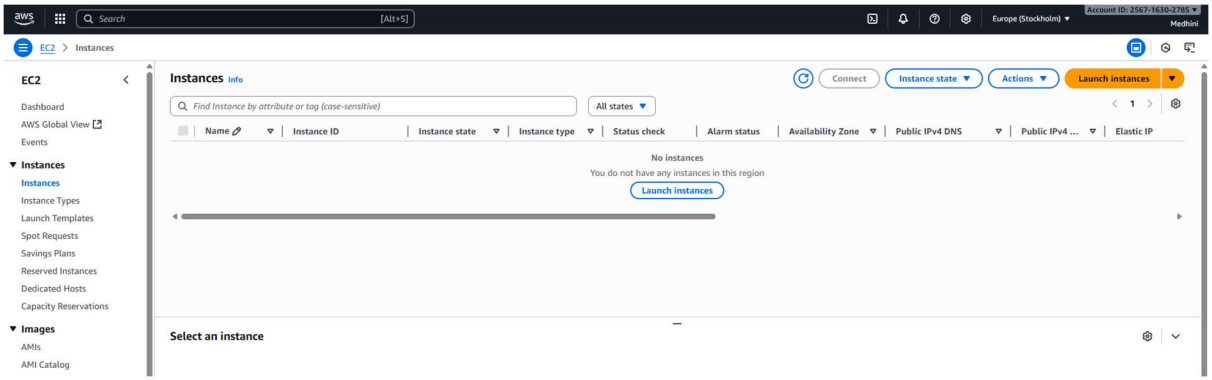
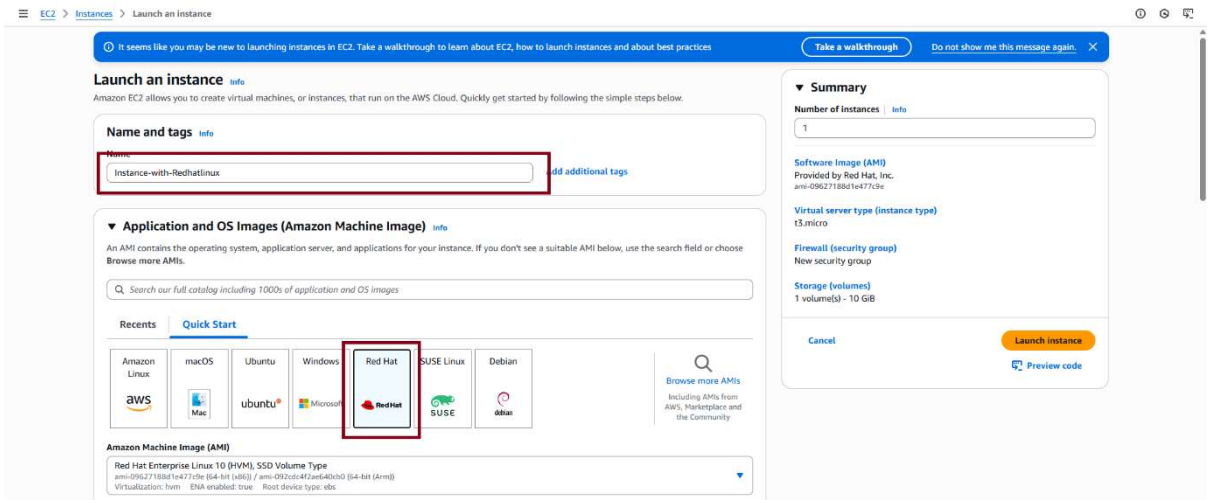
EC2 Instance with Red Hat Linux Operating System

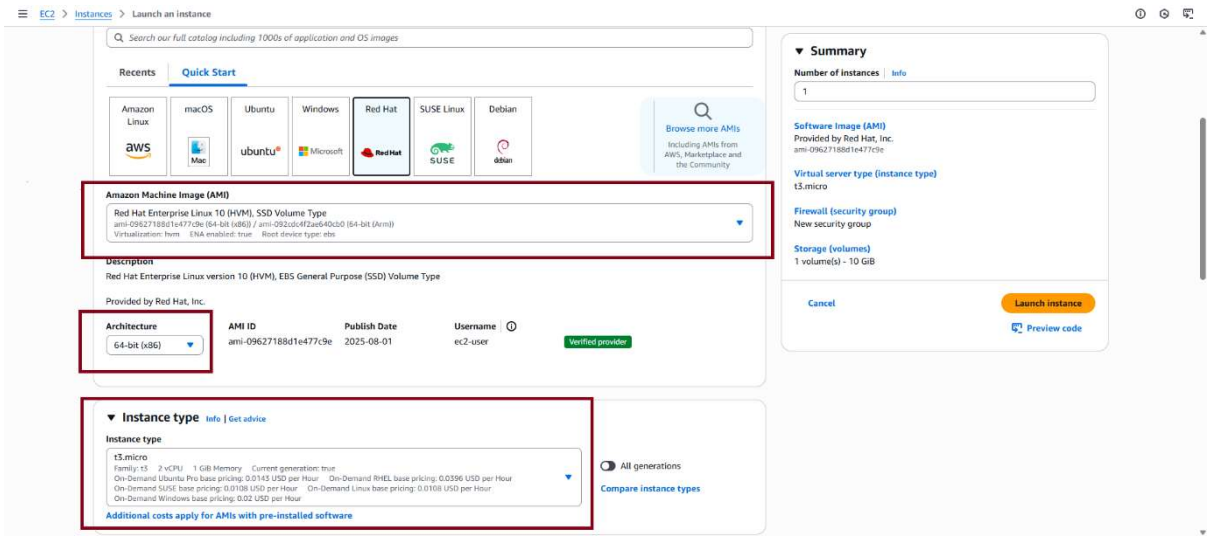
Step 1: Login to your account, click on **Instances**



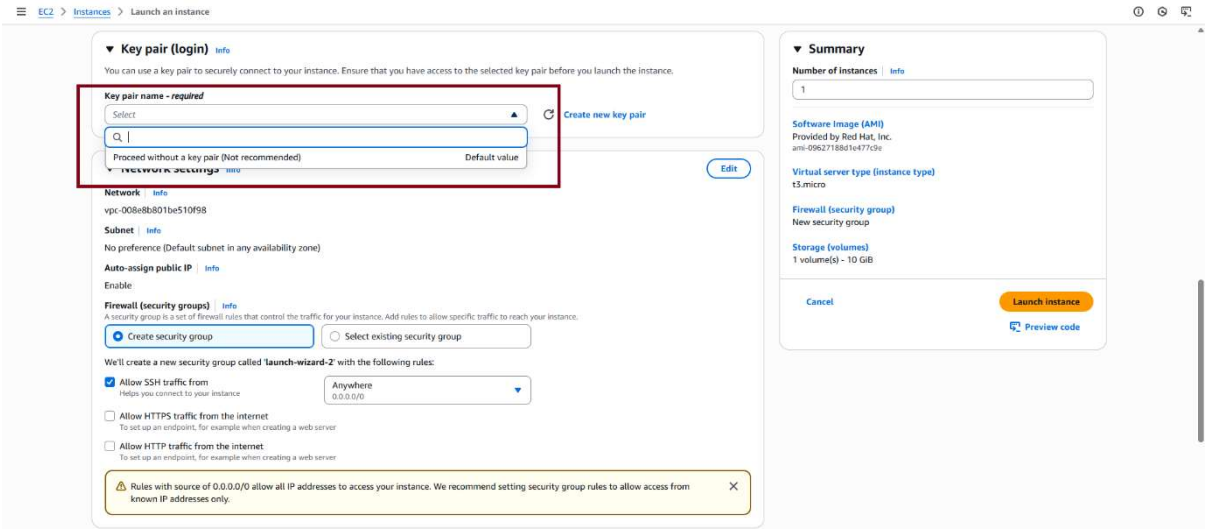
Step 2: Give a name for an instance and select Operating system as RED Hat



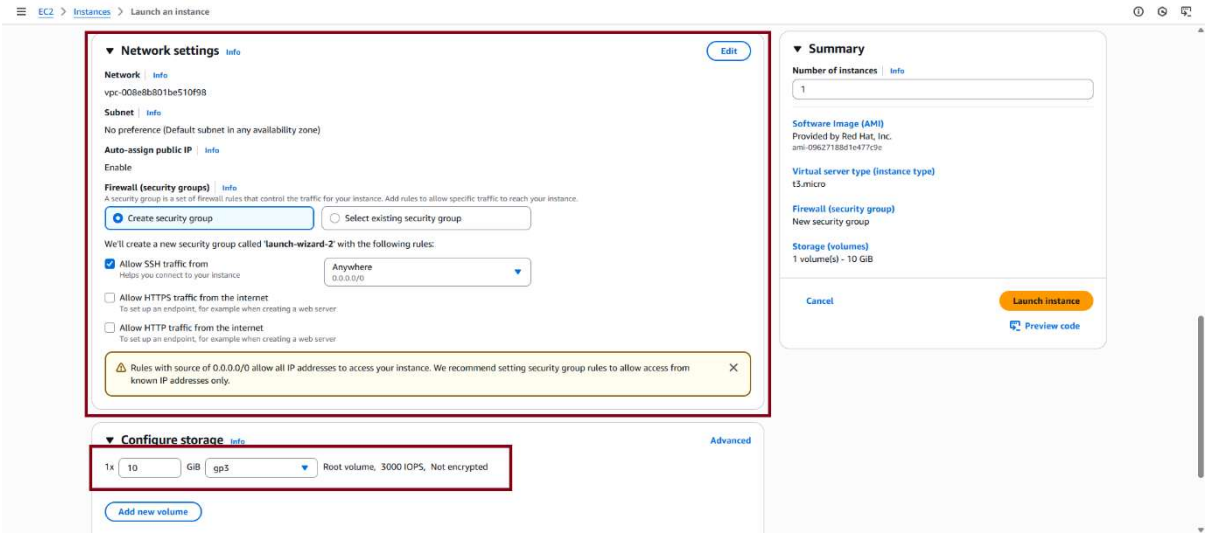
Step 3: Select AMI, choose storage type and instance type as shown in below picture



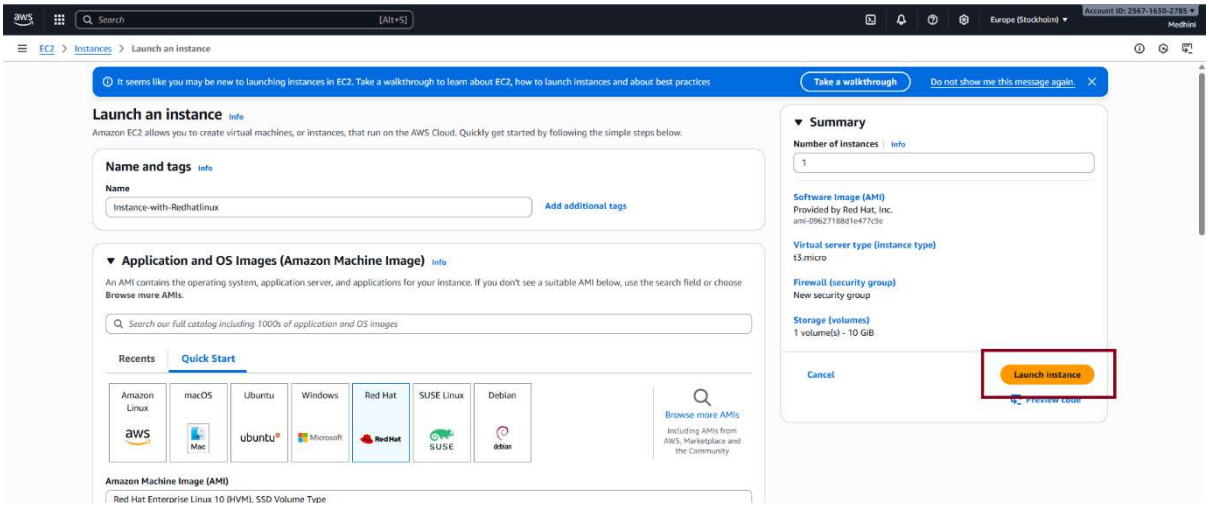
Step 4: Select Keypair as shown in below picture



