Day 40 AWS EC2 Automation

Maninder Singh

Dear Learners, In this Article we will discuss the AWS Ec2 Automation with the help of Tasks. Now let's start.

Automation in EC2:

Amazon Elastic compute cloud can give secure, reliable,high-performance and cost-effective computing infrastructure to meet demanding business needs.'

Launch template in AWS EC2:

A) You can make a launch template with the configuration information you need to start an instance. you can save launch parameters in launch templates so you don't have to type them in every time you start a new instance.

B) You can tell the Amazon Ec2 console to use a Certain launch template when you start an instance.

Instance Types:

In Amazon Ec2 has a large number of instance types that are optimised for different uses. The different combinations of CPU,memory,storage and networking capacity in instance types give you the freedom to choose the right mix of resources for your apps.

AMI:

An Amazon Machine image is an image that AWS supports and keeps up to date. It contains the information needed to start an instance. when you launch an instance you must choose and AMI. when you need multiple instances with the same configuration you can launch them form a single AMI.

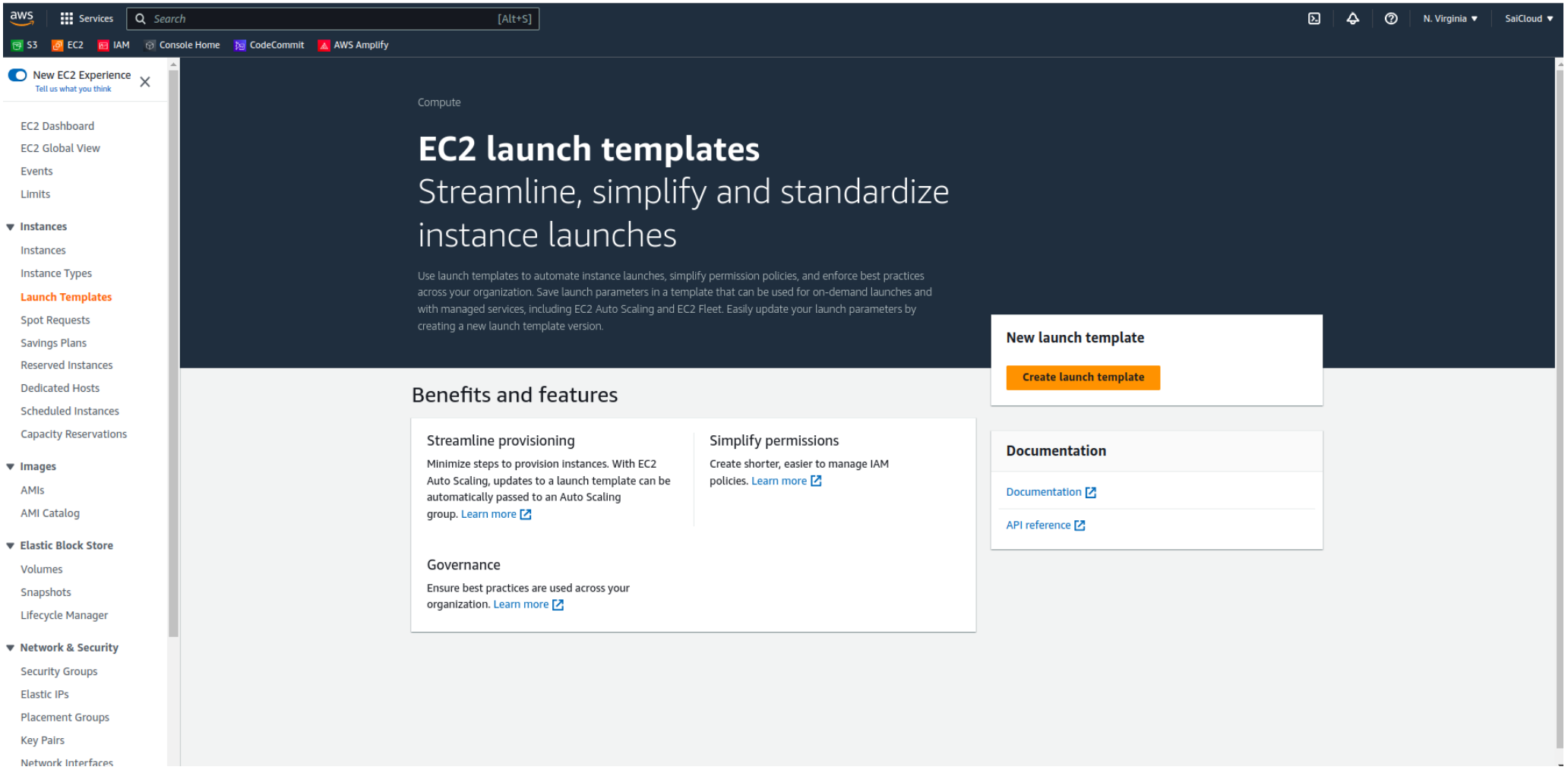
Task1:

Create a launch template with Amazon Linux 2 AMI and t2.micro instance type with jenkins and Docker setup.

1 open the Amazon Ec2 Console.

