

National Cloud Computing Strategy

May 2013

On 29 May 2013 The Minister for Broadband, Communications and the Digital Economy, Stephen Conroy, released the Government's *National Strategy Cloud Computing* (the Strategy), which outlines the government's vision for using the cloud to boost innovation and productivity across Australia's digital economy.

The Minister's media release is available <u>here</u>.

In October 2012 the Prime Minister, Julia Gillard, announced that Minister Conroy would start discussions with industry and stakeholders to inform a national cloud computing strategy. In the announcement the Prime Minister emphasised the important role for government to provide the tools that small business, individuals and government agencies need to realise the promise of cloud computing.

The adaption of cloud computing in Australia has been rather slow until now. One of the main barriers being insufficient access to the necessary infrastructure to support sophisticated cloud services in many parts of Australia. The National Broadband Network is changing this and is a key enabler of the digital economy more broadly. However, there are other reasons why cloud computing has not been adopted more broadly in Australia; these includes the lack of awareness of how to make best use of cloud computing and the lack of confidence that some organisations and individuals have in adopting cloud computing services. It is these issues the Strategy is set out to address.

The Strategy sets out the goals and actions that the government will take to fulfil its vision of Australians creating and using world-class cloud services to boost innovation and productivity across the digital economy.

The goals are:

- Maximising the value of cloud computing in government
- Promoting cloud computing to small businesses, not-for-profits and consumers
- Supporting a vibrant cloud services sector

The National Cloud Computing Strategy is available here.

Maximising the value of cloud computing in government

The benefits that broader adoption of cloud computing could offer the Australian economy are rich. The Strategy aims to address barriers to adoption while maximising the benefits of cloud computing in Australia.



There are a number of initiatives already in place to help realise the Government's vision, such as the Government's investment in the NBN. However, beyond the necessary upgrades to physical infrastructure, government has an important role on a number of fronts in order to reach its objective.

Objective in this area:

• The Australian Government will be a leader in the use of cloud services to achieve greater efficiency, generate greater value from ICT investment, deliver better services and support a more agile public sector

Key actions include:

- The Australian Government Information Management Office (AGIMO) will enhance the guidance available to government decision makers on how to evaluate the benefits of cloud services and how to procure and manage them.
- AGIMO and the Department of Broadband, Communications and the Digital Economy (DBCDE) will establish information sharing initiatives to facilitate continual improvement based on a repository of case studies, better practice risk approaches and practical lessons to enable agencies to learn from each other.
- The Department of Finance and Deregulation (DOFD) will enhance procurement practices to ensure that government agencies are required to consider public cloud services for new ICT procurements.
- Government agencies will transition public-facing websites to public cloud services as their refresh cycle allows, where those services represent the best value for money.
- The Government will develop a business case by the end of 2013 to analyse the benefits and drawbacks of a more centralised approach to the provision of cloud services to Australian government agencies.

Promoting cloud computing to small businesses, not-for-profits and consumers

Despite ICT in general has contributed to over 50 per cent of labour productivity growth over the past decade as well as being a major driver of innovation, adoption of cloud services by small organisations in Australia has generally been slow.

Objective in this area:

• Australian small businesses, not-for-profit organisations and consumers will have the protection and tools they need to acquire cloud services with confidence.

Key actions include:

• DBCDE and the Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education (DIICCSRTE) will jointly:



- work with intermediaries and member associations to promote informed decision making about cloud computing and tailor information to the needs of particular industry segments
- enhance the online information available to small business and not-forprofit organisations about the use of cloud services
- enhance the existing successes of the Digital Enterprise, Enterprise Connect, Technology and Knowledge Connect, the Digital Local Government and Small Business Advisory Service programs.
- The Australian Computer Society will co-ordinate with the National Standing Committee on Cloud Computing (NSCCC), the Australian Information Industry Association and other government and industry stakeholders to develop a voluntary Cloud Consumer Protocol to encourage information disclosure by cloud providers and support consumers of cloud services in being well informed.
- DBCDE and the Office of the Australian Information Commissioner (OAIC) will publish guidance for the cloud services industry about the new privacy reforms that are due to commence in March 2014.

Supporting a vibrant cloud services sector

In order for Australia to fully benefit from cloud technology, it needs a vibrant cloud services sector. A vibrant cloud sector with competition in services and a highly skilled and capable ICT workforce will ensure Australia is well placed to increase productivity growth through the supply and consumption of world-class cloud services.

Objectives in this area:

- A skilled and cloud-aware ICT workforce, able to create as well as adopt cloud services
- Effective competition in cloud services
- Regulatory settings that support growth, foster innovation and protect users.

Key actions include:

- The government will continue to work in close collaboration with industry and tertiary institutions to ensure the development of skilled and cloud-aware ICT professionals.
- Austrade will work in partnership with industry to promote Australia as a trusted hub for data storage and processing, and will encourage foreign investment and participation.
- DBCDE will continue to engage through the NSCCC to examine ad hoc cloud computing issues, opportunities and challenges.



