
ondia

AMI & Snapshot

AGENDA

- Amazon Machine Image (AMI)
- Snapshot

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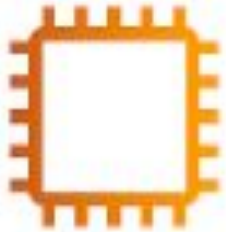
What is AMI?

- An Amazon Machine Image (AMI) is used for the launching an virtual instances in the AWS environment.
- AMI are like templates that are configured with an operating system and other software, which determine the user's operating environment.
- You can copy an AMI . So you can launch multiple instances from a single AMI with the same configuration.

Amazon Machine Image (AMI)

Amazon Machine Image

+



Instance Type

10th Gen Intel® Core™

+

EBS Volumes

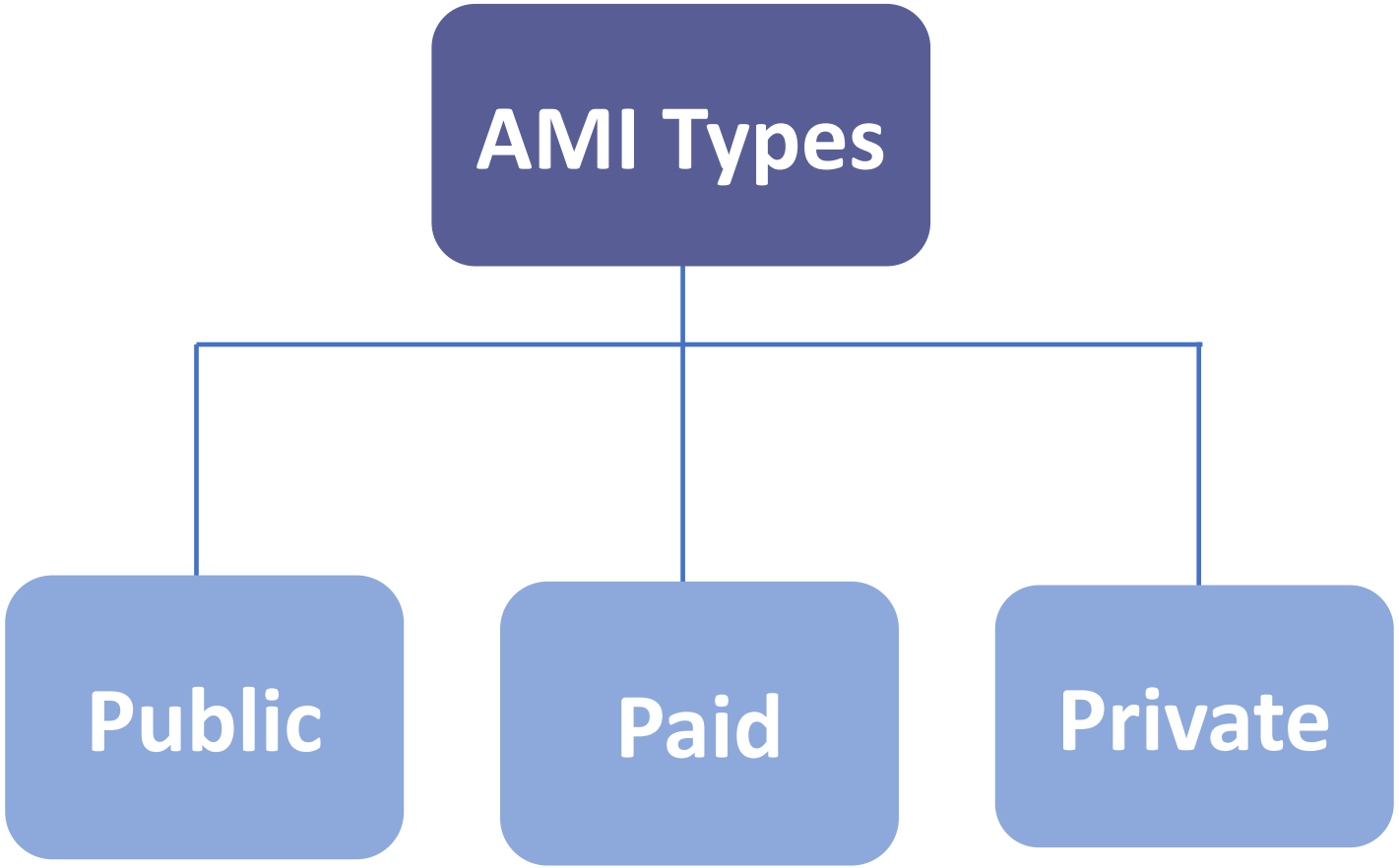
+

Security Group

=

Amazon Machine Image (AMI)

