



Telecommuting 101: Take the First Step

Presenters:
Andrew Z. Adkins III
Ben Schoor

April 2-4, 2009
www.techshow.com

Telecommuting 101: Take the First Step

ABA TECHSHOW 2009

By

Andrew Z. Adkins III

Session Description

Have you considered working from home a few days a week? Has any of your staff asked to? More than ever, lawyers are looking to improve their work/life balance and be more productive by finding non-traditional places, and ways, to work. Do you travel yet have to get work done? If you answered yes to any of these questions come learn how lawyers and staff can effectively and securely work when outside of the office. We'll cover VPNs, remote computing app, phone systems, policies and procedures, and more.

Telecommuting means different things to different people, much of which is determined by the person doing the telecommuting. Telecommuting and remote access are typically the same types of technologies, just differences in who, what, when, where and how. I know very few attorneys (at least private practice attorneys) that work nine to five, five days a week. Most attorneys I know put in much more time than that, sometimes at the office and sometimes at home. Staff, on the other hand, will work when requested, but many not have that “extra insanity,” or whatever you want to call it, that billable attorneys have.

My father was a solo practitioner in Gainesville, Florida and retired from practice in the mid 80s. While we took vacations to the mountains or to the beach every summer when I was a kid, he'd often be on the phone several times. Of course, growing up as a kid, I thought this was normal for an adult. Times may have changed but many attorneys still find it hard to truly get away. With that change, technology now allows us to work when we're away from the office. Whether that's good or not depends on the individual.

I'm not a lawyer, I'm actually an electronics engineer. I have a couple of degrees that hang on my wall, but I spent five years designing and developing computer-based technologies – part of a “previous life.” But because of that background and design experience, I've been able to help law firms work through many of their technology challenges and issues. Remote access technology is always an issue and a challenge within a law firm.

A couple of years ago my wife and I took a three-week vacation to Europe. I'm a computer guy and have been in the middle of all of this technology for many years. And while I'd like to think things would run smooth while I'm away from the office, I still found myself checking email and making a call or two while “on vacation.” I'm also a workaholic, and my wife has grown accustomed to my work habits. But, with available technology, I don't necessarily have to go into the office to work. Again, that's either good or bad, depending on who you ask.

There are several benefits and advantages that are obvious to telecommuting and a few not-so-obvious. One of the latest buzzwords is often referred to as the “carbon footprint,” which is an extension of the term “ecological footprint,” coined by William E. Rees, a planner at the University of British Columbia. If you can get as much work done at home by telecommuting and not have to commute to work, then you've effectively reduced your carbon footprint, at least for that one day.

Got a sick child? Not feeling up to snuff? Your car in the repair shop? We don't worry too much about it down here in Florida, but are you snowed in today? Any and all of these are reasons for people to consider telecommuting.

Kate Lister and Tom Harnish of *Undress for Success* fame, conducted research in 2008 showing that 33 million Americans hold jobs that *could* be performed at home. If they did, the U.S. could make major cuts in oil dependency. Based on their synthesis of data from EPA, DOT, and seven other sources, they found that telework could reduce Gulf oil imports by 24 to 48%, reduce greenhouse gases by up to 67 million metric tons a year, and save as much as 7.5 billion gallons of gasoline each year. ***These new telecommuters would collectively avoid 154 billion miles of driving and save \$25 billion in fuel purchases*** (even accounting for mileage for errands formerly accomplished driving to or from work). What's more, their research shows that by not commuting, these new teleworkers would enjoy the equivalent of an extra five workweeks of free time each year.¹

¹<http://undress4success.com/tell-the-middle-east-to-pound-sand/>

While there are advantages and benefits to telecommuting, there are certainly disadvantages, too. One of the primary reasons to telecommute is the ability to work from home. But this begs the question, if you had the ability to work from home, would you really work as much or as hard as you would if you were at the office? Sure, you've got distractions at the office, too, but what about distractions at home?

Before creating the Legal Technology Institute at the University of Florida Levin College of Law, I worked at home as a legal technology consultant (since 1989). I had two young kids and while my "work" schedule worked around their school schedule, there were many times I would be on the phone with clients when my kids were also at home. We had an "understanding" not to disturb daddy when he was on the phone. But one day I was on the phone for an unusually long time and my eight-year-old daughter came in with a handwritten sign, "I'm hungry." Now, how could I avoid that precious little girl at that particular moment in time?

