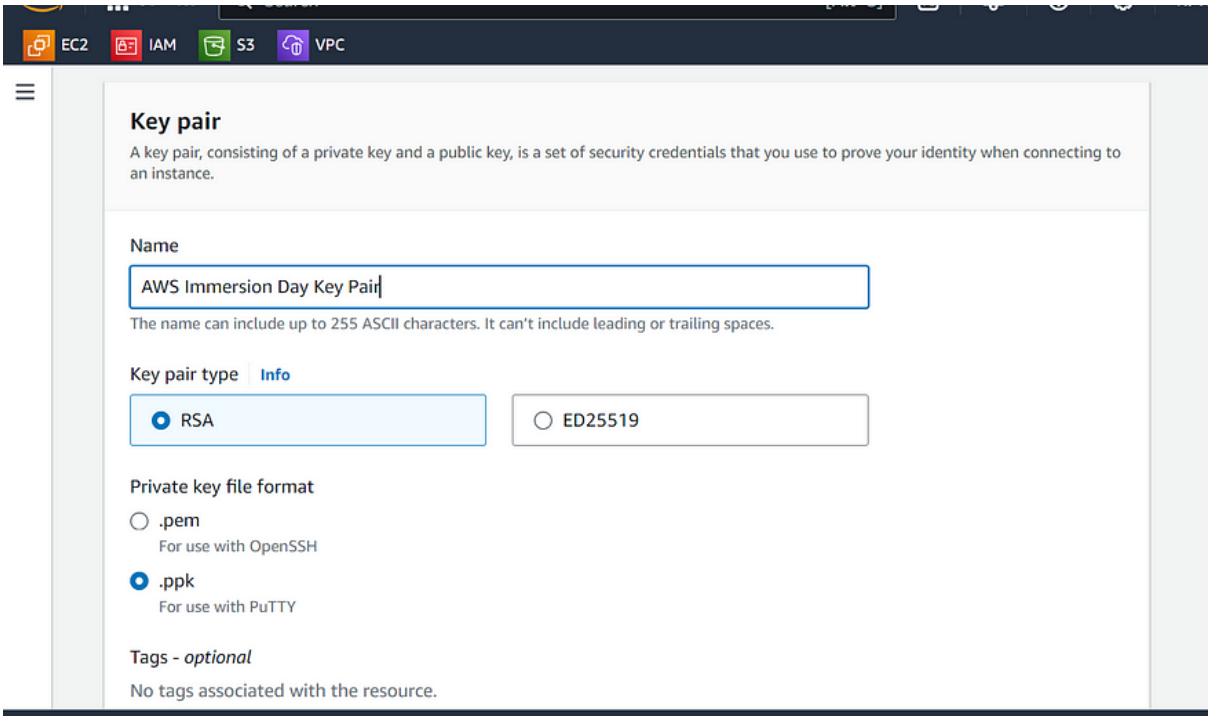
Task : Launching EC2 Linux instance and connect with Session Manager

