your career

LAW INSTITUTE VICTORIA

SESSION MATERIAL

Lawyers in the Cloud

Securing your client's data

MONDAY 24 AUGUST, 5.30–7PM
LIV LECTURE THEATRE

LAW INSTITUTE VICTORIA

Lawyers in the Cloud: Securing Your Client's Data

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Cloud Computing for Lawyers

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Overview

- What is the cloud?
- Issues for lawyers and law firms.
- Where is the cloud?
- Who controls and owns the data in the cloud?
- Security of the cloud.
- Privacy of the cloud.
- Communicating without paper.
- Retaining data without paper.
- Existing cloud providers.
- Tips and tricks.

To cloud or not to cloud...

...is no longer the question!

"I'm not going to the cloud because I don't trust it"

"Everyone seems to be in the cloud, so it must be safe"

To cloud or not to cloud...

ansarada

Gmail by Google

LinkedIn

xero

skype

MyCase

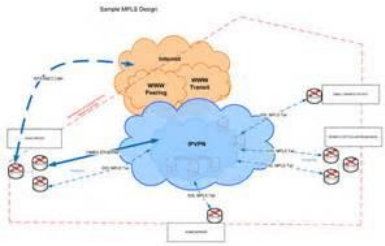
Available on iTunes

Dropbox

What are the origins of cloud?

"The cloud" is simply the new term for hosting – now with mass-market appeal.

Visio



What is the cloud?

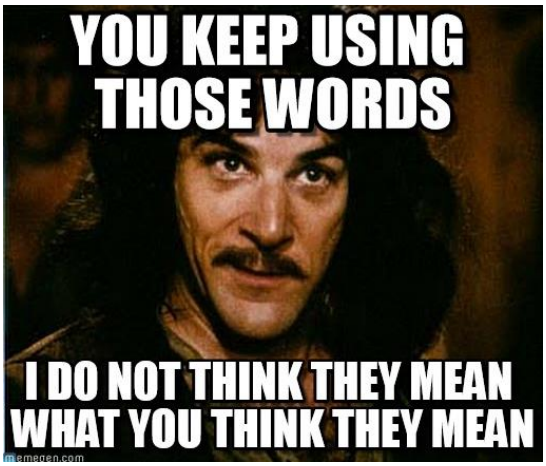
The provision of Information Technology infrastructure as a service rather than as a product – ie you share someone else's infrastructure rather than have your own.

"Outsourcing and renting back IT infrastructure"

Three core types of services:

1. Software as a Service (SaaS)
2. Infrastructure as a Service (IaaS)
3. Platform as a Service (PaaS)

Also, training-as-a-service, service-as-a-service, Disaster-recovery-as-as-service



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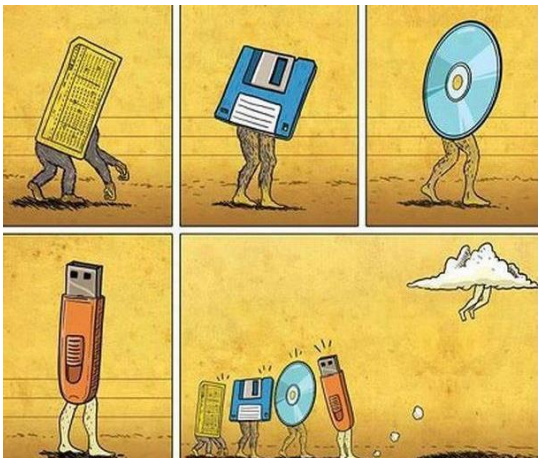
What is the cloud?

Traditional On-Premises	Software as a Service (SaaS)	Infrastructure as a Service (IaaS)	Platform as a Service (PaaS)
Actual software, hardware and ecosystem on premises	Virtual Software or apps	Virtual hardware	Virtual ecosystem
Server and desktops located on premises Software accessed from devices	Accessing software via the internet rather than locating it on your device	Outsourcing your server and computer environments off-premises	Building your IT environment on an echo system located off-premises
	Examples Hotmail, DocuSign, Ansarada, Affinity, LEAP, Dropbox, iTunes, Office 365	Examples Amazon, Rackspace, Microsoft	Examples Azure, AWS.

The Cloud - Issues for Law Firms

1. Security.
2. Compliance/Privacy.
3. Continuity/Risk/Recovery.
4. Functionality.
5. Performance.
6. Cost.



Where is the cloud?

The cloud is everywhere

The cloud can be anywhere you want it to be:

- Your own “private cloud”
- Off-shore services
- Local services
- Off-shore vendors with local services

Where is the cloud?

