

EBS (Elastic Block Store)

Check root access support volume type

Step 4: Add Storage

Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. [Learn more](#) about storage options in Amazon EC2.

Volume Type	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encryption
Root	/dev/sda1	snap-06543adebd4ea8e4e	30	General Purpose SSD (gp2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

[Add New Volume](#)

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. [Learn more about free usage tier eligibility and usage restrictions.](#)

Check other drive access support volume type

Step 4: Add Storage

Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. [Learn more](#) about storage options in Amazon EC2.

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Root	/dev/sda1	snap-06543adebd4ea8e4e	30	General Purpose SSD (gp2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted
EBS	xvdb	Search (case-insensit	8	General Purpose SSD (gp2)	100 / 3000	N/A	<input type="checkbox"/>	Not Encrypted

[Add New Volume](#)

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. [Learn more about free usage tier eligibility and usage restrictions.](#)

By default, click option delete on termination if create manually unclick delete on termination option

Step 4: Add Storage

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EBS	xvdb	Search (case-insensit	8	General Purpose SSD (gp2)	100 / 3000	N/A	<input type="checkbox"/>	Not Encrypted

[Add New Volume](#)

TASK -1 First create EC2 Instance than create new volume in different zone can attached volume or not?

Create EC2 instance in AZ = us-east-2b

Instances (1) Info							
<div>Search</div>							
Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
EBS-SERVER	i-0e78f8f2632148f17	Running	t2.micro	2/2 checks passed	No alarms	us-east-2b	ec2-52-14-102-19

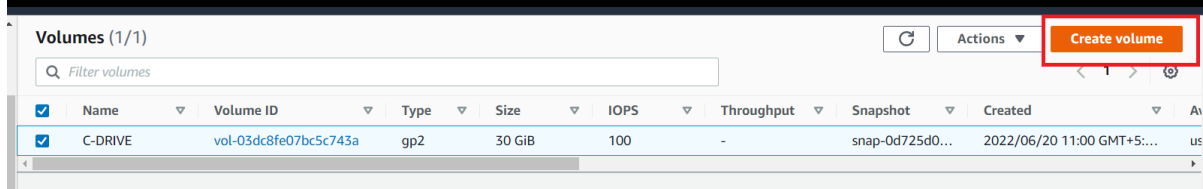
C drive create in gp2 type

Volumes (1/1)							
<div>Filter volumes</div>							
	Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot
<input checked="" type="checkbox"/>	C-DRIVE	vol-03dc8fe07bc5c743a	gp2	30 GiB	100	-	snap-0d725d0...

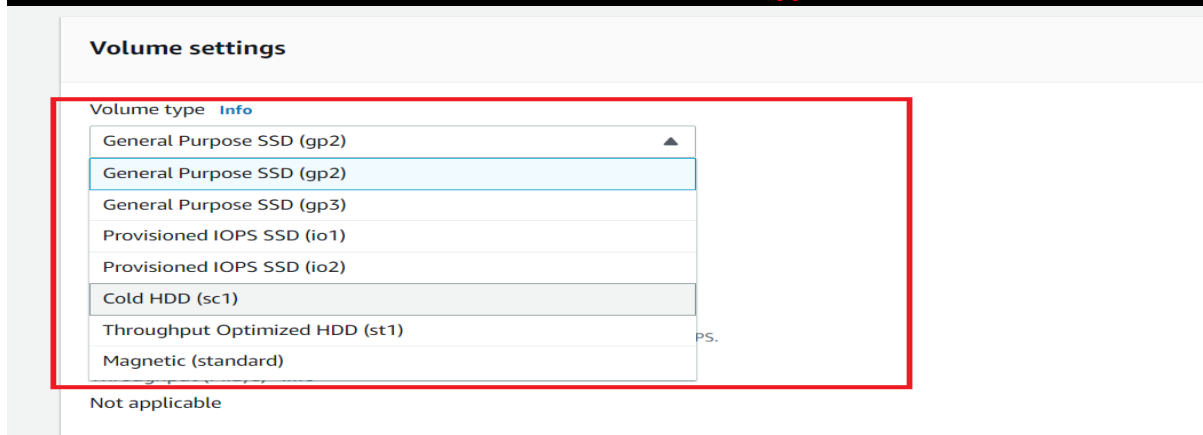
EBS (Elastic Block Store)

Create D drive in different AZ & different type and check try to attach instance from action and see able attach or not?