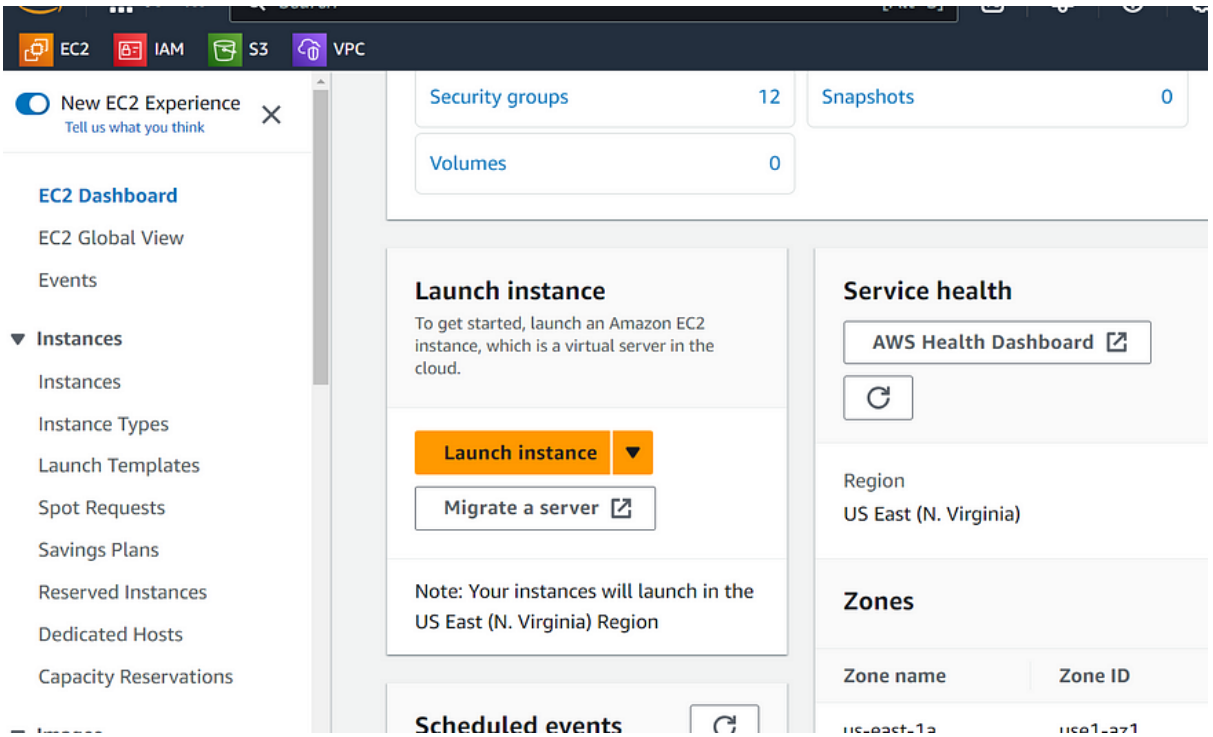
Creating Key Pair



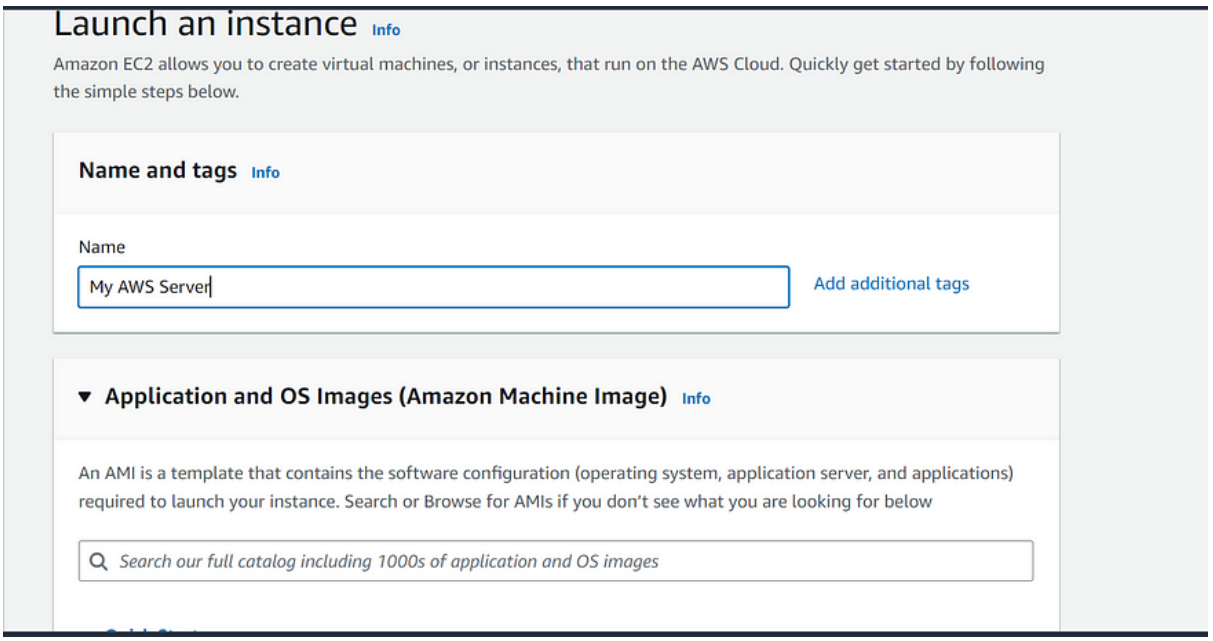
Launch a Web Server Instance

We will launch an Amazon Linux 2 instance, bootstrap Apache/PHP, and install a basic web page that will display information about our instance.

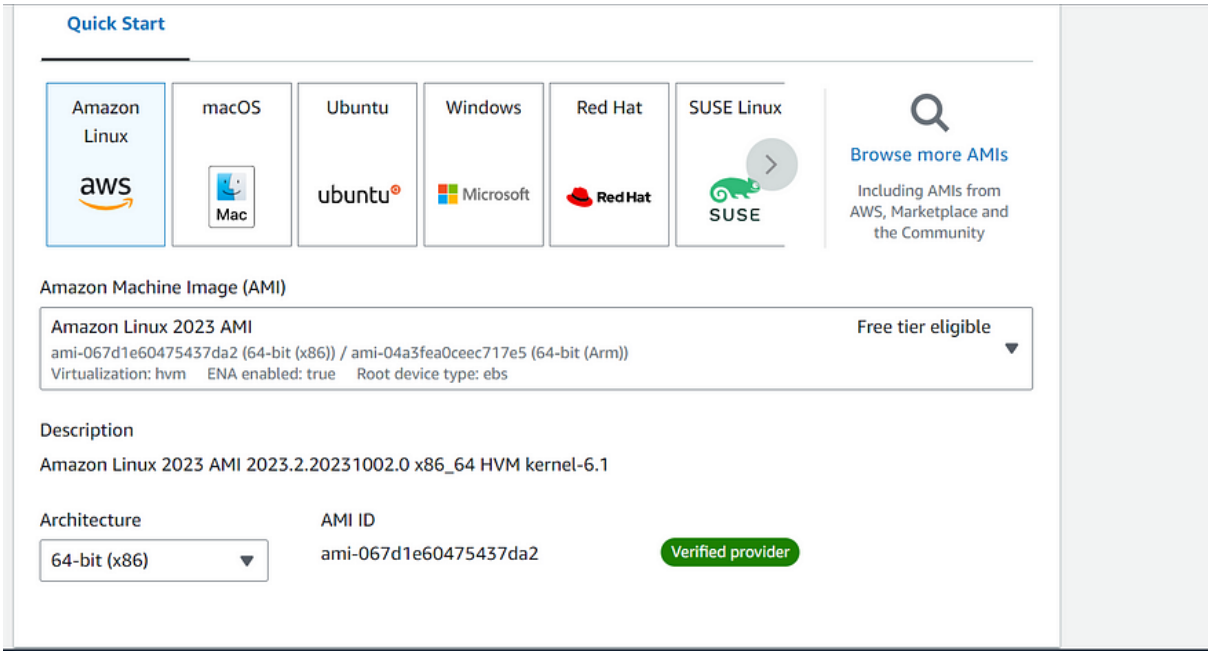
1. Click on EC2 Dashboard near the top of the leftmost menu. And Click on Launch instance.



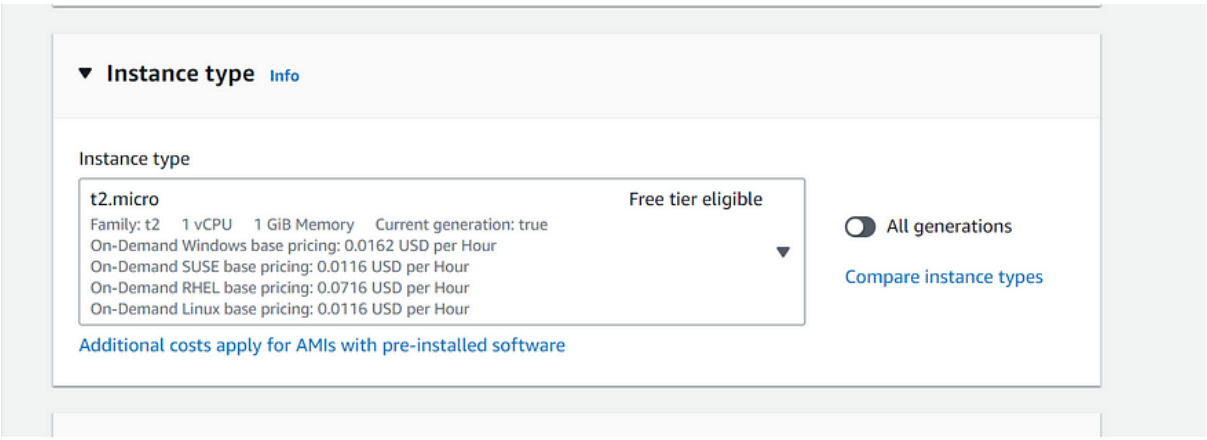
2. Give the name of your choice



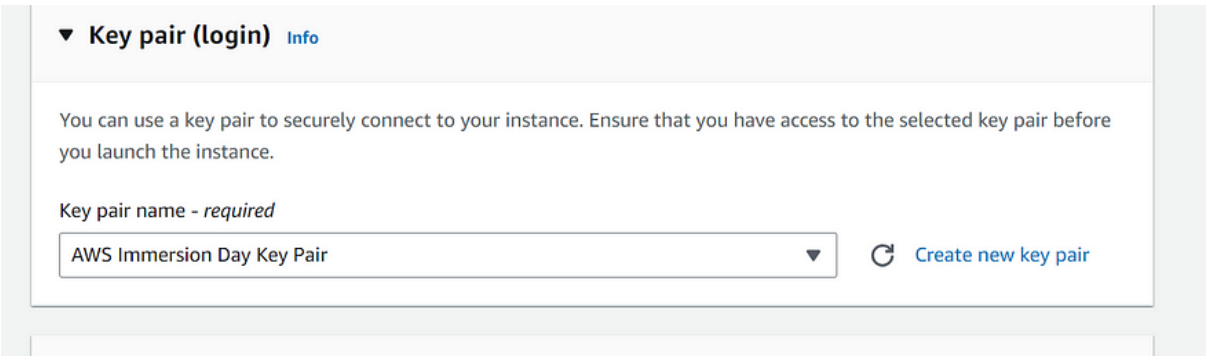
3. From Quick Start Choose **Amazon Linux**, Amazon Machine Image(AMI) is **Amazon Linux 2023 AMI** and Architecture as **64 bit(x86)**



