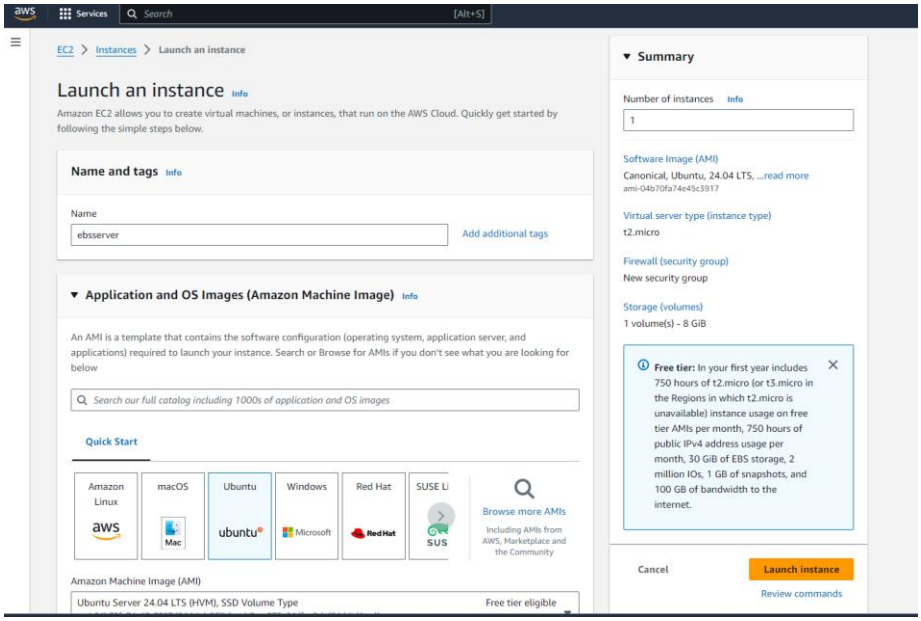
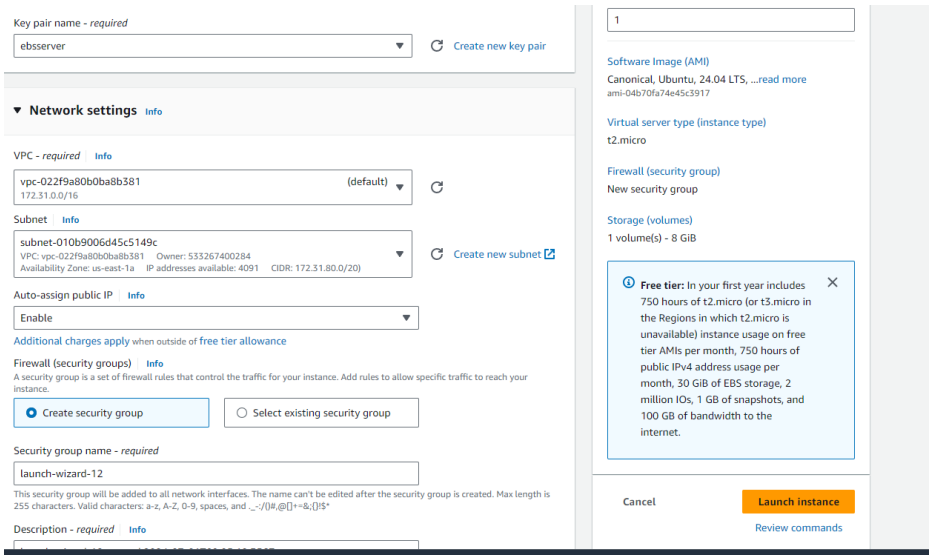
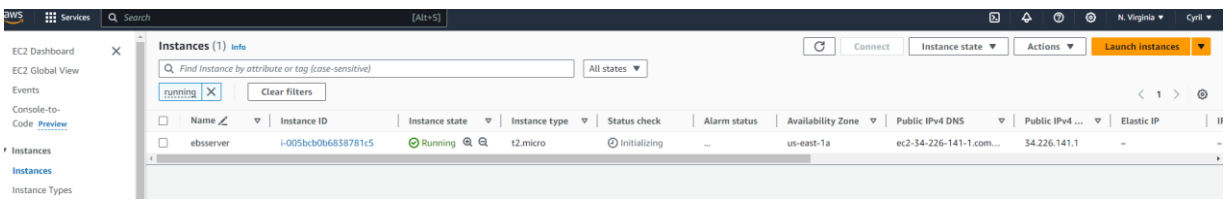
# Task - 13

