AWS Task-4

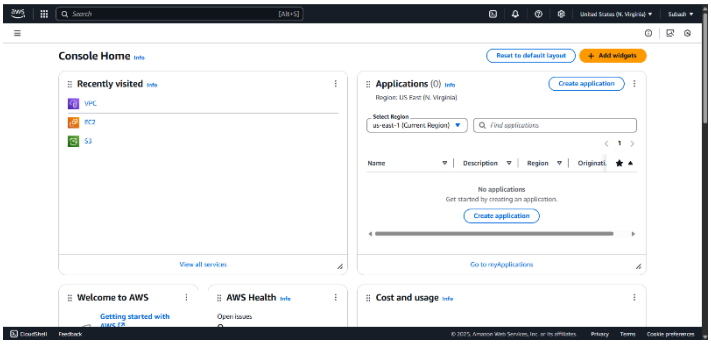
TASKS

1. **Launch an EC2 instance (Linux and Windows) along with a web server. Then, create an EBS volume of 5 GB, attach it to an EC2 machine (Linux and Windows), and take a snapshot. Finally, create an EBS volume using the taken snapshot.**

PART 1: Launching a Linux EC2 Instance

Step 1: Sign in to the AWS Console

- Go to: https://console.aws.amazon.com
- Input your login details to get into the AWS Management Console.

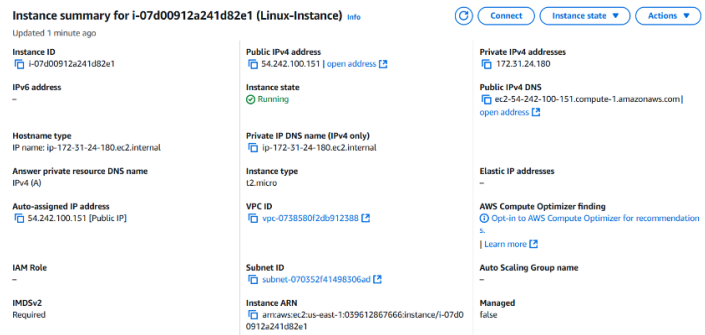


Step 2: Head over to the EC2 Dashboard

- In the AWS search bar, just type EC2 and pick EC2 from the list of services.

Step 3: Launch a Linux Instance

- Start by clicking on Launch Instance.
- Give your instance a name: **Linux-Instance**.
- For the Amazon Machine Image (AMI), pick Amazon Linux 2 (it's free tier eligible!).
- Next, choose your Instance Type: go with **t2.micro**.
- In the Key Pair section, either select an existing key pair or create a new one for SSH access later.
- Now, let's set up the Network Settings:
  - Make sure to allow **SSH (port 22)**
  - Also, allow **HTTP (port 80)** so that your web server can be accessed.
- For now, you can keep the storage settings as they are by default.
- Finally, click Launch Instance and hang tight until it's up and running!



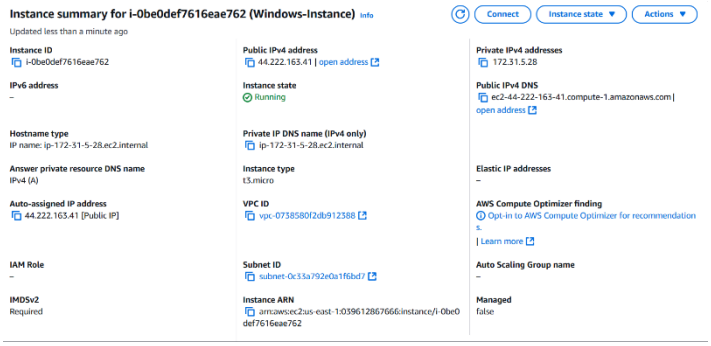
PART 2: Launching a Windows EC2 Instance

Step 1: Head back to the EC2 Dashboard

- Click on Launch Instance once more.

