Diablo Blue

April, 2004

The Monthly Newsletter of the Diablo Valley PC User's Group

April 1, 2004 Meeting Announcement
This Isn't an April Fool's Joke, Folks!
Come and Learn All About – and How to Fight – SPAM!

If you have an email account, you are undoubtedly getting much more spam. Not the canned meat product, Spam. We're talking about the junk email that is impacting and threatens to clog the Internet due to its constantly increasing volume. On March 5th Brightmail (www.brightmail.com) reported that in February of this year 62% of email messages were spam, compared to "only" 42% a year ago. So much for the CAN-spam law, which seems to tell the spammers "Guys, now you CAN-spam!. So, what the heck do we do about it?

One thing **you** can do is come to the April 1 *DVPC* meeting and listen to what Felix Lin of Qurb (www.qurb.com) will tell us about spam email, how spammers harvest email addresses (including **yours**!), and the different types of anti-spam software. Felix will demonstrate Qurb's solution. Qurb (pronounced *curb*) is simplicity itself. It uses a "white list" of email addresses and domain names. If an email message arrives that is from a domain or email address that's not on Qurb's Approved Senders list, it is put in quarantine, where you can review the messages and add senders to the list, or just send the message into that great bit bucket in the sky! Be sure to come and learn about spam and anti-spam software solutions.

DVPC meetings are held in the lobby conference room in Building B at the Bank of America Technology Center office complex in Concord, located near the northeast corner of Clayton Road at Galindo (see the map on page 4). Please use the entrance that's on the south side of the building. Doors open at 6:00 p.m. and the meeting starts at 7:00 p.m. 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. Also, as usual, we'll have library disks and those great DVPC mugs (version 2) for sale, SIG news, and some of our usual great door prizes. Also, our annual Board of Directors election will be held at the April meeting — all current *DVPC* members are eligible to vote. See you on April Fool's Day!

What's Inside

President's Message

by Alan Mildwurm, DVPC

Got spam? As you know, spam really angers me. I've noticed that my spam count has increased in the last month from about 30-40 per day to over 100 per day. So much for the effectiveness of the CAN-Spam law! I have tried *Spam Sleuth* but it requires a companion program to catch all my different types of email accounts. *Norton AntiSpam* is working relatively well on my laptop but it is glitchy on my office machine; it marks email as spam but doesn't move it to the spam folder. I know part of the problem is that the COM-PLUG IN box won't stay checked but solving that issue isn't easy and Norton support is… non-existent. Since it marks the email, I can create a rule to move it but it still misses lots of spam — the type where there are unrelated non-offensive words in the subject line.

So, the hunt goes on. At this month's *DVPC* meeting, Felix Lin of Qurb will demonstrate their answer to this very aggravating problem. Also be sure to read the review of Qurb on page 20.

Thanks to a lead from Dick Curry, I am trying to get a presenter from the Computer History Museum. I hope I can get them because it sounds like fun. Check out their Web site:

(Continued on page 8)

DVPC April 2004 Calendar

DVPC Calendar

April 2004

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 DVPC Monthly Meeting 7:00 pm; New Users SIG 6:30 pm	2	3
4 See SIG News starting on page 5 of Diablo Blue for more information about SIG meeting dates, times, topics, and locations	5 Windows SIG 7:30 pm	6	7 DVPC Board Meeting 7:00 pm	8	9	10
11 Easter	12	13	14	15 Advanced Users SIG 7:30 pm	16 Diablo Blue Deadline. Email articles and ads to the Editor: rogg@value.net	17 PC101 and PC201 No Meeting this Month
18	19 Genealogy eSIG (See SIG News on page 5 of Diablo Blue)	20	21 Internet SIG 7:00 pm	22	23	24
25	26	27	28	29	30	

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, 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 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			New Users SIG		
Clarion SIG			PC 101/PC 201 Classes		
Genealogy **e**SIG			Windows SIG		
Internet SIG					

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, call editor Ronald Ogg, at 415-281-0431 (days). 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 scanable. 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/Programs 510-770-5770 (work), *awm@mildwurm.com*

Nicholas Chase, SIG Coordinator 680-4211 (home), *nachase@yahoo.com*

Will Crites, Publicity 938-1291 (home), *bugkiller@aol.com*

Charlie Crothers, At Large 829-2237 (home), *ccrothers@attbi.com*

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*

Jessica Mildwurm, Treasurer 829-5858 (home), *jess@mildwurm.com*

Ron Ogg, Newsletter Editor and Web Site 415-281-0431 (work), *rogg@value.net*

Craig Peterson, Librarian 671-7025 (home), *compmail@pacbell.net*

Stan Umlauft, Web Site 458-5560 (home), *stanu@honeybee.com*

DVPC on the Internet

DVPC has a Web site on the Internet — thanks to our Web Team: Ron Ogg and Stan Umlauft. 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, by email to *bod@value.net*, or by leaving a message on the *DVPC* voice mail system.

DVPC Voice Mail System

DVPC has a computer-based voice mail system. The phone number for the *DVPC* VMS is 925-556-1449. Hear up-to-date information about monthly and SIG meetings, information about *DVPC* for potential new members, and a message center for Board of Directors members and SIG Leaders.

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*

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*

Get Involved! Learn! Join a SIG today!

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: _____

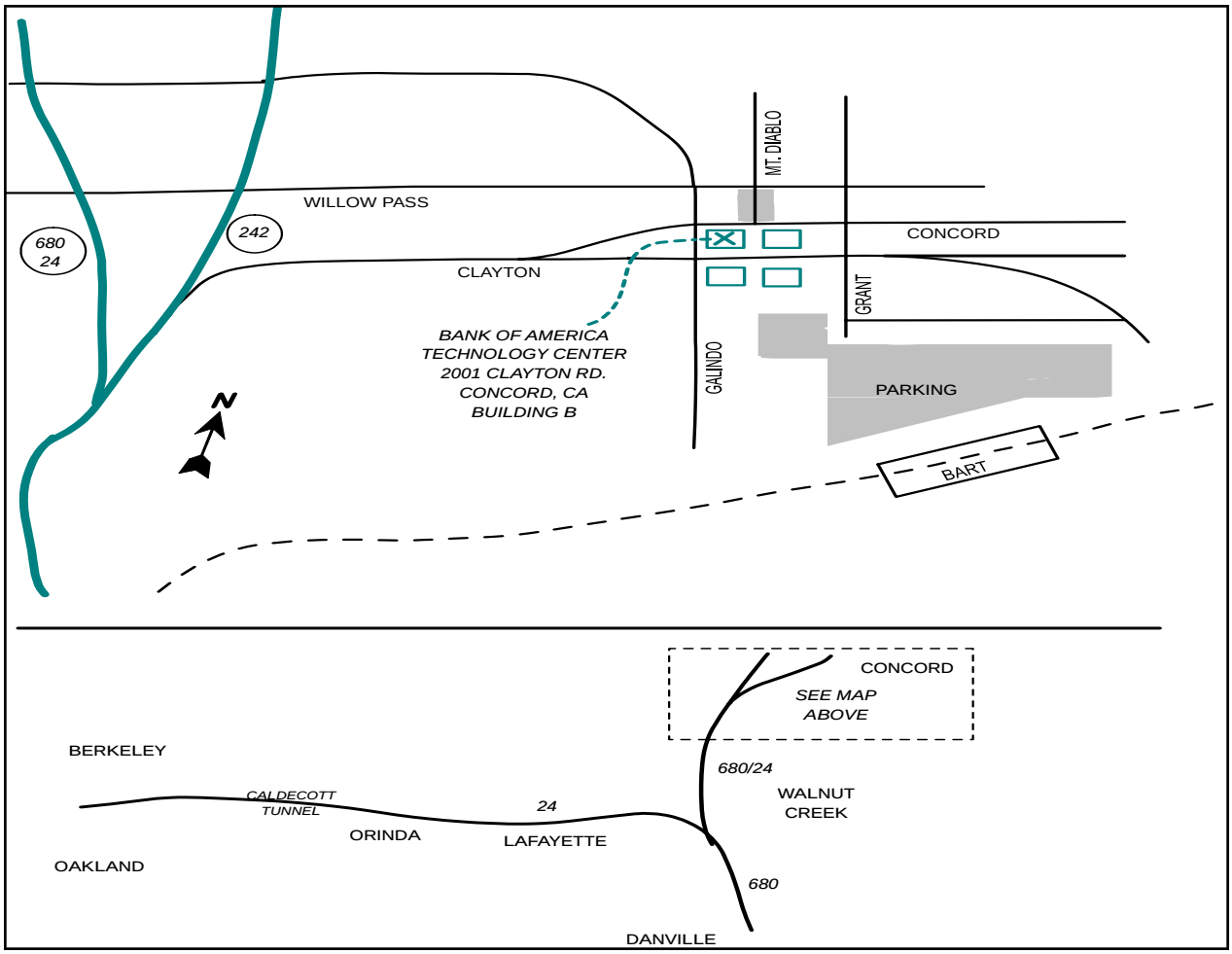
On occasion *DVPC* publishes a list of members **for distribution to *DVPC* members only.** Please check how you would like to be listed: **No** listing_____ **List** *Name* **and** Home_____ Work_____ *phone number(s)*

