

TECHNOLOGY FOR THE COUNTRY LAWYER

By Thomas J. Raftery

Practicing in the city was fun for a while, but unless you live in or close by the city the commute eventually wears on one. To get a reasonable start on the day, you had to leave early enough to beat the crush of commuter traffic. A transactional practice such as bankruptcy does not lend itself well to the rigid schedules of commuter rail. In the evening, there was no hope of leaving at a decent hour for again most of your time trying to get home was really spent screaming obscenities at other drivers, wishing for laser cannons in your car and trying to devise new routes around the madness of the rush hour traffic. You really had two jobs: the practice of law and the practice of getting to the place where you practiced law. Leaving behind a plethora of partners, associates, paralegals and support staff, I opted to jump into the void and go solo. I could not have done it without today's technology. The law library has moved onto the Internet. Courts are leaping head first into electronic case filing and management. Lawyers from across the country (and some outside the country as well) are sharing advice on listservs particular to their practice areas. When the "Super Internet" arrives with its 100 times faster speed we will probably see the virtual courtroom replace the telephonic appearance. However, for now the existing technology allows the "country lawyer" to be situated almost anywhere. Here is what I use to practice from my office.

1. Computers

a. Hardware

i. The Desktop Computer. My office computers are now Compaqs (now Hewlett-Packard), but there are plenty of manufacturers out there including Dell and Gateway willing to sell you a computer or two. I chose the Compaqs because of price. One I purchased directly from www.hp.com; the other I purchased from www.cdw.com. In my office one is 1.8 GHZ while the other, a newer machine, is 2.0 GHZ. While there are faster computers available, if you are not into gaming and high intensity graphics, almost anything between 1 and 2 GHZ is more that sufficient for word processing and the tasks that lawyers perform.

While speed is not a major consideration, main memory size is. Both of my office computers have 512 MB of main memory. In my opinion you cannot have enough memory. I tend to have a number of programs open at once, e.g., WinFax, WordPerfect, Outlook, BlackIce's firewall, Hotsync for the PDA, Timeslips. Each program eats into available memory. For a desktop computer, the minimum I would recommend is 256 MB. Buy more; it is cheap enough at the moment.

Each of my PC's has an 80 gigabyte hard drive, CD-ROM drive, CD-RW drive, floppy drive, mouse, modem, parallel, serial ports, 6 USB and 2 Firewire ports, speakers, keyboard, and LCD monitors. The price for the 1.8 GHZ computer was approximately \$1,300 in

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February, 2002. Virtually the same computer in February, 2003 was \$800 (both without monitors).

As with memory, the more hard disk space you can get the better. My applications in both offices consume about 15 to 17 gigabytes leaving plenty of room for future programs. (My first personal computer had 64K of memory and a 10 megabyte drive; I thought that I would never fill up that drive). A hard disk with plenty of room on it works better; the software spends less time looking for space to write data and tends to keep data in contiguous sectors on the disk which means faster performance. Hard disks that are over 75% full tend to fragment more quickly and slow the computer's performance. A general rule of thumb is that your disk should be no more than 50% full.

A CD-RW drive (affectionately known as a CD burner) may not be a necessity, but it does come in handy. There are times when I want to send someone a large file, over 10 MB and they may not be able to receive it over a cable connection. Some Internet Service Providers (ISP) limit the size of a file that can be placed in their mailboxes (usually 5 MB is the limit). Some attorneys may still be on a 56K dial up connection. Whatever the reason, large files can be "burned" to a CD and sent by snail mail. Last year I sent a lengthy appraisal together with color photographs, an 80 MB file, to other parties in a case. The CD was the perfect medium for that file.

Both of my computers came with Firewire ports; I would not have ordered them for as yet their use is limited. Both computers also came with 6 USB ports (USB 2.0 on the new machine). USB ports connect nearly everything today: cameras, wireless network base stations, scanners, etc. When you order a new computer, get the latest in USB ports.



