

The image features four purple triangles in the corners, pointing towards the center. The word "ondia" is centered in a bold, sans-serif font. The letters "on" are a medium purple, "di" is a darker purple, and "a" is the darkest purple. A light blue and teal graphic element is positioned above the "di", consisting of a teal shape on the left and a light blue shape on the right, both with rounded corners.

ondia



AMI & Snapshot

AGENDA



- ▶ **Amazon Machine Image (AMI)**
- ▶ **Snapshot**

A large, solid purple triangle is located on the left side of the slide, pointing towards the right.

Amazon Machine Image (AMI)

Amazon Machine Image (AMI)

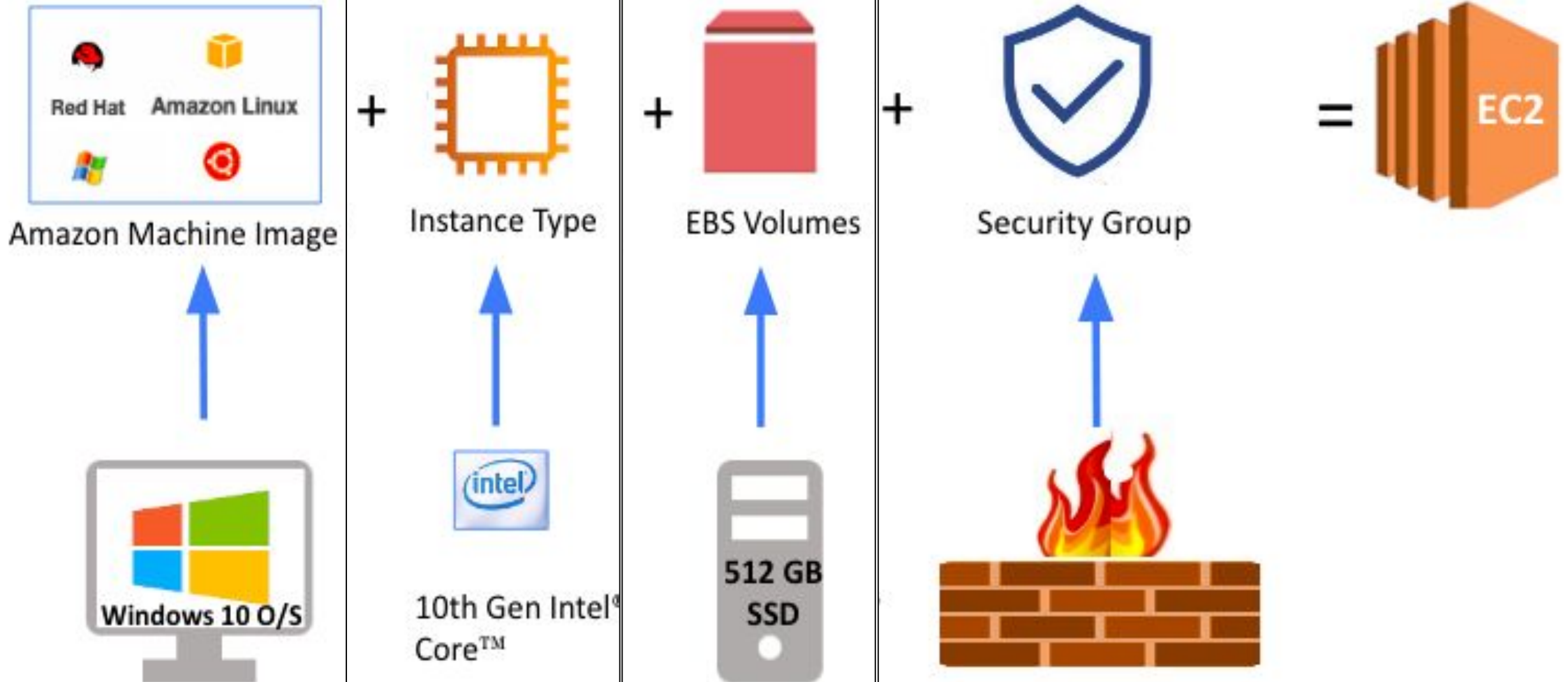


What is AMI?



