BATCH : 149

LESSON : **AWS**

DATE : 14.08.2023

SUBJECT : **AWS-Snapshots-AMI**
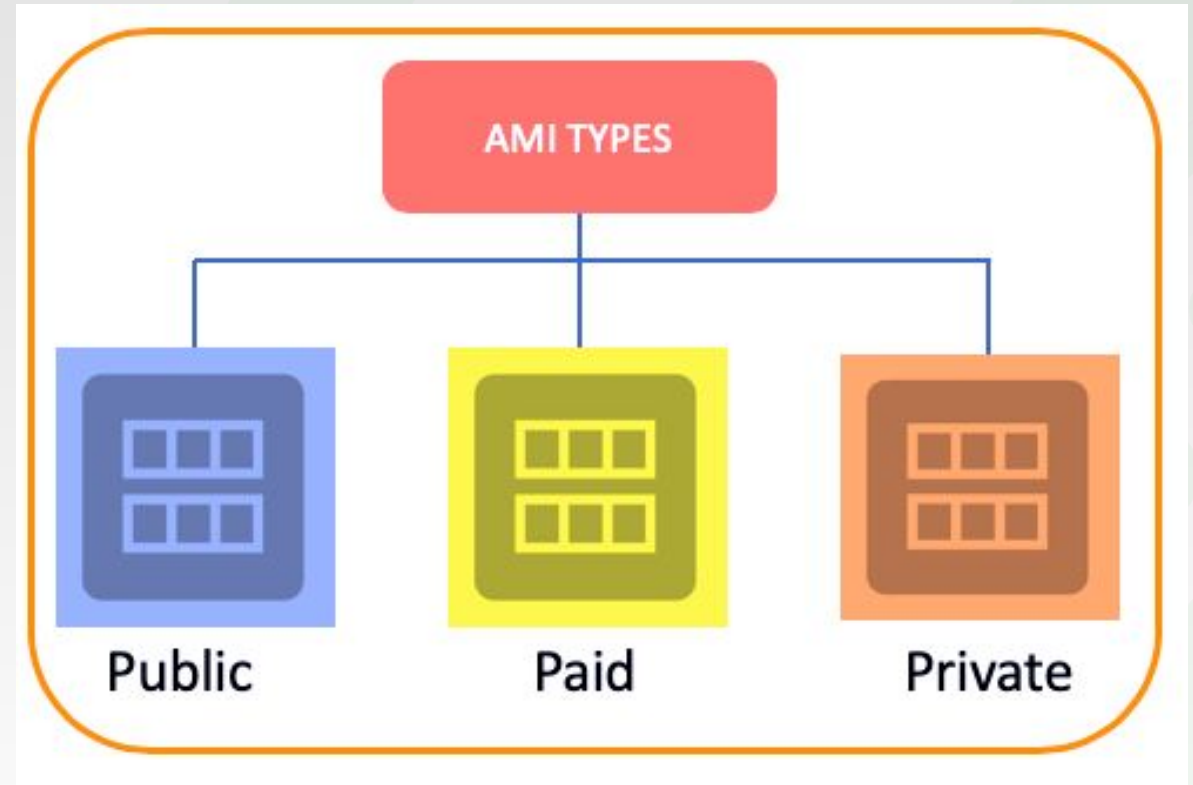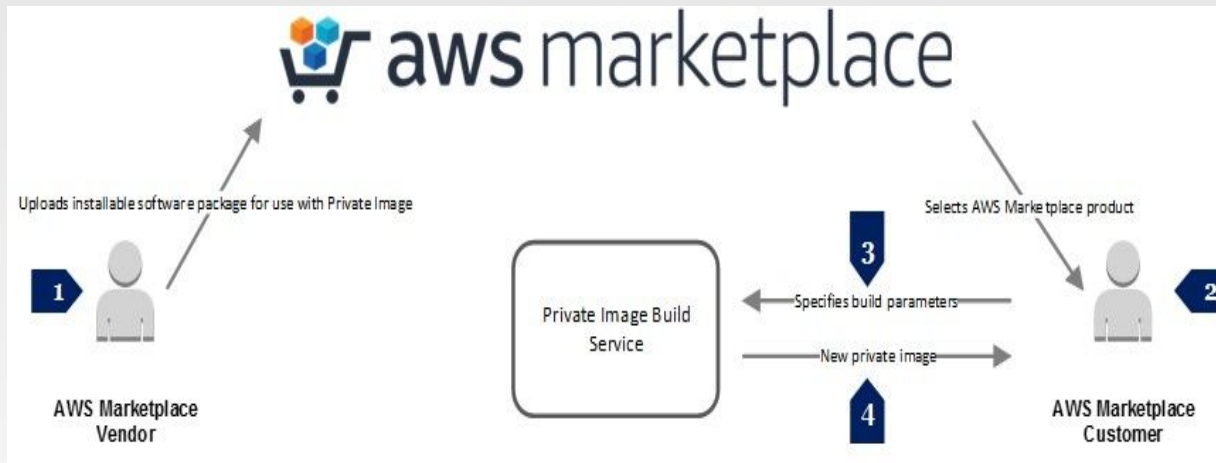
AWS Snapshots-AMI

