

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.

<input type="checkbox"/>	Name ↗	Instance ID	Instance state ↕	Instance type ↕	Status check	Alarm status	Availability Zone ↕	Public IPv4
<input type="checkbox"/>	windows-webs...	i-01caa3db66be74d41	Running 🔍 🔍	t3.micro	Initializing 🕒	View alarms +	eu-north-1a	ec2-13-60-2
<input type="checkbox"/>	ubuntu-webse...	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](#)

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](#)
eu-n1-az1 (eu-north-1a) [↕](#)

Snapshot ID - optional [Info](#)
 [🕒](#)

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	
<input type="text" value="Q. window"/>	<input type="text" value="Q. Enter value"/>	Remove

[Add tag](#)
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.

[Cancel](#) [Create volume](#)

3. EBS volume created.

vol-0b7bb433f626c2d0c (window) Last updated less than a minute ago [🕒](#) [Actions](#) [Delete](#) [Modify](#)

Details

Volume ID
[🔗](#) vol-0b7bb433f626c2d0c (window)

AWS Compute Optimizer finding
[🔍](#) Opt-in to AWS Compute Optimizer for recommendations. [Learn more](#) [🔗](#)

Fast snapshot restored
No

Attached resources
-

Source
Snapshot ID
-

Size
[🔗](#) 5 GiB

Volume state
[🔗](#) Available

Availability Zone
eu-n1-az1 (eu-north-1a)

Outposts ARN
-

Type
gp3

IOPS
3000

Created
[📅](#) Tue Jan 06 2026 19:09:38 GMT+0530 (India Standard Time)

Managed
false

Status check
[🔗](#) Okay

Throughput
125

Multi-Attach enabled
No

Operator
-

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)

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. xvd[f-p] for data volumes.

Details

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

Source

5. EBS attached to Linux ec2.

Details

Volume ID

vol-0af427190aa6c0292 (Linux)

AWS Compute Optimizer finding

Opt-in to AWS Compute Optimizer for recommendations. | [Learn more](#)

Fast snapshot restored

No

Attached resources

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

Size

5 GiB

Volume state

In-use

Availability Zone

eun1-az1 (eu-north-1a)

Outposts ARN

-

Type

gp3

IOPS

3000

Created

Tue Jan 06 2026 19:23:11 GMT+0530 (India Standard Time)

