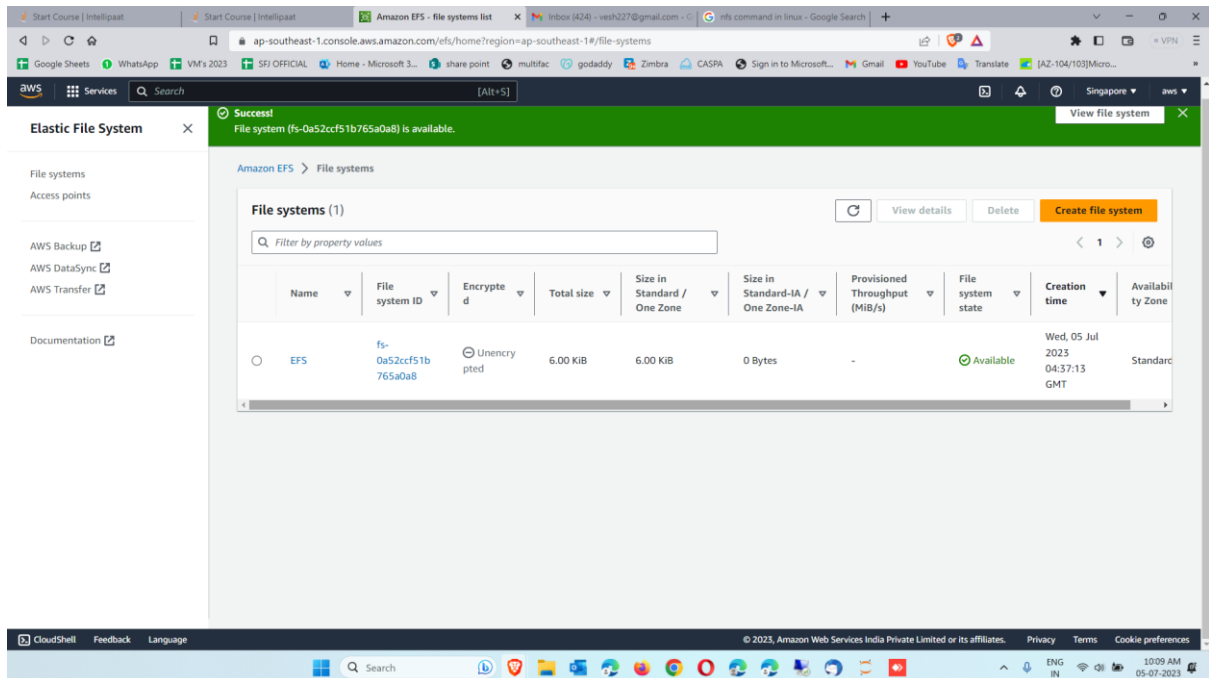
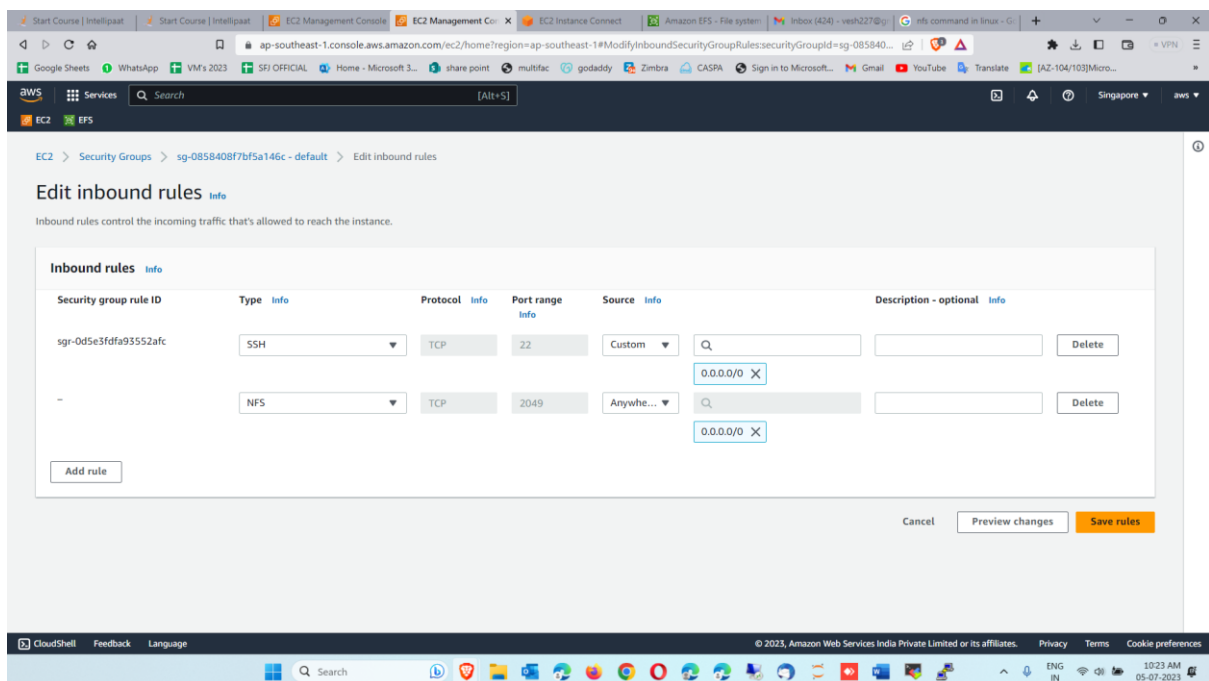


