Lesson 09 Demo 08

Setting up an Auto Scaling Group with a Launch Template

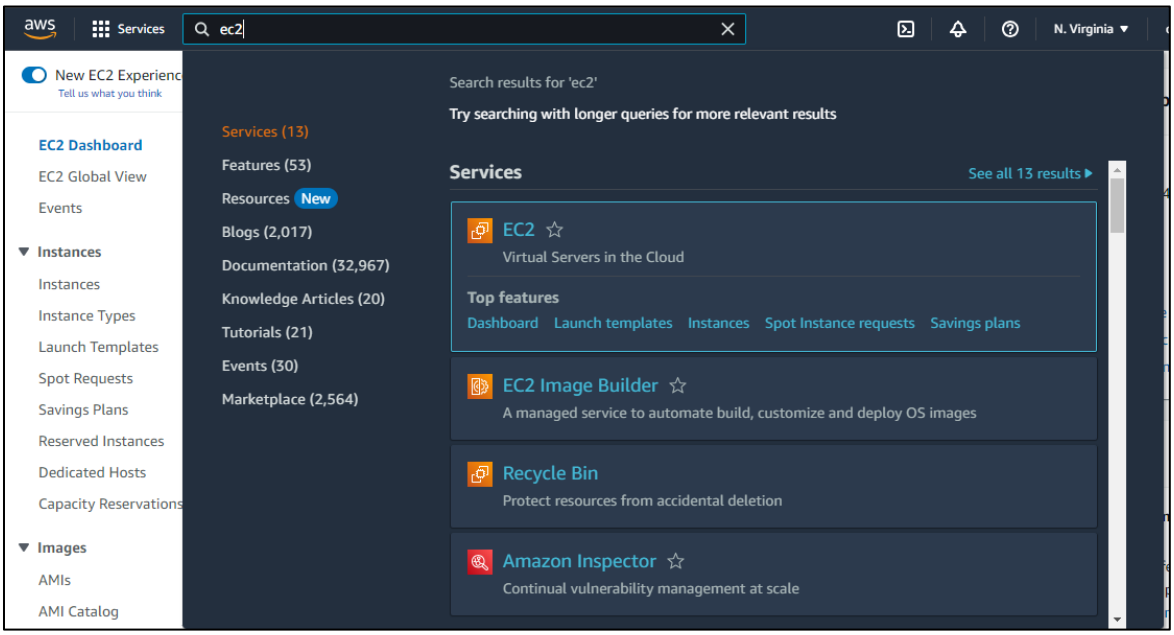
Objective: To set up an auto-scaling group using a launch template in AWS **Tools required:** AWS account **Prerequisites:** None

Steps to be followed:

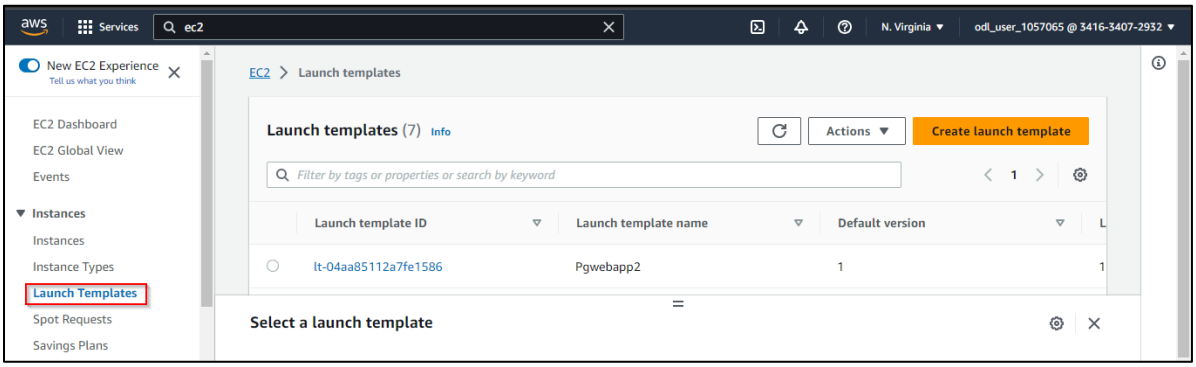
1. Create a launch template
2. Create an Auto Scaling group

