

Newsletter of Stanford Palo Alto Users Group for PC

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GENERAL MEETING
NOVELL NETWORKS PRESENTATION
VARIAN ASSOCIATES, BLDG. 7 AUDITORIUM
WEDNESDAY, FEBRUARY 22, 7:30 PM

President's Piece



True Color

The damp, gray darkness of January yielded its suffocating blandness as Diamond Multimedia ripped through full motion video with its *Viper Pro Video* accelerator card. 24 Bit color danced across the Varian screen in the form of AeroSmith, surfing clips, and dinosaur .FLI files. The extensive list of specifications which preceded the movies was almost as long as the list of industry awards that Diamond has won with their products. Mix that with multimedia kits bundled with 32 software titles and I felt like the audio ad guy who's being blown out of his chair. The full motion video jigsaw puzzle was hot, too.

February Link-Up — Novell Networks

Any software title worth upgrading eventually comes out in a network version. With the price of these monster programs in the hundreds of dollars, why buy an extra copy to load on your spouse's computer? Use your 80386 old friend to load the original copy and network it to the other 80486 or Pentiums in your house. Novell joins us for the February General Meeting to share the story of *NetWare*. The theme of "networks for the home and office" should help better utilize the expensive laser resources among the family or staff.

Giddy Up!

Jim Bailey rides into the sunset having passed his long-time role of PRinT SCreen Distribution Manager on to Mildred Kohn. Let's hope he's not a stranger to the group activities in the future. Good job, Jim! Thanks!

You Nominated Whom?

All members do not know your name. That can change as you move from the audience to the podium of the General Meeting. It's time to start rounding up your buddies to form the brains and energy core of SPAUG 1995. A motion has been proposed to create more officer positions therefore rotating the responsibilities. At the February General Meeting, we will start taking nominations for officers.

See you on February 22 Brian



The SPAUG Library Mildred Kohn, SPAUG Book Librarian

SPAUG now has a small library of paperback books which members may borrow and return at a subsequent meeting. These will be brought to each meeting by librarian Mildred Kohn. Four topics are available:

1. *The Little Windows Book, 3.1 Edition* by Kay Yarborough Nelson, is a well-written, well-illustrated book which coddles the beginner and has "Quick Tips" at the end of each chapter for the expert.

2. Two books on DOS grace our "library shelves." One is again by Kay Yarborough Nelson, *The Little DOS 6 Book*. Included with the clear instructions for the beginner are items to delight the experienced person, especially the "Concise Command Reference" at the end of the book. The other DOS book is *Visual QuickStart Guide to DOS 6* and is just that—the commands and computer responses are pictured for easy reference.

3. With *The Internet for Dummies* by Levine and Bardoudi you will have the opportunity for a guide through the intricacies and mysteries of the Internet.

4. For those who periodically feel like going back to basics or to help solve those problems that make you sweat, we have two PC books: *The Little PC Book* by Lawrence Magid and *PCs for Dummies, 2nd Edition*, by Gookin and Rathbone. They are also handy for looking up things you are ashamed to admit you don't know in public.

We also have two copies of *Microsoft Office*. They are so heavy that they will not be brought to the meeting unless you call 415-949-1833. ☸


A Comment on Street Atlas USA Mildred Kohn, SPAUG Member

Some time ago I was intrigued by Jim Dinkey's presentation of DeLorme Mapping Street Atlas USA 2.0. As soon as I installed a CD-ROM I purchased this program. My first task was to find a street in Santa Clara where I hoped to visit a friend's sandwich shop. No Santa Clara! I confirmed this by a phone call to the company office in Freeport, Maine. I have not attempted to discover if any other community is missing in spite of the statement on the box, "You can zoom in on every city, town, or rural area in the country...." However, I must add that using this program is pure pleasure for those maps which are there—and every one I have searched has been there except for Santa Clara. Could this omission reflect wishful thinking on the part of the "Silicon Valley of the Northeast"? Do they want the real Silicon Valley to disappear?

Taxing Tales of TurboTax

Louis L. Brossard, SPAUG Member

To: ChipSoft Forum



This is not a review. I have not yet received a Final Release copy of TurboTax for Windows.

This is not surprising. In fact, it is a very common problem with TurboTax. I have followed the ChipSoft Forum on CompuServe for a couple of years now and the most common posts are about paid-for software that hasn't been sent. I had a delivery problem the first year I bought TurboTax but then I learned to buy the Final Version at the store for less money and months earlier than the free upgrade. This year I am still waiting for a free review copy.

Here are some examples of complaints about delivery posted on CompuServe.

To: ChipSoft Forum

I am contacting tomorrow (Tues., Jan 3, 1995) State of Maine Attorney General and the Consumer Protection Division regarding what I consider FRAUDULENT use of customers' funds. From what I read on this forum, I am not the only one being subjected to this disgusting treatment.

I sent in a check on September 2 which was cashed on September 12, 1994 for \$68.85 for the priority plan, etc. TO DATE, NOTHING ...I called a couple of times but cannot get through. And all this time copies of your product is on the shelves at stores !!! How on earth can that be ???!!!! You have had my money since the middle of September; if that is not fraud you tell me what is. I think the AG will be very much interested in the case. If a local carpenter did something like this, he'd be arrested!

Frank

Reply to Frank:

Your message has been forwarded to Customer Service.

Ken, Intuit Tech Support

Reply to Frank:

I would suggest sending a copy of any complaint to the AG to your local postal inspector also. Seems it is a crime to send fraudulent solicitations through the mails, too! Perhaps a little attention from the feds would wake a few people at Intuit up!

Rick

Many weeks ago I got a letter from Jenni Wiese, Associate Product Manager, dated November, 1994, stating, "The HeadStart version of this software will be sent separately and should arrive to you shortly."

It's mid-January now and no software. I will have a hard time writing any kind of complete review and getting it in a month in advance so it can be included in the newsletter and still have it worth anything for tax season.

Since I have used TurboTax for years and followed the problems on this forum, I knew how slow ChipSoft is at customer support. I was hoping that after the number and ardor of the flames last year ChipSoft would have made some improvement. Some things just don't change.

What in the world is the problem with ChipSoft? Why can't they ever get their act together? TurboTax is a very good product, probably the best. ChipSoft's customer treatment is inexcusably poor, one of the worst. Why must that be?

Louis Brossard

Reply to Lou:

I like TTAX less and less each year. This year may be the end. I infer that the company is more interested in attracting new users with flashy graphics than in keeping loyal customers.

The most visible evidence to me is the inability of the Head Start Version to import W-2 income and numerous glitches with depreciated property in Sch E. These are things that a neophyte would enter himself, so a newbie won't even notice it. Past users have apoplexy.

I strongly disagree with a recent opinion that the company tries to get as much right as possible but that it can't catch everything. What about the frustrated individuals who call (on their own nickel) customer support fruitlessly? What about people who return the product? What about people who just give up and trash it?

Cont. on p. 4

To make this tome only a bit longer, TTAX isn't unique. Almost every major piece of software has a roaring bonfire on forums like this. (Peek at the Corel forums -- disasters abound.) National publications reported that up to 40% of the computers and software bought for Christmas was returned. Not exchanged -- returned! The more bells and whistles there are the louder they ring and trill.