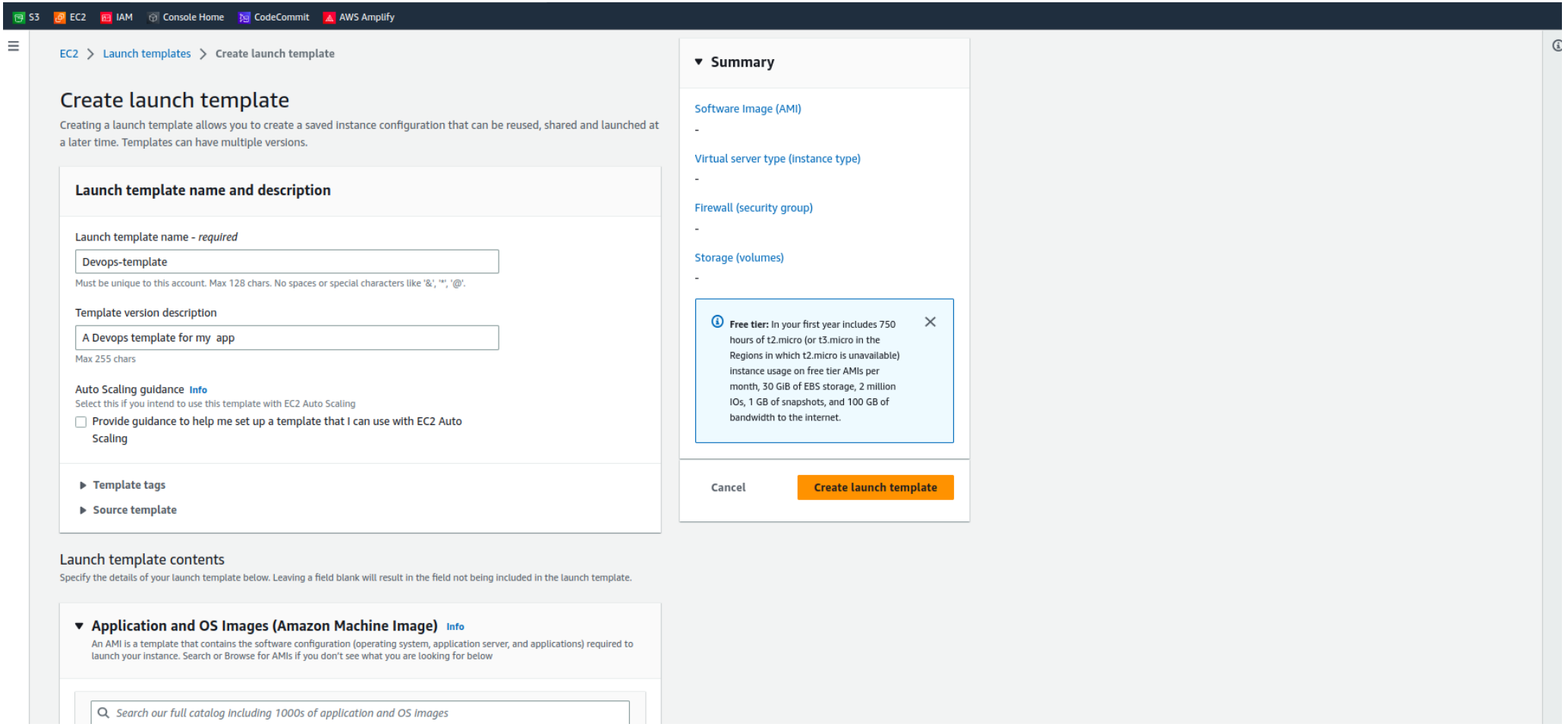
2 In the left navigation pane choose launch templates.

3 Choose "Create Launch template"



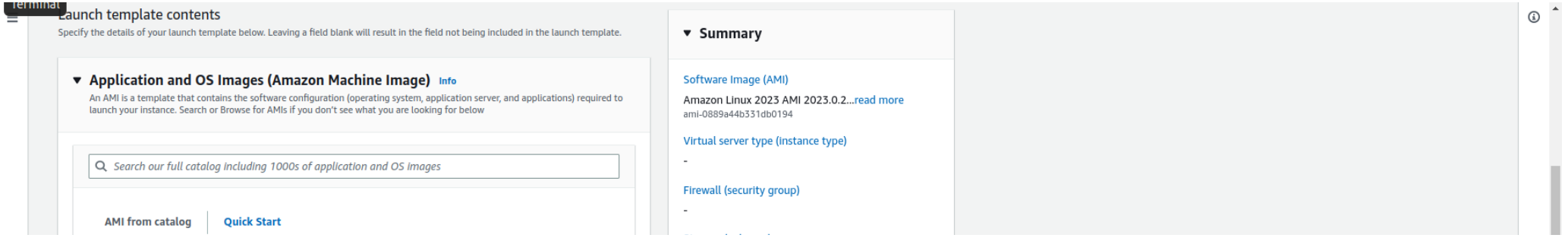
Choose "Create Launch template"

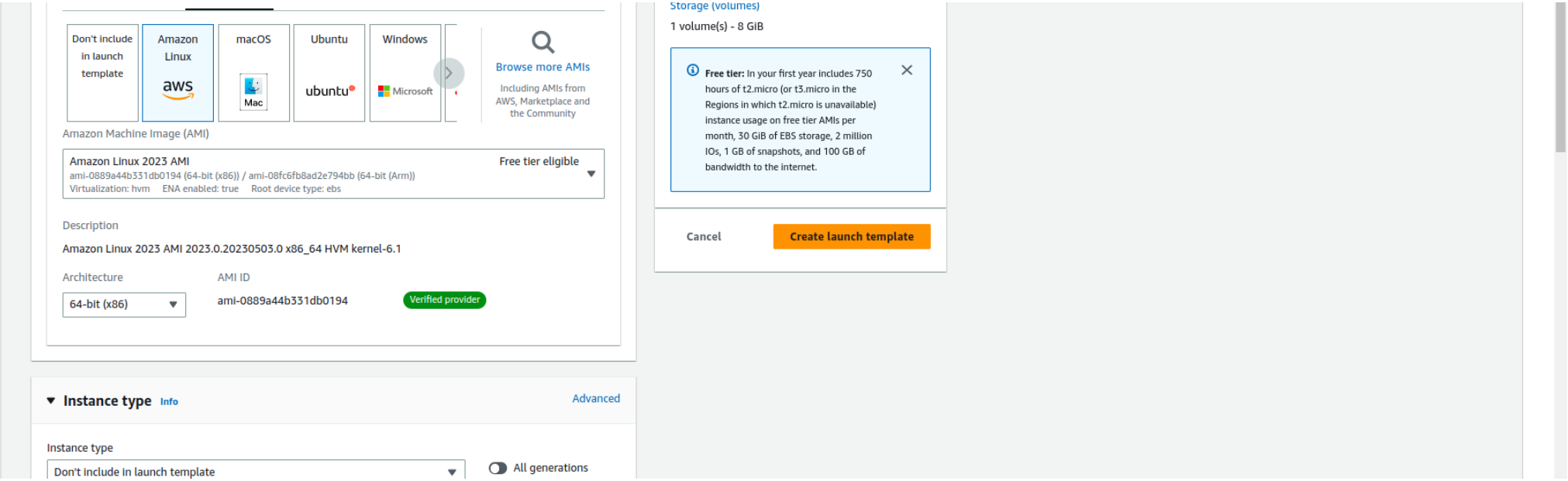
In the "Create launch template page enter a name for the launch template.



Create launch template page Diagram.