Module 2: EC2 and EFS Assignment

1. Created a file system with existing SG.

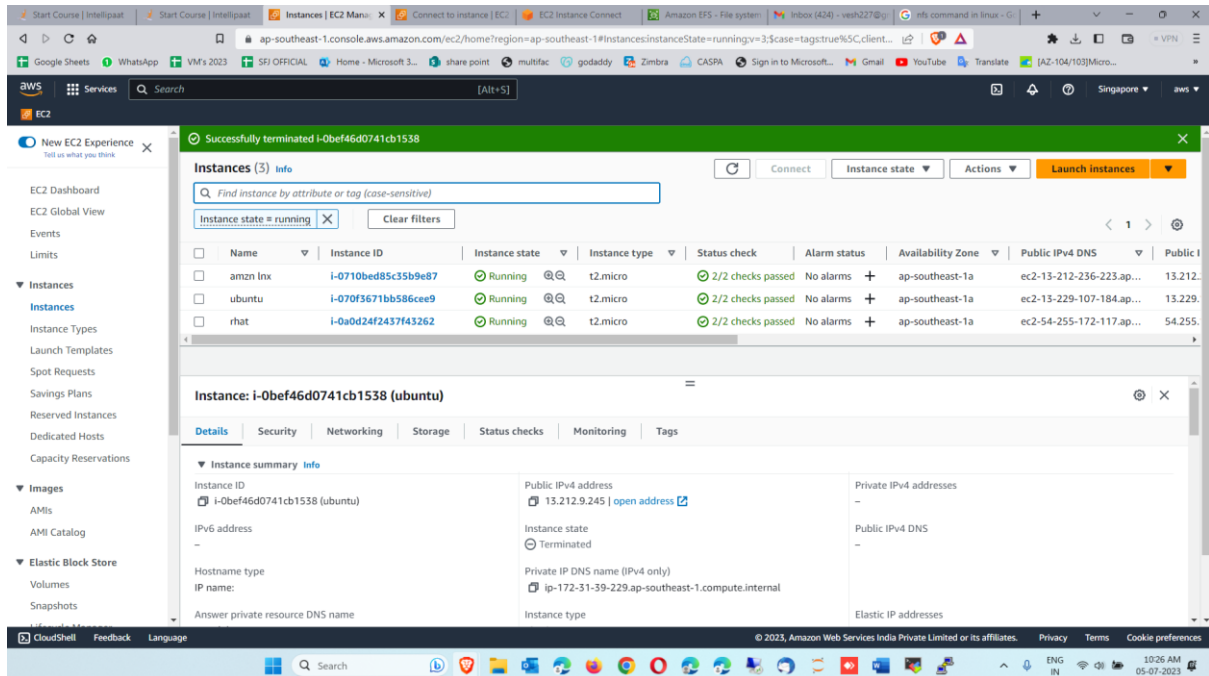


2. NFS rule added to existing SG

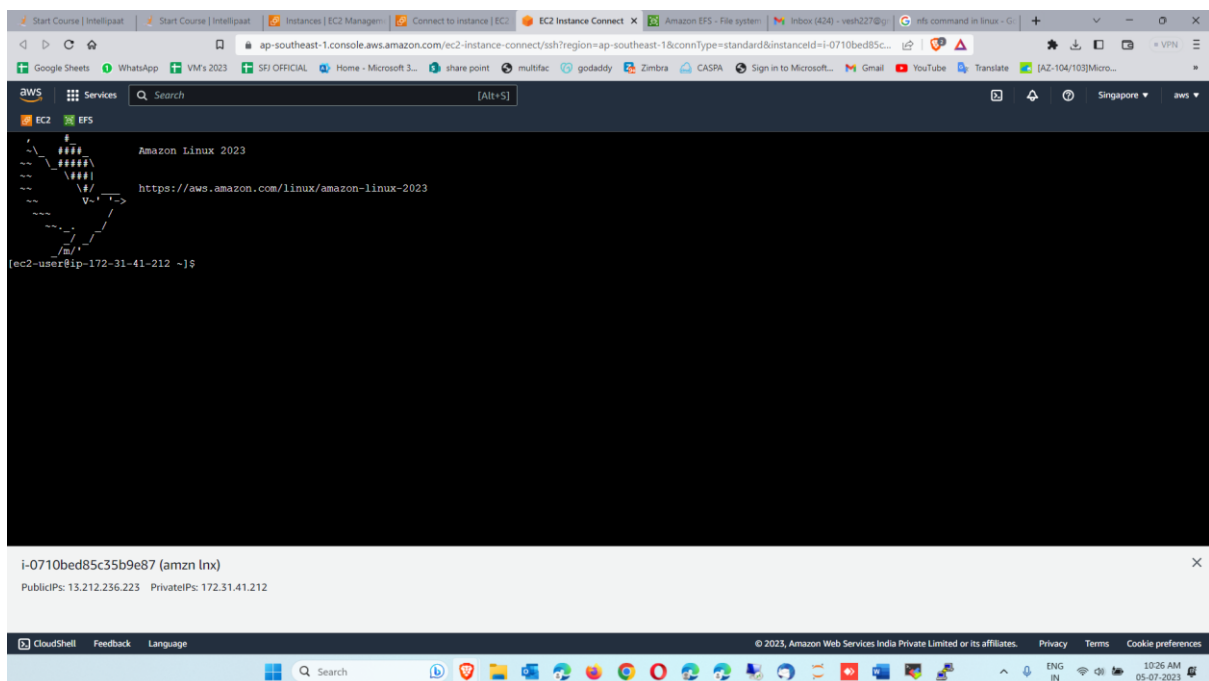


Module 2: EC2 and EFS Assignment

- launched amazon Linux, ubuntu and RedHat instance with which I have added SG for the file system the same SG.

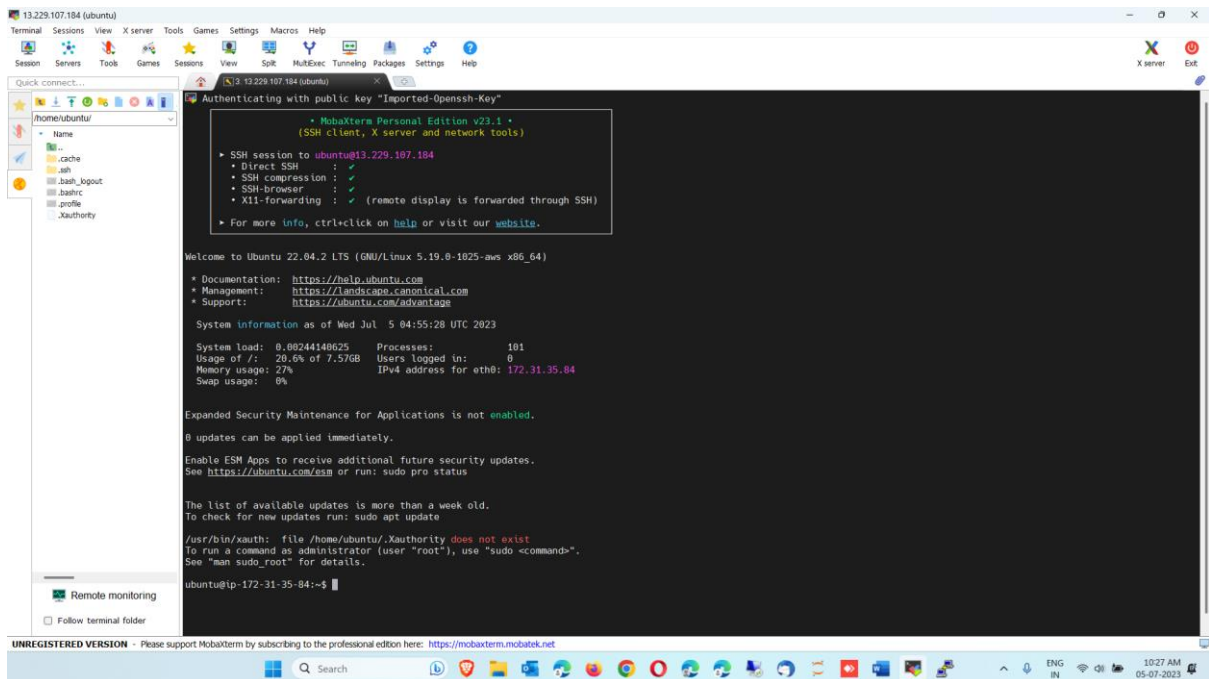


- Connected Linux instance via amazon console.

