Coping Techniques For Dealing With
Windows 98 Problems
By Ross Kodner*

If your firm is still squeezing the last ounce of life out of Windows 98 on some of your PC systems, you need to read this. The typical law firm Windows 98 user can experience anywhere between 1 and 5 of what Microsoft tactfully refers to as "incidents" per day. These can include, but are not limited to:

* General slowdowns
* Erratic operation - keyboard input slowdown and speed-up
* Illegal Page Fault errors
* Seemingly inexplicable application errors
* General Protection Faults
* Fatal Exception Errors (my favorite name for an error message!)
* Random lock-ups with no error message at all
* The (in)famous Blue Screen of Death

Many of us have come to accept these "incidents" as a fact of Windows 98 life (95 and Windows ME also). The best answer is to bite the bullet and move to Microsoft operating systems that actually work: Windows 2000 Pro (my all-time favorite desktop operating system!) or Windows XP (Pro is best | Home is best left at home). "Incidents" with Microsoft's newer operating systems are quite rare - I would be surprised to see a well-setup system have more than 1 incident per MONTH. But migrating to Windows 2000 or XP has its own "gotchas." These involve suitability and compatibility of the PC systems on which they will run, software and peripheral compatibility, etc. So if your firm isn't quite ready to relegate Windows 98 to the dustbin of techno.history, there ARE some steps you can proactively take to make those systems somewhat more reliable.

Some things that can be done to help with system slowness and instability (until you move to new network PC stations and the more stable Windows 2000 Pro or XP Pro operating system) are:

1. **<u>DEFRAGMENTATION:</u>** Defrag the Hard Drives and Run "Full" Scandisks Periodically: System maintenance needs to be performed regularly. The Defragment utility is found under Start /Programs /Accessories /System Tools. Run this at least quarterly. This can also be more automated and made more accessible for the people in your office: it can be done either via a Windows desktop "shortcut button" or manually selected from the Start menu system

A "Full" Scandisk should be done especially if users frequently use the PC's power button or reset button to shut down their systems (often because Windows 98 has a tendency to "hang" during shutdown) and are periodically bypassing the subsequent prompting upon rebooting to run the

Scandisk process. Again, found under Start /Programs /Accessories /System Tools (a desktop shortcut to the utility can make a lot of sense). Run a full Scandisk at least monthly (the even more complete Scandisk with a "surface scan" is different - run that more exhaustive and more time-consuming test one a year).

2. **STOP WINDOWS BRAIN DRAIN!** Remove Resource "Sappers" from the Windows System Tray - Each item loaded in the System Tray uses some of the limited and finite Windows "System Resources." By removing the unnecessary items from the System Tray, you actually make those resources available to be used by the workstation's applications. Some of these may be removed from your Startup programs group. You can access this group by right-clicking on the Start button, then clicking Explore. Scroll down the folder tree to Start Menu /Programs /Startup. Rather than deleting items, especially if you're unsure if that's a safe thing to do, consider making a subfolder called "Not Startup" and moving the items from the Startup group rather than deleting them. Other items in your System Tray may need to be removed from the Windows Registry. We would STRONGLY caution you not to remove such items if you are not ABSOLUTELY, POSITIVELY CERTAIN you know what you are doing when it comes to the Registry. If not, ask for help from someone who does.

3. **CLEAN THE TEMP(ORARY) HOUSE!** Clean Out Your Windows "Temp" Folder Regularly - Keeping the Windows "Temp" folder clean and empty will greatly improve the performance of the workstation. This is normally found at C:\WINDOWS\TEMP. Delete everything in it regularly. Windows 98 is supposed to do this automatically upon exiting the system, but often doesn't. It forgets. Think of it as a technology system version of Alzheimer's - perhaps "Winheimer's Disease."

4. **LOSE THE PRETTY PICTURES!** Turn off Screen Savers and Desktop Backgrounds: Screen savers and desktop backgrounds are the one of the most common offenders in low "system resources" situations. This is especially true if these features have been downloaded from the Internet and are larger than the standard Windows-included files. These downloaded files often contain viruses or are "spyware" and can wreak havoc with other files on the workstation. Set the Screen Saver and Background to "NONE." It is not necessary to have a "pretty" picture to look at on the computer - a colored desktop background in a solid pattern is fine however. Note that Windows "Themes" are equally problematic (i.e. settings packages that change icons, cursors, sounds, etc.).

