AWS-DEVOPS

DATE : 21.01.2025

DT/NT : DT

LESSON : AWS

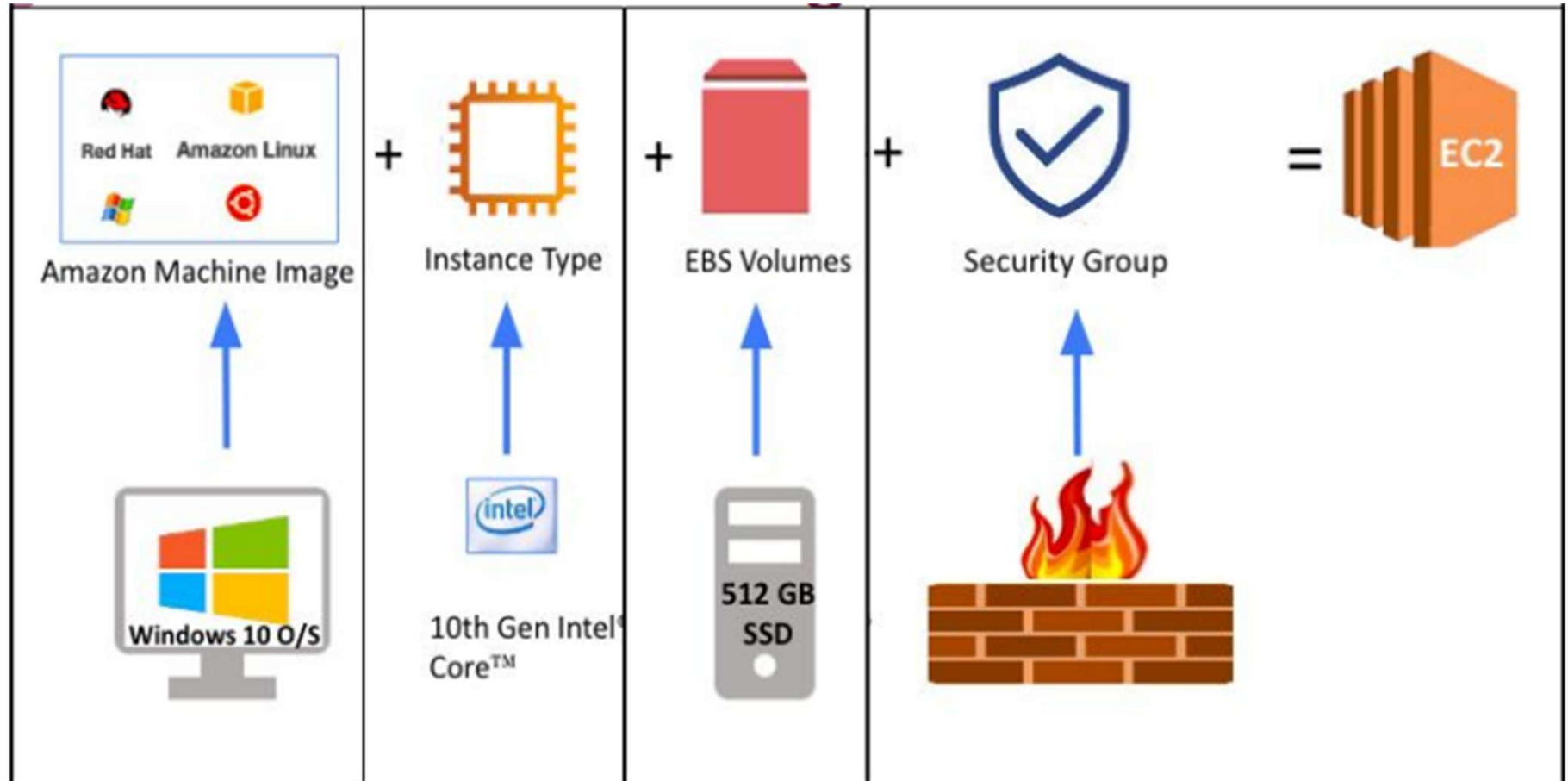SUBJECT: SNAPSHOTS-AMI

BATCH : B 303

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Amazon Machine Image (AMI)

Amazon Machine Image (AMI)

