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<http://www.dacs.org>

## Meeting Preview

# Partition Magic 4.0

## Compartmentalize to your drive's content

CAN YOU concurrently have Windows 98 or NT installed on your computer but also keep your Windows 95 operating system? PartitionMagic by PowerQuest of Orem, Utah, is the answer. PowerQuest will be the featured speaker at the next DACS general meeting on October 6, 1998, at Danbury Hospital. With PartitionMagic, users wanting to hold on to their familiar operating system while getting used to a new environment can quickly format separate partitions and move easily between systems, in addition to saving hard disk space.



PartitionMagic can convert FAT32 partitions to FAT16

dates drive letter references for partitions and peripheral attachments such as CD-ROMs and removable storage devices. MagicMover moves applications and their related files from one partition to another.

In addition to PartitionMagic 4.0, Power Quest will demonstrate its Drive Image, which is designed for the small office or home user who has a need to upgrade to a new hard drive, or to perform a full system backup for disaster recovery. The Professional version allows corporate, government, and education IS managers to create an image file of an entire hard disk, place it on a network or CD-ROM, and then restore the image file to set up any number of workstations. Both versions allow users to store a hard-drive image on removable media, such as a Jaz, Zip, or SyQuest drive.

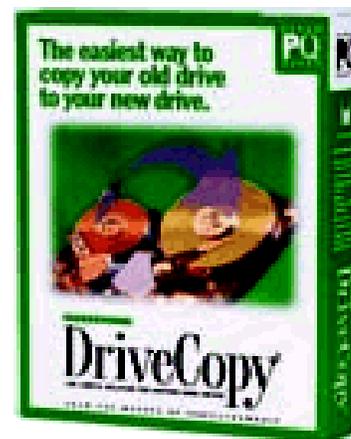
DACS general meetings, held on the first Tuesday of the month at the Danbury Hospital auditorium, 24 Hospital Avenue, are free to the public. The meeting starts at 6:30 p.m. with casual networking. At 7 p.m. join Random Access, a short-question-and-answer session during which members share computer problems and solutions. This is followed by a



partitions so users can continue to use other operating systems and utilities. FAT is File Allocation Table, the process used by computers to put data on the hard disk. By shrinking large FAT partitions, PartitionMagic automatically reduces the cluster size to regain megabytes of lost disk storage space. As drives grew larger, storage cluster sizes grew to 32K. If a 2K file is saved in a 32K cluster, the unused portion (30K) is wasted. By reducing the size of the partition, Partition Magic can bring cluster sizes down to a more efficient level, reclaiming up to 40 percent of the hard disk space.

PartitionMagic will create and manipulate the partitions in which multiple operating systems can reside. BootMagic, PowerQuest's new boot manager, allows the user to switch from one OS to another without worrying about compatibility problems. BootMagic allows users to safely install, run, and switch between multiple operating systems. Also included with Partition Magic 4.0 are DriveMapper and MagicMover. DriveMapper up-

brief business meeting and the main presentation at 8 p.m. As a DACS member, you receive the monthly award-winning newsletter, *dacs.doc*. For more information about DACS and its SIGs (Special Interest Groups), which meet throughout the month to discuss specific computer topics, see <http://www.dacs.org>.



# President's File

With the approach of the millennium, prophecies of doom are descending like the trick-and-treat cries of Halloween goblins. Although word of the Y2K bug began to creep in with the thirty-year mortgage in the 1970s, reality has only just begun to descend on most of us during the last two years. If there is any substantial difference among the doomsayers, it is over the question of whether we will even get to see the millennium.

Among all his dire predictions, Nostradamus is not reputed to have foretold of the Year 2000 bug; but then he might not have felt it was worth mentioning considering the Armageddon that was to occur in 1999. Certainly, some investors suffering the indignity of declining portfolios may soon actually look forward to a Dow Jones average measured in 1900 dollars.

If you're still unsure what the Year 2000 holds in store for you, come to the DACS Y2K seminar on Thursday, October 15, at 7 p.m. The program, which will be held at the Ansell School of Business at the Western Connecticut State University west-side campus, is being jointly sponsored by DACS, W.C.S.U. and the Danbury Chamber of Commerce. A panel of experts from DACS and the information technology community will be on hand to present their particular views on the millennium bug and to answer questions from the audience.

This program is just another in an ongoing series of New-to events designed not for the professional, but for the rest of us. Don't miss the program on computer viruses by DACS' own Jeff Setaro, the only

disinfectious agent with a license to exterminate. Other upcoming New-to events will include a post-Christmas "meet-your-new-PC/Mac," and topics on file management and Internet research and e-mail. Have an idea for a New to program? Tell us about it.

## DACS Elections

While we're on the subject of dreaded predictions, the annual membership meeting and election of directors for the coming year will be held in December as part of the monthly General Meeting. Six of the eleven board seats will be up for election by the membership. Past president Tom McIntyre will be relinquishing his seat on the board to ascend to a higher plain of existence and has graciously offered to chair a nominating committee.

You will hear a lot from Tom and me over the next two months about volunteering to run for the board—or just plain volunteering. We have been fortunate to have an extremely talented board; but even the best stars inevitably begin to flicker out. Unlike some organizations whose directors are merely affirmed without challenge, we try to give our membership a real choice by running more candidates than seats to be filled. While for some running for the first time on a slate dominated by incumbents this can portend the sting of defeat, most contenders inevitably end up volunteering, getting involved, coming to meetings, and eventually getting elected. That, at least, is my own story.

## Do old PCs have an afterlife?

Intel chairman emeritus, Gordon Moore, is best known for his prediction that the number of processors that could fit on a computer chip would double every year. While that prediction has been borne out over and over again, another prediction has become inevitable—that in the same time period the number of computers being superseded and decommissioned would also double. Do landfills have to also double in size to accommodate the ever rising number of scrap PCs?

For a number of years, DACS has helped local community groups get a piece of the computer revolution by refurbishing and donating used PCs. Among these groups are Voice for Joanie, the

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# dacs.doc

## Membership Information

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### Postmaster

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The editors welcome submissions from Dacs members. Contact Frances Owles, at 860-868-0077 ([jones@ct1.nai.net](mailto:jones@ct1.nai.net)) or Allan Ostergren at 860-210-0047 ([dacseditor@aol.com](mailto:dacseditor@aol.com)).

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*dacs.doc* file transfer security

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Applications & Hardware to enhance *dacs.doc* are always welcome.



Jeff Setaro  
APCUG Liaison  
748-6748

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Web Site: <http://www.dacs.org>

Danbury Senior Employment Center, and Computers 4Kids. And although the number of old and unwanted computers seems to be growing, the need for them in the community never seems to fade. If you know of anyone or any group that could use a used computer, or anyone who has one to give away, please contact Charles Bovaird (aam@mags.net, or 203 792-2752). Better yet—become a DACS volunteer, pull up your sleeves, and come down and get involved in our workshop. Just one condition: some PCs (386 and below) should really have the benefit of last rites and a decent burial in an appropriate landfill.