David

Conclusion

Last year's TurboTax was a very good piece of software and I believe this year's will be every bit as good. The forms that are printed on my LaserJet 4 look better than the ones sent to me by the IRS. If your taxes are fairly straightforward you can breeze through them by answering the questions. If you choose to fill out the forms directly you will probably have some trouble since many entries are to be made from worksheets. In previous years that has been a bit of a hassle. Moreover, my tax preparer always insists on original documents and his figures and TurboTax's have never agreed. This is not the sole fault of TurboTax; I have some funny stuff that I can never get entered correctly. Also, the special forms for this annoying junk always come much later than the Final Release of TurboTax.

In the Reviewer's Pack were suggestions to help me write the review of their TurboTax. They stressed things like ease of use, advice through Guide Me buttons, and reliability. What they didn't add was it's next to impossible to get help on the phone unless you are ready to spend a fortune in time and money.

Under no circumstances fall for the Head Start sucker's come-on or the "buy direct and save" flyers in the mail. You'll see the Final Version in the stores for less money and weeks before you get your copy from ChipSoft. And don't put off doing your taxes until the last minute thinking TurboTax is going to solve all your problems. You have to learn how to ring each bell and blow each whistle. These are high tech utensils, not the intuitive toys you hoped they would be.

Doing taxes isn't fun. Doing taxes on a computer should make it better, not worse. So if you don't want to spend a lot of time hating the IRS buy TurboTax and spend the time hating ChipSoft instead.



Tips on Multimedia Setup

Jan Fagerholm

Excerpted from *pccnews*, PC Clubhouse

One of the unintended educational aspects of multimedia-izing your PC is second-guessing what it takes to actually make it work.

A common problem is sound clips getting cut off before they are through playing. In technobabble, this means there are not enough DMA buffers allocated to store the sound clips in when they are read from the CD-ROM. Let's see if we can fix this once and for all.

Add a switch to the EMM386 line in CONFIG.SYS allocating DMA buffers under DOS. Load the CONFIG.SYS file into the DOS EDIT program (or, under Windows, fire up the SYSEDIT program and edit from there). The EMM386 line probably looks something like this:

```
DEVICE=C:\DOS\EMME86.EXE RAM NOEMS
```

To the end of the line, add D=64, so the line now looks like this:

```
DEVICE=C:\DOS\EMM386.EXE RAM NOEMS D=64
```

This will allocate more memory to DMA buffers for CD-ROMS that you run from DOS. That value has so far taken care of every CD-ROM that I run from DOS. When you find one that requires more, increase the value incrementally until the problem goes away.

A Windows-equivalent solution to this problem is firing up SYSEDIT and selecting the SYSTEM.INI file. Navigate to the [386Enh] section, and add a line at the end of the section:

```
DMABufferSize=128
```

Look through the [386Enh] section first, though, to see if there is already a DMABufferSize setting. If so, change it to the higher value. (I'm assuming that you are not trying this unless you have this problem. If you are merely investigating this out of curiosity, you may find that the value has been set to a higher value by some CD-ROM Setup program that you have already used.)

If you have CD-ROMS that use QuickTime for Windows for animation, go into Control Panel and double click Drivers. There you can customize all of those drivers that all of those multimedia programs add to your system. You may decide to play with others, but for now select the "[MCI] Sounds" driver, and press the "Setup" button. The dialog box will display a slider bar that controls the length of audio playback. Set it to the maximum (9 seconds). This should allocate enough memory for any machine faster than a 386/33 (the slowest that I actually tried it on).



Hardware: Heat Protection

Ken Hopkins

Reprinted from *Sacra Blue*, Sacramento PCUG

110 Alert \$19

110 TwinAlert \$39

PC Power and Cooling, Inc.

Carlsbad, CA 92008

800-722-6555

The basic design of the PC consists of many design concepts borrowed from the minicomputer. These concepts include the enclosure, integral power supply, motherboard, and removable option cards. One of the things that did not get copied from minicomputer systems is protection from excessive heat.

Computer components generate heat but can be damaged if they get too hot. The minicomputer systems detected an overheating condition and shut down before damage could occur. Personal computers have no such protection and can easily be destroyed by a failed fan.

I have found that most PC power supplies are imported from overseas from unknown companies. These power supplies include the fan responsible for cooling all of your computer components.

Admittedly fan failure does not happen often, but I have had four such failures in the last six years among 15 computers. Of these, only one suffered major damage; the others were caught before they got too hot. In at least one case, I suspect that the CPU fan is what saved the system. Fan failures do occur.

110 Alert and 110 TwinAlert

The first real solution for PC heat safety that I have seen comes from PC Power & Cooling. This answer is an alarm system called 110 Alert, designed to detect when the computer's temperature exceeds 110 degrees Fahrenheit. At that time, a loud audible alarm sounds. This tells you it is time to shut down the computer and fix the fan. The device only costs \$19 and installs in minutes, not leaving much excuse for you to avoid taking this great precaution. I recommend this unit as minimum protection for all personal computers.

Wait a second—what if no one is around to hear that alarm? (If the alarm goes off on a PC in the forest and nobody is there to hear it, does it still make a sound?) PC Power & Cooling came up with an answer for that, too. 110 TwinAlert provides the same audible alert, but can also tell your software to shut down. If the computer gets to 118 degrees, it'll shut down the machine. This greater level of protection is only \$39.00. I would

recommend this unit to anyone who runs a computer system overnight.

These units attach through an unused connector from the power supply for a disk drive. You may need to add a "Y" connector if you do not have a spare drive connector—I needed the "Y" myself. The small 110 Alert or TwinAlert unit can then be mounted anywhere in your computer using its included double-stick tape.

Some day power protection may exist in all computers. Until that happens, use the 110 Alert or the 110 TwinAlert. I have not seen either unit in a computer store yet, so you probably have to order by telephone. Don't wait for a failure—install one today.

ॐ

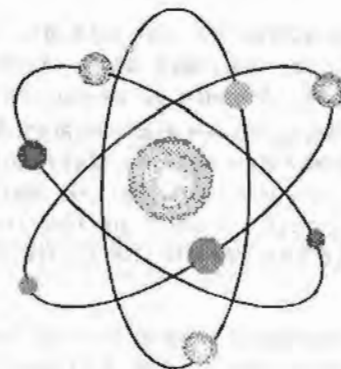
Special thanks to Sacramento PCUG's

Sacra Blue

and particularly to

Ken Hopkins,

several of whose articles are reprinted
in PRinT SCreen this month.



Three Shareware Gems for Windows

Steven Friedman

Reprinted from *Sacra Blue*, Sacramento PCUG

Despite an abundance of commercially available Windows programs, many shareware programs offer better features and ease of use than their commercial counterparts. All of these offer a try-before-you-buy policy and can be downloaded off many bulletin board systems or purchased at computer shows or from our own shareware library.

Because their registered users keep them in business, the authors are very responsive to users' suggestions and needs. Shareware development cycles tend to be shorter, too, in part because they do not have to worry about existing inventory stocks or sales promotions. Recently three "gems" have caught my attention that deserve some mention.