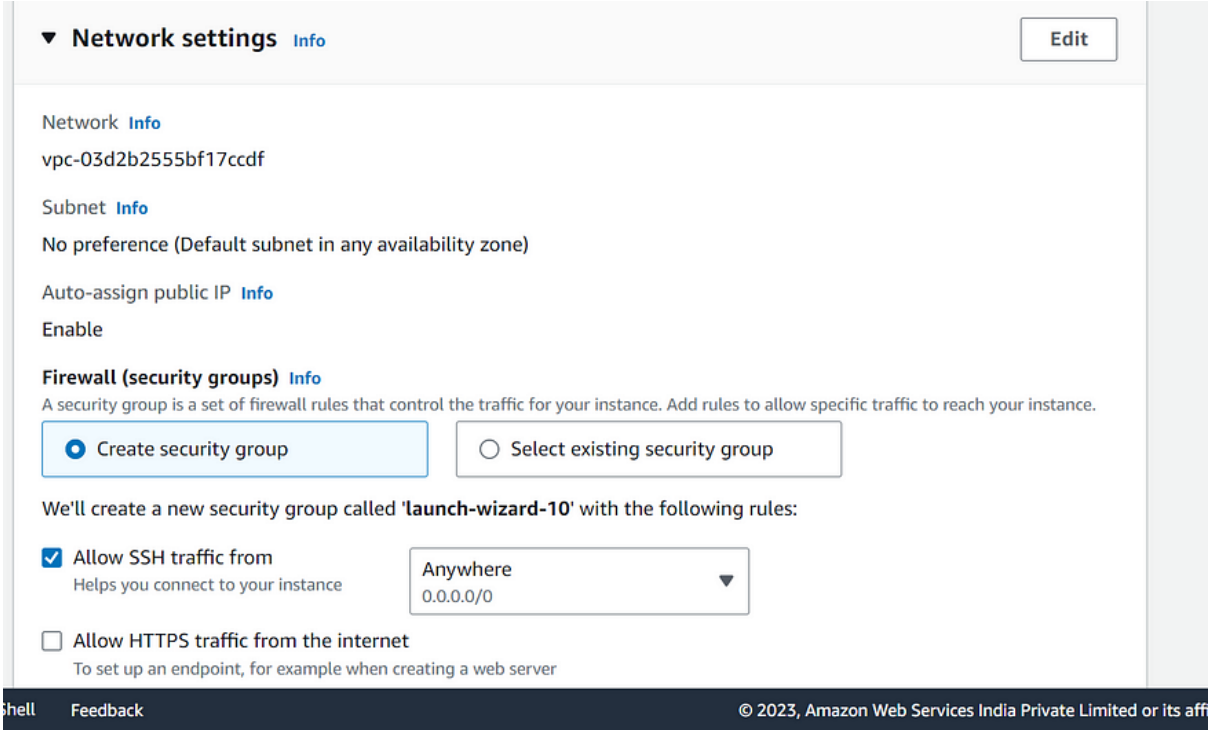
4. Instance type would be t2.micro(As it is for free tier)



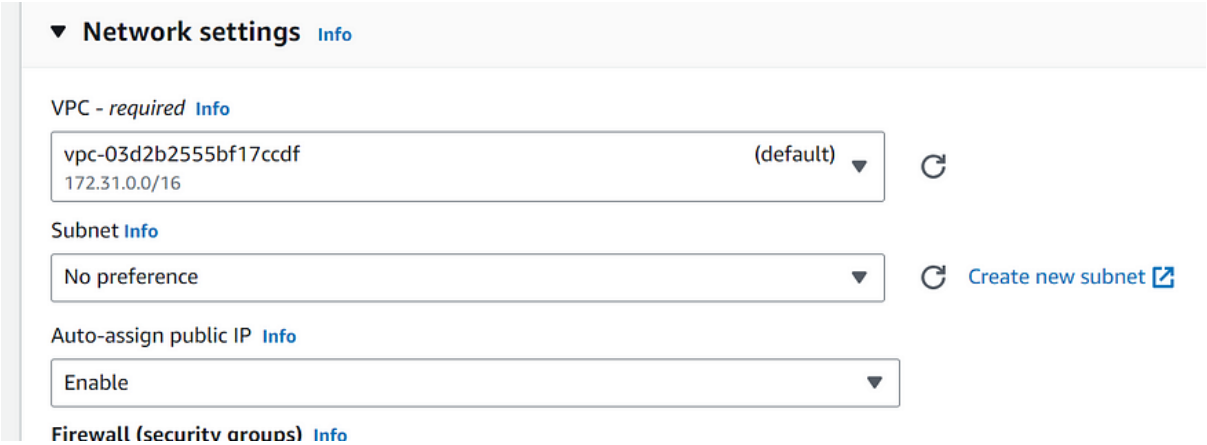
5. Choose Key Pair as we have created in the starting



