

The image features a white background with four purple triangles in the corners, pointing towards the center. The word "ondia" is centered in a bold, lowercase sans-serif font. The letters "o", "n", and "d" are a medium purple, while "i" and "a" are a darker blue-purple. The letter "d" has a decorative graphic element on its upper right side, consisting of a light blue semi-circle and a teal shape that overlaps the top of the letter.

ondia

A large, dark purple geometric shape on the left side of the slide, resembling a stylized 'X' or a folded ribbon, with several thin white lines extending from its right edge.

# **AWS EC2 Volumes**

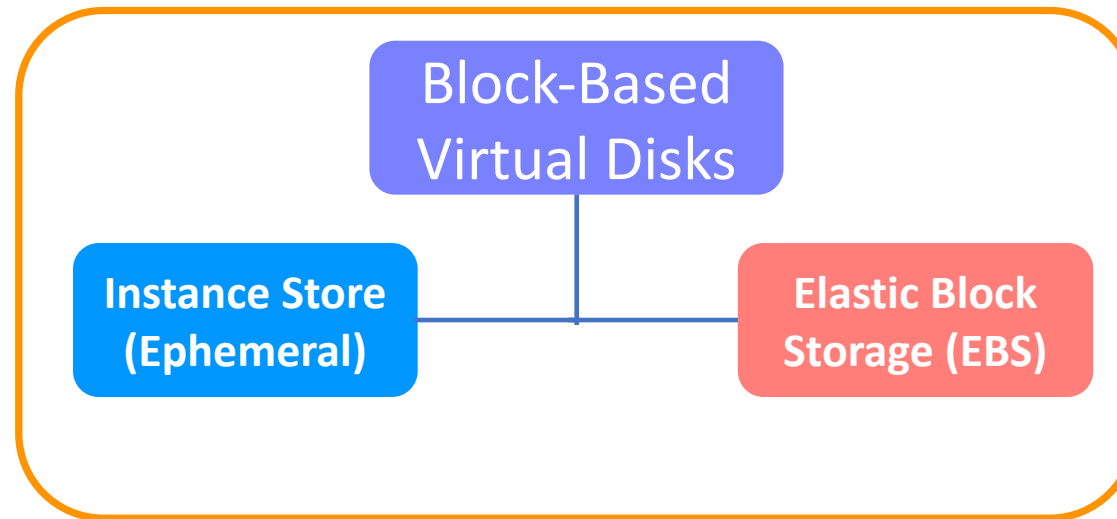


# EC2 Volumes



# EC2 Volumes

## What is Volumes?

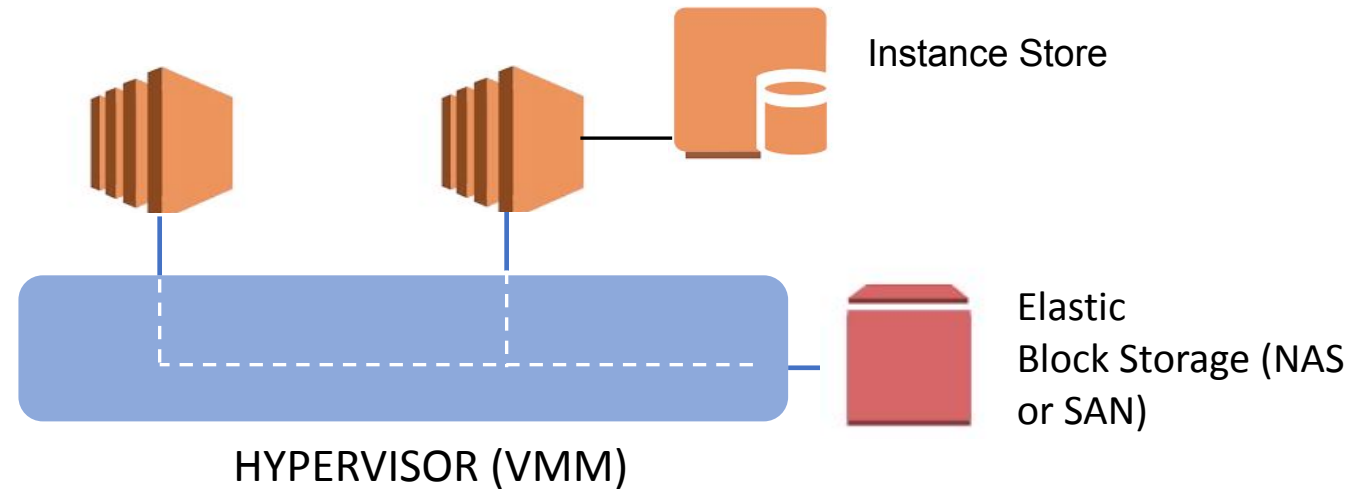


- Volumes are durable storage devices (virtual) that can be attached to EC2 instances.
- They are location in which the associated machine stores its data or loads its applications.
- There are two volume types in the block storage category. These are Instance Stores (Ephemeral) and Elastic Block Storage (EBS).



# EC2 Volumes

## Instance Store and Elastic Block Storage



- The storage connected directly to the hypervisor and accessible to each machine associated with the hypervisor is called the Instance Store.
