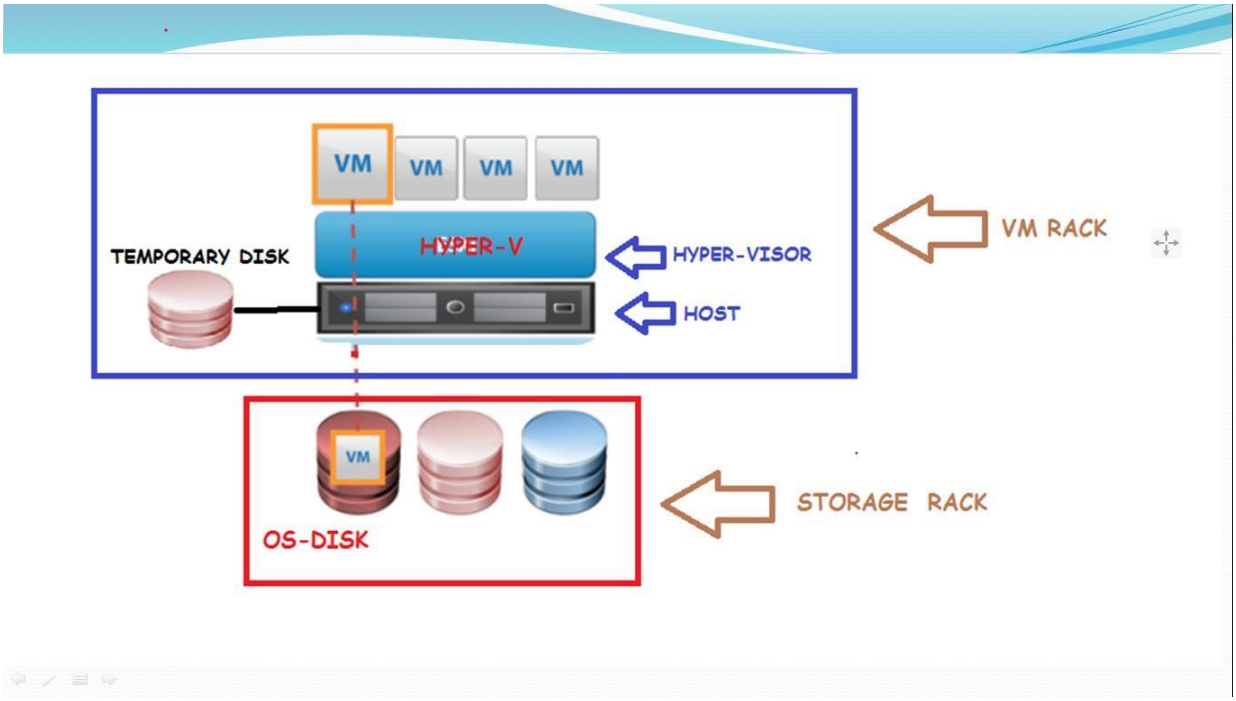
VM
VM
VM
VM
TEMPORARY DISK
HYPER-V
HYPER-VISOR
HOST
VM RACK
VM
OS-DISK
STORAGE RACK

Managed Disk

- With managed disks, all you have to do is specify the disk size, the disk type, and Azure will create the disk for you
- Disk Size can start from 4Gb and go up to 32TB
- The available types of disks are ultra disks, premium SSD, standard SSD, and standard hard disk drives (HDD).
- Managed Disk provide 99.999% availability(**26.30 seconds DT per month)**
- Managed disks achieve this by keeping three replicas of your disk
- Using managed disks, you can create up to 50,000 VM disks of a type in a subscription per region

- Managed disks Support Azure Backup, Snapshot and Image
- Managed disks are available in fixed size
- Pricing is per hour as per disk size

Attari Classes

DISK

- Disk is associated with VM
- Disk must be in same Region / Availability Zone(AZ) as of VM

OS DISK (C DRIVE):-

- By default each Windows VM get 127 GB and Linux VM get 30 GB as OS disk
- OS Disk is persistent disk and has pre-installed OS
- Only Increase in disk size is allowed and we need to de-allocated the VM
- Gen1 VMs support up to a 2 TiB OS disk.
- Gen2 VMs support up to a 4 TiB OS disk.
- We can change disk Type to Premium /Standard SSD HDD

TEMPORARY DISK(D Drive)

- The temporary disk size varies based on the VM size
- This disk is stored on physical drive of the host
- This is used to save the system paging file
- This disk is non-persistent
- Not chargeable

	Ultra disk	Premium SSD	Standard SSD	Standard HDD
Disk type	SSD	SSD	SSD	HDD
Scenario	IO-intensive workloads such as SAP HANA, top tier databases (for example, SQL, Oracle), and other transaction-heavy workloads.	Production and performance sensitive workloads	Web servers, lightly used enterprise applications and dev/test	Backup, non-critical, infrequent access

- In Premium SSD the IOPS and throughput are guaranteed
- In Standard SSD the IOPS and throughput may vary

IOPS

- IOPS is the number of requests(read/write) per second

Throughput

- Throughput is the amount of data transfer/fetched per second

Attari Classes

As an example, suppose an application requirement is a maximum of 4,000 IOPS. To achieve this, you provision a P30 disk on a DS1 VM. The P30 disk can deliver up to 5,000 IOPS. However, the DS1 VM is limited to 3,200 IOPS. Consequently, the

Size	Disk tier	Max IOPS	Max throughput
1024 GiB	P30	5000	200

VM Size	Offering	Family	vCPUs	RAM (GiB)	Data disks	Max IOPS	Temporary storage ...	Premium disk supp...	Cost/month (estim...
DS1_v2	Standard	General purpose	1	3.5	4	3200	7	Yes	₹4,053.02

Attari Classes

What is Azure Locks?

Azure Resource Locks are very beneficial when you want to prevent accidental deletion and modifications in Azure environment

You can apply Azure Locks at Azure subscription, resource group, or individual resource level

Before applying the Azure Resource Locks it is important to understand the concept of inheritance in Azure Locks which means when you apply a lock at a parent scope, all resources within that scope inherit the same lock and even resources you add later inherit the same lock from the parent.

For example when you apply a lock to a resource group, all resources in that resource group will be locked, including any resources created in future will be locked

There are 2 types of Azure Locks

Read-Only: – This Locks means authorized users can only read the resource, but they cannot delete or modify the resource. This lock prevent modification and deletion

Delete: – This Locks means authorized users can read and modify a resource, but they can't delete it. This lock prevent deletion only

END