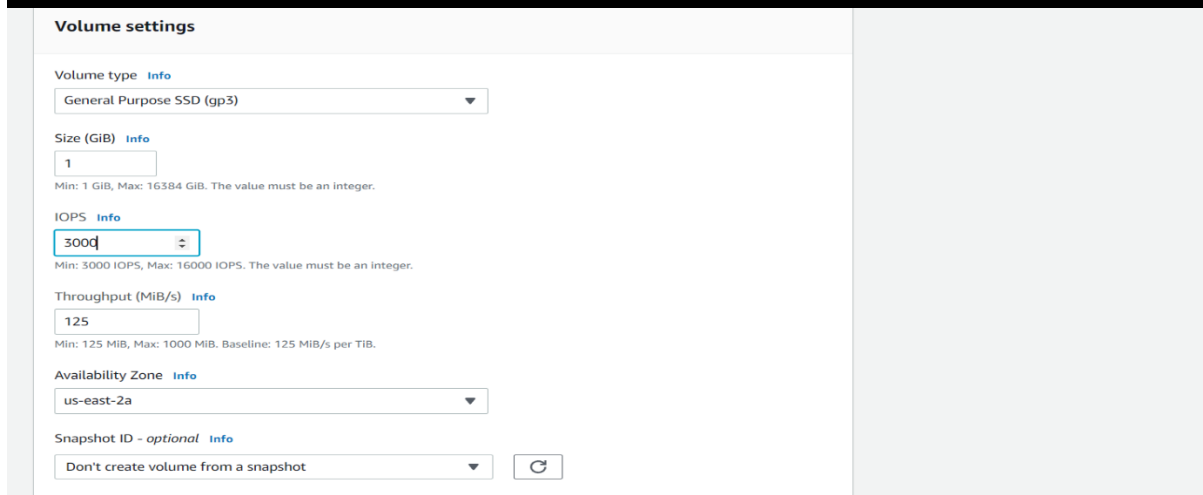
Click to create volume



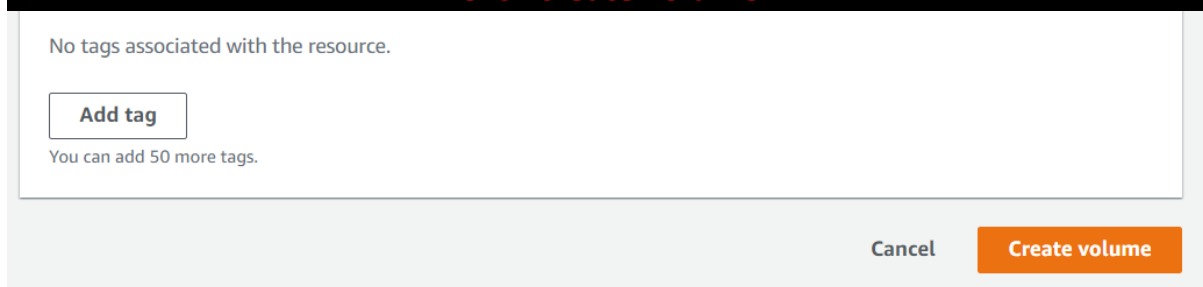
Select different volume type



Select different zone



Click create volume



EBS (Elastic Block Store)

Attach volume

Volumes (1/2)

Filter volumes

	Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot
<input type="checkbox"/>	C-DRIVE	vol-03dc8fe07bc5c743a	gp2	30 GiB	100	-	snap-0d725d0c
<input checked="" type="checkbox"/>	D-DRIVE	vol-0daac4732ff85749b	gp3	1 GiB	3000	125	-

Actions

- Modify volume
- Create snapshot
- Create snapshot lifecycle policy
- Delete volume
- Attach volume
- Detach volume

See if create different AZ volume not showing matching instance

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-0daac4732ff85749b (D-DRIVE)

Availability Zone
us-east-2a

Instance [Info](#)

Q |

No matching running or stopped instances in us-east-2a

Delete volume

Volumes (1/2)

Filter volumes

	Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot
<input type="checkbox"/>	C-DRIVE	vol-03dc8fe07bc5c743a	gp2	30 GiB	100	-	snap-0d725d0c
<input checked="" type="checkbox"/>	D-DRIVE	vol-0daac4732ff85749b	gp3	1 GiB	3000	125	-

Actions

- Modify volume
- Create snapshot
- Create snapshot lifecycle policy
- Delete volume
- Attach volume
- Detach volume

EBS (Elastic Block Store)

Create different volume type and same AZ

Volumes (1)

Filter volumes

	Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot	Created
<input type="checkbox"/>	C-DRIVE	vol-03dc8fe07bc5c743a	gp2	30 GiB	100	-	snap-0d725d0...	2022/06/20 11:00 GMT+5:...

All configuration

Volume type [Info](#)

General Purpose SSD (gp3)

Size (GiB) [Info](#)

2

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 per TiB.

Availability Zone [Info](#)

us-east-2b

Snapshot ID - optional [Info](#)

Don't create volume from a snapshot

Successfully created different volume type and attach volume

Volumes (1/2)

Filter volumes

	Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot
<input type="checkbox"/>	C-DRIVE	vol-03dc8fe07bc5c743a	gp2	31 GiB	100	-	snap-0d725d0...
<input checked="" type="checkbox"/>	D-DRIVE	vol-0879431d68a165752	gp3	2 GiB	3000	125	-

Actions

- Modify volume
- Create snapshot
- Create snapshot lifecycle policy
- Delete volume
- Attach volume
- Detach volume

Select 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-0879431d68a165752 (D-DRIVE)

Availability Zone

us-east-2b

Instance [Info](#)

i-Oe78f8f2632148f17

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

Device name [Info](#)

xvdf

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

EBS (Elastic Block Store)

Attach successfully and check status in use

Successfully attached volume vol-0879431d68a165752 to instance i-Oe78f8f2632148f17.

Volumes (1/2)

Filter volumes

	Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot	Created
<input type="checkbox"/>	C-DRIVE	vol-03dc8fe07bc5c743a	gp2	31 GiB	100	-	snap-0d725d0...	2022/06/20 11:00 GMT+5:...
<input checked="" type="checkbox"/>	D-DRIVE	vol-0879431d68a165752	gp3	2 GiB	3000	125	-	2022/06/20 11:48 GMT+5:...

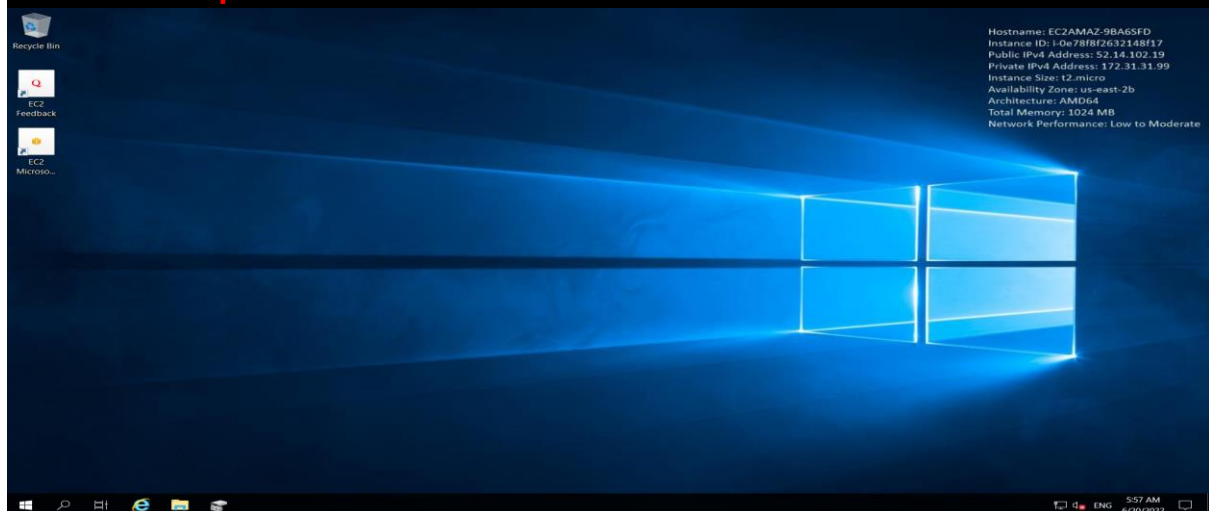
Volume ID: vol-0879431d68a165752 (D-DRIVE)