- Instance Storage can be connected to only one instance. And is the closest storage device to your instance.

# EC2 Volumes

Instance Store (Ephemeral) vs. Elastic Block Storage (EBS).



## EC2 INSTANCE STORE

- Hardware attach
- Non-persistent data storage/ Terminated if you stop the instance
- Snapshots are not available
- Used for Buffers, Cache, Temporary data
- No separate cost for storage

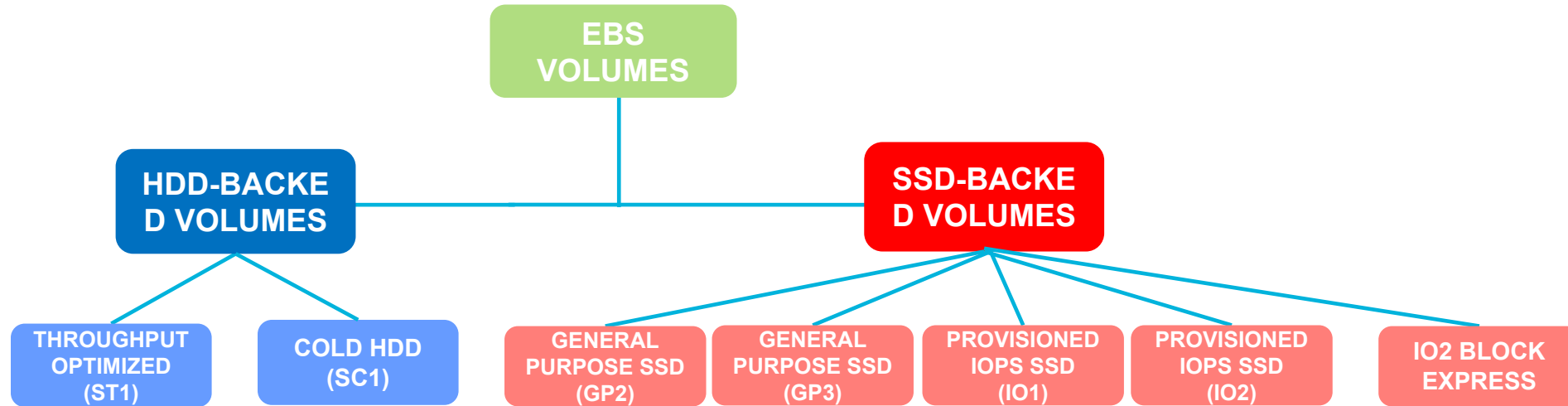


## ELASTIC BLOCK STORAGE

- Network attached storage
- Persistent data storage
- Snapshots are available
- Separate cost for EBS even EC2 is stopped

# EC2 Volumes

## EBS Volume Types



- There are 6 types of volumes in 2 categories for the different use cases.
- HDD-backed volumes are used for large streaming workloads where throughput is a better performance measure than IOPS.
- SSD-backed volumes are used for frequent read/write operations where the dominant performance attribute is IOPS.



## Let's get our hands dirty!

- Managing EBS Volumes on Console and Terminal
  - attaching
  - detaching
  - mounting
  - partition
  - resizing (single-partition)





# THANKS!

**Any questions?**

