THE GOVERNMENT OF CANADA: JOURNEY TO CLOUD

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GOVERNMENT OF CANADA CONTEXT

- 106 Departments and Agencies
- Shared Services Canada (SSC) as the Central Information Technology (IT) Service Provider
- 43 Departments mandated to use SSC
**DIGITAL GOVERNMENT VISION**

The Government of Canada is an open and service-oriented organization that operates and delivers programs and services to people and businesses in simple, modern and effective ways that are optimized for digital and available anytime, anywhere and from any device. Digitally, the Government of Canada must operate as one to benefit all Canadians.

- Digital Operations Strategic Plan 2018-2022
WHAT IF I TOLD YOU

"THE CLOUD" IS JUST SOMEONE ELSE'S COMPUTER.
SHARED RESPONSIBILITIES
GC CLOUD JOURNEY

CRAWL

WALK

RUN

Myth Busting
CRAWL (2015-2016)

- Industry Engagement
  - Request for Information (RFI)
- Publications
  - GC IT Strategic Plan
  - GC Cloud Adoption Strategy
  - Right Cloud Selection Guidance
  - GC Security Control Profile for Protected B, Medium Integrity, Medium Availability (PBMM)

- Perform Security Categorization
- Select Appropriate Security Controls, Cloud Deployment and Service Model
- Assess Cloud Services, Implement GC Security Controls & Authorize Operations
- Continuously Monitor Services & Maintain Authorization State
• **Publications**
  - Data Sovereignty White Paper
  - Direction on Electronic Data Residency
  - Direction on Secure Use of Commercial Cloud (Protected B)

• **Procurement**
  - Awarded 8 Cloud Service Providers contracts to host unclassified information system solutions
• **Publications**
  - Cloud First Direction
  - GC Cloud Security Risk Management Approach
  - Security Playbook for Information System Solutions

• **Procurement**
  - Microsoft Office 365 contract awarded
  - Three cloud service providers awarded contracts to host Protected B

• **Process**
  - Workload migration and application modernization funding available to departments
  - GC Accelerators Initiative launched
Evolving the Security Approach – Risk-Based

Leverage Third Party Assurance

Canadian Centre for Cyber Security

Central Assessments

Increasing levels of assurance

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<th>Requirements</th>
<th>Tier 0</th>
<th>Tier 1</th>
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<tr>
<td>GC Impact</td>
<td>Very Low</td>
<td>Low</td>
<td>Moderate</td>
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<td>Categorization</td>
<td>Unclassified</td>
<td>Up to and including</td>
<td>Up to and including Protected B, Medium</td>
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<td></td>
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<td>Protected A, Low Integrity, Low Availability</td>
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<td>Data Residency</td>
<td>Anywhere</td>
<td>Anywhere</td>
<td>In Canada</td>
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<td>Location</td>
<td>Off-premise</td>
<td>Off-premise</td>
<td>Off-premise</td>
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<tr>
<td>Deployment Model</td>
<td>Public</td>
<td>Private, Public, Community, Hybrid</td>
<td>Private, Public, Community, Hybrid</td>
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<tr>
<td>Service Model</td>
<td>SaaS</td>
<td>IaaS, PaaS, SaaS</td>
<td>IaaS, PaaS, SaaS</td>
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Evolving the Security Approach – Paradigm Shift

**Old Perimeter**
- Traditional network:
  - Endpoints
  - On-site users
  - Servers
  - Apps

**New Perimeter**
- Remote employees
- Cloud applications
- Mobile devices
- Hybrid cloud
- Personal devices
- Vendors & contractors
MYTH BUSTING

“Cloud isn’t secure”  BUSTED!

“Data residency is all you need to protect your sovereignty”  BUSTED!

“Cloud service providers keep getting breached”  BUSTED!

“Lose visibility with the cloud”  BUSTED!
LESSONS LEARNED

• Evolve Procurement Approach
• Establish Foundational Elements
• Managing Culture and Change
RISK OF STATUS QUO
THANK YOU!

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