Types of AMIs



Snapshot

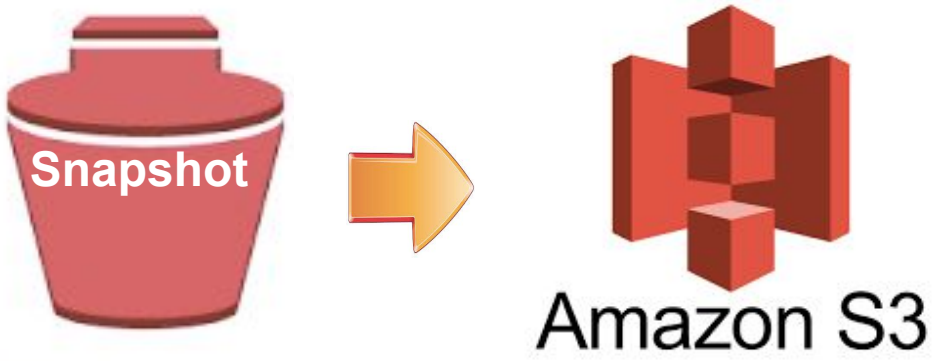
Snapshot

What is Snapshot?

- It is a point-in-time copy of your Amazon EBS Volume/Instance
- Snapshots are used for the purpose of
  - Backup
  - Copying AMI for creating multiple instances with the same features.
  - Creating a new Volume