Step 1: Create a launch template

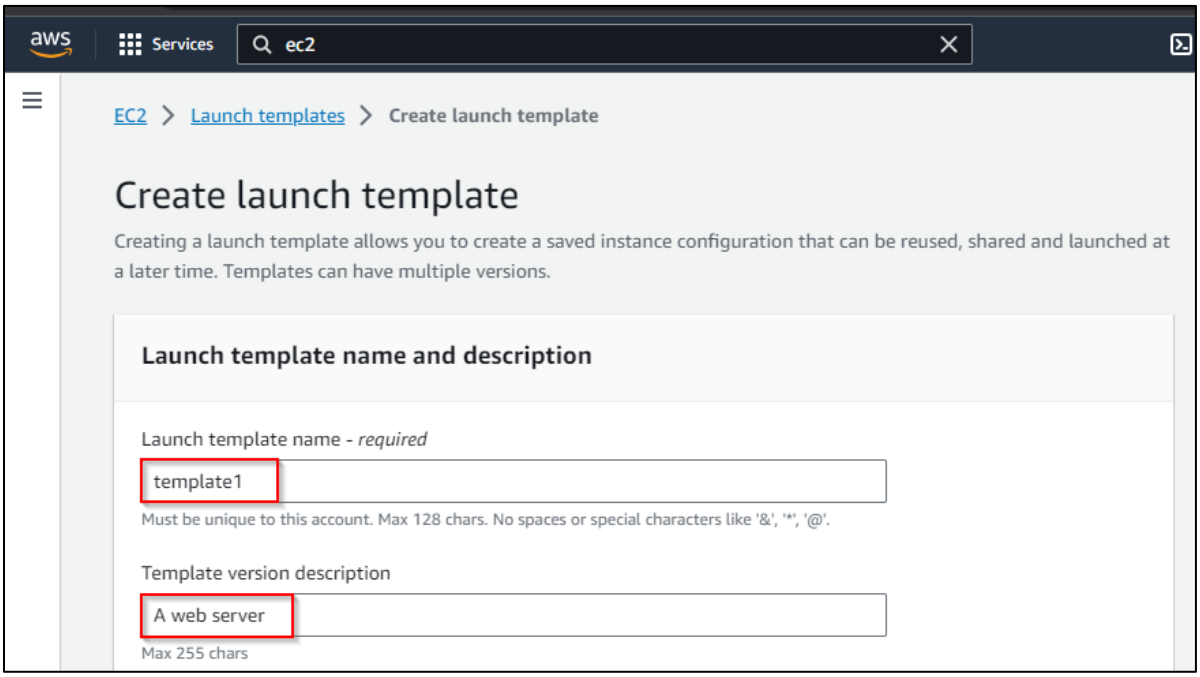
1.1 Navigate to the Amazon portal and search for and select **EC2**



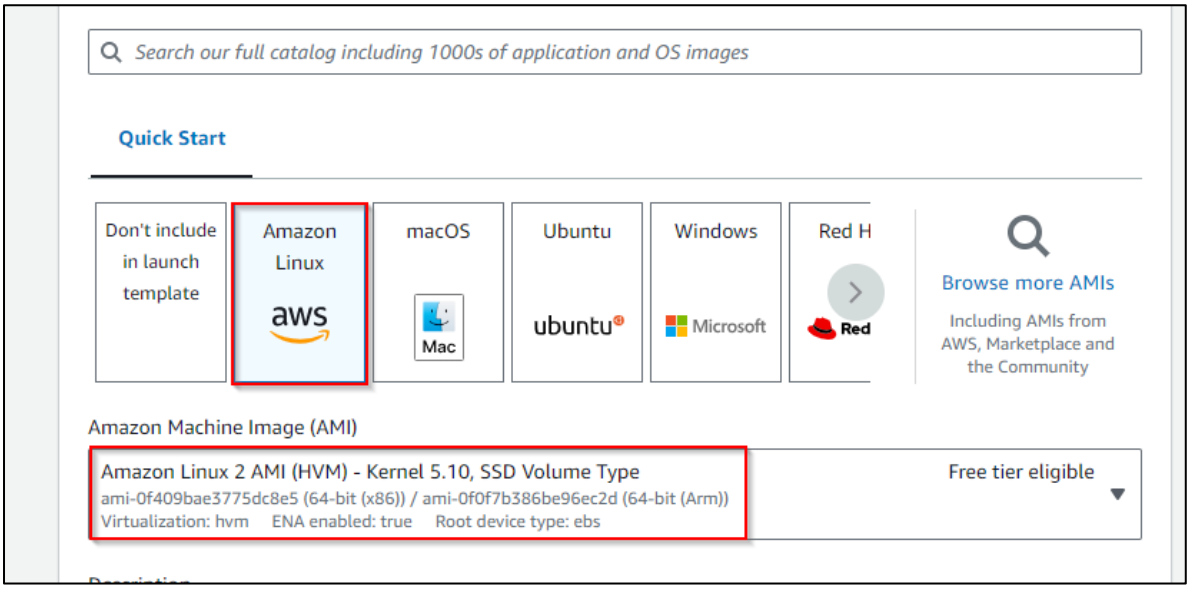
1.2 Select the **Launch Templates** tab and click **Create a launch template**