"ASD [Australian Signals Directorate] strongly encourages agencies to choose either a locally-owned vendor or a foreign-owned vendor that is located in Australia and stores, processes and manages sensitive data only within Australian borders. Note that foreign-owned vendors operating in Australia may be subject to foreign laws such as a foreign government's lawful access to data held by the vendor." – "Cloud Computing Security Considerations" ASD Discussion Paper
http://www.asd.gov.au/publications/protect/cloud_computing_security_considerations.htm

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Who controls the data in the cloud?

- You need to!!!
- Government regulation.
- Terms and conditions.
- Escrow especially with smaller providers .
- Separate back-up or DRaaS.
- Encrypting, tagging, audit trail.
- Insolvency or disputes with provider.

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Security of the cloud

The internet and email are inherently insecure

- Lavabit, PRISM, Wikileaks, WiFi, BYOD, passcodes.
- Your ISP (and your recipient's ISP) can examine all the data you send and receive via the internet as a side effect of providing your internet connection. Your email provider (and your recipient's email provider) can examine all your email simply as a side effect of providing your email service.
- Security is inversely proportional to useability: eg Tor, multi-factor authentication.

Security of the cloud

A law firm's expertise is providing legal advice, not IT security.

- Amazon Web Services: "Security is our number 1 priority". "Security at AWS is job zero…AWS and its partners offer over 700 tools and features to help customers meet your security objectives around visibility, auditability, controllability and agility. This means that you can create a resilient environment with the security you need, but without the capital outlay, and at a much lower operational overhead than in an on-premises environment." AWS website – https://aws.amazon.com/security
- Microsoft: "Microsoft understands that for you—our enterprise customer—to realize the benefits of the cloud, you must be willing to entrust your cloud provider with one of your most valuable assets—your data... Microsoft makes security and privacy a priority at every step, from code development through incident response." Microsoft website – https://azure.microsoft.com/en-us/support/trust-center
- iiNet and Dallas Buyers Club: "We don't support or condone copyright infringement but we couldn't sit by and have our customers potentially bullied by the process of speculative invoicing." "iiNet would never disclose customer details to a third party, such as movie studio, unless ordered to do so by a court. We take seriously both our customers' privacy and our legal obligations." iiNet Blog – http://blog.iinet.net.au/not -our0kind-of-club

ASD Certified Cloud Services

Security & compliance
Certification & classification level for government agencies.

Cloud provider	Cloud service	Classification level
Amazon Web Services	EBS, EC2, S3 and VPC	Unclassified DLM
Macquarie Telecom	GovZone (LAUNCH)	Unclassified DLM
Microsoft	Azure	Unclassified DLM
Microsoft	Office 365	Unclassified DLM

http://www.asd.gov.au/infosec/irap/certified_clouds.htm

Vulnerability of the cloud versus vulnerability on-site

Cloud (eg Tier 4)	On-site
Power redundancy - power supply back-ups to data centres	No power supply back-up so vulnerable to power outage
Internet redundancy – multiple internet connection to data centres	Only one internet connection so vulnerable to that connection going down
Hardware redundancy – use of multiple hard drives so that a hard-drive failure will not impact on functionality	Whilst mirroring and virtualisation can protect against hardware failure, delays and down time can arise
Fire and flood – data centres are replicated in multiple locations so that a disaster in one location will not impact on data centre	A fire or flood or earthquake onsite can be fatal - eg Brisbane or Christchurch
Theft – generally higher level of security for data centre than for ordinary business	No greater level of security than ordinary business

Security of the cloud

"The use of shared computing services represents a significant change to the way technology is employed. While share computing services may bring benefits, such as economies of scale, they also bring associated risks"

Information Paper, APRA, 6 July 2015

Example of security & privacy by a cloud provider

Security & Privacy Features of Microsoft Office 365
• We restrict physical data center access to authorized personnel and have implemented multiple layers of physical security, such as biometric readers, motion sensors, 24-hour secured access, video camera surveillance, and security breach alarms.
• We enable encryption of data both at rest and via the network as it is transmitted between a data center and a user.
• We don't mine or access your data for advertising purposes.
• We use customer data only to provide the service; we don't otherwise look in your mailbox without your permission.
• We regularly back up your data.
• We won't delete all the data in your account at the end of your service term until you have had time to take advantage of the data portability that we offer.
• We host your customer data in-region.
• We enforce "hard" passwords to increase security of your data.
• We allow you to turn off and on privacy impacting features to meet your needs.
• We contractually commit to the promises made here with the data processing agreement (DPA). For more information about the DPA, visit the Data Processing Agreement section of the Independently verified page.

