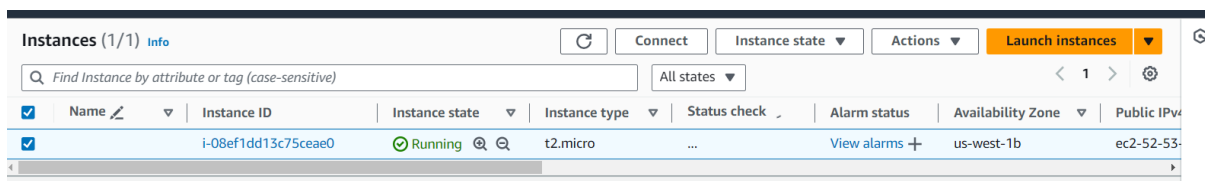


# ASSIGNMENT OF EBS & EFS

## EBS

One EBS you can attach only one instance do you want to connect another instance previously connected one to detach and connect to that instance.

## Creating ec2 instance



The screenshot shows the AWS Management Console 'Instances' page. It displays one instance with the following details:

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4
	i-08ef1dd13c75ceae0	Running	t2.micro	...	View alarms	us-west-1b	ec2-52-53-

Ec2-server launched and checking volume df -h

```
[root@ip-172-31-11-179 ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        4.0M   0    4.0M   0% /dev
tmpfs           475M   0    475M   0% /dev/shm
tmpfs           190M  440K   190M   1% /run
/dev/xvda1      8.0G  1.6G   6.5G  20% /
tmpfs           475M   0    475M   0% /tmp
/dev/xvda128    10M   1.3M   8.7M  13% /boot/efi
tmpfs           95M   0     95M   0% /run/user/1000
[root@ip-172-31-11-179 ~]#
```

- Creating volume of 20Gb attaching to the server

Volumes (2) Info									
<input type="text" value="Search"/> <span>Actions ▾</span> <span>Create volume</span>									
<input type="checkbox"/>	Name ▾	Volume ID ▾	Type ▾	Size ▾	IOPS ▾	Throughput ▾	Snapshot ▾	Created ▾	
<input type="checkbox"/>	-	vol-078376978568124f1	gp3	8 GiB	3000	125	snap-0c0958d...	2024/07/08 09:51 GMT+5:...	
<input type="checkbox"/>	Add on storage	vol-043b1c1bbb60abfe3	gp3	20 GiB	3000	125	-	2024/07/08 09:58 GMT+5:...	

```

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~/m/'-'
Last login: Mon Jul 8 04:29:42 2024 from 13.52.6.115
[ec2-user@ip-172-31-11-179 ~]$ sudo -i
[root@ip-172-31-11-179 ~]# lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
xvda        202:0    0   8G  0 disk
├─xvda1     202:1    0   8G  0 part /
├─xvda127   259:0    0   1M  0 part
└─xvda128   259:1    0  10M  0 part /boot/efi
xvdf        202:80    0  20G  0 disk
[root@ip-172-31-11-179 ~]#

```

- Once add on volume file is attached to instance
- Check whether file system is created or not
- If file system is created
  - Mount /dev/xvdf dir1/dir2
  - Check if it is mounted or not
  - df -h
  - Or
- If not created the file system when add on volume is not showed in the mount point this error will appear here.

## wrong fs type, bad option, bad superblock" error message

- Create file system
  - `Mkfs -t xfs /dev/xvdf`
  - `Mount /dev/xvdf dir1/dir2`
  - `df -h` check the volume
- 
- EBS Volume of 15GB attached to /pavan/ebs

```
[root@ip-172-31-11-179 ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        4.0M   0    4.0M   0% /dev
tmpfs           475M   0    475M   0% /dev/shm
tmpfs           190M  464K   190M   1% /run
/dev/xvda1      8.0G  1.6G   6.5G  20% /
tmpfs           475M   0    475M   0% /tmp
/dev/xvda128    10M   1.3M   8.7M  13% /boot/efi
tmpfs           95M   0     95M   0% /run/user/1000
/dev/xvdf       15G  139M   15G   1% /root/pavan/ebs
[root@ip-172-31-11-179 ~]#
```

- One EBS Volume cannot be attached to multiple instances, but multiple EBS can attached to one EC2.

# EFS (Elastic file system)

One EFS you can connect multiple instances

Instances (3) <a href="#">Info</a>									
<input type="text" value="Find Instance by attribute or tag (case-sensitive)"/>					All states ▾		< 1 > ⚙		
<input type="checkbox"/>	Name <a href="#">↗</a>	Instance ID	Instance state ▾	Instance type ▾	Status check	Alarm status	Availability Zone ▾	Public IPv4	
<input type="checkbox"/>	test-efs-1	i-0cad7488e0b8ab37f	Running <a href="#">🔍</a> <a href="#">🔍</a>	t2.micro	2/2 checks passed	<a href="#">View alarms</a> +	us-east-1a	ec2-44-202.110.13	
<input type="checkbox"/>	Test-efs-1	i-06192190d9f6f8cea	Running <a href="#">🔍</a> <a href="#">🔍</a>	t2.micro	2/2 checks passed	<a href="#">View alarms</a> +	us-east-1c	ec2-3-86-4	
<input type="checkbox"/>	test-efs-2	i-02299b66ae12c920d	Running <a href="#">🔍</a> <a href="#">🔍</a>	t2.micro	2/2 checks passed	<a href="#">View alarms</a> +	us-east-1a	ec2-44-202.110.13	

Created EFS

Attached to two instances

```
[root@ip-172-31-87-215 fs1]# ls
efs.txt  efs1.txt
[root@ip-172-31-87-215 fs1]# ls
efs.txt  efs1.txt
[root@ip-172-31-87-215 fs1]# cat efs.txt
This is efs test1
[root@ip-172-31-87-215 fs1]#
```

i-0cad7488e0b8ab37f (test-efs-1)

PublicIPs: 44.202.93.1 PrivateIPs: 172.31.87.215

Test-efs-1

```
[root@ip-172-31-81-43 fs1]# ls
efs.txt  efs1.txt
[root@ip-172-31-81-43 fs1]# ls
efs.txt  efs1.txt
[root@ip-172-31-81-43 fs1]# cat efs1.txt
This is efs test2
[root@ip-172-31-81-43 fs1]#
```

i-02299b66ae12c920d (test-efs-2)

PublicIPs: 44.202.110.13 PrivateIPs: 172.31.81.43

Test-efs-2