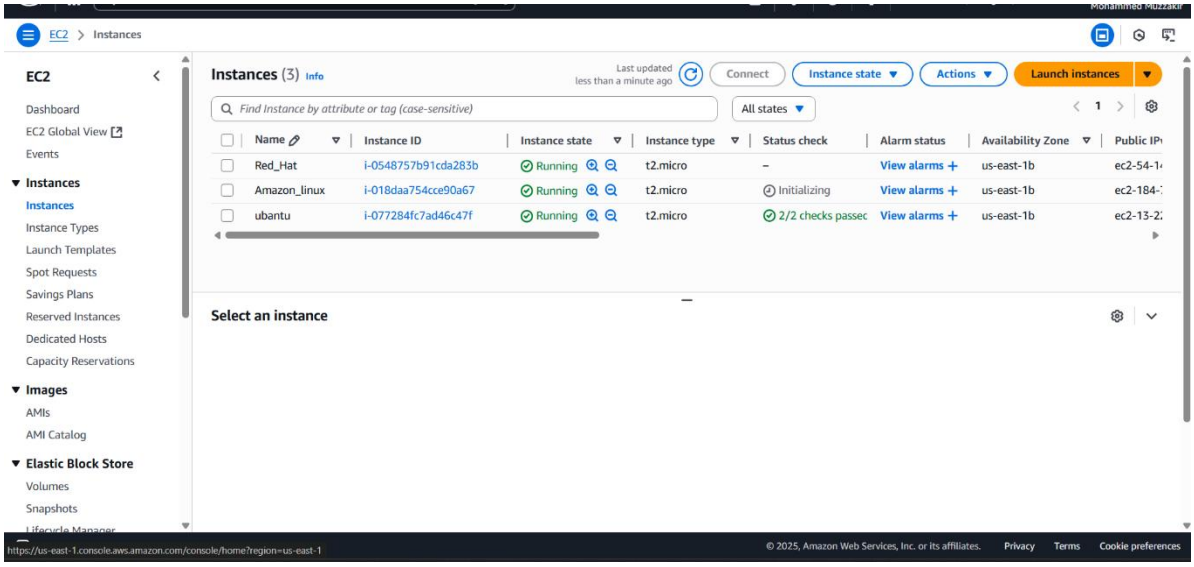
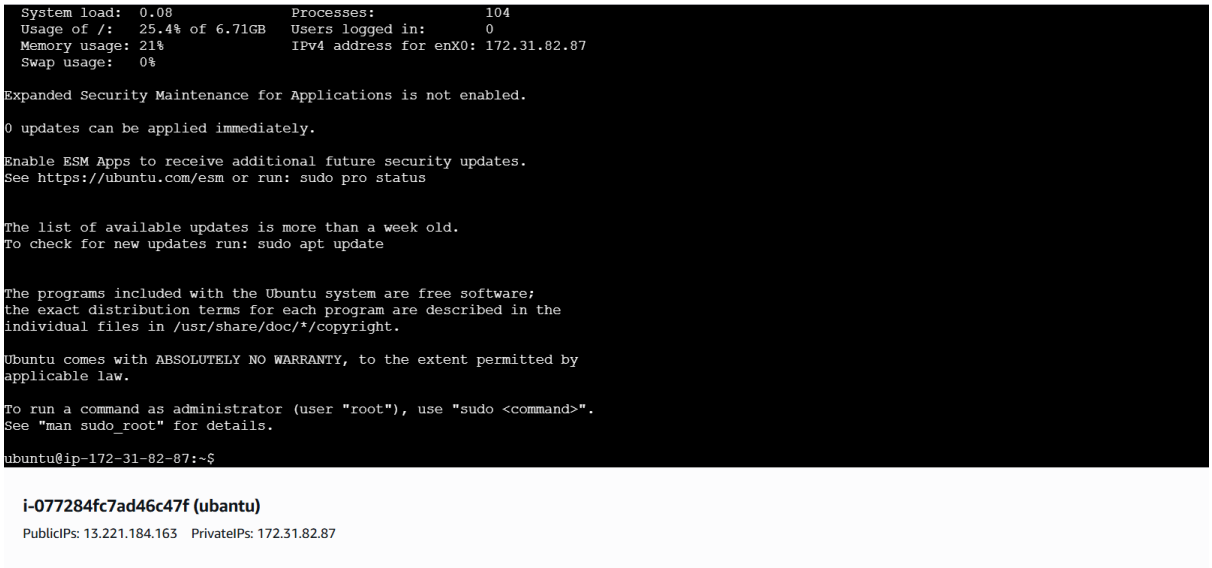
EFS AND EC2 ASSIGNMENT

