



October 6, 2005 DVPC Meeting Announcement Creative Labs

We're going to have Creative Labs at our October 6 DVPC monthly meeting. Creative Labs is best known for their market-leading SoundBlaster sound cards. The SoundBlaster line has the Live!, Audigy, and X-Fi series cards, and USB, PCI, and external sound adapters as well. For those with a serious interest in PC audio, Creative Labs offers the Creative Professional series. Including sound samplers, sound modules, USB/Midi controllers, and professional level digital audio processors. Creative Labs is in the sound input and output business as well, with a line of music keyboards, headphones, and speaker systems, including the Cambridge SoundWorks product line. Need a web cam? Check with Creative Labs! How about a mouse or a keyboard? A DVD-RW drive? A portable hard drive? A graphics card? A WiFi router or adapter? A modem? Yes, and yes, to all of the above. But Creative is also the #2 manufacturer of MP3 players (after the iPod). And Creative does media players, too, so you can view videos, listen to music, and see your digital photos on hand-held devices. The October DVPC meeting will be a great meeting! And we're going to have an a particularly interesting selection of raffle prizes as well! So, come one, come all!

DVPC meetings are held at Diablo Valley College in Pleasant Hill; see the maps and directions on pages 4 through 6 in this issue of Diablo Blue, and on the DVPC web site at www.dvpc.org/about.html. Our meetings are once again being held in room H109 in the Humanities building, on the north side of the campus adjacent to parking lot 7.

The New Users SIG holds its meetings at 6:30 p.m. prior to the regular DVPC monthly meeting. We discuss whatever is confusing or puzzling new PC users. If you are a new user of PCs who would like to meet with other new users — and some experienced users who can answer your questions as well — then join us at the New Users SIG meetings.

We'll also have the Networking Table from 6:30 to 7:00; if you have something to sell or trade, need technical help, or just want to exchange views, visit the Networking Table. As usual, we'll have those great DVPC mugs (version 2) for sale, SIG news, and some of our usual great door prizes and extra raffle tickets for sale. And, Alan will probably dig into the goodie bag and have some neat free stuff. First come, first served, so be sure to get to the meeting early to get the goodies!

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President's Message

by Alan Mildwurm, DVPC

Greetings! It's good to back. It will be gooder to be caught up. If this was March, I'd be right up to the minute!

We have an exciting lineup of meetings through the end of the year and into the next:

- ◆ October 6: Creative Labs
- ◆ November 3: Symantec
- ◆ December 1: Gene Barlow
- ◆ December 17: Build Your Own Computer Day Workshop: 9 to 5 at the Concord Police Department Community Room
- ◆ January 5: Live from CES — me!
- ◆ April 6: The Digital Photo Guy

These presentations should be terrific so please invite friends to come to the meetings. *Large audiences are always appreciated by the speakers!*

Elsewhere in this issue you should see the latest specs for the *Intel Build Your Own PC Program*. We have reserved space at the

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DVPC October 2005 Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2 See SIG News starting on page 8 of Diablo Blue for more information about SIG meeting dates, times, topics, and locations	3 Windows SIG 7:30 pm	4	5	6 DVPC Monthly Meeting 7:00 pm New Users SIG 6:30 pm	7	8
9	10	11	12	13 DVPC Board Meeting 7:00 pm	14	15 PC101, Computer Renaissance, 4 pm to 6 pm -- Meeting is on the third Saturday this month!
16	17 Genealogy eSIG (See SIG News on page 8 of Diablo Blue)	18	19 Internet SIG 6:00 pm Photoshop Elements SIG 7:00 pm	20 Advanced Users SIG 7:30 pm	21 Diablo Blue Deadline. Email articles and ads to the Editor: rogg@value.net	22
23	24	25	26	27	28	29
30	31 Halloween					

Created by [Calendarscope™](#)

Email Notification

We provide an email notification service for the current month's *Diablo Blue* password, the DVPC monthly meeting, and information about SIG meetings as well. You have to be a current, paid-up member to receive this service. To read the current month's issue of *Diablo Blue* on-line you need to receive these monthly email messages, so print this page, fill out the form, check your favorite SIGS, and mail it to DVPC, PO Box 3244, San Ramon, CA 94583; or bring it to the sign-in desk at the monthly meeting; or, if you prefer, you can send an email message to nopaper@dvpc.org with your name and email address and list your favorite SIGS.

Send me email notification of each monthly *Diablo Blue* password, the DVPC meeting, and the following SIGs:

Name _____

Email Address: _____

Advanced Users SIG	<input type="checkbox"/>	PC 101 Classes	<input type="checkbox"/>
Genealogy eSIG	<input type="checkbox"/>	Photoshop Elements SIG — New SIG!	<input type="checkbox"/>
Internet SIG	<input type="checkbox"/>	Windows SIG	<input type="checkbox"/>
New Users SIG	<input type="checkbox"/>	<i>Start a new SIG — See Nick Chase, DVPC SIG Coordinator</i>	

Diablo Blue Article and Ad Information

Diablo Blue needs articles from the members of DVPC. See your name in print! Achieve fame and fortune! (Well, maybe just some limited fame in Contra Costa County...) We are particularly interested in product and book reviews and stories about your PC experiences. Send your articles or member ad copy as email attachments to the Newsletter Editor (see email address below).

Commercial advertising is available in *Diablo Blue*. Prices are \$75 for a full page, \$40 for a half page, and \$25 for a quarter page for one insertion – or get three consecutive insertions for the price of two. For more information, email newsletter editor Ronald Ogg at rogg@value.net. Members of DVPC can submit personal classified ads that will be printed in *Diablo Blue* for three insertions at no charge. The rules are simple: up to 9 lines (as we format it), material must be suitable for publication (the editor is the sole judge of suitability), the member must be in good standing (current dues paid), and ad space is available on a first-come first-served space available basis only. If you want fewer than three insertions note that on your ad copy. If members want their business card reproduced, the rate is \$10 for one insertion, or \$25 for three insertions. The card must be horizontal and must be scannable. Send your ad copy as email attachments to the Newsletter Editor (see email address below). See the deadline information in the Calendar on page 16 of each issue of *Diablo Blue*.

DVPC Officers and Directors

- Alan Mildwurm, President/Program Chair, 510-770-5770 (work), awm@mildwurm.com
- Nicholas Chase, SIG Coordinator, 680-4211 (home), nchase@astound.net
- Charlie Crothers, At Large, 829-2237 (home), ccrothers@sbcglobal.net
- Dick Curry, At Large, 376-5541 (home), racorinda@pacbell.net
- Peggy Johnson, Membership Secretary, 676-7522 (home), pegszone@aol.com
- Tom Krauss, Secretary, 689-9960 (home), tkrauss@astound.net
- James Lundgren, Publicity, 355-0646 (home), philador@comcast.net
- Melody Lundgren, Publicity, 355-0646 (home), philador@comcast.net
- Jessica Mildwurm, Treasurer, 829-5858 (home), jess@mildwurm.com
- Ron Ogg, Newsletter Editor and Webmaster, 952-4987 (office), rogg@xemaps.com
- Craig Peterson, Librarian, 671-7025 (home), compmail@pacbell.net
- Stan Umlauf, Web Site, 458-5560 (home), stanu@honeybee.com

DVPC on the Internet

DVPC has an award winning Web site – thanks to our Web Team: Ron Ogg and Stan Umlauf. You can surf your way to our own domain and home page by starting your favorite Web browser and typing the following URL; be sure to save it in your browser's hotlist so you don't have to type it each time: www.dvpc.org.

The Board of Directors usually meets the week following the general meeting. Check the DVPC Calendar on page 16 of each issue of *Diablo Blue*, or the DVPC calendar page, for the meeting date, time, and location. You can reach any of the officers and directors by talking to them at the DVPC monthly meeting, or by email to bod@value.net.

Diablo Blue is the monthly Web-based newsletter of the Diablo Valley PC Users' Group.
 Editor: Ronald Ogg, Membership: Peggy Johnson

Please submit articles and columns to the Newsletter editor by email at rogg@value.net

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The Diablo Valley PC Users Group is a non-profit corporation.

DVPC is a member of APCUG, the Association of PC Users Groups, www.apcug.org

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A view of our meeting room, H109

MEMBERSHIP APPLICATION

Print this page, fill out this form, and enclose it with your check for \$30.00 for one year's dues with access to the Internet edition of *Diablo Blue* (\$20.00 for students who must enclose a copy of current Student ID), made payable to DVPC, and mail to: DVPC, PO Box 3244, San Ramon, CA 94583

Renewal _____ New Member _____ Referred by current member? Name _____
Name: _____
Company/School: _____ Email address: _____
Address: _____
City/State/Zip: _____
Home Phone: _____ Work Phone: _____
Email Address: _____
I'm also interested in these SIGs: _____

Directions to our Diablo Valley College meeting location

Our monthly meetings are held at Diablo Valley College In Pleasant Hill, California. The Main Campus is located at 321 Golf Club Road. Our meetings are held in Humanities Building H, shown on the map below near Viking Drive. We meet in room H109.

Driving Directions (see the map on page 6):

680 Northbound:

Exit at Willow Pass Road. At the end of the exit ramp turn left onto Willow Pass Road. Continue on Willow Pass Road to the second signal and turn right on Contra Costa Blvd.

680 Southbound:

Take the Concord Ave. Exit. Turn left on Contra Costa Blvd.

Direction into the Campus:

From Contra Costa Blvd. turn west on Golf Club Road. At the left turn just past the traffic signal at Old Quarry Road turn left into the campus. Immediately turn right and continue to parking lot 7. Turn left down one of the rows and park close to the buildings. Purchase a parking permit and put it on your dashboard. DO NOT park in metered or faculty spaces!

Finding Your Way (see the maps below and on page 5):

Notice that there's still a lot of construction going on at DVC. To prevent confusion, for parking and to get to our meeting room follow the instructions that are in boxes with red borders on the map below, and take the path from Parking Lot 7 to room H109 that's marked in blue. Press the large handicapped button to open the unmarked outside door to room H109.

Parking Fees:

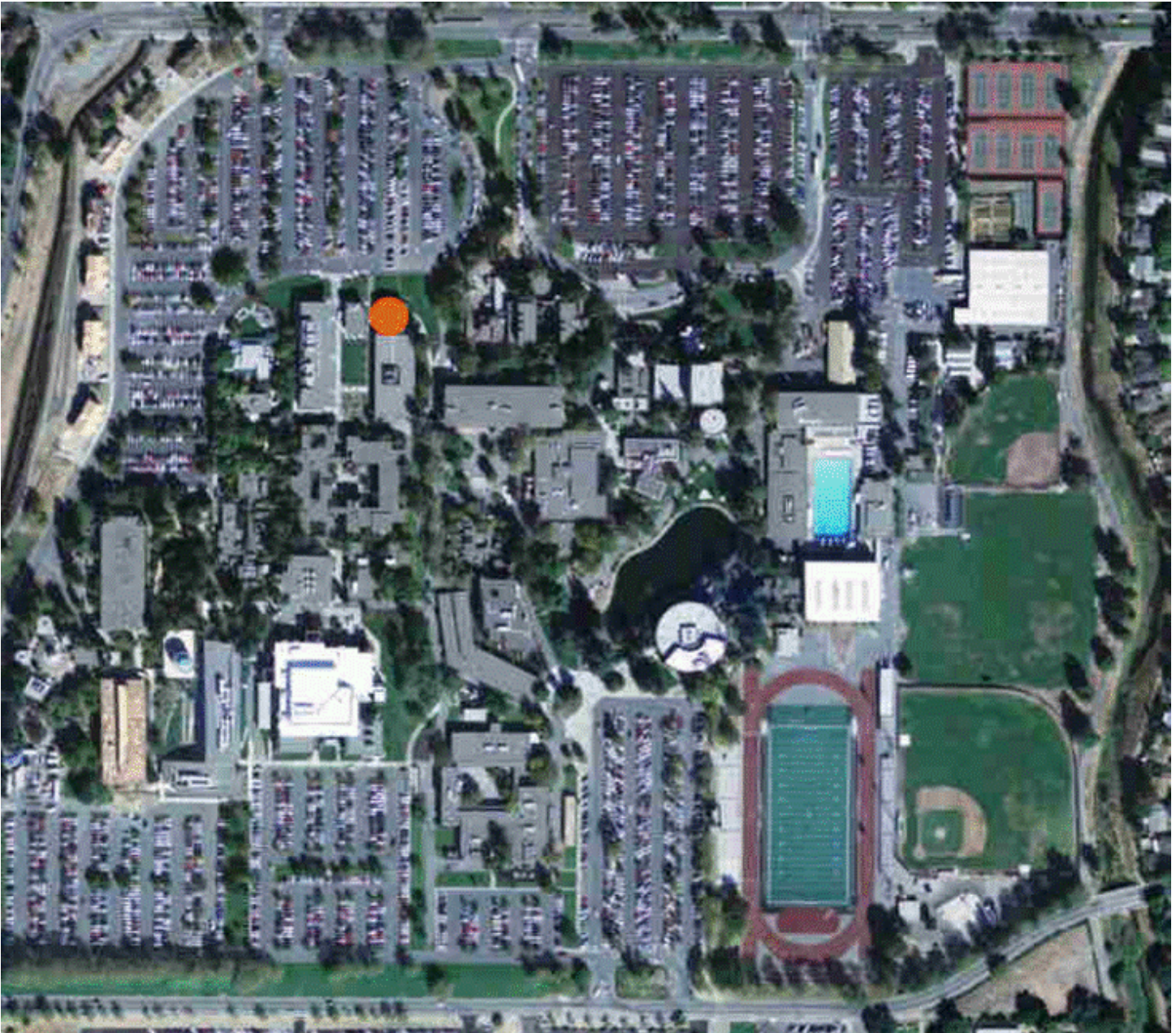
On the Pleasant Hill campus parking permits are \$2.00 per day for short-term parking. You need to purchase a parking permit and place it face up on your dashboard so it is clearly visible through the windshield. You can purchase permits at the parking permit machines marked with a red star on the map at the right. Parking permit machines only take quarters. Be sure to bring sufficient change! Permits are required Monday through Friday including the times that DVPC meetings are held! Do not park in metered or faculty spaces.

If you attend classes at DVC and have a campus parking permit, you can use it when you attend DVPC meetings. You might want to carpool to save parking fees.

Be sure to purchase a parking permit! Fines range from \$35 for parking in a regular space without a permit, to over \$275 for parking in a space reserved for the handicapped.



Aerial View of the Diablo Valley College Campus
(DVPC monthly meetings are held in room H-109 in the building marked with the red circle)



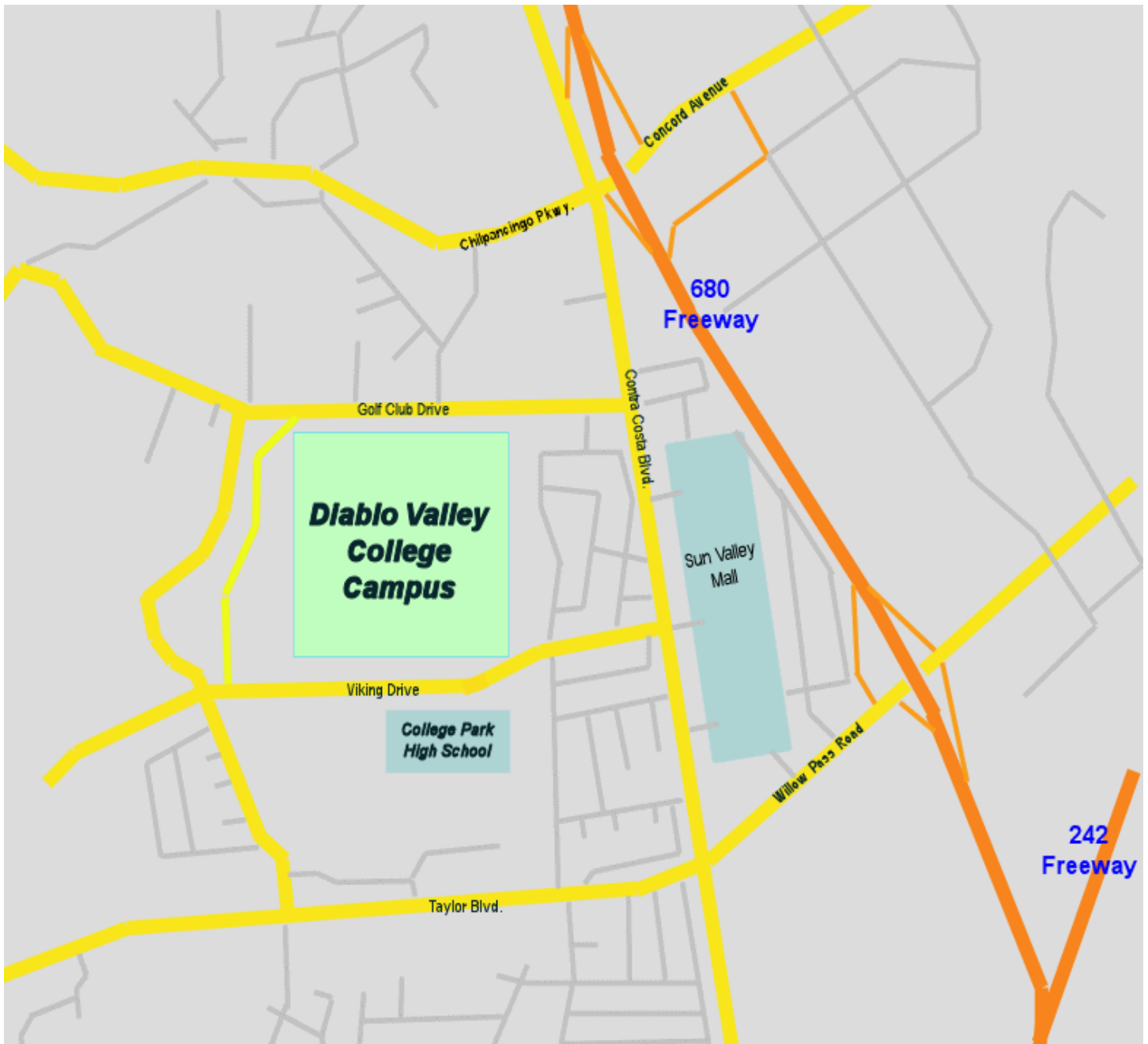
DVPC Winner of APCUG 2004 Awards for Web Site and Diablo Blue by Ron Ogg, DVPC

DVPC is a member of APCUG, the Association of PC User Groups. Each year the APCUG holds two contests, one for the best PC user group web sites, and one for the best PC user group newsletters, at their annual meeting at CES, the Computer Electronics Show. In January, 2005 DVPC won two 2004 Recognition of Excellence awards for medium-size user groups from APCUG. We won first place for our web site, www.dvpc.org, and also won honorable mention for our Diablo Blue newsletter. It's always nice to get recognition!

