North American Team: Project 10

Contract Terms for Cloud-Based Services

Corinne Rogers
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Project Team

- NA 10 was led by Yvette Hackett, Visual Media Archival Consultant (Ottawa, Ont.)
- Robert McLelland, Grant Hurley, Daniel Collins GRAs
- Courtney Mumma, Artefactual Systems, review and consultation

- October, 2013 – May, 2014
- Draft final report presented at the International Plenary in Vancouver, Canada February 2014
Background – RiC survey

• Web-based survey of cloud users conducted by the *Records in the Cloud Project* ran from April 11, 2013 for one month

• Sampling through professional listservs and social media, seeking respondents from the records professions, IT, executive management
RiC survey findings

• 57% of respondents are currently using cloud services
• 38% of those not currently using cloud services are considering moving to the cloud
• Approximately 1/3 of all users have experienced problems, related to a range of issues
• Only 1/3 of users negotiated SLAs, and responses clearly link this fact with problems experienced
NA 10 - Introduction

• Infrastructure Domain

• Need to understand the role of contracts between service providers and clients with respect to records and information management (RIM) in cloud environments
  – Degree of consideration of recordkeeping issues
  – Risks
  – Degree of trust
Goals

• Categorize:
  – Terms relating to RIM in standard SLAs
  – Services
  – Cloud infrastructures from a recordkeeping perspective

• Determine whose primary interest is protected by service contracts

• Identify gaps in existing service contracts with respect to RIM
Methodology

• Literature review:
  – Focus on IT and recordkeeping issues
  – How cloud services were organized and offered
• Review legal issues
• Review contracts typical of public bodies
• Review and textual analysis of standard contracts of major service providers

• Theoretical perspective of archival science and records management theory
“The Cloud”

• Deployment models:
  – Public, Private, Hybrid, Community

• Service models:
  – IaaS, SaaS, PaaS, DaaS

• Essential characteristics:
  – On-demand service, broad network access, resource pooling, rapid elasticity (multi-tenancy), measured service
What does “contract” mean?

• **Terms and Conditions** – Terms of Service
  – General clauses re termination, legal protection for the provider, copyright terms
  – Protection for the service provider

• **Service Level Agreement**
  – More specific terms and guarantees to the client
  – Tiered model

• **Lack of uniformity, lack of transparency**
  hinders meaningful comparison & analysis
Literature review

• IT and RIM literature shared concerns:
  – Storage specifications (hardware)
  – Infrastructure security (physical & technical)
  – Access authority
  – Data segregation (physical)
  – Accessibility of material
Proposed categories

• Destruction
• Availability
• Reliability
• Control
Legal issues

• Privacy
  – Third party issues: not what you might think!
• Custody & control
• Copyright
• Jurisdiction
Public Sector

- Shared Services Canada: tender process for storage & email
- Private cloud, outsourced to 3rd party
  - Multiple, layered sets of security, including PKI support
  - Data sovereignty/territory of storage
  - Security clearance process for all 3rd parties
  - Interface support for integration with an Electronic Document and Records Management Systems (EDRMS) solution
Public Sector

• FedRAMP: certification process for 3rd party cloud service providers
  – IT security assessment against NIST baseline requirements (NIST 8053)
  – Information security documentation and plans
  – 3rd party assessment of provider’s security readiness
  – Testing & final approval

• Restricted to IT security measures
Public sector – Cdn Universities

• Exploring cloud solutions for email hosting, data centres for storage, server space
• Restricted by legislation such as FOI, “territory of storage”
• University of British Columbia – EduCloud
• University of Alberta & Google - email
• Nova Scotia, Ontario Consortia – storage & access
## Cloud Service Providers