Details | Status checks | Monitoring | Tags

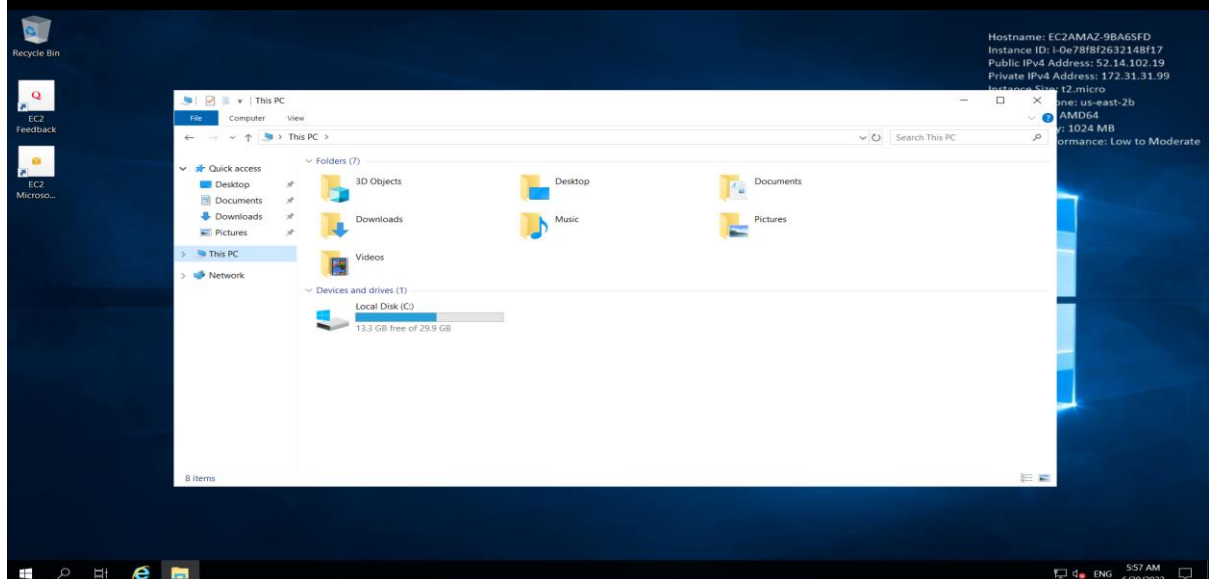
Details

Volume ID vol-0879431d68a165752 (D-DRIVE)	Size 2 GiB	Type gp3	Volume status Insufficient data
Volume state In-use	IOPS 3000	Throughput 125	Encryption Not encrypted
KMS key ID -	KMS key alias -	KMS key ARN -	Snapshot -

Open windows instance and check drive attach or not

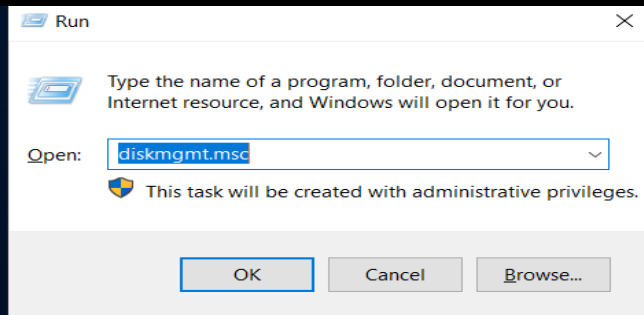


See not attach volume

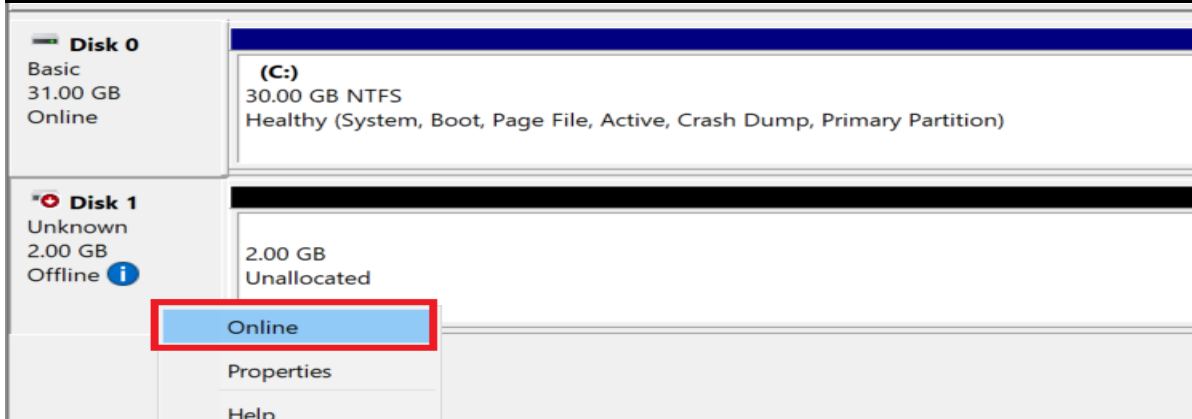


EBS (Elastic Block Store)

