

1.launch one instance(ubuntu),in public subnet with root volume and ssh allowed security group.

EC2 > Instances > i-0ee4042a7bc9ffdc8

Instance summary for i-0ee4042a7bc9ffdc8 (ebs-sizedecrease-test) [Info](#)

[Refresh](#) [Connect](#) [Instance state](#) [Actions](#)

Updated less than a minute ago

Instance ID i-0ee4042a7bc9ffdc8 (ebs-sizedecrease-test)	Public IPv4 address 43.205.115.255 open address	Private IPv4 addresses 10.0.10.37
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-43-205-115-255.ap-south-1.compute.amazonaws.com open address
Hostname type IP name: ip-10-0-10-37.ap-south-1.compute.internal	Private IP DNS name (IPv4 only) ip-10-0-10-37.ap-south-1.compute.internal	
Answer private resource DNS name -	Instance type t2.micro	Elastic IP addresses -
Auto-assigned IP address 43.205.115.255 [Public IP]	VPC ID vpc-016be3c83fbc4809c	AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more

2.connect the instance and run the below commands one by one and observe .

\$ lsblk (#list the blocks you attached)

```
ubuntu@ip-10-0-10-37:~$ lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
loop0        7:0    0   24.6M  1 loop /snap/amazon-ssm-agent/7528
loop1        7:1    0   55.7M  1 loop /snap/core18/2790
loop2        7:2    0   63.5M  1 loop /snap/core20/2015
loop3        7:3    0  111.9M  1 loop /snap/lxd/24322
loop4        7:4    0   40.8M  1 loop /snap/snapd/20092
xvda        202:0    0    8G    0 disk
└─xvda1     202:1    0    7.9G  0 part /
└─xvda14    202:14   0     4M    0 part
└─xvda15    202:15   0   106M  0 part /boot/efi
ubuntu@ip-10-0-10-37:~$
```

3.now i am creating 10gb size of ebs volume,and attach it to running instance.

vol-0583b85f19b5f7950			
<div> <div></div> <div>Actions</div> <div>Delete</div> <div>Modify</div> </div>			
Volume ID vol-0583b85f19b5f7950	Size 10 GiB	Type gp2	Volume status Okay
AWS Compute Optimizer finding Opt-In to AWS Compute Optimizer for recommendations. Learn more	Volume state In-use	IOPS 100	Throughput -
Encryption Not encrypted	KMS key ID -	KMS key alias -	KMS key ARN -
Fast snapshot restored No	Snapshot -	Availability Zone ap-south-1a	Created Thu Nov 16 2023 17:15:39 GMT+0530 (India Standard Time)
Multi-Attach enabled No	Attached Instances i-0ee4042a7bc9ffdc8 (ebs-sizedecrease-test): /dev/sdf (attaching)	Outposts ARN -	

4. Again i run command like `$lsblk`,here we can see our attached volume of size 10 gb(xvdf).

```
ubuntu@ip-10-0-10-37:~$ lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
loop0        7:0    0   24.6M  1 loop /snap/amazon-ssm-agent/7528
loop1        7:1    0   55.7M  1 loop /snap/core18/2790
loop2        7:2    0   63.5M  1 loop /snap/core20/2015
loop3        7:3    0  111.9M  1 loop /snap/lxd/24322
loop4        7:4    0   40.8M  1 loop /snap/snapd/20092
xvda        202:0    0     8G   0 disk
└─xvda1     202:1    0    7.9G   0 part /
└─xvda14    202:14   0     4M   0 part
└─xvda15    202:15   0   106M   0 part /boot/efi
xvdf        202:80   0    10G   0 disk
ubuntu@ip-10-0-10-37:~$
```

5.here we do first,that is formatting by command with super user we do.

```
$ sudo su
```

```
$ mkfs.ext4 /dev/xvdf
```

```

ubuntu@ip-10-0-10-37:~$ sudo su
root@ip-10-0-10-37:/home/ubuntu# mkfs.ext4 /dev/xvdf
mke2fs 1.46.5 (30-Dec-2021)
Creating filesystem with 2621440 4k blocks and 655360 inodes
Filesystem UUID: 644e9743-f3bb-4566-9433-80c05da4bf11
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632

Allocating group tables: done
Writing inode tables: done
Creating journal (16384 blocks): done
Writing superblocks and filesystem accounting information: done

root@ip-10-0-10-37:/home/ubuntu# 