Step 2: Set Up Your Windows Instance

- Give your instance a name: **Windows-Instance**.
- AMI: Pick the Microsoft Windows Server 2019 Base.
- Instance type: **t2.micro.**
- Key pair: Either select an existing one or create a new one (this is for RDP access).
- Network Settings:
  - Enable **RDP (port 3389)**
  - Enable **HTTP (port 80)**
- Hit Launch Instance and hang tight until the status shows it's running.



PART 3: Setting Up the Web Server on Both Instances

Step 1: Linux: Installing Apache Web Server

- Start by selecting the Linux instance → Click on Connect → Use your SSH client.

- Open your terminal and type in, the command is:

  ssh -i your-key.pem ec2-user@<Public-IP>

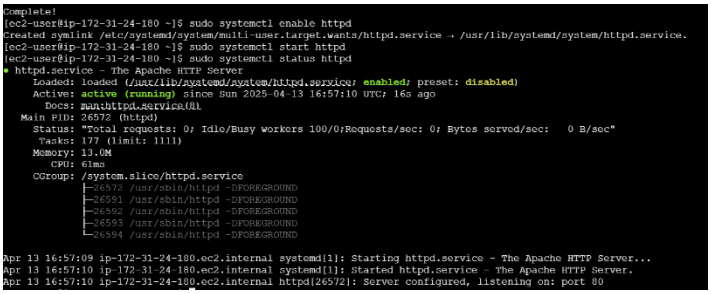
- After you're connected, it's time to install Apache, the command is:

  sudo yum update -y
  sudo yum install httpd -y
  sudo systemctl start httpd
  sudo systemctl enable httpd

- Let's create a simple test web page, the command is:

  echo "<h1>Hello from Linux EC2 Web Server</h1>" | sudo etc /var/www/html/index.html

- Now, open your browser and navigate to the public IP of your Linux instance. You should see the message displayed there.

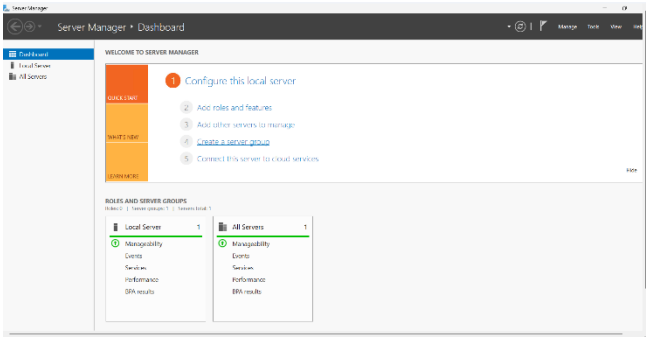


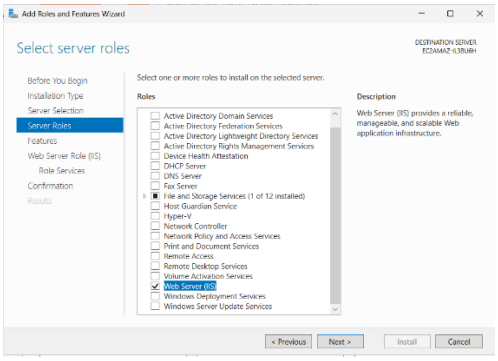
Step 2: Windows: Install IIS Web Server

Ready to set up the IIS Web Server on your Windows instance? Just follow these simple steps:

- Start by selecting your Windows instance, then click on Connect and download the Remote Desktop File.
- Open that file and log in using your credentials (the default user is Administrator).
- Once you're logged in:
  - Launch Server Manager –
  - Navigate to Manage > Add Roles and Features
  - Find Server Roles and check the box for Web Server (IIS).
  - Click Next and then hit Install.
- After the installation is complete, open Internet Explorer on your instance and head over to:

  http://localhost
- You should be greeted by the IIS welcome page. To check it out from outside, just enter the instance's public IP in your own browser.

