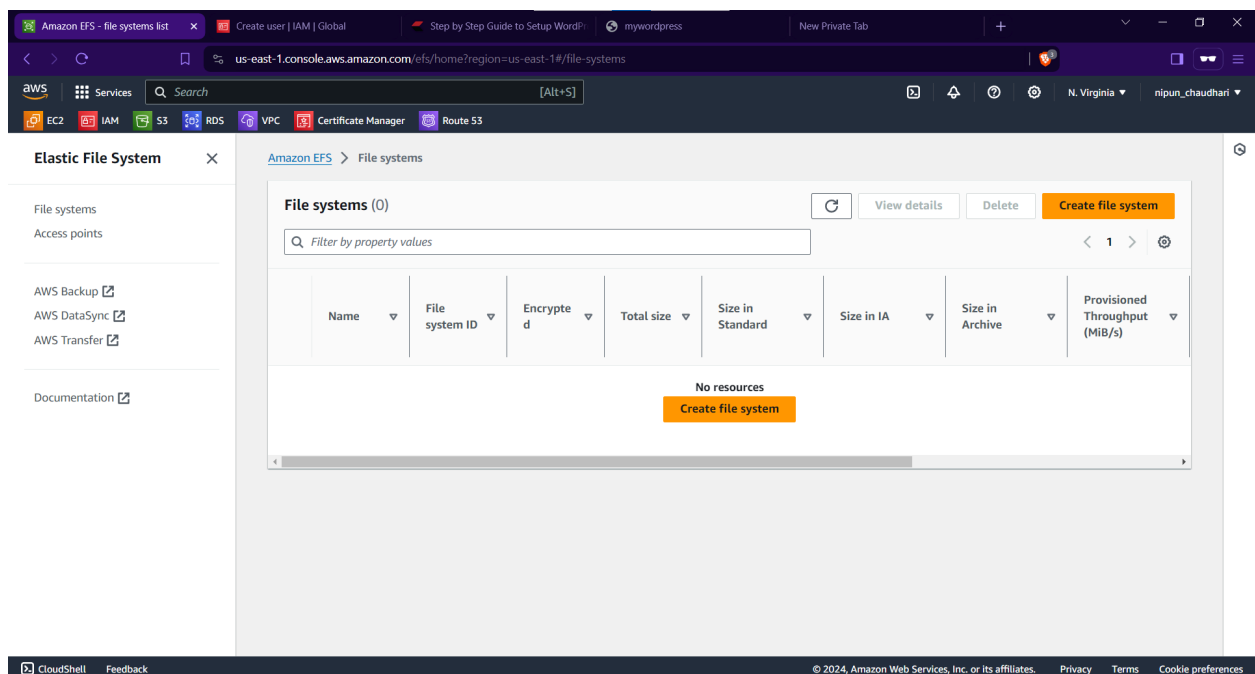


Creating and Mounting Elastic file system to EC2 Instance.

