Case Study

Problem Statement:

You work for XYZ Corporation. Your corporation is working on an application and they require secured web servers on Linux to launch the application.

Tasks To Be Performed:

1. Create an instance in the US-East-1 (N. Virginia) region with Linux OS and manage the requirement of web servers of your company using AMI.
2. Replicate the instance in the US-West-2 (Oregon) region.
3. Build two EBS volumes and attach them to the instance in the US-East-1 (N. Virginia) region.
4. Delete one volume after detaching it and extend the size of the other volume.
5. Take backup of this EBS volume

Step-by-Step Procedure:-

Step 1:- Open AWS console and sign in with root user, In home search For EC2 service.

Step 2:- As you open Ec2 change the region to US-East-1 (N. Virginia) region

Step 3:- click on launch an Instance and select linux os as mention in the case study, and provide other related details like key pair, security groups and volumes etc..
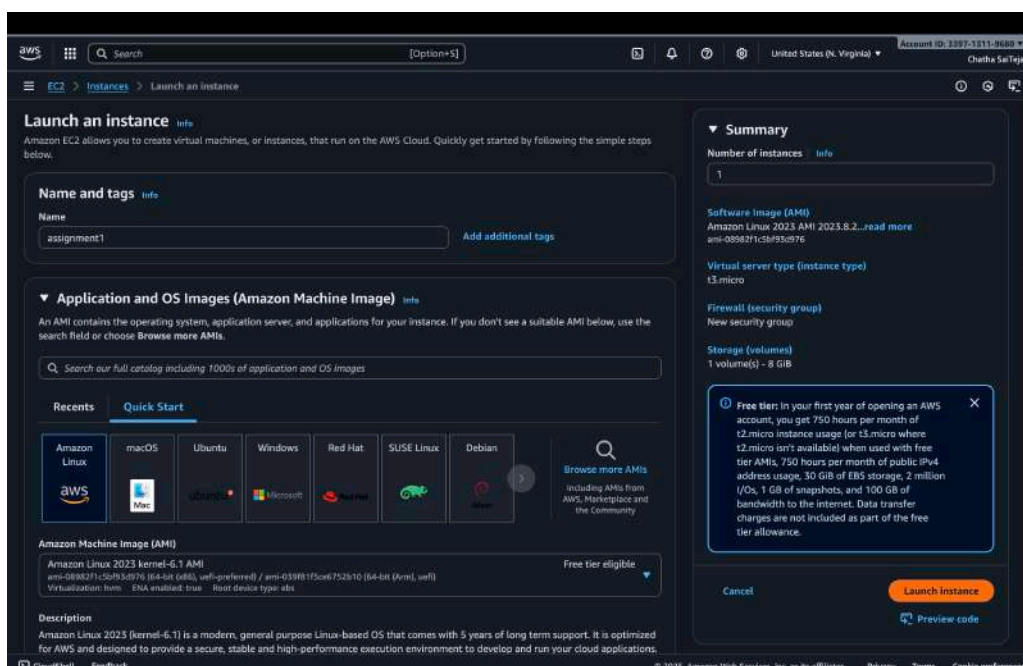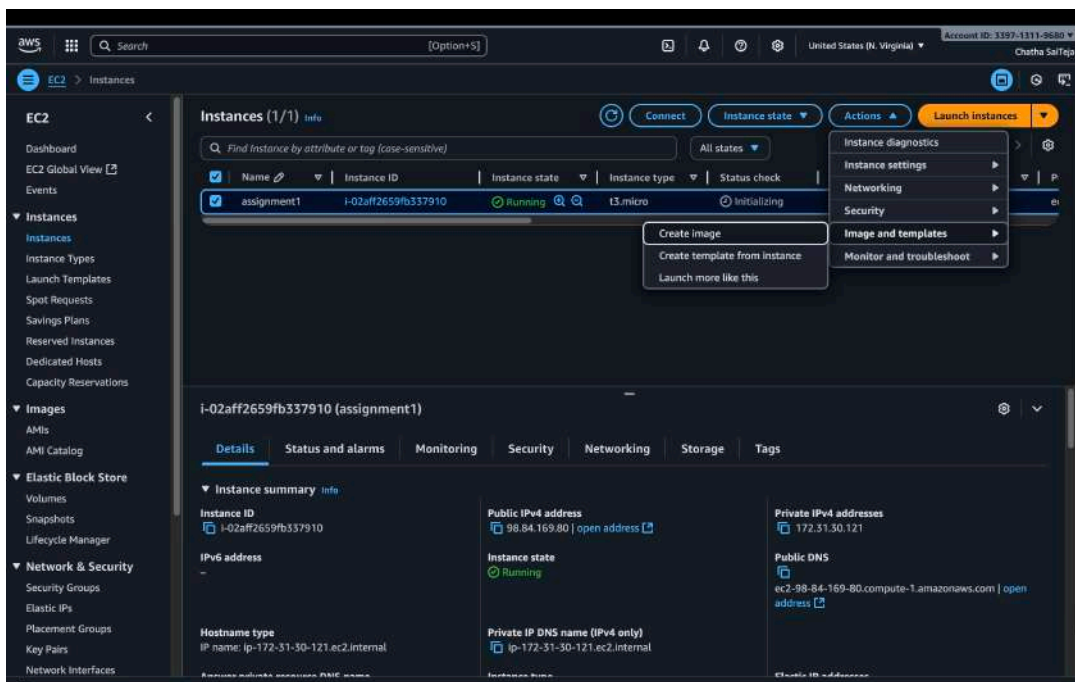

