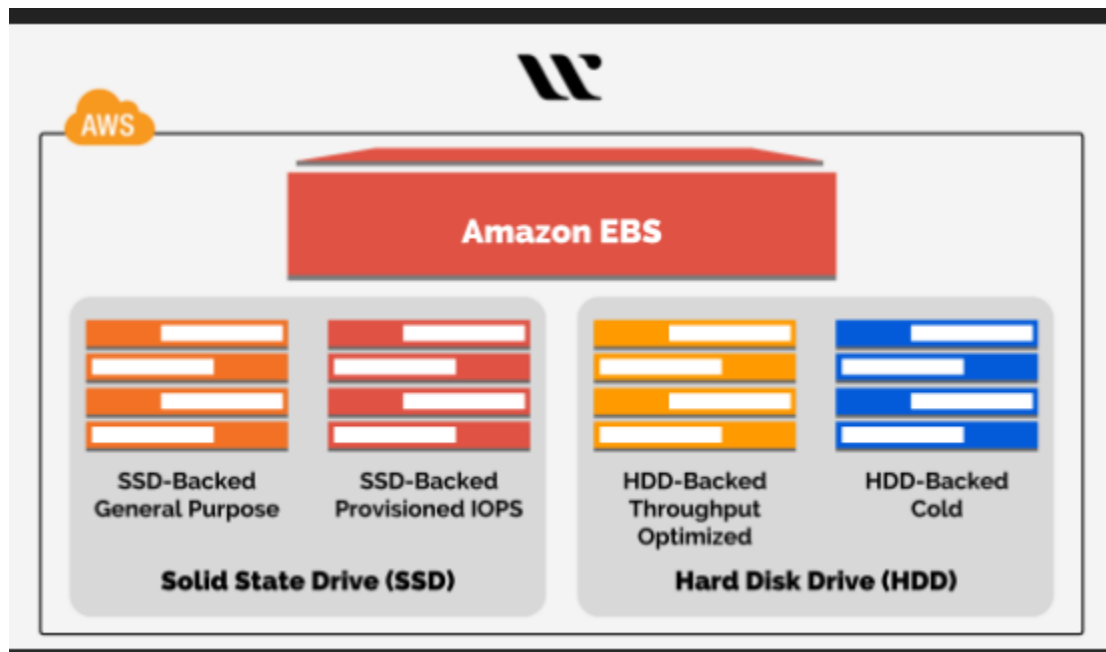


EBS[ELASTIC BLOCK STORE]



What is EBS(Elastic Block Store) in AWS

- AWS EBS is a cloud-based storage services that provides durable, high-performance block storage for use with Amazon EC2 instances.

It works like a virtual hard drive, allowing you to store and access data even when your EC2 instances are stopped or terminated.

- Amazon EBS is a block storage services designed to be used with EC2(Elastic Compute Cloud) instances. It provides persistent storage volumes that can be attached to EC2 instances.
- This service is used for hosting database (e.g., MySQL, PostgreSQL), storing files and logos with durability, taking automatic backups using snapshots.