Font Spec Pro 5.3

FontSpec Pro 5.3

Unitech Corp.

2697 McKelvy Road

Maryland Hts., MO 63043

Registration: \$25.00

Font Spec Pro is a must-have utility for anyone who has more than 20 fonts installed on his system. It consists of four modules: A font installer, a font viewer, a font printer, and a font launcher.

The font launcher displays a small tool box that can be dragged and dropped anywhere on your screen. From this tool box you can launch any of the other three Font Spec modules.

The viewer lets you preview installed fonts in a variety of ways. You can choose to view the font in any size from 6 to 98 points, using the default "Sample Text" or two different user-defined text samples. You can view the bold, underlined, and italicized version of the font by checking the appropriate box.

For a quick selection, you can use the "display multiple lines" option, and each of your installed fonts is listed in 18 point sizes sequentially in the text sample box. This is a great way to select the appropriate font for a logo or flyer, since you can enter the text you want for the user defined option, and it will appear in each of the installed type faces. You also can review the entire character set of any font.

The font manager installs and deletes fonts from your system. Font Spec Pro goes one better, too, since it permits you to create your own font

groups such as "Headline fonts" or "Decorative fonts." These entire groups can then be quickly installed and uninstalled as needed. When you have a project that needs a decorative font, that font pack can be loaded and those fonts will become available for all applications. This is a more efficient way of managing fonts since each installed font takes up memory and resources, and too many installed fonts will slow Windows loading to a crawl.

Another great feature of this program is that it permits you to view a font before you install it. Given that many CD-ROMs offer over 1000 fonts, you'll definitely need this to determine which fonts you want to install before actually installing them.

The font printer permits you to print out one or more font samples using character sets, sample text, or user defined text. If you want to create a font catalog for future reference, you may choose the "full sheet" option, which displays sample or user defined text in 6-72 point sizes as well as the extended character set and "greeked" paragraph text in 10 point size. Other options will display multiple font faces in a point size you select printed in one or two columns on a single page.

In summary, Font Spec Pro is one of the best font managers around and is well worth the \$25 registration fee. Font Spec Pro works with all Windows fonts including True Type and Adobe Type 1 fonts.

Time & Chaos Professional 4.02

Time & Chaos Professional 4.02

Basic Registration: \$29.95; Utilities, manual extra

1314 Cardigan Street

Garland, Texas 75040

If you are just looking for a good organizer, Time & Chaos is the best around. It permits you to create appointments, phone lists, personal memos, and to-do lists in one of the most elegant and user friendly program interfaces I've seen to date.

The main screen is divided into 4 quadrants consisting of a calendar, to-do list, phone directory, and appointment book. You can resize each of these separately, and the fonts and graphics in the boxes size accordingly so you always have all the features in full view.

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More Minding Your P's & Q's

Carol Jessen

Reprinted from *Sacra Blue*, Sacramento PCUG

In the May issue of *Sacra Blue* I reviewed some easy guidelines for using typefaces and fonts in a way that will both accent your publications and enhance their clarity. However, the production of a good publication is a complex task that draws upon many skills, both technical and aesthetic. You need look no further than *Sacra Blue* itself for confirmation of that. So, "easy guidelines" are merely a starting point. Good typographic composition comes with experience and being acutely aware of how your publication affects its intended audience.

One thing that I think is confusing to beginning typographers is the difference between legibility and readability. Legibility is defined as the ability of the reader to perceive a set of typeface characters as distinct from others. Readability is defined as the ability of the reader to comprehend the meaning of the written words.

Legible, but not readable —

NOW IS THE TIME FOR ALL GOOD MEN
TO COME TO THE AID OF THEIR COUNTRYMEN.

Both legible and readable —

**Now is the time for all good men to
come to the aid of their countrymen.**

For instance, the flourishes of Old English or Fraktur script typefaces are very distinctive, therefore highly legible, but also difficult to discern as words and sentences, therefore quite unreadable. Amateur typographers are often impressed by the drama of such typefaces without realizing that they often don't do the basic job of communication. Typography must be primarily for language and only secondarily for art.

Text with dark "color" —

**Now is the time for all good men
to come to the aid of their
countrymen.**

Text with light "color" —

Now is the time for all good men
to come to the aid of their
countrymen.

Legibility—that is, distinctiveness—is only one of many factors affecting readability. Another prime factor, as was discussed in May's issue, is clutter on the page. Typographers refer to the "color" of text copy. Tight kerning, dense line packing, boldface fonts, heavy strokes in the shapes of the characters, and too little white space add up to a "dark" page—i.e., too much ink relative to paper.

On the other hand, loose kerning, skimpy line packing, thin character shapes, and too much white space add up to a "light" page—i.e., too much paper relative to ink. The first is unpleasant to read and the second is uneconomical, but both are inefficient.

Another typographical term that relates to readability is "transparency." This term refers to a typeface that requires no conscious deciphering by the reader. Recognition of the letterforms is effortless. It is important that body text, in particular, achieves this sort of smoothness and simplicity. Reading attention-grabbing headlines may challenge the reader's conscious cognition, but reading body text must be subconscious and seamless.

Usually, the upper case letters of a typeface—that is, the capitals—are the most finely designed. However, lower case letters account for almost 95% of text composition, so typeface choices should be made with regard to lower case letters rather than upper case letters.

Fonts should be selected according to "x" height (the top to bottom measurement of the lower case "x") rather than point size, as there are wide variations in both legibility and readability among typefaces of the same point size. In general, regular and medium typeface weights are more readable than light, bold, or extra-bold weights, which should be reserved for emphasis within text copy.

Also, the contour of the letterforms is a factor. Character shapes with pronounced contrasts of thick and thin "strokes" are more difficult to read. Conversely, character shapes with more open space in the bowls (the round shapes in letters like "o" and "c") are easier to read.

Whereas character kerning and line packing are fairly obvious factors in the density of body text, a commonly overlooked factor is word spacing. The reader usually does not notice word spacing unless it is causing a problem. When word spacing is too

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The phone directory defaults to "White Pages" or "Yellow Pages." Headings for business, home, car, and fax number entries are provided boxes. The home and business entries are fixed, but the car and fax headings can be changed to other options such as pager or voice mail number.

You can enter addresses, contact information, and multiple user defined fields such as Christmas card list, sales contact, etc. Drag and drop is supported throughout this program. Dragging a phone entry into the to-do list or calendar will display that entry as either a to-do item or a meeting item in your appointment log. You can also do specific searches on phone lists, have it create envelopes and headings on letters in your word processor, or export to ASCII files. There is also an add-on to the registered version which permits you to export and import phone and address lists with WinFax Pro.

For viewing items at a glance, you have many options. You can view and print "monthly views," which displays a block style desk calendar with events and appointments filled in, or weekly or daily lists.

There is a report feature that can create spreadsheet-like tables on the fly of phone lists, to-do items, contact information, appointments, or anything else you define. You also have a link to Excel 4.0 or 5.0, provided Excel is in your PATH. Recurring appointments can also be added, and to-do items and appointments can be color coded for priority.

