$516.41	\$552.58
Total Income	\$2,803.91	\$1,952.28
Income less Expenses:	\$3.03	\$277.03





January Meeting Minutes

Q&A topics tonight concerned: How to eliminate a login request when Windows XP starts; How to stop Weatherbug from starting automatically; How to retrieve the original file type associations that Photoshop Elements took over; How to copy a section of a PDF file to be pasted into a Word document; Why a system might be freezing when trying to install either Windows 98SE or XP.



Clarke Walker presented a demonstration on lesser-known Windows XP features. The club's wireless router was set up. An area of the club computer's hard drive was set to be shared and attendees were invited to connect to it. Shown were: How to write files to a CD using XP's built-in features; Using Windows Movie Maker v2 to create videos; How to use the Analog Recorder feature of Plus! Digital Media Edition to create sound files; and Making a video CD with a slide show by using Plus! Photo Story. Photo Story's transitions and panning of static photographs coupled with background music produce a very attractive result.



Book Review - eBay Hacks Don Arrowsmith, PPCUG

eBay Hacks, David A. Karp, O'Reilly, 2003, ISBN 0-596-00564-4

As a Christmas gift, I received an O'Reilly book: "eBay Hacks". Many PPCUG members are interested in using eBay, and our club has had two programs in past years and one scheduled for this year so I thought I would write a review of this fabulous book.

Since 1999 I have listed over 200 items on eBay and sold about half so I'm not exactly a newcomer to the experience. Even with this background I found many worthwhile suggestions in the book. The one hundred hacks are logically divided into eight chapters.

Many suggestions are described in the context of keeping to the idea of an eBay community that depends on trust to prosper. This is especially shown when he describes both

what not to say as well as what to say when constructing the emails necessary to do business. Chapter one is on Feedback and how to manage it, especially when things go wrong. Searching is described in chapter two with tips for more easily finding those items of interest to you. He presents some example scripts, written in Perl, to provide a search robot with more features than anything eBay provides. Perl is an interpreted language and a complete package is a free download from ActiveState at <http://www.activeperl.com/Products/ActivePerl/>.

Bidding is covered in chapter three with money saving tips on sending payments, reducing shipping charges, utilizing the Buy-it-now feature, etc. Sniping (bidding at the last possible moment) is covered both done manually and by using an online service. In chapter four sellers learn the best ways of writing descriptions and which listing upgrades are worthwhile. From Hack #45, I was able to include a shipping cost calculator in an auction of a heavy item to let prospective bidders estimate their costs. Chapter five is devoted entirely to working with photos. Photo quality will go a long way to inspiring potential bidders to bid by providing concrete evidence that your item is described accurately and completely. I have decided to start including watermarks (Hack #58) on my photos so that other sellers won't steal them for their own auctions.

Chapter six covers completing transactions with both payment and shipping questions. One of Karp's mantras is that the more ways that you give a bidder to pay, the more bids you'll get on an item that you have for sale. Shipping probably takes more time than any other aspect of selling and Karp shows several ways to keep from wasting your time standing line at the Post Office or at another shipper. If you become a heavy trader on eBay, you'll appreciate the many ways to automate your record keeping that are detailed in chapter seven.

The final chapter describes the eBay API and how to use it. Most of the examples are again in Perl and could be very useful. The downside of using the API is that it's not free, with various eBay charges depending on your business level. The lowest level is Individual which has a one-time \$100 fee and limits you to 50 API requests per day. I would be interested in trying some of the sample scripts but not at that cost.

Two web resources are of note: www.oreilly.com/catalog/ebayhks which has errata, reviews, examples, etc. and www.ebayhacks.com which includes code examples, additions, corrections, etc. Karp has provided a web page for each hack which includes any referenced downloadable files and is updated as he finds changes made necessary by eBay revisions.

Many of you may be receiving spam messages promising huge profits by purchasing their guide to eBay. I suspect that won't be the case but I can say that this Hacks book is filled with practical tips that will help beginners and experi-

enced traders alike. The book is available at local bookstores and the usual online locations. The list price is \$24.95 but Amazon is currently selling it for \$17.47. I highly recommend it.

Through the PPCUG arrangement with O'Reilly Publishers, I am currently reading "Windows XP Annoyances" also by David Karp and will be reviewing it in a future newsletter.