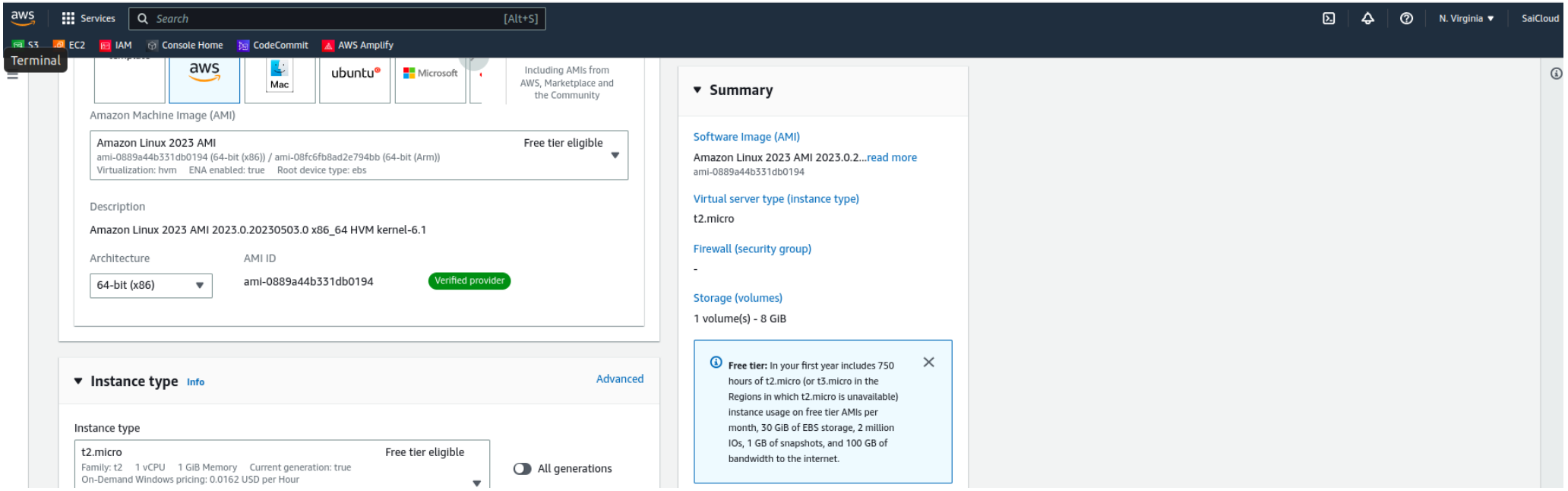
For "Amazon Machine image" choose Amazon Linux 2 "

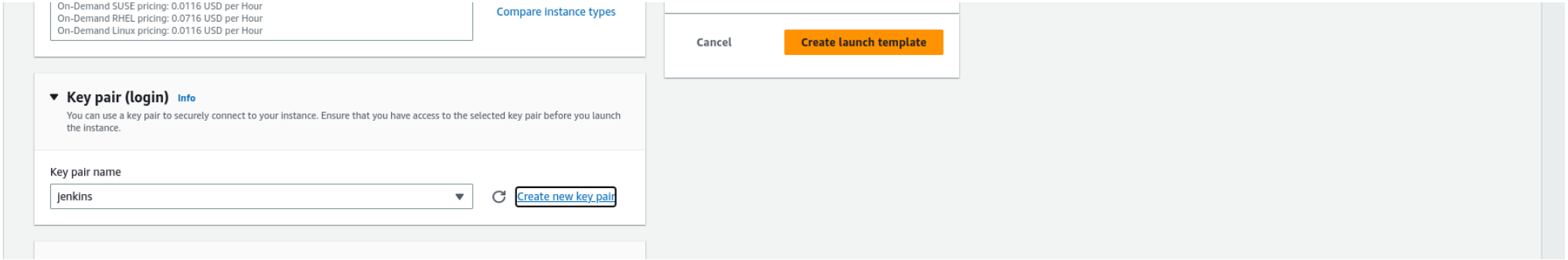




Amazon Machine image Diagram

For Instance type choose t2.micro.





Instance type choose t2.micro Diargam

In the "Advance Details" section paste the user data script for installing Jenkins and Docker in the User data field.

Advance Details" section paste the user data Diagram.

Choose "Create launch template" below you can see template is created.

Create launch template" Diagram.

Create 3 Instance using Launch template there must be an option that shows number of instances to be launched can you find it.

To lauch 3 Instances using the launch template

In the Amazon EC2 console, choose "Launch instance form templates" in the left navigation pane.

Amazon EC2 console, choose "Launch instance form template Diagram.

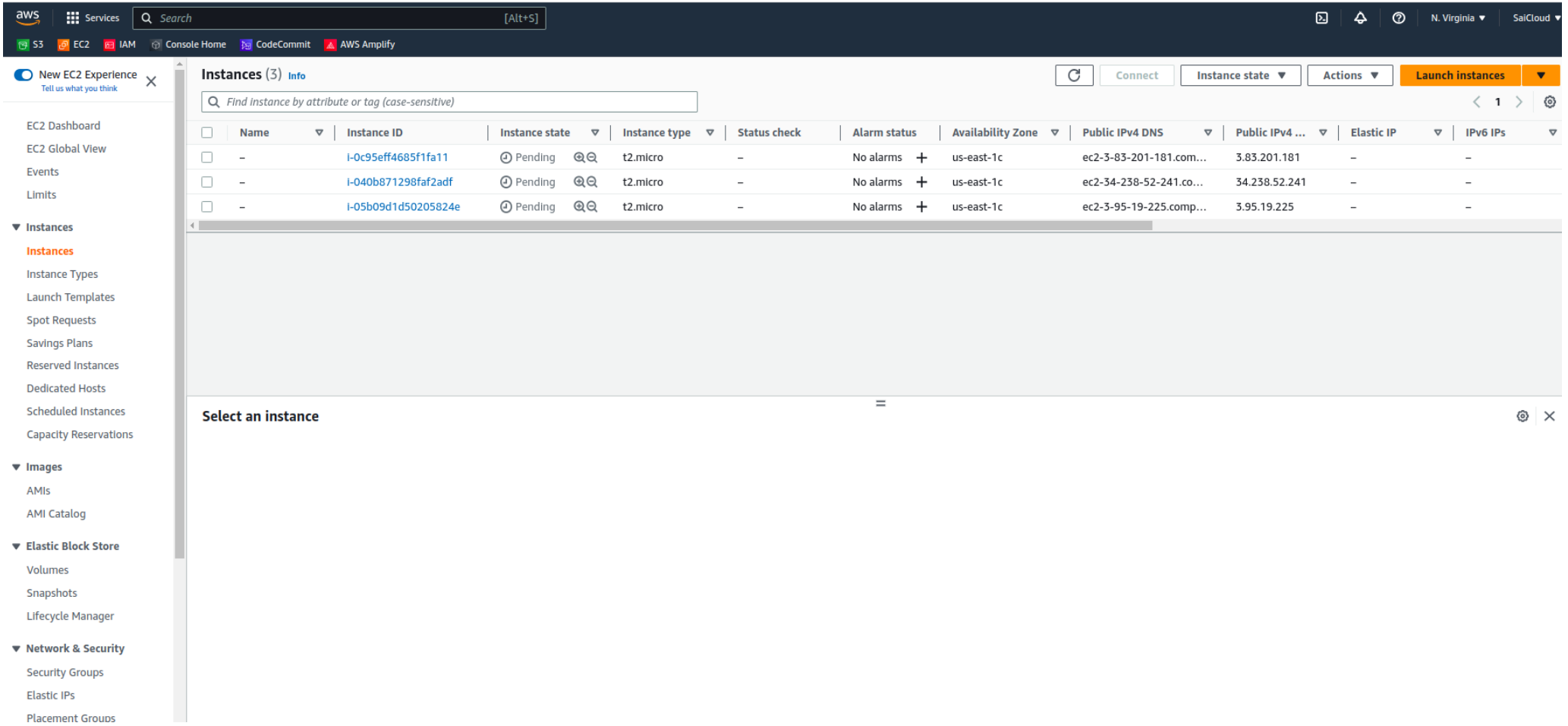
Select the Launch template that you just created.