—ALLAN OSTERGREN  
dacsprez@aol.com

## HelpLine

Volunteers have offered to field member questions by phone. Please limit calls to the hours indicated below. Days means 9 a.m. to 5 p.m.; evening means 6 to 9:30 p.m. Please be considerate of the volunteer you are calling. HelpLine is a free service. If you are asked to pay for help or are solicited for sales, please contact the *dacs.doc* editor; the person requesting payment will be deleted from the listing. Can we add your name to the volunteer listing?

d = day    e = evening

Program	Name	Phone #	
Alpha Four	Dick Gingras	(203) 426-0484	( e )
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AutoCAD	Peter Hylenski	(203) 797-1042	( e )
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WordPerfect	John Heckman	(203) 831-0442	( e )

## Directors' Notes

THE MONTHLY MEETING of the Board of Directors was held at the Resource Center on Monday, September 14, 1998, at 7:30 p.m. Present were Messrs. Bovaird, Buoy, David, McIntyre, Ostergren, and Setaro. Also present was Marlene Gaberel. Wally David, Chairman, presided. Larry Buoy, Secretary, kept the records of the meeting.

### Finance & membership

Treasurer Charles Bovaird reported a combined checking and postal account balance of \$12,227.18 and postage on hand of \$179.28, a total of \$12,406.48, and current membership of 603.

### Y2 Program

The board explored various opportunities to publicize the Y2K program to be held on October 23 in cooperation with the Ansell School of Business and discussed which media and business groups most likely to promote the event we should contact. Also discussed were potential panelists and/or moderators for the program.

### Community outreach

President Ostergren suggested that DACS, with its commitment to community outreach, might explore ways it could help provide disadvantaged groups with computers, Internet access, and instruction. The board agreed that research be done on ways DACS might contribute.

**Directors' Notes** Continued on page 14

# Lotus SmartSuite Millennium Edition

## Toss your keyboard, LSS has ViaVoice!

By Jack Corcoran

**R**EMEMBER the briefings in the old "Mission Impossible" series? "If you should choose to accept ..." Of course it was always impossible, of course they always accepted, and of course they always succeeded.

When IBM's Lotus project manager was told that his assignment, should he choose to accept it, would be to go out and grab Microsoft's 80% share of the desktop office software market, the theme from "Mission Impossible" had to rattle his eardrums. But he accepted the challenge, realizing there were only two things he had to do: (1) build a better product, and (2) convince people to try it.

### Build a better product

The presentation at the September general meeting of DACS showed IBM's success in achieving at least the first of these goals: IBM has built a superior product whose features outshine the current Microsoft Office suite. We saw elements of the Lotus SmartSuite Millennium Edition in action, and it looked good.

SmartSuite has ten components that work together to provide a spectrum of office services. Word processing is provided by WordPro, and spreadsheets by the classic 1-2-3. Presentation facilities are integrated with Web access so that users can present documents over the Web as easily as they can generate hard copy. FastSite, Approach, Freelance Graphics, and ScreenCam combine to provide a comprehensive, coordinated presentation capability. Scheduling and information management are handled in Organizer. SmartCenter facilitates accessing the various capabilities, and Doc OnLine is there when you need help.

It's all there. The basic office environment for everybody—and everything that most people will ever need or use. Lotus has made a great effort to make life easier for the user. The various applications work together, supporting data transfer among each other where it makes sense to do so, and using as much commonality as possible. As an essential marketing strategy, SmartSuite can read in

data files from practically any source. This includes Microsoft Office, Oracle, SAP, and several others.

In a very impressive extra, SmartSuite includes IBM's ViaVoice speech recognition software, which allows you to train the system to recognize your voice so you can talk data into WordPro instead of having to type it in.

This very impressive suite was introduced at PC Expo in June and is now becoming available from all the usual sources. The upgrade price is \$149 and apparently practically anything you have in office software qualifies you for a competitive upgrade.

### Convince them to buy it

As for second part of IBM's mission, Lotus sent in Joseph C. Hureau from New York to convince DACS users to use the new SmartSuite.

Joe came in with an attitude: an arsenal of Microsoft slams, an in-your-face presentation, and a late-night-show delivery. Fortunately for our audience, the Danbury area is culturally greater New York, so we capice. But I hope Lotus doesn't let Joe out of the Tri-State area.

The hit of the show was the demonstration of ViaVoice, which Joe used with several of the applications. Voice entry will inevitably take over for data entry, and Joe made it clear why. When he spoke a set of tongue-twisters into the system, ViaVoice handled them flawlessly, bringing a round of applause from the audience. It was obviously a well-practiced set, but the translation was still impressive. Joe also gave us some excellent advice on how to begin training a voice recognition system.

### Weaknesses

Any system as large and complicated as SmartSuite will lack something—no system can do everything. Several knowledgeable people in the DACS audience asked in-depth questions that identified some of these problems, such as the suite's inability to pick up address books from Lotus Notes.

Joe's response to these criticisms was pure performance art. Like a polished spinmeister, he identified with the critic, proclaiming that he too had complained about that very matter to his Lotus management. Their failure to implement his advice was the problem, and he emphatically told us that he was "pissed off" about it. Four times during the evening he used this technique, combining the best (or the worst?) of Washington, D.C., and invoking the image of Dilbert management. Joe is really wasting his time in the computer field.

Lotus generously donated four copies of SmartSuite Millennium Edition to our end-of-meeting raffle. I was one of the lucky winners. The next day I loaded the full suite onto my NT 4.0 system and was relieved that all the elements installed easily. IBM ViaVoice had a few awkward and confusing moments fitting in with the Lotus software, but eventually it all worked together. (ViaVoice co-habits with my Dragon NaturallySpeaking system, even using the same microphone.)

Lotus WordPro looks much like Microsoft Word to me and reads all my .DOC files. Lotus 1-2-3 looks just like Microsoft Excel to me and handled all my .XLS files.

### The upshot?

This is my first experience with Lotus products, and I am well pleased with SmartSuite. I'll use it in place of my Office 95 applications. The suite looks good to me. It does load up the Startup folder and insinuate itself into your life with menu bars and taskbar icons, but one can live with that.

Joe's presentation was pretty much a showcase for Joe. The audience had comparatively few questions, and the presentation clocked in at 53 minutes total—the shortest one at a DACS general meeting in some time. Just as well.

*JACK CORCORAN is an old, retired computer programmer who just discovered that he has an attitude.*

# Small Business Hardware

## Label Mania

### The day I dumped my typewriter for a CoStar

By Marlene Gaberel

FOR AS LONG as I can remember, I have owned typewriters, ranging from mechanical models to electrics. And then I bought my first computer, motivated mainly by the hype about how easy it was to word-process with it. But I never quite abandoned my typewriter, since I found it inconvenient to switch my computer printer setups to print out a label, an envelope, or a recipe card.

