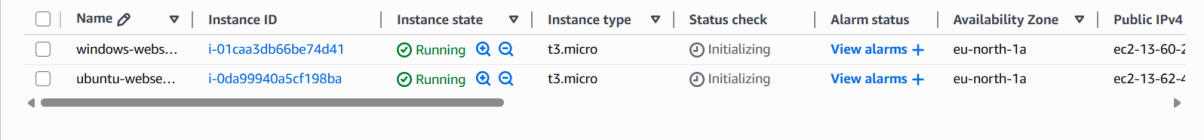
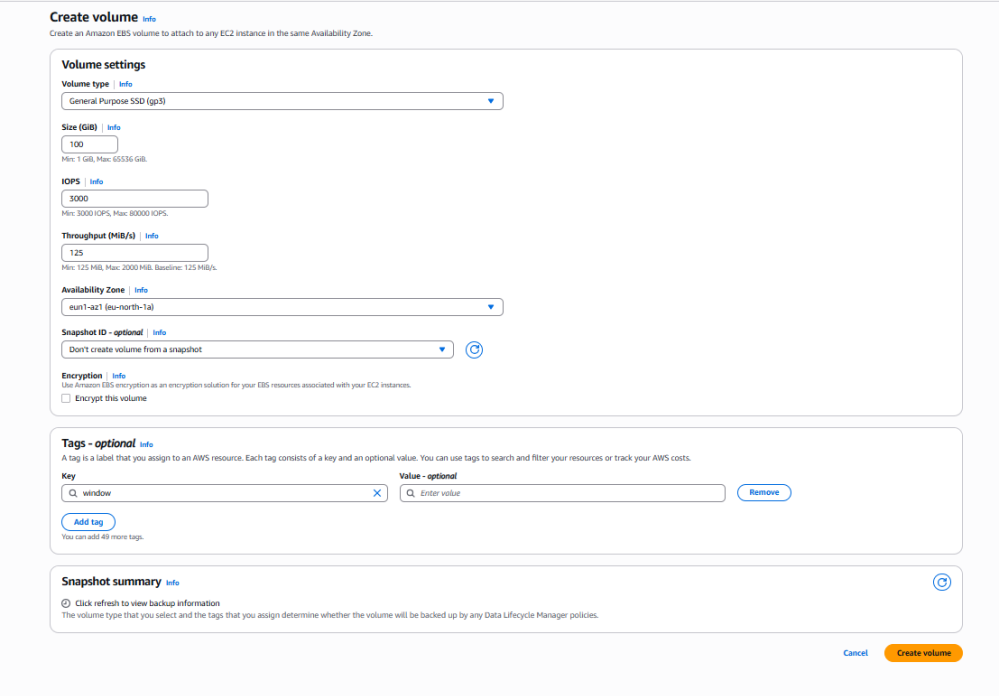
AWS Task-4

Task: Launch an EC2 instance (Linux and Windows) along with a web server. Then, create an EBS volume of 5 GB, attach it to an EC2 machine (Linux and Windows), and take a snapshot. Finally, create an EBS volume using the taken snapshot.

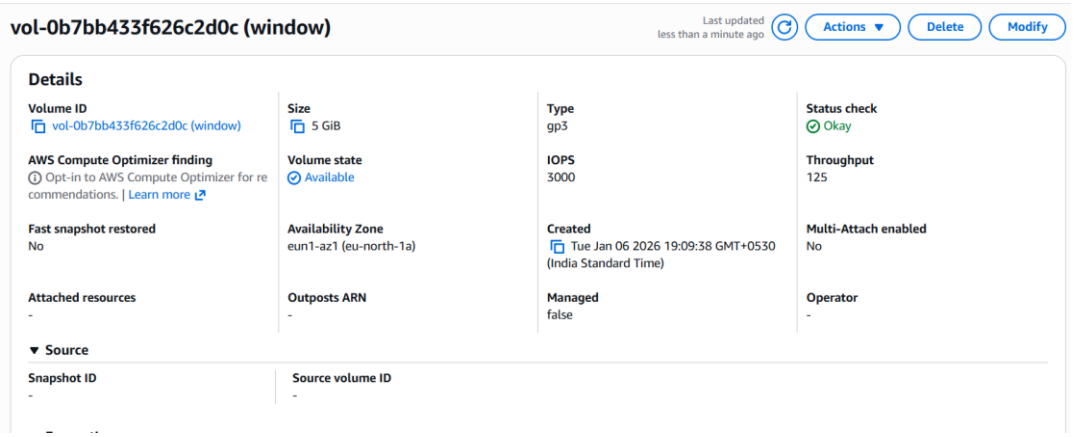
1. Created two ec2 instances.one is linux machine and another one is windows machine.



