

Should You Cut the Cord and Move The Cloud? Legal Practice Without a File Server

By Seth G. Rowland

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A file server can cost upwards of \$22,000 plus another \$7,000 per year to maintain. Should you instead keep that money in your bank account? But can your law firm conduct business without a server? In this TechnoFeature, legal technology consultant Seth Rowland explains how you can cut the cord by using “the cloud” — online applications for backups, practice management, and document management. But everything has a downside, which Seth also explores. What’s his verdict on moving the cloud? Read the article to find out.

INTRODUCTION

Are you spending too much for computer hardware and software? Is there enough left for the support, configuration and customization you really wanted in the first place? Do you know the total cost of your firm’s computer network? Let me pose a radical question: Do you really need a file server?

In March 2009, I started “The Virtual Lawyer” group on LinkedIn to explore the possibility that a lawyer could practice law without a “physical space” in which to practice. These discussions have focused on “remote access” technologies such as [GoToMyPC](#) that enable you to access your desktop from any computer

anywhere, and “remote meeting” technologies such as [GoToMeeting](#) and [WebEx](#) that enable you to achieve real-time collaboration by setting up ad hoc meetings with multiple participants on a moment’s notice.

Last summer, I travelled to Paris for a month, and discovered that “remote access” wasn’t enough. The router connected to my server failed to automatically restart after a power surge with the result that my office server went offline. And so, I began to seriously explore whether I could run my office “without a server” and whether others, especially law firms, could also run their offices “virtually” without a server.

THE ESSENTIAL SERVER

Some clients ask me, “Why do I need a server?” My answer is that you need a server because computers fail, laptops and desktops are replaced ever 2-3 years, and viruses wreak havoc on computers. Unlike a PC, a server is designed to “fail gracefully” without any loss of data, and servers have the ability to be back up and running in a short time after a failure.

Servers are also needed because law is a collaborative business requiring members of a firm to share access to files across a network. Properly configured, servers have faster processors,

more RAM, redundant hard drives, and external backup procedures. They are required to run the Client-Server versions of most major legal practice management software, including Time Matters, Amicus Attorney, ProLaw, and PracticeMaster.

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COSTS OF A SERVER

In examining the alternatives to the “client-server” network, one needs to look at the TCO (“Total Cost of Ownership”) for that server and weigh these costs against the alternatives.

Typically, one thinks of system cost in terms as one-time, up-front server and software expenses. I decided to price Dell’s entry-level business server, the PowerEdge T110. By the time I added a RAID 5 array, with 4 1 TB SATA drives, 16 GB of RAM, tape backup and disks, along with Microsoft Small Business Server and SQL Server Software, and 3-year warranty, the price had reached \$8,000!

However, that is just the beginning of the equation. A far greater cost lies in configuration of the server, ongoing operational expenses, and maintenance and support agreements. For other computers to access the “server,” you need a business-quality router, a managed network switch and a firewall. You should budget one to two days for a “certified” network engineer to set up the system. If you have an existing server or data on multiple machines, you should budget an additional day or two for data migration and setting up each of the PC’s. At the rate of \$1,500/day that is an additional \$6,000.

Now you need to factor in the costs of practice management software, billing software, and document management software. For a full suite, the cost can range between \$750 and \$3,000 for the initial user, and between \$500 and \$1,500 for each additional user. For five users, you’ll spend between \$3,000 and \$8,000. Then there is installation, configuration and training. Factor in annual maintenance fees of between \$1,000 and \$3,000.

Looking at all the numbers together:

\$8,000: Server Hardware Software
\$6,000: Server and Network Configuration
\$3,000 to \$8,000: Software for 5 Users

\$17,000 to \$22,000: Total Initial Outlay

\$1,000 to \$3,000: Annual Software Maintenance

\$2,000 to \$4,000: Server Maintenance

\$3,000 to \$7,000: Annual Recurring Total

In the first year, the startup costs for your server range from \$3,400 to \$4,400 per user. In subsequent years, it drops to between \$600 and \$1,400. If you spread the cost over 3 years, the monthly cost is between \$144/user and \$240/month per user. These fees don’t include a number of intangibles, such as security, administration, daily backups, test restores, application of updates and patches, and a whole hosts of tasks.