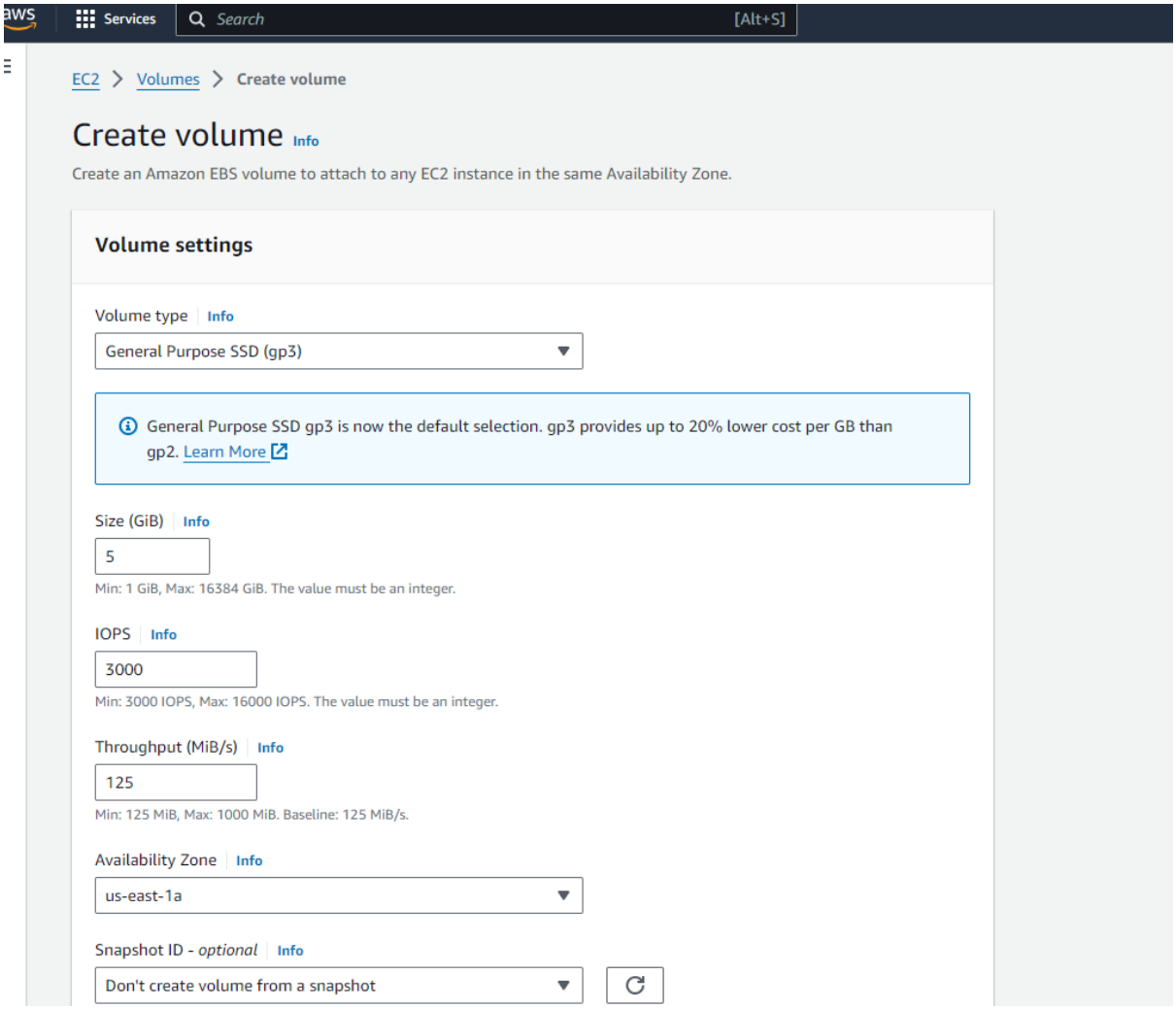
## Creating a EC2 in zone 1a:

