

ASSESSMENT 3 BRIEF	
Subject Code and Title	CCF501 Cloud Computing Fundamentals
Assessment	Cloud Application Deployment
Individual/Group	Individual
Length	1,500-word report (+/-10%), including screenshots and URL link to application.
Learning Outcomes	<p>The Subject Learning Outcomes demonstrated by successful completion of the task below include:</p> <ul style="list-style-type: none">c) Identify key cloud services' offerings for recommendation to major industry providers.d) Implement cloud services via major cloud providers to support stakeholder requirements.e) Appraise IT governance requirements to safeguard cloud-driven business solutions.
Submission	<p>12-Week Duration: by 11:55pm AEST/AEDT, Wednesday of week 12</p> <p>6-Week Duration: by 11:55pm AEST/AEDT, Wednesday of week 6</p>
Weighting	40%
Total Marks	100

Assessment Task

Submit a report that displays the Cloud Application Deployment and also provide the URL link to access the application.

Please refer to the **Instructions** for details on how to complete this task.

Context

This assessment will require you to use a variety of services on a public cloud platform (either Google Cloud Platform, Microsoft Azure or Amazon Web Services), their products and experience the concepts of security, virtualisation and resource pooling in a cloud environment. You will deploy

the steps mentioned in the instructions section using any cloud service provider, such as AWS, AZURE or GCP.

Instructions

1. Cloud Service Provider

You will deploy the following steps using a cloud service provider, such as AWS, Azure, or GCP. Your deployment will include a virtual machine and or container that will be demonstrated to your Learning Facilitator.

For any of the cloud providers mentioned above, you will register for a free Azure/GCP Virtual Machine or Free Tier AWS EC2 server. Then, complete these four tasks:

- a) Create a resource group.
- b) Add a virtual network in that group.
- c) Protect the cloud network (or virtual network) with a firewall or security policy.
- d) Deploy an open-source web application server like Moodle, Thinksboard, KaalOT or Jira.

2. Report:

You must then prepare a 1,500-word report (+/- 10%) based on your project task. To do this, you will need to include the following:

- a) An explanation of why you selected this particular service provider (AWS/Azure/GCP). (Rationalise your selection of service provider).
- b) Deployment model or block diagram.
- c) Discussion on the procedure being followed from registration of the cloud account to all four tasks mentioned in Part 1 with supporting evidence like screenshots.
- d) Discuss cloud services security policies for deployed applications, with supporting evidence and screenshots.
- e) Analysis of the applications (or any further steps that can make these applications more robust while on the cloud).

Report Structure

1. Introduction:

Start off with a short **introduction** (approximately 100 words) stating what the assessment is about and some basic information relevant to the application. Provide information about the selection of a particular service provider for deployment of cloud services as specified in this assessment.

Your introduction should be followed by a section on the background information (approximately 200 words) including some context related to cloud computing and its advantages over traditional IT infrastructure, the service models and the deployment models used in the project. This section is to be written in complete sentences and paragraphs. It should not contain any dot point information or tables, graphs and diagrams.

2. **Body:**

Then, structure the main **body** of the report (approximately 1,000 words) using the five points in Part 2 as –sub-section headings. These sections should be written in complete sentences and paragraphs. However, you can include items such as graphs, diagrams and tables if appropriate. Ensure that you title these clearly, in the correct way, and reference them using APA style. If placing any tables, graphs and diagrams in an appendix at the end of your report, you need to clearly state where the item can be located. Generally, the information presented in appendices does not count towards the total word count.

3. **Conclusion:**

Finally, write a **conclusion** (approximately 200 words) as a summary of your project. This section brings together all of the information that you have presented in your report and should link to the purpose of the assessment as mentioned in the introduction. You can also discuss any areas, which have been identified as requiring further investigation and how this will work to improve or change our understanding of the topic. This section should not introduce or discuss any new information specifically, and like the introduction, will be written in complete sentences and paragraphs. No tables, graphs, diagrams or dot points should be included.

References:

You should support your report with additional peer-reviewed journal articles with a minimum of 10 to 12 references. These should be included using the appropriate APA style and are not included in the word count.

Please refer to the Assessment Rubric for the assessment criteria.

