

WEEK-5 Create and manage Elastic Block Store.

Go to Services→compute→EC2→ELASTIC BLOCK STORE→VOLUMES

The screenshot displays the AWS Management Console interface. On the left, the 'EC2 Dashboard' sidebar is visible, containing links to 'EC2 Global View', 'Events', 'Instances', 'Images', and 'Elastic Block Store'. The 'Instances' section is expanded, showing options like 'Instances', 'Instance Types', 'Launch Templates', 'Spot Requests', 'Savings Plans', 'Reserved Instances', 'Dedicated Hosts', and 'Capacity Reservations'. The 'Elastic Block Store' section is also expanded, showing 'Volumes', 'Snapshots', and 'Lifecycle Manager'. The main content area is titled 'Resources' and shows a summary of EC2 resources in the US East (N. Virginia) region. It includes a table with counts for various services: Instances (running), Auto Scaling Groups, Elastic IPs, Instances, Load balancers, Placement groups, Snapshots, and Volumes. Below this, there is a 'Launch instance' section with a 'Launch instance' button and a 'Migrate a server' link. A note states: 'Note: Your instances will launch in the US East (N. Virginia) Region'. On the right, the 'Service health' section shows the region as 'US East (N. Virginia)' and the zone as 'us-east-1a'.

Click on create volume

The screenshot displays the AWS Management Console interface for the 'Volumes' page. The left sidebar is the same as the previous screenshot. The main content area is titled 'Volumes' and shows a table with columns for Name, Volume ID, Type, Size, IOPS, Throughput, Snapshot, and Created. A message states: 'You currently have no volumes in this region'. There is a 'Create volume' button in the top right corner.

aws Services Search [Alt+S]

EC2 > Volumes > Create volume

Create volume [Info](#)

Create an Amazon EBS volume to attach to any EC2 instance in the same Availability Zone.

Volume settings

Volume type [Info](#)

General Purpose SSD (gp3) ▼

[i](#) General Purpose SSD gp3 is now the default selection. gp3 provides up to 20% lower cost per GB than gp2. [Learn More](#)

Size (GiB) [Info](#)

100

Min: 1 GiB, Max: 16384 GiB. The value must be an integer.

IOPS [Info](#)

3000

Min: 3000 IOPS, Max: 16000 IOPS. The value must be an integer.

Throughput (MiB/s) [Info](#)

125

Select default settings as volume type :General Purpose SSD(solid state drives)(gp3),size:20gb,IOPS(Input/Output Operations Per Second):3000,Throughput(mb/s):125

Availability zone is same as where Instance was crated ,choose that availability zone only.

Click on create volume

aws

Services

Search

[Alt+S]

EC2 > Volumes > Create volume

Create volume [Info](#)

Create an Amazon EBS volume to attach to any EC2 instance in the same Availability Zone.

Volume settings

Volume type [Info](#)

General Purpose SSD (gp3) ▲

General Purpose SSD (gp3) ✓

General Purpose SSD (gp2)

Provisioned IOPS SSD (io1)

Provisioned IOPS SSD (io2)

Cold HDD (sc1)

Throughput Optimized HDD (st1)

Magnetic (standard)

provides up to 20% lower cost per GB than gp2.

IOPS [Info](#)

3000

Min: 3000 IOPS, Max: 16000 IOPS. The value must be an integer.

Throughput (MiB/s) [Info](#)

125

aws

Services

Search

[Alt+S]

Volume settings

Volume type [Info](#)

General Purpose SSD (gp3) ▼

General Purpose SSD gp3 is now the default selection. gp3 provides up to 20% lower cost per GB than gp2. [Learn More](#)

Size (GiB) [Info](#)

20

Min: 1 GiB, Max: 16384 GiB. The value must be an integer.

IOPS [Info](#)

3000

Min: 3000 IOPS, Max: 16000 IOPS. The value must be an integer.

Throughput (MiB/s) [Info](#)

125

Min: 125 MiB, Max: 1000 MiB. Baseline: 125 MiB/s.

Availability Zone [Info](#)

us-east-1a ▼

Snapshot ID - optional [Info](#)

Don't create volume from a snapshot ▼

↺

Services
[Alt+S]

IOPS

Info

Min: 3000 IOPS, Max: 16000 IOPS. The value must be an integer.

Throughput (MiB/s)

Info

Min: 125 MiB, Max: 1000 MiB. Baseline: 125 MiB/s.

Availability Zone

Info

us-east-1a

Snapshot ID - optional

Info

Don't create volume from a snapshot

↺

Encryption

Info

☐ Encrypt this volume

Tags - optional

Info

Key

Value - optional

Created successfully.

Services
[Alt+S]

EC2 Dashboard

EC2 Global View

Events

Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

New

Images

AMIs

AMI Catalog

Successfully created volume vol-02804a7894df0ed61.

Volumes (1/2)

Info

↺

Actions

Create volume

	Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot	Created
<input type="checkbox"/>	-	vol-06d60e4a7e1a8582e	gp3	100 GiB	3000	125	-	2023/11/14 22:52 GMT+5:...
<input checked="" type="checkbox"/>	Windows_volu...	vol-02804a7894df0ed61	gp3	20 GiB	3000	125	-	2023/11/14 23:05 GMT+5:...

Volume ID: vol-02804a7894df0ed61 (Windows_volume)

Details

Status checks

Monitoring

Tags

Volume ID

Size

Type

Volume status

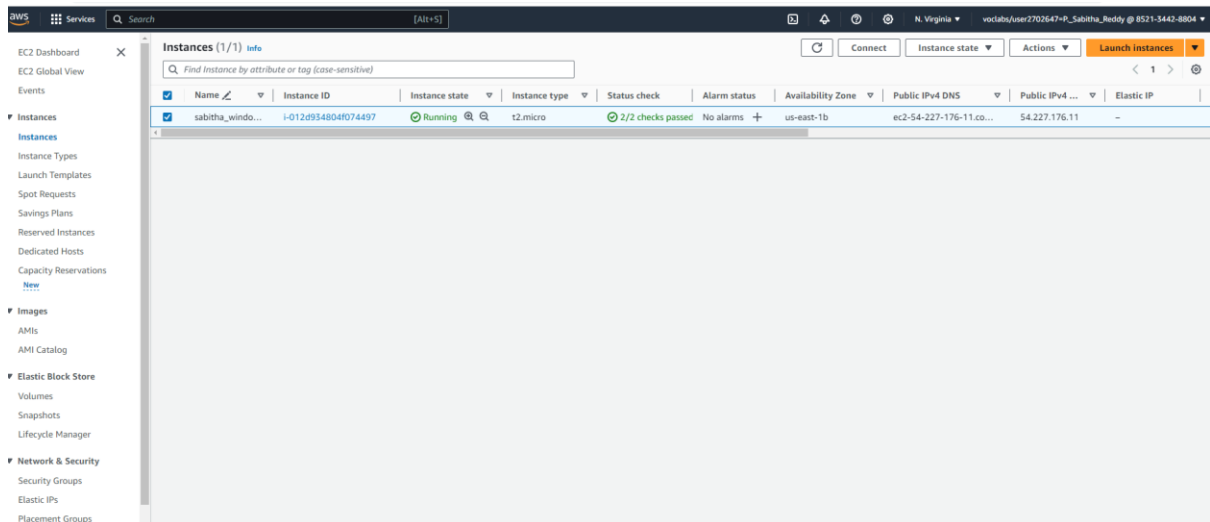
vol-02804a7894df0ed61 (Windows_volume)