Lab Steps

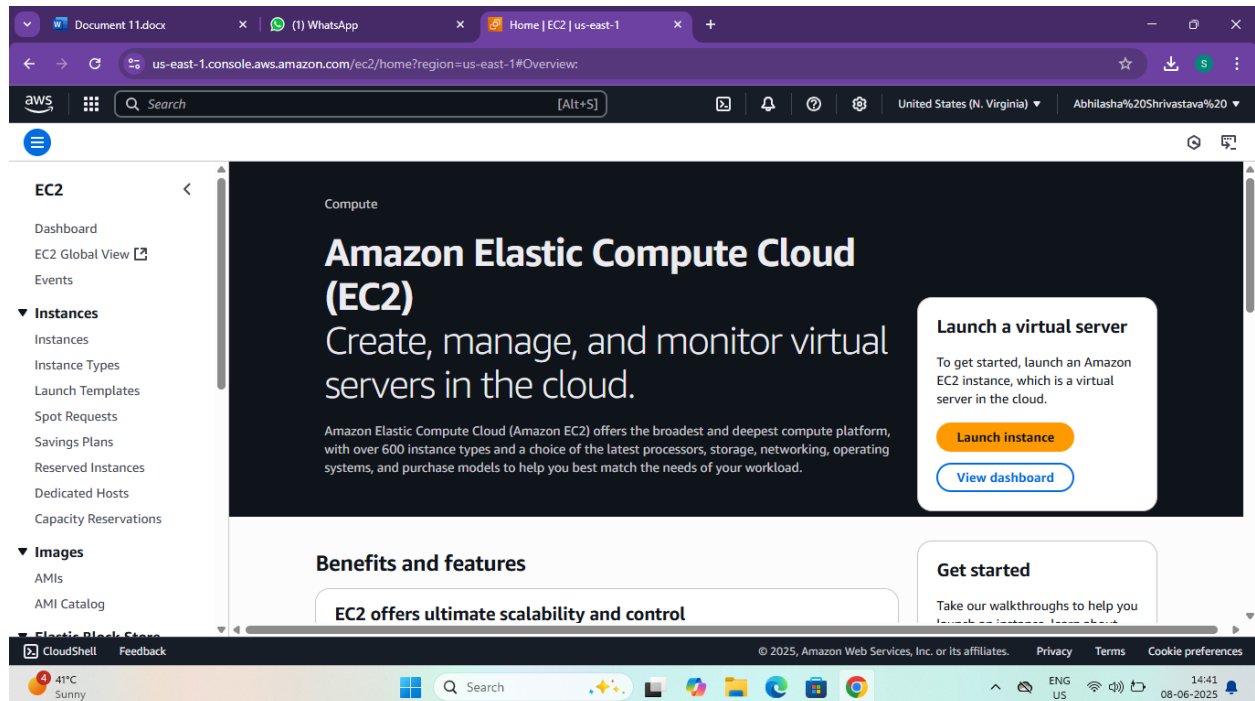
Task 1: Sign in to AWS Management Console

1. Click on the open console button, and you will get redirected to AWS console in a new browser tab.

2. On the AWS sign-in page,
 - Leave the Account ID as default. Never edit/remove the 12-digit Account ID present in the AWS console. Otherwise, you cannot proceed with the lab.
 - Now copy your username and password in the lab console to the IAM username and password in AWS console and click on the sign-in button.
3. Once signed in to the AWS Management Console, make the default AWS Region as US East (N. Virginia) us-east-1.

Task 2: Open EC2 Dashboard

1. In the AWS search bar, type EC2 and click on it.
2. You will enter the EC2 Dashboard.



Task 3: Launch an Instances

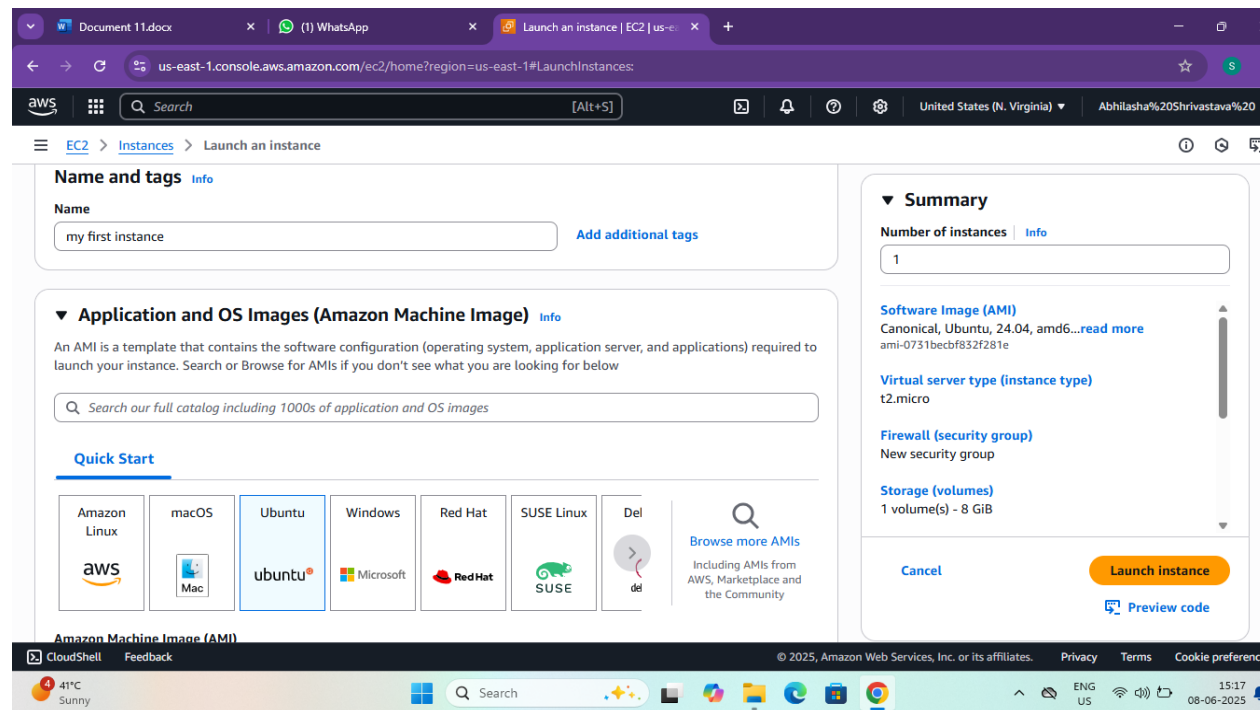
1. Click the “Launch Instances” button.
2. Fill out the following:

21. Name and Tags

- Give your instance a name (My first Instance).

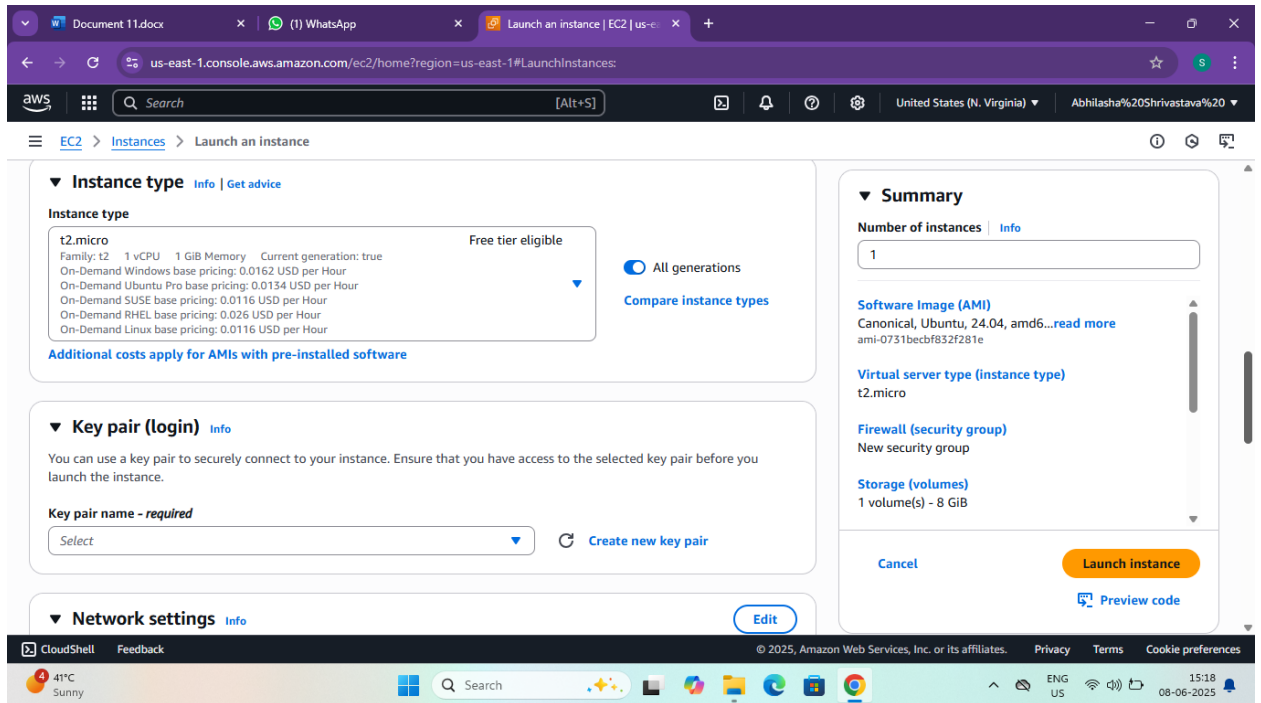
2. Application and OS Images (AMI)

- Choose an AMI (Amazon Machine Image):
- Example: ubuntu, windows etc.