Time & Chaos offers well written and easy to understand context sensitive help throughout.

Drag-n-View Plus

Drag-n-View Plus

Canyon Software

1537 4th Street

San Rafael, CA 94901

Initial Registration cost \$69

Canyon Software has long been a personal favorite of mine. Their Director file management program for DOS has been one of the stalwarts in my computer survival kit for many years.

Now Canyon Software has come out with Drag-n-View, Drag-n-Zip, and ZipView programs and adds new file management features.

Drag-n-View Plus permits you to open up to 12 display windows. You can then mark individual files for batch handling file operations, or move, copy, delete, zip, view, or launch them individually. You can view multiple drives side by side and use filters for selecting just the files you want. It provides viewer filters for most of the

commonly used Windows application formats, which permit you to view the contents in native format without having to launch their programs.

In the viewer, you can search for text but unfortunately cannot mark text for copying to the Windows clipboard. You can also launch the files which load them into their associated programs, or choose your own text editor for editing ASCII files.

Drag-n-Zip and ZipView are also included in this application, which permit you to perform PKZIP and PKUNZIP functions without having to exit from Windows. All of the cryptic options for the new PKZIP2.0x format are listed in plain English on a pull-down list.

Special options such as "maximum compression" or "span to multiple disks" are available and automatically place the appropriate parameter in the PKZIP command line. ZipView, in addition to unzipping files, lets you preview any Zip or LHARC file and perform virus scans. ☺

P's&Q's cont. . . .

tight, the text loses its "transparency" and the reader must apply too much effort toward isolating individual words.

Most people do not read one word at a time, nor do they read in full sentences. Rather, they pause between phrases. Therefore, text lines shouldn't be too long. However, textlines that are too short fragment sentences into awkward phrases, causing poor comprehension. Magazines and newspapers break up text into multiple columns per page in order to pace the natural pauses in the course of reading.

If you are beginning to think that good typography choices require great deftness and technical proficiency, you are only partly correct. More importantly, good typography choices require intuition. You can improve your judgments about typography by becoming an avid reader and being aware of your own responses to typeface selections and layouts in the publications that pass through your daily life.

One of the most helpful books currently on the market for helping someone who is not already a professionally trained typographer to cope with such matters is Roger C. Parker's *One Minute Designer* by Que Books (1993). Parker illustrates over two hundred before-and-after cases of typical typographic problems. Sometimes the makeovers are so subtle that it takes a second look to see the differences, but they are all very effective. Training yourself to have a critical eye is the best thing you can do to set yourself on the course toward producing better designed and more useful publications. ☺

Windows Files

Ken Hopkins

Reprinted from *Sacra Blue*, Sacramento PCUG

We have been living with DOS filename limitations since the CP/M days (the mid-70s). Seattle Computers' 86-DOS (which eventually became Microsoft's MS-DOS and PC-DOS) copied the file naming used in CP/M. Actually the limitation existed on the DEC systems I worked on before that. (After all, that is where Digital Research stole the idea in the first place.)

The limitations are in filename size. DOS permits filenames consisting of eight characters, a period (normally called a dot), and then a three-letter extension. The limitations will change when Chicago is finally released early next year.

Chicago will hide the file extension from the user unless the user wants to see it. In addition, Chicago will permit long file names, so we can finally have meaningful names instead of cryptic ones. (Hey, no flames from OS/2 users: you brave few have had longer file names for a while. I hope they were worth the installation effort!)

Chicago is not here yet, though, so we will have to live with the limitations for a while longer. Actually file extensions will still exist, but they will just be more transparent. When Chicago does release, I will deal with Chicago features. Until then, let's deal with today.

The filename extensions can often be used to identify the file type. DOS has several standard filename extensions that must be adhered to. In addition, each software developer has made up its own set of extensions. Over time, some of these extensions have been accepted as de-facto standards. Some of the most widely accepted standards are the result of Windows-based developments.

DOS Extensions

The DOS extensions are primarily used for executable files (programs). The most recognizable of the extensions is .EXE, an abbreviation of the word "execute," or "executable." Batch files use .BAT as the extension (another obvious abbreviation). One carryover from the original released of CP/M and DOS are .COM or command files.

System drivers have a .SYS extension. These system drivers are the first of the invisible programs that show up in Windows. A typical .SYS file is the HIMEM.SYS program that increases the memory that can be accessed by DOS and Windows programs. Unfortunately, one

common deviation was made to the use of .SYS as an executable. The CONFIG.SYS file is a text file containing commands that are loaded when your computer is loaded.

Special Windows Executables

In addition to the DOS executables and the Windows executables (still with an .EXE extension), there are specialized programs that run invisibly to the user. These include libraries of routines and drivers. It may surprise you to see that fonts are actually programs. Windows loads all required drivers and fonts into memory when it is started.

A Dynamic Link Library (.DLL file) is a collection of program routines that can be used by any other program. The loading and unloading of this file are handled automatically by Windows. These files may be located in the application directory, the Windows directory, the Windows\System directory, or anywhere on the path.

Be sure that you only have one copy of a .DLL on a given program path. You cannot have two different .DLLs with the same name (but different functions) on your system. If a .DLL is loaded, Windows will not load a second copy. Many system problems can be traced back to having two DLLs, one in the application directory and the other in the Windows directory.

Visual Basic introduced .VBX as a specialized version of a .DLL developed to enhance Visual Basic. The .VBX module allows the integration of sophisticated functionality to Visual Basic programs. There are hundreds of .VBX libraries being sold by lots of small companies. Microsoft was surprised by how fast the .VBX industry grew. They added the functionality for their own use, but they did not expect a new industry.

Screen savers are really .EXE programs with a .SCR extension. If an .SCR is launched by itself, it will go into configuration mode. If it is launched with a /S option, it will initiate the screen saver. Using this information, you can create a series of icons to launch screen savers on demand. This program is only loaded when the screen saver is needed. The screen saver files have to be in the Windows directory to work.

Fonts are actually executable programs that are loaded when Windows is loaded. Note that a

Cont. on p.10

program is loaded for each font that you have installed—even if you do not use those fonts. If you are running out of system resources, it may be because of those fonts you loaded from CorelDraw when you got it.

Screen fonts, known as raster fonts, are kept in .FON files. These are not scaleable fonts, so a separate file is required for each font size. Windows 3.1 added TrueType fonts, which are scaleable. There are two files used for each of these fonts, a .TTF file and a .FOT file. As I understand it, the .TTF file is an executable and the .FOT file is the data file containing the vector font data.

Configuration Files

Windows has many files that contain configuration information. Most of this configuration information is contained in the .INI files. When Windows 3.0 was released, most programs wrote their configuration information into the WIN.INI file. With Windows 3.1 this information was moved to private .INI files.

You will see a lot of .INI files in your Windows directory. Some software developers place their .INI files in the application's directory instead of the Windows directory. This makes it easier to find and also easier to remove the application when you no longer want it.