Creating an Instance
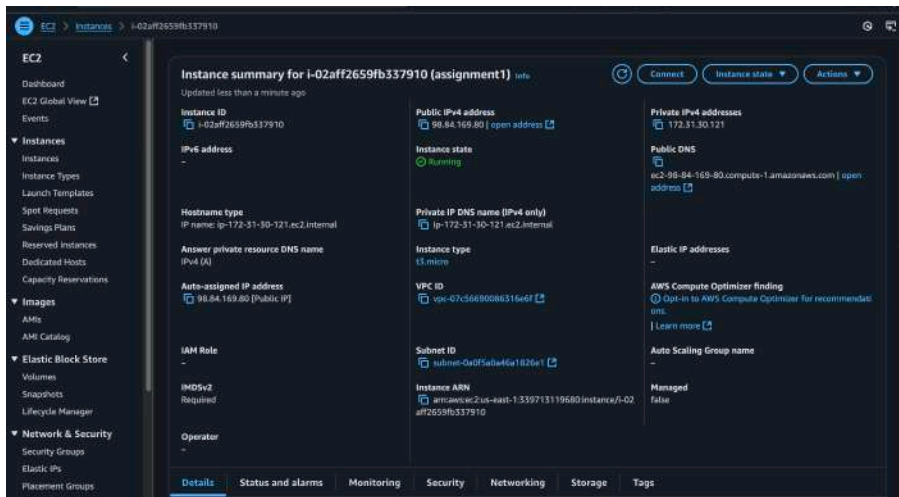
Instance Summary

Step 4:- Select the Running instance and Go to "Actions" then click on the "Image&Templates" and click on "create Image".

Creating Ami

Step 5:- Enter Image (AMI) Details like image name, description here we can also add a volume ,click on create image
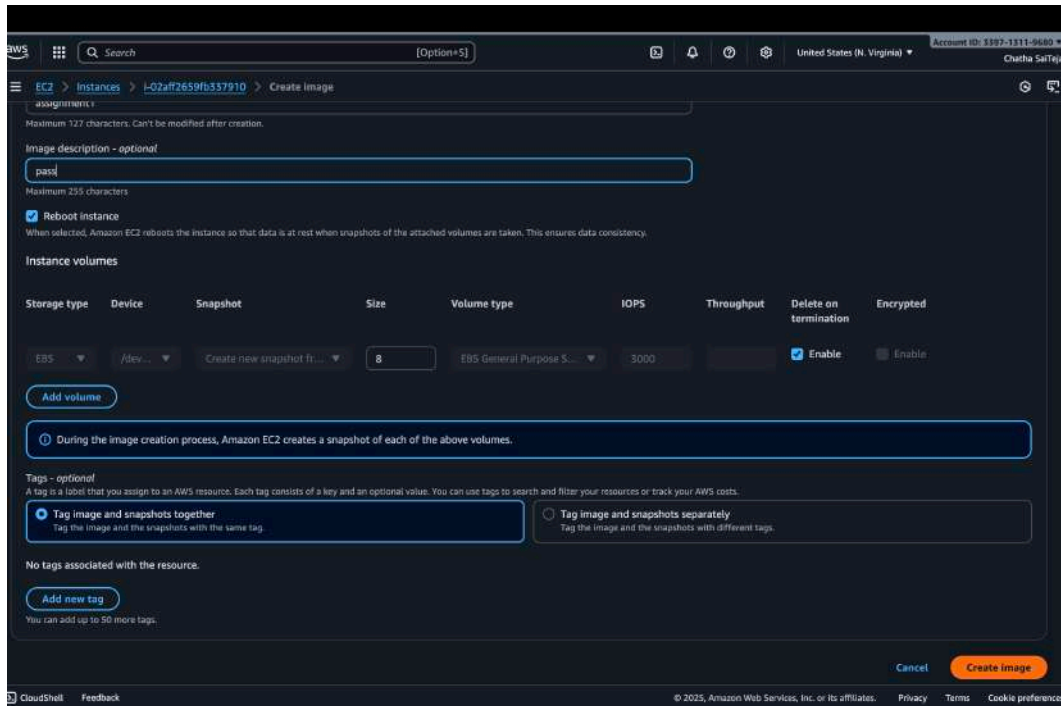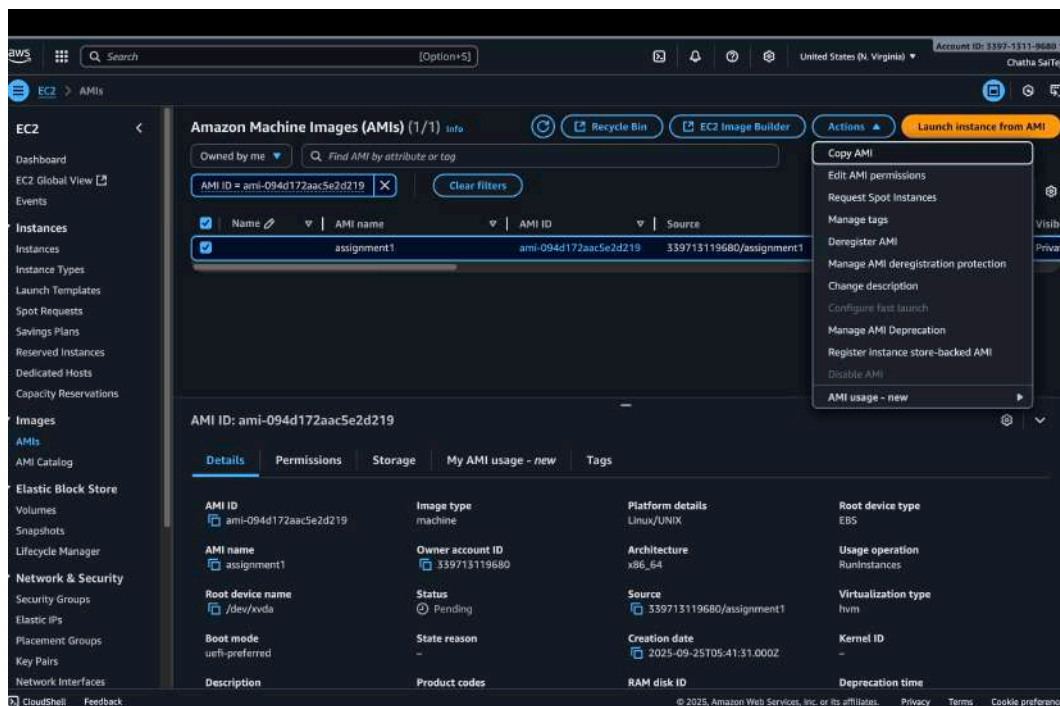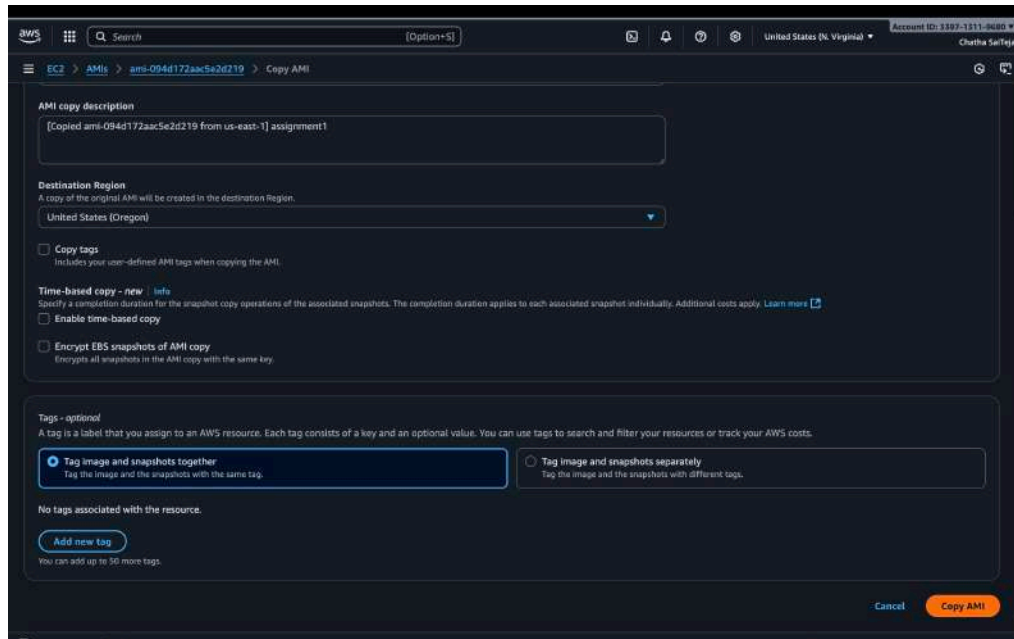
Image Details