Privacy Obligations

Australian Privacy Principles

- If revenue over $3 million, may be applicable to law firms.
- APP 11: must take reasonable steps to protect personal information from misuse, interference and loss and from authorised access, modification or disclosure.
- APP 12: must provide access to a person's personal information upon request of that person.
- APP 8: If disclosed to an overseas organisation, can be responsible for the use of the information by the organisation.

Privacy Obligations

What is disclosure?

•Not defined in Privacy Act.

•APP Guidelines say that an APP Entity discloses personal information when it makes it accessible to others outside the entity and releases the subsequent handling of the personal information from its effective control (B.64).

•Disclosure is to be contrasted with "use". See 8.14 of APP Guidelines: "For example, where an APP Entity provides personal information to a cloud service provider located overseas for the limited purpose of performing the services of storing and ensuring the entity may access the personal information, this may be a "use"" provided:

1. there is a binding contract between the parties for the information to handled only for these limited purposes;
2. the contract requires subcontractors to agree to the same obligations; and
3. the contract gives the entity effective control of how the information is handled.

Example of compliance by a cloud provider

Top 10 compliance standards of Office 365
• HIPAA • DPAs • FISMA (US) • ISO 27001 • European Union Model Clauses (EU) • US-EU Safe Harbor Framework (US/EU) • FERPA (US) • SSAE 16 • PIPEDA (Canada) • GLBA

Communicating without paper

- A transaction is not invalid because it took place wholly or partly by means of one more more electronic communications (ss8(1) Electronic Transactions Act 1999 (Cth) (ETA) and 11(2) Electronic Transactions (Victoria) Act 2000 (Vic) (ETA Vic).
- A requirement to give information in writing is satisfied by an electronic communication provided it is readily accessible and the party receiving the information consents (ss 9(1) ETA Cth and 8(1)(a) ETA Vic).
- If, under a law of the Commonwealth [or the relevant jurisdiction] a person is required to retain for a particular period a document that is in the form of paper, an article or other material, that requirement is taken to have been met if the person retains, or causes another person to retain, an electronic form of the document throughout the period where Sections 12(2) ETA and 11(2) ETA Vic.
- The information must remain complete and unaltered (section 12(3) ETA and 11(3)).
- Sections 12(4) and 11(4) ETA Vic, same applies for electronic communication (and the information must remain complete and unaltered – subsection (5).
- Arguably, the printing of an email with attachments whereby the attachments are not clearly identified or stored with the email means subsection (5) is not being met.

Billing and retaining data without paper

Billing

- A bill is to be given in accordance with the Uniform Rules (section 189 of the Legal Profession Uniform Law (**Uniform Law**)).
- A law practice must not commence legal proceedings to recover legal costs from a person who has been given a bill until at least 30 days after the date on which the person is given the bill (section 194(2) of the Uniform Law).
- A bill given by a law practice to a client is to be given…in the case of a client who has consented to receiving bills sent electronically to the client…by means of the client's usual email address (or another email address… specified by the client)…or different arrangements agreed to by the client…by transmitting the bill electronically in accordance with those arrangements – Rule73(1) Legal Profession Uniform General Rules 2015.

Scanning Files to Electronic File

- A solicitor or law practice may destroy client documents after a period of 7 years has elapsed since the completion or termination of the engagement, except where there are client instructions or legislation to the contrary – Rule 14.2 of the Legal Profession Uniform Law Australian Solicitor's Conduct Rules 2015. In other words, the obligation to make reasonable efforts to seek the consent of the client has been removed. I would also suggest that cost agreements include an explicit consent to destroy hard copy documents if they are scanned to the file.

Why the cloud?

1. Costs (ie upgrading servers and software). From capital to revenue account.
2. Protection of data (ie flood, fire, theft).
3. Absolute access (ie not restricted by premises access).
4. Ease of scalability up or down.
5. Reduced maintenance and ongoing servicing.
6. Always have latest software (no need to upgrade).
7. Outsource responsibility for security and privacy.
8. Client functionality – working collaboratively.
9. Agility and flexibility.

Legal firms using Office 365

- Allens Arthur Robinson
- Clayton Utz
- Gadens Lawyers
- Gilbert & Tobin
- Hall & Wilcox
- Hunt & Hunt Lawyers
- Maurice Blackburn
- Minter Ellison
- Victoria Legal Aid

Tricks and Tips

1. Take it slow (eg hybrid). Email. Dictation. Practice Management. Server.
2. Read (and negotiate) the service terms of conditions.
3. Consider an escrow arrangement.
4. Consider a DRaaS solution.
5. Encrypt.
6. Multi-factor authentication.
7. Implement password policy.
8. Bigger is probably better.
9. How fast is your Internet?
10. Mobile Device Management - BYOD.

Want to get to the cloud or know more?

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