

POC : EFS

Amazon Elastic File System

Simple, serverless, set-and-forget, elastic file system

Step 1 : Create atleast two EC2 Instances. With Security group SSH protocol port no 22, and NFS Protocol Port Number 2049.

Step 6: Configure Security Group

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below. [Learn more](#) about Amazon EC2 security groups.

Assign a security group: ☒ Create a new security group ☐ Select an existing security group

Security group name:

Description:

Type	Protocol	Port Range	Source	Description
SSH	TCP	22	Custom 0.0.0.0/0	e.g. SSH for Admin Desktop
NFS	TCP	2049	Anywhere 0.0.0.0/0:::0	e.g. SSH for Admin Desktop
All traffic	All	0 - 65535	Anywhere 0.0.0.0/0:::0	e.g. SSH for Admin Desktop

[Add Rule](#)

[Cancel](#) [Previous](#) [Review and Launch](#)

Step 2 : Here the first Instance efs-server-A (with NFS protocol)

Instances (1/3) Info

Name	Instance ID	Instance state	Instance type	Status check	Ala...	Avail...	Public IPv4 DNS
LinuxforTer...	i-0978b518b2b857cd4	Stopped	t2.micro	-	N. +	us-east-1d	-
-	i-0ebf9e01f82929ee3	Stopped	t2.micro	-	N. +	us-east-1d	-
<input checked="" type="checkbox"/> efs-server-A	i-07bab4a418b36ba74	Running	t2.micro	-	N. +	us-east-1a	ec2-174-129-170-10.compute-

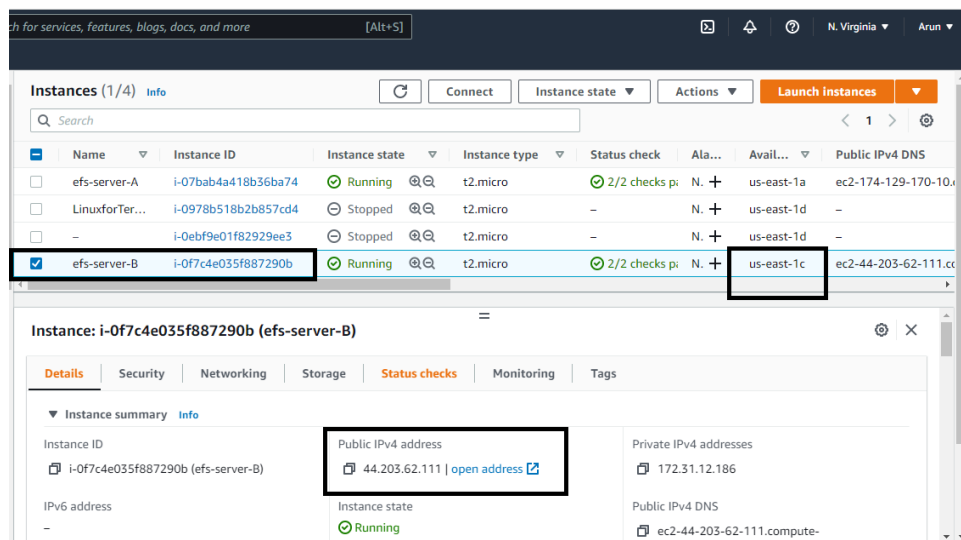
Instance: i-07bab4a418b36ba74 (efs-server-A)

Details | Security | Networking | Storage | Status checks | Monitoring | Tags

▼ Instance summary Info

Instance ID	i-07bab4a418b36ba74 (efs-server-A)	Public IPv4 address	174.129.170.10 open address	Private IPv4 addresses	172.31.23.91
IPv6 address	-	Instance state	Running	Public IPv4 DNS	ec2-174-129-170-10.compute-

Step 3 : Here the second instance efs-server-B (with NFS protocol)