Step 5: Select Network Settings and configure storage as shown in below figure



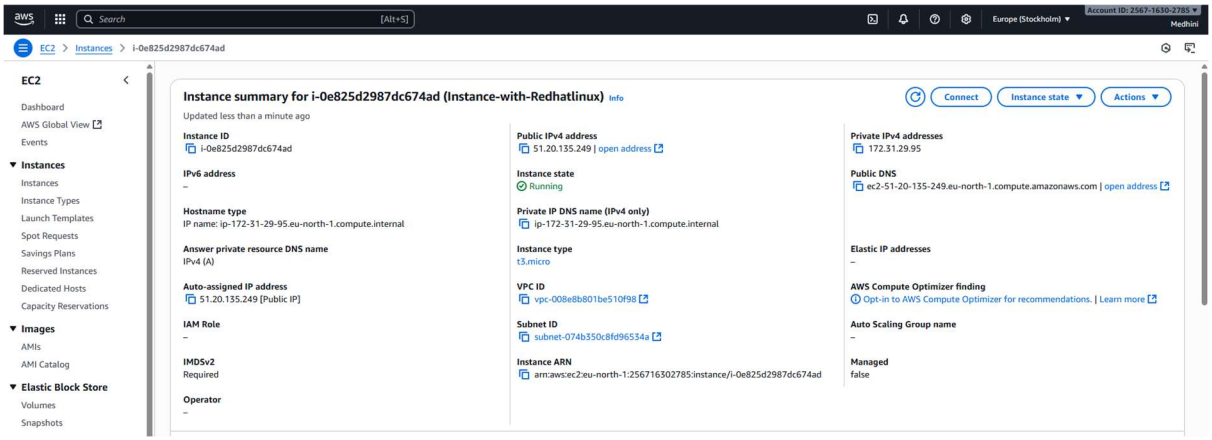
Step 6: Click on Launch Instance as shown in picture



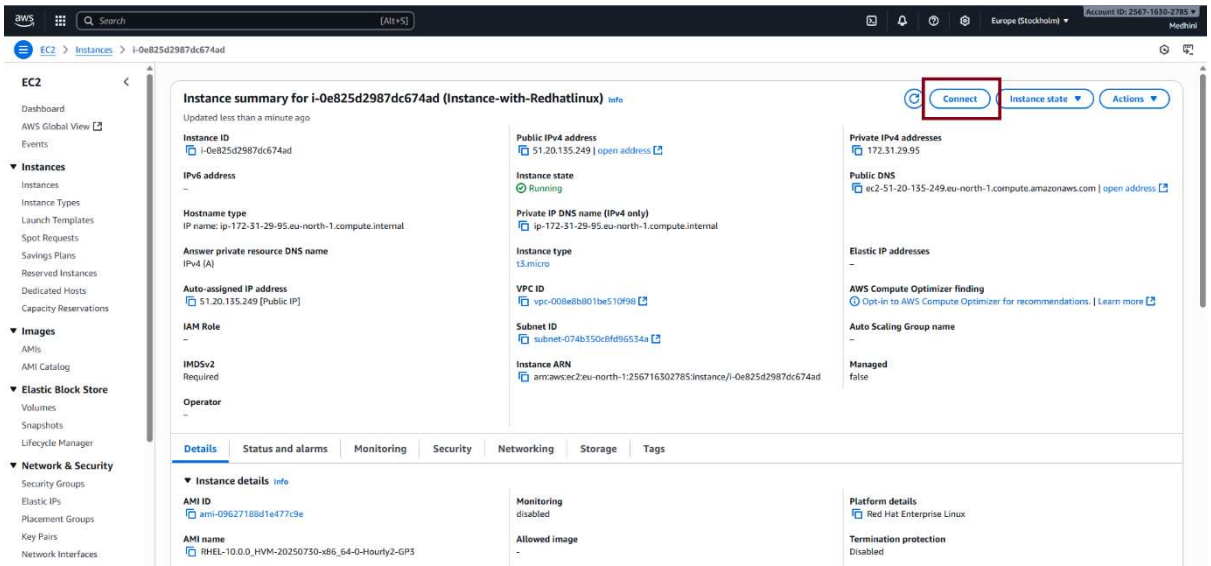
Assignment 1 – EC2 AND EFS

Step 7: You will see this Green bar where your instance is created and click on the marked area

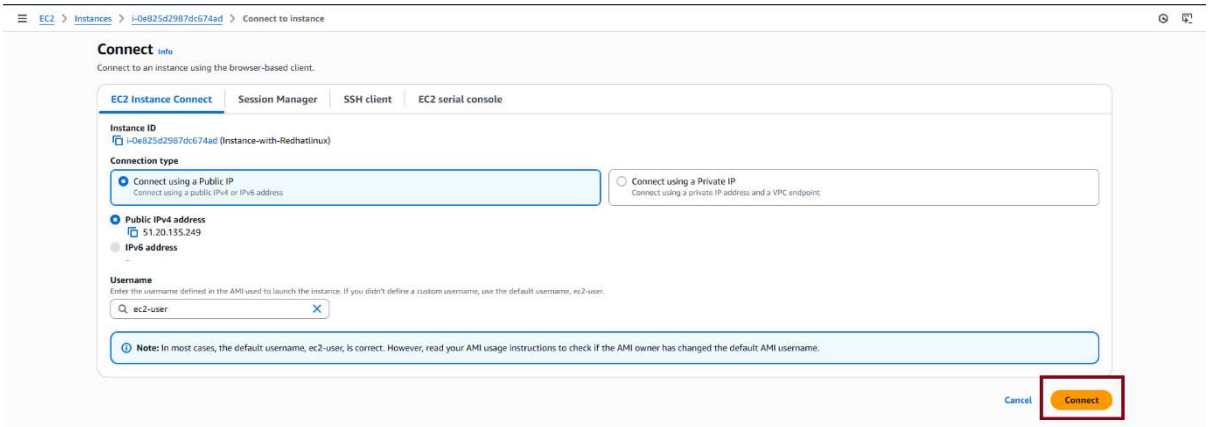
Step 8: The below picture shows output of EC2 instance created with Redhat operating system



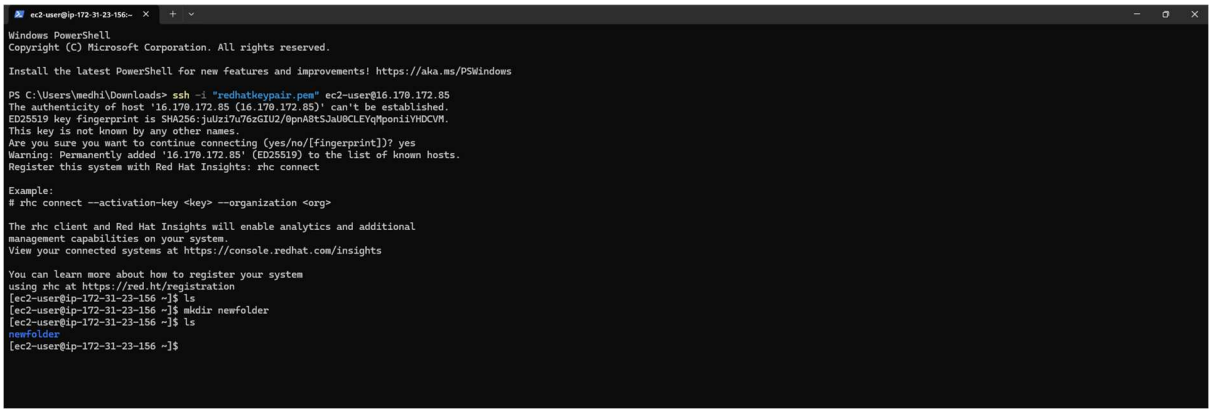
Step 9: Click on Connect as shown in below figure



Step 10: Click on connect it will redirect to new tab

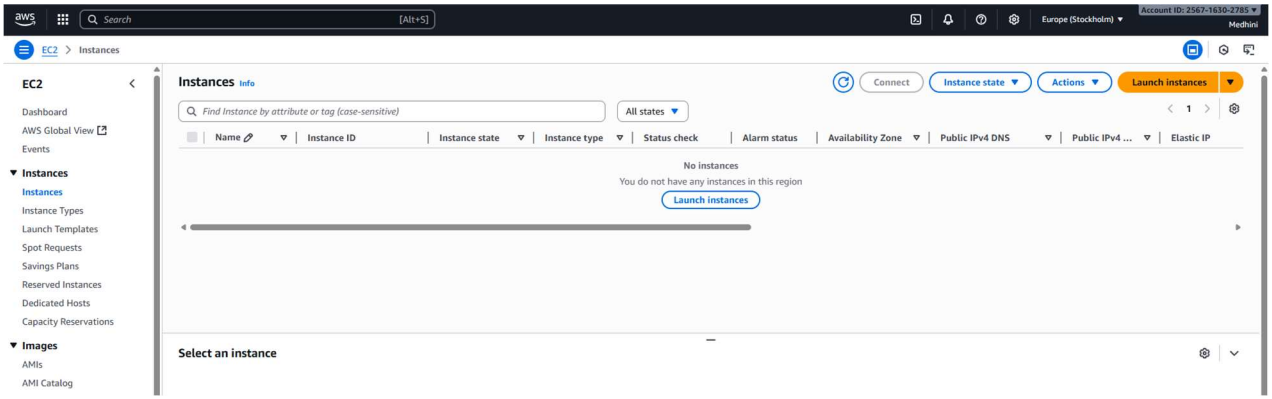


Step 11: The below picture shows the EC2 instance running on REDHAT linux operating system