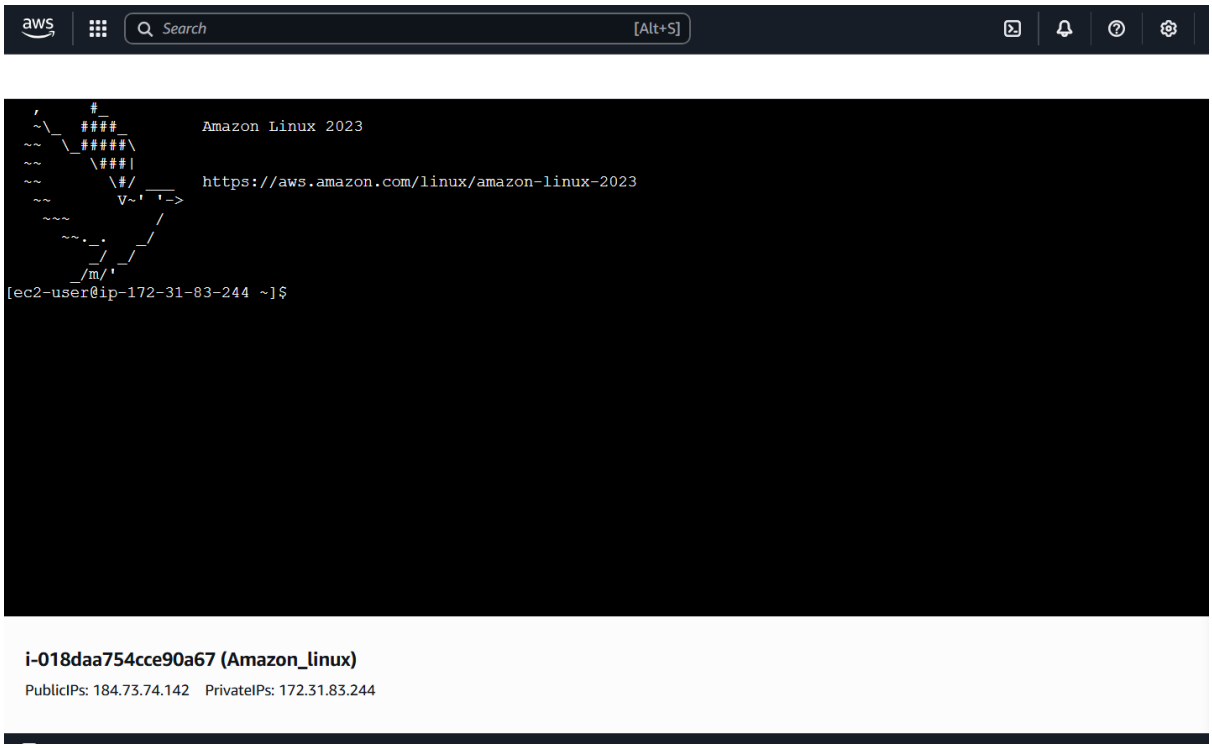
STEP 1 : created 3 different instance with with AMI amzon linux,ubantu and Red Hat



