



- This [session](#) dives into the essentials of managing EBS volumes, snapshots, and encryption in AWS.
- From automating backups to handling snapshots across regions, you'll learn how to streamline your workflows and ensure data security.

Key Content

- a) Automate EBS Volume Backup
- b) Snapshot and AMI Recycle Bin
- c) Copy Snapshot From One Region to Another
- d) Encrypt the EBS Volume
- e) Delete EBS Snapshot



a) Automate EBS Volume Backup

- **Navigate** to Lifecycle Manager in the AWS Management Console.
- Create a policy by adding a **Name** and the **Target Volume**.
- Leave other settings at their default values and click **Next**.

- Configure the schedule for snapshots:
 - Specify the **Frequency** (daily, monthly, etc.).
 - Set the **Starting Time**.
 - Also, add the **Retention Type** & number of snapshots to retain.

Frequency

Daily

Every

2 hours

Starting at

09:00 UTC

Retention type

Keep

Count 15 snapshots in standard tier

- **Review Settings**, including the schedule, and click **Create Policy**.
- Your snapshots will now be auto-created at defined times.



b) Snapshot and AMI Recycle Bin

- Access the **Recycle Bin** in the AWS Management Console.

The screenshot shows the AWS Snapshots management console. At the top right, there is a blue rounded rectangle containing the name "SOHAIL ASGHER". Below it is a circular profile picture of a person standing on a balcony. The main area is a table titled "Snapshots" with columns: Name, Snapshot ID, Size, Description, Storage..., Snapshot status, and Started. A toolbar above the table includes buttons for "Create snapshot", "Recycle Bin" (which has a yellow cursor arrow pointing to it), "Actions", and other navigation options. The "Recycle Bin" button is highlighted with a yellow circle.

- Create a **Retention Rule** by specifying the following:
 - The **Resource Type** (EBS Snapshot or AMI).
 - The **Retention Period** (e.g., 30 days).

The screenshot shows the "Create Retention Rule" configuration page. It starts with a "Resource type" dropdown set to "EBS Snapshots". Below it is a checked checkbox "Apply to all resources" with a note: "The retention rule will apply to all resources of the selected type." Under "Retention period", there is a dropdown menu showing "1 days" with a note: "Min: 1 day, Max 365 days".

- Click **Create Retention Rule**.
- Deleted Snapshots** will now move to the Recycle Bin.
- To Recover a Snapshot:
 - Select the desired snapshot from the Recycle Bin.
 - Click **Recover** to restore it.

The screenshot shows the "Recycle Bin > Resources" page. It displays a table titled "Resources (1/1)" with one item. The table columns are: Name, Resource ID, Bin entry date, Bin exit date, and Description. The single row shows "snap-0f32dcddd3237ac37" with "Thu Nov 17 2022 09:50:0..." and "Fri Nov 18 2022 09:50:09 ..." under the respective dates, and "manual-snap" in the Description column. A "Recover" button is visible at the top right of the table area.



c) Copy Snapshot From One Region to Another

- Go to the Snapshots section in the AWS Management Console.

Snapshots (1/1)

Name	Snapshot ID	Size	Description	Storage...
-	snap-Of32dcddd3237ac37	5 GiB	manual-snap	Standard

Actions: Create snapshot, Recycle Bin, Copy snapshot, Modify permissions

Regions: US East (N. Virginia) us-east-1, US East (Ohio) us-east-2, US West (N. California) us-west-1, US West (Oregon) us-west-2, Asia Pacific (Mumbai) ap-south-1

- Select the snapshot you want to copy.
- Click **Copy Snapshot** in the **Actions** menu.

Snapshots (1/1)

Name	Snapshot ID	Size	Description	Storage...	Snapshot status
-	snap-Of32dcddd3237ac37	5 GiB	manual-snap	Standard	Completed

Actions: Create volume from snapshot, Create image from snapshot, Copy snapshot, Modify permissions

- Specify the destination region for the snapshot.
- Click **Copy Snapshot** to initiate the process.
- The snapshot will now appear in the **Specified Region**.

Snapshot ID

The ID of the original snapshot that is to be copied.

snap-Of32dcddd3237ac37

New snapshot settings

Description

A description for the snapshot copy.

[Copied snap-Of32dcddd3237ac37 from ap-south-1] manual-snap

255 characters maximum.

Destination Region

The Region in which to create the snapshot copy.

us-east-1

Encryption Info

Use Amazon EBS encryption as an encryption solution for your EBS resources.

Encrypt this snapshot



d) Encrypt the EBS Volume

- During EBS Volume Creation, choose:
 - Default **Encryption** or custom **KMS encryption** keys.

Encryption [Info](#)

Use Amazon EBS encryption as an encryption solution for your EBS resources associated with your EC2 instances.

Encrypt this volume

KMS key [Info](#)

(default) aws/ebs

KMS key description

Default key that protects my EBS volumes when no other key is defined

- Snapshots of encrypted volumes are also encrypted.
 - Volumes created from **Encrypted snapshots** have encryption.
 - **Unencrypted snapshots** can still create encrypted volumes.

Encryption [Info](#)

Use Amazon EBS encryption as an encryption solution for your EBS resources associated with your EC2 instances.

Encrypt this volume

KMS key [Info](#)

(default) aws/ebs

- To enable account-wide default encryption:
 - Navigate to **EC2 > EBS Encryption**.
 - Click **Modify** and enable default EBS encryption.

Encryption [Info](#)

Use Amazon EBS encryption as an encryption solution for your EBS resources associated with your EC2 instances.

Encrypt this volume

KMS key [Info](#)

Select a KMS key



e) Delete EBS Snapshot

- In the **Snapshots** section of the AWS Management Console,

Select the snapshots you want to delete.

Snapshots (2/3)								
Owned by me		Search				Actions		Create snapshot
Name	Snapshot ID	Size	Description	Storage...	Snapshot status	Started		
-	snap-0f32dcccc3237ac37	5 GiB	manual-snap	Standard	Completed	2022/11/17 09:49 GMT+5:...		
<input checked="" type="checkbox"/>	snap-031b4be78268eeb35	5 GiB	Enc-snap	Standard	Completed	2022/11/17 10:51 GMT+5:...		
<input checked="" type="checkbox"/>	snap-0ad8c736ba1a04c63	5 GiB	unEnc-snap	Standard	Completed	2022/11/17 10:51 GMT+5:...		

- Click **Actions** and choose **Delete Snapshots**.
- Confirm** the deletion to remove the snapshots from your account.