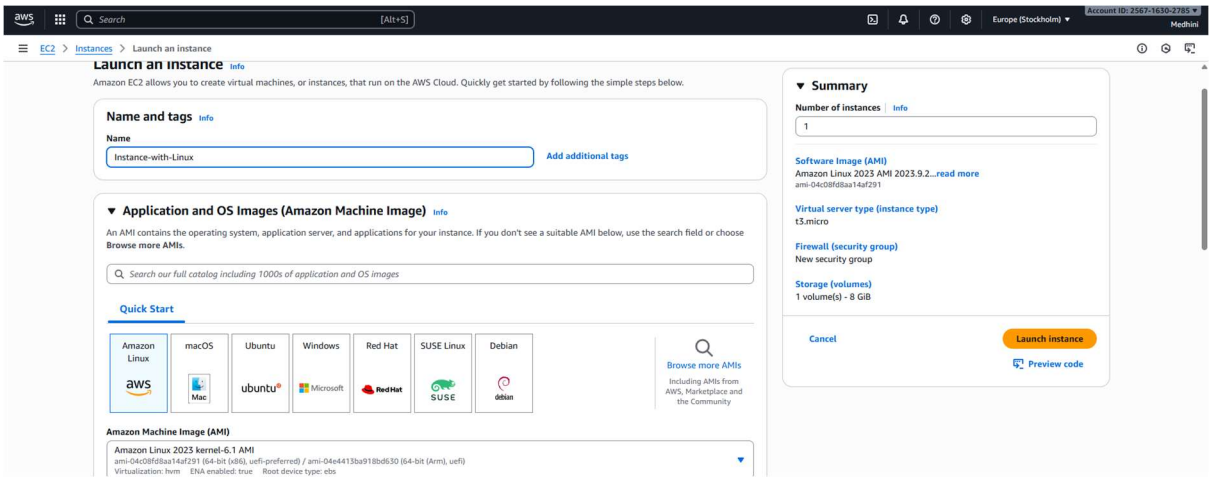


EC2 Instance with AWS Linux Operating System

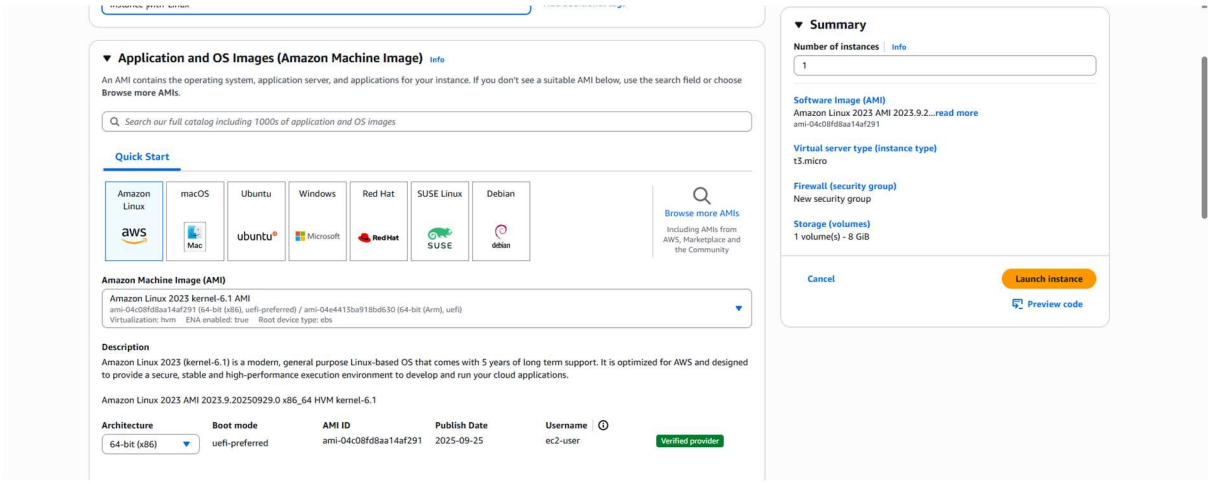
Step 1: Login to your account, click on **Instances**