5. **IS LESS MORE? IS MORE LESS?** Minimize Programs Rather than Opening and Closing Them - Closed programs do not return the same amount of Windows System Resources that were taken up when the program was first opened. If a program is going to be used during the day, don't close the program after the first use – minimize it and restore to full-screen mode each time the program is needed. This will have a lessened impact on Windows System Resources compared to actually opening and closing programs.

6. **GIVE WINDOWS 98 A BREAK:** Close Programs and Reboot at Lunch Time - Often users will notice their system is slower or locks up more frequently in the afternoon or later in the day. Opening a program uses some of the Windows System

Resources and closing that program does not recapture all of the System Resources that were used when the program was opened. This is often referred to in Windows 98 as "Resource Leakage." It is better to keep a program open, minimize it, and then restore it to full-screen mode from the Task Bar when the program is needed again. Some features within programs require a lot of System Resources (such as WordPerfect sorting, spell check and merging). Rebooting the system during the day (at lunchtime) refreshes the Systems Resources.

7. **WHO'S WATCHING YOU?** Remove so-called "SpyWare" programs from your PC. These are uninvited and generally unwanted programs that can clandestinely self-download and install themselves onto your system. These programs do all sorts of scary things but are generally focused on transmitting marketing information about your web surfing and even your purchasing habits to someone. Aside from the privacy issues, trespass questions, etc., these programs can seriously destabilize any version of Windows. Download the free program called AdAware from Lavasoft, Inc. Go to www.lavasoftusa.com/aaw.html for information. This program will scour your PCs' hard drives for offending SpyWare software and can eradicate it. Think of it as being akin to calling your local Orkin man to rid your PC of irritating pests - SpyWare is definitely the vermin of the PC world. You'll likely be amazed at how many offending programs it finds on your system and removes. Run this at least quarterly.

While nothing can completely eliminate the frustrating "incidents" as Microsoft refers to them, following some of these tips can definitely reduce the number of "Blue Screens of Death," "Invalid Page Faults," "General Protection Errors," "Fatal Exception Errors," and random freeze-ups, lock-ups, and slowdowns that are just part of life when using Windows 98. Your firm will benefit appreciably. There's nothing more painful for your practice than thinking about how much time your lawyers and staff waste every day waiting for a misbehaving Windows system to start up and shut down.

Note that Windows 95 and 98 can install a System Resource meter on the Task Bar and actually have real-time monitoring of available Windows System Resources. You can also check the System Resource percentage available at any time by going to the "My Computer" shortcut/icon on the Windows desktop and right clicking on it, then selecting Properties. You will see the Resource percentage on the screen that appears. There is not a hard and fast rule relating available Windows System Resources and system stability under Windows 98 (or 95 or ME). Generally speaking however, if the System Resources fall below 30%, the probability of "incidents" skyrockets.

Or . . . just go out and get yourself Windows 2000 Pro or Windows XP Pro!

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*Ross Kodner is a "recovering lawyer" turned legal technology consultant. Founder of MicroLaw, Inc., he spends his time guiding law firms and legal departments in integrating technology into their practices. In his spare time he writes about and speaks on legal technology topics worldwide.

The Case of the Missing Manuals

By Ernie Schaal*

The best advice I ever received about computers was from an old book on BASIC programming. It was to read my manual thoroughly; and to take the manual to the bathroom as casual reading material. Following that advice is difficult today, because software often comes without a manual.

My first computer came with a technical manual, a users' manual, and a tutorial on BASIC programming. But then, there was an ad mocking IBM'S voluminous documentation. An unseen announcer said something like "Here are the manuals that come with an IBM-compatible computer," and thick tomes began slamming down like bricks all over a table. Then the voice announced "And here is the manual to operate the new Macintosh computer," and a thin booklet floated down like a feather. That ad was the beginning of a trend toward limited printed documentation.