You can see the award logos we received at the right.



Map for Driving to the Diablo Valley College Campus

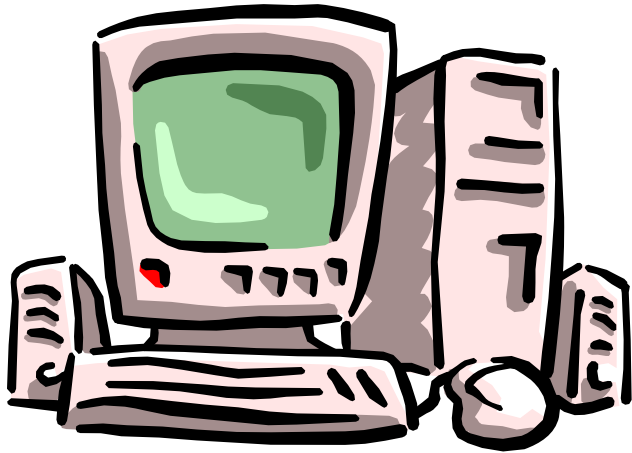


Special Raffle Promotion

Bring a guest to a *DVPC* meeting, you get 10 Raffle tickets!

If your guest joins at the meeting, you get 10 Raffle tickets –
and your new member guest *also* gets 10 Raffle tickets!!

Bring a Friend to a *DVPC* Meeting – Help Them Grow their PC Knowledge – Help Grow *DVPC* Membership



DO YOU KNOW HOW TO USE YOUR COMPUTER? ARE YOU GETTING THE MOST OUT OF IT?

NO ONE STARTS OUT KNOWING HOW TO USE COMPUTERS.

Like every other tool, users need to learn how to use it. Many of us learn what we can on our own or try to find a teacher who can show us how to use it the right way. Some of us have the time and money to take a class, but are not even sure what classes to take.

BEGIN YOUR EDUCATION WITH PC 101

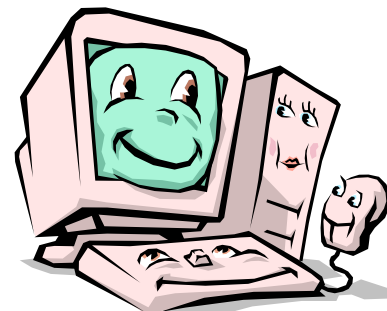
This **FREE** class will help any student who needs basic information on computers. Diablo Valley PC User's Group and Computer Renaissance have joined together to offer all who would like to be introduced to computers, learn more about the basics, or just have a place to ask questions. Come to Computer Renaissance at 1936 Linda Dr. in Pleasant Hill from 4 to 6 PM the second Saturday of every month. For more information, contact Craig Peterson (compmail@pacbell.net or 925-671-7025).

October 15, 2005

PC 101 CLASS: *WHAT IS COMING NEXT?*

This month we will meet on the third Saturday, October 15th, and continue the class with "LESSON #5: WHAT IS COMING NEXT?". Ever want to know just how one computer can talk to another? How the Internet works? Or how to access your computer when away?

Join us October 15th from 4 to 6 p. m. as we look at how computers talk to each other and to us.



Advanced Users SIG Jeff and Sharon Noyer, SIG Co-Leaders – 778-4348

The Advanced Users SIG meets on the third Thursday of each month at 7:30 p.m. at 4208 Amargosa Drive in Antioch. The Advanced Users SIG is for anyone interested in discussing advanced topics such as hardware and software issues, cutting-edge technologies, networking, servers, troubleshooting, etc. Please join us to participate in this very informative and educational forum. We hope to see you at the meeting! For more information phone Jeff and Sharon at 925-778-4348.

Directions: Go east on Highway 4 through Antioch to the Hillcrest Avenue exit. At the light at the end of the exit ramp, go right onto Hillcrest Avenue, and then stay towards your left. At the 3rd light, Hillcrest Avenue turns to the left. Go left and stay on Hillcrest. (Landmark: "The Crossings" Shopping Center is at intersection). At the 4th light, go left onto Wildhorse Drive. (Landmark: 7-Eleven on corner at intersection). At the 2nd left turn, go left onto Meadow Lake Drive. At the 4th right turn, go right onto Amargosa Drive. 4208 Amargosa Drive is the 3rd house on your right, blue and white one-story.

Genealogy eSIG Peggy Johnson, SIG Leader – 676-7522

The first meeting of the Photoshop Elements SIG will be held Wednesday, October 19, 2005, from 7 p.m. to 9 p.m. at the home of Peggy Johnson, 4278 Satinwood Dr., Concord, CA. Please email Peggy at pegszone@aol.com for further information and/or directions. Most of us have digital cameras, and this is an opportune time to discover all the wonderful photo correction, manipulation and enhancement tools found in this software. We can learn from each other and enhance our skills and enjoy our photos more.

Internet SIG Craig Peterson, SIG Leader – 671-7025

The Internet SIG meets at Computer Renaissance in their store at 1936 Linda Drive in Pleasant Hill. We meet the third Wednesday of each month at 6:00 p.m. See the meeting details in each issue of *Diablo Blue* (you can find the *Internet SIG Meeting* article each month by checking the Table of Contents on page 1). Hope to see all of you there.

For more information, please call Craig Peterson at 925-671-7025 or e-mail him at compmail@pacbell.net.

New Users SIG Craig Peterson, SIG Leader – 671-7025

The New Users SIG holds its meetings at 6:30 p.m. prior to the regular DVPC monthly meeting on the first Thursday of each month. Since we no longer meet at Bank of America, check your email or the DVPC web site for the new meeting location. The New Users SIG discuss whatever is confusing or puzzling new PC users. If you are a new user of PCs who would like to meet with other new users – and some experienced users who can answer your questions as well – then join us at the New Users SIG meetings at 6:30 p.m. prior to each DVPC monthly meeting.

PC101 Classes Craig Peterson, SIG Leader – 671-7025

The PC101 class is usually held from 1 pm to 3 pm on the second Saturday of each month at Computer Renaissance, which is located at 1936 Linda Drive off Contra Costa Blvd. in Pleasant Hill. **PC101** is a beginning class on computers. This class helps introduce computers to and empower the person not comfortable with the technology. For class meeting dates, times, and topics, see page 7 in this issue of *Diablo Blue*. **This month we're meeting on the third Saturday, October 15.**

Photoshop Elements SIG Peggy Johnson (676-7522) and Mel Lundgren (355-0646), SIG Co-Leaders

The first meeting of the Photoshop Elements SIG will be held Wednesday, October 19, 2005, from 7 p.m. to 9 p.m. at the home of Peggy Johnson, 4278 Satinwood Dr., Concord, CA. Please email Peggy at pegszone@aol.com for further information and/or directions. Most of us have digital cameras, and this is an opportune time to discover all the wonderful photo correction, manipulation and enhancement tools found in this software, including the new version 4. We can learn from each other and enhance our skills and enjoy our photos more.

Windows SIG Ron Ogg (415-281-0431) and Walt Parsons (934-0775), SIG Co-Leaders

The Windows SIG usually meets at the Community Room at the Concord Police Department building on the first Monday of each month at 7:30 p.m. We discuss the latest version of Windows, demonstrate interesting shareware and freeware, and have random access sessions where we all try to answer SIG members' questions. Everyone who uses, is interested in, or is curious about Windows on their PC is invited to attend. Directions: The Concord Police Department is at 1350 Galindo Street in Concord. From the 242 Freeway take Clayton Road east to Galindo and turn right; the Police Department building is 3 blocks south on your left. From 680 take Monument Blvd. east and continue to where it changes to Galindo; the Police Department building will be on your right a short distance past Cowell Road. Note we will not have a meeting in January, 2006 in observance of New Years Day.

Start a New SIG Nick Chase, SIG Coordinator, DVPC, 680-4211

What SIG are you looking for? A Digital Photo SIG, a Palm/PDA SIG, a Microsoft Office SIG, a Home Networking SIG, or some other topic? If there's a SIG (Special Interest Group) that you would like to start, or join, contact SIG Coordinator Nick Chase by email (see the email addresses on page 3), or see him at the next DVPC monthly meeting. Nick will help you with all of the details about how to set up your new SIG and let the DVPC membership know about it. So, decide on what SIG you would like to start, and contact Nick.

President's Message...

(Continued from page 1)

Concord PD on Sat Dec 17 to assist people in building their machines. So if you are interested, do your final research and, **NOW IS THE TIME TO ORDER!** Please understand that this offer was made available to us as members of DVPC and the club has no control in the selection, design, ordering, and/or shipping of the components. (The club does not receive any compensation for your order.) We will assist in the assembly but again, the club (and assembly volunteers) will not be responsible if something is wrong with your order or something does not work. You are welcome to come to the workshop (space available), even if you don't order a machine.

Adobe Digital Days Classes Offered *by Adobe Systems, Sony, and Popular Photography Magazine*

Adobe Digital Days

Brought to You By Sony, Experts in Digital from Day One

Since the very dawn of digital, Sony has been engineering not only great digital cameras, but the vital ingredients from which most digital cameras are made. So who better to eliminate the confusion of digital photography? This is why Sony proudly presents the Digital Days workshops. Whether you're a novice or a pro, or maybe you don't even own a digital camera, there's plenty to learn from Sony's trained experts who provide in-depth, hands-on demonstrations featuring the latest in digital imaging technology and software. From advanced tips and tricks to figuring out which camera is right for you, Digital Days is the perfect way to explore all of your picture-taking possibilities. It's an experience unlike any other. And it's only from Sony.

To sign up, or for more information, go to <http://digitaldays.pophoto.com/>.

DATES AND TIMES

Beginner Session: Saturday November 5, 2005, 9:00 a.m. to 5:00 p.m.

Intermediate Session: Sunday, November 6, 2005, 9:00 a.m. to 5:00 p.m.

LOCATION

Both Sessions:

Radisson Miyako Hotel

1625 Post Street

San Francisco, CA 94115

Phone 415-972-3200

FEE

Beginner Session \$69

Intermediate Session \$99

Both Sessions \$139

INCLUDES:

Full Day Workshop (9:00am - 5:00pm)

Hands-on use of the latest digital equipment

Interactive DVD from SONY

Breakfast & Lunch

Beginner's Session - Saturday (9am - 5pm)

Course Goals

BEGINNER'S WORKSHOP

Attend Beginner's day if you are beginning your exploration of the world of digital photography. Join us as we look at how a digital camera works as well as learn how to use a digital camera in a wide-variety of shooting situations. This class is perfect for those who may be intimidated by the technical jargon often associated with digital photography and those who want to learn to take better pictures without being bogged down in technical detail. Our emphasis is on learning how to simply and effectively use your digital camera in any situation and working with simple techniques to dramatically improve your photographs.

At the end of Saturday's session, each participant will...

- ◆ Understand the similarities and differences between film and digital cameras.

(Continued on page 10)

Adobe Digital Days Classes Offered...

(Continued from page 9)

- ◆ Have a better understanding of the principles of digital photography.
- ◆ Learn simple techniques that you can use to improve your digital photographs.
- ◆ See the flexibility digital photography offers for refining, printing and sharing your digital photographs.

Digital Days – Beginner Session Outline

Module I

Following the Light

Introduction

- 1) Introduction
- 2) Why Digital?

Photography: Film vs. Digital

- 1) What is Photography?
- 2) Film Photography vs. Digital Photography?
- 3) How a film camera works
- 4) How a digital camera works

Module II

How a Digital Camera Works

- 1) What happens when you press the shutter?
- 2) Focusing
- 3) Measuring the light in the scene
- 4) Exposure Components
- 5) Digital Specific Components
- 6) What is a pixel?

Module III

Using the Camera

- 1) What type of camera do you have?
 - a) Point and Shoot
 - b) Digital SLR
- 2) Focus and Recompose
- 3) Metering
- 4) Scene Modes
- 5) ISO Sensitivity
- 6) White Balance
- 7) Image Size/Resolution
- 8) File Size and File Types
- 9) In-Camera Editing Features

Lunch

(Continued on page 11)

Give a DVPC Membership Gift Certificate!

See Peggy at the membership table at the DVPC monthly meeting.

DVPC Board Meeting Minutes by Tom Krauss, DVPC

The highlight of tonight's Board meeting turned out to be the unveiling of the Mildwurm's new kitchen. Arriving virtually at the stroke of 7:00 pm I found Charlie, Peggy, Ron and Nick milling around in the kitchen. Alan and Ron were in the midst of conversation so Nick graciously gave me a guided tour.

I must say, it was a striking transformation. Alan and Ruth managed to move every cabinet, fixture and appliance to a different location in the room. And, since this is Alan's home, there are more electronics in the room than kitchen appliances and fixtures. Just by way of example, the computer on the built-in desk in the far corner is wired to use a wall-mounted flat panel 42" TV as a monitor (dimensions are approximations: actual details are I'm sure available for downloading on Alan's website). Alan claimed this setup was not for his use but rather to allow Ruth quick access to her recipe file. Right.

We finally settled down in the dining room to our meeting, but the conversation stayed with electronic gadgets (surprise!) for a while. The Mildwurm Kitchen of the Future naturally led to comments about Martha Stewart which in turn led to the topic of electronic ankle bracelets. This reminded Alan of the time his brother-in-law (I am instructed at this point to make clear this was not a blood relative, rather a relative by marriage: different gene pool from Alan) got curious about how those electronic dog collars work to stop dog's from barking. With the initiative of Ben Franklin investigating lightning, but not the luck, this fellow put an electronic dog collar around his neck and spoke. The sound of his voice activated the collar which gave him s good jolt of electricity which in turn elicited a scream which of course triggered another jolt, which...well, you get the picture. Unfortunately, the fellow was finally able to get the collar off before being traumatized to the point of never being able to speak again.

This prompted Nick to recount his adventure when purchasing a taser-like device for his wife. This device had to be pressed against your assailant, but would then deliver a shock of significant voltage. The salesman, I think his name was Dr. Mengele, told Nick that he always insisted that people buying this device try it out in the store first. For some reason this sounded like a good idea to Nick. He was not even deterred when the salesman told him to "stand somewhere where there was a good place to fall". Carefully positioning himself, Nick applied the juice and found himself paralyzed on the floor for about ten minutes. When Nick was finally able to stand, he had to be discouraged from doing it again. As it is, he took the device home and every weekend treats himself to 10,000 volts. This is probably what makes Nick so interested in anything electronic. Okay, I made that last part up. But it could be true, maybe.

The surprise quote of the evening came from Charlie when he said that the projector we now use "still works great". Very uncharacteristic of Charlie.

Several new names were added to the list of potential speakers. We then adjourned to the kitchen where we commandeered Ruth's recipe system to critique our club website. APCUG is about to selected the top websites of the year and we want to spruce up our site so we can repeat our coup of last year when we won first place. As usual, many good ideas were put forth, and I'm certain that if my suggestions are followed we will once again prevail.

Finally, a discussion of our Build your Own Computer program led to some actual decisions and progress. Watch your newsletter for important details.

Adobe Digital Days Classes Offered...