6. Click on **Edit** for Network Settings

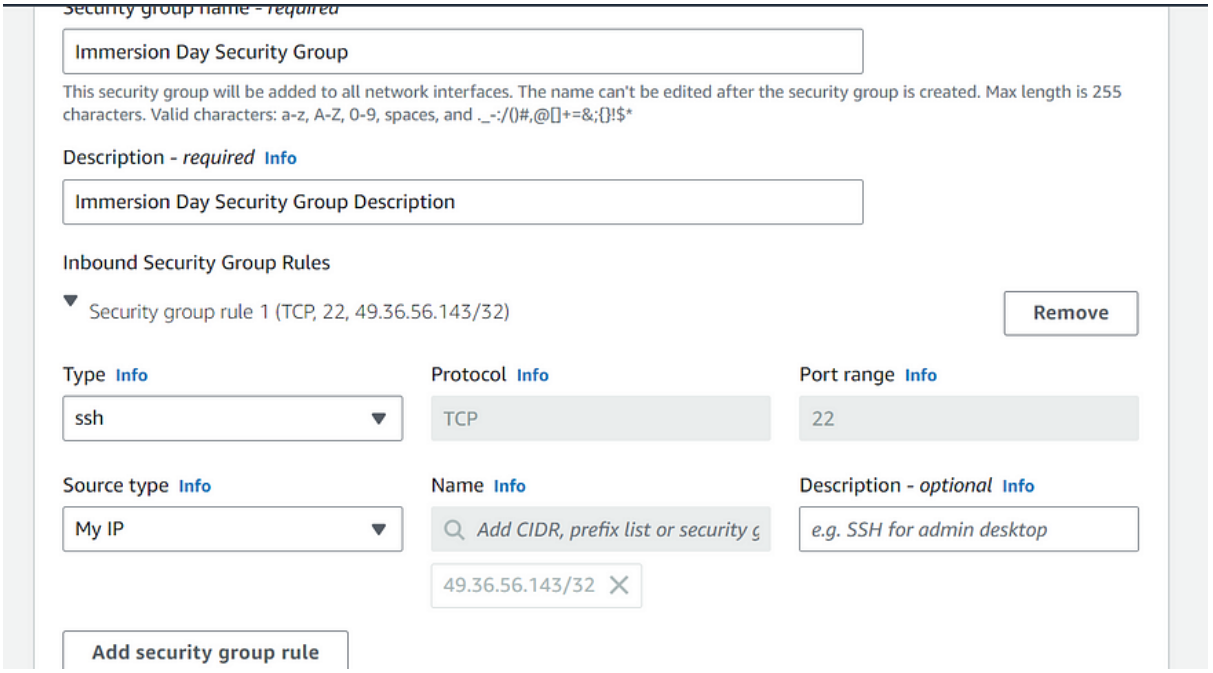


7. Choose VPC as Default VPC, Subnet as No Preference, and Auto Assign IP as “Enable”

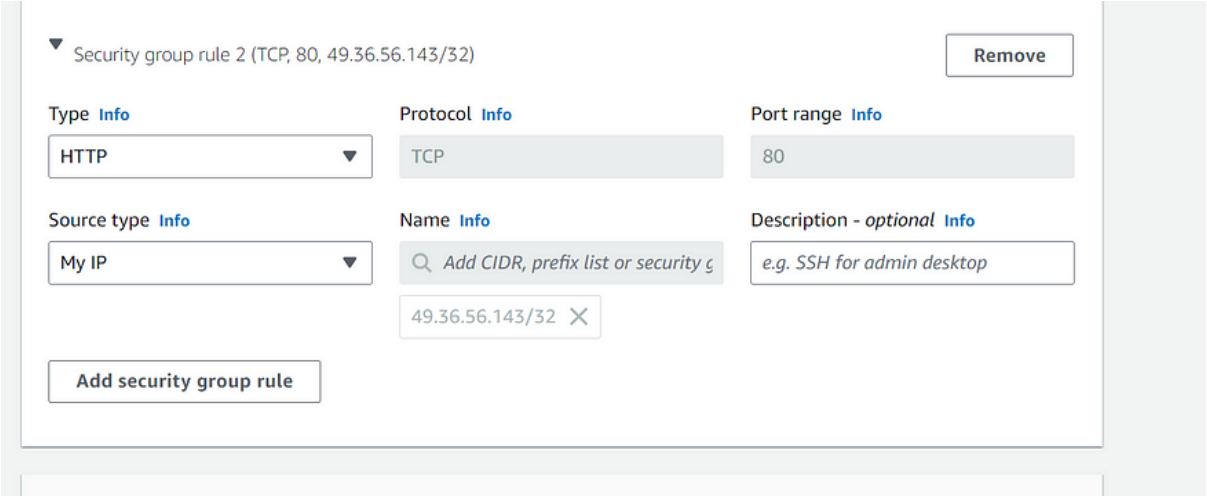


8. Give the Security Group name as “Immersion Day Security Group” and Description as “Immersion Day Security Group Description”

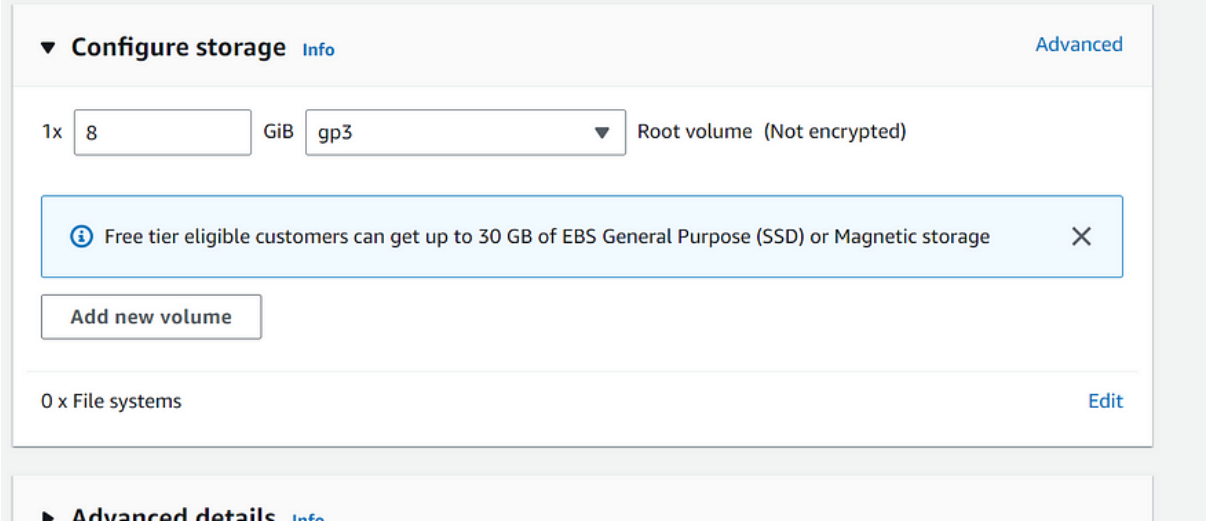
i). Rule 1 allows TCP traffic to port 22 for My AWS Web Server.



ii) Rule 2 allow HTTP traffic to My AWS Web Server



9. Configure storage should be kept as it is.



10. Go to Advanced Details

Scroll down to Metadata version and select V2 only(token required)

Metadata accessible Info

Select

Metadata transport

Select

Metadata version Info

V2 only (token required)

For V2 requests, you must include a session token in all instance metadata requests. Applications or agents that use V1 for instance metadata access will break.

Metadata response hop limit Info

11. Under userdata add the script

User data - *optional* Info

Upload a file with your user data or enter it in the field.

