Create EBS and Attach Volume to EC2 Instance

What is Elastic Block Storage (EBS)

Amazon Elastic Block Store (Amazon EBS) provides scalable, high-performance block storage resources that can be used with Amazon Elastic Compute Cloud (Amazon EC2) Instances.

What is EBS Volume?

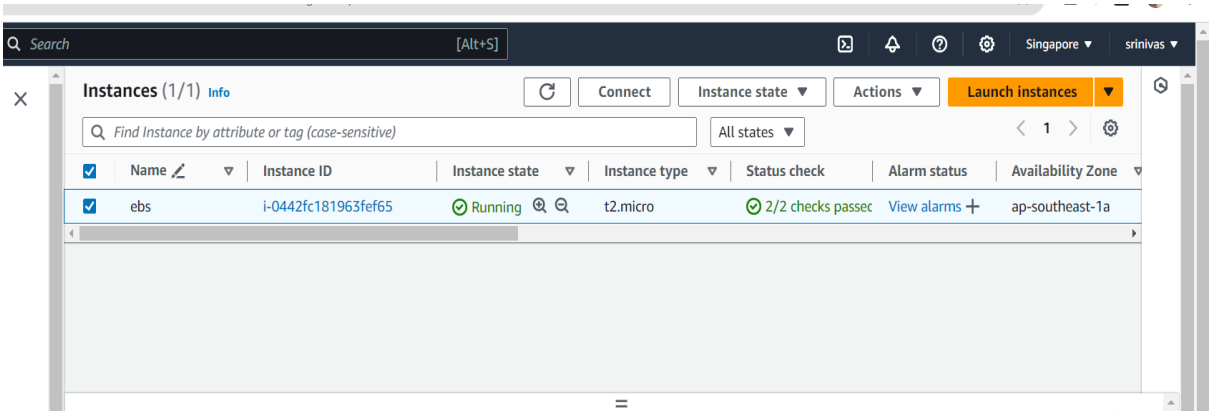
These are storage volumes that you attach to Amazon EC2 instances. After you attach a volume to an instance, you can use it in the same way you would use a local hard drive attached to a computer, for example to store files or to install applications.

What is EC2 Instance?

Amazon Web Service EC2 (Amazon Elastic Compute Cloud), one of Amazon Web Services' most well-known services, offers businesses the ability to run applications on the public cloud. An EC2 instance is simply a virtual server in Amazon Web Services terminology

Create EC2 Instance:

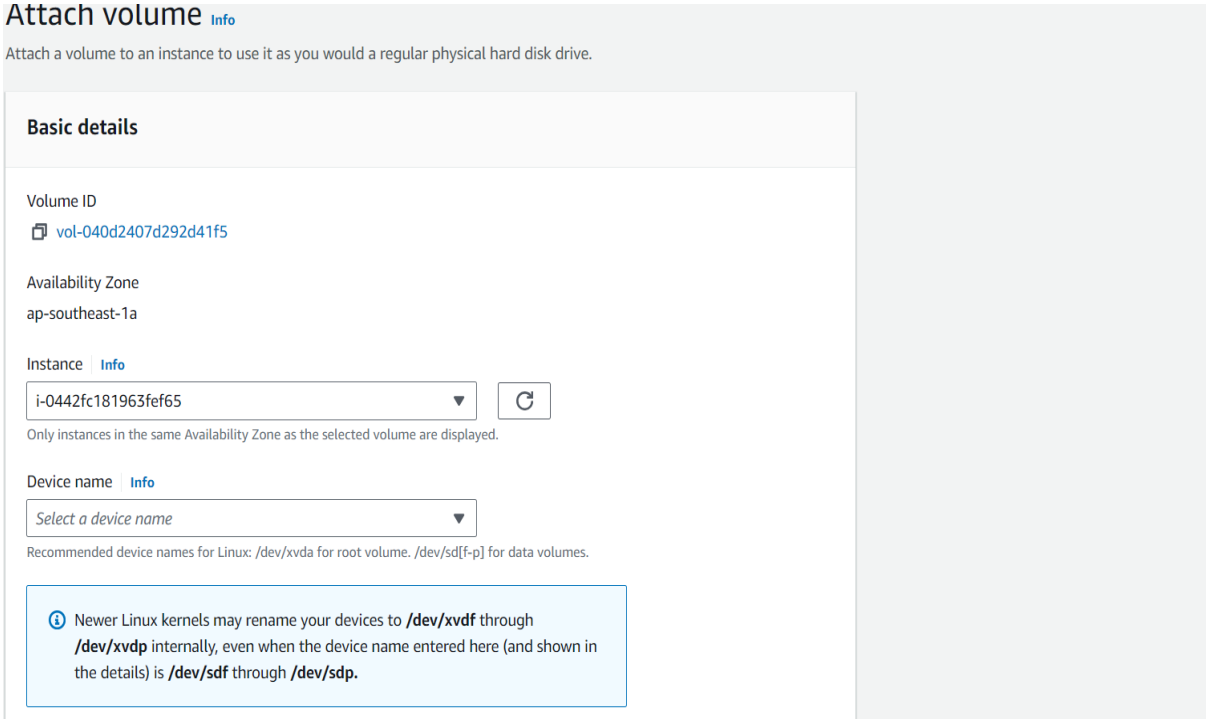
1. Create EC2 Instances.
2. Go to instance -- Launch Instance – create key pair – Select Security Group – Launch Instance.
3. Some EC2 Snapshots are attached below.
4. After creating EC2 Instances & Copy the SSH.
5. Paste it in the Git bash and Connect.