So I logged onto the CoStar Web page (<http://www.costar.com>) and tried to download the right software. My first attempt was unsuccessful, but the support staff at CoStar took pity and e-mailed me two software options. The one I installed was called Easy Suite, which included Easy Labelwriter. The software was intuitive to use, and I was able to print labels as soon as it was

#### ■ LABELWRITER XL PRINTERS

*The fast and easy way to print labels, name badges and bar codes right from your computer.*



Labels sheets are convenient when you want to print out a batch of labels but wasteful when you want to print just one. So even though most of my output came out of my regular printer, my typewriter was still a prominent feature on my desk for those little tasks.

Now I'm ready to put the typewriter in the attic, since I recently acquired a CoStar label maker. What prompted me to buy it were the several unsuccessful trips I made to the local office store to locate a replacement ribbon for my old typewriter. Planned obsolescence?

An advantage to the CoStar labelwriter is that there is no need to change ribbon, ink, or toner cartridge. I just wish that my regular printer were so inexpensive to maintain.

The hardware was easy to hook up to my computer, and adding the print drivers took only a matter of seconds. But then the stumbling block: When everything was up and running, I realized I did not have the software to run the labelwriter. Only Connectix Photobadge was included, which I did not need at the time.

installed. An added benefit to Easy Label is the inclusion of a Microsoft Word icon. When typing a letter in Word, you just highlight the address and paste and copy it into the labelwriter software. A two-click time-saving device.

One inconvenience is getting the labels. You need to order them by mail-order since local office stores don't carry them. But CoStar does have a wide range of labels for every purpose. You can choose from thirty different kinds, from 5" x 1/2" to large shipping labels. So far I have mostly used the versatile 1 1/8" x 3 1/2" format, which accommodate most of my jobs. Should I need specific labels, those are also available from CoStar.

Now I'm ready to organize my office, my file cabinets, and my diskettes. I'll even put labels on my kids' notebooks and textbooks. And then I may even organize my recipes!

MARLENE GABEREL is a DACS vice president, director of publicity, and assistant Webmaster. You may contact Marlene at [mgaberel@ct1.nai.net](mailto:mgaberel@ct1.nai.net).

## Internet Humor

### If Restaurants Functioned Like Microsoft

**Waiter:** Hello, my name is Bill and I am your waiter.

What is the problem?

**Client:** There is a fly in my soup.

**W:** Stir it, maybe it will go away.

**C:** No, it is still there.

**W:** Maybe it's because of the way you are eating. Try using your fork.

**C:** Even if I use the fork, the fly is still there.

**W:** Maybe your soup is incompatible with your bowl. What sort of bowl are you using?

**C:** Uh, a soup bowl.

**W:** Oh, that should work. Maybe it's a configuration problem. How was your bowl prepared?

**C:** You brought me the bowl on a platter. But what does that have to do with the fly?

**W:** Do you remember what you did just before you noticed there was a fly in your soup?

**C:** Well, I sat down and ordered the soup of the day.

**W:** Have you considered upgrading your soup of the day?

**C:** What? You have more than one soup of the day every day?

**W:** Of course. The soup of the day is changed once an hour.

**C:** I see. What is the soup of the day right now?

**W:** The soup of the moment is tomato.

**C:** Bring me that and the check. I'm in a hurry.

**W:** Here is your soup and the check.

**C:** But this is leek soup! Waiter!!! There is an ant in my soup!

**THE BILL:** Soup of the Day: \$4  
**UPGRADE** to Soup of the Day: \$2  
**TECH SUPPORT** by Waiter: \$8

— From *Le Monde Informatique*  
22 May 1998

## Soldiers at War

By Joshua Gaberel

**T**HE BEST game I have seen all year is Soldiers at War (<http://www.soldiers-at-war.com>) by Strategic Simulations Inc. (<http://www.ssi.com>), a Mindscape company (<http://www.mindscape.com>). I think it is one of the most realistic WWII games I have ever seen—even though historians would not think so.

Here are some of the battles that you can reenact: Kasserine Pass, Maltese Island, East of Messina, Monte Cassino, Anzio, Normandy, Outside St. Lo, Platoon HQ, Cherbourg, Paris, Vineyards, German airfield, The Rhine, Dredsen, Near Berlin.

The music in this game is very good—and dramatic. The composer is Crystal Lenenes.

Before each battle, you have to dress your platoon and give them weapons. You can choose if you want the battle to take place in the rain or in the sun. And you can choose the level of difficulty, such as being a private, a commander, a general, or a commando. You can also do mini battles and play the part of the Germans or the French resistance.

I would really give Soldiers at War a ten on a scale of one to ten. The rating

given by the ESRB of “13+ teen for animated violence and animated blood” I find unfavorable. I think the game is very historical and educational, but it was rated teen. So some mothers would not buy it, and their kids will not get help with their history if they do not get the game.

Soldiers at War is a very good multiplayer game. You can play two, three, or four players together. I would really want to try this, but I do not know anyone else who has the game.

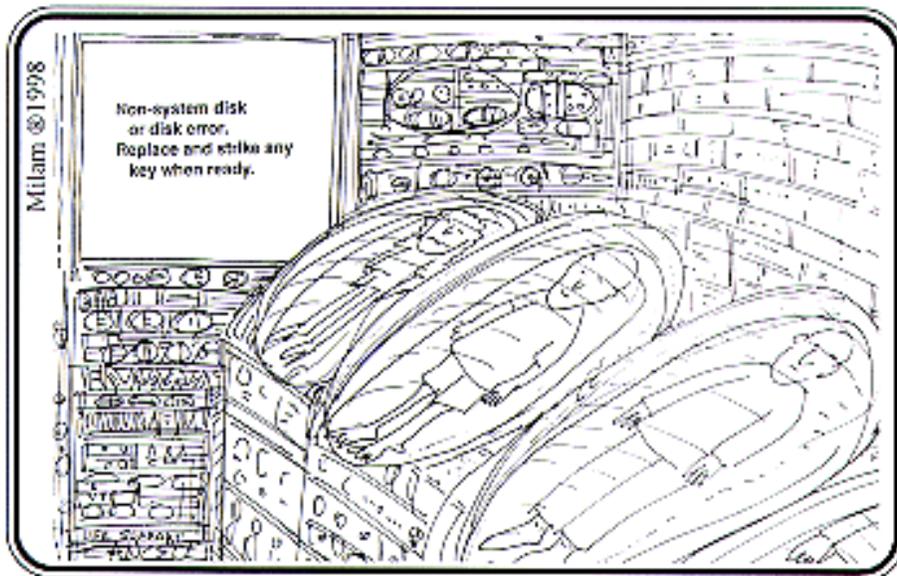
There are some bad things about the game. It is a memory hog needing 175MG of hard disk space, for instance. But there are good things too.

Soldiers can move in different ways: They can crawl, walk, or run. They can also help the wounded by picking them up and taking them somewhere safe. And they can climb into disabled tanks and fire at the enemy. The last move, and my favorite, is to throw grenades.