Step 6:- Now we have to Replicate the Instance that we created in US-East-1 (N. Virginia) region to US-West-2 (Oregon) region, so we have to copy the AMI (image). As we created the image N-V region in previous step.

Copy Ami

So we have to select the AMI(image) then Go to "Actions" ,click on " Copy AMI"
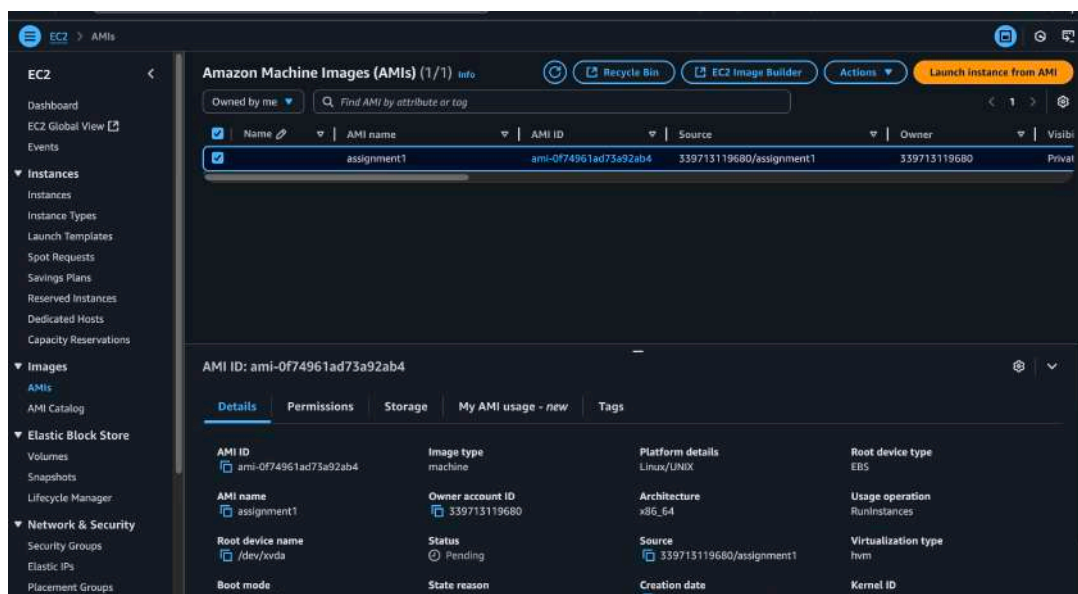
Step 7:- After Clicking on Copy Ami we have to specify the destination region which is US-West-2 (Oregon) region.

Providing the destination

Step 8:- it takes some minutes to copy ,After it we can go to US-West-2 (Oregon) region, click on AMI ,then we can able to see the Copied AMI from US-East-1 (N. Virginia) region