20 GiB

gp3

☒ Okay

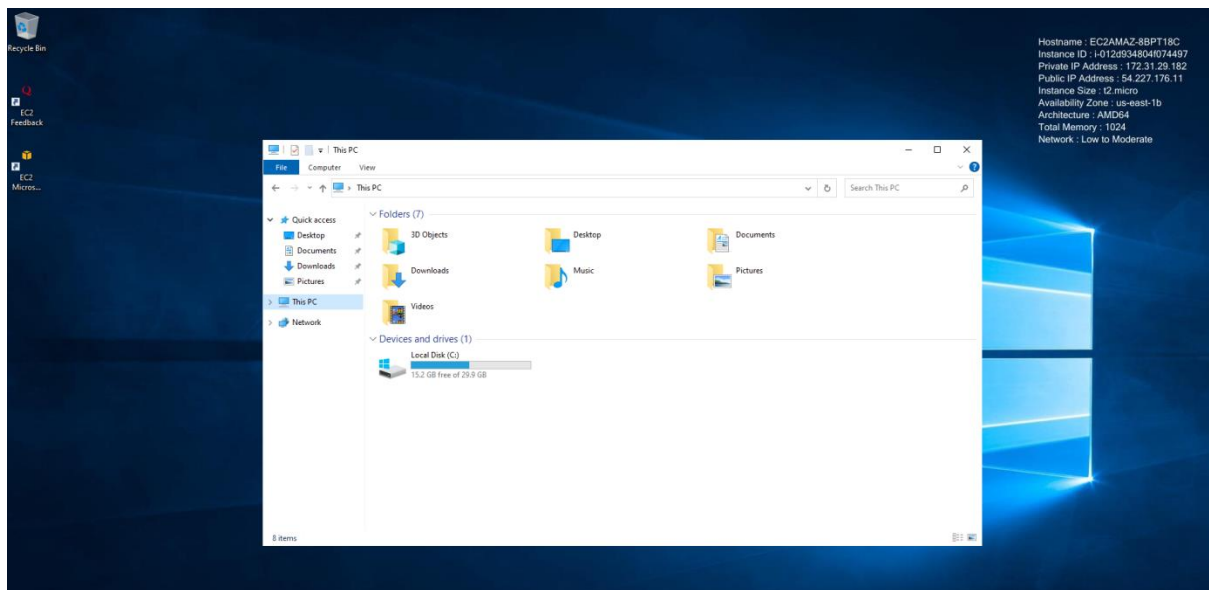
Launch the Windows.



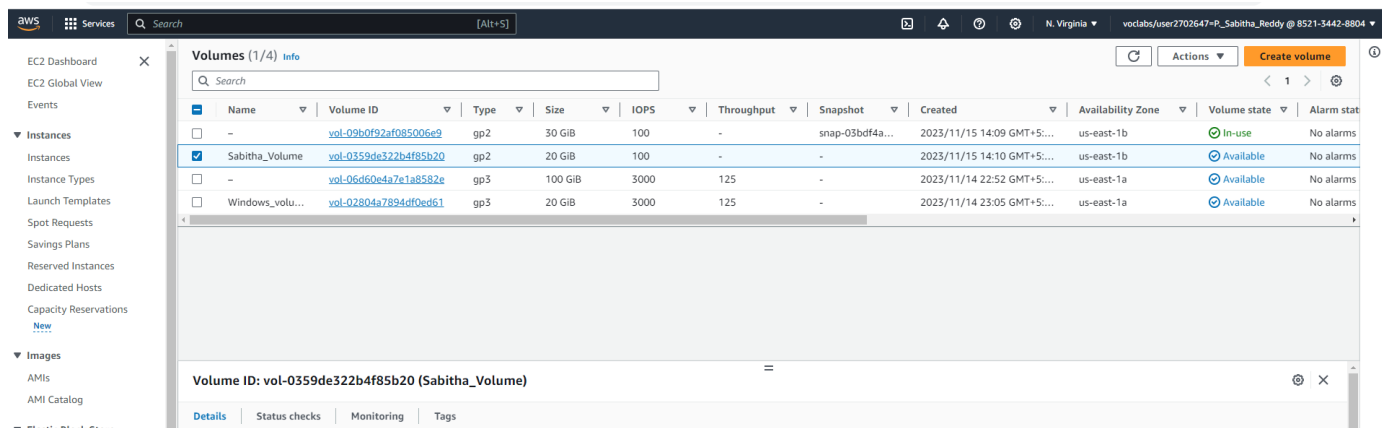
Instance and connect the windows instance.