This change occurred because printed documentation is expensive. The Microsoft website recently offered Office XP Professional for $579 and the book about it for $44.99. The software comes with skimpy printed documentation telling how to install the software, but not how to use it. By not bundling printed documentation with their software, Microsoft significantly reduces its costs.

Some software publishers rely heavily on on-line help, templates, and function wizards to replace the missing printed documentation. Studies show, however, that reading comprehension significant decreases when reading such material on-line. Also, these solutions often don't give a good overview of the software.

One solution is to buy a "missing manual" from an independent book publisher. This allows you to choose documentation that will answer your needs and that is aimed at your level of computer knowledge. Unfortunately, such books tend to expensive and they might not accurately reflect your version of the software.

Software publishers often sell more than one package in the same product line, differing in the platform used and in the features included. Microsoft sells at least eight versions of "Office". Book publishers don't always publish separate books for each iteration of the product. This results in books that sometimes do not adequately cover the features or requirements of your version. If possible, try to get a book covering your computer platform (operating system) and the specific version of the software you have.

Often, publishers discover programming problems or other bugs after releasing a product. Generally, publishers address these issues with upgrades or patches, sometimes called "Service Releases". Some upgrades constitute only minor patches to correct problems; but upgrades can include major changes in program features. Unfortunately, that means your previously purchased book becomes out-of-date and of limited utility. You don't have to buy every upgrade, but I recommend that you try to keep your documentation current with your software.

There are a variety of other resources (such as websites, newsgroups and mailing lists) available to help you learn about your software. One good place to start is with the software publisher's website; often those sites have support or tutorial sections. For

instance, recently I bought an iMac so that I could make DVDs from my home movies. Since I live in Japan, my iMac came with the Japanese operating system. I needed English documentation and none of the local bookstores had it. I went to the Apple web site (www.apple.com), clicked on the "Support" tab, and entered "iDVD" in the search support of the knowledge base. I got 95 hits that answered many of the questions I should have asked. Unfortunately, it didn't give me a good overview.

When the software publisher's website doesn't give you what you want, you can use a search engine to find other web pages. I used Google (www.google.com) with the words "iDVD," which got 53,500 hits. I used Google's advanced search function to limit my search to pages in English having the word "burn" and the phrases "iDVD 2" and "OS X" in the past six months. That reduced the hits to 676, including Ken Stone's excellent tutorial "Authoring with iDVD 2 - OS 10.1."

Newsgroups offer another resource. Once, I had a problem with Microsoft Word automatically closing every time I tried to open a particular document. I checked the Microsoft Word support site, which didn't have the answer. It did have the option of using their portal to access Google's database of newsgroup messages. A search of that database found messages on my topic. It turned out that I had a corrupted file (it was a known issue), which meant I had to use my backup file. To directly access the Google's database visit (www.groups.google.com).

If you can't find your problem in Google's database, you can always post your problem to an appropriate newsgroup. Don't expect an immediate answer, but you might get a response within a day or two. To ask fellow lawyers, try a legal-related mailing list. Two excellent lists (both are free) are SOLOSEZ (for solo practitioners and small firms) [to join go to (www.abanet.org/solo/solosez)] and MacLaw (for lawyers using the Macintosh OS)[to join, go to (www.maclaw.org/subscribe.htm)].

Another resource, for major software, is the instruction video. Such videos can show the software in operation in a way that can't be described on the printed page. Don't expect to find videos on every software product. If you don't want to buy one, you might be able to rent them at video rental stores or borrow them at your library.

User groups are another great resource. Most user groups are platform focused; a number of software-specific user groups have also formed. User groups usually meet monthly and often have a question and answer part of their program where people from the audience can ask local experts about particular technical problems.

Additionally, the ABA, state and local bar associations as well as private CLE providers often offer seminars on technology in the law office. Technology shows for legal products often have technical seminars as well as product displays. Many colleges, universities and adult schools offer computer courses for the public. Some of these courses are very specific as to software and even software/platform combinations. They have the advantages of being low cost, on-hand training where you have the ability to ask questions.