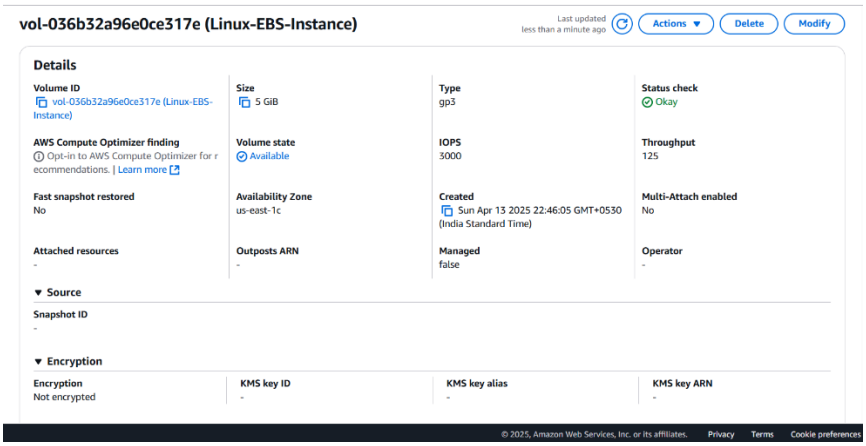


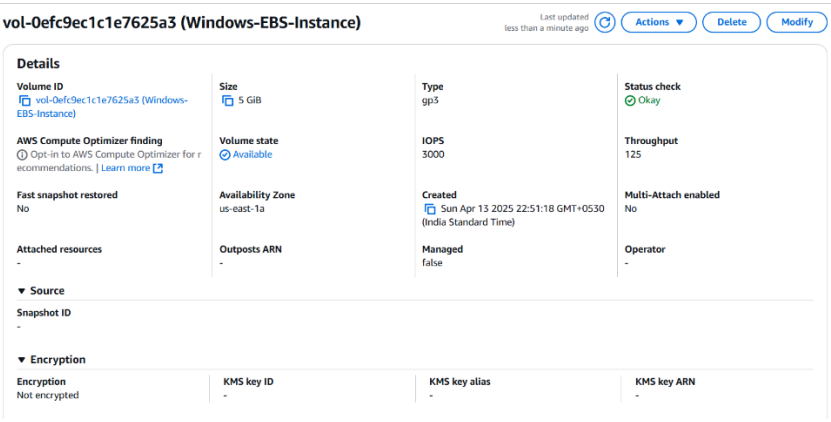


PART 4: Create and Attach EBS Volume Step

Step 1: Create EBS Volume

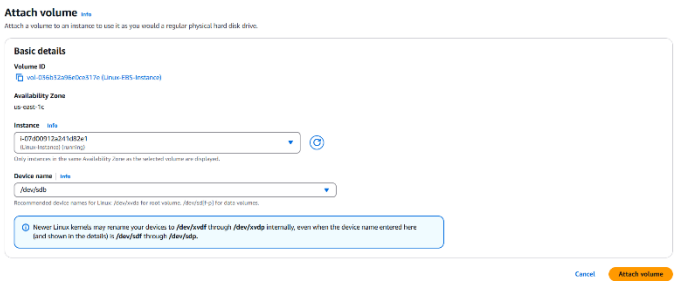
- Head over to the EC2 dashboard and find Elastic Block Store, then click on Volumes.
- Hit the Create Volume button.
- Configure the following settings: - Size: 5 GiB - Availability Zone: Ensure it matches the zone of your instance (for example, us-east-1a).
- Click on Create Volume to finish up.





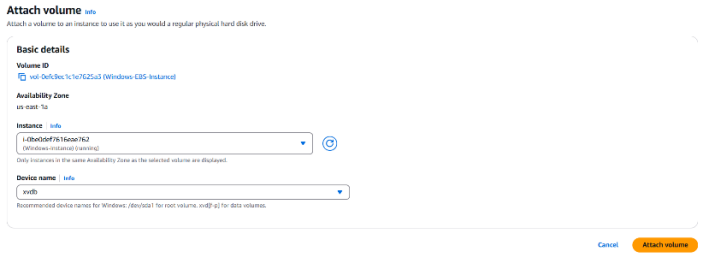
Step 2: Attach EBS Volume to Linux Instance

- Navigate back to the Volumes section.
- Select the 5 GB volume, then click on Actions and choose Attach Volume.
- Pick your Linux instance from the list and hit Attach to connect it.