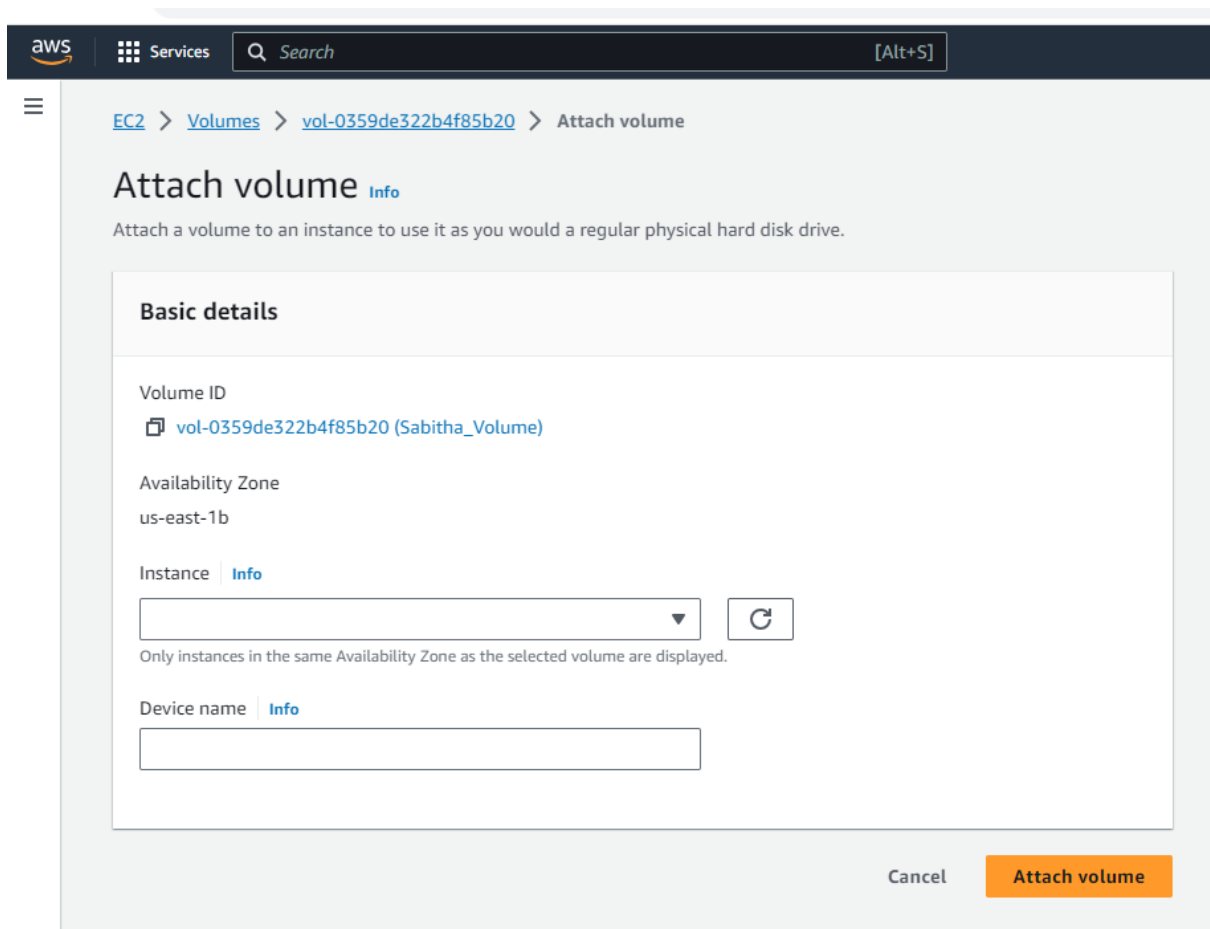
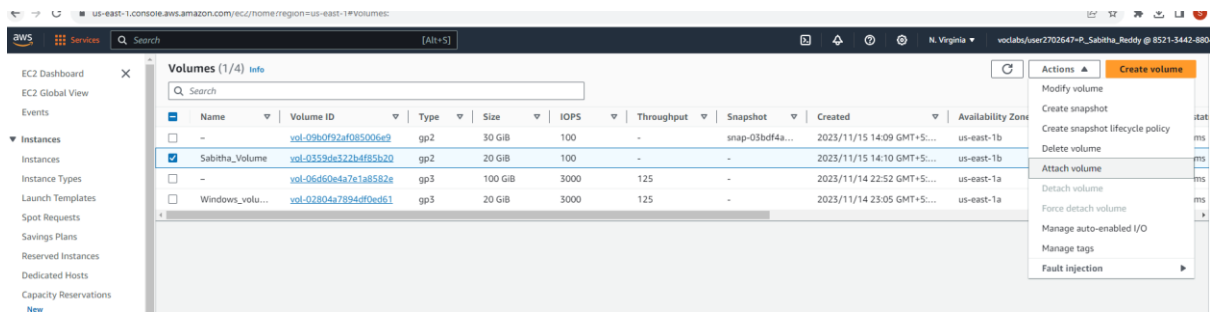
Open File Folder—> we can find only one driver :C with 29.9 GB

Attach the EDS volume to Windows instance.



In Aws Management Console go to Instance→Volumes→click one volume name→actions→attach Volume





Select Instance from same Availability Zone and remember Device name & click on attach volume.


aws Services Search [Alt+S]

EC2 > Volumes > vol-0359de322b4f85b20 > Attach volume


Attach volume [Info](#)

Attach a volume to an instance to use it as you would a regular physical hard disk drive.

Basic details

Volume ID
 [vol-0359de322b4f85b20 \(Sabitha_Volume\)](#)

Availability Zone
us-east-1b

Instance [Info](#)
 

Only instances in the same Availability Zone as the selected volume are displayed.

Device name [Info](#)





Recommended device names for Windows: /dev/sda1 for root volume. xvd[f-p] for data volumes.

Cancel **Attach volume**

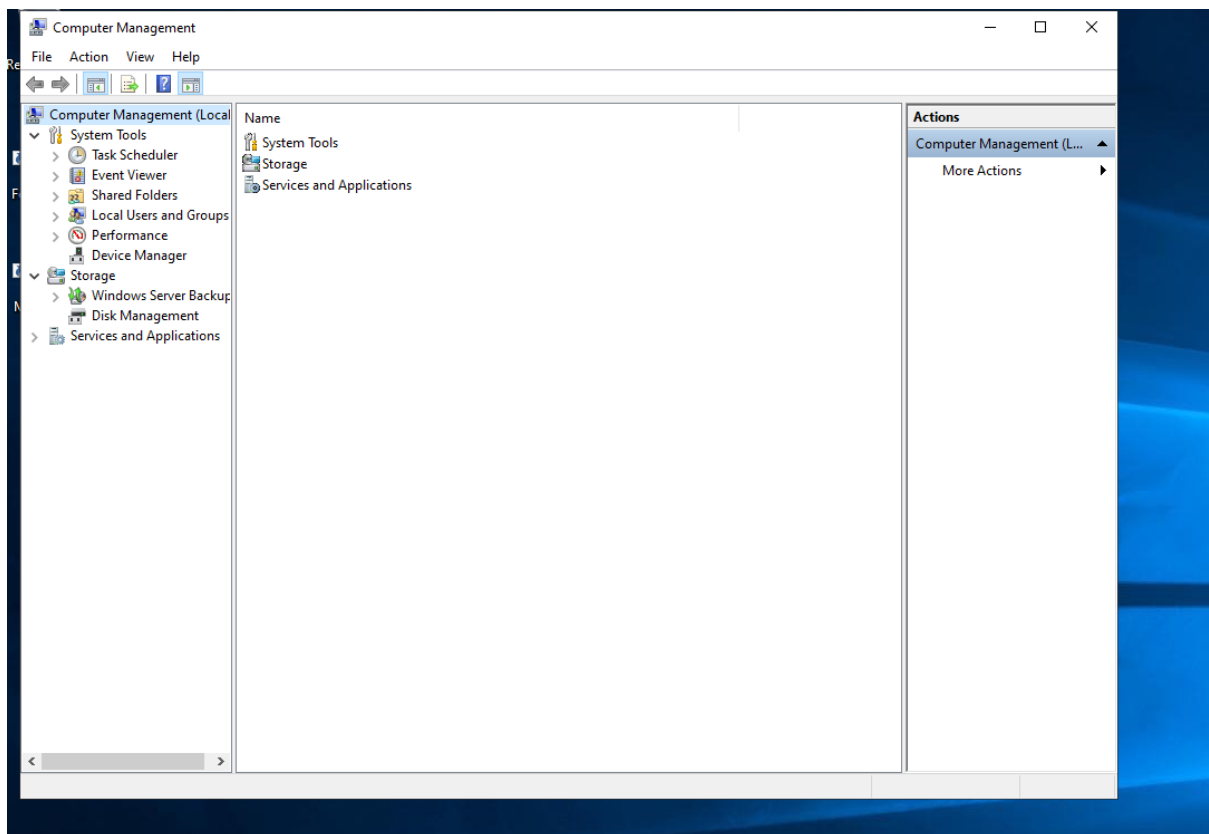
Now this volume state will be change to in-use from available state

Successfully attached volume vol-0359de322b4f85b20 to instance i-Ofdb7616bd02ecc86

Volumes (4) [Info](#)

