

Senate Standing Committee on Education and Employment - Education

**QUESTIONS ON NOTICE
Supplementary Budget Estimates 2014-2015**

Cross Portfolio

Department of Education Question No. ED0507_15

Senator Ludwig provided in writing.

Question

Dept & its agencies: Cloud Services and Storage

1. Is the department using or planning to use cloud digital services (e.g. storage, computer software access etc)?

If yes:

2. What date did/will cloud services be deployed in the department?
3. Please provide a list of all cloud services in use or being considered for use.
4. How much do these services cost? Please break down by service.
5. How much cloud storage (in gigabytes) is available for departmental use? What percentage of the available total is in use?
6. How much does this cloud storage cost per month?
7. What security arrangements are in place to protect cloud based services and storage?
8. Have any security analysts been employed / contracted to advise on the implementation and upkeep of these security arrangements?
9. What has been the cost of security for the cloud? Please provide a breakdown.

Answer

1. Is the department using or planning to use cloud digital services (e.g. storage, computer software access etc)?

Yes

If yes:

2. What date did/will cloud services be deployed in the department?

The department, via the Shared Services Centre (SSC) has been consuming public cloud Infrastructure as a Service (IaaS) since June 2013.

3. Please provide a list of all cloud services in use or being considered for use.

The department, via the SSC consumes the following public cloud services from Amazon Web Services (AWS):

- I. Amazon Elastic Cloud Compute (EC2) instances – server compute platform – the SSC has deployed 96 servers of various instance types in AWS; and
- II. Amazon Simple Storage Service (S3) – online file storage. The SSC has commissioned 32 Terabytes of online storage in AWS.

4. How much do these services cost? Please break down by service.

The cost of providing access to public cloud services since June 2013 is:

- I. Server compute platform – \$96 663
- II. Storage - \$9 745
- III. Support – \$6 127
- IV. Cost for dedicated network connectivity to the AWS data centre i.e. direct connect service – \$95 000

5. How much cloud storage (in gigabytes) is available for departmental use? What percentage of the available total is in use?

The amount of storage available in AWS is not publicly advertised. The SSC has to date, commissioned 32 Terabytes of storage in AWS.

6. How much does this cloud storage cost per month?

The average monthly cost since June 2013 is \$573.

7. What security arrangements are in place to protect cloud based services and storage?

The department, via the SSC, has performed a security risk assessment on the suitability of the AWS IaaS offering in accordance with the requirements of the Protective Security Policy Framework and the Information Security Manual.

The SSC's use of public cloud employs a security construct known as a "Virtual Private Cloud" which is simply an extension of the departmental infrastructure environments into the AWS data centre. This means that our existing internal security controls are used to govern access to AWS services and to enforce the departments IT Security Policy on the infrastructure commissioned within the public cloud.

The AWS public cloud infrastructure services used by the SSC are not exposed to the internet in any way and can only be accessed via the SSC internal network.

8. Have any security analysts been employed / contracted to advise on the implementation and upkeep of these security arrangements?

The department, via the SSC, employs internal IT Security staff with the expertise to analyse and regularly reassess the security arrangements of departmental systems including the use of public cloud services.

9. What has been the cost of security for the cloud? Please provide a breakdown.

The cost of security to date associated with the use of AWS has been approximately \$19 400 comprising internal staff time.