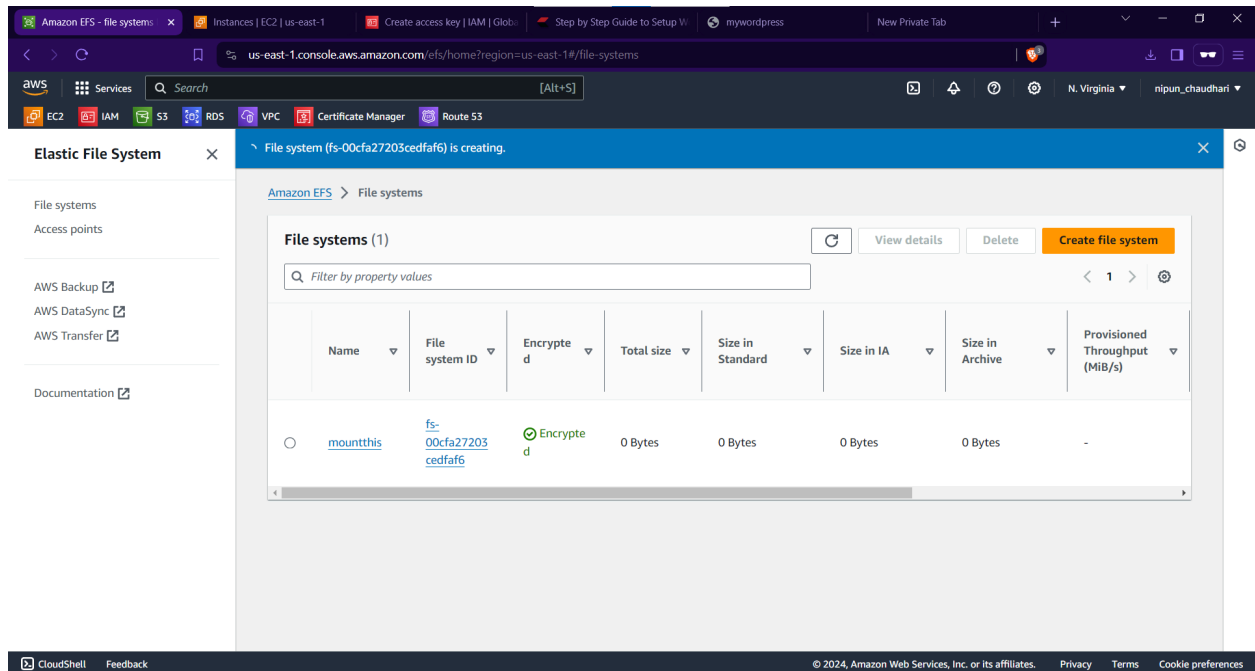
Step 1 : Create Elastic File System.

We can create an Elastic File System(EFS) from Amazon AWS EFS console.



1. Click on 'Create file system' button.
2. Give name for your file system.
3. Click 'Create' button.

We can see our file system as shown below.



Step 2 : Launch Two EC2 instances.

Sign-in into your AWS account and go to the EC2 service console.

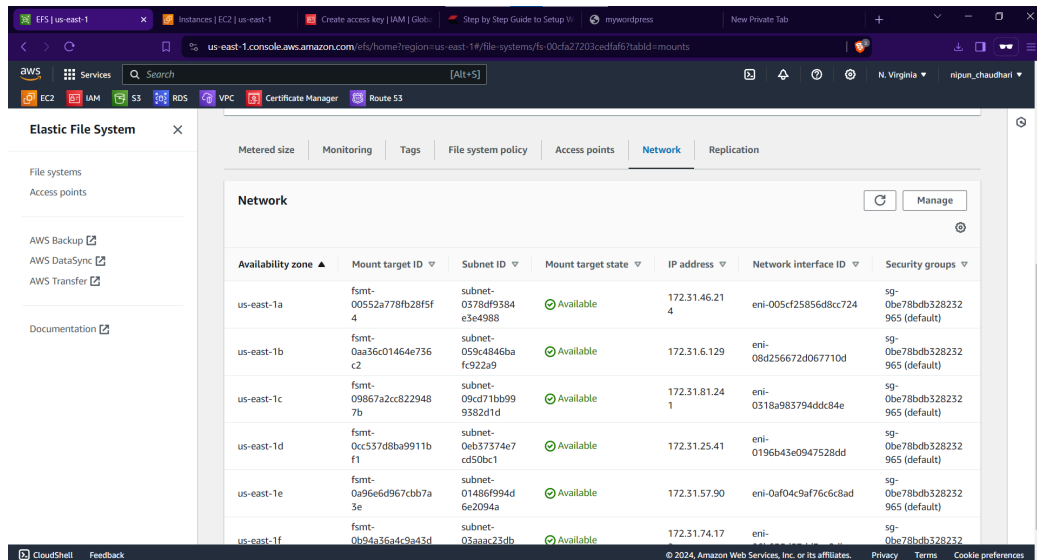
Select **Launch Instance** option, provide name for your instance and select the machine image you want. I am using an Ubuntu image for this task.

Next select the Key-Pair that you will use to connect to your instance. While adding the security group to your instance make sure that it allows the inbound traffic on port 22 for SSH. Also add NFS protocol in security group.

