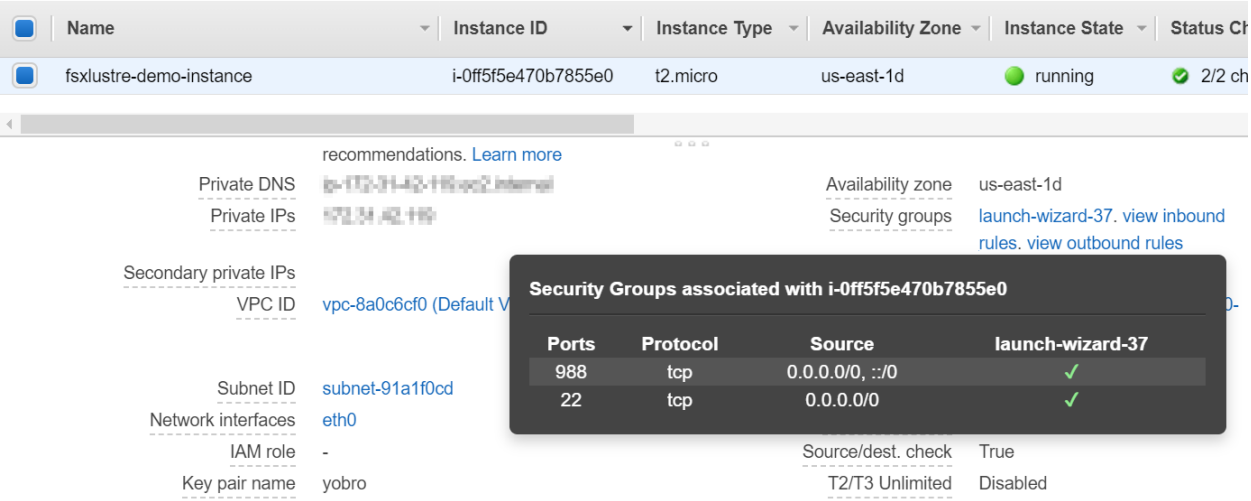
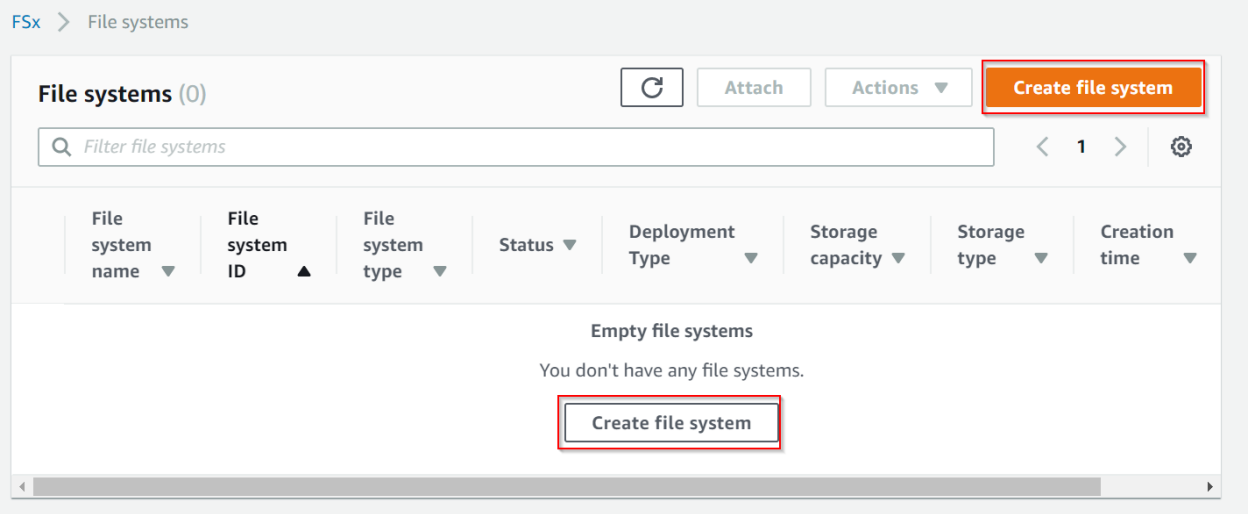
Module 10 – Hands-On: Creating a Lustre File System and Mounting it