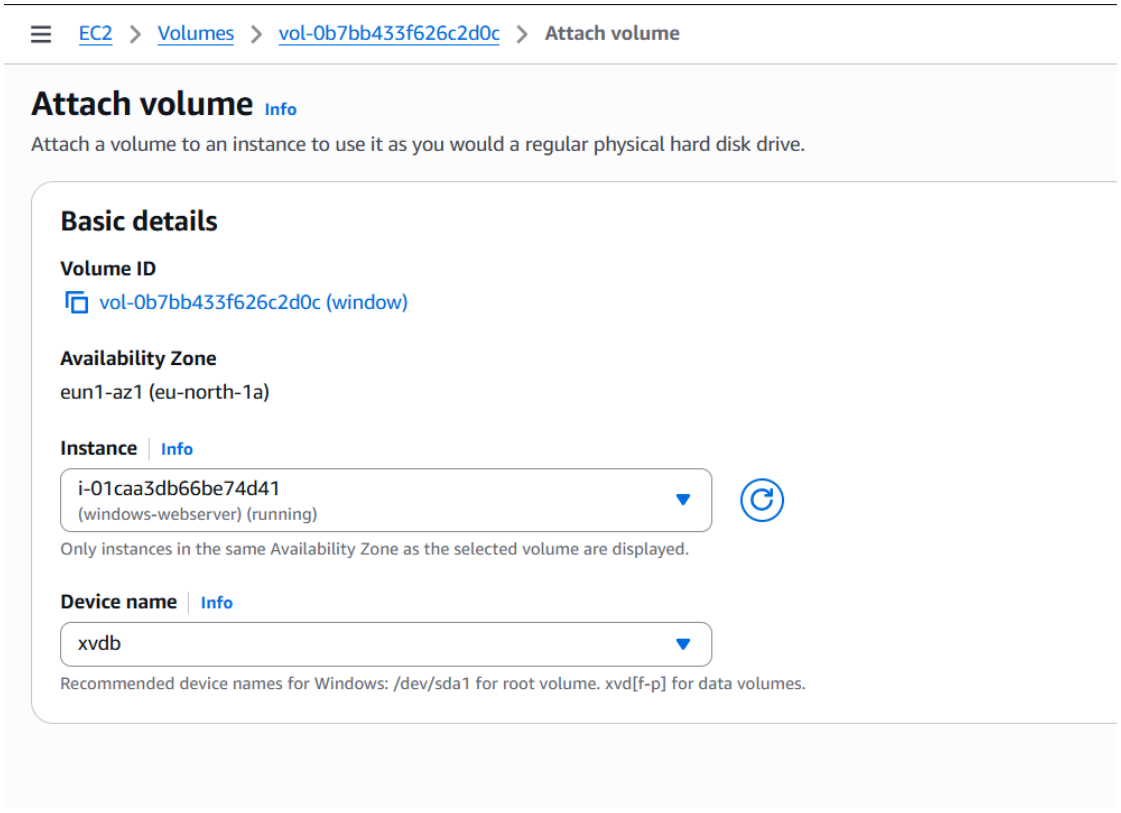
2. Creating EBS of 5GB volume.