You should think about getting Soldiers at War for your kids. The price is about \$40.00.

*JOSHUA GABEREL, the son of DACS officer and Assistant Webmaster Marlene Gaberel, is an avid computer games enthusiast who reports his findings regularly in dacs.doc. Contact Joshua at [jgaberel@usa.net](mailto:jgaberel@usa.net)*

*I think the game is historical and educational, but it was rated teen.*



### Local Area Internet Providers

AT&T WORLDNET	800-967-5363
CLOUD 9	914-682-0384
CONCENTRIC NETWORKS	800-745-2747
C. P. CONNECT	203-734-6600
DELPHI INTERNET	800-695-4005
EARTHLINK	800-395-8425
MAGS-NET	203-207-5695
EROL'S	888-463-7657
GTE INTERNETWORKING	800-927-3000
IBM/ADVANTIS	800-888-4103
INTERNET84	203-830-2122
INTERRAMP/PSI	800-827-7482
JAVANET	800 952-4638
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MCI	800-550-0927
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NORTH AMERICAN	800-952-INET
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PUTNAM INTERNET	914-225-3234
SMART WORLD TECH.	203-790-4600
SNET INTERNET	800-408-8282
SPRYNET	800-SPRYNET
TIAC	203-323-5957
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WEBQUILL INT. SVCS	203-750-1000

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Further information?

Call Jim Finch @ 203 790-3654

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08/17/1998 thru 09/21/1998

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- 2) Cathrine Hines
- 3) Walter Hope
- 4) Jon E. Kimberlin
- 5) Andrea Martin
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- 8) Mary F. Rindfleisch
- 9) Bill Sears
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- 11) Ted Winokur
- 12) Jutta Wolff

#### THIS IS YOUR LAST NEWSLETTER

If the membership date on your mailing label reads

**EXP 08/1998**

you need to renew your DACS membership—NOW!

# Become A Multiboot Power User

**System Commander Deluxe gives you an OS choice.**

By Richard Corzo

**I**F YOU ONLY run one operating system such as Windows 95 on your computer, you don't need to read this article. But if you ever have a need to run more than one operating system, you should read on.

Perhaps you're a game player who likes to play DOS-based games under real DOS. Or maybe you're in the computer field and need to support Windows 95, Windows 98, and Windows NT, or try beta test versions of these. Or perhaps you want to stray even further and run things like OS/2, Linux, or the new BeOS that came from the Mac platform but now runs on Intel-compatible machines.

Depending on your needs, you may be satisfied with various options. For instance, if you have the Windows 95 retail upgrade version, you can press F4 when the "Starting Windows 95" message appears to boot into your previous version of DOS. If you install Windows NT on a machine with Windows 95 already installed, you will get a boot menu on startup to choose between running 95 or NT. If you have OS/2 Warp and install a Boot Manager partition at the beginning or end of your hard drive, you can boot OS/2—as well as any other operating system installed in a primary partition, such as DOS or some form of Windows.

In fact with DOS, Windows 95, Windows NT, and OS/2 all installed you could wind up going through several of these multiboot facilities: from the OS/2 Boot Manager menu, select Windows NT, from the Windows NT multiboot menu select Windows 95, then press F4 directly, or indirectly press F8 and select "Previous version of DOS" to get to your installed version of DOS. Another way to get the OS/2 Boot Manager is to buy Partition Magic, which also allows you to repartition your hard drive without destroying the data in your existing partitions.

None of the above choices give you as much flexibility as System Commander Deluxe from V Communications. I had heard of this program before but was finally motivated to buy it

with the thought of adding Windows 98 to my existing stable of operating systems: Windows 95, Windows NT 3.51, NT 4.0, and OS/2 Warp. Unlike IBM's Boot Manager, it does not require you to set aside a primary partition for it. (There is a limit of four primary partitions on a hard drive, including an extended partition that may contain multiple logical drives.) Instead it replaces your master boot record (MBR), which is what determines which primary partition gets booted when you start your computer. (You are actually modifying the MBR when you run FDISK and set the active partition.)

Well, replacing the master boot record didn't sound to me like a particularly safe thing to do, but the System Commander installation program backs up your existing MBR before it proceeds with the install.

You have a choice of installing System Commander from Windows 95, a DOS or Windows 95/98 DOS prompt, or from the included System Commander Deluxe boot diskette. The manual mentions that System Commander is not compatible with any form of compression. I chose the Windows 95 install and things seemed to go smoothly until the very end of the install. I got an error message indicating I didn't have a bootable partition! I tried to stay calm and figure out the problem, reading the extensive manual that comes with the product. I decided to make a tactical retreat and uninstall System Commander. This restored my original master boot record, and took me back to my original state where I could boot all my operating systems from the OS/2 Boot Manager.

**AFTER MORE THAN ONE** attempt, I started to suspect that the Boot Manager partition might be interfering with the System Commander installation. During installation, System Commander shows you your partition table,

which indicates the starting and ending cylinder values for each partition. Apparently, my one-cylinder Boot Manager partition overlapped the last cylinder of my extended partition.

Somehow this didn't prevent me from using my system in the past, but both Partition Magic and OS/2's FDISK indicated that there was some kind of partition table error. I reasoned that if I could get rid of the Boot Manager partition, that would make everybody happy. The only way I found to do this was to use Windows NT's Disk Administrator and delete the Boot Manager partition from there. I held my breath and did this, hoping that grave consequences would not result. (I did have reasonably up-to-date backups of my hard drive.) Fortunately, the computer gods smiled on me and I was able to shut down NT and then boot Windows 95 to try the installation again.

With my System Commander installation now successful, my next reboot showed me a menu of all the



operating systems it had found already installed. However, if your experience is like mine, you may find some of the entries with strange names like QNX, or a lot more entries than operating systems you thought you had installed.

The sometimes funny names are explained in the manual. For instance, QNX may show up for OS/2 partitions. Some operating systems may modify the boot

*System Commander Continued on pg. 10*

# Special Interest Groups

**ACCESS.** Designs and implements solutions using Microsoft Access database management.

**Contact:** Bruce Preston (203 431-2920). Meets on 2nd Tuesday at 7p.m., at the DACS Resource Center, Ives Manor (lower level), 198 Main Street, Danbury.

**Next meeting:** October 13.

**ADVANCED OPERATING SYSTEMS.** Uses, explores, and develops OS/2, BSD UNIX, and NT operating systems.

**Contact:** Don Pearson (914 669-9622).

Meets on Wednesday of the week following the general meeting, 7:30 p.m., at Don Pearson's office, North Salem, NY.

**Next meeting:** October 14.

**DESKTOP PUBLISHING.** Edits and produces *dacs.doc*. Anyone interested in the art of newsletter publishing is welcome.

**Contact:** Allan Ostergren (860 210-0047) or Marc Cohen (203 775-1102). Meets on Thursday following monthly general meeting, 7p.m., at the DACS Resource Center, Ives Manor (lower level), 198 Main Street, Danbury.

