

# VOLUME CREATION IN AWS EC2

## Objective

- To understand the process of creating and attaching Elastic Block Store (EBS) volumes in AWS.
  - To learn how to extend the storage capacity of an EC2 instance by adding a new volume.
  - To gain hands-on experience in managing persistent storage for cloud instances.
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## Pre-requisite

- An active AWS account with permissions to manage EC2 and EBS.
  - Basic knowledge of EC2 instances, availability zones, and storage types.
  - At least one running EC2 instance in the same Availability Zone as the volume.
  - SSH client (e.g., terminal, PuTTY) to connect and configure the instance.
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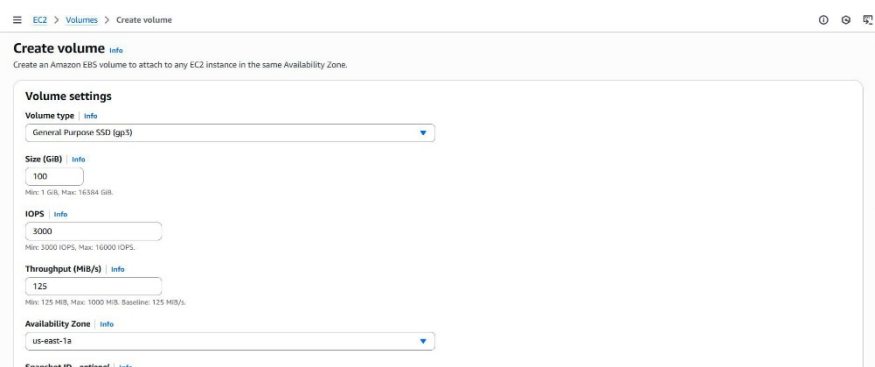
## Procedure:

Go to **EC2 → Volumes**. Click **Create Volume**.

Choose size (e.g., 8 GiB).

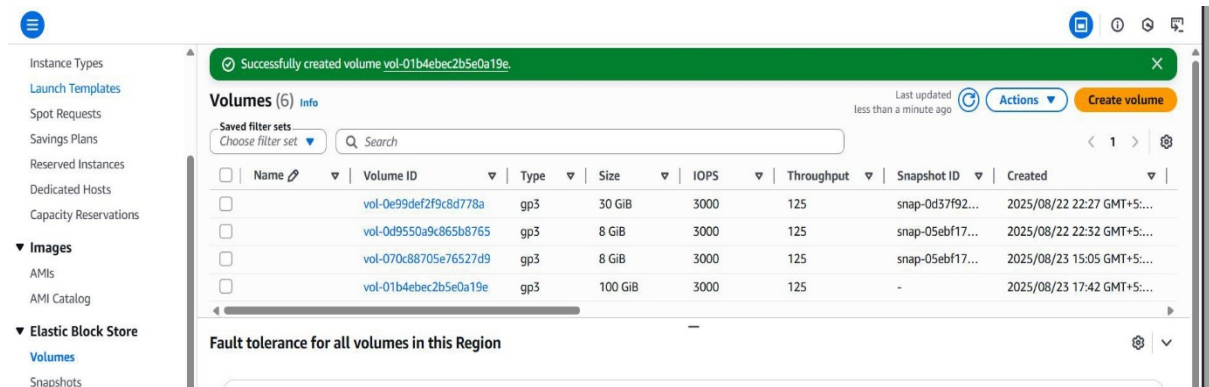
Select **Availability Zone** same as your EC2 instance. Volume type: General Purpose SSD (gp2).

Click **Create Volume**.



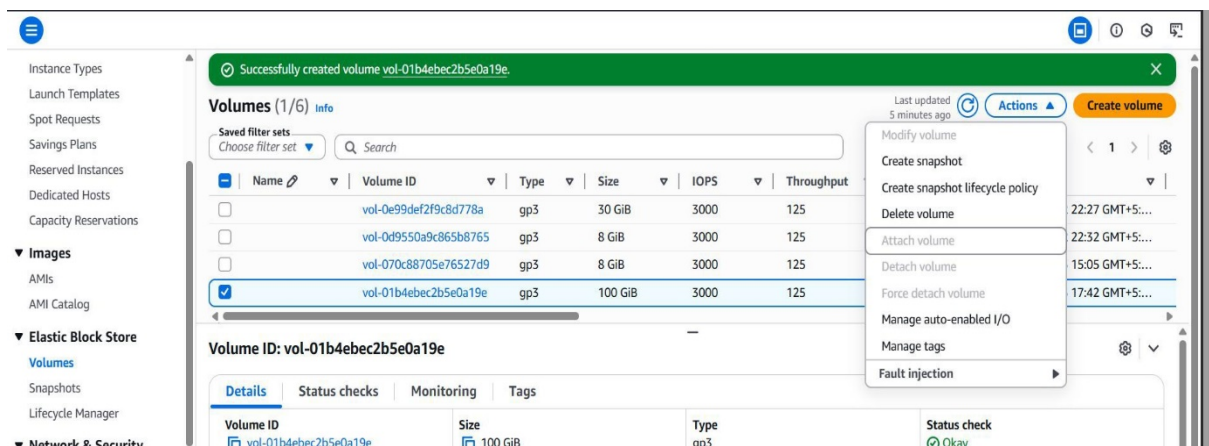
The screenshot shows the 'Create volume' page in the AWS Management Console. The breadcrumb navigation at the top reads 'EC2 > Volumes > Create volume'. The page title is 'Create volume' with an 'info' link. Below the title is a subtitle: 'Create an Amazon EBS volume to attach to any EC2 instance in the same Availability Zone.' The 'Volume settings' section contains the following fields:

- Volume type:** A dropdown menu set to 'General Purpose SSD (gp2)' with an 'info' link.
- Size (GiB):** A text input field containing '100' with an 'info' link. Below the field, it says 'Min: 1 GiB, Max: 16384 GiB.'
- IOPS:** A text input field containing '3000' with an 'info' link. Below the field, it says 'Min: 3000 IOPS, Max: 16000 IOPS.'
- Throughput (MiB/s):** A text input field containing '125' with an 'info' link. Below the field, it says 'Min: 125 MiB/s, Max: 1000 MiB/s. Baseline: 125 MiB/s.'
- Availability Zone:** A dropdown menu set to 'us-east-1a' with an 'info' link.
- Snapshot ID - optional:** A text input field with an 'info' link.



Select the new volume → click **Actions** → **Attach Volume**. Choose your **EC2 instance** from the list → click **Attach**.

SSH into your instance and run:



## Conclusion

In this lab, we successfully created an EBS volume, attached it to an EC2 instance, and prepared it for use. Volume creation and attachment are essential for scaling storage, separating data from compute resources, and ensuring persistence beyond the instance lifecycle. This demonstrates how AWS provides flexible and reliable storage management for cloud applications.