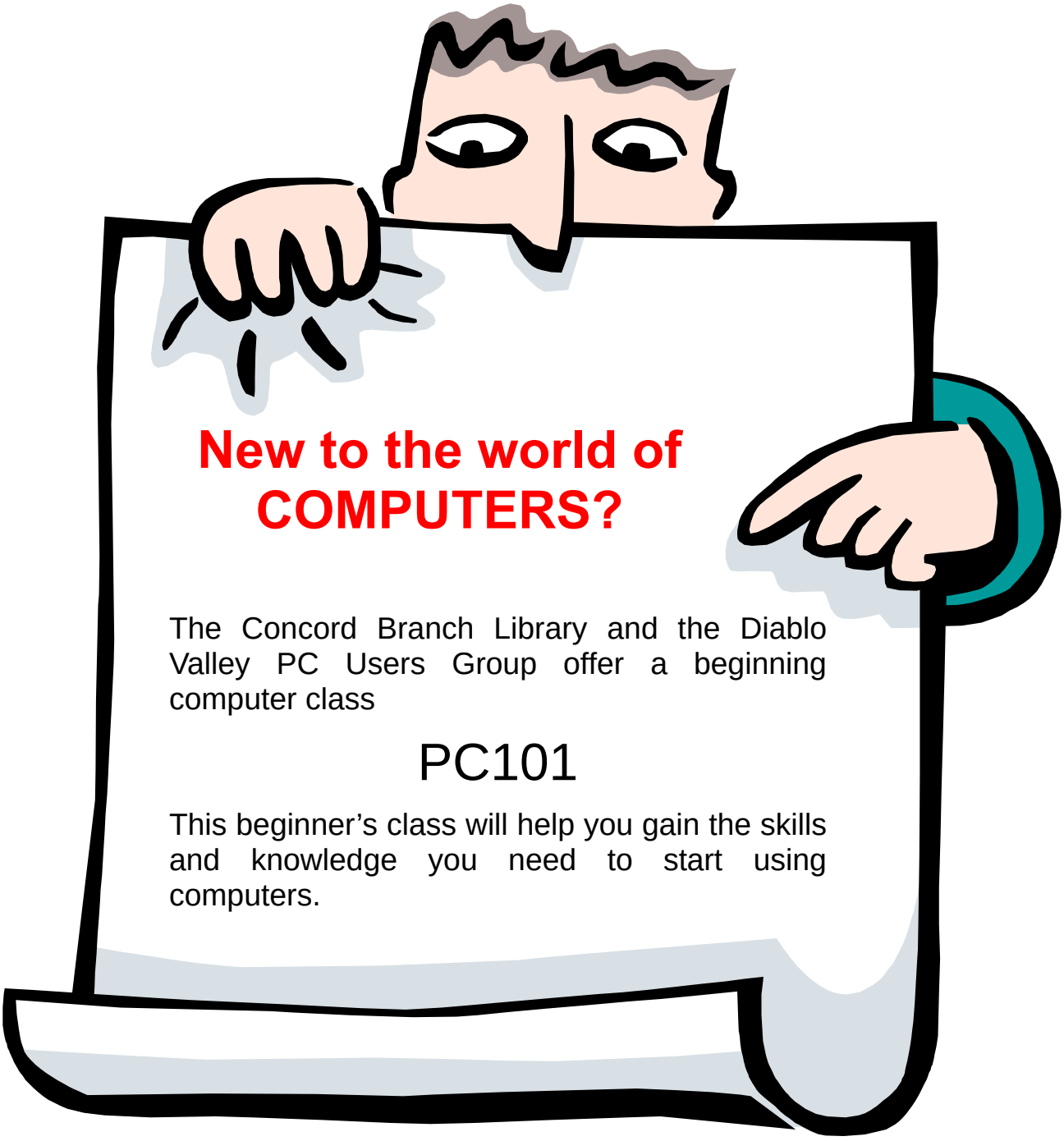
I'm also interested in these SIGs: _____

Directions to Bank of America Building B in Concord

Take the Clayton Road exit off of the 242 Freeway and go east on Clayton Road. After about 1½ miles you'll come to Galindo, and you'll see the Bank of America complex of four high-rise buildings. Parking: Turn left on Galindo then right onto Concord Avenue to find street parking. Or turn right on Grant Street (the first block past Galindo), then right into the BART parking lot at the back of the BofA complex. Building B is the building at the northeast corner of Clayton and Galindo. Enter the door on the south side of the building.

Be sure to observe parking regulations! Concord parking officers are very efficient!



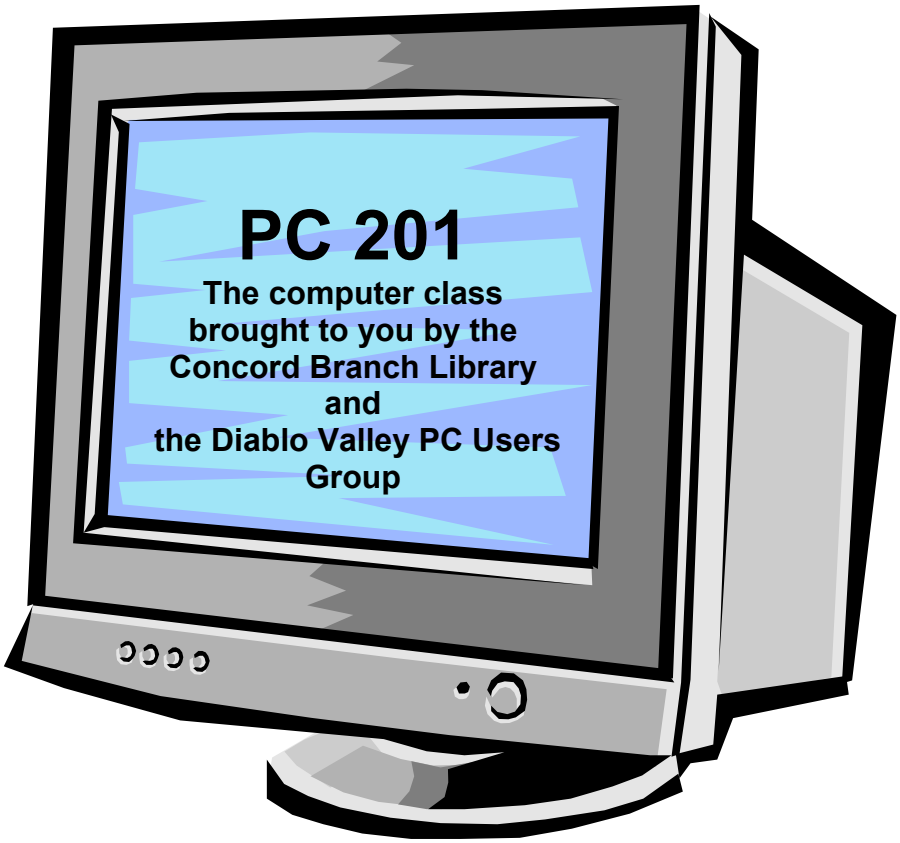


The next PC 101 class will be held in May. The topic is not set yet, so look for an update on the DVPC web site at **www.dvpc.org**.

The PC101 class is usually held fro 10:00 a.m. to 2:00 p.m. at the Concord Branch Library's Community room, 2900 Salvio Street, Concord, CA.

This free class is brought to you by the Concord Branch Library and the Diablo Valley PC Users Group. Space is limited, so sign up at the information desk at the Concord Branch Library.

PC 201



SOFTWARE

The next PC201 class will be held in May. The topic is not set yet, so look for an update on the DVPC web site at **www.dvpc.org**.

The PC201 class is usually held from 12:00 noon to 2:00 p.m. in the Concord Branch Library's Community room, 2900 Salvio Street, Concord, CA.

This free class is brought to you by the Concord Branch Library and the Diablo Valley PC Users Group. Space is limited, so sign up at the information desk at the Concord Branch Library.

SIG News *Compiled by Nick Chase, SIG Coordinator, DVPC, 680-4211*

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!

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.

Clarion SIG *SIG Leader Bill Morris (wcm@soft-trak.com)*

The February meeting will be held on the 18th. See the Clarion SIG page on the web at www.desine.com/svcug/sv_meet.htm for meeting location, dates, and time, or send an email to Bill Morris (bill@soft-trak.com) asking to be put on his email announcement list for the Clarion SIG.

Genealogy eSIG *Peggy Johnson, SIG Leader – 676-7522*

The DVPC Genealogy SIG is a group of computer genealogists who share helpful websites, databases and source information found on the internet. It's an opportunity for members seeking help to put forth a question or problem to the SIG and receive suggestions and advice. When you locate a useful website, database or visit a research facility, please email the group of the details so we also can take advantage of this information. If you wish to be included in the Genealogy eSIG, please email Peggy Johnson, *pegszone@aol.com*.

Internet SIG *Craig Peterson, SIG Leader – 671-7025*

The Internet SIG, after not being active for a few months, will once more be meeting at Computer Renaissance in the new store location 1936 Linda Drive, Pleasant Hill. Those of you who show up at the old location will find a map on the door to the new store. As usual, we will meet the third Wednesday of April (4/21/04) at 7:00 p.m. We will be discussing "Spring Cleaning". We hope to make an easy to follow "to do" list that all computer users need to follow with special focus on getting prepared for further exploration of the "wild, wild online world". 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 at Bank of America building B. 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 at 6:30 p.m. prior to each DVPC monthly meeting.

PC101 and PC201 Classes *Craig Peterson, SIG Leader – 671-7025*

PC101 usually is held from 10 am to 2 pm, and PC201 is usually held from noon to 2 pm, at the Concord Library, 2900 Salvio Street, on the third Saturday of each month. Look for information on these classes on the *DVPC* web site.

PC101 is a beginning class on computers. Offered in conjunction with the Concord Branch Library, it helps introduce computers to and empower the person not comfortable with the technology. Class space is limited, so sign up at the information desk at the Concord Library, 2900 Salvio Street, Concord, CA 94519-2597 from 10 am to 2 pm in the community room of the Concord Branch library. For class meeting dates, times, and topics, see page 5 in this issue of *Diablo Blue*.

PC201 is a series of lectures that will be given by experts in different areas of computers and technology. This month we are back from vacation and will have a class on everyone's favorite computer topic, "Everything you ever wanted to know about Software". The class will take place on January 17th from noon to 2 pm in the community room of the Concord Branch library. For class meeting dates, times, and topics, see page 6 in this issue of *Diablo Blue*.

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 Freeway 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 the signal at Cowell Road.

President's Message...

(Continued from page 1)

www.computerhistory.org.

Lastly, I am working on two other presentations — DVD burning and authoring, and computer security. Stay tuned. Don't forget that April is election month at DVPC — here's your chance to join the Board!!! See you in April!

March DVPC Presentation *by Tom Krauss, DVPC*

Just in time to make your tax filing season more enjoyable (well, maybe "less painful" would be more accurate), the Walt and Ron Show rolled into town to demonstrate several different tax preparation packages.

Walt Parsons led of with an authoritative and fearless demonstration of Turbo Tax. I say "fearless" because he seemed totally unconcerned that his wife might find out what he was saying. It takes a braver man than I to refer to his wife in public as "the wicked witch of the west"!!!

Walt gave us the full flavor of Turbo Tax, whizzing through the initial setup portion and providing examples of the most common features and options of the software. He even managed to finish his tax preparation with the IRS owing him a refund.

Ron then demonstrated H&R Block's TaxCut, the second most popular tax preparation software. This package has a look and feel that is very similar to Turbo Tax. Of course, tax law is very straightforward, and the only room for variation in the software is in presentation.

Ron wrapped things up with a demonstration of the freeware version of 2nd Story Software's TaxACT. You can prepare your taxes just fine with this, if you don't mind the constant popups and interruptions pitching their deluxe version. For a mere $9.95 you might well find that version worth the money just to avoid the constant sales pitch.

Each demonstration gave us an excellent introduction to the particular package. However, Ron ended up with a much bigger refund due him after his TaxCut demonstration. It was not clear, however, whether this is because he is more creative or more dishonest than Walt.

Alan Mildwurm finished out the evening with a demonstration of Photo3-D Mixer. You take two identical photographs, moving the camera slightly to the right or left between photos. This software then "stitches" them together into a single picture which looks sadly out of focus until you put on your old fashioned, red and blue lens, cardboard framed 3-D glasses. Through these glasses, you do indeed see an excellent 3-D photo. Get a free raffle ticket at the next meeting by mentioning this secret message. You can buy the entire kit, which includes a small tripod, a device to mount your camera atop the tripod so you can slide it left and right for the two requisite photos, the software to create the 3-D image, and a couple of pairs of 3-D glasses, for $129.

Intel provided a promotional CD and a CD storage album in a box for each member contingent upon our viewing a four minute video. Fortunately, the video was really short and the sound didn't work, so it was not too painful an experience to go through for a free gift.