Amazon Machine Image (Red Hat, Amazon Linux, Windows, Ubuntu) — Windows 10 O/S

+

Instance Type (intel) — 10th Gen Intel® Core™

+

EBS Volumes — 512 GB SSD

+

Security Group

=
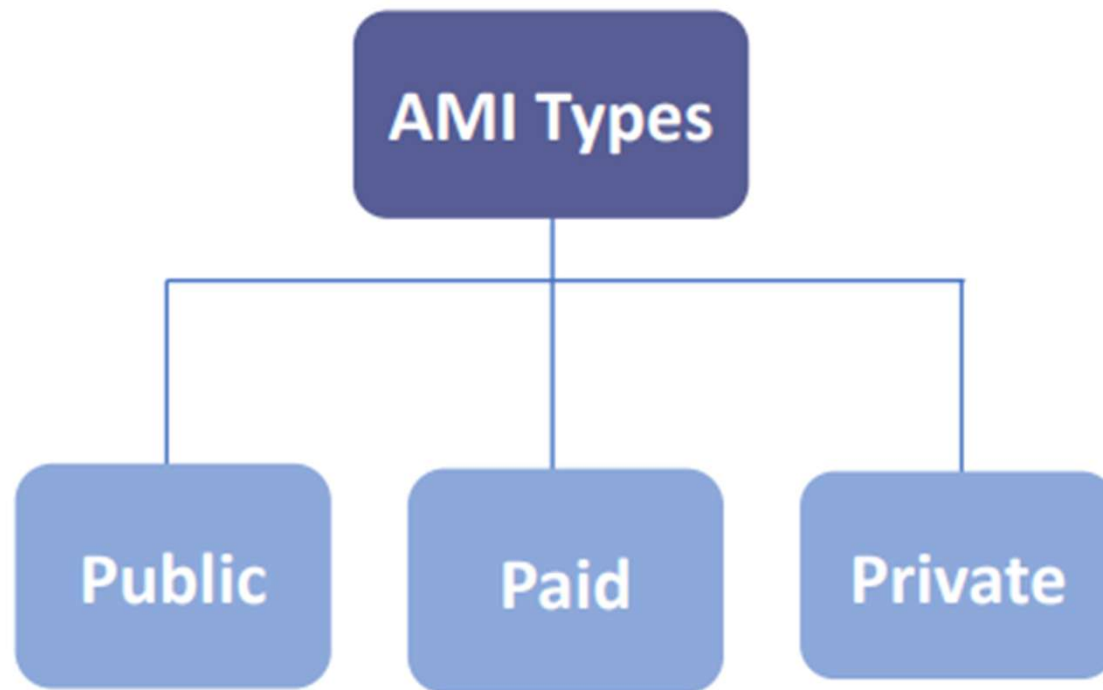
EC2

Amazon Machine Image (AMI)

What is AMI?

Amazon Machine Image (AMI)

