

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.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4
windows-webs...	i-01caa3db66be74d41	Running	t3.micro	Initializing	View alarms +	eu-north-1a	ec2-13-60-2
ubuntu-webs...	i-0da99940a5cf198ba	Running	t3.micro	Initializing	View alarms +	eu-north-1a	ec2-13-62-4

2. Creating EBS of 5GB 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)

Size (GiB) [Info](#)
100
Min: 1 GiB, Max: 65536 GiB.

IOPS [Info](#)
3000
Min: 3000 IOPS, Max: 80000 IOPS.

Throughput (MiB/s) [Info](#)
125
Min: 125 MiB, Max: 2000 MiB, Baseline: 125 MiB/s.

Availability Zone [Info](#)
eu-n1-az1 (eu-north-1a)

Snapshot ID - optional [Info](#)
Don't create volume from a snapshot

Encryption [Info](#)
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

You can add 49 more tags.

Snapshot summary [Info](#)
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.

3. EBS volume created.

vol-0b7bb433f626c2d0c (window)				Last updated C less than a minute ago	Actions	Delete	Modify
Details							
Volume ID	vol-0b7bb433f626c2d0c (window)	Size	5 GiB	Type	gp3	Status check	Okay
AWS Compute Optimizer finding	Opt-in to AWS Compute Optimizer for recommendations. Learn more	Volume state	Available	IOPS	3000	Throughput	125
Fast snapshot restored	No	Availability Zone	eun1-az1 (eu-north-1a)	Created	Tue Jan 06 2026 19:09:38 GMT+0530 (India Standard Time)	Multi-Attach enabled	No
Attached resources	-	Outposts ARN	-	Managed	false	Operator	-
Source							
Snapshot ID	-	Source volume ID	-				

4. EBS attached to windows ec2.

EC2 > Volumes > vol-0b7bb433f626c2d0c > 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-0b7bb433f626c2d0c (window)

Availability Zone
eun1-az1 (eu-north-1a)

Instance | Info
i-01caa3db66be74d41
(windows-webserver) (running) ▼ C

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

Device name | Info
xvdb ▼

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

Details

Volume ID <input type="checkbox"/> vol-0b7bb433f626c2d0c (window)	Size <input type="checkbox"/> 5 GiB	Type gp3	Status check OK Okay
AWS Compute Optimizer finding <i>(i) Opt-in to AWS Compute Optimizer for recommendations. Learn more ↗</i>	Volume state In-use	IOPS 3000	Throughput 125
Fast snapshot restored No	Availability Zone eun1-az1 (eu-north-1a)	Created <input type="checkbox"/> Tue Jan 06 2026 19:09:38 GMT+0530 (India Standard Time)	Multi-Attach enabled No
Attached resources i-01caa3db66be74d41 (windows-webserver): xvdb (attached)	Outposts ARN -	Managed false	Operator -

▼ Source

5. EBS attached to Linux ec2.

EC2 > Volumes > i-0af427190aa6c0292 (Linux) > 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-0af427190aa6c0292 (Linux)

AWS Compute Optimizer finding
(i) Opt-in to AWS Compute Optimizer for recommendations. | Learn more ↗

Fast snapshot restored
No

Attached resources
i-0da99940a5cf198ba (ubuntu-webserver): /dev/sdf (attached)

