

Working from the Whistler Cabin: Remote Access Technologies (FMM2)

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This paper looks at various aspects of mobile or remote computing and is broken into four parts:

1. Planning to be a computer commuter,
2. Gadgets and services that are essential for the mobile lawyer,
3. The realities of practicing from remote locations, and
4. Roadside disasters and assistance (what to do when your worst fears come true).

We have named some sources for certain of the products referred to in this paper, but please do not consider that to be a product endorsement or an exhaustive listing – the point of this paper is to have you consider choices that exist and to give you some framework in which to consider them.

1. Planning to be a Computer Commuter

Whether you are planning on practicing from home or on the road again, it is essential that the first step be a plan for what you will need to practice from that location. The tools which you require will vary widely amongst practitioners and will depend in no small way upon the kinds of activities you would hope to accomplish from a remote location. If your only desire is to be able to phone your office to retrieve messages, your technology kit will be very different from that of the lawyer who hopes to be able to dynamically access email and voicemail, as well as to research, draft, and publish a written argument or agreement.

Such planning must therefore necessarily look at where you will be practicing from, what you “need” to practice, what you must carry with you, and what you are able to resource while on the road. Analyze what can go wrong and speak with others who are “road warriors” – learn from their misfortune. Dealing first with the “where” of the analysis, if you are planning to work from a home office, plan for an office that has high speed internet access as well as a dedicated analog phone service (in a pinch if your high speed internet access is interrupted you can always go to the dial-up alternative). If you are going to be traveling and on the road, dial-up internet access may be sufficient for overnight trips, however, for extended absence, consider hotels with free high-speed internet access and free local calling. (Beware of hotels which limit the time of local calls to one hour or less, and start charging per minute thereafter; your internet

research can become extraordinarily expensive at those per minute rates even if you are using unlimited dialup service from your internet service provider.)

The most essential element of what you must take with you is a laptop computer (with internet access) and a cell phone (with voicemail). The price and performance of a laptop computer is certainly within range both for a home office as well as a mobile computing situation. Your computer should always be scanned for viruses and other “malware” before you head on a trip and should be security enabled (Zone Alarm [<http://www.zonelabs.com>] or Norton Internet Security [www.symantec.com]). Any confidential data on the computer should be encrypted and your laptop’s contents should be backed-up to reliable media at your office.[Encryption programs include PC Guardian (www.pcguardian.com), Coreguard (www.voremetric.com), R-Guard (www.data-security-software.com), Cryptainer (www.cypherix.com/products.htm) PGP (www.pgp.com)]

If you are going to be a regular absentee from the office, and if your office network allows for it, make arrangements with your network administrator to setup a VPN (Virtual Private Network) channel so that wherever you are, you have access to your firm’s resources, files and network. You may also accomplish the same kind of access using products like PC Anywhere (www.symantec.com) or GoTo My PC (www.gotomypc.com) beware however of the security risks and concerns of such products.

Make a standard checklist for your out of office experiences and pack accordingly. Making and reviewing such checklists before you leave can save a disaster when, for example you forget to pack the recharger or power converter for your laptop or cell phone.

2. Gidgets and Gadgets

(a) Laptop Computer

For most users a Pentium Mobile, Centrino, Celeron, or Athlon processor with not less than 512 megabytes of RAM and 40 gigabytes of hard disk storage is sufficient. The laptop must have a fax modem, an ethernet connection, USB ports (not just one), and at least a CD read-write drive. Look for built in wireless capabilities, as wireless Internet access is becoming more readily available as you travel. It is our suggestion that you consider only brand-name models (Dell, Toshiba, Compaq, HP, or similar) as you are more likely to obtain readily accessible telephone or online service assistance, compatible accessories to

work with such models and, for the most part, a reliability factor which is better than with no-name products.