**Next meeting:** Unscheduled.

**EDUCATION.** Coordinates DACS education classes.

**Contact:** Charlie Bovaird (203 792-7881). Meets as needed.

**FINANCIAL.** Discusses various investment strategies, emphasizing careful selection to maximize profits and limit risk.

**Contact:** Will Toll (203 270-1519), or Paul Gehrett (203 426-8436). Meets 3rd Thurs. 7:30 p.m., Edmond Town Hall, Newtown.

**Next Meeting:** October 15.

**GRAPHICS:** Create and print high-quality graphics and images.

**Contact:** Ken Graff (203 775-6667). Meets on last Wednesday, 7p.m., at Best Photo, Brookfield.

**Next Meeting:** October 28.

**INTERNET.** Acquaints DACS members with the Internet.

**Contact:** Larry Stevens (*LStevens@aol.com*) or Richard Koser (*rkoser@usa.net*). Meets 3rd Wednesday, 7p.m., Resource Center, Ives Manor (lower level), 198 Main Street, Danbury.

**Next Meeting:** October 21.

**MACINTOSH.** Discusses Macintosh hardware and software.

**Contact:** Chris Salaz (203 798-6417). Meets on 3rd Tuesday, 7:30 p.m., at the DACS Resource Center, Ives Manor (lower level), 198 Main Street, Danbury.

**Next Meeting:** October 20.

**VISUAL BASIC.** Develops Windows applications.

**Contact:** Chuck Fizer (203 798-9996 or Jim Scheef, 860 355-8001. Meets on 1st Wednesday, 7p.m., at DACS Resource Center, Ives Manor (lower level), 198 Main Street, Danbury.

**Next Meeting:** October 7.

**VOICE FOR JOANIE.** Provides and supports people with Lou Gehrig's disease with special PC computer equipment.

**Contact:** Shirley Fredlund (860 355-2611 x4517).

Meets on last Tuesday, 7:30 p.m., at Datahr, Brookfield.

**Next Meeting:** October 20 (changed from usual time).

**WALL STREET.** Examines new stock market software.

**Contact:** Phil Dilloway (203 367-1202). Meets on last Monday, 7p.m., at A. G. Edwards office, 42 Old Ridgebury Road, Danbury.

**Next Meeting:** October 26.

**WEB SITE DESIGN.** Designs and maintains *dacs.org*, the DACS Web site.

**Contact:** Jeff Setaro (203 748-6748). Meets on 2nd Wednesday, 7p.m., at the DACS Resource Center, Ives Manor (lower level), 198 Main Street, Danbury.

**Next Meeting:** October 14.

**WINDOWS.** Explores all aspects of Windows 95 and 3.1.

**Contact:** Ben Carnevale (203 748-1751). Meets on 1st Friday, 7p.m., at the DACS Resource Center, Ives Manor (lower level), 198 Main Street, Danbury.

**Next Meeting:** October 2.

## SIG News and New-to ...

*The SIG Notes and Calendar are also posted on the DACS Web site at <http://www.dacs.org> Please e-mail your comments and suggestions to the Webmaster.*

### INTERNET

The Internet SIG will resume on Oct 21 with new co leaders Larry Stevens and Richard Koser. The SIG will now meet at the DACS Resource Center.

### VOICE FOR JOANIE

Meeting change for October. Moves up one week to Tuesday, October 20.

### WINDOWS

The Windows SIG meetings will resume on Friday, October 2, at 7pm at the DACS Resource Center.



### NEW-TO EVENTS

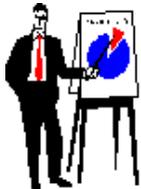
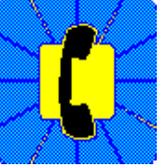
Even if you are a veteran gloomsbody predicting corporate chaos and communications cataclysms affecting all aspects of human endeavor, you should hotfoot it over to our next New-to program devoted to the Year 2000 Question.

The meeting will be held on Thursday, October 15, at the west-side campus of Western Connecticut State University at the Ancell School of Business. (Take I-84, Exit 4, west on Mill Plain Rd., and right at campus, up the long, sweeping driveway. Go to the auditorium.)

DACs and W.C.S.U. are jointly hosting the event, with additional support from the Danbury Chamber of Commerce. A panel of experts from DACS and the information technology community will present their views on the millennium bug and answer questions from the audience.

# October 1998

## Danbury Area Computer Society

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Calendar and SIG Notes are available on the Internet at <http://www.concentric.net/~dwmcleod/signotes.htm>

**System Commander** *Cont'd from page 7*

records of even logical partitions so that these will show up in the menu, even though not truly bootable. To straighten this out, I systematically tried each "operating system" choice on the menu and made note of those that actually booted. With all my operating systems accounted for, I proceeded to delete the false entries and rename the funny ones from the Setup menu. Now I was in business and truly felt like a power user.

One of the nicest features of System Commander is its MultiFAT feature, which allows you to keep a separate copy of key files like AUTOEXEC.BAT and CONFIG.SYS for each operating system that boots from a primary FAT partition. (FAT is the file system used by DOS and various Windows versions.) So you could, for example, create customized versions of AUTOEXEC.BAT for booting DOS for specific games. System Commander has its own standard set of key files for each operating system, but you can also add your own files to the list for each operating system choice.

Another nicety is the "Boot from drive A:" menu choice. By having this I could change my BIOS setup to not automatically boot from the A: drive before the C: drive. This saves a little time on bootup and prevents accidental boots from non-bootable diskettes that you forget to take out from the A: drive.

My next project was to install Windows 98 while preserving my existing Windows 95 installation. I installed 98 in a separate \WINDOWS directory on another partition, but since it does modify the AUTOEXEC.BAT and CONFIG.SYS files, I needed System Commander to manage the separate copies I would need to still boot Windows 95 successfully.

System Commander inserts a check in each AUTOEXEC.BAT file to check for changes in key files and for the installation of new operating systems. It successfully detected the new installation of Windows 98, but I did experience one minor glitch. When I booted Windows 95 to confirm that it was still bootable, it worked fine except that it showed the Windows 98 logo instead

of Windows 95 on startup! 98 had replaced the LOGO.SYS file that is used by both operating systems. I remedied this by adding this file to the File Management menu in System Commander Setup for these two operating system choices and copying the original LOGO.SYS for Windows 95 to C:\ when I was booted into that operating system.

**One of the nicest features of System Commander is its MultiFAT feature.**

System Commander Deluxe is called Deluxe to distinguish it from the previous version of System Commander. The first feature it adds is an OS Wizard, which is supposed to help you configure your system for the installation of a new operating system. I tried this after preparing a sufficiently large partition for installing Windows 98, but the OS Wizard informed me that it couldn't find a suitable configuration for installing 98. The other companion feature is a repartitioning tool to aid in preparing your system for a new OS. It only works on FAT partitions, so if you use NT's NTFS file system, OS/2's HPFS, or Linux, this won't meet your needs. I didn't actually try this feature since I already have Partition Magic, which I know and trust.