Finally, we held one of our famous old-fashioned auctions for a 17" flat-screen CRT monitor from eMachines. Thanks to some spirited and generous bidding by several members and the good efforts of Charlie as auctioneer, the Club was able to add $170 to our treasury; and one determined member went home with an excellent monitor purchased at a great price.

The Elections are Here! The Elections are Here! *by Ron Ogg, DVPC*

The April 1 *DVPC* Board of Directors election is here! You still have time to help out *DVPC* by seriously considering a run for office. You'll find fun, excitement, entertainment, the opportunity to do good works, the ability to shape *DVPC* over the next year, a bit of local fame, new friends, and good food (well, at least pizza at the monthly Board meetings). No fortune — sorry about that! The amount of time required is not excessive, and the duties are not oppressive. Join us! It's always great to someone new join the board. Your ideas will be appreciated and listened to, and you can make a real contribution to making *DVPC* an even better user group. Take a look at the list of Directors and Officers positions on page 3, and the titles. Surely, there's some position that you could fill. You won't hurt the feelings of any of the existing Board members who will be running again — competition is good! Talk to any of the current Board members before the April *DVPC* meeting, and toss your hat into the ring!

OK, which of the current Board of Directors members are running for office? So far (as of publication date), it's all 11:

Alan Mildwurm, President	Dick Curry, Director At Large	Ron Ogg, Newsletter Editor and Webmaaster
Nick Chase, SIG Coordinator	Peggy Johnson, Membership Secretary	
Will Crites, Publicity	Tom Krauss, Secretary	Craig Peterson, Librarian
Charlie Crothers, Director At Large	Jessica Mildwurm, Treasurer	Stan Umlauft, Web Site

You can join this illustrious crew! All you have to do is decide you're going to run — do it at the April meeting.

Abbott and Costello in the 21st Century

by Tom Krauss and Ron Ogg, DVPC

Do you remember that really old bit by Bud Abbott and Lou Costello titled "Who's on First"? Funny stuff, even if it is from the 1940's! If you would like to relive the original, go to www.paradiselost.org/whosonfirst.html (this is the version with the famous "damn" that shocked censors of that period) and members.aol.com/acqtrly/who.html (the version from their 1945 film *The Naughty Nineties* with the language "cleaned up" for the movie so it would be suitable for the tender ears of 1940's families).

Here's a computer-related version found on the Internet, just to show that funny stuff can become *au courant*!

———————————————————

Phone rings.

ABBOTT: Super Duper computer store. Can I help you?

COSTELLO: Thanks. I'm setting up an office in my den, and I'm thinking about buying a computer.

ABBOTT: Mac?

COSTELLO: No, the names Lou.

ABBOTT: Your computer?

COSTELLO: I don't own a computer. I want to buy one.

ABBOTT: Mac?

COSTELLO: I told you, my names Lou.

ABBOTT: What about Windows?

COSTELLO: Why? Will it get stuffy in here?

ABBOTT: Do you want a computer with Windows?

COSTELLO: I don't know. What will I see when I look in the windows?

ABBOTT: Wallpaper.

COSTELLO: Never mind the windows. I need a computer and software.

ABBOTT: Software for Windows?

COSTELLO: No. On the computer! I need something I can use to write proposals, track expenses and run my business. What have you got?

ABBOTT: Office.

COSTELLO: Yeah, for my office. Can you recommend anything?

ABBOTT: I just did.

COSTELLO: You just did what?

ABBOTT: Recommend something.

COSTELLO: You recommended something?

ABBOTT: Yes.

COSTELLO: For my office?

ABBOTT: Yes

COSTELLO: OK, what did you recommend for my office?

ABBOTT: Office.

COSTELLO: Yes, for my office!

ABBOTT: I recommend Office with Windows.

COSTELLO: I already have an office and it has windows! OK, let's just say, I'm sitting at my computer and I want to type a proposal. What do I need?

ABBOTT: Word.

COSTELLO: What word?

ABBOTT: Word in Office.

COSTELLO: The only word in office is office.

(Continued on page 10)

DVPC Board Meeting Minutes by Tom Krauss, DVPC

It's always nice to see a small turnout for the Board meeting. That means extra pizza and dessert for the dedicated ones. And tonight there were two desserts! Ruth really outdid herself, providing us with a pumpkin pie and a marvelously fattening chocolate cake with chocolate frosting.

The first topic of discussion was what to do about the prize which was won by a non-member at the December general meeting. We have a name, but that's all. We have been soliciting his response on the website for three months to no avail. We even phoned everyone listed in the Contra Costa phone book with that last name and the same first name or initial. Some of us want to hold on to the software for this person till the statute of limitations wears out, but we're undecided which statute to use. Others say three months is long enough, let's recycle the prize before it becomes obsolete. But given the world we live in today it's easy to imagine the winner showing up at a meeting two years or more from now demanding his prize, then suing the beejeebers out of us when we don't have it. In fact, after hearing Alan sigh at the Board meeting that there "aren't enough people suing these days", I'm a little concerned as to whose side he would choose to represent in such a lawsuit. We finally agreed to start a three month countdown on our website, at the end of which the prize goes back in to the hopper for some other lucky person to win.

We discussed spam, and I began to feel unloved. I don't get more than one or two spam items a month, while some of the other Board members get literally hundreds per week. How am I supposed to learn about sex unless people in Korea and Russia and other enlightened countries start writing to me? On the other hand, I have not had to spend money on anti-spam software. Yet.

The final item of business was a brief poll to see who was running for re-election to the Board. Yes, it's that time of the year. Time for Board elections at the April meeting, where the smarter members squirm in their seats, hoping no one will nominate them for a position on the Board, and the remaining members agree to serve yet another year. It seems the current Board will all run again, so if one of you out there wants to be on the Board, you better want it *real bad*, and *be prepared to fight for it*!

One final note: Craig, it's all right — all is forgiven. You can come back now.

Abbott and Costello in the 21st Century...

(Continued from page 9)

ABBOTT: The Word in Office for Windows.

COSTELLO: Which word in office for windows?

ABBOTT: The Word you get when you click the blue w.

COSTELLO: I'm going to click your blue w if you don't start with some straight answers. OK, forget that. Can I watch movies on the Internet?

ABBOTT: Yes, you want RealOne.

COSTELLO: Maybe a real one, maybe a cartoon. What I watch is none of your business. just tell me what I need!

ABBOTT: RealOne.

COSTELLO: If it's a long movie I also want to see reels 2, 3 & 4. Can I watch them?

ABBOTT: Of course.

COSTELLO: Great, with what?

ABBOTT: RealOne.

COSTELLO; OK, I'm at my computer and I want to watch a movie. What do I do?

ABBOTT: You click the blue 1.

COSTELLO: I click the blue one what?

(Continued on page 11)

Abbott and Costello in the 21st Century...

(Continued from page 10)

ABBOTT: The blue 1.

COSTELLO: Is that different from the blue w?

ABBOTT: The blue 1 is RealOne and the blue w is Word.

COSTELLO: What word?

ABBOTT: The Word in Office for Windows.

COSTELLO: But there's three words in office for windows!

ABBOTT: No, just one. But it's the most popular Word in the world.

COSTELLO: It is?

ABBOTT: Yes, but to be fair, there aren't many other Words left. It pretty much wiped out all the other Words out there.

COSTELLO: And that word is real one?

ABBOTT: RealOne has nothing to do with Word. RealOne isn't even part of Office.

COSTELLO: Stop! Don't start that again. What about financial bookkeeping? You have anything I can track my money with?

ABBOTT: Money.

COSTELLO: That's right. What do you have?

ABBOTT: Money.

COSTELLO: I need money to track my money?

ABBOTT: It comes bundled with your computer.

COSTELLO: What's bundled to my computer?

ABBOTT: Money.

COSTELLO: Money comes with my computer?

ABBOTT: Yes. No extra charge.

COSTELLO: I get a bundle of money with my computer? How much?

ABBOTT: One copy.

COSTELLO: Isn't it illegal to copy money?

ABBOTT: Microsoft gave us a license to copy Money.

COSTELLO: They can give you a license to copy money?

ABBOTT: Why not, they own it.

COSTELLO: Well, it's great that I'm going to get free money, but I'll still need to track it. Do you have anything for managing your money?

ABBOTT: Managing Your Money? That program disappeared years ago.

COSTELLO: Well, what do you sell in its place?

ABBOTT: Money.

COSTELLO: You sell money?

ABBOTT: Of course. But if you buy a computer from us, you get it for free.

COSTELLO: That's all very wonderful, but I'll be running a business. Do you have any software for, you know, accounting?

ABBOTT: Simply Accounting.

COSTELLO: Probably, but it might get a little complicated.

ABBOTT: If you don't want Simply Accounting, you might try M.Y.O.B.

COSTELLO: M.Y.O.B.? What does that stand for?

ABBOTT: Mind Your Own Business.

COSTELLO: I beg your pardon?

ABBOTT: No, that would be I.B.Y.P. I said M.Y.O.B.

COSTELLO: Look, I just need to do some accounting for my home business. You know — accounting? You do it with money.

(Continued on page 12)

Abbott and Costello in the 21st Century...

(Continued from page 11)

ABBOTT: Of course you can do accounting with Money. But you may need more.

COSTELLO: More money?

ABBOTT: More than Money. Money can't do everything.

COSTELLO: I don't need a sermon! Okay, let's forget about money for the moment. I'm worried that my computer might... what's the word? Crash. And if my computer crashes, what can I use to get back my data?

ABBOTT: GoBack.

COSTELLO: Okay. I'm worried about my computer smashing and I need something to restore my data. What do you recommend?

ABBOTT: GoBack.

COSTELLO: How many times do I have to repeat myself?

ABBOTT: I've never asked you to repeat yourself. All I said was GoBack.

COSTELLO: How can I go back if I haven't even been anywhere? Okay, I'll go back. What do I need to write a proposal?

ABBOTT: Word.

COSTELLO: But I'll need lots of words to write a proposal.

ABBOTT: No, you only need one Word — the Word in Office for Windows.

COSTELLO: But there's three words in... Oh, never mind. (Click!)

ABBOTT: Hello? Hello? Customers! Why do they always hang up on me? Oh, well. (Phone rings.) Super Duper computer store. Can I help you?

What is APCUG? *by Charlotte Semple, President/Editor, Los Angeles Computer Society*

The Association of Personal Computer User Groups (APCUG) is an international, plat-form-independent, volunteer-run nonprofit body devoted to helping user groups offer better ser-vices to their members. APCUG is an organization dedicated to helping mem-ber computer user groups succeed. It helps to foster communications by operating as an informal network between user group organizations and also with companies that provide computer-related and Internet-related goods and services. APCUG also assists member groups in the fulfillment of their educational missions and activities by sharing with officers of member user groups the knowl-edge of what it takes for user groups to better serve their mem-bers. APCUG operates as a 50l(c)(3) non-profit organization.

Is APCUG a user group?

Absolutely not. APCUG member-ship consists of user groups, not individual members. While AP-CUG facilitates information to the user groups and provides infor-mation about possible services, it is up to the individual user groups to offer the services to their mem-berships.

Is membership in APCUG lim-ited to user groups of any par-ticular operating system or platform?