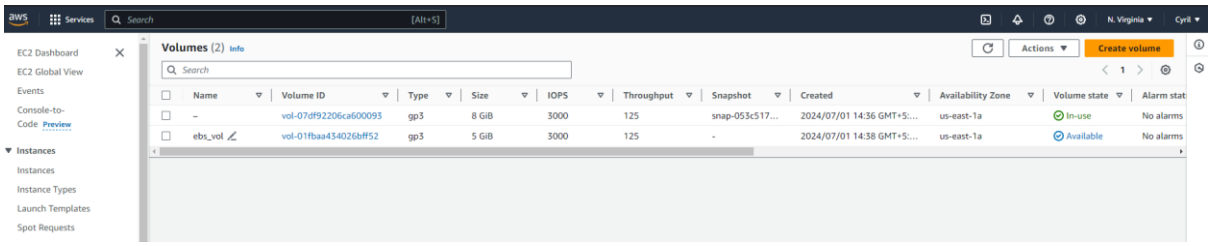


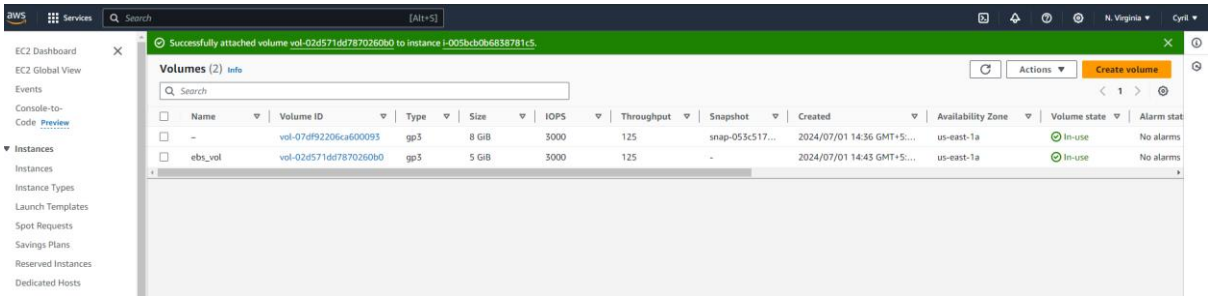



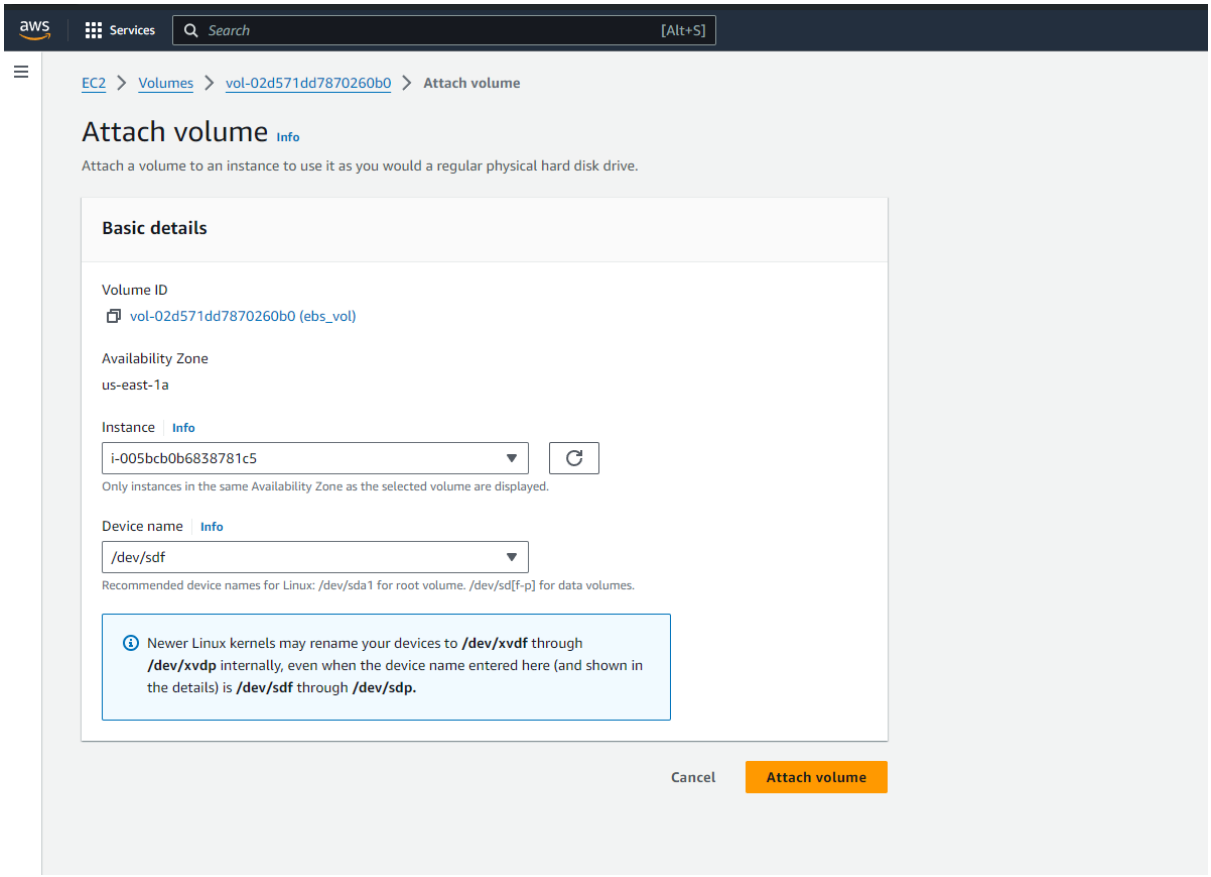
# Creating a EBS volume:

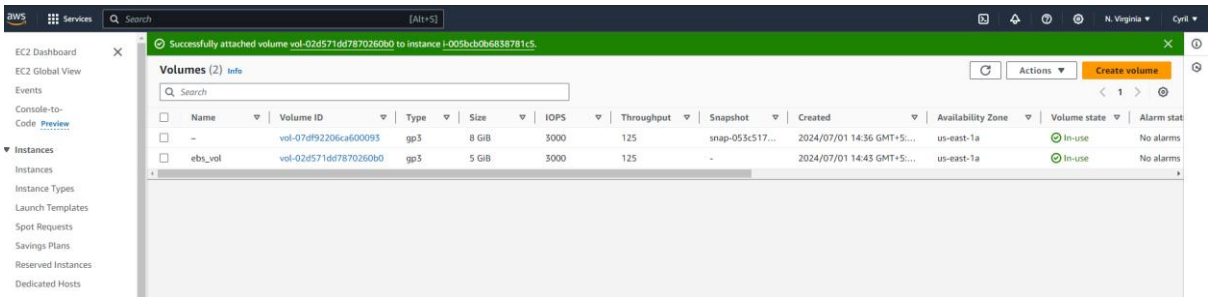


# Attaching the EBS to EC2 machine:



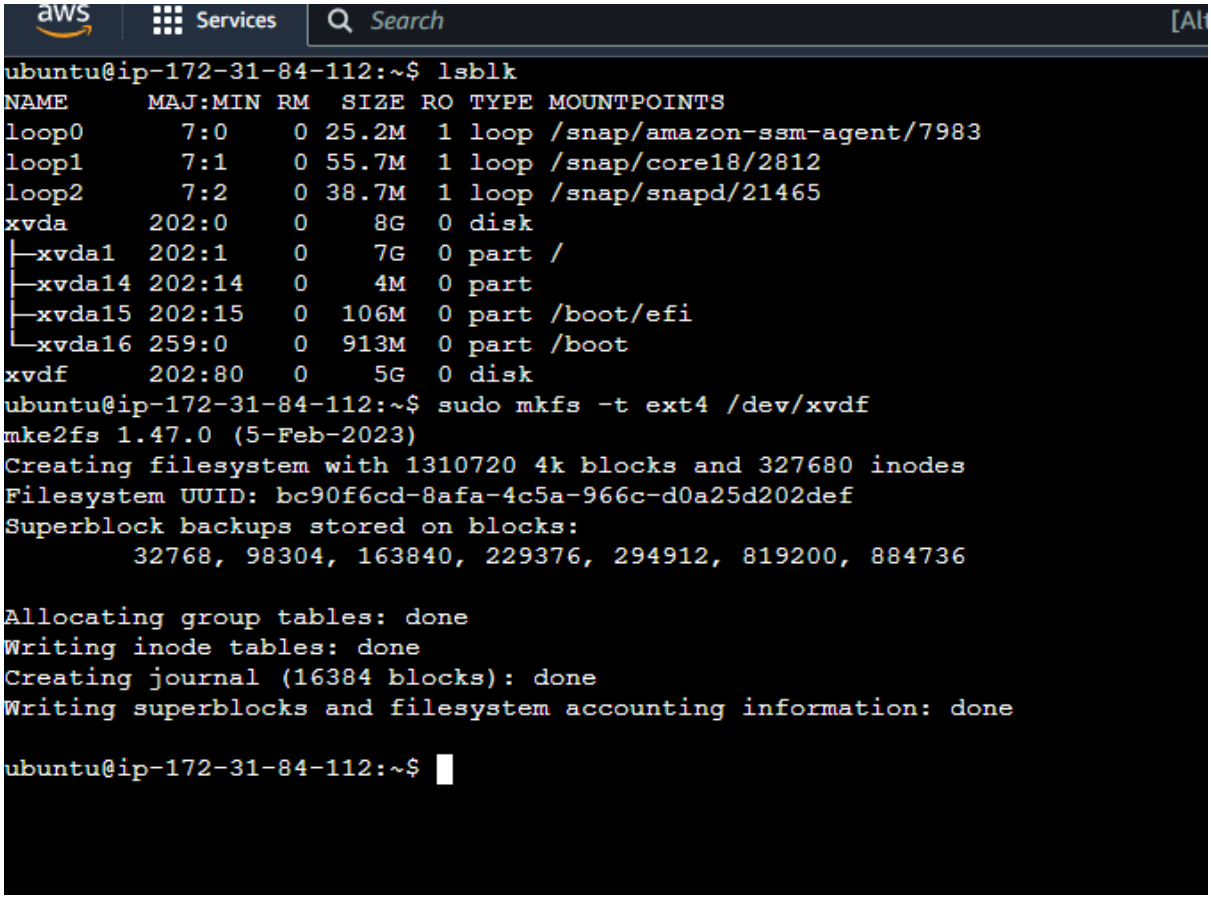
# Installing a webserver in EC2:

```
ubuntu@ip-172-31-84-112:~$ sudo apt install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils libapr1t64 libaprutil1-dbd-sqlite3 libaprutil1-ldap libaprutil1t64 liblua5.4-0 ssl-cert
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom www-browser
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils libapr1t64 libaprutil1-dbd-sqlite3 libaprutil1-ldap libaprutil1t64 liblua5.4-0 ssl-cert
0 upgraded, 10 newly installed, 0 to remove and 84 not upgraded.
Need to get 2080 kB of archives.
After this operation, 8091 kB of additional disk space will be used.
Do you want to continue? [Y/n] Y
```

