

Cloud Computing:

A Practical Guide for Small Firms



Richard Hugo-Hamman,
Managing Director,
LEAP Legal Software

IT HAS BEEN 20 YEARS SINCE LOCAL AREA NETWORKS BECAME COMMONPLACE. BEFORE THEN, DESKTOP COMPUTERS WORKED IN ISOLATION AND SHARING DATA WAS DIFFICULT AND CLUMSY. LOCAL AREA NETWORKS IN COMBINATION WITH CLIENT/SERVER SOFTWARE SOLVED MANY OF THESE PROBLEMS. HOWEVER, WHAT LOCAL AREA NETWORKS GENERALLY HAVE FAILED TO SOLVE WELL IS THE PROBLEM OF REMOTE ACCESS. RICHARD HUGO-HAMMAN DISCUSSES THE ADVANTAGES OF CLOUD COMPUTING.

Despite the best efforts of many software companies, remote access technologies never provide a fully adequate solution. They can be slow, expensive to maintain, won't work if the Internet fails, drain Server performance and are effectively no more than a way to send screen images, keystrokes and mouse movements from one computer to another. They are a shortcut attempt to circumvent the fact that local networks are designed to work in a physically distinct location, such as a single office or home.

Flash forward to 2013. Working from home, in branch offices and offsite is commonplace and the desire to install and maintain expensive and complex Server environments is waning: what is needed is a new way to access data that is location independent, fast, reliable and server-less... Enter the Cloud!

'Cloud Software' is bandied about

a lot. What does it mean?

1. Your data is hosted on a Server in a location remote from your office in a secure data centre.
2. The Internet is used to transfer data from your workstation to the Server and back again.
3. Each workstation in your firm has access over the Internet to the same data that is located on the server. As soon as data synchronises, it is available to all your users.
4. The software that you use on your workstation may be a Windows application on your desktop or, for software with restricted or limited functionality, may just work in a Browser.

You may be familiar with some Cloud products already, for example, your online banking portal, Facebook, Hotmail, Gmail and Salesforce are all examples

of successful Cloud products. In these cases the data is all stored on the remote Server. Security is good and the software is reliable. Cloud software is already widely used and well known.

The user interface

There are two common interfaces for Cloud software:

Browser only

Many Cloud products operate purely in the browser. You view and manipulate your data in a browser and that data is only useable when you are connected over the Internet. The positive aspect of this is that you can access the application and your data from any device connected to the Internet.

The negatives are:

- You cannot work offline;
- Your work can be frustrating

because of poor Internet speeds;

- Functionality is limited. It is not possible to perform many of the more complex programming tasks in a browser only;
- Integration is restricted. It is difficult to get data to move elegantly and reliably from a browser into a desktop application;
- You effectively have to abandon all the productivity benefits that the Windows environment provides.

A Windows application

This Cloud solution entails installing a small Windows application on your desktop which communicates with the Server over the Internet. iTunes is probably the most well known example of this type of Cloud Solution. It has its own database (now iCloud), it connects to the Internet for other data and from time to time you need to upgrade the application. Data is stored locally on your workstation and synchronises automatically to the remote Server whenever the workstation is connected to the Internet, in the same way as email synchronises on a smartphone.

The advantages of this approach are:

- You have all the power of Windows available to you;
- Integration, particularly with Microsoft Word, is proven successful;
- You can work offline (with some limitations);
- Your staff don't need re-training; and
- It is more secure, and not subject to any spyware.

Microsoft Windows running on the Windows operating system is used by 95% of law firms. The products

are feature rich, the computing capacity is powerful, and people know how to use them. Creating sophisticated merge documents, which is such a crucial activity, requires the power of Windows on the desktop.

Your productivity is also insulated from Internet speed. Because you have most of the matters and documents that you work on available on your laptop/workstation, you are not constantly reliant on the speed of your Internet connection.

This design allows you to maximise productivity and gain the benefits of a Cloud Solution.

No servers for your practice management system

The need to maintain and upgrade Servers is a considerable nuisance and cost. Not only does the hardware age, but operating systems change, applications get more sophisticated, and of course the amount of data grows significantly over time.

You don't have to concern yourself with the acquisition, support and upgrading of Servers. Cloud providers typically have large hosted Servers in an ultra secure facility that do all the work. The issues relating to scale, protection from malicious attacks and the like are no longer your concern.