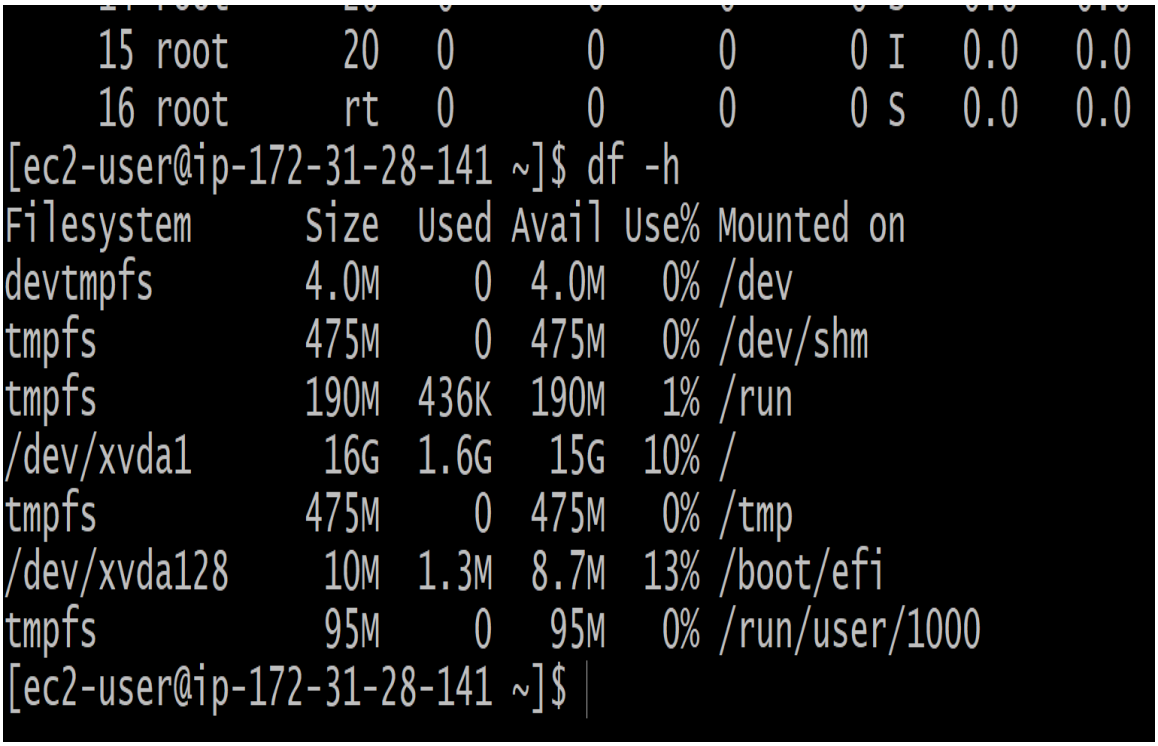
EBS Volumes:

1. Go to the Volumes and Modify the existing Volume.
2. Click on Actions – Modify volume – size (16) – Modify.
3. Create a Volume – size (10) – same AZ which is taken by Instance.
4. Select volume - Actions - Attach Volume - Running Instance (EBS) - /dev/sdf.

   - Create Volume.



5. Go to git bash, connect the server and use this command df -h.
6. Check there is a file system " file -s /dev/xvdf ".
7. Create file system " mkfs -t xfs /dev/xvdf ".
8. Create a directory mkdir -p apps/volume .
9. mount /dev/xvdf apps/volume.
10. df -h.



```
[ec2-user@ip-172-31-28-141 ~]$ sudo -i
[root@ip-172-31-28-141 ~]# mkfs -t xfs /dev/xvdf
meta-data=/dev/xvdf              isize=512    agcount=4, agsize=655360 blks
         =                       sectsz=512   attr=2, projid32bit=1
         =                       crc=1        finobt=1, sparse=1, rmapbt=0
         =                       reflink=1    bigtime=1 inobtcount=1
data     =                       bsize=4096   blocks=2621440, imaxpct=25
         =                       sunit=0      swidth=0 blks
naming   =version 2              bsize=4096   ascii-ci=0, ftype=1
log      =internal log           bsize=4096   blocks=16384, version=2
         =                       sectsz=512   sunit=0 blks, lazy-count=1
realtime =none                   extsz=4096   blocks=0, rtextents=0
[root@ip-172-31-28-141 ~]# file -s /dev/xvdf
/dev/xvdf: SGI XFS filesystem data (blksz 4096, inosz 512, v2 dirs)
[root@ip-172-31-28-141 ~]#
```

```
[root@ip-172-31-28-141 ~]# 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       16G  1.6G   15G  10%
 /
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        10G  104M  9.9G   2%
 /root/srinu/data
[root@ip-172-31-28-141 ~]#
```