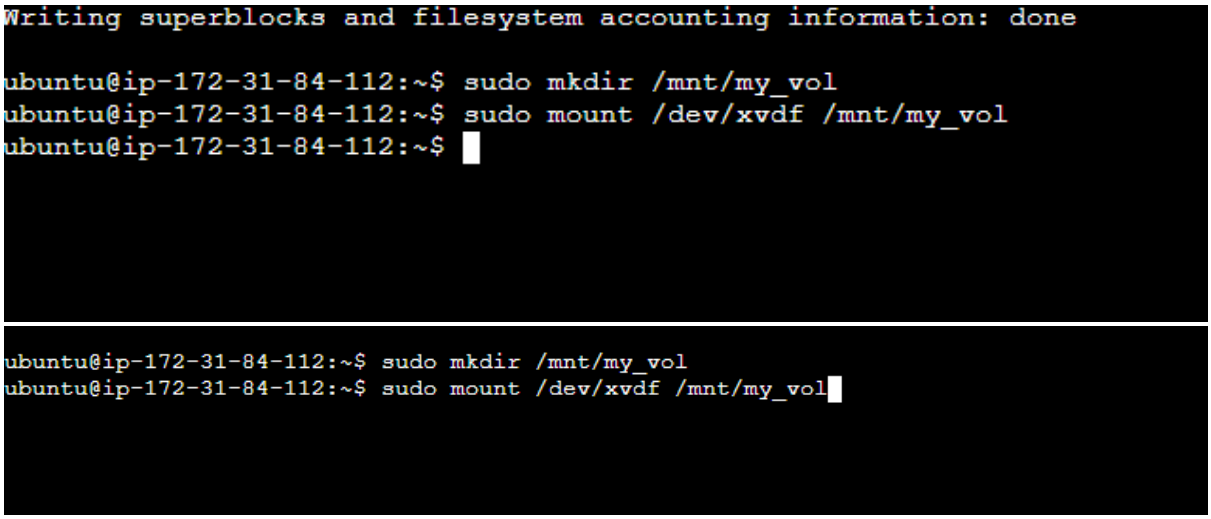
```
Enabling module authn_file.
Enabling module authz_user.
Enabling module alias.
Enabling module dir.
Enabling module autoindex.
Enabling module env.
Enabling module mime.
Enabling module negotiation.
Enabling module setenvif.
Enabling module filter.
Enabling module deflate.
Enabling module status.
Enabling module reqtimeout.
Enabling conf charset.
Enabling conf localized-error-pages.
Enabling conf other-vhosts-access-log.
Enabling conf security.
Enabling conf serve-cgi-bin.
Enabling site 000-default.
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service → /usr/lib/systemd/system/apache2.service.
Created symlink /etc/systemd/system/multi-user.target.wants/apache-htcacheclean.service → /usr/lib/systemd/system/apache-htcacheclean.service.
Processing triggers for ufw (0.36.2-6) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-84-112:~$
```

```
No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-84-112:~$ sudo systemctl start apache2
ubuntu@ip-172-31-84-112:~$ sudo systemctl enable apache2
Synchronizing state of apache2.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable apache2
ubuntu@ip-172-31-84-112:~$
```

