Attari Classes

AZURE STORAGE ACCOUNT

- You can store up to 500 TB of Data
- The name of storage account must be unique in azure
- The storage account provides a unique namespace for your data that's accessible from anywhere in the world
- You can enable soft delete (1-365 day)

STORAGE PERFORMANCE

PREMIUM:-

- They use SSD, best for I/O intensive

STANDARD:-

- They use Magnetic Drives, best for bulk storage

STORAGE ACCOUNT KIND

GENERAL PURPOSE V2 ACCOUNTS

Stores Blobs, files, queues, and tables

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ACCESS TIER

Data stored in the cloud grows at an exponential pace. To manage costs for your expanding storage needs, it can be helpful to organize your data based on how frequently it will be accessed and how long it will be retained. Azure storage offers different access tiers so that you can store your blob data in the most cost-effective manner based on how it's being used. Azure Storage access tiers include:

- **Hot tier** - An online tier optimized for storing data that is accessed or modified frequently. The hot tier has the highest storage costs, but the lowest access costs.
- **Cool tier** - An online tier optimized for storing data that is infrequently accessed or modified. Data in the cool tier should be stored for a minimum of **30** days. The cool tier has lower storage costs and higher access costs compared to the hot tier.
- **Cold tier** - An online tier optimized for storing data that is rarely accessed or modified, but still requires fast retrieval. Data in the cold tier should be stored for a minimum of **90** days. The cold tier has lower storage costs and higher access costs compared to the cool tier.
- **Archive tier** - An offline tier optimized for storing data that is rarely accessed, and that has flexible latency requirements, on the order of hours. Data in the archive tier should be stored for a minimum of 180 days.

REPLICATION

Locally Redundant Storage(LRS):-

Copies your data synchronously 3 times within same Data Centre

Zone redundant storage (ZRS):-

Copies your data synchronously across 3 AZ in same region

Geo Redundant storage (GRS):-

- Perform LRS in primary Region and perform LRS asynchronously in secondary region
- The other region where data is copied is according to region pair

Read-Access Geo Redundant storage (RA-GRS):-

- Similar to GRS
- Microsoft will provide read-only access

Geo Zone Redundant storage (GZRS):-

- Perform ZRS in Primary Region and perform LRS asynchronously in secondary region

Read-Access Geo Zone Redundant storage (RA-GZRS):-

- Similar to GZRS
- Microsoft will provide read-only access

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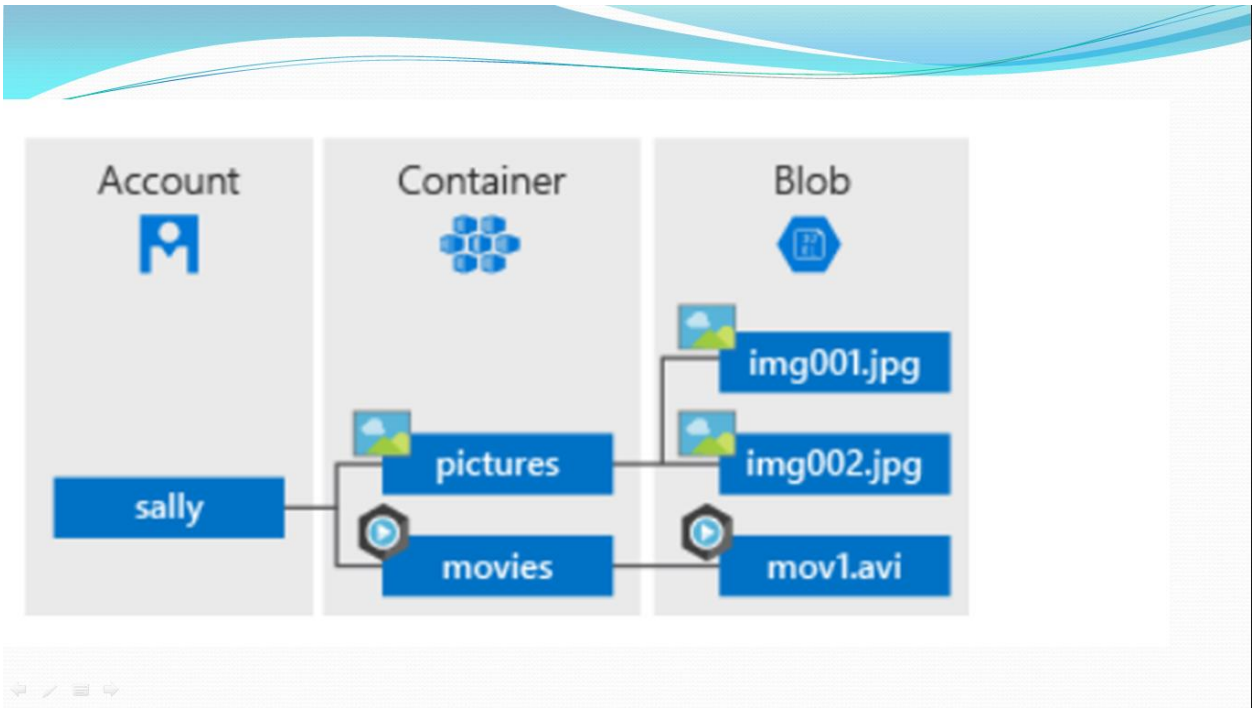
Scenario	LRS	ZRS	GRS/RA-GRS	GZRS/RA-GZRS (preview)
Node unavailability within a data center	Yes	Yes	Yes	Yes
An entire data center (zonal or non-zonal) becomes unavailable	No	Yes	Yes	Yes
A region-wide outage	No	No	Yes	Yes
Read access to your data	No	No	Yes (with RA-GRS)	Yes (with RA-GZRS)
Designed to provide __ durability of objects over a given year	at least 99.999999999% (11 9's)	at least 99.9999999999% (12 9's)	at least 99.99999999999999% (16 9's)	at least 99.99999999999999% (16 9's)