Managed

false

Status check

Insufficient data

Throughput

125

Multi-Attach enabled

No

Operator

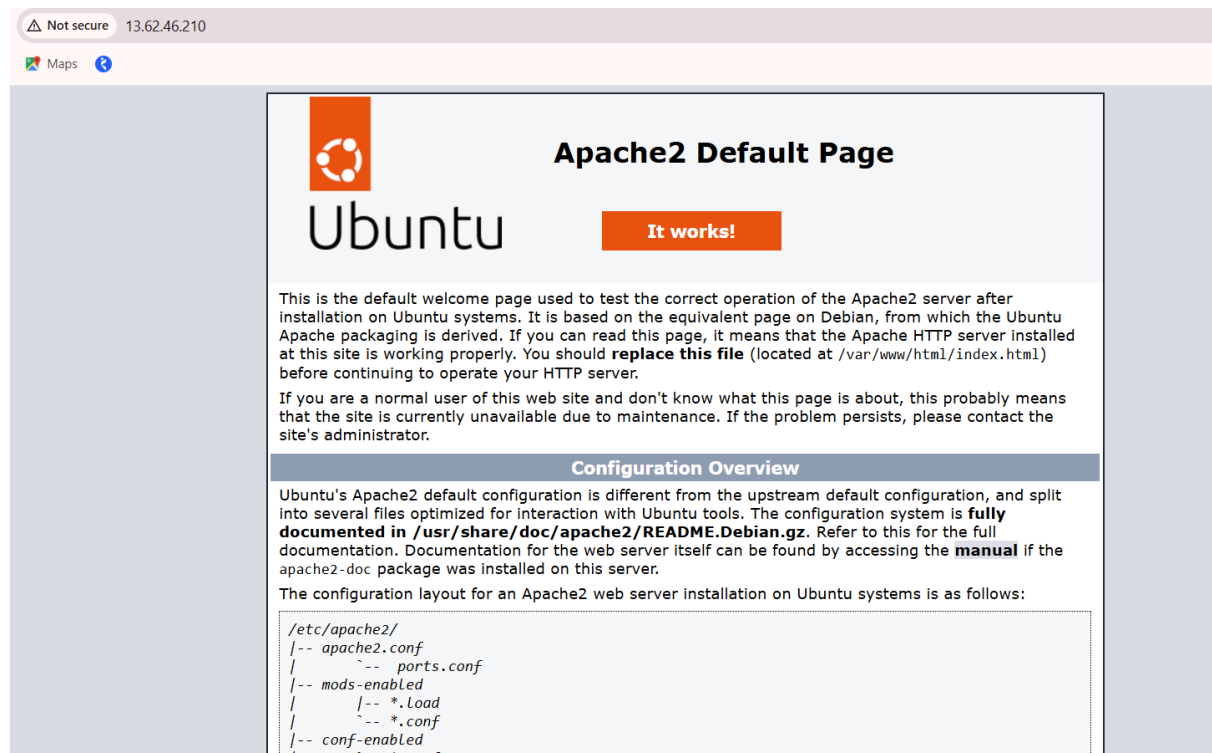
-

Source

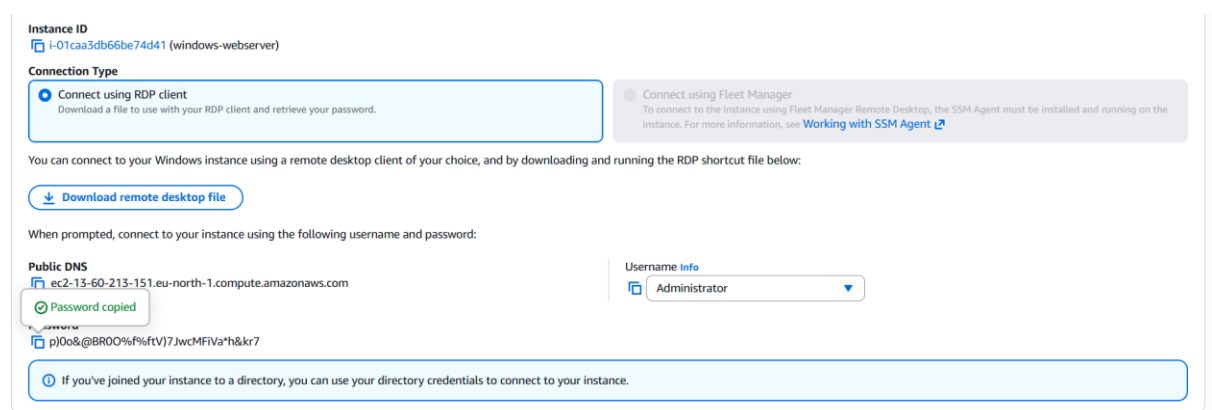
6. Installed Apache web server in linux machine.

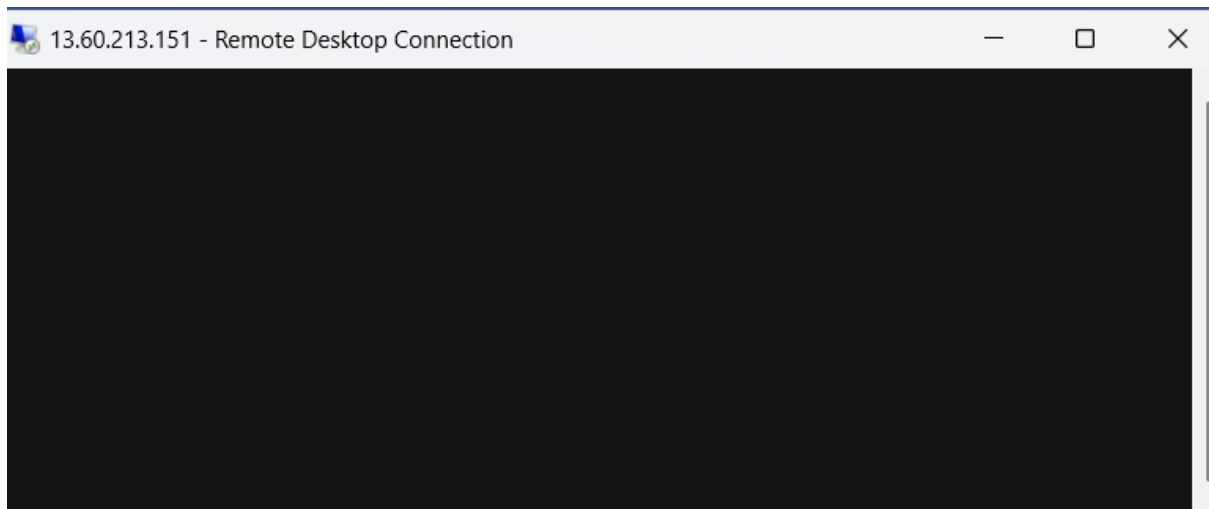
```
No user sessions are running outdated binaries.  
No VM guests are running outdated hypervisor (qemu) binaries on this host.  
Synchronizing state of apache2.service with SysV service script with /usr/lib/sy  
stemd/systemd-sysv-install.  
Executing: /usr/lib/systemd/systemd-sysv-install enable apache2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

7. Checking in browser with public ip.

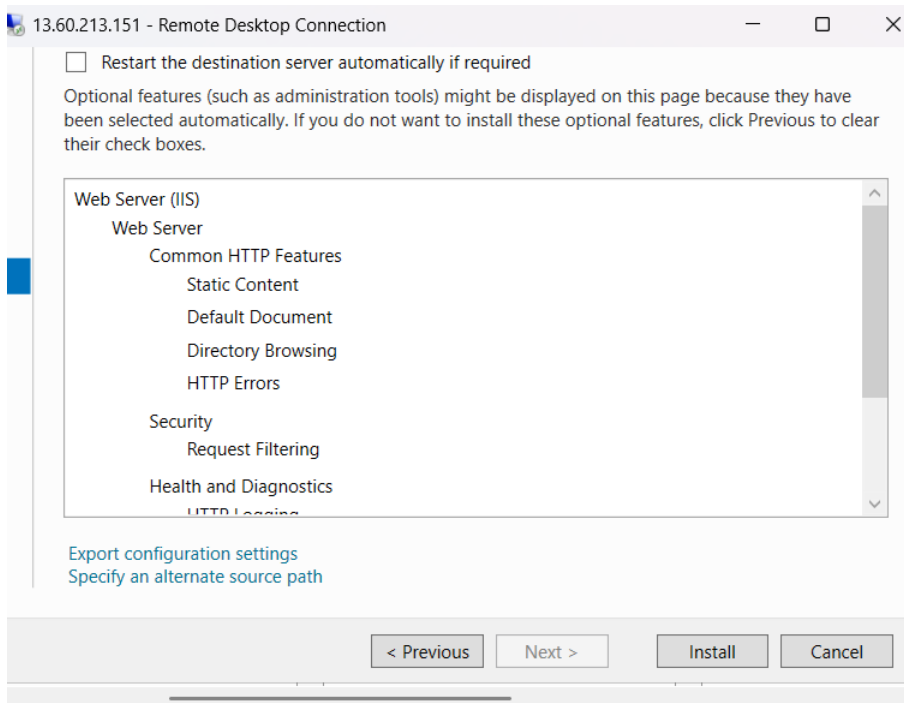


8. Login to windows ec2.





9. Installing web server.



GROUPS	
s: 1 Servers total: 1	
Page	1
	<div><div></div><div>IIS</div></div> <div><div></div><div>Manageability</div></div> <div>Events</div> <div>Services</div> <div>Performance</div> <div>BPA results</div>

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:~$ |
```