Having two offices set up in different places, I once used Omega's Jaz drives (each is 1 gigabyte) to transport my document files back and forth. Each system I set up had a Jaz drive or two. However, the Jaz drives fell out of use when their reliability was not terrific (the cartridges are expensive) and the 1 gig size became a serious limitation. Omega introduced a 2 gig drive, but by then I was concerned about reliability. I shifted to two Buslink 20 gigabyte USB Hard Drives. I have been using them for about 2 years. I can back up my entire drive which I do each day. When I leave one office for the weekend, I just grab one of the drives and take it with me. At the remote location, anything to be stored is saved to the USB drive so I have it when I return to the main location on Monday. When I purchased them, they were about \$200 each. Today a 40 gig USB drive is about \$129 while the 100 gig model is \$249.

A good printer is a must. I do not recommend multi-function machines. My primary printer is a Hewlett-Packard 2200d with dual paper trays. It came with an infrared port; I use that to print from my portable computer. I have to admit that I would not have purchased it had not my old workhorse, an HP4 LaserJet, broken in the midst of trying to get a disclosure statement and plan

of reorganization out the door. The HP4 was repaired for about \$125 and now serves as a backup printer. One advantage of the HP2200d is that it will print on both sides of the paper, a feature I use quite often when serving pleadings on other counsel. It is a cost saver. While the HP4 would print on nearly any grade of paper, the HP2200d is much more sensitive to the type of paper fed to it. I have settled on HP brand paper for it; other brands tend to curl coming out of the printer.

I do not use off-brand laser jet cartridge refill services. My initial experience with them was terrible, e.g., clogging, streaking, etc. I stick to the name brand replacement cartridges from HP, Canon, Epson. When considering a printer for simply black and white use, go for the laser. Cartridges for the inkjets are so expensive that they ought to give the printers away.

I have three color printers, but they are used primarily for photographs to hang on the refrigerator door.

The printer in my remote location is an HP 3330 Multi-Function Printer. It is a scanner, fax machine and printer. As I stated above am not a fan of multi-function machines. Often when one thing breaks it eliminates your ability to do the other things that the device is supposed to do. Since its use is limited to weekends and it takes up less space than multiple machines, I tolerate it, but I would not have it as a primary printer in my main office.

Speaking of scanners, with the advent of CM/ECF you need to have a good scanner. An HP scanner with a 50 page automatic document feeder will cost between \$500 and \$1,000. In my main office I use two scanners. The primary scanner is a Ricoh 420, a scanner for which the original list price was \$5,000, but which can be bought today for around \$2,500. It will scan 64 pages per minute; it has been a work horse for me. It uses a SCSI interface which requires a SCSI card in the computer. Had I not gotten a great price on the Ricoh, I probably would have purchased an HP or comparable model for about \$1,000.



I also have a Canon N1240U, a single sheet flatbed scanner. It is a USB scanner and requires no external power supply; it is powered from the power on the USB port. I use it to scan small jobs of a sheet or two. I also use it scan color photographs. If I need a scanner on the road, I can take it along and plug it into my portable computer.

A fast Internet connection where available is a must. In the country where I am, neither cable nor DSL were available until two months ago. While you can live with a 56K dial up and use it with CM/ECF, I prefer a high speed connection. When it became apparent that neither AT&T nor Verizon would wire my town for high speed Internet access, I installed a satellite connection from Earthlink which I used for over a year until Comcast finally rewired the town for digital cable and cable modems. I shifted to the cable modem just as soon as Comcast could install it. In terms of raw speed, the satellite connection is the fastest among the Internet access

services. However, as a practical matter it is slower than cable or DSL. The reason that the satellite has limited bandwidth and you cannot download really large files, 25 MB or larger, too often or the satellite provider will start slowing down your access. For the most part, use by a law office does not tax the satellite as does peer to peer music file sharing (remember Napster?). The cost of the satellite setup is around \$600 with access fees of \$50 to \$80 per month thereafter. By the way, the satellite dish needs a clear view of the southwestern sky. Some may remember that older satellite services were limited to satellite downloads and uploads by telephone line. The satellite service I had provided two way communication.