<table>
<thead>
<tr>
<th>Destruction</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Guarantee</td>
<td>Service Continuity</td>
</tr>
<tr>
<td>Specific Method</td>
<td>Outages</td>
</tr>
<tr>
<td>Contract Termination</td>
<td>Disaster Recovery Plan</td>
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<tr>
<td>General Security Provisions</td>
<td>Territory of Storage</td>
</tr>
<tr>
<td>Physical Security Specs</td>
<td>Copyright/Ownership</td>
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<tr>
<td>Technological Security Specs</td>
<td>General Privacy</td>
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<tr>
<td>Tiered Security Provisions</td>
<td>Privacy Policy</td>
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<tr>
<td></td>
<td>Privacy Legislation</td>
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- **Destruction**
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  - Specific Method
  - Contract Termination

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- **Reliability**
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  - Physical Security Specs
  - Technological Security Specs

- **Control**
  - Territory of Storage
  - Copyright/Ownership
  - General Privacy
  - Privacy Policy
  - Privacy Legislation
### Summary of Contract and Service Terms Offered by Cloud Service Providers - Europe

<table>
<thead>
<tr>
<th>Country</th>
<th>City Network</th>
<th>CloudSigma</th>
<th>GreenQloud</th>
<th>T-Systems</th>
</tr>
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<tbody>
<tr>
<td>Europe (Switzerland)</td>
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<tr>
<td>Destruction: General Guarantee</td>
<td>not addressed</td>
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</tr>
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<td>Destruction: Specific Method</td>
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</tr>
<tr>
<td>Destruction: Contract Termination</td>
<td>not addressed</td>
<td>not addressed</td>
<td>End User License Agreement - Definitions section under &quot;Termination&quot;</td>
<td>not addressed</td>
</tr>
</tbody>
</table>

| Availability: Service Continuity | General Conditions - 5 | Service Level Agreement | Service Level Agreement | T-systems Vcloud Terms of Service |
| Availability: Outages | General Conditions - 5 | Terms of Service - 7 | Service Level Agreement | not addressed |
| Availability: Disaster Recovery Plan | General Conditions - 5 | Terms of Service - 3.11 | not addressed | not addressed |

| Reliability: General Security Provisions | not addressed | Terms of Service - 10.6 and Service Level Agreement | Service Level Agreement | not addressed |
| Reliability: Physical Security Specifications | not addressed | not addressed | not addressed | not addressed |
| Reliability: Technological Security Specifications | Service Level Agreement | Terms of Service - 10.6 and Service Level Agreement | End User License Agreement - "Other Security and Backup." | not addressed |
| Reliability: Tiered Security Provisions | not addressed | Terms of Service - 10.6 | not addressed | not addressed |
| Control: Territory of Storage | not addressed | Company Privacy Policy | not addressed | not addressed |
| Control: Copyright/Ownership | not addressed | Copyright Notice | "Applicable rules means Icelandic rules, courts, laws and regulations" i.e. territory, only in the legal sense | not addressed |

| Control: General Privacy | General Conditions - 9 | Terms of Service | GreenQloud Privacy Policy | T-systems Vcloud Terms of Service Privacy and Data Protection |
| Control: Privacy Policy | not addressed | Company Privacy Policy | GreenQloud Privacy Policy | T-systems Vcloud Terms of Service Privacy and Data Protection |
| Control: Privacy Legislation | Personal Data Protection Act | Swiss Law, differing from EU. No link provided | Act on the Protection of Privacy as regards the Processing of Personal Data, No. 77/2000 | German Federal Data Protection Act (BDSG) and German Tele-communications Act (TKG) |
What’s next?

• This report is a starting point
• It will form the groundwork for NA 14 – requirements and guidelines for negotiating service contracts
• Technology is not standing still – new issues include ownership, availability, interoperability of metadata; increasing variety of services; brokering of services and cloud exchange
Thank you!

www.interparestrust.org

Yvette Hackett, Robert McLelland, Grant Hurley (2014) Contract Terms for Cloud Based Services, Final Report (Draft 1), InterPARES Trust, North American Team

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