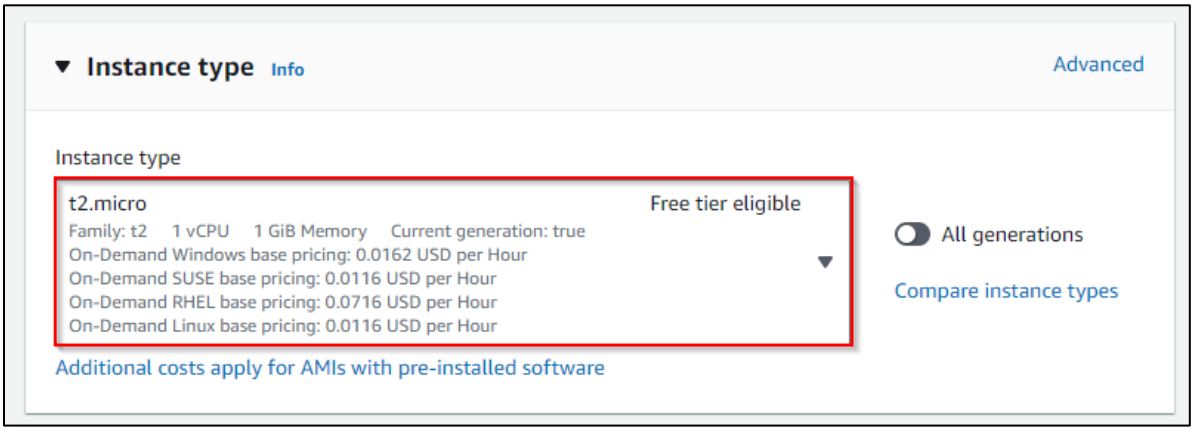


1.3 Provide a name and description to the **Launch** template

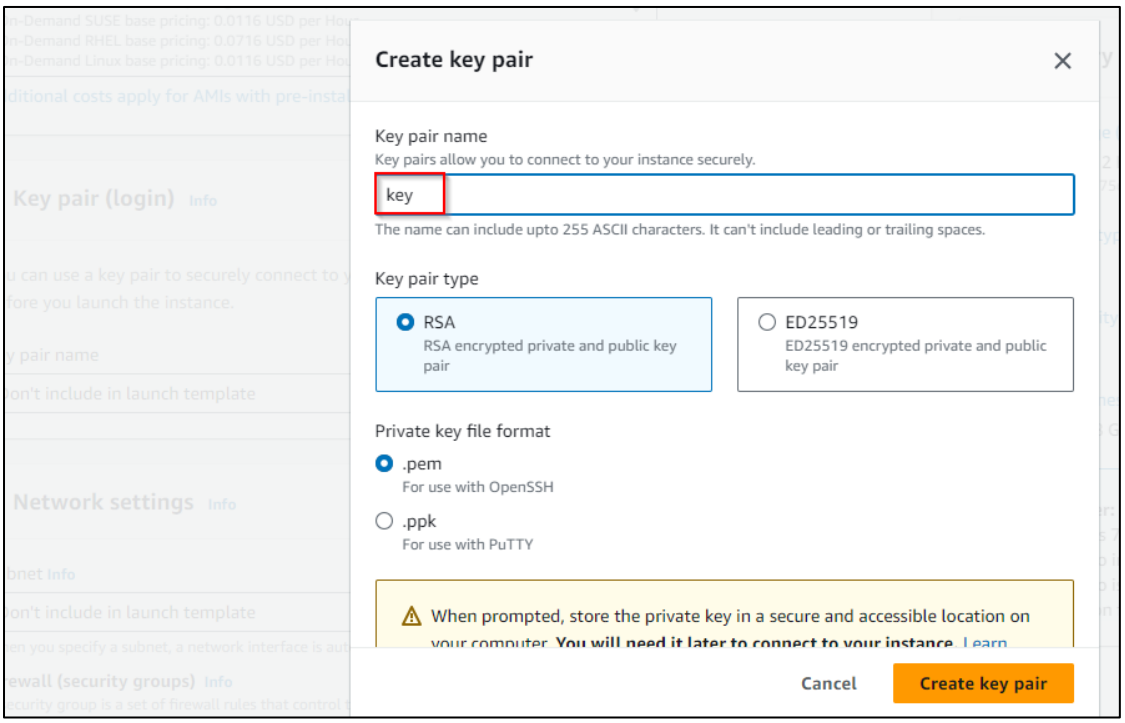


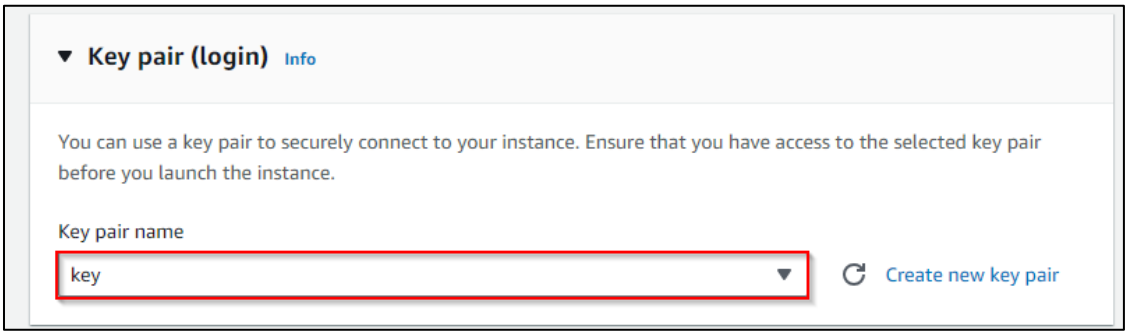
1.4 Choose **Amazon Linux-Kernel 5.10, SSD Volume Type** in the **Amazon Machine Image** section and set the instance type to **t2.micro**