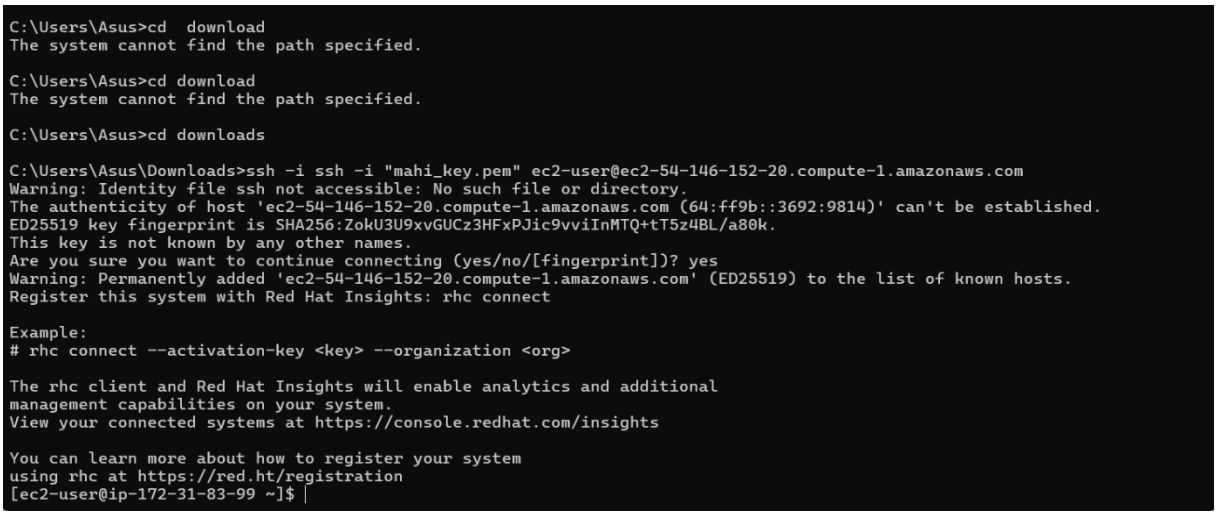
STEP 2: Connected Ubantu instances



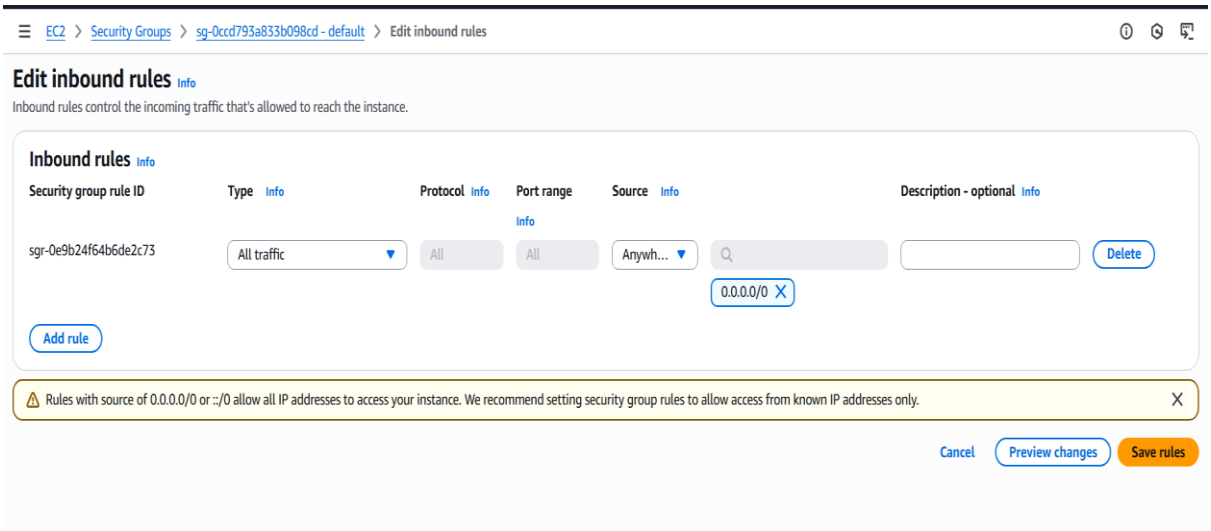
STEP 3: Connected Amazon Linux instance



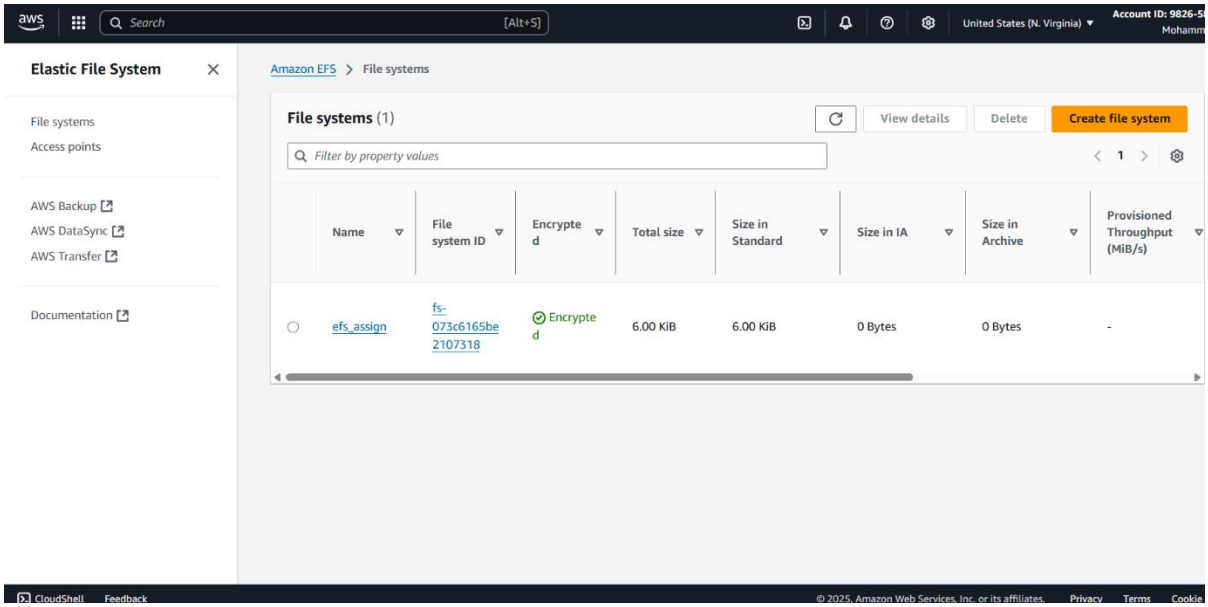
STEP 4: Connected created Red Hat instance with key pair in command prompt