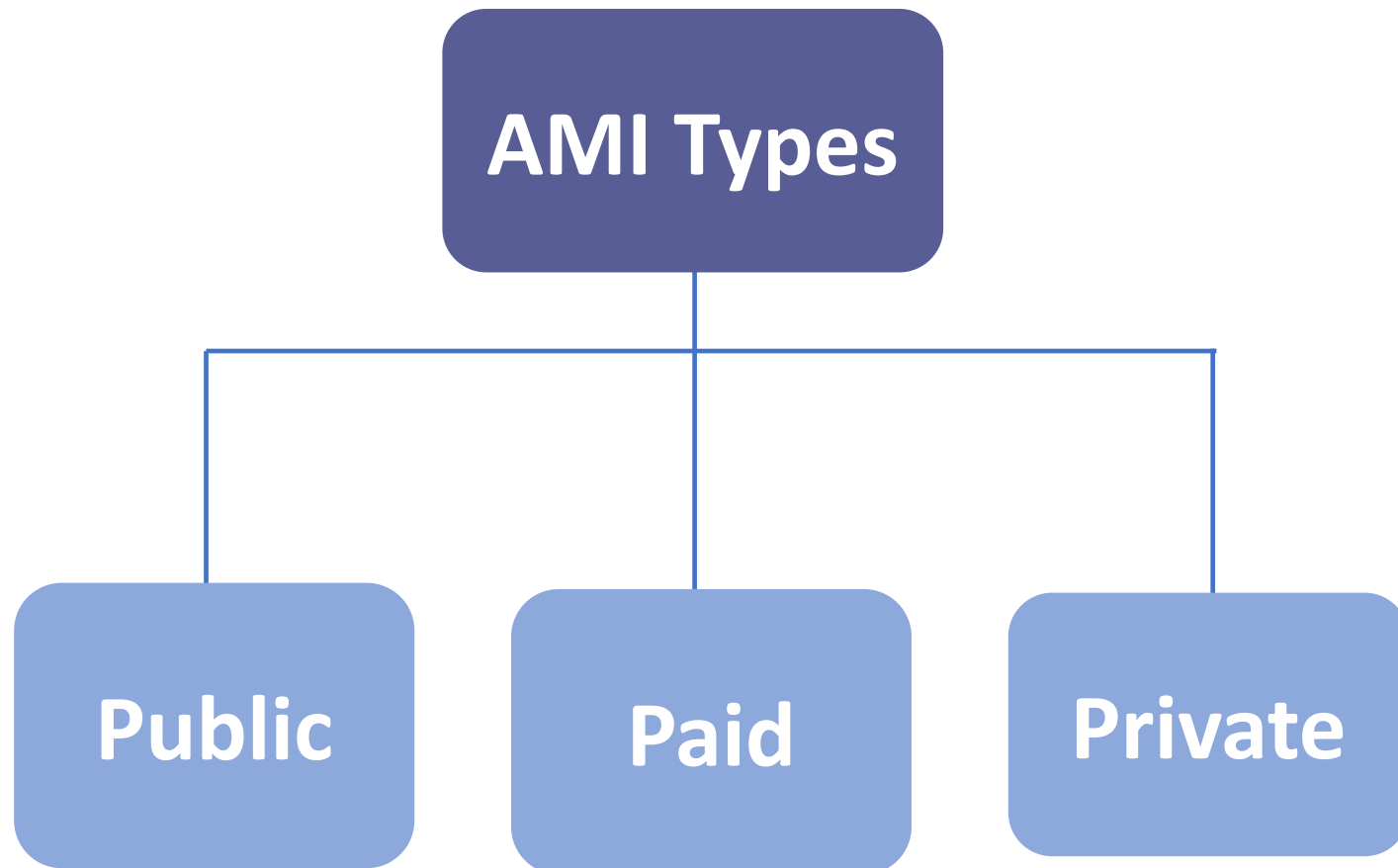
- An Amazon Machine Image (AMI) is used for the launching an virtual instances in the AWS environment.
- AMI are like templates that are configured with an operating system and other software, which determine the user's operating environment.
- You can copy an AMI . So you can launch multiple instances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

Amazon Machine Image (AMI)



Amazon Machine Image (AMI)

Types of AMIs





Snapshot



Snapshot

What is Snapshot?

