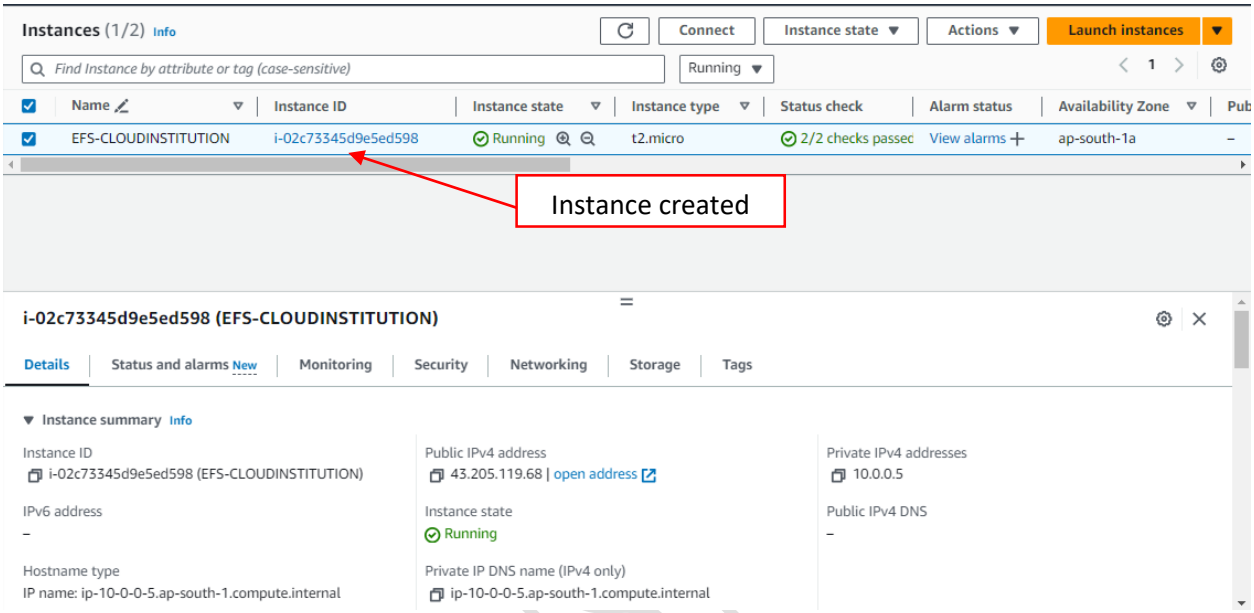
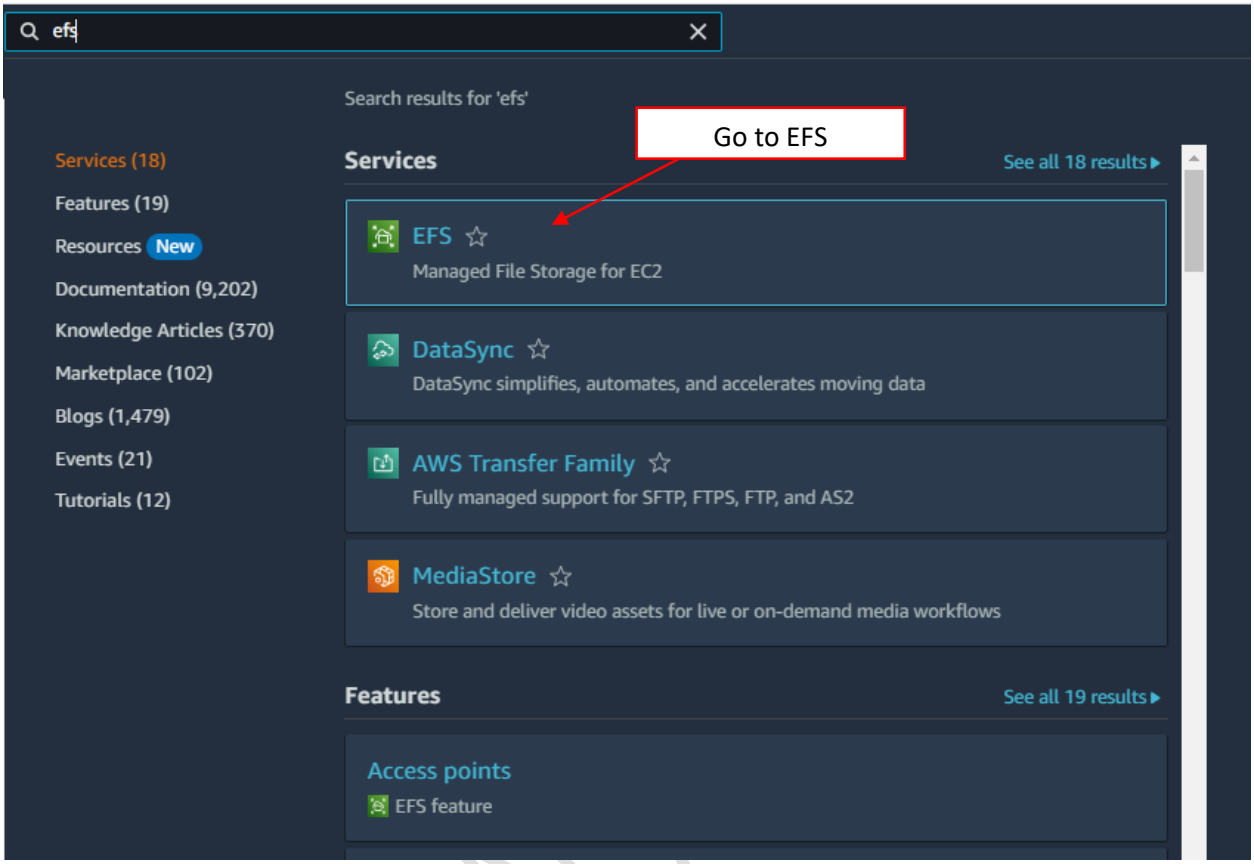
AMAZON EFS FILE SYSTEM CREATION, MOUNTING & SETTING