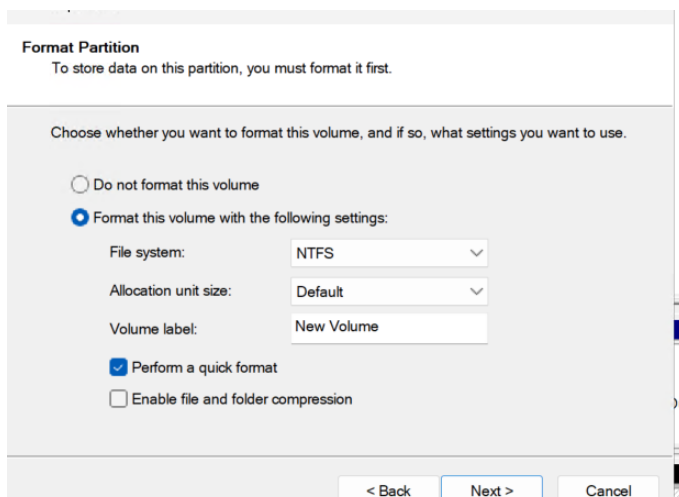
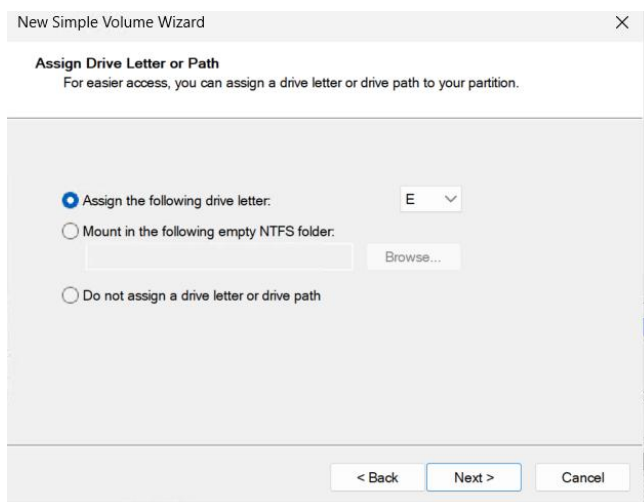
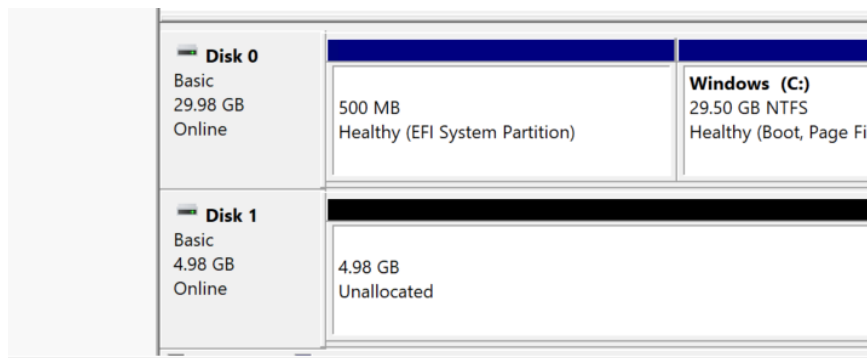
11. Updating fstab.