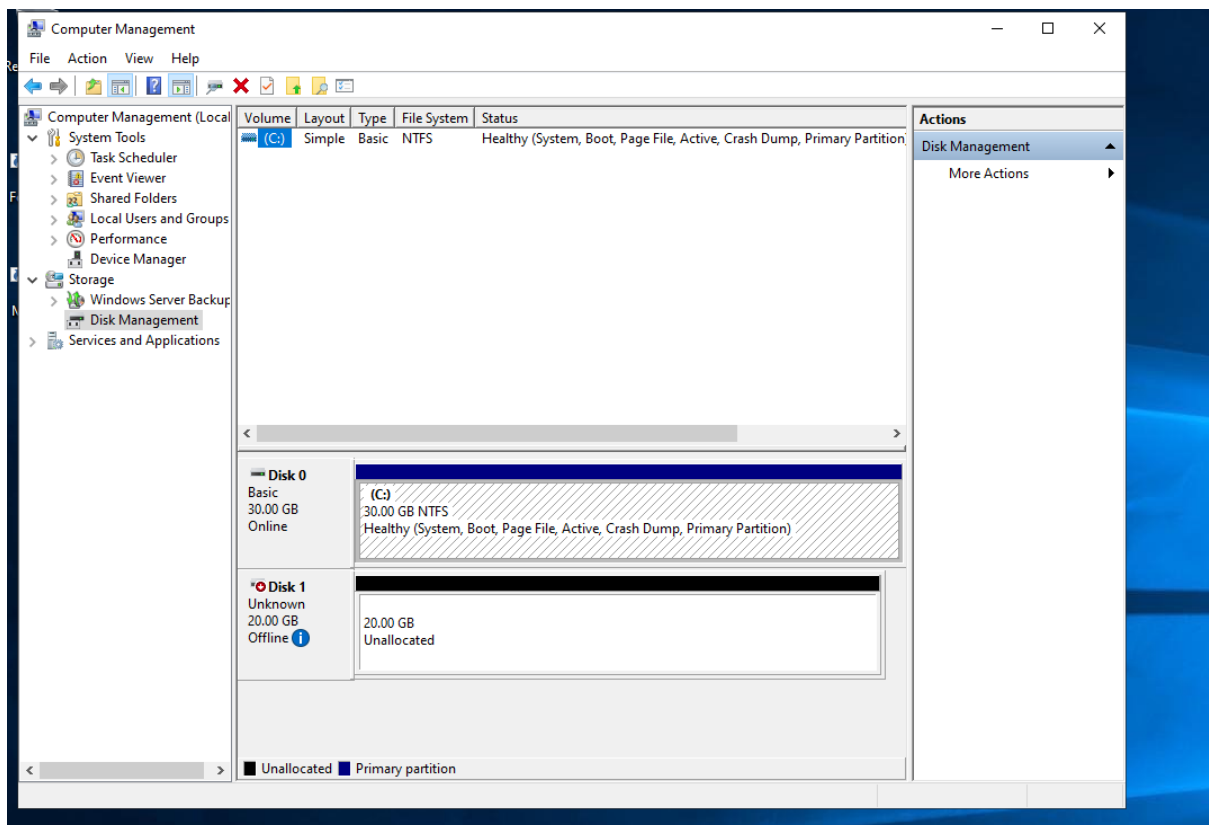
	Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot	Created	Availability Zone	Volume state	Alarm stat
<input type="checkbox"/>	-	vol-09b0f92af085006e9	gp2	30 GiB	100	-	snap-03bdf4a...	2023/11/15 14:09 GMT+5...	us-east-1b	 In-use	No alarms
<input type="checkbox"/>	Sabitha_Volume	vol-0359de322b4f85b20	gp2	20 GiB	100	-	-	2023/11/15 14:10 GMT+5...	us-east-1b	 In-use	No alarms
<input type="checkbox"/>	-	vol-06d50e4a7e1a8582e	gp3	100 GiB	3000	125	-	2023/11/14 22:52 GMT+5...	us-east-1a	 Available	No alarms
<input type="checkbox"/>	Windows_volu...	vol-02804a7894df0ed61	gp3	20 GiB	3000	125	-	2023/11/14 23:05 GMT+5...	us-east-1a	 Available	No alarms

Open the windows instance → open search bar → computer management



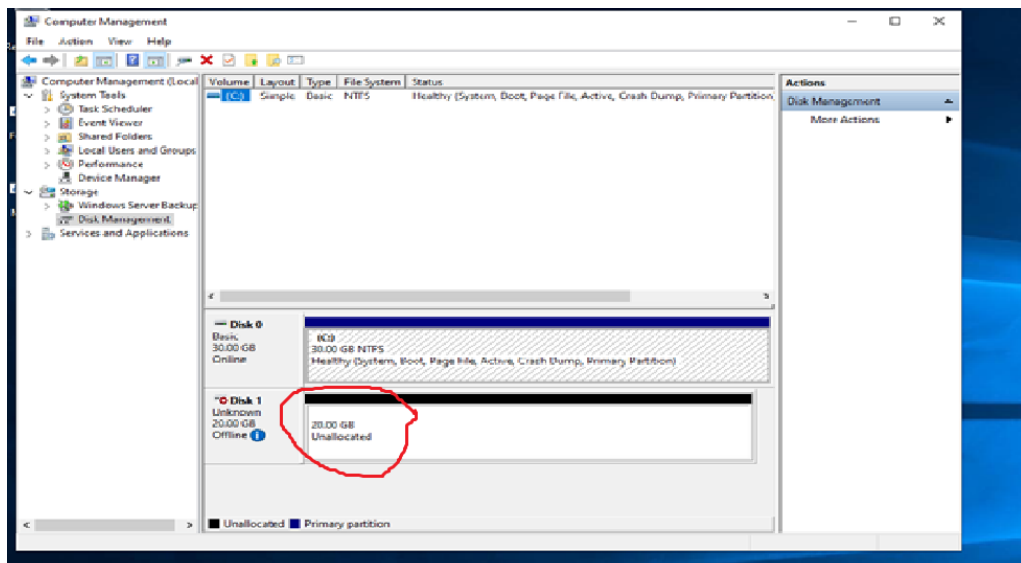
Click on storage → disk management → disk1 is unallocated

