Lab 3

Introduction

In this lab, you will use Amazon Virtual Private Cloud (VPC) to create your own VPC and add additional components to produce a customized network. You will also create security groups for your EC2 instance. You will then configure and customize an EC2 instance to run a web server and launch it into the VPC.

Amazon Virtual Private Cloud (Amazon VPC) enables you to launch Amazon Web Services (AWS) resources into a virtual network that you defined. This virtual network closely resembles a traditional network that you would operate in your own data center, with the benefits of using the scalable infrastructure of AWS. You can create a VPC that spans multiple Availability Zones**.**

Objectives

After completing this lab, you can:

- Create a VPC.
- Create subnets.
- Configure a security group.
- Launch an EC2 instance into a VPC.

Activities:

Task 1: Create an AWS VPC in an Availability Zone at one region.

Task 2: Create Internet Gateway and attached it to VPC.

Task 3: Create one public Subnet and one private subnet.

Task 4: Launch two different window EC2 instances in each created subnet

Task 5: Then check the internet availability of the running EC2 instances.

Task 6: The EC2 instance of public subnet should be reachable from the internet. Check the connection using CMD or any method which you know.

Task 7: The EC2 instance of private subnet should not be reachable from the internet. Check the connection using CMD or any method which you know.

Task 8: Both the launched EC2 instance should be communicated to each other. So, check the connection using CMD or any method which you know.

Task 9: Take the snapshots of all performed tasks and create a doc/pdf of your **enrolment number_lab03** (Ex: E18CSE072_Lab03) and upload the file on LMS.

Please note: Both the given URLs are helpful to perform the Lab 3.

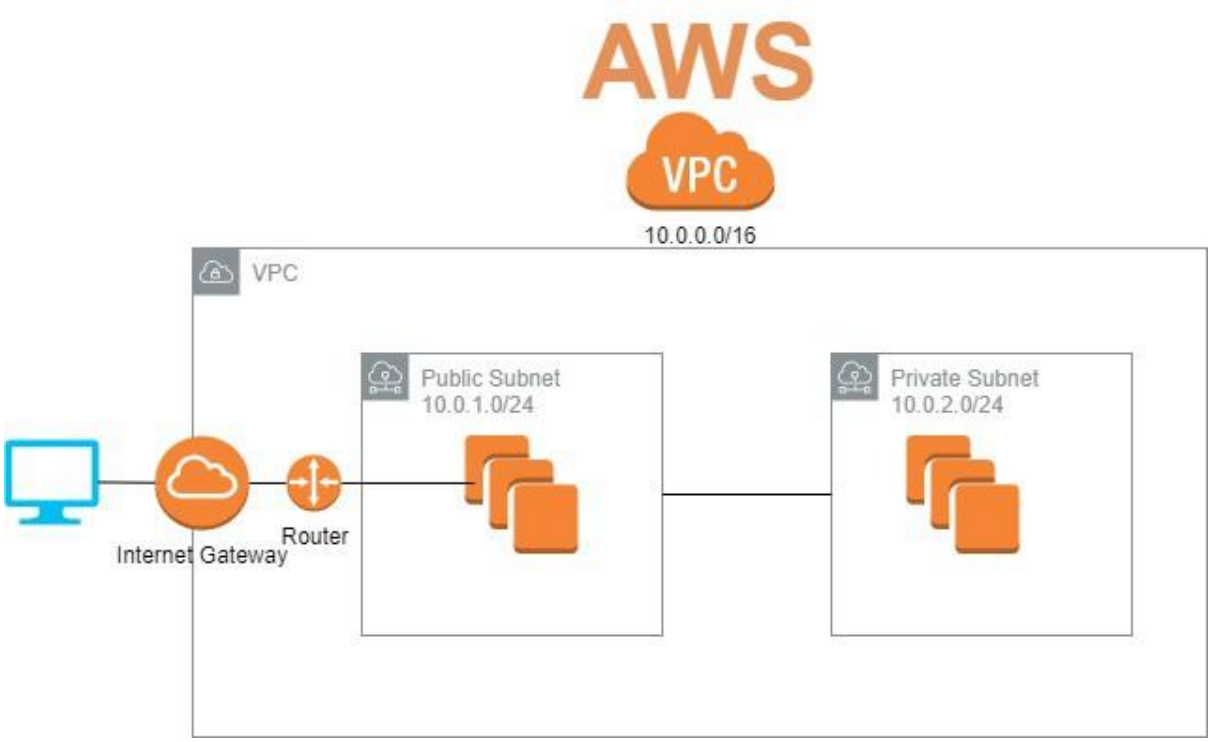
https://www.learnitguide.net/2019/01/aws-vpc-create-new-vpc-subnets-internet.html

https://www.learnitguide.net/2019/01/aws-vpc-create-route-tables.html

YouTube Video Demos:

https://www.youtube.com/watch?v=gUesnoDzNr4&ab_channel=LearnITGuideTutorials

https://www.youtube.com/watch?v=G7EvTsTCifk&ab_channel=AWSByDoing



AWS VPC Lab Scenario

Part of Lab 4 (Next Lab)

Task 1: Create 2 VPC in a Single Availability Zone at one region.

Task 2: Launch two different EC2 window servers in each VPC and Communicate them.

Task 3: Create 2 VPC in two different Availability Zone at Different regions.

Task 4: Launch two different EC2 window servers in each VPC and Communicate them.

Task 5: Check the working of Each VPC by sending ping message using cmd.

Task 6: Applying high availability and security concerns.