Snapshot

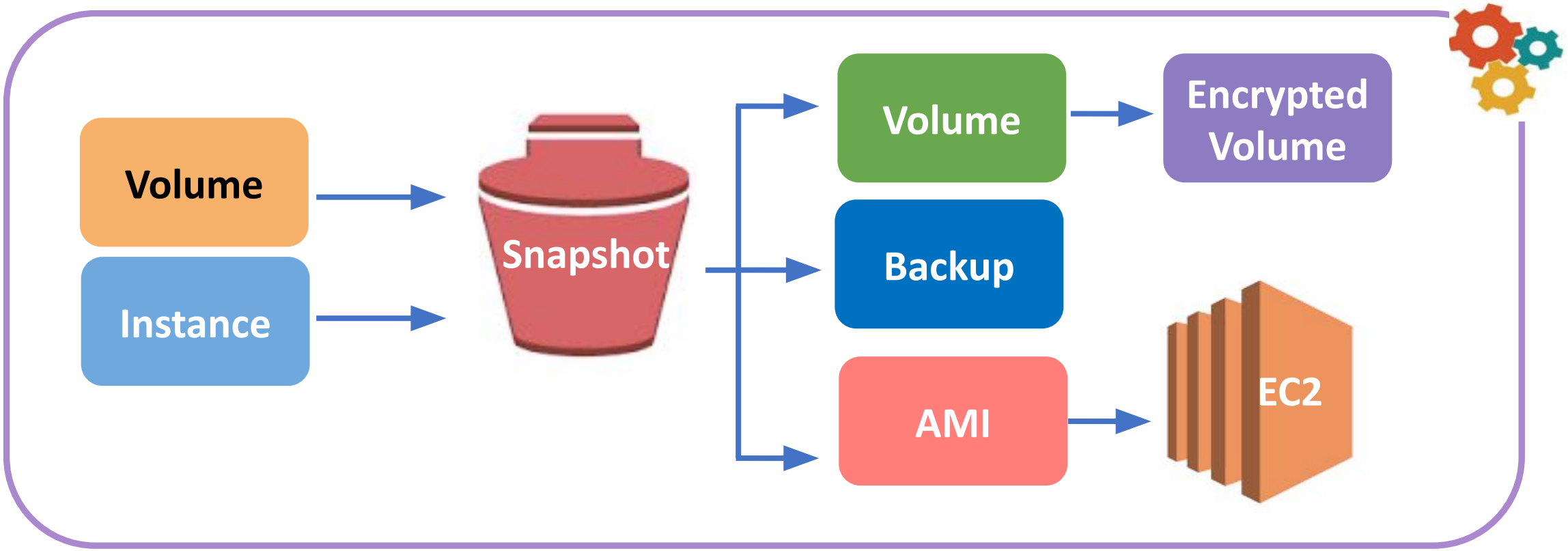
Features of the Snapshot



- Source from Volume or Instance
- Stored in Amazon S3
- Incremental storage
- Data Lifecycle Manager (DLM)