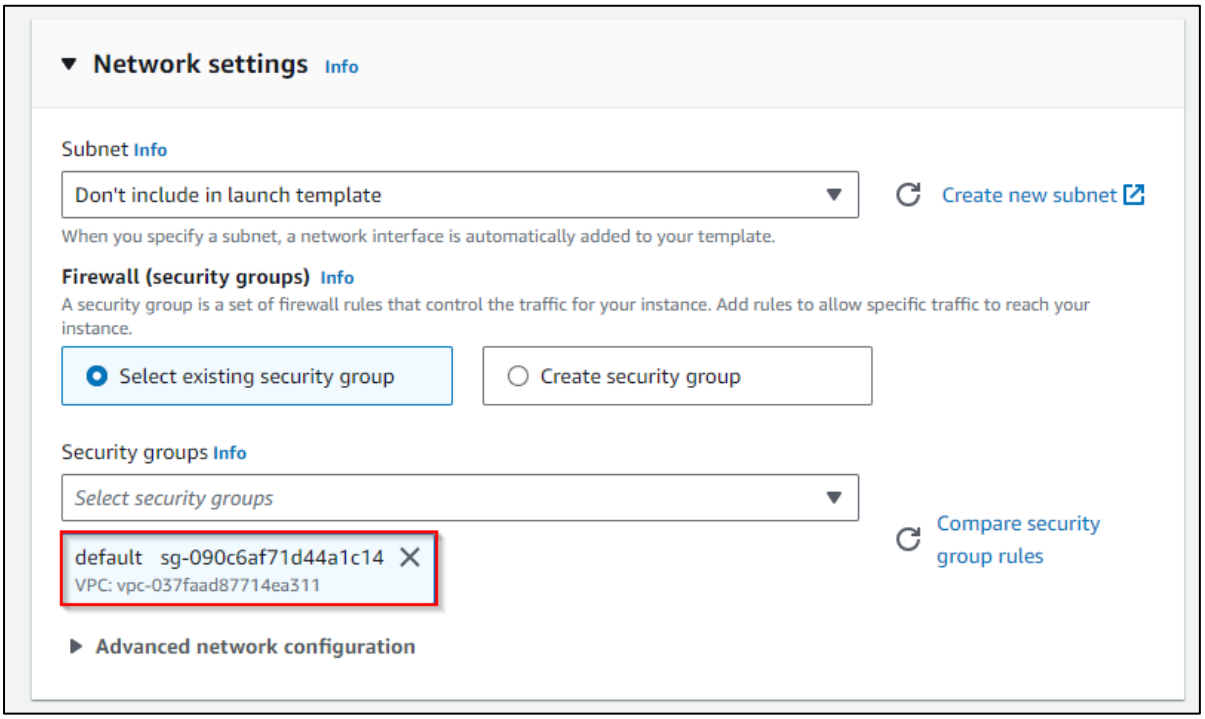


1.5 Specify the **Key pair name** as **key** and click on **Create key pair**





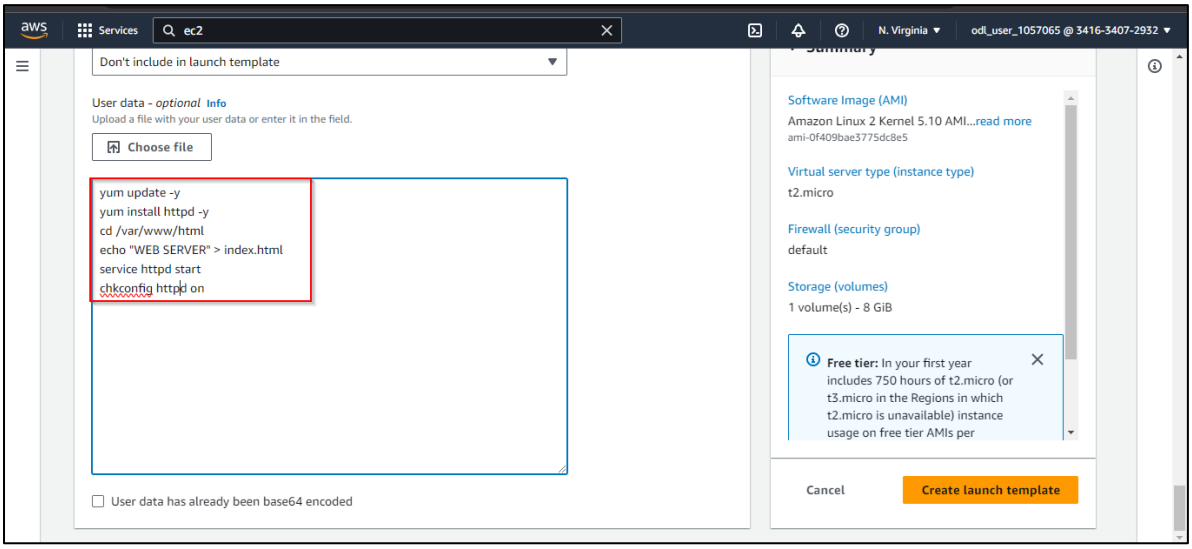
1.6 Keep the Security groups as **default**