Amazon Machine Image

✔ AMI i**s a virtual image** used to create a virtual machine within an EC2 instance. In other words, it is **a virtual machine template containing predefined operating system and application files**.

✔ When creating a virtual machine, you will get an **operating system and application list** according to the features presented in that template by choosing which template to create this machine. **All AMI provides a template for the root volume** of an instance.

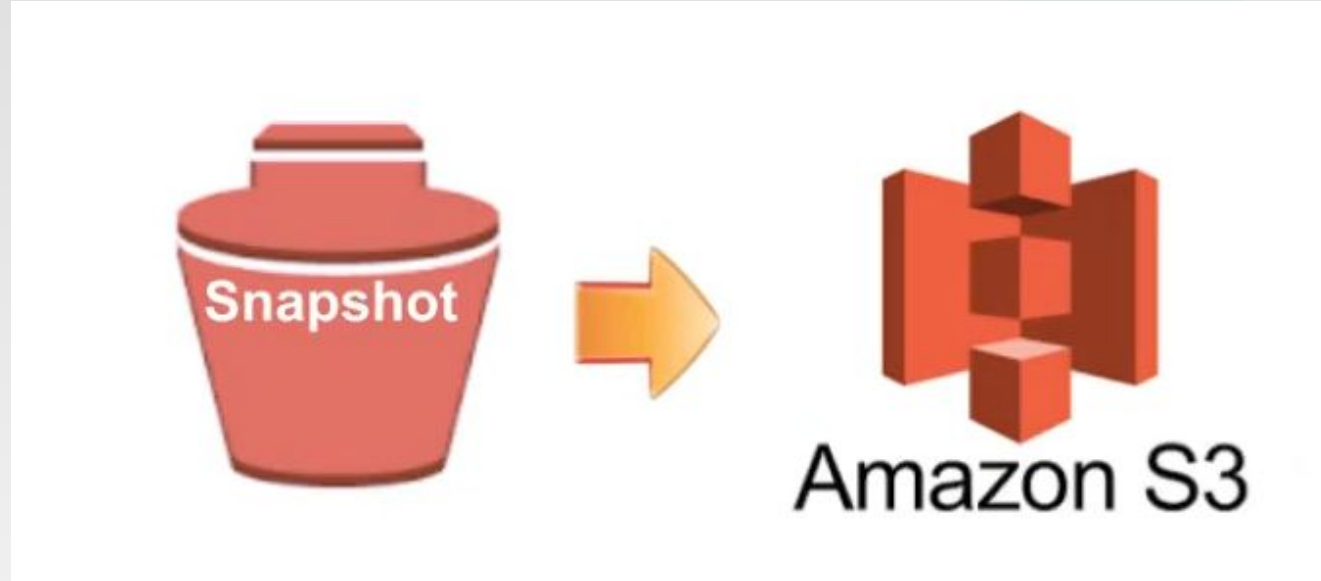Amazon AMI

Amazon Machine Image Types

What is Snapshot?

✔ Snapshot is the name of the method that allows us to take **a current copy of an EBS disk**.

✔ It is a **point-in-time copy of your Amazon EBS volume**.

