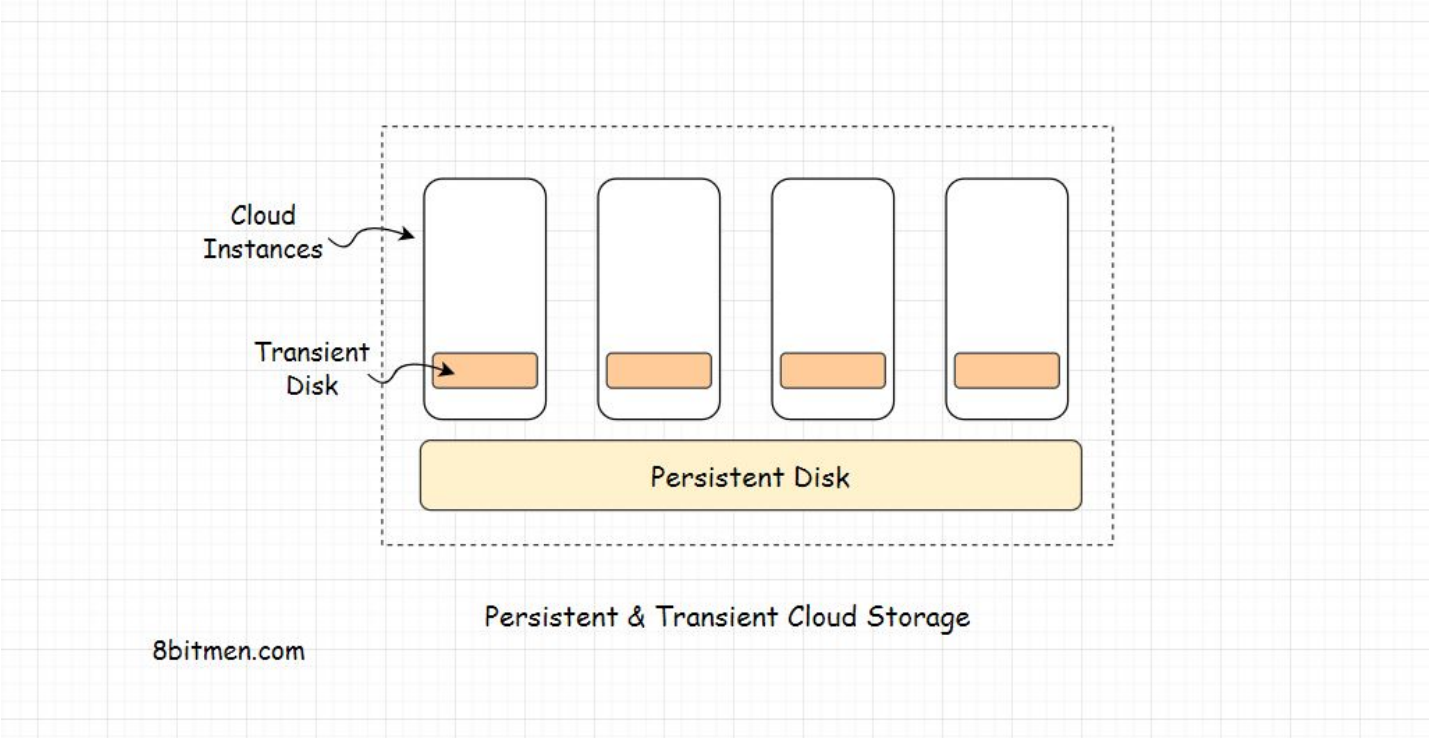
Data Storage Infrastructure – Part 2

This lesson discusses data storage infrastructure.

We'll cover the following

- What are persistent disks?

In a cloud data center, *DAS* means the *persistent* and *transient disks* are directly attached to the computing instance. These disks can be internally attached to the compute in the form of *boot disks*, or they can be externally attached in form of an external hard drive.



In a cloud environment, you can also set up your *NAS* or *SAN* based on your requirements. In this scenario, the business accesses the infrastructure over the web, and the cloud provider bills the business on the amount of storage consumed, network bandwidth consumed, *API* requests made for data read and write operations, etc.

Now, let's talk about the *persistent disks* that are attached to the computing process.

What are persistent disks?

What are persistent disks?

Persistent disks are *reliable, durable*, and *highly performant* block storages for compute instances. You'll see more on *block storage* in the upcoming lessons.

The persistent disk storage can be easily replicated, made redundant, and resized in capacity across the different *availability zones* and *regions* across the world. Furthermore, multiple *VMs* can read the data from a single persistent disk, or in other words, they can share a persistent disk between them without having any major impact on the disk's performance.

Since the disk is persistent, whatever data is stored on it remains even after the compute instances are decommissioned from the cluster.

Cloud takes care of managing the persistent disks and distributing the data across the globe for the business.

A persistent disk provides both _ hard disk drive (HDD)_ & _ solid-state drive (SSD)_ storage for the compute. Both have their unique use cases. A solid-state drive is preferred when the business wants very low latency, and a hard disk drive is preferred when a business wants low-cost storage. *SSDs* are more expensive than *HDDs*.

In the next lesson, you'll learn more about them.