IMT Standards IMT Standards Oversight Committee Government of Alberta	Effective Date: 2015-10-30 Scheduled Review: 2016-10-30 Last Reviewed:
	Type: Reference ¹

Standard number: A000064

Cloud Computing Reference Architecture

Category: Enterprise Architecture Keywords: Cloud, Cloud Computing, Architecture, Reference Architecture

Description of Standard

The Cloud Computing Reference Architecture Standard will enable the Government of Alberta (GoA) to be an effective adopter of Cloud Computing, and provide more responsive and efficient IT services.

The standard provides a "one-enterprise" approach for Cloud Computing to guide the Government of Alberta (GoA) IT and government business. Careful consideration is given to security, privacy, classification of information, and availability of the Cloud Computing services.

Standard Specification

The GoA will adopt the National Institute of Standards and Technology (NIST) Cloud Computing Reference Architecture with the amendments described in the "GoA Cloud Computing Reference Architecture" document.

Cloud Computing Architecture refers to the components and subcomponents required for cloud computing, the structure, their relationships to each other and the environment. The principles used develop a vendor-neutral architecture and a solution that does not restrict innovation by defining a prescribed technical solution.

Where to Apply This Standard

The Government of Alberta (GoA) Cloud Computing Reference Architecture Standard applies to all the Ministries within the Government of Alberta.

Authority and Exceptions

Internal Use Only

¹ See Appendix A for description

Supporting Documentation

References

1. Government of Alberta

GoA Cloud Computing Reference Architecture

https://imtpolicy.sp.alberta.ca/standards/_layouts/15/DocIdRedir.aspx?ID=SA U4XS6JAYRN-1770012109-155

2. National Institute of Standards and Technology (NIST)

Cloud Computing Reference Architecture - NIST SP 500-292, Published on September 8, 2011

http://www.nist.gov/manuscript-publication-search.cfm?pub_id=909505

Owner

Internal Use Only

Contact

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Additional Information

Audience	GoA
Source	Service Alberta, Service Modernization
Sensitivity	Unrestricted
Proposed Date	2015-09-18
Proposed By	Service Alberta, Service Modernization, Architecture and Standards

Appendix A

Types of Standards	Description
Technical Standard	These are detailed, unique standards that have developed in response to government IMT policies. Technical standards are intended to be replicable, transferable, and adaptable across ministries and other government agencies. Examples of these could include address data standards or specifications for a single identifier for transacting with government electronically.
Product Standard	An IMT product or specific technology oriented standard that facilitates the task of planning for enhancements and acquisitions within the government's broad information systems environment. As a definitive list of the numerous technologies either employed or under evaluation by Workplace Technology Services, product standards are critical in establishing conformity, interoperability and interchange-ability. Examples of these could include a government-wide standard for document, record management and database, and the list of core products for government workstations.
Process Standard	An established, mandatory business practice that supports IMT projects and existing systems to improve the outcome, diminish risks, and increase reliability. Examples could include business continuity planning processes, threat risk assessment processes, etc.
Reference Standard	An IMT industry standard (either a national or international formal or de facto standard) that has been adopted for use by the Province of Alberta. A Reference Standard may be adopted either as stand-alone or as a precursor to a customized standard or policy document. Examples could include the 1024 bit RSA standard for public key encryption.