AMI in Oregon region

Step 9:- Click on "Launch Instance from AMI" in Oregon region
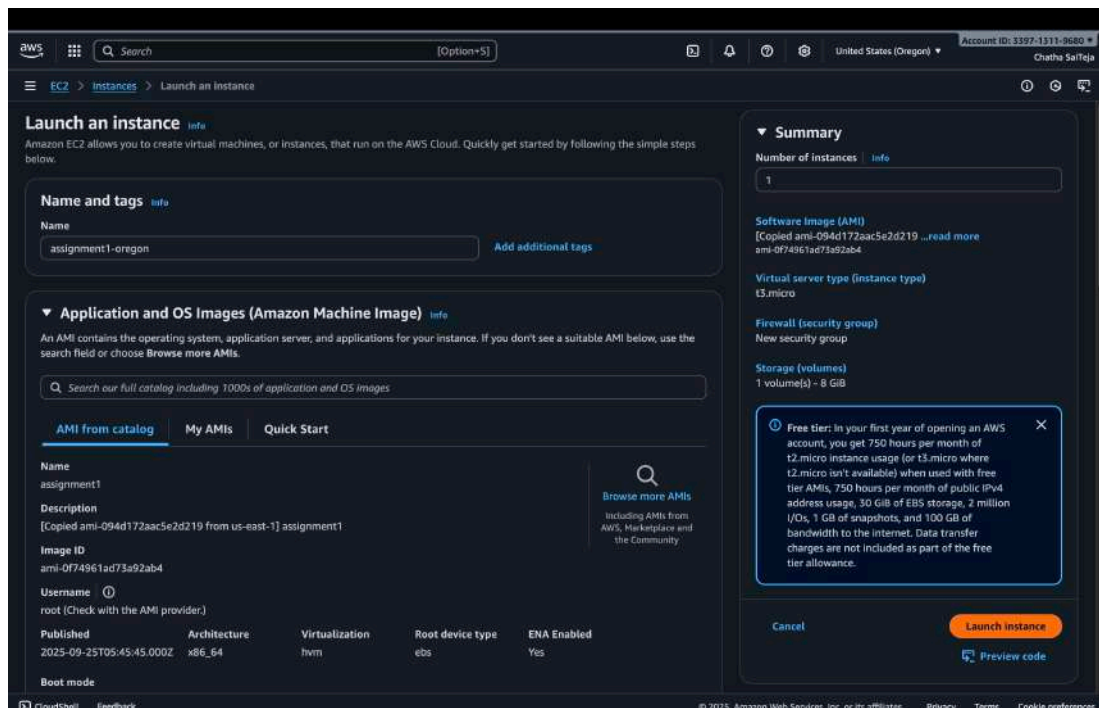
Launching Instance From AMI
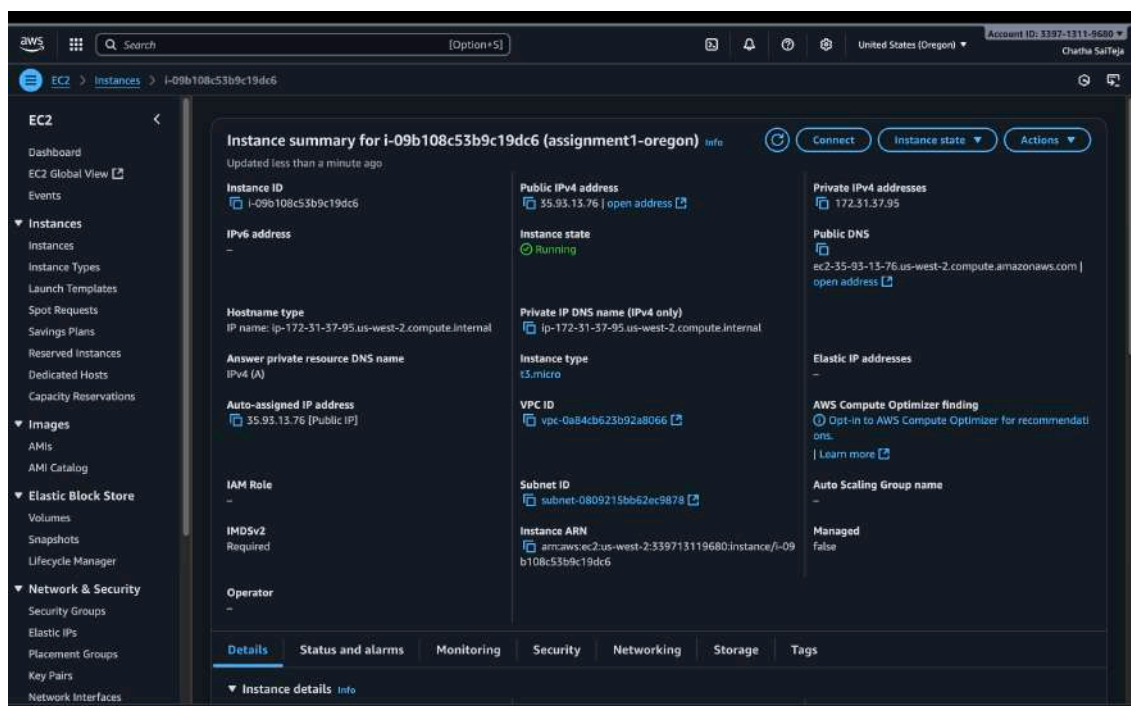
Instance Summary

Step 10:- Now we have to change the region to US-East-1 (N. Virginia) ,In that Go to "EBS Volumes" ,we have to create two volumes, So click on create a volume.

