Exp - 4 **Implementing IaaS - Compute through EC2**

29/07/24

Aim:

To implement Iaas by compute through EC2.

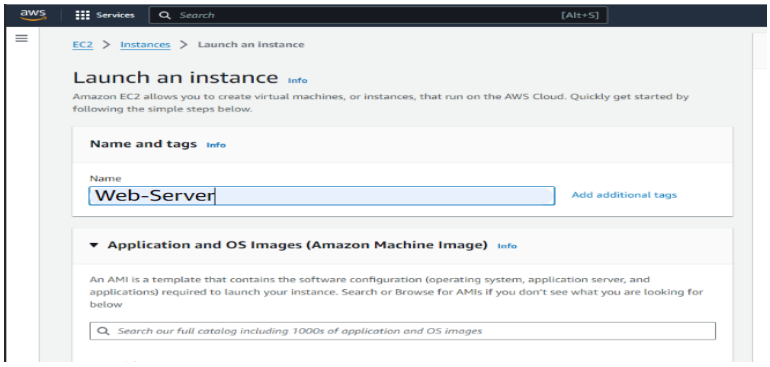
Procedure:

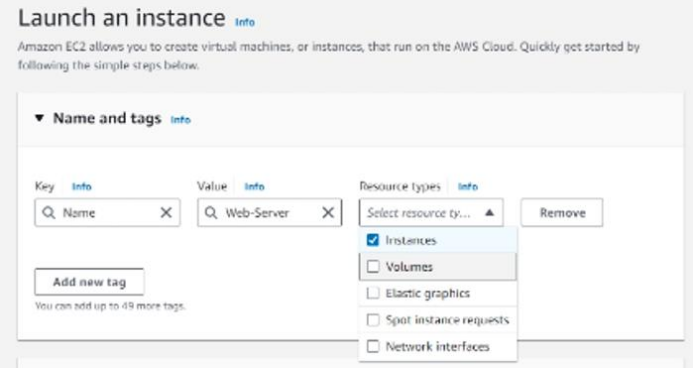
Task 1: Launching your EC2 instance

In the AWS Management Console in the Search, enter EC2 and choose Enter. From the search results, choose EC2. In the Launch instance section, choose Launch instance.

From the Resource types dropdown list, Instances is selected by default. Leave Instances selected and select Volumes.

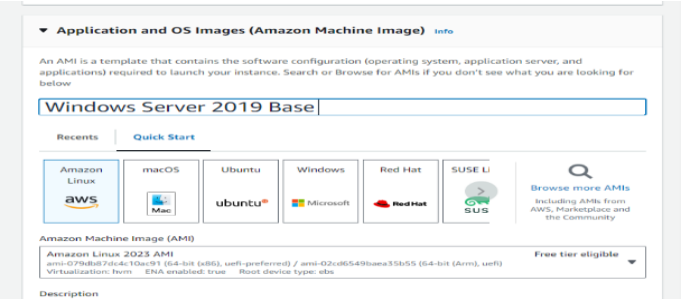
STEP 1: NAME YOUR EC2 INSTANCE





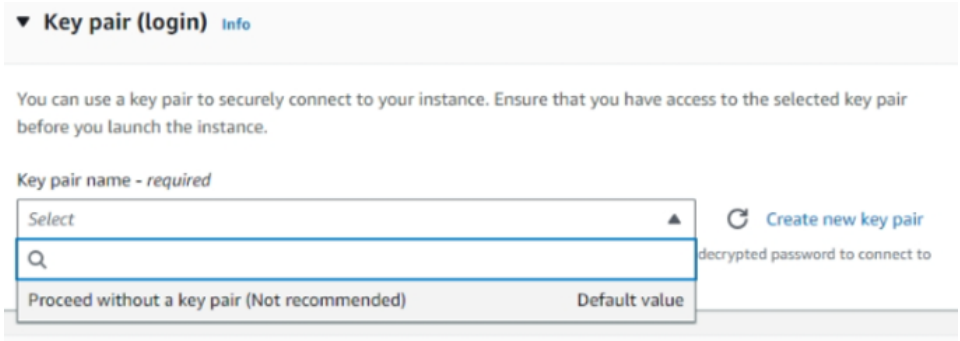
STEP 2: CHOOSE AN AMI

Locate the Application and OS Images (Amazon Machine Image) section. It's below the Name and tags section. In the search box, enter Windows Server 2019 Base and choose Enter. Next to Microsoft Windows Server 2019 Base, choose Select.