Actions, Implementation and Timeline

Maximising the value of cloud computing in government

	Action	Implementation
1.1	 The government will: identify training and skills development opportunities available to agencies on how to evaluate the benefits of cloud services and how to procure and manage them. clarify obligations on agencies in relation to risk management, data security, privacy and the storage and processing of data offshore. 	AGIMO, with input from DBCDE, OAIC and AGD: to complete in 2014
1.2	The government will identify opportunities for cloud services trials in agencies and establish information sharing initiatives to facilitate continual learning and establish a repository of case studies, better practice risk approaches and practical lessons learned. Interested State and Territory government organisations will be invited to participate.	AGIMO: ongoing, with work beginning in 2013 through the Chief Information Officer Committee.
1.3	The government will publish and report on the use of cloud services in the public sector. Using this information, the government will consider whether additional tools are necessary to assist agencies to self-assess their own cloud computing needs, and investigate whether current ICT funding models are suitable to encouraging adoption of cloud services in government.	DBCDE with support feom AGIMO: to report annually beginning in early 2014
1.4	The government will explore the feasibility of a community government-Cloud.	AGIMO: to report by early 2014
1.5	The government will review the current cloud strategic directions paper, and issue an updated version shortly after the release of the National Cloud Computing Strategy.	AGIMO: by mid-2013
1.6	Government agencies will be required to consider cloud services (including public cloud services) for new ICT procurements. Government agencies will choose cloud services, where the service represents the best value for money and adequate management of risk, compared to other available options.	DOFD/AGIMO: to release guidance by end of 2013.
1.7	 The government will: > consider the ways that the early successes of Data Centre as a Service Multi Use List can be built upon. > refresh the Data Centre Facilities Panel. 	DOFD: to refresh The Panel in 2013 and to review the DCaaS MUL in 2014.
1.8	Government agencies will migrate public facing websites to cloud hosting at natural ICT refresh points, where those cloud services demonstrate the best value for money and is fit for purpose. Agencies will also adopt public cloud services for their testing and development needs, as appropriate and where the service represents best value for money and is fit for purpose.	AGIMO: to publish guidance for agencies in 2013. Agencies: to implement at natural ICT refresh points.
1.9	The government will investigate how the use of cloud services can be promoted to NGOs that receive government funding, and consider what assistance could be provided to NGOs in procuring cloud services.	DBCDE: to conduct initial investigations by the end of 2013.



Promoting cloud computing to small businesses, not-for-profits and consumers

	Action	Implementation
2.1	The government will enhance the online information resources about cloud computing through digitalbusiness.gov.au and other online information portals.	DBCDE and DIICCSRTE: beginning in 2013.
2.2	 The government will work with intermediaries and members of peak body associations to: promote informed decision-making about cloud computing, particularly in relation to the productivity and security benefits develop information tailored to the needs of particular industry segments. 	DIICCSRTE and DBCDE: beginning in 2013.
2.3	The government will publish guidance targeted towards industry and users on how existing privacy legislation fits with cloud computing.	DBCDE and OAIC to publish guidance by mid-2014.
2.4	The government will establish a consumer cloud working group to bring together industry and consumer groups to examine emerging consumer cloud computing issues.	DBCDE, ACMA, ACCC and Industry (including the NSCCC): to establish the proposed working group in 2014.
2.5	The information technology industry, in consultation with government will work to develop a voluntary Cloud Consumer Protocol, to encourage information disclosure by cloud providers and support consumers of cloud services in being well informed.	The Australian Computer Society: to engage with industry and government through the NSCCC, and the Australian Information Industry Association on development of a protocol by the end of 2013 with a review in 18 months.
2.6	The government will develop a cloud regulatory stocktake in consultation with industry, regulators and consumer groups.	DBCDE: to consult with key stakeholders including the NSCCC and develop the cloud regulatory stocktake by end of 2013.
2.7	The government will continue to provide small businesses with access to technology experts to provide advice and recommendations about using cloud services through the Technology and Knowledge Connect service.	DIICCSRTE: delivered as part of existing program
2.8	The government will help small businesses understand the benefits of cloud computing as an enabler of business productivity through the Enterprise Connect service.	DIICCSRTE: delivered as part of existing program



	Action	Implementation
2.9	The government will promote the benefits of cloud services to small business and not-for-profits through the Digital Enterprise Program.	DBCDE: delivered as part of existing program
2.10	The government will provide focused and practical advice about how cloud computing services can help small businesses through the Small Business Advisory Service Program.	DIICCSRTE: delivered as part of existing program
2.11	The government will regularly measure and report on take-up and use of cloud services in small business and not-for-profits.	DBCDE: to commission research and report every two years

Supporting a vibrant cloud services sector

	Action	Implementation
3.1	The government will encourage discussion between tertiary education stakeholders to consider strategies to ensure graduates have the right skill sets. Cloud computing would form an important part of this, to ensure that Australian ICT workers have the skills that they need to succeed in the cloud services industry.	Further details to be released in 2013
3.2	Further examination of the current and future skill needs of the ICT industry will be undertaken by the Australian Workforce and Productivity Agency (AWPA)	AWPA: Further details to be released in 2013
3.3	The government will strengthen Australian engagement with regional and international standards institutions and technical committees, and strongly encourage involvement by the private sector.	DBCDE, AGIMO and the Defence Signals Directorate: ongoing.
3.4	The government will collaborate with industry to promote Australia as a trusted hub for data storage and processing, while encouraging foreign investment and participation.	AusTrade: to lead engagement with industry, beginning in 2013.
3.5	The government will continue to engage through the NSCCC to examine cloud computing issues, opportunities and challenges.	DBCDE and AGIMO: to lead engagement with the NSCCC throughout 2013.
3.6	The government will work collaboratively with industry and research institutes though existing mechanisms to identify research needs for cloud computing.	DIICCSRTE, DBCDE, CSIRO and NICTA: to consider in 2014.
3.7	The government will consider the creation of a community of interest, to discuss whether additional cloud research is needed and how to apply or enhance existing research efforts in this space.	DBCDE: to explore interest with key stakeholders in 2014.