# **SECURING MOBILITY**

# Through the Canadian Medium Assurance Solutions Program

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May 2016	Director, Architecture and Technology Assurance



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## **INTRODUCTION**

- **Basic**, Medium, and High Assurance environments offer different levels of protection for information
- These levels of assurance indicate the level of confidence that a part or full system will work properly or as intended











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#### **THE BUSINESS CALCULUS**

- As the Government of Canada modernizes, it needs to keep pace with advances in technology and how it is being used
  - Different levels of sensitive \_\_\_\_ information
  - Information needs to be secure, but still highly available
  - Solution needs to be affordable







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## **CANADIAN MEDIUM ASSURANCE SOLUTIONS (CMAS)**

- The Canadian Medium Assurance
  Solutions will provide options for
  protecting classified information
  using commercial technology
- Striking the balance between business need and security is important for the Government of Canada
- CSE established the Canadian
  Medium Assurance Solutions (CMAS)
  Program to provide Medium
  Assurance solutions for clients to
  implement



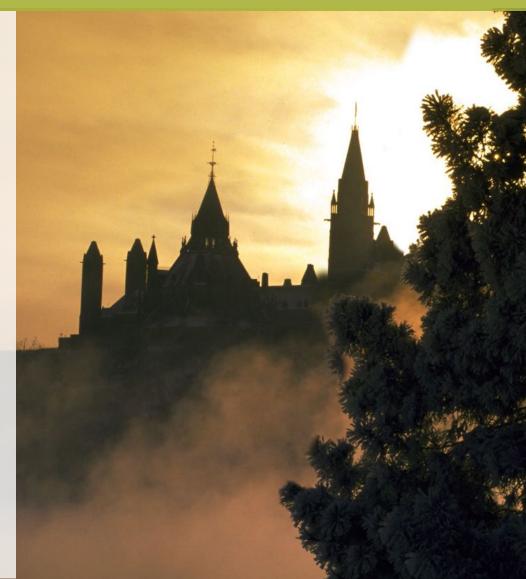






## WHO IS MEDIUM ASSURANCE FOR?

- The main users will be the Government of Canada
- Industry, critical infrastructure, municipal and provincial entities, and foreign partners can benefit
- It is for domestic use, along with mission and environment specific international uses







#### **HOW IS MEDIUM ASSURANCE BUILT?**

- Medium Assurance, when using commercial technology, uses the principle of Defence-in-Depth which layers independent security measures to prevent a single point of weakness
  - Monitoring is an essential component to detect any compromises and respond quickly
  - At the component level, it uses Common Criteria and FIPS 140-2 (CMVP) certified modules that implement CSE-approved cryptographic algorithms
- At the system level, CSE security architects provide additional assurance validation for the tailored solutions







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#### **CANADIAN MEDIUM ASSURANCE SOLUTIONS**

- Working in collaboration with TBS and SSC, CSE is developing enterprise-level MA Solutions for the Government of Canada
- Based on a risk management approach, it provides additional options for departments that understand their needs and their environmental risks



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## **USE CASE**

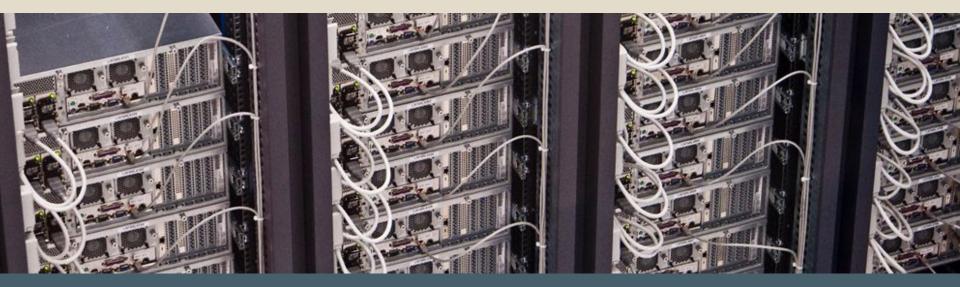
- Smart Phone for Classified (SPfC)
- Protects Voice, Instant
  Messaging (IM), and E-mail
  communications up to SECRET
- Pilot Project of Medium
  Assurance
  - Proof-of-Service complete in December 2015
  - Pilot with Shared Services Canada (SSC) is in planning





#### **BUILDING INNOVATION**

- Built for security without sacrificing usability
- Maintains the principle of Defence-in-Depth
- Infrastructure crypto and data is completely under the control of the Government of Canada using commercially available evaluated products





## WHAT'S INSIDE AN SPFC SOLUTION?

- Virtual Private Network (VPN) Gateway (VPG)
- Firewalls
- Router
- Session Initiation Protocol (SIP) Server and Voice over Internet Protocol (VoIP) client
- Mobile Device
- Mobile Device Management (MDM) solution
  - e.g. Blackberry Enterprise Server (BES)
- Certificate Authorities (CA)

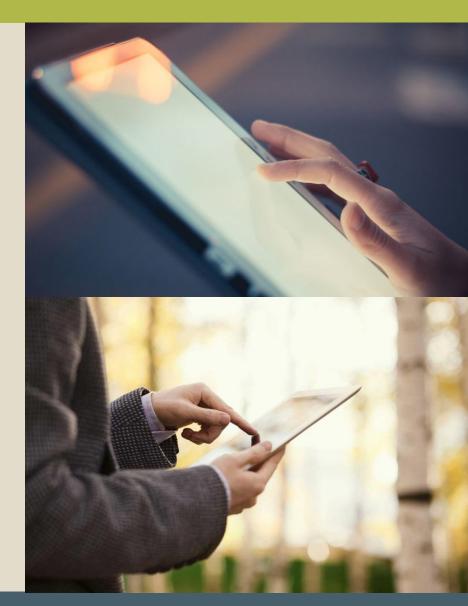






## **NEXT STEPS**

- Work has begun on a wireless tablet solution
- Medium Assurance solutions will be incorporated into the future Government of Canada Secret Infrastructure (GCSI)
- CMAS program will continue to evolve
  - Provide cost-effective solutions for all business needs
  - Protect GC's sensitive operational information





#### WANT MORE INFORMATION?



## Need IT Security Advice and Guidance? cse-cst.gc.ca/its <u>itsclientservices@cse-cst.gc.ca</u>



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