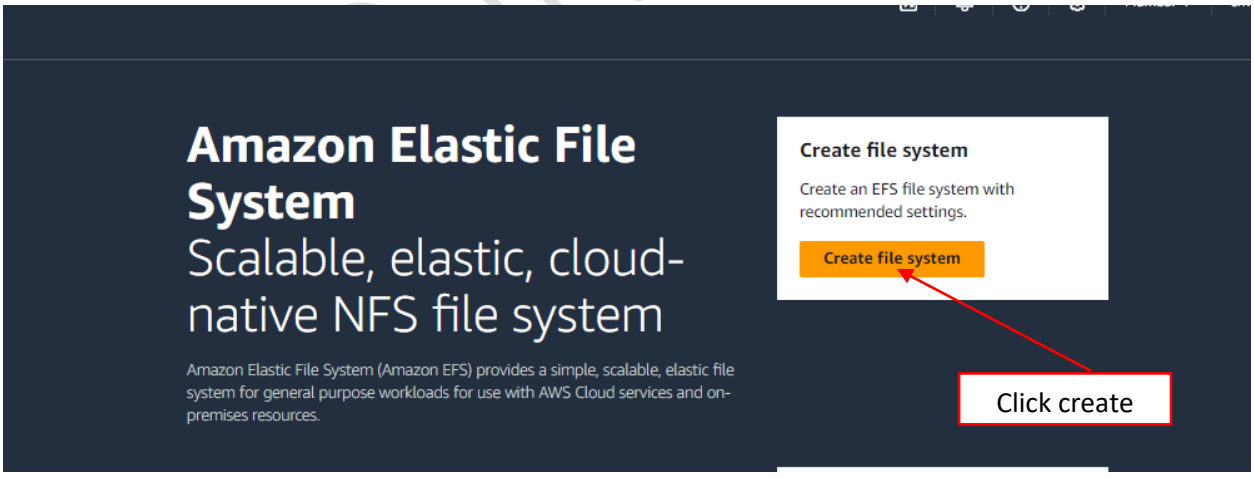
Step 1 : Create a EC2 instance

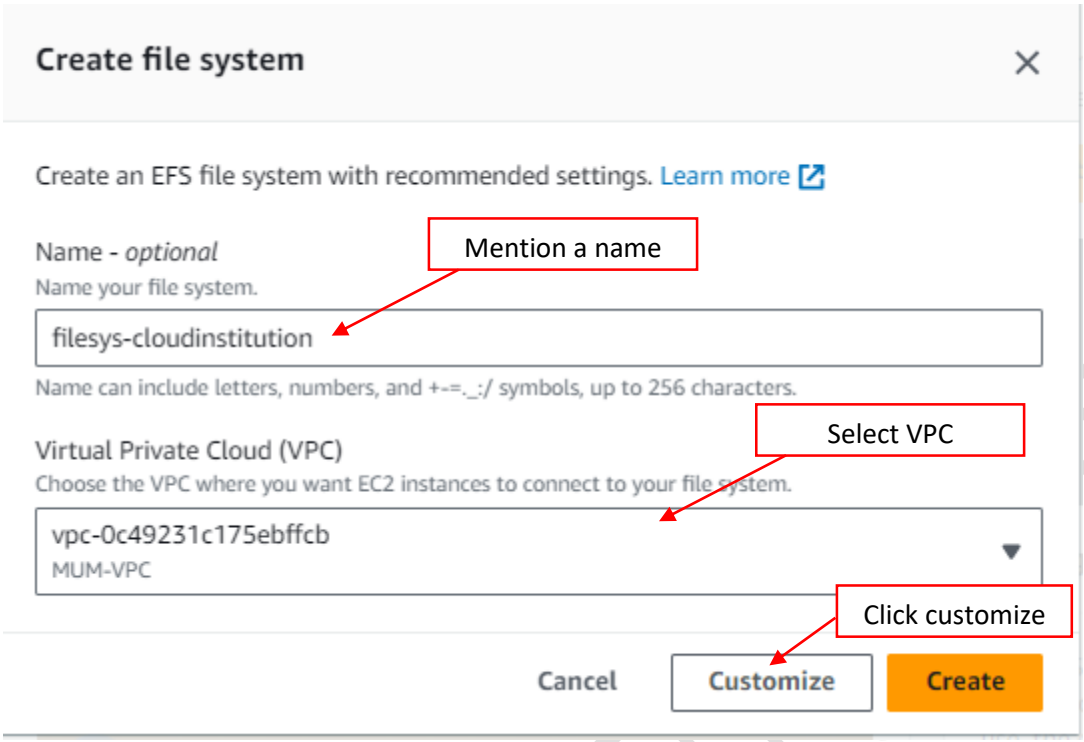
Note: While creating a security group for instance, include NFS in the inbound rules