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*Ernie Schaal lives in Gifu, Japan and works as a U.S. patent attorney in ONDA TECHNO Intl. Patent Attorneys.

Look Ma! No Hands!**

Everyone once in a great while I see a device that really inspires me. The last time I had the "wow" reaction was the first time I used a PalmPilot. This time it happened when I first used my UC-500 hands free cell phone speaker/microphone in my car.

The device is about 15 inches long. On one end is a speaker and a headphone jack for private listening; on the other is a flexible boom microphone and cord to connect to the headphone/microphone jack of your cell phone. The unit fastens to the two metal posts on your car headrest. It takes about one minute to insert the unit and lock in the two clips. Power comes from three AA batteries, which should last about six months.

Plug in your cell phone, move the microphone to an area within a foot of your mouth, and place calls as you normally do with your cell phone. It worked perfectly for me right out of the box. The speaker provides clear, crisp sound. The microphone has a patented device to substantially reduce noise from wind, radio and passengers. With 4 people in the car and the microphone positioned in front, I tested it with a call to my parents. We all participated and it worked fine. (Hint: You can also take the unit out of the car and use it with your cell phone for conference calls.) Truly "plug and play", the unit works automatically once you connect your cell phone. It turns itself off two minutes after you terminate your call. If you have voice dialing on your cell phone, it works fine. (The manufacturer recommends retraining for the new acoustical environment). Batteries should last about 6 months.

It's easy to install and use, draws no power from my phone and leaves nothing hanging from my dashboard. Nothing restricts vision or access to controls. It takes up no space as it is mounted between the headrest and the top of the seat. UC-500: Retail $99, Unwired Technology. www.unwiredtechnology.com. -**Reviewed by Bruce Dorner***

Digital Dictation**

If you need or want new dictation equipment, you should seriously consider the digital dictation products from Legal Easy Technologies, Inc. (www.legaleasy.com). The system consists of software that enables your computer to function as a dictation machine and a foot-pedal that allows you to control it like a standard transcription device.   The foot-pedal is available in either a USB or serial model.   To use the system you need Windows 98™, or above, a computer with a sound card, microphone (recommend a headset) and an available port for the foot-pedal (permitting hands free dictation).

The reviewer installed the digital dictation software in less than 15 minutes on 4 workstations running Windows 98SE and a file server running Linux. This has become our primary dictation solution in the office and has been trouble free since initial installation.

The system allows users to record and store dictation without magnetic tapes. It's as easy to use as a tape recorder. You can send the dictation to the transcriptionist of your choice without leaving your seat. A dictation alert notifies the transcriptionist of the new file. You can import voice files from compatible digital recorders and PDAs, making this truly a versatile solution. It also has the benefit of reducing the devices residing on a desk by allowing the removal of transcription and dictation equipment. -**Reviewed by Robert A. Woodke***

product news & views

I See the Light!**

Those of you that often travel across time zones will find the space-age technology of the Lite Book interesting and useful. A small, easily portable device that can run off of battery or AC power, the Lite Book helps solve the "jet-lag" and other fatigue-related problems. It employs a new white light emitting diode (LED) technology, resulting in an extremely bright light delivery system (5000 lux) that is extremely compact (5.5" x 6.25" x 1"), lightweight (12 oz.), and durable. The light is used to help the body accommodate quickly to changing time zones or to deal with adjustment to night work and other fatigue-related issues. The system works by exposing you to high intensity light during certain periods and by having you avoid light during other periods. The times and durations depend on the number of time zones you cross and which way you are going. The LiteBook can also offer treatment for people affected by Seasonal Affective Disorder (SAD), a disorder that causes depression during the winter months. Medical research has confirmed the use of a light box to relieve symptoms of SAD.

The company's web site (www.litebook.com/htdocs/home.html) has considerable information and links to even more information about studies that have been done and are in process with respect to the use of light for treatment of a variety of conditions. I have tried the LiteBook as a travel-aid to help deal with jet-lag; and to my surprise, I found that it really worked. A woman in my office suffers from SAD; she has tried it and found that light therapy improves her mood and perspective during the winter months.