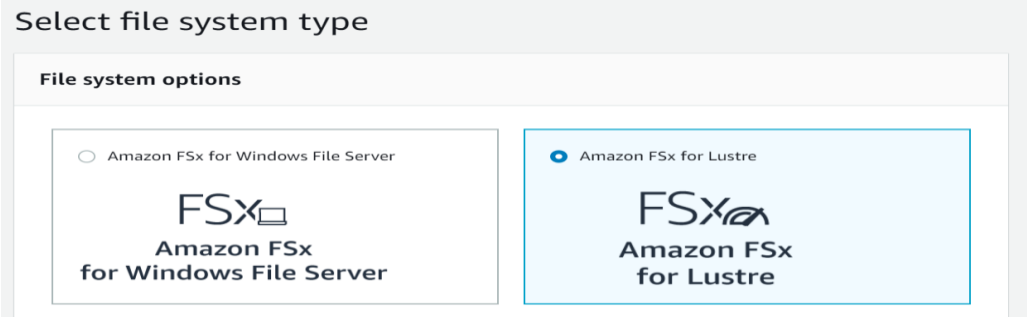
Step 1: Launch an Amazon Linux 2 instance with a custom TCP rule of port 988 open



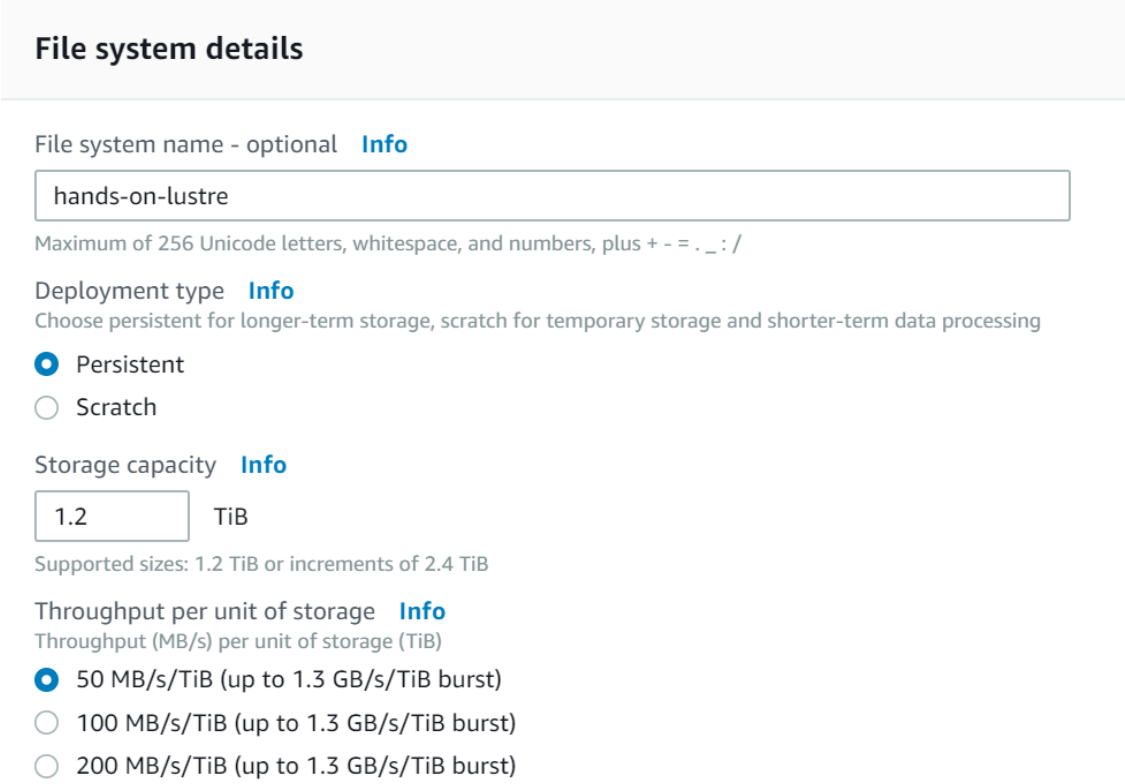
Step 2: Click on Create File System to start the process