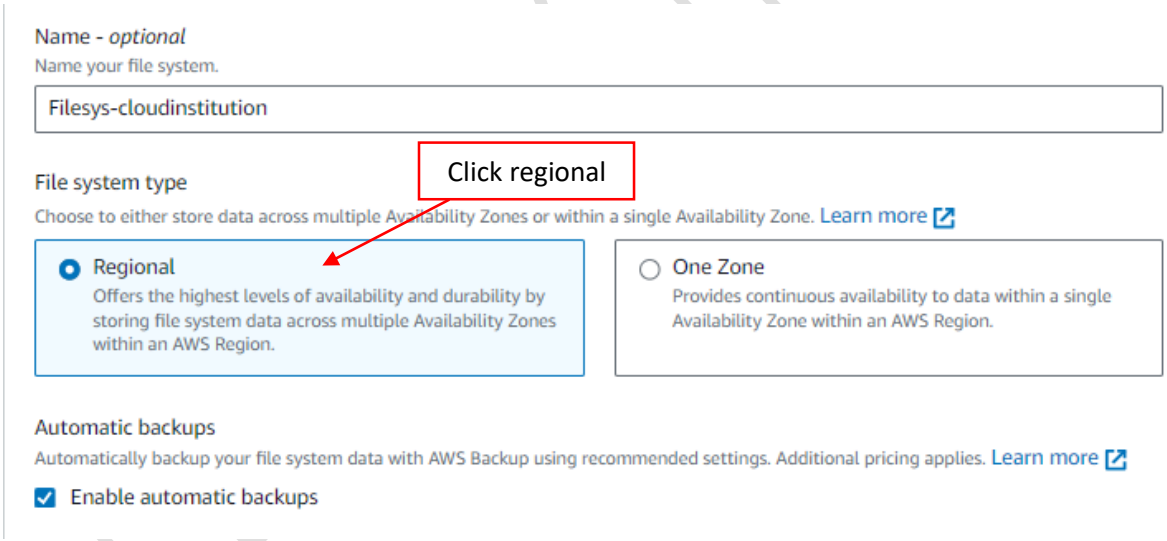


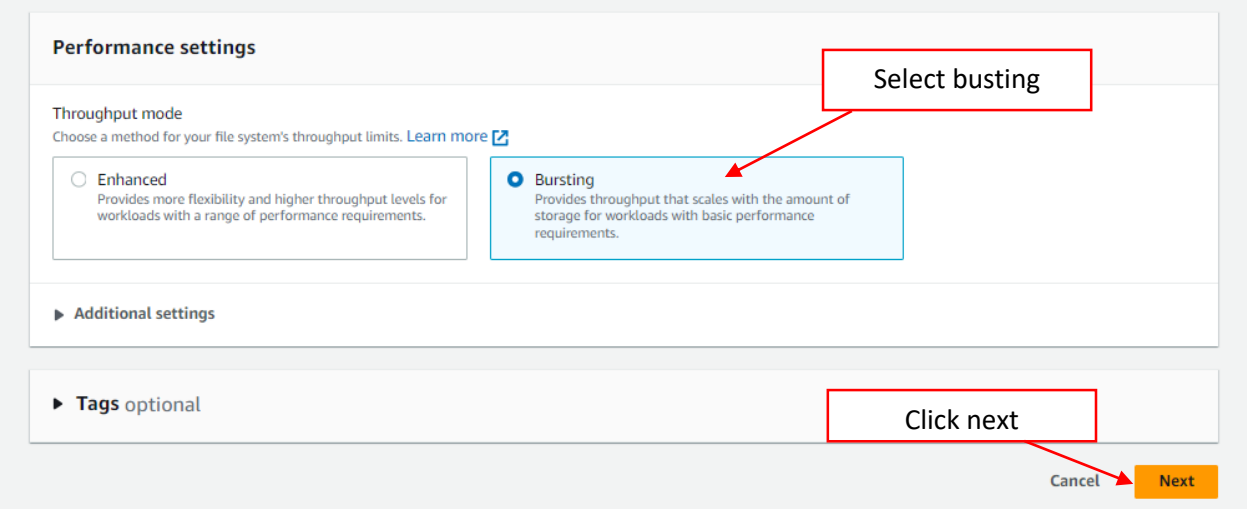
Step 2 : Create EFS

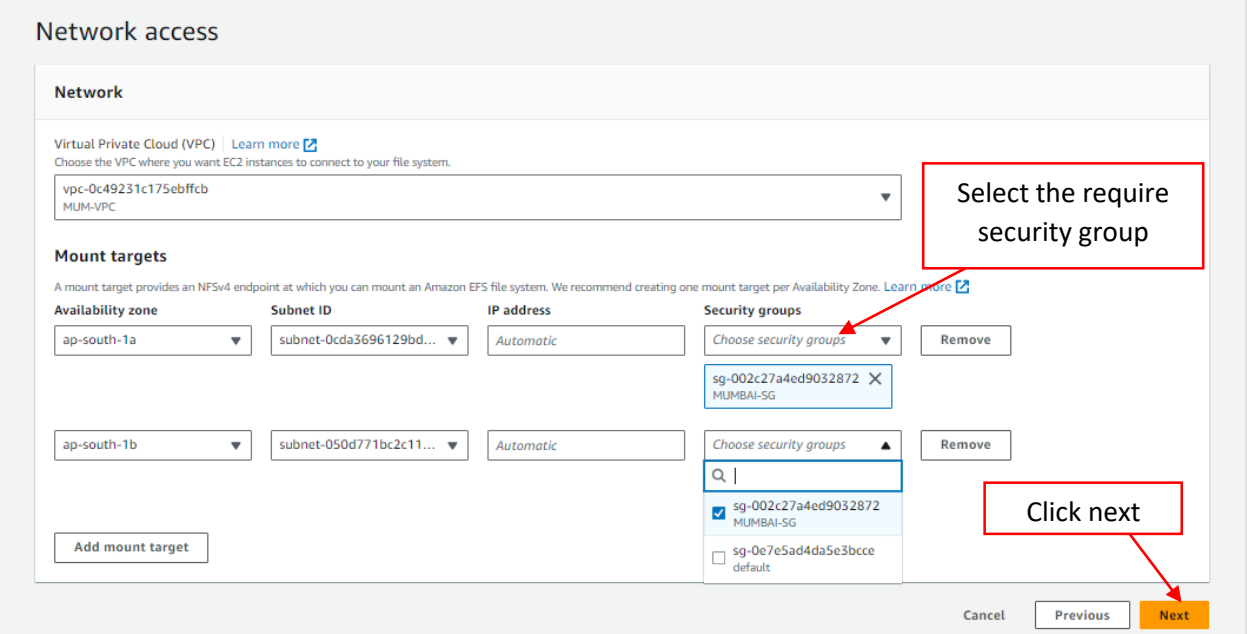


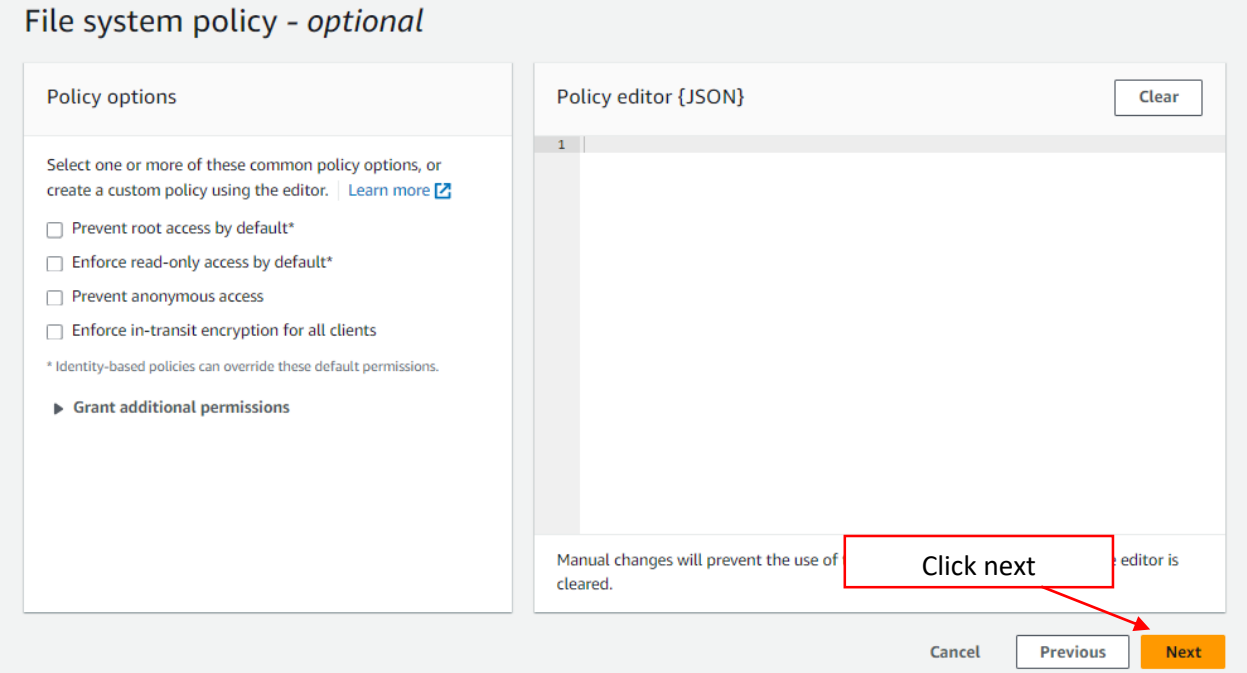


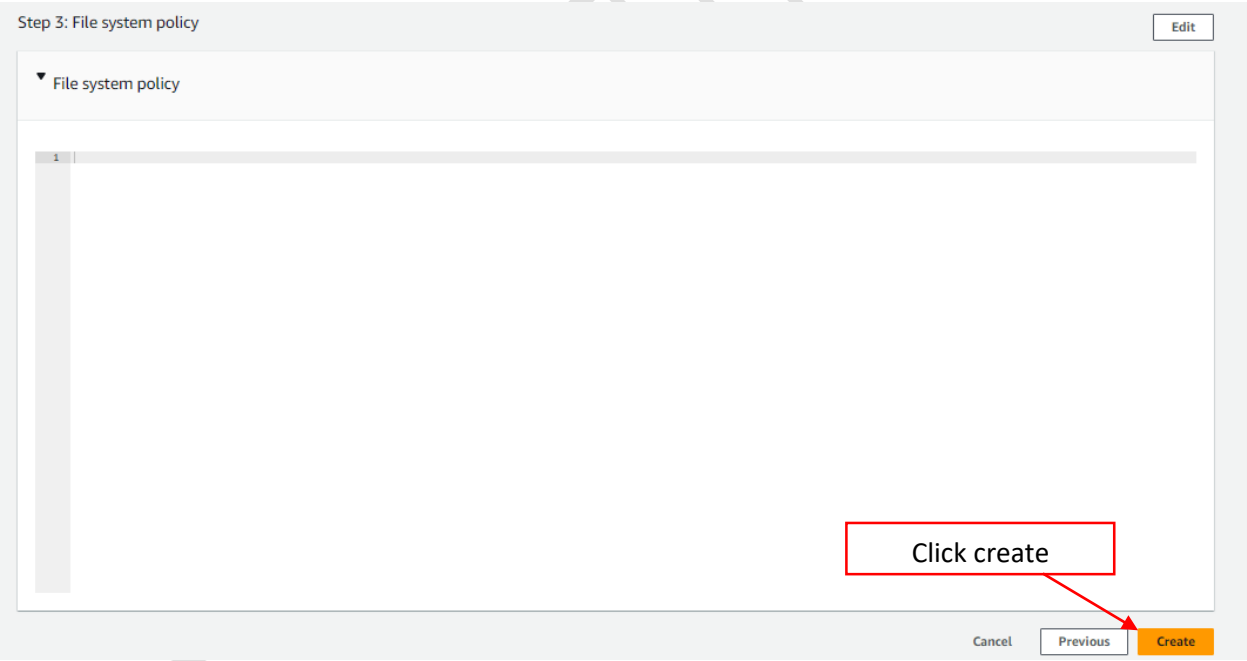

Create file system
Create an EFS file system with recommended settings. Learn more
Name - optional
Name your file system.
Mention a name
filesys-cloudinstitution
Name can include letters, numbers, and +-=._:/ symbols, up to 256 characters.
Virtual Private Cloud (VPC)
Choose the VPC where you want EC2 instances to connect to your file system.
Select VPC
vpc-0c49231c175ebffcb
MUM-VPC
Click customize
Cancel
Customize
Create

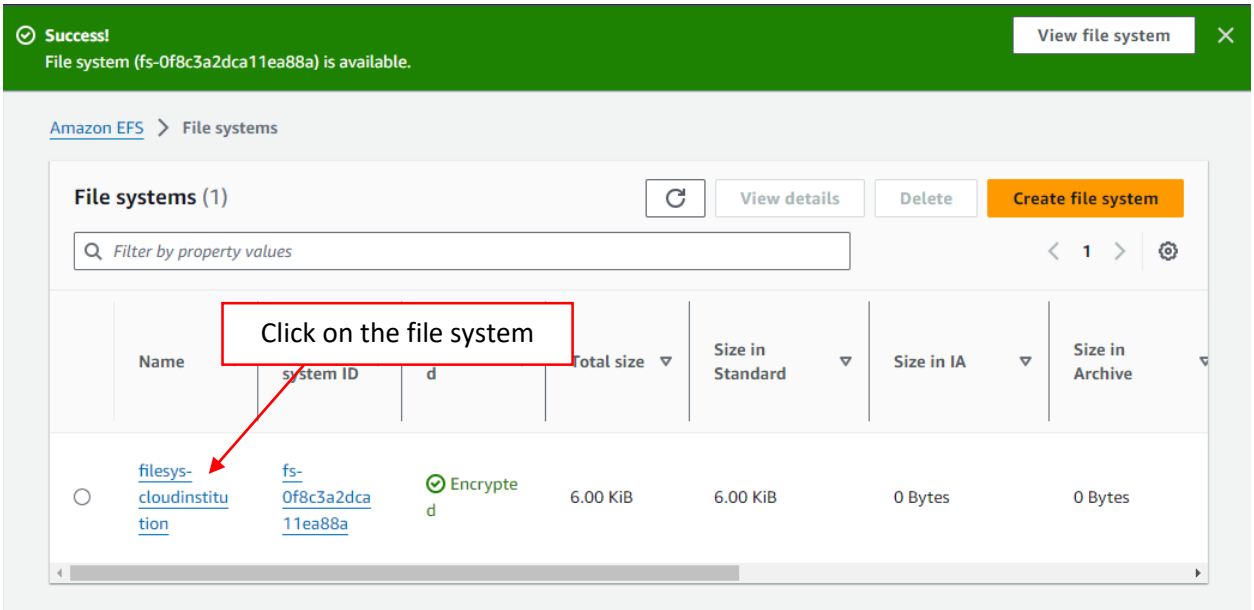

Name - optional
Name your file system.
Filesys-cloudinstitution
File system type
Click regional
Choose to either store data across multiple Availability Zones or within a single Availability Zone. Learn more
Regional
Offers the highest levels of availability and durability by storing file system data across multiple Availability Zones within an AWS Region.
One Zone
Provides continuous availability to data within a single Availability Zone within an AWS Region.
Automatic backups
Automatically backup your file system data with AWS Backup using recommended settings. Additional pricing applies. Learn more
Enable automatic backups