- An AMI (Amazon Machine Image) on AWS (Amazon Web Services) is a virtual server image used to launch EC2 (Elastic Compute Cloud) instances.
- AMIs contain a complete software stack of a server, including the operating system (OS), application server, and applications.
- You can copy an AMI. This allows you to start multiple instances from a single AMI with the same configuration.
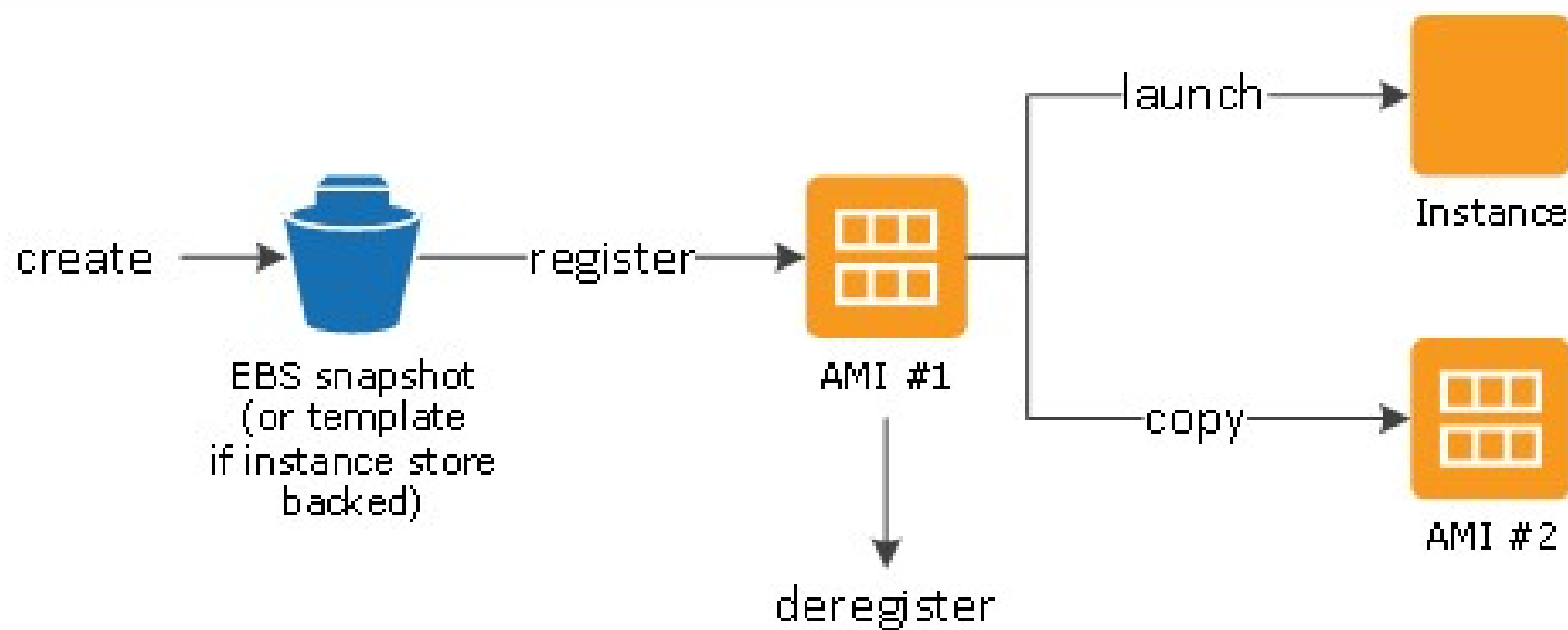
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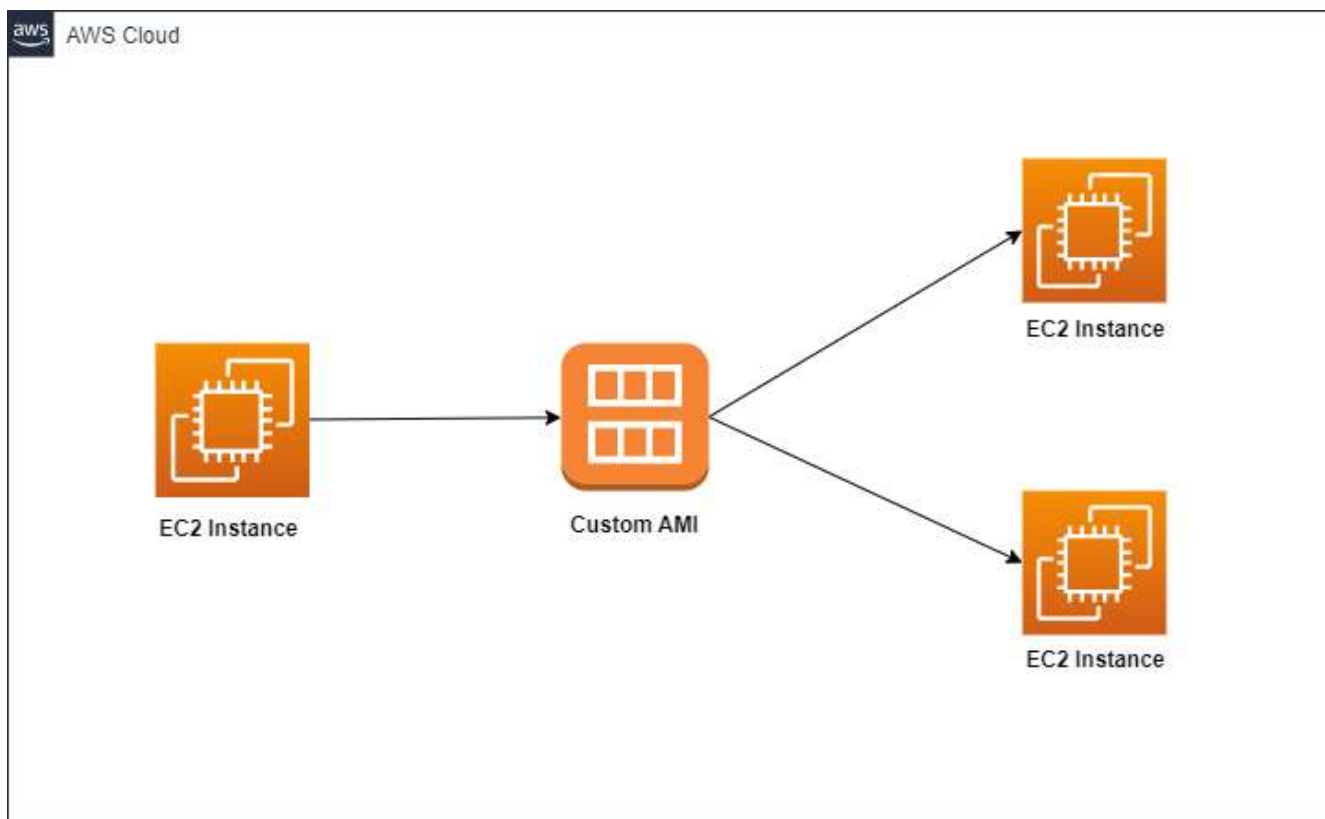
Amazon Machine Image (AMI)

Types of AMIs

Amazon Machine Image (AMI)

AMI lifecycle

create → EBS snapshot (or template if instance store backed) → register → AMI #1

- AMI #1 → launch → Instance
- AMI #1 → copy → AMI #2
- AMI #1 → deregister

Amazon Machine Image (AMI)

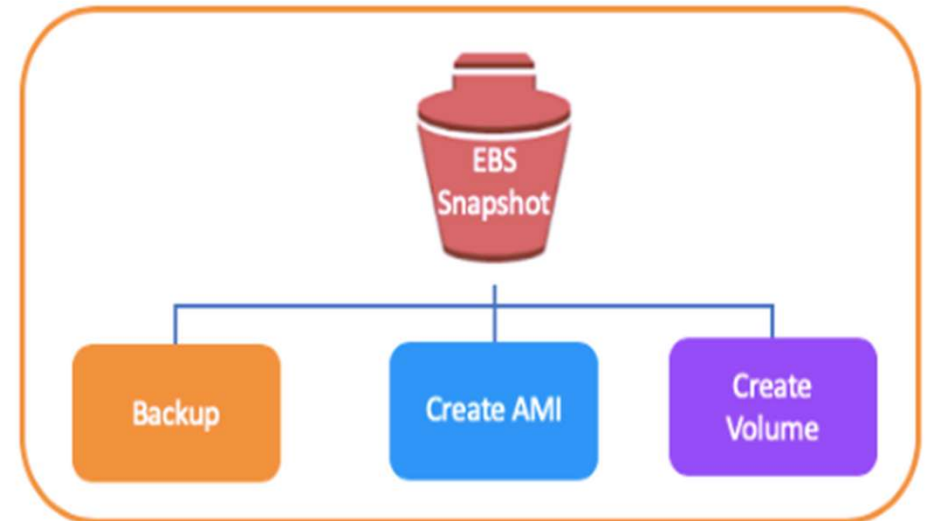**AMI lifecycle**

Snapshot

Snapshot

What is Snapshot?