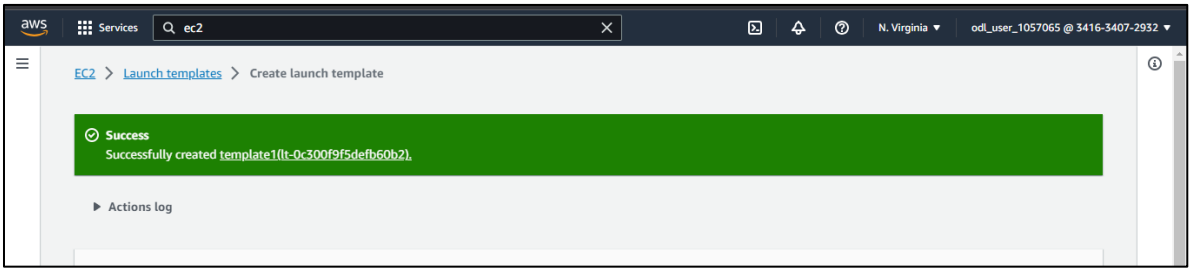


1.7 In the **Advanced details** section, add the following code under **User data**:

yum update -y
yum install httpd -y
cd /var/www/html
echo "WEB SERVER" > index.html
service httpd start
chkconfig httpd on

After adding the code, click **Create launch template.**

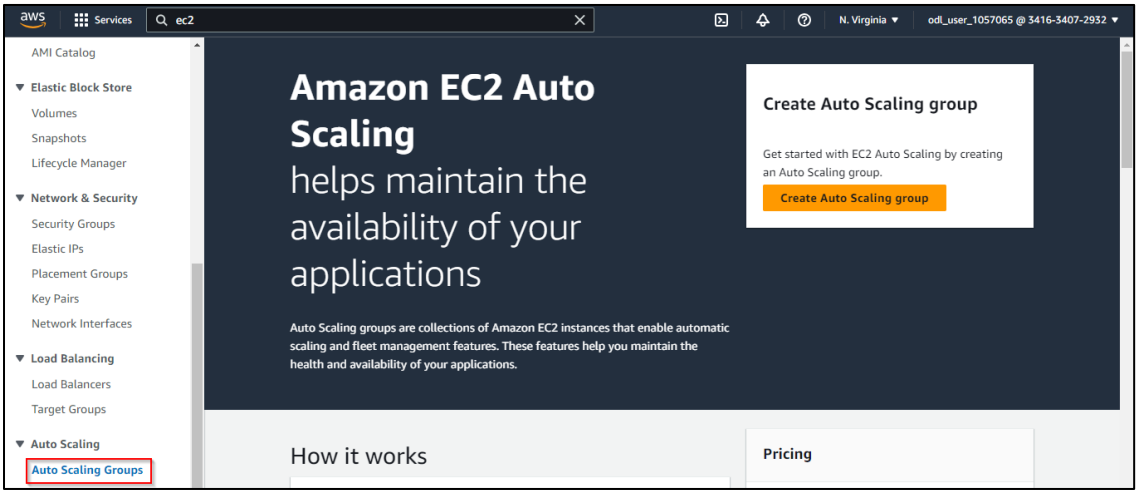




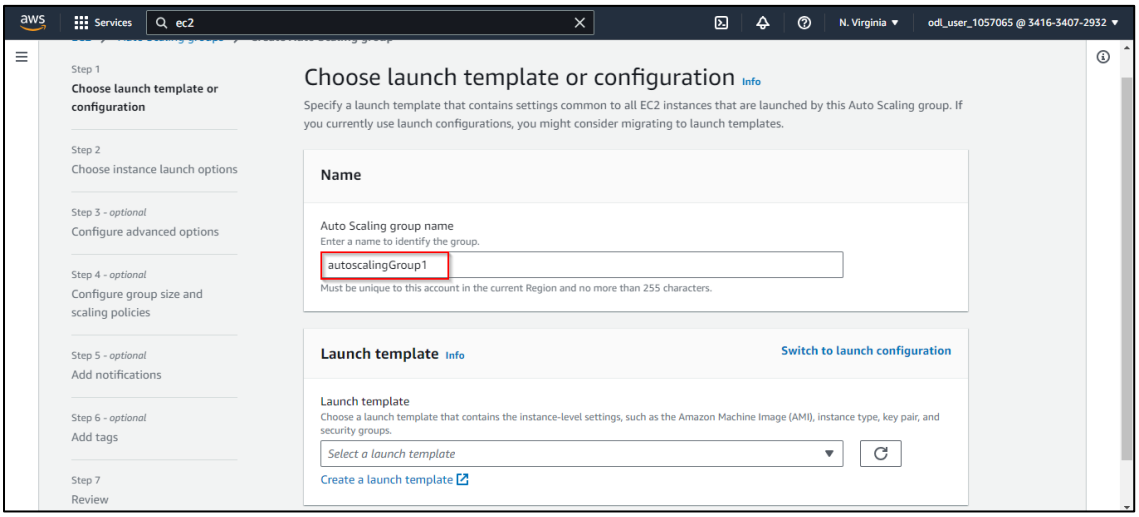
The template has been created successfully.