Creating a volume1 with size 10 GIB

Volume 2 with 10 GIB

Step 11:- Attach the volume 1 to the running instance by selecting the volume1 then click on "Actions" and Click on "Attach Volume"
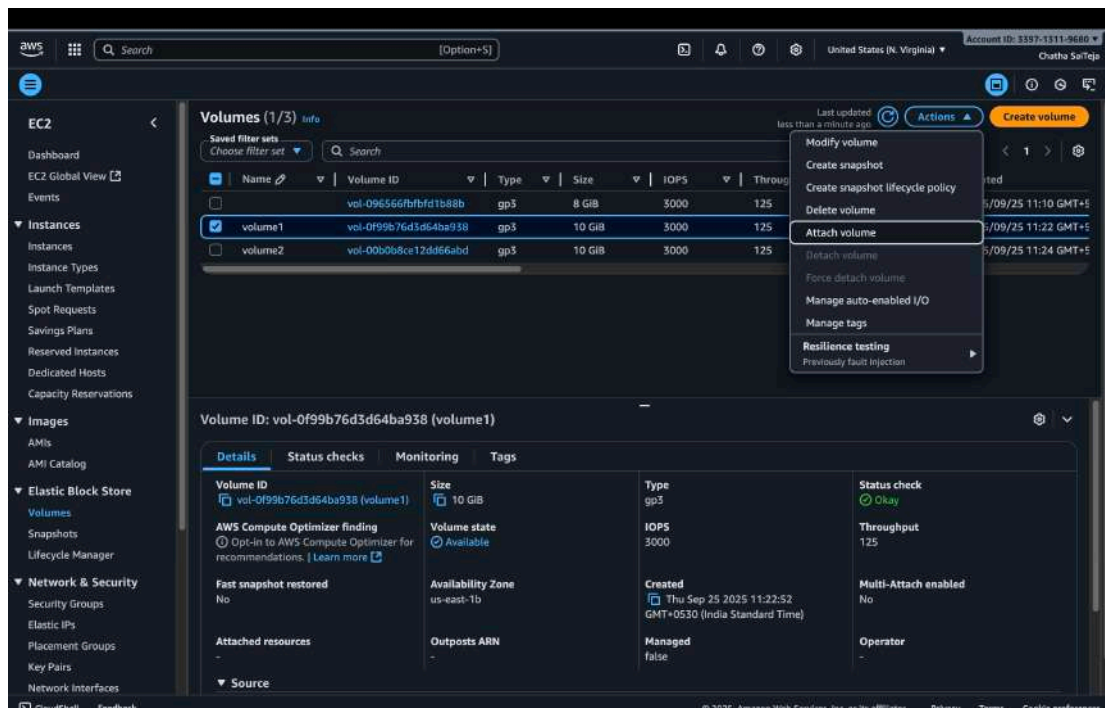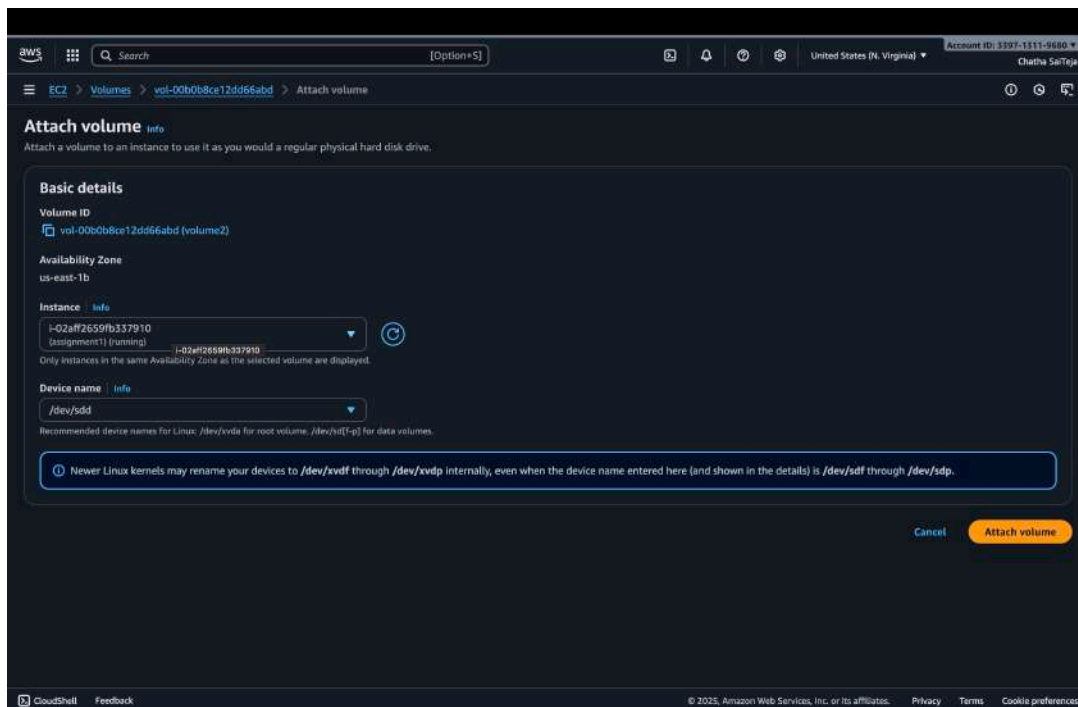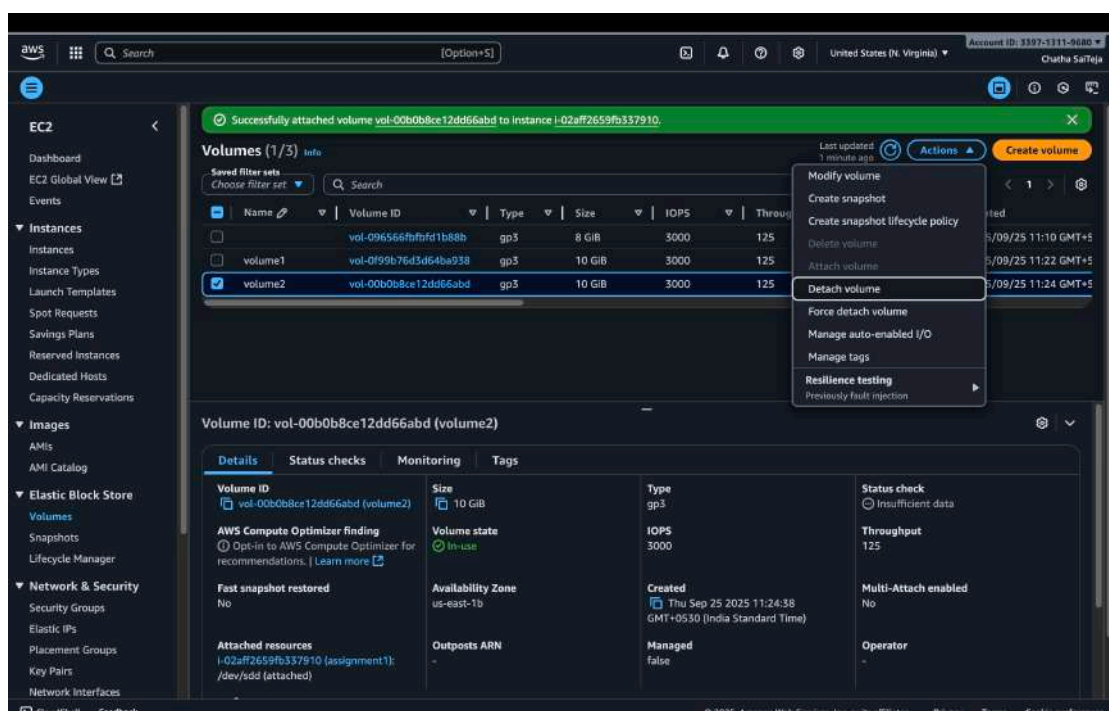