Snapshot

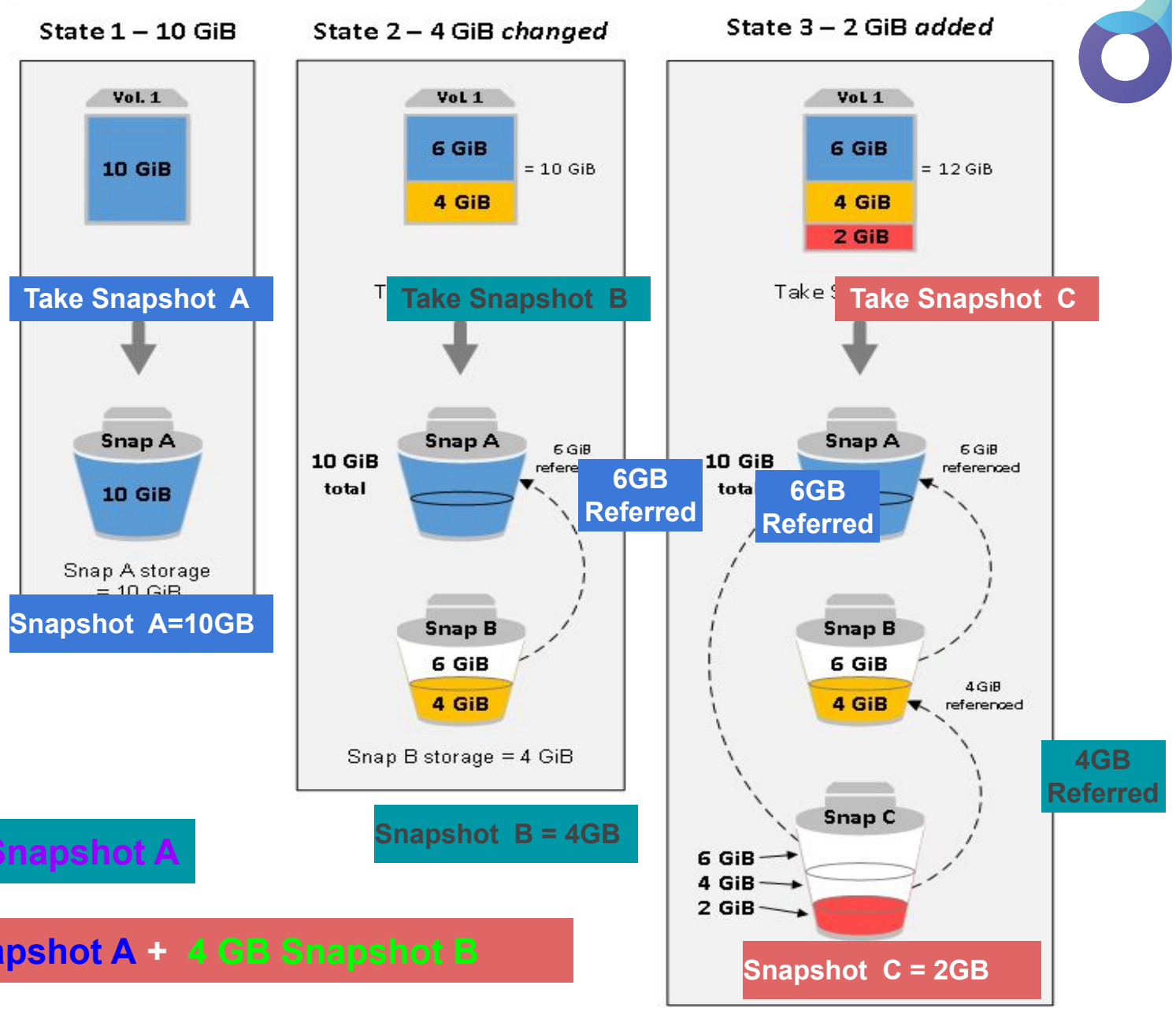
Lifecycle of Snapshot



Snapshot

Incremental Backups

32 GIB vs. 16 GIB



Snapshot A = 10 GB

Snapshot B = 4 GB Changed + Referred 6 GB Snapshot A

Snapshot C = 2 GB Added + Referred 6 GB Snapshot A + 4 GB Snapshot B

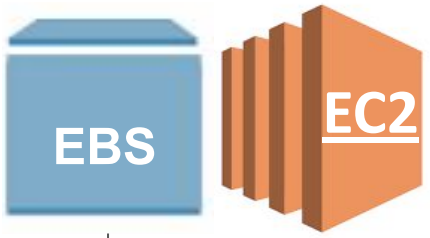
Snapshot

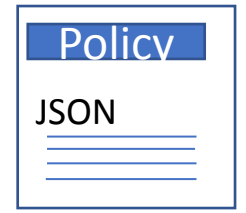
Data Lifecycle Manager (Amazon DLM)