- Snapshot is the name of the method that allows us to make a current copy of an EBS disc.
- It is a point-in-time copy of your Amazon EBS volume.

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Snapshot

Snapshots are used for the purpose of

- Backup
- Copying AMI to create multiple instances with the same properties.
- Creating a new Volume

Snapshot

Features of the Snapshot

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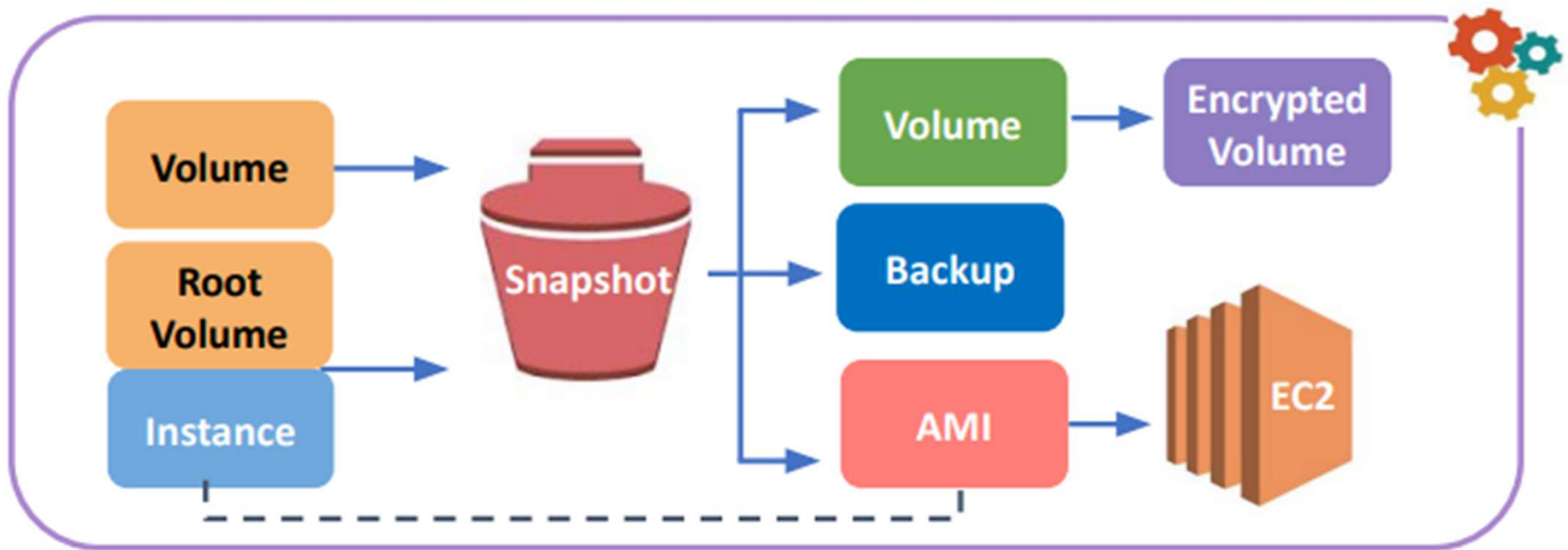- Data Lifecycle Manager (DLM)

