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Stanford
Palo Alto
Users Group

PRint SCreen

The Newsletter of
Stanford/Palo Alto PC Users Group

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C·O·N·T·E·N·T·S

THE NOVEMBER PRESENTATION

Last Wednesday: November 27th, 7.30pm at Turing Auditorium

Has your curiosity gotten the best of you? Do you find yourself peeking in the window of a Mac shop when no one's looking, just to see what this magical, mystical machine is all about? Let's dispel the myths.

In November, we will invite a (hopefully) unbiased expert to show you what a Mac looks like, and explain the reasons behind its enormous popularity. You'll get a feel for the operating system, and see how it compares to Windows, whose claim to fame is to make a PC more "Mac-like." (Course if you're interested in seeing a Big Mac, I suggest you go to Fry's.)

CLUB NEWS

The President's Piece

Do We Really Need This?

A recent article in a computer magazine announced a software package that will, seemingly, allow you to set your computer's clock to an accuracy heretofore impossible. The program dials up the government office that runs the cesium-atomic clock. This device is the standard that is used by the military and any scientific organization that needs super accurate timing. Once you're hooked up to this thing, your computer and the clock's software start echoing back and forth to establish the lag time between you and the clock. With this established, the clock sends the correct time to your computer's clock along with the correction for the lag time. This sets your clock to within several thousandths of a second of the official time of the cesium clock.

The software for this is only about $35 - quite a bargain for the ultimate in timing. I think it would be fun, if pointless, to see how well this works. If your clock is anything like mine, I'm happy if it keeps me on the right day of the month.

Welcome Home Nancy

Nancy Helmy, one of our hardest working members, was recently in the hospital for some major surgery. We were all very concerned, especially since it was so sudden. I'm happy to report that she's now back at home and recovering rapidly. So, welcome back, Nancy, all of us here at SPAUG send heartfelt love and best wishes for your speedy recovery! We miss you!

Money! Money! Money!

The planning committee met earlier this month to begin the process of hashing out a new budget for the club. I'm glad to report that, with the insight of Henry Holwedell, we were able to look at our expenditures for last year and recognize quite a few that are one-time expenses. This made our financial picture a little brighter, still we are going to have to examine all aspects of our finances so that we can bring in more revenue.

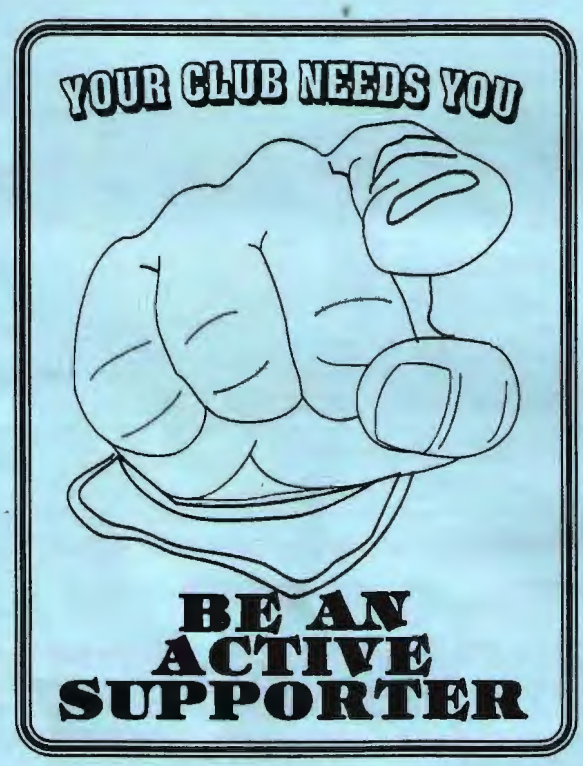
As was mentioned last month we're looking for a new facility to use for our meetings. We need a hall that has all the equipment necessary for our presentations and is either very cheap or, better yet, free. Please search through your mind for possible locations for us. Call Bob Bottini with your leads.

Don't forget that there will be no meeting in December! There'll be a meeting this month (November) and the next one will be in January.

SPAUG would like to thank

PRACTICAL PERIPHERALS, INC.
of Westlake Village, CA
for their most generous help with a V32/42 modem for our BBS

OCTAVE SYSTEMS
of Campbell
for helping us with the hard drive for our BBS



TELL US A STORY

Why did you buy your computer? What's your favorite program? And why? When was the last time you felt like throwing the damn thing through the nearest window? Why? Everybody's got a story to tell. So, tell us yours and we'll print it here. How about your computer wish list? What about that free software you won? Did it do what it claimed it could? We need fresh input from some fresh voices. It doesn't have to be fancy or long, just real. Tell us your story.

THE BBS IN PRINT

BOB BOTTINI

Bob is the BBS Sysop

(415) 321-4497

THE NEW BULLETIN BOARD NUMBER

Using Our BBS Message Editor

Our BBS Software(Wildcat) contains two distinctly different editors, the Line Editor and the Full-Screen Editor. We will review both.

All of the information presented in this article is for use of our membership to facilitate the use of Wildcat software published by Mustang Software Inc. Our license to use this software for our BBS is #89-0949.

As stated previously, WILDCAT offers two editors, a Line Editor and a Full-Screen Editor. Any caller can use the Line Editor, but the Full-Screen editor requires Ansi.sys for operation. You can choose between the two Editors for a default setting to be used each time you send a message. I recommend the choice of a default setting to avoid confusion. You can also choose to use both editors, making your selection at the time you are preparing to enter your message.

The Line Editor enters text a single line at a time, and to make corrections on that line you must use the backspace key and re-enter text. Text will word-wrap or you can use the Enter key to move to the next line. Once you have moved to the next line you cannot edit the previous line. You can edit your message when it is completed however by using the OLDSTRING replaced by the NEWSTRING method as in our previous version of Wildcat.