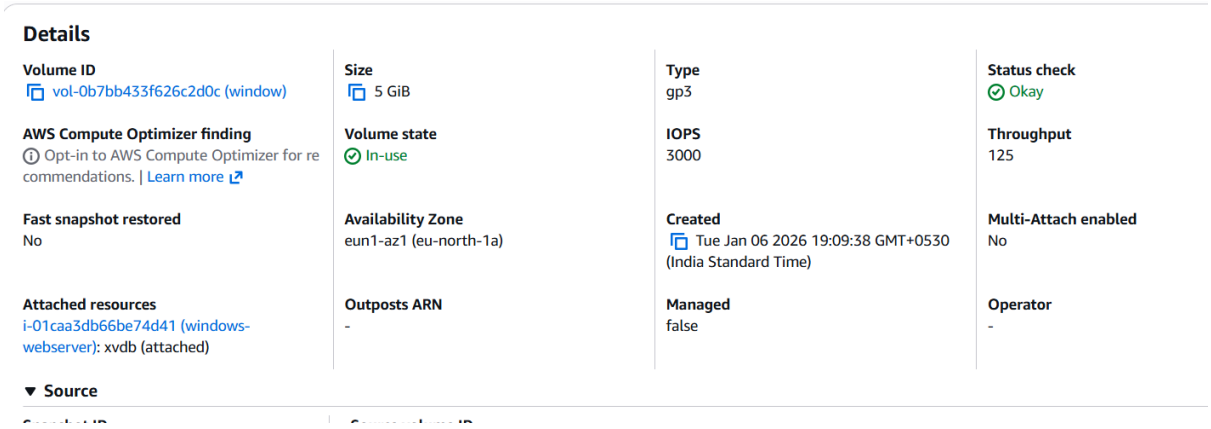


3. EBS volume created.

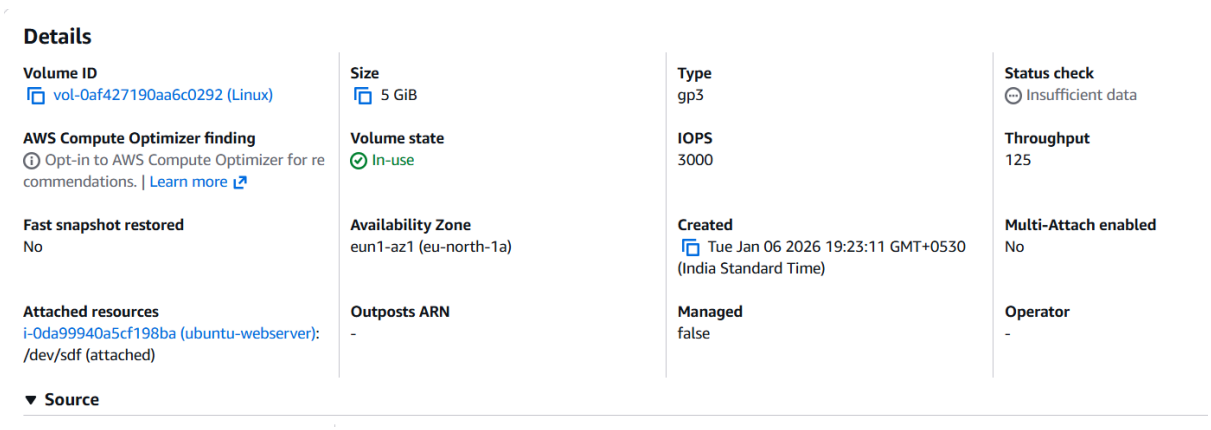


4. EBS attached to windows ec2.

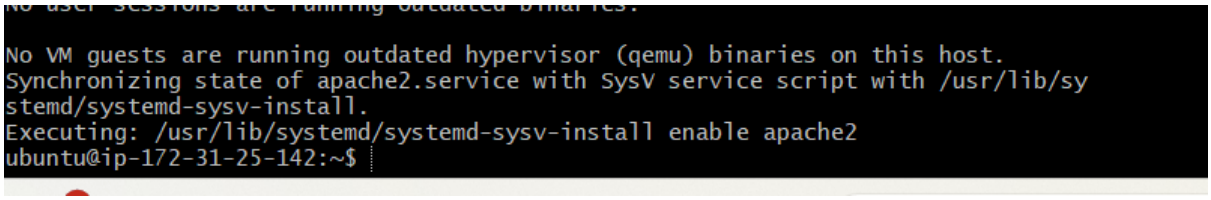




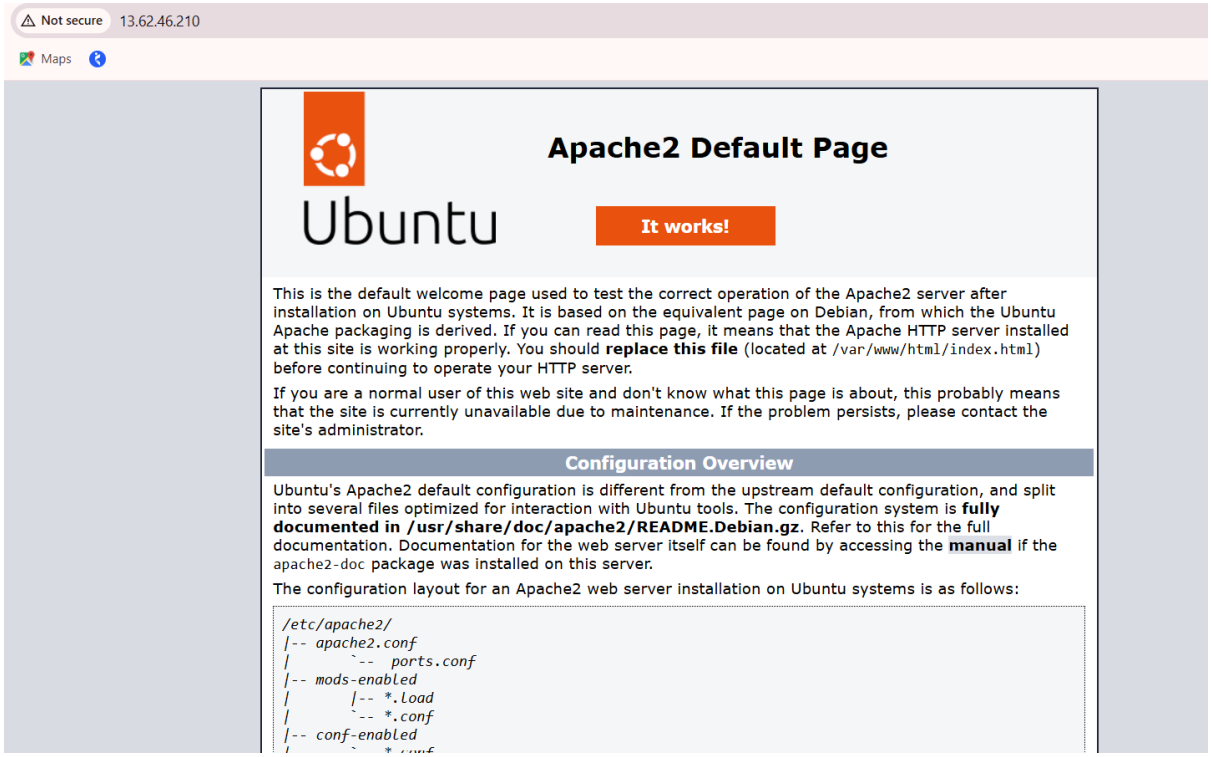
5. EBS attached to Linux ec2.



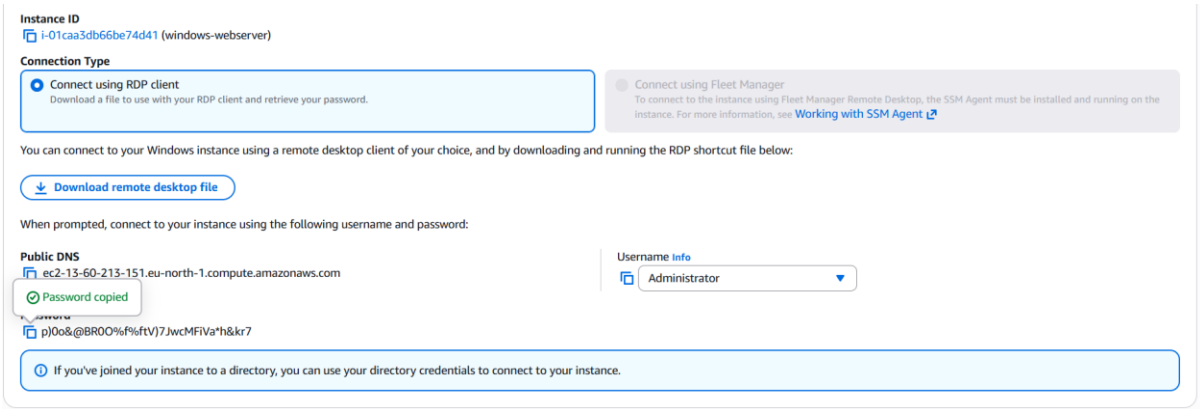
6. Installed Apache web server in linux machine.