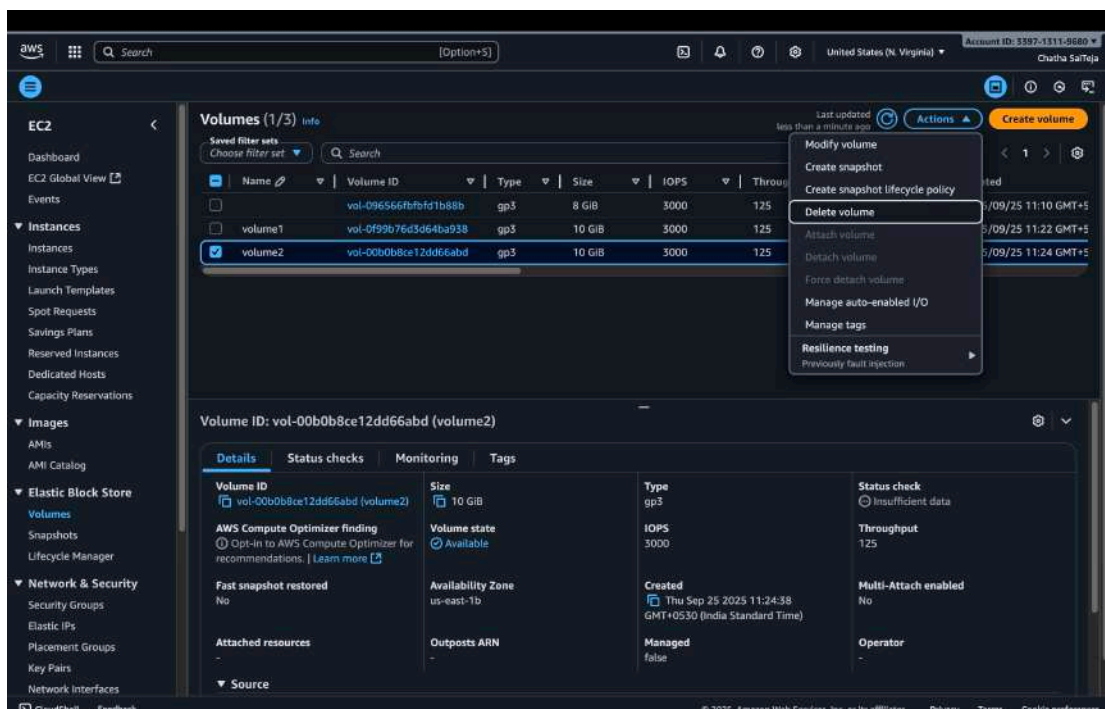Attach Volume1 to Instance
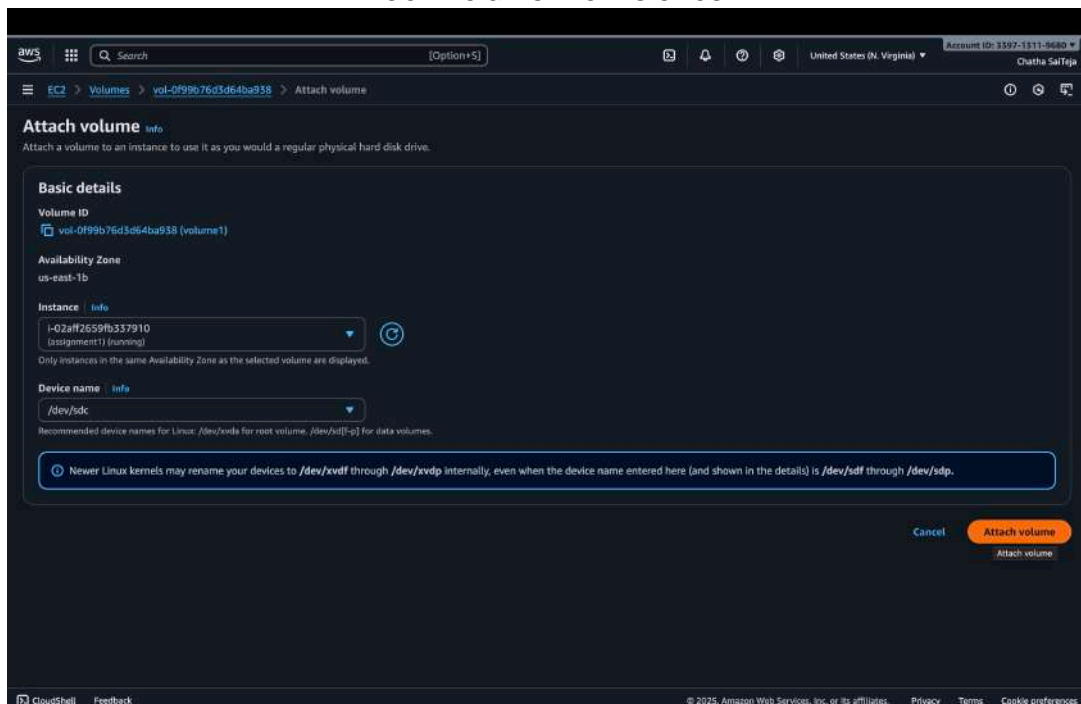
Details to Attach

Step 12:- Attach the volume 2 to the running instance by selecting the volume2 then click on "Actions" and Click on "Attach Volume"