Step 4 : Connect the server A Instance perform the basic NFS commands .

```
sudo su -
```

```
sudo hostnamectl set-hostname efs-server-A
```

```
exec bash
```

```
sudo yum update -y
```

```
sudo yum install -y amazon-efs-utils
```

```
sudo service nfs start
```

```
sudo service nfs status
```

```
Mkdir efs
```

```

Complete!
[root@efs-server-a ~]# sudo service status nfs
The service command supports only basic LSB actions (start, stop, restart, try-restart, reload, force-reload, status). For
other actions, please try to use systemctl.
[root@efs-server-a ~]# sudo service nfs status
Redirecting to /bin/systemctl status nfs.service
● nfs-server.service - NFS server and services
   Loaded: loaded (/usr/lib/systemd/system/nfs-server.service; disabled; vendor preset: disabled)
   Active: inactive (dead)
[root@efs-server-a ~]# sudo service nfs start
Redirecting to /bin/systemctl start nfs.service
[root@efs-server-a ~]# sudo service nfs status
Redirecting to /bin/systemctl status nfs.service
● nfs-server.service - NFS server and services
   Loaded: loaded (/usr/lib/systemd/system/nfs-server.service; disabled; vendor preset: disabled)
   Active: active (exited) since Tue 2022-03-08 12:18:28 UTC; 4s ago
     Process: 4004 ExecStart=/usr/sbin/rpc.nfsd $RPCNFSDARGS (code=exited, status=0/SUCCESS)
     Process: 4000 ExecStartPre=/bin/sh -c /bin/kill -HUP `cat /run/gssproxy.pid` (code=exited, status=0/SUCCESS)
     Process: 3998 ExecStartPre=/usr/sbin/exportfs -r (code=exited, status=0/SUCCESS)
    Main PID: 4004 (code=exited, status=0/SUCCESS)
   CGroup: /system.slice/nfs-server.service

Mar 08 12:18:27 efs-server-a systemd[1]: Starting NFS server and services...
Mar 08 12:18:28 efs-server-a systemd[1]: Started NFS server and services.
[root@efs-server-a ~]#

```

Step5 : Similarly Connect the server B Instance perform the basic NFS commands

sudo su -

sudo hostnamectl set-hostname efs-server-B

exec bash

sudo yum update -y

sudo yum install -y amazon-efs-utils

sudo service nfs start

sudo service nfs status

Mkdir efs

Step 6 : now goto management console, search for NFS >> create EFS file system
>> give Name >> enter create

res, blogs, docs, and more [Alt+S]

Create file system

Create an EFS file system with service recommended settings. [Learn more](#)

Name - optional
Name your file system.

MYEFS

Name must not be longer than 255 characters, and must only contain letters, numbers, and these characters: + - = . _ : /

Virtual Private Cloud (VPC)
Choose the VPC where you want EC2 instances to connect to your file system. [Learn more](#)


vpc-03858f2d50a4bce0a
default

Availability and durability
Choose Regional (recommended) to create a file system using regional storage classes. Choose One Zone to create a file system using One Zone storage classes. [Learn more](#)

☒ **Regional**
Stores data redundantly across multiple AZs

☐ **One Zone**
Stores data redundantly within a single AZ

Cancel Customize **Create**





Step 7 : Goto view details

services, features, blogs, docs, and more [Alt+S]

