Records in the Cloud (RiC)

Records in the Cloud is a 4 year (2012-2016) SSHRC-funded research initiative led by Dr. Luciana Duranti at the University of British Columbia. RiC focuses on the benefits and risks of keeping records in the cloud. It is a qualitative research project that assumes an inductive relationship between archival, diplomatic, and legal theory, information technology and research findings.

We are currently in year two of the project, focusing on iterative data collection. Our activities to date include:

- a close analysis of the services offered by various CSPs, as well as the technology that supports such services;
- an extensive literature review;
- a study of relevant law and case law, regulations and standards;
- Online survey questionnaire distributed to Cloud Users; and
- Semi-structured in-depth interviews with various Cloud Service Providers (CSPs).

The Problem

- **Volume:** an increasing number of users have or are considering moving to the cloud. This results in a high volume of data and records being entrusted to pervasive system that is at times unstable and whose characteristics are unknown to the average user.
- **Risks:** security of records and data, legal and jurisdictional implications, loss of control, and privacy are all risks when considering deployment to the cloud.
- **Metadata:** cloud-generated metadata remains in the hands of CSPs; it remains crucial to users and their records, however, as it can help establish and track records’ authenticity, reliability, and accuracy; thus establishing:
- **Trust** in the cloud: what is needed to establish this trust?

Goal

We seek to establish a “balance of trust”, between cloud users and cloud providers, by developing trustworthy procedures and contractual conditions, in addition to secure technologies with regards to the cloud.

Next Steps & Objectives

- Interview CSPs regarding cloud metadata. Generate feedback on design features of a potential application protocol for automatic metadata extraction.
- Model service metadata generated by the provider but useful to the consumer for the purposes of assurance of security, reliability, and integrity.
- Draft the framework of an application protocol that would allow for the maintenance of authentic, and therefore trustworthy records over space and time.
- Offer models for Service Level Agreements (SLAs) and Terms of Services conditions that will consider and reflect the need to preserve the integrity of data and records entrusted to the cloud from the point of creation, throughout their entire lifecycle.

About Records in the Cloud Team

The RiC research team is made up of graduate research assistants (GRAs), collaboratively led by Principal Investigator Luciana Duranti, Co-investigator Victoria Lentini, SLAIS professors, Anthony Sheppard, professor at the UBC Faculty of Law, and Ron Canfield, associate professor at UBC’s Sauder School of Business. Collaborators include Eric Borgland, associate professor in the Department of Information Technology and Media at Mid-Sweden University; Barbara Endicott-Shaw, professor and director of the Center for Information Assurance and Cybersecurity at the University of Washington; Richard Marciano, professor of the School of Information and Library Sciences at the University of North Carolina at Chapel Hill; Bruno Mokhtari Shalaby, professor at the School of Business Administration at the University of Applied Sciences Western Switzerland; and Yale Li, research director of the Seattle Chapter of the Cloud Security Alliance (CSA).

Survey drafted and data collected and published by RiC GRAs Joy Rowe, Georgie Bartasoua and Weimei Pan.

Languages in which the interviews were conducted (English, French, Chinese)

Geographic regions from which originate the interviewees (US, Switzerland, China)

Interviews conducted to date with representatives of different CSPs or vendors

Total minutes of interview data collected to date