Snapshot

Features of the Snapshot

- You can create a copy of the snapshot, but you cannot create a copy of a volume.
- Volumes, AMIs, instances are all connected to the snapshot.
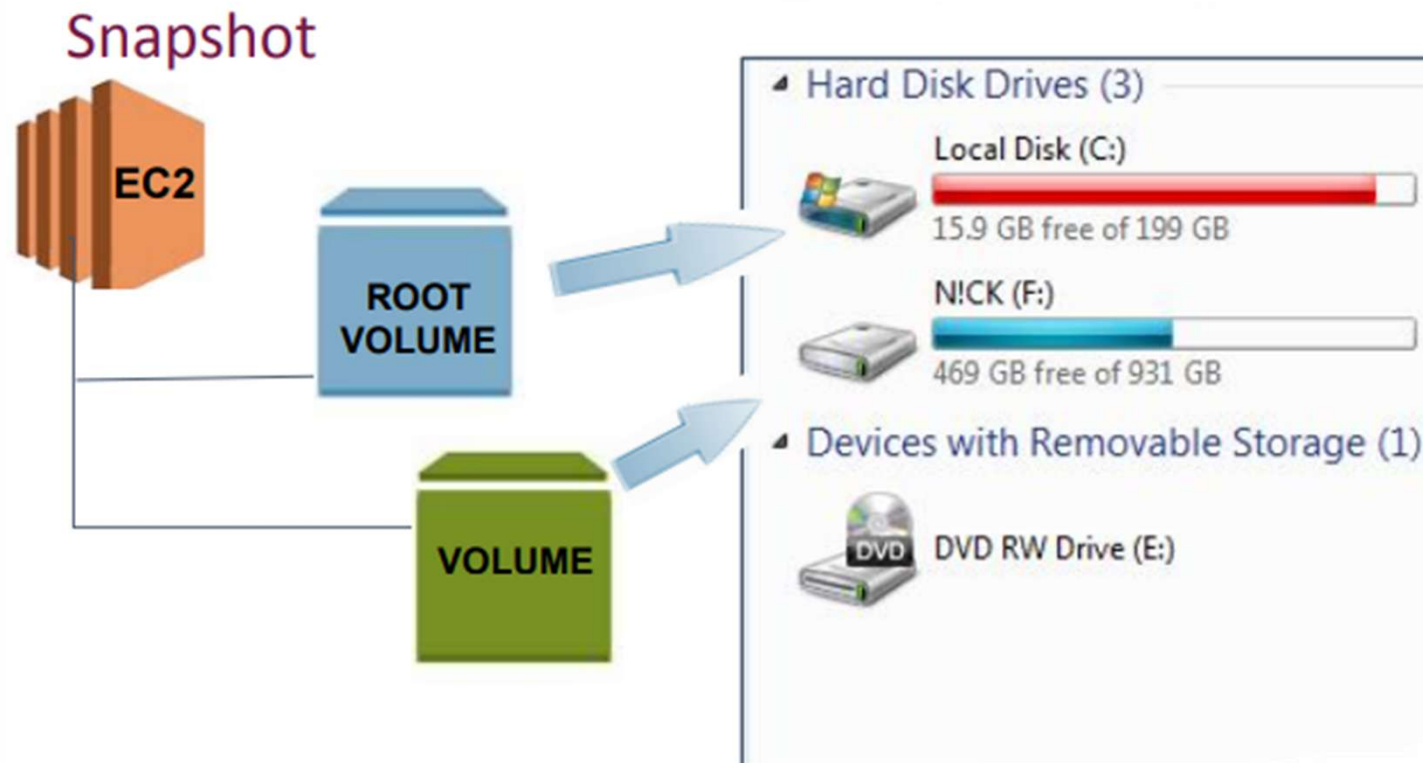- A snapshot can be moved between different AWS regions.
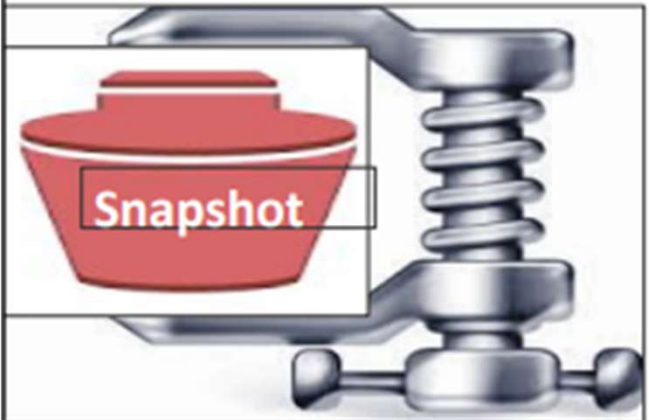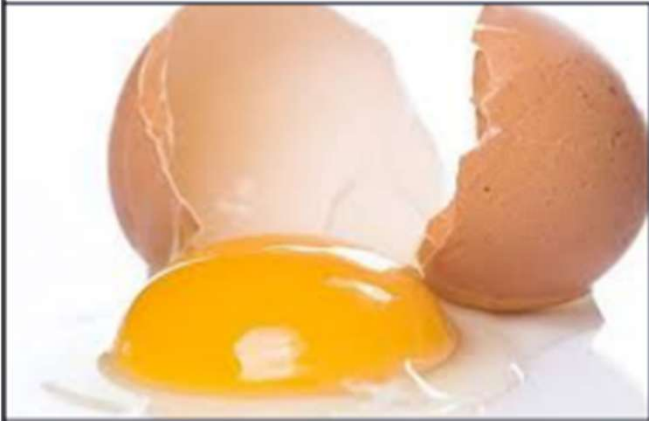
Snapshot

Lifecycle of Snapshot

Snapshot

Lifecycle of Snapshot

EBS

Snapshot

Snapshot

EC2

ROOT VOLUME

VOLUME

Hard Disk Drives (3)

Local Disk (C:)
15.9 GB free of 199 GB

N!CK (F:)
469 GB free of 931 GB

Devices with Removable Storage (1)