No. APCUG membership is open to all microcomputer user groups. Some of the members of APCUG are computer societies that serve many different platforms.

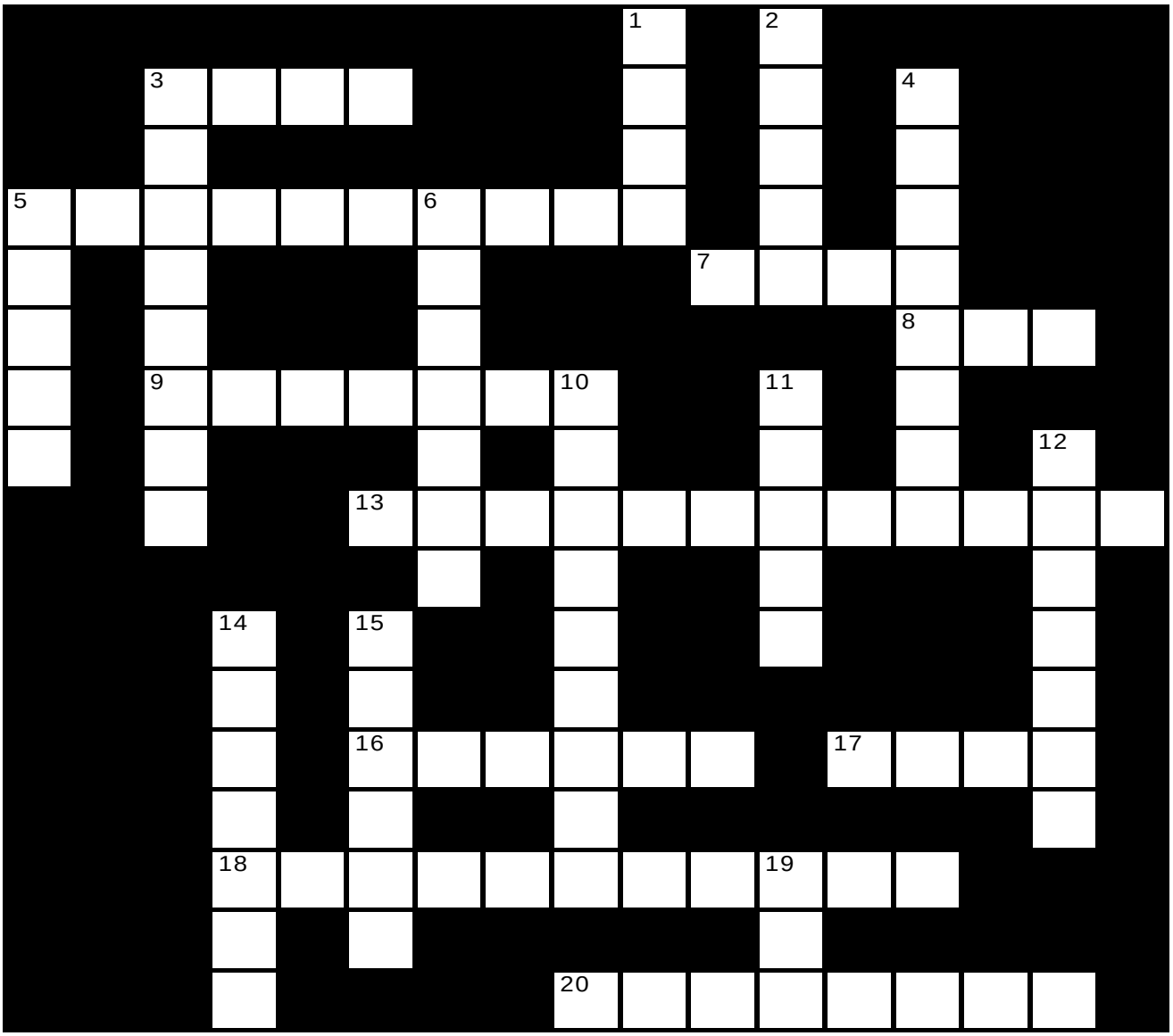
How did APCUG get started?

The genesis of APCUG came from a series of meetings by represen-tatives from various user groups around the country. Whenever user group officers and directors met, there were continual discus-sions about the need to improve communication between the groups and to share information such as newsletters, strategies, ideas, etc. As a first step, the presidents from three user groups — Boston Computer Society, Capi-tal PC User Group, and Houston Area League of PC Users - organ-ized the First Annual User Group Summit meeting at the 1986 Fall Comdex. As a result of the feedback from that first Summit meeting and sub-sequent meetings among user group representatives, the leaders of 15 user groups met in Seattle in October 1987, and proposed the formation of an association for the purpose of fostering communica-tion among and between user groups. That proposal was pre-sented before 130 representatives from 50 user groups at the Second Annual User Group Summit Meet-ing in November 1987, and was unanimously approved.

(Continued on page 14)

Computer Crossword "Green Grows My Computer"

by Craig Peterson, DVPC



Spring is when many of us try to plan and plant that "perfect garden". For thousands of years people have used technology to make the growing of plants easier and less work. Take a break from the back hoe, get a glass of iced tea, and try to solve this month's puzzle. If you need to get back to the garden before you finish, you can find the answers at www.dvpc.org/solution.html.

Across

3. Frozen version of water that falls from the sky
5. Where you do not want your house to be located
7. Large "fishin' hole"
8. Word not to be used outside of beaver studies
9. Subterranean water level
13. Best way to lower water bills
16. Measure of snow-to-water conversion
17. A larger version of #3 Across
18. Natural loss of water
20. Manufactured transportation route for liquids

Down

1. Warm version of #3 Across
2. An area where fresh water streams meet salt water bodies
3. California's water storage from November to April
4. Water transport system
5. More water then the local delivery system can handle
6. Type of toilet the water companies would like you to use
10. Same as #3 Down, but from April to November
11. Natural version of #4 Down
12. Drinkable water
14. Brief bursts of #1 Down
15. Smaller version of #11 Down
19. The original hard water

What is APCUG?...

(Continued from page 12)

What is the organizational struc-ture of APCUG?

The primary governing body of APCUG is a 9-person Board of Di-rectors. Each Director is elected for a three-year term, with one-third of the Board elected each year. The Board of Directors is responsible for the implementa-tion of APCUC activities and daily management of the organization. A 15-person Board of User Group Advisors, each of whom is elected for a two-year, staggered term (one-half of the Advisory Board is elected each year), is the ombudsman for their assigned groups and is responsible for proposing new activities or directions for APCUG and for ad-vising the Board of Directors on user group concerns. All of the members of the Board of User Group Advisors are active partici-pants in APCUG-member user groups. In addition, each Member User Group designates a person to act as a representative to AP-CUG. The APCUG user group rep-resentatives are responsible for keeping their group's officers and members up-to-date with information sent to them by APCUG, as well as keeping their group's information in the APCUG database current. They also receive the yearly ballot.

What kinds of things does AP-CUG do?

APCUG has established and main-tains a National Registry of PC User Groups and provides this information to participating groups, publications, and ven-dors. By making this information available, more groups will be able to take advantage of services provided by manufacturers, pub-lishers, and publications. APCUG encourages hardware manufactur-ers and software publishers to es-tablish formal user group support programs and provides them list-ings of APCUG member user groups to facilitate the implemen-tation of such programs.

APCUG provides a number of Internet services, including web pages with information about APCUG, mailing lists for User Group offi -cers to communicate with their peers, Web Space for User Groups, and a number of other services, all accessible through www.apcug.org.

APCUG also plans and coordi-nates user group activities at ma-jor computer shows and exposi-tions. These activities include a series of pro-fessional development seminars for user group officers; computer product showcase and exposition; the APCUG Summit Meeting held during the Fall conference; com-puter industry sponsored technol-ogy briefings; and sponsored breakfasts, luncheons and recep-tions.

APCUG serves as a clearinghouse for user group resources and ven-dor programs. In this way, each user group will not have to reinvent the wheel when it comes to creating something like a new member brochure or novice user diskette. Similarly, APCUG has developed a vendor database that summarizes the various programs and identifies the contact person within each company. User groups can then contact the vendors directly to enroll their groups into the programs.

Does APCUG take stands on is-sues or lobby?

No. It is more appropriate for indi-vidual user groups and not an umbrella organization to take posi-tions on issues. As an information clearinghouse, the APCUG can, however, facilitate the exchange of communication on issues and help put user groups in contact with one another. Since the policy in most user groups is that only the Board of Directors can establish policy, it would be inappropriate and harmful for the APCUG to take positions on behalf of its member organizations. If it is to be success-ful, it is essential that APCUG not interfere or encroach upon the inherent responsibilities of its user group members.

How does APCUG pay for its di-rectors, officers, staff, and of-fices?

Like many user groups, APCUG is a non-profit organization that de-pends primarily on volunteer ef-fort. APCUG does not maintain its own physical offices but instead contracts for services on an as needed basis. APCUG employs an administrative assistant who handles updating the database, sends renewal invoices to groups, etc. All director and officer positions are unpaid volunteers. Thus far, many people have stepped forward from individual user groups and volunteered their services to APCUG. This spirit is expected to continue.

How much does it cost to join APCUG?

Each APCUG member user group is assessed an annual membership fee of $50 to help defray administrative and operational expenses.

Is my group a member of APCUG?

Yes. Most APCUG member groups display the APCUG logo on their web page and in their newsletter.

APCUG Member Services

To help new User Groups to form, APCUG offers a collection of information, including sample Articles of Incor-poration and Bylaws.

(Continued on page 15)

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

What is APCUG?...

(Continued from page 14)

APCUG puts on one or two national events each year. The many Round Table Pro-grams offered are set up to help leaders in running their user groups. There are also Regional Conferences held during the year where user groups can also meet to exchange ideas, share the highs and lows of running a user group, meet vendors, etc. on a more local level.

APCUG provides web space and other web services for user groups that have trouble finding a local ISP to host their web page The WebBoard offers a ListServe for groups to contact their members, chat accessibility for on-line meetings, and conferences for a group's guru to answer technical questions.

APCUG publishes APCUG Reports four times a year, and copies are mailed to selected officers of all APCUG member user groups. It contains many articles to help officers do their jobs better. These reports are also published on the Net.

Newsletter editors can often use more content for their newsletters. The APCUG Editorial Committee emails four to six articles each month to all editors in APCUG member user groups. These articles can then be published in the group's newsletter. Articles are usually written by user group members from around the world.

The monthly NOOZ newsletter from your group's advisor contains information about APCUG and the group's region.

Tips & Tricks for Running your User Group are special articles written to provide assistance to a member user group on some aspect of running a User Group. Fre-quently they will be based on ma-terial presented at a Round Table session at an APCUG or regional conference.

APCUG maintains a Presentation-in-a-Box list that contains information about vendor-provided material that user group members can use themselves to make a presentation at their meeting.

Occasionally, member groups receive information about discounts being offered to their members. Many vendors have special programs set-up for user group members that offer continuous discounts.

APCUG maintains a user group locator on its website which any-one can use to find another user group to arrange joint projects, arrange a vendor tour for several groups, and enable officers to find other user group officers in their area to interact with to discuss topics of interest to the groups.