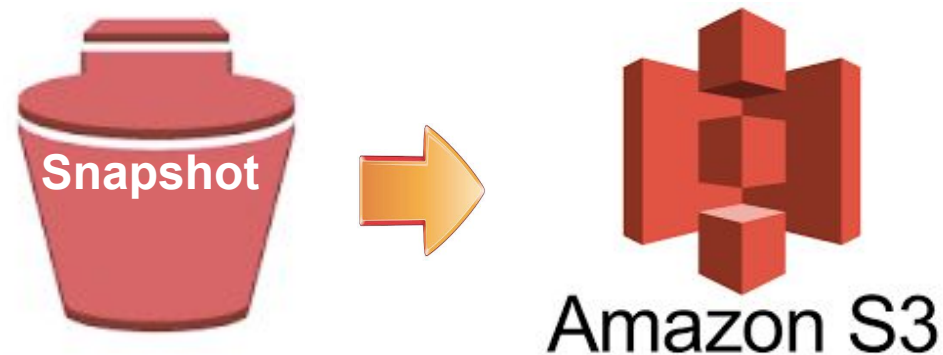


- It is a **point-in-time copy** of your Amazon EBS Volume/Instance
- Snapshots are used for the **purpose of**
 - Backup
 - Copying AMI for creating multiple instances with the same features.
 - Creating a new Volume



Snapshot

Features of the Snapshot

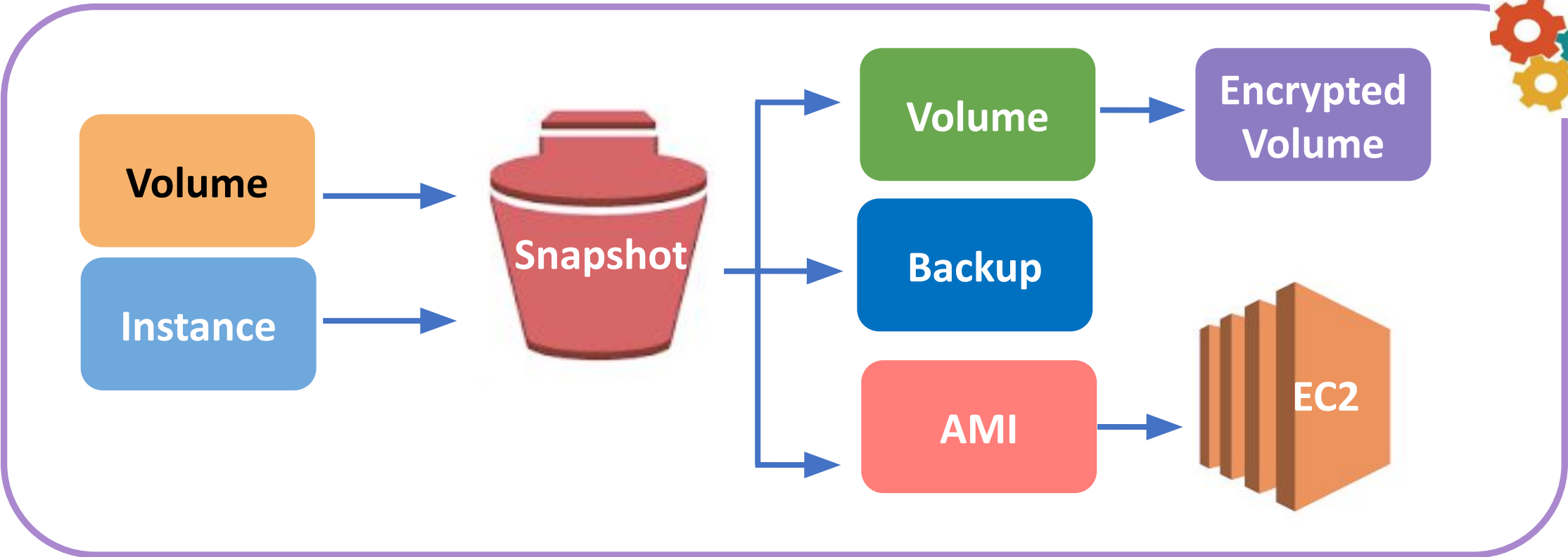


- Source from Volume or Instance
- Stored in Amazon S3
- Incremental storage
- Data Lifecycle Manager (DLM)