I've also worked with firms in the "early years" of remote computing that had a specific need for remote access. Two examples stand out, both involving the firm's bookkeeper. While most firms can find a temp for filling in a couple of days for a secretary or legal assistant position, it's not an easy thing to find a temp to fill in the bookkeeper's job. In both cases, the firm decided it would be worth the expense to set up a remote access system for the bookkeeper to work from home. It was not difficult, and we used simple point-to-point secure communications back then. Technologies have evolved and while there are still challenges, we're finding that attorneys and staff need access more and more when away from the office.

One of the more obvious issues with telecommuting is the lack of face-to-face meetings. We've strived for many years to establish relationships with attorneys and staff and while we can conduct much business on the phone, sometimes it's just better to be there in person for the meeting. However, with the advent of video conferencing and Internet video applications such as *Skype*, this may not be the problem one perceives.

Another issue that law firms deal with is the technology required to work when away from the office. There are plenty of resources and technologies available for telecommuters and it is sometimes overwhelming to determine which technology is best for what application. Not only that, but who is to help set up the technology and once it is working, who will maintain it? All good questions and while there is no "one size fits all" technology for telecommuting, there are several technologies to evaluate.

Before you decide on the technologies you need to implement, you first need to examine the applications you'll need to access. These are the common software applications you utilize in your office, such as email, calendaring, address book, documents, and timekeeping, to name a few. You may already be able to remotely access these applications using a variety of different methods.

For example, if your firm uses *Microsoft Outlook* or *Novell GroupWise* for email, calendaring, and address book, each application provides a web access module. This means you can check your email, calendar appointments, and grab client contact information while away from the office. If you don't have this solution implemented, then check either with your internal IT staff or your systems integrator. These are basic tools and everyone should have access to them, either remotely or through their *Blackberry* or *Palm* device.

As for documents, it also depends on the applications you already have installed. If your firm has a document management system, such as *Worldox*, *Interwoven*, or *OpenText*, then these systems have remote access modules that allow you to *securely* access your documents while away from the office. They may even have technologies to allow you to review documents on your Blackberry, if you so choose to read a 40-page brief on your handheld.

Accessing your timekeeping system may be a different story, though, and while there are technologies available to provide secure access, it's a question you need to ask if the benefits of this specific access (timekeeping or client invoices) is worth the cost. Without going into too much detail, most firms incorporate this type of access into their existing remote computing solution.

There are a several ways to provide remote access to your firm's computing resources, outside of those described above. These are *Terminal Services* (a solution provided by Microsoft) and *Citrix XenApp* (a.k.a. "MetaFrame," a.k.a. "Presentation Server"). Each has its own advantages and disadvantages. The main buzzword is "thin client" technology.

According to the *ILTA 2008 Technology Survey*, most firms (64%) use Citrix for remote computing; 23% use Microsoft Terminal Services with no Citrix; and 9% use GoToMyPC. The Citrix remote access products have seen several name changes over the past few years: WinFrame (1995) to MetaFrame (2000) to Presentation Server (2005) to XenApp (2008).

The Citrix solution is a software application that resides on a server. Any applications that the firm wants users to access via Citrix must be “published” on the Citrix system. That means you install the various software applications on the Citrix server and users can then access them from a remote location. Using this setup, the user “experiences” the same interface as they would if they were in their office, albeit there may be a slightly slower performance, since the data and files are transferred over the communication line (i.e., the Internet) at those speeds.

Microsoft’s Terminal Services (now known as *Remote Desktop Services* from Windows 2008 R2 onwards) is a solution similar to the Citrix solution described above, but while Citrix and Remote Desktop Services provide similar applications, there are several differences.

- **Web access:** Citrix provides the ability to access published applications through a web interface. Microsoft Terminal Services requires some add-on to provide this access.
- **Published applications:** Citrix provides the ability to publish a single application to a user's desktop where it looks like a local installation yet the processes run on the remote Citrix server. Microsoft Terminal Services has only remote desktop capabilities.
- **Performance tuning:** Citrix provides the ability to tune the user sessions with features like load balancing between presentation servers in a server farm. There is also the ability to tune other network and user session parameters in a Citrix implementation that Terminal Services does not provide.