After you have completed entering your message the message editing prompt will appear at the end of the text. Please read the commands carefully the first time you encounter the Editor. It will save you considerable time and consternation in the future. These commands are the same for either the Line Editor or the Full-Screen Editor. Remember choosing (S)ave also sends your message.

The Full-Screen Editor operates more like a word processor. You can move freely about the screen and many of the commands that are used are similar to the commands used in the popular word processing software. This is the most flexible of the Editors but it will take a little learning in that you will have to become familiar with and commit to memory its keystrokes. Again, after your message is complete by hitting the Enter key you bring up the Message Commands, and as with the Line Editor you send you message by hitting (S)ave.

Looking forward to hearing from you.

PLANNING MEETING

December 4th (1st Wednesday) at 7:30pm

The location

1670 Oak Avenue, Menlo Park

Help us to make decisions about the club. All members are welcome. You don't have to be a club officer to get your views heard.

A Big Welcome to the following New Members

Jim Bailey	Palo Alto
Alicia Boyd	Palo Alto
Emmy Lou Miller	Palo Alto
Fred Rey	Menlo Park
Sven Rogge	Palo Alto

and Thanks to Renewing Members

Jim Hilton	Sunnyvale
Bruce Levitch	San Leandro
Larry Mehl	Menlo Park

OCTOBER MEETING NOTES

Thanks to the generosity of our two presenters, Mike Todd of PRACTICAL PERIPHERALS and Greg Marek of INTUIT we had three lucky winners in the October meeting draw. **Lou Brossard** won a Practical Peripherals modem, **Cal Worley** and **Ed Doherty** both walked out with copies of the new QUICKEN version 5.0.

For those of you in the market for a modem and who missed the meeting, Practical Peripherals announced a special offer for SPAUG members. Get in touch with Mark Dodge and he will arrange a special deal with one of your local retailers. The number is [415] 866-8630. By the way, they have just announced a Lifetime Warranty on their products.

The Windows and OS/2 Conference 1992

It's almost that time again, you show people! This year's Windows conference will be held January 28-30, at the San Jose Convention Center. And SPAUG's booth is confirmed. All of us who worked 1991's show shared a great experience together, and even Sam says we should play it again. Let it be known I am now hereby taking names for booth duty! All those participating get a free pass to what is (in my opinion) the best Windows show in the Bay Area. Oh, gee, in the world! Let the games begin!

WORD RAPPING WITH
JAN

OLÉ for Winword 2.0!

Amidst the excitement at October's Comdex, Microsoft announced the long-awaited Word for Windows 2.0. After close to two years in creation, happy Microsoft employees walked off with Comdex's Number One prize for Applications Software. The slogan for this product is "Everyday Made Easy." This stems from the company's extensive research into usability studies. Microsoft boasts a usability lab at their corporate offices, where they literally hire people to come in and use software.

Three cameras are strategically placed to record a user's actions: one on the face, one on the fingers, and one on the screen. The majority of changes made in this new release were a direct result of data from the usability lab. Easy access to features The first thing to catch your eye when you boot up is the new toolbar stretching across the screen. According to Microsoft, the twenty-two buttons on the toolbar make up those everyday tasks used 80% of the time (thus, "Everyday Made Easy"). Double-clicking the toolbar brings up an extensive dialog box used to customize it to your liking. Merely select the button to change, choose among over 90 icons, and specify the command or macro to be launched when you press the button. Thanks to Ami Pro and WordPerfect for Windows, a customizable toolbar was a mandatory addition to this program. But I do like the way Microsoft makes the toolbar a part of the document template; choosing from an array of customized toolbars is as easy as changing the document's template with the new File Template command.

MOVABLE TEXT AND GRAPHICS IN ANY VIEW

You can now zoom your document view anywhere from 25% to 200%. And all the zoom views are completely editable. Adding the View Zoom button to the toolbar lets you specify any zoom amount at any time to get a different look at your document. Once you've done that, and you don't like where your graphic is placed, forget about the intricacies of the Format Position box - just drag and drop the graphic in a new place. Text automatically wraps around it.

Microsoft was so excited about the whole idea of "drag and drop" that they decided to add it to text, too. ("After all, this is a word processor," they say.) Once you've selected any amount of text, use a simple drag to move it to a new location (hold down Ctrl to copy). A little broken line follows on the screen to make sure you drop in the right place. My hunch is that most people will quickly get addicted to the ease of dragging text around. I've found that using a medium zoom of about 75%, I get a good overview of my document, and can easily reorganize with a few drag-and-drops.

(A small aside: once you've selected text, dragging again in that area is considered a drag-and-drop. If you need to reselect in the same location, click first to remove the highlight, and then reselect. If you do this often and become annoyed, go to Tools Options General, and turn drag-and-drop off.)

HAVING A TWO-WAY DIALOG

Dialog boxes have also been refurbished. Many contain what Microsoft calls WYSBYGI, or What-You-See-Before-You-Get-It. This comes in the form of sample boxes showing a preview with the options you've selected. Feel free to tweak as much as you like before OK'ing the box. (My absolute favorite example of this is in File Find. You can actually preview the contents of any file before opening it.)

Most dialog boxes now also contain Help buttons, providing access to the much-improved Help facility. I give the new Help facility a resounding A+. It is well organized, and offers much more information than before (even descriptions of fields are included - yay!). WordPerfect users can enter a WordPerfect command, and get a hand-held demo through the Word for Windows alternative.

EASY PRINT MERGE . . . AN OXYMORON?

As a Word for Windows trainer, I get more questions (pronounced "complaints") regarding print merging than everything else combined. Admit it, Microsoft, print merge in Winword 1 is too complex to bother with. It is such a bear, in fact, that Microsoft Product Support has what is called the "print merge couch." Whenever a call comes in regarding merging, the product support specialist sits down on the couch for what is invariably a long phone call. (True story!)