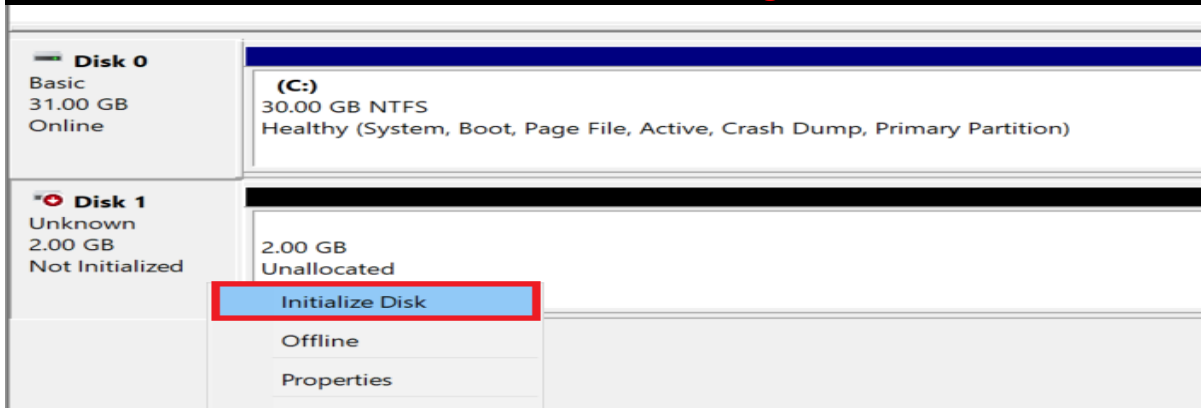
Check disk management



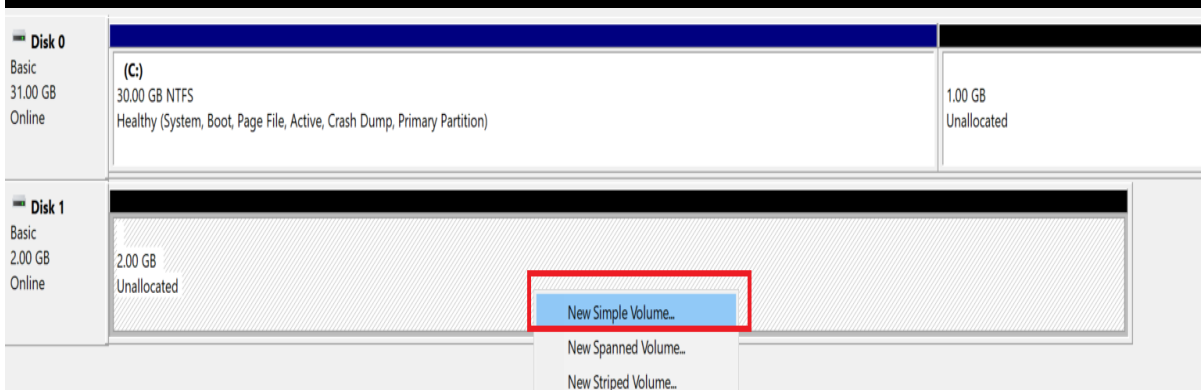
Check status is offline right click online



After online not initialized status than right click to initialize

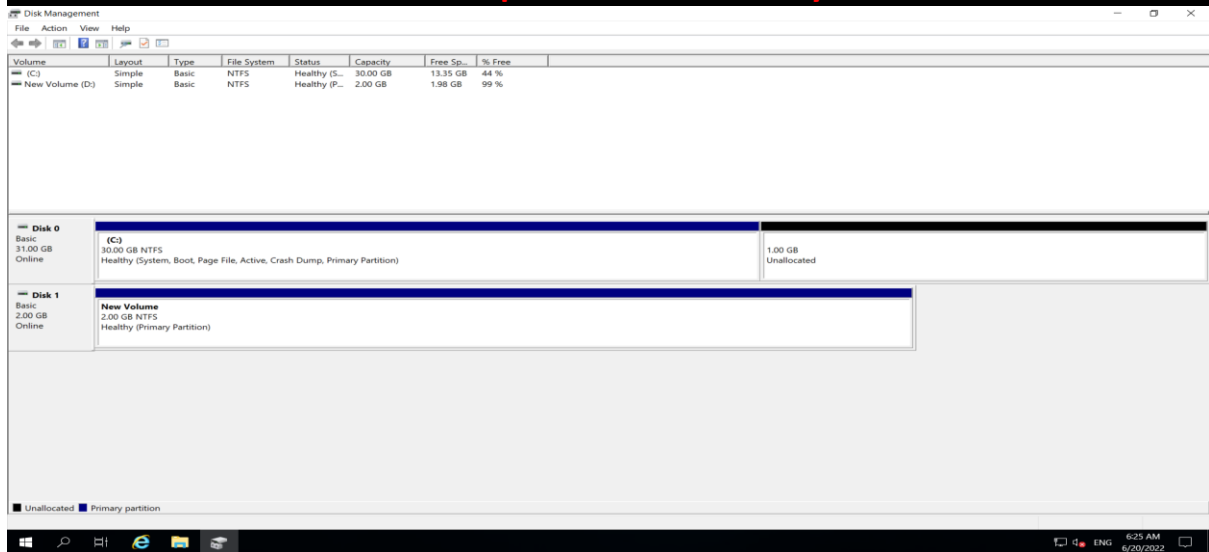


Than allocate volume

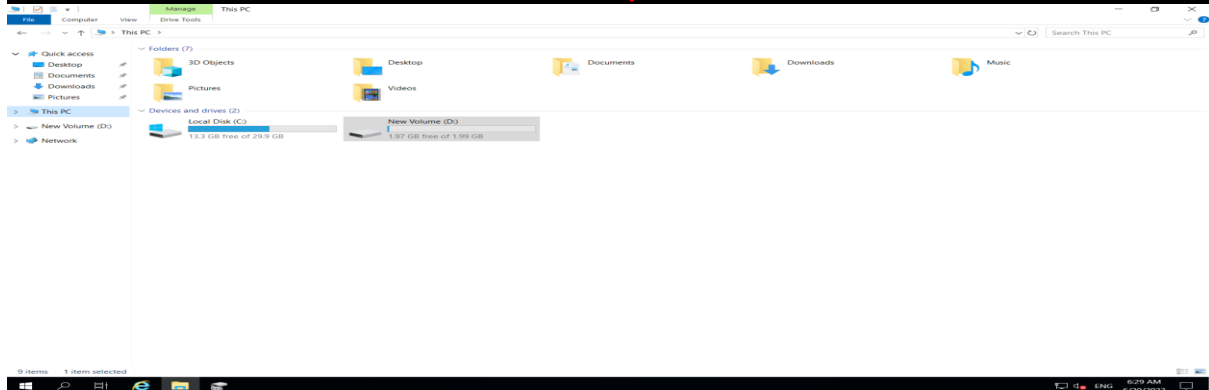


EBS (Elastic Block Store)