Snapshot

Lifecycle of Snapshot



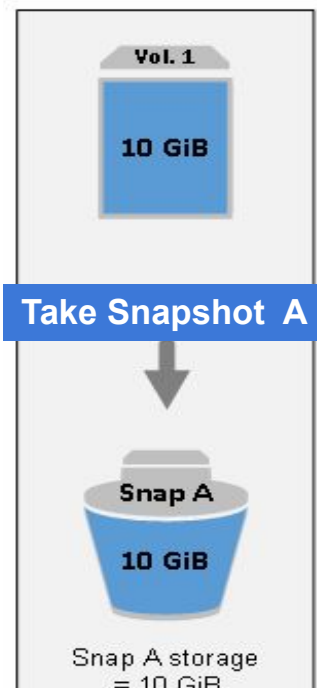
Snapshot

Incremental Backups

32 GiB vs. 16 GiB

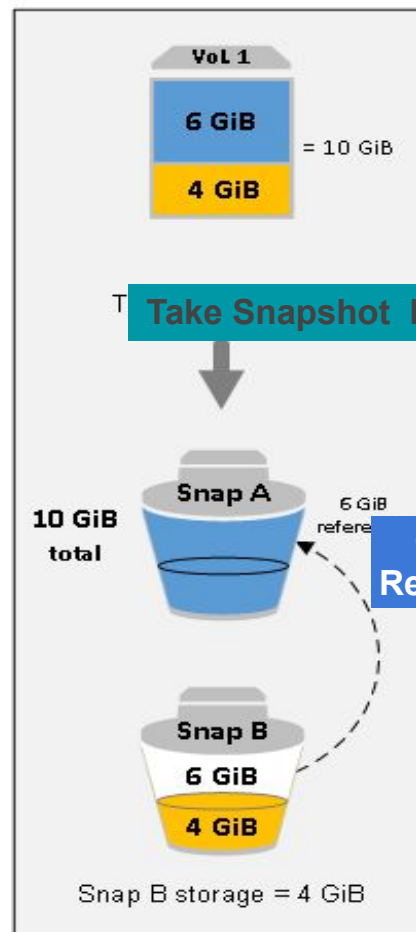


State 1 – 10 GiB



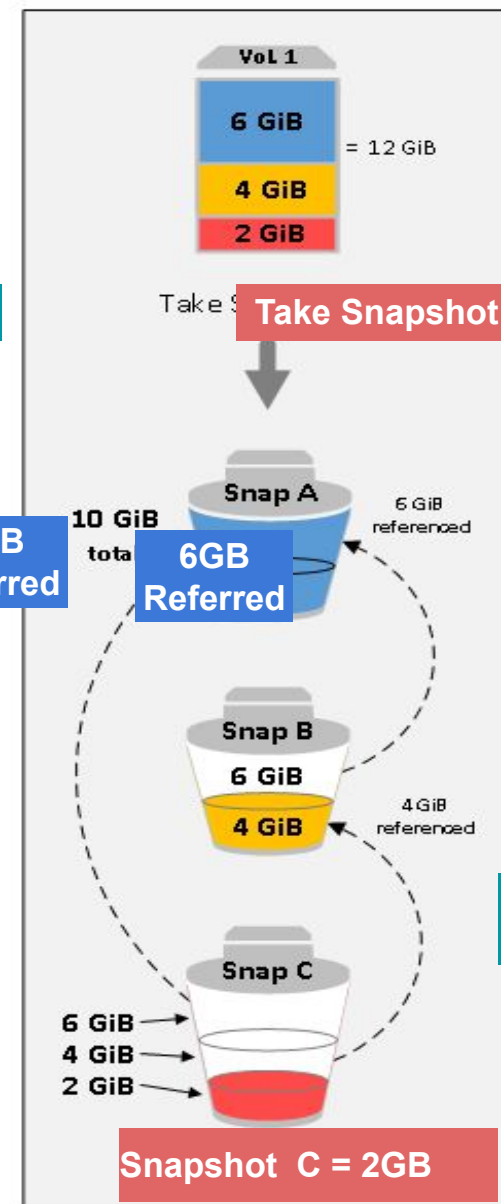
Snapshot A=10GB

State 2 – 4 GiB changed



Snapshot B = 4GB

State 3 – 2 GiB added



4GB Referred

Snapshot A = 10 GB

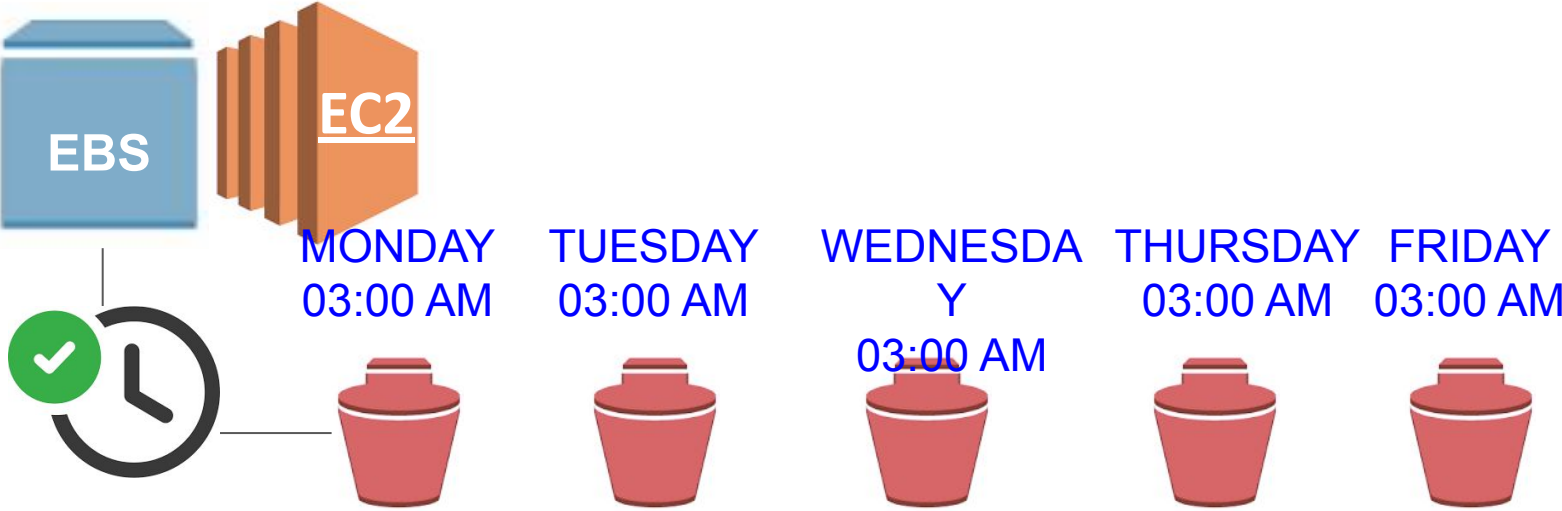
Snapshot B = 4 GB Changed + Referred 6 GB Snapshot A

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



Snapshot

Data Lifecycle Manager (Amazon DLM)



Policy

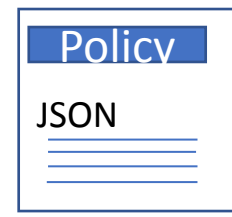
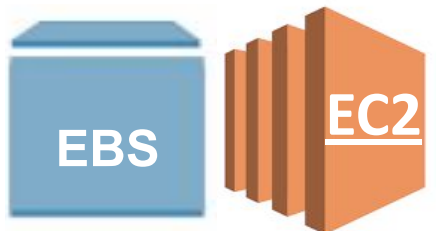
JSON

RETENTION=5



Snapshot

Data Lifecycle Manager (Amazon DLM)



RETENTION=5

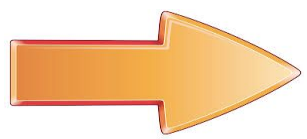
MONDAY 03:00 AM TUESDAY 03:00 AM WEDNESDAY 03:00 AM THURSDAY 03:00 AM FRIDAY 03:00 AM