```

6. Now we check by command `$ df -h`, here we didn't see the volume we formatted.

```

root@ip-10-0-10-37:/home/ubuntu# lsblk
NAME        MAJ:MIN RM   SIZE RO TYPE MOUNTPOINTS
loop0         7:0    0   24.6M  1 loop /snap/amazon-ssm-agent/7528
loop1         7:1    0   55.7M  1 loop /snap/core18/2790
loop2         7:2    0   63.5M  1 loop /snap/core20/2015
loop3         7:3    0  111.9M  1 loop /snap/lxd/24322
loop4         7:4    0   40.8M  1 loop /snap/snapd/20092
xvda         202:0    0     8G   0 disk
└─xvda1      202:1    0    7.9G   0 part /
└─xvda14     202:14   0     4M   0 part
└─xvda15     202:15   0   106M   0 part /boot/efi
xvdf         202:80   0    10G   0 disk
root@ip-10-0-10-37:/home/ubuntu# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/root        7.6G  1.6G   6.0G  21% /
tmpfs           475M    0   475M   0% /dev/shm
tmpfs           190M  836K   190M   1% /run
tmpfs            5.0M    0    5.0M   0% /run/lock
/dev/xvda15     105M   6.1M    99M   6% /boot/efi
tmpfs            95M   4.0K    95M   1% /run/user/1000
root@ip-10-0-10-37:/home/ubuntu# 

```

7. Because we didn't mount it yet, so we mount it to a folder for that make directory and check. With above command we will see our formatted volume here.

```

root@ip-10-0-10-37:/home/ubuntu# mkdir test
root@ip-10-0-10-37:/home/ubuntu# ls
test
root@ip-10-0-10-37:/home/ubuntu# mount /dev/xvdf /test/
mount: /test/: mount point does not exist.
root@ip-10-0-10-37:/home/ubuntu# cd /
root@ip-10-0-10-37:/# mount /dev/xvdf /test/
mount: /test/: mount point does not exist.
root@ip-10-0-10-37:/# mkdir test
root@ip-10-0-10-37:/# mount /dev/xvdf /test/
root@ip-10-0-10-37:/# mountpoint /test/
/test/ is a mountpoint
root@ip-10-0-10-37:/# df -h

```

Filesystem	Size	Used	Avail	Use%	Mounted on
/dev/root	7.6G	1.6G	6.0G	21%	/
tmpfs	475M	0	475M	0%	/dev/shm
tmpfs	190M	836K	190M	1%	/run
tmpfs	5.0M	0	5.0M	0%	/run/lock
/dev/xvda15	105M	6.1M	99M	6%	/boot/efi
tmpfs	95M	4.0K	95M	1%	/run/user/1000
/dev/xvdf	9.8G	24K	9.3G	1%	/test

```

root@ip-10-0-10-37:/#

```

8. Yes we can see our volume that is 10gb.now we create some files inside test folder.

```

root@ip-10-0-10-37:/# cd test
root@ip-10-0-10-37:/test# ls
lost+found
root@ip-10-0-10-37:/test# touch file1.txt file2.txt file3.txt
root@ip-10-0-10-37:/test# touch a b c d
root@ip-10-0-10-37:/test# ls
a b c d file1.txt file2.txt file3.txt lost+found
root@ip-10-0-10-37:/test#

```

9. Now we create another EBS volume of size 2gb and attach to same instance .

vol-0b3e2d3ea621435e7				Actions ▼	Delete	Modify
Volume ID vol-0b3e2d3ea621435e7	Size 2 GiB	Type gp2	Volume status ✓ Okay			
AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more	Volume state ✓ In-use	IOPS 100	Throughput -			

