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Data Management Session: Privacy, the Cloud and Data Breaches



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IACCM APAC – Australia
Sydney, 1 August 2012

Overview

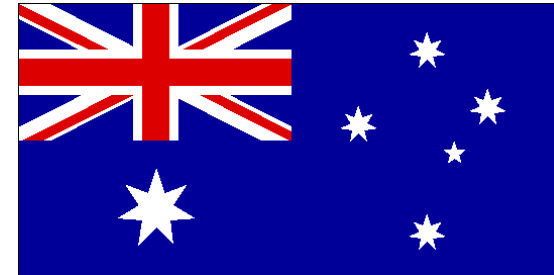
- Changing privacy regulation across the globe



- Cloud computing & privacy risks
- Safeguards
- Data breaches

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Australia



- Privacy laws under review since 2006
- Privacy bill tabled by Commonwealth Government on May 23, 2012
 - Australian Privacy Principles
 - Positive credit reporting
 - Increased powers for Privacy Commissioner and civil penalties

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Asia-Pacific

- New Zealand: Review of Privacy Act – Law Commission's recommendations



- APEC: finalisation of the Cross-Border Privacy Rules system
- Asia: a flurry of activity in many jurisdictions, as privacy laws are adopted and modified

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Asia

Country	Law	In Force	Coverage
Vietnam	Law on Protection of Consumer's Rights, 2011	Yes	Private sector, in commercial transactions
South Korea	Personal Data Protection Act, 2011	Yes	Public and private sectors
India	Information Technology Act, 2000 and IT Rules, 2011	Yes	Private sector
Taiwan	Personal Data Protection Act, 2010	Not yet	Public and private sectors
Malaysia	Personal Data Protection Act, 2010	Not yet	Private sector, in commercial transactions
Philippines	Data Privacy Act, 2011	Not yet	Public and private sectors
Hong Kong	Personal Data (Privacy)(Amendment) Ordinance, 27 June 2012	In October 2012	Public and private sectors
China	Draft regulations: strengthening the management of network access for mobile smart devices & internet information services, June 2012	No	Sector specific
Singapore	Personal Data Protection Bill to be introduced in 2012	No	Private sector

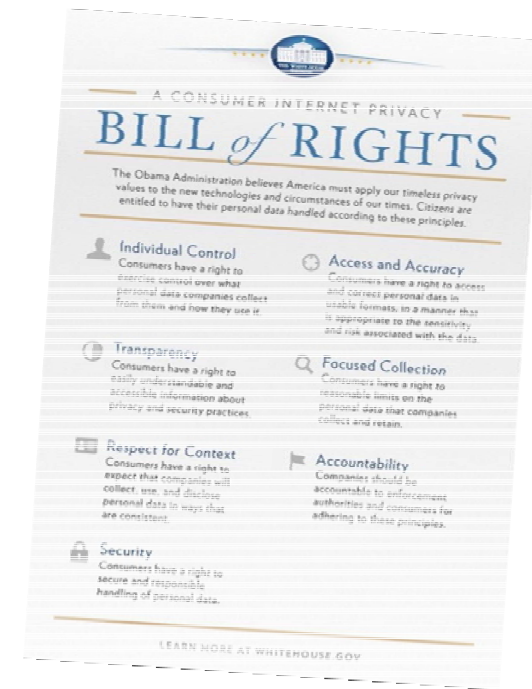
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United States



Blueprint for protecting consumer data privacy and promoting innovation in the digital economy

- Consumer Privacy Bill of Rights
- Development of opt-in, enforceable Codes of Conduct for companies