**I**N SUMMARY, System Commander Deluxe is a very useful tool for a power user, but as you have probably have gathered, it is not for novices.

The Deluxe version should retail for \$65 to \$70. There is also supposed to be a non-Deluxe version, which leaves out the OS Wizard and partitioning tool, that would have suited my purposes, but I wasn't able to find a copy in a retail store.

I also stumbled on a Windows 98 Special Edition version for about \$30 dollars that is supposed to allow you to switch only between Windows 3.1 or 95 and a new Windows 98 installation. I did not evaluate this version, so I can't say how easy it might be for an "average" user to use. If you would like more information check the V Communications Web site at <http://www.v-com.com>.

RICHARD CORZO is a computer programmer working for Packard BioScience Company in Meriden, CT. He has been working with 32-bit PC operating systems for the past six years. You can contact Richard at [rcorzo@ibm.net](mailto:rcorzo@ibm.net).

## CONTACT of Danbury, CT

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Responsible for C language program development and maintenance of real-time embedded systems. 2+ years experience using Windows '95/NT operating system, and experience with C, C++, WIN 32, Visual C++, MFC, and ODBC.

### SOFTWARE ENGINEER

Participate in new product development using Windows '95/NT. The product will include the ability to maintain program database using Windows user interface in an embedded system. Position requires 2+ years experience using Windows '95/NT operating system, knowledge of WIN 32, and experience with C, C++, Visual C++, MFC, ODBC, RDBMS, SQL, OOAD, Multi-threading, Client-Server helpful.

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# Internet Resources for Teachers

By Jacqueline Renee Cohen

**W**HETHER YOU ARE a new teacher or a 25-year veteran, this brief reference guide can help you access educational information on the Internet. The Net offers a plethora of resources for teachers—lesson plans, games, classroom resources, professional organizations, teaching materials, television resources, up-to-date research articles cited for students—but I have discovered that learning how to access them takes time. Here's a starter list I have compiled—ten useful Internet sites geared to the needs of educators. With a little effort, you can find many more.

To make this a more compact and useful guide, I will first supply the site's URL, then briefly describe it. I have tried to include only those sites that offer links to other sites. A visit to one site, for instance, may lead you to links on every other subject—and more. You may be surprised at what you find.

One of the national, state, and local education goals is for teachers and students to become more computer and Internet literate. I hope this guide will help you and your students achieve this goal. Please feel free to copy and share it with other educators and interested parties. Good luck and enjoy!

### Teacher Resources: Web Instructional Assistance.

<http://www.aces.k12.ct.us/~spagnesi/help/helptch.htm>

Offers lots of links with brief descriptions of each site. Quick, easy, and no graphics. A great place to start!

### The National Library of Education Presents: The Educational Resource Center (ERIC).

<http://www.aspensys.com/eric/index.html>

ERIC is the largest online database of educational resources, and it is constantly being updated. You could get lost in the links for years, or you might quickly find exactly what you are looking for.

### Urban Education Web.

<http://eric-web.tc.columbia.edu/>



Offers a good selection of links to sites concerned with urban education issues. Includes academic articles and lesson plans.

### Teachnet.com.

<http://www.teachnet.com/index.html>

This is a weekly online newsletter that offers excellent links (refer to the frame on the left side of the Web page for access to them). Check out their lesson ideas, resources and links, and classroom sections.

### AskERIC Lesson Plans.

<http://eric.syr.edu/virtual/lessons/>

Check out the lesson plans offered here, or post your own. Mostly deals with core subjects but offers good links as well, including those dealing with refugee and multicultural issues.

### Kathy Schrock's Guide for Educators.

<http://www.capecod.net/schrockguide/>

An excellent site with links categorized by subject. Also has many links relating to Internet and technology in the classroom. I highly recommend this site!

### Schoolhouse Topics

<http://teacherpathfinder.svr.edu/school/school.htm/>

Another great site with lots of links for educators. Categorized by subject, including assessment, integrated curriculum, and special needs to name but a few.

### Web Sites and Resources for Teachers.

<http://www.csun.edu/~vceed009/>

K-6 resources, categorized by subject, including ESL/Bilingual. It is updated regularly.

### Web Resources ... Helpful to Middle School Teachers.

<http://www.westnet.com/~rickd./teachers.html>

This is a superb Web site. Even if you are not a middle-school teacher, you will find useful links here. Designed by Eastchester Middle School, it has links to a page of middle school student links, academic subjects, special education and technology education sites, various organizations, and on and on.

### Dave Sperling presents the ... ESL Web Guide.

<http://www.eslcafe.com> and <http://www.eslcafe.com/search/index.html>

The ultimate Internet resource for ESOL, bilingual, or other language teachers. If every subject had a site this good, it would be a perfect world!

NOTE: Ms Cohen originally compiled this list in 1998 for the School of Education and Human Resources at the University of Bridgeport.

JACQUELINE RENEE COHEN is currently teaching English as a Foreign Language at Cognitio College in Hong Kong. Jackie is attempting to integrate Internet technology into her lessons. If you use this guide—or want to contribute your own sites for a future dacs.doc article—please send your comments to Jackie at JAQATAC@iname.com.

# Windows NT

## Should You Switch to NT?

### Less expensive memory makes this RAM hog an attractive choice

By April Miller Cripliver

**T**HERE HAVE BEEN more and more articles on the other Windows—Windows NT. You may be wondering if this new operating system is just for business or if it's practical for home use as well.

Windows NT actually isn't new. It was released as Windows NT 3.1 in 1993, which makes it older than Windows 95. Parts of Windows NT were born in the same Microsoft-IBM development effort that gave birth to the not-very-successful OS/2. OS/2 was IBM's industrial-strength operating system that was to overcome the speed and reliability limitations of Windows in the days before version 3.0. Of course, after Windows 3.0, Windows became a household word.

OS/2 lost the battle for the desktop to Windows 3.1 and finally to Win95. But Windows 3.1, in compromising design to assure it could run all of the old DOS programs, had some weaknesses. The most serious to those running critical operations was that Windows 3.1, unlike OS/2, didn't have preemptive multitasking. This meant that programs running under it weren't completely isolated from each other or the system, so a single misbehaving program could shut down the whole machine. Therefore, OS/2 appealed to businesses because of its stability, speed, multiuser, and security features.

When IBM and Microsoft parted ways around 1994, Microsoft knew it needed a version of Windows for the business users who would eye OS/2. The answer was Windows NT, which is also a true preemptive multitasking 32-bit operating system. The older version had an interface more similar to Windows 3.1 than OS/2 and was able to run virtually all Windows 3.1 and most DOS programs. Unlike Windows 3.1, however, it didn't have DOS underneath it.