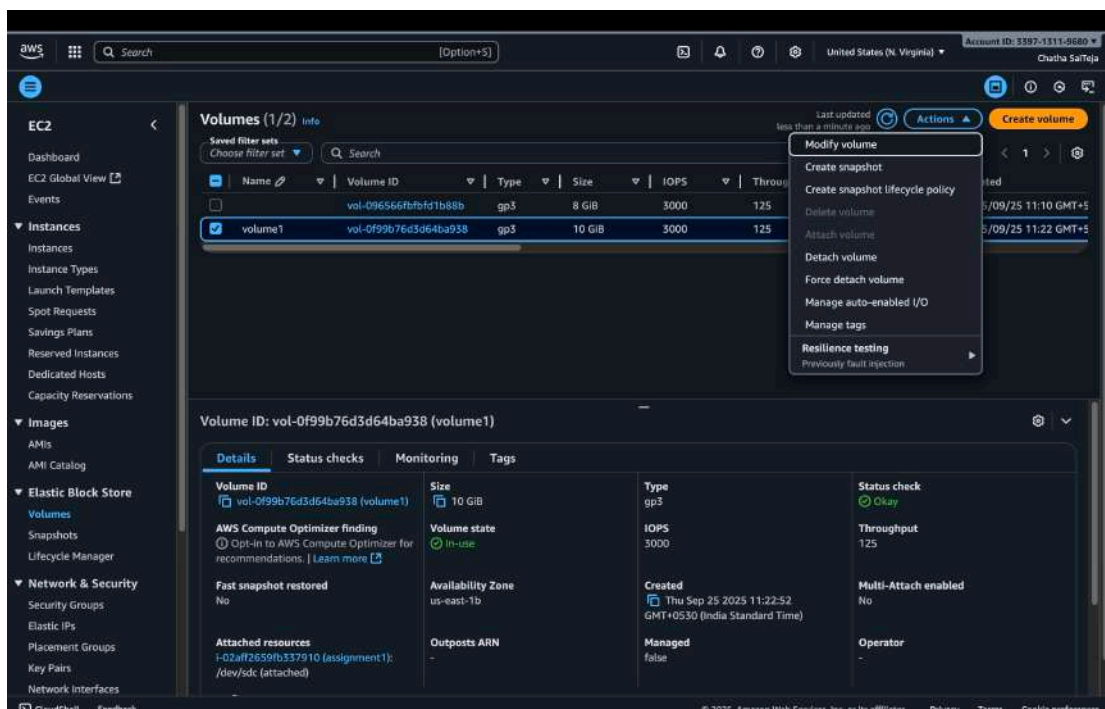Details to attach to the Volume

Step 13:- Now we have to delete one volume(volume2) after detaching it to the Instance
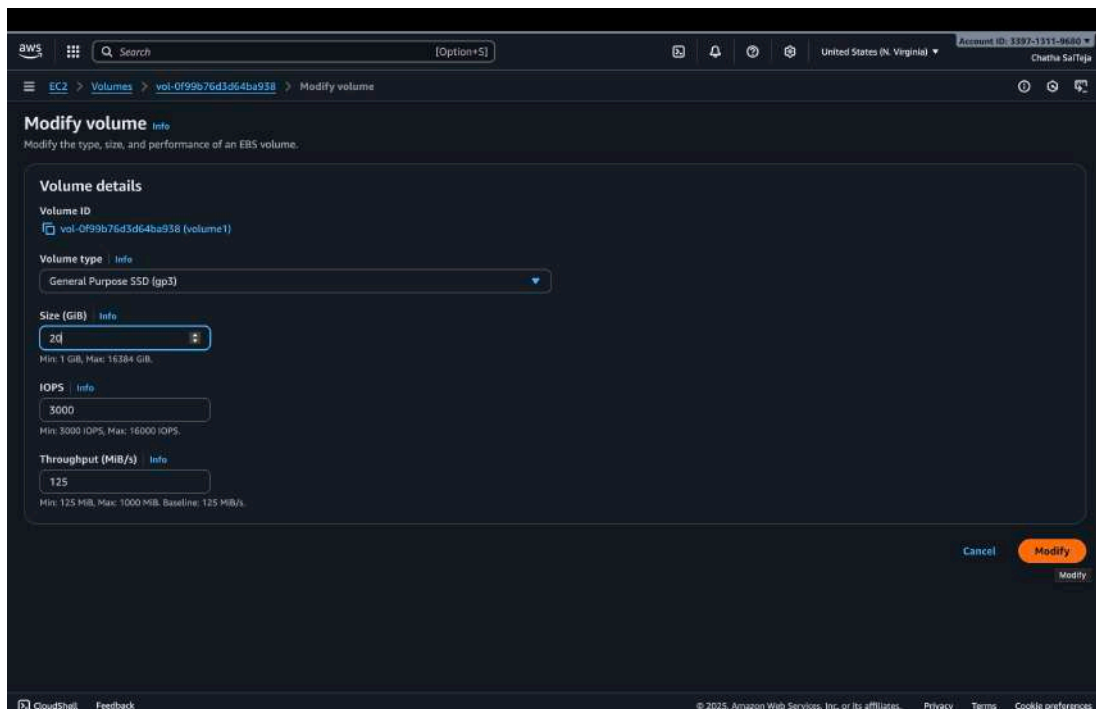
Deleting the Volume 2

