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## **Technical Committee Considerations on the Development of a National Standard for Geo-Residency and Sovereignty**

*Preliminary Position Paper*

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This past year, in 2020, COVID-19 had undeniable impacts on businesses, IT services, governments, and health.

COVID-19 has shown that IT services are essential to business and governments, and that governments and technology companies can cooperate to expedite providing services and meeting prioritized service levels.

While there is a certain comfort in keeping supply chains as localized as possible, in a globalized world, there are also advantages to using and sharing IT services and data across geo-jurisdictions. COVID-19 has highlighted that over-reliance on foreign supply chains can have consequences and challenges when cross-border crises occur.

In Canada, the United States are a perpetual consideration for partnering with. They have advantages in market size, finances, international influence, investments, and the proximity to Canada. Utilizing the United States and other foreign IT services, when practical, can be an advantage for Canada, all while considering our unique sovereignty and risk profiles.

Many Canadian companies benefit in using IT cloud services hosted in Canada. There are also many Canadian companies which offer or use services only available from US hosted domains, which may be less expensive, more resilient, and part of a larger market with higher revenue streams.

The US Government has the experience, budget, and power to influence the supply chains. The utilization of a combination of dedicated “govclouds” (from private and public sectors) and public clouds, residing in the US, controlled by US, staffed by US, provides significant benefits enjoyed by the US due to their scale.

Canada needs to be realistic and recognize our limited scale, budget, and influence, while still protecting our citizens privacy and Canadian sovereignty.

Geo-jurisdiction is a complex challenge, where Canada has been lagging. Canada must clarify policies, and influence and utilize standards, to better position Canadian companies and governments in the distributed global IT marketplace.

Canadian financial institutions, for example, are largely international, and many major cloud services are only available from foreign hosted domains/ offerings, thus creating geo-jurisdictional regulatory compliance challenges.

Canadian companies and governments play multiple roles as customers and providers, where approaches should be applied to help inform and influence decision making. Best practices include using basic risk management methods to gain transparency, and to understand geo-jurisdictional and sovereignty considerations.

Ideally, Canada should better develop and encourage companies to focus on where they can effectively compete globally, and to consider that Information Systems are the new core business competencies. Canada should look to the future, further developing the capabilities and competencies in cloud services, hosted both in and outside of Canada.

For the purpose of the development a national standard, the following are important considerations:

- In the EU, consumers by default own their data, not the providers
- In the US, providers by default own the customers data (providers may be willing to include a clause to potentially state that they will recognize that Canadian customers own their data)
- The EU has determined that using cloud data centres hosted in the United States will *not* be General Data Protection Regulation (GDPR) compliant
- In Canada, many regulations and policies have additional confusing, sometimes inconsistent guidance (between geo-jurisdictions and in governments between agencies)
- In Canada, many services only available from non-Canadian jurisdictions
- Major customers are outside of Canadian jurisdictions.
- Hyperscale Cloud Service Providers (CSPs) have been stellar in protecting customer data
- Sheer size and scale of major US Hyperscale CSPs (similar to the domination of US hardware mainframe systems)
- Developing in-house expertise versus reliance on foreign suppliers

Canada continues to generate great IT talent that frequently gets acquired by foreign companies. Smaller Canadian companies are very reliant on foreign markets to expand revenue sources and competitively scale technical capabilities.

Canadian governments are less willing to support “Canadian First” policies and have several contractual expectations and requirements leading to exclusion of Canadian companies. Many of the contractual requirements are unrealistic, and suppliers (Canadian & foreign) need to find additional partners.

Where *do*, and where *can* Canadian companies fit into the cloud eco-systems? The potential is obvious, and working to clarify policies, improve upon consistency, assess our distinctive sovereignty and risks, will work to support Canadian companies on a global scale.

Economic advantages are significant to those countries that have competencies and capabilities in the new IT focused eco-systems. The reality is some services should remain in Canada, under Canadian control, while other services maybe good candidates to be hosted outside of Canada.

The national standard itself will provide an approach to evaluate risks and determine options that could mitigate risks when using cloud and IT services that may cross geo-jurisdictions.

## About the Authors

### **Steven Woodward**

*Steven Woodward is founder and CEO at Cloud Perspectives, helping companies and governments effectively and transparently plan, secure, architect, deliver, support and monitor cloud and digital transformation opportunities.*

Our highly automated portfolio of solutions and expert specialists helps simplify and expedite compliant, secure solutions, cost effectively, while anticipating and addressing the necessary culture and process changes. Cloud Perspectives provides solutions that meet customers private, public, community, hybrid, and multi-cloud needs across service models.

Steven is respected for being vendor neutral, logical, and value-focused, where current Canadian standards contributions include: AI Ethics, GDPR and Data Governance. At NIST he co-leads the cloud audit and cloud carrier activities, while contributing to the NIST/ IEEE cloud federation standards. With ISO/ IEC he is a convenor for the Cloud Service Connectivity Advisory Group and is liaison between the software systems standards (SC7) and cloud distributed standards (SC38) committees. For agile and DevSecOps standards he is a co-editor with ISO/ IEC, IEEE, and Cloud Security Alliance (CSA) focusing on SLAs, metrics, and governance.

Steven has contributed to many other publications and communities such as: OMG, IFPUG, ITU-T, TM Forum, PTC, itSMF, IIBA, ISACA and NIST.

Steven is a director with the CSA Canadian Chapter and contributes to the CSA Global cloud audit training and certification activities.

### **Kristin Curran**

*Kristin Curran is the Culture Transformation Officer at Cloud Perspectives.* Kristin has degrees in Anthropology and Hispanic Studies, as well a Bachelor of Education, and she brings an objective and holistic mindset to the tech sector. Her areas of focus for Cloud Perspectives include data classification and categorization, data governance, and geo-jurisdiction, in addition to culture change.

Kristin has been a contributor with the Object Management Group, and participated with Canadian standards in data governance, alongside Cloud Perspectives CEO, Steven Woodward

Kristin is a member of the PTC, IEEE, as well as the Society on Social Implications of Technology, and keeps current in anthropological news and educational developments. She has over a decade of experience in coaching and teaching capacities, both in Canada and Spain, and has spent time living abroad, expanding her understanding of culture both academically, personally, and professionally.