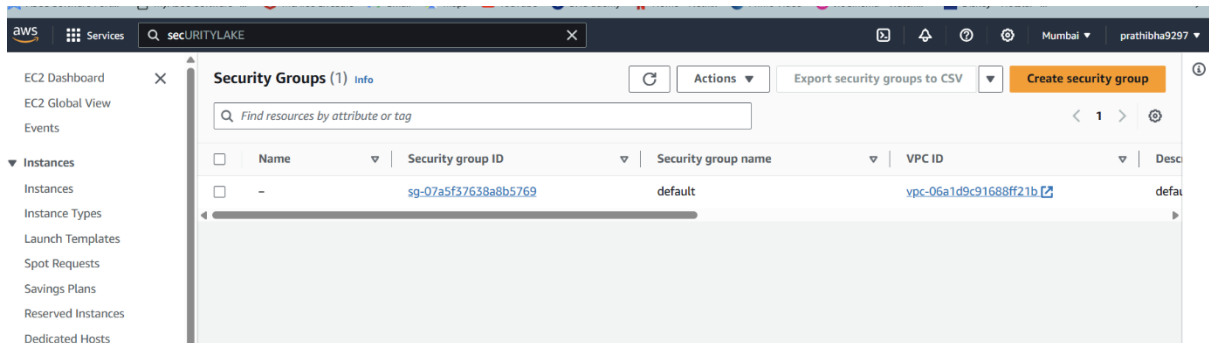


ELASTIC FILE SYSTEM(EFS)

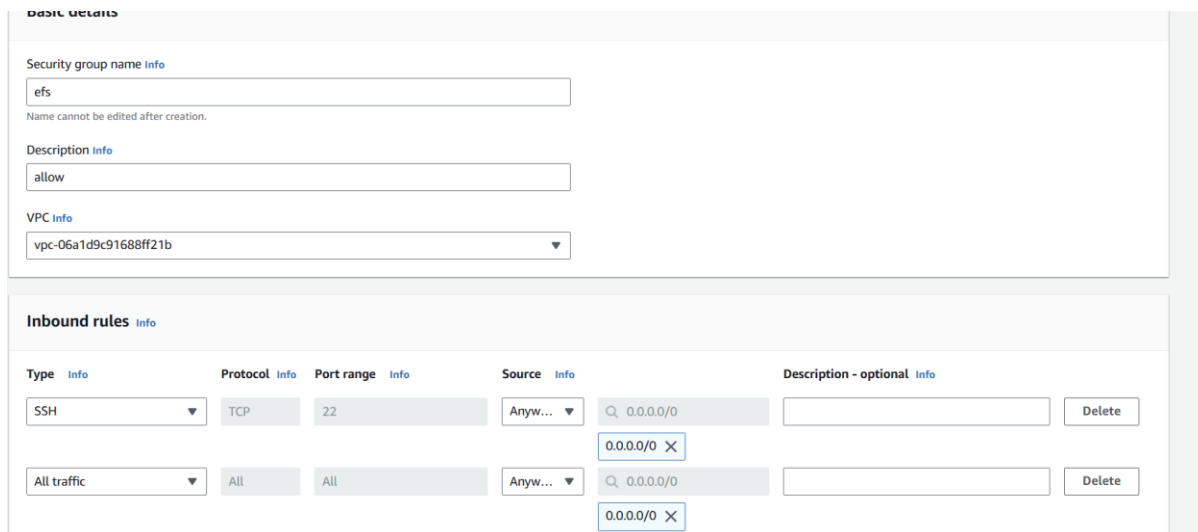
Amazon Elastic File System (EFS) is designed to provide serverless, fully elastic file storage that lets you share file data without provisioning or managing storage capacity and performance.

Step1:

Security group: Go to security group in AWS console and click on create security group.



- Give name tag as efs for security group and enter allow in Description.
- Add inbound rules as shown in below slide.



Basic details

Security group name [Info](#)
efs
Name cannot be edited after creation.