That's now (thankfully) a thing of the past. Winword 2.0's print merge capability has been so improved that I literally had trouble making a mistake! (I tried to create one to see what would happen, and I had to go out of my way to do something wrong.) Print merge is now done graphically. Once you initiate a merge (with the File Print Merge command), the print merge icon bar appears on the screen to help you through the process. By merely clicking buttons you can: create or attach the data document, add merge fields to the main document, and merge to a file or printer. You've got to see it to believe it - it's an incredible improvement.

OLÉ FOR WORD FOR WINDOWS!

Yes, Winword now supports OLE, or "Object Linking and Embedding." OLE is the process of linking objects created in different applications into a single document. Example: create a graph in Excel, and embed it into a Word document. When it comes time to edit the graph, simple double-click it. Word recognizes the source application. Excel is automatically launched, and the graph loaded. You can then make the changes, close Excel, and you're returned to Word with the newly-edited graph in place. It's dynamic data exchange with a twist: you need only double-click an embedded object to launch its native application, whatever it may be. Remember that in order to use OLE, both the source and destination programs must support it.

Just to make things more fun, Microsoft has bundled four little applications with Winword: WordArt (my favorite - changes text into works of art), Graph (for Excel-type charts), Draw (for pictures), and Equation Editor (for the Einsteins among us). These are the Winword "applets," and they all support OLE. For the price of Winword, you actually get five separate programs. (The applets are kept in their own subdirectories under WINDOWS, and can be used to link with any other OLE app, including Excel or Powerpoint.) In some cases, Microsoft uses shared code between these applications to give an identical look. Example: Microsoft Graph uses exactly the same charting engine used by Microsoft Excel. Know one, know the other.

OTHER MISCELLANEOUS WAYS TO MAKE LIFE EASIER

Selecting italicized text is a breeze with an italicized cursor. Create a table

of any dimension with a click on the toolbar. Once you've entered text, drag and drop any row or column. You can also shade cells (or any paragraph, for that matter). And table dialog boxes aren't scattered among three menus - they're all under the Table menu.

A click on the toolbar can also: indent or outdent a paragraph, divide your text into columns, number selected paragraphs, bullet selected paragraphs, cut, copy, or paste text, undo, save or print a file, or create an envelope. Attaching an envelope to a letter is now possible since you can mix different margins and page orientations in the same document.

Winword 2.0 now provides grammar checking. (Sorry, you'll have to check your grampa yourself.) Not only can you check in English, but you can purchase foreign language spelling and grammar checkers.

You'll also be pleased with the program's improved speed.

THE FLIP SIDE

Okay, I admit, there are a few things I wasn't crazy about. After all, Microsoft isn't finished with Word yet - there will someday be a Word 3.0. Here are a couple of things I'd like to see changed when that day comes:

The standardized Windows shortcuts for Undo, Cut, Copy, and Paste aren't listed on the menus or in Help; instead, there are some other new Ctrl shortcuts. But Shift/Del, Ctrl/Ins, Shift/Ins, and Alt/backspace still work in the usual Windows way.

In some cases, it takes more clicks to do things I do often. For example, there are too many levels of dialog boxes: File Find File - then Search - then Edit Path; also Format Style - then Define - then Character or Paragraph. I would also prefer fewer drop-down list boxes. I prefer to go into a dialog box and be able to immediately choose an option, instead of having to drop down a list first and then choosing. (More back doors between related dialog boxes would have been great.)

In other cases, dialog boxes hang around longer than I like. Edit Find and Edit Replace are two prime examples. They no longer disappear after you've done a find or replace. But these were user suggestions, so it's really just a matter of personal taste. But considering the total package, it's now my primary word processor!

WHERE IT'S SELLING NOW THAT YOU'RE SOLD

By the time you receive this, most of the stores should be selling the program. MSRP is $495; upgrade price from Microsoft is $129. I will be on the lookout for any further discounts, so call me to keep in touch. Minimum hardware requirement is a 286 with 2 MB of RAM, running Windows 3.0. The minimum disk space needed is 5 MB; maximum with all four applets is 15 MB. (Installation gives you a choice of options.) Feel free to call anytime. I am available for demos of the program, or for a helping hand if you're in need.

Jan is the Vice-President of SPAUG and a Microsoft Certified Trainer. Send your questions on Windows applications to:
3655 Pruneridge Avenue, No. 135, Santa Clara, CA 95051, (408) 243-5955.

Don't forget about the **'Excel Tips & Tricks'** contest wrapping up soon! Send in your favorite tricks to the address above.

PC TOOLS

Most of you PC Tools users probably know that because of the voluminous bugs in version 7.0 (time display freezes, keyboard locks, etc.) Central Point Software is sending every registered user of 7.0 an update (Version 7.1) in the hopes that their reputation won't suffer too much from user dissatisfaction. All well and good - right?

All users who now configure with the Datamon Screen Blanker and have Lotus 1-2-3 and/or Quattro Pro installed will have NO screen blanker for those programs. This info comes from member Marty Rosenblum who was not able to get Screen Blanker working after installing Version 7.1. A call to Central Point got him this story: So many 1-2-3 and Quattro Pro users of PC Tools 7.0 complained of interference (sometimes only half of the screen would return upon "push any key") that they rigged Version 7.1 so as not to blank the screens of these two programs.

I use 7.0 with Quattro Pro and when the screen returns the colors do strange things, but it settles down immediately. Central Point suggest that, after installing 7.1, you copy the Datamon files from 7.0 over the 7.1 Datamon files. Marty says that they're wrong, and it only works with his version of 1-2-3 if you call Datamon and reset the blanker time-out - then it only works for that session. If you terminate by turning off power or with the reset button, it's gone.

In order for the blanker to work with 1-2-3 in Version 7.1 you must install the blanker with the hot-key setup and blank the screen yourself with the hot-key - it won't time-out automatically. Marty got conflicting information in two different phone calls to Central Point.