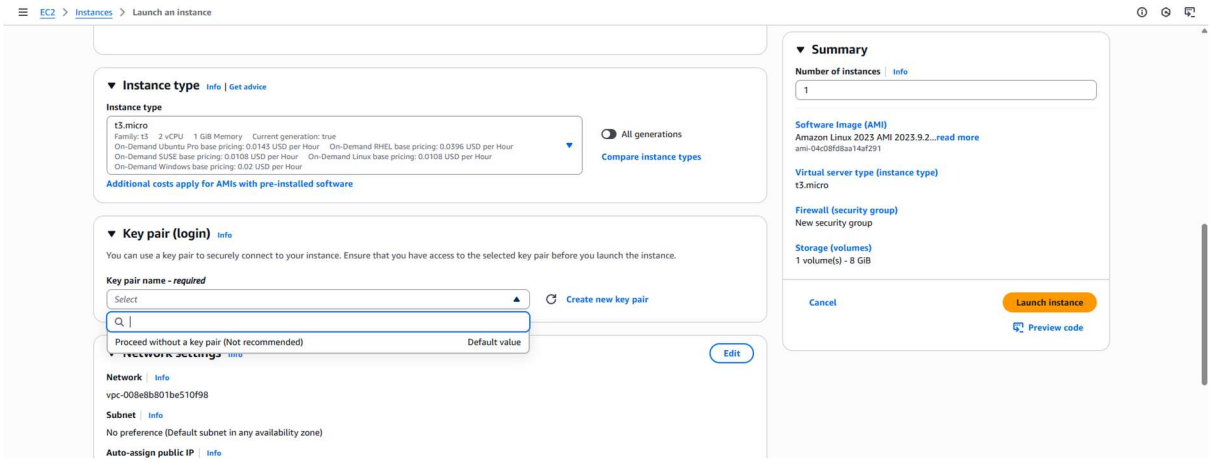
Step 2: Give a name for an instance



Step 3: Select Operating systems and storage under Architeture

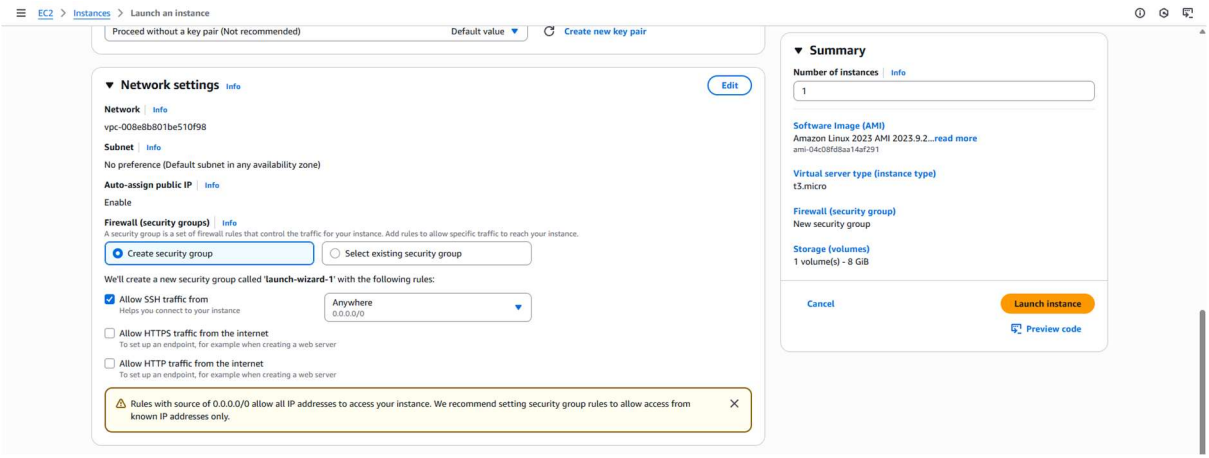


Step 4: Select instance type and Keypair

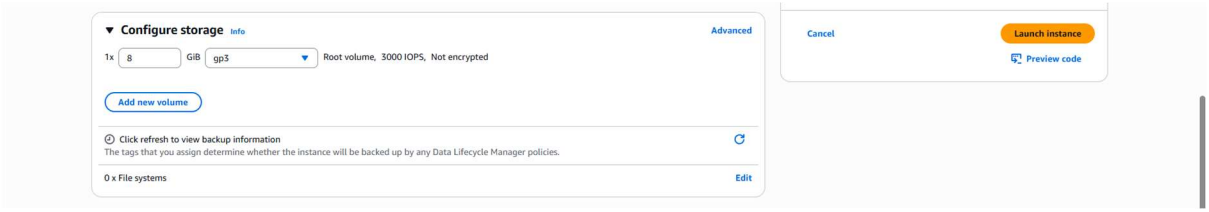


Step 5: Select Network settings

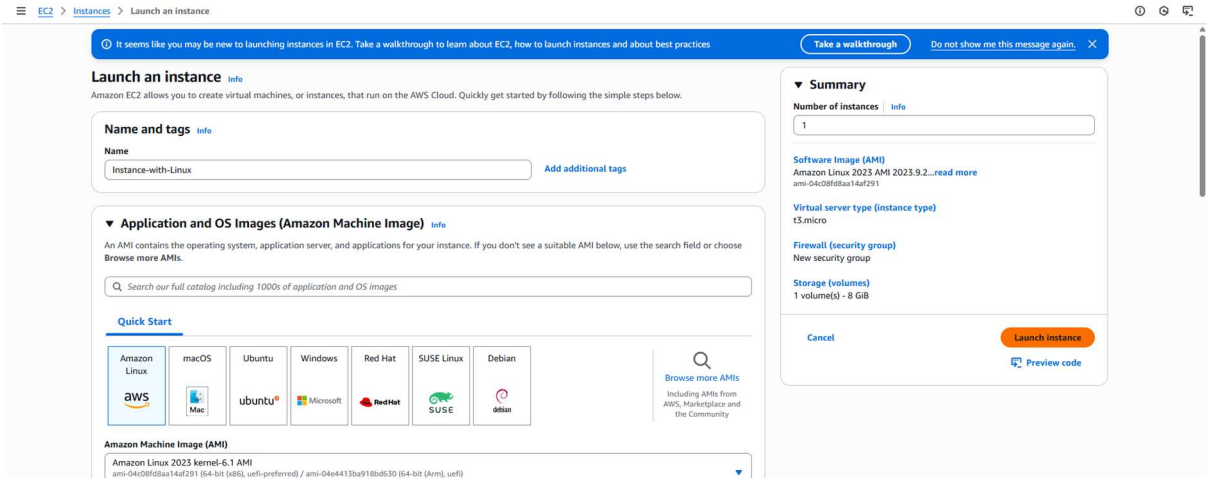
Assignment 1 – EC2 AND EFS



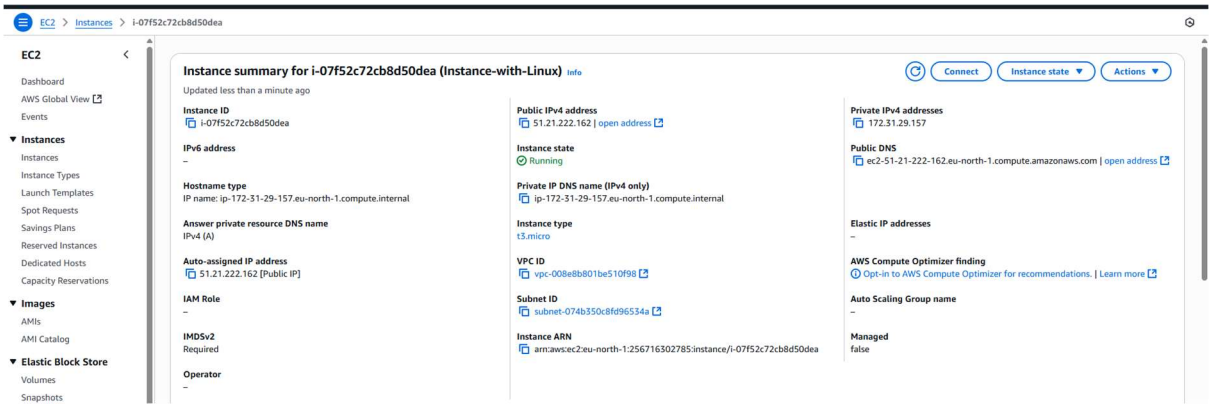
Step 6: Configure storage



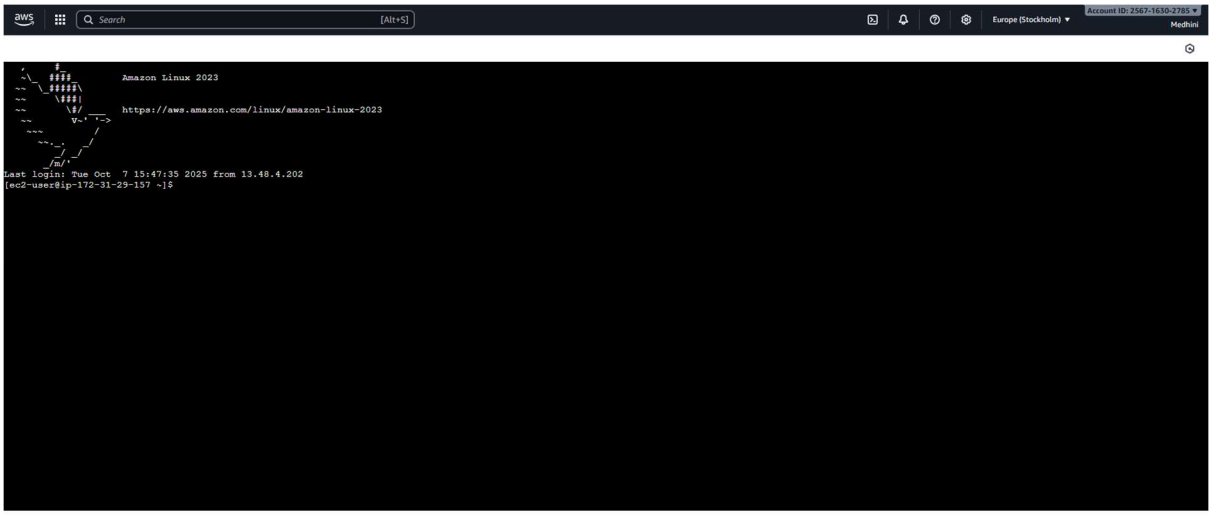
Step 7: Click on Launch Instance



Step 8: The Instance overview and Click on connect it will redirect to new tab as shown in figure below

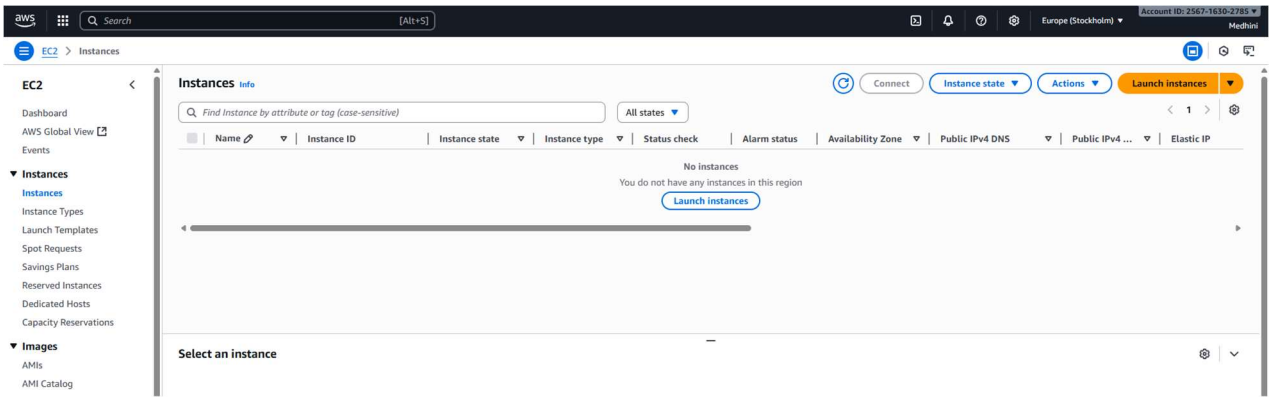


Step 9: The instance is running in AWS Linux is shown in below picture

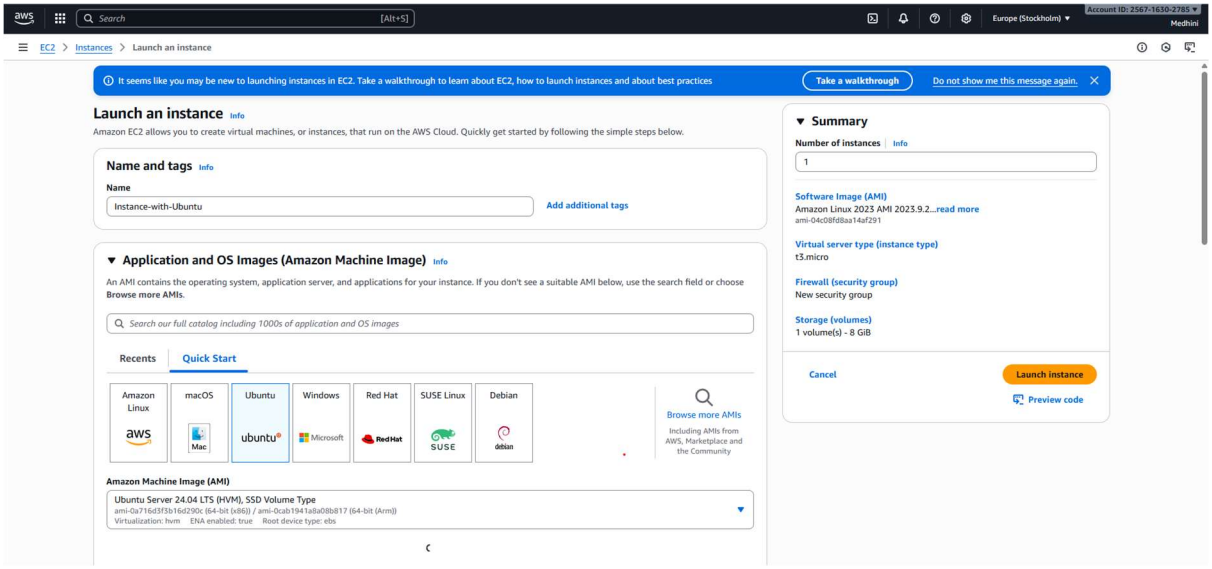


EC2 Instance with Ubuntu Operating System

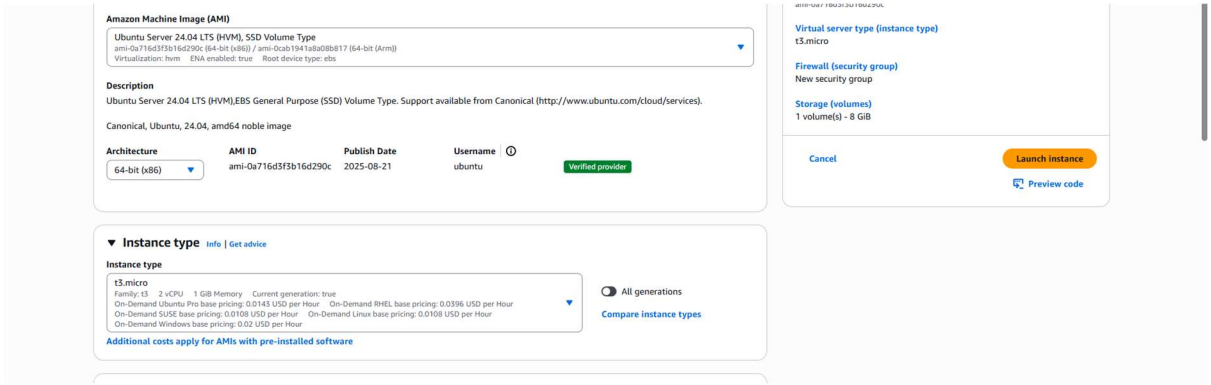
Step 1: Login to your account, click on **Instances**



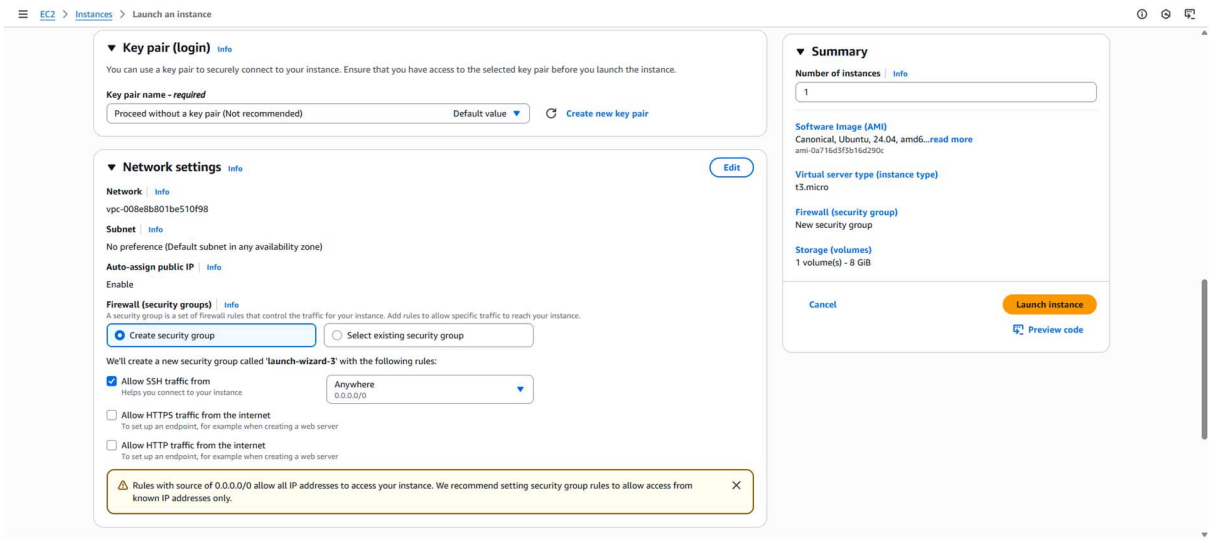
Step 2: Give a name for an instance and choose operating system as Ubuntu as shown in below picture



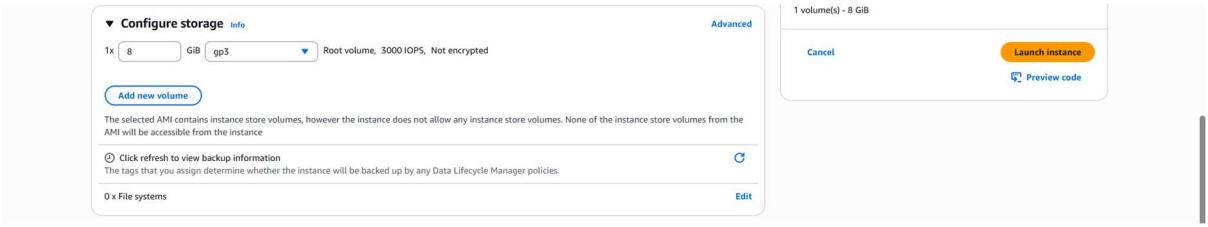
Step 3: Choose AMI, Storage under Architecture and Instance type