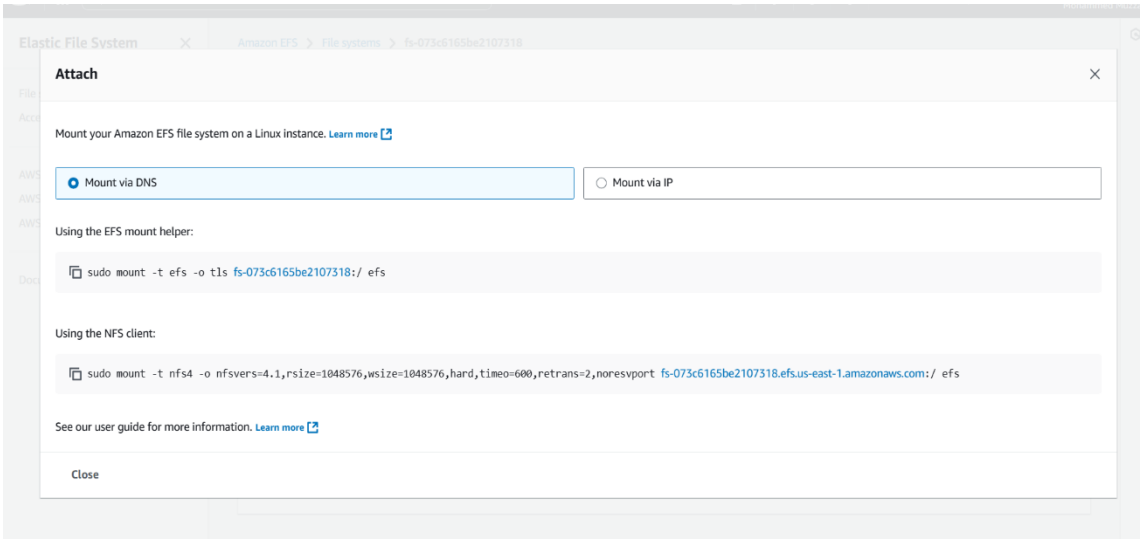
STEP 5: For each instance created allow all traffic from inbound rules as to connect EFS using EC2 NFS port must be enabled as all traffic allows every port and source from anywhere



