



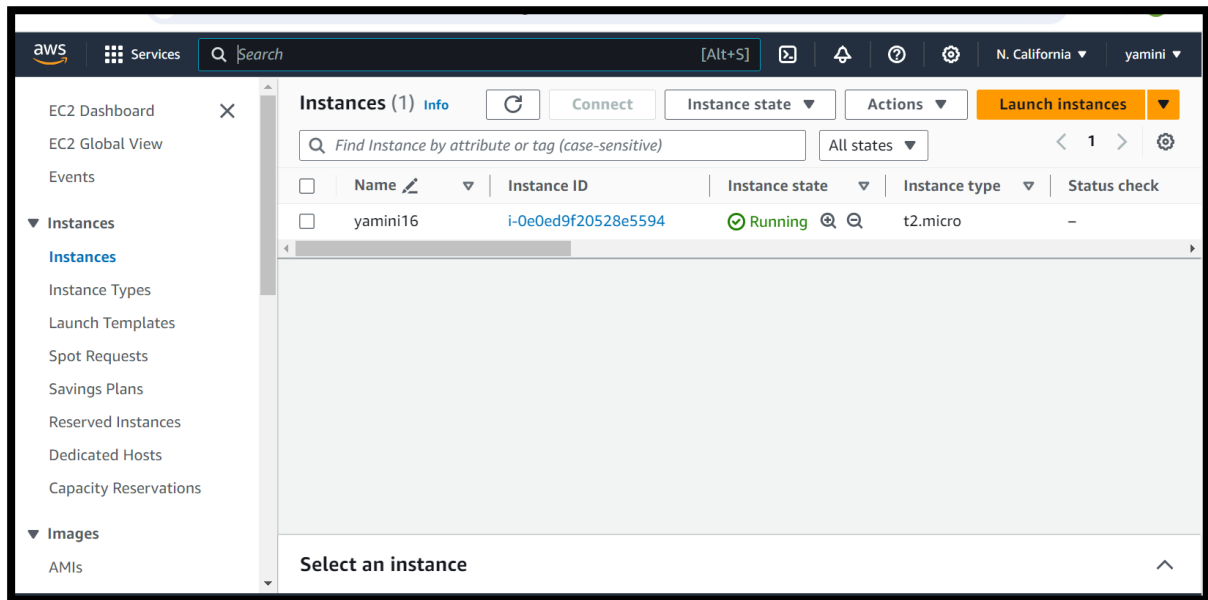
ASSIGNMENT-1

- A. Attach one EBS to one instance
- B. Attach one EFS to two instances

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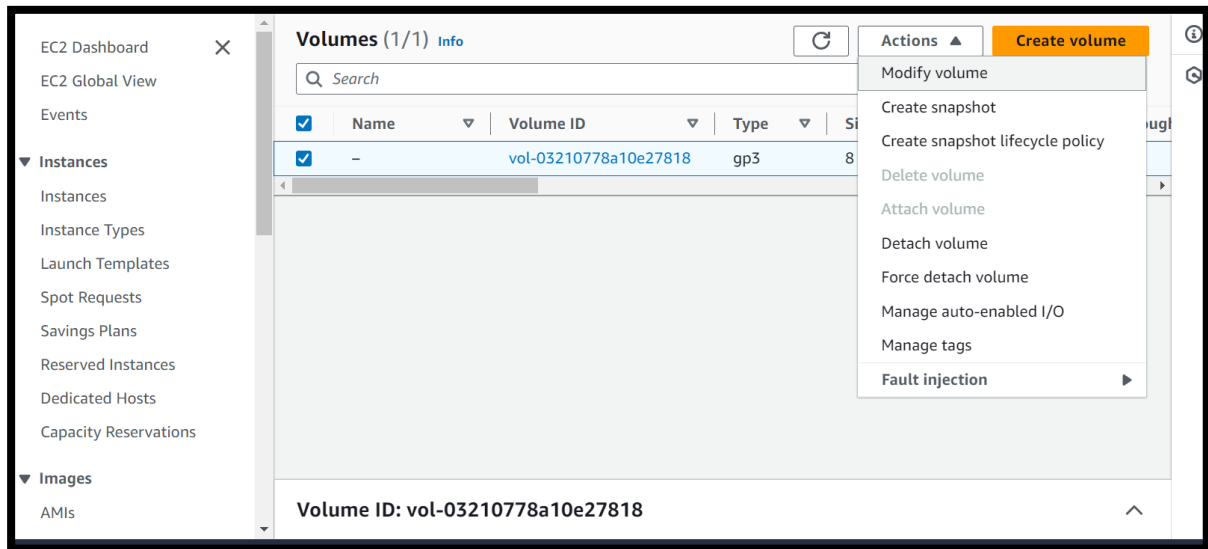
A. Attach one EBS to one instance