(Continued from page 10)

Module IV

Making Great Pictures/Live Model Shoot Demonstration

- 1) Looking at light
- 2) Get Closer and Simplify
- 3) Look for details to tell a story
- 4) Framing your pictures
- 5) Controlling Motion
- 6) Controlling Focus
- 7) Model shoot Demonstration

Module V

Acquire and Edit

- 1) Model shoot debrief

(Continued on page 12)

Support DVPC – Get a friend to join!

Adobe Digital Days Classes Offered...

(Continued from page 11)

- 2) Downloading from Camera To Computer
- 3) Watching Photos and slideshows on TV
- 4) Editing and Enhancing With Photoshop Elements 3.0

Module VI

Organize and Refine

- 1) Storing Your Photos
- 2) Printers and Printing

Module VII

Sharing Your Images

- 1) Photoshop Elements 3 Continued
- 2) Sharing your Photos
- 3) Getting Creative With Photoshop Elements 3.0

Intermediate Session-Sunday (9am - 5pm)

Intermediate Workshop

The Intermediate Workshop is designed for photographers who are very comfortable with their digital or film camera and want to take their skills to the next level. Experienced film shooters with a sound understanding of the technical requirements of exposure, and graduates of the Beginner's workshop will improve their photography and learn how to manually adjust the features of a digital camera including exposure compensation, white balance and ISO sensitivity. You will put these skills to work during the live model shoot and gain photographic inspiration from our guest speakers.

Course Goals

At the end of Sunday's session, each participant will...

Have an in-depth understanding of how a digital camera works

Understand how to adjust for difficult lighting situations

Be able to describe the principles of lighting a portrait

Be able to decipher the histogram on the back of your camera

See how Adobe Photoshop CS2 can be used to refine and enhance your digital photographs

Digital Days—Intermediate Session Outline

Introduction

- 1) Introduction
- 2) Recap why digital?

Module I

Following the Light

- 1) How a digital camera works (recap and highlight)
- 2) Lenses
- 3) Flash Photography

Module II

Using the Digital Camera

- 1) Follow the light (overview and recap)
- 2) Focusing the camera
 - a) Focus modes
 - b) Lenses/Filtration
- 3) Measuring/Adjusting the light in the scene
 - a) Metering features in your camera

(Continued on page 15)

We fix the problems your manufacturer won't.

Computer Problems? We Can Help.

Unlike computer manufacturers, our A+ Certified in-store technicians will happily remove viruses, spyware and adware from your system. Plus, we can retrieve data you've lost due to these frustrating intruders. Just bring your computer in, and we'll do our best to have you up and running within 48 hours.



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Service

Please show your DVPCUG
Membership Card
at the time of purchase

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1936 Linda Drive.
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(925) 827-1200

Hours:

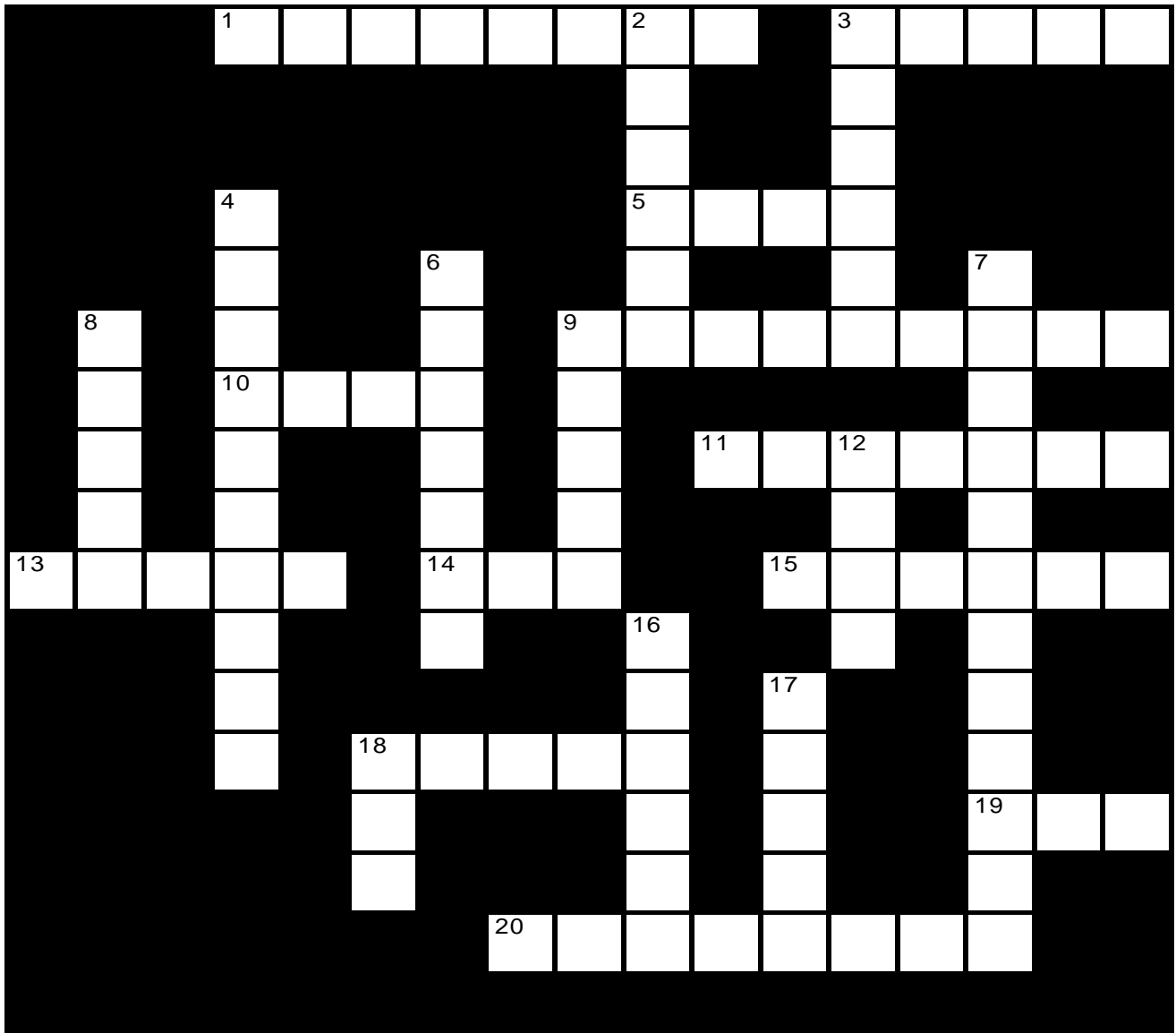
M-F 10:00am—07:00pm

SAT 10:00am—06:00pm

SUN 12:00pm—05:00pm

Visa, MC and Discover Cards accepted. All prices subject to change without notice. Franchise listed
is independently owned and operated. Products may not be available in all areas.

Computer Puzzle
"Halloween"
by Craig Peterson, DVPC



This month's puzzle, a crossword, is all about the most scary night of the year (no, April 15th is the scariest *day* of the year, Halloween gets the title for the scariest *night*).

If you need help, or want to see the answers, go to www.dvpc.org/solution.html.

Across

1. What "Trick or Treaters" used to tip over as a trick.
3. What treat you give to little trick or treaters
5. These have their own day on November 2, 2005 in Mexico
9. A place people are "dying" to get into
10. If the moon is not yet up, this is the only light to see by
11. This gets carved in October and made into pies in November
13. Ghosts rattle these
14. Never let a black one cross your path
15. Mischievous, ugly creature
18. Witch flying device
19. These were thrown at the houses of those who didn't to pass out candy
20. What is left if you don't have no skin

Down

2. Original web master
3. This type of light can be used in a power outage (or to look for ghosts in a spooky house)
4. Check the batteries before needing this emergency lighting device
6. Male version of #8 down
7. This decoration is made from #11 across
8. Crone
9. Boooooooo
12. Full, new, hunter's, harvest
16. The walking dead
17. Your last residence
18. Known as "flying rats"

Adobe Digital Days Classes Offered...

(Continued from page 12)

- b) Understanding the histogram
- c) Exposure compensation
- d) Types of flash
- e) Reflectors
- 4) Exposure/Sensitivity
 - a) Controlling Aperture
 - b) Controlling Shutter Speed
- 5) Understanding White Balance
- 6) Sensor
- 7) File Formats
 - a) JPEG or Raw
- 8) Image Storage
 - a) On Camera Memory
 - b) External Memory
- 9) Batteries

Lunch

Module III

Creative Digital Photography / Live Model Shoot

- 1) Understanding Light
- 2) Lighting a studio portrait
- 3) Lighting a portrait at home or in the field
- 4) Composition
- 5) Introduction to the model shoot
- 6) Model shoot

Module IV

The Digital Darkroom

- 1) Model shoot debrief
- 2) Editing and Enhancing with Photoshop CS
- 3) Cropping and Resizing
- 4) Printing
- 5) Archiving

Module V

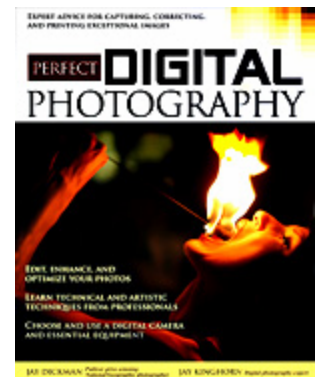
Guest Speaker

About The Instructor

Jay Kinghorn's background as an assignment and fine-art photographer has led to his engaging and information-packed training programs that fulfill the essential training needs of digital photographers. Knowledgeable and approachable, Jay brings his comfortable and efficient training style to the Digital Days Workshops to inspire and educate photographers of all ages and abilities.

Jay recently completed his first book, *Perfect Digital Photography*, co-authored by Pulitzer-Prize winning photographer Jay Dickman. Jay Kinghorn has taught seminars and workshops for corporations and professional photography organizations across the United States and overseas. Last fall, Jay taught alongside a National Geographic Photo editor and two top U.S. photojournalists at the First Light Workshop in Oban, Scotland.

Digital Days 2005, San Francisco, CA



Jay Kinghorn's New Book

(Continued on page 16)

Adobe Digital Days Classes Offered...

(Continued from page 15)

Workshop is from 9:00 a.m. to 5:00 p.m. both days

Level	Date	Cost
Beginners Workshop (9am-5pm)	Saturday: November 5, 2005	\$69
Intermediate Workshop (9am-5pm)	Sunday: November 6, 2005	\$99
Take Both and Save \$29 !	Sat & Sun: November 5-6, 2005	\$139

Radisson Miyako Hotel San Francisco

1625 Post Street, San Francisco CA 94115

Telephone: (415) 922-3200

To register, or for more information, go to <http://digitaldays.pophoto.com/>.

Build-Your-Own Computer FAQ by Kathy Whittle



BUILD-YOUR-OWN COMPUTER SEMINAR

Frequently Asked Questions (FAQ)

The revision of the Intel Build Your Own PC seminar is now complete! I'm attaching a new FAQ that gives updated information about this seminar. In addition, you may visit www.pclub.com/byo, click on your group's name, and see the different options that are now available to user group members wishing to purchase parts and build their own computer. There are three "systems" listed, with options within each one. Members can basically custom build the computer they would like by clicking on the arrows next to each component. There are only a few components that will need to stay the same.

Please look over the FAQ, visit the website above and let me know if you have members interested and when you would like to hold the workshop.

Best regards,
Kathy Whittle

Q1. What is the Intel® Build-Your-Own Computer Seminar-In-a-Backpack?

It's a two-part presentation specially developed by Intel for computer user groups. Everything you need to hold a seminar and a workshop (except the presenter and the parts) is included so you can educate your members and help those who would like to build their own state-of-the-art personal computer. The seminar-in-a-backpack consists of two PowerPoint slide shows (one for each of the two parts) with accompanying scripts, as well as "Thank-You" cards and gifts. There are also numerous reference files on the CD which can be printed and given to attendees as handouts, burned to a user group-sponsored CD, or used as the basis for newsletter articles.

Part I (the BYO Seminar) has been designed to be presented by a user group officer or member in a 45 to 60 minute time period at a general meeting or Special Interest Group (SIG) meeting. The content addresses "Why Build Your Own Computer?", "Where to Buy Parts?" and the considerations involved in choosing the various components and technologies. During the BYO Seminar, audience members will be introduced to the opportunity to customize, purchase and build a state-of-the-art, high-performance, high-value PC from specially-priced components. *The Part I BYO Seminar was presented at our May 5, 2005 DVPC monthly meeting.*

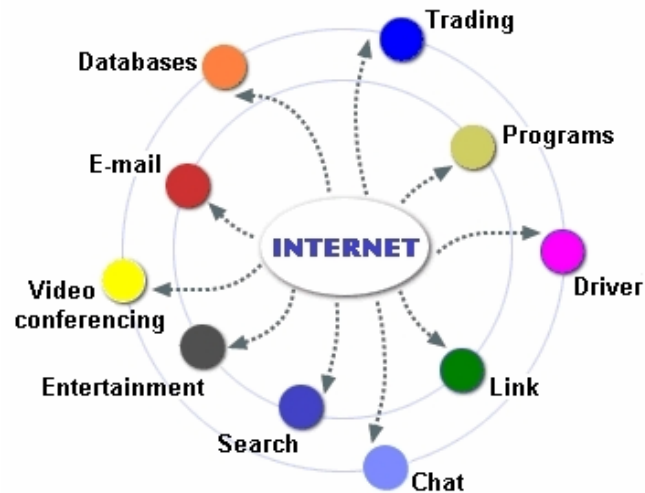
Part II (the BYO Workshop) will provide participants the opportunity to build their own computer, using the parts they've ordered, or watch a computer being built, under the direction of a workshop leader — preferably but not necessarily the

(Continued on page 17)

Changing Your E-mail Address?

Tell us so you will continue receiving Diablo Blue!

E-mail your name and new information to changes@dvpc.org

Internet SIG Meeting by Craig Peterson, DVPC**Internet SIG:*****"Your Pit Stop on the Information Superhighway"***

Maybe you think you've been missing the on-ramp to the Information Superhighway... or perhaps you are just curious about what the Internet is all about. If either of the above apply, then you should join the Internet SIG. The Internet SIG meets on the third Wednesday of each month at 6:00 p.m. at Computer Renaissance, 1936 Linda Dr. in Pleasant Hill. Please join us as we explore the "wild, wild world of the web".

Please join us at Computer Renaissance, 1936 Linda Drive in Pleasant Hill on Wednesday, September 21st at 6 p. m. This month we will be sharing our best ways to find travel information on the Internet.

For more information about the Internet SIG, email Craig Peterson at compmail@pacbell.net or call him at 671-7025.

Build-Your-Own Computer FAQ...

(Continued from page 16)

same person who presented the BYO Seminar. There is also a script and a PowerPoint slide show that simplifies the task for both workshop leader and participants alike by taking them through the process of building a computer step by step with tested, on-screen, projected instructions and pictures of the process of building a PC. *The Part II BYO Workshop will be held on December 17, 2005. See "How to Order Your Build-Your-Own Computer" on page 21.*

Q2. How long is the BYO Seminar (Part I)?

It is designed to take 45 minutes, although the presenter can take more or less time to present the material.

Q3. How long is the BYO Workshop (Part II)?

The workshop should take between two and three hours (110 to 190 minutes), depending on the experience level of the class and instructor. If you install an operating system as part of the workshop, add an additional hour or so.

Q4. How can our group register for the Intel® Build-Your-Own Computer Seminar-in-aBackpack?

If you have not yet ordered this seminar, then you can register online at www.intel.com/go/pcug. Please be sure you are authorized to commit your group to hold the seminar – all orders will be verified before shipping. All materials for the seminar will be mailed to the authorized user group officer or a designated person, who will be responsible for the appropriate distribution of the materials and arranging for someone qualified to present both the seminar and the workshop. *DVPC is registered for the Intel® Build-Your-Own Computer Seminar-in-a-Backpack.*

Q5. How much will it cost user group members to purchase the parts necessary to build their own computer at the BYO Workshop?

(Continued on page 18)

Build-Your-Own Computer FAQ...

(Continued from page 17)

Anywhere from \$506 to \$2,899, plus tax, depending on which components you select and how much function and performance you need. Even the most inexpensive system, however, is a fantastic value, providing state-of-the art components at a specially negotiated, discounted price available exclusively for user group members who participate in the BYO Workshop. Shipping and handling is free.

Q6. What are the system specifications?

Participants in the workshop can select from three basic systems, and can further customize their systems from there. Please note that each system includes the very latest high-performance technologies, including an Intel® processor with a Dual Core or Hyper-Threading Technology, DDR2 RAM, Serial ATA (SATA) hard drives, RAID, PCI Express, Intel® High-Definition (HD) audio, Hi-Speed USB 2.0, and IEEE-1394 (Firewire™) interfaces. Don't make the mistake of trying to compare these systems based only on GHz and GB to systems using older, inferior, obsolete technologies. Most of the sub-\$500 systems you'll see advertised are bare-bones systems using obsolete technologies.