Report writing

Please review the [Torrens University Academic Skills](https://library.torrens.edu.au/academicskills) page where you can find instructional videos, samples and other links to support your report writing at:

https://library.torrens.edu.au/academicskills_ap/reports

Referencing

It is essential that you use appropriate APA style for citing and referencing research. Please see more information on referencing in the [Academic Skills webpage](#).

Submission Instructions

Due date: 12-Week Duration: by 11:55pm AEST/AEDT, Wednesday of week 12

Submit your report as a Word document (including screenshots and URL link to application) via the **Assessment 3** link in the main navigation menu in *CCF501 Cloud Computing Fundamentals*.

Label the document using the following naming convention which includes your student ID, subject code and assessment number: **studentID_CCF501_Assessment 3.docx**

You will need to submit screencasts of the project showing the cloud dashboard deployment steps along with login credentials and public IP addresses of the registered instances or virtual machines.

How to screencast:

1. Install the Google Chrome extension from <https://www.screencastify.com/> in Google Chrome.
2. Go to this URL to see how it works: <https://www.screencastify.com/products/screen-recorder/>

Your assessment will be formally graded via the Grade Centre by your Learning Facilitator and feedback will be provided through **My Grades**.

Academic Integrity

All students are responsible for ensuring that all work submitted is their own and is appropriately referenced and academically written according to the [Academic Writing Guide](#). Students also need to have read and be aware of the Torrens University Australia Academic Integrity Policy and Procedure and subsequent penalties for academic misconduct. These are [viewable online](#).

Students also must keep a copy of all submitted material and any assessment drafts.

Special Consideration

To apply for special consideration for a modification to an assessment or exam due to unexpected or extenuating circumstances, please consult the [Assessment Policy for Higher Education Coursework and ELICOS](#) and, if applicable to your circumstance, submit a completed [Application for Assessment Special Consideration Form](#) to your Learning Facilitator.

Assessment Attributes	Fail (Unacceptable) 0-49%	Pass (Functional) 50-64%	Credit (Proficient) 65-74%	Distinction (Advanced) 75 -84%	High Distinction (Exceptional) 85-100%
<p><i>Describes the essential computing elements in cloud services to enable business automation</i></p> <p><i>Distinguishes the use of cloud services from traditional IT infrastructure in business automations</i></p> <p>20%</p>	<p>Demonstrates a limited understanding of key concepts required to accomplish the project tasks.</p> <p>Information is taken from reliable sources but without a coherent analysis or synthesis.</p> <p>Viewpoints of experts are taken as fact with little questioning.</p> <p>Demonstrates little or no awareness of context and/or purpose of the assessment.</p>	<p>Resembles a recall or summary of key ideas.</p> <p>Often conflates and/or confuses personal opinion with evidence from research and subject materials.</p> <p>Analysis and evaluation do not reflect expert judgement, intellectual independence, rigour and adaptability.</p> <p>Demonstrates a limited awareness of context and/or purpose of the assessment.</p>	<p>Identifies and supports the essential characteristics and concepts substantiated by evidence from the research and subject materials.</p> <p>Demonstrates a proficient capacity to explain and apply relevant concepts.</p> <p>Demonstrates consistent awareness of context and/or purpose of the assessment.</p>	<p>Discriminates between the essential characteristics and concepts substantiated by robust evidence from the research and subject materials and extended reading.</p> <p>Well-demonstrated capacity to explain and apply relevant concepts.</p> <p>Analysis and evaluation reflect growing judgement, intellectual independence, rigour and adaptability.</p> <p>Demonstrates an advanced and integrated understanding of context and/or purpose of the assessment.</p>	<p>Comprehensively and critically discriminates between the essential characteristics and concepts by robust evidence from the research and subject materials and extended reading.</p> <p>Information is taken from sources with a high level of interpretation and evaluation to develop a comprehensive and critical analysis or synthesis.</p> <p>Exhibits intellectual independence, rigour, good judgement and adaptability.</p> <p>Consistently demonstrates a systematic and critical understanding of context and purpose of the assessment.</p>
<i>Demonstration of practical skills and process documentation</i>	Demonstrates limited skills by attempting some of the set project tasks, but there are	Demonstrates adequate skills by attempting some of the set project tasks, but there are some errors	Demonstrates proficient skills by completing the project tasks but there are minor errors or gaps.	Demonstrates advanced skills by completing the project tasks completely but there are some minor	Demonstrates exceptional skills by completing the project tasks comprehensively.