Step 14:- Now we have to modify the volume1 as it has to extend by clicking on modify the volume.
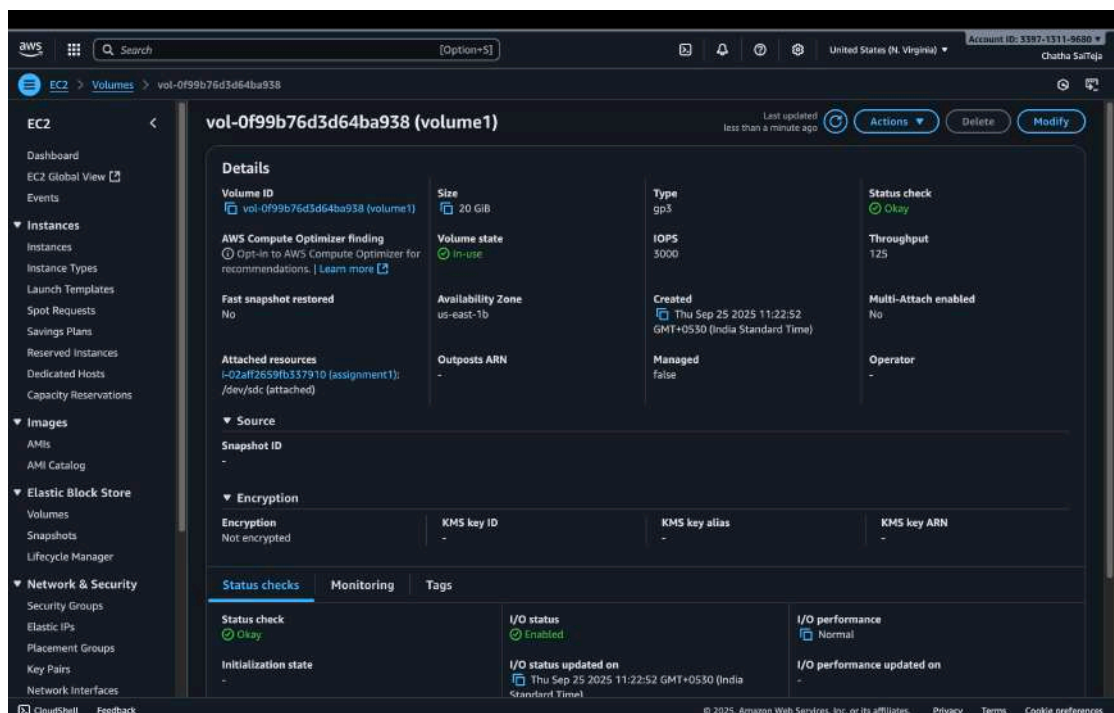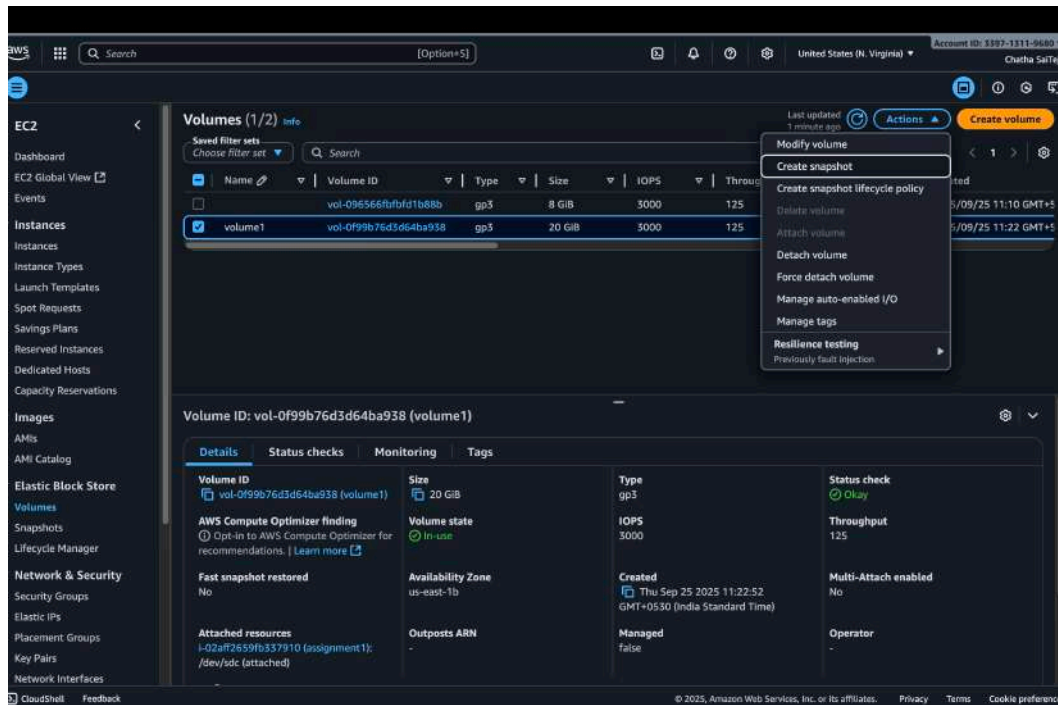

Modifying the Volume

Size extended to 20 GIB
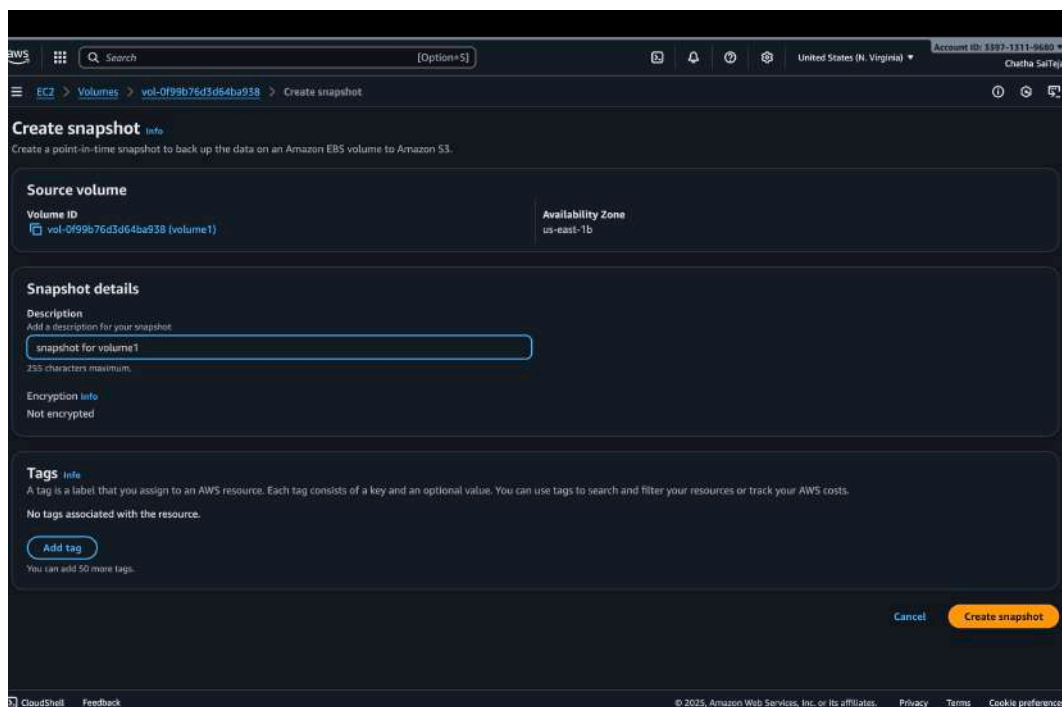
Here we extended the size of vol1 from 10 GIB to 20 GIB

Volume 1 Summary

Step 15:- Take the Backup of EBS Volume(volume1) i.e we have to create a snapshot for Volume 1. So select the volume and Go to "Actions" then Click On Create Snapshot

Creating a Snapshot

Details of snapshot

Snapshot summary