Step 2: Create an Auto Scaling group

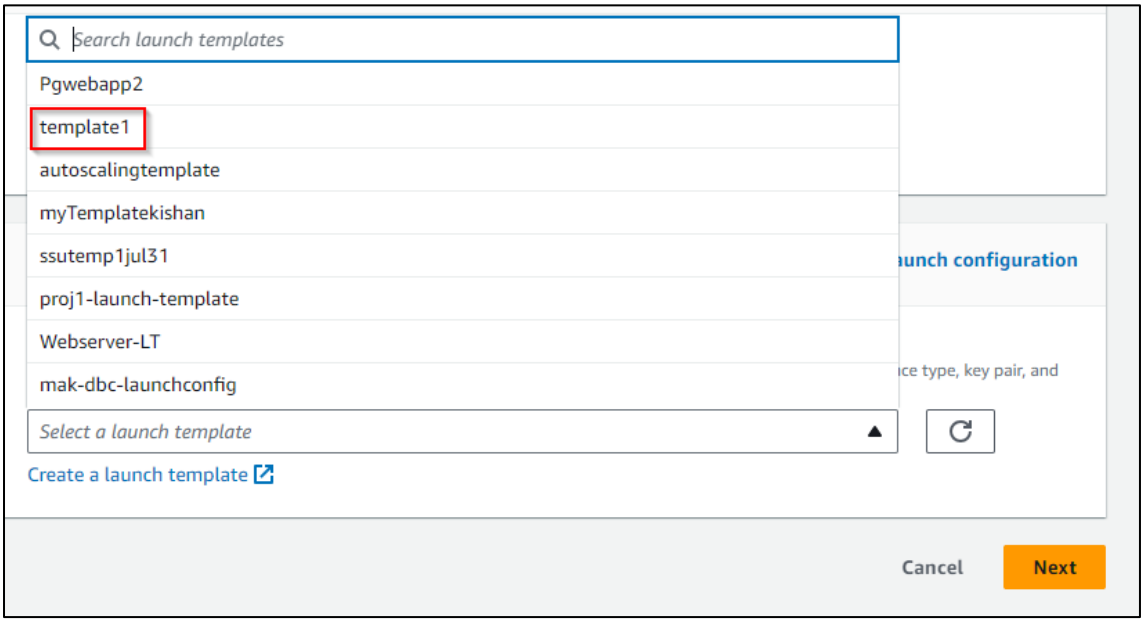
2.1 In the EC2 dashboard on the left pane, click on **Create Auto Scaling group** under **Auto Scaling Groups**