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European Union



Draft Regulation for the protection of individuals and their personal data

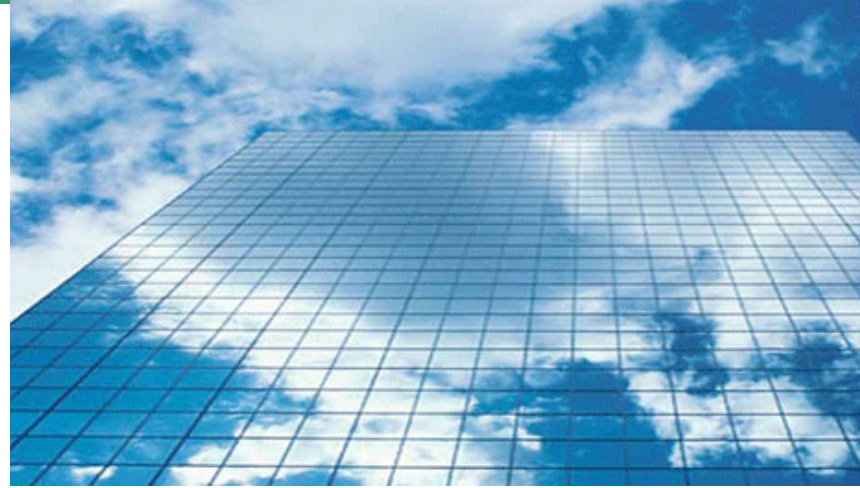
➤ **One law for the entire EU**



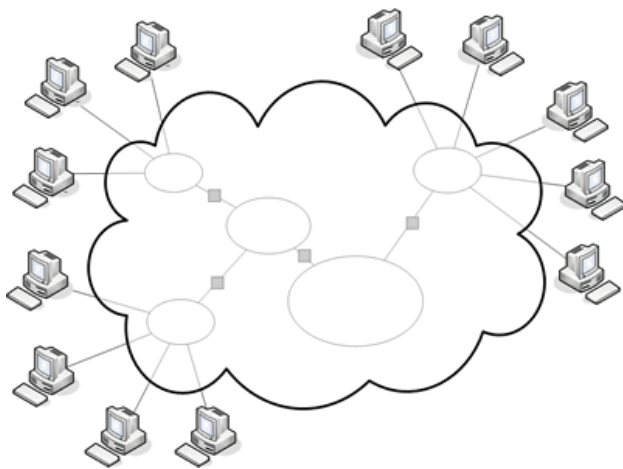
Strengthened Consent	Extraterritorial application
Accountability of processors	Significant penalties
Mandatory privacy officers	The right 'to be forgotten'
Data breach notification	The right of 'portability'

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Cloud Computing



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What is cloud computing?

“[A] model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable resources (eg, networks, servers, storage, applications and services)...”

National Institute of Standards and Technology (2011)

- On-demand service
- Efficiency
- Scalability
- Automatic updates
- Elasticity of demand and capacity
- Cost effectiveness
- Remote access

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Why engage a CSP?

- Connecting with multiple devices, business agility and cost-cutting were the top three reasons cited for adopting cloud services (TNS)
- 88% of Australian organisations saw improvement in their IT departments since adoption of cloud (TNS)
- The global cloud computing market is predicted to grow from \$40.7 billion in 2011 to more than \$240 billion by 2020 (Forrester Research 2011)

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U.S. Govt: Megaupload Users Should Sue Megaupload

Ernesto

June 11,
2012

167

MegaUpload

Print

The U.S. Government says it's in no way responsible for the millions of Megaupload users who have lost access to their files due to the criminal proceedings against the file-sharing site. Responding to a motion from one of the site's users, the Government explains that no "irreparable harm" has been done. Instead of targeting the Government, disadvantaged users should sue Megaupload or its hosting company Carpathia for damages.

Nearly half a year has passed since Megaupload's servers were raided by the U.S. Government, and still there is no agreement on how former users can retrieve their files.

This prompted Megaupload user Kyle Goodwin, a sports reporter who used Megaupload to store work-related files, to take action. Helped by the EFF, Mr. Goodwin filed a motion in which he demands that the court finds a workable solution for the return of his data, and that of other former Megaupload users.

Previous attempts to come to a solution have all failed.



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Preliminary privacy considerations

Types of data and privacy policies:

1. How sensitive or critical to your business is the data that the CSP will be processing/hosting?
2. Is the disclosure or transfer of information to the CSP authorised by your customers?
3. Whose privacy policy is the data subject to once outsourced – your business or the CSP's privacy policy? Who owns the data once with the CSP?

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Privacy risks

Location and retention of data	Transferring data	Changing provider
<p>Location of data and backups</p> <ul style="list-style-type: none"> Politically and environmentally stable regions? Legal jurisdiction of data How does the CSP know where the data is? With other clients' data? 	<p>Technical glitches</p> <ul style="list-style-type: none"> What happens when the data cannot be accessed or retrieved from the cloud service provider due to technical or other difficulties? 	<p>Unforeseen events</p> <ul style="list-style-type: none"> What happens when CSP is shut down? How is operational change handled - CSP bankrupt, sold, merged How is a disaster/hacking managed?
<p>Protection and Security</p> <ul style="list-style-type: none"> Encrypted whilst stored? Who controls the encryption keys? Physical security 	<p>Protection and Security</p> <ul style="list-style-type: none"> Encrypted in transfer? Who controls the encryption keys? 	<p>Updates</p> <ul style="list-style-type: none"> Can upgrades to software or other services be refused?
<p>Retention</p> <ul style="list-style-type: none"> What are the data retention policies? 	<p>Subcontractors</p> <ul style="list-style-type: none"> Does the CSP use third party subcontractors? 	<p>Portability</p> <ul style="list-style-type: none"> Can the data be easily relocated?