Details

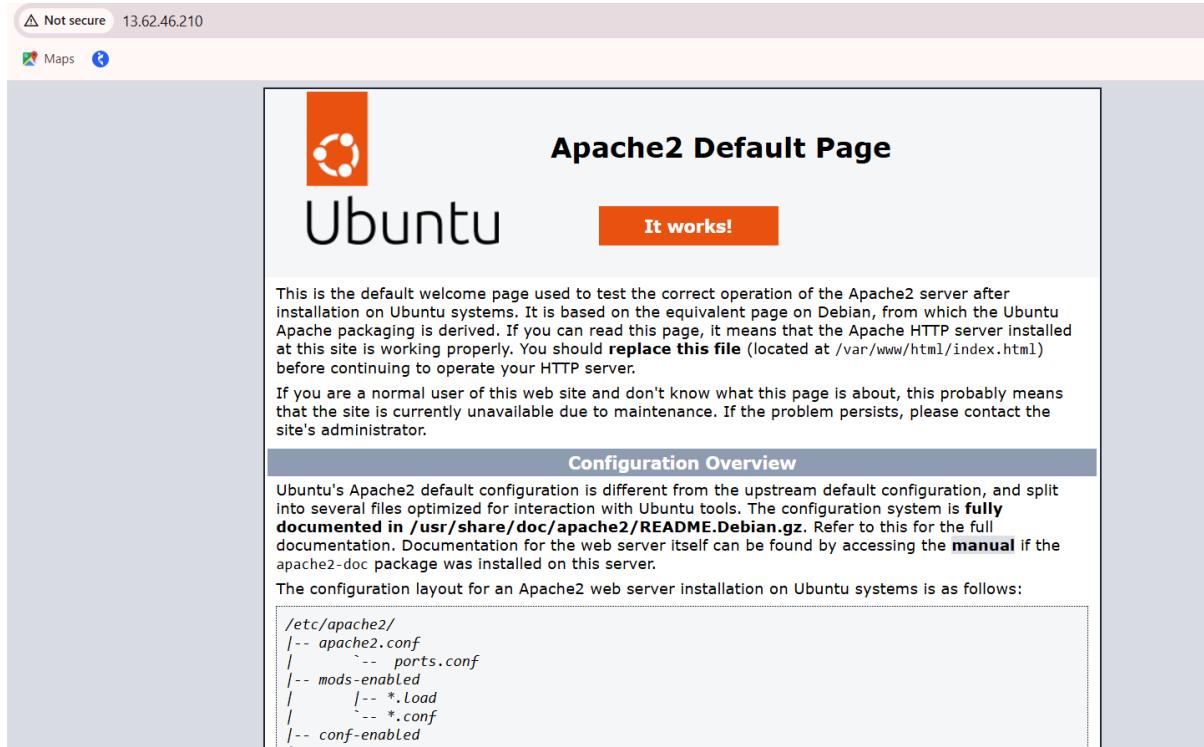
Volume ID <input type="checkbox"/> vol-0af427190aa6c0292 (Linux)	Size <input type="checkbox"/> 5 GiB	Type gp3	Status check Insufficient data
AWS Compute Optimizer finding <i>(i) Opt-in to AWS Compute Optimizer for recommendations. Learn more ↗</i>	Volume state In-use	IOPS 3000	Throughput 125
Fast snapshot restored No	Availability Zone eun1-az1 (eu-north-1a)	Created <input type="checkbox"/> Tue Jan 06 2026 19:23:11 GMT+0530 (India Standard Time)	Multi-Attach enabled No
Attached resources i-0da99940a5cf198ba (ubuntu-webserver): /dev/sdf (attached)	Outposts ARN -	Managed false	Operator -

▼ Source

6. Installed Apache web server in linux machine.

```
NO user sessions are running outdated binaries.  
No VM guests are running outdated hypervisor (qemu) binaries on this host.  
Synchronizing state of apache2.service with SysV service script with /usr/lib/sy  
stemd/systemd-sysv-install.  
Executing: /usr/lib/systemd/systemd-sysv-install enable apache2  
ubuntu@ip-172-31-25-142:~$
```