Performance settings
Select busting
Throughput mode
Choose a method for your file system's throughput limits. Learn more
Enhanced
Provides more flexibility and higher throughput levels for workloads with a range of performance requirements.
Bursting
Provides throughput that scales with the amount of storage for workloads with basic performance requirements.
Additional settings
Tags optional
Click next
Cancel
Next

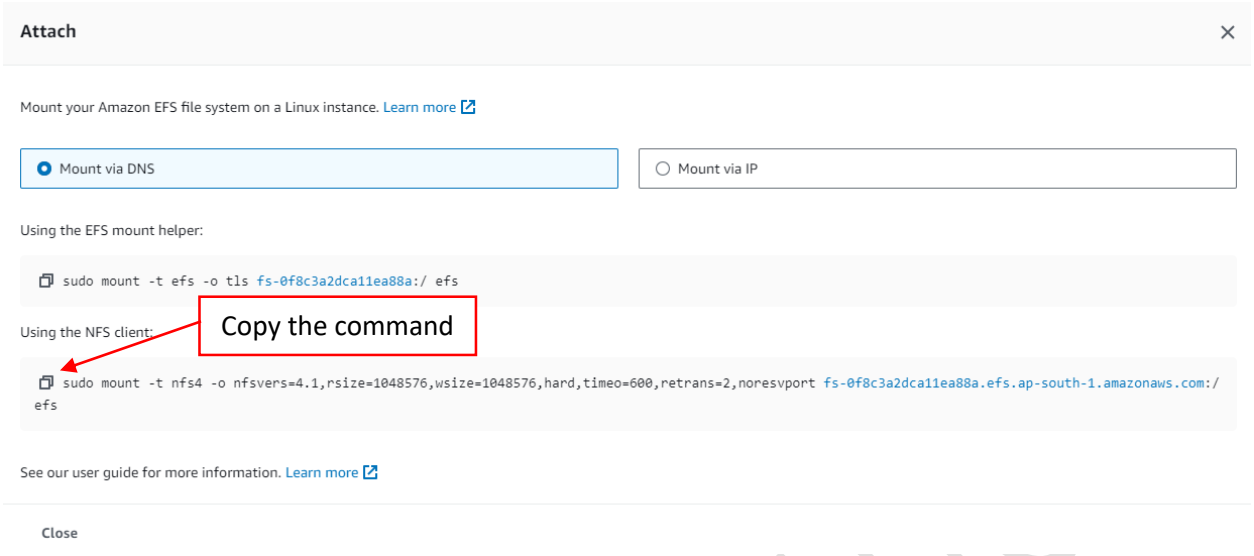

Network access
Network
Virtual Private Cloud (VPC) Learn more
Choose the VPC where you want EC2 instances to connect to your file system.
vpc-0c49231c175ebffcb
MUM-VPC
Select the require security group
Mount targets
A mount target provides an NFSv4 endpoint at which you can mount an Amazon EFS file system. We recommend creating one mount target per Availability Zone. Learn more
Availability zone
Subnet ID
IP address
Security groups
ap-south-1a
subnet-0cda3696129bd...
Automatic
Choose security groups
Remove
sg-002c27a4ed9032872
MUMBAI-SG
ap-south-1b
subnet-050d771bc2c11...
Automatic
Choose security groups
Remove
sg-002c27a4ed9032872
MUMBAI-SG
sg-0e7e5ad4da5e3bcce
default
Click next
Add mount target
Cancel
Previous
Next


File system policy - optional
Policy options
Select one or more of these common policy options, or create a custom policy using the editor. Learn more
Prevent root access by default*
Enforce read-only access by default*
Prevent anonymous access
Enforce in-transit encryption for all clients
* Identity-based policies can override these default permissions.
Grant additional permissions
Policy editor {JSON}
Clear
1
Manual changes will prevent the use of editor is cleared.
Click next
Cancel
Previous
Next

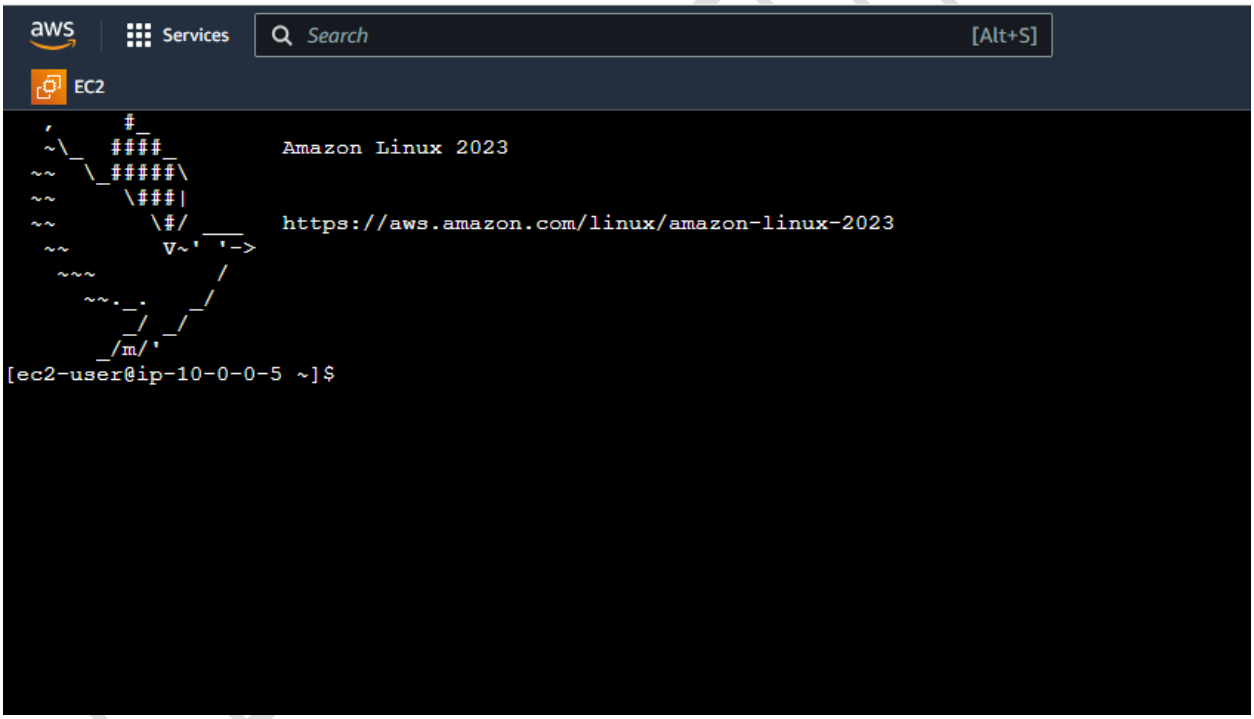

Step 3: File system policy
Edit
File system policy
1
Click create
Cancel
Previous
Create



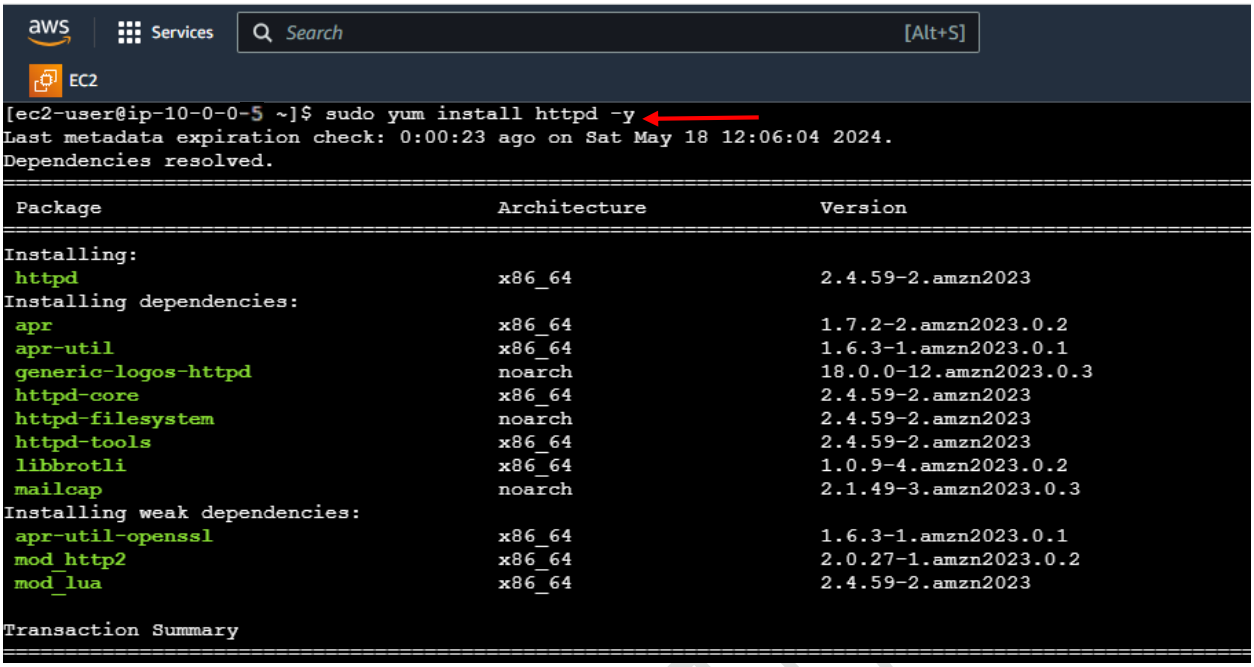
Step 3 : Attach File system to the linux machine