## Formatting the EBS volume in EC2 machine:




## Mounting the EBS volume to the EC2 machine:

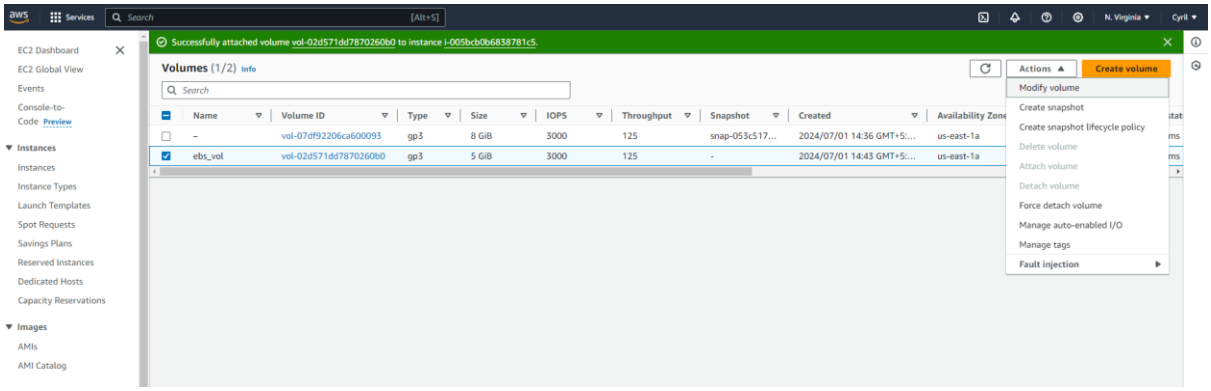


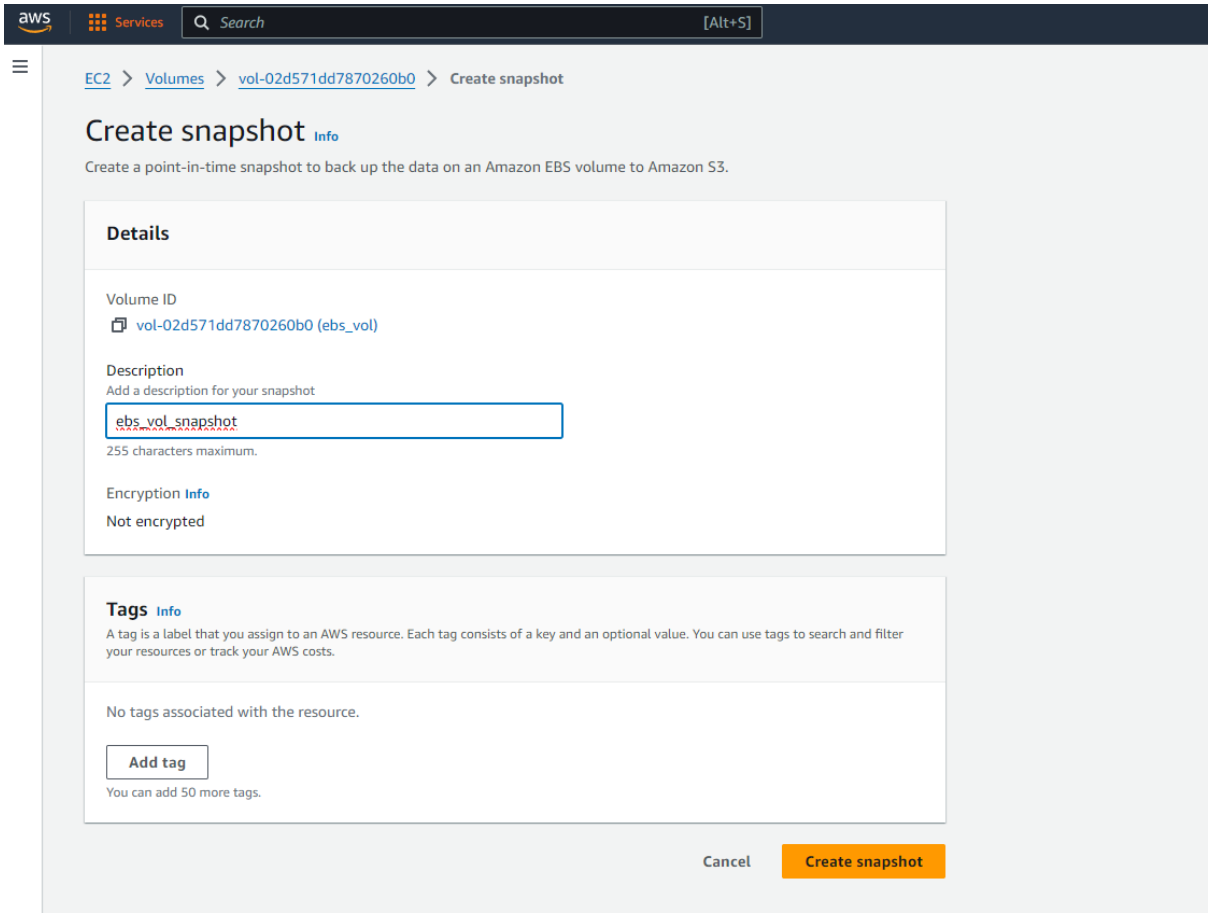
```
ubuntu@ip-172-31-84-112:~$ sudo vi /etc/fstab
```