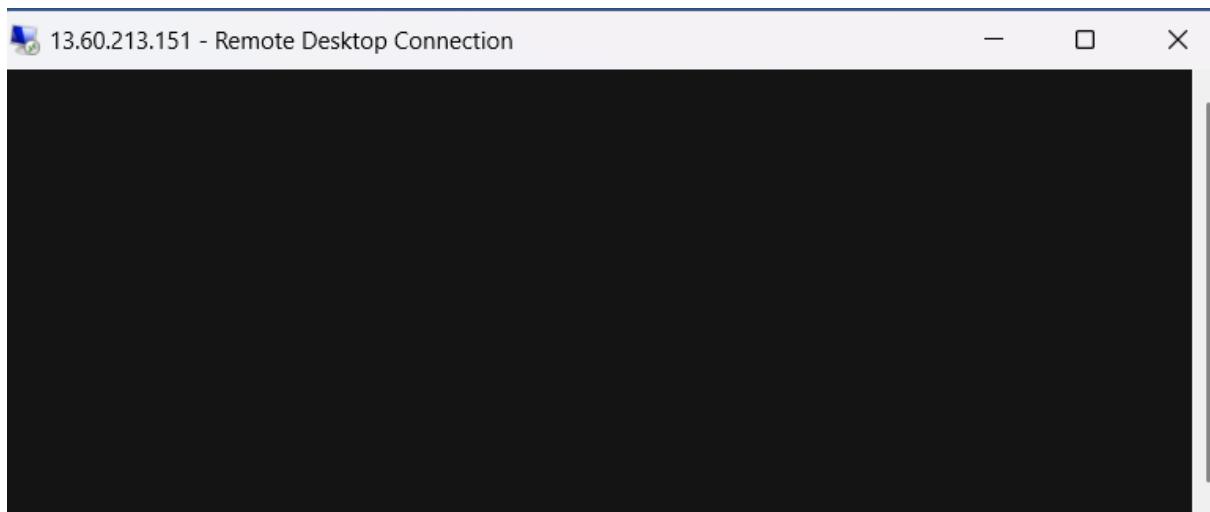
7. Checking in browser with public ip.



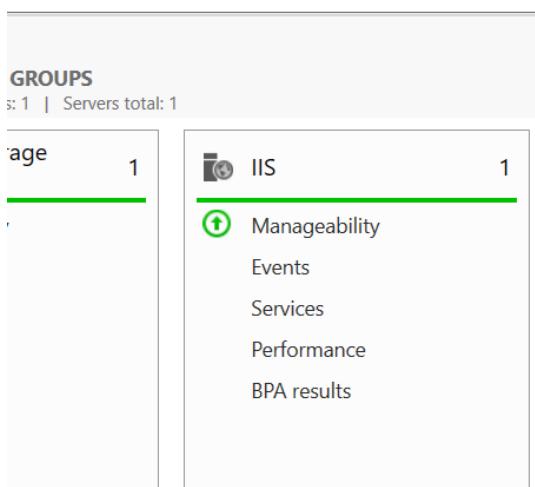
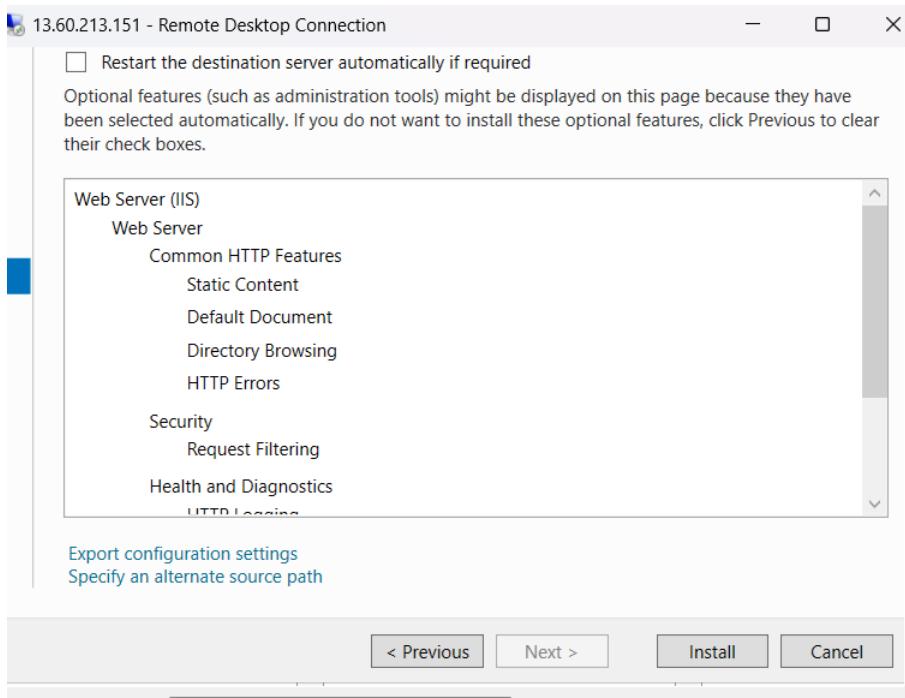
8. Login to windows ec2.

