



# Cloud Computing, Contracts & Law

Jamie Clark, General Counsel, OASIS  
Windsor, UK, October, 2011



**"The largest standards group for electronic commerce on the Web"**

**The New York Times**  
ON THE WEB

**Over 5,000 participants representing more than 600 organizations and individuals, since 1993**

**60+ technical committees producing royalty-free and RAND standards**

<http://www.oasis-open.org/>

# OASIS interoperates with the world

Cooperation, liaison and harmonization is a first-class OASIS priority:

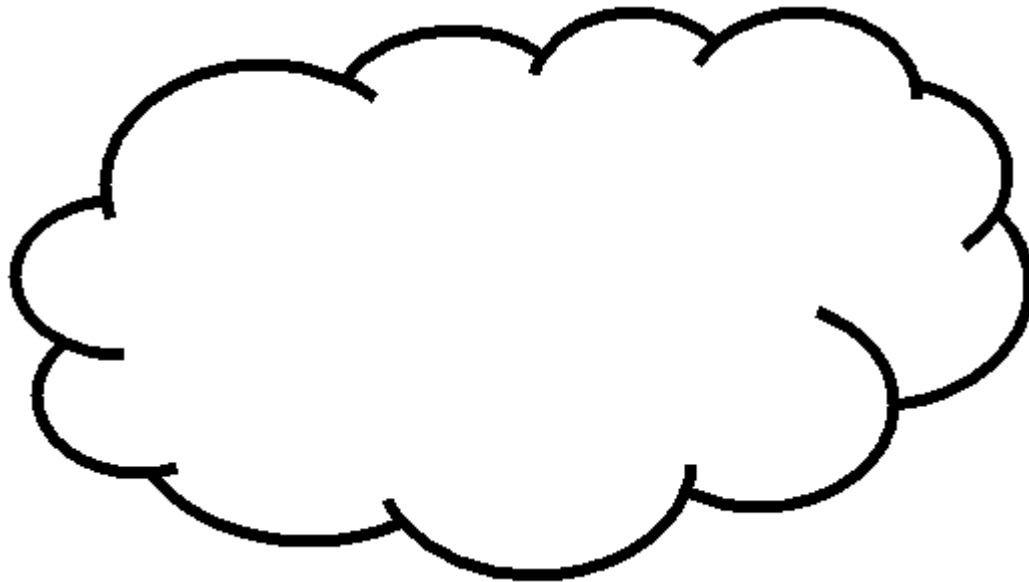
- ISO, IEC, ITU, UN-ECE MoU for E-Business
- ISO/IEC JTC1 SC34, SC38; ISO TCs 154, 215, ITU-T SG 17
- OECD, SWIFT, UPU, World Bank
- Asia PKI, Changfeng (Beijing), CESI, EA-ECA, Korean NIA, CEN/ISSS, European ICTSB, ETSI, PSLX, SIENA, Standards-AU
- ABA, ACORD, AIAG, CalConnect, CSCC, HL7, MBAA, NAESB, LRC, InfoCard/OpenID, Kantara/Liberty, OAGi, ODCA, OGC, OMA, OMG, RosettaNet/GS1/UCC, W3C

<http://www.oasis-open.org/liaisons>

Name	URL	Status to OASIS	Comments
ANSI	www.ansi.org		
ASAC	www.asac.org	C++ SPC, U.S. representative to ISO	Organizations and individuals: \$450 to \$25,000
BSI	www.bsi.com	EN (Common Information Model)	Organizations and individuals: \$450 to \$25,000
ISO	www.iso.org	Eligible, but not a member	Organizations and individuals: \$450 to \$25,000
IEC	www.iec.ch	Eligible, but not a member	Organizations and individuals: \$450 to \$25,000
ITU	www.itu.int	Eligible, but not a member	Organizations and individuals: \$450 to \$25,000
UN-ECE	www.un.org/Depts/underdev/cees/cees.htm	Eligible, but not a member	Organizations and individuals: \$450 to \$25,000
W3C	www.w3.org	Eligible, but not a member	Organizations and individuals: \$450 to \$25,000

**INTERNATIONAL CONFERENCE ON ADVANCING PUBLIC-PRIVATE PARTNERSHIPS FOR E-BUSINESS STANDARDS**  
18-19 September 2008  
World Meteorological Organization  
Geneva (Switzerland)

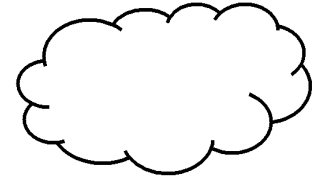
# So what about the Cloud?



# It's a fairly loud, crowded topic right now



# But maybe not as complex as it sounds, for law



software-as-a-service

platform-as-a-service

application-as-a-service

storage-as-a-service

infrastructure-as-a-service

acronyms-as-a-service

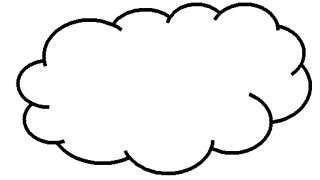
boring-slides-as-a-service

toy-gevalt-as-a-service

- Someone else holds or controls your data? Not new.
- Your computing resources are somewhere else? Not new.
- Network latency and service levels? Not new.