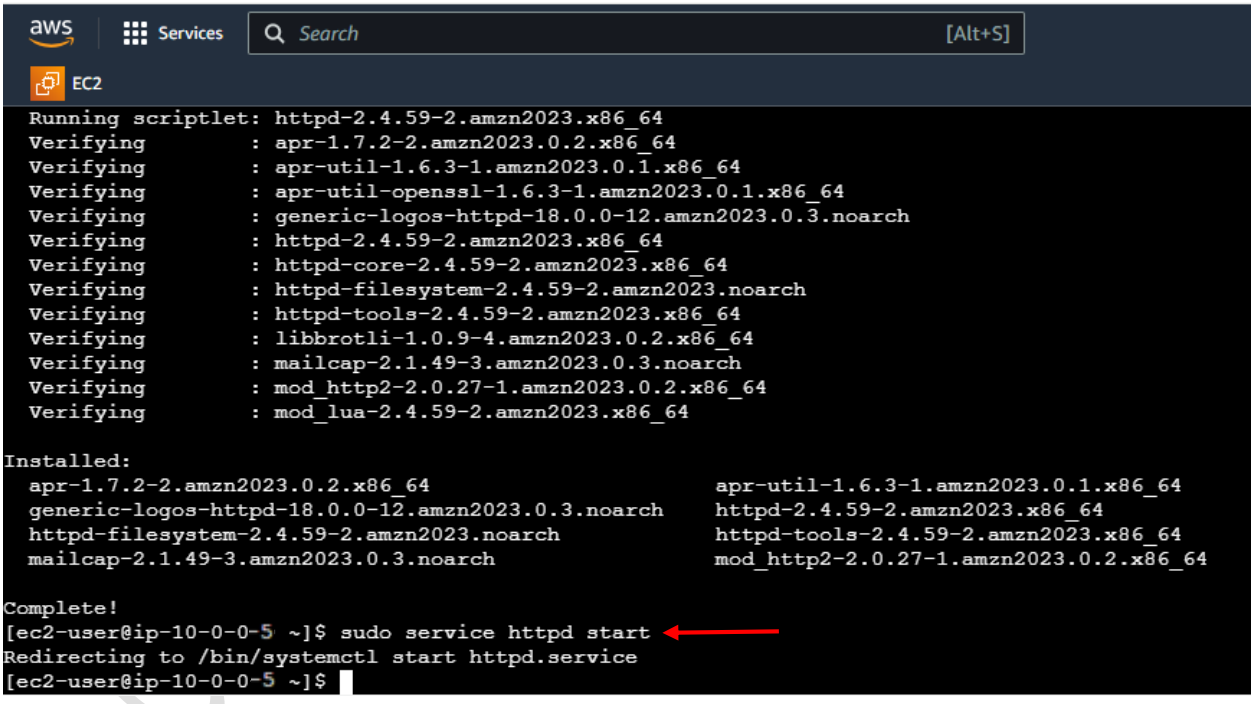


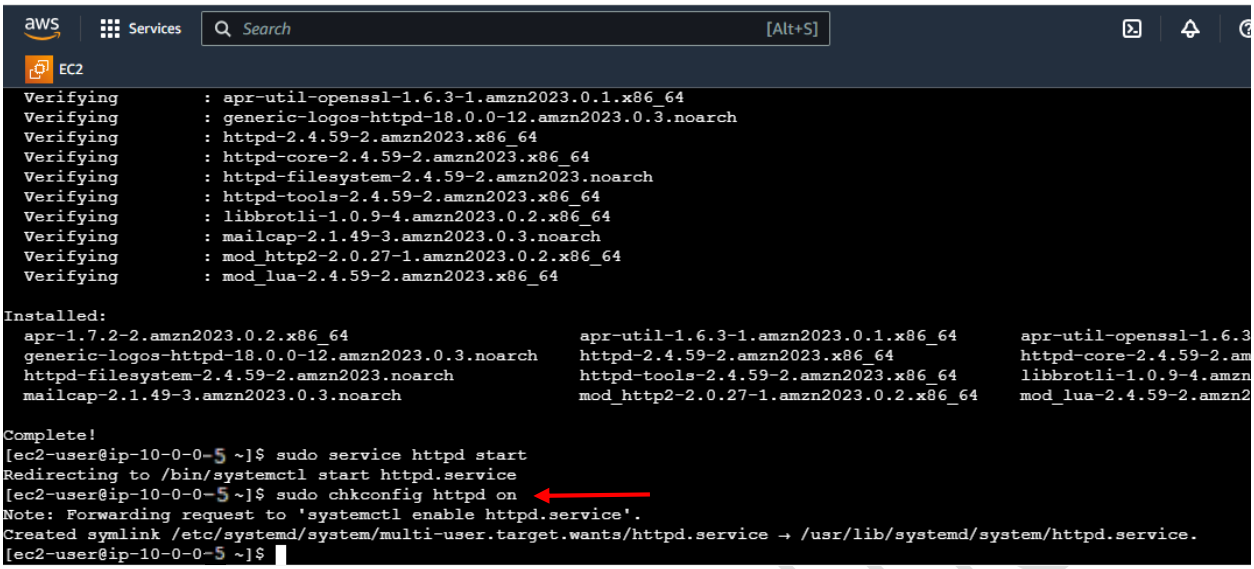
Now connect the linux instance



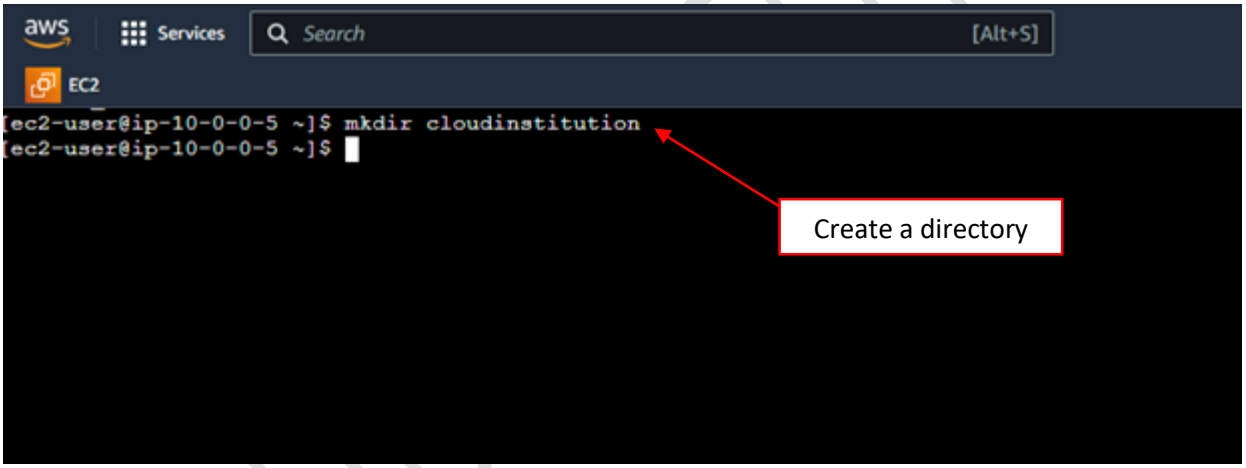
Install httpd service in the linux instance


aws
Services
Search
[Alt+S]
EC2
[ec2-user@ip-10-0-0-5 ~]$ sudo yum install httpd -y
Last metadata expiration check: 0:00:23 ago on Sat May 18 12:06:04 2024.
Dependencies resolved.
Package
Architecture
Version
Installing:
httpd
x86_64
2.4.59-2.amzn2023
Installing dependencies:
apr
x86_64
1.7.2-2.amzn2023.0.2
apr-util
x86_64
1.6.3-1.amzn2023.0.1
generic-logos-httpd
noarch
18.0.0-12.amzn2023.0.3
httpd-core
x86_64
2.4.59-2.amzn2023
httpd-filesystem
noarch
2.4.59-2.amzn2023
httpd-tools
x86_64
2.4.59-2.amzn2023
libbrotli
x86_64
1.0.9-4.amzn2023.0.2
mailcap
noarch
2.1.49-3.amzn2023.0.3
Installing weak dependencies:
apr-util-openssl
x86_64
1.6.3-1.amzn2023.0.1
mod_http2
x86_64
2.0.27-1.amzn2023.0.2
mod_lua
x86_64
2.4.59-2.amzn2023
Transaction Summary