General System Specifications

1. Your choice of one of the new dual-core Intel® Pentium® D Processors for a smooth, high performance computing experience, an Intel® Celeron® D for incredible value, or an Intel® Pentium® 4 Processor with Hyper-Threading Technology for those seeking a balance of performance and value.
2. An Intel® Media Series (945GNTLR) or Executive Series (945GNTLKR) motherboard w/Socket LGA775, featuring the Intel 945G Express chipset with:
 - Advance Intel GMA950 graphics (DirectX 9, 3D accelerator)
 - Intel High-Definition (HD) Audio
 - PCI Express
 - Intel 10/100 Ethernet
 - Hi-Speed USB 2.0
 - IEEE 1394
 - Intel SATA and RAID support.
3. Your choice of 512MB, 1GB, 2GB, or 4GB of fast DDR2 Memory (533 or 667).
4. Your choice of Serial ATA (SATA) hard drive(s):
 - 80GB, 160GB, or 320GB Western Digital 7200RPM Hard Drive, 8MB Cache
 - 73.4GB 10,000 RPM Seagate Hard DriveNote: When you order two identical drives, you can optionally configure them in a striped RAID array for a single-volume, high-performance disk drive
5. Your choice of 1 or 2 CD/DVD drives from the following:
 - 52x32x52 CD-RW Drive
 - 52x32x52 DVD/CD-RW Combo Drive
 - 16x DVD-ROM drive
 - 16x Double-Layer DVD+/-RW drive
 - 16x Double-Layer HP LightScribe DVD+/-RW drive, for laser-labeling without a printer (using approved media)
6. CoolerMaster Centurion Case (Black with Silver or Blue Trim) with front panel USB 2.0 and IE 1394 (Firewire™) connectors and headphone/microphone audio jacks
7. Your choice of a 380W or 450W Power Supply w/24-pin motherboard connector
8. Your choice of keyboard and mouse combinations, including:
 - Logitech Deluxe Optical Desktop
 - Logitech Cordless Optical Desktop
 - Microsoft Wireless Optical Desktop
 - Logitech diNovo Media Desktop
9. Your choice of operating system:
 - Windows XP Home
 - Windows XP Professional
 - Linspire (Linux) Operating systems
10. Available optional extras include:
 - Floppy drive
 - nVidia GeForce 7800GTX KO 256MB PCI Express HD video card

(Continued on page 19)

Buy extra raffle tickets and increase your chance of winning – as you support *DVPC!*

Build-Your-Own Computer FAQ...*(Continued from page 18)*

- Internal 9-in-1 media card reader
- Microsoft Office or Microsoft Works

Q7. What does all that mean to users in plain English?

What do you gain from this alphabet soup of new technologies that is worth the extra cost over a cheaper system made from older technologies? Plenty, with a much faster system than is generally available at comparable prices being at the top of the list. It's ahead of the technology curve too, which means the system will have a longer useful life than most comparably-priced retail systems you'll find out there. The BYO systems provide you with the power, performance, and compatibility to:

- Dramatically reduce the amount of time you spend waiting for your computer or looking at the Windows hourglass
- Transfer pictures from your digital camera or camcorder to your computer quickly and easily, through the Hi-speed USB ports or IEEE-1394 (Firewire™) ports that are standard on every system.
- Minimize the time spent copying or moving files
- Handle even the most demanding e-mail and online applications with ease
- Plug a headset with a microphone into the front for use with optional voice recognition software Optical keyboard and mouse for maximum convenience
- Install new application programs from CD in a fraction of the time it took you previously Run all kinds of personal productivity applications with outstanding performance Run high-intensity graphical and video applications, including the latest games (even grandchildren will be impressed)
- Enjoy outstanding audio with stereo speakers, a 5.1 speaker system, or a 7.1 speaker setup. You can even plug things into the wrong port and it will auto-sense your mistake and adjust the inputs for you.
- Edit your home movies and capture video from your camcorder to your computer
- If you order a system with a DVD+/-RW drive, you can burn DVDs with your own video or photos, including the ability to create high-capacity, dual-layer (8.5GB) DVDs with 4 hours of DVD-quality video or 16 hours of VHS-quality video
- Do more than one thing at a time without causing your computer stall or jerk through smooth multi-tasking (dual core or hyper-threading) support – for example, download files while working on a document, or run a virus scan while checking your e-mail.
- Connect up to 6 Hi-speed USB devices without needing a USB hub
- Connect 1 or 2 Hi-speed USB devices, such as a digital music player, camera, camcorder, or game adapter into the front of the computer for extra convenience
- If you order two CD/DVD drives, you can copy unprotected CDs/DVDs without swapping media
- Achieve superior performance when running multi-threaded applications optimized for dual core or HT Technology, including popular consumer and professional applications from Adobe® and other leading software companies
- Connect directly to cable or DSL modems or to a local area or home network. Enjoy all of the many benefits of Microsoft Windows XP and Microsoft Office, and much more, depending on the application software you run.

Q8. Wow! That's an amazing system. How can I or other user group members order a system?

Call 800-340-1948 (M-F, 8am-6pm) or go online at www.pcclub.com/byo. Be prepared to provide the following information:

- Your name
- The name of your User Group
- The date of your workshop (*DVPC has held workshop Part I at our May, 2005 meeting*)
- Your billing address
- Your shipping address
- Your phone #
- Your e-mail address
- Your credit card #

(Continued on page 20)

Build-Your-Own Computer FAQ...

(Continued from page 19)

- Your credit card expiration date
- Your credit card verification # (the CCV is usually the last 3 digits on the signature stripe on the back of the card)
- The configuration you want to order (go to www.pcclub.com/byo for configuration details).

Q9. Who is providing the system parts?

PC Club has been selected to fulfill all orders for systems to be built under this program. If you have a local PC Club store, you may work with them directly.

Q10. What about warranty and warranty service?

The system and parts are warranted by PC Club for a period of one year from the date of your workshop.

Q11. Can I or other user group members order a system in advance of the seminar or even after the workshop is completed?

Yes. Within a week or two after your group is confirmed to give the seminar, you or your group members will be able to order system parts. Unless otherwise specified, all orders will be shipped all at once to the workshop or other address you provide to PC Club, to arrive on the date you designate. However, exceptions for each order may be made by designating shipment to an alternate address when the order is placed. Contact PC Club for details.

Q12. How can I contact PC Club with questions or problems?

Call them at 800-340-1948, which is the special ordering number for the Intel Build-Your-Own Seminar kits, or e-mail them at byo@pcclub.com.

Q13. I've contacted PC Club, but they can't help me, or I have a general question about the seminar materials. Who should I call?

Webworking Services represents Intel in administering their user group program, including the BYO Seminar. You can contact them via e-mail at intelbyo@webworkingservices.com, or by calling toll-free 877-887-8687.

Q14. Is Windows included?

Yes, Windows XP Home or Windows XP Professional may be purchased with the system parts.

Q15. Can I or other user group members order more than one system?

Yes, however, BYO Workshop participants will only be able to build one system at the workshop. They can either take the unassembled parts for the second system home following the workshop, or have someone else accompany them to the workshop in order to build the second system without slowing the pace for the rest of the workshop participants.

Q16. Are the specifications subject to change?

Only in your favor. Like all technology-based products, today's state-of-the-art system won't stay at the high-end of the technology curve for more than a few months; therefore, we reserve the right to make improvements to the specifications list at any time in order to ensure that each group is building a system that is fresh and highly competitive. We are working hard to ensure that your members who research the available alternatives are happy with their choice to participate in the BYO Workshop. In most cases the specifications list above will be exactly what your members will receive.

Q17. Can group members customize the system they purchase?

Yes. Workshop participants will start the purchase process by selecting one of three systems (good, better, and best). They can then upgrade, downgrade, add, or remove components until they have the system and features that they want and need and can afford. In order to keep the workshop instructions and pictures consistent with the actual systems built, certain components (namely the motherboard, system case, and power supply) are required to be similar for all systems built at the workshop. Other components (processor, memory, drives, operating system, display adapter, and optional accessories) can be customized without affecting the participant's ability to build their system in harmony with the rest of the group during the workshop.

Q18. Is there a handout that explains the system and how to order that we can give to attendees at the Seminar?

Yes. PC Club will provide a handout with information about the systems, ordering procedures, and more. They should be in contact with you soon after you order the seminar to provide you with this information. If you don't hear from them in a timely manner, please feel free to contact them at usergroups@pcclub.com or call 800-340-1948 (M-F, 8am-6pm).

Q19. Can our user group run multiple BYO Workshops (Part II) without holding another BYO Seminar (Part I)?

Yes. Just let Kathy at Webworking Services (kathy@webworkingservices.com) know at least a month in advance that you'd like to hold additional BYO Workshops. We'll make sure you are informed of any updates or changes and get the appropriate materials.

(Continued on page 21)

Build-Your-Own Computer FAQ...

(Continued from page 20)

Q20. Is a monitor required for the workshop? Is it included?

Workshop participants should be invited to bring their own monitor to the workshop, or make arrangements to have a monitor available to them, for the last few steps in the build process. Alternatively, the group can make sure a few monitors are available for participants to share, taking turns to accomplish the final steps.

Q21. Who is responsible for providing assistance during the workshop?

Your group may wish to have experienced members on hand to assist participants who may have questions or concerns during the build process.

Q22. The system specifications mention RAID as an option for those who purchase two identical Serial ATA drives. What is RAID, and are instructions included on how to take advantage of RAID?

RAID stands for "Redundant Array of Inexpensive Disks." RAID is an elegant chipset technology that brings to personal computers the benefits of high-priced, high-end technology previously found only in servers or high-performance desktops. Workshop participants will be provided simple, clear instructions on how to create, in only a few minutes, their own striped SATA RAID volume — one high-performance C: drive comprised of two separate disk drives. When one of the two drives is latent, the other is often working, so a striped RAID volume delivers enhanced disk utilization for improved performance over the typical system with only a single hard disk.

The instructions on how to load the RAID drivers are included in the Workshop and may be presented if you have anyone who would like to learn how to configure a RAID array. Once each system is completed and working, participants may then take their pre-paid computer home with them where they can easily install Windows using the instructions provided with Windows.

Q23. We want to be sure the expectations of our user group members are set appropriately, and that our group is protected from any possible liability. Is there something we should have participants sign before the workshop?

Yes. In order to avoid any possible misunderstanding, confusion, liability, or ill will, please have each participant in Part II: The Workshop sign the following Disclaimer and Acknowledgement. There is a Word file on the CD for the Workshop you can print out; alternatively, you can copy, paste, and print the text on the next page.

How to Order Your Build-Your-Own Computer by Ron Ogg, DVPC

Interested in a powerful high-end new computer? An inexpensive new computer? The **Build-Your-Own** computer program sponsored by Intel and PC Club has either (or, even both if you need more than one computer!) of these options for you. In fact, they have a three base systems you can choose from, then you can customize the base system with the specific options that you want to include. See the articles starting on page 23 for the details about the different models. Once you've made your model selection and are ready to order, you need to do the following:

Call 800-340-1948 (M-F, 8am-6pm) or go online at www.pcclub.com/byo and selecting *Diablo Valley PCUG* from the drop-down list near the bottom of the page. Be prepared to provide the following information:

- Your name
- The name of your User Group
- The date of your workshop (*DVPC held workshop Part I at our May 5 meeting, and Part II will be on December 17*)
- Your billing address
- Your shipping address
- Your phone #
- Your e-mail address
- Your credit card #
- Your credit card expiration date

(Continued on page 22)



Tired of Spam?

Go to www.dvpc.org to download QURB!

Build-Your-Own Computer Disclaimer and Signature Form

DISCLAIMER AND ACKNOWLEDGEMENT

The Intel Build-Your-Own PC (BYOPC) Seminar and Workshop is jointly sponsored by Intel Corporation and your local user group, club, or association in order to provide supplemental education and experience for those members of your local user group, club or association who might be interested in learning more about the latest Intel-developed and Intel-supported technologies, and perhaps even building a state-of-the-art PC that incorporates those technologies. Although you may benefit from the Seminar by gaining information that would help you build or upgrade your own PC, please note that Part II (the BYOPC Workshop) is designed to help you build a PC from carefully selected designated components you must purchase from a vendor selected by Intel through an open, competitive bid process. Everyone who chooses to participate must purchase similar parts in order to facilitate the BYOPC Workshop, where each participant, regardless of prior experience, will build their own PC according to the pictures and instructions provided by Intel. The BYOPC Workshop is not, however, designed to help you build a PC from your own parts and it is not intended to help you upgrade your existing PC. Although many of the BYO PC component prices are significantly discounted and available only to participants of the Intel BYOPC Workshops, neither Intel Corporation nor your local user group, club, or association can guarantee that it is the lowest price you can find for a system with the designated components. You may be able to find the identical parts or an equivalent system elsewhere at a lower price, but without, of course, the guidance and training offered as part of the Workshop.

The parts you purchased are warranted from PC Club [see separate warranty agreement from PC Club]. NEITHER INTEL NOR YOUR LOCAL USER GROUP, CLUB, OR ASSOCIATION MAKES ANY WARRANTIES UNDER THIS AGREEMENT, AND EXPRESSLY DISCLAIMS ALL WARRANTIES, WHETHER EXPRESS, STATUTORY, OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NONINFRINGEMENT. NEITHER Intel nor your local user group or club SHALL BE LIABLE to the undersigned FOR any DAMAGES whatsoever including any injury or damage to any persons or property as a result of the use or misuse of this information and/or advice, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

I have read the above disclaimer and acknowledge that I understand and agree with the terms of participation in the Intel Build-Your-Own PC Workshop.

Signed

Date

How to Order Your Build-Your-Own Computer...

(Continued from page 21)

- Your credit card verification # (the CCV is usually the last 3 digits on the signature stripe on the back of the card)
- The configuration you want to order (see the model information starting on page 23, then go to www.pcclub.com/byo to confirm configuration details).
- Print, sign, and date the Disclaimer and Acknowledgement (see above). You may be asked to mail this form to PC Club.

Despite what it says on the PC Club system configuration web pages, the computer components you order will be shipped to your address, not to DVPC, and there will be no additional charge for shipping. See the "Build-Your-Own Computer FAQ" on page 16.

After your computer components arrive you are free to follow the included documentation and assemble the system yourself. If you would like guidance, you can come to our Computer Day Workshop on Saturday, December 17 from 9 a.m. to 5 p.m. It will be held at the Concord Police Department Community Room. Directions: The Concord Police Department is at 1350 Galindo Street in Concord. From the 242 Freeway take Clayton Road east to Galindo and turn right; the Police Department building is 3 blocks south on your left. From 680 take Monument Blvd. east and continue to where it changes to Galindo; the Police Department building will be on your right a short distance past Cowell Road.

Please make sure you understand what you are ordering. This is a set of components, not a pre-built computer. The disadvantage is that you have to install these components yourself. The *advantage* is that you have to install these components yourself. You will have a computer with which you will totally familiar. If you want to expand the computer, or replace a component, you will have the knowledge to do so yourself.

You'll need some simple tools. Medium and small size slot head and Phillips head screwdrivers are required. Needle nose pliers and a set of socket drivers will be very useful, and you might find that a power screwdriver will save a lot of work. If you're unsure about putting together your own computer, you should definitely plan on bringing your system, monitor, and tools to the Computer Day Workshop on December 17. DVPC members who have experience building computers will be on hand to provide assistance to those who are assembling their systems.

What Are the Different Build-Your-Own Computer Models? by Ron Ogg, DVPC

The computers offered by the Intel and PC Club *Build-Your-Own* computer program come in three base systems you can choose from, then you can customize the base system with the specific options that you want to include. So, what are the three base models? You can see the models by going to www.pcclub.com/byo/ and selecting *Diablo Valley PCUG* from the drop-down list near the bottom of the page. The three base models are Silver, Gold, and Platinum. So, what's the difference between these base models?

The Silver base system is for configuring economy-level systems. Here's the list of components included in the basic Silver system:

Item	Component	Default Silver Base System	Price	Help
CPU	Intel® Celeron® D 330J 2.66GHz, 256K L2 Cache		\$ 0	?
CPU Fan	Included with the Retail Box Processor		\$ 0	
Motherboard	Intel 945GNTLR Media Series Motherboard PCI-E		\$ 0	
Memory	512MB KINGSTON Valueram Memory DDR2 533		\$ 0	?
Floppy Drive	NONE		\$ 0	
Case	COOLER MASTER Centurion 5 Case- Black w/Silver Trim- 380W PS		\$ 0	
Hard Drive	WESTERN DIGITAL 80GB Hard Drive - 7200RPM 8MB Cache, SATA		\$ 0	?
Video Card	On-Board Video Card		\$ 0	?
Sound Card	On-Board 5.1 Sound		\$ 0	
Network	On-Board Ethernet Network Adapter		\$ 0	
Keyboard & Mouse	LOGITECH Deluxe Desktop Optical Black		\$ 0	
CD/DVD Writer	LITEON 16X DVD ROM Retail, Black		\$ 0	
CD/DVD Drives	NONE		\$ 0	
Miscellaneous	NONE		\$ 0	
OS	Microsoft Windows XP Home DSP		\$ 0	
Software	NONE		\$ 0	
			Total Price	
<input type="button" value="Printable View"/> <input type="button" value="Reset"/> <input type="button" value="Add to Cart"/>			\$ 578	

The \$578 price is certainly competitive for this level system. Some premium components are included, like the Western Digital 80 GB SATA hard drive, 512 MB RAM, and the same case and power supply. OK. Let's see how we can enhance this puppy! On the next page we're showing the same Silver base system upgraded to a mid-range Silver configuration that includes options to improve system performance (except for the additional Microsoft Office software), with a goal of staying below \$1,000.