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In evaluating the cost of servers versus the cloud (SaaS), I have excluded from the equation a number of other costs, including costs of the desktop hardware and cost of productivity tools such as Microsoft Office or Corel Wordperfect Office. A cloud-based solution will continue to require a desktop or laptop and most users would prefer to use Microsoft Office or Corel Wordperfect Office to do their work.

In addition, you will need to dedicate the time of an Office Manager internally to maintain the hardware, or engage the services of an outside consultant to monitor and service the server. Moreover, you’ll need to monitor intrusions and viruses, apply

patches and updates, and maintain daily backups. And when a server fails, you’ll need a recovery plan that can put you back in business in a timely fashion.

There are some Infrastructure as a Service (“IaaS”) offerings whereby a service provider “leases” server hardware to you and provides remote support in exchange for a monthly fee. I would caution you to review those offerings very carefully and pay careful attention to the hardware selected and the level of service included for that fee. Beware of any “Home Server” software masquerading as business entry-level systems. The costs of failure of such hardware, and the tradeoffs on speed and performance, may be more than you are willing to risk.

ALTERNATIVES TO THE SERVER

So if a server is so essential yet so expensive, do any alternatives exist? Is there a way to get the benefits of a “Server” without actually owning and managing a server?

1. Practice Management

If you migrate to the cloud, you will need a solid practice management system. Such systems enable you to manage your clients and matters, organize your notes, bill your clients, and maintain your trust accounts. These systems work from anywhere, at any time. This means that your staff no longer needs to be co-located in one facility. They can work from home, from a client’s site, or from multiple office lo-

cations. It also means you can bring in ad hoc staff for a case and give them access to your practice management system, limited to the matters on which they work.

There are currently four hosted practice management systems: [AdvologixPM](#) built on Force.com platform, [RocketMatter](#), [Clio](#), and [HoudinESQ](#). I have reviewed each of these systems in previous TechnoFeatures. Some focus on ease of use while others stress the ability to customize the environment. What they have in common is that there is no upfront license fee. Also, you can try them for free. You pay per month per licensed user. There are, of course, discounts if you choose to pay in advance for a year, but there is no requirement. Prices range from \$50 to \$100 per user per month.

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2. Online Backup

Most law firms' first exposure to the cloud comes in the form of file backup services. [Carbonite](#), [Mozy](#), and [IDrive](#) are geared to consumers, but have business-level service plans. Other enterprise options include [Jungle-](#)

[Disk](#), a front-end to Amazon Simple Storage Service (otherwise known as "S3"), [Barracuda Backup Service](#), [IronMountain](#), and [Rackspace Backup](#).

3. Online Document Management

Online document management comes in two varieties — relatively simple online storage services and more sophisticated document management systems.

Even with a simple online storage system you no longer need to email "files to your clients for review. You can enable the client to securely access your online storage folder. That way, they always review the most current version of the file. Most online services enable you to set up a secure workspace and grant specified users access to the files contained in that workspace.

A number of general business services lease space on their servers for a monthly fee. You can use their interface to upload files. Or, you can set up a Web-DAV connection on your PC and treat the Web storage as just another file folder on your network.

Rather than do it yourself, you can use a popular online storage service such as [Box.net](#), [Ignyte Software](#) and [MyOtherDrive.com](#).

For those looking for genuine document management, which includes integration with Microsoft Office applications, document profiling, version control, full-text indexing, and profile-based security, the leader is [NetDocuments](#). Other options

include a hosted version of [Alfresco](#) and [CentralDesktop](#).

4. Hosted Exchange Server With BlackBerry and SharePoint

Many free email services exist, including, Yahoo, Gmail, and AOL. Please read their terms of service. There is, however, an alternative. You can subscribe to a hosted Microsoft Exchange Server. Many of these services also include [Microsoft SharePoint](#) which can function as a Web-based document repository.

You can easily configure Microsoft Outlook to pull data from a hosted Exchange Server. The benefits of hosting include security, anti-virus, spam protection, patches and updates, backups, and archiving. My company uses a service from [One Web Now](#), which includes BlackBerry Enterprise Server and Sharepoint.

Microsoft itself offers a hosted Exchange service. Other providers include [Intermedia](#), [Rackspace.com](#), [Aptix Mi8](#), and [SherWeb](#).

THE DOWNSIDE OF CLOUD COMPUTING

When I discussed this article with some of my friends in the hardware business, they asked me to point out some of the "tradeoffs" of moving entirely to the cloud. Their chief concern is usually security followed by data ownership, access, and data-lockin.