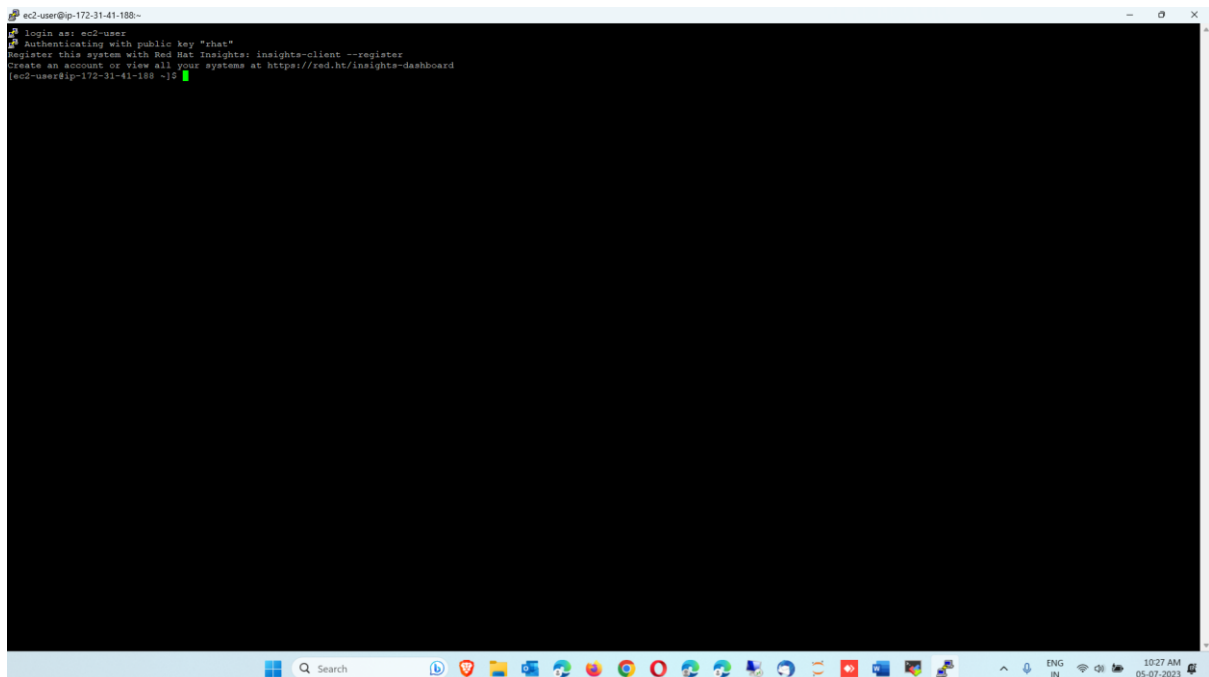


Module 2: EC2 and EFS Assignment

5. Connected **ubuntu** instance through mobaxterm.

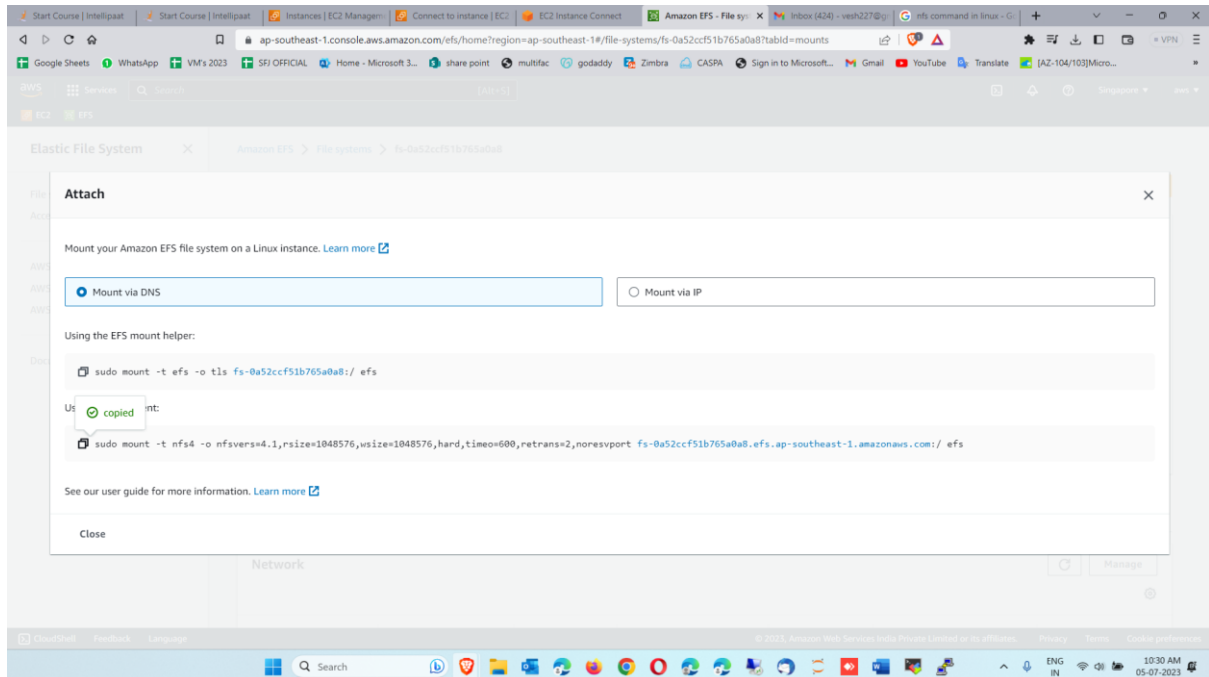


6. Connected **RedHat** instance through putty.

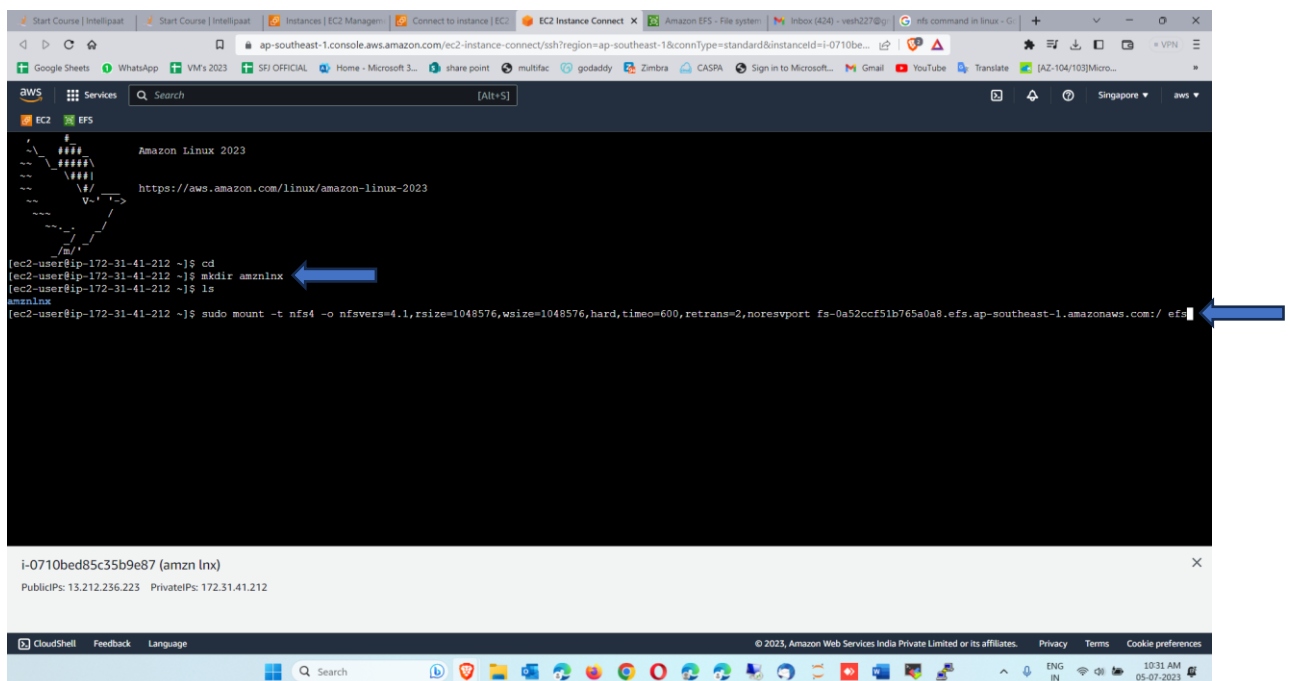


Module 2: EC2 and EFS Assignment

7. Go to EFS which I have created. Copy NFS client cmd.

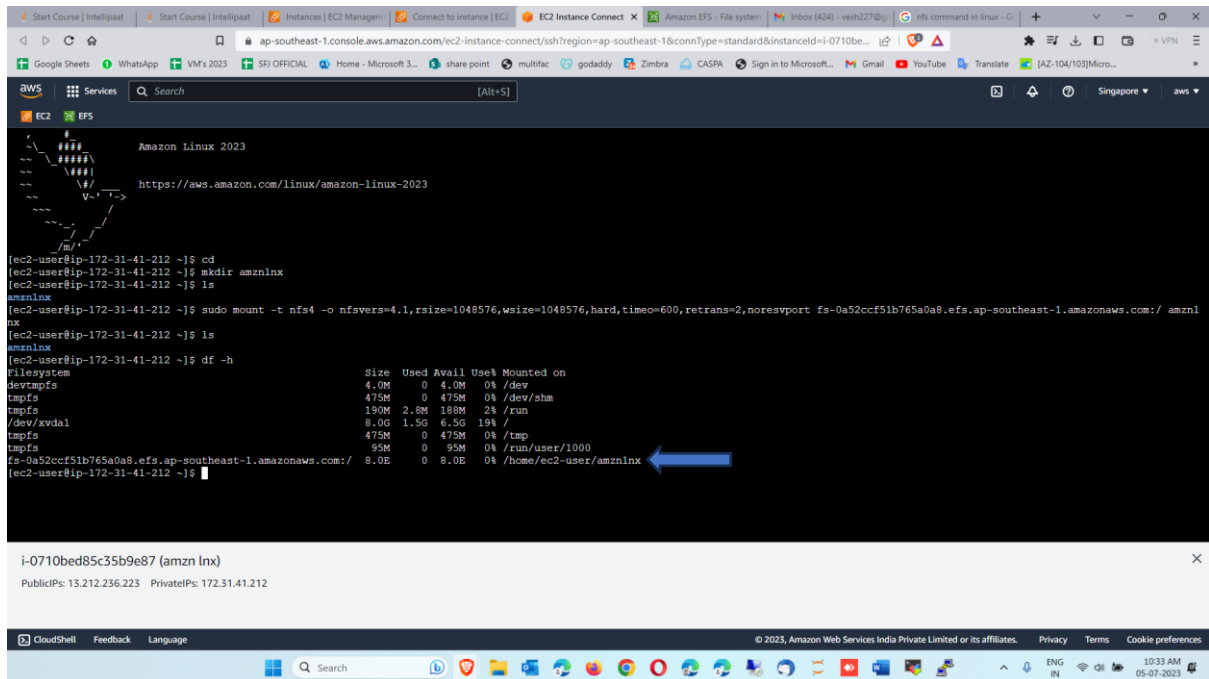


8. Go to Linux machine. Created a directory (dir name: amznlnx). Paste the NFS client cmd and replace efs to amznlnx.



Module 2: EC2 and EFS Assignment

9. Enter define host cmd (df -h). EFS has been attached here.

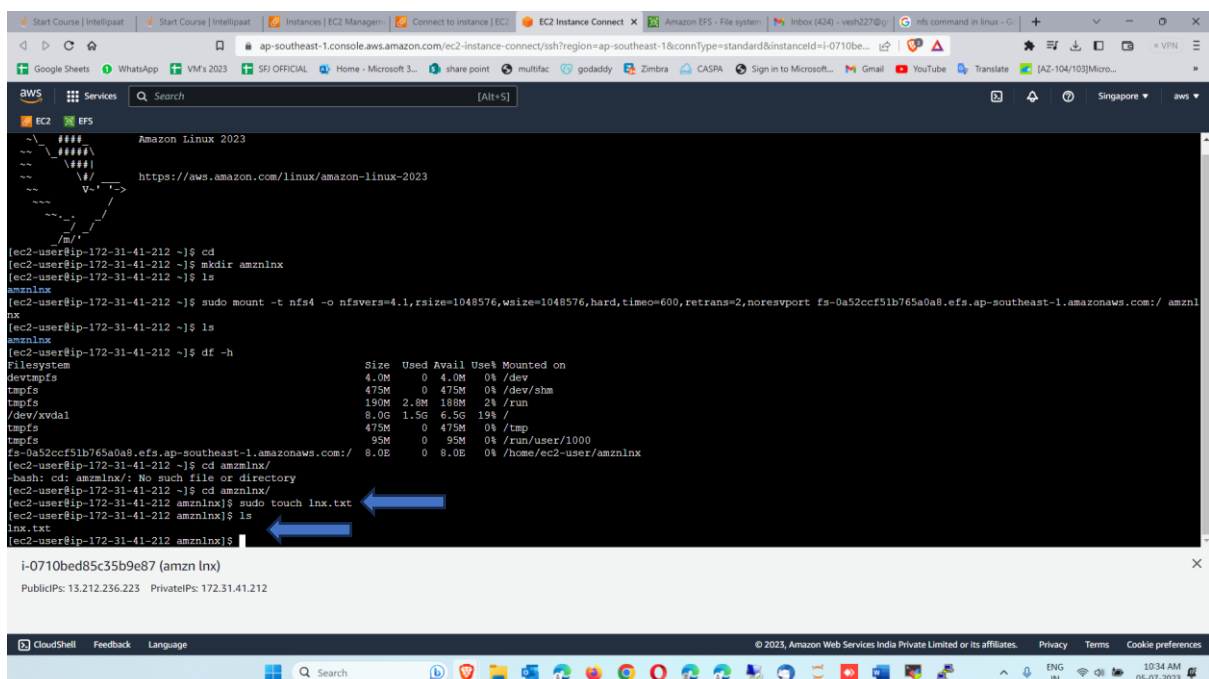


```
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023

(ec2-user@ip-172-31-41-212 ~)$ cd
(ec2-user@ip-172-31-41-212 ~)$ mkdir amznlnx
(ec2-user@ip-172-31-41-212 ~)$ ls
amznlnx
(ec2-user@ip-172-31-41-212 ~)$ sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsize=1048576,hard,timeo=600,retrans=2,noresvport fs-0a52ccf51b765a0a8.efs.ap-southeast-1.amazonaws.com:/ amznlnx
(ec2-user@ip-172-31-41-212 ~)$ ls
amznlnx
(ec2-user@ip-172-31-41-212 ~)$ 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    2.8M   188M   2% /run
/dev/xvda1                 8.0G    1.5G    6.5G  19% /
tmpfs                      475M        0   475M   0% /tmp
tmpfs                      95M        0    95M   0% /run/user/1000
fs-0a52ccf51b765a0a8.efs.ap-southeast-1.amazonaws.com:/ 8.0E        0   8.0E   0% /home/ec2-user/amznlnx