The .GRP files contain the Program Manager group assignments. I have heard that these files get corrupted or even disappear. I have not experienced such problems myself, but I do backup often just in case—it would be easy for me to recover. Note that the group files will be going away with Chicago. Chicago will use special directories containing pointers to actual program directories.

If you do not backup your system regularly, at least backup your .INI and .GRP files. This will make it easier to restore your system after a hard disk failure. Remember that if you have not experienced a hard disk failure, it is only because your time has not come yet. A hard disk failure will eventually occur in all computers.

Windows permits you to create a .PIF (Program Information File) for DOS programs. This is the file used to make DOS programs perform better under Windows. This includes the ability to set the window size and memory allocation. If you do not create one for a particular program, the DEFAULT.PIF file is used. Microsoft includes a collection of common .PIF files that are loaded by the Windows install program if it detects those DOS programs.

Most programs provide on-line help through WINHELP. This help information is contained in the .HLP files. The help files are often kept in the application's directory.

If you use Notepad, it will create a .TXT file. This is a straight ASCII data file; it contains no formatting characters. Notepad will let you edit other ASCII files even if the extension is different.

If you need formatting, you will either use a word processing program like Word or WordPerfect or the Write program that is included with Windows. Write creates a metafile (a file that contains text formatting, and/or graphics) with an extension of .WRI. A lot of the documentation files are distributed in this format because every Windows user has a copy of the program.

The other applications included with Windows create their own data files. Most of these file formats are proprietary and are used only by the single application. The Calendar program uses a .CAL file for its files. The Cardfile program uses a .CRD extension. The Recorder program uses a .REC file. The Terminal program uses the .TRM extension. The Clipboard program can save the clipboard contents in a .CLP file.

Bitmap Files

Windows uses two different bitmap files. Both of these file formats support a variety of color resolutions (monochrome, 16 colors, and 256 colors). Windows 3.0 Paint brought a new file format and the .BMP extension. This file format replaces the .PCX used in Windows 2.x and .MSP used in Windows 1.x. These old formats did not support the size and color needed for today's high resolution displays.

Stand-alone icon files (.ICO) can be used by Program Manager to display a different icon for a particular program. Yes, these are bitmaps too, just very small ones. Oddly enough, Microsoft did not include an icon editor in Windows. To edit Windows there are many shareware and commercial icon editors available. Most of the programming languages include an icon editor as well. Icons are normally compiled into a working program instead of left on their own.

Multimedia

Multimedia adds two multimedia file formats. These are quite different in their functionality. Windows audio files (.WAV) contain a digitized audio file that could have been sampled at a

Cont. on p.11

variety of different rates. These files tend to have a large amount of information and correspondingly large size for each second of sound recorded.

The other sound file is the MIDI file (.MID). This is a file of commands to MIDI devices (instrument, note, and note duration). MIDI devices include internal devices like sound cards and external devices like Casio keyboards. These files are relatively much smaller per second of sound than .WAV files. There is actually a third multimedia file, but it is not common for Windows users yet. The .AVI file is an Audio Visual Interface file that contains a video sequence. These tend to be very large files.

Making Space

If you are tight on space it is time to buy a new disk drive. If that is not practical, there are some files that are safe to delete. Warning: These files must be deleted from DOS and not from Windows (and no, the DOS shell is not the correct way either). This is because Windows may be using them.

Any files in the TEMP directory can be deleted. Programs are supposed to delete these when they are done, but if the program crashes, it cannot do its housekeeping.

Any files that start with ~WOA or ~GRB can be deleted. I do not know what creates these files, but Microsoft says they are safe to delete.

Any files named WIN386.SWP are temporary swap files. Do not delete the permanent swap file (386PART.PAR or SPART.PAR); the correct way to delete these files is through the Control Panel.

If you want to cut a little deeper, you can delete applications and their associated files. Most of the applications consist of an .EXE and a .HLP file. There may also be a .DLL, but you need to be certain that no other program uses the .DLL before you delete it. I recommend leaving the .DLL files alone. Remember to delete the icon from the appropriate Program Manager group when you delete an application. It is up to you to decide if the space obtained is worth not having that application available.

If you are not using them, eliminate the .BMP files used for wallpaper. I myself only keep one around. Technically, you only need one screen saver. You can eliminate all of the others if you wish. I like to change screen savers periodically. I keep quite a few loaded on both my desktop and laptop computers.

There are several documentation files with a .WRI extension that are not needed. You may want to print them out or move them to a floppy so you can get them when you need them.

Leave in the standard Windows fonts because many programs expect them to be present. If you added fonts but don't use them, they can go. Delete fonts through the Control Panel rather than deleting the files.

The Future

One bit of good news about Chicago. In order for software to wear the Windows symbol after April 1995, the application will have to include an uninstall program. This will make it easier to remove unneeded applications and gain back all of your disk space.

At this writing, I currently have to limit my comments to the information that has been published already. I can't tell you about ____ or even _____. The industry guesses are that Windows 95 will be publicly released in early 1995. I am not sure that I am allowed to tell you that it will be worth the wait.



DOS/WIN Tip

In MS-DOS Prompt mode (DOS shell):

To copy text from a DOS screen or app into Windows, use Alt-Enter to toggle from full screen to a window. To mark text on DOS screen, select Control menu/Edit/Mark, then position cursor and use Shift+arrow to highlight text. Select Control menu/Edit/Copy.

Next, switch to Windows app, position cursor at insertion point, and either use the Insert key or Paste from the Edit menu.

Welcome to...Desktop Publishing; From Mystery to Mastery

Mitch Feinberg

Reprinted from *Sacra Blue*, Sacramento PCUG

Welcome to...Desktop Publishing, From Mystery to Mastery, David Browne, MIS Press, \$19.95

In Part I of this book the author suggests that you may be able to use any software you already own to publish your own documents. The beauty of the Windows environment is that all applications play to the same "sheet music," allowing you to dress up and compose your documents rather than merely typing them.

To back up that philosophy, he details some of the attributes and uses of several of the popular general applications (as contrasted with specific desktop publishing applications). Among the Windows word processing applications, he indicates that WordPerfect and Microsoft Word manage the creation of words better than just about anything else. Like Microsoft Access database program, all the programs mentioned above can incorporate multiple fonts in different sizes and import graphics. There is also information in this book on using Micrografx' Windows Draw and Microsoft Paintbrush in a "publishing" mode.

All of the above methods can do much of the job; however, all lack the freedom to position text and graphics wherever you want them on the page. That is the advantage and flexibility of dedicated page composition software. This leads into a description of the various features of four current, popular desktop publishing programs: the low-cost Microsoft Publisher and PFS Publisher, and the powerhouse Pagemaker and QuarkXPress programs.

Part II delves into the basic steps of using proportion, lines, graphic shapes, and texture to improve the look of the text in columns and general page layout. There is also a full chapter on typography and the elements of characters and spacing. Templates and styles are introduced as a method for saving time and money when working with lengthy compositions. The section also addresses the use of graphics and photos to add interest and appeal, along with printing procedures and commercial interfaces.

Part III is essentially a publisher's companion for the desktop. Here is where the rubber meets the road and the results are there for the world to see. There are some neat examples and ideas for various specific types of projects. Finally, a full chapter covers handling of long documents and

books, including details on headings, numbering, captions, and proof checking aids.