What else do I have connected to my PC? A wireless network base station is one item. With the Wi-Fi base station I network my portable and another computer. It is pretty simple: plug the base station between the cable modem and the computer, then plug the Wi-Fi PC card into the portable. Set up the software and you have a wireless network. I also have a Dymo LabelWriter EL60, a USB label printer that is primarily used with Stamps.com software (see below). I have a Hotsync cradle for my PalmPilot plugged in.

Most of us don't think about keyboards, but I use the Microsoft Natural keyboards which separate the right and left banks of keys and angle them slightly. It takes about five minutes to get used to the keyboard, but after that it is an extremely comfortable keyboard to use. The Pro version provides buttons for bringing up the calculator and other functions.

My mouse is the Microsoft Laser Mouse. It does not need a mousepad; it will operate on the desktop. Early versions seem to fail with regularity and Microsoft just kept sending new ones to me. Later versions appear to have longer lives. I have friends with wireless versions of the Laser Mouse, but those mice seem to be battery eaters.

Finally, I use LCD monitors. In my main office I have an NEC MultiSync 1855X, an 18 inch LCD which has the viewing area of a 20 inch CRT, but without the use of desk space that the CRT consumes. The price of the monitor was about \$550, but that will decrease as time goes on. In my remote office, the monitor is also an NEC, but 17 inches in size. That cost about \$300.

ii. Portable computers. (Notebooks, laptops). I use an IBM ThinkPad Model 600XE which has been around a while. I may replace it this year, but I will probably stick with IBM because I like the eraser head mouse tool. I use it primarily when I travel. It has a Wi-Fi card and I can get onto the Internet at any Starbucks. Hotels and airports are rapidly installing wireless networks. The big advantage to the laptop with the wireless network access is that I can sit outside with an appropriate beverage and work outside the office. On a whim I purchased a flexible keyboard which wraps around the computer for storage, but uses the USB port for access. It gives one the benefits of a full size keyboard and it is drink-proof (a feature I have yet to test).

iii. PDA. I use a PalmPilot V. It, too, has been around a while and I toy with replacing it this year. Nevertheless it syncs with my desktop and allows me to carry my calendar around as well as a contact list. I used to use an email program with my PalmPilot which I could access my email through an acoustic coupler. That was handy for a while, but with the proliferation of cybercafes here and abroad, the need to receive email on the PDA decreased. Moreover, the company that offered the service had no clue how to leave

b. Software

i. Operating System. I use WindowsXP on my desktops. It is far more stable than Win98 and much more user friendly. Where I used to reboot Win98SE at least a couple of times a day, I rarely reboot WinXP. Older operating systems tend to have a problem called memory leak where errors in a program's dynamic-store allocation logic cause it to fail to reclaim discarded memory, leading to eventual collapse due to memory exhaustion. In other words, your programs are eating up system resources as they run and do not release those resources when they close. WinXP is more efficient in managing that problem. I am still using Win98 on my laptop, but I will likely change that soon. I am not a Mac user for the reason that there are enough of them in the business community.



Whatever operating system you use, I recommend that you keep it up to date. There are some pundits that recommend against updating an operating system if it working well, but Microsoft is quick to correct security breaches in its software and often publishes updates. I set my Windows Update software to automatic. If you want good information on Windows, then I recommend Brian's Buzz, a twice monthly newsletter available at www.briansbuzz.com. He will tell you that not all updates are beneficial. The advantage to WinXP is that you can create a restore point before installing an update. If the update slows your computer or does other strange things, you can restore your system to the point before the update.