Create partition successfully



Successfully attach



Create folder

Name	Date modified	Type	Size
vivek testing	6/20/2022 6:02 AM	File folder	

EBS (Elastic Block Store)

Okay than modify change volume type to magnetic & try to modify size 2 Gb (we cannot decrease size but we can increase size)

Click to modify volume

Volumes (1/2)

Filter volumes

	Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot
<input type="checkbox"/>	C-DRIVE	vol-03dc8fe07bc5c743a	gp2	31 GiB	100	-	snap-0d725...
<input checked="" type="checkbox"/>	D-DRIVE	vol-0879431d68a165752	gp3	2 GiB	3000	125	-

Actions **Create volume**

- Modify volume
- Create snapshot
- Create snapshot lifecycle policy
- Delete volume
- Attach volume

Due to in use instance not decreased volume

Volume details

Volume ID
vol-0879431d68a165752 (D-DRIVE)

Volume type [Info](#)
Magnetic (standard)

Size (GiB) [Info](#)

The size of a volume can only be increased, not decreased.
Min: 1 GiB, Max: 1024 GiB. The value must be an integer.

IOPS [Info](#)
Not Applicable

Change volume type and increased volume

Volume ID
vol-0879431d68a165752 (D-DRIVE)

Volume type [Info](#)
Magnetic (standard)

Size (GiB) [Info](#)

Min: 1 GiB, Max: 1024 GiB. The value must be an integer.

IOPS [Info](#)
Not Applicable

Successfully modify type and size increased

Requested volume modification for volume vol-0879431d68a165752.
The volume is being modified.

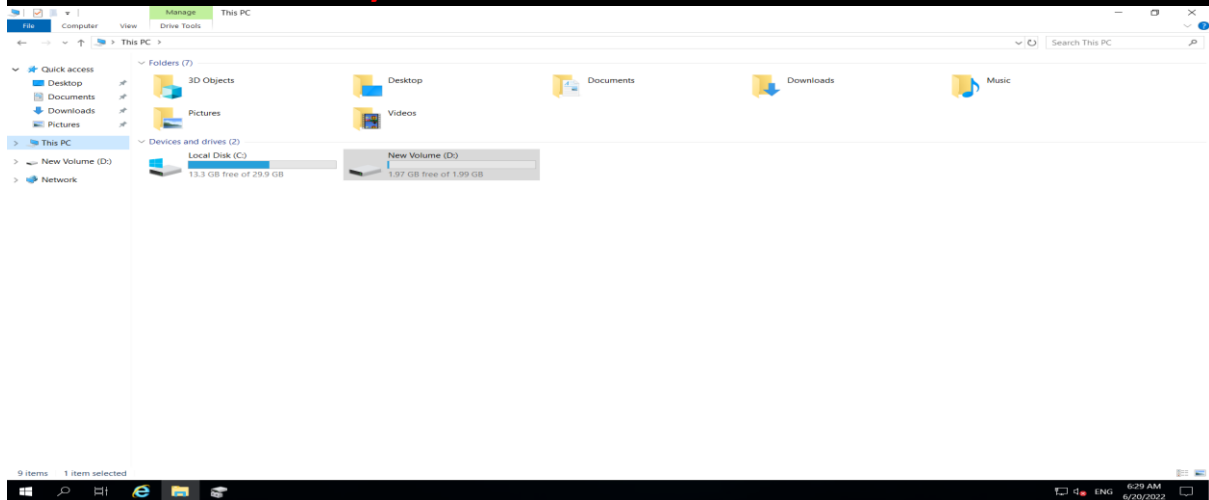
Volumes (2)

Filter volumes

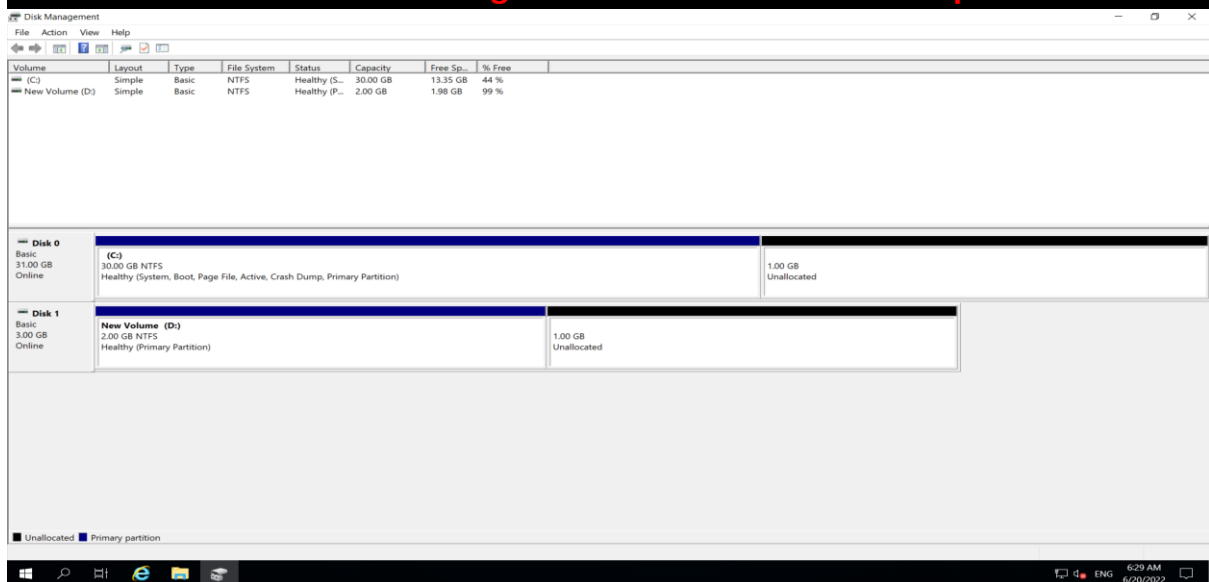
	Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot	Created
<input type="checkbox"/>	C-DRIVE	vol-03dc8fe07bc5c743a	gp2	31 GiB	100	-	snap-0d725d0...	2022/06/20 11:00 GMT+5:...
<input type="checkbox"/>	D-DRIVE	vol-0879431d68a165752	standard	3 GiB	-	-	-	2022/06/20 11:48 GMT+5:...