Choose file

```
#!/bin/sh

#Install a LAMP stack
dnf install -y httpd wget php-fpm php-mysqli php-json php php-devel
dnf install -y mariadb105-server
dnf install -y httpd php-mbstring

#Start the web server
chkconfig httpd on
systemctl start httpd

#Install the web pages for our lab
if [ ! -f /var/www/html/immersion-day-app-php7.zip ]; then
  cd /var/www/html
  wget -O 'immersion-day-app-php7.zip' 'https://static.us-east-
```

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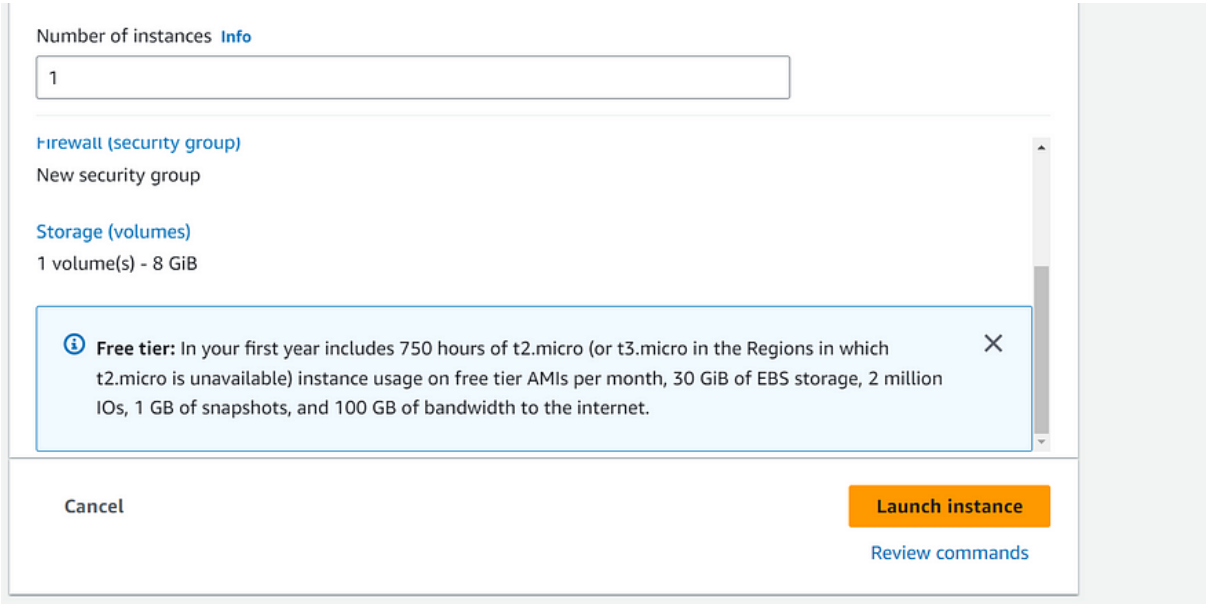
```
#!/bin/sh

#Install a LAMP stack

dnf install -y httpd wget php-fpm php-mysqli php-json php
php-devel

dnf install -y mariadb105-server

dnf install -y httpd php-mbstring



#Start the web server

chkconfig httpd on

systemctl start httpd
```

```
#Install the web pages for our lab

if [ ! -f /var/www/html/immersion-day-app-php7.zip ]; then

cd /var/www/html

wget -O ‘immersion-day-app-php7.zip’
‘https://static.us-east-1.prod.workshops.aws/public/444df362-a2
11-4686-869b-77496f0dd3be/assets/immersion-day-app-php7.
zip'

unzip immersion-day-app-php7.zip

fi
```

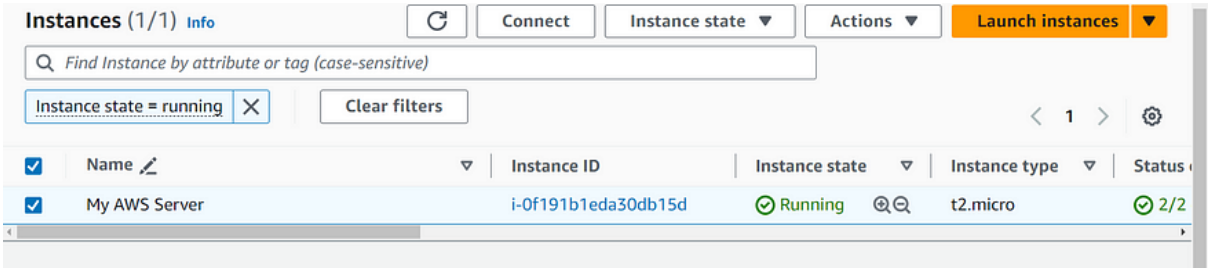
```
#Install the AWS SDK for PHP

if [ ! -f /var/www/html/aws.zip ]; then

cd /var/www/html

mkdir vendor

cd vendor

wget
https://docs.aws.amazon.com/aws-sdk-php/v3/download/aws.zip

unzip aws.zip

fi

# Update existing packages
```

dnf update -y

12. Click on Launch Instance



13. Click the View Instances button in the lower right hand portion of the screen to view the list of EC2 instances. Once your instance has launched, you will see your Web Server as well as the Availability Zone the instance is in, and the publicly routable DNS name. Click the checkbox next to your web server to view details about this EC2 instance.

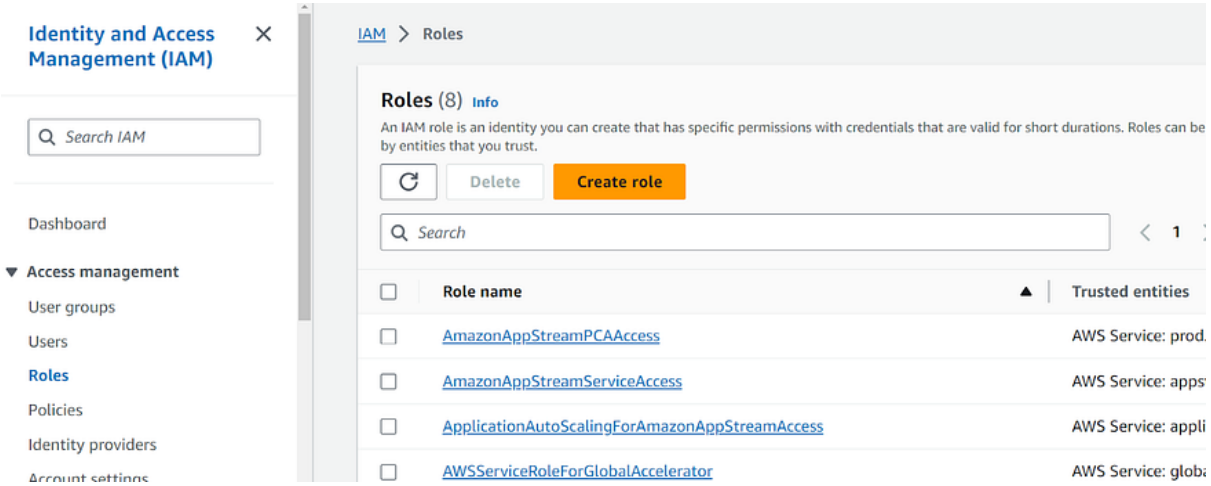


Connect to your Linux instance using Session Manager (Optional)

