Department of Science, Information Technology and Innovation

Queensland Government Cloud Computing Strategy



Queensland Government Cloud Computing Strategy © State of Queensland (Department of Science, Information Technologyand Innovation and the Arts 2014

Published May 2014



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To attribute this material, cite the Queensland Government Chief Information Office

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Introduction

The Queensland Government emphasises the adoption of ICT-as-a-service as key focus. It envisages the transformation in the sourcing of ICT capability from a mainly internal own and operate model to a services consumption model.

The Queensland Government's adoption of cloud computing, as one form of ICTas-a-service, will enable it to transition from mainly internal, high-cost customised ICT applications and solutions to lower cost, standardised services where quality improvements and cost reductions are driven by highly competitive market forces. Cloud computing presents the opportunity to reduce vendor lock-in, enable self-service procurement and provisioning, and accelerate innovation and productivity in the delivery of contemporary public services to Queensland's citizens.

Cloud computing services are not without implementation risks, many of which are shared with any form of outsourcing. Issues relating to the control and security of data, management of service levels, integration with related systems as well as information privacy compliance must be dealt with diligently.

The Queensland Government will look to place cloud computing in a prominent position in government ICT reform by taking a 'cloud-first' approach. This approach to the sourcing of ICT functions (similar to that taken by other government jurisdictions, e.g. United States of America, United Kingdom and New Zealand governments) will require agencies to adopt cloud-based services as the default ICT-as-a-service solution unless a sound business case exists for a contrary solution.

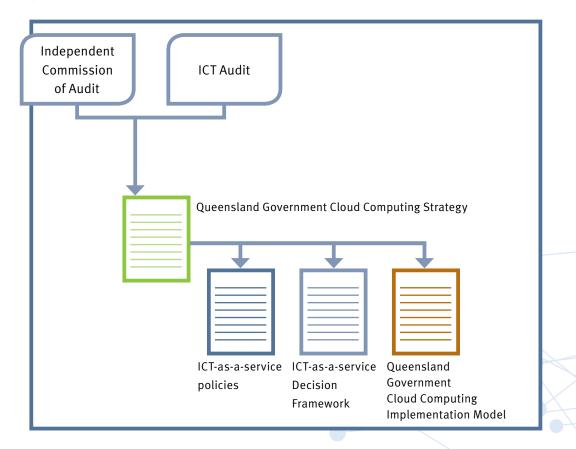
The Queensland Government Chief Information Office has extensively researched cloud computing and its implementation in various international jurisdictions. This work is documented in the *Queensland Government Cloud Computing Implementation Model*. The benefits, potential risks, and impacts of the Queensland Government's adoption of cloud computing are explored and recommendations for an implementation model are described. The implementation model underpins the strategic themes in this document.

Background

The need and direction for this cloud computing strategy derives from the Cabinetapproved recommendations of the Independent Commission of Audit.

Commission of Audit recommendations		Queensland Government response
147	The government adopt an ICT-as- a-service strategy and source ICT services, especially commoditised services, from private providers in a contestable market where this is feasible and represents value for money.	Accepted The government accepts this recommendation and notes that it is consistent with the findings of the ICT Audit and current industry directions. Transition to this model is based on positive business cases which preserve the integrity of agency systems.
148	The government utilise as appropriate cloud-based computing and other emerging technologies as enablers to complement its ICT-as-a- service strategy.	Accepted The government accepts the recommendation and notes that this approach is a key element of implementing the ICT-as-a-service strategy.

Key documents



Cloud Computing Strategy

The *Queensland Government Cloud Computing Strategy* addresses the following strategic themes.

- ICT services and capabilities will be procured from the private sector in the form of ICT-as-a-service wherever this is feasible and represents value for money.
- The Queensland Government will place cloud computing in a prominent position in the government's ICT reform by taking a 'cloud-first' approach to the sourcing of ICT-as-a-service: agencies will procure cloud-based ICT services as the default option for their ICT requirements unless a sound business case exists for a contrary solution.
- To facilitate the adoption of ICT-as-a-service through cloud computing, agencies will analyse their application portfolio and develop roadmaps for the adoption of ICT-as-a-service, including cloud computing.
- Queensland Government will develop an implementation model for the adoption of cloud computing which will provide mechanisms to minimise risk and maximise efficient engagement and benefit realisation.
- Implementation of cloud computing will be supported by the development of wholeof-government policies to promote the adoption of ICT-as-a-service, including cloud computing, and to guide decisions on the appropriate use of offshore data storage and processing.
- To support a comprehensive and consistent approach to contracting for cloud computing services, and to help assure service delivery and legislative compliance, Queensland Government will develop appropriate legal and contractual artefacts for use by agencies when procuring ICT-as-a-service.
- Queensland Government will create procurement arrangements to streamline agency adoption of commodity ICT-as-a-service, including cloud computing services.
- A cloud computing decision framework will be developed, encompassing guidance on risk and data security, to provide direction to agencies in the selection of agency ICT workloads which may be appropriate for sourcing from cloud providers.

Cloud Computing Implementation Model

The *Queensland Government Cloud Computing Implementation Model* outlines a plan comprising of five streams and 26 recommendations to progress Queensland Government's transition to a cloud-first enterprise and align with the above themes. The five key focus areas and the outcomes that each focus area seeks to achieve is summarised below:

Cloud ready: Government agencies will be better educated and informed on best practice procurement and management of cloud services. Cloud computing policies, a decision framework and model contract to assist agencies to make well-informed decisions regarding cloud implementations will be developed.

Cloud foundations: Queensland Government will establish the key foundational building blocks necessary, over the long term, to address a holistic approach to acquisition, secure consumption and management of a multi-provider cloud ecosystem.

Cloud engagement: Queensland Government will make available trusted advisers to assist agencies with cloud transition and migration plans.

Cloud accelerate: Queensland Government will initially look to adopt common and commodity ICT cloud services through accredited (pre-qualified) arrangements. Whole of-government panel arrangements for cloud email and infrastructure-as-a-service will accelerate agency adoption of proven cloud solutions from trusted suppliers.

Cloud governance: The Queensland Government will leverage existing governance arrangements such as the ICT Management Framework and the Directors-General Council to ensure alignment with a 'cloud-first enterprise' vision.

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