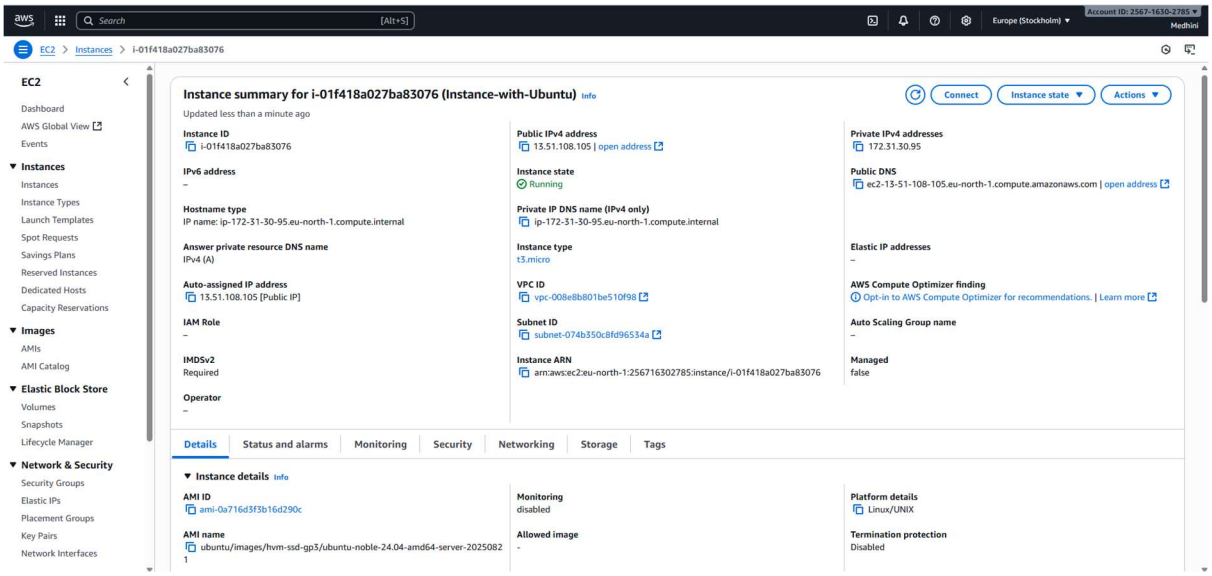
Step 4: Select Keypair and Network settings



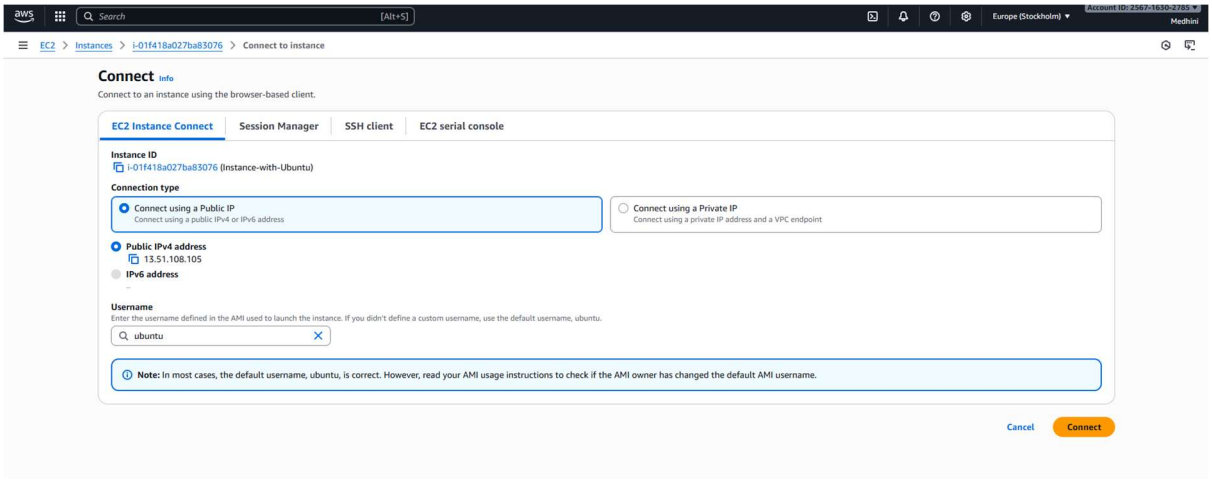
Step 5: Configure storage and click on **Lunch Instance**



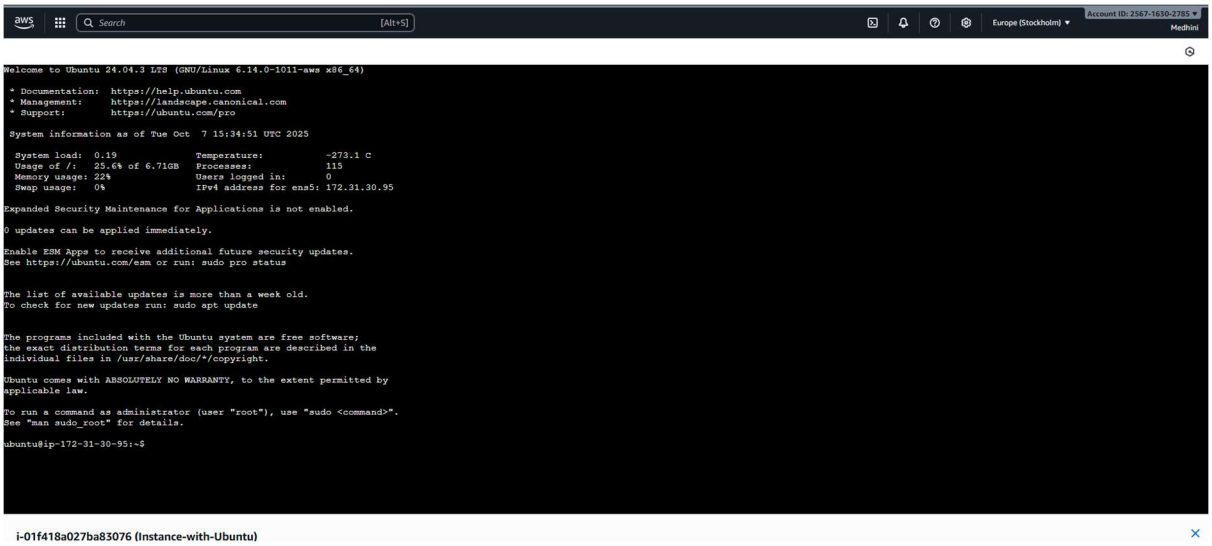
Step 6: The below figure shows the Instance created with Ubuntu Operating Systems



Step 7: Click on connect it will redirect you to OS

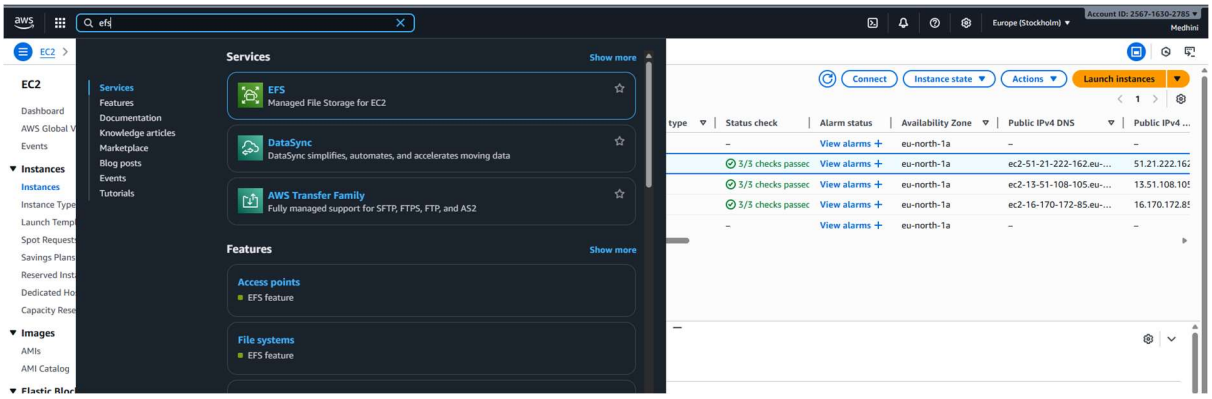


Step 9: The below picture shows the operating system is running



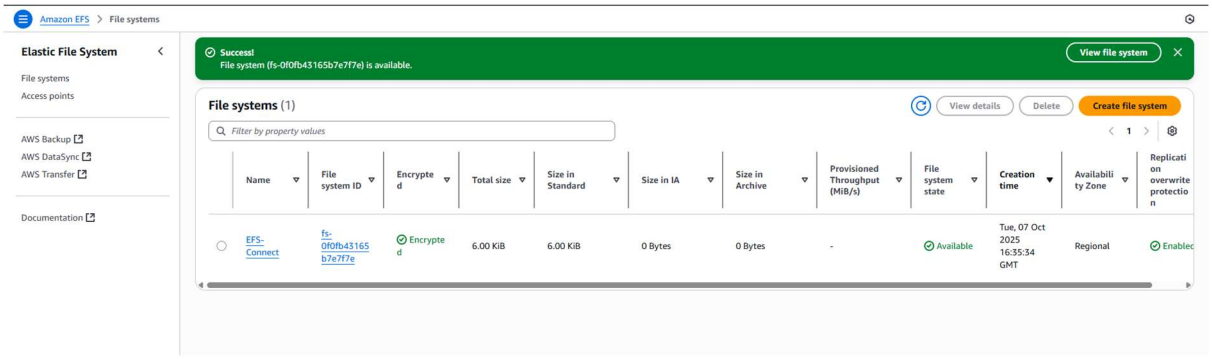
Create EFS(Elastic File System)