RETENTION=5

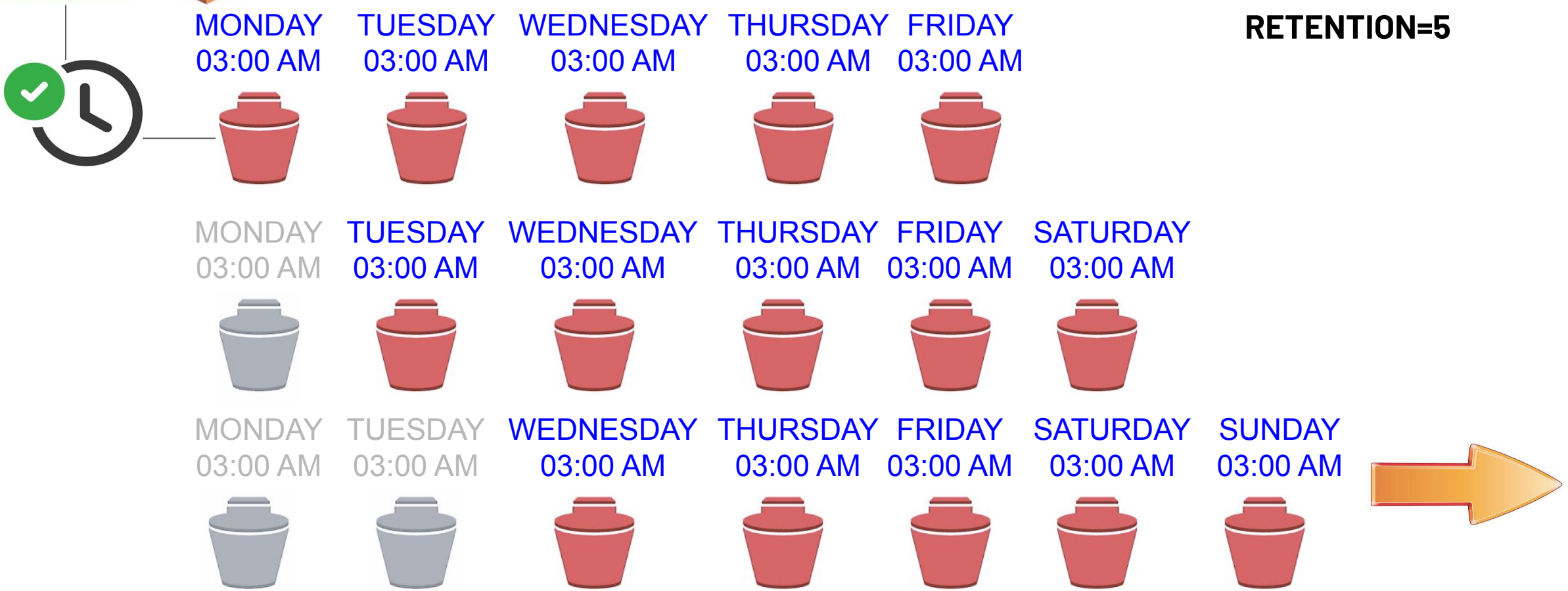
Snapshot

Data Lifecycle Manager (Amazon DLM)