EBS (Elastic Block Store)

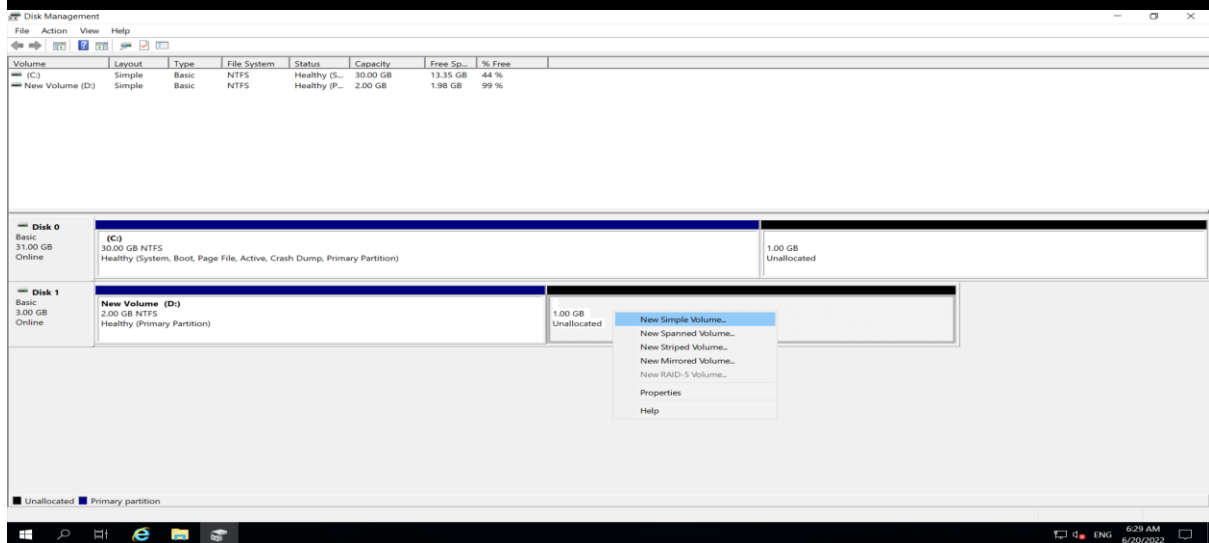
After modify check instance not increased volume size