Step 1: Login to your account and search EFS and click on EFS

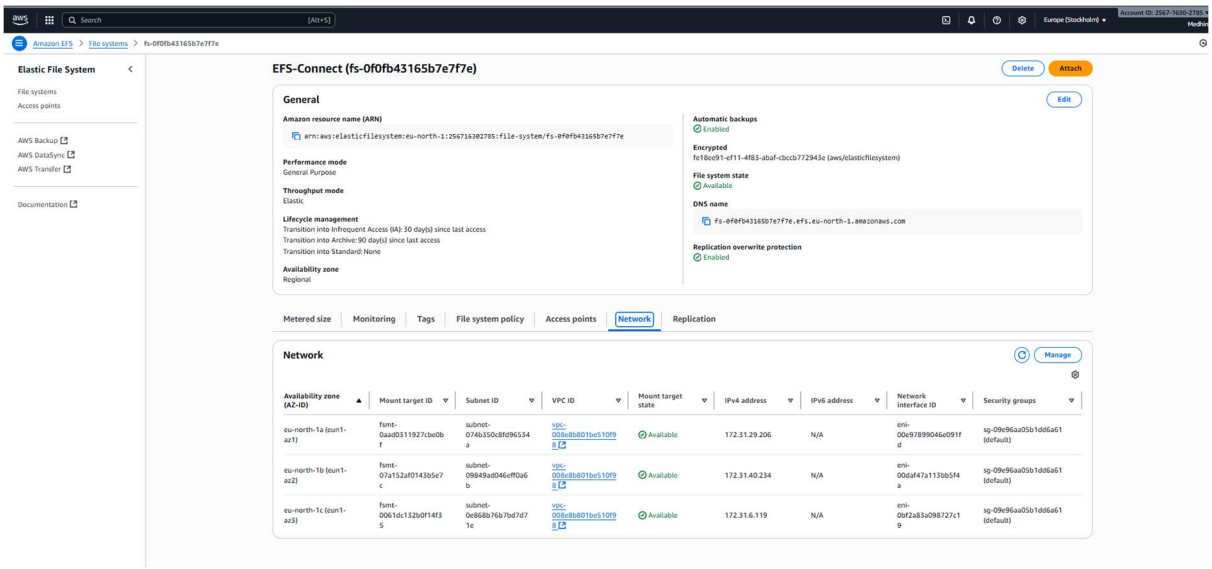


Step 2: Click on Create File System as shown in below picture

Step 3: EFS has been created as shown in below picture

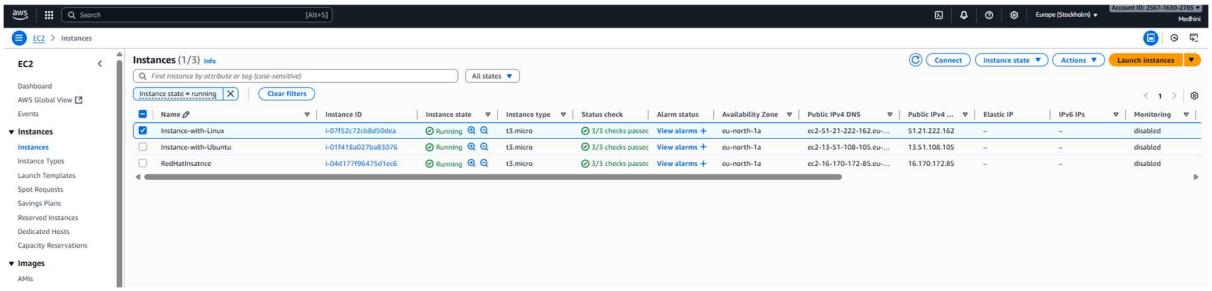


Step 4: Click on created EFS, there will be overview of the created EFS

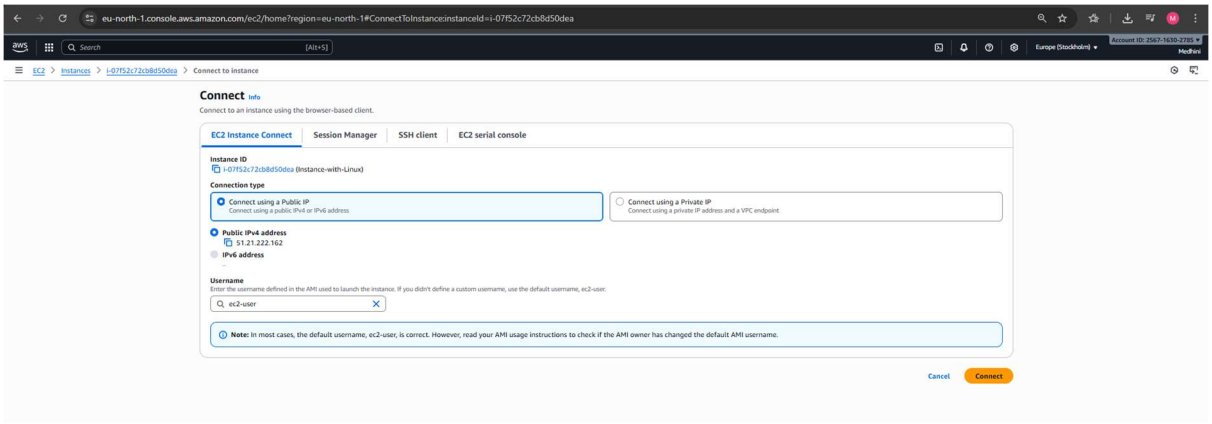


Connect AWS Linux Instance to EFS

Step 1: Select AWS instance and click on connect

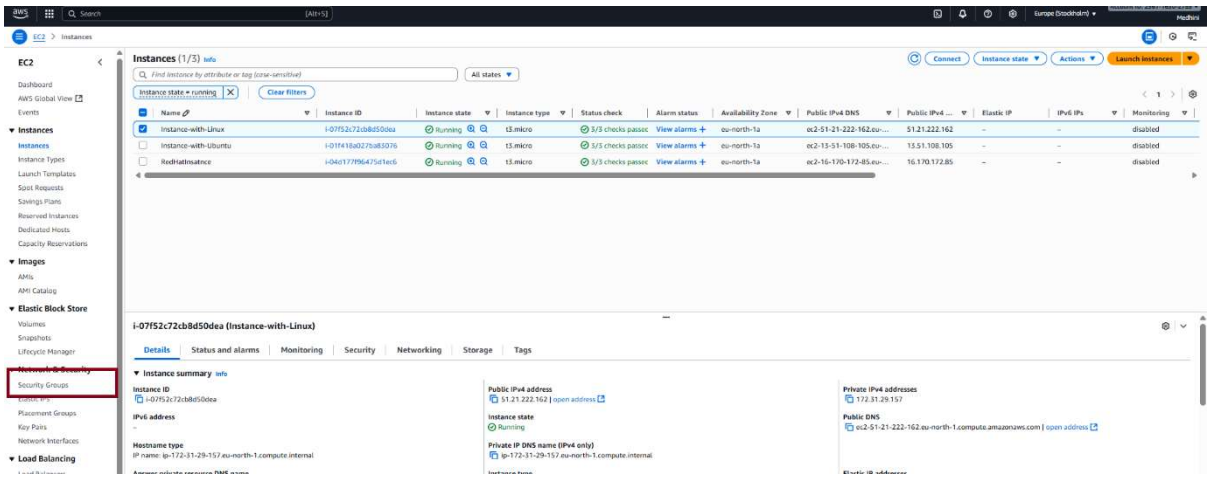


Step 2: You will redirect to below section, now click on Connect

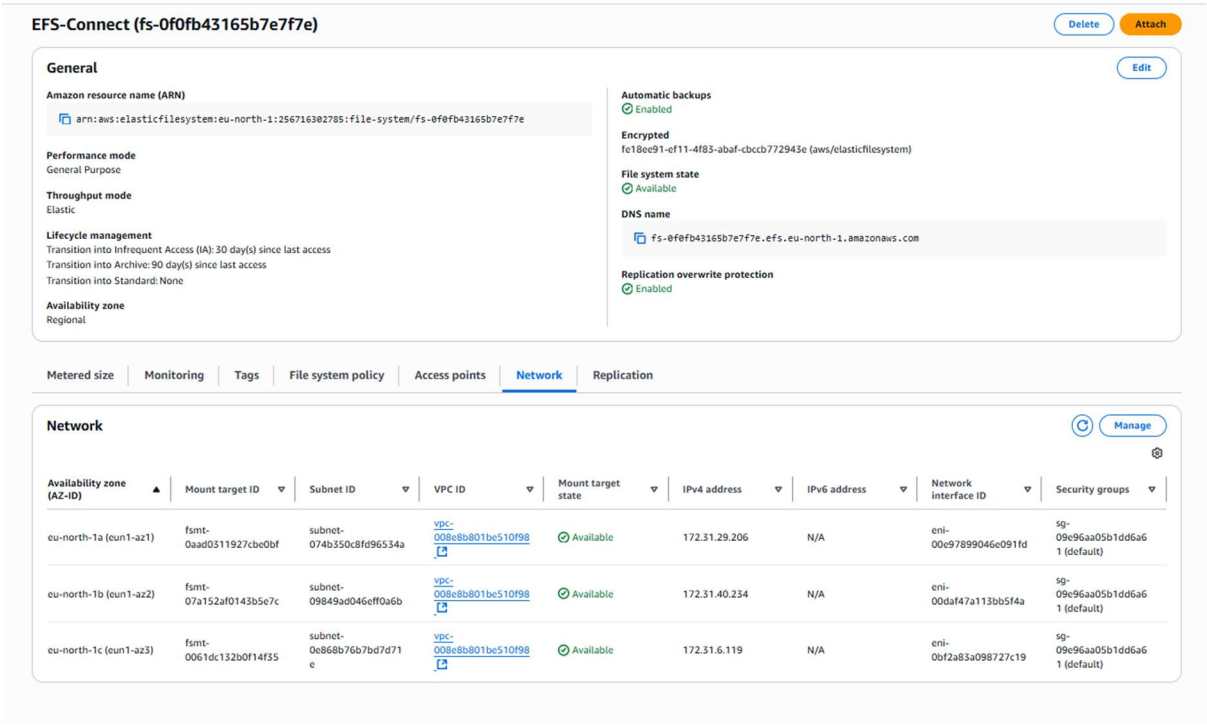


Step 3: The OS will be running

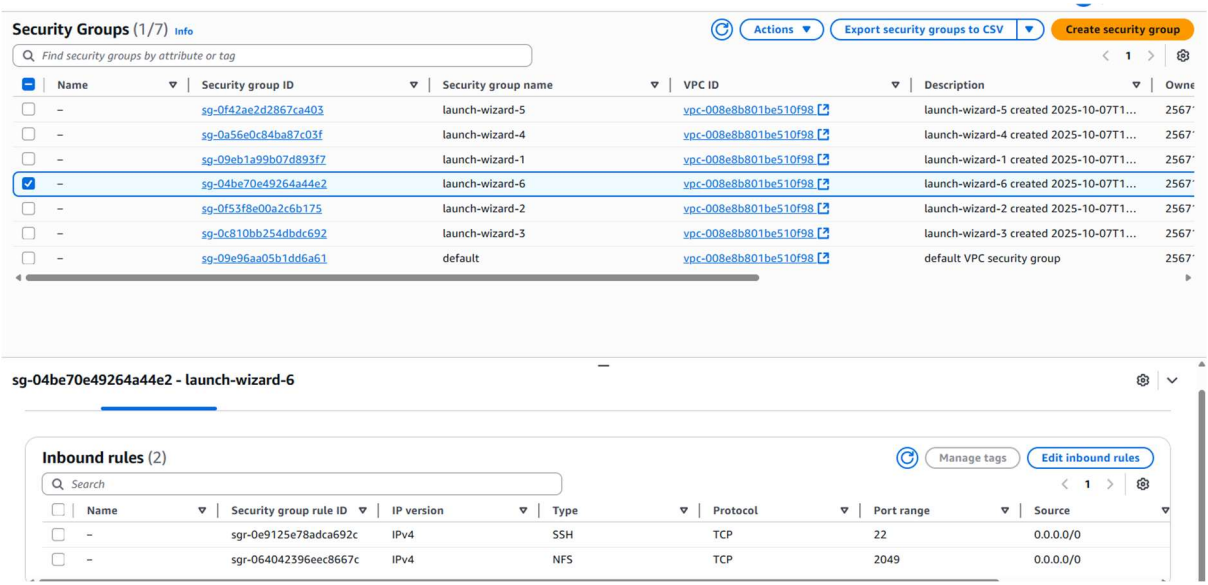
Step 6: Click on Security Groups marked on below picture