As with e-signatures in the 1990s, lots of pre-existing law and risk allocation practices inform us

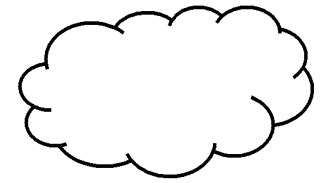
# But maybe not as complex as it sounds. for law



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- **What IS new is the degree of reliance on this tech for critical systems.**
- **“More outsourcing”**
- **Consider how our expectations of mobile telephones changed, as they evolved from toy, to convenience, to necessity.**
- **Increasingly, apps, MSPs, PaaS and remote storage define computing.**

Many of the challenges that "the cloud" brings already are well in hand. Others, not so much yet.



*Being sorted out (maybe not done, but well started, anyway):*

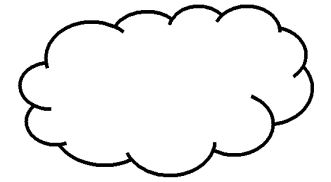
- *Cloud computing security*
- *Virtualization and hypervisor interactions*
- *Reliable messaging and transactional patterns*
- *Federated identity (of humans and organizations)*
- *Remote data storage access*

*Uncharted waters ahead (Here Be Dragons):*

- *Comparable Quality of Service measures*
- *Vocabularies for SLAs & dashboardability*
- *Data ownership and access*
- *Jurisdiction*
- *Identifier rigor*



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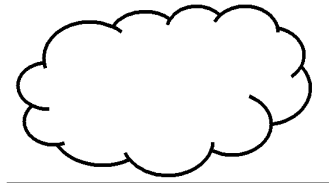
*Being sorted out (maybe not done, but well started)*

- Standards
- Technology
- The Markets

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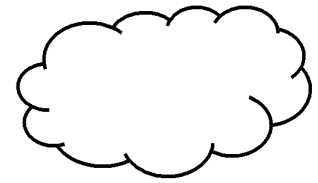
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# What's left over for the lawyers to sort out so that our contracts actually work?

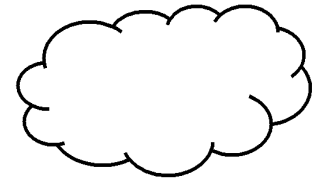


- *Comparable Quality of Service measures*
- *Vocabularies for SLAs & dashboardability*
- *Data ownership and access*
- *Jurisdiction*
- *Identifier rigor*

**All elevated from casual to critical priority: this isn't your teenager's party pics anymore**



# Quality of Service, and service level agreements



- *Comparable QoS measurements: dashboardability*
- *Automated SLAs: Rule-based negotiations for service use and management: common vocabularies for SLAs?*
- *The “Heidi” model of endpoints: when is a service asserted to be reliable? Do reputational models suffice? Consider “good enough” weather forecasts.*
- *Data protection due diligence, plenary magic-bullet licenses, and the general problem of liability in software*

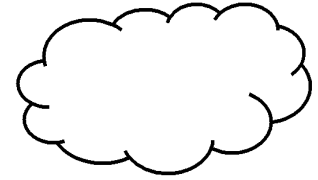
WSQM? RuleML? WSDM?

$.90^2 = 0.81$  ...  $.90^4 = 0.66$  ...  $.90^{10} = 0.35$

“warranty of merchantability ... fitness for a purpose”

<http://legalbrat.blogspot.com/2011/09/why-this-cloud-has-no-silver-lining-for.html>

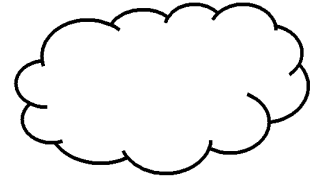
# Data ownership and access



- *It's yours, but you can't get at it: backup and portability*
- *Platforms: lock-in by code, not data*
- *If it's about you, is it yours or mine? Privacy, personal data and the rights of subjects*
- *It's yours, but you gave me permission: ToS documents, implied consent, and transitive permission to third parties*

Exchange formats; lock-in; data replication  
Ownership vs. regulation (as in credit bureaus)  
Uniform legal intercept expectations  
Who's a “third party”?

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Exchange formats; lock-in  
Ownership vs. regulation  
Uniform legal interpretation  
Who's a "third party"?

Transitive permission:

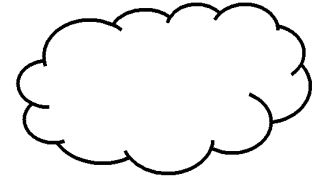
"We may share your data with our business partners"

"We may use your data for management purposes, by us and our service providers"

HIPAA "business associates"

Controller versus Processors

# Jurisdiction, applicable laws and enforcement



## **Jurisdiction: in the sense of contract enforcement**

“This contract and all services provided hereunder are governed by the law of the State of California without regard for the application of blah blah blah” and you must come here to sue us.