Today, Windows NT 4.0 comes in two flavors: Windows NT Workstation, which is for individuals or networks, and Windows NT Server, which is for computers functioning as the main machine on a network. They're similar, but let's keep this discussion to the Workstation version.

Windows NT has been gaining popularity for years and has really taken off with the release of version 4.0, for several good reasons:

- One thing slowing Windows NT's acceptance had been its hunger for RAM and powerful CPUs. Recent price cuts on these two components have made this less of a barrier.
- Windows NT 4.0 now has the same, easier-to-use interface that Win95 offers.
- Windows NT makes a more secure platform for running your own Web page server, which is something more businesses are undertaking.
- Windows NT always would run Windows 3.1 programs. Until recently, however, there were few programs written specifically to take advantage of the operating system's 32-bit capabilities. Now, many of the programs written today for Win95 are also optimized for Windows NT, so Win95's success has given the other operating system a boost.

**F**ROM A USER'S viewpoint, Win95 and Windows NT have more similarities than differences. I have included a summary of how they compare at the end of this article. Here's an overview of where the operating systems differ:

Although it looks and feels like Win95, Windows NT is usually more crash-resistant, more secure from hackers, better for servers that need a lot of RAM and large hard drives, and able to let more remote users dial in. Sometimes it can be faster, especially if mated with a computer having multiple Pentium CPUs. And it makes a good Web page server.

Win95 is less demanding upon hardware, usually easier to install, runs faster on modest hardware, and is far superior for running DOS and Windows games. Some games will run only under Win95. Your chance of running into some gadget incompatible with Win95 is far smaller than on Windows NT. And on a portable computer, it knows how to stretch battery capacity/time because it can reduce power to components when

the machine isn't in use. Win95 runs a wider variety of software; most, but not all, Win95-compatible programs will run on Windows NT. But, Windows NT costs more.

### The real differences

Windows NT's inability to use MS-DOS and Windows 3.1 device drivers causes some hardware and software not to run because the operating system requires its own, sometimes-hard-to-find drivers. Possible victims are less popular, specialized, and older video cards or printers; many new 3D video cards; and offbeat gadgets that contain their own drivers. Adobe Type Manager fonts (PostScript) won't run on Windows NT either. While Windows NT's known RAM appetite is at least 32MB, there's a compensation: It manages large amounts of RAM better. For example, if you run RAM-hogging programs that thrive on more than 32MB, once you buy that extra RAM, the programs are likely to run faster on Windows NT than on Win95.

Unlike Win95, if a computer has a motherboard with sockets for several CPUs, Windows NT simultaneously taps the computing power of these processors. This makes a fast desktop machine or, more commonly, a network server that performs well even when everyone's logged on. Windows NT lacks power management (the ability to reduce power to the hard drive, monitor, and CPU during inactivity). On a desktop computer, this is disappointing and ecologically offensive.

Your chances of getting high-quality games to run are much better on Win95 than on Windows NT. On the other hand, Windows NT's OpenGL graphics support means professional 3D CAD/design programs, such as AutoCAD, run much faster than on Win95 when rendering 3D figures. Windows NT's higher system resources capacity means it's far less likely to give you out-of-memory messages.

Although many MS-DOS programs will run well in a DOS window in Windows NT, complex and intensely graphical ones, particularly games, may not. If this is the case, unlike Win95, Windows NT doesn't offer a built-in feature of restarting in MS-DOS mode. Raw DOS is usually gone forever.

While a Win95 machine could be turned into a company Web server by adding some software, it's not an optimal setup. Both Windows NT Workstation and Windows NT Server include Peer

Web Services, a module specifically designed to run a reliable Web page server.

Windows NT's more complete preemptive multitasking protects the system against lockup, not only from the misbehavior of modern 32-bit programs but also from errant Windows 3.1 and DOS programs. In Windows NT, old Windows 3.1 programs may crash themselves but are far less likely to bring the whole house down.

Windows NT offers far more security. Win95's opening password is a joke that anyone can bypass. By contrast, Windows NT lets you make individual files and directories closed to individuals or groups.

Although you can set up a computer to let any user dial in by modem and become part of a small network with the Win95 Plus Pack, Windows NT Server lets dozens of remote callers dial in simultaneously. Even though Win95's Plug-and-Play way of adding new hardware is imperfect, there are times when it works flawlessly and lets you install new toys painlessly and brainlessly. With Windows NT, you're

back to manually setting IRQs and installing software drivers for the time being (until NT 5.0 is released).

Win95 has decent built-in faxing ability; Windows NT requires a sometimes expensive, and less standard, third-party utility.

Another Windows NT weakness is that it provides no way of upgrading an existing Win95 system; you have to install Windows NT from scratch and reinstall all of your programs, drivers, and data. It's a frustrating job, especially if you've been spoiled by Win95's ability to recognize hardware on its own.

**I**F YOU'VE thoroughly checked your hardware and software and still have to reboot (or restart) your locked-up Win95 or Windows 3.1 system several times a day, if you are planning to set up a Web server for the Internet or an intranet (an internal network that works like the Internet), or need the upper limits of performance that only a multiple-CPU computer can give you, then lean toward Windows NT.

If your Win95 system is as reliable as you need it to be, you're serious about playing games, your hardware is modest, or you just can't stomach the idea of reinstalling all of your programs, drivers, and data, then stay with Win95. For now, you may have little to gain and much to lose by switching. And of course, if you have a critically important program or device that won't run under Windows NT, you should leave your system alone.

• • •

Each operating system has clear strengths and weaknesses, and you can use both within one office. It's your choice. But wait long enough, and you may not have to decide. We suspect that one day, Microsoft will merge Win95 with Windows NT. Within a year or two, the differences may become less pronounced, and even the names Windows NT and Win95 may disappear, leaving something more like one Windows with three levels—home, workstation, and server.

APRIL MILLER CRIPLIVER, is Director of PC Applications at the Computer Education Institute in Chesterton, Indiana. Contact April at [userfriendly.bigfoot.com](mailto:userfriendly.bigfoot.com).

## What's the Difference?

	Windows 95	Windows NT 4.0
<b>SYSTEM AND PERIPHERAL REQUIREMENTS AND SUPPORT</b>		
Runs MS-DOS device drivers	Yes	No
Runs Windows 3.1/16-bit device drivers	Yes	No
Recommended RAM for running multiple applications	12MB	32MB
Typical hard drive space required	40MB to 80MB	120MB to 200MB
Runs on PowerPC, MIPS R4x00 and DEC RISC systems	No	Yes
Large performance increases available by running many CPUs on one computer	No	Yes
Can run on 386 and 386sx computers	Yes	No
Supports power management/savings	Yes	No
<b>APPLICATION/PROGRAM SUPPORT</b>		
Multimedia APIs (DibEngine, DirectDraw, DirectSound, Direct Input, Reality Lab 3D graphics—mostly for games)	Yes	In future versions
OpenGL 3D graphics	No	Yes
System resources capacity	Larger	Unlimited
Runs MS-DOS programs	Yes	Most
Dial-in networking possible	1	Many
Peer Web services (ability to be a Website server)	No	Yes
<b>APPLICATION AND DATA PROTECTION</b>		
Preemptive multitasking for Windows 3.1/16-bit programs (**But Windows 3.1 programs still can crash each other)	No	Yes**
File security (files closed to selected persons/groups)	No	Yes
<b>EASE OF USE</b>		
Plug-and-Play technology to easily add hardware	Yes	In future versions
Hot swapping of accessories	Yes	In future versions
Built-in ability to send and receive faxes	Yes	In future versions

## Letters to the Editor

DACS is the best \$25 a year I spend! This latest issue of *dacs.doc* answered several pressing questions for me. Having my own computer training business for nine years, I generally spend several thousand dollars every year on hardware and software upgrades. My last three years of membership dues in DACS is the best money I've ever spent. I've told many a client about the DACS community! Thank you all for being so conscientious.