Launch template that you just created. Diagram.

Specify the no of instance you want to launch in the number of instances fields on right side. choose the other configuration settings as desired such as VPC subnet, security group.

desired such as VPC subnet, security group. Diagram

You can see three instances created from template.

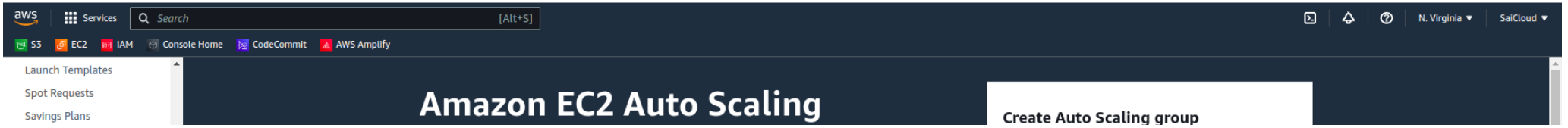


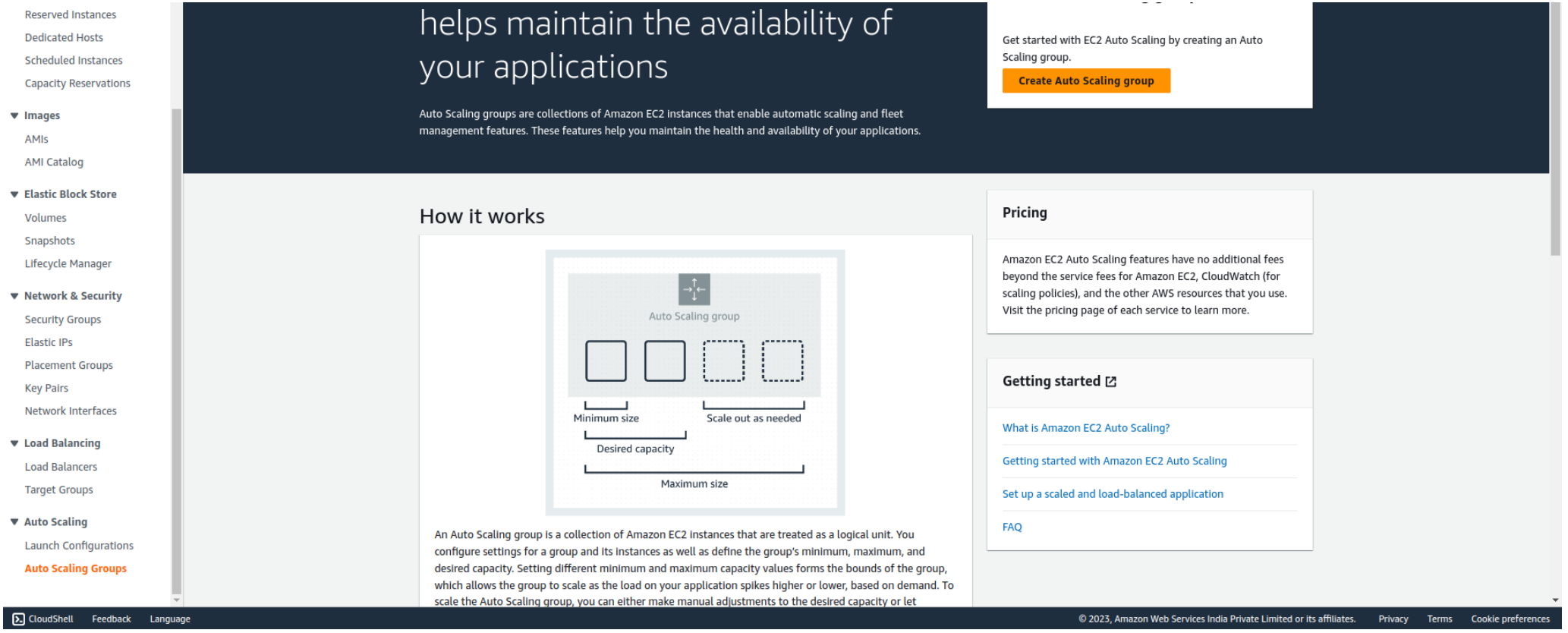
You can see three instances created from template. Diagram

You can go one step ahead and create an auto scaling group.

In the Left navigation pane, choose Auto-Scaling groups.

Choose "Create Auto Scaling Group"