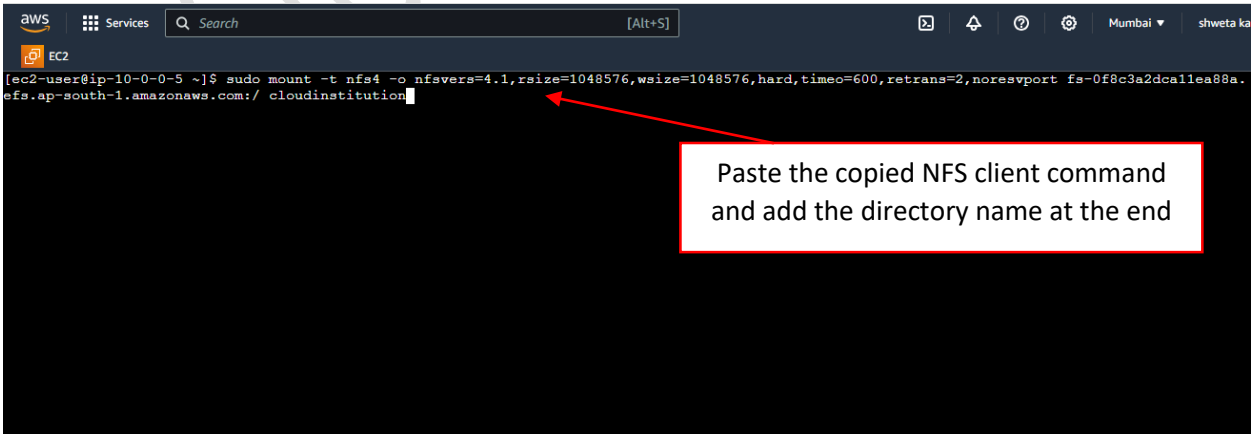

aws
Services
Search
[Alt+S]
EC2
Running scriptlet: httpd-2.4.59-2.amzn2023.x86_64
Verifying : apr-1.7.2-2.amzn2023.0.2.x86_64
Verifying : apr-util-1.6.3-1.amzn2023.0.1.x86_64
Verifying : apr-util-openssl-1.6.3-1.amzn2023.0.1.x86_64
Verifying : generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch
Verifying : httpd-2.4.59-2.amzn2023.x86_64
Verifying : httpd-core-2.4.59-2.amzn2023.x86_64
Verifying : httpd-filesystem-2.4.59-2.amzn2023.noarch
Verifying : httpd-tools-2.4.59-2.amzn2023.x86_64
Verifying : libbrotli-1.0.9-4.amzn2023.0.2.x86_64
Verifying : mailcap-2.1.49-3.amzn2023.0.3.noarch
Verifying : mod_http2-2.0.27-1.amzn2023.0.2.x86_64
Verifying : mod_lua-2.4.59-2.amzn2023.x86_64
Installed:
apr-1.7.2-2.amzn2023.0.2.x86_64
apr-util-1.6.3-1.amzn2023.0.1.x86_64
generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch
httpd-2.4.59-2.amzn2023.x86_64
httpd-filesystem-2.4.59-2.amzn2023.noarch
httpd-tools-2.4.59-2.amzn2023.x86_64
mailcap-2.1.49-3.amzn2023.0.3.noarch
mod_http2-2.0.27-1.amzn2023.0.2.x86_64
Complete!
[ec2-user@ip-10-0-0-5 ~]$ sudo service httpd start
Redirecting to /bin/systemctl start httpd.service
[ec2-user@ip-10-0-0-5 ~]$



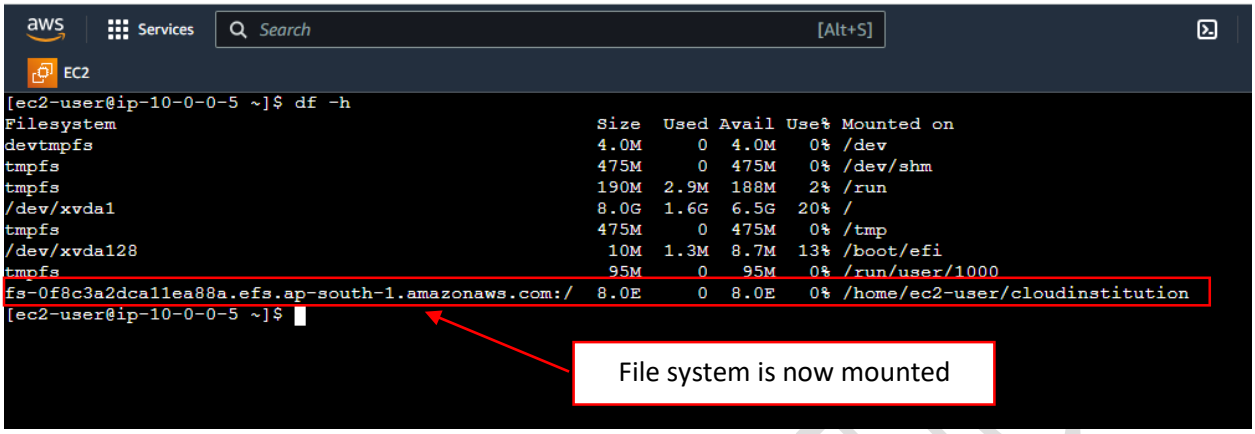
Now create a directory



Now mount the EFS in the linux instance

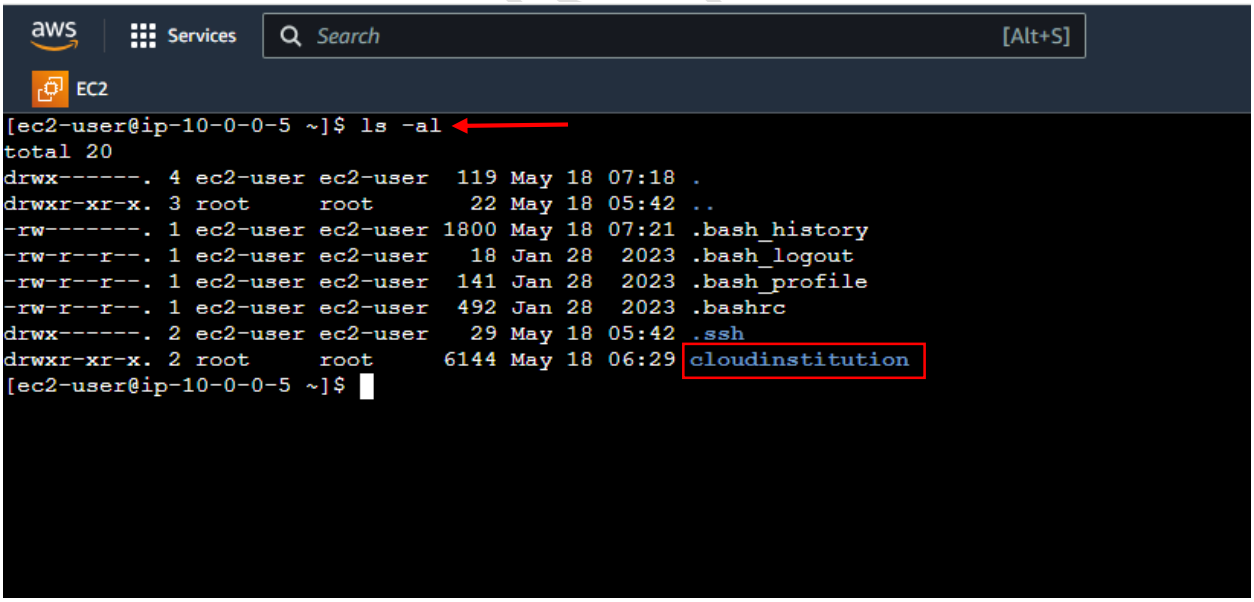


The **df -h** command is used in Linux to display information about the disk space usage of all mounted filesystems