The APCUG logo is available for use by APCUC member groups. Different sizes of transparent GIF files (color) for the web, and BMP and TIP files (gray scale) for print use are included, as well as AI, EPS, and PSD formats for those who need different sizes or formats than those provided.

Help is just an e-mail away – groups can contact their regional advisor or a member of the Board of Directors. All officers are willing and available to assist APCUG-member groups.

Compiled from information gleaned from the APCUG Website, www.apcug.org.

Tips and Tricks *by Ron Ogg, DVPC*

Remove Hyperlinks for Microsoft Word Documents

To remove a hyperlink from a Microsoft Word document, right-click on the hyperlink and from the pop-up menu select Remove Hyperlink. To prevent hyperlinks from being created in a Word document, on the Tools menu click AutoCorrect Options, then click on the AutoFormat As You Type tab; under Replace as you type, clear the Internet and network paths with hyperlinks check box.

Create Dropped Initial Capital Letters

You've seen books and other publications where there's a large first letter at the beginning of each paragraph, like the one at the beginning of this paragraph. This letter is called a Dropped Initial Capital Letter, or Drop Cap for short. It's easy to do! Click anywhere in the paragraph, then from the Format menu select Drop Cap. Depending on the version of Microsoft Word that you are using, there are different options. In Word 2000 and Word 2002 a dropped capital that is merged into the paragraph or one where the dropped capital is in the margin to the left of the paragraph. In Word 2003 there are many more options, including the ability to define custom drop cap layouts.

"Wait a minute," you say, "I looked up Drop Cap in Word 2003 Help and it says there are only two options, Dropped or In Margin. What gives?" What gives is that Word 2003 Help was based on Word 2002 Help, and they forgot to update the Drop Cap section!

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

How Not to Get Hooked by a 'Phishing' Scam

from the U.S. Federal Trade Commission Web Site

Internet scammers casting about for people's financial information have a new way to lure unsuspecting victims: They go "phishing." Phishing, also called "carding," is a high-tech scam that uses spam to deceive consumers into disclosing their credit card numbers, bank account information, Social Security numbers, passwords, and other sensitive information.

According to the Federal Trade Commission (FTC), the emails pretend to be from businesses the potential victims deal with - for example, their Internet service provider (ISP), online payment service or bank. The fraudsters tell recipients that they need to "update" or "validate" their billing information to keep their accounts active, and direct them to a "look-alike" Web site of the legitimate business, further tricking consumers into thinking they are responding to a bona fide request. Unknowingly, consumers submit their financial information - not to the businesses - but the scammers, who use it to order goods and services and obtain credit.

To avoid getting caught by one of these scams, the FTC, the nation's consumer protection agency, offers this guidance:

- If you get an email that warns you, with little or no notice, that an account of yours will be shut down unless you reconfirm your billing information, do not reply or click on the link in the email. Instead, contact the company cited in the email using a telephone number or Web site address you know to be genuine.
- Avoid emailing personal and financial information. Before submitting financial information through a Web site, look for the "lock" icon on the browser's status bar. It signals that your information is secure during transmission.
- Review credit card and bank account statements as soon as you receive them to determine whether there are any unauthorized charges. If your statement is late by more than a couple of days, call your credit card company or bank to confirm your billing address and account balances.
- Report suspicious activity to the FTC. Send the actual spam to uce@ftc.gov. If you believe you've been scammed, file your complaint at www.ftc.gov, and then visit the FTC's Identity Theft Web site (www.ftc.gov/idtheft) to learn how to minimize your risk of damage from identity theft.

Visit www.ftc.gov/spam to learn other ways to avoid email scams and deal with deceptive spam.

The FTC works for the consumer to prevent fraudulent, deceptive and unfair business practices in the marketplace and to provide information to help consumers spot, stop, and avoid them. To file a complaint or to get free information on consumer issues, visit www.ftc.gov or call toll-free, 1-877-FTC-HELP (1-877-382-4357); TTY: 1-866-653-4261. The FTC enters Internet, telemarketing, identity theft, and other fraud-related complaints into Consumer Sentinel, a secure, online database available to hundreds of civil and criminal law enforcement agencies in the U.S. and abroad.

A New Phishing Attempt

by Ron Ogg, DVPC

There is a new phishing attempt purporting to come from Microsoft. "What," you say, "the heck is phishing?" See the article from the Federal Trade Commission above and learn about this dangerous scam. Then read on about the details of a phishing attempt.

Here's the text of the message I received with my **comments in red**:

++

From: Cora Schultz [mailto:Cora@microsoft.com] ◄ **Microsoft doesn't send email messages from people.**

Sent: Monday, March 15, 2004 2:12 PM

To: mperry@value.net; troi@value.net; smithfamily@value.net; rogg@value.net; penomee@value.net

Subject: Security Download ◄ **Microsoft never sends email messages to end users about Security Downloads.**

Welcome to Windows Update!

There are 10 critical updates available at this time

Get the latest updates available for your computer's operating system, software, and hardware. Windows Update scans your computer and provides you with a selection of updates tailored just for you.

Checking for the latest version of the Windows Update software... ◄ **This implys your computer is being scanned — it's not!**

Depending on your connection speed, this might take a minute. During this time, you may receive one or more security warnings.

Review each security warning to ensure that the content is signed by Microsoft, and then click Yes to install the software.

Follow the link: Windows Update ◄ **This link doesn't take you to Microsoft's Windows Update page, but to a fake page that is similar to the Microsoft Windows Update page — don't click this kind of link email messages!**

(Continued on page 17)

A New Phishing Attempt...

(Continued from page 16)

Open the fail,and new updates are installed. ◄ **"Open the fail" — great English! And check the comma not followed by a space. The "fail" referred to here is your browser (Internet Explorer, especially) trying to warn you that a file is dangerous to install.**

Sincerely, ◄ **Microsoft never signs *anything* "Sincerely"!**

www.microsoft.com. ◄ **Microsoft never signs anything with an email address.**

++

Here's the message header (using Outlook 2003 Options); the message header tells us where this email originated:

++

Return-Path: <Dean@microsoft.com> ◄ **This is a fake email address; it doesn't exist.**

Received: from psmtp.com (exprod6mx2.postini.com [12.158.35.142])

by mail.value.net (8.11.6/8.11.2) with SMTP id i2FMKHc31946;

Mon, 15 Mar 2004 14:20:17 -0800

Received: from source ([66.30.57.242]) by exprod6mx2.postini.com ([12.158.35.251]) with SMTP;

Mon, 15 Mar 2004 14:15:36 PST

Received: from 239.130.64.180 by web865.mail.yahoo.com; Mon, 15 Mar 2004 18:14:28 -0400 ◄ **This is what's important; this may be the IP address of the sender, or it could be a "spoofed" address. We can check it at network-tools.com to find out what server sent the message. Note, however, that the IP address may not exist if spoofed, or the server may not belong to the spammer. Spammers, especially those who "go phishing," find a server that's an "open relay" — that is a server that lets anyone (either by design, or by configuration error and poor server management) to use the server to send their own email messages so they can't be traced to the actual sender. In this case, the IP address doesn't exist, so it was spoofed.**

Message-ID: <QUYEXPADMLGRTAUBRYGMIPRFM@yahoo.com>

From: "Cora Schultz" <Cora@microsoft.com>

To: mperry@value.net, troi@value.net, smithfamily@value.net, rogg@value.net,

penomee@value.net

Subject: Security Download

Date: Mon, 15 Mar 2004 23:12:28 +0100

MIME-Version: 1.0

Content-Type: multipart/alternative;

boundary="--515109793471411 35"

X-CS-IP: 209.13.134.252

X-pstn-levels: (S: 0.00394/90.47169 R:95.9108 P:95.9108 M:98.0684 C:78.1961)

Status:

++

Here's the source of the message; the message was formatted as HTML similar to a Web page, so we can click on View-Source in IE and look at the HTML code that's hidden in back of the message:

++

<html>

<title></title>

<META HTTP-EQUIV="Content-Type" Content="text/html;Charset=windows-1251">

<body>

<FONT COLOR=#333399>Welcome to Windows Update!</FONT><hr>

There are 10 critical updates available at this time<p>

Get the latest updates available for your computer's operating system,

software, and hardware.

(Continued on page 18)

A New Phishing Attempt...

(Continued from page 17)

<p>
Windows Update scans your computer and provides you with a selection
of updates tailored just for you.
<p>
Checking for the latest version of the Windows Update software...
<p>
Depending on your connection speed, this might take a minute.
During this time, you may receive one or more security warnings.
Review each security warning to ensure that the content is signed by Microsoft,
and then click Yes to install the software.
<p>
Follow the link : Windows Update **◄ Aha! Now we have something! This is the URL that's behind the Windows Update link near the end of the message. Who the heck is www.microsoft-security-update.com? It certainly isn't a Microsoft web site! Let's look it up at network-tools.com.**
<p>
Open the fail,and new updates are installed.

<hr>
<FONT COLOR=#333399>Sincerely,
www.microsoft.com.</FONT>
</body>

++

OK, let's look up **microsoft-security-update.com** and see who registered it and where they are located.

++

Whois Server Version 1.3

Status: REGISTRAR-HOLD **◄ The site has been taken down — that's what Registrar-Hold means. Good news!**

Creation Date: 09-mar-2004 **◄ Notice the date the record was created was March 9, 2004 when the site was taken down.**

Expiration Date: 09-mar-2005

Registrant:

Xxxxxxx Xxxxxx xxxxxxx@xxxxx.xxx **◄ Microsoft-security-updates.com was registered by someone in Los Angeles.**

Xxxxxxxx Co. **◄ The person's and company's name and address are hidden here, but they are on line.**

1243 xxxxxxxx st

Los Angeles,CA,UNITED STATES 90125

(Continued on page 19)

A New Phishing Attempt...

(Continued from page 18)

++

www.microsoft-security-updates.com was hosted in China and a WhoIs search before resolved this domain to IP address 218.107.207.120:

Here's the WHOIS results for 218.107.207.120:

++

Country: CHINA ◄ **China is the source of many of the phishing web sites.**

ARIN says that this IP belongs to APNIC; I'm looking it up there.

Using cached answer (or, you can get fresh results).

% [whois.apnic.net node-2]

% Whois data copyright terms http://www.apnic.net/db/dbcopyright.html

inetnum: 218.107.192.0 - 218.107.223.255

netname: CNC-FJ-xiamen-MAN

country: CN

descr: Fujian Xiamen branch of China Netcom ◄ **This is the ISP in China that hosts microsoft-security-updates.com**

admin-c: RC64-AP

tech-c: LY472-AP

status: ALLOCATED NON-PORTABLE

changed: cncipaddr@china-netcom.com 20040107

mnt-by: MAINT-CN-ZM28

mnt-lower: MAINT-CN-XM28

source: APNIC

++

OK, we've found the domain registrant. We've found the ISP. Now we can report this to the FTC and, since they are claiming to be Microsoft, we can report it to them as well. That's what I (and I'm sure others) did, and the web site was shut down. Some time people go phishing and they don't catch anything! The bad guys lose!