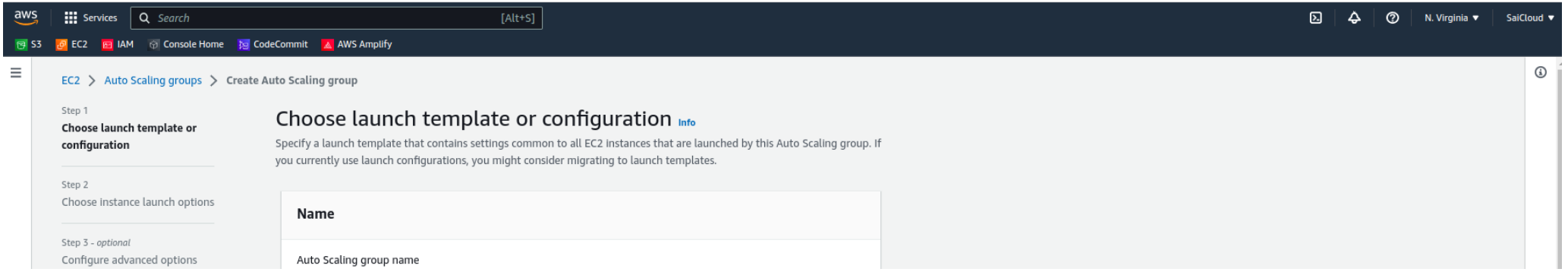


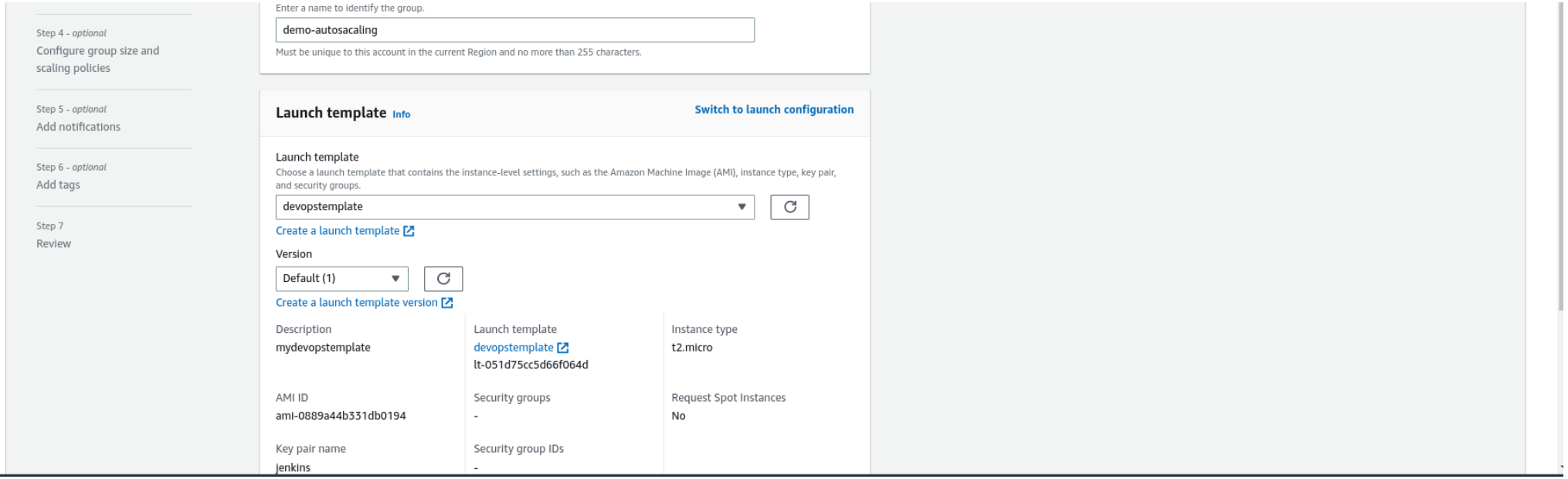


Choose "Create Auto Scaling Group" Diagram

In the "Create Auto scaling Group: page enter a name for the Auto-scaling group.

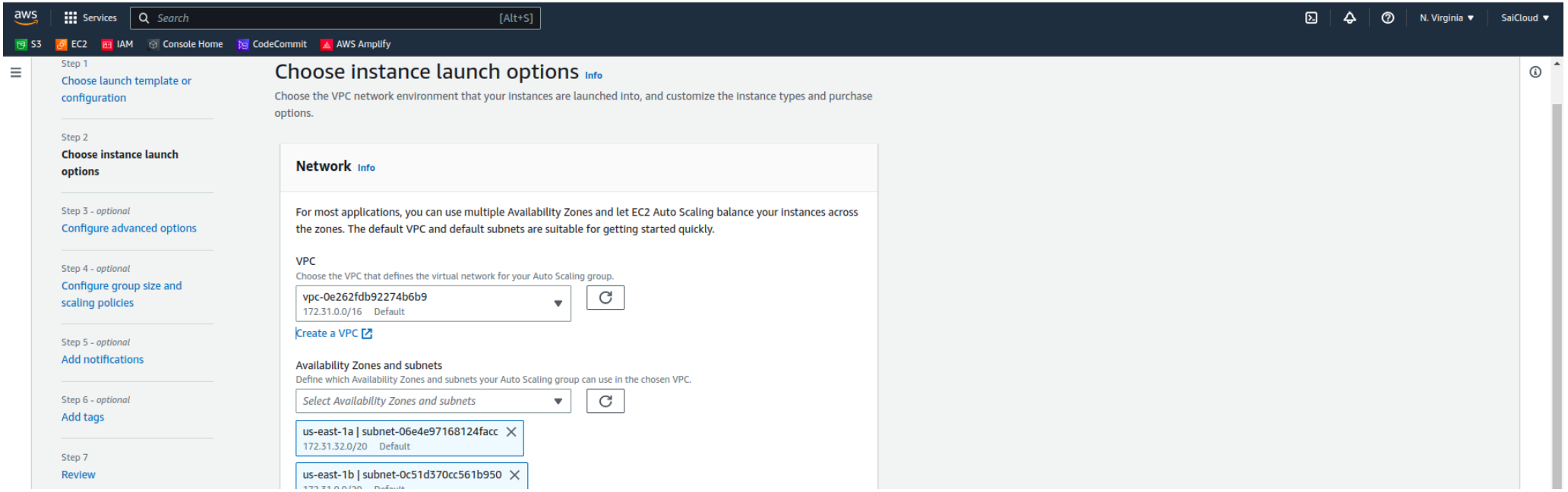
For "Launch Template" , choose the launch template we created earlier.