❖ Create an instance



```
root@ip-172-31-27-14:~# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/root        6.8G  1.6G  5.2G  23% /
tmpfs           479M    0  479M   0% /dev/shm
tmpfs           192M  868K  191M   1% /run
tmpfs           5.0M    0   5.0M   0% /run/lock
/dev/xvda16     881M   76M  744M  10% /boot
/dev/xvda15     105M   6.1M   99M   6% /boot/efi
tmpfs           96M   12K   96M   1% /run/user/1000
root@ip-172-31-27-14:~#
```

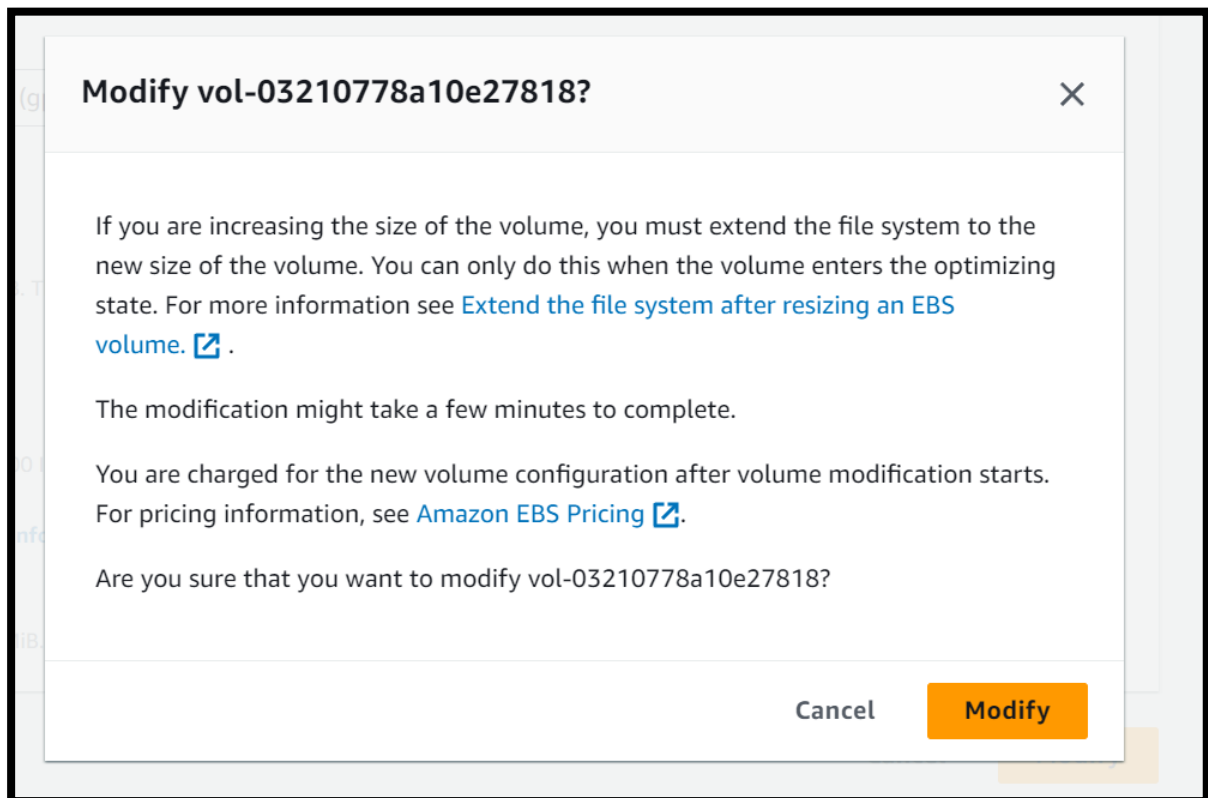
❖ Modify volume



The screenshot shows the AWS Management Console 'Volumes' page. On the left is a navigation sidebar with categories like EC2 Dashboard, Instances, and Images. The main panel is titled 'Volumes (1/1) Info' and contains a table with columns: Name, Volume ID, Type, and Size. One volume is listed with ID 'vol-03210778a10e27818' and type 'gp3'. An 'Actions' dropdown menu is open, showing options such as 'Modify volume', 'Create snapshot', 'Delete volume', and 'Attach volume'. The 'Modify volume' option is highlighted. Below the table, the 'Volume ID: vol-03210778a10e27818' is displayed.