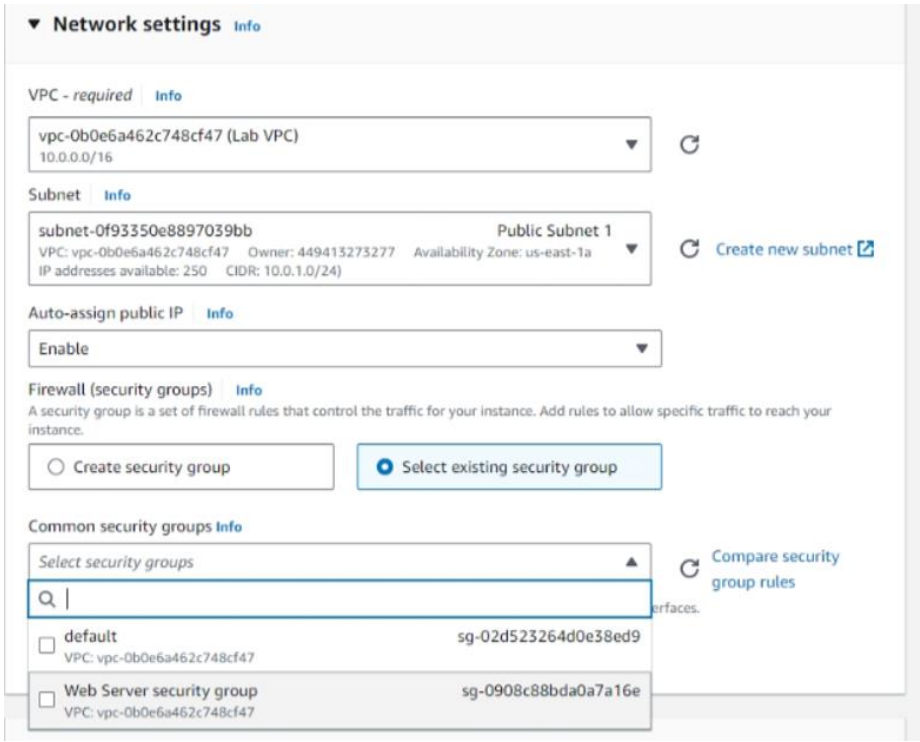


STEP 3: CHOOSE AN INSTANCE TYPE

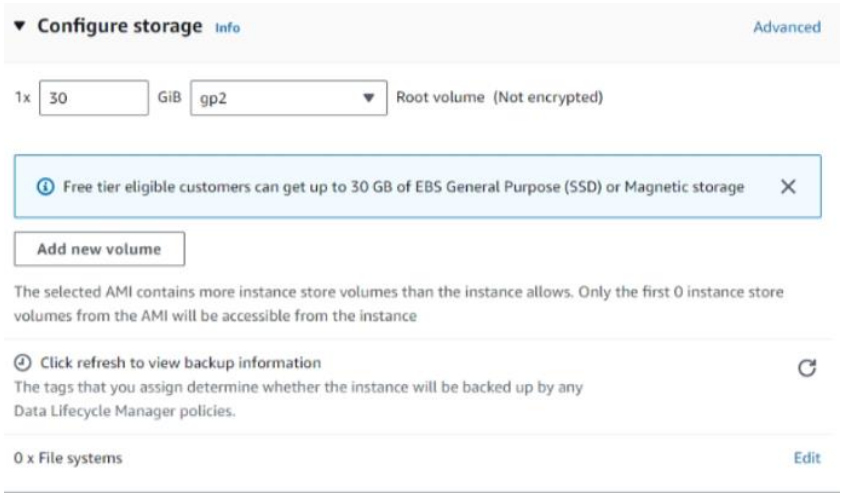
STEP 4: CONFIGURE A KEY PAIR



STEP 5: CONFIGURE THE NETWORK SETTINGS

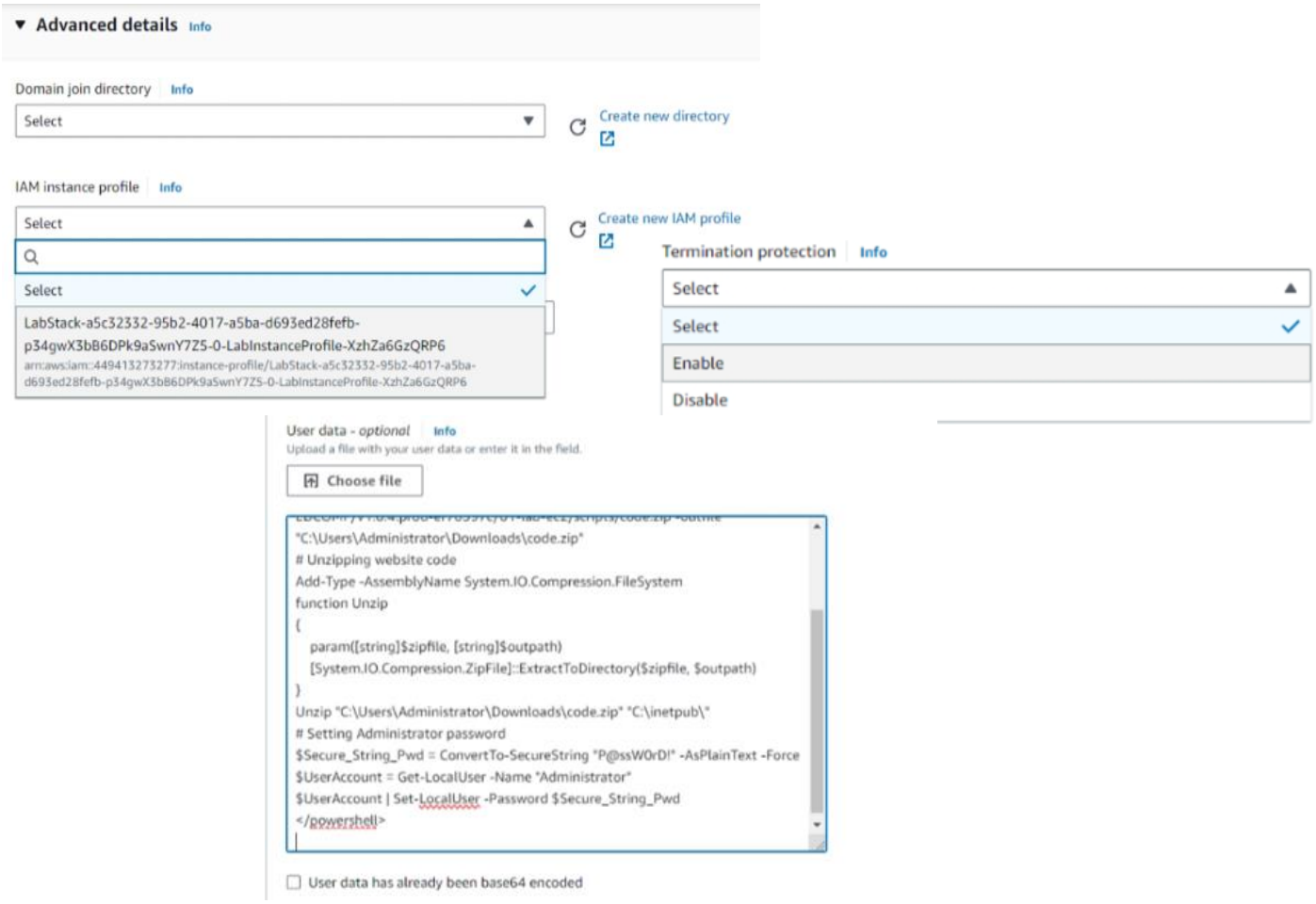


STEP 6: ADD STORAGE



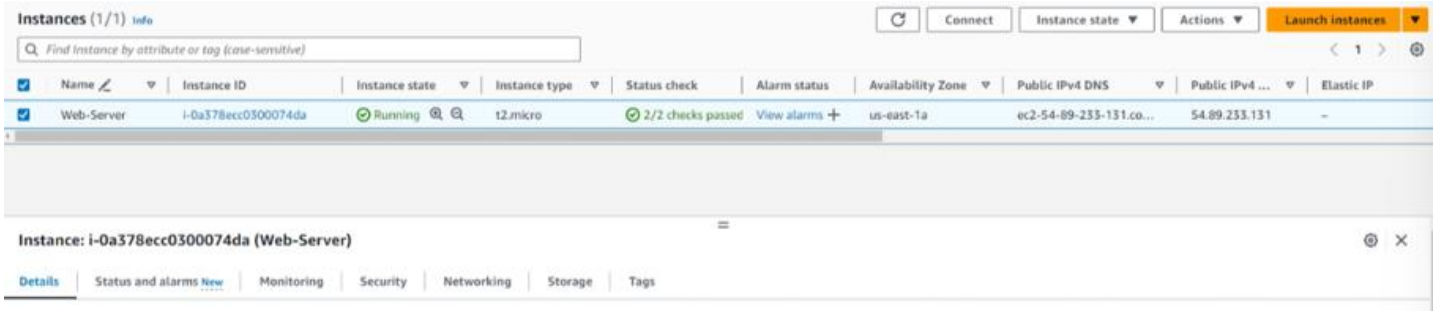
STEP 7: CONFIGURE ADVANCED DETAILS:

Expand the Advanced details section. For IAM instance profile, choose the role that begins with LabStack in the name and make the termination protection enabled. choose the User data text box. Then, choose Paste.