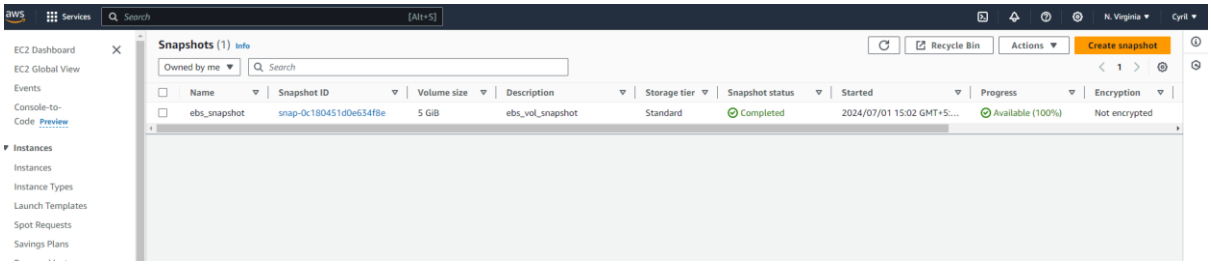
```
LABEL=cloudimg-rootfs   /        ext4   discard,commit=30,errors=remount-ro      0 1
LABEL=BOOT      /boot   ext4    defaults        0 2
LABEL=UEFI      /boot/efi       vfat    umask=0077      0 1

/dev/xvdf /mnt/my_vol ext4 defaults 0 2
```

```
ubuntu@ip-172-31-84-112:~$ sudo vi /etc/fstab
ubuntu@ip-172-31-84-112:~$ lsblk
NAME      MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
loop0       7:0    0 25.2M  1 loop /snap/amazon-ssm-agent/7983
loop1       7:1    0 55.7M  1 loop /snap/core18/2812
loop2       7:2    0 38.7M  1 loop /snap/snapd/21465
xvda      202:0    0    8G  0 disk
├─xvda1   202:1    0    7G  0 part /
├─xvda14  202:14   0    4M  0 part
├─xvda15  202:15   0  106M  0 part /boot/efi
└─xvda16  259:0    0  913M  0 part /boot
xvdf      202:80   0    5G  0 disk /mnt/my_vol
ubuntu@ip-172-31-84-112:~$
```

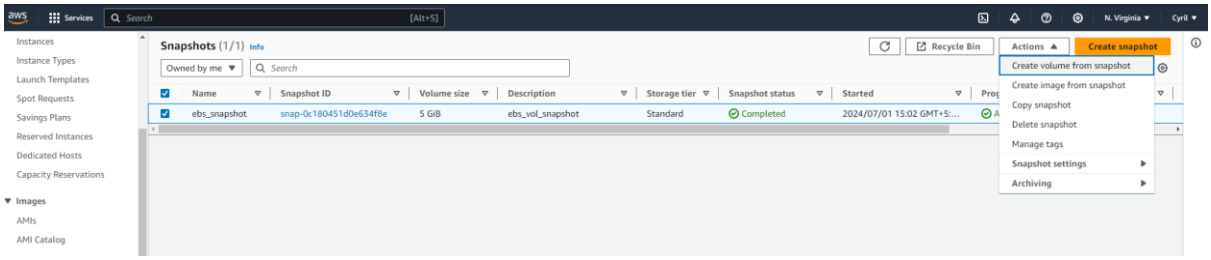
## Taking snapshot of the created EBS volume:

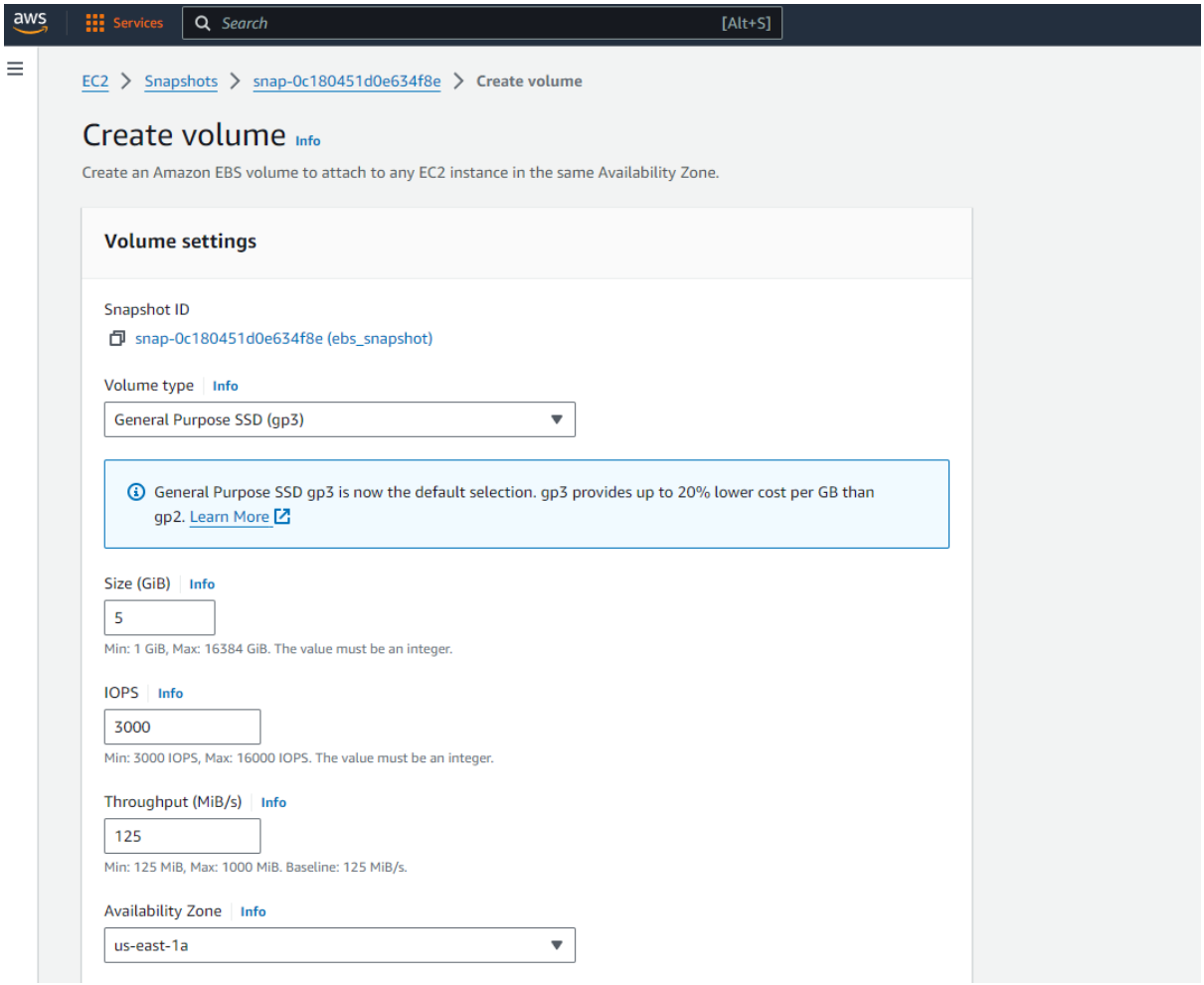



aws
Services
Search
[Alt+S]
EC2 > Volumes > vol-02d571dd7870260b0 > Create snapshot
Create snapshot Info
Create a point-in-time snapshot to back up the data on an Amazon EBS volume to Amazon S3.
Details
Volume ID
vol-02d571dd7870260b0 (ebs_vol)
Description
Add a description for your snapshot
ebs_vol_snapshot
255 characters maximum.
Encryption Info
Not encrypted
Tags Info
A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.
No tags associated with the resource.
Add tag
You can add 50 more tags.
Cancel
Create snapshot


EC2 Dashboard
EC2 Global View
Events
Console-to-Code Preview
Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Snapshots (1) Info
Owned by me
Search
Recycle Bin
Actions
Create snapshot
Name
Snapshot ID
Volume size
Description
Storage tier
Snapshot status
Started
Progress
Encryption
ebs_snapshot
snap-0c180451d0e634f8e
5 GiB
ebs_vol_snapshot
Standard
Completed
Available (100%)
Not encrypted

# Creating a EBS volume using the snapshot:



Encryption

Use Amazon EBS encryption as an encryption solution for your EBS resources associated with your EC2 instances.

☐ Encrypt this volume

**Tags - *optional*** Info

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

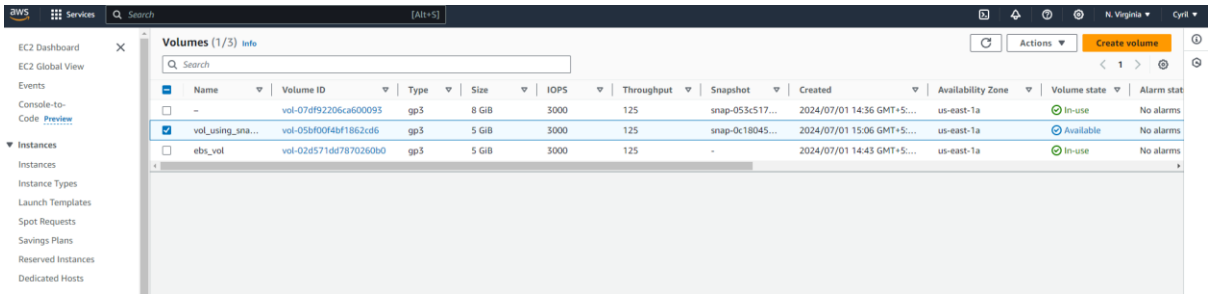
| Key | Value - *optional* | |
|---|---|---|
| name | vol_using_snapshot | Remove |

Add tag

You can add 49 more tags.

**Snapshot summary**

Click refresh to view backup information

The volume type that you select and the tags that you assign determine whether the volume will be backed up by any Data Lifecycle Manager policies.

Cancel | Create volume