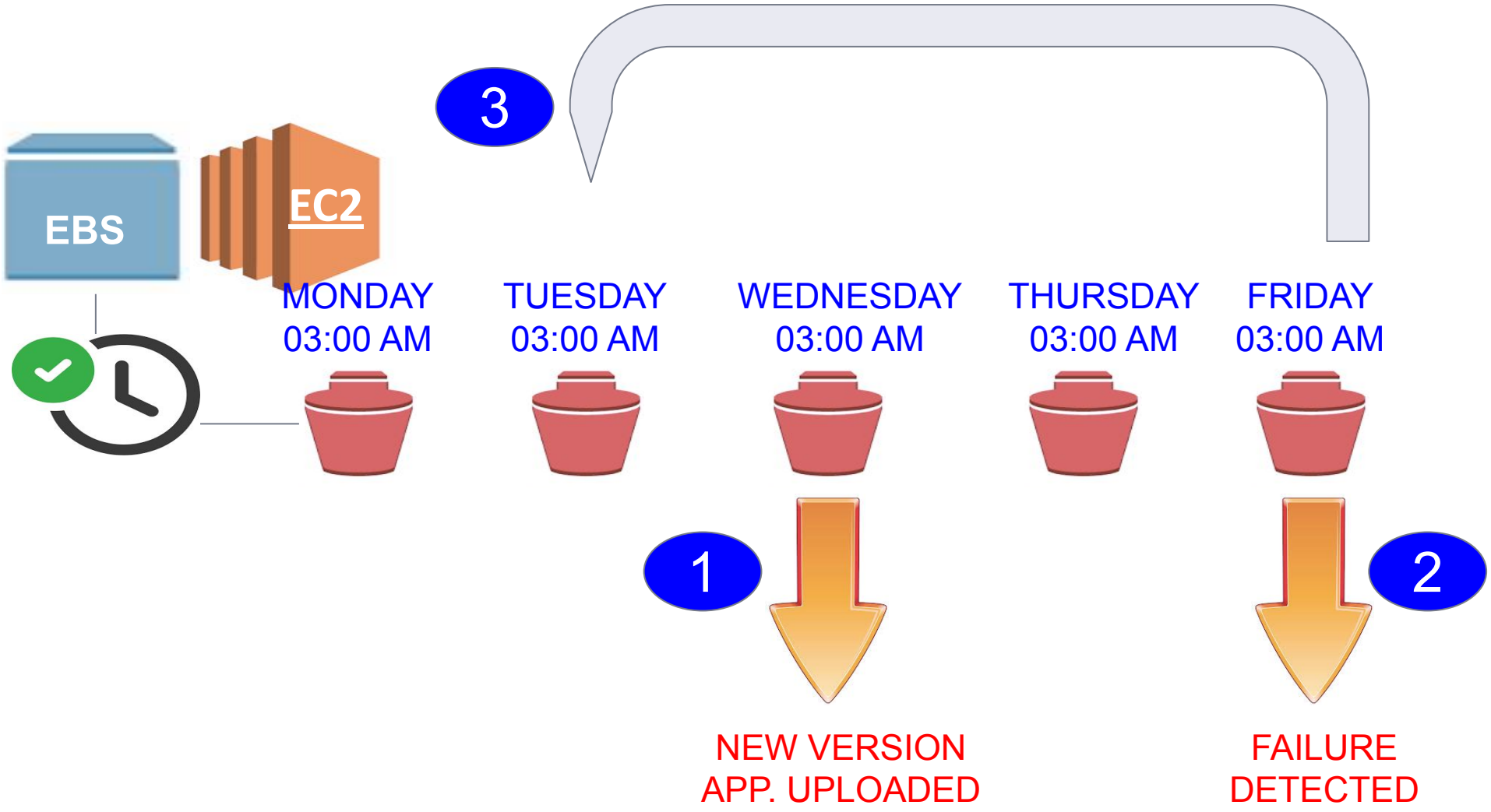


RETENTION=5



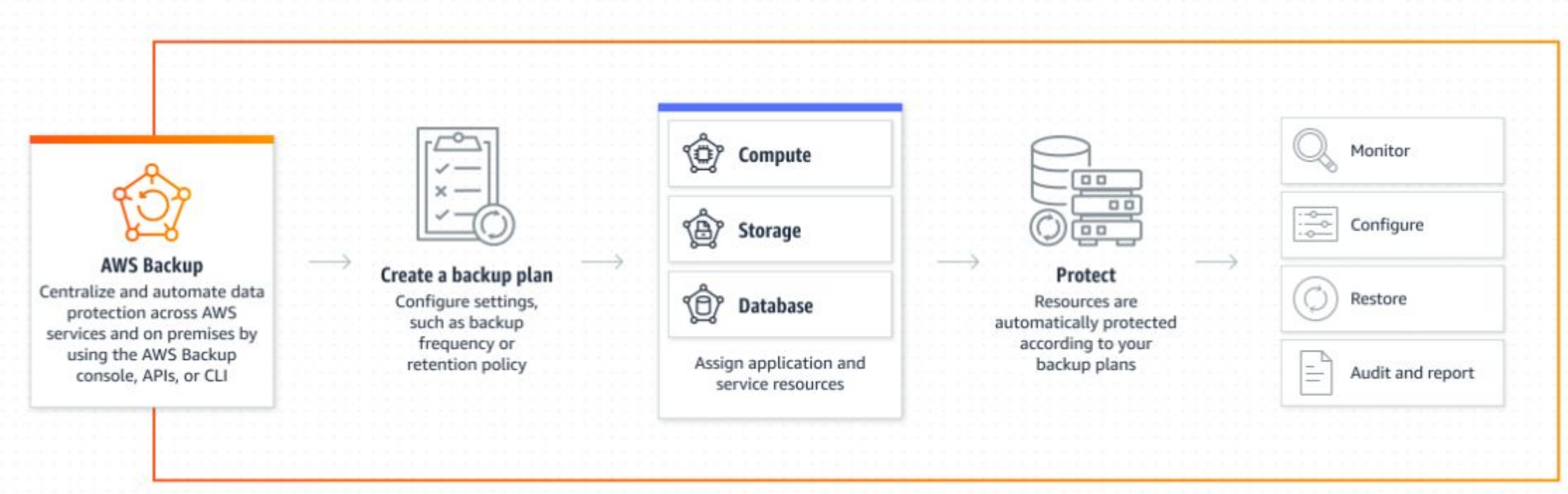
Snapshot

Data Lifecycle Manager (Amazon DLM)- Backup and Restore



Snapshot

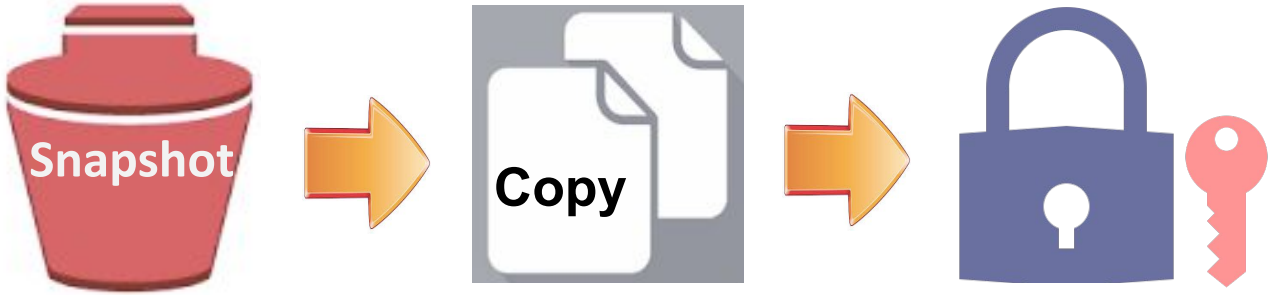
AWS Backup



AWS Backup is fully managed service that centralizes the all backup process in your project including.