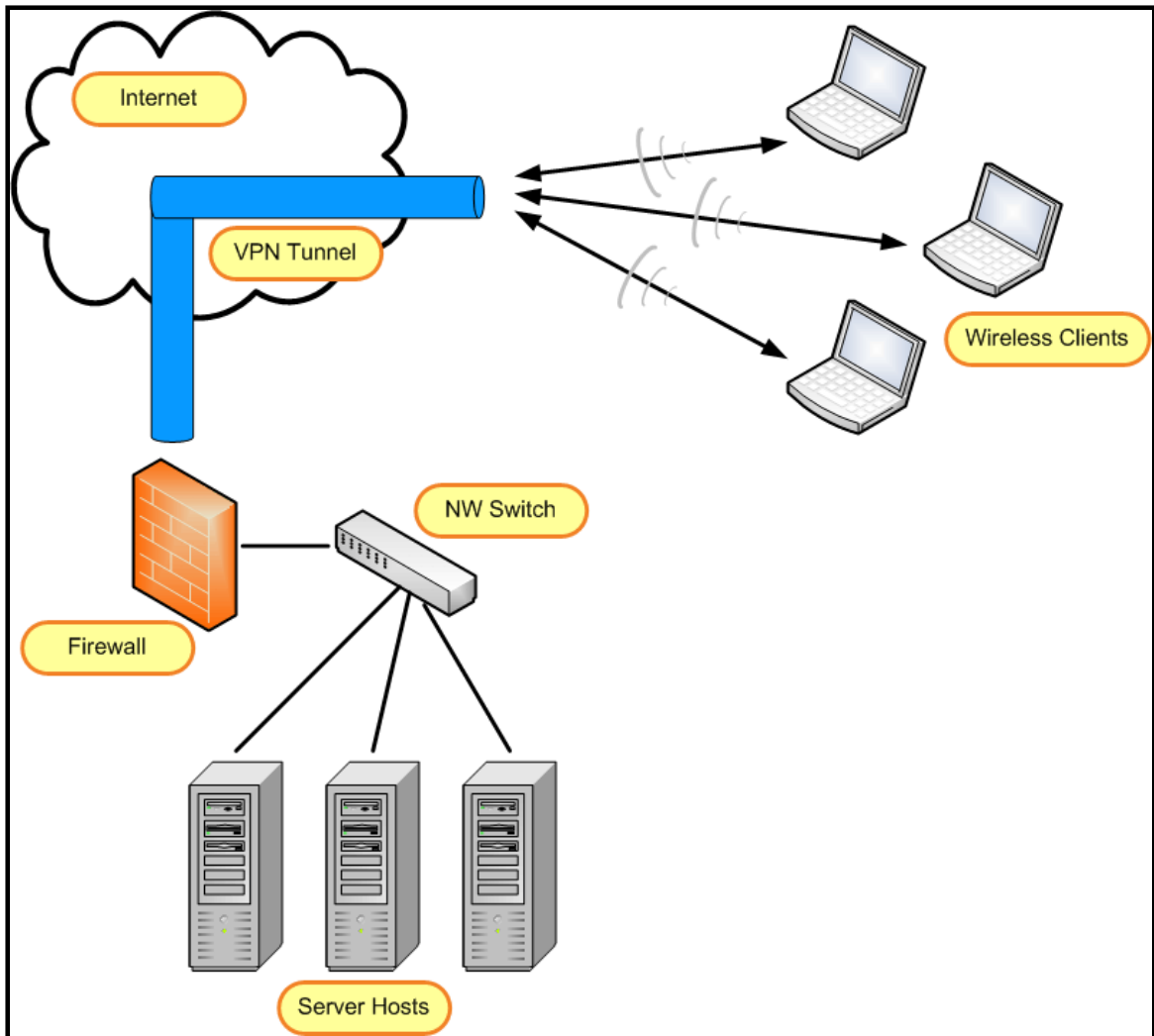
Unfortunately, it is beyond the scope of this paper to get into the technical details of the major differences between Citrix XenApp and Microsoft RDS. However, no matter which solution you choose, you’ll still need to purchase user licenses for Microsoft RDS. That is, if you choose to implement Citrix, you’ll also need to install Microsoft RDS. So the big question is, do you need to install Citrix?