(ec2-user@ip-172-31-41-212 ~)$
```

i-0710bed85c35b9e87 (amzn lnx)
PublicIPs: 13.212.236.223 PrivateIPs: 172.31.41.212

10. I have created sample file. It showing below



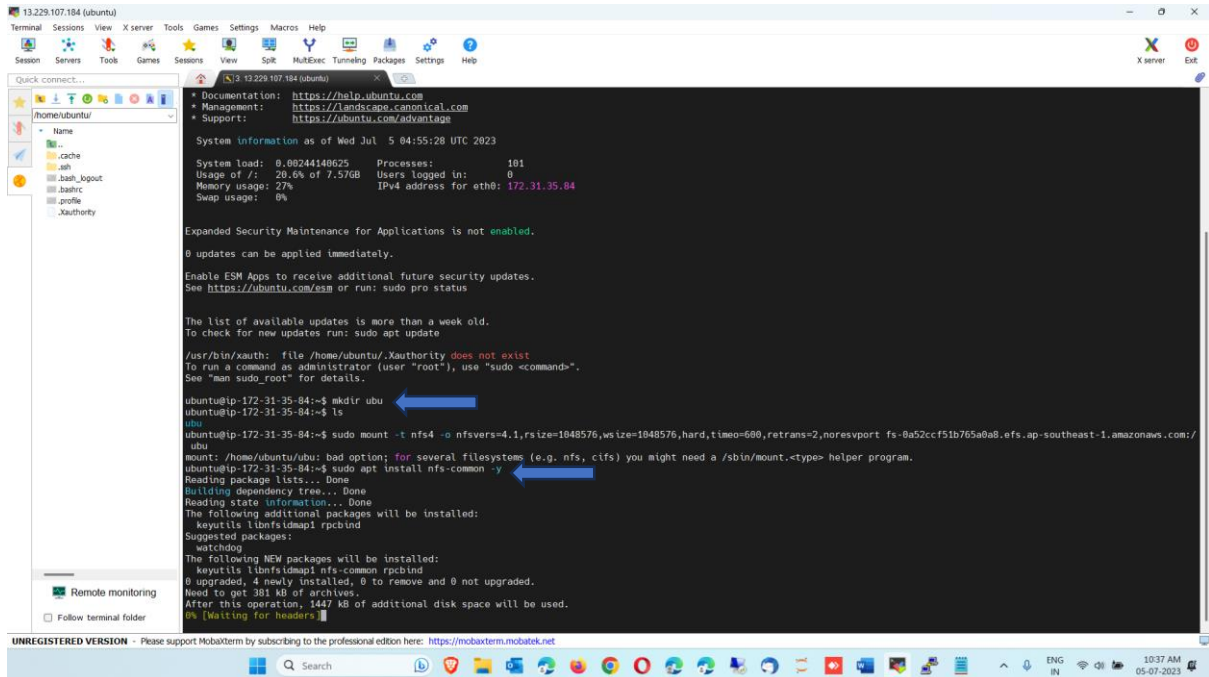
```
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023

(ec2-user@ip-172-31-41-212 ~)$ cd
(ec2-user@ip-172-31-41-212 ~)$ mkdir amznlnx
(ec2-user@ip-172-31-41-212 ~)$ ls
amznlnx
(ec2-user@ip-172-31-41-212 ~)$ sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsize=1048576,hard,timeo=600,retrans=2,noresvport fs-0a52ccf51b765a0a8.efs.ap-southeast-1.amazonaws.com:/ amznlnx
(ec2-user@ip-172-31-41-212 ~)$ ls
amznlnx
(ec2-user@ip-172-31-41-212 ~)$ 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    2.8M   188M   2% /run
/dev/xvda1                 8.0G    1.5G    6.5G  19% /
tmpfs                      475M        0   475M   0% /tmp
tmpfs                      95M        0    95M   0% /run/user/1000
fs-0a52ccf51b765a0a8.efs.ap-southeast-1.amazonaws.com:/ 8.0E        0   8.0E   0% /home/ec2-user/amznlnx
(ec2-user@ip-172-31-41-212 ~)$ cd amznlnx/
-bash: cd: amznlnx/: No such file or directory
(ec2-user@ip-172-31-41-212 ~)$ cd amznlnx/
(ec2-user@ip-172-31-41-212 amznlnx)$ sudo touch lnx.txt
(ec2-user@ip-172-31-41-212 amznlnx)$ ls
lnx.txt
(ec2-user@ip-172-31-41-212 amznlnx)$
```

i-0710bed85c35b9e87 (amzn lnx)
PublicIPs: 13.212.236.223 PrivateIPs: 172.31.41.212