STEP 6 : Create an EFS just by clicking on creat file system in EFS

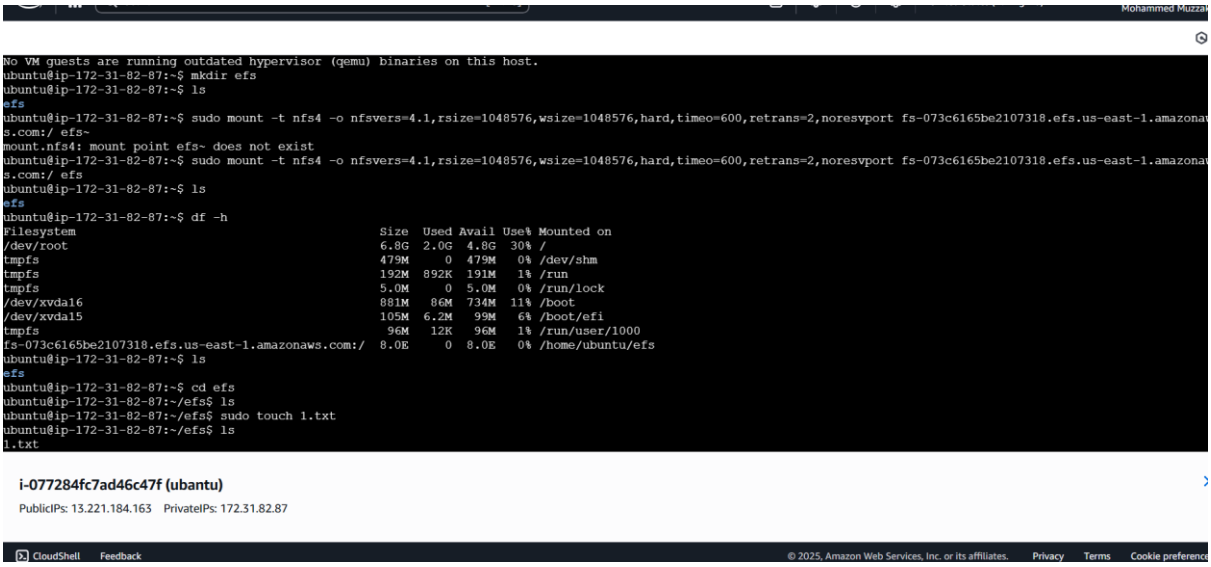


STEP 7: Click on attach option in EFS to copy mount code that is required to mount the file in two different instance



STEP 8: After updating and installing required packages (i.e nfs-common & utils in different machine) create file EFS and just paste the mount code in it and next create file