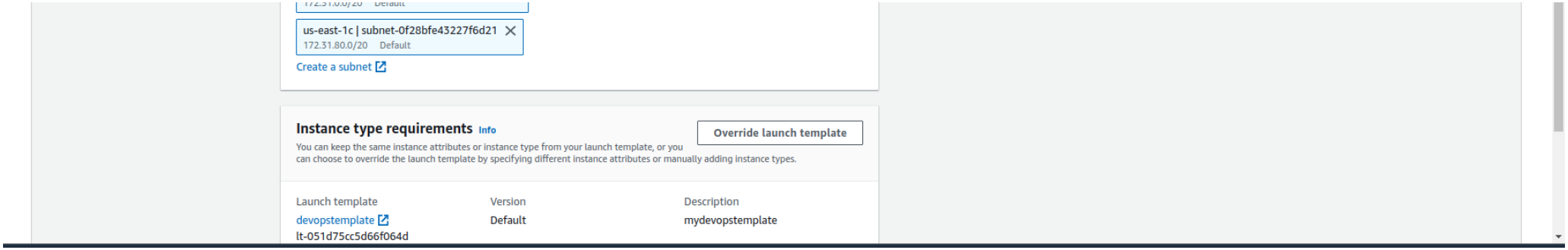




Choose "Create Auto Scaling Group" Diagram

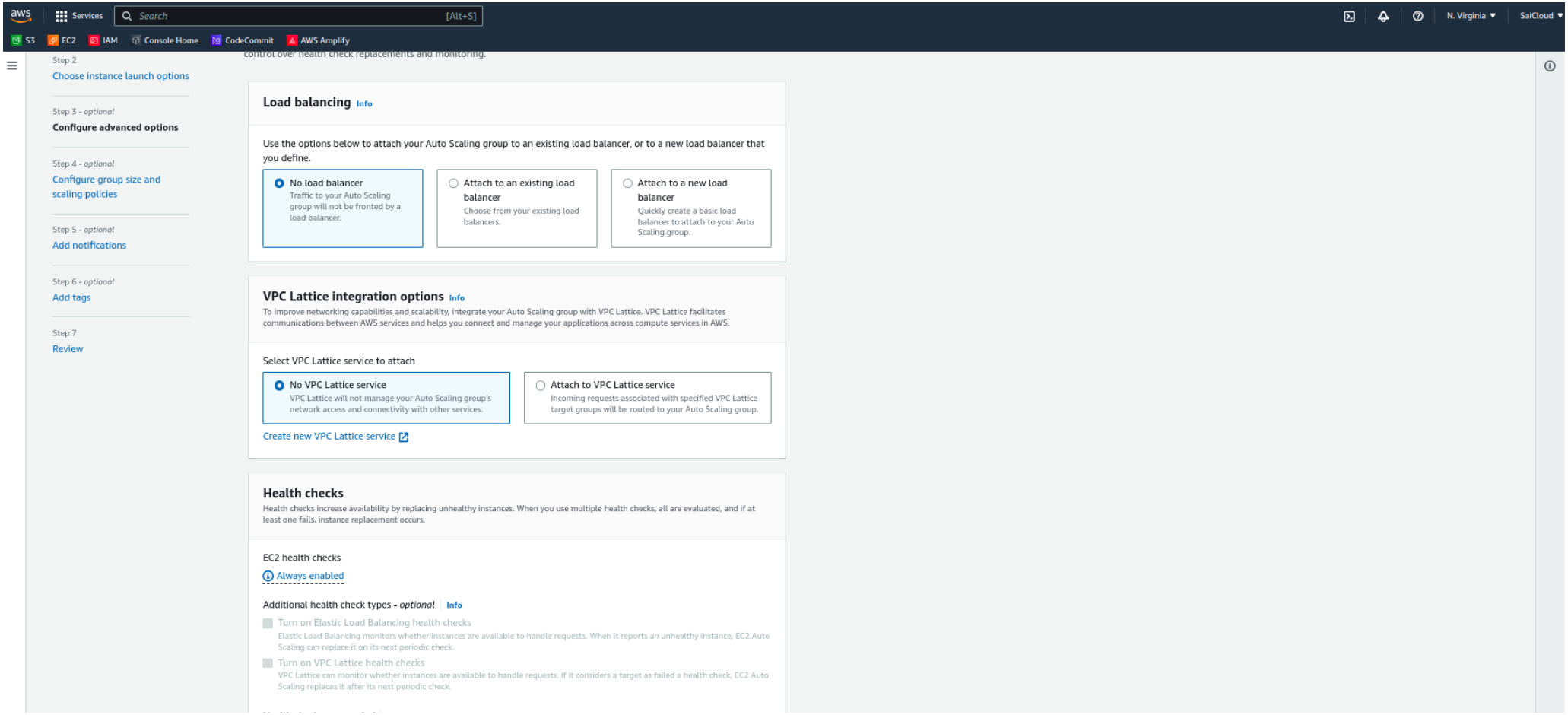
For "Network: choose the VPC which are default and subnet you want the instance to launch in.

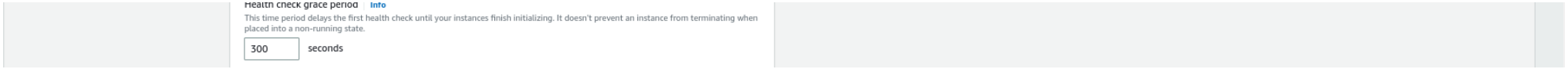




"Network: choose the VPC which are default and subnet Diagram.

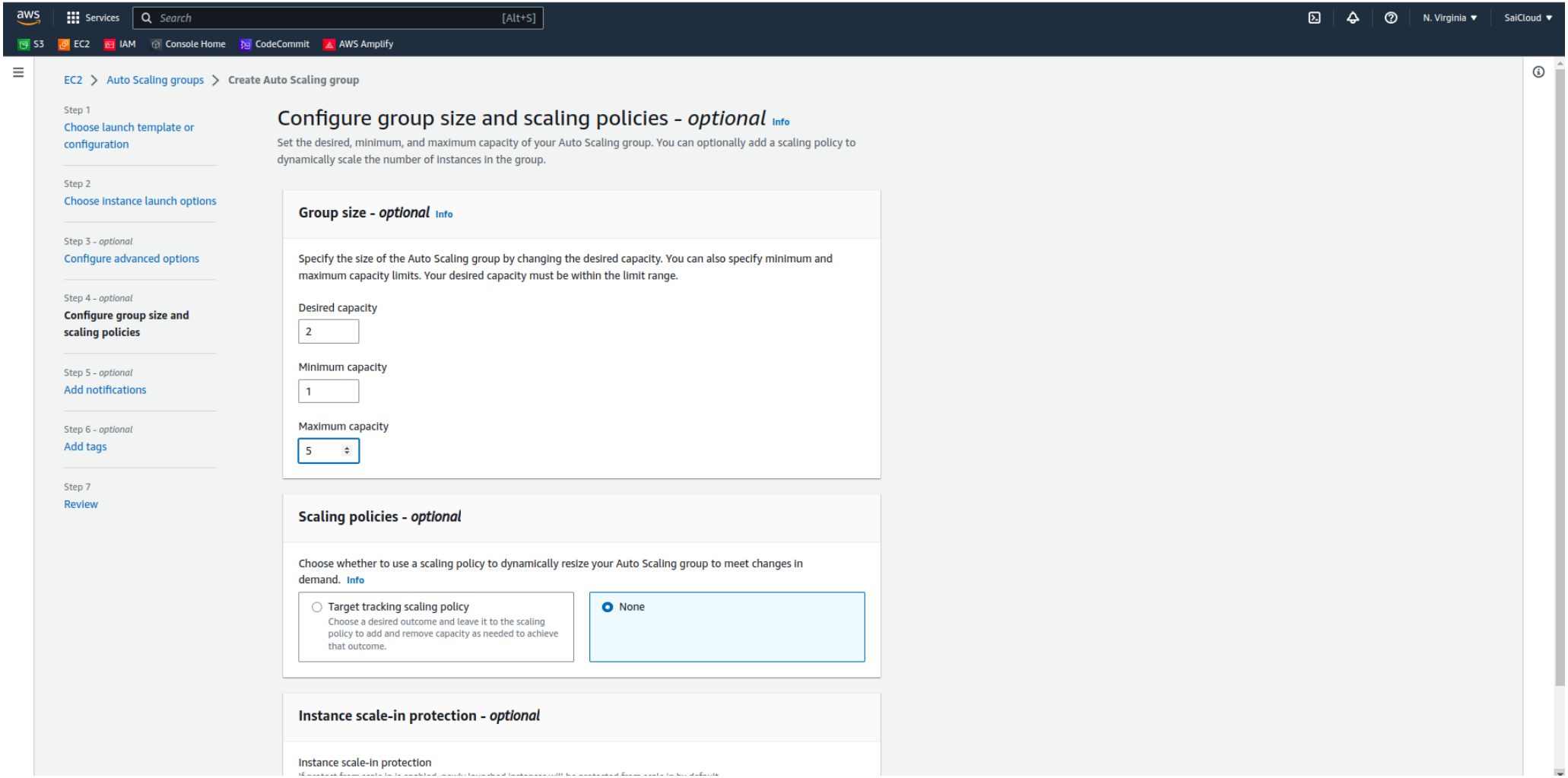
For "Load Balancing" choose any option as per your requirement.