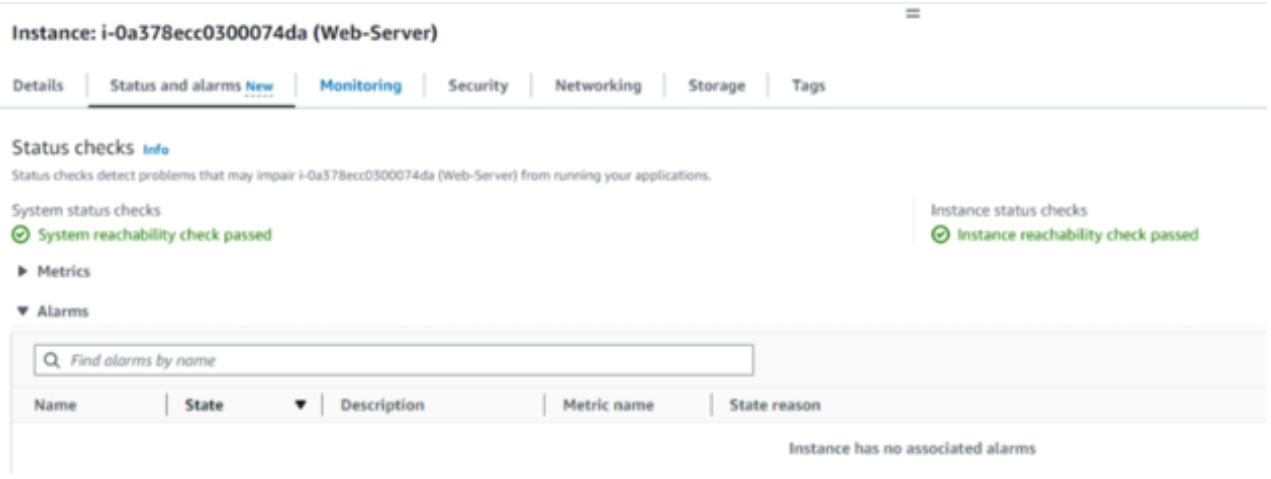
STEP 8: LAUNCH AN EC2 INSTANCE

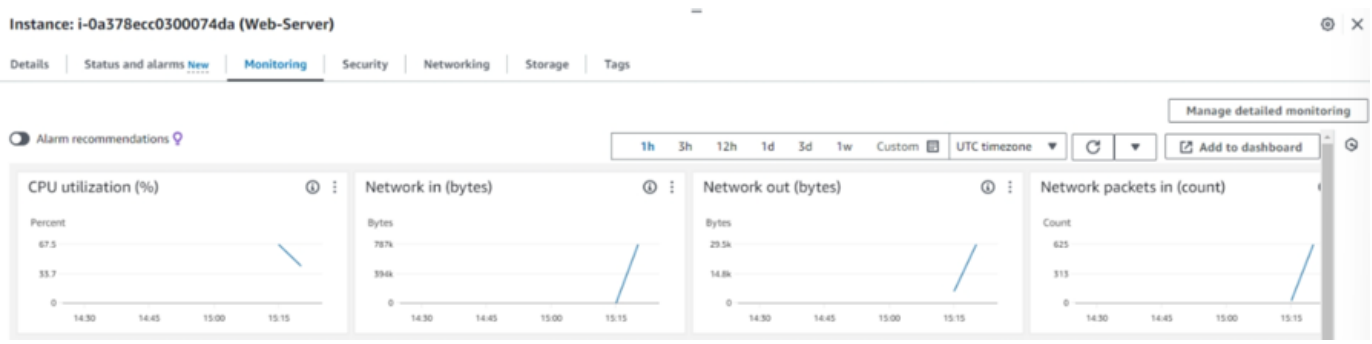
In the Summary section, choose Launch instance. Your instance should display the following:
• Instance State: Running • Status Checks: 2/2 checks passed



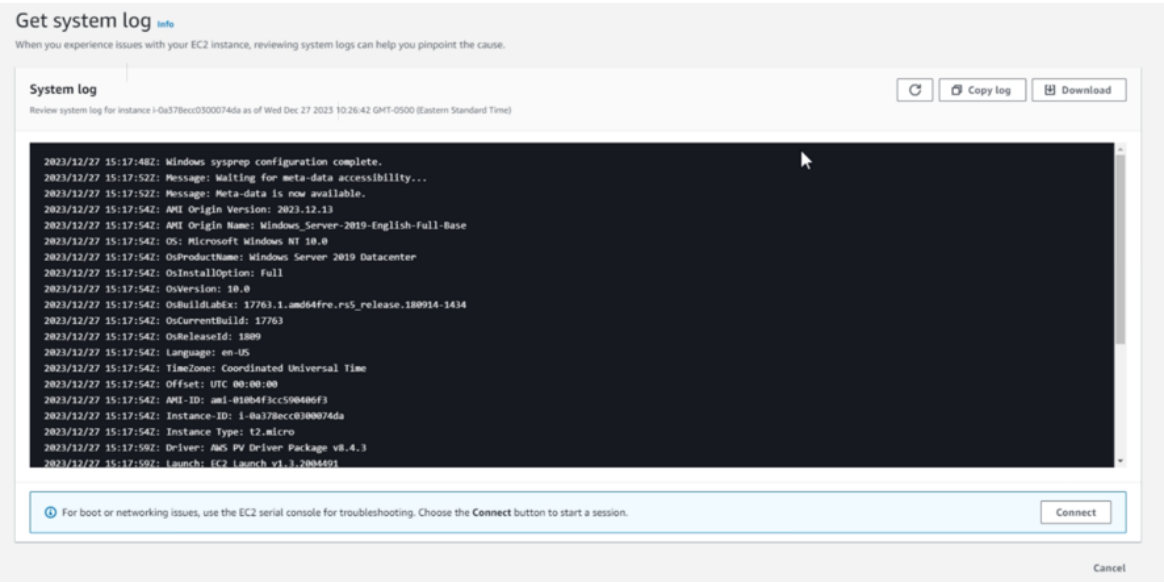
Task 2: Monitor your instance

Choose the Status and alarms tab. Review the information that's available to you. Choose the Monitoring tab.