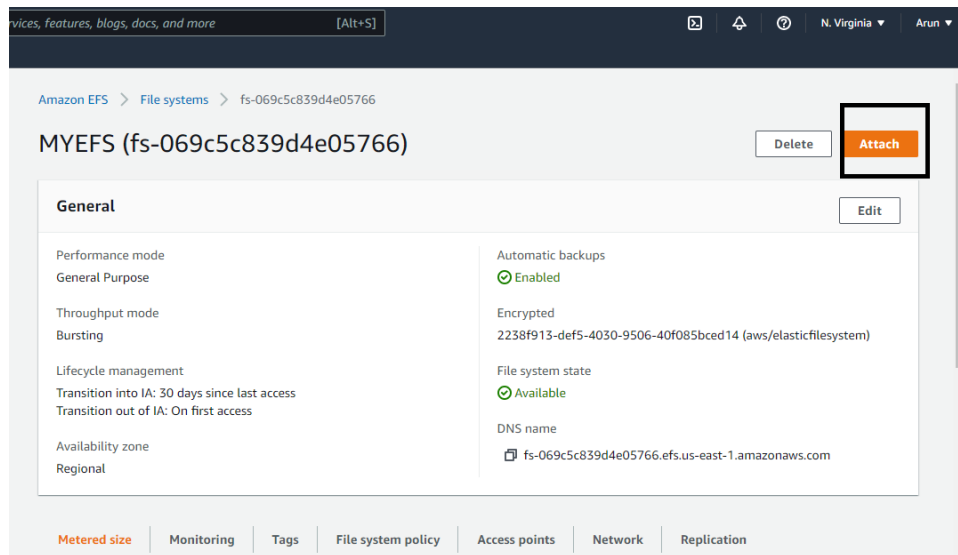
Amazon EFS > File systems

File systems (1) [View details](#) [Delete](#) [Create file system](#)

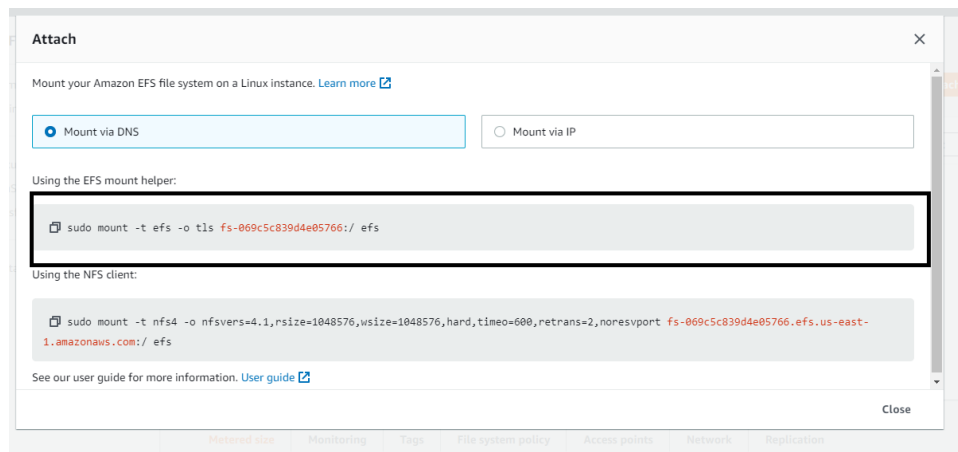
Filter by property values

Name	File system ID	Encrypted	Total size	Size in Standard / One Zone	Size in Standard-IA / One Zone-IA	Provisioned Throughput (MiB/s)
 MYEFS	fs-069c5c839d4e05766	 Encrypted	6.00 KiB	6.00 KiB	0 Bytes	-

Step 8: click Attach

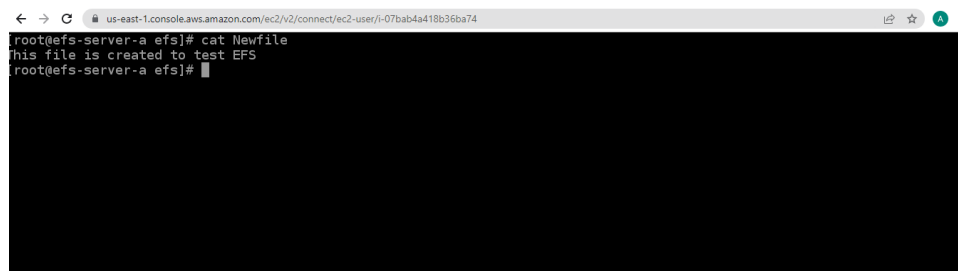


Step 9 : Now copy the code



Step 10 : Paste it in server A and Server B

Then create one file in the efs folder in any of the instance , then notedown that if any changes occurs , its reflect in the other Instance



```
us-east-1.console.aws.amazon.com/ec2/v2/connect/ec2-user/i-0f7c4e035f887290b
[root@efs-server-b efs]# cat Newfile
This file is created to test EFS
[root@efs-server-b efs]#
```

Hence Proved