You can get the LiteBook by itself ($249) or packaged in a travel case with light blocking glasses, AC and DC power connectors and international power plug adapters ($399). -**Reviewed by Jeffrey Allen***

*Bruce Dorner (bdorner@attglobal.net)is a sole practitioner in Londenderry, New Hampshire. He is a member of the ABA Standing Committee on Small Firms and Sole Practitioners, Chairman of the Internet Board of the ABA General Practice, Solo and Small Firm Section and a frequent speaker on technology and the law.

*Robert Woodke (rawoodke@paulbunyan.net) is a principal in a small firm in Bemidji, Minnesota. An active member of the ABA GPSSF Section, he has been a member of the Editorial Board of the Technology & Practice Guide. He often writes for lawyers and regularly speaks at continuing education courses for attorneys.

*Jeffrey Allen (jallenlawtek@aol.com) has a general practice in Oakland, California. His firm, Graves & Allen, emphasizes real estate and business transactions and litigation. He is a frequent speaker and author on technology topics and the Editor-In-Chief of the GPSolo Technology & Practice Guide and the Technology eReport.

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Trends In Technology

By J. Anthony Vittal*

In my last column, I discussed the shrinking size of computers. Convergence devices like the PDA/cellular phone combinations are the rage. Wearable electronics are beginning to find their way into the marketplace from companies like Infineon Technologies. Many of these devices are designed around the technology, not the users, and have reached or exceeded the limits of our ability to use them.

How many of us are willing "oyayubizoku" – the Japanese colloquialism for teenagers who spend their days thumbing out messages to each other on portable communicators? My fingertips are bigger than the keys on many of the devices I use. My eyesight is strained by the size of the displays and the information they contain. My fantasies of increasingly smaller, lighter, and more powerful devices are constrained by the reality that we need new ways of getting information in and out of them. Human factors engineering will drive the development of these new or improved technologies.

My cellular telephone already has limited voice recognition capabilities. Full-scale voice recognition on a chip could circumvent the problems of the tiny keyboards and eliminate the need to carry additional devices. Until that occurs, a creative interim solution is the Senseboard™ virtual keyboard developed in Sweden. Two small, lightweight devices strap to the palms of your hands and measure the movements of your fingers, enabling you to "type" on any surface as if it were a traditional, full-size keyboard. A virtual mouse function is included. The Senseboard™ devices transmit input information wirelessly to your PDA, Smart Phone, or other mobile computing device, using RF or Bluetooth™ technology. For "hunt-and-peck" typists, however, that is not very useful without a set of keyboard templates to "type" on. If I'm going to carry a folded template, I might as well carry a folded keyboard! Developments in flexible circuit "boards" and solid-state switches may enable me to do that.

On the output side, eyestrain is an occupational hazard for lawyers. Would we accept virtual reality glasses, where the lenses are thin-film displays or LCDs, and the information appears to hang in the air in front of us? A better solution might be foldable displays. Samsung Electronics demonstrated a 17.1 cm (6.732 inch) by 12.8 cm (5.039 inch) flat LCD screen this Spring. About the size of two 3x5 index cards, it folds along a central hinge and initially will be used for e-book computer displays. On the other hand, bigger screens mean more weight – as anyone who carries a "notebook" computer with a 15" screen knows all too well. This is another area where flexible electronics can offer a better solution.

Whatever happens, developments will succeed if they are "human-centered." As the consumer, you need to let the marketplace know what you want these devices to do for you – and what you don't want them to do to you.

J. Anthony Vittal (tony.vittal@abanet.org) is Partner in Finestone, Richter & Vittal in Los Angeles, California. A member of the ABA Standing Committee on Technology and Information Systems, he frequently speaks and writes on legal technology topics.

It's A Bird! No, It's A Plane! No, No, It's A Jaguar?

By Jeffrey Allen*

The big news for Mac users came out at MacWorld in New York last month. OS X will take the form of a big cat, a Jaguar to be precise, when Apple releases it at the end of August. With cat-like agility, the new OS promises more stability, more features and greater flexibility than its predecessors. Apple advertises in excess of 150 new features in Jaguar. Apple has announced several new iApps capitalizing on Jaguar's features.