(b) Digital Cell Phone

Depending on your budget, you may want to consider a cell phone which integrates the technology which would otherwise be contained on a personal digital assistant (PDA) such as those from PALM (Treo), Kyocera, or Samsung. Most important, however is that the access be digital and that your service provider deliver cell phone service to the location(s) what you regularly travel to. If you are traveling outside of the country be very aware of the “roaming and user charges” for using your cell phone in another service provider’s area. The cell phone service should also include voicemail and have a hands-free headset attachment, charger, and, if you are traveling by car, a lighter-adapter to allow you to keep your phone charged at all times. Remember that you do not need to access your cellphone voicemail from your cellphone... it CAN be done from a normal land-line and when you are accessing your voicemail system from some foreign jurisdictions that can provide a VERY substantial saving.

(c) Internet Access

If you have planned your trip well and are staying at hotels that offer free highspeed internet access, you will not need to go further, however, if high-speed access is not available, or is costly or is simply too inconvenient to set-up and access, a reliable stand-by source is a dial-up internet connection. Whether you subscribe to AOL (www.aol.com), Telus (www.telus.com) , Bell Internet (www.bell.ca) , or some other service, be sure that the local dial-in numbers for dial-up internet access are available at the location(s) you are traveling to before you travel there.

Wireless access is often available in hotels, as well as public libraries, courthouses, coffee shops and even restaurants. (www.fatport.com) If your laptop has a wireless card this offers an excellent way to get internet access without the boundaries of cords. You can create your own wireless network in a hotel room equipped with a highspeed dataport by bringing along your own portable router.

Other options to access the Internet are appearing each day. Many of the large telcom providers such as Sprint and Verizon are making EVDO cards that slip into a pc or ExpressCard slot in your laptop. These cards use existing broadband voice and data networks from your wireless cell phone provider to provide

Internet access where wireless hotspots are not available. Some cell phones will also act as a modem for a laptop.

Be mindful of the security concerns about using wireless networks of any kind, however this does offer a convenience in terms of internet access.

(d) Personal Digital Assistant (PDA)/Smart Phones

Whether it is integrated into your phone's electronics or not, many lawyers find the address book functionality of PDAs to be invaluable. As you pause to make a phone call while waiting at the airport, there may not be sufficient time to bootup your laptop computer and access your Amicus Attorney Database to get a client phone number. Being able to turn on your PDA and have full access to a range of telephone numbers, addresses and other information is very convenient. Using a smartphone, such as Treo or Blackberry, provides cell phone, email, Internet and applications in the palm of your hand. Be sure that the information that is on your hand-held is encrypted and password protected so that in the event you lose your PDA, personal information of your clients is not accessible by others. [See PDA Secure (www.handheld-security.de/english), Safeguard Easy (www.safeguard-utimaco.com/)]

PDAs and Smartphones also allow traveling attorneys to track time on the road. Applications like METAmessgae Legal for Blackberries, or the PDA enabled function of your time and billing software, such as Timeslips or PCLaw, will allow you to keep up with your billable hours and track time without having to wait to input it back at the office.

(e) Portable Media

In order to be able to transfer information from your computer to another computer or to a service provider you should consider carrying with you or having access to blank CD read-write disks and a USB "thumb" drive or "smart" drive. These will allow you to copy information and share it with other computer users or service providers (to print copies, etc.). These small storage devices continue to increase in capacity with some models storing as much as 4 GB of data. Always ensure that the data stored on these drives is encrypted in case you should lose or misplace them.

(f) Software

Your laptop computer should be loaded with standard office applications (Microsoft Office or Corel Office), remote access software (e.g. AOL, Go to My PC, etc.). For my part, I travel with a back-up copy of the application installation disks (see section on First Aid). If you access a research database (Quicklaw or E-Carswell) have the access software loaded on your laptop.

One option for those who have multiple offices, few IT support staff, or are on the road frequently is to consider an ASP (application service provider) in lieu of traditional downloaded software. This allows access to your firm's software anywhere you have Internet access. As this concept becomes the rule, rather than the exception watch for opportunities for your own law office software. There are certain risks and caveats associated with the use of ASPs, so read the service level agreement carefully and check with your insurance, liability or risk management partner.