Module 2: EC2 and EFS Assignment

11. Go to ubuntu machine. Created a directory (dir name: ubu). Install NFS utils.



```
13.229.107.184 (ubuntu)
Terminal Sessions View X server Tools Games Settings Macros Help
Session Servers Tools Games Sessions View Split MultExec Tunneling Packages Settings Help

Quick connect...
home/ubuntu/
  Name
  .cache
  .ssh
  .bash_logout
  .bashrc
  .profile
  .Xauthority

Documentation: https://help.ubuntu.com
Management: https://landscape.canonical.com
Support: https://ubuntu.com/advantage

System information as of Wed Jul 5 04:55:28 UTC 2023

System load: 0.00244140625 Processes: 101
Usage of /: 20.6% of 7.57GB Users logged in: 0
Memory usage: 27% IPv4 address for eth0: 172.31.35.84
Swap usage: 0%

Expanded Security Maintenance for Applications is not enabled.
0 updates can be applied immediately.
Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

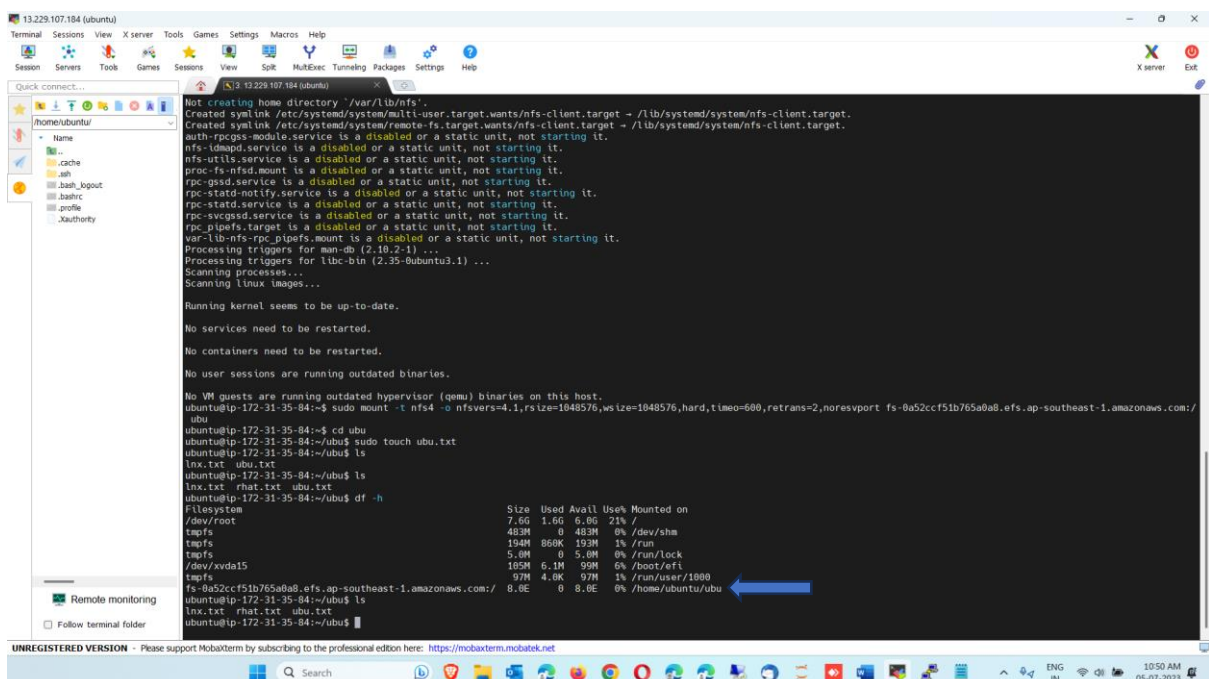
The list of available updates is more than a week old.
To check for new updates run: sudo apt update

/usr/bin/sauth: file /home/ubuntu/.Xauthority does not exist
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-35-84:~$ mkdir ubu
ubuntu@ip-172-31-35-84:~$ ls
ubu
ubuntu@ip-172-31-35-84:~$ sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsize=1048576,hard,timeo=600,retrans=2,noresvport fs-8a52ccf51b765a0a8.efs.ap-southeast-1.amazonaws.com:/ubu
mount: /home/ubuntu/ubu: bad option: for several filesystems (e.g. nfs, cifs) you might need a /sbin/mount.<type> helper program.
ubuntu@ip-172-31-35-84:~$ sudo apt install nfs-common
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  keyutils libnfsidmap1 rpcbind
Suggested packages:
  switchdog
The following NEW packages will be installed:
  keyutils libnfsidmap1 nfs-common rpcbind
0 upgraded, 4 newly installed, 0 to remove and 0 not upgraded.
Need to get 381 kB of archives.
After this operation, 1447 kB of additional disk space will be used.
0% [Waiting for headers]

UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: https://mobaxterm.mobatek.net
```

12. Enter define host cmd (df -h). EFS has been attached here.



```
13.229.107.184 (ubuntu)
Terminal Sessions View X server Tools Games Settings Macros Help
Session Servers Tools Games Sessions View Split MultExec Tunneling Packages Settings Help

Quick connect...
home/ubuntu/
  Name
  .cache
  .ssh
  .bash_logout
  .bashrc
  .profile
  .Xauthority

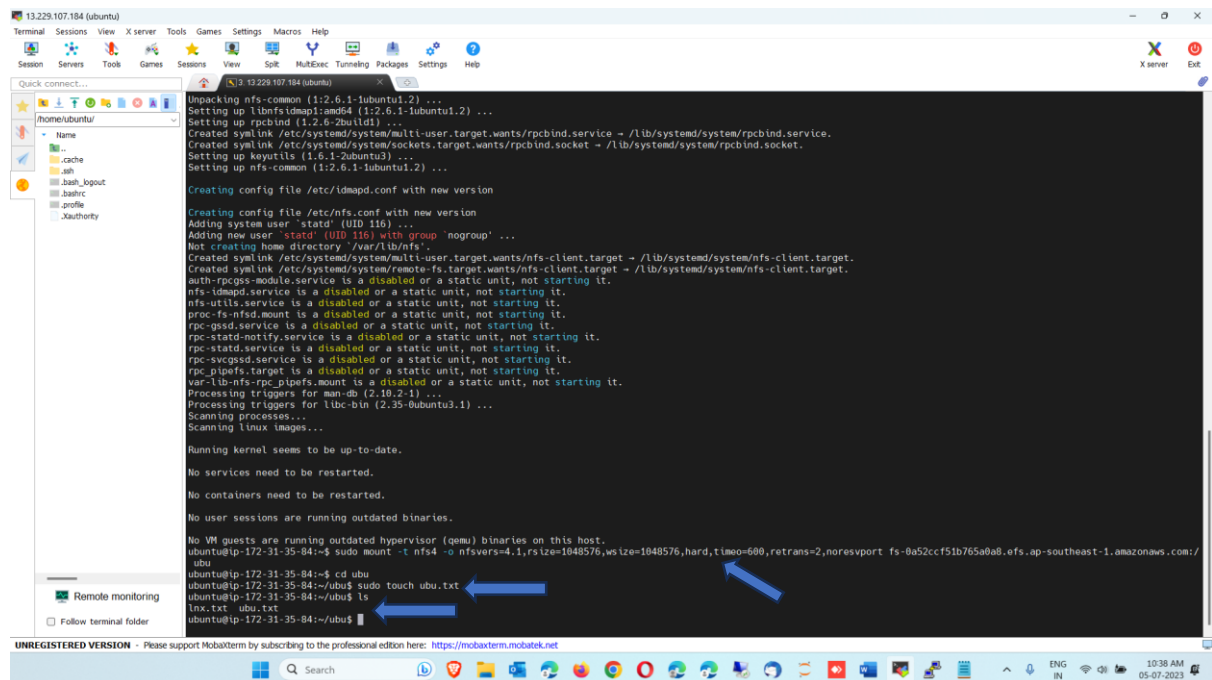
Not creating home directory /var/lib/nfs/.
Created symlink /etc/systemd/system/multi-user.target.wants/nfs-client.target → /lib/systemd/system/nfs-client.target.
Created symlink /etc/systemd/system/remote-fs.target.wants/nfs-client.target → /lib/systemd/system/nfs-client.target.
auth-rpcgss-module.service is a disabled or a static unit, not starting it.
nfs-dmptd.service is a disabled or a static unit, not starting it.
nfs-idmapd.service is a disabled or a static unit, not starting it.
nfs-utils.service is a disabled or a static unit, not starting it.
proc-fs-nfsd.mount is a disabled or a static unit, not starting it.
rpc-gssd.service is a disabled or a static unit, not starting it.
rpc-statd-notify.service is a disabled or a static unit, not starting it.
rpc-statd.service is a disabled or a static unit, not starting it.
rpc-svcgssd.service is a disabled or a static unit, not starting it.
rpc_pipefs.target is a disabled or a static unit, not starting it.
var-lib-nfs-rpc-pipefs.mount is a disabled or a static unit, not starting it.
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.
No services need to be restarted.
No containers need to be restarted.
No user sessions are running outdated binaries.
No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-35-84:~$ sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsize=1048576,hard,timeo=600,retrans=2,noresvport fs-8a52ccf51b765a0a8.efs.ap-southeast-1.amazonaws.com:/ubu
ubuntu@ip-172-31-35-84:~$ cd ubu
ubuntu@ip-172-31-35-84:~/ubu$ sudo touch ubu.txt
ubuntu@ip-172-31-35-84:~/ubu$ ls
linx.txt  ubu.txt
ubuntu@ip-172-31-35-84:~/ubu$ ls
linx.txt  rhat.txt  ubu.txt
ubuntu@ip-172-31-35-84:~/ubu$ df -h
Filesystem                                Size  Used Avail Use% Mounted on
/dev/root                                7.6G  1.6G  6.0G  21% /
tmpfs                                     483M   0  483M   0% /dev/shm
tmpfs                                     194M  869K  193M   1% /run
tmpfs                                     5.0M   0  5.0M   0% /run/lock
/dev/xvda15                             105M  6.1M   99M   6% /boot/efi
tmpfs                                     97M  4.0K   97M   1% /run/user/1000
fs-8a52ccf51b765a0a8.efs.ap-southeast-1.amazonaws.com:/ 8.0E   0  8.0E   0% /home/ubuntu/ubu

UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: https://mobaxterm.mobatek.net
```