DVD RW Drive (E:)
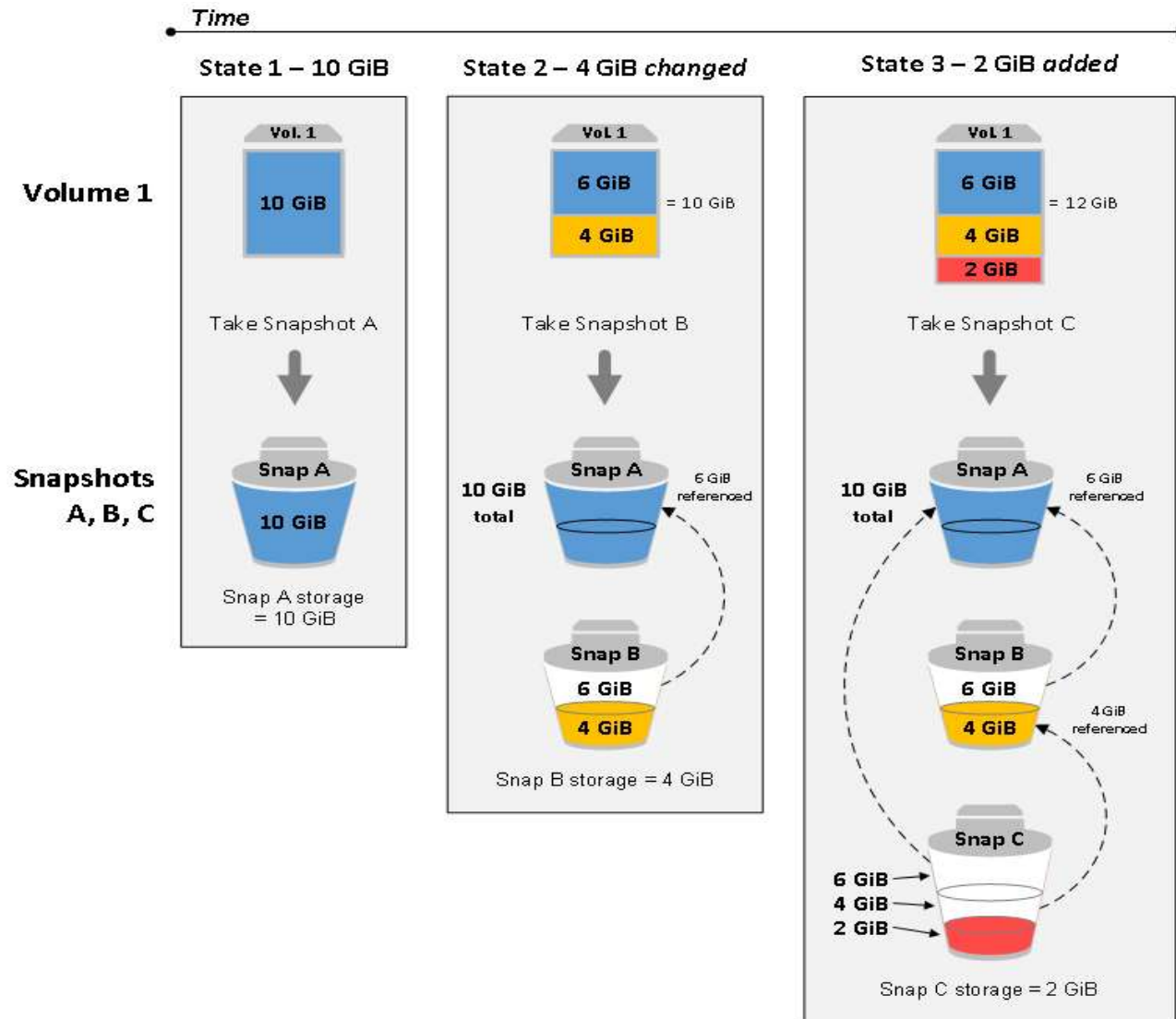
Snapshot

VS
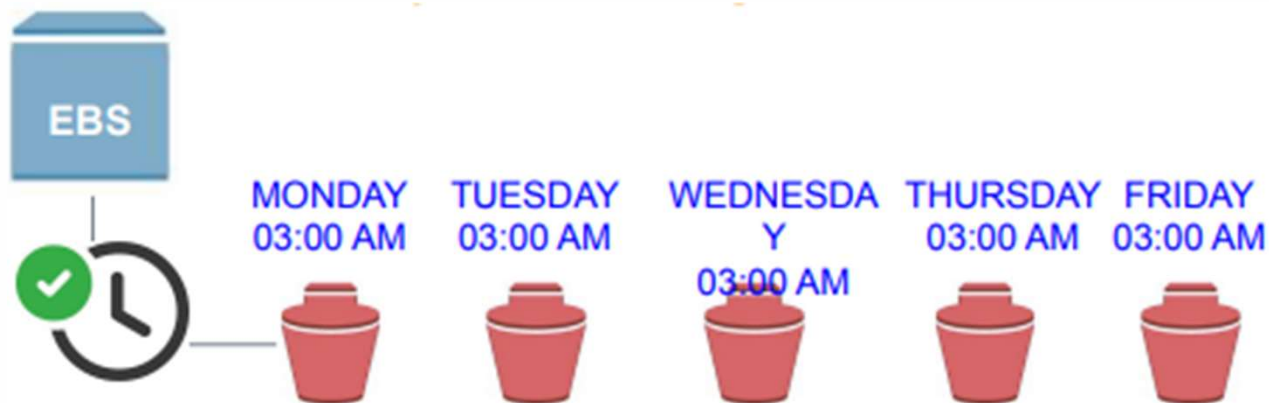
Snapshot

Incremental Backups

Snapshot

Data Lifecycle Manager (Amazon DLM)