10. we do similar like formatting, mounting to new directory. but we can't create any files here
We just sync from source directory to destination.

```
root@ip-10-0-10-37:/# lsblk
NAME        MAJ:MIN RM   SIZE RO TYPE MOUNTPOINTS
loop0        7:0      0   24.6M 1 loop /snap/amazon-ssm-agent/7528
loop1        7:1      0   55.7M 1 loop /snap/core18/2790
loop2        7:2      0   63.5M 1 loop /snap/core20/2015
loop3        7:3      0  111.9M 1 loop /snap/lxd/24322
loop4        7:4      0   40.8M 1 loop /snap/snapd/20092
xvda         202:0     0    8G   0 disk
├--xvda1     202:1     0   7.9G 0 part /
├--xvda14    202:14     0    4M 0 part
└--xvda15    202:15     0  106M 0 part /boot/efi
xvdf         202:80     0   10G 0 disk /test
xvdg         202:96     0    2G 0 disk

root@ip-10-0-10-37:/# mkfs.ext4 /dev/xvdg
mke2fs 1.46.5 (30-Dec-2021)
Creating filesystem with 524288 4k blocks and 131072 inodes
Filesystem UUID: a9122360-d890-471c-8bc9-24f61d0b9e70
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376, 294912

Allocating group tables: done
Writing inode tables: done
Creating journal (16384 blocks): done
Writing superblocks and filesystem accounting information: done

root@ip-10-0-10-37:/# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/root        7.6G  1.6G  6.0G  21% /
tmpfs            475M    0  475M   0% /dev/shm
tmpfs            190M  840K  190M   1% /run
tmpfs            5.0M    0   5.0M   0% /run/lock
/dev/xvda15     105M   6.1M   99M   6% /boot/efi
tmpfs            95M   4.0K   95M   1% /run/user/1000
/dev/xvdf        9.8G   24K   9.3G   1% /test

root@ip-10-0-10-37:/# mkdir /test2
root@ip-10-0-10-37:/# mount /dev/xvdg /test2/
root@ip-10-0-10-37:/#
```











11. \$ rsync -aHAXxSP /test1/ /test2/

From above command we transfer data from 10 gb to data from
2 gb of volume. after that we can delete the 10gb ebs volume.

```

root@ip-10-0-10-37:/# $ rsync -aHAXxSP /test1/ /test2/
$: command not found
root@ip-10-0-10-37:/# cd test2
root@ip-10-0-10-37:/test2# ls
lost+found
root@ip-10-0-10-37:/test2# rsync -aHAXxSP /test1/ /test2/
sending incremental file list
rsync: [sender] change_dir "/test1" failed: No such file or directory (2)
rsync error: some files/attrs were not transferred (see previous errors) (code 23) at main.c(1338) [sender=3.2.7]
root@ip-10-0-10-37:/test2# cd ..
root@ip-10-0-10-37:/# rsync -aHAXxSP /test1/ /test2/
sending incremental file list
rsync: [sender] change_dir "/test1" failed: No such file or directory (2)
rsync error: some files/attrs were not transferred (see previous errors) (code 23) at main.c(1338) [sender=3.2.7]
root@ip-10-0-10-37:/# ls
bin  dev  home  lib32  libx32  media  opt  root  sbin  srv  test  tmp  var
boot  etc  lib  lib64  lost+found  mnt  proc  run  snap  sys  test2  usr
root@ip-10-0-10-37:/# rsync -aHAXxSP /test/ /test2/
sending incremental file list
./
a
      0 100%  0.00kB/s  0:00:00 (xfr#1, to-chk=7/9)
b
      0 100%  0.00kB/s  0:00:00 (xfr#2, to-chk=6/9)
c
      0 100%  0.00kB/s  0:00:00 (xfr#3, to-chk=5/9)
d
      0 100%  0.00kB/s  0:00:00 (xfr#4, to-chk=4/9)
file1.txt
      0 100%  0.00kB/s  0:00:00 (xfr#5, to-chk=3/9)
file2.txt
      0 100%  0.00kB/s  0:00:00 (xfr#6, to-chk=2/9)
file3.txt
      0 100%  0.00kB/s  0:00:00 (xfr#7, to-chk=1/9)
lost+found/
root@ip-10-0-10-37:/#

```

vol-0583b85f19b5f7950				   
Volume ID  vol-0583b85f19b5f7950	Size  10 GiB	Type gp2	Volume status  Okay	
AWS Compute Optimizer finding  Opt-in to AWS Compute Optimizer for recommendations. Learn more	Volume state  Available	IOPS 100	Throughput -	
Encryption Not encrypted	KMS key ID -	KMS key alias -	KMS key ARN -	
Fast snapshot restored No	Snapshot -	Availability Zone ap-south-1a	Created  Thu Nov 16 2023 17:15:39 GMT+0530 (India Standard Time)	
Multi-Attach enabled No	Attached Instances -	Outposts ARN -		