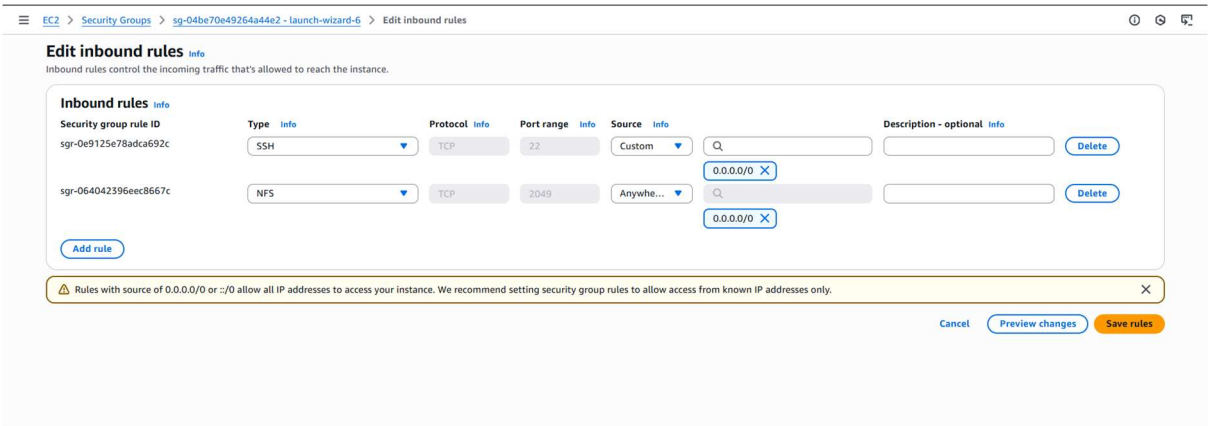
Step 6: Go to EFS and click On “NETWORK” and then click on “Manage”



Step 7: Go to Security groups and click on “Edit Inbound Rules”



Step 8: Add new and Select NFS and then select “Anywhere ipv4”



Step 9: Then Go do OS running command window and paste “sudo yum install -y amazon-efs-utils” code to manually install
then create a folder and add “sudo mount -t efs -o tls fs-0f0fb43165b7e7f7e:/ <folder name>”

Amazon Linux 2 / Amazon Linux 2023

Step 1: Install required packages

 # For Amazon Linux 2

sudo yum install -y amazon-efs-utils

 # For Amazon Linux 2023

sudo dnf install -y amazon-efs-utils

Step 2: Create a mount point

sudo mkdir -p /mnt/efs

Step 3: Mount the EFS

sudo mount -t efs fs-xxxxxxxx:/ /mnt/efs

Optional: Add to /etc/fstab

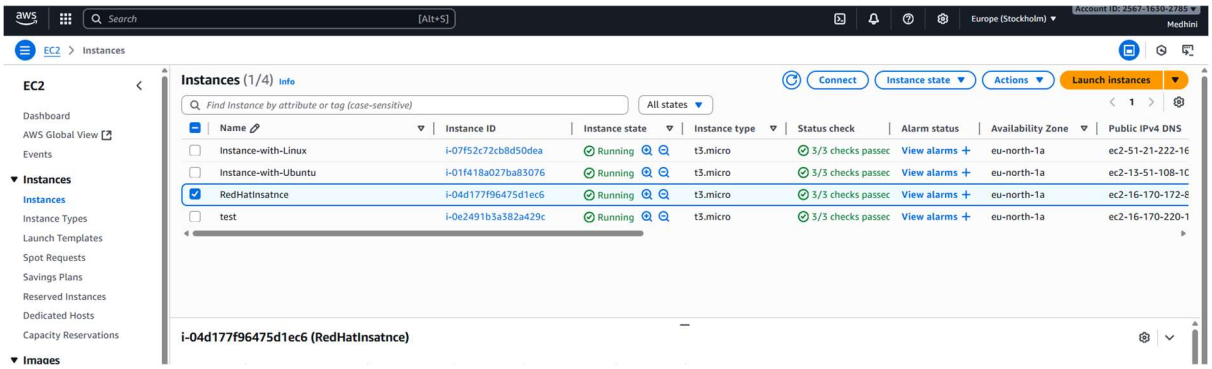
echo "fs-xxxxxxxx:/ /mnt/efs efs defaults,_netdev 0 0" | sudo tee -a /etc/fstab

The AWS Linux – Instance is mounted to EFS

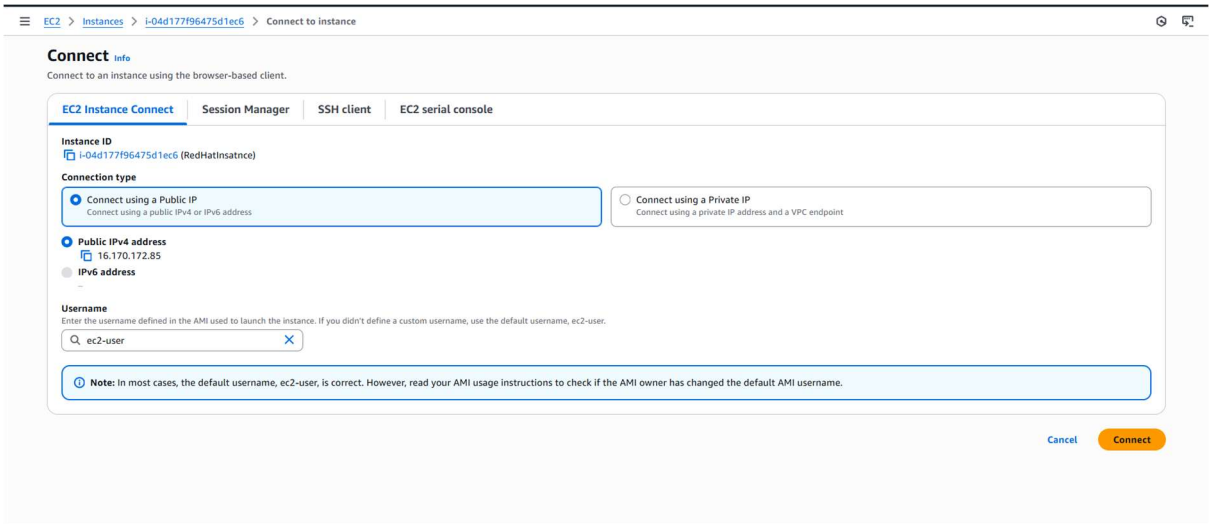
```
[ec2-user@ip-172-31-29-100 ~]$ sudo mount -t efs fs-0f0fb43165b7e7f7e:/ /mnt/efs
[ec2-user@ip-172-31-29-100 ~]$ df -h
Filesystem        Size  Used Avail Use% Mounted on
devtmpfs          4.0M     0  4.0M   0% /dev
tmpfs             453M     0  453M   0% /dev/shm
tmpfs             181M  444K  181M   1% /run
/dev/nvme0n1p1    8.0G  1.6G  6.4G  20% /
tmpfs             453M     0  453M   0% /tmp
/dev/nvme0n1p128   10M  1.3M  8.7M  13% /boot/efi
tmpfs              91M     0   91M   0% /run/user/1000
127.0.0.1:/       8.0E     0  8.0E   0% /mnt/efs
[ec2-user@ip-172-31-29-100 ~]$
```

RedHat EFS Mount

Step 1: Select instance and click on connect



Step 2: Click on Connect



Step 1: Install required packages

1. sudo yum install -y amazon-efs-utils
2. sudo yum install -y nfs-utils

Step 2: Create a mount point

Assignment 1 – EC2 AND EFS

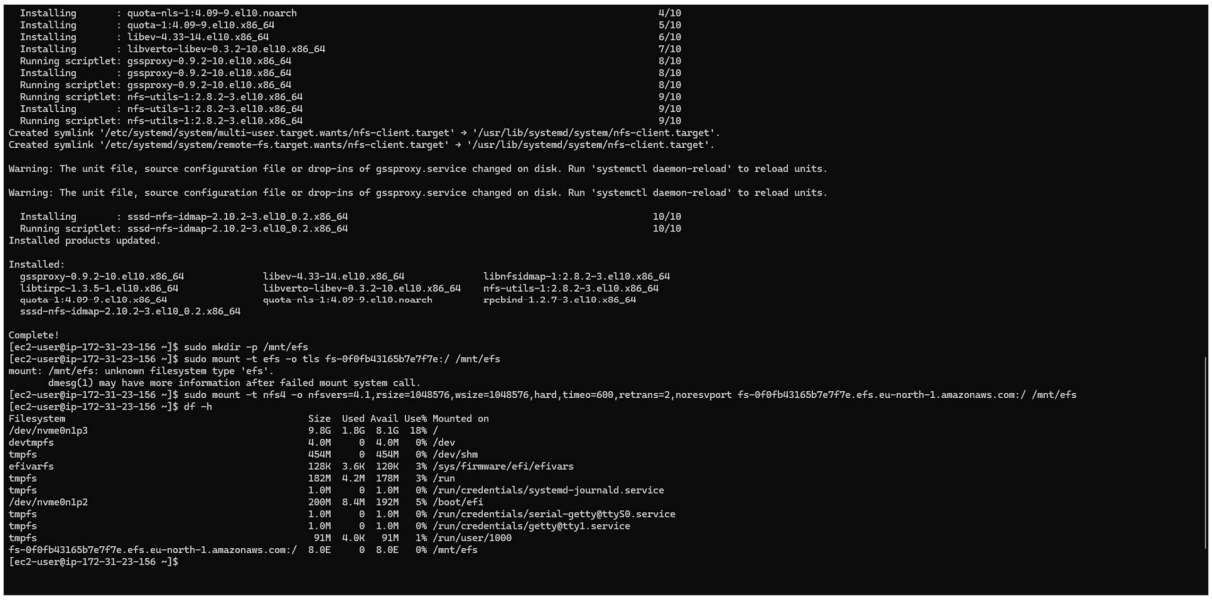
sudo mkdir -p /mnt/efs

Step 3: Mount the EFS

Replace fs-xxxxxxxx with your EFS ID and <region> with your AWS region.