40%	major errors and/or gaps. Fails to document the processes and procedures.	and/or gaps. Documents the processes and procedures but these are not supported by evidence.	Documented the processes and procedures which are supported by evidence. Demonstrates a clear flow of steps, ideas and arguments, but there are some major gaps.	errors or gaps. Documents the processes and procedures which are well-supported by evidence. Demonstrates a clear flow of steps, ideas and arguments, but there are some minor gaps.	Documents the processes and procedures which are well-supported by evidence. Demonstrates a clear flow of steps, ideas and arguments.
Identifies key cloud services' offerings for recommendation to major industry providers 10%	Demonstrates limited or no knowledge of the cloud services offered by major industry providers. Unable to compare the services.	Demonstrates some knowledge of the cloud services offered by major industry providers. Limited capacity to compare the services, including cost models and resource elasticity.	Demonstrates a proficient level of knowledge of the cloud services offered by major industry providers. Shows adequate capacity to compare the services, including cost models and resource elasticity.	Demonstrates an advanced level of knowledge of the cloud services offered by major industry providers. Compares the services thoroughly, including cost models and resource elasticity.	Demonstrates an expert level of knowledge of the cloud services offered by major industry providers. Expertly compares the services, including cost models and resource elasticity.
Appraises IT governance requirements to safeguard cloud-driven business solutions by identifying the security threats to the cloud deployment, draft and implementation of the firewall/security policy 20%	Demonstrates a limited understanding of the security threats and mitigation policies. Neither drafts an effective security policy nor implements it effectively.	Demonstrates some understanding of the security threats and mitigation policies. Drafts an effective security policy but unable to implement it completely.	Demonstrates an adequate understanding of the security threats and mitigation policies. Drafts and implements an effective security policy.	Demonstrates an advance level understanding of security threats and mitigation policies. Drafts and implements a comprehensive good security policy which mitigates most of the threats identified.	Demonstrates a comprehensive and critical understanding of security threats and mitigation policies. Implements and includes a comprehensive security policy mitigating nearly all the threats identified.

Demonstrates appropriate use and referencing of resources, including correct in-text citations and reference list composition (minimum of 10 to 12 references) 10%	<p>Demonstrates an inconsistent use of good quality, credible and relevant resources to support and develop ideas.</p>	<p>Demonstrates some use of credible and relevant resources to support and develop ideas, but these are not always explicit or well-developed.</p>	<p>Demonstrates the use of high quality, credible and relevant resources to support and develop ideas.</p>	<p>Demonstrates the use of good quality, credible and relevant resources to support and develop arguments and statements. Employs a wide scope for sourcing evidence.</p>	<p>Demonstrates the use of high-quality, credible and relevant resources to support and develop arguments and position statements. Researches widely to source evidence for arguments.</p>
	<p>Little or no attempt to include in-text citations, a minimum number of resources and/or a reference list at the end of the report. APA referencing is omitted or incorrectly addressed.</p>	<p>Some attempt to include in-text citations, a minimum number of resources and a reference list at the end of the report. APA referencing is basic, with frequent or repeated errors.</p>	<p>Adequate use of in-text citations and 10 to 12 resources have been included and listed in the reference list. APA referencing is adequate, with occasional errors.</p>	<p>Thorough use of in-text citations and a minimum of 12 resources have been included and listed in the reference list. Applies APA referencing techniques with no errors.</p>	<p>Excellent and meticulous use of in-text citations and 12 or more than 12 resources have been included and listed in the reference list. Applies APA referencing techniques with no errors.</p>

The following Subject Learning Outcomes are addressed in this assessment	
SLO a)	Describe the essential computing elements in cloud services to enable business automations.
SLO b)	Distinguish the use of cloud services from traditional IT infrastructure in business automations
SLO c)	Identify key cloud services' offerings for recommendation to major industry providers.
SLO d)	Implement cloud services via major cloud providers to support stakeholder requirements.
SLO e)	Appraise IT governance requirements to safeguard cloud-driven business solutions.