Module 2: EC2 and EFS Assignment

13. Paste the NFS client cmd and replace efs to ubu. I have created sample file as well. I can able to see the sample file and which I have created in Linux instance. Both the files it showing below



```
13.229.107.184 (ubuntu)
Terminal Sessions View X server Tools Games Settings Macros Help
Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help

Quick connect...
home/ubuntu
Name
.cache
.sh
.bash_logout
.bashrc
.profile
.ssh
.ssh.authority

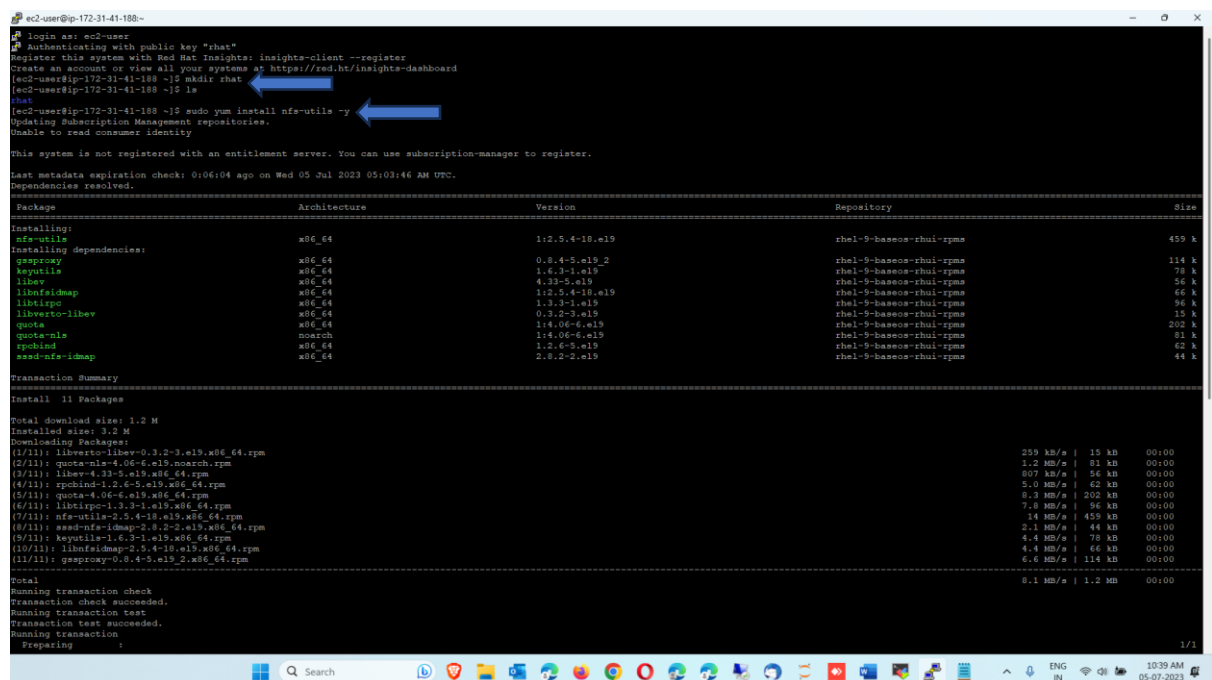
Uploading nfs-common (1:2.6.1-1ubuntu1.2) ...
Setting up libnfsidmap2:amd64 (1:2.6.1-1ubuntu1.2) ...
Setting up rpcbind (1:2.6-2ubuntu1) ...
Created symlink /etc/systemd/system/multi-user.target.wants/rpcbind.service - /lib/systemd/system/rpcbind.service.
Created symlink /etc/systemd/system/sockets.target.wants/rpcbind.socket - /lib/systemd/system/rpcbind.socket.
Setting up keyutils (1.6.1-2ubuntu3) ...
Setting up nfs-common (1:2.6.1-1ubuntu1.2) ...

Creating config file /etc/idmapd.conf with new version

Creating config file /etc/nfs.conf with new version
Adding system user 'nfs' (UID 116) ...
Adding new user 'nfs' (UID 116) with group 'nogroup' ...
Not creating home directory /var/lib/nfs/.
Created symlink /etc/systemd/system/multi-user.target.wants/nfs-client.target - /lib/systemd/system/nfs-client.target.
Created symlink /etc/systemd/system/remote-fs.target.wants/nfs-client.target - /lib/systemd/system/nfs-client.target.
auth-rpcgss-module.service is a disabled or a static unit, not starting it.
nfs-idmapd.service is a disabled or a static unit, not starting it.
nfs-utils.service is a disabled or a static unit, not starting it.
proc-fs.mount is a disabled or a static unit, not starting it.
rpc-gssd.service is a disabled or a static unit, not starting it.
rpc-statd.service is a disabled or a static unit, not starting it.
rpc-statd.notify.service is a disabled or a static unit, not starting it.
rpc-statd.service is a disabled or a static unit, not starting it.
rpc-svcgssd.service is a disabled or a static unit, not starting it.
rpc-pipefs.target is a disabled or a static unit, not starting it.
var-lib-nfs-rpc-pipefs.mount is a disabled or a static unit, not starting it.
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.
No services need to be restarted.
No containers need to be restarted.
No user sessions are running outdated binaries.
No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-35-84:~$ sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsize=1048576,hard,timeo=600,retrans=2,noresvport fs-8a52ccf51b765a8a8.efs.ap-southeast-1.amazonaws.com:/
ubuntu@ip-172-31-35-84:~$ cd /var/lib/nfs
ubuntu@ip-172-31-35-84:~$ touch ubuntutxt
ubuntu@ip-172-31-35-84:~$ ls
lnx.txt  ubu.txt
ubuntu@ip-172-31-35-84:~$ cat /var/lib/nfs/ubuntutxt
ubuntutxt
```