Check to disk management and see unallocated space

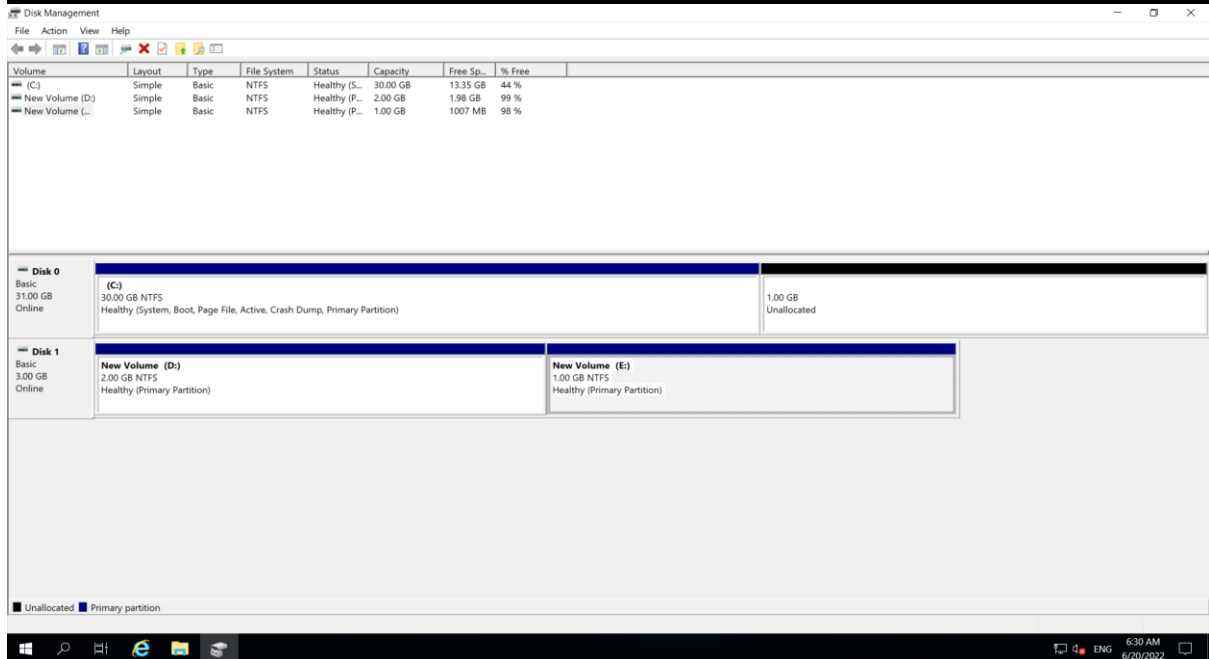


Allocate volume

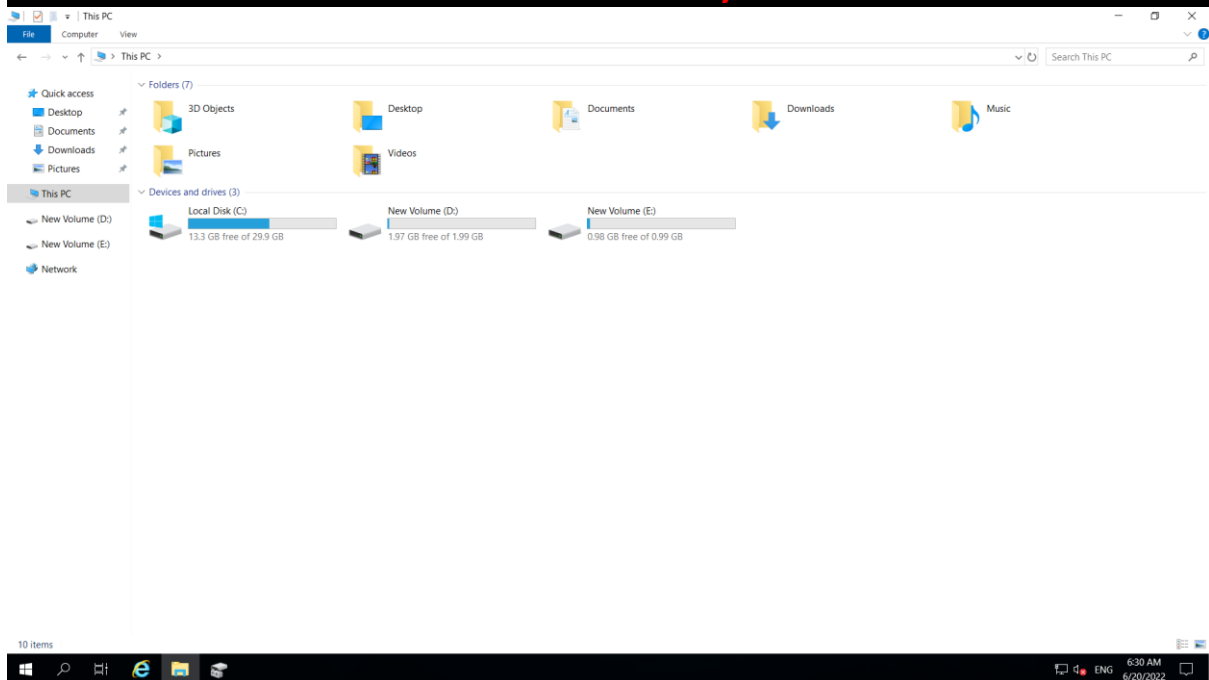


EBS (Elastic Block Store)

Successfully add new portion create new because select different type






Add successfully



EBS (Elastic Block Store)

IF I DETACH D DRIVE DIRECT THAN ATTACH AUTO ATTACH OR NOT

Check to volume use or not

Details			
Volume ID	Size	Type	
 vol-0879431d68a165752 (D-DRIVE)	 3 GiB	standard	
Volume state	IOPS	Throughput	
 In-use	-	-	
KMS key ID	KMS key alias	KMS key ARN	
-	-	-	

Direct detach volume

Volumes (1/2)								Actions	Create volume
Filter volumes									
<input type="checkbox"/>	C-DRIVE	vol-03dc8fe07bc5c743a	gp2	31 GiB	100	-	snap-0d725d0...	Modify volume	Create snapshot
<input checked="" type="checkbox"/>	D-DRIVE	vol-0879431d68a165752	standard	3 GiB	-	-	-	Create snapshot lifecycle policy	Delete volume
								Attach volume	Detach volume
								Force detach volume	

Successfully detach volume check status available

Volumes (1/2)

Filter volumes

< 1 >

Name

Volume ID

Type

Size

IOPS

Throughput

Snapshot

Created

C-DRIVE

vol-03dc8fe07bc5c743a

gp2

31 GiB

100

-

snap-0d725d0...

2022/06/20 11:00 GMT

D-DRIVE

vol-0879431d68a165752

standard

3 GiB

-

-

-

2022/06/20 11:48 GMT

Volume ID: vol-0879431d68a165752 (D-DRIVE)

Details

Status checks

Monitoring

Tags

Details

Volume ID

vol-0879431d68a165752 (D-DRIVE)

Volume state

Available

Size

3 GiB

IOPS

-

Type

standard

Throughput

-

Volume status

Okay

Encryption

Not encrypted

EBS (Elastic Block Store)

Then attach volume

Volumes (1/2)

Filter volumes

	Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot
<input type="checkbox"/>	C-DRIVE	vol-03dc8fe07bc5c743a	gp2	31 GiB	100	-	snap-0d725d0...
<input checked="" type="checkbox"/>	D-DRIVE	vol-0879431d68a165752	standard	3 GiB	-	-	-

Actions

- Modify volume
- Create snapshot
- Create snapshot lifecycle policy
- Delete volume
- Attach volume

Successfully attach and status is in use

Successfully attached volume vol-0879431d68a165752 to instance i-0e78f8f2632148f17.

Volumes (1/2)

Filter volumes

	Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot	Created
<input type="checkbox"/>	C-DRIVE	vol-03dc8fe07bc5c743a	gp2	31 GiB	100	-	snap-0d725d0...	2022/06/20 11:00 GMT+5:...
<input checked="" type="checkbox"/>	D-DRIVE	vol-0879431d68a165752	standard	3 GiB	-	-	-	2022/06/20 11:48 GMT+5:...

Volume ID: vol-0879431d68a165752 (D-DRIVE)

Details

Volume ID	Size	Type	Volume status
vol-0879431d68a165752 (D-DRIVE)	3 GiB	standard	Okay
Volume state	IOPS	Throughput	Encryption
In-use	-	-	Not encrypted

Automatic allocate volume

Devices and drives (3)

Device	Free Space
Local Disk (C:)	13.3 GB free of 29.9 GB
New Volume (D:)	1.97 GB free of 1.99 GB
New Volume (E:)	0.98 GB free of 0.99 GB

EBS (Elastic Block Store)

TRY TO DETACH C DRIVE OF EC2 INSTNCE AND SEE WHAT HAPPING

First, stop instance

Instances (1/1) Info

Name	Instance ID	Instance state	Instance type	Status
EBS-SERVER	i-Oe78f8f2632148f17	Running	t2.micro	2

Actions: Stop instance, Start instance, Reboot instance, Hibernate instance

Successfully stop instance

Instances (1/1) Info

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 D
EBS-SERVER	i-Oe78f8f2632148f17	Stopped	t2.micro	2/2 checks passed	No alarms	us-east-2b	-

Instance: i-Oe78f8f2632148f17 (EBS-SERVER)

Click root volume and select to detach volume

Volumes (1/2)

Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot
C-DRIVE	vol-03dc8fe07bc5c743a	gp2	31 GiB	100	-	snap-0d725d0...
D-DRIVE	vol-0879431d68a165752	standard	3 GiB	-	-	-

Actions: Detach volume

Successfully detach

Volumes (1/2)

Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot	Created
C-DRIVE	vol-03dc8fe07bc5c743a	gp2	31 GiB	100	-	snap-0d725d0...	2022/06/20 11:00 GMT+5...
D-DRIVE	vol-0879431d68a165752	standard	3 GiB	-	-	-	2022/06/20 11:48 GMT+5...