The screenshot shows the AWS Lambda console interface for connecting to a Windows EC2 instance:

- Instance ID: i-01caa3db66be74d41 (windows-webserver)
- Connection Type:
 - Connect using RDP client: Download a file to use with your RDP client and retrieve your password.
 - Connect using Fleet Manager: To connect to the instance using Fleet Manager Remote Desktop, the SSM Agent must be installed and running on the instance. For more information, see [Working with SSM Agent](#).
- Message: You can connect to your Windows instance using a remote desktop client of your choice, and by downloading and running the RDP shortcut file below.
- Download button: [Download remote desktop file](#)
- Username: Administrator
- Public DNS: ec2-13-60-213-151.eu-north-1.compute.amazonaws.com
- Copy button: Password copied
- Copy button: p0o&@BROO%F%rtV)7JwcMFivah&kr7
- Info message: If you've joined your instance to a directory, you can use your directory credentials to connect to your instance.



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
efivarsfs      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:~$ |
```

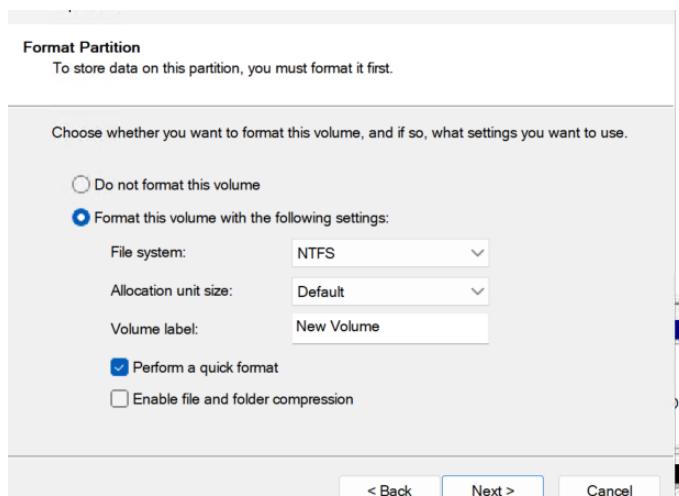
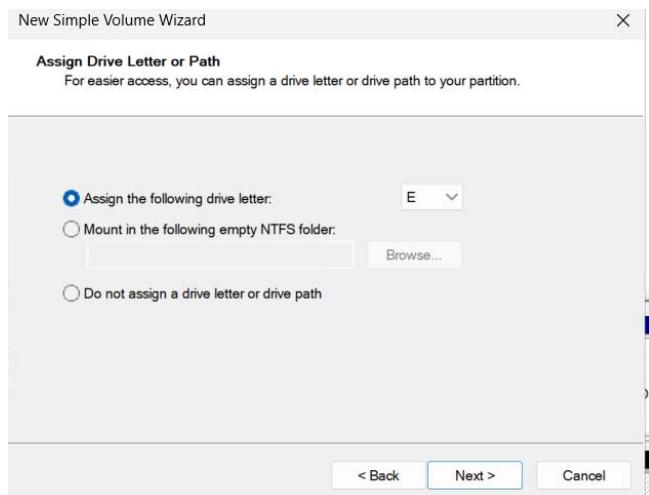
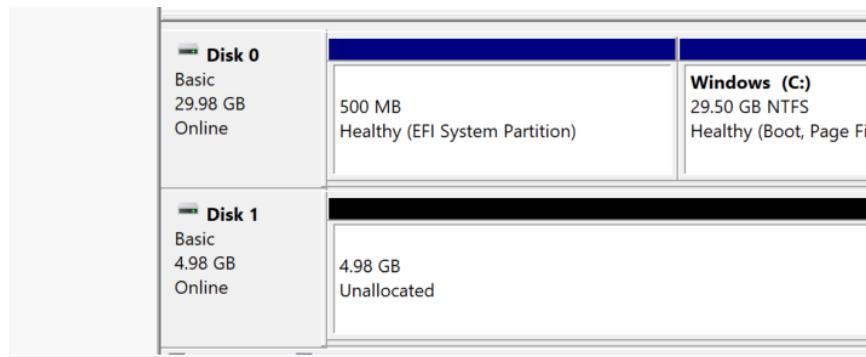
11. Updating fstab.

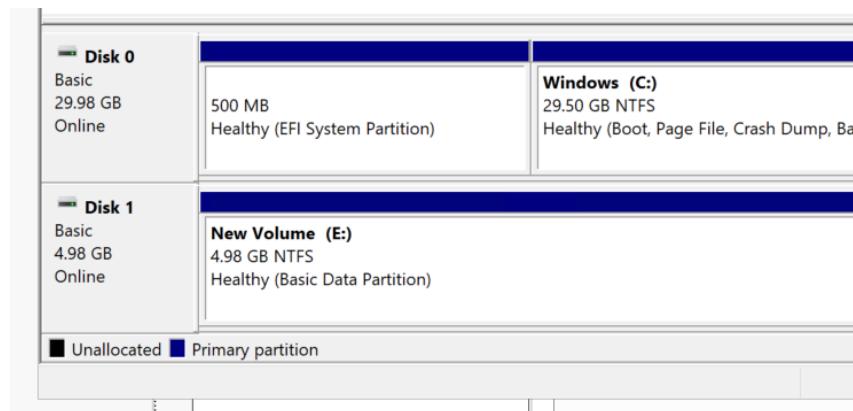
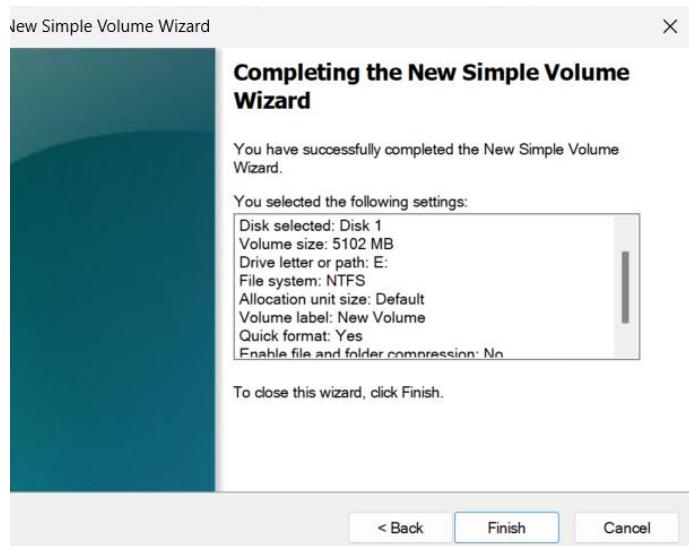
```
ubuntu@ip-172-31-25-142: ~
LABEL=cloudimg-rootfs  /      ext4  discard,commit=30,errors=remount-ro  0 1
LABEL=BOOT    /boot  ext4  defaults  0 2
LABEL=UEFI   /boot/efi  vfat  umask=0077  0 1
UUID="41170548-273d-4470-a843-f63a6019ba4c" /data ext4 defaults nobail 0 2
~
```

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
efivarsfs     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.

Create snapshot Info

Create a point-in-time snapshot of an EBS volume and use it as a baseline for new volumes or for data backup. You can create snapshots from an individual volume, or you can create multi-volume snapshots from all of the volumes attached to an instance.

Source