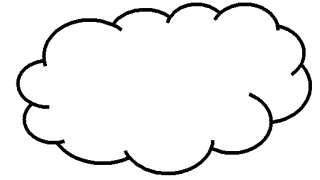
## **Jurisdiction: In the sense of applicable regulatory schemes**

Memset (UK): Our cloud's not housed in a Patriot Act jurisdiction: <http://www.katescomment.com/securing-data-in-the-cloud/>

## **Jurisdiction: In the sense of government enforcement**

India: Move your servers for RIM, Google and Skype, please: [http://news.cnet.com/8301-1009\\_3-20015418-83.html](http://news.cnet.com/8301-1009_3-20015418-83.html)

# Jurisdiction, applicable laws and enforcement



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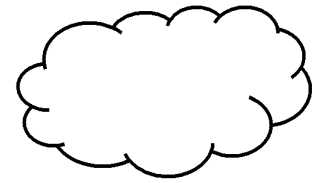
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**Jurisdiction: In the sense of applicable regulations**

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jurisdiction: <http://www.k...>  
*in-the-cloud/*

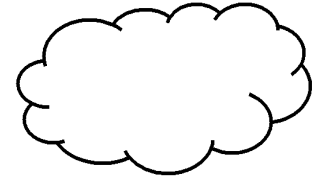
**Jurisdiction: In the sense of**

India: Move your servers for  
please: <http://news.cnet.com...>  
*83.html*

Going to court to sue is one thing; going there to attach local property is another.

Contract law only affects your contracts: not all regulatory rules.

# Jurisdiction, applicable laws and enforcement



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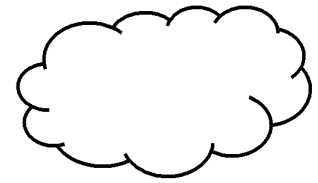
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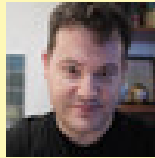
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# Jurisdiction, applicable laws and enforcement



Jurisdiction is the power of a court to hear and determine a case.

“The government has a right to sue us here to sue us.”



**mnot** Mark Nottingham

Dear amazon silk browser: so, when I browse .au sites in .au, my connections will go through .us or .sg? Thx, no.

29 Sep

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**Jurisdiction:**

India: Move please: <http://83.html>



**independentid** Phil Hunt

@JamieXML I remember discussion that gov'ts had to use suppliers that use servers outside the US not subject to the Patriot Act.

20 Sep

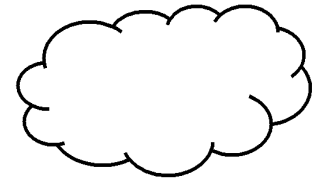


**independentid** Phil Hunt

@JamieXML Canada did that immediately after patriot act passed (provincial and fed levels). Apparently it was a big deal. #cloud #privacy

20 Sep

# Jurisdiction, applicable laws and enforcement



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# Jurisdiction, applicable laws and enforcement

**Jurisdiction:** in the sense

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**Jurisdiction:** In the sense of

Memset (UK): Our cloud's jurisdiction: <http://www.kate.in-the-cloud/>

Governing law for:

- Rights of software users?
- Data protection & privacy?
- IPR; moral rights?
- Fair trade & competition rules?

And ease of enforcement, if the server farm's in-country.

☀ **Jurisdiction:** In the sense of government enforcement

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# Jurisdiction, applicable laws and enforcement



## Jurisdiction

“This contract is governed by the law of the country for the applicable here to sue the defendant.”

## Jurisdiction:

Memset (UK), jurisdiction: *in-the-cloud/*

- Governing law for:
- Rights of software
  - Data protection
  - IPR; moral rights
  - Fair trade & competition
- And ease of enforcement in the defendant's in-country.

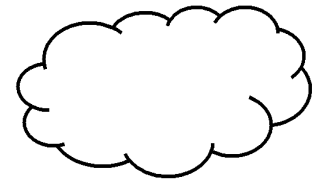
But is that a naïve view of network location?



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India: Move your servers for Skype, please: [http://news.cnet.com/0501-1009\\_3-20015418-83.html](http://news.cnet.com/0501-1009_3-20015418-83.html)

# The peculiar problem of identifiers



- *Competing identifier systems*
- *Non-rigorous identifiers and massive scaling*
- *Who owns the ID for the object? Who can charge for it? Where does the data live?*
- *Identifiers and names as a predicate for enforceable obligations*

URIs, URNs, XRIs, UUIDs, UPCs, ASN.1, oh my.

If my inventory falls in the forest, but my subscription to the identifier database runs out, does it make a sound?

Is the product “identified to the contract”, or substitutable?



# Cloud Computing, Contracts & Law

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Windsor, UK, October, 2011



The Intersection of Policies, Standards & Best Practices for Robust Trusted Public Sector Cloud Deployments