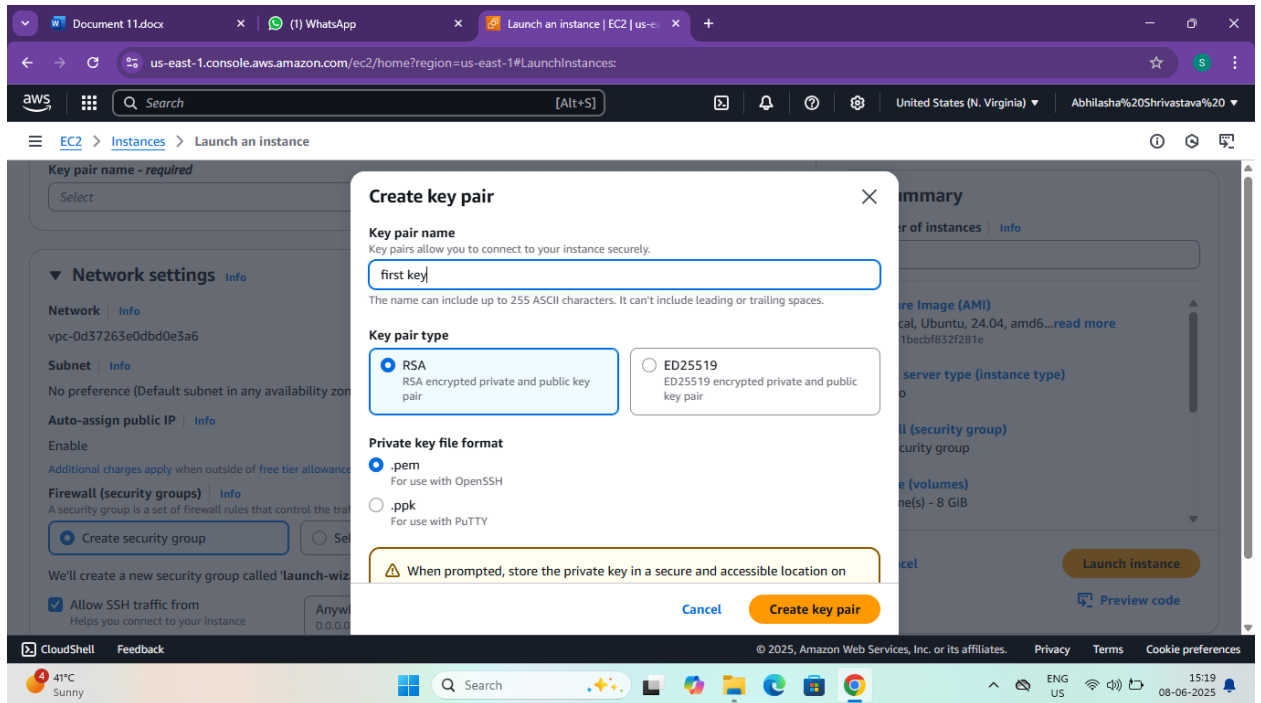
3. Instance Type

- Choose an Instances type (default is t2. micro- Free Tier eligible).



4. Key Pair (login)

- Create a new key pair (if you don't have one)
- Download the .pem file- this is needed for SSH access.