You no longer need to worry about:

- Backups;
- The Server hardware;
- The operating system;
- The Windows version on the Server;
- Virus protection on the Server;
- Defence from malware attacks;

- The amount of data you have;
- Speed and performance; and
- Air conditioning, fire protection and other server environment necessities.

It also means that you have access to the highest quality infrastructure – beyond the IT budget of most small firms.

Software version upgrades

Software version upgrades are vastly simplified and faster. If the application is purely Browser based then you will of course just get the new version when you log in. If the User Interface is a Windows application, then when a new version becomes available you will be asked if you want to have the software automatically updated. In just a few minutes you will have the very latest software. This results in minimal disruption and minimal cost.

Mobility: work from anywhere and work anytime!

Another great benefit of cloud software is that you can work from anywhere. All the complications associated with remote access, for example, the need for a separate Terminal Server, VPN's, remote desktop sessions are eliminated.

Multiple branches

It has never been easier to deal with the problems and costs associated with running small branch offices. Provided an Internet connection is available all the concerns about the technology and database management are removed. You will work as one firm like never before.

Working from home

With difficulty of travelling into

and out of our big cities, more and more people want to work from home. 54% of new lawyers are women. Many will become mothers who require more flexible working arrangements. Their needs are perfectly met with this solution.

Work when travelling

Work travel is now part of most lawyers' work lives. With a cloud solution you don't have to worry about how you are going to access your office systems whilst travelling. You have your work with you and connect to the Server and collaborate with your colleagues **as if you are in the office.**

Peace of mind # 1 – data security

You no longer need to worry about where you locate your Servers and who has access to them. All Server considerations are the responsibility of the provider.

Data security on the server

Data is typically stored on servers that are located in commercial data centres. You should expect that you would achieve levels of security for your data which are comparable to those required by the leading banks and airlines, and the data is kept in Australia.

Server security considerations include:

- Anti-virus and the other network intrusion protection solutions;
- Data Centre physical access security including biometric scanning, and 24/7 interior and exterior CCTV surveillance;
- Redundancy of power supplies and internet provision;
- Multiple geographic location of servers;
- In-building uninterruptible power supply systems (UPS),

battery backup and multiple diesel-powered generators;

- Fire detection and suppression mechanisms;
- Disaster recovery mechanisms, so in case of flood, earthquake or other natural disasters, your data is safe in another location which can be recovered quickly and seamlessly.

Communication between the server and your workstations

Most reliable Cloud products will utilise what is known as Secure Sockets Layer (SSL) and RSA encryption, industry standard encryption technologies to ensure that all communication between your computer and the host server is encrypted and protected from interception. SSL and RSA are extremely powerful technologies which allow for completely secure communication and are also used by the Banks to protect your banking data.

Workstation security

You still need to ensure that your desktop or laptop is properly secured with a firewall, antivirus protection, and the latest security updates for your operating system.

Password security

As always, it is important to have a good password and to maintain secrecy.

Peace of mind # 2 – backups

Traditional backup in PC environments are still a problem even after 20 years. There is a huge responsibility to ensure:

- A backup system in place;
- The backup runs successfully;
- It backs up all data;
- The data can be restored;

- Backups are stored off-site;
- Appropriate backup are available in case of disaster;

With a Cloud solution you no longer need to worry about backups as the provider of the host servers is responsible for making backups.

Simplification means IT cost savings

Cloud computing simplifies a lot of previously complex technology issues. All of these translate directly into cost and time savings for you.

Think of the cost savings of an affordable monthly subscription fee. What is now available to you with no upfront capital payments is access to what used to be very expensive equipment and IT infrastructure accessible by only the largest law firms. Cloud is affordable, including all the previously mentioned benefits, in one simple monthly fee for each User.

A word of caution

Because the 'Cloud' is enjoying such prominence at the moment, some providers are passing off older technologies as Cloud solutions.

LEAP Office Cloud will transform the way you manage your practice and the way you practice law.

Contact LEAP today on 1300 886 243 to find out more or visit www.leap.com.au.

Richard Hugo-Hamman is Managing Director of LEAP Legal Software and has been involved in developing software for small law firms for more than 20 years. He may be contacted at richard.hugo-hamman@leap.com.au or on his mobile 0409 846 512. You can also visit www.leap.com.au for more information.