So right click on disk1 → click on online

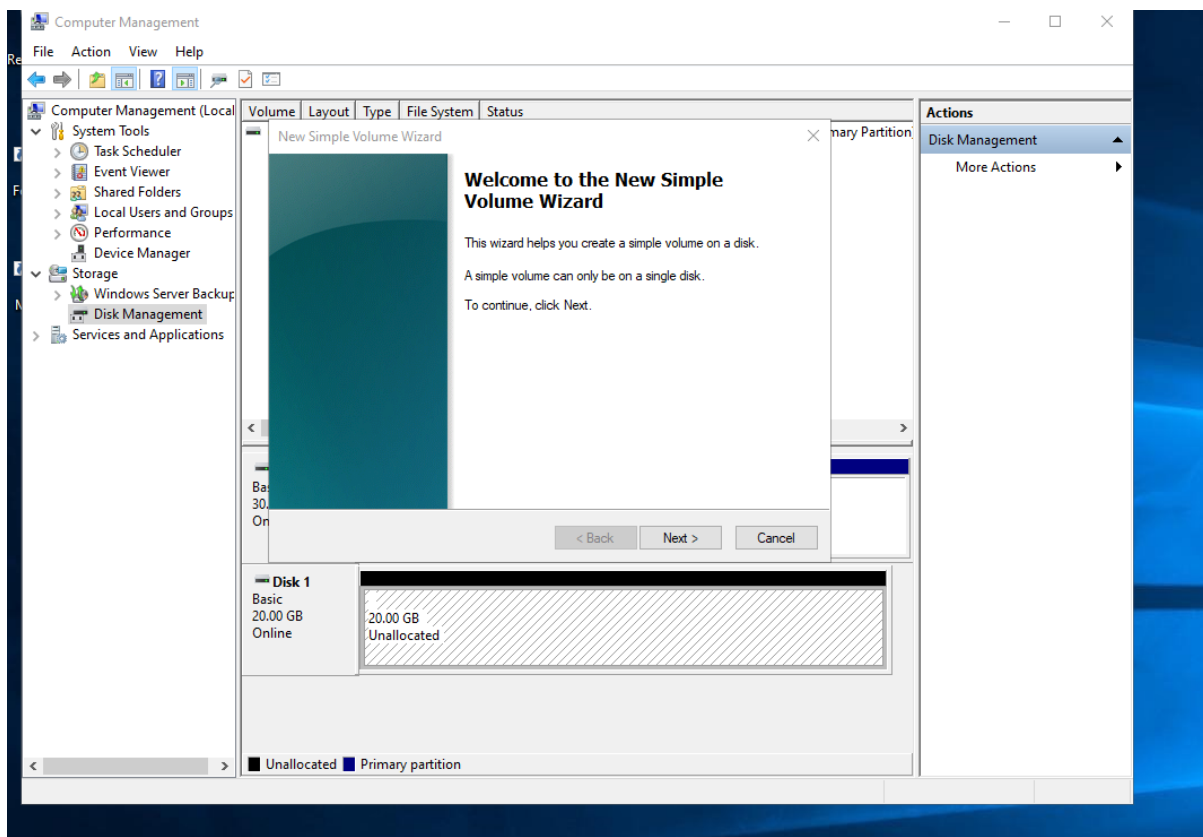


Disk will be change to offline to online

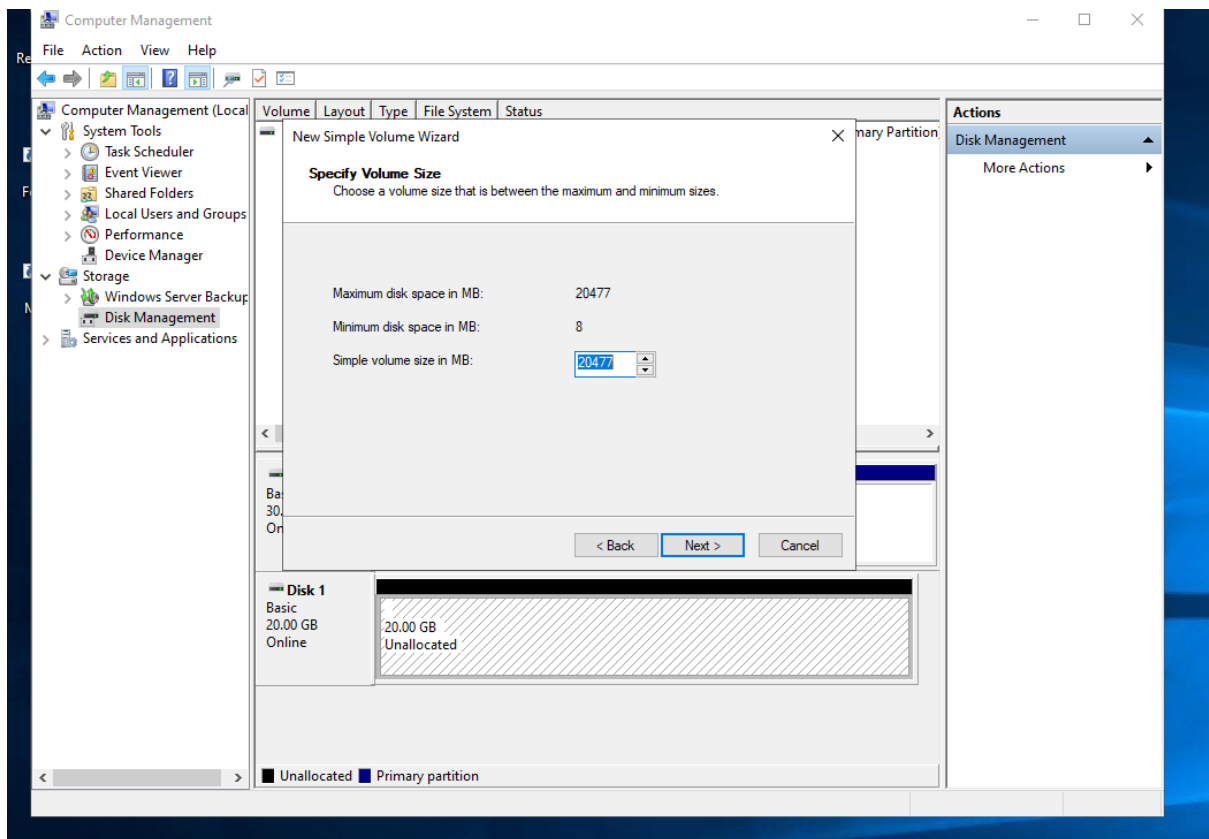
Click on the right click on memory→select new simple volume