2.2 Name the Auto Scaling group as **autoscalingGroup1**

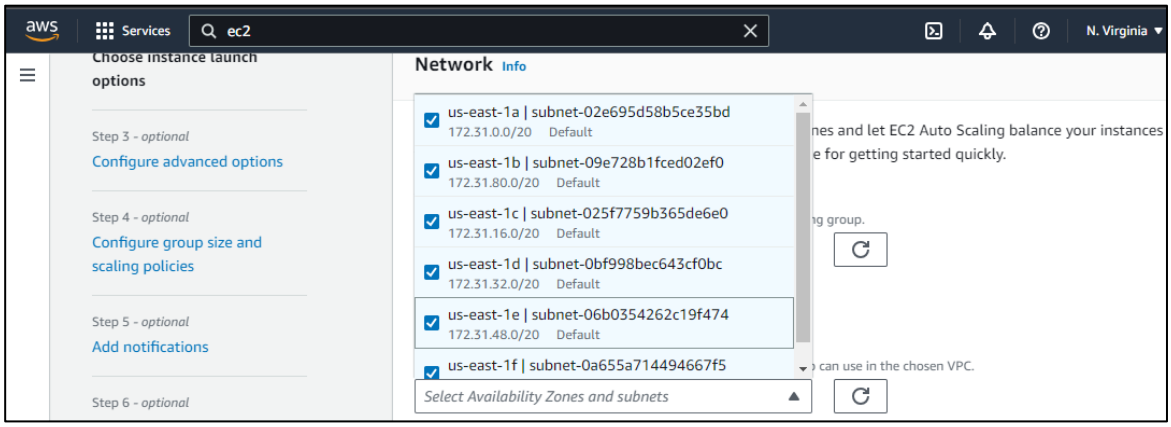


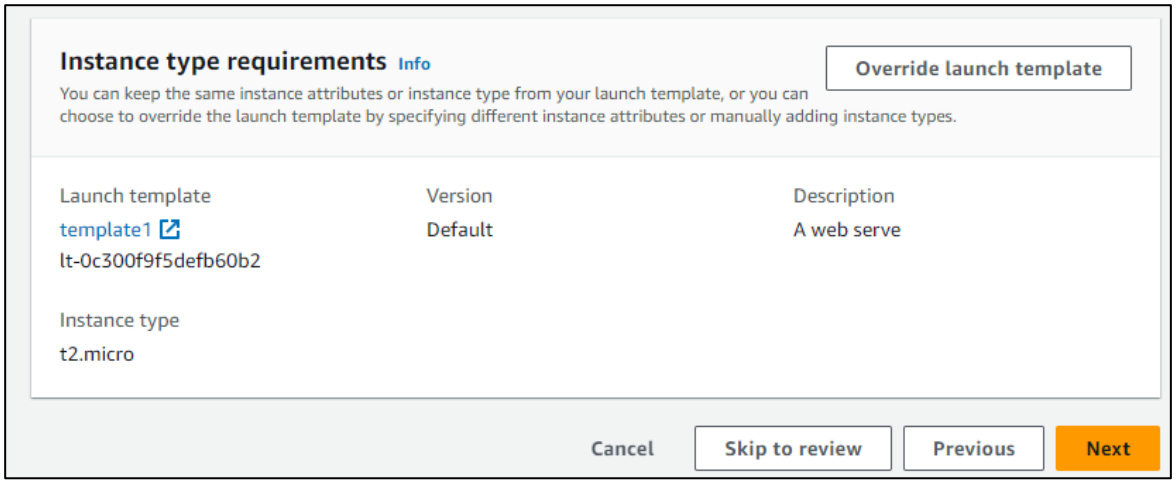
2.3 Select Launch template as **template1** created in previous steps and click **Next**



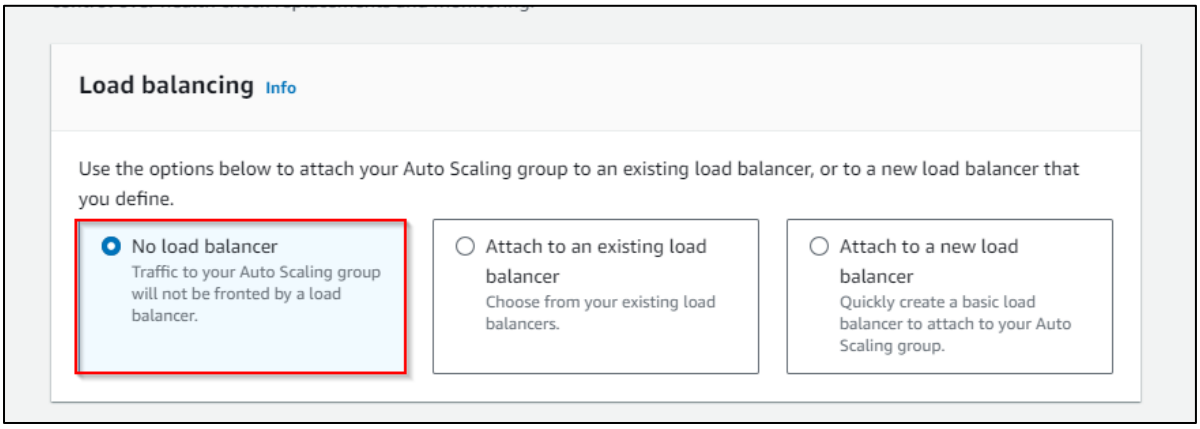
2.4 In the **Choose instance launch options**, follow these steps:

- Select the **default VPC**
- Select all the **Availability Zones and subnets** and click **Next**





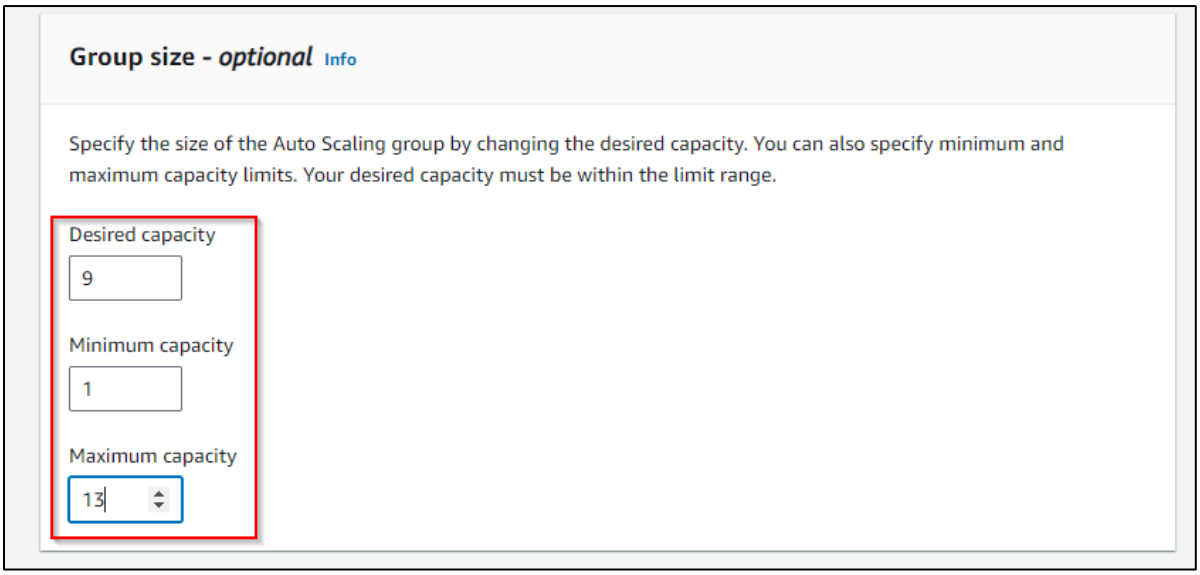
2.5 Select **No load balancer** for the **Load balancing** option