Resource type Info

Volume Create a snapshot from a specific volume.

Instance Create multi-volume snapshots from an instance.

Volume ID
The volume from which to create the snapshot.

vol-0af427190aa6c60292 (Linux)
eun1-a2t (eu-north-1a)

Snapshot details

Description
Add a description for your snapshot.
creating linux 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.

Create snapshot

Create snapshot [Info](#)

Create a point-in-time snapshot of an EBS volume and use it as a baseline for new volumes or for data backup. You can create snapshots from an individual volume, or you can create multi-volume snapshots from all of the volumes attached to an instance.

Source

Resource type [Info](#)

Volume Create a snapshot from a specific volume.

Instance Create multi-volume snapshots from an instance.

Volume ID
The volume from which to create the snapshot.

vol-0b7bb433f626c2d0c (window)
eun1-az1 (eu-north-1a)

Snapshot details

Description
Add a description for your 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](#)

15. Snapshots are created.

Successfully created snapshot snap-081c1a896b0998f8b.

Snapshots (1/2) Info							Last updated 1 minute ago	Recycle Bin	Actions ▾	Create snapshot
Owned by me ▾	Search									
	Name Info	Snapshot ID	Full snapshot size	Volume size	Description	Storage tier	Snapshot status			
<input checked="" type="checkbox"/>	windows	snap-081c1a896b0998f8b	-	5 GiB	creating snapshot for wind...	Standard		Pending		
<input type="checkbox"/>	linux	snap-0413febda35014668	152 MiB	5 GiB	creating linux snapshot	Standard		Completed		

16. Creating new EBS volumes by using snapshots.

Create volume [Info](#)

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

Volume settings

Snapshot ID

Volume type [Info](#)

Size (GiB) [Info](#)

Min: 1 GiB, Max: 65536 GiB.

IOPS [Info](#)

Min: 3000 IOPS, Max: 80000 IOPS.

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

Min: 125 MiB, Max: 2000 MiB, Baseline: 125 MiB/s.

Availability Zone [Info](#)

Fast snapshot restore [Info](#)