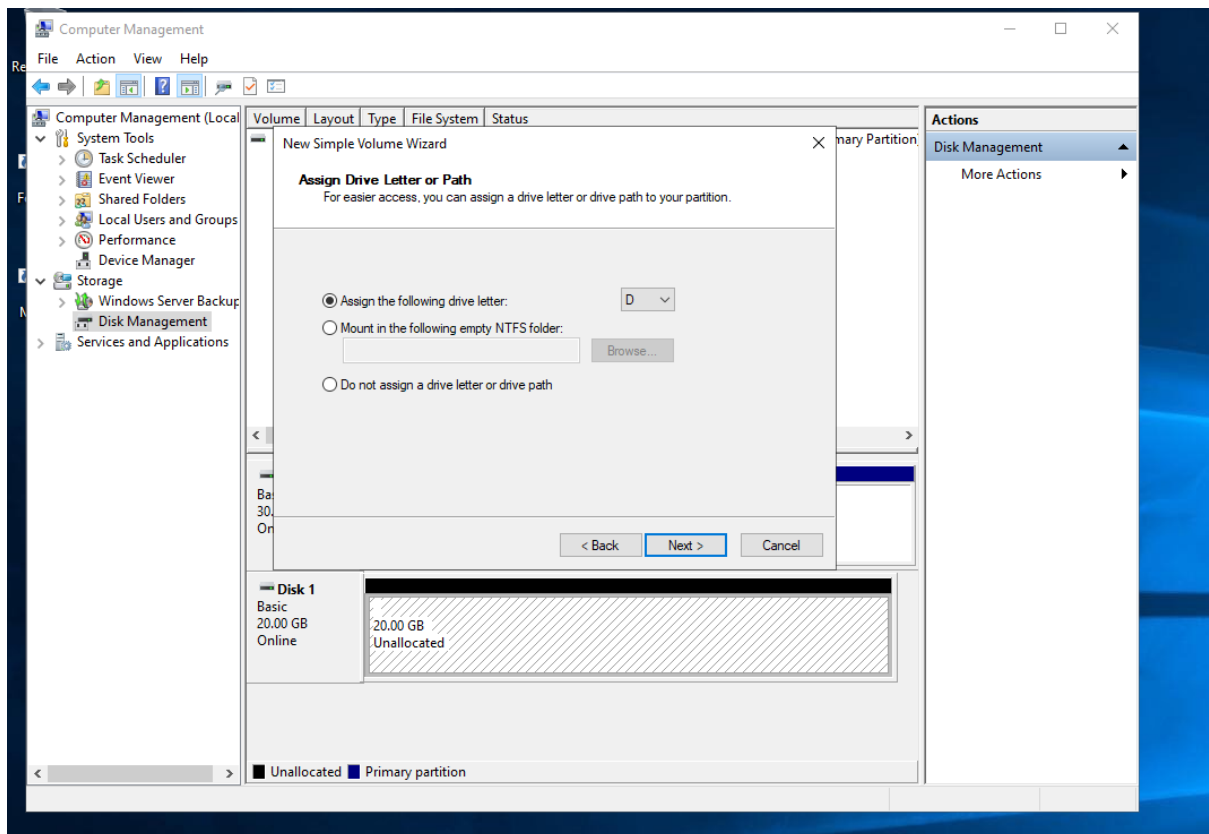
Click on next



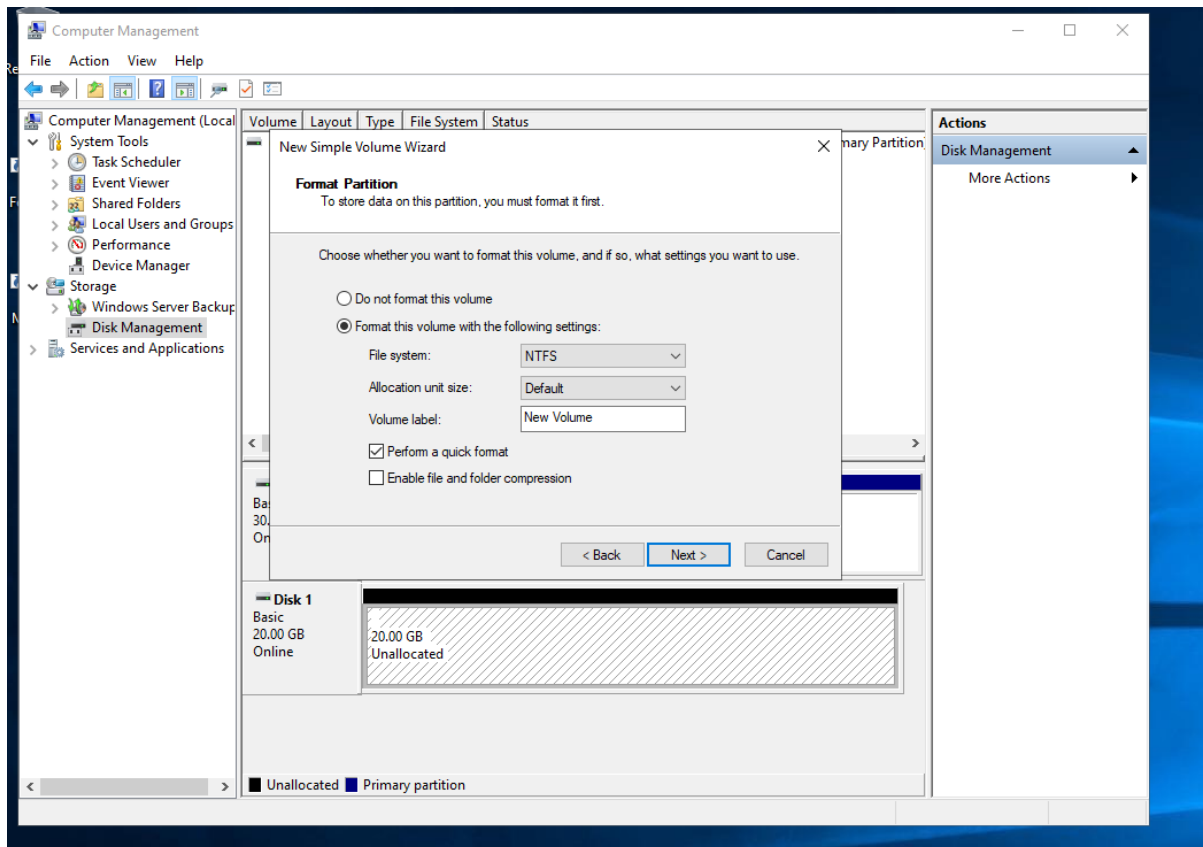
Click on next



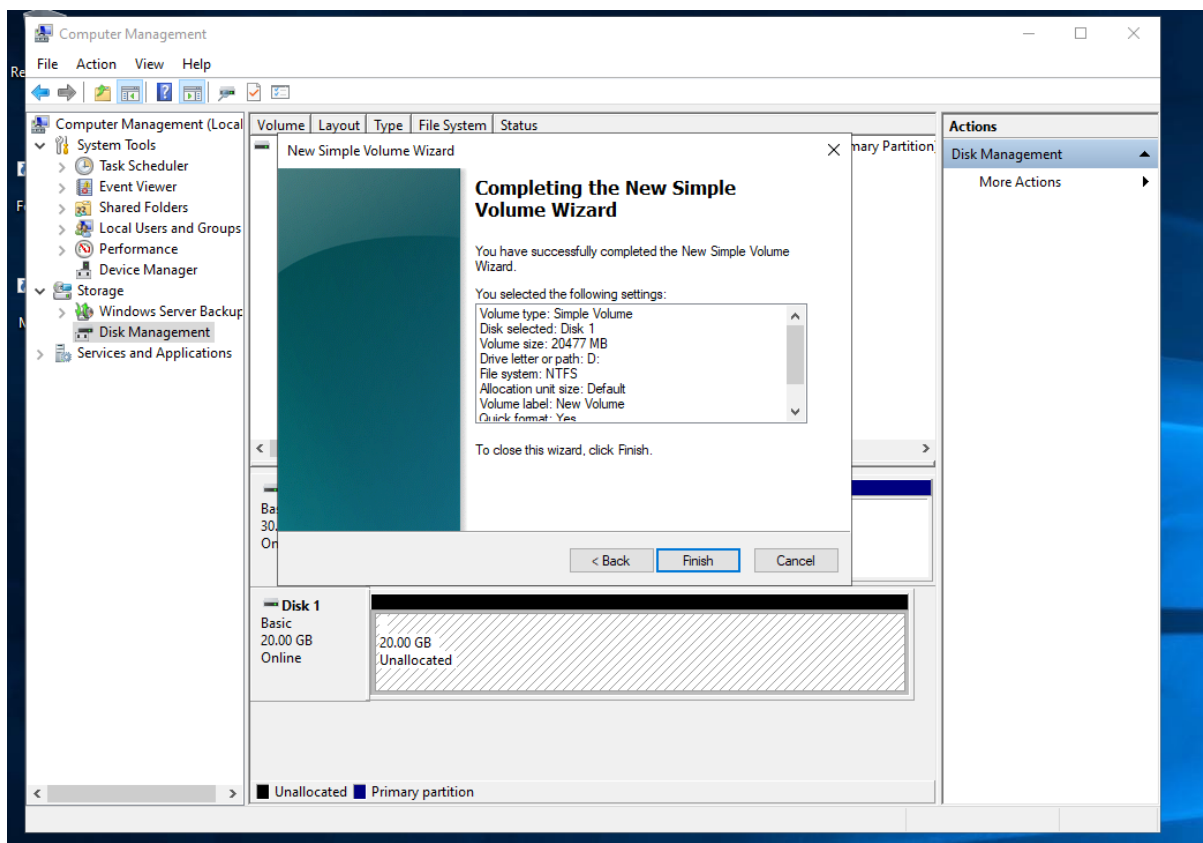
Select drive name from list → click on next