✔ Snaphots are used for the purpose of

  ✔ **Backup**

  ✔ **Copying AMI for creating multiple instances** with the same features

  ✔ **Creating a new Volume**

EBS Snapshot

Features of Snapshot

✔ Source from **Volume or Instance**
✔ Stored in Amazon **S3**
✔ **Incremental** Storage
✔ Data Lifecyle Manager
✔ EBS Snapshot Archive, From Standard to Archive Tier
✔ Recycle Bin for EBS Snapshots
✔ Fast Snapshot Restore
✔ **Snapshots go across regions** where **volumes stay in the same region as the snapshot**.
✔ You can **create a copy of a snapshot** but you **can't create a copy of a volume.**
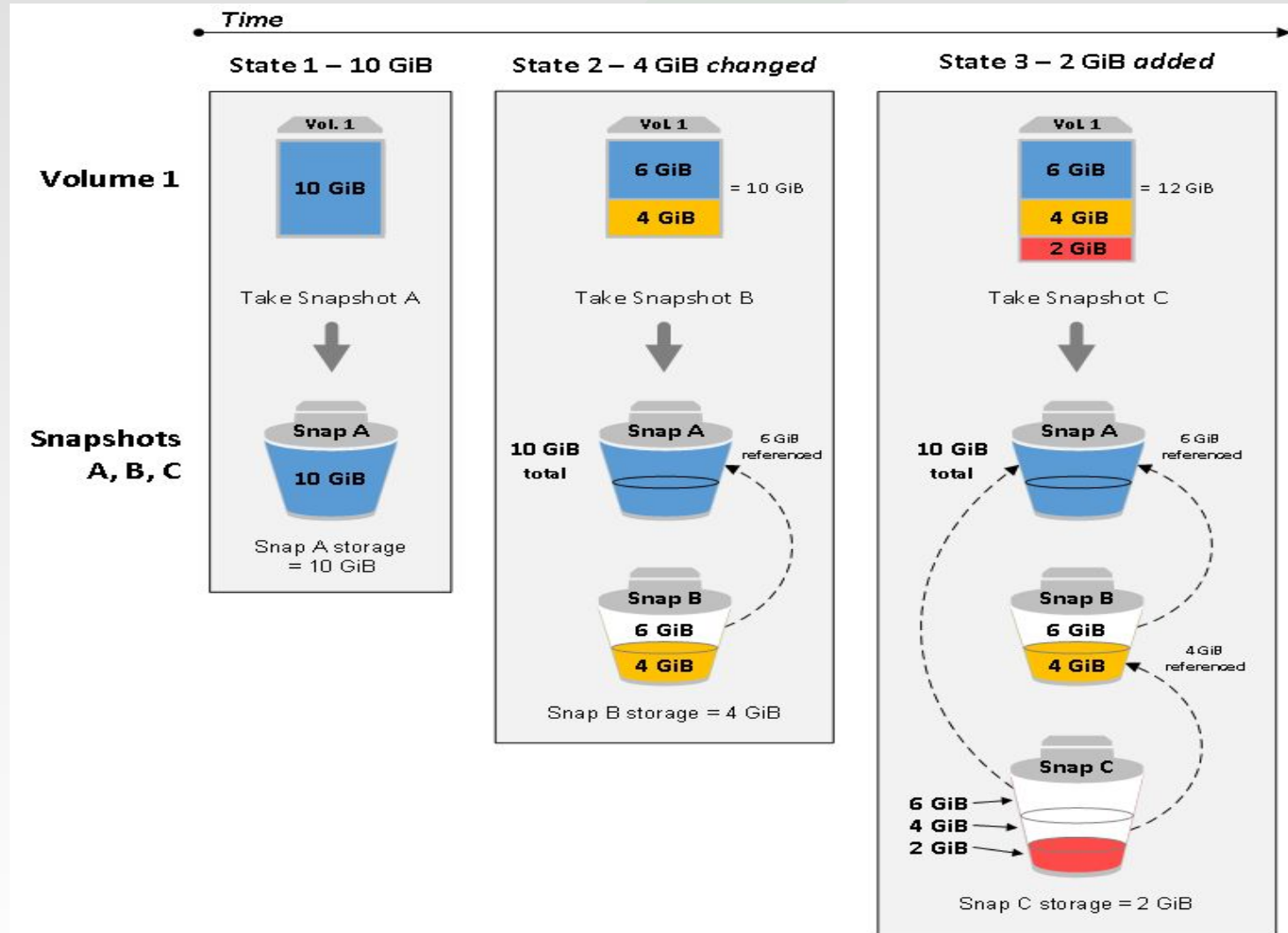✔ **Volumes, AMIs, instances all depend on the snapshot**.
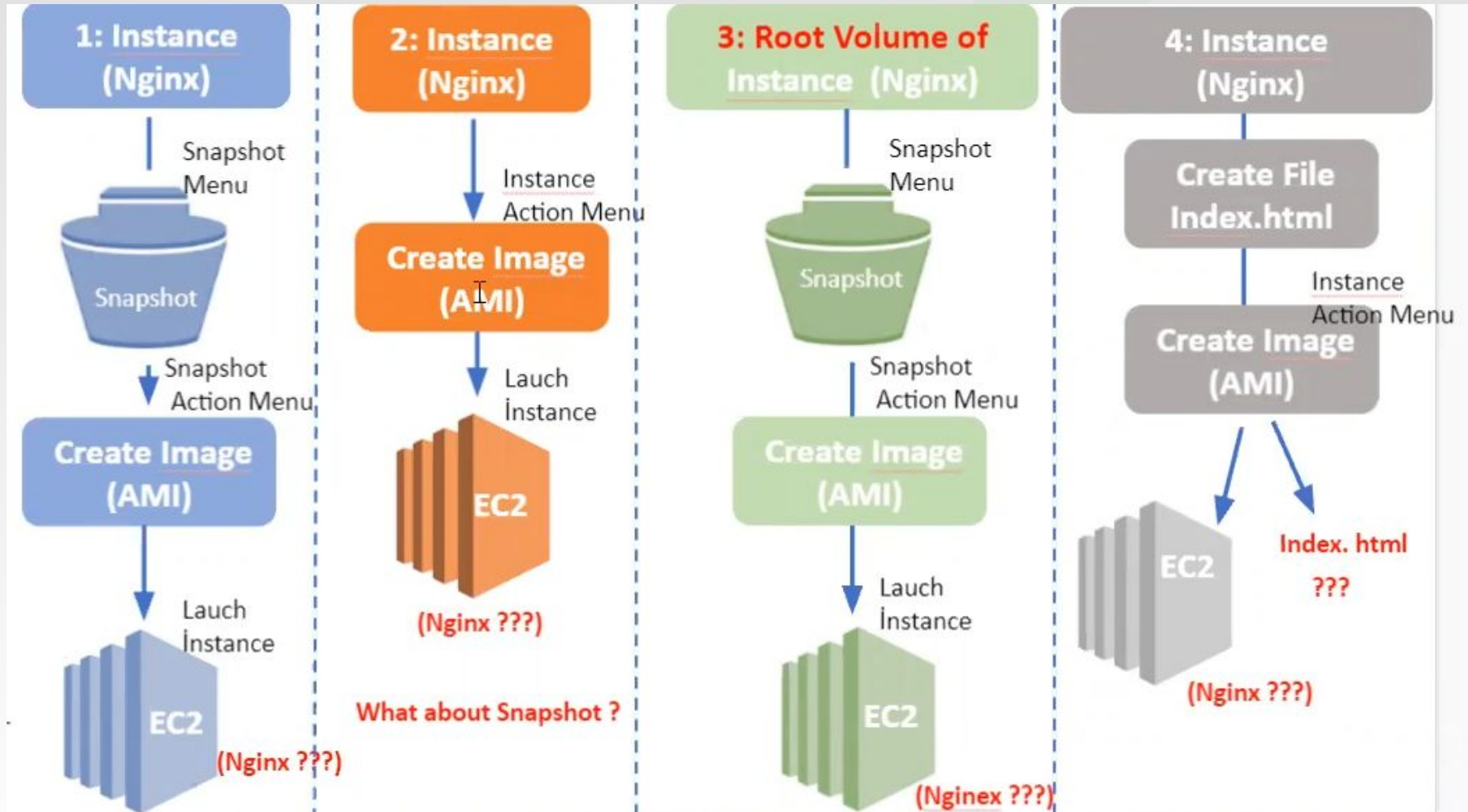
Lifecycle of Snapshot
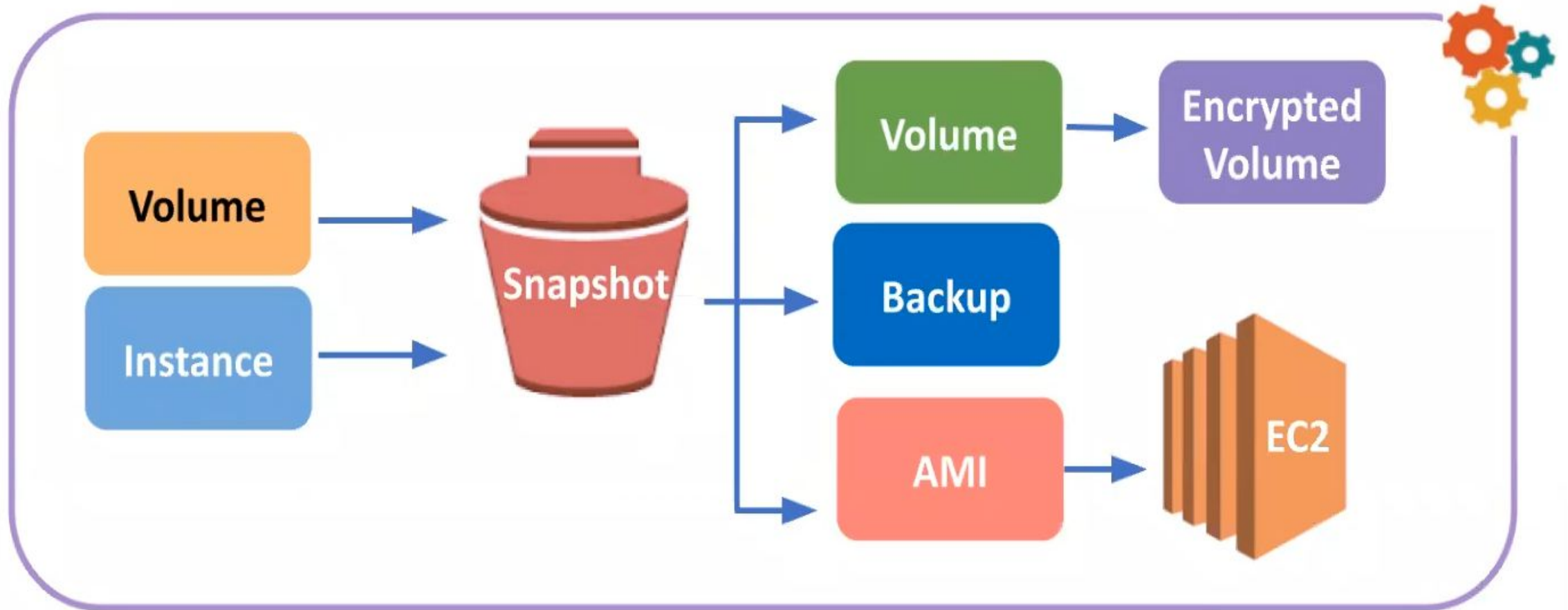
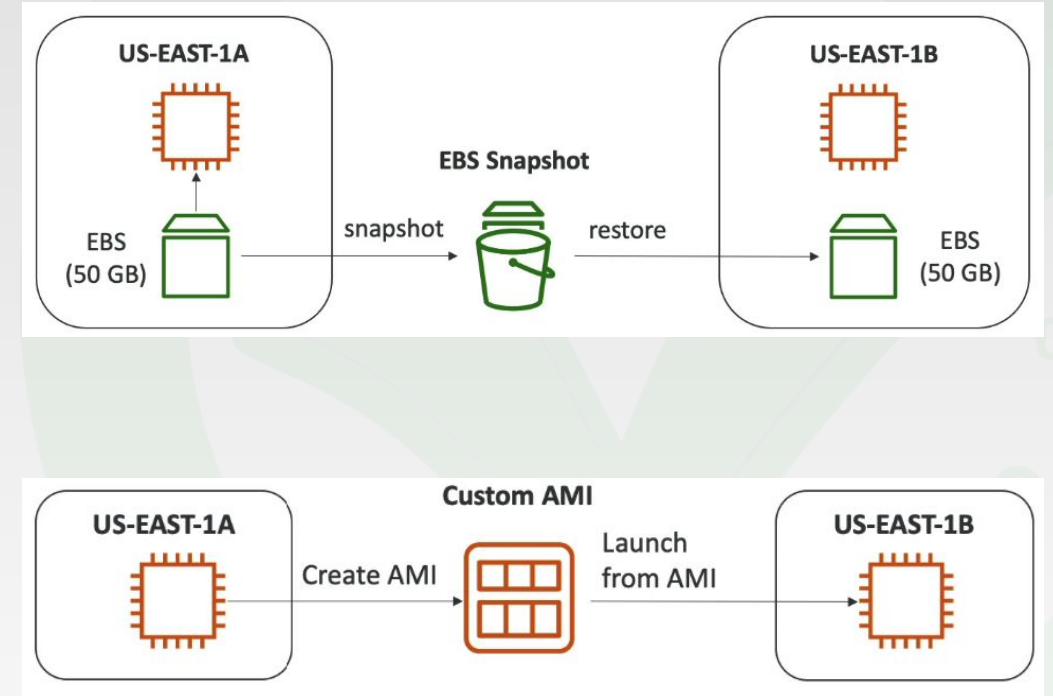# Lifecycle of Snapshot