14. Go to RedHat machine. Created a directory (dir name: rhat). Install NFS utils.



```
ec2-user@ip-172-31-41-188:~$ login as: ec2-user
ec2-user@ip-172-31-41-188:~$ ssh
Register this system with Red Hat Insights: insights-client --register
Create an account or view all your systems at https://red.ht/insights-dashboard
[ec2-user@ip-172-31-41-188 ~]$ mkdir rhat
[ec2-user@ip-172-31-41-188 ~]$ ls
rhat
[ec2-user@ip-172-31-41-188 ~]$ sudo yum install nfs-utils -y
Updating Subscription Management repositories.
Unable to read consumer identity

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

Last metadata expiration check: 0:06:04 ago on Wed 05 Jul 2023 05:03:46 AM UTC.
Dependencies resolved.
=====================================================================================================================================
Package                                Architecture      Version            Repository          Size
=====================================================================================================================================
Installing:
nfs-utils                              x86_64            1:2.5.4-10.el9    rhel-9-basos-rhui-rpms 459 k
Installing dependencies:
gssproxy                               x86_64            0.8.4-5.el9_2     rhel-9-basos-rhui-rpms 114 k
keyutils                               x86_64            1.6.3-1.el9        rhel-9-basos-rhui-rpms 78 k
libavahi                              x86_64            4.33-5.el9         rhel-9-basos-rhui-rpms 56 k
libidn2                               x86_64            1:2.5.4-10.el9    rhel-9-basos-rhui-rpms 46 k
libtirpc                              x86_64            1.3.3-1.el9        rhel-9-basos-rhui-rpms 96 k
libverto-libev                        x86_64            0.3.2-3.el9        rhel-9-basos-rhui-rpms 15 k
nfs-utils                             x86_64            1:2.5.4-10.el9    rhel-9-basos-rhui-rpms 202 k
quota-nls                             noarch            1:4.06-6.el9       rhel-9-basos-rhui-rpms 81 k
rpcbind                               x86_64            1:2.6-5.el9        rhel-9-basos-rhui-rpms 42 k
sssd-nfs-idmap                        x86_64            2.8.2-2.el9        rhel-9-basos-rhui-rpms 44 k
Transaction Summary
-----
Install 11 Packages
Total download size: 1.2 M
Installed size: 3.2 M
Downloading Packages:
(1/11): libverto-libev-0.3.2-3.el9.x86_64.rpm 259 kB/s | 15 kB 00:00
(2/11): quota-nls-4.06-6.el9.noarch.rpm 1.2 MB/s | 81 kB 00:00
(3/11): libev-4.33-5.el9.x86_64.rpm 807 kB/s | 56 kB 00:00
(4/11): rpcbind-1:2.6-5.el9.x86_64.rpm 5.0 MB/s | 42 kB 00:00
(5/11): quota-4.06-6.el9.x86_64.rpm 8.3 MB/s | 202 kB 00:00
(6/11): libtirpc-1.3.3-1.el9.x86_64.rpm 7.9 MB/s | 96 kB 00:00
(7/11): nfs-utils-2.5.4-10.el9.x86_64.rpm 14 MB/s | 455 kB 00:00
(8/11): sssd-nfs-idmap-2.8.2-2.el9.x86_64.rpm 2.1 MB/s | 44 kB 00:00
(9/11): keyutils-1.6.3-1.el9.x86_64.rpm 4.4 MB/s | 78 kB 00:00
(10/11): libidn2-1:2.5.4-10.el9.x86_64.rpm 4.4 MB/s | 46 kB 00:00
(11/11): gssproxy-0.8.4-5.el9_2.x86_64.rpm 6.6 MB/s | 114 kB 00:00
Total
-----
6.1 MB/s | 1.2 MB 00:00
Transaction check succeeded.
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing
-----
1/1
```


Module 2: EC2 and EFS Assignment

15. Paste the NFS client cmd and replace efs to rhat. Entered define host cmd (df -h). EFS has been attached here.

I have created sample file as well. I can able to see the sample file and which I have created in Linux and ubuntu instance. all the files it showing below

```
Running transaction
Installing      : libtirpc-1.3.3-1.el9.x86_64                                1/1
Installing      : libnfsidmap-1.2.5.4-18.el9.x86_64                        2/11
Installing      : rpcbind-1.2.6-5.el9.x86_64                               3/11
Running scriptlet: rpcbind-1.2.6-5.el9.x86_64                               3/11
Installing      : rpcbind-1.2.6-5.el9.x86_64                               3/11
Running scriptlet: rpcbind-1.2.6-5.el9.x86_64                               3/11
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      : keyutils-1.6.3-1.el9.x86_64                                4/11
Installing      : libev-4.33-5.el9.x86_64                                  5/11
Installing      : libverto-libev-0.3.2-3.el9.x86_64                        6/11
Installing      : gssproxy-0.8.4-5.el9.x86_64                              7/11
Running scriptlet: gssproxy-0.8.4-5.el9.x86_64                              7/11
Installing      : quota-nls-1:4.06-6.el9.noarch                             8/11
Installing      : quota-nls-1:4.06-6.el9.x86_64                             9/11
Running scriptlet: nfs-utils-1:2.5.4-18.el9.x86_64                         10/11
Installing      : nfs-utils-1:2.5.4-18.el9.x86_64                         10/11
Running scriptlet: sssd-nfs-idmap-2.8.2-2.el9.x86_64                       11/11
Installing      : sssd-nfs-idmap-2.8.2-2.el9.x86_64                       11/11
Verifying      : quota-nls-1:4.06-6.el9.noarch                             1/11
Verifying      : libverto-libev-0.3.2-3.el9.x86_64                       2/11
Verifying      : libev-4.33-5.el9.x86_64                                  3/11
Verifying      : quota-1:4.06-6.el9.x86_64                                4/11
Verifying      : rpcbind-1.2.6-5.el9.x86_64                              5/11
Verifying      : nfs-utils-1:2.5.4-18.el9.x86_64                         6/11
Verifying      : libtirpc-1.3.3-1.el9.x86_64                              7/11
Verifying      : sssd-nfs-idmap-2.8.2-2.el9.x86_64                       8/11
Verifying      : keyutils-1.6.3-1.el9.x86_64                              9/11
Verifying      : libnfsidmap-1:2.5.4-18.el9.x86_64                       10/11
Verifying      : gssproxy-0.8.4-5.el9.x86_64                             11/11
Installed products updated.

Installed:
  gssproxy-0.8.4-5.el9.x86_64      keyutils-1.6.3-1.el9.x86_64      libev-4.33-5.el9.x86_64      libnfsidmap-1:2.5.4-18.el9.x86_64      libtirpc-1.3.3-1.el9.x86_64      libverto-libev-0.3.2-3.el9.x86_64
  nfs-utils-1:2.5.4-18.el9.x86_64  quota-1:4.06-6.el9.x86_64      quota-nls-1:4.06-6.el9.noarch  rpcbind-1.2.6-5.el9.x86_64      sssd-nfs-idmap-2.8.2-2.el9.x86_64

Complete!
(ec2-user@ip-172-31-41-188 ~)$ sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsrsize=1048576,hard,timeo=600,retrans=2,noresvport fs-0a52ccf51b765a0a8.efs.ap-southeast-1.amazonaws.com:/ zhat
(ec2-user@ip-172-31-41-188 ~)$ cd zhat
(ec2-user@ip-172-31-41-188 zhat)$ ls
ls.txt  zhat.txt  ubu.txt
(ec2-user@ip-172-31-41-188 zhat)$ df -h

```

	Size	Used	Avail	Use%	Mounted on
/dev/mapper/centos7-root	4.0M	0	4.0M	0%	/dev
/dev/mapper/centos7-root	385M	0	385M	0%	/dev/shm
/dev/mapper/centos7-root	154M	4.4M	150M	3%	/run
/dev/mapper/centos7-root	9.6G	1.3M	8.1G	14%	/
/dev/mapper/centos7-root	495M	153M	343M	31%	/boot
/dev/mapper/centos7-root	200M	8.0K	200M	1%	/boot/efi
/dev/mapper/centos7-root	77M	0	77M	0%	/usr/share/zoneinfo
fs-0a52ccf51b765a0a8.efs.ap-southeast-1.amazonaws.com:/	8.0E	0	8.0E	0%	/home/ec2-user/zhat

```
(ec2-user@ip-172-31-41-188 zhat)$ ls
ls.txt  zhat.txt  ubu.txt
(ec2-user@ip-172-31-41-188 zhat)$
```

16. I can able to see all efs file in all instances.

```
Setting up rpcbind (1.2.6-2build1) ...
Created symlink /etc/systemd/system/multi-user.target.wants/rpcbind.service -> /lib/systemd/system/rpcbind.service.
Created symlink /etc/systemd/system/sockets.target.wants/rpcbind.socket -> /lib/systemd/system/rpcbind.socket.
Setting up keyutils (1.6.1-2ubuntu3) ...
Setting up nfs-common (1:2.6.1-1ubuntu1.2) ...

Creating config file /etc/ldmnd.conf with new version

Creating config file /etc/nfs.conf with new version
Adding system user 'nfsd' (UID 116) with group 'nfsd' ...
Not creating home directory '/var/lib/nfs'.
Created symlink /etc/systemd/system/multi-user.target.wants/nfs-client.target -> /lib/systemd/system/nfs-client.target.
Created symlink /etc/systemd/system/remote-fs.target.wants/nfs-client.target -> /lib/systemd/system/nfs-client.target.
auth-rpcgss-module.service is a disabled or a static unit, not starting it.
nfs-idmapd.service is a disabled or a static unit, not starting it.
nfs-idmapd.service is a disabled or a static unit, not starting it.
proc-fs-nfsd.mount is a disabled or a static unit, not starting it.
rpc-gssd.service is a disabled or a static unit, not starting it.
rpc-gssd.service is a disabled or a static unit, not starting it.
rpc-statd-notify.service is a disabled or a static unit, not starting it.
rpc-statd.service is a disabled or a static unit, not starting it.
rpc-svcgssd.service is a disabled or a static unit, not starting it.
rpc-pipefs.target is a disabled or a static unit, not starting it.
var-lib-nfs-rpc-pipefs.mount is a disabled or a static unit, not starting it.
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
Scanning processes...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubu@ubuntu@ip-172-31-35-84:~$ sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsrsize=1048576,hard,timeo=600,retrans=2,noresvport fs-0a52ccf51b765a0a8.efs.ap-southeast-1.amazonaws.com:/
ubu@ubuntu@ip-172-31-35-84:~$ cd ubu
ubu@ubuntu@ip-172-31-35-84:~/ubu$ sudo touch ubu.txt
ubu@ubuntu@ip-172-31-35-84:~/ubu$ ls
ls.txt  ubu.txt
ubu@ubuntu@ip-172-31-35-84:~/ubu$ ls
ls.txt  zhat.txt  ubu.txt
ubu@ubuntu@ip-172-31-35-84:~/ubu$
```