(g) Cords and Cables

Carry with you multiple retractable ethernet and telephone cables as well as extension junctions. I also carry at least one "splitter" (a small plastic plug which allows 2 telephones to be plugged into a single telephone outlet). These are necessary to connect your computer to telephone or high speed internet lines. Most hotels do provide power outlets sufficiently close to a desk to allow you to plug-in your laptop computer adjacent to the telephone line, however this is not always the case and carrying a small power cord extension is not a bad idea. You may also find that a USB hub is useful, providing more ports for all of your peripherals. If you use a PDA which is rechargeable, make sure that you bring with you the appropriate power adapter and connecting cables to allow it to be recharged and backed-up onto your laptop computer. Laptop computers are a thief's delight, and if you are going to leave it unattended, even in a locked hotel room, you would be well advised to secure it to an immovable object with a security cable. A cable will not protect your laptop against disappearance by some hands, but will deter the impulsive thief.

(h) Bookmarks/Favourites

If you use your laptop computer regularly for computing, then it will have on it your Favorites or Bookmarks of sites regularly visited. If you do not, however, use your traveling computer as your prime computer, you may find yourself searching for websites on into the night. Transferring your Favorites or Bookmarks to a website such as My Bookmarks (www.mybookmarks.com) allows you to transfer your frequently used bookmarks from computer to computer, or access them remotely. Other services, such as eSnips (www.esnips.com) , furl (www.furl.com) and the new bookmark functionality in the Google Toolbar 4.0 (toolbar.google.com) also offer portable bookmarks, plus better organization and annotation.

(i) Research Access

Although there are many free sites to obtain information about statutes, regulations, and decided cases, the “for pay” research services provided by ECarswell and Quicklaw remain very popular and allow you from a remote location to have full access to a digital legal library.

(j) Carry Bags and Roller Boards

Given the importance of your laptop and its accessories it is important that these necessities be protected during travel and that you are able to transport such equipment with you (and not in the cargo hold of an aircraft). Obviously there are size constraints, but consider transporting your laptop in a padded case INSIDE a small salesman’s case/rollerboard with wheels on it. The wheels should be skateboard type wheels and are best located so that the case travels on its end... that way it is narrow enough to fit down the aisle of a bus or airplane without having to be carried. Make sure the wheels are not too close together or you will have a “wobbler” to deal with and will be frustrated that you are unable to pull the case smoothly (especially if you place a coat or a small paper case on top of it as you are walking). Such cases are small enough to fit overhead, or if you are traveling on small aircraft, you can at the very least remove the computer and its internal case to take with you while your rollerboard is placed on the valet cart.

I normally carry or pack papers for trips in a smaller, lighter computer shoulder bag so that when I arrive at a destination I have the flexibility of transporting the computer in something less than a “suitcase”. In addition, by removing the weight of papers from the roller case there is a smaller likelihood that you will put pressure on the laptop case which might otherwise damage the LCD display.

(k) The Luxury Gidgets and Gadgets

• A Portable Printer

Although portable printers from HP and Canon are small enough to carry, it remains the case that they add weight and bulk to your mobile office, and the cost of replacing their inkjet cartridges remains a financial concern. There are many other ways to print while on the road (see below), but if you must have 24-7 printing services, a portable printer may be for you.