Picture and Video Files: Size Matters Timothy Everingham, TUGNET (The User Group Network), Granada Hills, CA

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

First you have to understand that if it is either an image or video file each little pixel or time interval is represented by bits of data. You may have heard 8, 16, 24, 32 bit color. The number of bits represents the color of each pixel. On an 800x600 image you have 480,000 pixels (800 multiplied by 600). Then you multiply the color bit depth to get the size of the image representation (800 x 600 x 24 bit equals 11,520,000 bits). Divide by 8 and you get the number of bytes (11,520,000 bits divided by 8 equals 1,440,000 bytes). It get worse with video because you have to multiply by the frames per second and by the number of seconds in the video (at a standard 30 frames per second it would be 41 Megabytes per second or 2.4 Gigabytes per minute). Now if you have a lot of large image or video files you are trying to transfer through a dial up connection to the Internet you have problems. If that is the case, you just figure you will save and send things using a smaller image size and blow up when it will be used. The problem is that when you go to a smaller image size you loose detail in the process. Then when you try to blow it up again it just gets blocky. The same thing goes for video files, the smaller the file size the less detail and nuances are in the file. This really shows up when you take a small image and then try to project it using a good LCD projector. So if you want to project it, show it on a large monitor, or print it out large you need to keep the image size up. This is one reason there is so much hype on the amount of megapixels a digital camera has.

So how then do we get the small file size of images we do. We use compression algorithms, also known as codecs (compressor/decompressor). There are lossless and lossy compression algorithms. But how can there be lossless compression? It is because nature is filled with patterns and uniform things, which is what we take images of. So if we record info about the pattern instead of each pixel of it a lot of file space is saved. An example would be if a person in your image is wearing a blue sweater. Instead of recording every

pixel individually you record this area of the image, where the sweater is, in blue. The Tiff image format (.tif) uses only lossless compression techniques, so it is a good format for achieving purposes or something you may wish to edit later. But then there is lossy compression. You lose some of your detail, but a lot less than if you just shrank the image. One of the regularly used lossy compression techniques is color palette reduction. With 24 bit color you have 16 million colors available. However, there are far less that many colors in an image. It takes less space to analyze which colors are in an image, and create a custom color table that will represent all the color in the image in less than 24 bits, write the color representation of the pixels with the custom table code, and then include a copy of the table in the file. This can be used as a lossless technique, but usually this is taken one step farther. In the analysis of the image it is detected how often each color is used and ranked. As the compression rate increases then the number of colors that are less used are converted to colors that are close to it but are widely used in the image. This compresses the size of the color table, which decreases the bits per pixel representation of a color used and the blending to nearby colors increases the space that areas of the image that can be described as having one color (this is a situation of compression techniques complementing each other). Some formats start out using only lossless compression techniques but as the level of compression increases they start to use lossy compression. Some common formats that use a combination of lossless and lossy compression are GIF (.gif) and JPEG (.jpg). Remember once you lose image data using a lossy technique you will not have it anymore unless you still have the original or a lossless copy. The compression methods discussed so far are referred to as spatial compression because they reduce the file size by compacting the description of the visual area (space) of an image.

Video is made up of sequential images played over time. This means we can not only use spatial compression; but also use temporal compression, which compresses the file using analysis of the difference and similarities of the frames in an image. This usually exhibits itself by the first frame in a video sequence being compressed just like a still image using spatial compression, but in the following frames only the changes from the previous frame is recorded. Periodically or when there are major changes between frames, a new initial frame, also called a keyframe, is produced followed by more just recording of differences between frames. These temporal compressions can be lossy or lossless. As with still images you should achieve them using only lossless compression. However, using only lossless compression may be impractical because of the limitation of your computers or hard drives' speed or hard drive space, but keep lossy compression at a minimum.

If you are creating a video DVD for achieving that uses the MPEG-2 format that uses both lossy and lossless compression techniques, it is better to achieve the file using the DV codec it was originally imported in from your video camera and writing that file to a data DVD or CD. Be aware that

some compression techniques and settings are better for some types of video than others. If you just have a talking head in your video with a static background you can compress it greatly without degrading the image much, But if there is a lot of fast action or panning of the camera, the amount of compression you can successfully have you have to be more picky on what codec you should use.

File size matters because it limits what you can use the file for. If you just want a small file you can send to a friend's dial up connection or have friends using a dial up connection view via a website a small file is good. However in printing large photos, showing on a large computer display or having it projected on a screen small files are not good. Use only lossless compression techniques on things you want to achieve or edit later because it keeps your options open. Keep your archival file large and make smaller copies of it for other purposes.

It is fortunate that hard drive and DVD and CD blank prices have come down a lot so doing this does not cost a fortune, but not planning ahead on image size and which compression techniques can cost you not being able to fully use your precious digital photos and videos.