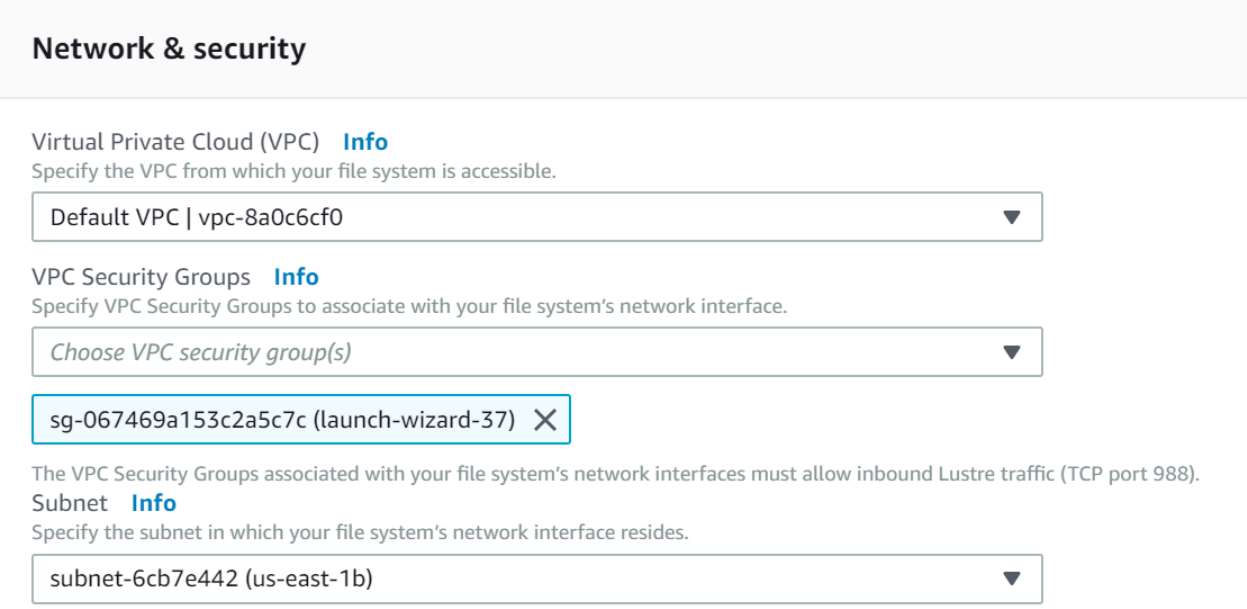
Step 3: Then choose FSx for Lustre, then go down and click Next button

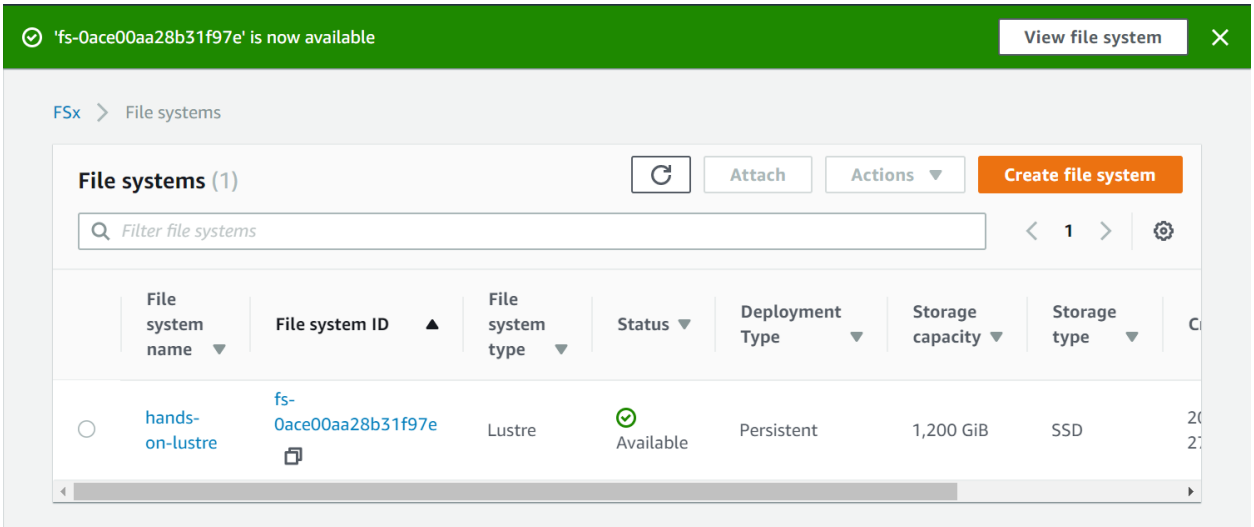


Step 4: Then put in the details to create a File system



Step 5: Under Network & Security, the VPC security group should be the same group as your EC2 instance you created in Step 1. The security group should allow inbound traffic from TCP port 988. After that go down and click Create File System.