Module 2: EC2 and EFS Assignment

```
ap-southeast-1.console.aws.amazon.com/ec2-instance-connect/sh?region=ap-southeast-1&connType=standard&instanceId=i-0710be...
AWS
Services
Search
[Alt+S]
EC2 EFS

[ec2-user@ip-172-31-41-212 ~]$ cd
[ec2-user@ip-172-31-41-212 ~]$ mkdir amznlnx
[ec2-user@ip-172-31-41-212 ~]$ ls
amznlnx
[ec2-user@ip-172-31-41-212 ~]$ sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsrize=1048576,hard,timeo=600,retrans=2,noresvport fs-0a52ccf51b765a0a8.efs.ap-southeast-1.amazonaws.com:/ amznlnx
[ec2-user@ip-172-31-41-212 ~]$ ls
amznlnx
[ec2-user@ip-172-31-41-212 ~]$ 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    2.8M  188M   2% /run
/dev/xvda1                  8.0G    1.5G   6.5G  19% /
tmpfs                      475M        0  475M   0% /tmp
tmpfs                      95M        0   95M   0% /run/user/1000
fs-0a52ccf51b765a0a8.efs.ap-southeast-1.amazonaws.com:/    8.0E        0   8.0E   0% /home/ec2-user/amznlnx
[ec2-user@ip-172-31-41-212 ~]$ cd amznlnx/
-bash: cd: amznlnx/: No such file or directory
[ec2-user@ip-172-31-41-212 ~]$ cd amznlnx/
[ec2-user@ip-172-31-41-212 ~]$ sudo touch lnx.txt
[ec2-user@ip-172-31-41-212 amznlnx]$ ls
lnx.txt
[ec2-user@ip-172-31-41-212 amznlnx]$ cd
[ec2-user@ip-172-31-41-212 ~]$ cd amznlnx/
[ec2-user@ip-172-31-41-212 amznlnx]$ ls
lnx.txt  ubu.txt
[ec2-user@ip-172-31-41-212 amznlnx]$ ls
lnx.txt  rhat.txt  ubu.txt
[ec2-user@ip-172-31-41-212 amznlnx]$
```

i-0710bed85c35b9e87 (amzn lnx)

PublicIPs: 13.212.236.223 PrivateIPs: 172.31.41.212

CloudShell Feedback Language

© 2023, Amazon Web Services India Private Limited or its affiliates. Privacy Terms Cookie preferences

ENG IN 10:43 AM 05-07-2023

```
ec2-user@ip-172-31-41-188 ~$ rhat
Running transaction
  Preparing                : libtirpc-1.3.3-1.el9.x86_64                                1/11
  Installing                : libnfsidmap-1:2.5.4-18.el9.x86_64                        2/11
  Running scriptlet: rpchind-1.2.6-5.el9.x86_64                                       3/11
  Installing                : rpchind-1.2.6-5.el9.x86_64                                       3/11
  Running scriptlet: rpchind-1.2.6-5.el9.x86_64                                       3/11
  Created symlink /etc/systemd/system/multi-user.target.wants/rpchind.service → /usr/lib/systemd/system/rpchind.service.
  Created symlink /etc/systemd/system/sockets.target.wants/rpchind.socket → /usr/lib/systemd/system/rpchind.socket.
  Installing                : keyutils-1.6.3-1.el9.x86_64                                4/11
  Installing                : libev-4.33-5.el9.x86_64                                    5/11
  Installing                : libverto-libev-0.3.2-3.el9.x86_64                        6/11
  Installing                : gasproxy-0.8.4-5.el9.x86_64                                7/11
  Running scriptlet: gasproxy-0.8.4-5.el9.x86_64                                       7/11
  Installing                : quota-nls-1:4.06-6.el9.noarch                             8/11
  Installing                : quota-1:4.06-6.el9.x86_64                                    9/11
  Running scriptlet: nfs-utils-1:2.5.4-18.el9.x86_64                                10/11
  Installing                : nfs-utils-1:2.5.4-18.el9.x86_64                            10/11
  Running scriptlet: nfs-utils-1:2.5.4-18.el9.x86_64                                10/11
  Installing                : sssd-nfs-idmap-2.8.2-2.el9.x86_64                        11/11
  Running scriptlet: sssd-nfs-idmap-2.8.2-2.el9.x86_64                                11/11
  Verifying                : quota-nls-1:4.06-6.el9.noarch                             1/11
  Verifying                : libev-4.33-5.el9.x86_64                                    2/11
  Verifying                : libverto-libev-0.3.2-3.el9.x86_64                        3/11
  Verifying                : libnfsidmap-1:2.5.4-18.el9.x86_64                        4/11
  Verifying                : rpchind-1.2.6-5.el9.x86_64                                       5/11
  Verifying                : nfs-utils-1:2.5.4-18.el9.x86_64                            6/11
  Verifying                : libtirpc-1.3.3-1.el9.x86_64                                7/11
  Verifying                : keyutils-1.6.3-1.el9.x86_64                                8/11
  Verifying                : libnfsidmap-1:2.5.4-18.el9.x86_64                            9/11
  Verifying                : gasproxy-0.8.4-5.el9.x86_64                                10/11
  Verifying                : sssd-nfs-idmap-2.8.2-2.el9.x86_64                        11/11
Installed products updated.

Installed:
  gasproxy-0.8.4-5.el9.x86_64  keyutils-1.6.3-1.el9.x86_64  libev-4.33-5.el9.x86_64  libnfsidmap-1:2.5.4-18.el9.x86_64  libtirpc-1.3.3-1.el9.x86_64  libverto-libev-0.3.2-3.el9.x86_64
  nfs-utils-1:2.5.4-18.el9.x86_64  quota-1:4.06-6.el9.x86_64  quota-nls-1:4.06-6.el9.noarch  rpchind-1.2.6-5.el9.x86_64  sssd-nfs-idmap-2.8.2-2.el9.x86_64

Complete!
[ec2-user@ip-172-31-41-188 ~]$ sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsrize=1048576,hard,timeo=600,retrans=2,noresvport fs-0a52ccf51b765a0a8.efs.ap-southeast-1.amazonaws.com:/ rhat
[ec2-user@ip-172-31-41-188 ~]$ cd rhat
[ec2-user@ip-172-31-41-188 rhat]$ sudo touch rhat.txt
[ec2-user@ip-172-31-41-188 rhat]$ ls
lnx.txt  rhat.txt  ubu.txt
[ec2-user@ip-172-31-41-188 rhat]$ df -h
Filesystem                Size      Used Avail Use% Mounted on
devtmpfs                   4.0M        0  4.0M   0% /dev
tmpfs                      385M        0  385M   0% /dev/shm
tmpfs                     154M    4.4M  150M   3% /run
/dev/xvda4                  9.4G    1.3G   8.1G  14% /
/dev/xvda3                  45M    15M   30M  31% /boot
/dev/xvda2                 200M    8.0M  192M   4% /boot/efi
tmpfs                      77M        0   77M   0% /run/user/1000
fs-0a52ccf51b765a0a8.efs.ap-southeast-1.amazonaws.com:/    8.0E        0   8.0E   0% /home/ec2-user/rhat
[ec2-user@ip-172-31-41-188 rhat]$ ls
lnx.txt  rhat.txt  ubu.txt
[ec2-user@ip-172-31-41-188 rhat]$
```