- Amazon Data Lifecycle Manager (DLM) is a service used to automatically manage EBS (Elastic Block Store) snapshots and implement lifecycle policies within Amazon Web Services (AWS).
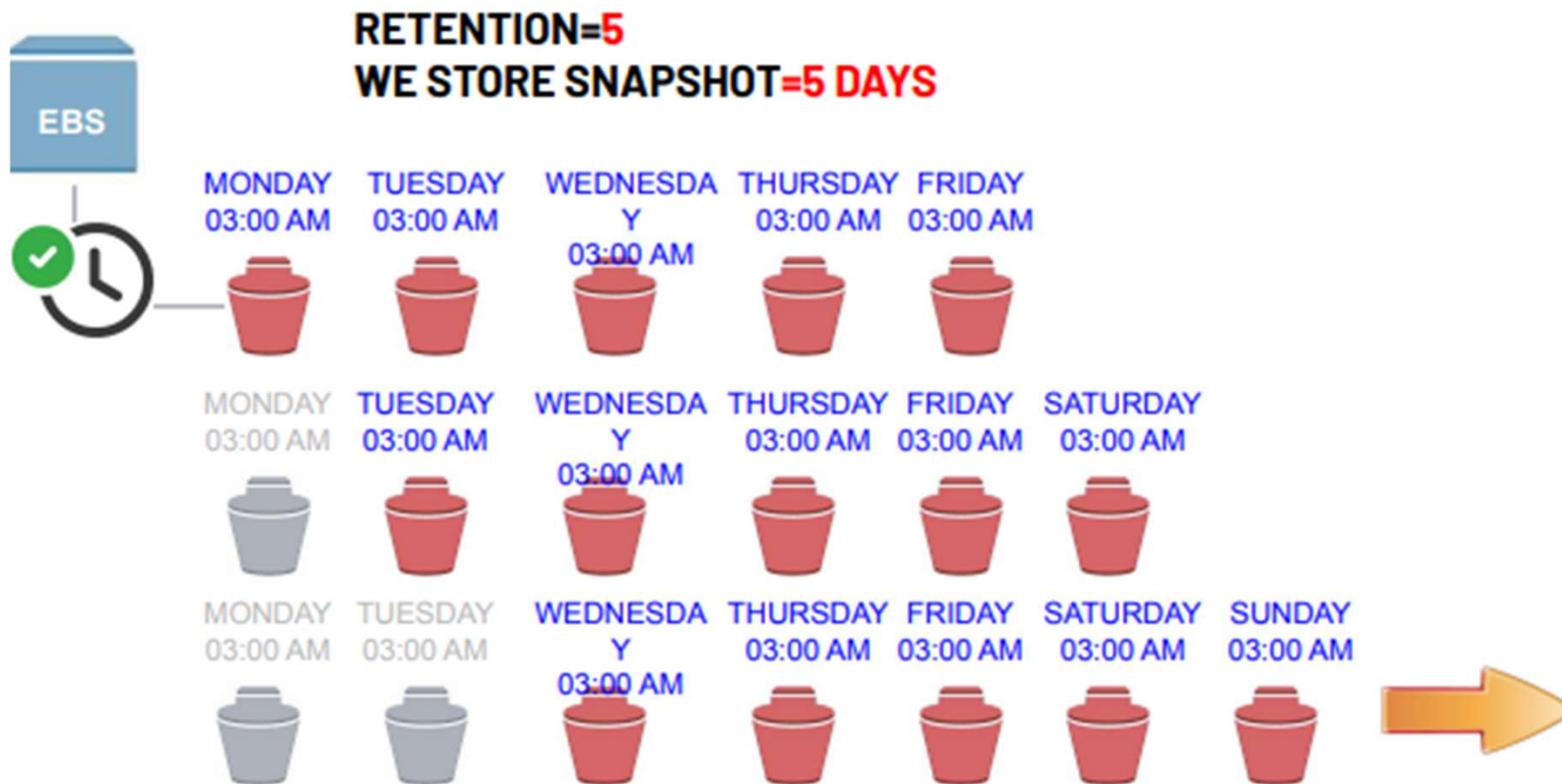
Snapshot