Name	Volume ID	Type	Size
-	vol-03210778a10e27818	gp3	8

Volume ID: vol-03210778a10e27818



The screenshot shows a confirmation dialog titled 'Modify vol-03210778a10e27818?'. The dialog contains the following text:

If you are increasing the size of the volume, you must extend the file system to the new size of the volume. You can only do this when the volume enters the optimizing state. For more information see [Extend the file system after resizing an EBS volume.](#)

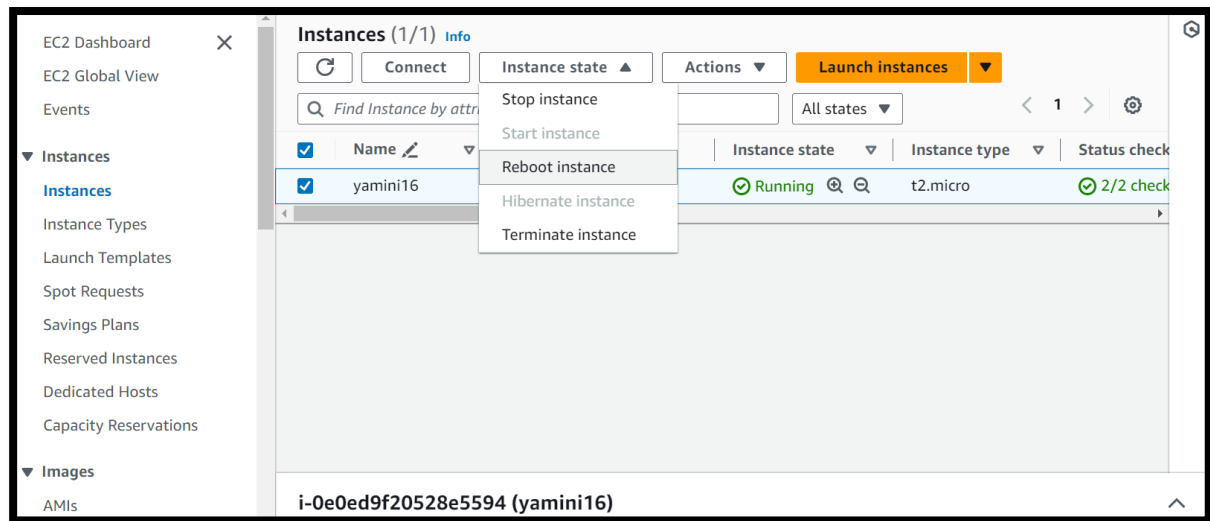
The modification might take a few minutes to complete.

You are charged for the new volume configuration after volume modification starts. For pricing information, see [Amazon EBS Pricing](#).

Are you sure that you want to modify vol-03210778a10e27818?

At the bottom right, there are two buttons: 'Cancel' and 'Modify'.