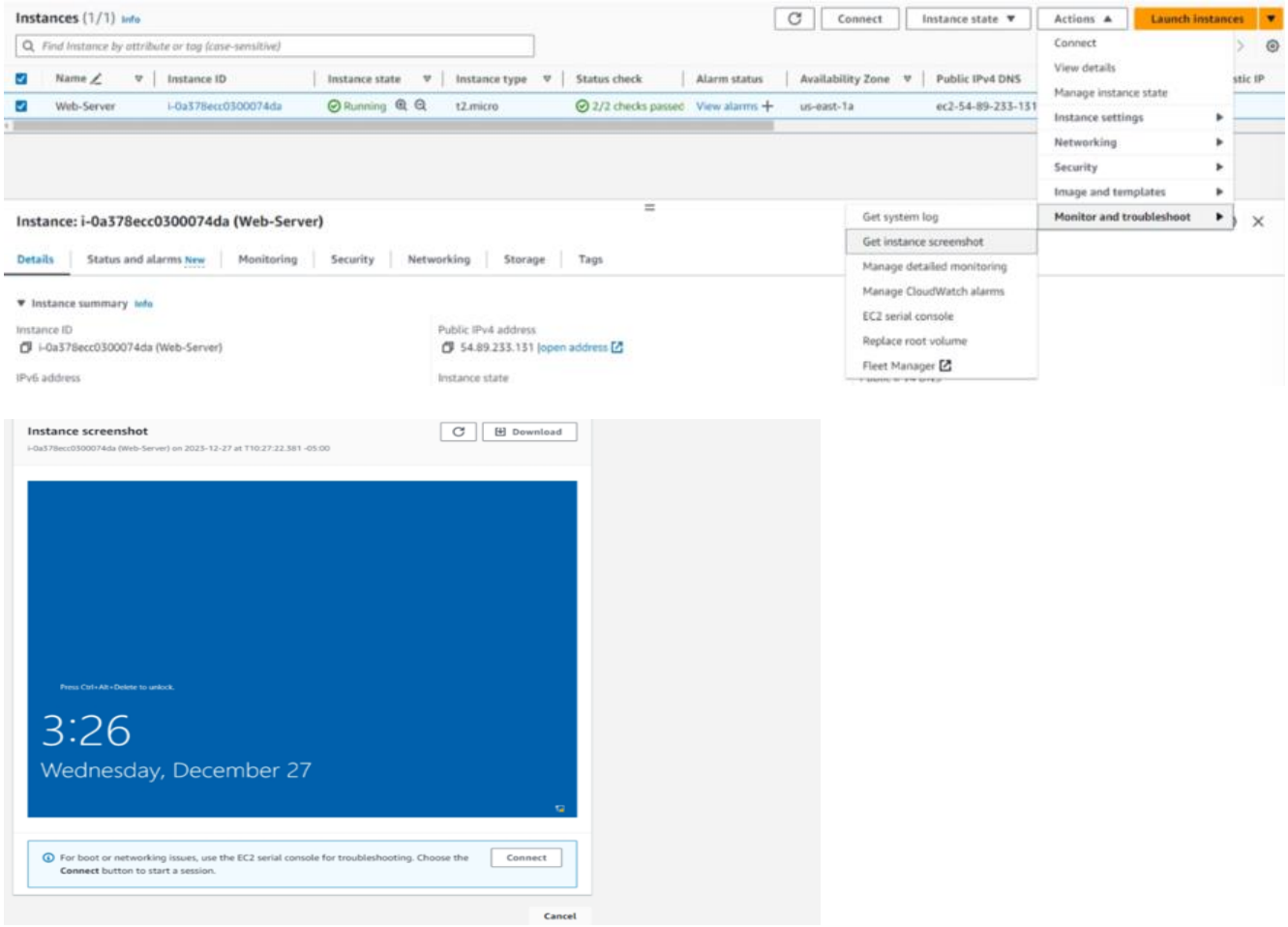


At the top of the page, choose the Actions dropdown list. Choose Monitor and troubleshoot Get system log.



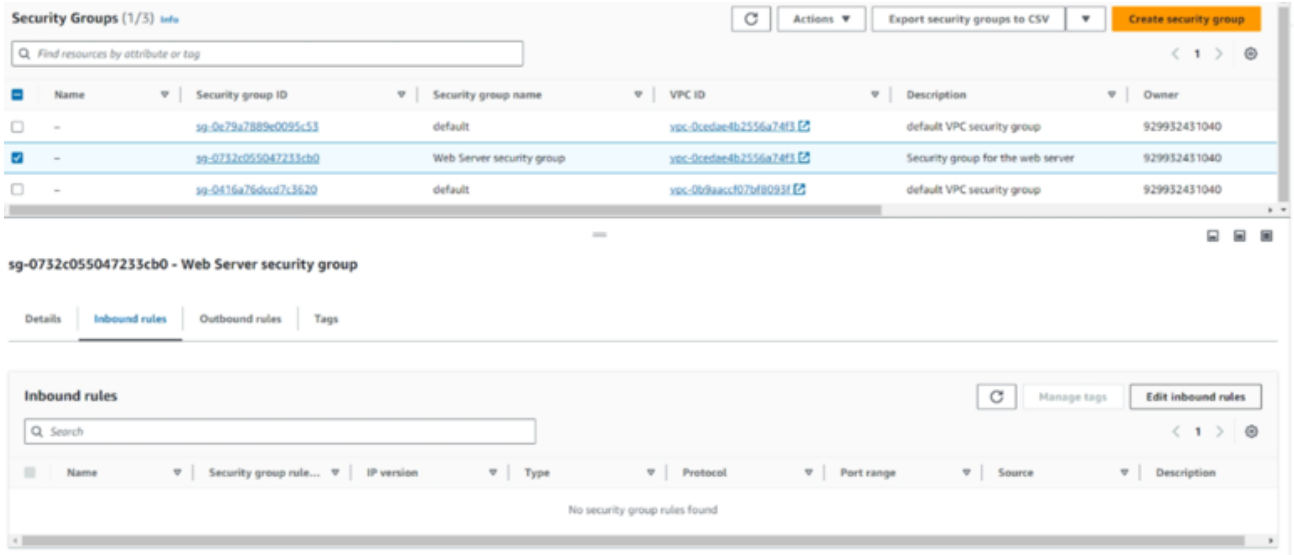
To return to the Amazon EC2 dashboard, choose Cancel.

With your Web-Server selected, choose the Actions dropdown list, and choose Monitor and troubleshoot Get instance screenshot.