MONDAY 03:00 AM TUESDAY 03:00 AM WEDNESDAY 03:00 AM THURSDAY 03:00 AM FRIDAY 03:00 AM SATURDAY 03:00 AM



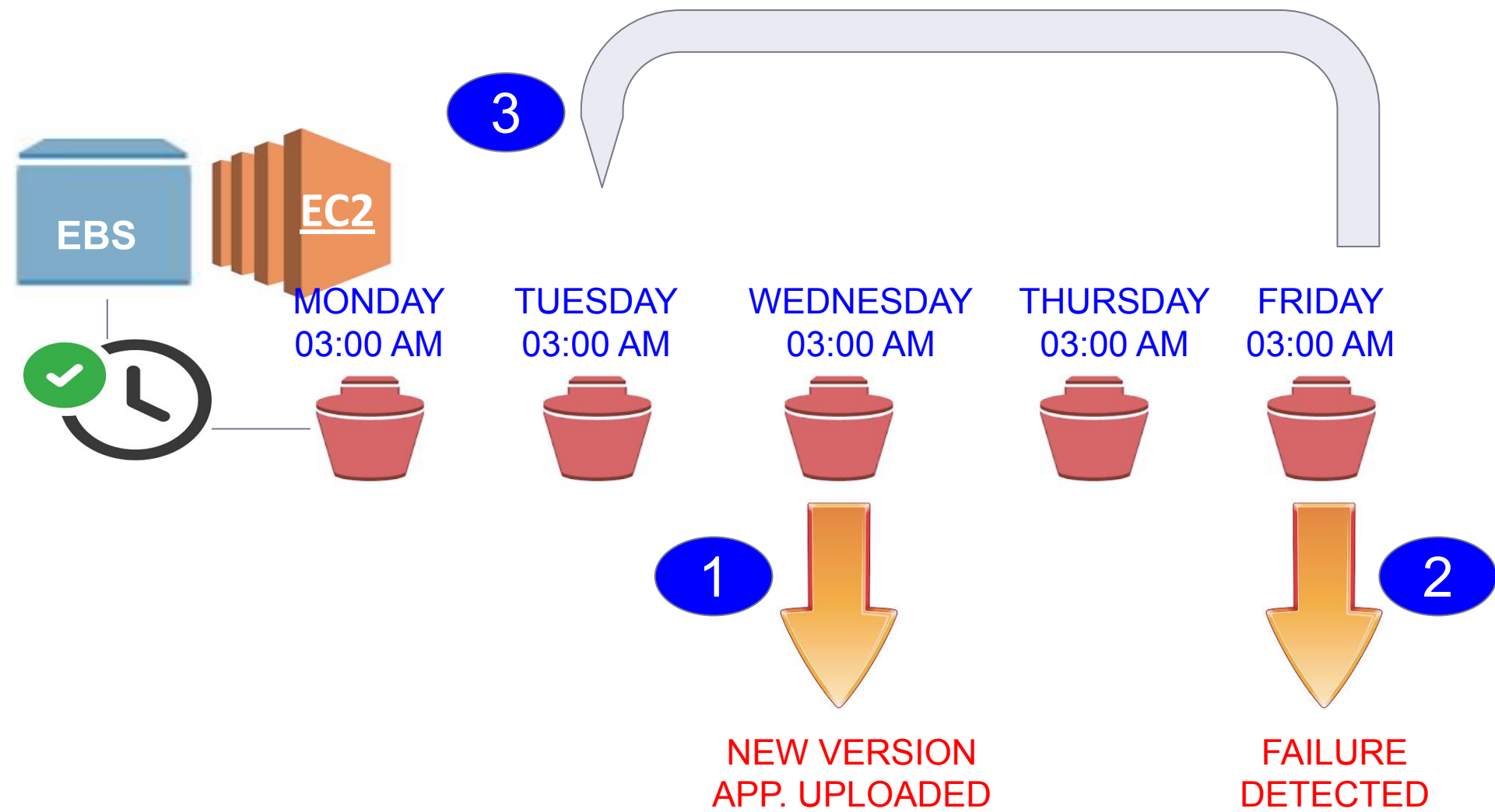
MONDAY 03:00 AM TUESDAY 03:00 AM WEDNESDAY 03:00 AM THURSDAY 03:00 AM FRIDAY 03:00 AM SATURDAY 03:00 AM SUNDAY 03:00 AM