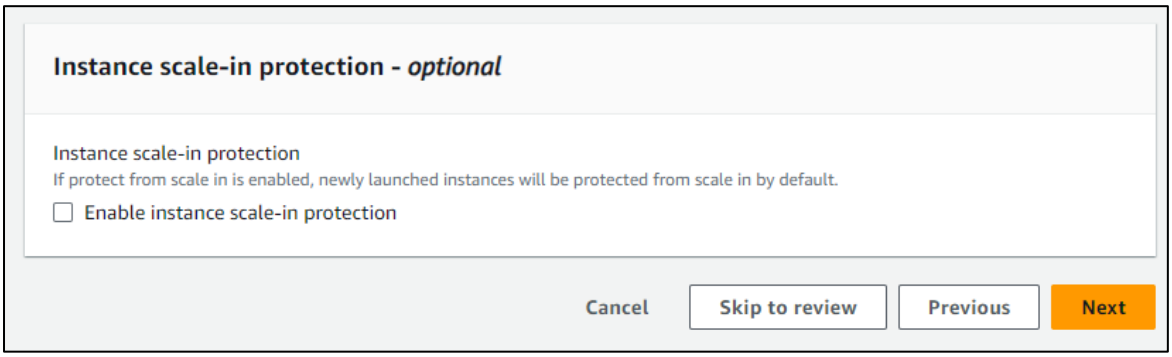


Note: The users can create or attach an existing load balancer if they want.

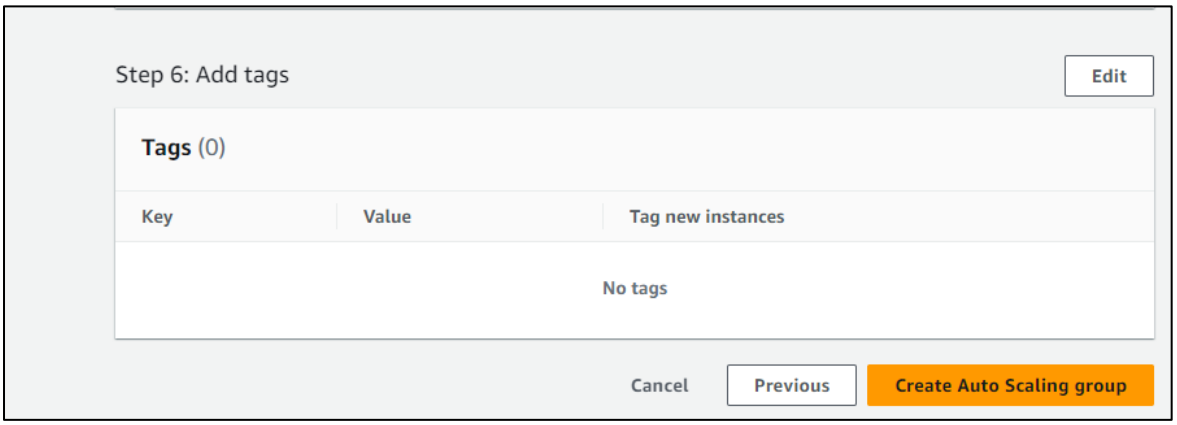
2.6 In the **Configure group size and scaling policies**, make the following changes:

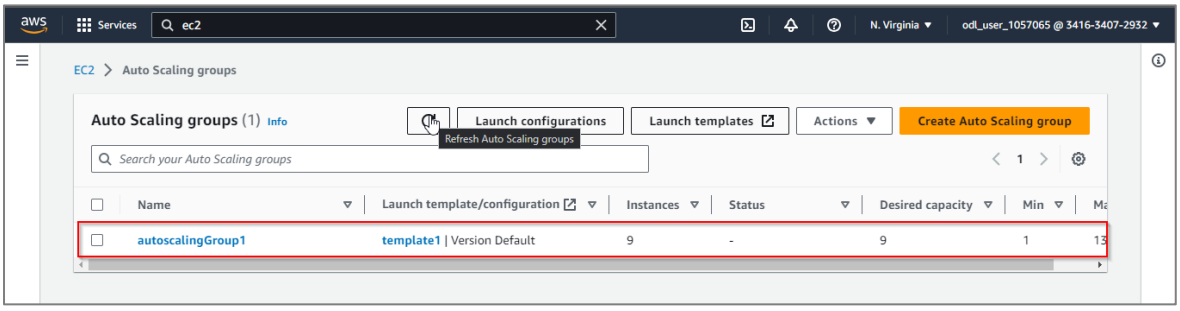
- **Desired capacity** = **9**,
- **Minimum capacity** = **1**
- **Maximum capacity = 13** and click **Next**





2.7 Skip all the remaining sections by clicking **Next.** Now, click **Create Auto Scaling group**





Finally, you will see **AutoScalingGroup1** in the **Auto Scaling group Dashboard,** which indicates that the Auto Scaling group has been launched successfully.

By following these steps, you have successfully implemented dynamic and efficient auto-scaling solutions, enhancing the availability and performance of your AWS-based applications.