• Portable Scanner

One of my favourite luxuries for mobile computing, space and budget permitting is a small portable scanner. This kind of equipment allows you to convert paper into digital images or editable text which can then be emailed or faxed to others. They do not take up much room but are nearly invaluable in some situations. [For hardware see:Strobe from Visioneer (www.visioneer.com), Or DocuPen from Planon Systems (www.planon.com); for scanner software see www.nuance.com

• Digital Recording

There are a variety of digital recording devices which will allow you to dictate and record in the same way that you can dictate and record for your secretary at your office. With certain software, the digital recording can be emailed to your office or saved on your computer where it can be transcribed by you, your secretary or by voice-recognition software. Once transcribed, the dictation can be emailed to wherever you are. [See Talk2Me Technology (www.talk2me.com) and Dye & Durham(www.dyedurham.ca)]

• Mouse

Although many enjoy using an eraserhead mouse or a touchpad built into a laptop, for extended use my large hands still prefer a “mouse”. There are various compact cordless optical mice that have a USB transmitter and which are far more comfortable and precise in their control, in my view. Most of these products are battery poweredso remember to take spares. (www.microsoft.com, www.logitech.com, www.labtec.com, www.targus.com)

If you make frequent presentations, consider a wireless mouse with built in presenter functions, such as “presentation mode” and a laser pointer. Atek, Targus, and other providers supply special controllers/laser pointers

which allow presenters to control the PowerPoint Presentations on their laptops while moving around the presentation area. If your traveling involves you making presentations to large groups on a regular basis, this may be an advisable luxury. Most of these products are battery powered ... so remember to take spares.

3. Being There

The following are some very real considerations gathered from those who spend significant time “on the road” ... some of the experiences learned from are humorous and some disastrous; what is important is that they are lessons well learned and remembered. Sharing them with you may spare you the sometimes painful experience of learning them yet again.....first hand.

- **Keep track of your toys**

Your laptop computer, its power supply, and your cell phone/smart phone are the fundamental tools you need to connect to your workplace. These parts of your mobile office should not be left unattended, nor should they be entrusted to baggage handlers, porters, or any other person. If your computer is lost, your work plans may be scuffled and undoubtedly your angst levels will be increased. Remember to take your laptop computer with you after you clear airport security. Airports are the number one place laptops are stolen – do not lose sight of your laptop for an instant.

- **Keep your workspace organized**

At your hotel or home office, set up your laptop computer, get the cables out of the way (so you are not tripping over them) before you fire-up your computer and attempt to start working. Cable organizers are readily available.

- **Preparation is 9/10 of the battle**

It is always a good idea to have, in advance, checked with your hotel to see if they have internet access, whether wired or wireless. You can also check online with sites like JiWire (www.jiwire.com) or Wifi Free Spot (www.wififreespot.com) to see other local locations that offer wireless access.

If you are going to a particularly remote location, check with your internet service provider to ensure that you have the dial-up internet access numbers for the community you are visiting, or alternatively the 1-800 universal access number that may be required to be used elsewhere. Be aware that 1-800 internet access will cost \$6-10 per hour plus any hotel charges for such telephone access. Without internet access the likelihood of your being able to “work” on the road is

minimal. Make sure that your email program is set up to work from a remote location or do you need to have a VPN channel connected to make it work... and if so... do you know how to launch it?

Check also with your cellphone/wireless provider to make sure that you will have coverage in remote locations. If your plan was to leave the laptop at home and use a Blackberry or smartphone to access email and work on documents make sure the area has coverage.

- **Printing**

If you need to print documents or information on your computer, save it on a thumb drive or a read-write disk and take it to a business centre in your hotel or a service provider like Kinkos, Staples, or Office Depot. They will be able to help you print any necessary copies with laser quality printers. If a pinch, you can always fax your work product using the fax modem that is built into most laptop computers to the hotel you are staying at and thereafter photocopy the faxed work product.

- **Telephone**

Local and long distance telephone charges in hotels can be astronomical especially in remote areas. Beware of hotels that charge “per minute” telephone charges on local calls after one (1) hour of duration and surcharges on 1-800 or credit card long distance calls. If possible, and if your hotel allows free local and 1-800 telephone calls, you may want to use a phone card to make long distance phone calls from rather than using your cell phone in remote locations. Save cell phone/smart phone battery life for incoming calls.

