

ASSESSMENT 03 BRIEF	
Subject Code and Title	ICC104 Introduction to Cloud Computing
Assessment	Project + Report
Individual/Group	Individual
Length	2500 words (+/-10%)
Learning Outcomes	This assessment addresses the Subject Learning Outcomes outlined at the bottom of this document.
Submission	Due by 11:55 PM AEST Sunday of Module 12 <b>For intensive class:</b> By 11:55 PM AEST Sunday of Module 6.
Weighting	40%
Total Marks	100

#### Context:

This assessment is designed to acquaint the students to public cloud platforms, their products, and experience the concepts of virtualisation and resource pooling in the Cloud Environment.

#### Project:

The project comprises of two tasks;

1. Explore Google Cloud Platform, setup a Virtual Machine in Google Cloud, deploy LAMP (Linux, Apache, MySQL and PHP) Server on that server install WordPress, without using any “Click to Deploy” Images.
2. Explore Amazon Web Services, setup an EC2 instance in AWS, deploy LAMP (Linux, Apache, MySQL and PHP) Server and on that server install WordPress, again without using “Ready to Deploy Images”

The deliverables of this project will be a report and a demonstration that can be carried out by the instructor in person or can be shared as screencasts of student’s project showing GCP and AWS dashboards, WordPress dashboard and all login credentials of AWS and GCP accounts and WordPress administrator with Public IP addresses of the registered instances or Virtual machines.

## **Instructions:**

For AWS and Google Cloud Platform, you will register for a free Virtual Machine and Free Tier EC2 server.

The assessment requires you to prepare a report based upon your project and to record a screencast of your Project. To do this you will need to consider the following and specifically add in the body of the report:

1. Key service offering from Amazon Web Services and Google Cloud Platform.
2. Comparison of cost model of AWS EC2 and GCP VM.
3. The procedure you followed from the registration of your account to the deployment of WordPress with supporting evidence like screenshots and logs.
4. Possible improvement suggestion in the process while remaining within the Cloud domain.
5. Comparison of both the Platform EC2 and VM.
6. The concept of virtualization and elastic resources in AWS and GCP.

## **Writing the report**

Start off with a short introduction (approximately 100 words) stating what the assessment is about and some basic information relevant to 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.

The introduction should be followed by some background information (approximately 200 words), in which you can provide some context related to cloud computing and the deployment models.

Then structure the main body of the report (approximately 2000 words) using the above 6 points 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 using the APA system. 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.

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 that have been identified as requiring further investigation and how this will work to improve or change our understanding of the topic. This section does 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.

## Report

If you would like some assistance on writing your report, please refer to the link below.

Laureate academic skills unit (n.d.). Report Writing. Retrieved from [https://laureate-au.blackboard.com/webapps/blackboard/content/listContent.jsp?course\\_id= 20163\\_1&content\\_id = 2498855\\_1&mode=reset](https://laureate-au.blackboard.com/webapps/blackboard/content/listContent.jsp?course_id= 20163_1&content_id = 2498855_1&mode=reset)

## Demonstration

Your demonstration should be a screencast of the project showing GCP and AWS dashboards, WordPress dashboard along with all login credentials of AWS, GCP accounts and WordPress administrator with Public IP addresses of the registered instances or Virtual machines.

How to screencast:

1. Install google chrome extension from <https://www.screencastify.com/> in google chrome.
2. Use the url to know how does it work: <https://www.screencastify.com/products/screen-recorder/>

N.B. Uploading your video presentation:

- Detail instructions on compressing (if necessary) and uploading your video presentation is available at: [https://laureate-au.blackboard.com/webapps/blackboard/content/listContent.jsp?course\\_id= 4044\\_1&content\\_id= 387629\\_1&mode=reset](https://laureate-au.blackboard.com/webapps/blackboard/content/listContent.jsp?course_id= 4044_1&content_id= 387629_1&mode=reset)
- After uploading your video presentation, retain a copy in a safe place.

## Referencing

It is essential that you use appropriate APA style for citing and referencing research. Please see more information on referencing here:

Library (n.d.). *Referencing*. Retrieved from [http://library.laureate.net.au/research\\_skills/referencing](http://library.laureate.net.au/research_skills/referencing)

## Submission Instructions:

You should submit **both** your report (as a word document) and demonstration (vide/screencast) by 11:55pm AEST Sunday Module 12.

You should submit through the **Assessment 3 submission link** under **Assessment** found in the main navigation menu of the subject Blackboard site. Your assessment will be formally graded via the Grade Centre by your Learning Facilitator and feedback will be provided through **My Grades**.

