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Cloud Service Contracts: An Issue of Trust

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Workgroup members

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Research object

Contract

as a tool to build

Trust

in the Cloud

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Research question

How effective
are cloud service contracts
at addressing the needs
of
records managers and archivists?

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Milestones

- iTrust Project 10 : Contract terms with cloud service providers
  - Cloud contracts vs RM's needs
- iTrust Project 14 : Trust in Cloud Service Contracts
  - Cloud contracts vs RM and archivists' needs
  - Standards and Legal framework
- Also linked to Project 6 : Retention and disposition in the cloud

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Selected contracts

- Boilerplate contracts
  - No room for negociation – Take it or leave it
- Cloud Services relevant for RM and archivists
  - No consumer contracts
- Contractual (binding) documents
  - No marketing material
  - Terms of Service (ToS)
  - Service Level Agreement (SLA)
  - Privacy Policy, Acceptable Use Policy, Security Terms…
- Jurisdiction
  - Canada – US – Europe

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Selected standards

- ISO 15489:2001 – Records management
- ISO 14721:2002 – Preservation of records
- ISO 14721:2012 – Open Archival Information System (OAIS)
- ARMA's Recordkeeping Principles (2013)
- Moreq 2009

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Legal framework

- Canada – US – EU
- Transverse view on
  - Freedom of information law (public bodies)
  - « Patriot » laws
  - Privacy law
  - Evidence law (esp. Civil law)
  - Ownership principles

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Research Product

- Check-list for record managers and archivists to:
  - Understand boilerplate cloud contracts
  - verify if they meet their needs
  - clarify recordkeeping needs to legal and IT departments
  - communicate recordkeeping needs to cloud providers

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Methodology

- Literature review and annotated bibliography
  - Legal, archival and RM literature on cloud contracts
  - Existing recommendations for private and public bodies
- Identify RM and archival needs & functions to be considered in the contract
- Clarify the legal framework linked to these needs
- Compare with a sample of cloud provider contracts
- Identify gaps
- Cloud contracts Reader's Check-list

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Cloud contracts Reader's Check-list

(Preliminary results)

- Data ownership
- Availability, retrieval and use
- Data retention and disposition
- Data storage and preservation
- Security, confidentiality and privacy
- Data location and cross-border data flows
- End of Service – Contract termination

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Gaps

- Data retention and disposition
- Data preservation
- Data location
- End of contract
  - Not (fully) addressed in the majority of the contract terms

Data Ownership

- Who owns
  - the data stored, transmitted of created in the cloud by the customer (i.e. you)?
    - Does the service provider have the right to use them and, if so, to what extent?
  - the associated metadata generated by the system/ provider?
    - Do you have the right to access to them for recordkeeping or legal purposes
      - during the contractual relationship?
      - at the end of the contract?

Availability, retrieval and use

- Precise indicators and providing clear information about the availability of the service?
- Does the degree of availability of the data
  - fit with your business needs?
  - allow you to comply with
    - the freedom of information legislation (if public body),
    - the right of a person to access to her own personal data
    - the right of authorities to legally access to your data for investigation, control or judicial purposes?

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Data retention and disposition

- Are your data (and all their copies) destroyed
  - In compliance with your data retention and disposition schedules
  - Immediately and permanently
  - According to a secure destruction policy?
- Associated metadata generated by the provider
  - Need to be destroyed? Same time & same manner ?
  - Will the service provider proceed to such destruction?
- Audit trails?
  Attestation or report of deletion? (if requested)

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Data storage and preservation

- Who is responsible for backups and for recovering the data?
- Are records migrated or emulated in a way that preserves their authenticity, reliability, integrity and usability?
  - Audit trails?
- How will the service evolve?
  - Will you be noticed of any evolution that could impede the authenticity of your data?

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Security, Confidentiality & Privacy

- Does the system prevent unauthorized access, use, alteration or destruction of the data through technical, physical and organizational measures?
  - Audit trails, metadata and/or access logs to demonstrate this?
- Will you be noticed in the case of security breach or system malfunction?
- Any subcontractor?
  - Information about the identity of the subcontractor and its tasks?
- Confidentiality policy of the service provider, in regards to its employees, partners and subcontractors?
- Any special confidentiality or security policy for sensitive, confidential, personal or other special kinds of data?
- Is the service provider accredited and/or is he audited
  - on a systematic, regular and independent basis by a third-party in order to demonstrate that he complies with his security, confidentiality and privacy policies?
  - Is such a certification or audit process documented?
  - Certifying or audit body and expiration date of the certification?

Data location & Cross-border data flows

- Where is the location of the data (and their copies)?
  - Does it comply with the location requirements imposed by law? (if applicable)
  - Will you be notified if the data location is moved outside your jurisdiction?
- Does the contract mention the possibility of disclosure orders by national or foreign security authorities?
  - Will the provider inform you and ask for your consent prior to disclosure? (if allowed by law)

End of Service – Contract termination

- Duration of the contract?
  - Why and how can it be terminated?
  - Any prior notification?
- At the end of the contract, whatever the reason
  - Warranty that your data will be restored in a usable and interoperable format?
    - Time, procedure and cost?
    - Provider's assistance?
  - Right to access to the associated metadata generated by the system?
  - After restitution of data, immediate and permanent destruction?

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Next steps

- Consolidation of the results
  - From check-list to guidelines (vs. « model contract »)
    - Collaboration with iTrust Project 6 – Retention and disposition in the cloud (Pat Franks)
  - Comments and suggestions are welcome:
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Dissemination

- *Canadian Journal of Information and Library Science*
  - Special Issue on Data, Records and Archives in the Cloud (June 2015)
    - Paper submitted (October 2014)

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