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Item	Component	Mid-Range Silver Configuration	Price	Help
CPU	Intel® Celeron® D 345J 3.06GHz, 256K L2 Cache		\$ 40	?
CPU Fan	Included with the Retail Box Processor		\$ 0	
Motherboard	Intel 945GNTLR Media Series Motherboard PCI-E		\$ 0	
Memory	1GB (2x 512MB) KINGSTON Valueram Memory DDR2 533		\$ 65	?
Floppy Drive	1.44MB Black Floppy Drive		\$ 11	
Case	COOLER MASTER Centurion 5 Case- Black w/Silver Trim- 450W PS		\$ 30	
Hard Drive	WESTERN DIGITAL 160GB Hard Drive - 7200RPM 8MB Cache SATA2		\$ 50	?
Video Card	NVIDIA GeForce 6600 128MB Video Card, PCI-E		\$ 109	?
Sound Card	On-Board 5.1 Sound		\$ 0	
Network	On-Board Ethernet Network Adapter		\$ 0	
Keyboard & Mouse	LOGITECH Deluxe Desktop Optical Black		\$ 0	
CD/DVD Writer	LITEON 16X DVD ROM Retail, Black		\$ 0	
CD/DVD Drives	LITEON 16X16 Double Layer DVD+/-RW Drive		\$ 55	
Miscellaneous	NONE		\$ 0	
OS	Microsoft Windows XP Pro DSP		\$ 50	
Software	NONE		\$ 0	
			Total Price	
<input type="button" value="Printable View"/> <input type="button" value="Reset"/> <input type="button" value="Add to Cart"/>			\$ 988	

We've increased the processor speed from 2.66 MHz to 3.06 MHz, increased RAM from 512 MB to 1 GB, added a diskette drive, upgraded the case from the 380W power supply to the 450W power supply, upgraded from an 80 GB SATA hard drive to a 160 GB drive, installed an NVIDIA 6600 video card, added a dual-layer DVD/CD burner in addition to the DVD/CD ROM drive, and selected Windows XP Pro instead of the Home edition. All of this increased the price to \$988. However, before you decide to go with this

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Please note: Until further notice we are once again meeting in room H109 in the Humanities Building. This change (from MA101 in the Mathematics building) was required to accommodate summer session classes, and will continue until we have to move again. Please check the maps on pages 4 through 6 of each issue of Diablo Blue!

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mid-range Silver configuration, take a look at the Gold base system on page 28. You might like it better! Now, what's the absolute high-end Silver configuration look like – and cost? Let's take a look:

Item	Component	High-End Silver Configuration	Price	Help
CPU	Intel® Pentium® 4 660 3.6GHz, 2MB L2 Cache		\$ 530	?
CPU Fan	Included with the Retail Box Processor		\$ 0	
Motherboard	Intel 945GNTLKR Executive Series Motherboard (ETA Mid Oct)		\$ 14	
Memory	4GB (4x 1GB) Memory DDR2 667		\$ 600	?
Floppy Drive	1.44MB Black Floppy Drive		\$ 11	
Case	COOLER MASTER Centurion 5 Case- Black w/Silver Trim- 450W PS		\$ 30	
Hard Drive	2x WESTERN DIGITAL 320GB Hard Drive - 7200RPM 8MB Cache		\$ 339	?
Video Card	NVIDIA GeForce 7800GTX KO 256MB Video Card, PCI-E HD-VIVO		\$ 599	?
Sound Card	On-Board 5.1 Sound		\$ 0	
Network	On-Board Ethernet Network Adapter		\$ 0	
Keyboard & Mouse	LOGITECH diNovo Media Desktop		\$ 173	
CD/DVD Writer	HP 16x DVD+/- Double Layer LightScribe Drive		\$ 64	
CD/DVD Drives	HP 16x DVD+/- Double Layer LightScribe Drive		\$ 90	
Miscellaneous	Card Reader 9 IN 1 Internal		\$ 17	
OS	Microsoft Windows XP Pro DSP		\$ 50	
Software	NONE		\$ 0	
			Total Price	
<input type="button" value="Printable View"/> <input type="button" value="Reset"/> <input type="button" value="Add to Cart"/>			\$ 3095	

Woof! \$3,095 is BIG buck\$, that's for sure! And let's face it, most of us aren't ready to shell out this amount of cash for a PC. (Yeah, yeah, I know YOU are, but I said *most* of us, right?) But we said we'd show the highest level Silver configuration. So, what did we do to the mid-range Silver configuration to arrive at this budget-stretcher? Here's what: a Pentium 4 model 660 3.6 GHz processor, an enhanced motherboard, 4 GB of RAM, 2 of the 320 GB SATA hard drives, an NVIDIA 7800GTX KO video card, the fanciest Logitech keyboard and mouse, two HP LightScribe dual-layer DVD/CD burners, and a 9-in-1 internal media card reader. The items that cost the most are the processor, memory, hard drives, and video card. This is a whopping \$1,977 more than the mid-range Silver configuration, or \$2,241 more than the base Silver system! **Double WOOF!**

But how does this compare to the Gold and Platinum systems? What's the difference if we try to configure a Gold or Platinum sys-

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tem this way? Let's configure the Platinum base system so it matches what we did to get to the high-end Silver configuration:

Item	Component	High-End Platinum Configuration	Price	Help
CPU	Intel® Pentium® 4 660 3.6GHz - 2MB L2 Cache		\$ 50	?
CPU Fan	Included with the Retail Box Processor		\$ 0	
Motherboard	Intel 945GNTLKR Executive Series Motherboard (ETA Mid Oct)		\$ 0	
Memory	4GB (4 x 1GB) DDR 2 Memory - 667		\$ 250	?
Floppy Drive	1.44MB Black Floppy Drive		\$ 11	
Case	COOLER MASTER Centurion 5 Case- Black w/Silver Trim- 450W PS		\$ 0	
Hard Drive	2x 320GB WESTERN DIGITAL Hard Drive- 7200RPM, 8MB Cache SATA		\$ 0	?
Video Card	NVIDIA GeForce 7800GTX OC KO 256M Video Card - PCI-E		\$ 599	?
Sound Card	On-Board 5.1 Sound		\$ 0	
Network	On-Board Network		\$ 0	
Accessories	None		\$ 0	
Keyboard & Mouse	LOGITECH diNovo Media Desktop Keyboard and Mouse		\$ 0	
CD/DVD Writer	HP 16x DVD+/- Double Layer LightScribe Drive		\$ 0	
CD/DVD Drives	HP 16x DVD+/- Double Layer LightScribe Drive		\$ 64	
Miscellaneous	9-in-1 Internal Card Reader		\$ 17	
OS	Microsoft Windows XP Pro, DSP		\$ 0	

Total Price
\$ 2938

Whoa! What's going on here? This configuration is at \$2,938 which is \$157 *cheaper* than the base system configured the same way! Well, let's take a look at the default Platinum base configuration on the next page. The base Platinum configuration includes a Pentium D 840 3.2 GHz dual core processor which we've upgraded to a Pentium 4 660 3.6 GHz processor for \$50, it includes 2 GB of RAM which we've upgraded to 4 GB for \$250, it doesn't include a diskette drive which we've included for \$11, it includes only the on-board video which we've upgraded to an NVIDIA 7800GTX KO video card for \$599, it includes as its second optical drive a DVD/CD ROM drive which we've upgraded to a second HP LightScribe dual-layer DVD/CD burner for \$64, and it didn't include a 9-in-1 internal media card reader which we've included for \$17. These additions cost \$991 over the price of the base Platinum system, but the additions over the base Silver system cost \$2,241.

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Item	Component	Default Platinum Base System	Price	Help
CPU	Intel® Pentium® D 840 3.2GHz - 2 x 1MB L2 Cache		\$ 0	?
CPU Fan	Included with the Retail Box Processor		\$ 0	
Motherboard	Intel 945GNTLKR Executive Series Motherboard (ETA Mid Oct)		\$ 0	
Memory	2GB (2 x 1GB) DDR2 Memory - 667		\$ 0	?
Floppy Drive	NONE		\$ 0	
Case	COOLER MASTER Centurion 5 Case- Black w/Silver Trim- 450W PS		\$ 0	
Hard Drive	2x 320GB WESTERN DIGITAL Hard Drive- 7200RPM, 8MB Cache SATA		\$ 0	?
Video Card	None		\$ -0.01	?
Sound Card	On-Board 5.1 Sound		\$ 0	
Network	On-Board Network		\$ 0	
Accessories	None		\$ 0	
Keyboard & Mouse	LOGITECH diNovo Media Desktop Keyboard and Mouse		\$ 0	
CD/DVD Writer	HP 16x DVD+/- Double Layer LightScribe Drive		\$ 0	
CD/DVD Drives	LITEON 16X DVD ROM Retail, Black		\$ 0	
Miscellaneous	None		\$ 0	
OS	Microsoft Windows XP Pro, DSP		\$ 0	
			Total Price	
<input type="button" value="Printable View"/> <input type="button" value="Reset"/> <input type="button" value="Add to Cart"/>			\$ 1946.99	

Let's think about this for a minute. The base systems are pre-configured by PC Club as a related set of boxes that can be taken off the shelf and shipped. If you're going to replace stuff to something that's off-the-shelf, it will take more effort and cost more money to do so if you start from something that will require more changes. The Silver base configuration needed to have the motherboard replaced, the processor replace, the RAM replaced, the hard drive replaced by two hard drives, the power supply replaced, and the second optical drive to be replaced. This will take more effort than starting with the Platinum base system which required only the processor and second optical drive to be replaced. All of the other stuff were add-ons that can be added to the package whether it's the Silver base system or the Platinum base system. (By the way, don't ask me why using the on-board video is listed as "None" and valued at a one cent discount! I don't have a clue!)

So, here's the scoop on selecting the right base system:

Pick the base system that's closest to your desired configuration, and that requires fewer replacements.

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OK, you've seen the Silver base system (that's the economy model) on page 23, and the Platinum base system (that's the premium model) on page 27, here's the Gold base system (the intermediate model):

Item	Component	Default Gold Base System	Price	Help
CPU	Intel® Pentium® D 820 2.8GHz, 2 x 1MB L2 Cache		\$ 0	?
CPU Fan	Included with the Retail Box Processor		\$ 0	
Motherboard	Intel 945GNTLR Media Series Motherboard PCI-E		\$ 0	
Memory	1GB (2 x 512MB) KINGSTON Valueram Memory DDR2 533		\$ 0	?
Floppy Drive	NONE		\$ 0	
Case	COOLER MASTER Centurion 5 Case- Black w/Silver Trim- 380W PS		\$ 0	
Hard Drive	160GB WESTERN DIGITAL Hard Drive- 7200RPM 8MB Cache SATA2		\$ 0	?
Video Card	On-Board Video Card		\$ 0	?
Sound Card	On-Board 5.1 Sound		\$ 0	
Network	On-Board Network		\$ 0	
Accessories	NONE		\$ 0	
Keyboard & Mouse	LOGITECH Cordless Desktop Optical		\$ 0	
CD/DVD Writer	LITEON 16X16 Double Layer DVD+/-RW Drive		\$ 0	
CD/DVD Drives	NONE		\$ 0	
Miscellaneous	NONE		\$ 0	
OS	Microsoft Windows XP Home, DSP		\$ 0	
			Total Price	
<input type="button" value="Printable View"/> <input type="button" value="Reset"/> <input type="button" value="Add to Cart"/>			\$ 915	

Compared to the Silver base system, the Gold base system has a much faster dual-core processor, twice as much RAM, twice as large a hard drive, and a dual-layer DVD/CD burner.

I guess the next question is: what's the best configuration. No way, Jose! Not gonna get ME in THAT argument! One person's flowers are someone else's weeds, etc. etc. There's no BEST configuration, there's only what's going to work for each of us, base on what configuration we want and how much we can or are willing to spend. "So, Ron," you say, "what configuration are YOU going to buy?"

That I'm willing to answer. Here it is, starting from the Platinum base system which is closest to what I'm looking for. You'll see that I've added some things and haven't replaced anything except the keyboard and mouse and I did that because I have a per-

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factly good keyboard and mouse that I connect to my PCs and server through a KVM switch, and see no reason to replace. If I could, I'd select "None" for the keyboard and mouse. Maybe I can do that when I place my order by phone. Oh, and the other thing I'll do when I phone in my order is find out about increasing the one-year on-site service warranty to 3 or 4 years.

Item	Component	Ron's Platinum Configuration	Price	Help
CPU	Intel® Pentium® D 840 3.2GHz - 2 x 1MB L2 Cache		\$ 0	?
CPU Fan	Included with the Retail Box Processor		\$ 0	
Motherboard	Intel 945GNTLKR Executive Series Motherboard (ETA Mid Oct)		\$ 0	
Memory	2GB (2 x 1GB) DDR2 Memory - 667		\$ 0	?
Floppy Drive	1.44MB Black Floppy Drive		\$ 11	
Case	COOLER MASTER Centurion 5 Case- Black w/Silver Trim- 450W PS		\$ 0	
Hard Drive	2x 320GB WESTERN DIGITAL Hard Drive- 7200RPM, 8MB Cache SATA		\$ 0	?
Video Card	NVIDIA GeForce 6800 GT 256MB Video Card - PCI-E		\$ 289	?
Sound Card	On-Board 5.1 Sound		\$ 0	
Network	On-Board Network		\$ 0	
Accessories	None		\$ 0	
Keyboard & Mouse	LOGITECH Deluxe Desktop Optical Black		\$ -173	
CD/DVD Writer	HP 16x DVD+/- Double Layer LightScribe Drive		\$ 0	
CD/DVD Drives	LITEON 16X DVD ROM Retail, Black		\$ 0	
Miscellaneous	9-in-1 Internal Card Reader		\$ 17	
OS	Microsoft Windows XP Pro, DSP		\$ 0	
			Total Price	
<input type="button" value="Printable View"/> <input type="button" value="Reset"/> <input type="button" value="Add to Cart"/>			\$ 2091	

I've added a diskette drive, the NVIDIA 6800 GT 256 MB video card, and the 9-in-1 media reader. My price, \$2,091, is only \$144 more than the Platinum base system, partially because I'm getting a credit for downgrading the keyboard and mouse.

I selected a base model that includes a Pentium D processors are dual-core. That means that they will provide superior performance while running multiple applications, such as editing video while downloading music. Dual-Core provides two execution cores in one physical processor allowing the platform to do more in less time while enjoying smooth interaction with your PC. Dual-core processors will be compatible with the 64-bit version of Microsoft Windows Vista when it is released in 2006. The Gold base system includes the Pentium D 820 2.8 GHz processor, and the Platinum base system includes the Pentium D 840 3.2 GHz processor.

If you select the Silver or Gold base system, I recommend you select Windows XP Pro for \$50. It's a better OS at a bargain price.

The PSP – A Hardware Review by Alan Mildwurm, DVPC

The remodel is over. I actually got one car in the garage after a day and a half of work this past weekend! So it must be time to play.

PSP stands for (Sony) PlayStation Portable. A new handheld gaming system based on the PlayStation 2 gaming system.



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In addition to playing games, the PSP has wireless capability, plays videos and music and (with the new firmware upgrade) can surf the net with its built in browser. The 4.3-inch wide-screen display (480x272 pixels, 16.77 million colors) is beautiful. The screen is flanked by the "standard" Playstation controls the directional keypad is to the left of the screen, and the familiar square, triangle, circle, and X buttons are to the right. There is also an analog "joystick" below the directional keypad. The shoulder buttons are on the left and right top of the unit. Battery life seems nothing short of excellent- (I love Sony's info-lithium batteries!)

Games and movies come on Sony's proprietary UMD (Universal Media Disc) media, which are housed in protective cartridges. The UMD drive is accessed from the back of the unit. The drive is read only. Open the hatch, load the game or movie and snap it shut.

The top edge also houses the infrared and a USB 2.0 port that you can use to link the device to your PC or Mac, though no USB connection cable is included. The USB port will also be the connector for any future accessories you might add, such as a keyboard or a camera attachment. There is also a Memory Stick Duo port for storage of games, game info, pictures and video. You can transfer videos to the Memory Stick in MPEG-4 format. The unit ships with an anemic 32MB Memory Stick. Getting movies onto the stick (you really need a 512MB stick to be useful) requires creation of a directory. There is already some 3rd party software available to simplify the process. Thanks to the new firmware upgrade, you can easily play MP3s, WAVs and AAC-encoded song files.



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There is also an image viewer, with simple slide-show functionality. It's easy to drag JPEG files--or TIFFs, PNGs, GIFs, and BMPs, if you download v2.0—you can also rotate. In addition, you can set a photo as your PSP's background wallpaper, replacing the colorful splash screen behind the home menu. I haven't figured out how to view photos and listen to music simultaneously.