❖ Reboot instance



```
root@ip-172-31-27-14:~# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/root       19G   1.6G   17G   9% /
tmpfs           479M    0   479M  0% /dev/shm
tmpfs           192M  860K   191M  1% /run
tmpfs           5.0M    0    5.0M  0% /run/lock
/dev/xvda16     881M   76M   744M 10% /boot
/dev/xvda15     105M   6.1M   99M   6% /boot/efi
tmpfs           96M   12K    96M  1% /run/user/1000
root@ip-172-31-27-14:~#
```

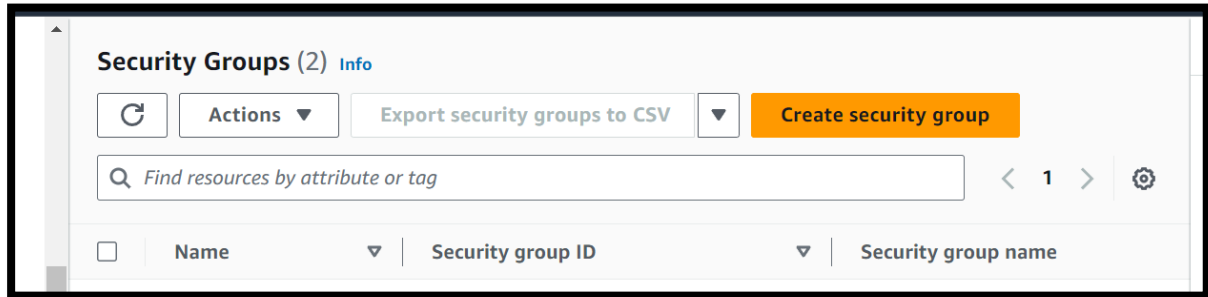
❖ Process

- List all the block devices in Linux machine
- Check if there any file system on this device
- Create file system
- Check if there any file system on this device
- Create a directory
- Mount the directories
- Check the disk free space
- List all block device by using “lsblk” command
- Check file system by using “file -s /dev/xvdf” command
- Create directory by using “mkdir -p app/user” command
- Mount the directory by using “mount /dev/xvdf app/user” command
- To check disk free by using “df -h” command