The hot-key doesn't always work either! I wonder what else there was that really wasn't broken but got fixed by elimination.

Those who remember the discussion at the October meeting, about Quicken 5.0 and its interference with TSRs, may also remember that I stated that the PC Tools 7.0 screen blanker does not work with Quicken on my setup. Well Intuit is working on a fix but it is not ready for release yet. Could it be that PC Tools - - - - nah, just coincidence, most likely. Norton is beginning to sound interesting!!

FLOYD KESSLER

TECH TOPICS

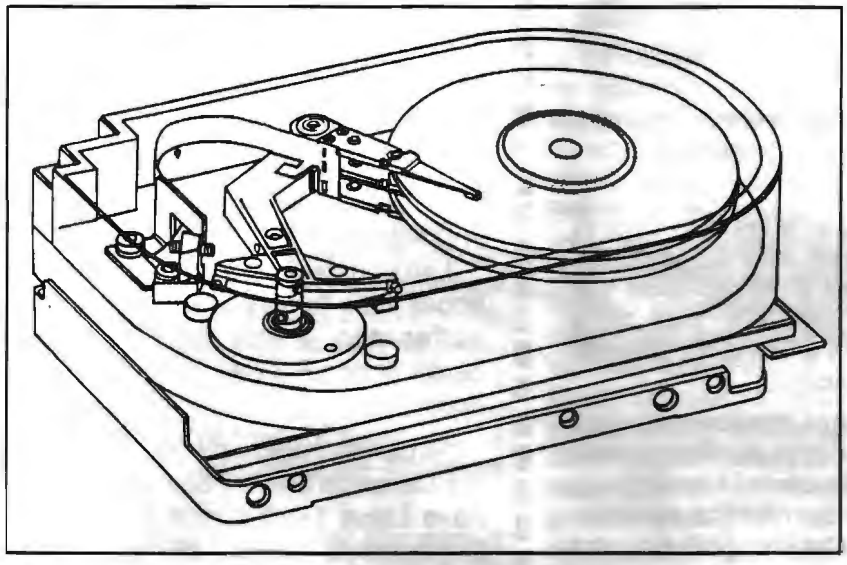
WHAT IS IDE?

Part 1

Mike Osborne

IDE, AT interface, Embedded Controller, Compaq Winchester interface are all names for the same hard drive interface. The advantages over MFM, SCSI, and RLL are numerous. First let's look at the history of IDE (which means integrated Drive Electronics).

Compaq was the first PC Manufacturer to use the 40 pin single cable hard drive interface on their Portable II in 1987. At that time they commissioned Western Digital to make a single 40 pin interface adapter board which converted a 20 Meg Miniscribe MFM Hard Drive to the "new" connection. Shortly after that, Compaq commissioned Control Data to use the Western Digital chipset on a new circuit board that replaced the MFM circuit board on the bottom of their existing 30 Meg and 60 Meg drives. These Control Data (CDC) Hard drives first appeared in Deskpro 386 16 Mhz Compaq computers. CDC named the interface the "AT interface", while Western Digital calls it the now popular Integrated Drive Electronics or IDE. These CDC Hard Drives had 28 millisecond (ms) access time and around 400 Kilobits per Second (KBS) transfer rate.



(The access time is the average time in milliseconds that is required to read or write any track on the hard drive from anywhere on the drive. The transfer rate is time it takes the data to be sent from the hard drive to the computer's CPU (or vice versa) and is measured in kilobits per second (KBS)).

In 1987, a few hard drives were 28ms, but most were 40 milliseconds. Their transfer rates were usually 160 KBS and were being used with 3:1 interleave MFM controllers. Early IDE Drives also had 3:1 interleave controllers built in. Current IDE drives have 1:1 interleave controllers. The interleave can have a great effect on the transfer rate.

If a hard drive's data area is thought of as a pie with 17 pieces, a 3:1 interleave would read the first piece then jump to the third piece and read it. A 1:1 interleave would read every piece consecutively. The drawback in the older machines was if the machine was too slow to accept the speed of the data being sent at a 1:1 interleave, then it effectively became a 17:1 interleave because the CPU would ask to read it a second time and the hard drive would have to go all the way around a second time before the data was read. This, of course, causes the transfer rate to go down which is undesirable. The KBS numbers I'm referring to can be generated using a utility called CORETEST version 2.8, which can be downloaded from the most bulletin boards.

Because the CDC Hard Drives (now owned by Seagate) were much faster in access time and transfer rate, Compaq standardized on the interface by putting the 40 pin connector on the serial, parallel and floppy controller board which also eliminated a slot being used by a separate controller. Compaq calls this connector the Winch connector (which is short for Winchester). This connector is an interface and not a controller. It is usually made up of four logic gates chips and a PAL (Programmable Array Logic) chip. It is like a doorway for the hard drive, but it does prevent an MFM or RLL controller from being inserted and being the boot device.

Compaq invested 45% in a company called Conner Peripherals in 1987. Conner was a startup company with former Seagate and IBM officers being the founders. Their first products were 40 Megabyte and 100 Megabyte IDE Hard Drives and their first customer was Compaq. Today, Compaq only owns 20% of Conner and their products include not only IDE 3½" Hard Drives but SCSI 3½" Hard Drives. Last year,

Reprinted from the October issue of

Conner introduced 1½" IDE and SCSI Hard Drives. Today Conner's customer Acer, AST Research, ALR, Data General, Epson, Mitac, Texas Instruments, Toshiba, Wang and many others.

Other hard drive manufacturers have not been ignoring the IDE interface. The Apple SCSI hard drive OEM, Quantum, also makes 3½" IDE hard drives. They offer a two-year warranty on their products. Quantum also has the largest cache on board their hard drives, at 64 Kilobytes. Most Conner hard drives have a 32 Kilobyte cache, as do Maxtor and most other IDE Hard Drives.