That's not an easy question to answer because like anything else that deals with technology, it depends. Without going into a lot of detail, it has been reported that Citrix with its proprietary protocol called Independent Computing Architecture ("ICA") supposedly provides a faster connection medium.

There are another couple of solutions that are slightly less expensive that lawyers might also evaluate. These are direct PC to PC connections. For those of you who have been in the business as long as I have might remember the old Procomm communications system software that allowed you to use a dial up connection (high speed was limited to T-1 lines at the time) to connect your home computer (we didn't have laptop computers back then) to the office computer using a 1200 baud (1,200 bits per second as opposed to 128,000 bits per second available now for DSL) modem. After that came products like *pcAnywhere* and *CarbonCopy* that allowed the user to "take over" the PC s/he was connecting to. These were "point-to-point" type connections – one PC connecting to another PC.

GoToMyPC, a Citrix solution, allows you to connect to your office PC for \$19.95 per month. It is a Web-based solution which provides for 128-bit encryption, "strong" passwords and authentication, and allows you to remotely view your computer screen and access all of your computer's programs, email, files and network resources as if you were sitting at and using your computer in your office. As mentioned above, about 9% of the *ITLA 2008 Technology Survey* respondents reported using GoToMyPC.

Perhaps one of the most understood technologies, at least to the legal profession, is the Virtual Private Network, or "VPN" for short. VPNs have been around for years and are reliable, safe, and perhaps the most secure method for computing across the Internet. VPNs basically use two things to connect external computers securely: authorization and encryption.



A virtual private network is a secure *private* network that makes use of a shared public communication system, such as the Internet. A VPN connection is established by means of secure communication paths, called “tunnels.” Each tunnel has two ends, one on either side. All of the data traffic from site “A” to site “B” must go through this tunnel. All of the traffic between the ends of the tunnels is encrypted in turn, so that the data transfer is secure. That’s about as simple an explanation of a VPN as you’ll find. The figure above provides a high-level overview of a Virtual Private Network.

One of the other factors that law firms need to take into account when providing telecommuting technologies is support. The firm’s internal IT department typically put in more than a 40-hour work week, but rarely do they match some of the firm’s top performing attorneys as far as time at work. Working remotely either from home, a remote office, a client’s office, or even overseas requires a higher level of sophistication than simply working in the office.

“Who you gonna call” if the system locks up while you’re in the middle of a document? If you can’t connect to the firm’s Citrix system from a hotel room, who’s going to help you? As most everyone knows, technology is definitely not foolproof, and there are times when it seems the technology gods are against you. There’s no getting around this – attorneys and staff who choose to telecommute need to have that extra level of training on the “what ifs” when away from the office. The technology is getting better and more reliable, but there will be times when it doesn’t work and you need to know some basic troubleshooting tips.

It might not be a bad idea to develop a “Telecommuting Policy,” one based on the firm’s expectations for those who will be telecommuting. A Telecommuting Policy should cover the following topics:

- Definition - the firm’s definition of telecommuting
- Eligibility - who should be able to telecommute and how one should request
- Duration - how long the telecommuting arrangement lasts
- Guidelines - specific details regarding the telecommuting arrangements
- Ownership - who owns the equipment
- Insurance - who is responsible for the equipment

In summary and in my humble opinion, telecommuting is one of those issues that law firms will face sooner rather than later. There are many reasons firms may want to consider telecommuting as well as who should be able to telecommute. There’s no doubt that law firms provide remote access now, so many of the technologies are already in place. With that in mind, it becomes more of a cultural issue than a technology challenge.

Additional Resources

The American Telecommuting Association www.yourata.com

Undress for Success: Work from Home www.undress4success.com

Managing Remote Workers, by Adrian Burnhold.....

www.computing.co.uk/crn/comment/2227210/managing-remote-workers