You won't want to overlook the appendix either, especially if you are in the market for some new hardware. There's a lot of worthwhile information on the type of equipment best used with a desktop publishing system.

About the only layout feature of the book needing a bit of improvement is the differentiation between headings and subheadings. Perhaps a contrasting color or font style would make the major headings stand out more effectively. All in all, though, this book provides a wealth of data. It can certainly be recommended for anyone interested in desktop publishing or in need of reference material on the subject.



Ten Rules for Fast Modems

Bruce Carson

Reprinted from Tulsa Computer Society
via NOCC *Orange Bytes*

- * 14,400bps modems must connect to computer at 19,200bps or faster.
- * 16450 UART chips on your IO card can only handle 19,200bps modem communications.
- * 16550 UART chips can handle up to 57,600bps depending on computer and modem.
- * Two active devices cannot share the same interrupt require (IRQ). COM1 and COM3 are both on IRQ 4; COM2 and COM4 are both on IRQ3.
- * Serial ports must be configured consecutively, COM1, COM2, and COM3, not COM1, COM2, COM4.
- * You must not have two of any com port, such as two serial 1 ports or two serial 2 ports.
- * When in your communications program in terminal mode, you must be able to type "AT" and get a response "OK" from your modem—every time! This should occur even without a telephone line connected to your modem.
- * Modems are like computers in some respects: When they are turned off they lose the active configuration and when turned back on they must restore an operating configuration into active RAM. ATZ as an initialization string will restore whatever you have saved in NVRAM.
- * File transfer problems are often caused by a software or setup problem. If your modem dials and connects but will not transfer files, check your communications program setup.
- * If you are running a Windows communications program, it is important to have your ports set at the proper speed in that program and in the Windows control panel under ports.

Bernoulli Drives

Larry Graf

Reprinted from *Sacra Blue*, Sacramento PCUG

Mass storage—I need lots of it. Much of my work is graphics and when each file is 2M to 3M, a hard disk can run out of space quickly. There is nothing worse than spending a couple of hours working on a file, saving several early versions, and running out of disk space when it's time to save the final. In Windows you have to alt-tab out to file manager and clear up some room. Sometimes a graphics program will make a backup copy of the file before it saves the file. If you do not have room for both the file and the backup file, the program will not save it.

I needed to get files off my hard disk, but I still wanted to save the files. Some files I could copy to floppy, but larger files won't fit on a floppy even when compressed. In despair, some files were erased; the new ones replaced the old. I wish I could have kept them.

What are the long-term options? New hard drive? Tape backup? Stacker or some other compression program that compresses the information in the file? When you uncompress a graphical file, the file is not always the same. In graphics, when you lose information, you lose quality. With repeated compression, you lose a little more information—and a little more quality—each time.

I started looking at removable hard drives, like Bernoulli, Syquest, and magnetic optical drives. I talked to artists and service bureaus. Magnetic optical drives are often used for archival storage because they have long shelf life but slow access times.

Most service bureaus, which deal mainly with Macs, use Syquest removable drives. Syquest drives come with 44M or 88M disks, but the drive can only read one size or the other, but not both. A common complaint I heard from the service bureaus was that the Syquest disks were not very durable. If one is accidentally knocked off the table, it's done for. Accidents do happen. How about calling a client and telling them that you killed their file?

Several of the service bureaus that I talked with use the Bernoulli drive. It is very similar to the Syquest but the disks are more durable. A Bernoulli disk can be dropped from a height of eight feet without damage. One service bureau told me that they just bought ten Bernoulli drives for almost all their work stations. Instead of sharing a large file on their network, they would copy the file to a Bernoulli disk and pass the disk to another station. They say the access time is good. The 150M drive is downward compatible, able to read and write to other size disks.

Making the Decision

Magnetic optical was not the best option for my needs. I called Syquest and asked for information, but I was sent only a little brochure—nothing to relieve my concern about the durability. When I called Omega.

maker of the Bernoulli drive, they sent me lots of information and their tech support was very helpful.

I got the Bernoulli 150 transportable drive to try out. It came standard with a SCSI adapter, and I also requested a parallel port adapter. The transportable drive can be moved from machine to machine. With the parallel port adapter it does not require a SCSI connector on each computer—it hooks up to the parallel port. This setup is ideal for someone with several machines that are not on a network.

The Bernoulli can be used to transfer large files between machines, or as a backup disk. Although a little slower, it behaves just like a hard disk. It could be used to boot-up the computer to which it's attached. You make directories and subdirectories just as on a hard disk.

I use my Bernoulli drive to store programs or information that I only use less than two or three times each month. I made a directory for the *Sacra Blue* covers and moved them off my hard disk. I used to delete seldom-used drawing packages and reinstall them when needed. Now I just pop in the disk on which the package is already installed. Initiating a program from the Bernoulli is slower than from my hard disk, but it is much faster than reinstalling the program.

How much slower is the Bernoulli? My hard disk has 12ms access time. The Bernoulli using a SCSI interface has an 18ms access time. The parallel port adapter (my usual connection) is even slower. Starting Quicken from my hard disk takes 9.07 seconds, loading from the Bernoulli takes 24.40 seconds. Once it is loaded I don't see any difference between operating speed on the hard drive and Bernoulli.

If you have to access a lot of files from the Bernoulli while working, you will work slower. If I am going to be doing a lot of work with a program I have on the Bernoulli, I will copy the program to my hard disk before I begin for faster response. Then I'll delete it again when finished. It's not elegant, but it works.

There are several Bernoulli drives from which to choose. I picked the transportable Multidisk 150 for its ability to read and write on all the other sizes of disk. It can be found for around \$550. The SCSI adapter cables with SCSI card cost around \$100, and a three-pack of 150M disks (450M total memory) costs around \$300. The drive has a two year warranty; the disk has a five year warranty.

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Diagnostics: QAPLUS/WIN 2.0
Ken Hopkins
Reprinted from *Sacra Blue*, Sacramento PCUG

QAPLUS/WIN 2.0
DiagSoft, Inc.
Scotts Valley, CA
800-DIAGSOFT
List \$99.95

It used to be that diagnostic programs were included with computers. As the clone PCs became common, diagnostics seemed to have disappeared. Unfortunately, with the complexity of today's software, diagnostics are more important than ever.

QAPLUS/WIN provides the essential diagnostics to make it possible to isolate hardware problems, including those in the motherboard, memory, video, and disks. If your computer is failing or Windows is crashing more often than you are willing to accept, this program can save you. There are even tests for your sound board, CD-RPM drive, fax, and LAN. I have yet to see all of these tests in any other single package.

Extraordinary Excavation

QAPLUS/WIN digs out all kinds of information about your computer and the configuration. This information includes memory maps and interrupt allocation. I found the information layout in the DOS information section to be easier to read than Microsoft's MSD layout. The Windows information section is great, helping you find out all kinds of things about your system.

The configuration file editor is nice. It features a quick jump to any section of an .INI file. There are buttons to open the standard configuration files (AUTOEXEC.BAT, CONFIG.SYS, WIN.INI, and SYSTEM.INI) but you can open any .INI file for editing.