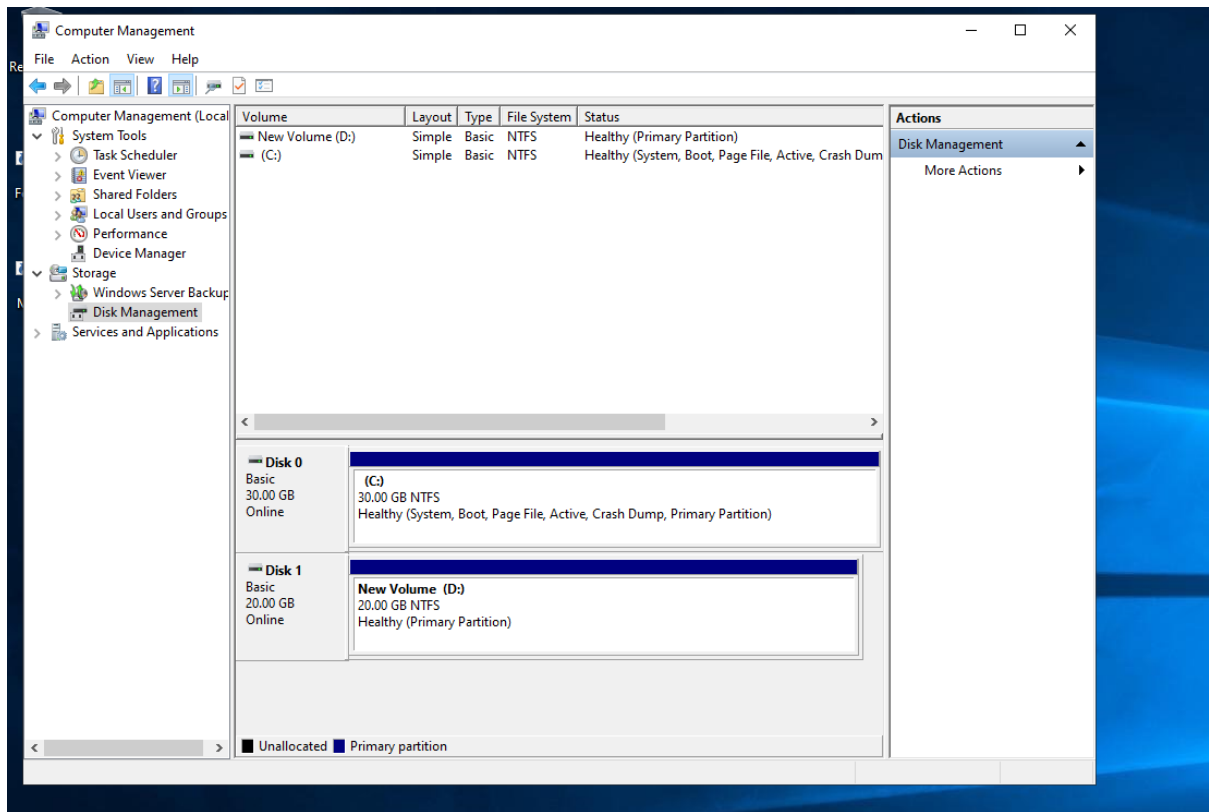
Select format of the volume as NTFS → click on next



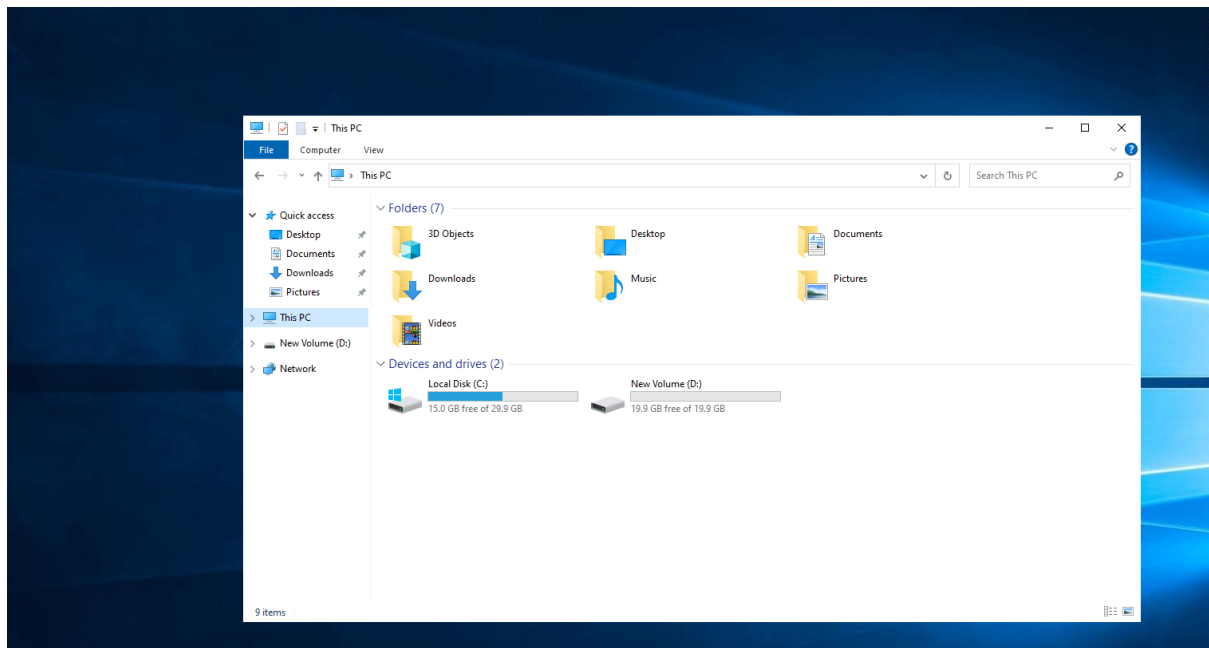
Click on finish



In disk management new volume(D) will be available

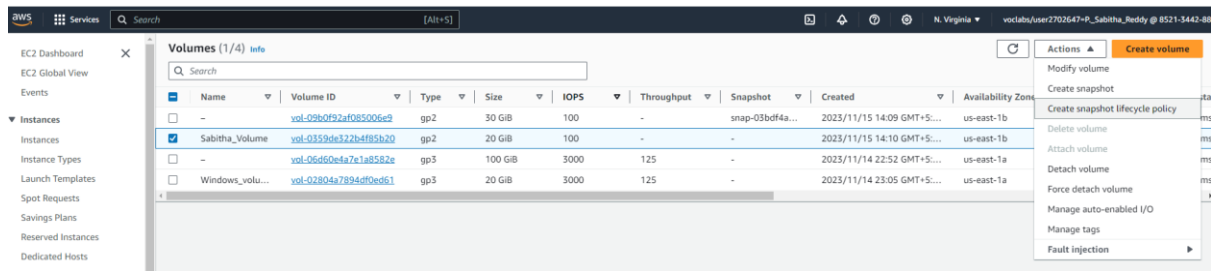


Go to this PC in the windows instance then find the new EBS Volume as D drive with 20 GB memory