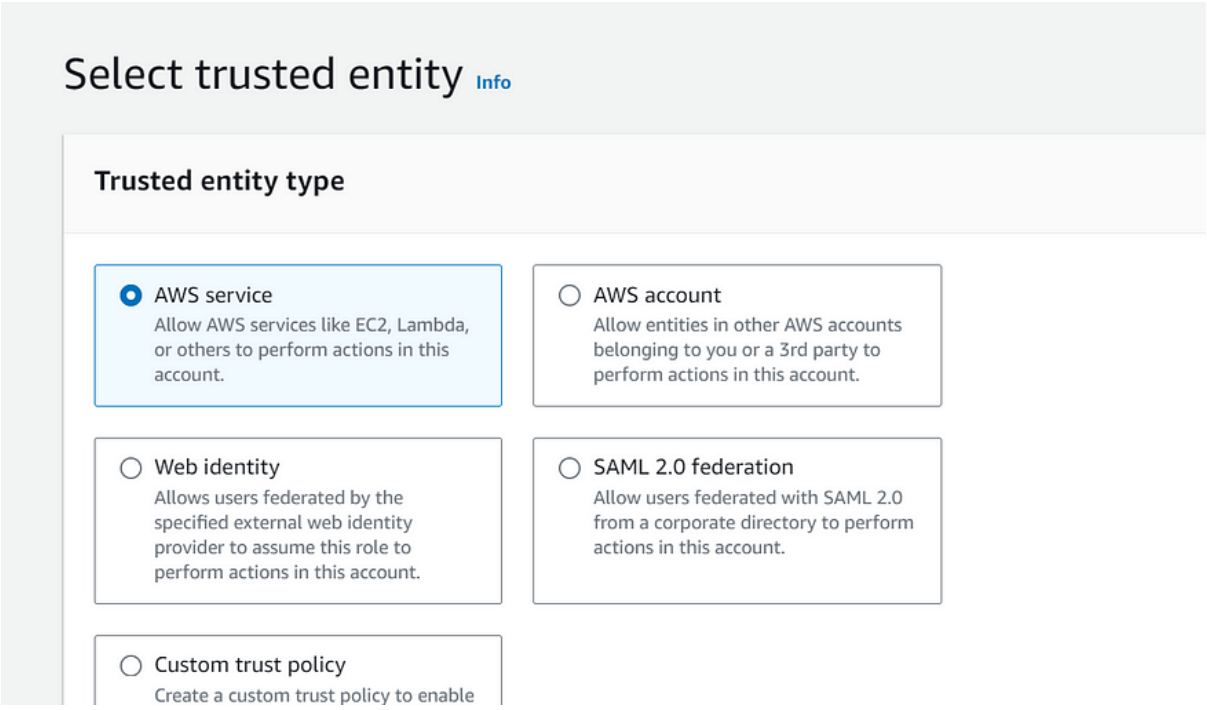
Session Manager is a fully managed AWS Systems Manager capability that lets you manage your Amazon EC2 instances through an interactive one-click browser-based shell or through the AWS CLI. You can use Session Manager to start a session with an instance in your account. After the session is started, you can run bash commands as you would through any other connection type.

Create an IAM instance profile for Systems Manager

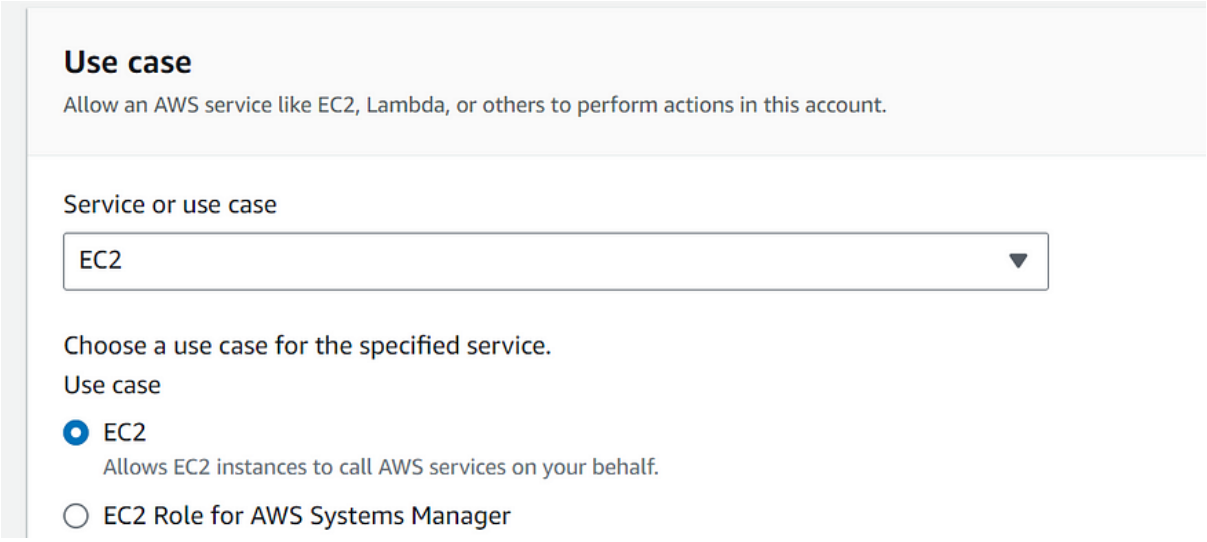
1. Sign in to the AWS Management Console and open the IAM console . In the navigation pane, choose Roles, and then choose Create role