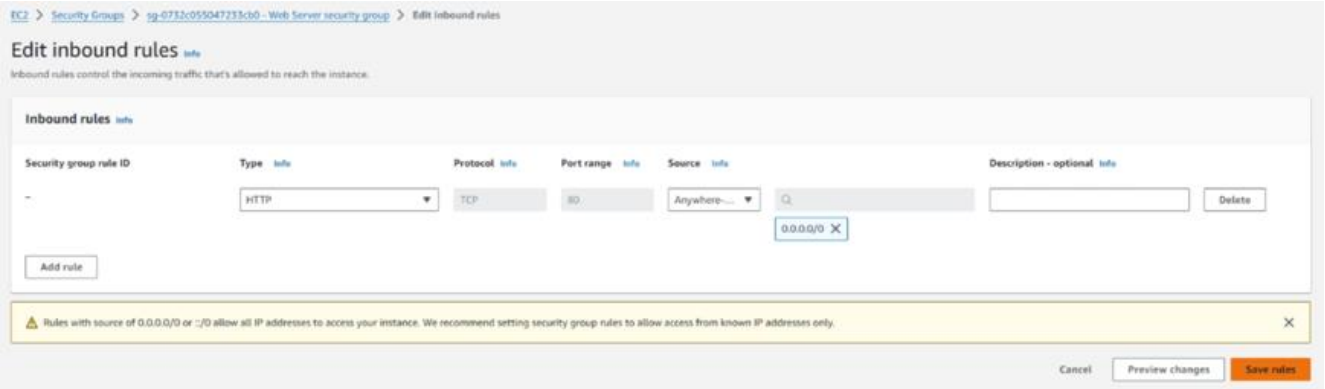


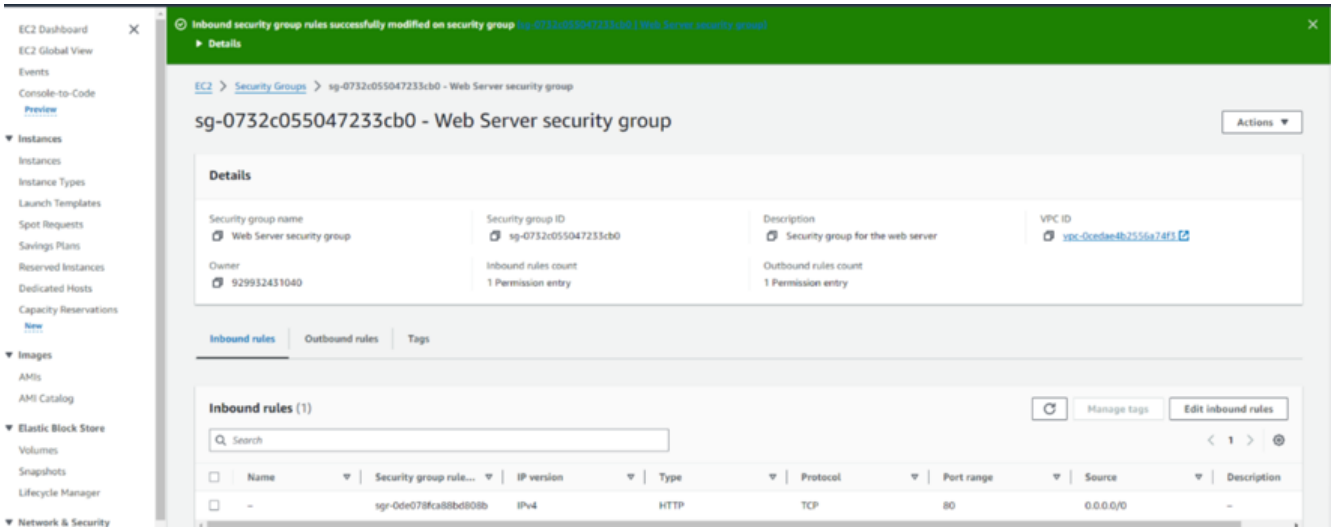
Task 3: Updating your security group and accessing the web server

In the left navigation pane, choose Security Groups. Next to Web Server security group, select the check box. Choose the Inbound rules tab.



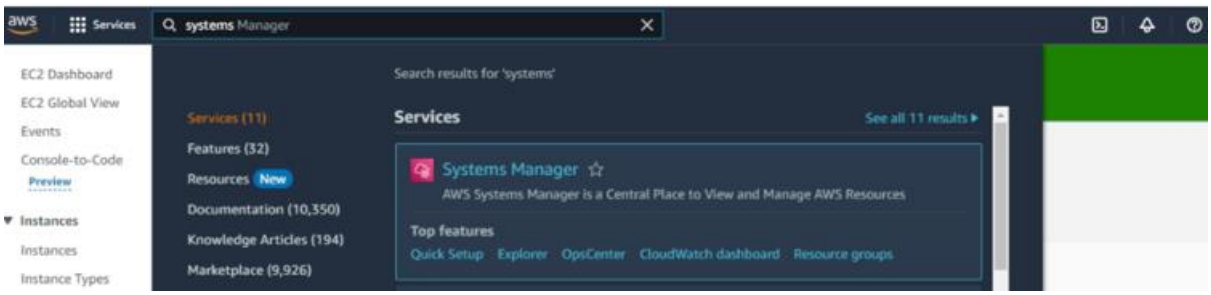
Choose Edit inbound rules, and then choose Add rule, and configure the following options Type: Choose HTTP. • Source: Choose Anywhere-IPv4.



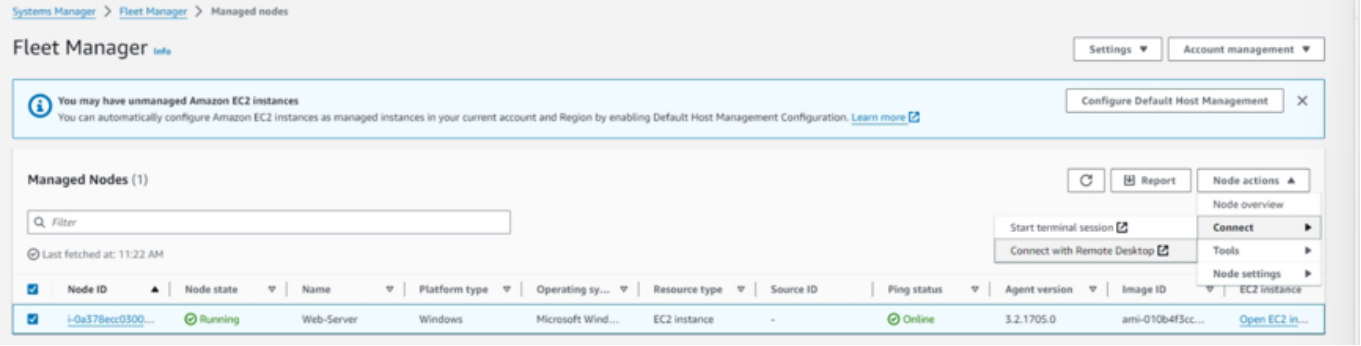


Task 4: Connecting to your instance using AWS Systems Manager Fleet Manager

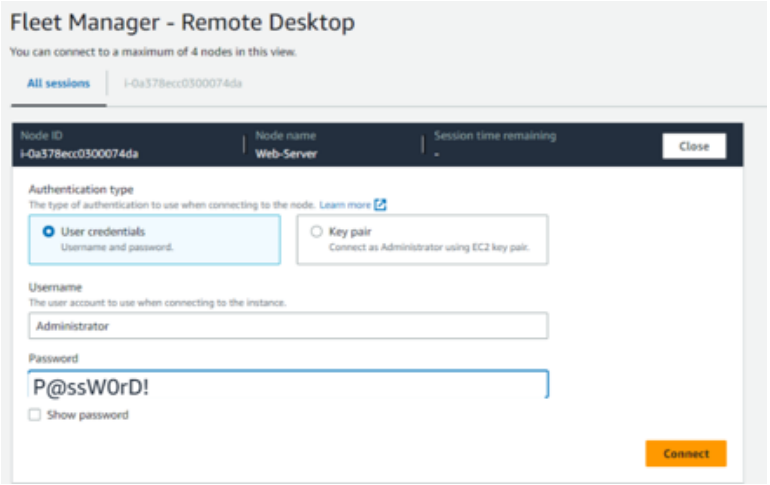
Search for Systems Manager and choose Enter. Choose Systems Manager.