Eg : As shown below 1.txt and 2.txt

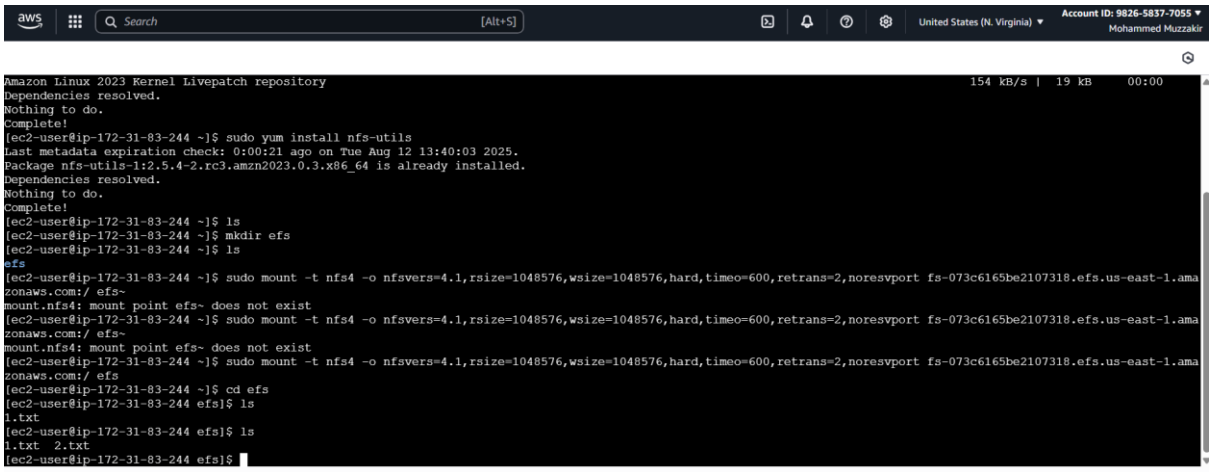


```
ubuntu@ip-172-31-82-87:~$ sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsize=1048576,hard,timeo=600,retrans=2,noresvport fs-073c6165be2107318.efs.us-east-1.amazonaw
s.com:/ efs~
mount.nfs4: mount point efs~ does not exist
ubuntu@ip-172-31-82-87:~$ sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsize=1048576,hard,timeo=600,retrans=2,noresvport fs-073c6165be2107318.efs.us-east-1.amazonaw
s.com:/ efs
ubuntu@ip-172-31-82-87:~$ ls
efs
ubuntu@ip-172-31-82-87:~$ df -h
Filesystem                                      Size  Used Avail Use% Mounted on
/dev/root                                       6.8G  2.0G  4.8G  30% /
tmpfs                                           479M     0  479M   0% /dev/shm
tmpfs                                           192M  892K  191M   1% /run
tmpfs                                           5.0M     0  5.0M   0% /run/lock
/dev/xvda16                                     881M   86M  734M  11% /boot
/dev/xvda15                                     105M  6.2M   99M   6% /boot/efi
tmpfs                                            96M   12K   96M   1% /run/user/1000
fs-073c6165be2107318.efs.us-east-1.amazonaws.com:/  8.0E     0  8.0E   0% /home/ubuntu/efs
ubuntu@ip-172-31-82-87:~$ ls
efs
ubuntu@ip-172-31-82-87:~$ cd efs
ubuntu@ip-172-31-82-87:~/efs$ ls
ubuntu@ip-172-31-82-87:~/efs$ sudo touch 1.txt
ubuntu@ip-172-31-82-87:~/efs$ ls
1.txt
ubuntu@ip-172-31-82-87:~/efs$ sudo touch 2.txt
ubuntu@ip-172-31-82-87:~/efs$ ls
1.txt  2.txt
ubuntu@ip-172-31-82-87:~/efs$
```

i-077284fc7ad46c47f (ubantu)

PublicIPs: 13.221.184.163 PrivateIPs: 172.31.82.87

STEP 9 : Similarly after updating and installing package create file and paste the mount code just list the file in EFS it will show the files created from Ubuntu machine