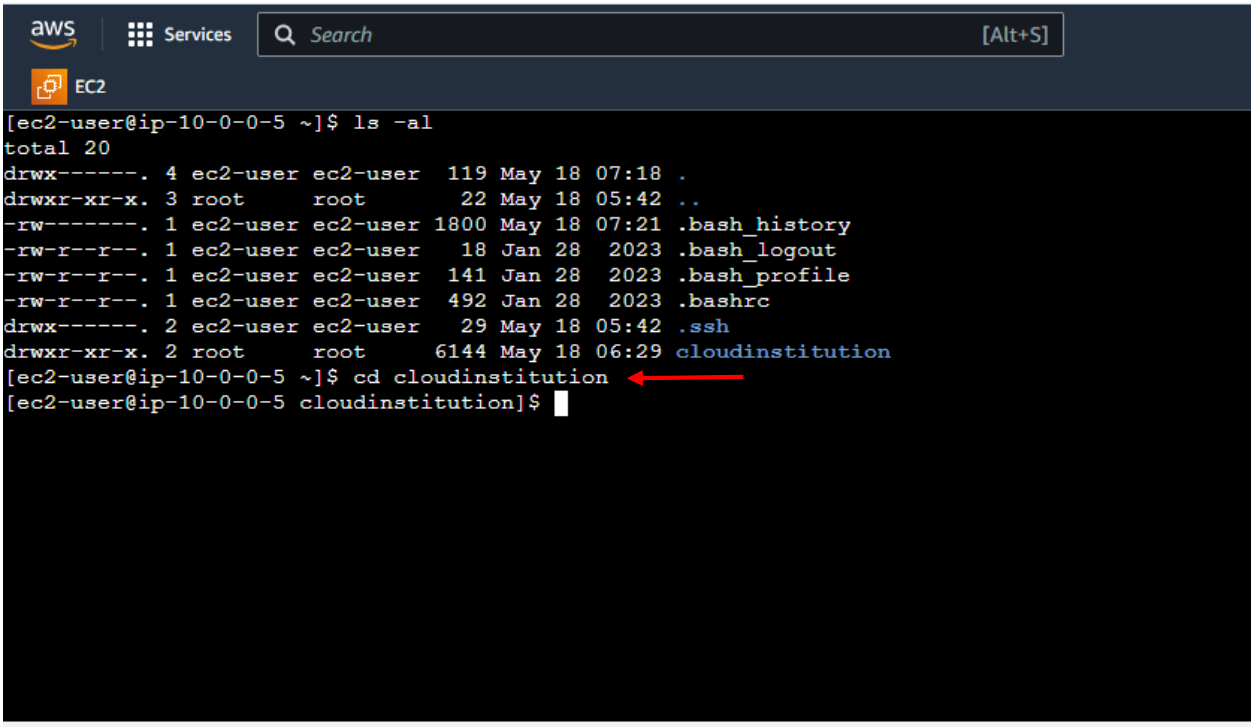


Step 4 : Mount a file to the linux instance

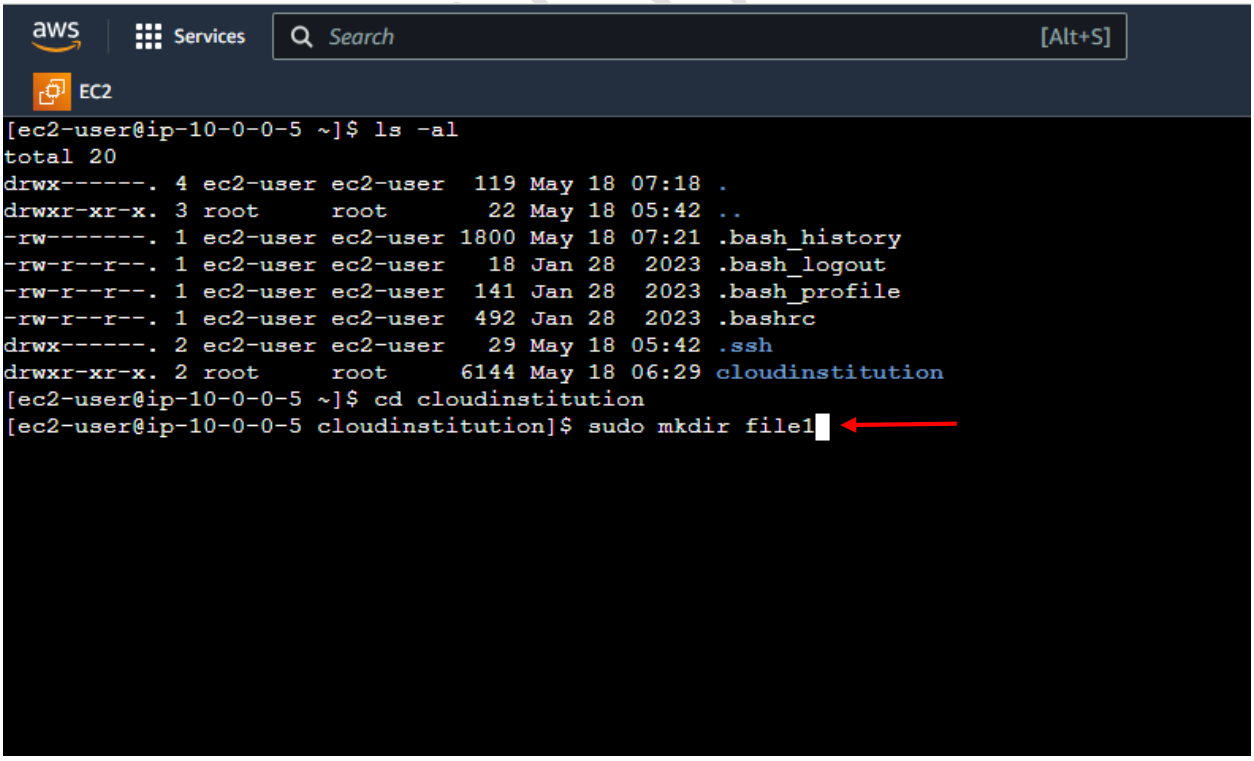
The **ls -al** command is used to list the contents of a directory in long format, including hidden files.