Incremental Backups

Lifecycle of Snapshot

Snapshots-AMI Summary

- You can have a backup of your EBS volume **at any point in time**
- **Snapshots can be copied across AZ or Region**
- **Snapshots are incremental storage**
- **Snapshots are stored in S3**
- **AMI is customization of an EC2 instance**
- **AMI is built for a specific region and can be copied across regions**

Snapshots-AMI

Certification Test Cases

1 A Cloud Engineer needs to backup EBS volumes simply in an automated way.
How do you advise?
Use Data Lifecycle Manager

2 A DevOps Engineer needs to move EBS volume across Regions.
How can you advise?
**Take a snapshot of the volume then copy the snapshot between Regions**

3 A system administrator needs to reduce the cost of snapshot data as many instances have numerous snapshots. Which snapshots must be retained to ensure a full restore can be performed?
Only the most recent snapshot

4 A solutions architect needs to encrypt an unencrypted EBS volume attached to an EC2 instance. What should he/she do?
Create a snapshot of EBS volume. Copy the snapshot and check the encryption option. Then use the encrypted snapshot to create EBS volume.
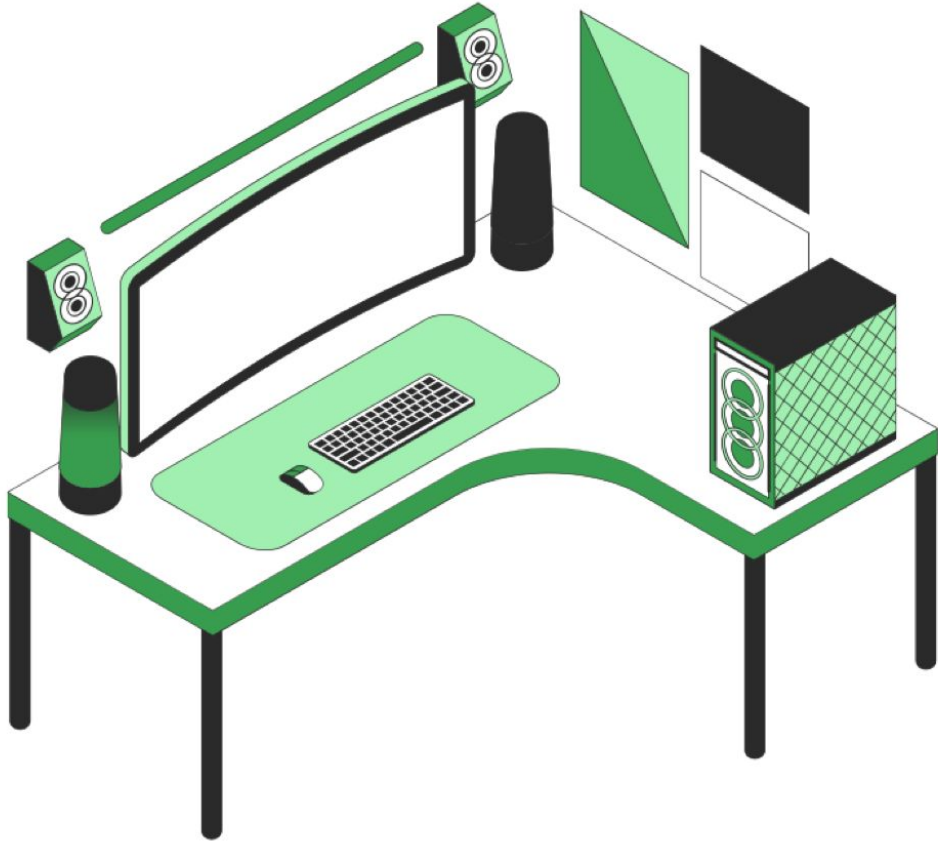
Do you have any **questions**?

Send it to us! We hope you learned something new.