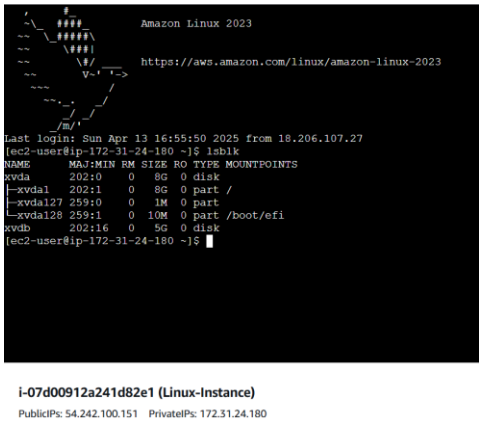
Step 3: Attaching an EBS Volume to Your Windows Instance

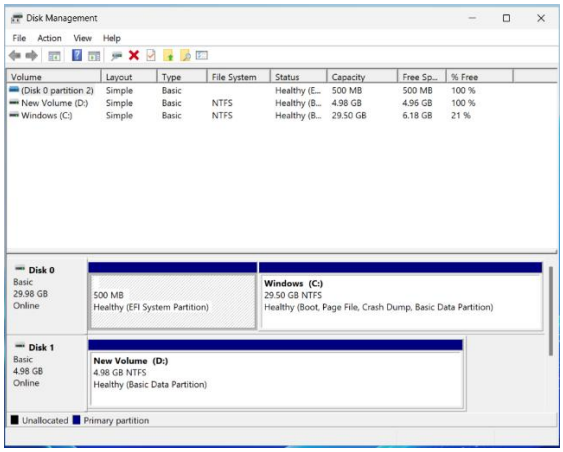
- If you want, you can detach it from the Linux instance first, then head back to the Volumes section.
- Click on Actions > Attach Volume, and this time, choose the Windows instance you want to connect it to.



Step 2: Check The volume is added in Instance or Not

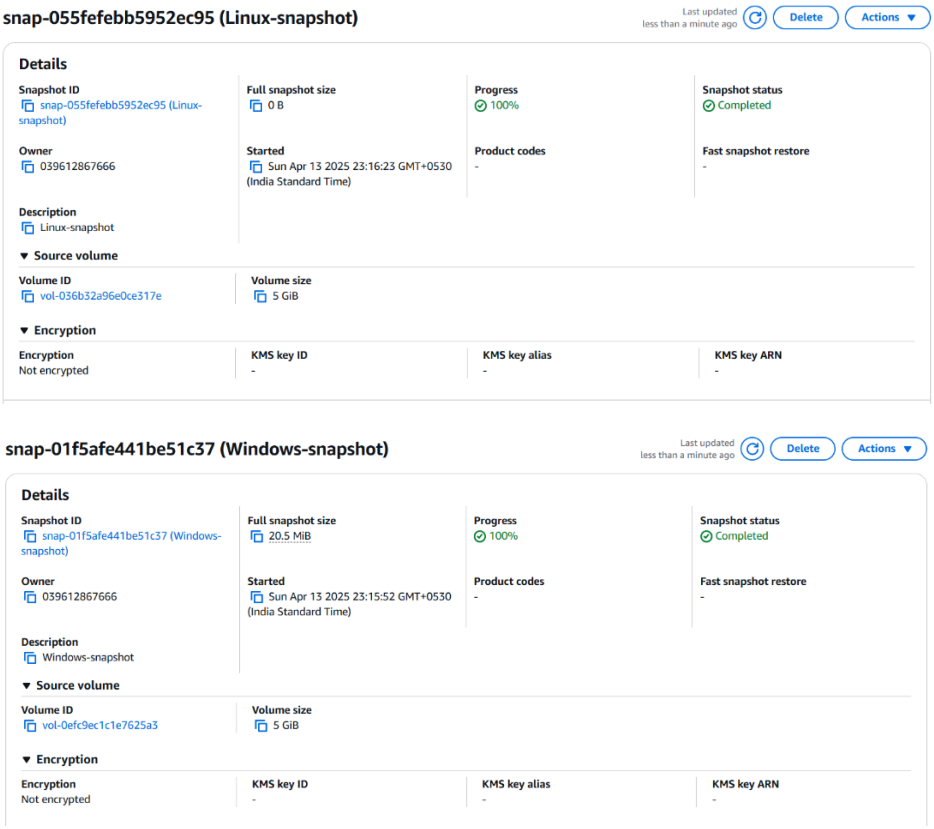
- To check the volume in Linux, The command is:
  - **lsblk**
- To check the volume in windows, go to disk management their you can find an disk partiation.