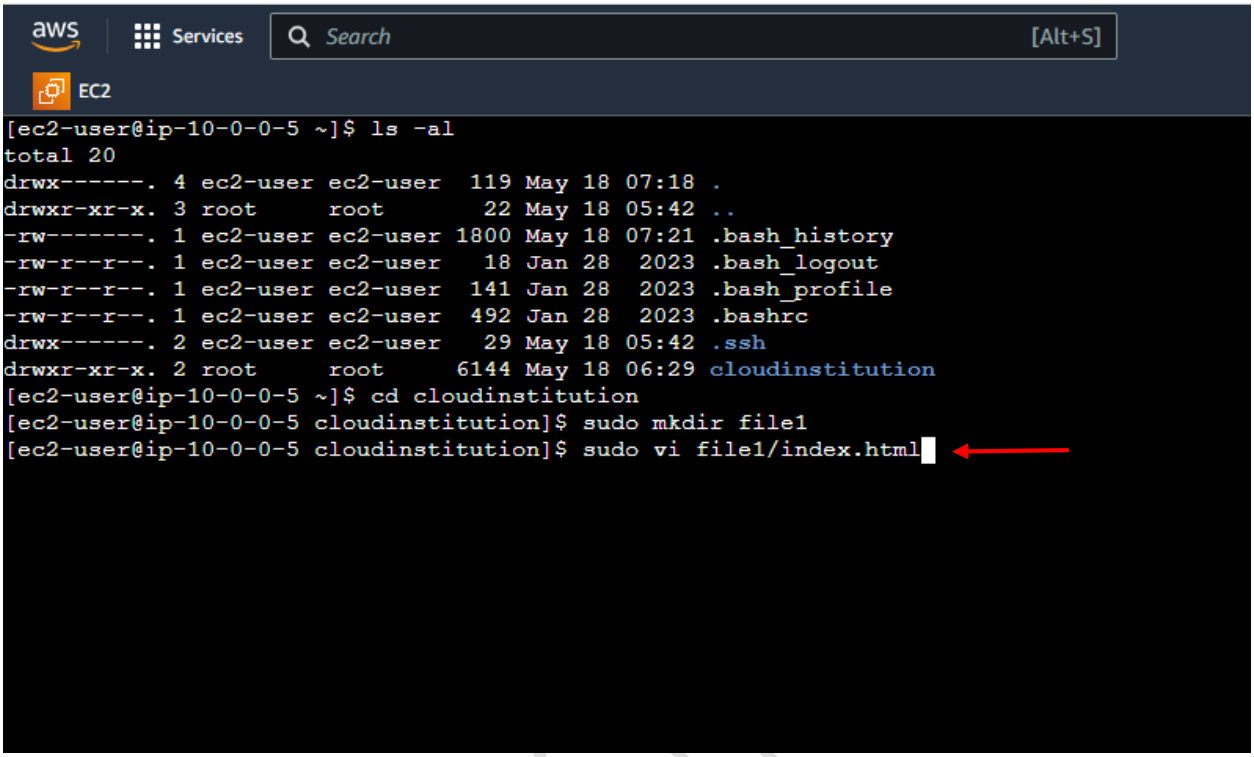
Go to the cloudinstitution directory

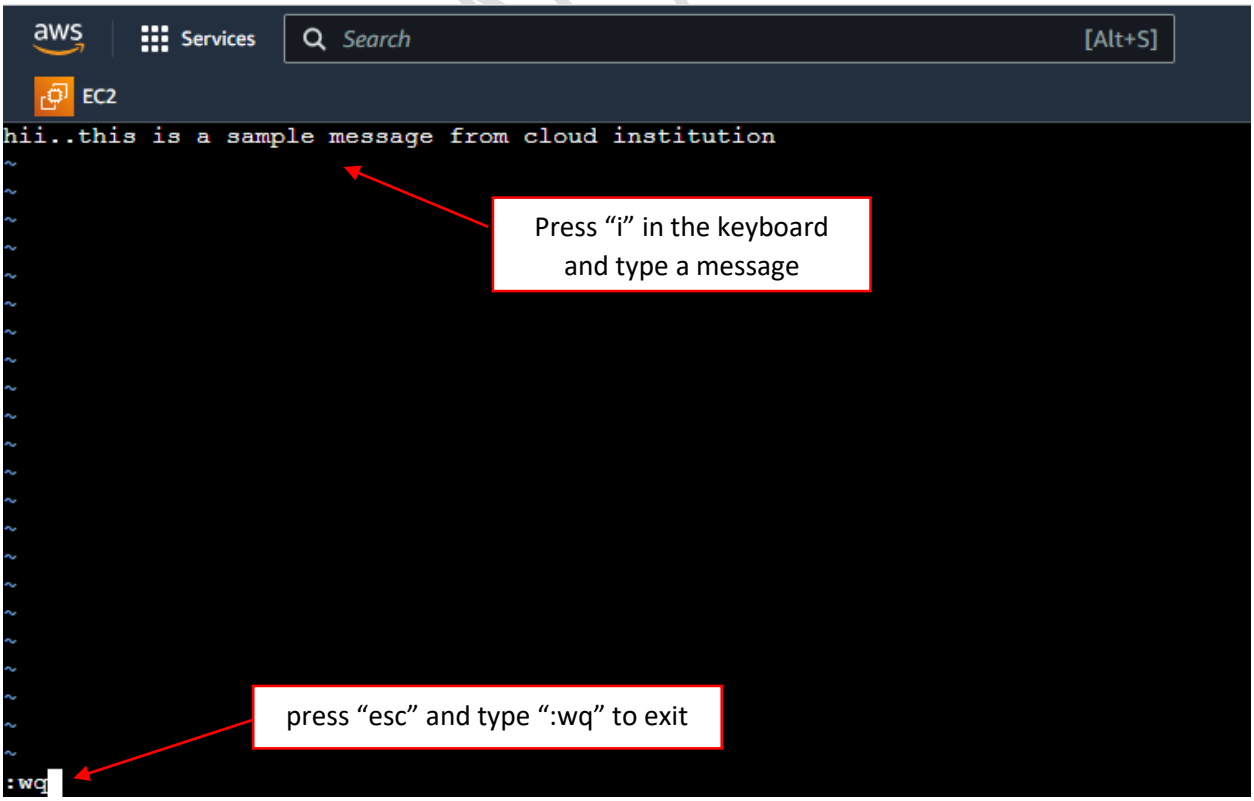


Create a directory and name it as file1

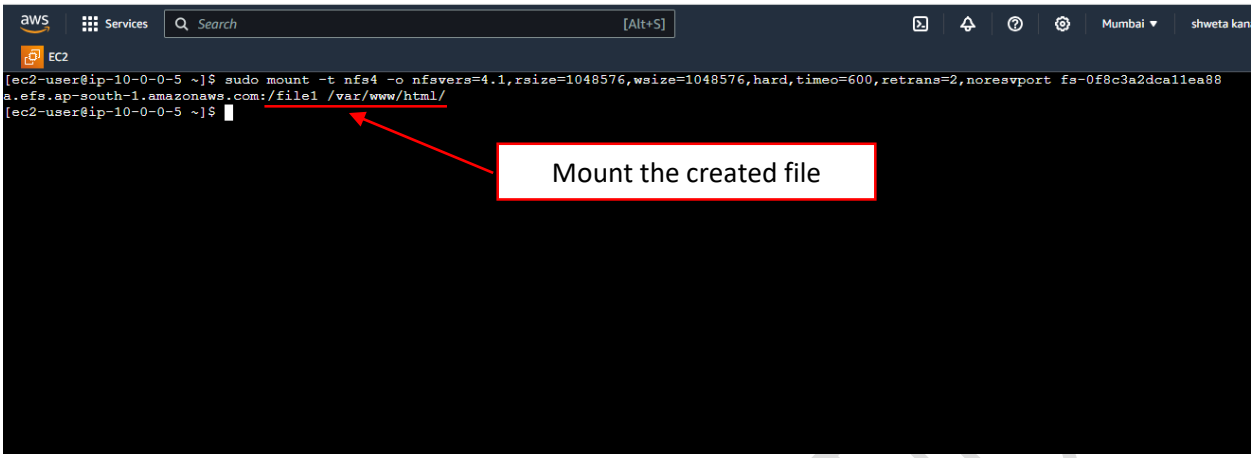


Create a index.html file inside the directory

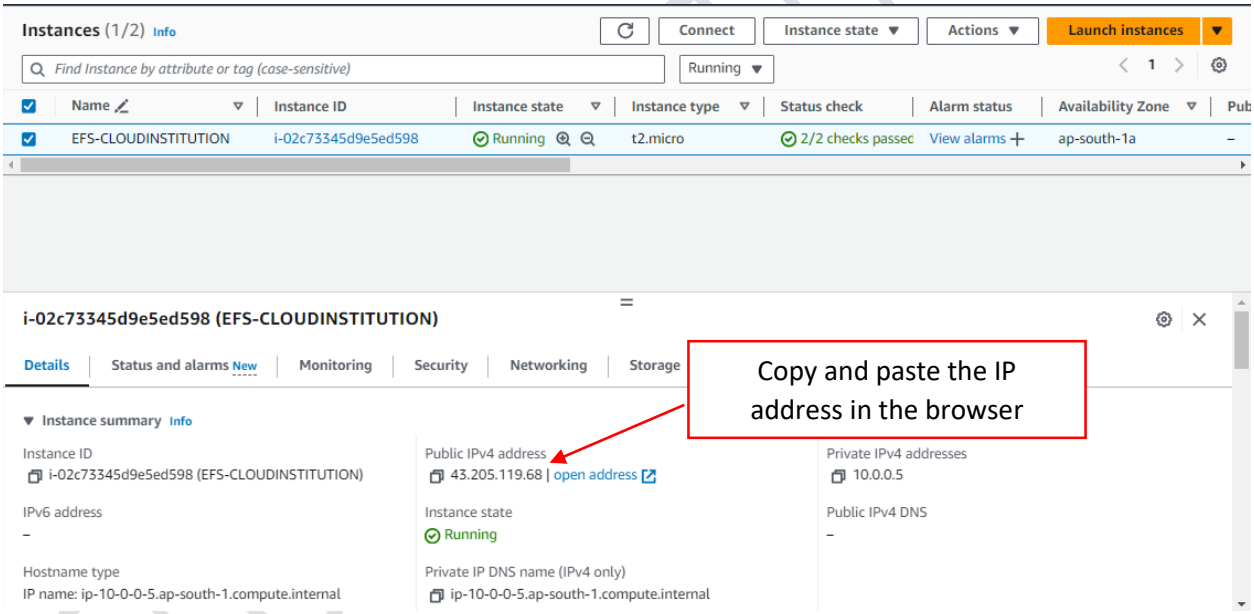


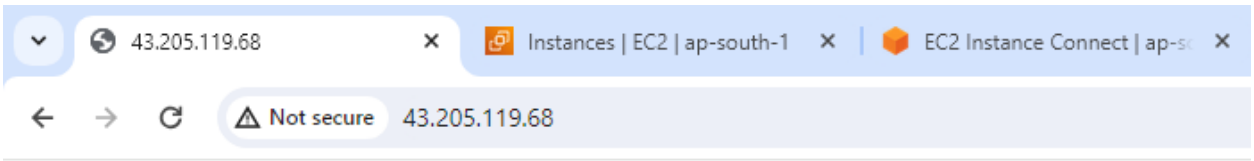


Now copy and paste the NFS client code from file system console



Step 5 : Go to the EC2 instance page





hii..this is a sample message from cloud institution