ii. Case Management: Calendaring and Docketing. I use OutlookXP which provides email, calendar, to do list, notes in one program. I have TimeMatters, but rarely use it. TimeMatters, like others of its ilk, promise integration among email, documents, etc. and will allow you to keep everything in one place by client. However, its learning curve is higher than using Outlook, so I stick with the latter. I have not found a good case management system for a bankruptcy practice, but that may be a matter of personal taste. However, a good case management system will give you a good overview of your cases and related documents in one place. While I don't use designated case management tool, if I were in a firm with just one other attorney I would insist on using one so both (or more) of us could have access to calendars, cases and files.

iii. Word Processing. It has been said that lawyers use WordPerfect while clients use Microsoft Word. My observation is that is true for the most part, but it seems that more

lawyers are shifting to Word. I also believe that WordPerfect is superior in ease of formatting and the preparation of pleadings, but that Word is superior in its ability to track changes.¹

WordPerfect users are quick to point out that Word lacks a true reveal codes function, but Microsoft has indicated that future versions of Word will have a capability similar to that in WordPerfect. I use both Word and WordPerfect. Those considering switching from WordPerfect to Word can get a guide at <http://office.microsoft.com/downloads/2002/wdLegalG.aspx>.

WordPerfect (Version 9 and later) has a PDF engine built into it. In theory that would mean that you do not need to purchase Adobe Acrobat (about \$200 street price) to create PDF documents. You can get a PDF creation program for free from www.pdf995.com, but I have not tried that software. My personal recommendation is to stick with Adobe Acrobat. I scan my attachments directly into an Adobe file.

iv. Spreadsheet and database software. I used to use dBase extensively, but long ago Excel succeeded dBase. With Excel you can run your own projections in a Chapter 11 case, play with projections and assumptions and run mortgage calculations. I use it for reformatting postage reports from Stamps.com which I attach to certificates of service.

v. Accounting and Bookkeeping. For accounting I use Quicken. It is a straight forward, easy to use program. Quickbooks is more power than I need.

vi. Time and Billing. I use TimeSlips Version 11. I skipped version 9 and 10, both of which were reported to be buggy. Other programs are TABSIII and PCLaw, Jr.



Raferty

vii. Legal Research. I use Lexis for which I pay \$120 per month for bankruptcy and state law libraries. I used Westlaw at one point, but I could never understand the Westlaw bill and Lexis initially saved me about \$100 per month. In fairness to Westlaw, I understand that it has changed its billing system after complaints from the bar. Nevertheless, I am staying with Lexis. I also use www.findlaw.com from time to time.

viii. Internet access and browser. For raw access, I now use Comcast which provides our cable television service. Prior to that I used Earthlink's satellite service. I have shifted my primary browser from Netscape to Internet Explorer 6. The CM/ECF system is certified to work with Netscape 4.7 and IE5.5 and higher. It is not certified to work with Netscape 6 or 7. I have found that CM/ECF will not work with Netscape 6 and with 7 you take your chances. Netscape 4.7 is reported to be laden

¹ Word documents which are modified using Word's Track Changes feature often have metadata embedded in the file and which recipients can use to view your changes and comments that you may have given to a client. There are commercial programs which will scrub your Word documents.

with security problems and it is no longer supported by Netscape.

ix. Listsers. Listsers are probably the greatest boon to the solo lawyer on the planet. I belong to a number, but for attorneys in Massachusetts I recommend at least three listsers: roundtable@bankruptcy.com, the Mass Forum at Lawyer's Weekly and ucclaw-l-bounces@lists.washlaw.edu. Each discusses issues, both practical and technical, important to the bankruptcy lawyer. There is no question to dumb to ask on those listsers, but be sure to protect your client's confidentiality. For example, I had a question about an issue which was new to me. I simply asked a question on the Mass. Lawyer's Weekly Forum and was besieged by answers within moments. Within moments I knew where to look for answers most of which were of practical use. However, you might consider using an alternative email address to join a listserv. I once saw a message from an attorney on the other side of an issue concerning administrative expenses. He sent out a message asking for research on a landlord's claim for an administrative expense. The case law was in his favor, but the only person to respond was me. I responded that he did not have a chance of winning. He called me the next day and we settled for an amount favorable to my client. The moral of the story is don't play your cards on the Internet and use an alias if you are concerned about confidentiality. The second thing you should consider is that technically sophisticated judges (I have found that bankruptcy judges tend to have good Internet technical skills) tend to lurk on the listsers that the attorneys use. After a comment by one attorney on a listserv that I thought could be interpreted adversely I sent a private email to the commenter. He immediately corrected his message. Listsers are not a place for tirades or idiotic comments.