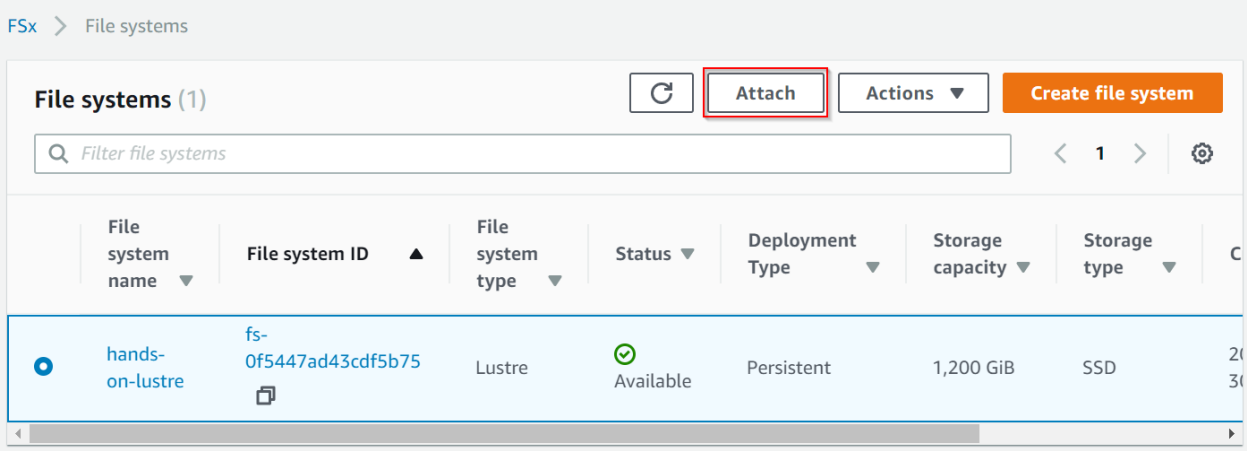
Step 6: Now install a Lustre client in your Linux EC2 instance using these commands.

To install --**sudo amazon-linux-extras install -y lustre2.10**

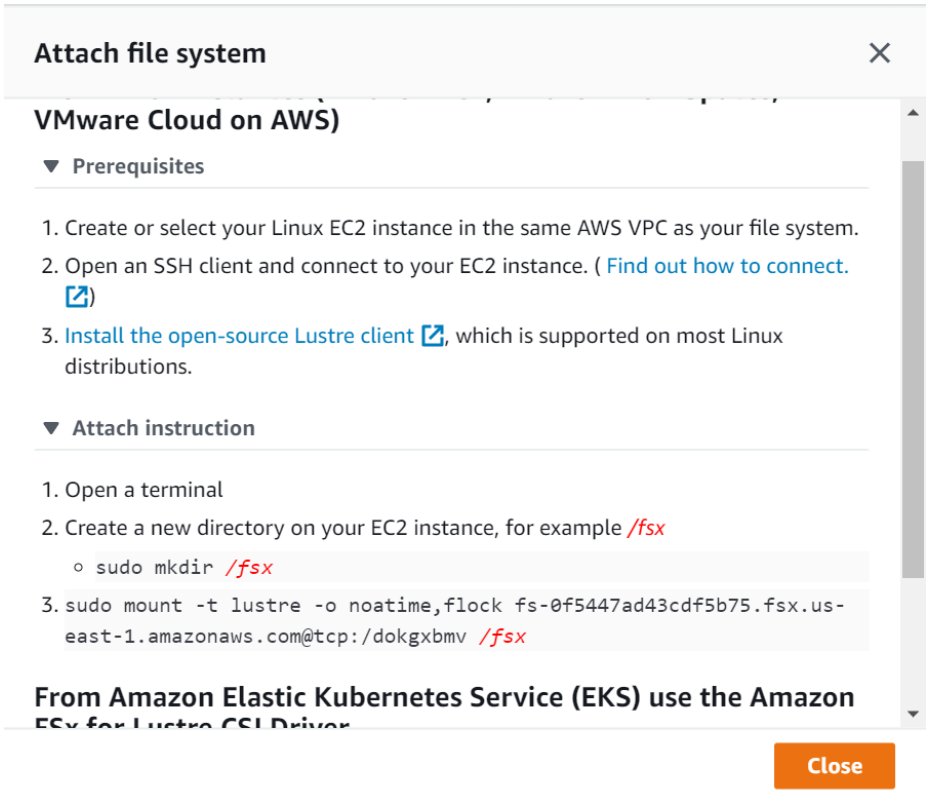
```
ec2-user@ip-172-31-42-119:~
[ec2-user@ip-172-31-42-119 ~]$ sudo amazon-linux-extras install -y lustre2.10
Installing lustre-client
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Cleaning repos: amzn2-core amzn2extra-docker amzn2extra-lustre2.10
12 metadata files removed
4 sqlite files removed
0 metadata files removed
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
amzn2-core                                               | 2.4 kB     00:00
amzn2extra-docker                                        | 1.8 kB     00:00
amzn2extra-lustre2.10                                    | 1.7 kB     00:00
(1/7): amzn2-core/2/x86_64/group_gz                        | 2.5 kB   00:00
(2/7): amzn2-core/2/x86_64/updateinfo                      | 199 kB   00:00
(3/7): amzn2extra-lustre2.10/2/x86_64/primary_db           | 4.7 kB   00:00
(4/7): amzn2extra-docker/2/x86_64/updateinfo               |   69 B   00:00
(5/7): amzn2extra-docker/2/x86_64/primary_db               |  64 kB   00:00
(6/7): amzn2extra-lustre2.10/2/x86_64/updateinfo           |   69 B   00:00
(7/7): amzn2-core/2/x86_64/primary_db                      |  39 MB   00:00
Resolving Dependencies
--> Running transaction check
---> Package lustre-client.x86_64 0:2.10.8-1.amzn2 will be installed
--> Finished Dependency Resolution

Dependencies Resolved
```

