

EE4221 Lab 4 - Introduction to Amazon EC2

Checkpoints and Lab Assignments

This worksheet supplements the lab activities and provides additional checkpoints to verify your learning outcomes. Extended tasks are provided to guide students to explore more in-depth knowledge. Follow the instructions below to complete each checkpoint and explain your results in the lab report.

Part A – ACF Lab 3: Task 1 to 6

Checkpoint 1:

(Task 1) Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Explain these instance types and use cases briefly.

Checkpoint 2:

(Task 2) Show the System Log that displaying the installed “httpd” package and its dependencies. What is the “httpd” package used for?

Checkpoint 3:

(Task 3 to Task 4) Show the new instance type (t2.small) and new EBS volume (10GB) have been applied. Did the public IP and public domain name change after a restart? Explain briefly.

Checkpoint 4:

(Task 5) What is the current limit for T instance type? Assuming that if you want to launch ten t2.xlarge instances and two t3.2xlarge instances for a project, will it exceed the limit?

Part B – Extended Tasks

Checkpoint 5:

Use your **AWS Educate Account** to complete this task. Follow the instructions in the tutorial below to set up a LAMP web server stack on Amazon Linux 2.

- <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-lamp-amazon-linux-2.html>

When you finish the above installation, use phpMyAdmin to create a database “labdb” and a user “labuser”, then grant all privileges of “labdb” to “labuser”. For the “labuser”, set its login password to “ee4221”. Now signing in the phpMyAdmin with the “labuser” account should see two databases listed:

- information_schema
- labdb

In the lab report, provide the public URL of your phpMyAdmin installation for demonstration. Explain why a separate account should be assigned for applications to access database.