x. Utilities. Within Windows there are three very important utilities: Cleandisk, Defragmenter and Checkdisk. Cleandisk will rid your hard disk of temporary and deleted files which tend to accumulate there. I run that once per week. When I was using Win98SE I used to run Checkdisk often. With WinXP I run it once a week. Defragmenter is run once per week whether or not the system tells me it needs defragmentation. Defragmenter tends to place highly used programs in those areas of the hard disk with faster access, thus improving performance.

Two other simple utilities that I use are Ad-Aware (now in Version 6.0) and Spybot. Both programs find and eliminate spyware that websites will place on your computer and which track your usage, buying habits, etc. Spybot can be configured to block certain downloads. Both are good and they are free. I run Ad-Aware and Spybot at least once a day. The average number of spyware spies removed each day is about 10.

Included in the utilities category are anti-virus and firewall software. For anti-virus software my personal choice is Symantec's Norton Anti-Virus. I am using version 2003. It automatically downloads updates and I set it to do a full system scan on Friday evenings. It is also set to scan both incoming and outgoing email. I have used McAfee in the past, but I was not happy with it. Whatever you do, get an anti-virus program.

Before I installed the wireless base stations, I relied heavily on Defender's BlackIce firewall software. It blocks those constant probes that affect anyone who leaves their computers connected to the Internet on 24 hours a day. I would receive 20 to 30 probes each day. The wireless base station has a built-in firewall which has blocked all but one or two each day, but I still keep my BlackIce up to date. In my remote office, I use the free ZoneAlarm as a firewall. It works well.

In Outlook, I use an add-in program named Matador from MailFrontier. It scans incoming email and automatically filters out junk mail into a separate junk mail folder. I have to scan the junk mail folder for sometimes good mail gets filtered as junk. From time to time I use MailWasher which is free for the basic version. Before starting Outlook, MailWasher will scan my email, list it and allow me to send bounce messages to spammers. A spammer will delete your email address if it starts getting bounced mail. The program is pretty good: I was delisted from a listserv on which I accidentally bounced a message.

FileSync is a free program which I use to synchronize files among the main computer and the two USB hard disks I have connected to it.

xi. Other software

Excel for spreadsheets. It is now the default for spreadsheets and database files.

Microsoft PowerPoint for presentations.

FrontPage for website maintenance. The others require me to read the manual.

Delorme's Street Atlas 2003 provides me with directions to the offices of new clients.

TimeMap 2.0 (a new version is coming soon) is a handy tool for graphically presenting a chronological series of events.

Lawyers Diary and Manual for both states in which I practice. It beats the paper version hands down. I load the whole thing onto the hard disk rather than having to return to the CD for the database.

Bankruptcy Helper is a help file I keep on the desktop. It contains the Bankruptcy Code and Rules. Unfortunately, it is out of date, but it is a quick reference and it can be annotated. It is free.

Symantec's WinFax is my primary fax machine. I also have an Efax number



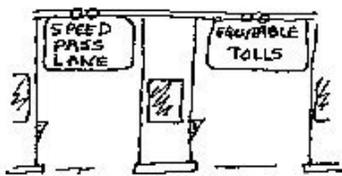
which will send faxes to my email address. When I am away from the office I set WinFax to forward faxes to my Efax number. That way I can receive faxes anywhere that I have Internet access. It is not foolproof, however, for WinFax tends to hang on calls which are mistakenly dialed to the fax number. That often requires a reboot of the computer. I believe that the problem lies in the interface between WinFax and the modem (I have changed modems and saw an improvement), but Symantec has no solution yet. The good news is that if the fax doesn't answer I will get a call and I give the Efax number as a backup. The other thing about WinFax is that it has a good OCR engine. If I really need a document OCR'd I have it faxed to my WinFax number and OCR it under WinFax.