Not enabled for selected snapshot

Volume initialization rate (MiB/s) - new, optional [Info](#)
Specify the rate at which the snapshot blocks are to be downloaded from Amazon S3 to the volume. [Additional costs apply](#)

Min: 100 MiB/s, Max: 300 MiB/s.

Encryption [Info](#)
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.
No tags associated with the resource.

[Add tag](#)
You can add 50 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.

Create volume [Info](#)

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

Volume settings

Snapshot ID
 snap-081c1a896b0998fb (windows)

Volume type [Info](#)

Size (GiB) [Info](#)

Min: 1 GiB, Max: 65536 GiB.

IOPS [Info](#)

Min: 3000 IOPS, Max: 80000 IOPS.

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

Min: 125 MiB, Max: 2000 MiB. Baseline: 125 MiB/s.

Availability Zone [Info](#)

Fast snapshot restore [Info](#)
Not enabled for selected snapshot

Volume initialization rate (MiB/s) - new, optional [Info](#)
Specify the rate at which the snapshot blocks are to be downloaded from Amazon S3 to the volume. Additional costs apply [Learn more](#)

Min: 100 MiB/s, Max: 300 MiB/s.

Encryption [Info](#)
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.
No tags associated with the resource.

[Add tag](#)
You can add 50 more tags.

Snapshot summary [Info](#) [Edit](#)

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.

17.new EBS volume created from snapshot.

<input type="checkbox"/>	window	vol-0b7bb433f626c2d0c	gp3	5 GiB	3000	125	-	-	2026/0
<input checked="" type="checkbox"/>	windows-snap...	vol-081090319affd6ddd	gp3	8 GiB	3000	125	snap-0ef1ff7e...	-	2026/0
<input type="checkbox"/>		vol-02830728baa0f073f	gp3	30 GiB	3000	125	snap-055f9dc...	-	2026/0
<input type="checkbox"/>		vol-0dece4a19d73b7e23	gp3	5 GiB	3000	125	snap-081c1a8...	-	2026/0
<input type="checkbox"/>	Linux	vol-0af427190aa6c0292	gp3	5 GiB	3000	125	-	-	2026/0
<input checked="" type="checkbox"/>	linux snapshot	vol-07f8983f58ada7bf6	gp3	5 GiB	3000	125	snap-0413feb...	-	2026/0