Week 2 – ACF Lab 3

Introduction to EC2

Thanh Minh - 103809048

1. A screenshot of a computer

   Description automatically generated with medium confidence
2. A screenshot of a computer

   Description automatically generated with medium confidence
3. A screenshot of a computer

   Description automatically generated

Task 1:

1. A screenshot of a computer

   Description automatically generated
2. Launch instance A screenshot of a computer

   Description automatically generated

**Step 1: Name and tags**

1. A screenshot of a computer

   Description automatically generated

**Step 2: Application and OS image (Amazon Machine Image)**

1. A screenshot of a computer

   Description automatically generated
2. Keep Amazon Linux 2023 AMI selected

**Step 3: Instance type**

1. A screenshot of a computer

   Description automatically generated

T2.micro instance type has 1 virtual CPU and 1 GB of memory

**Step 4: Key pair (login)**

1. A screenshot of a computer

   Description automatically generated

**Step 5: Network settings**

1. A screenshot of a computer

   Description automatically generated with medium confidence
2. A screenshot of a computer

   Description automatically generated

The instance will run by using that subnet and the instance will be assigned a public IP address.

1. A screenshot of a computer

   Description automatically generated

We can add rules for each security group. And also can modify it at any time.

**Step 6: configure storage.**

1. A screenshot of a computer

   Description automatically generated

EC2 store data on a network attached virtual disk called Elastic block store.

EC2 using default 8 GB disk volume.

**Step 7: Advanced details**

1. A screenshot of a computer

   Description automatically generated

Enable termination protection to prevent the instance from being accidentally terminated.

1. A screenshot of a computer

   Description automatically generated with medium confidence
2. A screenshot of a computer

   Description automatically generated

User data is the place that can be used to perform automated installation an configuration tasks after the instance starts.

The script will:

* Install an Apache web server (httpd)
* Configure the web server to automatically start on boot.
* Run the web server once it has finished installing.
* Create a simple webpage.

**Step 8: Launch the instance.**

1. A screenshot of a computer

   Description automatically generated
2. A screenshot of a computer

   Description automatically generated with medium confidenceA screenshot of a computer

   Description automatically generated with medium confidence
3. A screenshot of a computer

   Description automatically generated

**Task 2: Monitor Your instance**

1. A screenshot of a computer

   Description automatically generated with medium confidence

Detected any problems that might prevent instances from running applications.

EC2 performs automated checks on every running EC2 instance to identify hardware and software issues.

1. A screenshot of a computer

   Description automatically generated
2. A screenshot of a computer

   Description automatically generated

Used for problem diagnosis, troubleshooting kernel problems and service configuration issues that could cause instance to terminate or become unreachable before is SSH daemon can be started

1. A screenshot of a computer

   Description automatically generated
2. A screenshot of a computer

   Description automatically generated

If I can’t reach instance via SSH or RDP, I can capture a screenshot of instance and view it as an image. This provides visibility as to the status of the instance and allows for quicker troubleshooting.

**Task 3: Update your security group and access the web server**

1. A screenshot of a computer

   Description automatically generated
2. A screenshot of a computer

   Description automatically generated with medium confidence
3. A screenshot of a computer

   Description automatically generated
4. .
5. No because it has not run on port 80 which is used for the HTTP web request.
6. A screenshot of a computer

   Description automatically generated
7. A screenshot of a computer

   Description automatically generated
8. A screenshot of a computer

   Description automatically generated
9. A screenshot of a computer

   Description automatically generated with medium confidence
10. A screenshot of a computer

    Description automatically generated
11. A screen shot of a computer

    Description automatically generated with medium confidence

**Task 4: Resize your instance: Instance type and EBS volume**

Before can resize and instance, must stop it first. When it stop, it will shutdown.

1. A screenshot of a computer

   Description automatically generated
2. A screenshot of a computer

   Description automatically generated with medium confidence
3. .
4. A screenshot of a computer

   Description automatically generated

**Change the instance type.**

1. A screenshot of a computer

   Description automatically generated

T2.small has twice as much memory as t2.micro instance.

**Resize the EBS volume.**

1. A screenshot of a computer

   Description automatically generated
2. A screenshot of a computer

   Description automatically generated
3. A screenshot of a computer

   Description automatically generated
4. .
5. A screenshot of a computer

   Description automatically generated

**Start the resized instance**

1. A screenshot of a computer

   Description automatically generated
2. A screenshot of a computer

   Description automatically generated
3. A screenshot of a computer

   Description automatically generated with medium confidence
4. A screenshot of a computer

   Description automatically generated with medium confidence

**Task 5: Explore EC2 limits**

1. A screenshot of a computer

   Description automatically generated with medium confidence
2. .

**Task 6: Test Termination Protection**

1. A screenshot of a computer

   Description automatically generated
2. A screenshot of a computer

   Description automatically generated
3. A screenshot of a computer

   Description automatically generated
4. A screenshot of a computer

   Description automatically generated
5. A screenshot of a computer

   Description automatically generated
6. .
7. A screenshot of a computer

   Description automatically generated
8. A screenshot of a computer

   Description automatically generated

**Lab complete**

1. A screenshot of a computer

   Description automatically generated with medium confidence
2. A screenshot of a computer

   Description automatically generated with medium confidence