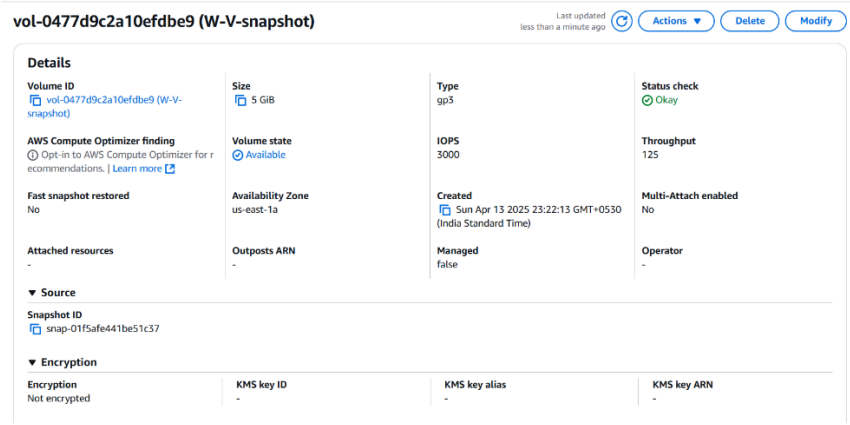
PART 5: Taking a Snapshot of Your EBS Volume

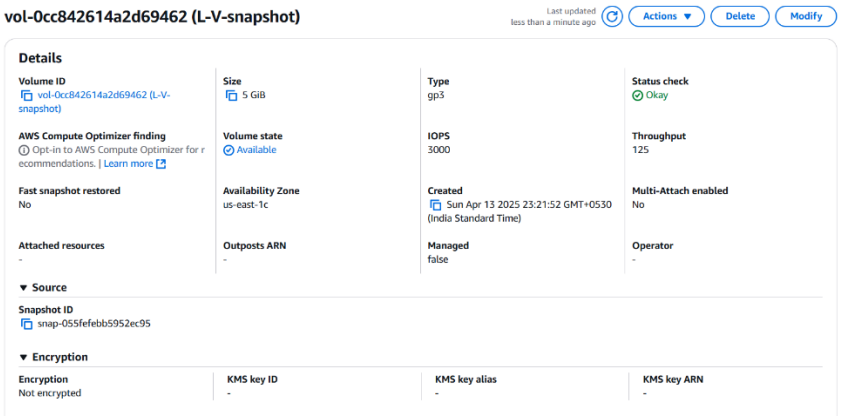
- Head over to the EC2 Dashboard and click on Volumes.
- Find and select your 5 GB volume.
- Hit Actions and then choose Create Snapshot.
- Give it a name: my-ebs-snapshot, and add a description.
- Click on Create Snapshot and hang tight until it's done.



PART 6: Creating a New Volume from Your Snapshot

- Navigate to Snapshots in the EC2 Dashboard.
- Select your snapshot, then go to Actions and click Create Volume.
- Configure the following:
    - Size: You can stick with the default or increase it if you need more space.
    - Availability Zone: Make sure it matches the instance you plan to use it with.
- Click Create Volume.





Once your new volume is ready, you can attach it to any EC2 instance just like before and mount or format it as necessary.

********** **TASK COMPLETED** **********