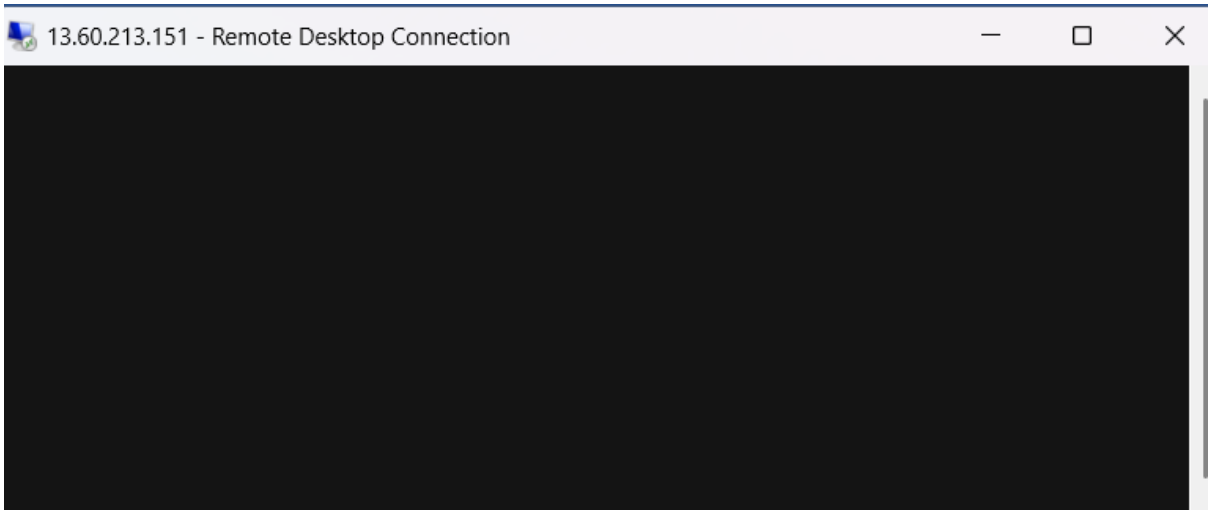


7. Checking in browser with public ip.

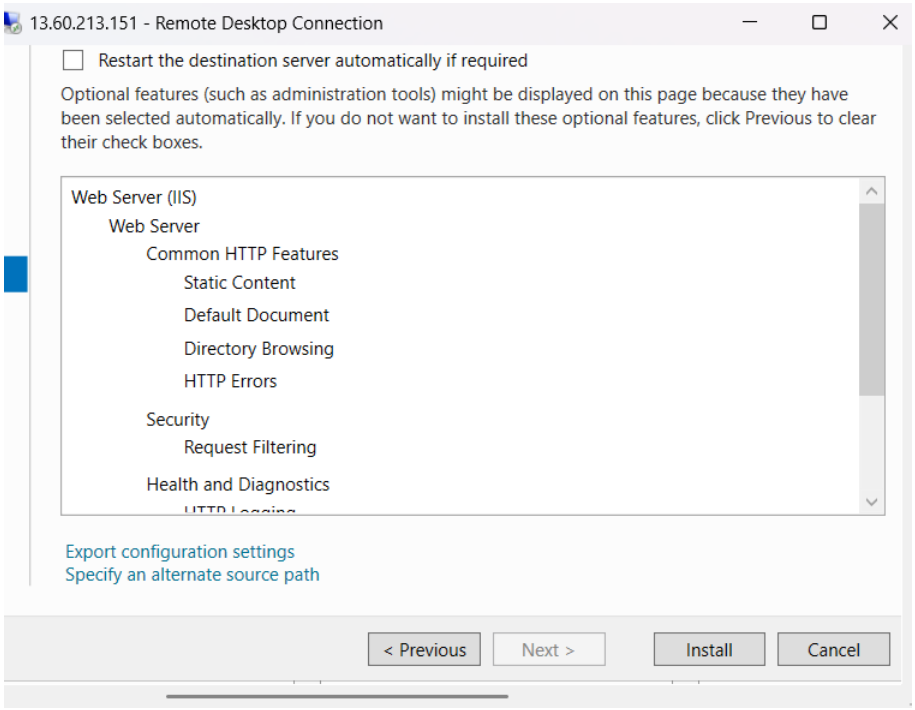


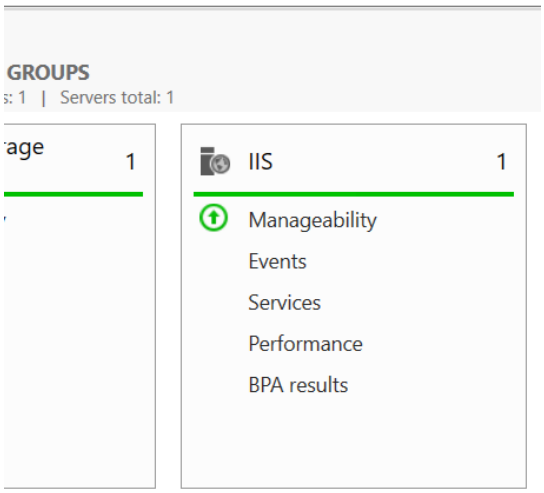
8. Login to windows ec2.