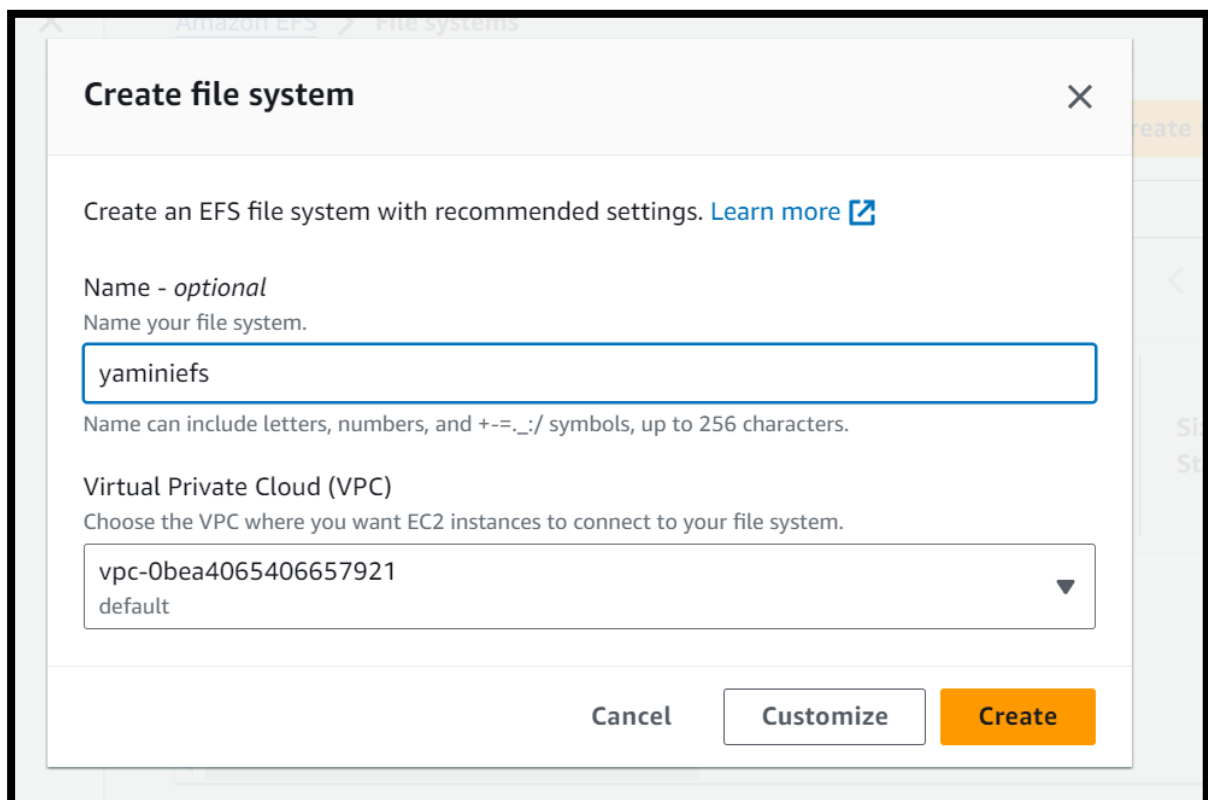
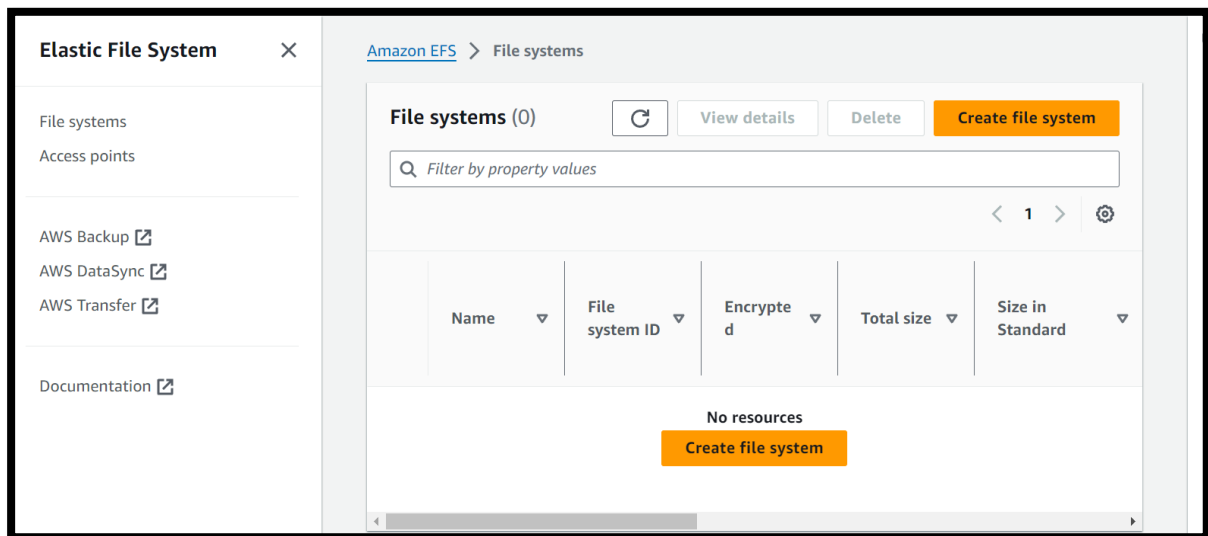
```
root@ip-172-31-21-250:~# mkdir -p vcube/vcube126
root@ip-172-31-21-250:~# mount /dev/xvdf/vcube/vcube126
mount: /dev/xvdf/vcube/vcube126: can't find in /etc/fstab.
root@ip-172-31-21-250:~# mount /dev/xvdf vcube/vcube126
root@ip-172-31-21-250:~# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/root        19G   1.6G   17G   9% /
tmpfs            479M    0   479M   0% /dev/shm
tmpfs            192M  864K   191M   1% /run
tmpfs            5.0M    0   5.0M   0% /run/lock
/dev/xvda16      881M   76M   744M  10% /boot
/dev/xvda15     105M   6.1M   99M   6% /boot/efi
tmpfs            96M   12K   96M   1% /run/user/1000
/dev/xvdf        10G  228M   9.8G   3% /root/vcube/vcube126
root@ip-172-31-21-250:~# |
```