A cache is a major contributor to better than hardware access time in milliseconds. Older hard drive controllers didn't include a cache at all. The Western Digital WD1006MMx series include an 8 Kilobyte cache. A cache keeps recently read information concerning the file's location on the hard drive. This can make a Quantum 40AT which is rated at 19 milliseconds, give an effective access time of 12 milliseconds. This will especially be noticed on larger files which get read quite a lot. Recently, I have clocked a Quantum 105AT at 16 milliseconds access time and 851 KBS transfer rate and a Maxtor 7120A at 15 ms access time and 1211 KBS transfer rate, using CORETEST 2.8. This is a very substantial performance gain over a similarly priced MFM hard drive/ controller combination. Other hard drive manufacturers making IDE drives include Western Digital, Maxtor, Seagate, Seagate formerly imprimis/ CDC, JVC, Teac, Fujitsu, Hewlett Packard, Kyocera and Plus Development (a division of Quantum).

IDE hard drives are more reliable than regular hard drives. Some models can take 60 G's of force when powered off! Because there are fewer electronic circuits (no external controller), there is less heat generated and all of the hard drive and controller electronics reside together on the bottom of the drive on one board. This allows the drive manufacturer to low level format the drive during manufacturing. This not only saves the installer time, but was also done because IDE drives have the servo information embedded in between the data tracks. This allows the drive to "know" precisely where the heads are located by reading the servo information for track location. This servo information can not be wiped off without factory servo writers writing over the old information.

Currently, almost all the IDE hard drives have low level formatting inhibited to prevent the servo information from being wiped out, thereby maintaining the correct low level and servo information integrity. Since factory written servo tracks on MFM drives seem to never fail before the motors or data media wears out, IDE hard drives should never need a low level reformatting. The DOS "high" level format will "clean" off and lock out bad tracks on an older IDE hard drive.

SPAUG MEMBERSHIP BENEFITS

Our club was founded in 1984 as a Stanford Voluntary Student Organization with Associate Membership available to members of the non-Stanford community who use PCs. SPAUG is a nonprofit organization whose purpose is to bring together people interested in personal computing and to provide a forum for the exchange of ideas in the field.

General Meeting
A monthly General Meeting featuring programs of general interest is held on the last Wednesday of the month at 7:30 PM. The meeting place is on the Stanford Campus, Jordan Quad, in Polya Hall, Turing Auditorium.

SIG Meetings
Novice and other special interest groups (SIGs) meet monthly, providing demonstrations or detailed coverage of topics of special interest.

PRinT SCreen
A monthly Newsletter is mailed to all Members, including feature articles, the Club Calendar and other helpful information.

SPARC
An electronic Bulletin Board is maintained for uploading and downloading files and for message communicating among Members. Bulletins, and files in several public domain and shareware categories are available. The BBS number is **(415) 321-4497.**

Software Library
A library of public domain software disks is maintained for the benefit of Members.

Random Access
Members may announce items for sale, ask questions and share information during the Random Access period of the General Meeting.

Disk of the Month.
A collection of public domain or shareware programs is prepared and presented at the General Meeting. The disk is available for $1 or in exchange for the Goodie Coupon on your membership card.

Mailcall
Items received in the club mailbox are reviewed at the General Meeting. Shareware programs, demo disks, and special offers are made available as well as the newsletters received from the exchange program with other user groups.

Renewals
Members' expiration information is printed on Newsletter mailing labels. A return envelope is enclosed for convenience in the month prior to renewal date.

New Members
Names of new and renewing Members are listed in the Newsletter.

Resource Center
A list of Members who are available to give help by telephone on various aspects of computing is provided in the Newsletter. The SPAUG Constitution is available for downloading from the Bulletin Board.

Classified Ads
Members may post noncommercial ads at General Meetings, send them to the PRinT SCreen Editor for publication in the Newsletter, or send them to the BBS Sysop for posting on the For Sale bulletin section of the board.

Random Drawing
Members attending the General Meeting are eligible for a drawing for a prize, often a valuable program or hardware item.

Sidewalk Sale
An annual sidewalk sale is held featuring computer-related items for sale by vendors and Members.

Member of the Month
A Member who has contributed recent or ongoing service to the club is selected by the Steering Committee for recognition. A quarterly no-host dinner is held to honor these Members.

APCUG
SPAUG is a member of the Association of PC User Groups. An APCUG Bulletin Board and other benefits are shared.

Information Line
A recorded message provides up-to-date information about programs and activities. Callers may request information about membership. The phone number is **(415) 321-4498.**

WHAT IT'S ALL ABOUT
A Guide to PC Memory

Part 3:
MAKING THE MOST OF IT

TONY ALLEN

Last month I discussed the Memory Map and described the different types of memory. This month I thought I'd show some practical examples of the way memory can be allocated.

The three screen dumps shown here are from my computer (a 386DX with 8Mb). The configuration as far as device drivers and TSRs is the same in each case and the only changes made to the setup files (Autoexec.Bat and Config.Sys) are those dictated by the different programs.

None of these examples will be particularly relevant unless you have either Microsoft's MS/PC-DOS 5 or DR DOS 5/6 from Digital Research. If you are still working with MS/PC-DOS 3.3 or 4.01 it will greatly benefit you to upgrade. The fully bootable version of MS-DOS 5.0 is now available (not just the upgrade version, that required you to already have a DOS installed on your system) and I've seen it in Fry's for $69.95. They also have the full bootable DR DOS, at $65.95. This is the new version 6.0 and it would seem that Digital Research and Microsoft are involved in a game of leapfrog. DR DOS 5.0 came out last year and those who used it were mightily impressed - mind you it was only competing against MS-DOS 4.01. Then Microsoft released DOS 5.0 in the summer and it had many of the features of DR DOS plus some new ones. Digital Research have just responded with their new version 6.0.