The PSP has built-in Wi-Fi capabilities (ad-hoc and infrastructure) which were just enhanced with a browser with the new firmware upgrade (v.20). The browser is clumsy but it works and supports tabbed browsing, Javascript, and CSS. Setting up the unit on a WEP or WPA-PSK wireless network was very easy. It has the ability the save many configurations for different locations.

Sony has a huge library of movies which are being released on the new UMD format. Many Playstation2 games are also being re-

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The PSP – A Hardware Review...

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leased for this format. My favorite game is Mercury.



Like many PSP games, you can play other opponents over Wi-Fi - but that is another article. This is really a fun device! MSRP \$299.00.

Indexing the Web by Brian K. Lewis, Ph.D., Sarasota PC Users Group

Spiders, Web Crawlers & Bots

Have you ever wondered how search engines such as Google manage to get the answers to your queries so rapidly? How could they search the web that fast, I mean usually less than one second to find the words you ask for? Well – they don't. Actually the searching goes on constantly, 24/7. And, the mechanism they use is just a modification of what you use for browsing the web.

Although you may have heard about spiders, web crawlers and web bots, they don't actually traverse the web any more than does your web browser (Internet Explorer or Firefox or whatever browser you use). Instead they download web pages that are then scanned and the significant words added to an index.

To simplify the terminology, I will refer to all the web searching programs as "spiders". (It takes less space and is easier to type.) These spiders are programs designed to find web addresses (URL's) and to download the pages. Some also do the indexing of the words on the page. However, Google uses a separate indexing program and stores the downloaded pages for future reference. Now if a single spider were being used to locate and download pages, the task would really be impossible. Sergey Brin and Lawrence Page, the originators of Google, published a paper while they were graduate students at Stanford that utilized three spiders. Each spider kept about 300 connections open simultaneously. With four spiders they could download about 600 pages per second. This paper referred to the prototype that became the commercial Google enterprise. Even with the prototype system they were able to download and index 24 million pages in a week. Their current methodology is proprietary and so is not public, but it is probably a significant improvement over their prototype system.

We can use the original Google system as a model of what could be used by search engines to prepare the index and database of web pages that you access when you send a query. The first step is to send a list of URLs to the spider to download. This is done by a server that maintains a list of URLs. The spider will download pages and also follow any hyperlinks to other pages. Addresses of pages that were linked to the original search list are also sent back to the server to be checked to see if they were already on the list. If not, they are added to the URL lists. Not every spider uses a URL server. The spider will continue crawling the web until it reaches a dead end or a page with no further links.

As I mentioned earlier, a spider isn't just working with one page, but has hundreds of connections open to different pages. Given that there are billions of pages on the Web, even with thousands of spiders collecting information, only a small fraction of the entire web is scanned. Some web sites, such as those with news or rapidly changing information are visited hourly. Every spider has a re-visitation policy that determines how frequently a page will be revisited and checked for changes.

There is another general policy that is usually programmed into these spiders. That is called the "politeness" policy. This is used to prevent the overloading of web sites. After all, there is a finite limit to bandwidth and it would be possible to overwhelm a web site with visits from multiple spiders in a short period of time. This policy provides for an interval of time to elapse between accesses by a spider. This time interval seems to vary from 20 seconds to 3-4 minutes. This would be the case where multiple pages need to be downloaded from a single server. Revisiting indexed and stored web sites occurs at less frequent intervals.

However, even this politeness policy is sometimes inadequate. Frequent visits by spiders may result in complaints being sent back

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Indexing the Web...

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to the owner of the spider. So it is also possible to enter code on a web page which asks the spider to not access or download a page or pages. This can be done by the addition of meta tags in the page header or by a robots.txt file placed in the root directory for the web site. This is especially appropriate for game pages. These pages use a dynamic format that changes when pages are viewed or links are followed. When a spider downloads these pages the game program may respond as if a very high-speed player were logged on. This can create problems for the program and may result in crashing the game server. So we now have the robot exclusion protocol being used by owners of web pages that do not want their pages included in the search engine indexing.

In the original Google system the web pages were sent to another program referred to as the indexer. This program sorts through every word on the page and stores them in a database. The exceptions are the simple words such as a, an, the. However, simply entering the words into a database is not sufficient. They have to be identified to the particular page from which they came, the location on that page and a relative ranking in importance. The frequency with which they appear on the page as well as the position on the page may be used in determining the weight or relative rank. Words in the title or near the top of the page may be ranked as more important. So the storage of the words include the URL, and a calculated weight in an encoded format.

The word database is then indexed to speed the retrieval of the information. This is usually done by the building of a Hash Table. Hashing evens out the alphabetical sections so that it takes no longer to find a "z" than it does a more popular letter like "m". It also separates the index from the actual entry for the word. This improves the efficiency of the storage of this information. The indexing and the Hash Table also speed the overall retrieval of the information. The complete web page is also stored in a separate location. Once the indexing process is completed, the information is available for your query.

Given the size of the web and the continuing changes to web pages, the spider's search is never ending. It may also be one where we will never have every page indexed. One other aspect of the size of the web and the time required for the crawling process is that broken links will always occur. If a page is not re-visited frequently, it may still be in the index and the database long after it has been removed from its server. Another situation may be where the URL has changed and the new location has not yet been crawled. So, the process is not perfect by any means.

The other aspect of searching the web is the design of the query you want to submit to a search engine. As I'm sure you know, you can simply list a few keywords in the search engine and hope you will get a useful result. Many times you will also get results that have no relationship to the information you are seeking. In some of these cases, you need to try the advanced search or learn to use Boolean operators. Those most frequently used are:

- AND - all the terms joined by "AND" must appear in the pages or documents.
- OR - at least one of the terms joined by "OR" must appear in the pages or documents.
- NOT - the term or terms following "NOT" must appear.
- Quotation marks - Words between quotation marks must appear as a phrase.
- Followed By - one of the terms must be followed by the other.
- Near - one of the terms must be within a specified number of words of the other.

Generally, search engines can use these Boolean operators to provide results more closely aligned to the topic you are trying to locate.

Like everything else related to computers, web indexing and searching are not static technologies. The search engine companies are researching "natural language" queries such as those handled by "Ask Jeeves". Currently, these queries can accommodate only relatively simple phrases. However, there is heavy competition to develop an engine that can work with much more complex queries. Another area that is being pursued is "concept-based" searching. This would use a form of statistical analysis to determine if the page fit your query. And, as you may have read, Google has plans to put the content of the world's libraries on the web.

Just imagine what it would be like if we didn't have these search engines to help us find information on the web. So good searching and I hope you find what you are looking for.

Dr. Lewis is a former university & medical school professor. He has been working with personal computers for more than thirty years. He can be reached via e-mail: bwsail at yahoo.com.

There is no restriction against any non-profit group using this article as long as it is kept in context with proper credit given the author. The Editorial Committee of the Association of Personal Computer User Groups (APCUG), an international organization of which this group is a member, brings this article to you.

This October issue of Diablo Blue was delivered late this month.

The cause was a conflict between programs installed on the Editor's computer.

Thanks to Microsoft Technical Support, the cause of these problems was finally discovered, the fixes were applied, and you are looking at the result.

We apologize for the inconvenience this caused DVPC members.

Microsoft is Helping by Bob Elgines, Colorado Computer Club of Lake Havasu

You may have noticed in your Windows XP/2000 updates that you have updated the MS Malicious Software Tool (MSRT). Don't bother to look for it on your computer, you won't find it. You will only see a window if you have or had a problem.

What is malicious software? Malicious software (also called "malware") is software that was developed with the intention to cause harm. Malware can include viruses, worms, spyware, and other destructive programs that can hide on your computer and can slow its performance to a crawl. Even more alarming, malware can be used to monitor your browsing habits, steal passwords, and even allow an attacker to gain control of your system. Malicious software either installs on your computer without your knowledge or can be installed with a program you intended to download.

The MSRT checks for and helps to remove specific, prevalent malicious software infections. If detection and removal has accrued, a display window indicates which malicious software was picked up.

Each month, after the second Tuesday, Microsoft will provide an updated version of this tool that removes malicious software that is found to be prevalent for that month.

Getting the Malicious Software Removal Tool — There are two ways you can get the Malicious Software Removal Tool. Microsoft recommends that home users either turn on the Automatic Updates feature in Windows XP, or run the tool online.

1. If your computer is running Windows XP, you can get the latest version of the tool online from Microsoft Update. To have the tool automatically delivered and installed each month on your computer without having to take further action, simply turn on Automatic Updates.

2. If your computer is running either Windows XP, or Windows 2000, you can run the tool directly from an easy-to-use online wizard available at:

www.microsoft.com/malwareremove

How do I verify whether the removal tool has run on a client computer? There are two ways to check:

1. You can examine the value data for following registry entry to verify the execution of the tool. You can implement such a check as part of a startup script or a logon script. This will prevent the tool from running multiple times. Subkey: HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\RemovalTools\MRT

Every time the tool is run, independent of the results of the execution, the tool will record a GUID to the registry to indicate that it has been executed. The following table lists the GUID that corresponds to each release.

2. Using Windows Explorer look for the log entitled "mrt.log" located under your "Document" files or in the following folder: C:\Windows\Debug\mrt.log

Another similar tool is written by McAfee called Stinger. It is updated approximately every three months and can be downloaded at: <http://vil.nai.com/vil/stinger/>

There is no restriction against any non-profit group using this article as long as it is kept in context with proper credit given the author. The Editorial Committee of the Association of Personal Computer User Groups (APCUG), an international organization of which this group is a member, brings this article to you.

The Mystery of File Extensions Explained by Dave Gerber, Sarasota PC User Group

GIF, JPG, TXT, DOC, HTML, WAV, BMP, ETC.

You'll see them over and over again as you encounter manuals, web sites, and anything related to your computer. Tons of file extensions. Whole pickup truck loads of 'em running back and forth on the info highway. File extensions are easy enough to understand, and with just a bit of history, you'll know everything you need to know about files, and not a bit more.

Back in the DOS days (DOS stands for Disk Operating System), before the invention of Windows, every file had to be named with a maximum of 8 characters, and could include a three letter "file extension."

For example, lets say you want to save that recipe for Quesos Rancheros. You were forced to use a maximum of 8 characters. So you call it queranch. Hmm, in Spanish, that's like, "What ranch?" Or that's a loose translation, at least.

You were limited. Severely. So along comes the long file name. You can use a whole mess of characters now, calling your file "My greatest recipe using eggs and tortillas since the invention of the wheel." The sentence between the quote marks is the name of the file, or "filename." The stated character limit is 255, but in reality it comes in just a tad under, like 253 or something. The techies can quibble over that. Regardless, it's l-o-n-g. And more than adequate to describe the content of your creation!

Now, notice that many files have extensions. They all do, really. In fact, your computer doesn't know what to do with a file if it doesn't have an extension. The extension is the three letter part following the main name. (You didn't see an extension on my quesos rancheros example, because I left it off.)

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The Mystery of File Extensions Explained...

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Here's an example: My Word processing report.doc

The ".doc" part of the file's name tells Windows to use the program that's associated with .doc files to open it. So, let's say you've got Microsoft Word installed. Whenever the Windows operating system realizes you've clicked a file with the extension ".doc" it fires up Word, and Word opens the file. Presto.

There are lots of file extensions. Here's a table for you that includes a few common file types you may encounter during your web travels.

<i>Common file types</i>	
<i>Extension</i>	<i>Type of file</i>
txt	Text File, such as Notepad produces
doc	Document File, for example, MS Word
gif	Graphics Interchange Format (graphics)
jpg or jpeg	Joint Photographic Experts Group (graphics)
pdf	Portable Document File
htm or html	Hypertext Markup (special coded text files)
zip	Compressed file requiring special software to decompress the file
tar	Same as zip. Just another compression style
pdf	Portable Document File (universal text file)
wav	Sound files
bmp	Bitmap files (graphics)

If you try to open a file extension that's unregistered (unregistered means Windows doesn't know what to do with it 'cause there's no association in the Windows Registry), Windows throws the Open With dialog box at you. This dialog box lets you decide what program to open the file with. For example, I tried to open the file named 'java.usj' and I got this screen as a result. Since nothing on my computer is set up to edit or open a '.usj' file, I have to locate and use a program that "understands" that type of file extension. Now that's another trick altogether!

Commonly, people will send Power Point presentation files or Microsoft Publisher files as attachments to people who don't have Microsoft Office installed on their computer. So those files cannot be viewed unless the appropriate software is installed.

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Netiquette Equals Friendly Online Neighborhoods by Gabe Goldberg, APCUG

Etiquette — proper behavior in various situations — has concerned humans through the ages. Google www.google.com turns up references to early telephone manners, proper Medieval-era knightly behavior, and how shells and sharp stones became today's knives and forks (and, of course, which hand to hold them in).

Though the Internet became generally accessible about ten years ago, academics and researchers had used it for decades before that. Just as civilization accommodated sudden widespread automobile and telephone usage, developing common practices (stop for red lights, answer telephones with "Hello"), new online technologies created the need for corresponding innovations in manners.

Called Netiquette ("Net + etiquette), the new discipline really just requires using old manners in a new setting. But since going online is like traveling to another country, a guidebook is useful.

The first and simplest chapter is simply "Follow the golden rule" http://en.wikipedia.org/wiki/Ethic_of_Reciprocity: Treat people online with the same courtesy you expect. Without normal conversational cues such as body language, facial expression, and tone of voice, it's easy to misunderstand someone's meaning. You may remember Emily Litella on classic Saturday Night Live television, mishearing the need to reduce TV violence as "eliminating violins". Even stranger miscommunication occurs online, so give others the benefit of the doubt.

Out-of-control ranting is sometimes called "flaming". Before responding angrily, consider how you'd react to receiving the note you're about to send. Remember that once sent, e-mail and other online communications take on a life of their own, being forever

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Netiquette Equals Friendly Online Neighborhoods...

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retrievable with your name attached. And asking "Did you mean..." can avoid having to give Emily Litella's trademark "Never mind" if your interpretation was off target. Replying calmly often gets a conversation back on track without anyone suffering a "flame war", an unproductive exchange of angry notes.

E-mail is likely the most commonly addressed Netiquette area. Searching Google for email + netiquette provides an encyclopedia of advice, some general, some for personal use, and much for business settings. Common tips are DON'T USE ALL CAPITAL LETTERS (it's hard to read and is considered "shouting"); be brief; use meaningful subject lines; quote just enough from what you're answering to provide useful context; don't forward to everyone you know jokes, rumors, hoaxes, chain letters, charity appeals, and such, even if an arriving note tells you to do so; don't send "Me too" notes to discussion lists; don't send attachments without getting the recipient's permission; send plain text e-mail unless all your addressees prefer HTML-format; etc. Accept and cheerfully answer questions asked by people newly online -- remember that we all started with basics. Interesting e-mail tips are available at places like Writers Write www.writerswrite.com/journal/dec99/pirillo1.htm, Emailreplies.com www.emailreplies.com/, and Yale University Library www.library.yale.edu/training/netiquette/.

Not all tips are "Don't"!

If you receive multiple replies to a question you ask online, it's advisable — this will make people love you — to summarize answers for everyone else who saw the question. Be careful with humor: what's obvious and sidesplitting to you may baffle or annoy someone else. When appropriate, and sparingly, use "smileys" — symbols like ;-) — to show that you're not serious. And if you receive what seems to be an unlikely rumor, do the sender a favor by checking it out at a site like snopes.com [www.snopes.com] and reporting what you find.

The Netiquette Home Page www.albion.com/netiquette/ is an entertaining and informative reference. It notes that Netiquette covers both common courtesy online and informal cyberspace "rules of the road". The site lists and explains rules with friendly illustrations. It's interesting that not only do the rules all agree with that Golden Rule mentioned earlier, they're often different ways of giving the same advice. For example, using the same standards of behavior online that you follow in real life is an easy way to make yourself look good online.

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October is National Cyber Security Awareness Month by James Katz, Capital PCUG

The month of October is designated as National Cyber Security Awareness Month

Once again this year by the National Cyber Security Alliance (NCSA), a not-for-profit public-private partnership dedicated to promoting awareness and education about computer security. Working with sponsors in the government, such as the Department of Homeland Security (DHS) and the Federal Trade Commission (FTC), as well as corporate and computer industry partners in the private sector, the NCSA began the initiative of celebrating October as Cyber Security Awareness Month last year to increase the computing public's attention to computer security issues, enhance their recognition of computer threats and vulnerabilities, and motivate them to better prepare for, prevent, and respond to computer security risks.

The goal of the NCSA initiative is to reach millions of users in homes, small businesses, schools, colleges, and universities, as well as those in corporations and government. According to NCSA President, Ken Watson, the mission of the NCSA is "to reach out to all Americans -- not just the computer experts," through a campaign of media announcements and national and regional events, such as presentations, workshops, conferences, and fairs, dealing with topics like identity theft, computer scams, safe behavior practices on the Internet, and child safety online. (For information about events in your area, check with your local college or university, look at the listings at www.staysafeonline.info/events/index.html, or go to the Multi-State Information Sharing Analysis Center's Web site at www.cscic.state.ny.us/msisac/ncsa/oct05/index.htm to find out what events your state government may have planned.)