STEP 10: Similarly for Red Hat machine as well as shown below

```
Example:
# rhc connect --activation-key <key> --organization <org>

The rhc client and Red Hat Insights will enable analytics and additional
management capabilities on your system.
View your connected systems at https://console.redhat.com/insights

You can learn more about how to register your system
using rhc at https://red.ht/registration
Last login: Tue Aug 12 13:17:21 2025 from 152.57.7.116
[ec2-user@ip-172-31-83-99 ~]$ sudo yum install nfs-utils
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use "rhc" or "subscription-manager" to register.

Red Hat Enterprise Linux 10 for x86_64 - AppStream from RHUI (RPMs)                    17 MB/s | 3.0 MB     00:00
Red Hat Enterprise Linux 10 for x86_64 - BaseOS from RHUI (RPMs)                       53 MB/s |  17 MB     00:00
Red Hat Enterprise Linux 10 Client Configuration                                       23 kB/s | 1.9 kB     00:00
Dependencies resolved.
================================================================================================================
 Package                  Architecture       Version                    Repository                        Size
================================================================================================================
Installing:
 nfs-utils                x86_64             1:2.8.2-3.el10             rhel-10-baseos-rhui-rpms          487 k
Installing dependencies:
 gssproxy                 x86_64             0.9.2-10.el10              rhel-10-baseos-rhui-rpms          118 k
 libev                    x86_64             4.33-14.el10               rhel-10-baseos-rhui-rpms           56 k
 libnfsidmap              x86_64             1:2.8.2-3.el10             rhel-10-baseos-rhui-rpms           67 k
 libtirpc                 x86_64             1.3.5-1.el10               rhel-10-baseos-rhui-rpms           98 k
 libverto-libev           x86_64             0.3.2-10.el10              rhel-10-baseos-rhui-rpms           15 k
 quota                    x86_64             1:4.09-9.el10              rhel-10-baseos-rhui-rpms          201 k
 quota-nls                noarch             1:4.09-9.el10              rhel-10-baseos-rhui-rpms           79 k
 rpcbind                  x86_64             1.2.7-3.el10               rhel-10-baseos-rhui-rpms           63 k
 sssd-nfs-idmap           x86_64             2.10.2-3.el10_0.2          rhel-10-baseos-rhui-rpms           37 k

Transaction Summary
================================================================================================================
Install  10 Packages

Total download size: 1.2 M
```

```
ec2-user@ip-172-31-83-99:~/
  Running scriptlet: rpcbind-1.2.7-3.el10.x86_64                                                          3/10
Created symlink '/etc/systemd/system/multi-user.target.wants/rpcbind.service' → '/usr/lib/systemd/system/rpcbind.service'.
Created symlink '/etc/systemd/system/sockets.target.wants/rpcbind.socket' → '/usr/lib/systemd/system/rpcbind.socket'.

  Installing       : quota-nls-1:4.09-9.el10.noarch                                                       4/10
  Installing       : quota-1:4.09-9.el10.x86_64                                                           5/10
  Installing       : libev-4.33-14.el10.x86_64                                                            6/10
  Installing       : libverto-libev-0.3.2-10.el10.x86_64                                                  7/10
  Running scriptlet: gssproxy-0.9.2-10.el10.x86_64                                                        8/10
  Installing       : gssproxy-0.9.2-10.el10.x86_64                                                        8/10
  Running scriptlet: gssproxy-0.9.2-10.el10.x86_64                                                        8/10
  Running scriptlet: nfs-utils-1:2.8.2-3.el10.x86_64                                                      9/10
  Installing       : nfs-utils-1:2.8.2-3.el10.x86_64                                                      9/10
  Running scriptlet: nfs-utils-1:2.8.2-3.el10.x86_64                                                      9/10
Created symlink '/etc/systemd/system/multi-user.target.wants/nfs-client.target' → '/usr/lib/systemd/system/nfs-client.target'.
Created symlink '/etc/systemd/system/remote-fs.target.wants/nfs-client.target' → '/usr/lib/systemd/system/nfs-client.target'.

Warning: The unit file, source configuration file or drop-ins of gssproxy.service changed on disk. Run 'systemctl daemon-reload' to reload units.

Warning: The unit file, source configuration file or drop-ins of gssproxy.service changed on disk. Run 'systemctl daemon-reload' to reload units.

  Installing       : sssd-nfs-idmap-2.10.2-3.el10_0.2.x86_64                                             10/10
  Running scriptlet: sssd-nfs-idmap-2.10.2-3.el10_0.2.x86_64                                             10/10
Installed products updated.

Installed:
  gssproxy-0.9.2-10.el10.x86_64              libev-4.33-14.el10.x86_64              libnfsidmap-1:2.8.2-3.el10.x86_64
  libtirpc-1.3.5-1.el10.x86_64               libverto-libev-0.3.2-10.el10.x86_64    nfs-utils-1:2.8.2-3.el10.x86_64
  quota-1:4.09-9.el10.x86_64                 quota-nls-1:4.09-9.el10.noarch         rpcbind-1.2.7-3.el10.x86_64
  sssd-nfs-idmap-2.10.2-3.el10_0.2.x86_64

Complete!
[ec2-user@ip-172-31-83-99 ~]$ mkdir efs
[ec2-user@ip-172-31-83-99 ~]$ ls
efs
[ec2-user@ip-172-31-83-99 ~]$ sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsize=1048576,hard,timeo=600,retrans=2,noresvport fs-073c6165be2107318.efs.us-
east-1.amazonaws.com:/ efs
[ec2-user@ip-172-31-83-99 ~]$ cd efs
[ec2-user@ip-172-31-83-99 efs]$ ls
1.txt  2.txt
[ec2-user@ip-172-31-83-99 efs]$
```