B. Attach one EFS to two instances

❖ Create a security group



❖ Create a EFS file system



Network

Virtual Private Cloud (VPC) [Learn more](#)

Choose the VPC where you want EC2 instances to connect to your file system.

vpc-0bea4065406657921
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

us-west-1a

Subnet ID

subnet-0a8f75fc900908c2e

IP address

Automatic

Security groups

Choose security groups

sg-040b8130c30c6a547 X

sgyamini

Availability zone

us-west-1b

Subnet ID

subnet-010c6ea5e48614768

IP address

Automatic

Security groups

Choose security groups

sg-040b8130c30c6a547 X

sgyamini

Remove

Add mount target

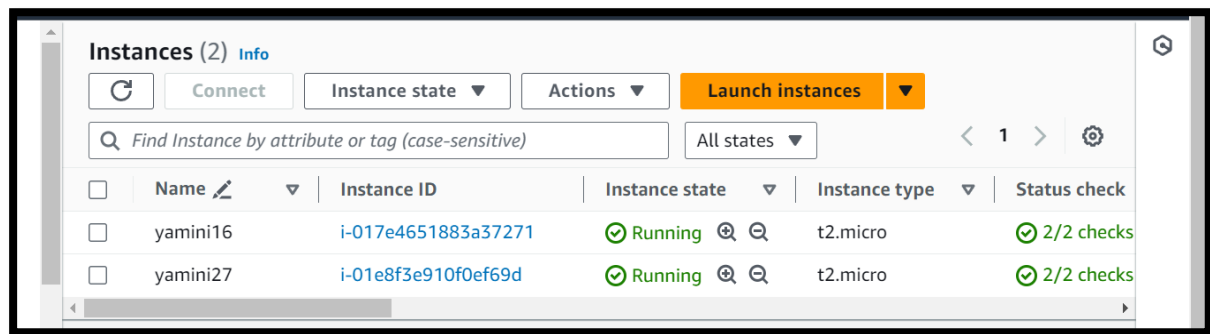
You can only create one mount target per Availability Zone.

Cancel

Previous

Next

Launch two instances with different zones and connect instances



EFS - Elastic File Storage

It is designed to share parallelly with thousands of EC2 instances to provide better throughput and IOPS. It is a regional service automatically replicated across multiple AZs to provide High availability and durability.

→ In server1

Create a file system in one server
Store some data in that file system

→ In server2

Create a file system in one server
Store some data in that file system

Both servers share same file and data these types of data sharing are known as EFS.

❖ Server 1

```
[ec2-user@ip-172-31-15-175 ~]$ sudo -i
[root@ip-172-31-15-175 ~]# cd /mnt
[root@ip-172-31-15-175 mnt]# ls
efs
[root@ip-172-31-15-175 mnt]# cd efs
[root@ip-172-31-15-175 efs]# ls
fs1
[root@ip-172-31-15-175 efs]# cd fs1
-bash: cd: efs: No such file or directory
[root@ip-172-31-15-175 efs]#
[root@ip-172-31-15-175 efs]# cd fs1
[root@ip-172-31-15-175 fs1]# vi file1
[root@ip-172-31-15-175 fs1]#
```

❖ Server 2

```
[root@ip-172-31-27-36 ~]# cd /mnt
[root@ip-172-31-27-36 mnt]# ls
efs
[root@ip-172-31-27-36 mnt]# cd efs
[root@ip-172-31-27-36 efs]# ls
fs1
[root@ip-172-31-27-36 efs]# cd fs1
[root@ip-172-31-27-36 fs1]# ls
file1
[root@ip-172-31-27-36 fs1]# vi file2
[root@ip-172-31-27-36 fs1]# ls
file1 file2
[root@ip-172-31-27-36 fs1]#
```