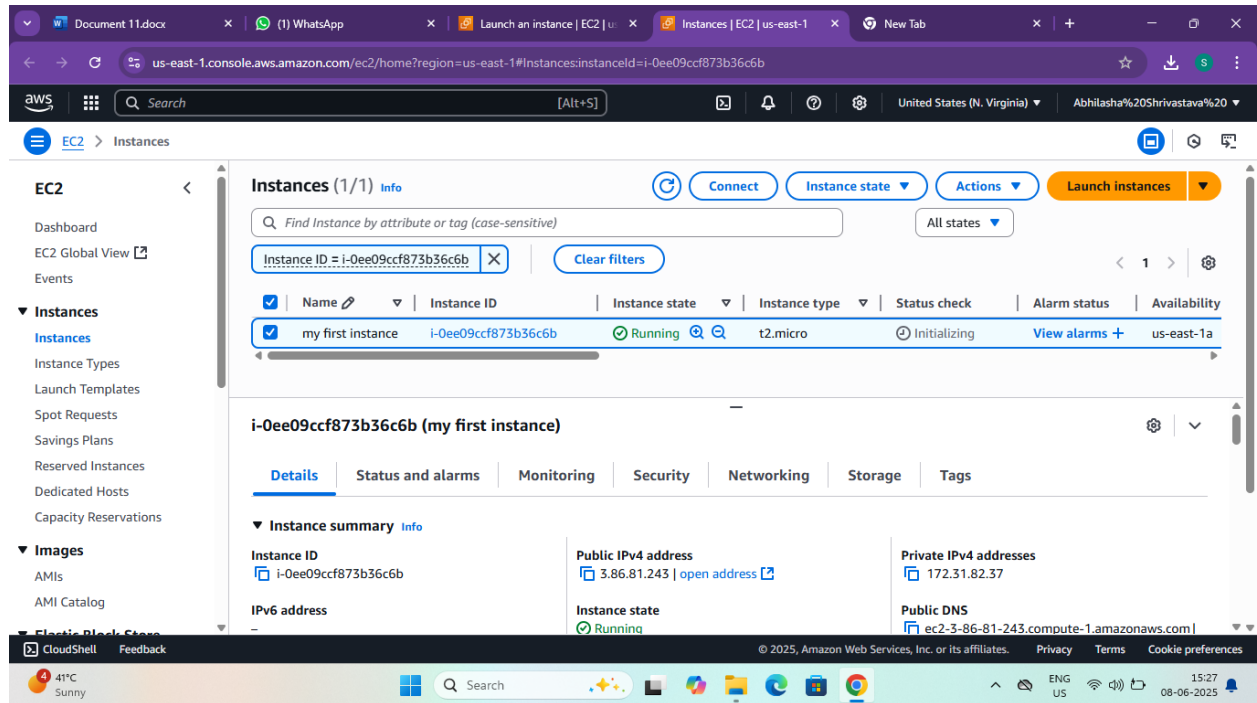
Task 4: Launch the Instance

1. Click “Launch Instances”.

Task 5: Connect to the Instances

For Linux:

1. Go to the Instances-> Select your Instances-> Connect.



Task 6: Go to EC2 Dashboard

- In the AWS search bar, type “EC2” and select EC2.
- In the left menu, scroll to Elastic Block Store and click "volumes".

Task 7: Create a volume

- Click the “create volume” button.
- Fill the following details:
 1. Volume type- gp3(general purpose SSD)
 2. Size-10 GiB (or more as needed)

Document 11.docx | WhatsApp | Launch an instance | EC2 | u... | Create volume | EC2 | us-ea... | EC2 Instance Connect | us-e...

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateVolume:

EC2 > Volumes > Create volume

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: 16384 GiB.

IOPS | Info
3000
Min: 3000 IOPS, Max: 16000 IOPS.

Throughput (MiB/s) | Info
125
Min: 125 MiB, Max: 1000 MiB. Baseline: 125 MiB/s.

Availability Zone | Info
us-east-1a

CloudShell | Feedback

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3 38°C Clear | Search | 22:29 08-06-2025

3. Availability Zone-Same as your EC2(e.g., us-east-1a)

4. Encrypted-Optional (choose if you want encryption)

Document 11.docx | WhatsApp | Launch an instance | EC2 | u... | Create volume | EC2 | us-ea... | EC2 Instance Connect | us-e...