Account
Container
Blob
sally
pictures
movies
img001.jpg
img002.jpg
mov1.avi

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A storage account can include an unlimited number of containers, and a container can store an unlimited number of blobs.

CONTAINER TYPE

Private Container

- Data in this container is private and only accessible to account owner

Blob Container:-

- Data in this container is publicly accessible

Container:-

- Data and entire container is publicly accessible

AZURE BLOB

- Used to store large amount of unstructured data
- Such as image, video, audio, files
- The maximum size of a blob is 4.75 TB

Blobs

Azure Storage supports three types of blobs:

- **Block blobs** store text and binary data. Block blobs are made up of blocks of data that can be managed individually. Block blobs store up to about 4.75 TiB of data. Larger block blobs are available in preview, up to about 190.7 TiB
- **Append blobs** are made up of blocks like block blobs, but are optimized for append operations. Append blobs are ideal for scenarios such as logging data from virtual machines.
- **Page blobs** store random access files up to 8 TB in size. Page blobs store virtual hard drive (VHD) files and serve as disks for Azure virtual machines.

STORAGE ENDPOINTS

The combination of Azure Storage name and Storage Service form the endpoint

http://<Storage-Account-Name>.blob.core.windows.net

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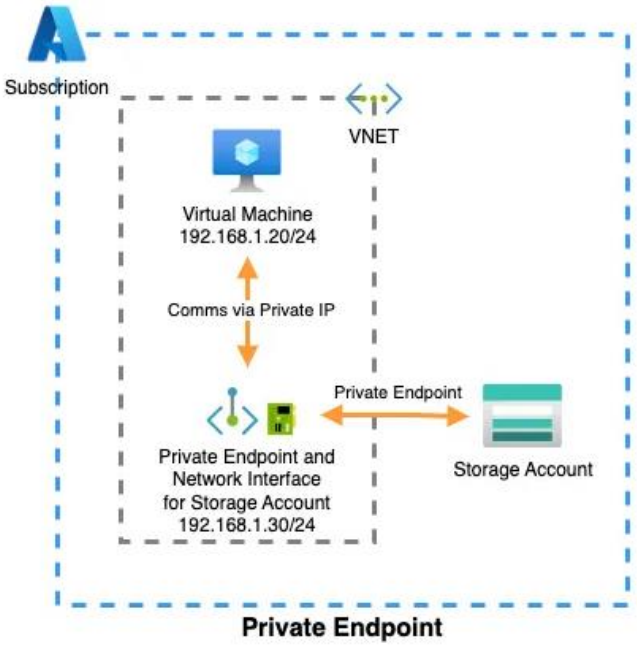
PRIVATE ENDPOINTS

Azure Private Endpoint provides a mechanism to connect to an Azure Resource via a private IP address. This is achieved by associating a network interface with the resource, such as an Azure Storage Account. When you activate a Private Endpoint for a Storage Account, it receives a network interface, complete with a private IP address sourced from the selected Virtual Network (VNET). Consequently, resources already residing within the same VNET or connected to it (by means of VNET peering, VPN, ExpressRoute etc.) gain the capability to securely access the Storage Account solely through this private IP address.



Attari Classes

Azure Private DNS zone

Azure Private DNS provides a reliable, secure DNS service to manage and resolve domain names in a virtual network without the need to add a custom DNS solution. By using private DNS zones, you can use your own custom domain names rather than the Azure-provided names available today.

The records contained in a private DNS zone aren't resolvable from the Internet. DNS resolution against a private DNS zone works only from virtual networks that are linked to it.

END