9. Installing web server.





10. Configure EBS Inside Ubuntu.

```
ubuntu@ip-172-31-25-142:~$ lsblk
NAME         MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
loop0          7:0    0 27.6M  1 loop /snap/amazon-ssm-agent/11797
loop1          7:1    0 73.9M  1 loop /snap/core22/2133
loop2          7:2    0 50.8M  1 loop /snap/snapd/25202
nvme0n1      259:0    0    8G  0 disk
├─nvme0n1p1  259:1    0    7G  0 part /
├─nvme0n1p14 259:2    0    4M  0 part
├─nvme0n1p15 259:3    0  106M  0 part /boot/efi
└─nvme0n1p16 259:4    0  913M  0 part /boot
nvme1n1      259:5    0    5G  0 disk
ubuntu@ip-172-31-25-142:~$ sudo mkfs.ext4 /dev/nvme1n1
mke2fs 1.47.0 (5-Feb-2023)
Creating filesystem with 1310720 4k blocks and 327680 inodes
Filesystem UUID: 41170548-273d-4470-a843-f63a6019ba4c
Superblock backups stored on blocks:
        32768, 98304, 163840, 229376, 294912, 819200, 884736

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

ubuntu@ip-172-31-25-142:~$ sudo mkdir /data
mkdir: cannot create directory ‘/data’: File exists
ubuntu@ip-172-31-25-142:~$ sudo mount /dev/nvme1n1 /data
ubuntu@ip-172-31-25-142:~$ df -h
Filesystem       Size  Used Avail Use% Mounted on
/dev/root        6.8G  2.0G  4.7G  30% /
tmpfs            458M     0  458M   0% /dev/shm
tmpfs            183M  908K  182M   1% /run
tmpfs            5.0M     0  5.0M   0% /run/lock
efivarfs         128K  3.6K  120K   3% /sys/firmware/efi/efivars
/dev/nvme0n1p16  881M   89M  730M  11% /boot
/dev/nvme0n1p15  105M  6.2M   99M   6% /boot/efi
tmpfs             92M   12K   92M   1% /run/user/1000
/dev/nvme1n1     4.9G   24K  4.6G   1% /data
ubuntu@ip-172-31-25-142:~$
```

```
ubuntu@ip-172-31-25-142:~$ sudo blkid /dev/nvme1n1
/dev/nvme1n1: UUID="41170548-273d-4470-a843-f63a6019ba4c" BLOCK_SIZE="4096" TYPE="ext4"
ubuntu@ip-172-31-25-142:~$
```

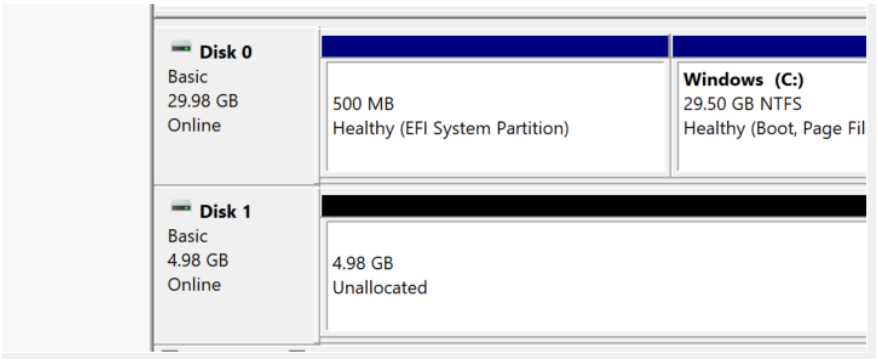
11. Updating fstab.

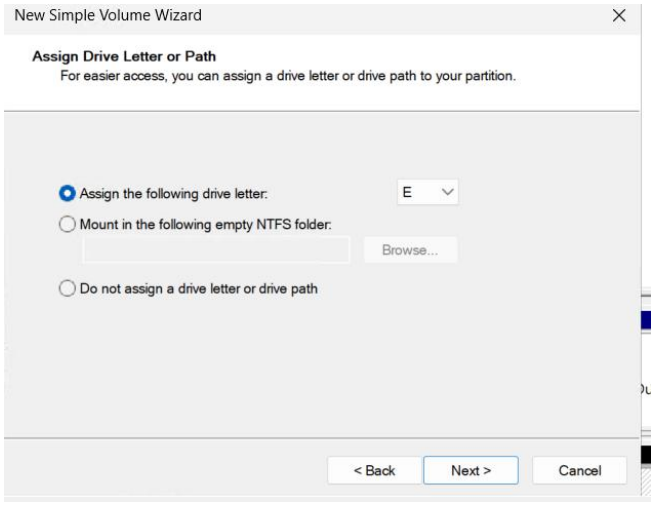
```
ubuntu@ip-172-31-25-142: ~
LABEL=cloudimg-rootfs   /        ext4   discard,commit=30,errors=remount-ro     0 1
LABEL=BOOT      /boot   ext4    defaults        0 2
LABEL=UEFI      /boot/efi       vfat    umask=0077      0 1
UUID="41170548-273d-4470-a843-f63a6019ba4c" /data ext4 defaults nofail 0 2
~
~
~
~
~
~
~
~
```

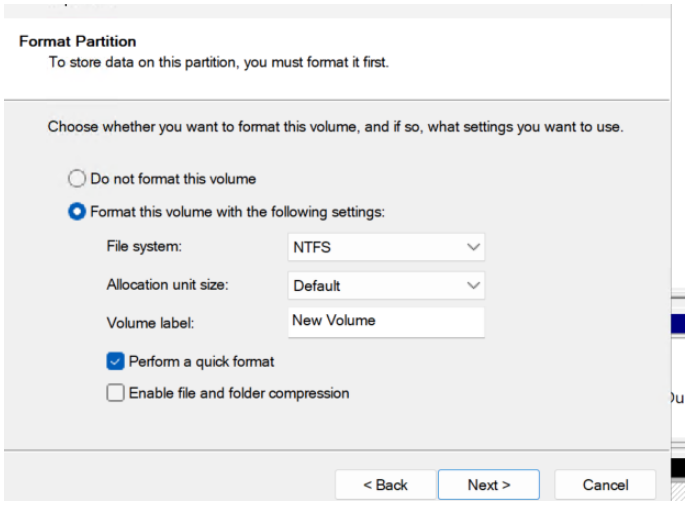
12. Checking volume attached.