Helps with Hard Disks

In addition, there is a comprehensive hard disk performance tester. I find this useful for evaluating the relative performance between the various disk drives that I use. You could use this to evaluate the performance gains and losses from different disk caching settings. I used it to check the performance of PCMCIA hard disk and decided that the PCMCIA card was not suitable for my use. I admit you will not use this program often, but this is a great program to have in your set of tools.

A report program is included to let you browse (and print) the test results. Use this to provide a hardcopy profile of your computer. You can use this information to answer questions when talking

to the tech support personnel of other programs. I cannot see any information missing from its list.

One feature that makes this package outstanding is the Electronic Technical Support Center (ETSC). It helps DiagSoft troubleshoot your problems. With ETSC, two phone calls are made. The first is made by your computer to feed the configuration and test information (and a description of your problem) to the ETSC. ETSC evaluates the information to come up with solutions. The second call is the response call, which may be voice, fax, or e-mail. Alternatively, you can call back in a while and pick up the response yourself. This is a great idea, and I expect this kind of function from other programs in the future.

It's a Winner

I recommend this package for all Windows users. Over a year ago, I reviewed QAPLUS/WIN and recommended its use. DiagSoft has updated the package and made it even better than ever. Note that the list price is less than the previous version price of \$159.



WIN Tip

Lynn L. Kauer, Saginaw Valley Computer Assn.

"Out of Memory"

"This Application has Violated System Integrity"
"Application Error"

If you do lots of cut-and-paste or graphics and receive the above-type error messages (even with 16MB RAM), increase the maximum breakpoint portion of memory from the default 356 BPs.

Edit SYSTEM.INI file in [386Enh] section to:

MaxBPs=768

This solves the problem and costs only 4K RAM.

Windows Through the Keyboard

Ken Hopkins

Reprinted from *Sacra Blue*, Sacramento PCUG

Windows was obviously designed to be used with a mouse (or some other pointing device) but I have found that there are many people who are unaware of the keyboard capabilities. I am sure you know many of the keystrokes described here, but you may find a few you did not know.

Any time you see the Alt, Shift, or Ctrl keys followed by another key, hold down the Alt, Shift, or Ctrl first and then press the other key without removing your finger from the first. It is possible to require Alt, Ctrl, and Shift all held down plus an additional key, but this is rare and I will not have any of those described here.

One fundamental thing you should know is that you can access the commands found in menu bars by pressing the Alt key and the letter that is underlined. This should work on dialog boxes and wherever you see underlined characters. Once you are on the menu bar, you can navigate through the menu with arrow keys. Press Enter when you want to issue the command. You can also use the key combinations that appear on the menu. An alternative method to get to the menu bar is the F10 key. This will highlight the first menu field.

The F1 function key is supposed to bring up online help for the current program. Some programs will change the cursor when you are in a dialog box so that you can point to a particular dialog field that you want to know more about. This will load help information on the desired topic.

The Esc key can be used to return to where you were before reaching the menu bar. Some programs have the Esc key performing some other functions, but it almost always performs some sort of "escape" function.

By itself, the Tab key can be used to jump from one dialog field to another. If you use the Shift key with the Tab key, you jump in the other direction. Note that it is the programmer who decides the order of the jumps; the sequence may not make sense with some programs.

One of the most useful keyboard commands is Alt-Tab. Alt-Tab is used to switch between the different programs that you currently have running. Shift-Alt-Tab goes in the opposite direction. If you have selected Fast "Alt-Tab" Switching in Control Panel Desktop, you will get a pop-up box that shows the icon and the program title (as it appears on the program title bar). If not, the title bars will pop up. Do not let go of the

Alt key, and you can keep pressing the Tab key until the desired program is selected.

A similar command for task switching is the Alt-Esc command. Not surprisingly, the Shift-Alt-Esc command switches programs in the opposite order. The appearance of this function is different from the Alt-Tab command. Where Alt-Tab brings each program to the top, Alt-Esc moves the current window behind the others.

Another command that can be used to switch between programs is Ctrl-Esc. Ctrl-Esc will bring up the task list dialog box. The task list dialog box provides a list of all active programs. From the keyboard you can use the up and down arrow keys to select the program. Then press Enter and the selected program will be on top.

If you are still using DOS programs, you will want to know about Alt-Enter—it will toggle the DOS box between full screen and a window. Note that when the DOS box is windowed you can cut and paste the text contents through the control menu. [See DOS/WIN Tip on p.11.—Ed.]

The command that brings up the control menu is Alt-Space. You normally access the control menu by clicking on the minus sign located in the top left corner of virtually every program window. This gives you access to the commands such as minimize and maximize. Most programs allow you to exit the program via the close command, although a few programs block it out. This is also another way to reach the task list dialog box. The standard shortcut key for closing a program is Alt-F4.

Windows allows you to cut, paste, and copy any windows text that can be highlighted. It does not have to be in the menu and it works just as well in dialog boxes as it does in edit windows. I have found that the standard keys will work even when the program identifies new keys. The key combination to cut is Shift-Delete. The key combination to paste is Shift-Insert. The key combination for copy is Ctrl-Insert. There seems to be a move to use Ctrl-X, Ctrl-V, and CTRL-C for cut, paste, and copy respectively. I am not sure why, because the insert key seems more logical to me.

Other keys like the arrow and page commands generally work in a logical manner. I admit that some programs invent their own novel functionality. Often Ctrl or Shift can be added to

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move further, but there is no real standard. PrintScreen is confusing to many people since it does not appear to do anything. Actually, PrintScreen copies the entire screen image to the clipboard. You need to paste it somewhere to print it. If you just wanted to get an image of just the active window, use Alt-PrintScreen. If you would really like the computer to print the screen image when you press the PrintScreen key, try the shareware program SnagIt.

Special Keyboard Tricks

There is an undocumented feature in Program Manager that requires the keyboard. If you attempt to exit Program Manager (with either a /File/Exit or a Control Menu/Close command) but you hold down the Shift key, Program Manager will not exit. Instead Program Manager will store the current desktop layout. This will happen even if you have turned off the Save Settings on Exit option.

This feature allows you to lock in a desktop layout without exiting Windows. Without this option, you would have to set the save option on and exit, restart Windows and turn the save option off. By the way, the program Plug-In (a great shareware program) will add a "save without exiting" option to the Program Manager menu.

Another undocumented feature exists in File Manager. One of the major complaints about File Manager is that it is difficult to have two file directories side-by-side. This ability has always been in Windows but hasn't been documented by Microsoft. The normal way to window your directories is to issue a /Window/Tile command that will place the windows on top of each other. To place them side-by-side just press the Shift key before pressing the 'T' key.

The same applies to mouse commands: Press the Shift key before clicking on the Tile option in the Window menu. Note that there is a real command for this in the Windows for Workgroups version of File Manager. The WGFW version even has a nice customizable toolbar.

And Unto Dust ...