Timothy Everingham is Vice Chair of the Los Angeles Chapter of ACM SIGGRAPH, the largest chapter of the Association for Computing Machinery's (ACM) Special Interest Group on Computer Graphics and Interactive Techniques and one of Southern California's significant professional organizations within the entertainment and media industries. He is also part-time press in the areas of high technology, computers, video, audio, and entertainment/media and has had articles published throughout the United States and Canada plus Australia, England, & Japan. Further information can be found at <http://home.earthlink.net/~teveringham>

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What Is Your Resolution **George McGinnis,** **Computer Society of West Florida – Pensacola**

This story is not about your New Year's Resolutions. Instead it is about the resolution of your monitor. The resolution of a monitor is important because it determines how correctly the monitor will portray the textual and graphical material that is sent to it by the graphics board in your computer.

The following information relates to cathode ray tube monitors and it is not intended to apply to the so-called "flat"

Liquid Crystal Display "LCD" monitors.

Your monitor is based on a 4 x 3 aspect ratio. This means that it is four elements wide by three elements high. If you measure the screen of your monitor, taking into account the portion of the screen that is obscured by the plastic frame, you will find this to be true. Historically, these numbers relate to the aspect ratio generally used by the TV industry and in a loose way are also related to the aspect ratio of the movies as invented by Thomas Edison almost 100 years ago. Computer resolution refers to the number of pixels on the face of the monitor. For example, a resolution of 800 x 600 (note the 4 x 3 ratio) means that there are 800 pixels wide on the monitor face and 600 pixels high. The width is always expressed before the height. In this example, if you multiply 800 x 600 you will get the number 480,000 and this represents the total number of pixels on the face of the monitor. The general rule that applies is that the greater the number of pixels the better the quality of the reproduced image. This same reasoning applies to both graphical and textual material. Of the two, graphical material is of course more difficult to reproduce and the number of pixels is of greater importance.

Whom, or what, determines the resolution? You do. You set the resolution when you set up the computer when you take it out of the box. Each Windows version has a slightly different way of setting the resolution however they are all similar. For Windows XP go to Control Panel, Display, Setting and move the screen resolution slider to the desired resolution position. At the same time you can select the color quality from the pull down menu. The highest setting is (Highest 32 bit). By going to Advanced, you can set the monitor refresh rate and change the size of the text.

Now, you are probably wondering what your setting(s) should be. Here are most of the standard resolutions that are ordinarily available for your monitor, however they may vary slightly depending on the size and model of your monitor:

640 x 480
800 x 600
1024 x 768
1280 x 1024
1600 x 1200

However, each size monitor has a recommended resolution number. Here are the recommended numbers:

17" 1024 x 768 19" 1280 x 1024

The capability of your computer to obtain the desired resolution depends on several things. For example, the graphics board that is in your computer and the quality of the monitor are predominant. A high quality graphics board will probably permit you to go to the highest setting your monitor will permit. You will have to look at the manual you received with your monitor to find the settings that are recommended

and to determine other parameters of the monitor's capabilities. For some monitors, you must not go above a certain resolution or refresh rate for fear of harming the monitor. Another factor to consider is the Screen Refresh Rate. This represents the number of times per second the monitor screen is refreshed. If your monitor will permit a refresh rate of as high as 85 Hz, at the recommended monitor resolution, then choose that number. However, a refresh rate of 75 Hz is more likely the maximum number your monitor will permit unless you have a high quality monitor. The higher the refresh rate, the finer detail the picture and the better the quality of reproduction. Very low refresh rates such as 65 Hz are likely to produce annoying flicker and possibly jumpy text. This is very hard on your eyes and is to be avoided. To repeat, look in your monitor manual and determine the maximum refresh rate it will permit and try for that number at the recommended resolution of your monitor.

I took a poll of 50 computer users to determine the monitor resolution they used. I was surprised to learn that, regardless of monitor size, the predominant resolution was 800 x 600. I also learned that most of the individuals were not aware that a higher resolution produced higher quality graphics representation on the monitor. Several individuals indicated that the higher resolution produced very small text and small icons on the desktop and therefore they had difficulty reading the text. All this is true; however these problems

can easily be remedied. With Windows XP, go to Control Panel, Display, Appearances, font size and choose the larger font. Then go to Advanced, desktop, icons, to increase the size of the icons; then to icon spacing to adjust the horizontal and vertical spacing of the desktop icons. All these adjustments are important and will overcome the objection to smaller icons and smaller text and at the same time give you better quality graphics and text.

In case you are interested, I have a 19" monitor. It is set for 1280 x 1024 pixels, 32 bit color quality and 90 Hz screen refresh rate. As you would expect at these numbers, it produces outstanding textual and graphics reproduction.

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