- **Keep in Touch**

Do not be distracted – just because you are away from the office does not mean that your clients have forgotten you, and just because you happen to be “working” from a resort hotel does not mean that the deadline or limitation your client is facing will be as relaxed as you are. Make and keep specific time available for contact with your office either by telephone, by email, or instant messenger service. Make sure that the personnel back at your office forward to you incoming emails as well as scanned PDFs of incoming correspondence so that you can stay current on incoming communications. If your hotel room’s telephone line is preoccupied by your dial-up internet connection, your cell phone accessibility will become even more important to your office and clients.

- **Don't Get Lost**

There are often hyperlinks in electronic telephone directories which will assist you in locating a business or other address. When that fails go to www.mapquest.com or www.mapquest.ca for directions.

- **E-fingers do the real walking**

Need a phone number which is not in your PDA or Outlook directory... go to www.canada411.com and get the address

- **Public Access Terminals and Wifi Hotspots**

Attorneys using public access terminals at airports, hotels, or in the courthouse need to remember that every trip to the Internet leave traces of that visit. Consider anonymous browsing by using a website such as Anonymouse.com (www.anonymouse.com) or loading a copy of Browzar (www.browzar.com) on a thumb drive. Often public terminals are rife with spyware, and keystroke loggers so stay alert.

Using either a public access terminal at a convention, or a wireless hotspot at a coffee shop, be aware of those around you. People tend to be curious and you need to be aware that information on your computer screen may be confidential. Consider a privacy filter for your laptop, like those from 3M, if you often compute in public places. Also consider that hackers set up look-alike wifi networks that are "free" and have stronger signal strength than those you might find in the airport. Strongly consider not using unsecured free wifi.

4. First Aid

- **Back-up and Redundancy** – Before you leave your office, ensure that your laptop system is backed-up and that the critical documents, presentation, or other information that you must have access to are saved on media which you carry with you. That way critical data can be accessed by another computer should your computer be lost, stolen, or crash. Although you can restore information to your computer from a back-up at your office, the shelf-life of critical information is very short when you are on the road. Saving documentation in a PDF format will allow you to access the file from any computer without software and to, if necessary, reconstruct the text of the original document into a word processing program.

- **Power Outages** – If you should leave your power supply at the office when you leave on a business trip understand that for many laptops you can purchase (at an outrageous price) a replacement power supply with adapters which can work.

These do not have the power of the manufacturers original equipment and may, over extended use, cease to function, however they will provide you with power to get you through your crisis until you can order a proper replacement power supply for your laptop or return to your office. (www.targus.com)

- **Take your CD Collection** – Take with you back-up copies of your core programs/applications (Corel Office, Microsoft Office, Outlook, AOL, etc.). Also take an encrypted CD containing regularly used precedents and forms. If your application calls for installation of a program disk in order to do an update of the particular application, it will not help you if that disk is back at your office. [Oh yes, and by the way, take your favourite music on CD as well. That way you can relax at the end of your working day or have some familiar background noise as your work in your hotel room.]

- **Don't always try to be a repairman** – If you need to access parts of the laptop, or its cabling connectors, the best advice is to visit a service center as soon as possible or contact your on-site service supplier for advice as how to remedy the problem. Do not be unscrewing connectors in a laptop without technical advice. That said, a multi-purpose tool can help you replace a damage cord end or ease removal of a lodged cable.

- **Anticipate what could happen** – By preparing for your mobile computing adventure, you can also avert various dangers. For example if you have prepared and set up your office network to allow you a VPN connection while traveling and your laptop is damaged, lost, or stolen, you may still be able to configure VPN access from another computer to your office network and obtain copies of critical documents, pleadings, presentations, etc.

IN CONCLUSION

Preparation and planning for remote or mobile computing can greatly assist in averting disasters that can otherwise challenge or completely destroy a business trip. With some planning and preparation, however the success of the trip and your ability to deal with routine matters outside of the physical confines of your office may convince you to take some additional personal time away and that is NOT a bad thing.