1. Security

The argument for security risk is that if your "data" is stored in the cloud, a host of bad guys will

see your confidential information either by intercepting your communications or by hacking into the data repository of your service provider. Further, your service provider could be compelled by a subpoena to disclose privileged documents that you maintain.

The reality is that most service providers provide for secure encrypted data transfer. As for hacking into the repository, I would take 10:1 odds favoring the security of any cloud provider against that of a network administrator of a small law firm when it comes to intrusion protection. This is not to say that these services cannot be hacked. Rather, a hacker would have a field day with most servers.

As for risk of subpoenas, don't confuse subpoenas of public email service providers like AOL with subpoenas of cloud services providers. The terms of service agreements are quite different. Enough said.

With a cloud service provider, there are up-time commitments, generally in the range of 99.9% to 99.999%.

2. Data Ownership

The argument on data ownership is that you have no idea where your documents and data are being stored so you cannot retrieve your data and documents

on short notice. On a server, you know your files are on the hard drive. But do you know where all your copies of those files reside? There may be backup copies on a tape drive, flash drives, or a USB drive. There may also be copies on each of the PC's in the network. And there may be copies on a backup service (which could be in the cloud). And then there are copies as attachments to emails which are ... well ... everywhere.

With a service provider, there is a service agreement that specifies rights with respect to data ownership. You should read that agreement. Most, but not all, provide that the subscriber owns the data, and most, but not all, provide a mechanism for a local backup of all the data on a periodic basis. While you may not know "where" your data is, you will know that it accessible, stored on redundant servers, and regularly backed up.

3. Access Risk

What if the Internet goes down? What if the service provider is offline? What if I have no Internet access? If you are working out of an office and the Internet goes down, the reality is you will have problems conducting business anyway since so much business is conducted via email. If your server goes down, you may be entirely out of business anywhere from an hour to several days.

With a cloud service provider, there are up-time commitments, generally in the range of 99.9%

to 99.999%. If your access to the Internet goes down or you are in transit and don't have an Internet connection, a number of the service providers support "off-line" mode or a local cache of data. If you are out of the office, in fact, remote access to the cloud is usually superior to remote access to your server.

It is my belief that more and more lawyers will move out into the cloud, taking advantage of the cost savings and flexibility available.

4. Data Lock-In

The argument goes, "If you use The Cloud, what happens if you want to change service providers or move the data back to your server?" You are "locked-in" to the provider and cannot switch without incurring substantial costs. With regard to document hosting, most cloud providers allow you to restore your files to your PC at any time, often with a convenient batch procedure, or even a drag-and-drop option.

With regard to practice management software, the dirty secret of all systems, both client-server and the cloud, is that database systems are sticky. Moving data from one database to another is expensive because each database is designed differently.

Some client-server case management systems completely lack any built-in export procedures. By contrast, most cloud offerings in the area of practice management are actually designed for data mobility. Salesforce.com and SeibelCRM, for example, enable you to schedule a complete local backup in under a minute. You receive an email notification when the zip file(s) containing your data and documents are ready for download. Using an add-on called DBAmp, you can even maintain a local SQL database that mirrors your AdvologixPM database.

CONCLUSION

Cutting the cord is not for everyone. Having a 100-pound hunk of steel sitting in your office is the ultimate security blanket. Properly maintained and configured, it will continue to meet most of your needs. However, switching to the cloud has real benefits. It enables freedom of movement. It's flexible, enabling you to pay for only as much computing storage and processing power as your need. It's scalable as it can support anywhere from 1-100 users with no costs other than the per user subscription fee. It's open, enabling you to grant secure access to clients via custom

portals. It's safe. Because there is no server there is no need for disaster recovery in the event of fire or disaster. Get a new laptop and you are back up and running.

So, is "cutting the cord" right for you? It is my belief that more and more lawyers will move out into the cloud, taking advantage of the cost savings and flexibility available. You may well decide that the cloud is not for you and that you want to keep your server. Still, it can't hurt to try some of these cloud applications. Never forget — many people never believed that the word processor would replace the reliable typewriter.

Seth Rowland, Esq. was named TechnoLawyer Consultant of the Year in 2002 for his contributions to TechnoLawyer on the subject of document assembly and law practice automation. He is a nationally known technologist whose company, [Basha Systems LLC](#), has helped many law firms build customized practice management and workflow solutions. Please feel free to visit [his blog](#) for the latest on document assembly and practice management.

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