Kathleen Slivka  
Computer Training Partners  
New Milford  
860-210-0055

### Be Their Eyes and Ears

**V**oice for Joanie needs volunteers to monitor its clients throughout Connecticut. Responsibilities include maintaining periodic one-on-one contact to see if any new services are necessary. Only occasional time or travel and TLC, and little technical expertise are required. Please call Shirley Fredlund at VOICE FOR JOANIE at (860) 355-2611, Ext. 4517.



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Directors' Notes *Continued from page 3*

### December elections

Chairman David reminded the directors that at the upcoming December general meeting that six directors are to be elected. Tom McIntyre again agreed to chair a nominating committee. It was also agreed that formal notice of the election of directors appear in the newsletter, and that solicitation of nominees from the general membership be made at the November general meeting.

### New to

Confirmed dates for upcoming New to ... programs were reviewed. Planned are: New to Windows 98 (Wally David, Resource Center, September 23), The Year 2000 Question (panel discussion, Ancell School of Business, October 23), and Virus Prevention (Jeff Setaro, November 16). Suggested programs for future meetings include Meet Your New PC (January 1999) and Internet Research Methods and E-mail Management (Date TBA).

### New member kit

Marlene Gaberel said she would like to see DACS develop a kit for presentation to all new members.

— LARRY BUOY

### Special Meeting The Year 2000

DACS,  
the Ancell School of  
Business  
and the  
Danbury Chamber of  
Commerce

will discuss the millennium  
bug and answer questions from  
the audience.

Thursday, October 15,  
at 7 p.m.  
at the

Ancell School of Business  
at the Western Connecticut  
State University west-side  
campus

## Instant replay: September 1998

Bruce Preston, Moderator

**Q. Recently, Windows 98 started locking up my machine approximately every half-hour. Any ideas what might be doing it?**

A. Probing by audience members uncovered that you had installed Norton Utilities / Crash Guard. There is an update release that cures several problems that show up under Windows 98, including some that lock up the system. Download it by selecting "LiveUpdate" from the Norton Utilities menu.

**Q. I have an Insignia (Toshiba) desktop system that shortly after starting blanks the screen. What likely causes this?**

A. It was suggested that the high-voltage transformer in the display might be failing once it gets hot. Try substituting a different display to make sure that the problem is the display and not the display adapter. If it's the display, you will need to repair it (typically about \$100) or replace it.

**Q. I have an annoying problem. When I boot up my computer, it says "Drive F: is not ready" and also asks me to enter a password. The "enter your password" message offers a "Do not ask again" option, which I always select but to no avail. How do I get rid of these messages? The machine has never been networked to a LAN or other machine.**

A. It sounds like you may have a residual drive image, perhaps from a compressed drive, which was incorrectly removed. The "enter your password" message might well be triggered by Dial-Up networking if you have an Internet connection.

There is a large write-up on dealing with Windows password problems on the "Windows Annoyances" Web site (<http://www.creativelement.com/win95ann>).

You may find the answer there.

**Q. If I have a choice of Windows 95 or Windows 98 on a new machine, which should I choose?**

A. If it's a laptop, there are more power-saving features in Windows 98. Windows 98 also has 3,000 fixes of things wrong in Windows 95. (And 3,000 new bugs? Sorry.) Lastly, it supports USB (Universal Serial Bus) devices, although there are few USB devices available as yet. The general consensus is to go with 98 for a new machine but not to rush to update 95.

**Q. I get my 35mm photos developed and digitized. When I bring up the images in Photo-REI, which came from the photo service, I can save only an entire "collection" rather than single images that I can then manipulate individually with software. How can I get just one image?**

A. After some discussion between members in the audience, it was found that the questioner had tried most of the suggestions. It was recommended that the vendor be contacted.

**Q. When I exit MS Office 4.1 applications such as Word, Excel, or Real Audio (Windows 3.1x, 16-bit), I get an "EMM386 Error 6" message. What is happening?**

A. Four suggestions: (1) First make sure you are using the EMM386 that shipped with Windows rather than the one included in DOS. (2) EMM386 is sensitive to bad hardware cache, so see if you can disable it in your BIOS Setup screen. (Note: this will slow the machine considerably, so it is only a diagnostic test). (3) Disable HIGHSCAN in the EMM386 reference in CONFIG.SYS. (4) Look into using a third-party memory manager (if you can find one) such as QEMM-386.

(Follow-up revealed that AutoCadd does not have a problem with the

machine. It uses its own expanded memory manager, pointing a finger to the EMM386 driver you are using.)

**Q. Does anyone have the URL for the Better Business Bureau? The Connecticut Bureau was here a while ago, but I can't remember where they are?**

A. <http://www.bbbonline.org>

**Q. I have a P-II / 300Mhz machine with 64MB of RAM, Win 95 that continually gets "GDI Resources Low" from Norton Utilities.**

A. Get the Norton Utilities update referenced in the first question. You might also want to remove Crash Guard and Fast Start temporarily and see what happens.

GDI refers to "handles" that are used to keep track of windows, pushbuttons, scroll bars, and icons that are active on the screen; it has nothing to do with the amount of memory in the machine.

**Q. Can anyone tell me how to find a TrueType font for the symbols used to write Gregorian chant in the classic form rather than those for modern musical notation?**

A. There are a few applications that let you manipulate or create TrueType fonts. One suggestion was Fontographer (<http://www.macromedia.com/software/fontographer/>), but at about \$500 you may find it a bit pricey for hobby work.

Other titles that people mentioned were FontMonger and FontManager. Web searches found many font library management programs but not font creation software for TrueType fonts.

---

BRUCE PRESTON is the president of West Mountain Systems, a consultancy in Ridgefield, CT, specializing in database applications. A DACS director and moderator of the Random Access sessions at the general meetings, Bruce also leads the Access SIG.

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## Future Events

**October 6 • PowerQuest — MGI Software**

**October 15 • Year 2000 SPECIAL — Ancell School of Business**

**November 3 • Microsoft — Home For the Holidays**

**December 1 • John Patrick (IBM) — State of the Net**

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