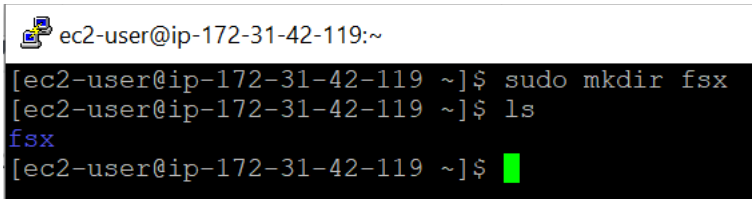
Step 7: Now go to the FSx console, choose the file system and click Attach button to check out the steps



Step 8: Use the commands provided in the Attach file system



Step 9: Use the commands provided in the Attach file system




```
[ec2-user@ip-172-31-42-119 fsx]$ sudo mount -t lustre -o noatime,flock fs-0f5447
ad43cdf5b75.fsx.us-east-1.amazonaws.com@tcp:/dokgxbmv /fsx
[ec2-user@ip-172-31-42-119 fsx]$ df -T
Filesystem                 Type      1K-blocks    Used  Available Use% Mounted
on
devtmpfs                   devtmpfs     485468       0     485468   0% /dev
tmpfs                      tmpfs        503480       0     503480   0% /dev/shm
tmpfs                      tmpfs        503480     468     503012   1% /run
tmpfs                      tmpfs        503480       0     503480   0% /sys/fs/
cgroup
/dev/xvda1                 xfs         8376300 1308336    7067964  16% /
tmpfs                      tmpfs        100700       0     100700   0% /run/use
r/1000
172.31.50.204@tcp:/dokgxbmv lustre   1168351232    4608 1168344576   1% /fsx
```

Step 10: We have successfully mounted the Lustre file system. Now, unmount the file system and delete it.

```
[ec2-user@ip-172-31-42-119 fsx]$ sudo umount /fsx
[ec2-user@ip-172-31-42-119 fsx]$ df -T
Filesystem     Type     1K-blocks    Used Available Use% Mounted on
devtmpfs       devtmpfs    485468       0    485468   0% /dev
tmpfs          tmpfs       503480       0    503480   0% /dev/shm
tmpfs          tmpfs       503480     468    503012   1% /run
tmpfs          tmpfs       503480       0    503480   0% /sys/fs/cgroup
/dev/xvda1     xfs        8376300 1308548   7067752  16% /
tmpfs          tmpfs       100700       0    100700   0% /run/user/1000
```