Volume ID: vol-03dc8fe07bc5c743a (C-DRIVE)

Details: Volume ID, Size, Type, Volume status, Volume state, IOPS, Throughput, Encryption

EBS (Elastic Block Store)

After detach root check to start instance what happen

Instances (1/1) Info

Search

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status	Availability Zone	Public IPv4 D
<input checked="" type="checkbox"/>	EBS-SERVER	i-Oe78f8f2632148f17	Stopped	t2.micro	-	us-east-2b	-

Actions

- Stop instance
- Start instance**
- Reboot instance
- Hibernate instance
- Terminate instance

See server failed to start error

Failed to start the instance i-Oe78f8f2632148f17
Invalid value 'i-Oe78f8f2632148f17' for instancelid. Instance does not have a volume attached at root (/dev/sda1)

Instances (1/1) Info

Search

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv
<input checked="" type="checkbox"/>	EBS-SERVER	i-Oe78f8f2632148f17	Stopped	t2.micro	-	No alarms	us-east-2b	-

Then attach root volume

Volumes (1/2)

Filter volumes

<input checked="" type="checkbox"/>	Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot
<input checked="" type="checkbox"/>	C-DRIVE	vol-03dc8fe07bc5c743a	gp2	31 GiB	100	-	snap-0d725
<input type="checkbox"/>	D-DRIVE	vol-0879431d68a165752	standard	3 GiB	-	-	-

Actions

- Modify volume
- Create snapshot
- Create snapshot lifecycle policy
- Delete volume
- Attach volume**
- Detach volume

Compulsory add device name → root name

Availability Zone
us-east-2b

Instance Info
i-Oe78f8f2632148f17

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

Device name Info
/dev/sda1

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

Cancel Attach volume

EBS (Elastic Block Store)

Successfully attach and status in use

Successfully attached volume vol-03dc8fe07bc5c743a to instance i-0e78f8f2632148f17.

Volumes (1/2)

Filter volumes

	Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot	Created
<input checked="" type="checkbox"/>	C-DRIVE	vol-03dc8fe07bc5c743a	gp2	31 GiB	100	-	snap-0d725d0...	2022/06/20 11:00 GMT+5:...
<input type="checkbox"/>	D-DRIVE	vol-0879431d68a165752	standard	3 GiB	-	-	-	2022/06/20 11:48 GMT+5:...

Volume ID: vol-03dc8fe07bc5c743a (C-DRIVE)

Details | Status checks | Monitoring | Tags

Details

Volume ID vol-03dc8fe07bc5c743a (C-DRIVE)	Size 31 GiB	Type gp2	Volume status Okay
Volume state In-use	IOPS 100	Throughput -	Encryption Not encrypted
KMS key ID	KMS key alias	KMS key ARN	Snapshot

Then check instance start or not

Instances (1/1) Info

Search

Connect | Instance state | Actions | Launch instances

	Name	Instance ID	Instance state	Instance type	Status	Availability Zone	Public IPv4 D
<input checked="" type="checkbox"/>	EBS-SERVER	i-0e78f8f2632148f17	Stopped	t2.micro	-	us-east-2b	-

Start instance

Stop instance

Reboot instance

Hibernate instance

Successfully start

Successfully started i-0e78f8f2632148f17

Instances (1/1) Info

Search

Connect | Instance state | Actions | Launch instances

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4
<input checked="" type="checkbox"/>	EBS-SERVER	i-0e78f8f2632148f17	Running	t2.micro	2/2 checks passed	No alarms	us-east-2b	ec2-3-142-

Instance: i-0e78f8f2632148f17 (EBS-SERVER)

Details | Security | Networking | Storage | Status checks | Monitoring | Tags

Instance summary Info

Instance ID i-0e78f8f2632148f17 (EBS-SERVER)	Public IPv4 address 3.142.209.252 open address	Private IPv4 addresses 172.31.31.99
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-3-142-209-252.us-east-2.compute.amazonaws.com open address

Check instance volume

Devices and drives (3)

Device	Free Space
Local Disk (C:)	13.3 GB free of 29.9 GB
New Volume (D:)	1.97 GB free of 1.99 GB
New Volume (E:)	0.98 GB free of 0.99 GB

EBS (Elastic Block Store)

After detach and Attach root terminate instance and check both volume automatic delete or not

Terminate instance

The screenshot shows the AWS Management Console 'Instances' page. The instance 'EBS-SERVER' (ID: i-0e78f8f2632148f17) is in a 'Running' state. The 'Actions' dropdown menu is open, and the 'Terminate instance' option is highlighted with a red rectangular box.

After terminate not delete automatic because after detach and then attach volume untick to storage termination option that's why not delete volume automatic

The screenshot shows the AWS Management Console 'Volumes' page. Two volumes are listed:

Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot	Created
C-DRIVE	vol-03dc8fe07bc5c743a	gp2	31 GiB	100	-	snap-0d725d0...	2022/06/20 11:00 GMT+5:...
D-DRIVE	vol-0879431d68a165752	standard	3 GiB	-	-	-	2022/06/20 11:48 GMT+5:...

After terminate check volume root status is available

The screenshot shows the AWS Management Console 'Volumes' page with the 'Details' tab selected for the volume 'vol-03dc8fe07bc5c743a (C-DRIVE)'. The details are as follows:

Details			
Volume ID vol-03dc8fe07bc5c743a (C-DRIVE)	Size 31 GiB	Type gp2	Volume status ✓ Okay
Volume state ✓ Available	IOPS 100	Throughput -	Encryption Not encrypted