Internet Annoyances Needed for New Book *by Marsee Henon, O'Reilly User Group Program*

Thanks for the great response to our call, over the last month or two, for annoyances, gripes, and complaints about Excel and PC hardware. The email we got was very useful and a lot of user group members not only sent annoyances, but fixes! As always, many thanks for the input.

This time around, we have yet another book in the wings — this one focusing on Internet annoyances. Some of the annoying areas: Email (and spam), connecting to the Net (via dialup, DSL, cable, configuration and all that), wireless annoyances (from WiFi hassles to hotspots to fiddling with WEP), web sites (namely creating, hosting, and maintaining your own web site), browsing and browsers (Internet Explorer, Netscape, and others), AOL, instant messaging, using search sites, security annoyances, and of course, shopping and auctions.

Got Internet gripes/annoyances/kvetches? Send 'em our way. Just email me (marsee@oreilly.com) with "Internet Annoyance" in the subject line and we'll put our author on the job.

As thanks for sharing, we'll make sure to get copies of "Internet Annoyances" sent to your group shortly after publication.

Marsee

An example:

> Pictureless Pages Predicament
>
> THE ANNOYANCE: There are some great pictures available on the Web, but certain pictures don't appear on web pages I visit. Instead I see a red X or a funny little icon where the picture is supposed to be.
>
> THE FIX: Several circumstances can keep pictures from appearing:

(Continued on page 20)

Internet Annoyances Needed for New Book...

(Continued from page 19)

- There's a logjam at the web server or somewhere along the miles of wires between the web server and your browser. Try refreshing the page (press F5 or click the Refresh button on the toolbar). But you probably already tried that.
- Something's wrong with the web server. The picture might not be on the server, or the programmer who created the web page might have put in the wrong path to the picture.
- Internet Explorer may be configured so that it doesn't show pictures, a common setup for those with slow dialup connections who don't want to waste time downloading pictures. (If this option is set, you can selectively display pictures by right-clicking the X or the icon and choosing Show Picture.) To undo this setting in Internet Explorer, choose Tools— Internet Options. Click the Advanced tab, and in the Multimedia section, check the Show Pictures box to make your pictures appear.
- An invalid value in the Windows Registry is preventing pictures from appearing. It's an easy fix, even for those who are squeamish about poking around in the Registry. (Before you mess around with the Registry, back it up as per the instructions in the sidebar on page 47.) Select Start— Run, type regedit, and press Enter. In the Registry Editor, navigate to HKEY_CLASSES_ROOT\.gif. In the right pane, click the Content Type item; its value should be image/gif. Then check HKEY_CLASSES_ ROOT\.jpg; Content Type should be set to image/jpg or image/jpeg. For more information about this fix, see Microsoft Knowledge Base article 307239.

Qurb Anti-Spam Software Review *by Ron Ogg, DVPC*

I downloaded a demo copy of Qurb last month and installed it on my PC at home that I use for email. After just 2 days I purchased a Qurb license. Based on my experience using Qurb at home, I recently purchased 100 Qurb licenses for work. This is a review of my experiences using Qurb at home and at work.

Qurb is a whitelist-only anti-spam program. When it is installed it scans the Outlook address book and adds every email address to the Approved Senders list, then scans the user's inbox and harvests the senders' email addresses and adds them as well. So, it's best to clean out the address book and inbox before installing Curb — especially to remove any spam messages! (Qurb also works with Outlook Express.)

A small toolbar with 4 icons is added to Outlook.

1. Review new quarantined messages
2. Qurb settings and options, including managing the Approved Senders list by adding and deleting entries
3. Approve a sender by adding the email address to the Approved Senders list
4. Block a sender by deleting the email address from the Approved Senders list and moving the messages for that sender in the inbox to the Qurb folder

Qurb checks incoming messages against the Approved Senders list; those on the list are passed into the inbox, those not are placed in a quarantine folder.

Periodically Qurb will pop up a dialog box asking the user to review their quarantined messages; this process can be run from the toolbar icon as well. In the quarantine window the user puts a check next to those that are not spam; those will have the email address added to the Approved Senders list and the message will be moved to the inbox and removed from the quarantine list. Messages not checked are put in the Qurb folder where the user can either delete them manually or let the automatic deletion remove them after a specified number of days.

Some nice Qurb features:

Qurb works well. Users at work who have been getting 75 or more spam messages per day are very happy with the way the program works, and the way it keeps spam out of their inbox. Qurb has a number of options that can be used to tailor the program to fit each user's preferences. This includes automatically marking spam messages as read (though with this enabled the user might miss messages that are not spam), how often to display the pop-up to remind the user to review their quarantined messages, automatically generating confirmation requests to unknown senders and automatically responding to confirmation requests sent to the user, automatically checking for Qurb updates, and — best of all — there's no annual renewal fee, unlike some other anti-spam packages like Norton AntiSpam and I Hate Spam.

The confirmation process is interesting. Here's how it works. When this feature is enabled, Qurb sends an email (which each user can customize) to unknown senders. This email requests that they send a reply email. When the reply email is received, Qurb adds the user to the Approved Users list, or (if automatic confirmation is not enabled) asks the user to manually confirm that the email address should be added.

(Continued on page 21)

Qurb Anti-Spam Software Review...

(Continued from page 20)

Some features that I'd like to see added to Qurb:

Since by default Qurb adds (or removes) the entire email address, the Approved Senders list can get very long. By opening the Approved Senders list entries can be added or deleted. This includes the ability to add (or delete) a domain instead of an email address, so adding "microsoft.com" will accept all Microsoft email addresses in the future. However, this is the only way to add a domain. It would be a real time saver to have a button on the Qurb toolbar to add a domain.

One problem with the whitelist-only approach is that if a domain is added, say "yahoo.com", and the user starts to get spam from garbage@yahoo.com, messages from this address will go into the users inbox because the "yahoo.com" domain is in the Approved Senders list.

I'd like the ability to sort the Approved Senders list by domain, so email addresses for a domain that is in the Approved Senders list (and are not needed there) can be easily found and removed. When you want to delete an entry in the Approved Senders list it has to be done one at a time, and after the entry is deleted the list is repositioned back to the first entry in the list. After a deletion, I'd like the list to be positioned at the next entry in the list. And I'd like to be able to select multiple Approved Senders entries so they can be deleted all at once. Finally, I'd like to have a Maximize button added to the Approved Senders list dialog box which always opens too a preset small size, and the only way it can be enlarged is by dragging the edges of the dialog box.

In summary:

I am a very happy user of Qurb at home. I previously used two other anti-spam programs, and I find that Qurb is much easier to use and is more effective. Qurb is also working very well for the users at work. Everyone who has it installed on their PC keeps telling me how much they like it. Qurb is available online at www.qurb.com. The list price is $29.95.

Felix Lin of Qurb will be at the April *DVPC* meeting. Be sure to come to the meeting and see a demo of this very effective anti-spam program. See the meeting announcement on page 1 of this issue of *Diablo Blue* for more information.

A Trip in Time *by Alan Mildwurm, DVPC*

At our last board meeting, while I was trolling for ideas for future speakers, Dick Curry told us about a speaker from The Computer History Museum (www.computerhistory.org) in Mountain View. So, last weekend we drove to the museum and took the free 1½ hour tour. The museum is in a beautiful building originally built for Silicon Graphics but never occupied by them. The museum just opened and therefore they are not fully moved into the 7.5 acre complex. Nonetheless, the exhibit and tour were very well done. In addition to the “stuff” one would expect to see, we saw a German Enigma machine, parts of the original Eniac, a tactical aerial defense computer with built in cigarette lighter and ashtray, an Apple I, and many more devices with switches and lights and tape drives that cost lots of money and have less computing power than a PocketPC. This is a tour well worth taking!

Following up on that is an excellent article from TechTV on the Best Vintage Computers and Videogames. I’m sure you’ll find many old friends in both of these locations.

Best Vintage Computers and Videogames *by Sellam Ismail, TechTV*

techtv

Vintage-computer collector Sellam Ismail looks at the history behind some of his favorite pieces of computer and videogame history. The founder of the Vintage Computer Festival, he visited the *Screen Savers* show to talk about the festival, his company VintageTech, and his vast personal collection of vintage computers and videogames. Below he details some of his favorites from his collection.

Favorite vintage computers

IMSAI 8080

The IMSAI 8080 can be considered the first clone microcomputer, since it improved upon the Altair 8800. The Altair was the "big bang" that started the personal computer revolution in 1975 when it appeared as a construction article in the January issue of Popular Electronics. The IMSAI 8080's improvements included being more robust, having nice, big, colorful front panel switches, and being technically superior to the Altair. It used the same S-100 bus that was pioneered by the Altair but with modifications that made it work more reliably.

The IMSAI 8080 was also featured in the movie "WarGames." The main character, David Lightmann (played by Mathew Broderick), used the IMSAI to hack into the fictional Department of Defense's WOPR computer. The actual IMSAI 8080 that was used in the movie was exhibited at our Vintage Computer Fair 2.0. (That's the exhibit picture you see above.)

(Continued on page 22)

Best Vintage Computers and Videogames...

(Continued from page 21)

Apple Lisa

Introduced a year before the Macintosh, the Apple Lisa was Apple's first attempt at bringing the graphical user interface (GUI) to the consumer market. Much of the technology (and some of the engineering team) that went into the Lisa was taken from Xerox's Palo Alto Research Center (PARC).

The first version of the Lisa featured disk drives invented by Apple and dubbed Twiggy. They proved to be unreliable, so Apple re-engineered the Lisa and came out with the Lisa 2, which had a single Sony 3.5-inch floppy drive (which Sony had just introduced).

The Lisa never sold well, which was attributed mainly to its price ($9,995 base price) and its poor performance. It could also be argued that the Lisa was just way ahead of its time. The Lisa was eventually phased out around 1987, with the remaining stock rumored to have been dumped in a landfill in Utah under armed guard.

Despite popular belief, Xerox was actually the first to market with a GUI computer, introducing the 8010 (aka Star) to the business world in 1981. The Lisa, while meeting only limited success, did help usher in the era of the GUI in the consumer market and paved the way for the Macintosh in 1984.

NeXT Cube

When Steve Jobs left Apple in 1985, he went on to found NeXT Computers and to design one of the most innovative computers ever produced. The NeXT computer had Jobs written all over it: It was a 1 cubic foot block that was entirely black. It featured a magneto-optical disk drive. And it ran an in-house developed variant of the Unix operating system called NeXTStep, which featured an advanced GUI desktop.

As with the Lisa, the NeXT was way ahead of its time. The operating system was based on object-oriented principals -- still a new paradigm in the mid-1980s. It had a built-in digital signal processor (DSP) for processing audio signals.

The NeXT found a market primarily with universities and engineering firms, but never quite captured the market it needed to stay viable. When Jobs returned to Apple in 1996, he also arranged for Apple to purchase NeXT in a sweet deal for himself. The NeXT computer remains a favorite of collectors.