I've just received my upgrade and, at first glance, it seems likely that it will become my operating system of choice. I still have to check it out for compatibility with the programs I run, but some of the features are very nice. For example, it will use extended or expanded memory for Diskcopy (so you can duplicate a high density disk in one fell swoop) at the same time it will keep a copy of the disk in memory, so you can do multiple copies - neat! It comes with two top commercial programs, Super PC-Kwik (disk caching) and SuperStor, which compresses data to increase the capacity of the hard disk. When I've had time to fully evaluate this new version I'll do a report in PRinT SCreen.

I've also upgraded 386MAX 5.1 to 6.0, though this only came through last week and I've not even had time to install it yet (PRinT SCreen takes preference). I'm only guessing, but I would expect one combination of MS-DOS 5 or DR DOS 6 with QEMM or 386MAX will give an increased amount of usable free memory over the examples here. It's simply(!) a case of trying out the various combinations and then fine tuning them. I'll let you know how it goes.

NOTE: As far as the screen dumps are concerned, I did no special tweaking of the UMBs. I simply massaged the Config.Sys and Autoexec.Bat a few times (or ran QEMM Optimize) and let it rest there. While playing about, however, I did come up with one configuration in DR DOS 5 that reported 703,664 bytes (687K) available. Unfortunately it wouldn't allow me to run Windows other than in Real mode. It does, however, show that by tinkering with the parameters you can free up whole lot of conventional memory.

Address	Name	Size Hex	(Bytes)	Type
000000		000400	(1024)	Interrupt Vector
000400		000100	(256)	ROM Communication Area
000500		000200	(512)	DOS Communication Area
000700	IO	000B30	(2864)	System Data
001230	MSDOS	001410	(5136)	System Data
002640	IO	003460	(13408)	System Data
	CONFIG	000070	(112)	DEVICE=
	SETVER	0001C0	(448)	DEVICE=
	HIMEM	0004A0	(1184)	DEVICE=
	EMM386	0020D0	(8400)	DEVICE=
		0005D0	(1488)	FILES=
		000100	(256)	FCBS=
		000200	(512)	BUFFERS=
		000370	(880)	LASTDRIVE=
005AB0	MSDOS	000040	(64)	System Program
005B00	COMMAND	000940	(2368)	Program
006450	MSDOS	000040	(64)	— Free —
0064A0	COMMAND	000210	(528)	Environment
0066C0	MEM	000100	(256)	Environment
0067D0	MEM	0176F0	(95984)	Program
01DED0	MSDOS	082110	(532752)	— Free —
09FFF0	SYSTEM	028010	(163856)	System Program
0C8010	IO	008370	(33648)	System Data
	RAMDRIVE	0004A0	(1184)	DEVICE=
	SMARTDRV	003F80	(16256)	DEVICE=
	ANSI	001060	(4192)	DEVICE=
	MOUSE	002EB0	(11952)	DEVICE=
0D0390	ADDKEYS	000040	(64)	Environment
0D03E0	ADDKEYS	000130	(304)	Program
0D0520	UNCRASH	000040	(64)	Environment
0D0570	UNCRASH	000130	(304)	Program
0D06B0	APPBK	000040	(64)	Environment
0D0700	APPBK	001190	(4496)	Program
0D18A0	MUSIC	000040	(64)	Environment
0D18F0	GRAFTABL	0004A0	(1184)	Program
0D1DA0	MUSIC	0001B0	(432)	Program
0D1F60	CRUISE	000040	(64)	Environment
0D1FB0	CRUISE	000D50	(3408)	Program
0D2D10	MSDOS	0000A0	(160)	— Free —
0D2DC0	LOG	000740	(64)	Program
0D3510	INSTALL	000100	(256)	Environment
0D3620	INSTALL	0005F0	(1520)	Program
0D3C20	NEWDOSED	000100	(256)	Environment
0D3D30	NEWDOSED	000780	(1920)	Program
0D44C0	COPYSAFE	000100	(256)	Environment
0D45D0	COPYSAFE	0007F0	(2032)	Program
0D4DD0	MSDOS	00B220	(45600)	— Free —

655360 bytes total conventional memory (640K)
655360 bytes available to MS-DOS
628752 largest executable program size (614K)

7733248 bytes total contiguous extended memory
0 bytes available contiguous extended memory
3288064 bytes available XMS memory
MS-DOS resident in High Memory Area

My MS-DOS 5.0 memory status at boot up.

A straight screen dump of MS-DOS 5.0 MEM /P with the addition of the Hex size converted to bytes.

