



Cloud Computing and the Legal Angles

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Eric A. Hibbard, CISSP, ISSAP, ISSMP, ISSEP, CISA, SCSE
CTO Security and Privacy
Hitachi Data Systems

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- Material prepared for the American Bar Association (ABA), Section on Science and Technology
 - Information Security Committee (ISC)
 - eDiscovery & Digital Evidence (EDDE) Committee
- Presented at the ABA ISC & EDDE meeting on April 12th in Sarasota, FL
- ABA ISC & EDDE Meeting topics included:
 - Forensics
 - Digital evidence – ABA book proposal (accepted)
 - Cloud Computing and Legal Issues
 - eDiscovery – recent rulings and ABA book proposal(s)
 - RSA Conference – Legal Track
 - ISO security standards – privacy, evidence acquisition, etc.
- SNIA Security Tutorial for Spring 2009 SNW (*Computing -or Litigating in the Cloud: Emerging Issues in eDiscovery, Search and Digital Evidence Management*)

- There is no clear definition of the term “Cloud” or “Cloud Computing”
 - No Official Definition
 - New project at SNIA (“Storage in the Clouds”) to evaluate the need from a broad storage industry perspective to address key best practices and standards development issues.
 - Term takes on the definition of the user.
 - Forrester: “Early overuse of the term ‘cloud’ by eager marketers is confusing the market.”

- There are two popular uses of the term “cloud” in today’s I.T. conversation**
 - **Cloud Services** – *consumer and business products, services and solutions that are delivered and consumed in real-time over the internet (e.g., content delivery, collaboration tools, record archiving, ecommerce, business analytics)*
 - *Examples: Google Maps, Credit Card Processing & PayPal, the US Postal Service*
 - **Cloud Computing** – *an emerging IT development, deployment, and delivery model that enables real-time delivery of a broad range of IT products, services and solutions over the internet (e.g. storage capacity or server processing resources)*
 - *Examples: Companies such as Amazon, IBM and others who offer storage and servers for corporate use on demand.*
 - *Main use is utility computing for non-mission-critical applications.*
 - *Examples: Application Development, data mining applications, etc.*

***(IDC: Storage in the Cloud What, How, and Who? October, 2008)*

IDC identifies 7 key attributes of all things “cloud” ** :

- **Offsite, provided by third-party provider** - “In the cloud” execution, which for most practical purposes means offsite (really, location-agnostic)
- **Accessed via the Internet** - standards-based, universal network access though this doesn’t preclude security or quality-of-service value-add
- **Minimal/no IT skills to “implement”** - online, simplified specification of services and no lengthy implementation of on-premise systems
- **Automated Provisioning** - self-service requesting, near real-time deployment, dynamic & fine-grained scaling
- **Fine-grained Pricing** - usage-based pricing capability though some providers mask this granularity with long-term, fixed price agreements
- **System Interface Via Web Services APIs** - providing a standards-based framework for accessing and integrating with and among cloud services
- **Shared resources/common versions** - some ability to customize “around” the shared services, via configuration options within the service

** IDC on The Cloud (<http://blogs.idc.com/ie/?p=189>)

- There are a few key Issues to overcome before “cloud computing” is widely accepted in our customers and prospects**
 - Concerns about stability
 - Few big-name players offering clouds
 - Few enterprise reference accounts
 - Concerns around security
 - Lack of commercial ISV support
 - Little geographic locality
 - Not for the faint-of-tech
 - Not very enterprise friendly

** Forrester Research Is Cloud Computing Ready For The Enterprise?

- Let's Assume...
 - Cloud Services and Cloud Computing are in heavy use because
 - Easy/fast to deploy
 - Pay-for-use models
 - Less in-house staff (and costs)
 - Offer the latest functionality
 -
 - The security issues have either been addressed (or ignored)
- What are the legal implications?

- Sensitive information is potentially flying around within the Cloud
- Data droppings throughout the Cloud; data retention and media sanitization are unpredictable
- Data protection and security dependent on contractual terms and service level agreements
- Data may be crossing national boundaries (possibly multiple jurisdictions)

- Amassing the forensic data from the various sources could be a serious challenge
- The real-time nature of Cloud Services may reduce the amount and nature of digital evidence
- The integrity and authenticity of data may be questionable (for example, inadequate protections against attacks)
- Describing (to a jury) indiscretions that occur within the Cloud could be extremely difficult

- Business processes will be dependent on many elements within the Cloud (multiple consumers and suppliers)
- Data classification and records management practices become more important, but they are less likely to be used
- Organizations will have additional challenges identifying relevant data because business units are directly leveraging the Cloud
- Relevant data could be within the hands of a large number of third parties (suppliers to suppliers)



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