DEC PDP-8

Founded in 1957, Digital Equipment Corporation quickly made a mark on the computing world with its programmed data processor, or PDP-1. In those days, computers were generally big monstrous beasts that took up entire rooms -- sometimes entire floors or even entire buildings -- and sucked up mass quantities of energy while spitting out massive BTUs of heat. The PDP-1 was much more compact than other computers of the day, taking up less than 50 square feet of space and not requiring as much power to run.

Fast-forward to 1965. DEC comes out with the PDP-8 and ushers in a new computing paradigm, the minicomputer. The PDP-8 stood only about 3 feet tall and about 2 feet wide. It was the first computer that a midsize or even small business might afford ($18,000 in 1965 dollars). Ask any middle-age geeks today and chances are they cut their teeth on some model of PDP-8 computer.

The PDP-8 had many successor models, including the 8s, 8i, 8e, 8f, 8m, and 8a. The original PDP-8 (dubbed the "straight 8") is highly sought after by collectors.

Imlac PDS-1

This is probably the most influential computer that nobody ever heard of. The Imlac PDS-1 is a graphics workstation that was introduced to the market in around 1970. It was used extensively in the publishing industry for laying out newspaper articles. It also found a huge user base in universities throughout the country. (It even made it over to Europe.)

Seminal games from hacker lore such as the 3D graphics version of "Maze" were written to take advantage of the Imlac's vector graphics display and produce a 3D wire-frame image of the maze that you walked through (i.e. early virtual reality). Many RFCs include mention of the PDS-1 as the reference computer for the standards they set to lay out.

The Imlac is a rare beast today, with few surviving units. A working PDS-1 was exhibited at the first VCF East (see the exhibit picture above). You can also get additional info here.

(Continued on page 23)

Best Vintage Computers and Videogames...

(Continued from page 22)

Favorite Vintage Videogames

Fairchild Channel F

The Fairchild Channel F, introduced in 1976, was the first microprocessor-based programmable home videogame system on the market. It featured plug-in cartridges that could change what games one could play. Each cartridge contained four different games or game variations selectable by a set of buttons on the front of the unit.

We take this all for granted today, but in 1976 it was a revolutionary concept. Back in those days, most home videogame machines had around four variations of the same basic game concept, which was generally a ball of some sort and paddles to bounce it around. As integrated circuit -- and primarily microprocessor -- technology became prevalent and started to come down in price, it became feasible to build a dedicated home videogame system around a microprocessor and place a ROM chip in each individual cartridge.

Atari's 2600 had been in development for a few months when the Channel F came out, lighting a fire under Atari's ass to speed up development, but it didn't work fast enough because another home videogame console came out in the interim, the RCA Studio II.

RCA Studio II

The RCA Studio II was another early programmable microprocessor-driven home videogame system. In fact, it ran on the same microprocessor (the RCA 1802) that powered the Voyager spacecraft that is now zipping along somewhere outside our solar system.

Like the Channel F, it used ROM cartridges that allowed one to play different games on the same unit. Also like the Fairchild, the graphics were primitive (even by standards of the day), which quickly led to its demise once advanced systems such as the Atari 2600 were introduced into the market.

Atari 'Pong'

Atari was not the first to market a home videogame (the idea was actually lifted from Magnavox's Odyssey, released in 1972), but it was certainly the most successful. Atari parlayed its video arcade "Pong" hit into a home version that sold more than 150,000 units when it made its debut in the Christmas season of 1975.

The home unit was a little pedestal that hooked up to your television and allowed two people to play against one another just like in the arcade. Atari's huge market share was quickly eaten away by dozens of cheap competitor knock-offs, but by 1978 Atari had regained market dominance using simple (and legal) trickery and deception to fool competitors out of business.

Microvision

The Microvision was the first handheld programmable videogame. Designed by the late Jay Miner (who was part of the Atari 2600 engineering team), the Microvision was unique in that the base unit was nothing more than a controller and LCD circuitry. The plug-in cartridges were really the brains of the system, each containing a 4-bit Texas Instruments TMS1000 microprocessor.

The Microvision was pretty cool for its day (first introduced in 1979). Although the graphics resolution was only 16x16 on a black-and-white LCD, it ran on batteries and you could take it with you, letting you have your videogame fix where ever you went. It wasn't until Nintendo came out with the Gameboy 10 years later that handheld videogames really took off.

ColecoVision

The ColecoVision was one of the finer videogame systems released in the early 1980s. Finally, here was a system that offered you real arcade-quality video gameplay. Based on the Zilog Z80 microprocessor that powered many home computers of the day (such as the Radio Shack TRS-80), the ColecoVision offered sound and graphics resolution that was superior to the Atari 2600 and Intellivision, which by this time were becoming antiquated.

Coleco started out making leather apparel (the name Coleco is derived from the parent company, Connecticut Leather Company), but by some strange twist of fate found itself producing home videogame systems in the mid-1970s. It was the first company to license Magnavox's TV tennis game (all the other clones were illegal knock-offs) and in 1976 it introduced the Coleco Telstar, which featured three built-in games. It sold more than 1 million units.

The strength of the ColecoVision was its excellent ports of arcade videogames to a home console. Its biggest success was the arcade hit "Donkey Kong." The ColecoVision version was almost as good as the arcade version and propelled early sales.

Unfortunately, the ColecoVision came out in 1982, only a little more than a year before the great home videogame crash of 1984. Unable to properly regroup and capitalize on its previous success, it never quite recovered, and by the late 1980s Coleco was but a memory.

Be sure to visit the Vintage Computer Festival page (www.vintage.org) and the VintageTech page (www.vintagetech.com).

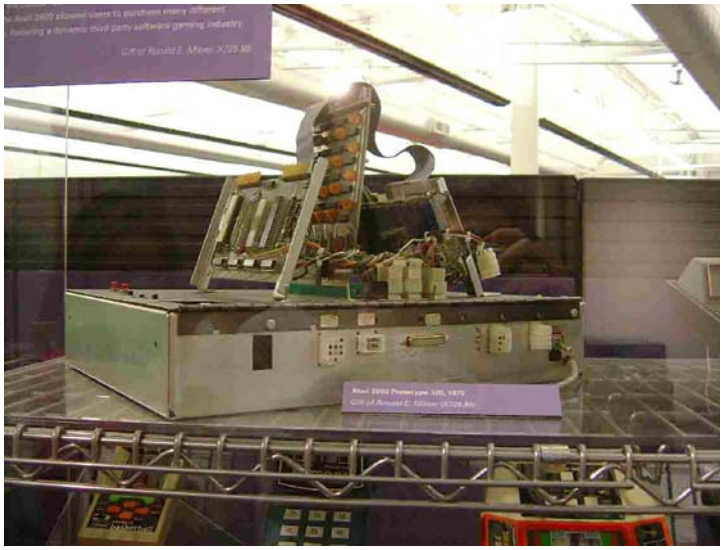
Originally posted November 7, 2002.

Pictures from the Computer History Museum

by Alan Mildwurm, DVPC

Apple 1

Original Atari 2600



Nieman Marcus "Woman's Computer"

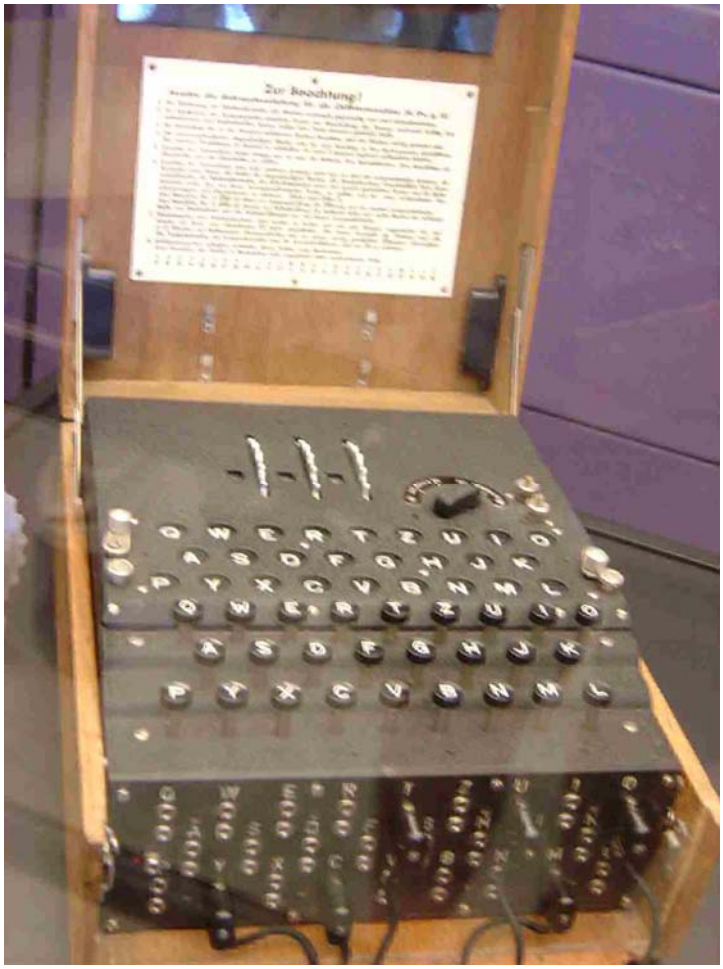
Tactical Air Computer, complete with Cigarette Lighter

(Continued on page 25)

Pictures from the Computer History Museum...

(Continued from page 24)

Geman Enigma Code Machine



Cray 1

What is Your Resolution?

by George McGinnis, Computer Society of West Florida – Pensacola

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

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

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

Whom, or what, determines the resolution? You do. You set the resolution when you set up the computer when you take it out of the box. Each Windows version has a slightly different way of setting the resolution however they are all similar. For Windows XP

(Continued on page 26)

What is Your Resolution...

(Continued from page 25)

go to Control Panel, Display, Setting and move the screen resolution slider to the desired resolution position. At the same time you can select the color quality from the pull down menu. The highest setting is (Highest 32 bit). By going to Advanced, you can set the monitor refresh rate and change the size of the text.

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

640 x 480

800 x 600

1024 x 768

1280 x 1024

1600 x 1200

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

17" 1024 x 768

19" 1280 x 1024

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

I took a poll of 50 computer users to determine the monitor resolution they used. I was surprised to learn that, regardless of monitor size, the predominant resolution was 800 x 600. I also learned that most of the individuals were not aware that a higher resolution produced higher quality graphics representation on the monitor. Several individuals indicated that the higher resolution produced very small text and small icons on the desktop and therefore they had difficulty reading the text. All this is true; however these problems can easily be remedied. With Windows XP, go to Control Panel, Display, Appearances, font size and choose the larger font. Then go to Advanced, desktop, icons, to increase the size of the icons; then to icon spacing to adjust the horizontal and vertical spacing of the desktop icons. All these adjustments are important and will overcome the objection to smaller icons and smaller text and at the same time give you better quality graphics and text.

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

Accessibility for Everyone

by Billy Mabray, Oklahoma City PC Users Group

Many people, including a lot of Web designers, think Web-site accessibility is only about making sites work for blind users with screen reader software. Accessibility should be about all of us. There is a wide range of physical conditions that can make using the Web difficult. The Internet can be a frustrating place when you have poor eyesight, colorblindness, or trouble using a mouse. You may not fall into any of these categories right now, but consider this statistic: 100% of Internet users are growing older. At some point, we will all need help navigating the Web.