Jaguar's most significant new features include substantial modifications of networking and information sharing capabilities. Jaguar introduces Apple's new Rendezvous Networking, allowing you to link computers and devices instantly without the need of reconfiguration. Jaguar allows Mac OS computers to interface easily with Windows-based computers, facilitating networking and sharing of documents and files.

Jaguar incorporates iCal, an internet savvy calendar application. iCal allows you to keep track of your own schedule and share the information with others. It also includes a to-do list. You can combine multiple calendars and publish calendars o the web. The application allows you to synch the information to an iPod, Palm OS devices and Bluetooth enabled cell phones through the new iSynch program. Apple promises iCal for download at no charge in September.

Jaguar's address book acts as an activity center for your contacts. It allows you to drag and drop information from incoming email for automatic entry. The information can be shared with other programs and with Bluetooth enabled phones. The program allows you to enter information into the address book and then access it from other applications, avoiding the need for re-entry of the data into each program.

With Jaguar, Apple introduces, "ichat". (compatible with AOL Instant Messenger). IChat offers instant message as well as chat capabilities.

A stroll through MacWorld made it clear that OS X has come of age. More and more established programs have gone OS X native and new programs keep coming out on a continuing basis. The software highlights seen at the show include (1) FileMaker Pro 6.0 [many new features, including direct import from digital cameras, import and export of XML, global find and replace and many new templates]; (2) Think Free Office (a suite including a word processor, presentation software, a spreadsheet, an image viewer and more); a $49.95 alternative to Microsoft Office for anyone wanting the basic power of Office, but not requiring all of the features. (2) Creo's Six Degrees organizes project-related information by names, email subject lines and headers, documents and file folders. At present the program only works with Entourage for email control. Many graphics and movie creation programs surfaced at MacWorld. Try demo versions of SketchUp (www.sketchup.com) and Asiva Photo (www.asiva.com).

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*Jeffrey Allen (jallenlawtek@aol.com) has a general practice in Oakland, California. His firm, Graves & Allen, emphasizes real estate and business transactions and litigation. He is a frequent speaker and author on technology topics and the Editor-In-Chief of the GPSolo Technology & Practice Guide and the Technology eReport.

RETHINK, RENEW, RETOOL: GPPSSF 2002 FALL MEETING

The ABA's GPSSF Section will hold its Fall Meeting at the Westin Horton Plaza Hotel, 910 Broadway Circle, San Diego, California, October 3-6, 2002. Contact the hotel for reservations (619) 239-2200. The Section has secured a room rate of $189/day plus tax (single/double) for attendees. **Attendees must make there own reservations (reservation deadline: September 3, 2002). For further meeting information, contact the Section office (phone: (312) 988-5659 or email: genpractice@abanet.org).**

Don't miss this Renaissance Weekend in sunny San Diego! In addition to the social events, administrative activities and committee meetings, the Section will offer four educational programs (CLE credit has been requested for each of them). Sign up and attend one or more of the following free programs designed to interest lawyers, their friends and families:

1. **The Inevitable. The Unthinkable. The Enjoyable. Estate Planning for the Lawyer's Family During Death, Disability and Retirement.** A program for attorneys and their families, to help you in your personal planning for retirement, disability and retirement.

2. **Professional Presence.** A multimedia presentation to help you improve your personal communications skills and increase your professional impact.

3. **50 Tips in 50 Minutes.**   A high-speed tour of the latest technology, gadgets, tips and tools to enhance your practice. This program played to a standing-room only crowd at the ABA Annual Meeting. An informative and entertaining show. Bring your friends and family.

4. **Tolerance Through Education "Welcome to School: Helping Kids Belong."** The "Tolerance Through Education" initiative is designed for lawyers to help strengthen diversity by promoting respect among children for those who look or act different or share different beliefs.

FUTURE GPSSF SECTION MEETIINGS

2003 Midyear Meeting: February 5-11, 2003. Seattle Washington
2003 Spring Meeting: May 8-11 Baltimore Marriott Inner Harbor, Baltimore Maryland

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