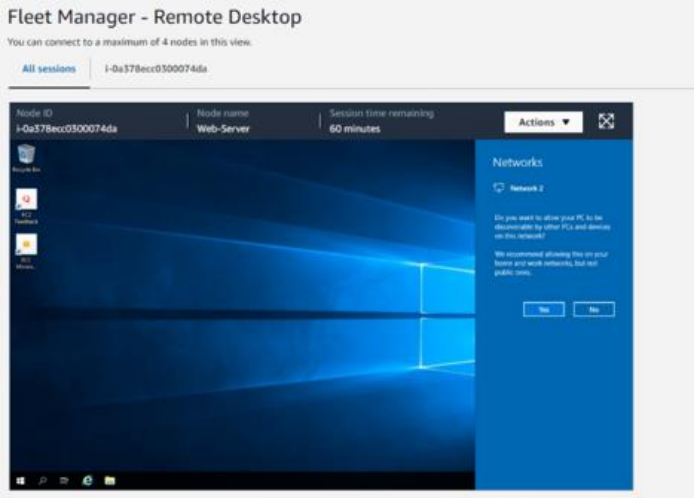


In left navigation pane, choose Fleet Manager. Under Managed nodes, select your Web-Server EC2 instance.From the Node actions dropdown list, choose Connect, then Connect with Remote Desktop.



Enter the Username: Administrator. Enter the Password: P@ssW0rD! 43. Choose Connect.

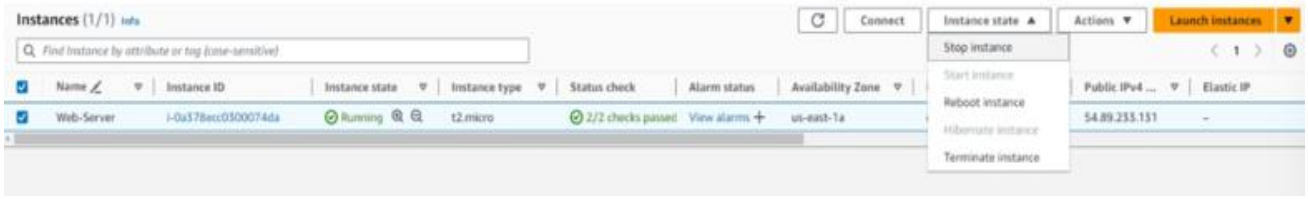


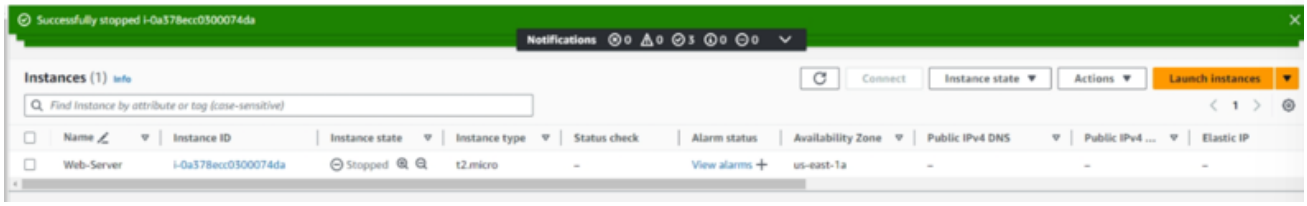


To disconnect from your Web-Server instance, choose Action and then choose End session.

Task 5: Resizing your instance

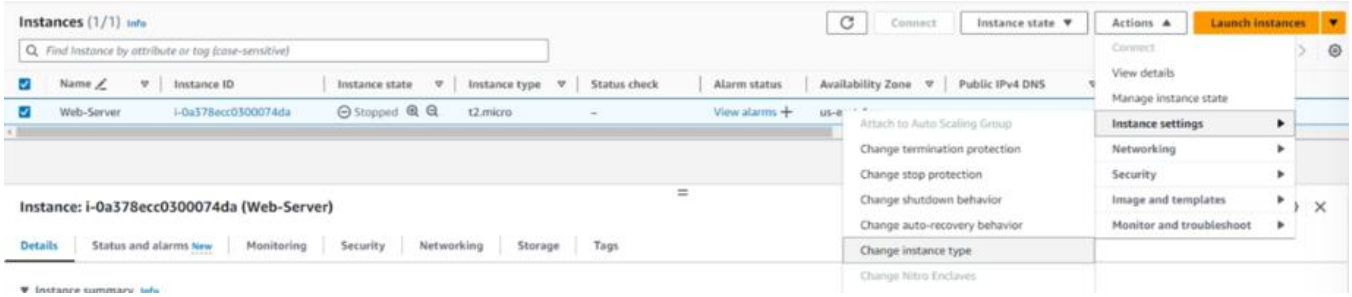
In the AWS Management Console, search for EC2 and choose Enter. Then, choose EC2. On the EC2 Management Console, left navigation pane, choose Instances. Select the check box next to your Web-Server instance. At the top of the page, choose the Instance state dropdown list, choose Stop instance.

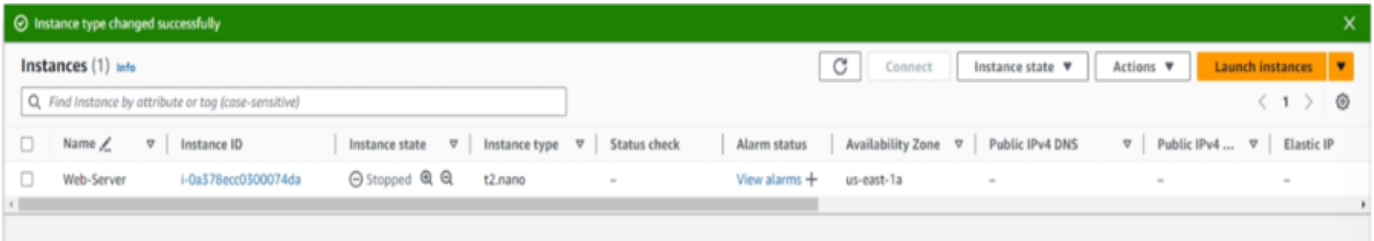




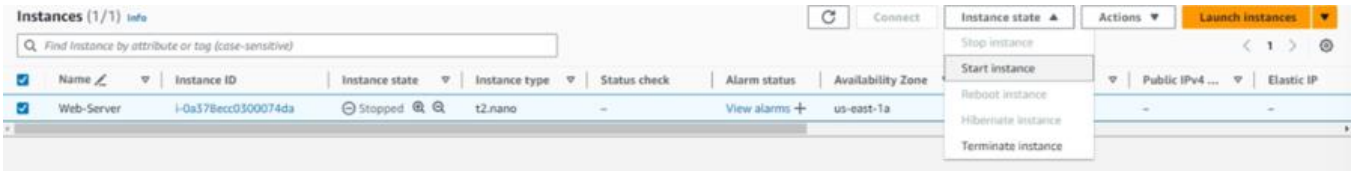
Select the check box next to your Web-Server. From the Actions dropdown list, select Instance settings Change instance type, and then configure the following option:

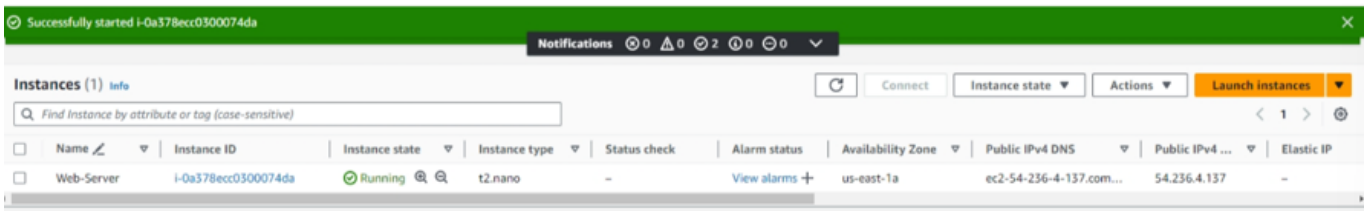
Instance type: Select t2.nano. And select Apply.





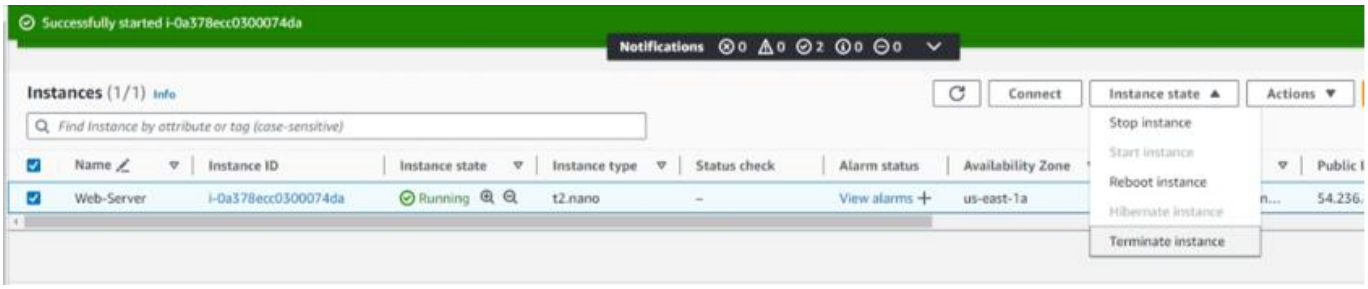
Now, again start the instance.

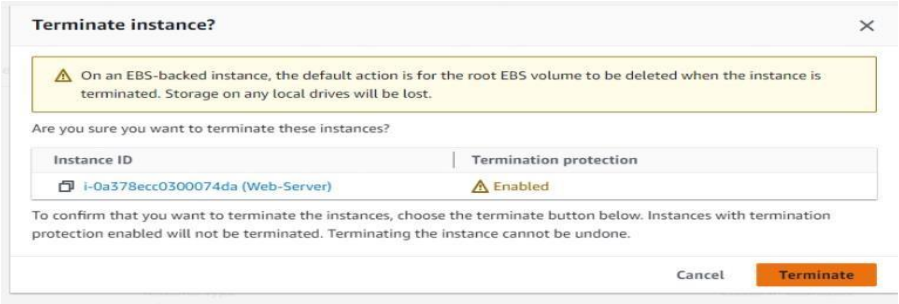


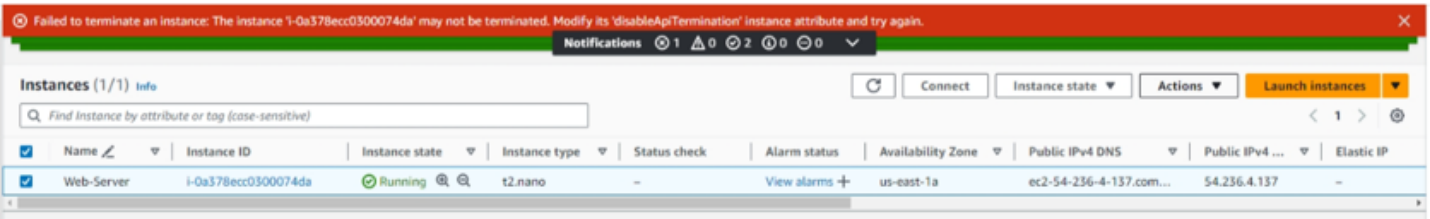


Task 6: Testing termination protection

Select the check box next to your Web-Server instance. From the Instance state dropdown list, choose Terminate instance.