Description [Info](#)
allow

VPC [Info](#)
vpc-06a1d9c91688ff21b

Inbound rules [Info](#)

Type	Protocol	Port range	Source	Description - optional
SSH	TCP	22	Anyw... 0.0.0.0/0	
All traffic	All	All	Anyw... 0.0.0.0/0	

Step 2:

EFS(Elastic file system):

- Go to EFS and click on create file system.
- Give name tag as efs.
- Go to network settings and select created security group for all availability zones
- Remaining fields in efs leave as default and click on create efs as shown in below slides.

Amazon EFS > File systems > Create

Step 1
File system settings

Step 2
Network access

Step 3 - optional
File system policy

Step 4
Review and create

File system settings

General

Name - optional
Name your file system.

efs

File system type
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**

Lifecycle management
Automatically save money as access patterns change by moving files into the Infrequent Access (IA) or Archive storage class. [Learn more](#)

[Transition into Infrequent Access](#) [Transition into Archive](#) [Transition into Standard](#)

Network access

Network

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

vpc-06a1d9c91688ff21b
default

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-0fe7fbc3874a0d65f	Automatic	Choose security groups sg-0ef55c94835ca2aa7 efs	Remove
ap-south-1b	subnet-0530c6f7a2deb2de4	Automatic	Choose security groups sg-0ef55c94835ca2aa7 efs	Remove
ap-south-1c	subnet-08b0ec8a4aefd4dc	Automatic	Choose security groups sg-0ef55c94835ca2aa7 efs	Remove

[Add mount target](#)
You can only create one mount target per Availability Zone.

Cancel Previous **Next**

Step 3:

Instance1:

- Go to EC2 dashboard and click on launch instance.
- Give name tag as efs-instance1 and select AWS Linux.
- Select key pair.
- Go to network settings and select subnet as ap-south-1a
- Enable the Auto-assign public IP
- Click on select existing security group and select the security group.
- Click edit in file system and click on add shared file system
- Click on launch instance.

Name and tags [Info](#)


Name

[Add additional tags](#)

▼ Application and OS Images (Amazon Machine Image) [Info](#)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

Quick Start

Amazon
Linux


macOS



Ubuntu



Windows



Red Hat



SUSE Li



[Browse more AMIs](#)

Including AMIs from
AWS, Marketplace and
the Community

VPC - required [Info](#)

vpc-06a1d9c91688ff21b
172.31.0.0/16

(default) ▼



Subnet [Info](#)

subnet-0fe7fbc3874a0d65f

VPC: vpc-06a1d9c91688ff21b Owner: 891377141179
Availability Zone: ap-south-1a Zone type: Availability Zone
IP addresses available: 4090 CIDR: 172.31.32.0/20



[Create new subnet](#)

Auto-assign public IP [Info](#)

Enable ▼

Additional charges apply when outside of free tier allowance

Firewall (security groups) [Info](#)

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

☐ Create security group

☒ Select existing security group

Common security groups [Info](#)

Select security groups ▼

efs sg-0ef55c94835ca2aa7 ✕
VPC: vpc-06a1d9c91688ff21b



[Compare security group rules](#)

Security groups that you add or remove here will be added to or removed from all your network interfaces.

► [Advanced network configuration](#)

▼ Summary

Number of instances [Info](#)

1

Software Image (AMI)

Amazon Linux 2023 AMI 2023.5.2...[read more](#)
ami-0a4408457f9a03be3

Virtual server type (instance type)

t2.micro

Firewall (security group)

efs

Storage (volumes)

1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which

[Cancel](#)

[Launch instance](#)

[Review commands](#)

File systems

Hide details

☒ EFS

☐ FSx

▼ Shared file system 1

Remove

File system

Info

fs-085940be0f3c3de56

Name: efs Availability: Regional

Mount point

Info

/mnt/efs/fs1

Add shared file system

Create new shared file system

4 remaining (Up to 5 file systems maximum).

☒ Automatically create and attach security groups
 To enable access to the file system, the required security groups will be automatically created and attached to this instance and the selected file system. To manually manage the security groups, clear the checkbox. [Learn more.](#)

☒ Automatically mount shared file system by attaching required user data script
 Automatically mount your file system by updating your user data to install efs-utils. If you would like to manually mount your file system, clear the checkbox.