2. Keep AWS Service for Trusted Entity type

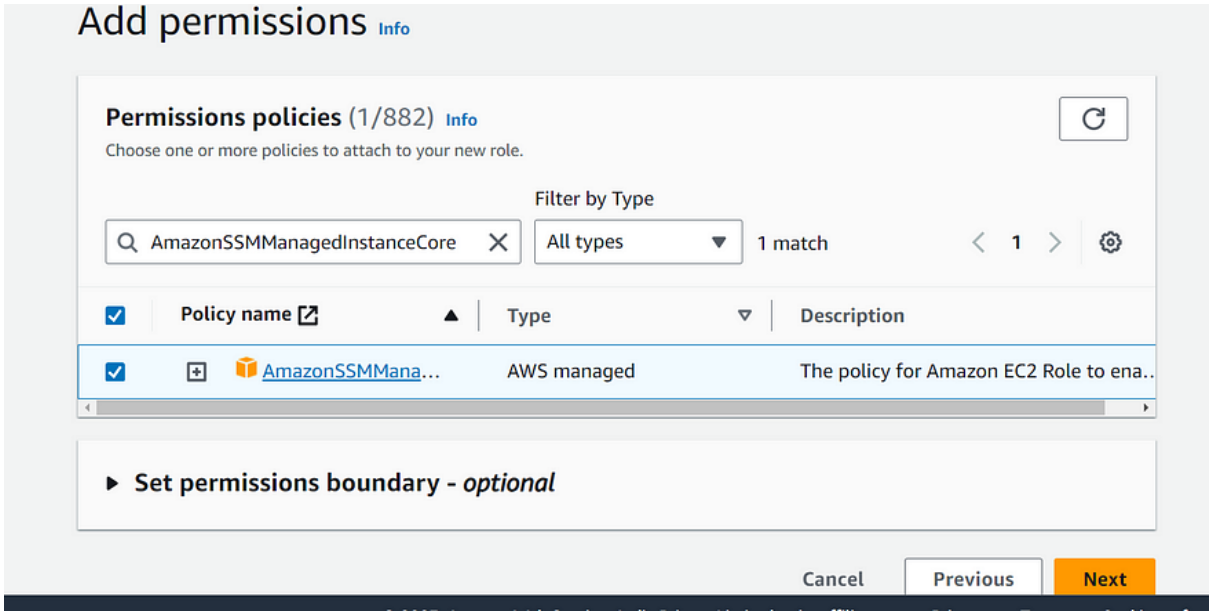


3. Use case select EC2 and click Next

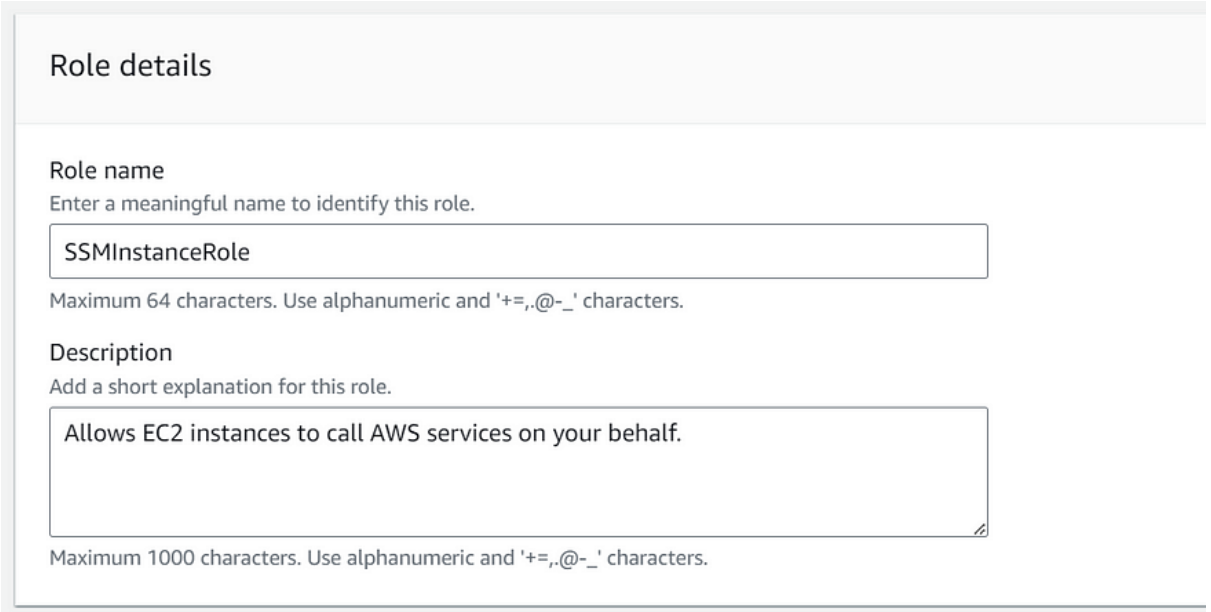


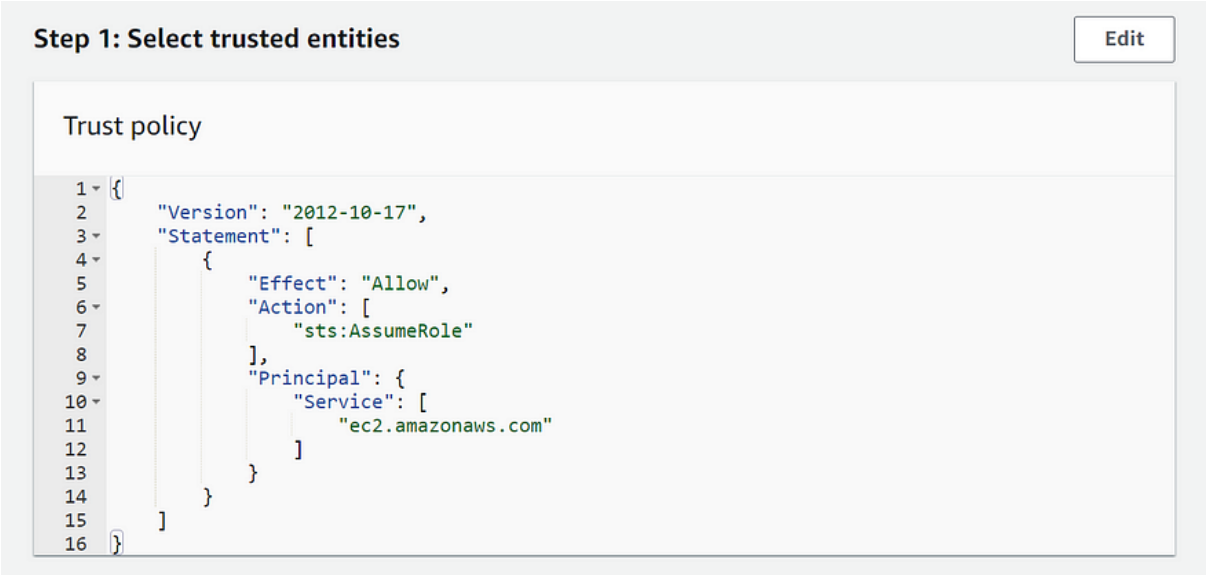
4. On the Attach permissions policies page, do the following:

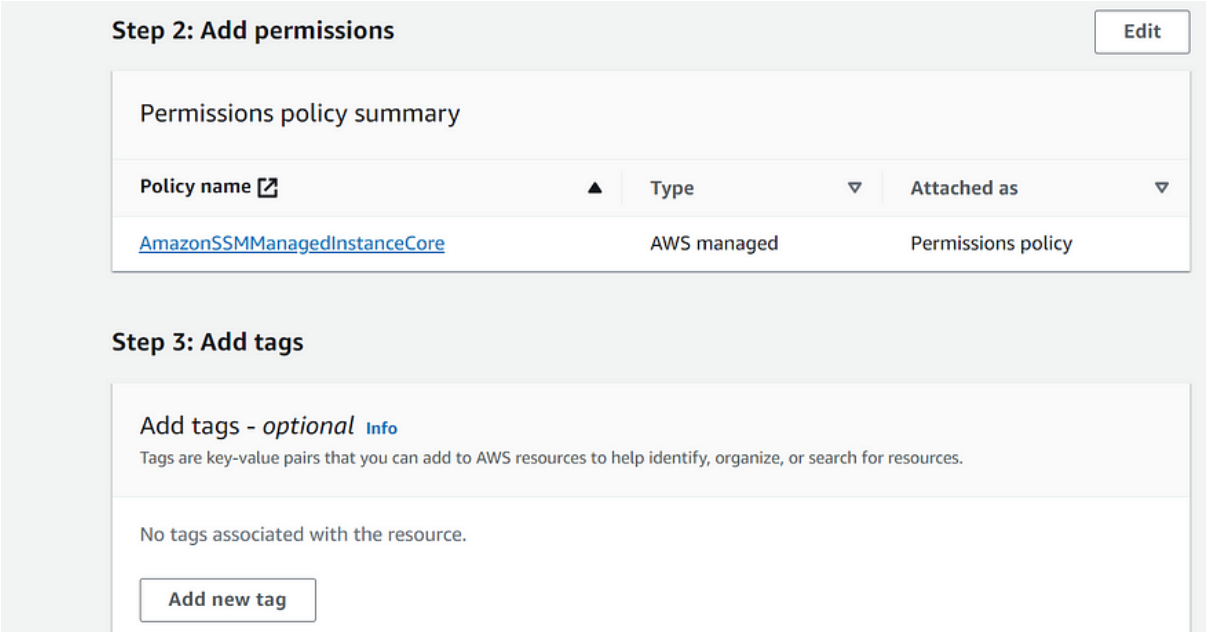
Use the Search field to locate the **AmazonSSMManagedInstanceCore**. Select the box next to its name. Choose Next.