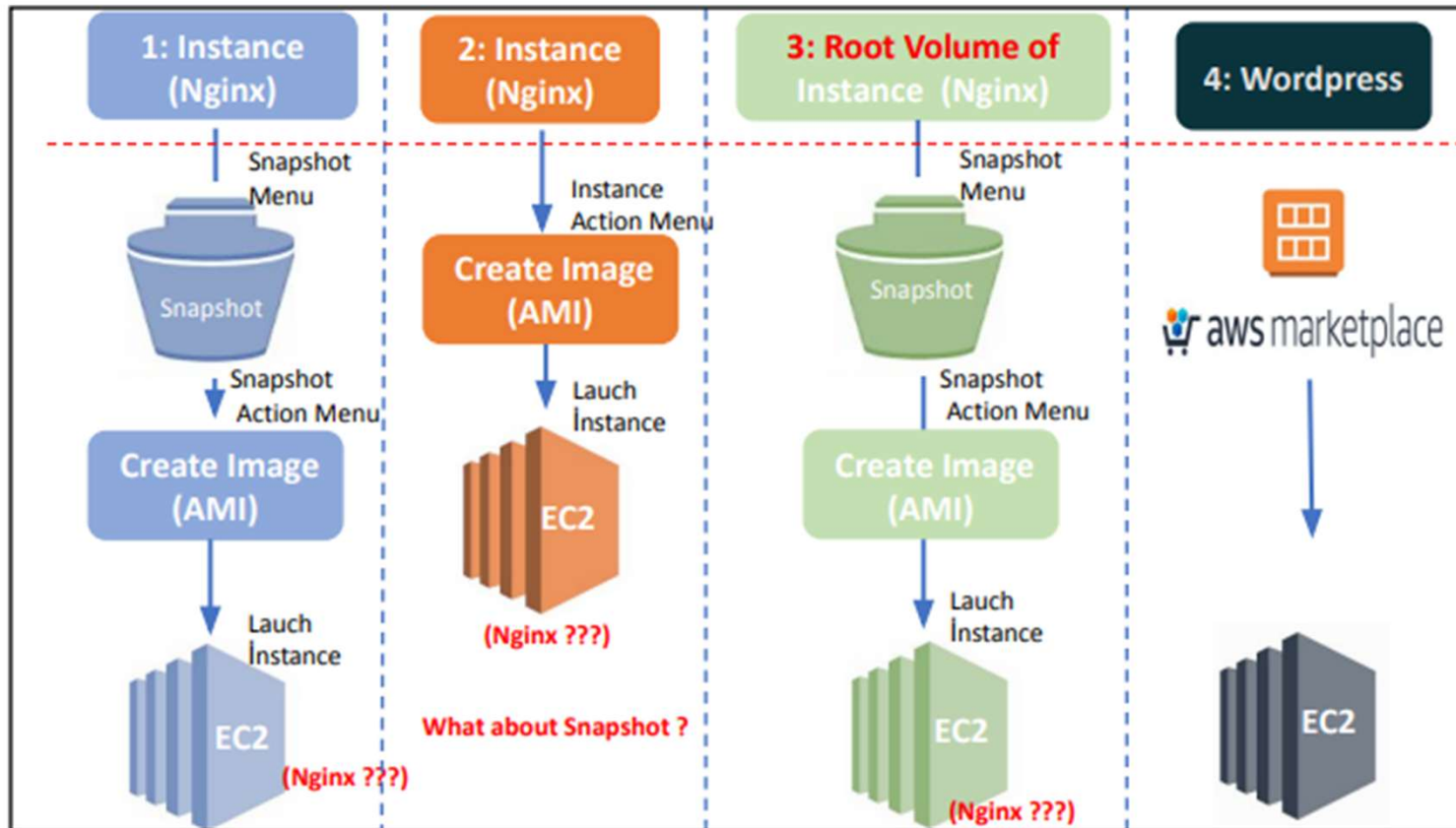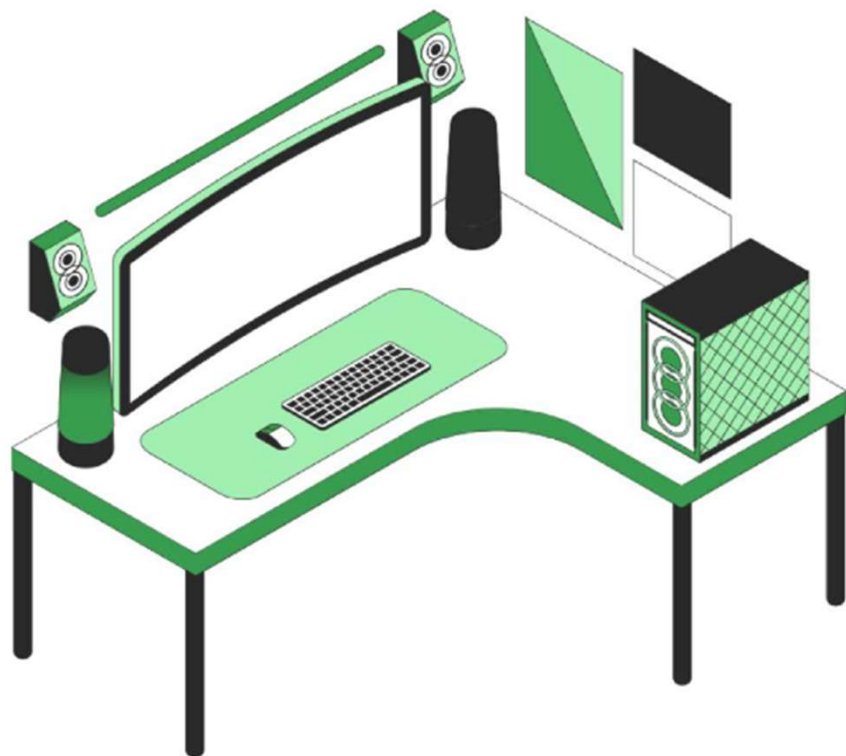## Data Lifecycle Manager (Amazon DLM)

Snapshot

Data Lifecycle Manager (Amazon DLM)

RETENTION=5
WE STORE SNAPSHOT=5 DAYS

EBS

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

HANDS-ON

Do you have any **questions?**

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

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