

Technology

Up in the Clouds

Managing the Risks and Benefits of Cloud Computing in Your Practice

BY DANIEL J. SIEGEL

In the past few months, I have been lecturing to a variety of groups about managing the risks and benefits of technology in their practices, focusing on emerging issues raised by technology. In this article, I will address what is perhaps the most cutting edge technology, cloud computing, and the ways in which it is changing how firms operate. I will also discuss how to address the risks and benefits this new technology presents.

The first question, of course, is “What is cloud computing?” The answer is relatively simple. In the September 2010 issue of *Maximum PC*, columnist Quinn Norton defined the concept:

Cloud computing is a fancy way of saying stuff’s not on your computer. It’s on a company’s server, or many servers, possibly all over the world. Your computer becomes just a way of getting to your stuff. Your computer is an interface, but not where the magic happens. But there’s a catch. When our stuff is in the cloud, it’s not covered by the same laws about privacy and access by law enforcement that it is when it’s in our houses or on our own computer.

While this explanation sounds a bit cynical, it is actually quite accurate. In essence, when you store your data on the “cloud,” you generally save money because staff can use terminals or less expensive computers when accessing the cloud.

Thus, the most tangible benefits for many firms are lower overhead, the reduction in hassle maintaining and/or upgrading their systems and, depending upon the configuration of the system, the increased ease of access, because these web-based systems may generally be accessed at anytime. Because of these cost savings, cloud computing is becoming an increasingly popular and often less expensive alternative to installing software on an onsite server in a law office.

As a general rule, there are three distinct characteristics that differentiate cloud computing from more traditional methods by which office data is hosted:

- It is sold on demand, typically by the minute or hour;
- It is elastic – users can have as much or as little of a service as they want at any given time; and,
- It is fully managed by the provider.

Although cloud computing can come in many forms, for law firms, it will generally fall into two technical categories: SaaS (software as a system) or PaaS (platforms as a system), although most users will never know or understand the difference. Regardless of which category is used, if you are not careful, you will find yourself or your firm at the mercy of the cloud provider in terms of how your data is stored, how you access it, and how secure it is.

As Norton also noted in her *Maximum PC* column, there are also risks involved in using cloud computing:

But what might be worse is that your access to your data in the cloud is predicated on a terms and services contract that you clicked “agree” on without reading, which may give your cloud provider everything up to and including the right to extort your first born in exchange for access to your own data.

Obviously, for lawyers, the potential for and dangers related to compromising client confidentiality is quite real. That is why, more than many other users of the cloud, attorneys must take great care to assure that any data stored offsite remains confidential and not accessible to anyone other than those persons authorized by their firms.

The most common forms of cloud computing are case and matter management programs, document management systems, document and collaboration systems (even ones as basic as Google Docs), digital dictation services, and time and billing services. For some firms, especially smaller firms without an onsite IT staff, using cloud computing allows them to focus more on practicing law because the cloud computing provider operates, updates and maintains the practice management software. In addition, some firms are not using the cloud for case or firm management, but do use it either to store client data or to backup their data offsite.

Electric Car Boom



Two new green vehicles are getting a lot of good press lately.

Nissan's zero-emission Leaf (above) has been named the 2011 European Car of the Year. It's the first time in the 47-year history of the award that the honor has gone to an electric car.

The 100-percent electric Leaf went on sale in the United States in December and sells for \$32,780 before federal tax credits.

The Chevrolet Volt, officially introduced in late November, was named *Motor Trend* magazine's Car of the Year.

The hybrid Volt is a plug-in car that can travel about 40 miles on battery power before a gasoline engine kicks in to generate electricity for more driving. Chevrolet will build 10,000 Volts in the next year. The \$41,000 Volt went on sale in December. ■

Desktop Meets PDA

Want to access your work computer from your cell phone? Try LogMeIn Ignition, which lets you access files and software. You can even use software that isn't available on mobile devices (like LotusNotes) by remotely controlling a computer that has the software installed. To use LogMeIn Ignition, you need to install LogMeIn Free or LogMeIn Pro on the computers you wish to remotely access.

You can get LogMeIn Ignition for the iPad, iPhone, and Android mobile devices (\$29.95), as well as for Windows PCs (\$39.95 /year subscription). Ignition can be used without a browser (unlike LogMeIn Free and LogMeIn Pro) since it's a self-contained application that can be locally installed or kept on a USB stick.