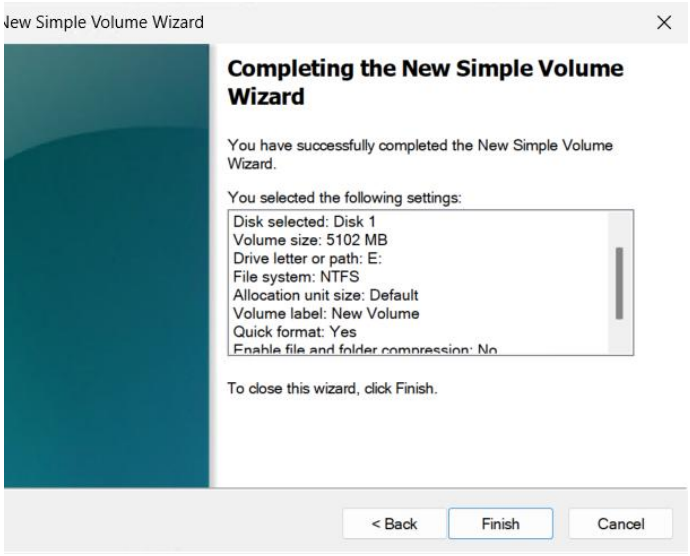
```
ubuntu@ip-172-31-25-142:~$ ls /dev/nvme*
/dev/nvme0  /dev/nvme0n1  /dev/nvme0n1p1  /dev/nvme0n1p14  /dev/nvme0n1p15  /dev/nvme0n1p16  /dev/nvme1  /dev/nvme1n1
ubuntu@ip-172-31-25-142:~$ df -h
Filesystem       Size  Used Avail Use% Mounted on
/dev/root        6.8G  2.0G  4.7G  30% /
tmpfs            458M     0  458M   0% /dev/shm
tmpfs            183M  908K  182M   1% /run
tmpfs            5.0M     0  5.0M   0% /run/lock
efivarfs         128K  3.6K  120K   3% /sys/firmware/efi/efivars
/dev/nvme0n1p16  881M   89M  730M  11% /boot
/dev/nvme0n1p15  105M  6.2M   99M   6% /boot/efi
tmpfs             92M   12K   92M   1% /run/user/1000
/dev/nvme1n1     4.9G   24K  4.6G   1% /data
ubuntu@ip-172-31-25-142:~$ sudo vi /etc/fstab
ubuntu@ip-172-31-25-142:~$
```

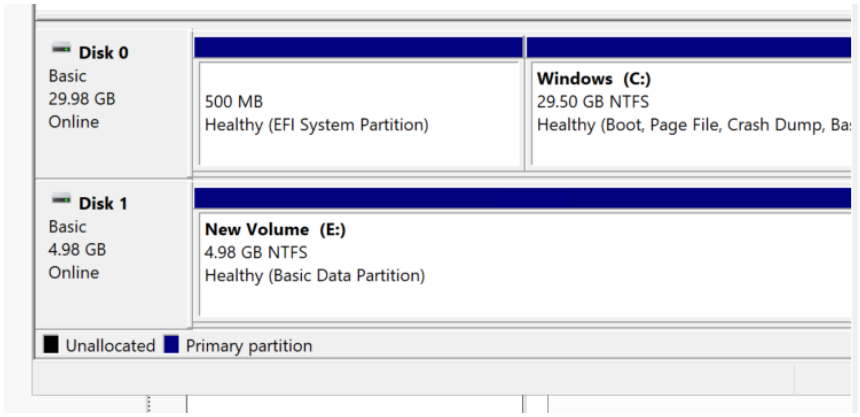
13. Configuring EBS Inside windows.