Brian Smither

Excerpted from *Sacra Blue*, Sacramento PCUG

In a message on the nets, someone asked what to do about the gradual accumulations of dust that collects on the inside of disk drives, on the motherboard, and power supply components. The consensus is that the writer's power supply cooling fan is blowing air out the back, which means the box is sucking air in through another opening somewhere.

That somewhere is usually the 5.25" floppy diskette opening. Eventually the drive will cease to function correctly as dust will have coated the write-protect sensor. Accumulated dirt may even damage the diskette as dust gets ground under the read/write heads.

The thing to do is to pop the hood of the case and vacuum what dirt you can. Be careful not to create any static charges that could fry the computer. Other folks will take the unplugged box to another area and apply compressed air to blow out the dust. But what can be done to prevent the situation?

The message continued with a plan to remove one or more of the unused access panels found at the rear of the cabinet (where the I/O ports present themselves) and tape strips of filter material over the hole. The theory is that air will then be sucked in from these openings, filtered, and not nearly so much unfiltered air will enter through the drive mechanism. I've tried something a little different.

I discovered that the blower fan can be remounted so that it blows in, not out. Unfortunately, there are no guards on the face of the fan that is now up against the vent holes in the power supply case. This prevents the ultimately simple step of slipping a piece of filter foam between the fan and the case. Instead, by running a bead of rubber cement on the outside of the power supply case and around the periphery of the vent holes, I was able to glue the filter foam in place. It doesn't look too bad, and nobody sees the rear of my computer anyway. The foam can be had at electronics shops, and is Ico-Rally part 5513-D.

QEMM 7.5: Quarterdeck to the Rescue

Bruce D. Boss

Reprinted from *Sacra Blue*, Sacramento PCUG

QEMM 7.5 \$29.95 upgrade
Quarterback Office Systems, Inc.
Santa Monica, CA 90405
800-366-7145

In the old days it was popular to complain about the lack of standards for PC software and hardware. Some of us cheered when someone tried to impose a standard for others to follow. Today, Windows 3.11 and the MPC specification are examples of successful standards. In the bad old days before standards, you never knew if a particular program would run on your computer. Then the industry gradually accepted standards for expanded and extended memory, and for EGA and VGA video. Such standards made our lives easier, and programmers benefited as well.

Today, we see a variety of multimedia platforms: DOS, Windows, and OS/2. I personally would be comfortable if all multimedia programs were Windows' MPC applications because I have made sure that my system meets the MPC standard. However, many of the arcade and simulation games are hampered by the Windows 3.11 overhead, so these games are released as DOS applications. As far as I know, even Microsoft's own Flight Simulator is still only available as a DOS application.

DOS multimedia applications require fast hardware and a 'clean' system configuration. A 'clean' system has an optimized (maximized) free memory space in the first 640K of RAM. When you see that dreaded "Insufficient Memory" message from your multimedia application, it is reporting that your lower 640K of RAM doesn't have enough free (empty) space to run the program. Even when you run Windows, you can get this message.

So what do you do? First you can try removing everything unnecessary in the AUTOEXEC.BAT or CONFIG.SYS. For example, remove drivers for AntiVirus, CD-ROM, SHARE, UNDELETE or even Disk Caching. Next you must optimize the memory allocation by running DOS's MEMMAKER. Then, if you still can't get your multimedia application to run, you may be ready for QEMM.

Quarterdeck is a leader in innovative memory management techniques. With version 7.5 of QEMM, Quarterdeck continues its tradition of providing flexible memory management that maximizes the amount of available DOS memory below 640K.

If QEMM is such a great tool, why doesn't everyone use it? In fact, millions of users do install QEMM, but a more complete answer is threefold. First, while your DOS package already contains

roughly the equivalent functionality in the combination of HIMEM.SYS and EMM386.EXE, you have to pay again to buy QEMM. Secondly, every change in DOS, Windows, OS/2, and computer hardware requires some tweaking of memory management. You will have to depend on Quarterdeck to make timely upgrades to meet each of these changes, a challenge they have lived up to so far. Thirdly, QEMM has so many advanced features it can seem daunting to use, even with its excellent setup utility.

We have "RAM cram" in our PCs because multimedia programs require us to load software (generally device drivers) for the sound card, for the CD-ROM, for disk caching, for the mouse, for a microphone, and for full-motion video. We are in big trouble under DOS or even under Windows if all this software crams the first 640K of memory where software runs most compatibly. Memory managers have the ability to move all this software above 640K. Even DOS itself can be moved up high.

The level of sophistication employed by QEMM to use all the RAM in your computer is far above what you can get from DOS's HIMEM.SYS and EMM386.EXE, even when you use DOS's MEMMAKER to optimize your setup. Not only can QEMM find all the available high places right above the lower 640K, it can use a proprietary "Stealth" technology to move all your device drivers out through a window (the Expanded Memory Frame).

In my tests, I consistently have trouble running multimedia applications because the available lower RAM on my system is below 550K when I use DOS memory management to load all my device drivers. With QEMM, I can easily clear out a space as large as 603 to 632K without omitting any of the device drivers I want to use. If the time it takes to start Windows 3.11 is any measure of performance, I see a 30% faster loading time using QEMM.

Perhaps you will not be able to exploit 100% of the advanced capabilities of QEMM unless you learn some of the basics of Memory Management, but the automated install program will still work for you, even if you are an unsophisticated user. In addition, the QEMM package contains the Manifest Memory analyzer that lets you look into your system RAM and see what is happening while it gives you advice about what to do to make your PC run better. ☸

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For info, call Mildred Kohn, 415-949-1833

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BBS Sysop	Brian Christopher	415-952-5632
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PRinT SCreen NEWSLETTER

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Copy Editor	Mildred Kohn	415-949-1833
OCR Production	Don Campbell	415-286-7510
Mailing Party	Mildred Kohn	415-949-1833
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UNCLE D'S BBS

415-364-3001 8-N-1 14.4 bps SPAUG open conference.

GENERAL MEETINGS

Last Wednesday of the month
 Varian Associates, Bldg. 7 Auditorium
 3075 Hansen Way, Palo Alto
 7:30 PM

PRinT SCreen Articles

Deadline

The second Friday following a General Meeting. The newsletter must be at the printer shortly thereafter and the mailing must take place at least 15 days before the next General Meeting.

Submissions

ASCII format is preferred, although most word processor formats can be converted. If you compose your article in a word processor, save it in ASCII (or MS-DOS Text) for submission.

Submit on a diskette with a hard copy (unless via e-mail). Include name, date and daytime voice phone.

Deliver via mail, bulletin board, or hand deliver to the editor at a meeting.



Kill the Editor Anon.

Reprinted from Orange Bytes
 North Orange Co. Computer Club

*Some find fault with the Editor
 And think he should be shot.
 They say his writing is as peppy
 As a cemetery lot.*

*They believe he shows poor
 judgment,
 Stuff in his column's stale;
 Some members choose to holler,
 And others choose to wail.*

*But when the newsletter's issued,
 They say it with a smile.
 If they find they didn't get one,
 You can hear them yell a mile.*

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MAP
SPAUG GENERAL MEETING
LAST WEDNESDAY OF THE MONTH
7:30 PM

NOT TO SCALE

KN