Load Balancing" choose any option as per your requirement. Diagram.

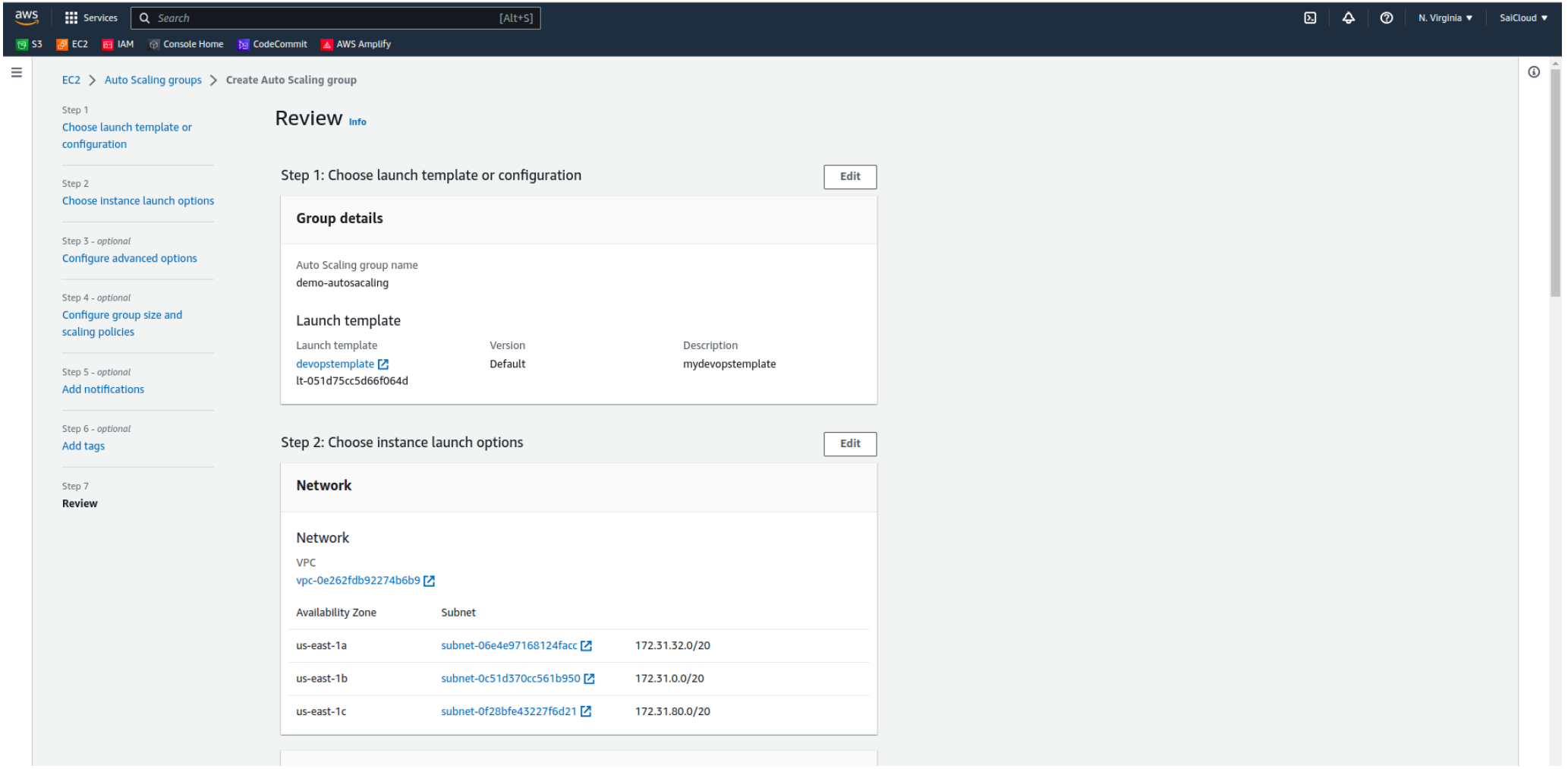
In the "Group Size" page enter the desired capacity for the auto-scaling group such as or like 2 .



"Group Size" page enter the desired capacity Diagram.

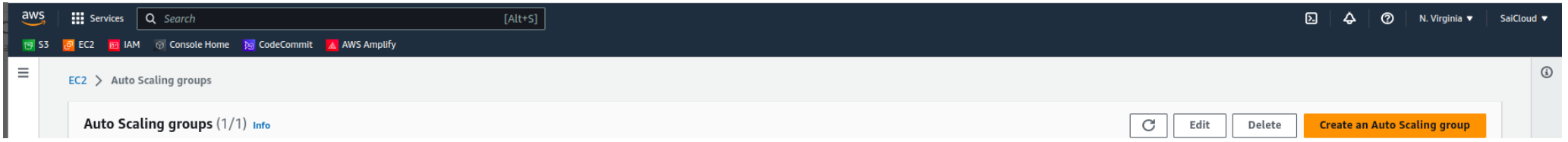
in the next options you can choose set up an scaling policies based on various metrics such as CPU utilization, network in/out and others.choose the policy