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateVolume:

EC2 > Volumes > Create volume

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.
No tags associated with the resource.
[Add tag](#)
You can add 50 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**

CloudShell | Feedback

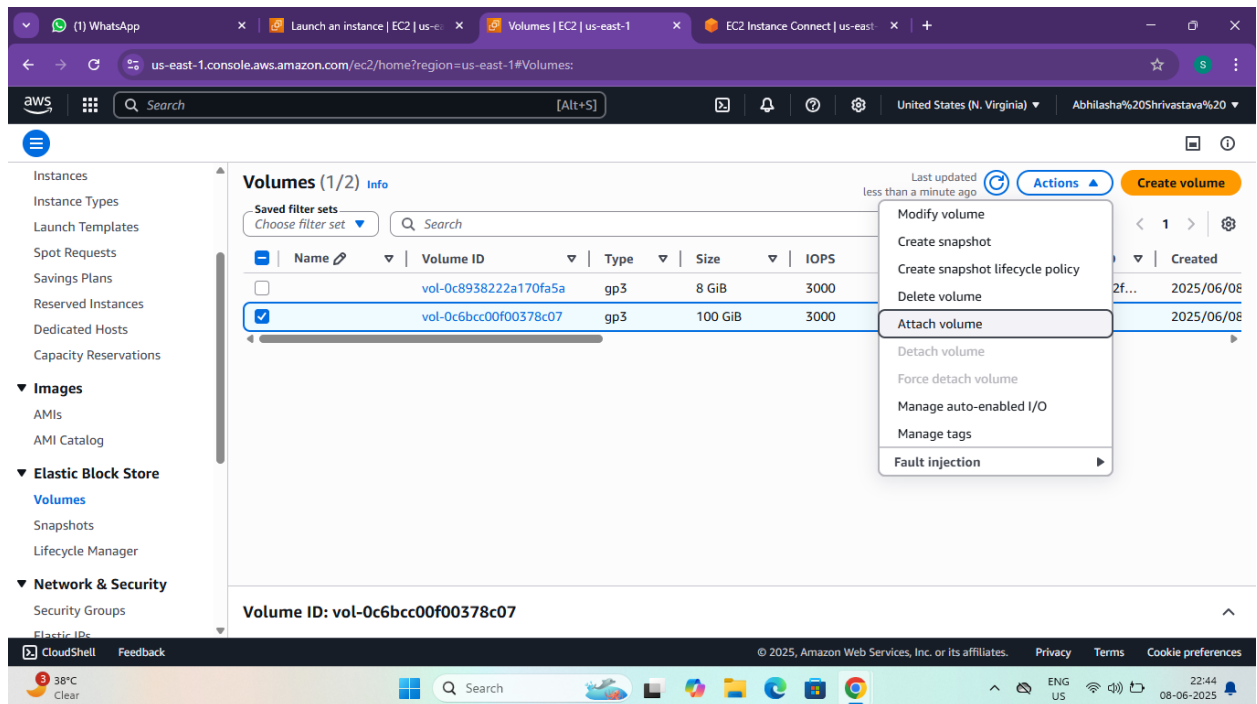
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- Click create Volume.

Task 8: Attach Volume to EC2 Instance

1. After creation, Select the new volume.
2. Click Actions-> Attach volume.



3. Choose the EC2 instances (must be in the same availability zone).
4. Click Attach.

WhatsApp

Launch an instance | EC2 | us-east-1

Attach volume | EC2 | us-east-1

EC2 Instance Connect | us-east-1

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#AttachVolume:volumeId=vol-0c6bcc00f00378c07

Search [Alt+S]

United States (N. Virginia)

Abhilasha%20Shrivastava%20

EC2 > Volumes > vol-0c6bcc00f00378c07 > Attach volume

Volume ID

vol-0c6bcc00f00378c07

Availability Zone

us-east-1a

Instance [Info](#)

i-0ee09ccf873b36c6b

(my first instance) (running)

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

Device name [Info](#)

/dev/sdb

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

Newer Linux kernels may rename your devices to /dev/xvdf through /dev/xvdp internally, even when the device name entered here (and shown in the details) is /dev/sdf through /dev/sdp.

Cancel

Attach volume

CloudShell Feedback

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ENG US

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08-06-2025