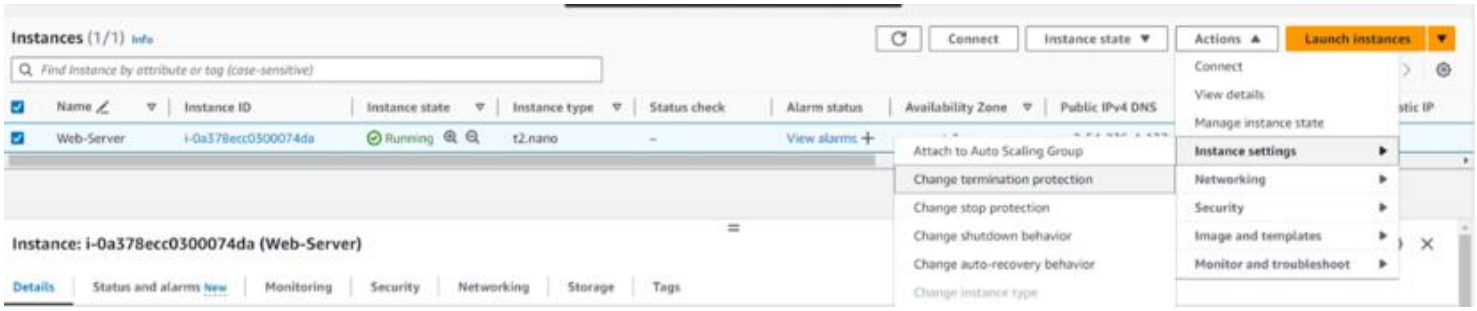


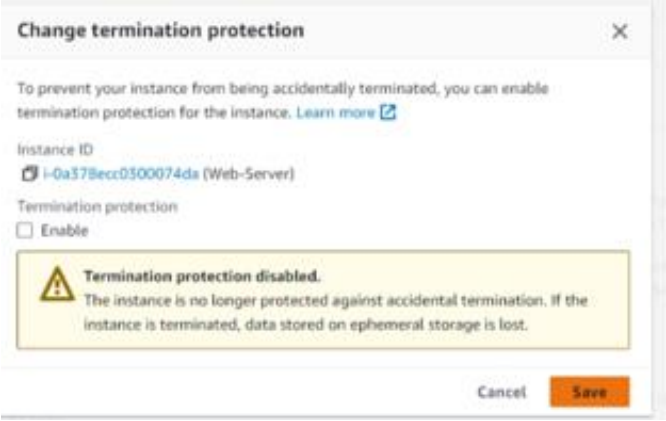


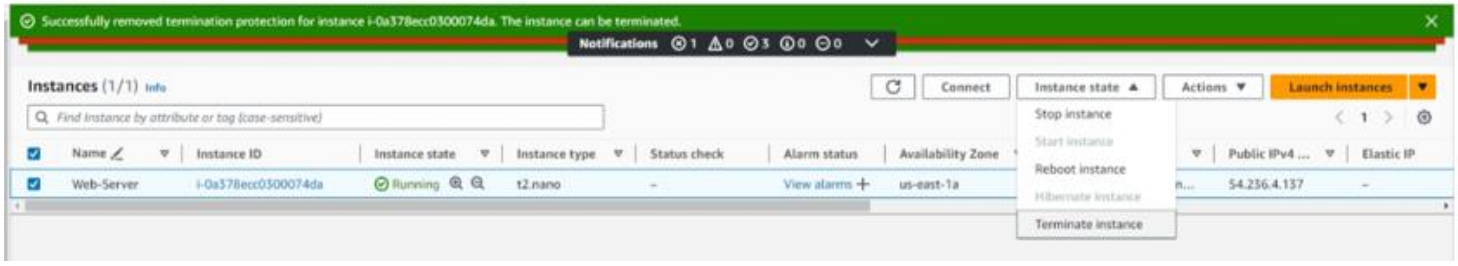


Notice that Termination protection is enabled. This is a safeguard to prevent the accidental termination of an instance.

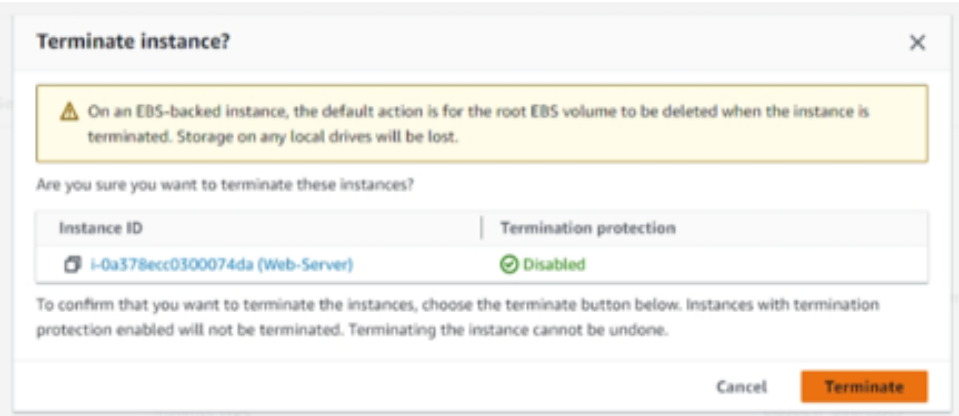
If you really want to terminate the instance, you need to turn off termination protection.

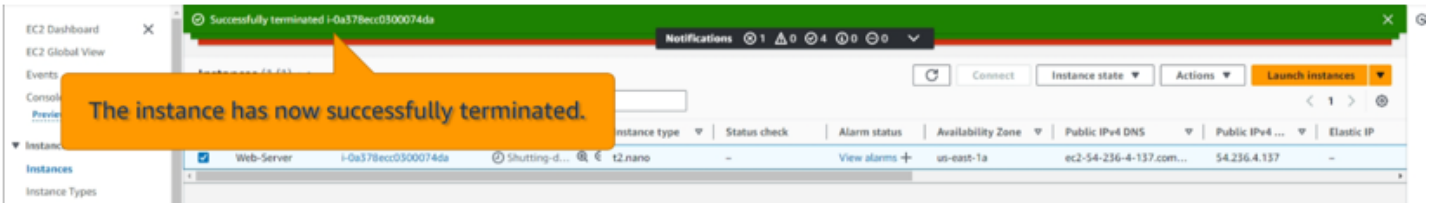




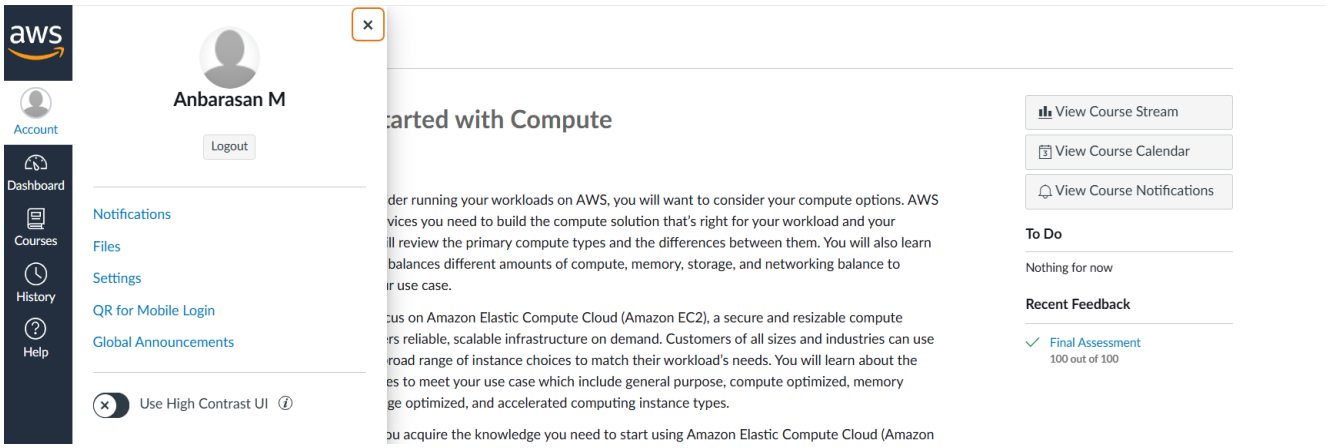


Termination protection is disabled. Now, you can terminate the instance.





Screenshot of AWS login:



Result:

Thus the implementation of Iaas through computing amazon EC2 have been successfully completed.