## Learning Rubric: Assessment 3 Project Report

Assessment Attributes	Fail (Unacceptable) 0-49%	Pass (Functional) 50-64%	Credit (Proficient) 65-74%	Distinction (Advanced) 75 -84%	High Distinction (Exceptional) 85-100%
<b>Content, Purpose and documentation (broad and specific content, process documentation)</b>  <b>10%</b>	<p>Demonstrates no awareness of context and/or purpose of the assignment.</p> <p>Fails to document the process and procedure.</p>	<p>Demonstrates limited awareness of context and/or purpose of the assignment</p> <p>Documents the Processes and procedures but not supported with evidence.</p>	<p>Demonstrates consistent awareness of context and/or purpose of the assignment.</p> <p>Documented the Processes and procedures and supported by evidence, demonstrating a clear flow of steps, ideas and arguments, but with some major gaps or missing some supportive evidence.</p>	<p>Demonstrates an advanced and integrated understanding of context and/or purpose of the assignment.</p> <p>Documents the Processes and procedures well supported by evidence, demonstrating a clear flow of steps, ideas and arguments, but with minor gaps</p>	<p>Consistently demonstrates a systematic and critical understanding of context and purpose of the assignment.</p> <p>Documents the Processes and procedures well supported by evidence, demonstrating a clear flow of steps, ideas and arguments.</p>
<b>Demonstration of theoretical, conceptual and new knowledge attained by the assessment</b>  <b>25%</b>	<p>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>Unable to compare the services by the two providers.</p>	<p>Resembles a recall or summary of key ideas.</p> <p>Often conflates/confuses personal opinion with evidence from research/course materials.</p> <p>Analysis and evaluation do not reflect expert judgement, intellectual independence, rigor and adaptability.</p> <p>Discusses some of the product lines of each cloud provider but failed to</p>	<p>Identifies/Support essential characteristics and concepts substantiated by evidence from the research/course materials.</p> <p>Demonstrates a capacity to explain and apply relevant concepts.</p> <p>Discusses most of the product lines of AWS and GCP but not able to clearly classify them in applications and characteristics</p> <p>Compares the services by the</p>	<p>Discriminates between essential characteristics and concepts substantiated by robust evidence from the research/course 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, rigor and adaptability.</p> <p>Discusses the product lines</p>	<p>Systematically and critically discriminates between essential characteristics and concepts by robust evidence from the research/course materials and extended reading.</p> <p>Information is taken from sources with a high level of interpretation/evaluation to develop a comprehensive critical analysis or synthesis.</p> <p>Comprehensively discusses the product lines of AWS and GCP classified them</p>

		<p>classify them correctly or clearly in application areas or characteristics.</p> <p>Compares the services by the service provider but doesn't include the cost model and resource elasticity.</p>	two service providers without covering either the cost models or resource elasticity.	<p>of AWS and GCP classified them well in characteristics and applications.</p> <p>Compares the services by the two service providers including cost models and resource elasticity with some minor gaps.</p>	<p>well in characteristics and applications.</p> <p>Expertly compares the services by the two services providers including cost models and resource elasticity.</p> <p>Identifies gaps in knowledge.</p> <p>Exhibits intellectual independence, rigor, good judgement and adaptability.</p>
<p><b>Demonstration of Practical Skills</b></p> <p><b>35%</b></p>	Does not achieve one task completely or both are having major errors/gaps.	<p>Somewhat demonstrates the skills by attempting both the project tasks but achieving for only one with some minor errors/gaps</p> <p>Achievement is not that lean made some unnecessary assumptions and taken unnecessary steps</p>	<p>Demonstrates the skills by achieving both the project tasks but one with some major errors/gaps.</p> <p>Achievement is through lean process avoiding/learning from unnecessary steps</p>	<p>Well demonstrates the skills by achieving both the project tasks completely but with some minor errors/gaps.</p> <p>Achievement is through lean process avoiding/learning from unnecessary steps</p>	<p>Expertly demonstrates the skills by achieving both the project tasks completely.</p> <p>Achievement is through lean process avoiding unnecessary steps where required.</p> <p>Security policy is defined with only the relevant ports open.</p>
<p><b>The concept of Virtualization and Resource Pooling</b></p> <p><b>20%</b></p>	<p>Demonstrates some awareness of the topics.</p> <p>Does not suggest to increase the role of resource pooling to</p>	<p>Demonstrates Limited understanding of the topics.</p> <p>Suggest increasing the role of resource pooling to enhance the efficiency of</p>	<p>Demonstrates a functional understanding of the topics.</p> <p>Does not suggest to increase the role of resource pooling to enhance the efficiency of the</p>	<p>Demonstrates an advance understanding of the topics.</p> <p>Also discusses the role of resource pooling to enhance the efficiency of the existing</p>	<p>Demonstrates a systematic and critical understanding of the topics.</p> <p>Also discusses the topic to enhance the efficiency of</p>

	enhance the efficiency of the existing project.	the existing project.	existing project.	project.	the existing project.
<b>Correct citation of key resources and evidence</b>  <b>Demonstrates appropriate use and referencing of resources, including correct in-text and reference list composition</b>  <b>10%</b>	Demonstrates inconsistent use of good quality, credible and relevant resources to support and develop ideas and an absence in the understanding of referencing etiquette.	Demonstrates some use of credible and relevant resources to support and develop ideas, but these are not always explicit or well developed and only a rudimentary understanding of referencing structure and style.	Demonstrates the use of high quality, credible and relevant resources to support and develop ideas and reasonable demonstration of referencing techniques.	Demonstrates the use of good quality, credible and relevant resources to support and develop arguments and statements. Employs a wide scope for sourcing evidence and demonstrates proper in-text and reference list construction.	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 with a clear understanding of the academic use of the APA (6th ed.) referencing system.

The following Subject Learning Outcomes are addressed in this assessment	
SLO a)	Explain the concept of Cloud and the traditional deployment model for IT services.
SLO b)	Compare and explain the essential characteristics of Cloud.
SLO c)	Outline and differentiate different service models of Cloud.
SLO d)	Explain and apply knowledge of various cloud deployment models and differentiate between them.
SLO e)	Describe the concept of resource pooling and virtualisation in Cloud.