LogMeIn Ignition, in conjunction with LogMeIn Free or LogMeIn Pro, provides end-to-end encryption to protect data transmissions between your mobile device and a remote computer. ■



This cost reduction comes with a corresponding caveat: if your online access goes down, so does your access to your firm's data. Plus, if your provider closes unexpectedly, you may lose your ability to access data for an extended time, or even permanently.

The use of cloud computing also raises ethical and practical concerns. First, attorneys have an ethical duty under the Rules of Professional Conduct to protect sensitive client data and to ensure that confidential data is preserved. Comments 23 and 24 to Rule 1.6 state:

[23] A lawyer must act competently to safeguard information relating to the representation of a client **against inadvertent or unauthorized disclosure** by the lawyer or other persons who are participating in the representation of the client or who are subject to the lawyer's supervision. See Rules 1.1, 5.1 and 5.3.

[24] **When transmitting a communication that includes information relating to the**

representation of a client, the lawyer must take reasonable precautions to prevent the information from coming into the hands of unintended recipients. This duty, however, does not require that the lawyer use special security measures if the method of communication affords a reasonable expectation of privacy. Special circumstances, however, may warrant special precautions. Factors to be considered in determining the reasonableness of the lawyer's expectation of confidentiality include the sensitivity of the information and the extent to which the privacy of the communication is protected by law or by a confidentiality agreement. A client may require the lawyer to implement special security measures not required by this Rule or may give informed consent to the use of a means of communication that would otherwise be prohibited by this



Rule. (emphasis supplied)

Thus, the question arises as to what are the ramifications of storing confidential client files via the cloud. Clearly, lawyers may store information in the cloud only if the methods of transmission and storage are secure and protect against unauthorized access or disclosure.

At a minimum, and in order to meet the standard of reasonable care, attorneys should:

- Be knowledgeable about how providers will handle the data entrusted to them;
- Include terms in any agreement with the provider requiring the provider

to preserve the confidentiality and security of the data; and,

- Include terms in any agreement with the provider requiring the provider to assure, should data be removed, or the contract terminated, that all confidential data will be destroyed in a method that assures that no other persons can ever access the data. Otherwise, a firm's data could reside on a server indefinitely, and fall prey to a savvy hacker.

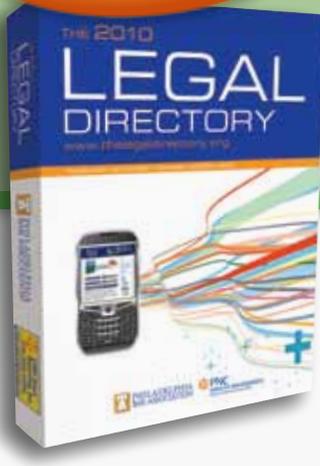
In sum, cloud computing has tremendous potential to reduce overhead and to increase law firm productivity, through easier access, and the use of

collaborative tools (such as Google Docs) and other applications. It also can be a trap for the unwary if they merely contract with a vendor without conducting proper due diligence. With these reasonable precautions, however, cloud computing has the potential to grow as a method of accessing software and storing client data. ■

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The tablet computing sector has some new entries that give the Apple iPad worthy competition. BlackBerry's PlayBook (left) and Samsung's Galaxy Tab (right) are both touch-screen models with 7-inch displays. Both weigh less than one pound and allow users to surf the web, e-mail and watch video as well as use apps. The Galaxy Tab is available from Verizon Wireless for around \$600. The Playbook, expected in early 2011, has been rumored to sell for less than \$500.

FEATURES	BLACKBERRY PLAYBOOK	SAMSUNG GALAXY
DISPLAY	7.0 INCH LCD	7.0 INCH TFT-LCD
OPERATING SYSTEM	BLACKBERRY TABLET OS	ANDROID 2.2
PROCESSOR	1 GHZ DUAL-CORE	CORTEX A8 1GHZ
CAMERA	3 MEGAPIXEL HIGH-DEFINITION FORWARD-FACING CAMERA; 5 MEGAPIXEL HIGH-DEFINITION REAR-FACING CAMERA	3 MEGAPIXEL WITH AUTO FOCUS AND LED FLASH; 1.3 MEGAPIXEL FRONT CAMERA FOR VIDEO TELEPHONY
APP AVAILABILITY	BLACKBERRY APP WORLD	ANDROID MARKET, SAMSUNG APPS
CONNECTIVITY	WIFI 802.11 A/B/G/N, BLUETOOTH 2.1	WIFI 802.11N, BLUETOOTH 3.0
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