What's in the contract?

Among existing contracts for cloud-based services in Australia, many have problematic provisions:

- Not addressing access to or deletion of data, on service termination or breach of contract
- Limitation of liability for direct damages, exclusion of liability for indirect damages
- Unilateral variation of terms and conditions

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What's in the contract?

- Onus on the customer to ensure privacy rules are complied with
- Onus on the customer to take security measures, with no mention of what would happen in the event of a security breach
- No control over third parties who receive the personal information in the course of providing the service

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10 Safeguards

1. Read the contract and terms of service very closely and clarify any ambiguous provisions

2. Add cloud computing to your outsourcing and/or offshoring risk management frameworks

3. Ensure you are not violating any law or policy by putting personal information in the cloud

4. Don't put anything in the cloud that you wouldn't want a competitor or government to see

5. Clarify the rights of access, correction and deletion

6. Find out where and how the data will be kept

7. Find out the CSP's arrangements with third party subcontractors

8. Determine liability and accountability – what happens when things go wrong?

9. Have back-ups of everything

10. Establish your own security measures

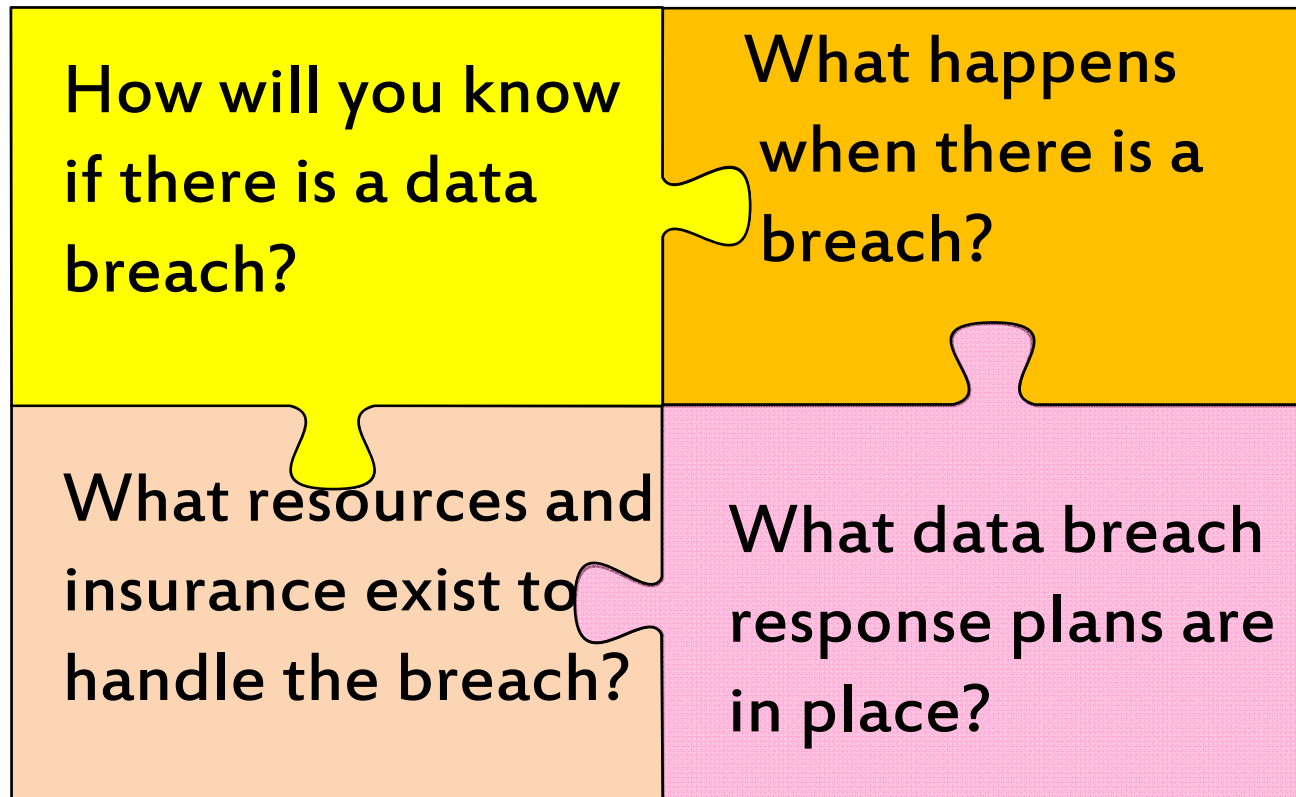


Data Breaches



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Data Breaches



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Sony Data Breach Highlights Importance of Cloud Security

by Czaroma Roman on May 9, 2011 · 6 Comments



The Sony data breach that compromised million customers' data has left the corporation a bit shaken and created woes for the cloud computing industry.