Threats to Security

More and more people are using computers to connect to the Internet to communicate with others, conduct their personal banking, and shop and make purchases online. As computer users spend more time online, and make more use of broadband connections or wireless networks to do so, they become increasingly at risk for harmful attacks if they do not take steps to protect their computers.

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October is National Cyber Security Awareness Month...

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And the risk is there and growing. According to the DHS, computers connected to the Internet are scanned to assess their setups and weaknesses an average 17 times a day. Estimates attributed to the FBI suggest that one in four computers will be hacked this year. Phishing scam attempts have been reported by Symantec, the security software vendor, to now exceed over 33 million each week. At the same time, 49 per cent of people surveyed were not able to recognize such e-mail as a Phishing scam, as indicated by research by the University of Pennsylvania's Annenberg Public Policy Center. A study of home users conducted for NCSA last year by America Online (AOL) found that 63 percent of respondents admitted to ever having a virus on their computers. And, according to the NCSA's Ken Watson, "Industry projections note that by year end, Internet users will have been confronted by an estimated 100,000 forms of malicious code. About 91 percent of PCs today are infected with spyware programs that send information from your PC to an unauthorized third party." He further pointed out that "more than 185 million Americans own computers connected to the Internet -- cyber security should become second nature, just like brushing our teeth."

Despite growing threats to the security of information and technology systems, attitudes and practices of computer users have changed little, if at all, even as reliance on computing and information technology is increasing at all levels of use. Even though surveys have found that computer users' concerns about cyber security risks have increased over past years, users have failed to make prevention or response measures a priority.

Perhaps it is due to users perceiving the pervasiveness of cyber threats as far less common than the reality. In a survey of average computer users, the NCSA found that many people fail to grasp the level of risk: over 30 percent reported believing they were more likely to be struck by lightning, win the lottery, or be audited by the IRS than become the victim of a cyber attack or privacy breach. Yet the actual odds of suffering a cyber attack are about 70 percent, while the odds of each of the other events are well under one percent.

The Need for Cyber Security

The risk of an attack is great, and the consequences of failing to prevent the potential damage can be devastating. You may not even realize the full extent of the consequences if your system is hacked or infected with malicious software ("malware"), such as a computer virus, worm, or Trojan horse. Some of the consequences can include:

- **Data loss:** The data you collected and the work you spent so much time producing can be destroyed. If you do get hacked or infected, you need to be able to identify what was damaged, and then restore the data from your backup systems. Computer downtime can cost money as well as time while files or hardware are fixed, and time and effort must be re-directed to restore or redo the original work.
- **Corruption of data:** If your data is not completely lost, it may be corrupted. If the data has been changed, but not destroyed or removed, this may be hard to discover. If you do, you will have to figure out which data is good and which is bad, and this can be difficult and painstaking. If you don't discover there is corrupted data right away, you may be working when you experience a "cascade failure," a problem that occurs when failure in one system takes down adjoining systems in a progressive series. Problems may then spread throughout your systems before the errors are discovered. It can take substantial time and effort to track down the initial problem and restore your computer's systems from backups.
- **Theft of data:** Some kinds of data are more attractive targets than others. Of course, anything associated with money is a prime target, such as credit card numbers and banking account information. Personal data, such as social security numbers, are often sought for identity theft to commit fraud.
- **Misuse of data:** Your work may be stolen by others at your school or business and represented as their own, or your personal photos or information could be taken and made public. If your records, trade secrets, financial data, or other sensitive information wound up in the hands of your company rival, business competitors, or even a stranger seeking to cause embarrassment, could you be at risk for losing the grant, account, promotion, job, or reputation you'd been working hard to achieve?
- **Noncompliance with legal responsibilities:** If your computer is hacked or infected and used to send out pornography or spam e-mail, you may be held legally liable for allowing such unlawful practices. Even if you did not know of it or intend for such e-mail to be sent, you could be judged at fault for failing to prevent or stop it from happening.
- **Becoming part of a larger problem:** Infection of your computer or network with a malware that sends out numerous e-mails can perpetuate the problem of spam and propagate more infections. If your computer is taken over by a hacker and used to take part in an attack on a federal or corporate mainframe computer, then your computer could possibly become an instrument of cyber terrorism intended to disrupt financial or governmental operations.

As this last factor points out, cyber security not only is a concern for each of us individually, it is a concern for us collectively. As Ron Teixeira, NCSA's Executive Director remarked, "The scope and impact of existing and emerging online threats requires an ongoing partnership between government, businesses, schools, and consumers. Working together, we can make the Internet safer for everyone." Making your personal computer secure can play a crucial part in protecting the nation's Internet infrastructure.

Cyber Security Practices

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To determine whether you've made the security of your computer system or network a priority, consider the following questions:

- Do you select strong passwords and keep them private?
- Do you use a password protected screen saver?
- Do you keep your computer locked up when not in use?
- Do you make sure important and sensitive personal information is not stored on your system?
- Do you use a software or hardware firewall, or both, and have you configured it properly?
- Do you use anti-virus and anti-spyware software, and do you keep them up to date?
- Do you exercise caution when opening e-mail attachments?
- Do you know where to report spam or fraudulent e-mail?
- Are you aware of the risks in file sharing?
- Do you download and install operating system and application software security patches as they become available?
- Do you back up your important files?

According to a number of cyber security experts, the first step in keeping your computer secure is to limit access to it by unauthorized users. If you use your computer in a setting where others are around, such as in a library or office, this means physically securing the machine. Locking up the computer when not in use, and using password protected access and screen savers keeps strangers from sitting down at your machine and exploring your files. Passwords should be strong (i.e., difficult to guess or discover), and never shared with others. As Cliff Stoll, an authority on security, suggested, "treat your password like your toothbrush — don't let anyone use it and get a new one every six months." You can use random password generators, such as those found at sites like www.securityawareness.com/files/rpg.exe or www.toad.net/cgi-bin/cgiwrap/spwgroup/lc.pl. If you suspect your password has been learned, change it immediately.

To limit access to your system by way of the Internet be sure to use firewall software or hardware, or both. And be sure it is configured correctly to allow in and out only those communications you want. According to the NCSA survey conducted by AOL, mentioned earlier, only 37 percent of the respondents currently used some sort of firewall on their computer; 87 per cent believed they had set up their firewall correctly, yet 72 percent were found to have an improperly configured firewall on their computer.

Despite using a firewall, sometimes viruses, spyware, and other malware can still get into your computer system, often through e-mail or file sharing.

Security experts say you should make sure you have anti-virus and anti-spyware software installed, and scans are being run (at least on a weekly basis). To avoid having to rebuild your entire system after malware has taken root, it must be detected, quarantined, and deleted before damage is done. And be sure to keep the protective software current by updating it regularly, if not automatically; protective software is useless if it doesn't know what the latest threat is to protect against. A number of different protective software applications are available, either free or at low cost; the National Capital Technology and Computer User's Group has a comprehensive table, with links to sources, comparing various anti-virus and anti-spyware programs on their Web site at www.nctcug.org/protection.html.

To minimize the risk of receiving malware through e-mail, it is best to not respond to any messages, click on any web page links, or open any attachments you have any questions about. Experts recommend that you use encrypted e-mail, and not send confidential or sensitive information via e-mail. If you get questionable or apparently fraudulent e-mail, you should report it to the network administrator, your Internet Services Provider, and the appropriate authorities.

More Precautions

A number of other precautions are recommended to protect your computer from harm and to preserve your data and privacy. If you use a wireless network, be sure to secure it with the appropriate protocols. If you use a broadband connection, turn off your computer or disconnect it when not in use so that unwanted communications cannot be sent or received when its activity is not monitored.

Be careful about what is getting into your computer by other means, as well. Do not use software that has not been obtained from a known source. Do not share files from your computer, and use caution in loading files from others through removable media, such as floppy disks, CDs, zip drives, tape cartridges, and other types of storage. And be sure to keep secure any of these removable media on which you've stored your data; keep removable data storage media locked up, destroy the material when you're finished with it, and make sure your computer's hard drive is wiped clean when time to dispose of it.

One important cyber security practice that is often overlooked is that of backing up your data and your systems. Consider how secure you'd feel if you couldn't rely on the information you're working with, or depend on your computer to operate properly. If

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any of your cyber security measures are breached, and your computer files are deleted, corrupted, or intentionally or accidentally falsified, or if your hard drive fails, at least you can re-establish a reliable system if you have your information safely backed up. Make sure that you back up your data on an on-going basis, that what is backed up can be restored, and that you have copies of your operating system and software applications, with all their security patch updates.

Vigilance Rewarded

NCSA's initiative to raise awareness about cyber security nationwide and empower people to improve their security knowledge and preparedness includes a number of events during the month of October, and a variety of resources all year long. You can find out more, and pick up cyber security tips, at the NCSA Web site, www.staysafeonline.info. More cyber security information is available at other sites, such as www.cybercitizenship.org, www.ftc.gov/bcp/conlineedcams/infosecurity, and www.cert.org. An assortment of items about cyber security, as well as links to other articles, is also available at www.microsoft.com/security/default.msp.

The fact is that no computer connected to a network can be assured of being 100 percent secure 100 per cent of the time. No one security measure is sufficient to protect your computer from all threats at all times. Each measure requires continual care to make sure it is operating, and all necessary updates and security patches are obtained and installed on a regular and timely basis.

Cyber security may seem like a substantial burden, but the effort is an investment that can be greatly rewarded. If you are not interrupted by a security breach, you can focus on moving forward rather than spending your time trying to recover and catch up. Continually seeking the latest information about cyber security, keeping yourself educated about security issues, staying vigilant about computer vulnerabilities, and consistently exercising good protective practices online can make the difference in preventing the hardship of destroyed data, lost time, duplicated effort, and disrupted progress.

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Tech News by Sue Crane, Big Bear Computer Club

Nothing is Ever Really FREE

Linus Torvalds, creator of the Linux OS, has begun protecting his trademark for the term Linux. He's doing so to protect users from unauthorized and confusing use of the name. Torvalds first trademarked Linux several years ago but has rarely defended its use. The licensing fees for Linux are modest. LMI is charging \$200 to \$5000 for each license; most sublicensees end up paying \$200 to \$500. Most Linux companies have enthusiastically agreed to the licensing terms.

AMD Asks Intel for a duel

Major US newspapers in September showed an AMD processor standing in a boxing ring waiting for Intel to appear for a duel later this year so consumers can see who has the best dual core processor. Dual-core chips have two processor cores on a single piece of silicon, boosting performance and reducing power consumption compared to two single-core processors. AMD released its first dual-core Opteron processors earlier this year. Intel said that it will release its first dual-core server chips later this year, ahead of its original schedule. But regarding the duel, Intel was not available for comment.

PC Has Water-cooled Radiator

NEC took the wraps off its Valuestar G Type C, a new desktop PC that has a radiator embedded in the water cooler unit built into the back of the chassis. The company said the added refrigeration will let consumers overwork the included Intel Celeron processor but keep the PC running at 30 decibels, which is whisper voice. PC noise is increasingly a concern as more powerful computers require stronger and often louder cooling systems.

New IE 7.0 is for Windows Only!

Sources at Microsoft have announced that IE 7.0 will henceforth be referred to as Windows IE 7.0, highlighting the fact that the browser is integrated with Windows and isn't a standalone product. According to a source at Microsoft, the change signifies that IE will no longer be available for other platforms. Users should simply consider IE 7.0 to be part of Windows.

No More Textbooks?

Students at Empire High School in Vail, AZ started class this year with no textbooks. Instead, the school issued laptop computers to each of its 340 students, becoming one of the first U.S. public schools to turn away from printed textbooks. Empire High, which opened for the first time this year, was designed specifically to have a textbook-free environment.

TMPs Make E-Commerce Safer

Trusted Platform Modules, if you've never heard of them, are chips that store cryptographic information needed to unlock hard

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Tech News...

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drives, authenticate network log-ons and perform similar tasks. What is exciting about TPMs is their role in electronic transactions because they make sure the money and the product get to their proper destinations, via "anonymous certificates." Hacking such a certificate would not give criminals access to personal information such as credit card numbers, since the transaction is done on your side of the network, not on the server-side.

eBay Rethinks Recycling

Faster, more advanced computers, cell phones and electronics offer endless possibilities for enrichment, learning and entertainment. But as consumers and businesses keep pace with the introduction of exciting new products, we are faced with a mounting challenge: what to do with the products we're upgrading from. The Rethink Initiative brings together industry, government and environmental organizations to offer a fresh perspective and new answers to the challenge of e-waste. On their website you can find information, tools and solutions that make it easy - and even profitable - to find new users for idle computers and electronics, and responsibly recycle unwanted products. <http://rethink.ebay.com/>

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The Insiders' Guide to Craigslist by Richard O. Johnson, TUGNET

If you're not using Craigslist, it's time you joined the crowd. This phenomenally successful community bulletin board serves over ten million online users in a single month, and, except for modest fees in three cities for help-wanted ads, all its services are without charge.

If you're one of the uninitiated few, you use Craigslist by posting your needs or interests in any of various categories, like jobs, for sale, services, housing, personal, etc., or by reading and acting on posts submitted by others. The Craigslist for this area is at <http://losangeles.craigslist.org>.

Beyond its imperfect documentation, Craigslist support is in practical terms non-existent (understandably so, in view of its enormous popularity and its staff of just eighteen). That's one of the reasons for writing this Guide.

Posting

Posting is straightforward. You just find the prominent "post to classifieds" link (it's at the upper-left corner of the main page), drill down to the appropriate category, and fill out the simple form.

The first page to which posters are directed will invite them to create an account. You don't really need an account, but it'll take only a minute or so to set up, and can make things a lot easier. So do get that account.

Should the need for which you posted be met right away, that's the end of it. In most cases, however, you'll want to re-post. Without re-posting, your post will stay up (in Los Angeles) for between 10 and 30 days, depending on the category, but you don't want to wait nearly that long. Posts appear in chronological order (last submitted on top), and readers will typically stop perusing after about two days' worth of posts.

(You can always edit your post, but editing won't move it up as will re-posting.)

Another way to improve your response rate is to post in more than one category. But don't do that before reading about Craigslist's...

Restrictions

Craigslist is replete with rules and regulations. Trouble is, they're not particularly easy to find, they're not all in one place, and, worst of all, some of the most crucial ones are not published at all (until you're found to be in violation, and by then you may be "blocked")!

If you want to see what rules are written down, find the Craigslist Terms of Use, Frequently Asked Questions, and General Posting Guidelines. But bear in mind that other unstated rules may bear equally on your submissions. Here are the most important Craigslist rules:

You may not post "essentially the same item" before deleting the old item. This applies even when posting in a different city or category. So if your post lends itself to more than one category, you need to alternate the categories. (You may possibly be able to get around this restriction by using different email addresses.)

Craigslist confuses this issue by appearing at one point to sanction posting "in multiple categories." This suggests that in some circumstances such multiple posts may be accepted. So if you want to try it, go ahead. The worst that can happen is that your second post will be refused.

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You may not post the same item more than once in 48 hours. This rule is not strictly enforced. That is, if you delete and re-post your Thursday noon post at 8 am Saturday, chances are there will be no problem. But it's unwise (and really unnecessary) to post as often as daily.

Your post may not contain a link "to a commercial website or auction." This is an example of a rule I haven't been able to find anywhere, until I was blocked for violating it! Note that Craigslist does not define what makes a website "commercial." My listing on the web of free summer shows, that contained a small link to my organization, was deemed to be "commercial." You'll be safe if you don't link to any website, but instead invite the reader to email you for more information (very easily done--see below). Linking to a webpage without any links on it is also safe.

Posting Tips

Craigslist makes it easy as pie for its users to respond to your posts. If you want phone calls, simply include your phone number in the writeup. If you want emails, Craigslist will "anonymize" your email address, never to be seen by responders. These folks will click on a link to respond, and that response will go to Craigslist, and then to you.

Each anonymized email response will refer to the unique number for that particular post. So if you're running several similar posts, you can easily track your responses to see which ones are most effective.

The body of your post can be either in plain text or HTML. If you choose plain text, Craigslist will automatically convert any Web addresses starting with `http://` to links (but exercise care before including a Web address--see above). You can't otherwise mix plain text and HTML (don't add a few HTML tags to a plain-text submission).

You can add photos or other graphics to your post, in one of two ways.

If your post is under the heading of "for sale/wanted," you'll be invited to add a picture from your hard disk. Otherwise (providing you're submitting in HTML), you can add graphics with the `` tag. See Craigslist's FAQ for more details.

How Best To Post

The following assumes you're using Windows, and have postings suitable for several categories. (You can adapt these guidelines to other circumstances.) Performing these steps will reduce the re-posting process to about a minute a day, while giving you maximum exposure.