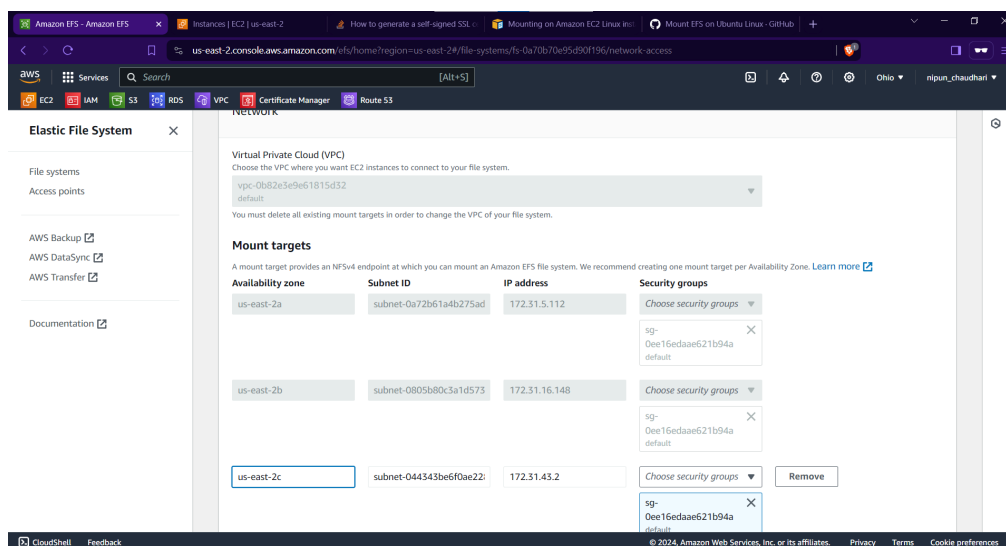
Type 2 in 'Number of Instances' field and click on **Launch Instance** to launch your instance. Once the instance is in running state, use any terminal to SSH into your EC2 Instance.

Step 3 : Manage networks for EFS

Go to EFS console and select your file system, then click on 'Network' tab and click on 'Manage' button.



On the following window, only keep the subnets of your instances and remove rest of the subnets. Select the Security Group that you have attached to your instances.



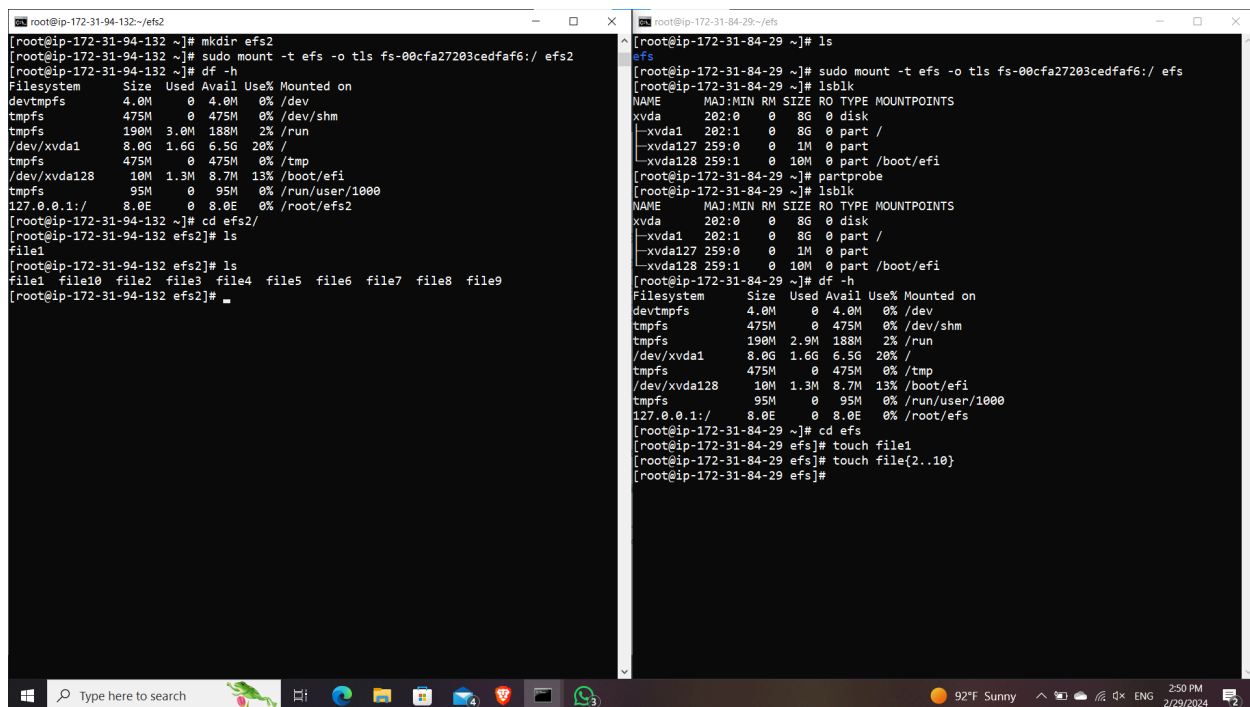
Click on 'Save' and exit the page.