Address	Name	Size Hex	(Bytes)	Type
000000		000400	(1024)	Interrupt Vector
000400		000100	(256)	ROM Communication Area
000500		000200	(512)	DOS Communication Area
000700	IO	000B30	(2864)	System Data
001230	MSDOS	001410	(5136)	System Data
002640	IO	001F50	(8016)	System Data
	CONFIG	000070	(112)	DEVICE=
	SETVER	0001C0	(448)	DEVICE=
	QEMM386	000C00	(3072)	DEVICE=
	LOADHI	000130	(304)	DEVICE=
	LOADHI	000100	(256)	DEVICE=
	LOADHI	000100	(256)	DEVICE=
	LOADHI	000100	(256)	DEVICE=
		0005D0	(1488)	FILES=
		000100	(256)	FCBS=
		000200	(512)	BUFFERS=
		000370	(880)	LASTDRIVE=
00F2C0	MSDOS	000040	(64)	System Program
0045F0	COMMAND	000940	(2368)	Program
004F40	MSDOS	000040	(64)	— Free —
004F90	COMMAND	000210	(528)	Environment
0051B0	MEM	000110	(272)	Environment
0052D0	MEM	0176F0	(95984)	Program
01C9D0	MSDOS	083610	(538128)	— Free —
09FFF0	SYSTEM	028010	(163656)	System Program
0C8010	RAMDRIVE	000470	(1136)	Program
0C8490	SMARTDRV	003F80	(16256)	Program
0CC420	ANSI	001060	(4192)	Program
0CD490	MOUSE	0037F0	(14320)	Program
0D0C90	ADDKEYS	000040	(64)	Environment
0D0CE0	ADDKEYS	000130	(304)	Program
0D0E20	UNCRASH	000040	(64)	Environment
0D0E70	UNCRASH	000130	(304)	Program
0D0FB0	APPBK	000040	(64	Environment
0D1000	APPBK	001190	(4496)	Program
0D21A0	MUSIC	000040	(64)	Environment
0D21F0	GRAFTABL	0004A0	(1184)	Program
0D26A0	MUSIC	0001B0	(432)	Program
0D2860	CRUISE	000040	(64)	Environment
0D28B0	CRUISE	000D50	(3408)	Program
0D3610	MSDOS	0000A0	(160)	— Free —
0D36C0	LOG	000740	(64)	Program
0D3E10	INSTALL	000100	(256)	Environment
0D3F20	INSTALL	0005F0	(1520)	Program
0D4520	NEWDOSED	000100	(256)	Environment
0D4630	NEWDOSED	000780	(1920)	Program
0D4DC0	COPYSAFE	000100	(256)	Environment
0D4ED0	COPYSAFE	0007F0	(1920)	Program
0D56D0	MSDOS	00A920	(43296)	— Free —

655360 bytes total conventional memory (640K)
655360 bytes available to MS-DOS
634128 largest executable program size (619K)

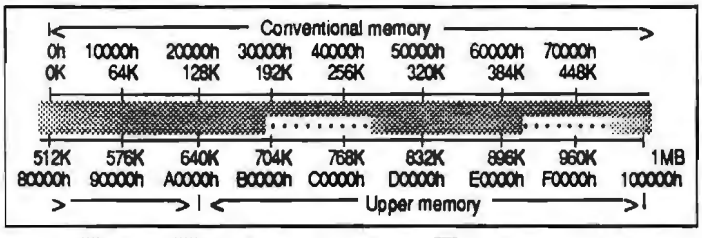
8060928 bytes total EMS memory
3211264 bytes free EMS memory

7733248 bytes total contiguous extended memory
0 bytes available contiguous extended memory
3211264 bytes available XMS memory
MS-DOS resident in High Memory Area

My MS-DOS 5.0 memory status at boot up after installing QEMM 6.0 and running OPTIMIZE.

A straight screen dump of MS-DOS 5.0 MEM /P with the addition of the Hex size converted to bytes.

Address	Owner	Size		Type
0:0000		A0000h,	655360	RAM
0:0000	———	400h,	1024	Interrupt vectors
40:0000	———	100h,	256	ROM BIOS data area
50:0000	DR DOS	200h,	512	DOS data area
70:0000	DR BIOS	1890h,	6288	Device drivers
1F9:0000	DR DOS	11B0h,	4528	System
314:0000	DR DOS	7DA0h,	32160	System
AEE:0000	COMMAND	210h,	528	Environment
B0F:0000	———	70h,	112	FREE
B16:0000	ADDKEYS	50h,	80	Environment
B1B:0000	D1580	50h,	80	Data
B20:0000	APPBK	50h,	80	Environment
B25:0000	GRAFTAB	60h,	96	Environment
B28:0000	MUSIC	50h,	80	Environment
B30:0000	CRUISE	50h,	80	Environment
B35:0000	INSTALL	F0h,	240	Environment
B44:0000	NEWDOSE	F0h,	240	Environment
B53:0000	COPYSAF	F0h,	240	Environment
B62:0000	MEMORY	100h,	256	Environment
B72:0000	MEMORY	12C80h,	76928	Program
1E3A:0000	———	91C50h,	597072	FREE
A000:0000	———	10000h,	65536	Upper RAM
AFFF:0000	EXCLUDED	16010h,	90128	Upper system memory
C000:0000	EMM386	6000h,	24576	EMM386 device driver code
C600:0000	———	20000h,	131072	Upper RAM
C600:0000	DR DOS	1000h,	4096	System
C700:0000	DR DOS	B40h,	2880	System
C7B4:0000	DR DOS	3150h,	12624	System
CAC9:0000	DR DOS	2EC0h,	11968	System
CDB5:0000	DR DOS	25C0h,	9664	System
D011:0000	COMMAND	1330h,	4912	Program
D144:0000	ADDKEYS	140h,	320	Program
D158:0000	D1580	140h,	320	Data
D16C:0000	APPBK	11A0h,	4512	Program
D286:0000	GRAFTAB	560h,	1376	Program
D2DC:0000	MUSIC	1C0h,	448	Program
D2F8:0000	CRUISE	D60h,	3424	Program
D3CE:0000	LOG	750h,	1872	Program
D443:0000	INSTALL	600h,	1536	Program
D4A3:0000	NEWDOSE	790h,	1936	Program
D51C:0000	COPYSAF	800h,	2048	Program
D59C:0000	———	10640h,	67136	FREE
E600:0000	DR DOS	96E0h,	38624	DR DOS kernel code
F800:0000	———	8000h,	32768	ROM



Key: ▒=RAM ▒=ROM =Shadow ROM ■=EMS

655,360 bytes, (640K), conventional memory
673,984 bytes, (658K), largest available block

7,733,248 bytes, (7552K), extended memory
7,733,248 bytes, (7552K), extended memory used
0 bytes, (0K), extended memory available

My DR DOS 5.0 memory status at boot up.

A straight screen dump of DR DOS 5 MEM /B/M.

AFTER THE SIDEWALK FAIR

This SPAUG fund-raising idea worked out well last month and will be continued as long as there is a response from our membership (as buyers or donors). The prices are excellent and so is the cause, so keep it in mind during this holiday season. You may order from Beverly Altman [415] 329-8252, and it can be brought to the meeting or you may arrange to pick it up.