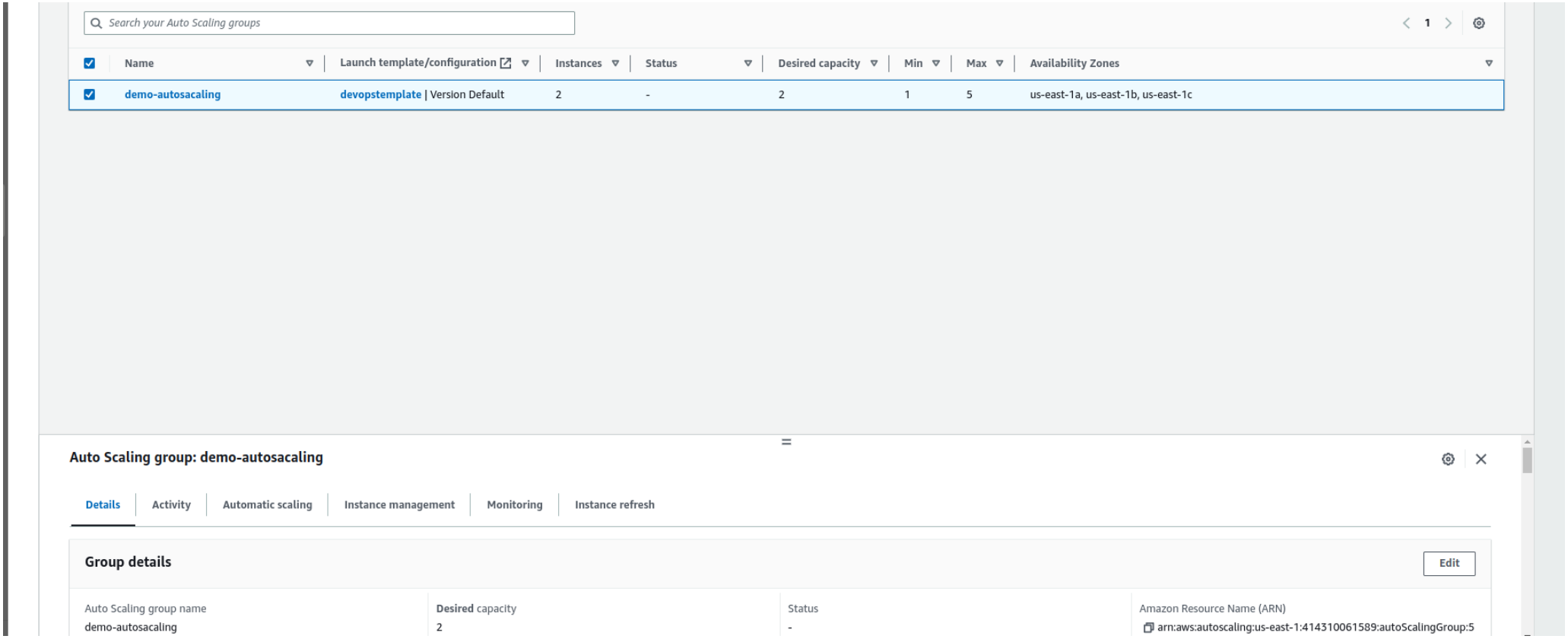
target tracking policy.



such as CPU utilization, Diagram

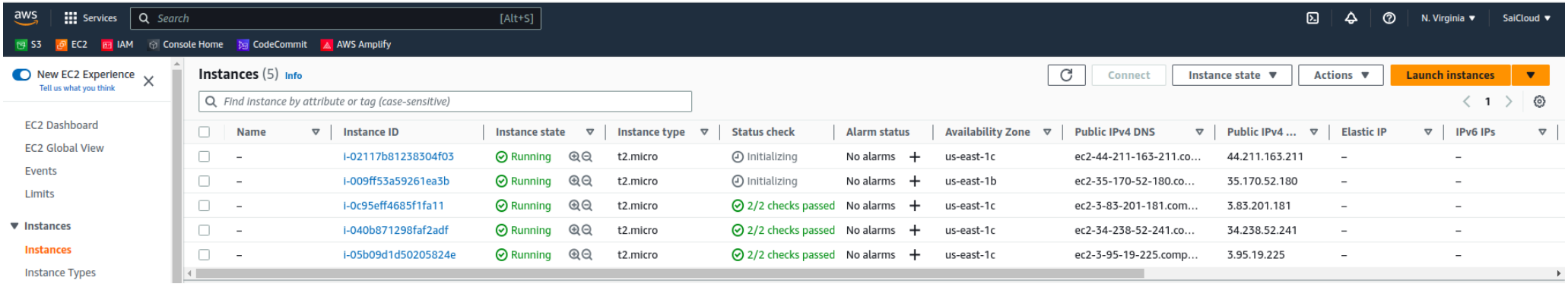
Choose "Create Auto Scaling Group" to create the auto-scaling group.

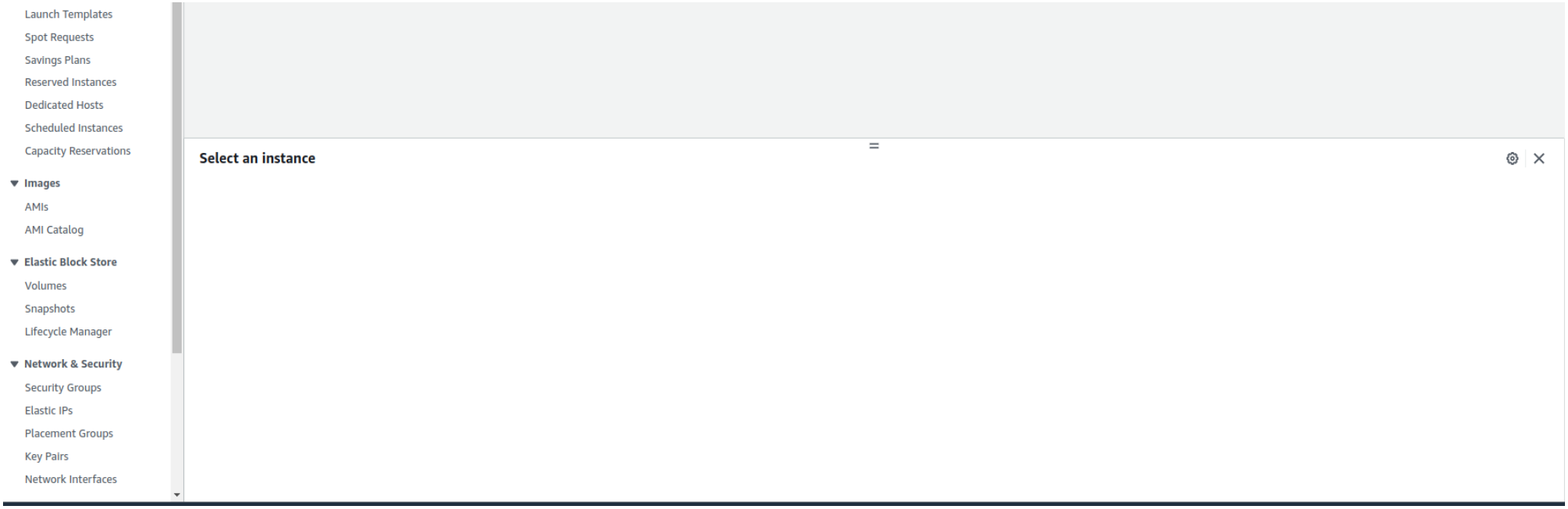




Create Auto Scaling Group Diagram

After a few moments, the auto scaling group will launch the desired number of instances based on the launch template and the configuration you specified and the count of instances are 2 new instances. launched by auto scaling group.





2 Instances are added with the help of Autoscaling option Diagram.

In this blog, I have discussed AWS Ec2 Automation with the help of task how we can launch a template. If you have any questions or would like to share your experiences, feel free to contact me or leave a comment.

Happy Learning!!

Maninder Singh

Next Topic:

Day 41: We will learn the Load Balancing with AWS EC2.