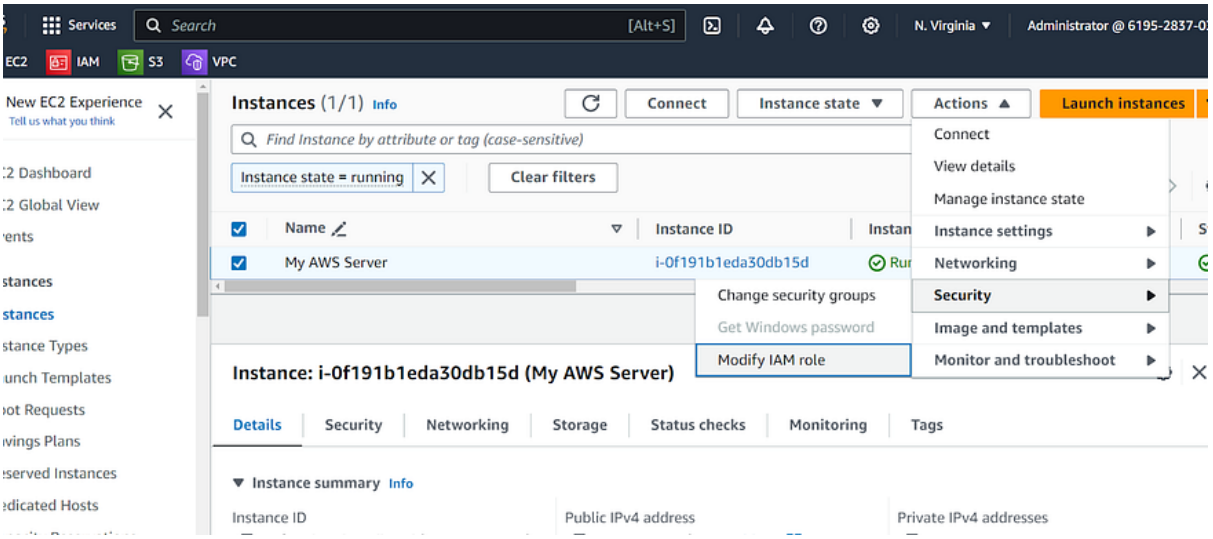
5. For Role name, enter a name for your new instance profile, such as **SSMInstanceRole**. Choose Create role. The system returns you to



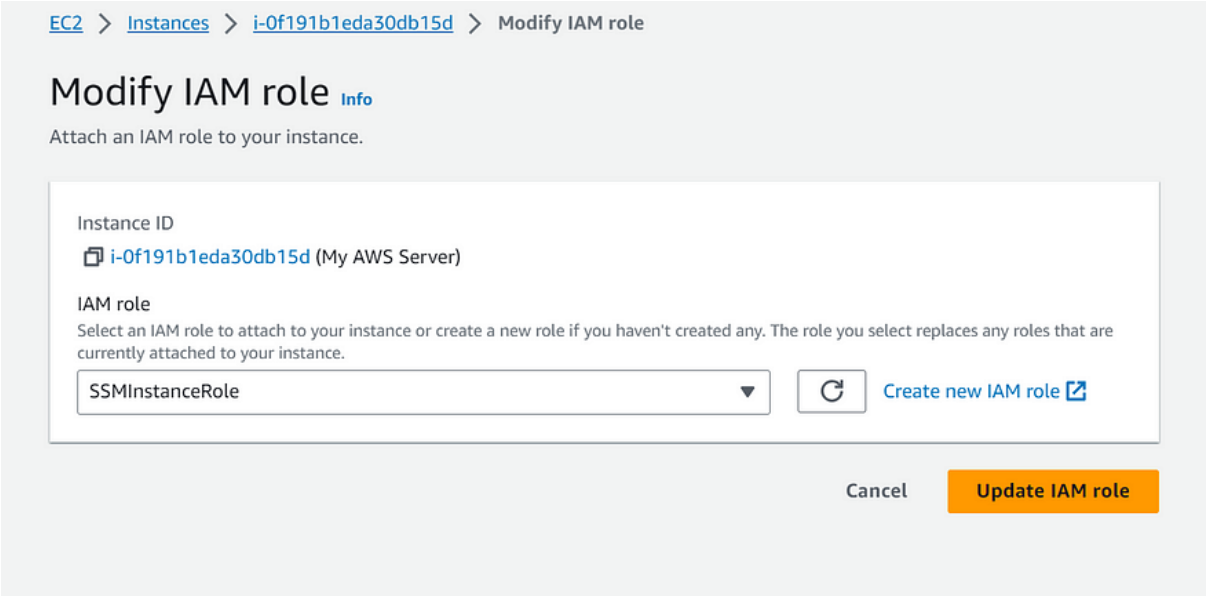




6. Move to EC2 console and In the navigation pane, under Instances, choose Instances. Choose your EC2 instance from the list and click Actions, go to Security and Modify IAM Role

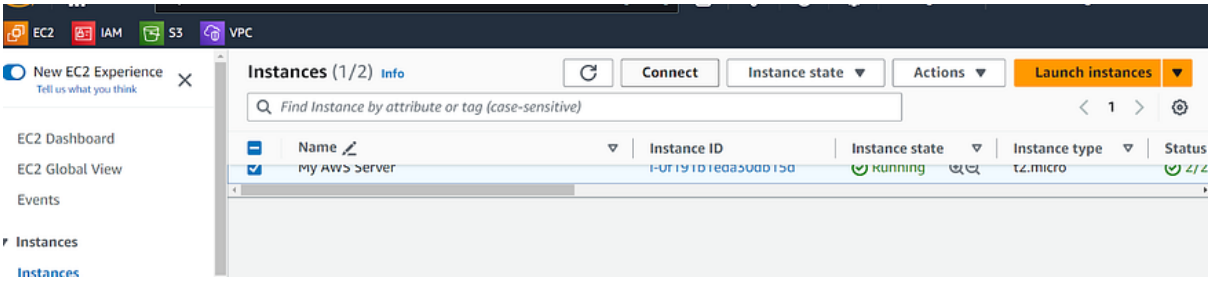


7. Choose SSMInstanceRole and click Update IAM Role.



Connect to your Linux instance using Session Manager

1. In the EC2 instance console, select the instance you want to connect to, and then click the Connect button.



2. In the Connect to instance page, select Session Manager.

Follow the instructions below.

3. Review the Session Manager usage section for advantages of using Session Manager.

4. Choose Connect. A new session will be started in a new tab. After the session is started, you can run bash commands as you would through any other connection type.