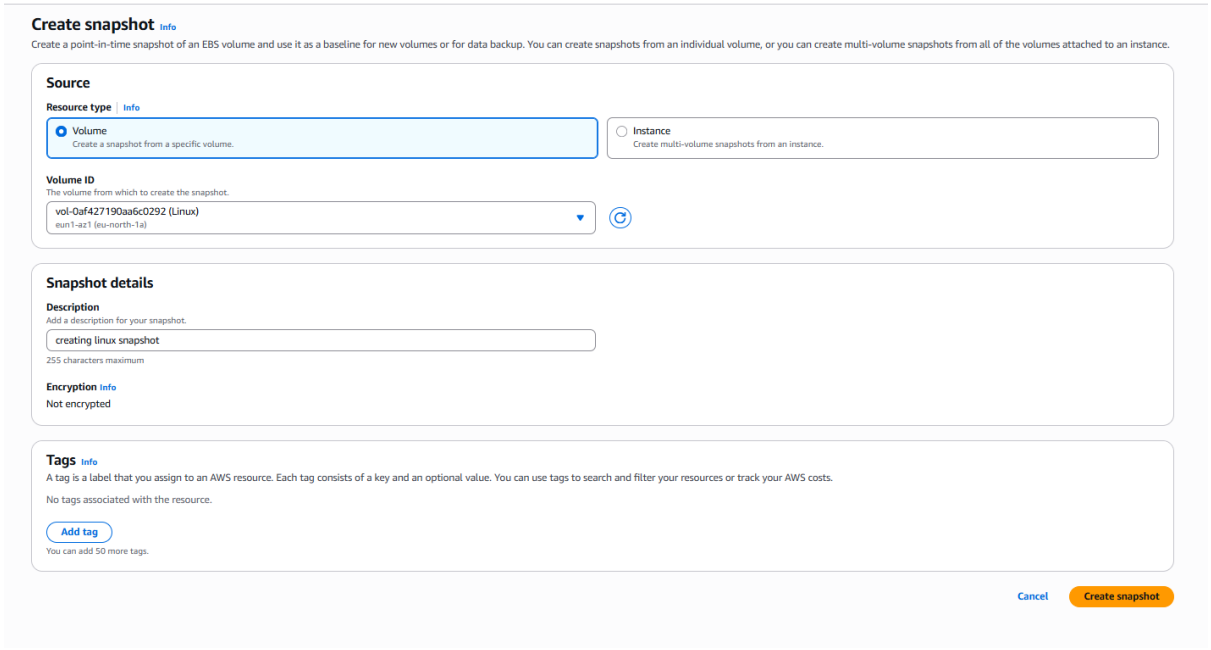


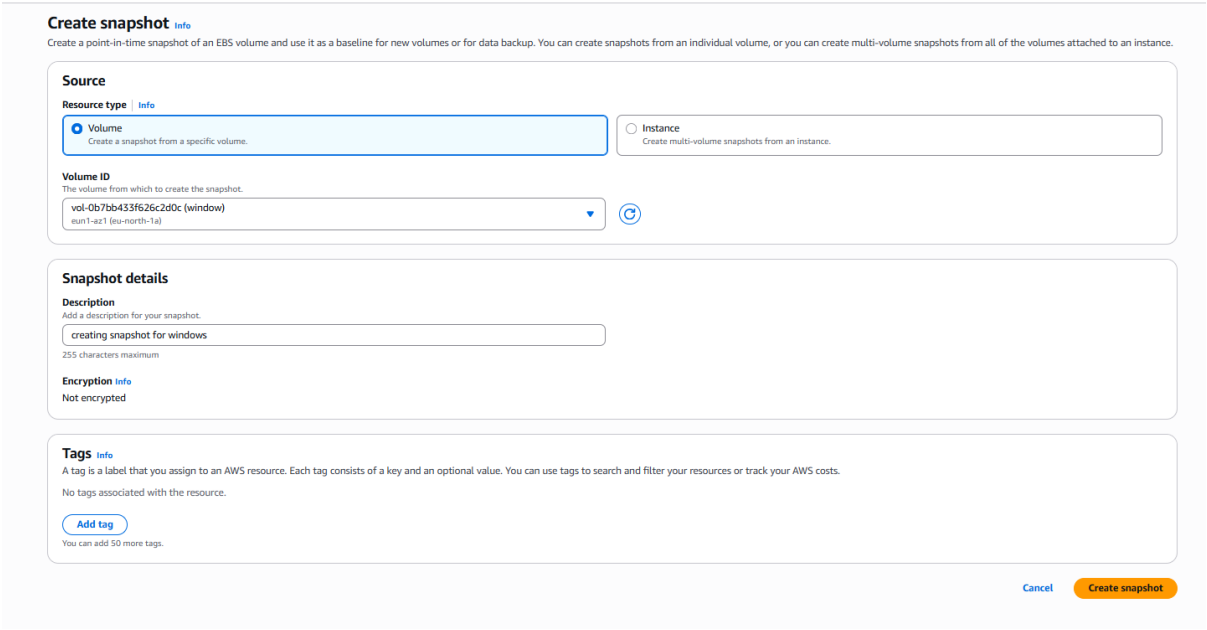




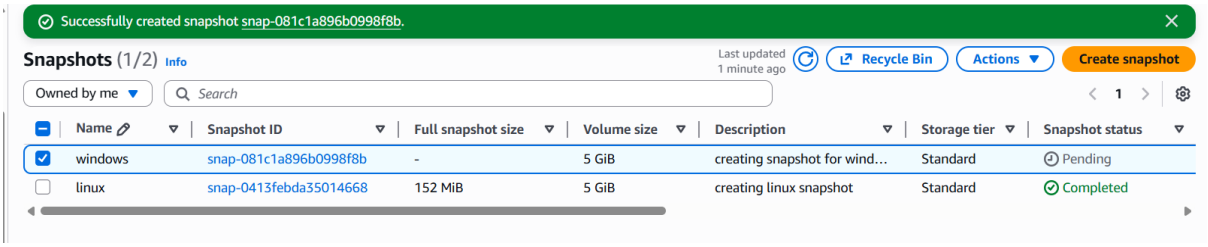


14. Creating snapshots for linux and windows EBS volumes.

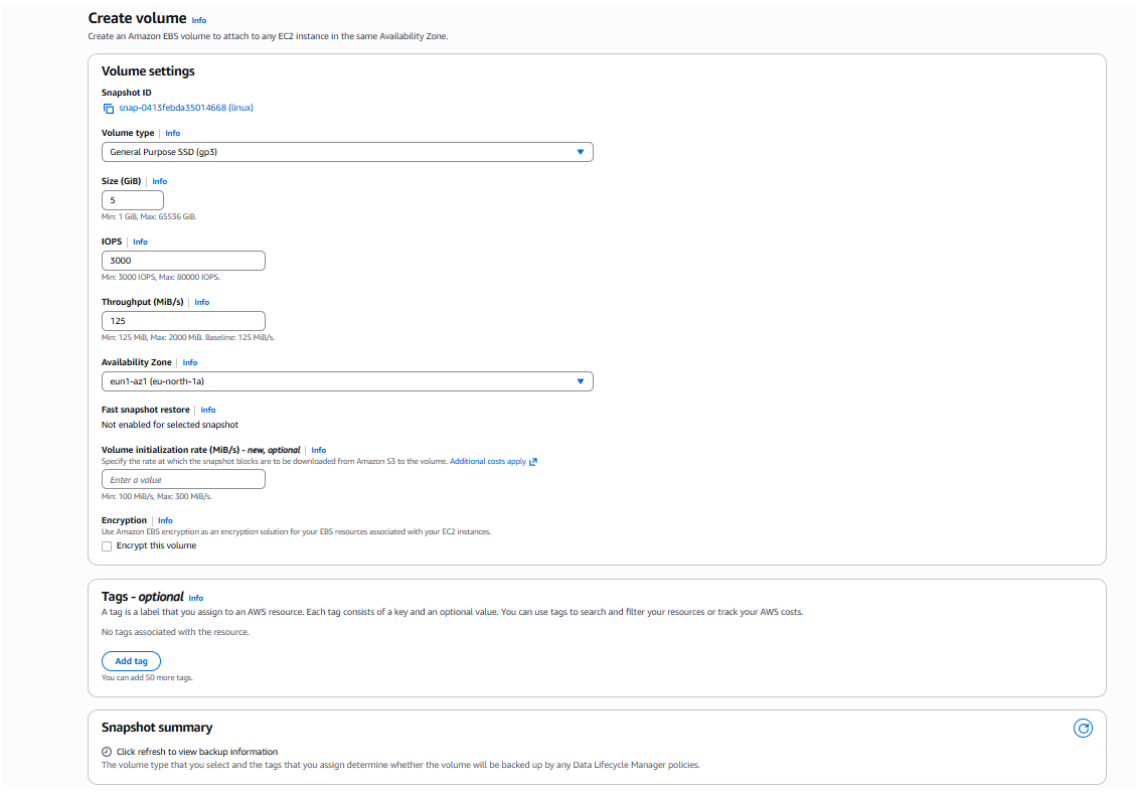


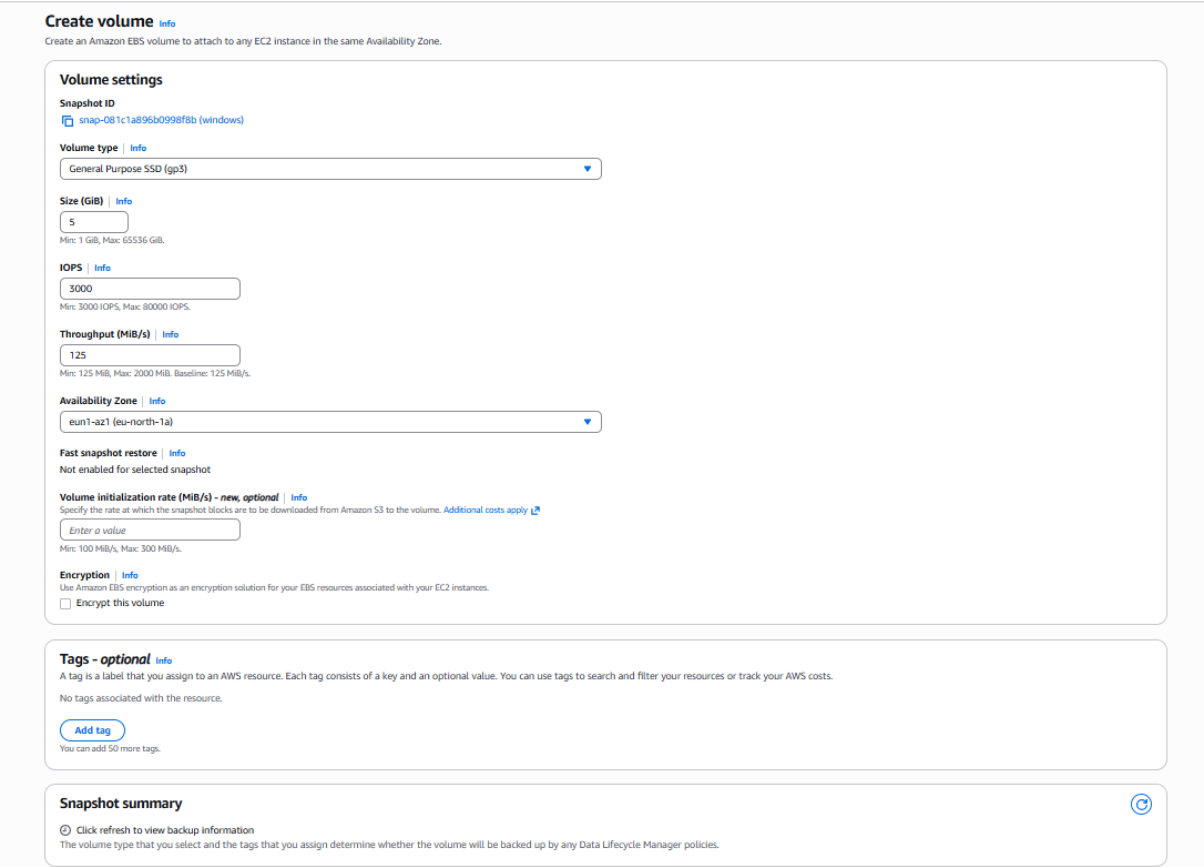


15. Snapshots are created.

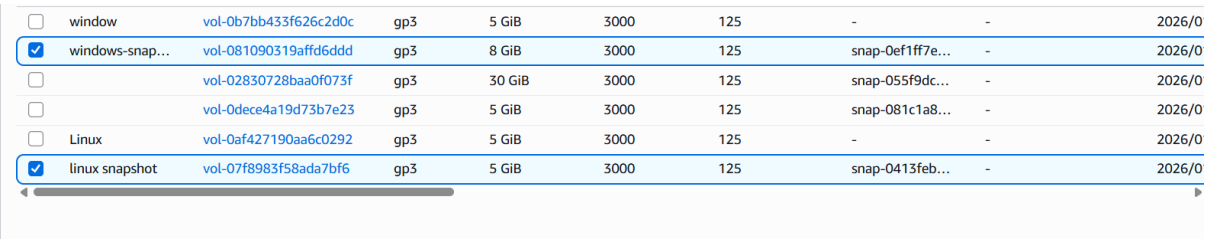


16. Creating new EBS volumes by using snapshots.





17.new EBS volume created from snapshot.



☐	window	vol-0b7bb433f626c2d0c	gp3	5 GiB	3000	125	-	-	2026/0
☑	windows-snap…	vol-081090319affd6ddd	gp3	8 GiB	3000	125	snap-0ef1ff7e…	-	2026/0
☐		vol-02830728baa0f073f	gp3	30 GiB	3000	125	snap-055f9dc…	-	2026/0
☐		vol-0dece4a19d73b7e23	gp3	5 GiB	3000	125	snap-081c1a8…	-	2026/0
☐	Linux	vol-0af427190aa6c0292	gp3	5 GiB	3000	125	-	-	2026/0
☑	linux snapshot	vol-07f8983f58ada7bf6	gp3	5 GiB	3000	125	snap-0413feb…	-	2026/0