Snapshot

Encryption of Root Device via Snapshot

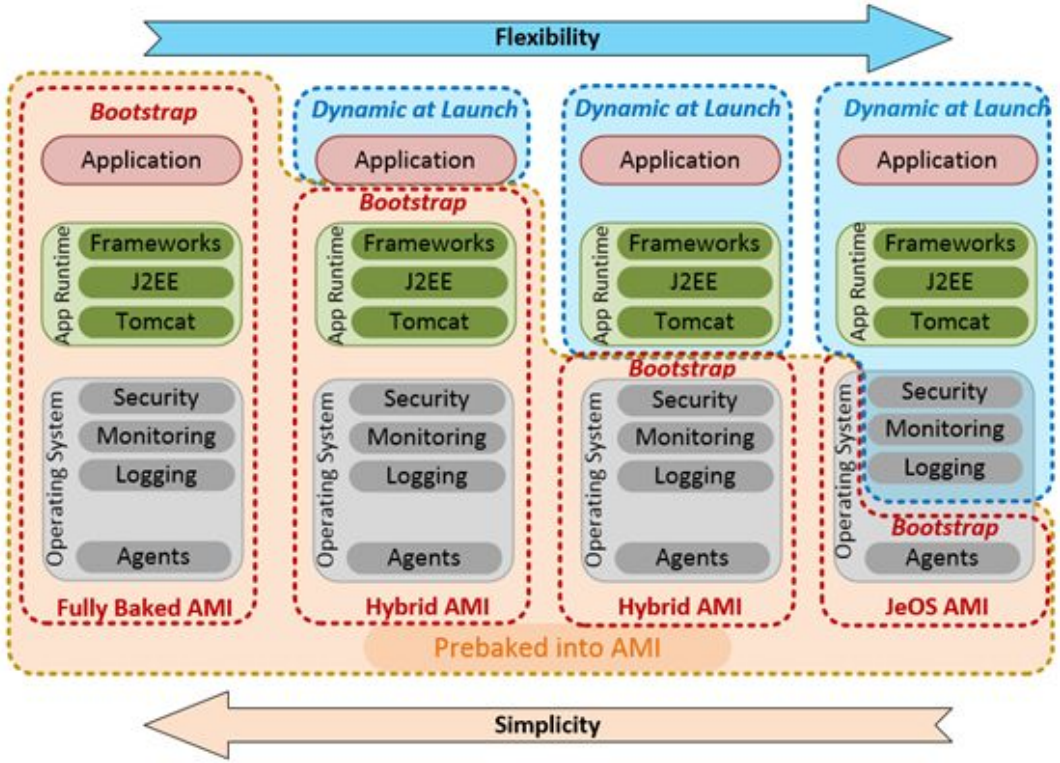


- Root device (volume) cannot be encrypted after creation. “How to encrypt unencrypted volume after after creation” is a common question that can be asked in certification exams!
  - Take snapshot of unencrypted volume.
  - Copying the unencrypted Snapshot,
  - You are able to encrypt this Snapshot while coping
  - Create an encrypted volume from this copied Snapshot.

Golden AMI

- A golden AMI is an AMI that contains security patches, configuration, and agents required to by an organization. A “just enough OS” (jeOS) is the most basic golden AMI.

- It may also contain specific software components that make it easier and faster to start-up an instance .



Snapshot

Let's get our hands dirty!

- Create Snapshots
- Make Public The Snapshot
- Data Life Cycle Manager
- Creating AMI from the Snapshot
- Creating Volume from the Snapshot
- Creating an Image from Instance

THANKS!

Any questions?