Step 4 : Mount EFS on EC2 Instance.

Select your file system and click on attach button. This will take you to a different page where you can see the command to mount EFS on your EC2 instance. Copy the first command.

Now connect to your instances, and create the directories where you want to mount the file system. Then paste the command you copied to mount the EFS.

Do these for both of your instances and create some files in directory where you have mounted your EFS on one of the instances. Check if you can see the files on other Instance.



```
[root@ip-172-31-94-132 ~]# mkdir efs2
[root@ip-172-31-94-132 ~]# sudo mount -t efs -o tls fs-00cfa27203cedfaf6:/ efs2
[root@ip-172-31-94-132 ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        4.0M  0  4.0M   0% /dev
tmpfs           475M  0  475M   0% /dev/shm
tmpfs           190M  3.0M  188M   2% /run
/dev/xvda1       8.0G  1.6G  6.5G  20% /
tmpfs           475M  0  475M   0% /tmp
/dev/xvda128     10M  1.3M  8.7M  13% /boot/efi
tmpfs           95M  0  95M   0% /run/user/1000
127.0.0.1:/      8.0E  0  8.0E   0% /root/efs2
[root@ip-172-31-94-132 ~]# cd efs2/
[root@ip-172-31-94-132 efs2]# ls
file1
[root@ip-172-31-94-132 efs2]# ls
file1 file10 file2 file3 file4 file5 file6 file7 file8 file9
[root@ip-172-31-94-132 efs2]# _

[root@ip-172-31-84-29 ~]# ls
efs
[root@ip-172-31-84-29 ~]# sudo mount -t efs -o tls fs-00cfa27203cedfaf6:/ efs
[root@ip-172-31-84-29 ~]# lsblk
NAME        MAJ:MIN RM SIZE RO TYPE MOUNTPOINTS
xvda        202:0    0  8G  0 disk
├─xvda1     202:1    0  8G  0 part /
├─xvda127   259:0    0  1M  0 part 
├─xvda128   259:1    0  10M  0 part /boot/efi
└─xvda129   259:2    0  10M  0 part /boot/efi
[root@ip-172-31-84-29 ~]# lsblk
NAME        MAJ:MIN RM SIZE RO TYPE MOUNTPOINTS
xvda        202:0    0  8G  0 disk
├─xvda1     202:1    0  8G  0 part /
├─xvda127   259:0    0  1M  0 part 
├─xvda128   259:1    0  10M  0 part /boot/efi
└─xvda129   259:2    0  10M  0 part /boot/efi
[root@ip-172-31-84-29 ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        4.0M  0  4.0M   0% /dev
tmpfs           475M  0  475M   0% /dev/shm
tmpfs           190M  2.9M  188M   2% /run
/dev/xvda1       8.0G  1.6G  6.5G  20% /
tmpfs           475M  0  475M   0% /tmp
/dev/xvda128     10M  1.3M  8.7M  13% /boot/efi
tmpfs           95M  0  95M   0% /run/user/1000
127.0.0.1:/      8.0E  0  8.0E   0% /root/efs
[root@ip-172-31-84-29 ~]# cd efs
[root@ip-172-31-84-29 efs]# touch file1
[root@ip-172-31-84-29 efs]# touch file{2..10}
[root@ip-172-31-84-29 efs]#
```