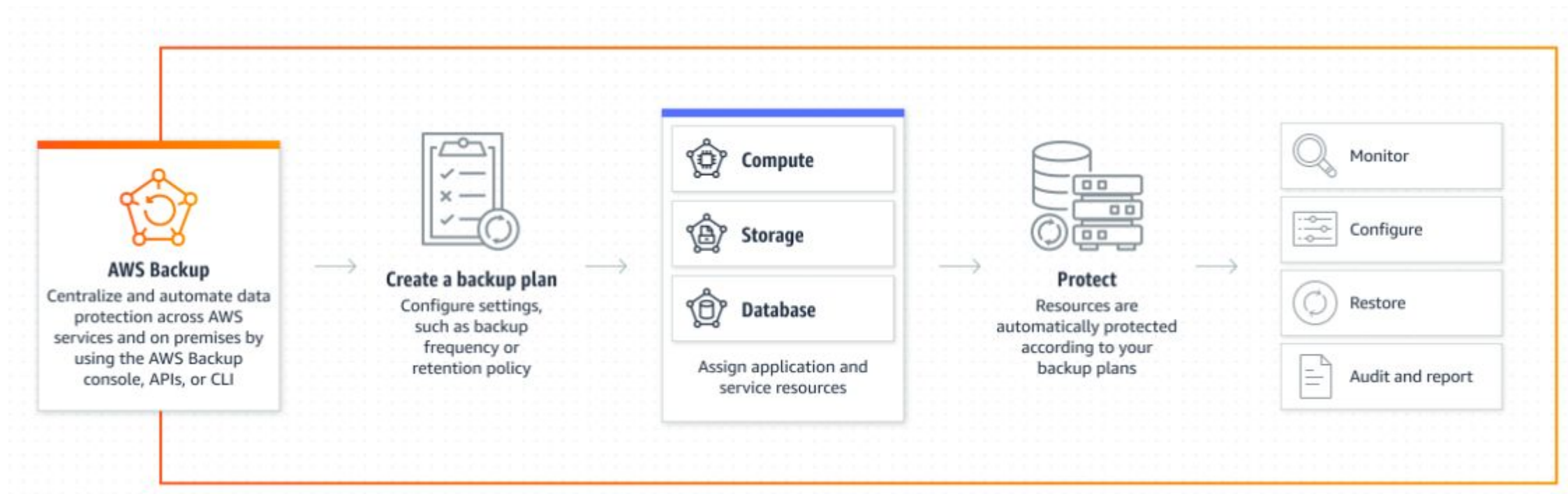
Snapshot

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

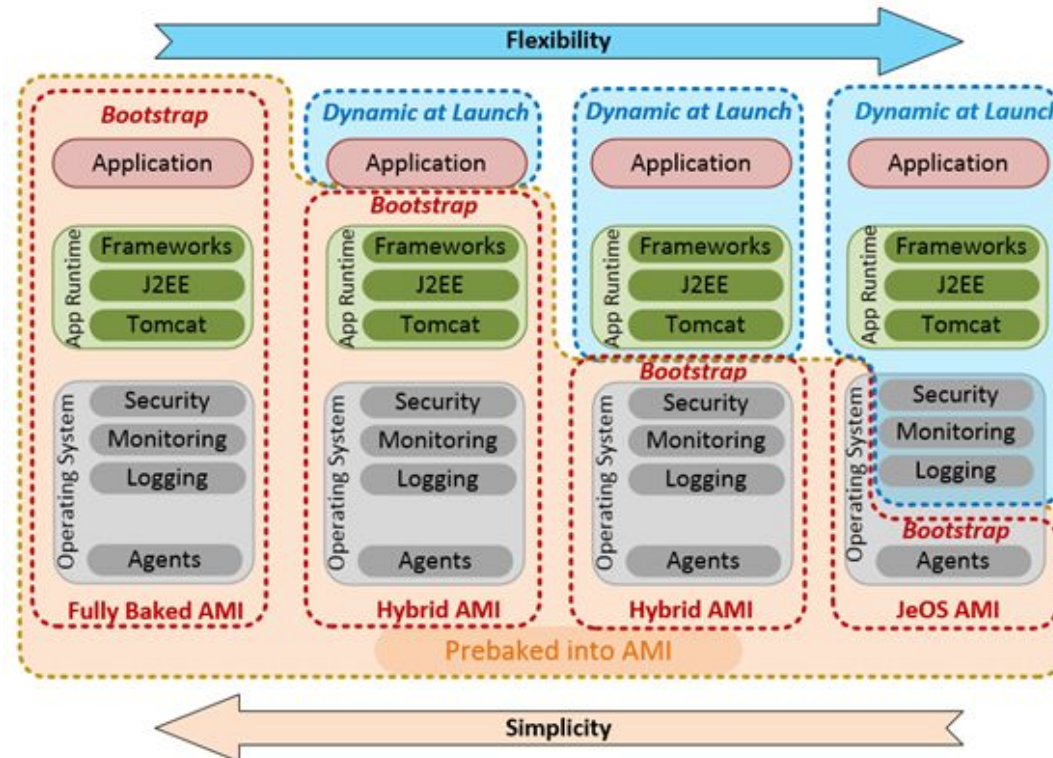


- Root device (volume) cannot be encrypted after creation. “How to encrypt unencrypted volume after after creation” is a common question that can be asked in certification exams!
 - Take snapshot of unencrypted volume.
 - Copying the **unencrypted** Snapshot,
 - You are able to encrypt this Snapshot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





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?