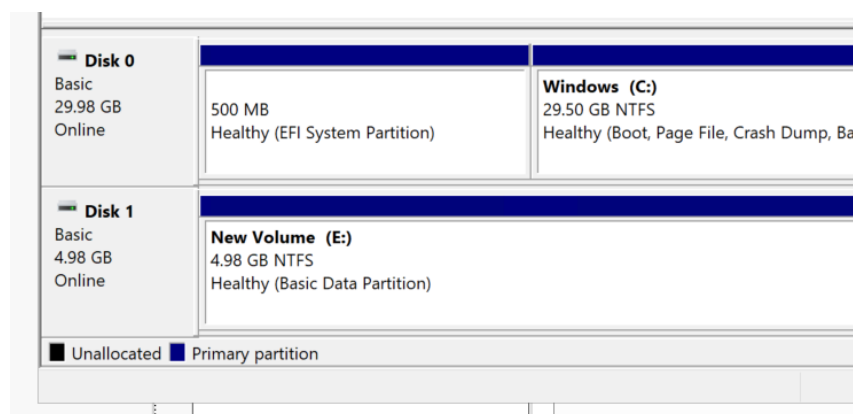
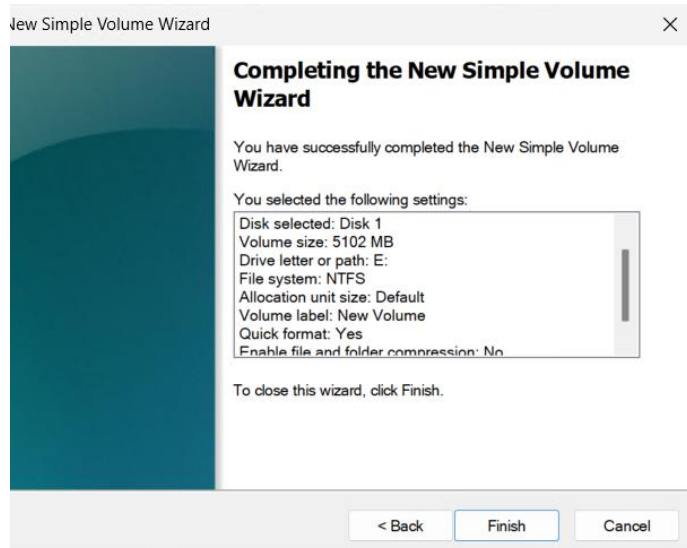
```
ubuntu@ip-172-31-25-142: ~
LABEL=cloudimg-rootfs / ext4 discard,commit=30,errors=remount-ro 0 1
LABEL=BOOT /boot ext4 defaults 0 2
LABEL=UEFI /boot/efi vfat umask=0077 0 1
UUID="41170548-273d-4470-a843-f63a6019ba4c" /data ext4 defaults nofail 0 2
~
~
~
~
~
~
```

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.

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-0af427190aa6c0292 (Linux)
eu-n1-az1 (eu-north-1)

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.

[Cancel](#) [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-0b7b6433f62c2d0c (window)
eu-n1-az1 (eu-north-1a)



Snapshot details

Description

Add a description for your snapshot.

creating snapshot for windows

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

< 1 >

<input checked="" type="checkbox"/>	Name	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

snap-0413febda35014668 (linux)

Volume type [Info](#)

General Purpose SSD (gp3)

Size (GiB) [Info](#)

5

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)

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

Snapshot ID

Snapshot ID

snap-081c1a896b0998f8b (windows)

Volume type | Info

General Purpose SSD (gp3)

Size (GiB) | Info

5

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

eun1-az1 (eu-north-1a)

[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 [↗](#)

Enter a value

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

A tag is a label that you assign to a document.

No tags associated with the resource.

[Add tag](#)

You can add 50 more logs.

⌂ 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.

	OS	Image	Architecture	Size	Version	Created	Updated	Deleted	Expires
<input type="checkbox"/>	windows	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