CATEGORY	ITEM	DESCRIPTION	SPAUG PRICE	STORE PRICE*
Software	RESOURCE WORKSHOP	A designing and compiling resource for applications running under Microsoft Windows, 3.0	20.00	99.00
Software	QUICKEN New Windows Version	Manages all your finances	12.50	30.99
Software	QUICKEN 5.0 New DOS Version	Manages all your finances	20.00	42.99
Software	TYPE DIRECTOR Version 1 Premier Collection by Hewlett Packard	LaserJet Font Management Program with 12 typefaces	25.00	125.00
Software	APORIA 1.4 (New, not shrink-wrapped)	File Manager for Microsoft Windows	15.00	??
Software	TRADING POST by LaserTools	Post Script Printer Manager	15.00	??
Software	Ventura Controll Version 1.0	Utilities for Ventura Publisher	15.00	??
Software	PrintCache 2.2 by LaserTools (New, not shrink-wrapped)	A printer spooler (very popular)	35.00	129.00
Software	ADDRESS BOOK PLUS 3.0 by POWER UP!	Prints address books, mailing labels, envelopes, with a built-in dialer and proportional laser fonts	8.00	49.00
Software	PC TOOLS DELUXE Version 6 (The bug-free version)	Data Recovery, Hard disk backup, Dos Shell, Desktop Manager	40.00	129.99
Software	THE MAXIMIZER 2.1 (With Maxmerge)	Contact Management Software INFO WORLD: "Best in its class". Classifies, sorts, searches, tracks history, writes letters, stores info.	10.00	30.00
Software	QUATTRO PRO 2.0	The popular Borland spreadsheet program	40.00	99.00
Hardware	BAR CODE SCANNER by Intermec	A 1620A Laser Scanner	100.00	1450.00(!)
Book	MICROCOMPUTER EXPERIMENTATION WITH THE IBM PC	Experimental training for scientists or engineers with emphasis on controller design and interfacing.	10.00	31.95
Book	HANDS-ON VENTURA C.J. Wallia (1989)	2.0 A Self-Teaching Guide and Reference Manual	8.00	26.00
Book	CLIPPER 5	A developer's guide to "The ultimate dBase compiler" (1300 pages! with disk)	15.00	44.95
Game	DIE HARD by ActiVision		8.00	25.00
Game	PIPE DREAM by Lucasfilm		8.00	25.00

* The current discount price - where available.

Non-profit vocational organization is in need of used computer hardware donations for training purposes. Tax deductible.

Contact
FLOYD KESSLER
[415] 493-7780

FOR SALE
HP DeskJet 500

Laser-quality ink jet printer. Prints at 300 dpi resolution. Includes over 100 fonts, from 5 point to 30 point. Comes with two extra print cartridges. Supported by over 600 software packages, including Windows 3.0. Prints on a variety papers, envelopes and labels.

A bargain, only $495
[415] 513-5513

THE SPAUG RESOURCE CENTER

This is a list is of club members who have volunteered their services. If anyone would like their name added to this list, please get in touch with Paul Staley or Jan Altman.

OFFICERS

President	Paul Staley	(415) 493-1864
Vice President	Jan Altman	(408) 243-5955
ASSU Representative	Alex McMillan	(415) 322-4543

MANAGERS

Bulletin Board Sysop	Bob Bottini	(415) 369-2086
Financial Manager	Bev Altman	(415) 329-8252
Librarian - Public Domain Software	Les Weil	(415) 321-5541
Newsletter Editor	Tony Allen	(408) 739-2953

SOFTWARE

Accounting	Larry Mehl	(415) 329-6037
Foxbase	Marie Hooper	(415) 325-1206
Windows Products	Jan Altman	(408) 243-5955
R:Base	Larry Mehl	(415) 326-6037
Lotus 1-2-3	Larry Mehl	(415) 326-6037

LANGUAGES

C	John Watson	(415) 325-7632
Fortran	John Watson	(415) 325-7632
Pascal	John Watson	(415) 325-7632
Smalltalk	John Watson	(415) 325-7632
QuickBasic	Don Baird	(415) 365-6822

CLUB EVENTS IN DECEMBER

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

December 4 First Wednesday - **PLANNING MEETING**
7:30pm Beverly Altman, (415) 329-8252 or
Paul Staley, (415) 493-1864

December 10 The ***WORD FOR WINDOWS*** **SIG** will meet this month
7:30pm on the **second Tuesday** at 7:30pm to talk about Word for Windows and general Windows issues. ***Call Jan for confirmation.***

NOTE NEW DAY

Location is Infotec Training Institute, Techmart, 5201 Great America Parkway, Suite 254, Santa Clara. The group is led by Jan Altman, a Certified Trainer in Word for Windows. For more information, please call Jan at (408) 243-5955.

December 25 Last Wednesday - **No General Meeting this Month**
The next meeting will be on January 29th.

THE NOVEMBER PRESENTATION

Last Wednesday: November 27th, 7:30pm at Turing Auditorium

Has your curiosity gotten the best of you? Do you find yourself peeking in the window of a Mac shop when no one's looking, just to see what this magical, mystical machine is all about? Let's dispel the myths.

In November, we will invite a (hopefully) unbiased expert to show you what a Mac looks like, and explain the reasons behind its enormous popularity. You'll get a feel for the operating system, and see how it compares to Windows, whose claim to fame is to make a PC more "Mac-like." (Course if you're interested in seeing a Big Mac, I suggest you go to Fry's.)

The Stanford/Palo Alto PC Users Group

P.O. Box 3738
Stanford, CA 94309

Club Inform

Meetings	Paul Staley (415) 493-1864
Membership	Beverly Altman (415) 329-8252 $25/year (Students $10)
Bulletin Board	(415) 321-4497
Newsletter	Tony Allen (408) 739-2953

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