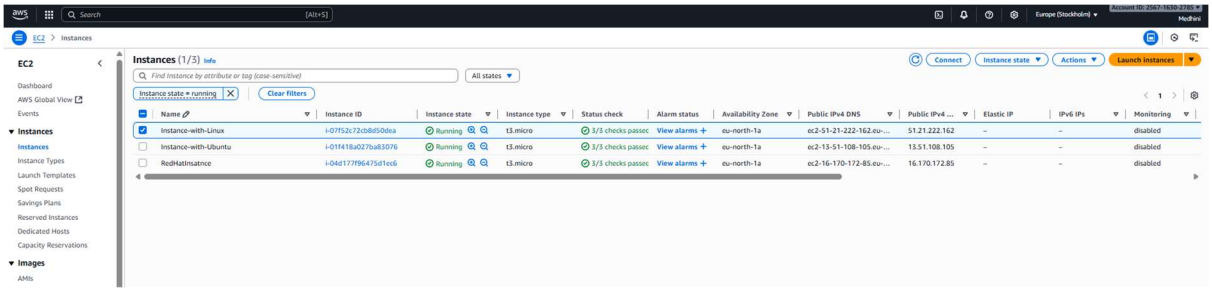
sudo mount -t efs fs-xxxxxxxx:/ /mnt/efs

The RedHat OS – Instance has been successfully mounted on EFS

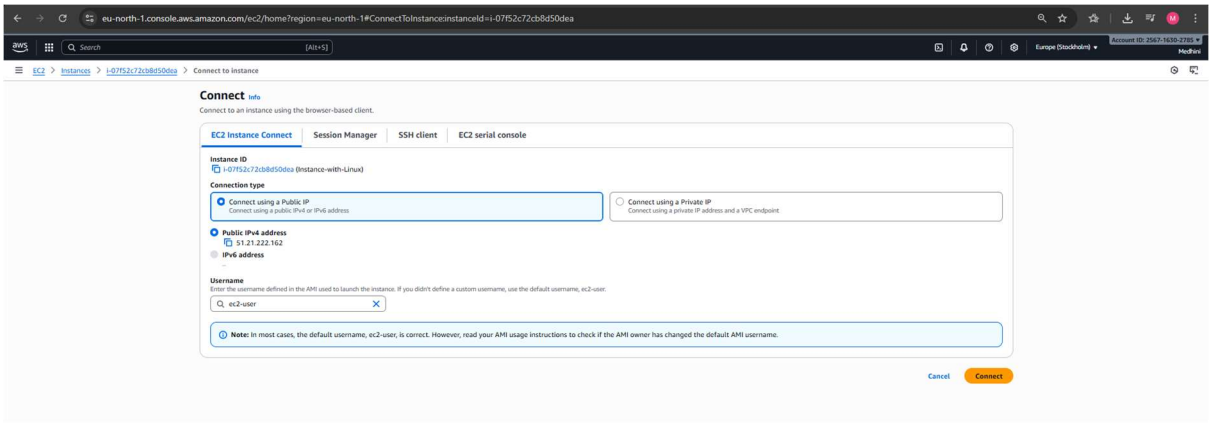


Ubuntu EFS Mount

Step 1: Select AWS instance and click on connect

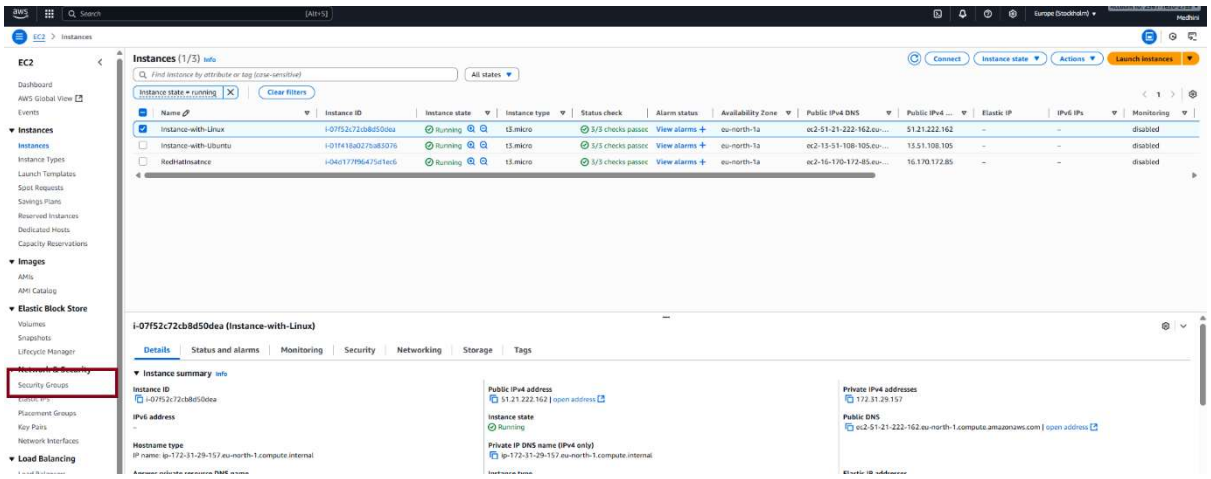


Step 2: You will redirect to below section, now click on Connect

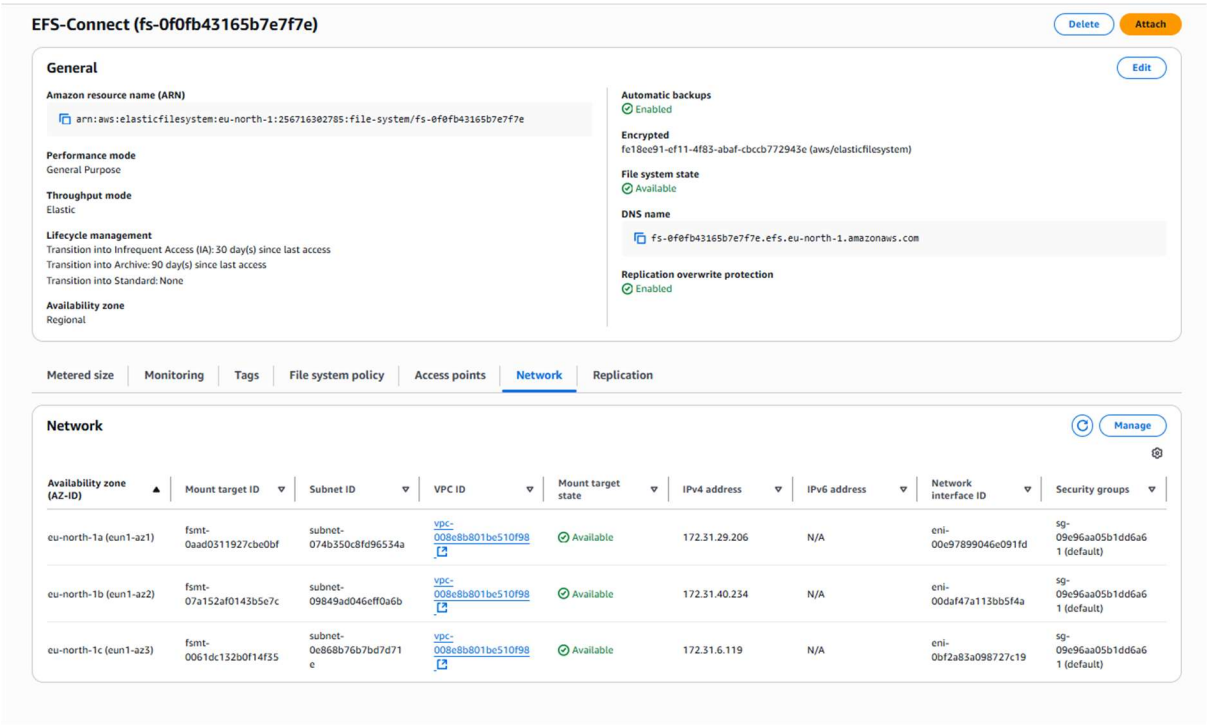


Step 3: The OS will be running

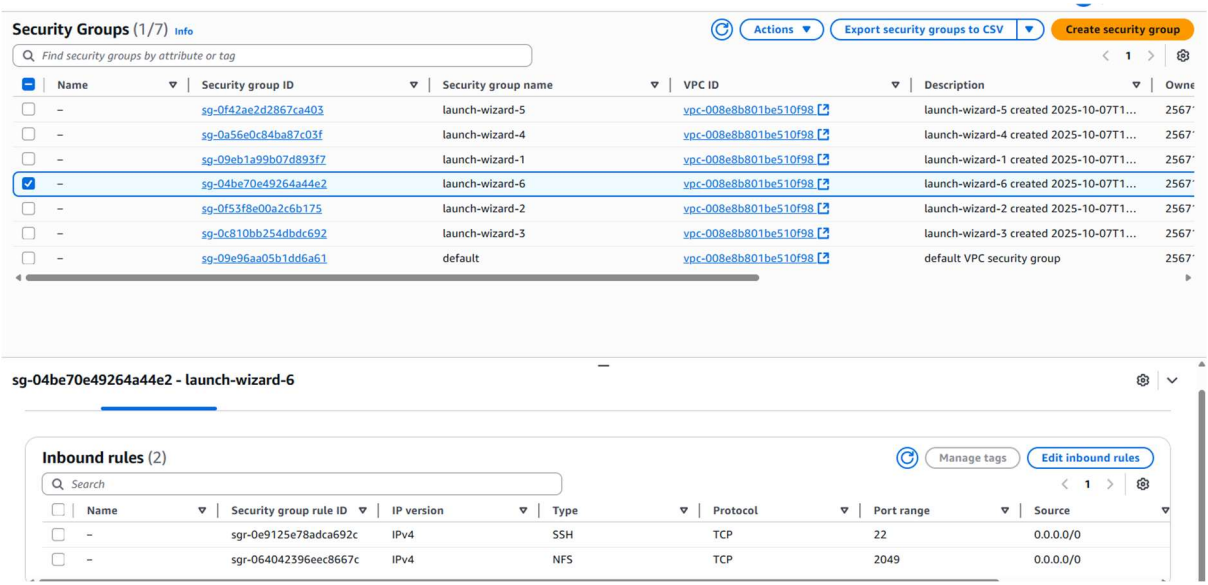
Step 6: Click on Security Groups marked on below picture



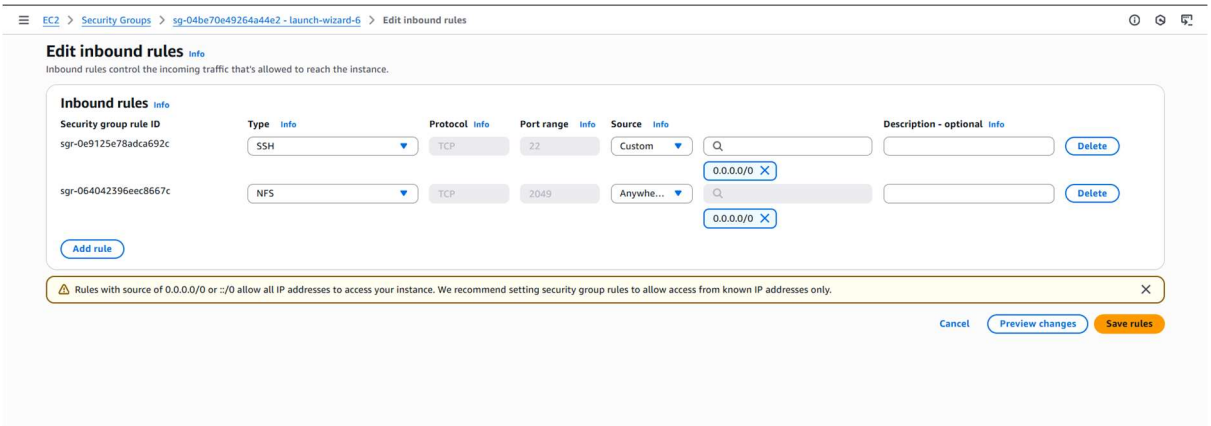
Step 6: Go to EFS and click On “NETWORK” and then click on “Manage”



Step 7: Go to Security groups and click on “Edit Inbound Rules”



Step 8: Add new and Select NFS and then select “Anywhere ipv4”



Step 9: Use Below code to mount on Ubuntu

sudo apt install -y nfs-common

sudo mkdir -p /mnt/efs

sudo mount -t nfs4 -o nfsvers=4.1 fs-xxxxxxxx.efs.<region>.amazonaws.com:/ /mnt/efs

df -h (This last one is to verify the mounted ec2)