There are many things that can be done to make the Web more accessible. Some of those things are already built into your Web browser. Others require Web designers to implement accessible features on their Web sites. If you are one of the many people who has difficulty using the Web, you will want to know what help is out there.

One of the biggest complaints people have is that text is too small. It is also the easiest to remedy. If you are using Internet Explorer, choose View>Text Size from the top menu. Also, if your mouse has a scroll wheel, you can hold the CTRL key and scroll up and down to change the text size. Now, this will not work on all Web pages – later, we will discuss why that is and what Web designers can do about it. The Netscape/Mozilla browser, however, can change text size on all Web pages. Choose View>Increase

Accessibility for Everyone...

Text Size, or hold CTRL and press the + key.

There are many shortcut keys available for those who have difficulty using a mouse. For example, the backspace key will take you to the previous page, F5 will reload your current page, and ALT plus the Home key will take you to your home page (the page set to load when you open your browser). Also, if you have gone back to a previous page, ALT plus the right arrow will take you forward again. Another useful key on any Web page is the TAB key. You can use the TAB key (and SHIFT plus TAB to go in reverse) to quickly navigate forward through all the links and form fields on a Web page. Once you have tabbed to a form element, other keyboard shortcuts may come in handy. For drop-down boxes, you can use the up and down arrows to highlight your selection. For radio buttons or checkboxes, use the space bar to select your choice. If you are using a recent version of Netscape/Mozilla, you can also use "Find As You Type." Start typing at any page and it will automatically do a search for what you are typing on that page.

Some people, particularly the colorblind, find Web sites hard to use because the color of the text does not contrast enough with the background colors. If the color scheme of your favorite Web site makes it difficult to read, you can override that as well. You will find this under Tools->Options or Edit->Preferences, depending on your browser. You can set your default fonts, font sizes, and page colors. You can also specify that your defaults always override what is set by the Web page.

While these browser features can be helpful, there is still much Web designers must do to make their site accessible to the widest possible audience. A good example is text sizing. If Web designers use fixed text sizes – sizes that specify an absolute unit of measurement, such as points or pixels – on their pages, Internet Explorer users cannot change their text size as I described earlier. Web designers can, and should, use relative text sizes to make their pages more accessible. Designers who prefer to use absolute sizes for text should provide a "style switcher." This is a link on the page that allows the site's visitor to make the text bigger and saves that preference in a cookie.

Another accessibility feature that some designers use is access keys. These are just like the shortcut keys I mentioned earlier; except they are defined by the Web page you are on. For example, the designer could define ALT plus 4 to take you directly to the search function. If you visit a site regularly and know their access keys, they can be useful.

Web designers should also use labels for forms. Labels make the text next to a form field clickable, just like the field itself. For example, if a form has a checkbox that reads, "Click here to subscribe," and that text is set as a label, the user can click anywhere on that text to check the box. It can be very helpful to have a larger target when trying to click things with a mouse.

We still have a long way to go before the Web is accessible to everyone. But now you know some of the helpful features you have at your fingertips already, and you know what to ask for from the Web sites you frequent. Hopefully, as users learn what they can do, and designers learn what they need to do, we can all enjoy the Web a little more.

Billy Mabray and his wife, Angela, own Smart Goat, a local software development and web design business. They are members of the OKCPCUG. Comments or questions on the article are welcome and can be addressed to: billy@smartgoat.com.

Computer Memory

by Brian K. Lewis, Ph.D., Sarasota Personal Computer Users Group

Occasionally the question arises as to how much memory can be put in a computer. The answer is "it depends". It depends on just what you mean by memory (RAM or hard disk), what operating system you are using and the capabilities of your computer's motherboard and its chipset. When I talk about memory I am not referring to the permanent storage of programs and data on the hard disk. Rather, I refer to the random-access memory or RAM. This is the memory provided by memory chips seated in slots on the motherboard of today's computers. Anything stored in RAM disappears when the power is turned off, so it is referred to as volatile, or temporary, memory.

If you want to upgrade the memory in your computer you have to be able to determine the memory type as well as the size, pins and speed, the number of slots available on your motherboard and the maximum amount of memory that your system can address. In general, this varies with the age of your computer. So let's look at these components in a little more detail. (Please note that although my remarks refer to Intel's Pentium series central processors, they also generally apply to the equivalent AMD processors.)

Early Pentium based computers had a CPU bus speed of 66 MHz (megahertz) and a PCI I/O bus speed of 33 MHz. These values relate to the speed of data movement within the central processor and transmission to and from peripherals such as the memory bank. In some cases transfer to and from memory was at 50 MHz. Pentium computers generally had four slots which were arranged as two banks. This meant that memory had to be installed in units of two. The memory chips were 72 pin DRAM (dynamic RAM) or SIMM (single in-line memory modules) modules. Many of these computers could support four DRAM modules of 32 MB (megabytes) for a maximum of 128 MB of RAM. There were some motherboards built for Pentium 5 systems that had 2 or 3-168 bit DIMM slots in addition to the 72 pin slots. However, you could not use both the 72 pin and 168 pin slots, only one or the other. These systems would support either 128 or 256 MB of memory. However, at the time, many Pentium/Pentium II computers were sold with only 16 MB of RAM and Windows 95. Later, with Windows 98 the basic memory was 32 MB. In both cases, this is a less than optimum amount of

Computer Memory...

memory for these operating systems. The first Pentium computers had a 32 bit address space which was theoretically capable of addressing 4 GB of memory. However, none of the motherboards manufactured for these computers carried this memory capacity.

The next generation of computers carried faster CPUs and chipsets along with faster bus speeds. For example the Intel 440 series chipsets were capable of working with CPUs with speed of 233 - 333 MHz at a bus speed of 66 MHz or with 350-450 MHz processors at a bus speed of 100 MHz. These motherboards generally had 3- 168 pin slots and would support a maximum of 384 MB of RAM. As the address space of the CPU was increased to 36 bit, the maximum addressable memory was 64 GB. However, in practice some computers running Win98 would not recognize more than 256 or 384 MB of RAM. This problem has been ascribed to the chipset design and problem with the L-2 cache. So some caution is recommended if you intend to upgrade the memory in a Pentium II or older system With some of the Pentium III class computers there was an additional increment in bus speed to 133 MHz. The motherboards had 2 to 4 168-pin memory slots. The maximum usable memory of such systems ranges from 512 MB to 1 GB. These motherboards for this CPU class are generally able to use 100 - 133 MHz DIMMs. The 133 MHz DIMMS are capable of working at the 100 MHz speed. The Pentium 4 motherboards came with a whole new array of chipsets and memory chip types and speeds. The maximum memory now ranges up to 4 GB. Intel's initial Pentium 4 motherboards required the use of RDRAM or Rambus DRAM memory chips. RDRAM is a serial memory technology that arrived in three speeds, PC600, PC700, and PC800. RDRAM designs with multiple channels, such as those in Pentium 4 motherboards, are currently the fastest in memory throughput, especially when paired with the newer PC1066 RDRAM memory. A Rambus channel is 2-bytes wide, so we get a maximum 1.6GB/s transfer rate for a single RDRAM channel using PC800 RDRAM or 2.1GB/s for PC1066. The other form of memory chip is the double data rate DRAM. Intel and other manufacturers now have motherboards and chipsets that can utilize these memory modules. They are less expensive than the RDRAM. DDR memory modules are named after their peak bandwidth - the maximum amount of data they can deliver per second - rather than their clock rates. This is calculated by multiplying the amount of data a module can send at once (called the data path or bandwidth) by the speed of the front side bus (FSB). The bandwidth is measured in bits, and the FSB in MHz. Note that the RDRAM bandwidth is in bytes. One byte is equal to 8 bits.

A PC1600 DDR memory module can deliver bandwidth of 1600Mbps. PC2100 (the DDR version of PC133 SDRAM) has a bandwidth of 2100Mbps. PC2700 modules use DDR333 chips to deliver 2700Mbps of bandwidth and PC3200 - the fastest widely used form in late 2003 uses DDR400 chips to deliver 3200Mbps (3.2 Gbps) of bandwidth. You may see the term "dual channel" applied to memory. When properly used, the term refers to a DDR motherboard's chipset that's designed with two memory channels instead of one. The two channels handle memory-processing more efficiently by utilizing the theoretical bandwidth of the two modules, thus reducing system latencies, the timing delays that inherently occur with one memory module. For example, one controller reads and writes data while the second controller prepares for the next access, hence, eliminating the reset and setup delays that occur before one memory module can begin the read/write process all over again.

Consider a model in which data is filled into a container (memory), which then directs the data to the CPU. Singlechannel memory would feed the data to the processor via a single pathway at a maximum rate of 64 bits at a time. Dualchannel memory, on the other hand, utilizes two pathways, thereby having the capability to deliver data twice as fast or up to 128 bits at a time. The process works the same way when data is transferred from the processor by reversing the flow of data. A "memory controller" chip is responsible for handling all data transfers involving the memory modules and the processor. This controls the flow of data through the pathways, preventing them from being over-filled with data. Now that you are totally confused by all this memory type and speed terminology, let's look at the next question: How much memory should you have in your computer? The answer is: probably as much as your motherboard and chipset can handle. For the newest motherboards, that may be excessive unless you are involved in digital video editing or graphic design. For most home users running WinXP or Win2K I would recommend 512MB up to 1GB. So why those figures? I have found that WinXP uses over 200 MB of RAM for its own files, if that much is available. So on a 256 MB system that leaves very little for other applications and data. The net result is a lot of swapping with the virtual memory space on the hard drive. That slows everything down. In WinXP the Windows Task Manager (bring up by pressing CTRLALT-DEL) shows your current performance and the amount of memory available in real time. With 512 MB and several programs running, I have over 300 MB of real RAM available. That greatly increases the responsiveness (speed) of the system as moving data to and from RAM is many times faster than using a hard disk. The Page File window shows you the virtual memory swapping your system is doing. At the moment, mine is zero. You can do similar analyses on Win98/WinMe systems. The System Monitor application that comes with Windows can supply this information. However, you may need to modify it to get the memory info you want. Go to Start-Programs-Accessories-System Tools and select System Monitor. If this selection is not available on your menu, then you need to install the program from your original Windows disk or from \WindowsOptions\Cabs file. You do that from the Control Panel (Add/ Remove Software) and Windows Setup. Once you have the system monitor you can ADD memory information by clicking on Edit, then add item. Select Memory Manager. The individual items that will be the most helpful are: allocated memory, unused physical memory, page files in/ out, swapfile in use or swappable memory. The kernel reading tells you how much of your CPU capacity is being used. Generally, Win98/WinME will do very well with 256 MB - 384 MB of RAM. You just have to be certain that your motherboard and chipset can support this much RAM. Most of the home computers I have worked on really don't have enough RAM for the most efficient operation. Does Yours?

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 at bwsail@yahoo.com or voice mail at 941/925-3047. :