Stamps.com is my primary postage software. I used to have a Pitney-Bowes machine the expense of which I was really not aware until PB offered a long term lease at a number I thought was extraordinarily expensive. I put Stamps.com on my main office computer and Estamps on the remote computer. Estamps has since folded, but Stamps.com works like a charm (it is now in both locations). It probably adds ten percent to your postage costs, but it gives you great postage reports, corrects addresses and can use Outlook address files. When I set up a bankruptcy case I take the Creditor.scn file and import it into Outlook in a separate contact folder. Then when I want to mail something in a particular case, Stamps.com can use that folder as a mailing folder. It is slick and I tend to use the postage reports for the certificate of service. I also have an accurate report of postage costs. One can also print sheets of stamps; I use those when I am including a SASE in a mailing.

xii. Bankruptcy Software. BestCase is my choice. Bankruptcy2003 is reported to be the other bankruptcy software program of choice, but when it was Bankruptcy2000 the company would not provide demonstration software so I opted for BestCase and have been disappointed. There are other choices, but the listserv users tend to vote for those two programs as the best.

2. Other items.

a. Telephone



i. Telephone system. As a country lawyer, my office is in my house. We have an AT&T Spirit telephone system installed. It handles three lines and has 12 stations on it. The key to a telephone system is not to buy it new. Find an auctioneer and buy a used system for 10 percent of what a new system cost. There are plenty of people around who can install it.

ii. Call forwarding. Call forwarding allows you to go almost anywhere and still stay connected to your office. I do not give out my cellular phone number, but I do forward my office calls to my cellphone when I am out. My clients know that they can contact me when they have the need. If I don't want to be disturbed, I simply shut the cellular phone off.

iii. Cellular Phone. A good cellular phone is invaluable. For nationwide coverage with no roaming charges I went with AT&T when it was the first to offer that service. Verizon is now alleged to have comparable coverage. AT&T is a CDMA system which is good for data, but allegedly mediocre for voice communications. As a result, AT&T is shifting to a GSM system which is prevalent in Europe and the rest of the world. Nextel is a GSM system, but GSM coverage in the U.S. is poor, e.g., Vermont is not covered. The thing that I like about AT&T is that I have a GSM phone for use in Europe and it has a SIM chip in it that will recognize a call coming into my AT&T mobile phone in the U.S. When someone calls my office the call is forwarded to my cellular phone number which then rings in Europe if I am there. The process is virtually seamless (you have to listen for a nearly imperceptible delay) as I answer in Europe. The drawback is the 6 hour time difference (5 in England and Portugal).

b. Things I might like to try.

i. Logitech's IO Pen. I still have the CrossPad, a device which captures your handwritten notes and converts them to text. It is great for board meetings and depositions, but neither Cross nor IBM continued their support and it now gathers more dust than use. The IO pen seems to be a successor. From what I understand, the IO will track your note taking and then dump it to your computer once inserted into its cradle. However, it will not convert the writing to text. For \$200 I am still sitting on the fence about this purchase.

ii. Color Laser Printer. They are dropping under the \$1,000 level. Still, why on Earth would I need one. Then again, what has need go to do with want?

c. Things I do not use. I do not use a Blackberry, but if we had better coverage where I am located I would consider it. I do not use document managers such as HotDocs. They are probably great for practices which tend to repeatedly use the same forms, but I don't have the need. Litigation software such as Casemap show great promise, but again I have not have had the need for that type of software.

In summary, I have attempted to discuss the items that I use most often in my practice. There may be one or two items that I have forgotten, but those are probably rarely used.