1. Compose your posts. If possible, create an entirely different post for each category. If sufficiently different, posts promoting the same transaction may display simultaneously without a problem.
2. Create your account, by using the link on the "post to classifieds" page.
3. Create three bookmarks for your browser. One will be your account page, another will be the Craigslist post page, and the third will be the browse page (the Craigslist main page for your locality), for reviewing others' posts.
4. Submit your posts.
5. Wait two or three days.
6. Open your account page. Decide which post you'll want to re-run. Click on that post.
7. You'll be given two choices, Edit and Delete. If you want to re-run the post in exactly the same category, choose Delete. Then go back to your account page, click on the deleted post, and you'll be able easily to re-run it.
8. If you want to re-run the post in a different category, click on the Edit button, to bring up your "raw" post. Then using Ctrl-A and Ctrl-C, copy that raw post to the Windows clipboard. Go back to your account page and delete the post. Finally, open the post page that you've bookmarked [step 3 above], and post in the appropriate new category.
9. Wait a day, and repeat steps 6 through 9.

If you're promoting the same transaction in several different categories, it may be to your advantage to stagger the posts. To this end you'll want to keep one or more initial posts for a longer interval than the others.

Browsing Tips

Here are two tips for using Craigslist to take advantage of others' posts.

A little known source of great bargains consists of offers on Craigslist to sell unwanted gift cards. This situation stems from the fact that many holders of gift cards either paid nothing for them, or paid well below the face value. For example, DiscoverCard distributes merchant gift cards at half price through its "Cashback" program.

To secure such a bargain, visit your bookmarked "Browse" page, and execute the "for sale" link. Then in the keyword search box, enter "gift card" (with the quotation marks), and pick out the offers that appeal to you. Don't hesitate to bargain with the seller for a lower price. (Aim at no more than 50% of face value.)

Once you've made a deal, be sure you meet the seller at the store, to verify the amount of credit remaining on the card.

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The Insiders' Guide to Craigslist...

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Craigslist has joined forces with Google Maps at www.housingmaps.com, to help you better locate available housing throughout the country. You'll be able to specify your price range, and you'll see at a glance whether there's a picture or pictures of the property. Once you make your preliminary selection, you'll be taken to the original Craigslist post.

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The New, the Best, and the Worst Collected by Pim Borman, SW Indiana PC Users Group, Inc.

Hard Drive Too Small?

If you think a 500 GB is still not big enough, help is on the way, in what seems to be an obvious way. If you think of a room filled with people all stretched out on the floor, you can cram in a lot more folks if you have everybody stand up, right? As it turns out, the magnetic elements on current hard drives are lying down on the job, but now several manufacturers, including Hitachi and Seagate, have figured out a way to make the lazy critters stand up on the disk and squeeze them closer together. It must be easier said than done, considering how long it took to implement this technology, but now Seagate is announcing a new 2.5" minidisk, named Momentus, that will hold 160 GB, 20% more than the highest-capacity 2.5" drives currently available. It sounds like magic, and the name, Momentus, suggests that Harry Potter had something to do with it. The new disks will be shipped early next year. Seagate anticipates that regular hard drive capacity will jump to 2500 GB (2.5 TB) in 3-5 years. (PC Magazine, 8/9/05)

How Much Is That Program in the Windows?

In the good old days, when you purchased the latest version of MS-DOS you were free to install it on as many computers as you owned, and many a copy was shared with friends and neighbors as well. That has changed, as we all know, and many expensive programs can now only be installed on a single computer, whether we like it or not.

Large commercial programs used in the business world have usually been licensed per seat, based on the number of computers the program was installed on. Some small engineering companies that obtained a single copy of expensive Autodesk and used it on multiple computers were fined and lost their use of the program when they got caught.

As CPUs have been getting faster, computer productivity has gone up, to the benefit of the users. Although most providers have increased their license fees to some extent as the programs improved, fees have mostly continued to be charged per seat or per CPU.

Now the trend to faster computers is to increase the number of CPUs on a single chip instead of making single ones faster, and some software companies want to charge their fees on a per CPU basis. They are mainly concerned about the many back-room computers used as servers dishing out data over computer networks to employees. Oracle and IBM have been in the forefront of the pricing battles, but seem to be compromising on an individual basis. Microsoft has unexpectedly taken the side of the users and licenses its software at the same cost for single-core or multiple-core processors. That may have something to do with the threat of Linux and its Open Source programming model that is looking more and more attractive to many businesses as the cost of Windows-based software keeps increasing. (The Economist, 7/16/05, thanks to Louis Ritz)

Too much security?

Recently I had occasion to help someone straighten out the connections between their computers and the router. The router had been set up by an expert, using all its available security features. Unfortunately, he left behind a jumble of notes about procedures and passwords that seemed to be incomplete or wrong. In the end all we could do was reset the router and start over again. That made me think about how much security we really need.

Most of us live in homes with maybe two locks on the front and back doors, possibly with an added bolt for extra security at night. That will keep most amateur burglars out, but a determined crook will find a way to get in anyhow. So be it, unless you live in a big city apartment where it is smart to live behind a steel door with multiple locks set in a reinforced frame.

The same goes for routers. To keep occasional snoopers out of your network takes only a few simple changes to be made on the router's access page.

- Replace the default password needed to access the set up screen with a secure one that is easy to remember (an old street address is good, as it contains letters and numbers). Also change the default user name, if your router lets you.
- On the wireless access page change the SSID name to a secure one.
- On the same page uncheck the option to broadcast the SSID name.

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The New, the Best, and the Worst...

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Forget about all the other security options, including WEP or WPA encryption, unless someone could have good reason to spend lots of time and talent guessing your setup information and ruin you in doing so. Just because it can be done doesn't mean anyone will actually go to the trouble! Just make sure to write down the user name, password and the SSID. And if you forget anyway, it only takes a few minutes to reset the router all over again.

Windows Tips and Tricks

The June 28, 2005 edition of PC Magazine carried a large number of Tips and Tricks for Windows, mostly contributed by PCM's lead analyst Neal Rubenking whose articles and advice I have been following almost as long as I have been using computers. Try to get hold of a copy to see for yourself. Here are some that caught my eye.

If an error message indicates that a system file is missing or corrupted you may be able to recover it from the Windows disk. You DID get one when you bought your computer, did you? Else ask the manufacturer for one - you paid for it! Insert the Windows system disk and select Search from the Start menu. Use the name of the file you are looking for, but replace the last character of the extension with an underscore, e.g. Notepad.ex_ instead of Notepad.exe. Make a note of where you found it and then use some good, old-fashioned DOS command to expand that file and install it on your hard drive where it belongs. Use Start...Run and in the window that pops up type (for this example, assuming your CD ROM is labeled D :) `expand D:\Setup\Notepad.ex_C:\Windows\Notepad.exe` and that should do it. In some cases the missing file is stored in a compressed CAB file. You can find out by repeating the search with the full file name. If found, open the CAB file in Windows Explorer and simply drag the missing file to its location on your hard drive.

Another handy tip concerns access to Windows in its Safe mode, such as might be required to remove a virus infection. The manual tells you to hit F8 or DEL (depending on the make of your computer) during start up, right after the initial boot sequence completes, but before Windows starts loading. In practice, there is only a fraction of a second during which you must do this, and it may take many repeats before you finally get it right. With a USB keyboard it is impossible to do at all, since the keyboard won't be active yet at the required moment. If you miss and the system boots up in the full-fledged Windows mode, press Start...Run and type `msconfig` followed by the Enter key. Choose the BOOT.INI tab and check the /SAFEBOOT box. Now XP will reboot in Safe mode until you repeat the procedure and uncheck the box.

Recovered Printer Cartridge

The other night I set out to print a first birthday picture of our black-and-white Cocker Spaniel, Bonnie. As the picture emerged from the printer, an older HP-812C, the top half looked OK but the bottom half was faded red. Clearly, one or two of the three colors in the color cartridge were depleted. Just because of such happenings, I always keep an extra cartridge on hand, in the refrigerator to keep it fresh. That may have been a bad idea.

I installed the spare cartridge, aligned it, and printed out the picture. The black snoot of the dog came out looking distinctly bluish. Back in the image editor I darkened the black parts of the image and printed it out again. Same result, distinctly bluish. Continuing the next evening, a test page indicated that the yellow color of the cyan-magenta-yellow cartridge was not printing. I used the printer's utilities to clean the cartridge and to prime the inks, without luck. I took the cartridge out and carefully cleaned the print head with 90% pure rubbing alcohol, still without success.

I was ready to give up on the cartridge and buy a new one when one more possibility occurred to me. I double-bagged the cartridge in two ZipLoc bags and immersed it for 20 minutes in a pan of hot tap water. That did the trick, Bonnie printed out just fine. From now on no more storing of color cartridges in the refrigerator!

AdSubtract, Good Bye!

For years I have used AdSubtract to block nuisance ads while browsing. These days ads are no longer just nuisances, as some are harmful and require stronger counter-measures. I still have AdSubtract on my older system, but its update button is no longer active. A Google search indicates that Intermute, AdSubtract's parent, has been acquired by Trend Micro. AdSubtract has been combined with TrendMicro's SpySubtract Pro to form Trend Micro Anti-Spyware 3.0, which is only compatible with Windows XT or 2000.

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Legal Bytes: Trolling for WiFi – Is It Legal? *by John Brewer, Computer Club of Oklahoma City*

Local area networking has experienced a profound change in recent years. Wired networks are still the norm but wireless networking is popular at homes and businesses. There are several issues worthy of exploration regarding this topic and this column will explore these issues in some detail in this and future columns. One issue is the legality of accessing an "open" wireless network and the other issue is the necessity to protect a wireless network.

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Legal Bytes: Trolling for WiFi – Is It Legal...

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Wikipedia states that "wardriving" involves the use of an automobile and a WiFi-equipped computer, such as a laptop or a PDA, to detect WiFi wireless networks. It is also known as "WiLDing" (Wireless Lan Driving), originating in the U.S. with the Bay Area Wireless Users Group (BAWUG). It is similar to using a scanner for radio. Many wardrivers use GPS devices to measure the location of the network, find and log it on a website. For better range, antennas are built or bought, and vary from omnidirectional to highly directional. Software for wardriving is freely available on the Internet, notably, NetStumbler for Windows, KisMac for Macintosh, and Kismet for Linux.

Wardrivers make identification and access of wireless networks a sport, but is the sport legal? Is there a clear-cut answer or does it depend on the facts?

A recent Florida case provides some guidance. A Florida man, sitting in his SUV and using a laptop, was accessing wireless networks in a residential neighborhood. The St. Petersburg Times reported the matter and made the observation that "a drive through downtown St. Petersburg shows how porous networks can be. In less than five minutes, a Times reporter with a laptop found 14 wireless access points, six of which were wide open. I'll guarantee there are tons of people out there who have their wireless network being exploited but have no idea. And as we see more people utilizing wireless, we'll see more people being victimized." The Florida man was indicted and convicted.

"Wireless fidelity, or 'WiFi,' has enjoyed prolific growth since catching on in 2000. More than 10-million U.S. homes are equipped with routers that transmit high-speed Internet to computers using radio signals. The signals can extend 200 feet or more, giving people the ability to use the Web in the back yard of his Crescent Heights home, but also reaching the house next door, or the street."

The expansion of WiFi hot spots is part of this phenomenon. With a wireless-capable laptop, it is possible to access the Internet at places called "hot spots," and they are everywhere. Some charge for access but many provide free access. There is an inherent risk in this technology. The router that provides the wireless access point has an identifiable internet protocol (IP) address. Anyone accessing the Internet through that router will appear to be authorized to use that IP address. Someone with a nefarious intent can create a possible legal nightmare for the person responsible for that IP address. The ability to look through the IP address and identify the computer behind the DHCP server is more difficult.

A recent case in Michigan involved the unauthorized access of an unsecured WiFi network at a Lowe's home improvement store to steal credit card numbers. A 20-year-old and a friend stumbled across the network while cruising around in a car in search of wireless Internet connections — wardriving. He was convicted.

An emerging threat is the "evil twin" attack. A person with the proper equipment sets up a local hot spot and overpowers the WiFi network. Any computer user who accesses the bogus WiFi network is then at risk by the evil twin. The Wall Street Journal has reported an evil twin setup at a technology conference in London. Hackers set up evil twins that infected other computers with viruses and gathered information on the users.

It is apparent that security is an important issue in a wireless network. The original standard was called WEP (wired equivalent privacy). WEP is a form of encryption, but the level of encryption is relatively weak. An improved form of encryption for wireless networks uses AES (advanced encryption standard). AES is strong encryption.

There are ethical issues in accessing a wireless network unless one has specific authority. Is it similar to a form of electronic trespass? Does it constitute a form of theft from the internet service provider? One can argue both sides of these questions easily.

The next column will investigate the legal issues of these questions in more depth. In the interim, owners of wireless networks should consider the security of their networks. Improvements can be made to the wireless network fairly easily. A company by the name of Force Field Wireless has some excellent suggestions regarding wireless security. See www.forcefieldwireless.com. Some of the tips are:

- Enable WEP. Make sure you use the largest WEP key size that the equipment supports.
- Change the SSID (Service Set Identifier) to something non-descriptive. Do not give a name, address, or any other useful information to potential hackers. Do not use the default SSID.
- Change the default password(s) on the access point. The default passwords of most network equipment are well known and could allow an intruder to gain access to the access point.
- Disable Broadcast SSID. If the access point supports "closed system" or allows one to "disable broadcast SSID," use this feature. This will make the network essentially invisible to almost all scanning methods.
- Update the firmware and drivers on access points and wireless cards. It is always wise to use the latest firmware and drivers on access points and wireless cards. Manufacturers commonly fix known issues, security holes, and enable new features with these updates.
- Enable MAC-based filtering. This feature limits access to unique wireless cards.
- Turn off access points when not in use.

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- Try to position access points in the center of the house or building. This will minimize the signal leak outside of its intended range.

Prudent use of security features in a wireless network can prevent misfortune.

John Brewer practices law in Oklahoma City, is a member of the Governor's and Legislative Task Force for E-Commerce, and enjoys issues relating to eBusiness and cyberspace. Comments and questions are welcome and can be emailed to johnb@jnbrewer.com.

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Browser Fun and Games by Steve Bass

My wife says I get cranky easily. She says it's a gene, or maybe a strand of my DNA, but I'm definitely crabby, and it happens whenever the computer starts acting up. See, the last time I re-installed Microsoft's Internet Explorer, my Standard Button Bar, Address Bar, and Links were in different spots. To make me feel even crabbiest, when I upgraded to a new version of Microsoft's Media Player, Radio Bar appeared in the same spot my Links Bar should have been.

Going Back

The first thing I had to do was get my Bars back in order. In IE, just right mouse click on any blank area on the upper portion of the toolbar and click the check mark for each item you want to see or hide.

Toolbar Customizing

The neat thing about IE's bars is you can drag them onto other toolbars--up, down, left, or right--move them to the very top menu bar, and easily resize them.

I have the Pull down menus at the very top with an add-on Browser Recorder to the right. Below that is IE's Button bar, one I customized to add buttons I use often and remove rarely touched buttons. (Do it by clicking a blank portion of the toolbar area and selecting Customize. Be *very* careful you don't inadvertently hit the poorly placed Reset button in the dialog box.)

Next down is the Link bar with buttons linked to the spots I go to daily, followed below by IE's standard Address bar and Google's add-on browser towards the right.

If you start fiddling and foul up the size or placement of the bars, try this: From IE's Tools menu, click Internet Options, choose Programs, and click the Reset Web Settings.

The Magic of the Links Bar

One incredibly powerful--and underutilized--feature in IE is the Links bar. Mine has a button for each of the three search engines I use regularly. Other single-use buttons include PC World, Yahoogroups, PIBMUG, eBay, TVGrid, and a Web-based e-mail program.

Three more buttons are multi-function. When I click on any of them, a list of other links drops down. I use one for sites I visit almost every day, another for weekly visited sites, and the third for pages I've visited that I might want to go to again.

***Add or Remove:** You may have a URL you often use in your favorites. Treat it as you would any other file -- drag and drop it onto the Links folder. Want a Folder on your Links Bar? Nothing to it: In Explorer, it's File - New - Folder and then just add items (filenames ending with URL) to the folder. In PowerDesk, just click F7.

By the way, the changes are dynamic--you can see them immediately in Internet Explorer.

Favorites? While We're Here...

You might as well examine all the other items in your Favorites folder. They're all part of Internet Explorer's Favorites -- you know, the stuff you see when you click the Favorites button. Many of these are poorly named, outdated, or useless. And I'll bet the majority of them could be better organized. Instead of using IE's Organize Favorites, use the method above. It's faster and substantially easier.

Steve Bass is a Contributing Editor with PC World and runs the Pasadena IBM Users Group. Write to him at steve_bass@pcworld.com. Check PCW's current edition at www.pcworld.com/resource/toc/index.asp and sign up for the Steve Bass online newsletter at www.pcworld.com/bass_letter

Remember: The Build-Your-Own Computer Workshop will be held on Saturday, December 17 from 9 a.m. to 5 p.m. at the Concord Police Department Community Room