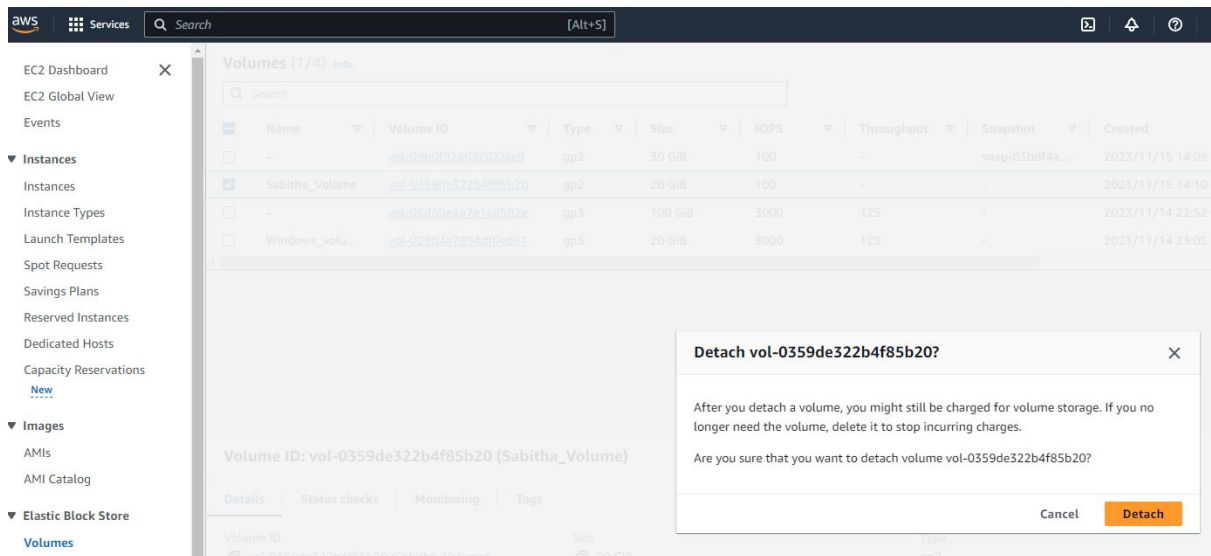


Detach the EBS volume from windows instance

In Aws Management Console go to instance→volumes→select the volume name→click on actions→click on detach volume

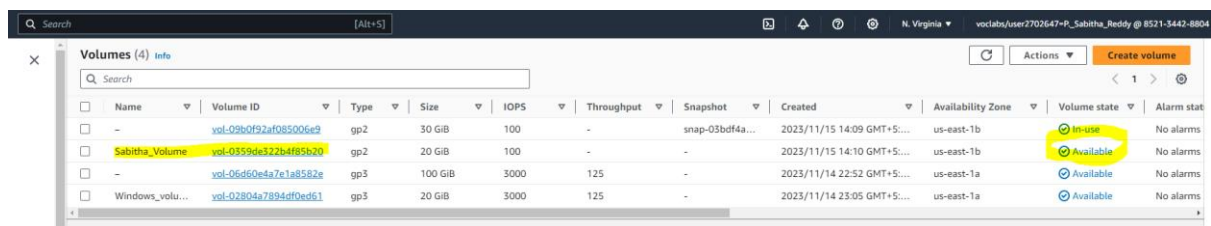


Click on detach

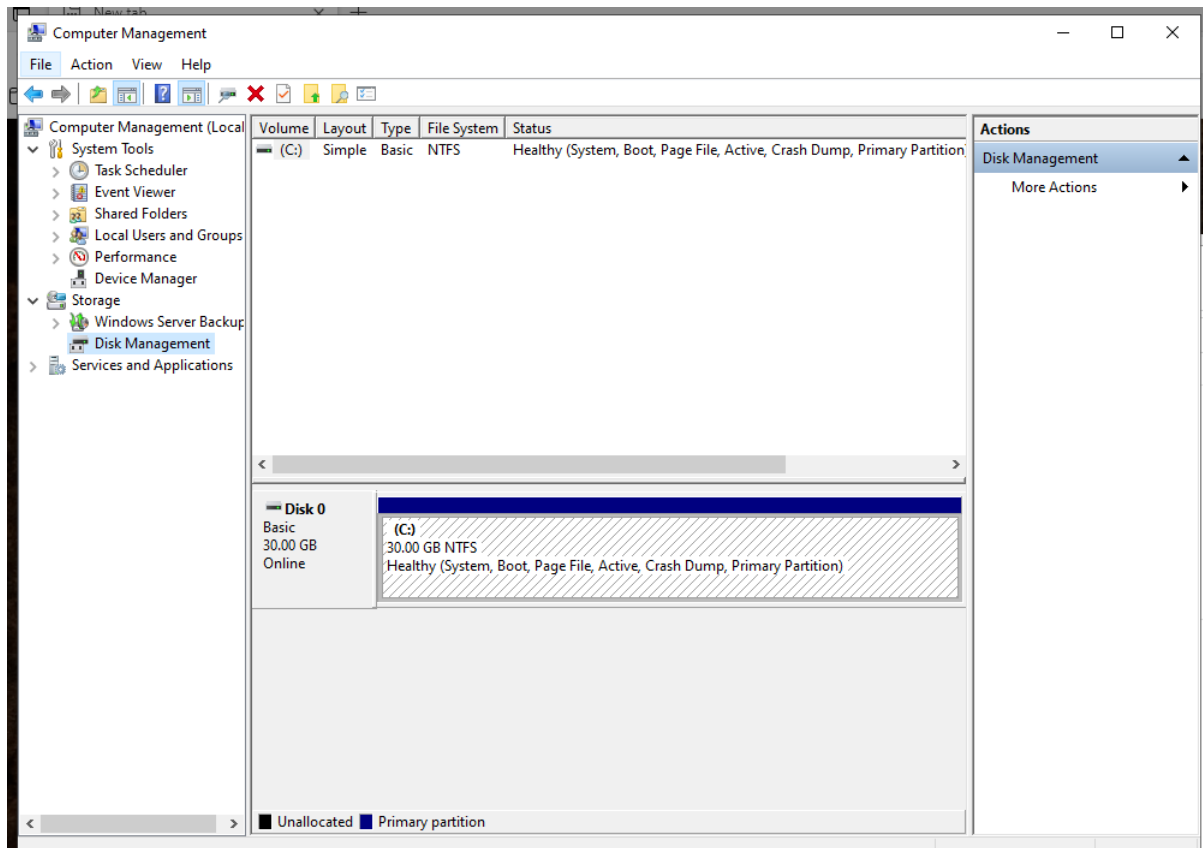


Now that EBS Volume state is change to available state from In-use state.

This volume is available for other instances.



Open the windows instance→open search bar→ computer management→ Click on storage →disk management→



Disk D volume is deleted from storage.