The shares of businesses that specialize in cloud computing had been

performing well for quite some time now. However, the massive cyber-attack including Amazon.com Inc's cloud computing center outage, has put the brakes on plans of some companies to move their operations into the cloud. VMware Inc, which sells software for building clouds, experienced 2 percent drop; while Salesforce.com Inc, a maker of web-delivered software, has declined 3 percent.

Five lessons from the Distribute.IT hosting disaster

Wednesday, 22 June 2011 12:01

Patrick Stafford

Like 12 Tweet 32 +1 0 Pin it Share 7

The cyber-attack that crippled Melbourne-based web hosting provider Distribute.IT has left thousands of customers furious, with the data of almost 5,000 websites now deemed completely unrecoverable.

The disaster has brought to light just how fickle the cloud can be. With a security breach earlier this week from DropBox and the cyber-attack against Sony, businesses everywhere are talking about cloud-based security.

0 Tweet +1

IT Security & Network Security News

Epsilon Data Breach Highlights Cloud-Computing Security Concerns

LinkedIn 17 Twitter 57 Facebook 59 +1 0 Share

By: Fahmida Y. Rashid
2011-04-06

[There are 0 user comments on this IT Security & Network Security News & Reviews story.](#)

The theft of email addresses from Epsilon could affect consumer trust, and organizations have to reassess the risks of outsourcing less sensitive data and processes.

As email-marketing company Epsilon continues to deal with the fallout related to the revelation that some of its clients' customer data has been exposed to a third-party, it becomes clear that this incident affects all service providers as organizations renew their focus on data security. In addition, this latest data breach calls into question how secure information is within a cloud-computing infrastructure.

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Impact of a data breach

- The average total cost per data breach in Australian organisations rose to \$2.16 million in 2011
- Having a data breach caused by a third party mistake cost on average 35% more per compromised record
- Malicious and criminal attacks are the main cause and are also the most expensive, at \$183 per record

(2011 Cost of Data Breach Study: Australia, Ponemon Institute LLC (sponsor Symantec), March 2012)

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Causes of data breach

Malicious or criminal attack (36%)

- Hackers or criminal insiders (employees, contractors, cloud providers, business partners) typically cause the data breach
- Viruses, malware, worms, trojans
- SQL injection
- Theft of data-bearing devices
- Social engineering

Negligence (32%)

- Negligent employee or contractor
- IT and business process failures

System glitch (32%)

(Based on data breaches experienced by 22 Australian companies within 10 industry sectors in 2011 – Cost of Data Breach Study: Australia, Ponemon Institute LLC (sponsor Symantec), March 2012)

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Responding to a breach

1. Contain the breach and do a preliminary assessment
2. Appoint lead person to manage (internal and/or external)
3. Evaluate the risks associated with the breach
4. Consider breach notification
5. Review the incident and take action to prevent future breaches

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Conclusion

- Data protection regulation increasing
- Privacy risks of cloud
- Safeguards
- Data breach is expensive
- How to respond to a data breach

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Further Information

- Data breach notification - A guide to handling personal information security breaches, Office of the Australian Information Commissioner, April 2012
http://www.oaic.gov.au/publications/guidelines/privacy_guidance/Data_breach_notification_guide_April2012FINAL.pdf
- Privacy in the Cloud: Key Questions, by Annelies Moens, Australian Corporate Lawyers Association, March 2012
Vol 22, Issue 1
- 2011 Cost of Data Breach Study: Australia, Ponemon Institute LLC (sponsor Symantec), March 2012
http://www.symantec.com/content/en/us/about/media/pdfs/b-ponemon-2011-cost-of-data-breach-australia-us.pdf?om_ext_cid=biz_socmed_twitter_facebook_marketwire_linkedin_2012Mar_worldwide__CODB_Australia
- 2012 Data Breach Investigations Report, Verizon, 2012
http://www.verizonbusiness.com/resources/reports/rp_data-breach-investigations-report-2012_en_xg.pdf
- Cloud Computing Contracts White Paper A Survey of Terms and Conditions, Truman Hoyle Lawyers, April 2011
<http://www.itnews.com.au/pdf/Cloud-Computing-Contracts-White-Paper.pdf>
- Privacy in the Clouds: Risks to Privacy and Confidentiality from Cloud Computing, Prepared by Robert Gellman for the World Privacy Forum, February 2009
http://www.worldprivacyforum.org/pdf/WPF_Cloud_Privacy_Report.pdf

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Questions?

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