Number of instances

Info

1

Software Image (AMI)

Amazon Linux 2023 AMI 2023.5.2...[read more](#)

ami-0a4408457f9a03be3

Virtual server type (instance type)

t2.micro

Firewall (security group)

efs

Storage (volumes)

1 volume(s) - 8 GiB

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Cancel

Launch instance

[Review commands](#)

Instance2:

- Go to EC2 dashboard and click on launch instance.
- Give name tag as efs-instance2 and select AWS Linux.
- Select key pair.
- Go to network settings and select subnet as ap-south-1b
- Enable the Auto-assign public IP
- Click on select existing security group and select the security group.
- Click edit in file system and click on add shared file system
- Click on launch instance.

Name and tags [Info](#)

Name

efs-instance2

[Add additional tags](#)

▼ Application and OS Images (Amazon Machine Image) [Info](#)

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 Search our full catalog including 1000s of application and OS images

Recents

Quick Start

Amazon
Linux



macOS



Ubuntu



Windows



Red Hat



SUSE Li



[Browse more AMIs](#)

Including AMIs from
AWS, Marketplace and
the Community

▼ Network settings [Info](#)

VPC - required [Info](#)

vpc-06a1d9c91688ff21b
172.31.0.0/16

(default) ▼



Subnet [Info](#)

subnet-0530c6f7a2deb2de4

VPC: vpc-06a1d9c91688ff21b Owner: 891377141179
Availability Zone: ap-south-1b Zone type: Availability Zone
IP addresses available: 4090 CIDR: 172.31.0.0/20



[Create new subnet](#) 

Auto-assign public IP [Info](#)

Enable ▼

Additional charges apply when outside of [free tier allowance](#)

Firewall (security groups) [Info](#)

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

☐ Create security group

☒ Select existing security group

Common security groups [Info](#)

Select security groups ▼

efs sg-0ef55c94835ca2aa7 ✕
VPC: vpc-06a1d9c91688ff21b



[Compare security
group rules](#)

Security groups that you add or remove here will be added to or removed from all your network interfaces.

File systems

[Hide details](#)

☒ EFS
 ☐ FSx

Shared file system 1

[Remove](#)

File system

[Info](#)

fs-085940be0f3c3de56

Name: efs
Availability: Regional

Mount point

[Info](#)

/mnt/efs/fs1

[Add shared file system](#)

[Create new shared file system](#)

4 remaining (Up to 5 file systems maximum).

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Automatically mount your file system by updating your user data to install efs-utils. If you would like to manually mount your file system, clear the checkbox.

Advanced details

[Info](#)

Number of instances

[Info](#)

1

Software Image (AMI)

Amazon Linux 2023 AMI 2023.5.2...[read more](#)

ami-0a4408457f9a03be3

Virtual server type (instance type)

t2.micro

Firewall (security group)

efs

Storage (volumes)

1 volume(s) - 8 GiB

[Free tier:](#) In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which

[Cancel](#)

[Launch instance](#)

[Review commands](#)

- Connect to the efs-instance1 and efs-instance2

Connect to instance

[Info](#)

Connect to your instance i-0d6667fcc9e705748 (efs-instance1) using any of these options

EC2 Instance Connect

Session Manager

SSH client

EC2 serial console

All ports are open to all IPv4 addresses in your security group

All ports are currently open to all IPv4 addresses, indicated by **All** and **0.0.0.0/0** in the inbound rule in [your security group](#). For increased security, consider restricting access to only the EC2 Instance Connect service IP addresses for your Region: 13.233.177.0/29. [Learn more.](#)

Instance ID

i-0d6667fcc9e705748 (efs-instance1)

Connection Type

☒ Connect using EC2 Instance Connect

Connect using the EC2 Instance Connect browser-based client, with a public IPv4 address.

☐ Connect using EC2 Instance Connect Endpoint

Connect using the EC2 Instance Connect browser-based client, with a private IPv4 address and a VPC endpoint.

Public IP address

3.111.198.24

Username

Enter the username defined in the AMI used to launch the instance. If you didn't define a custom username, use the default username, ec2-user.

ec2-user

Note: In most cases, the default username, ec2-user, is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

[Cancel](#)

[Connect](#)

- Once connected to the server change to root user using `sudo -i`
- Change directory using `cd /mnt/efs/fs1`
- Create file1 as shown in below slide.

