

# Understanding Microsoft Azure Storage

## Agenda



### Understanding Microsoft Azure Storage: Part 01

#### Microsoft Azure Storage



Azure Storage Basics



Azure Storage Data Services



Types of Azure Storage



Securing Storage Accounts



Summary

# Understanding Microsoft Azure Storage

## Azure Storage Features



### High availability and durability

Data replication across data centers,  
zones and regions



### Security

Encryption and fine grained access  
control services of your data

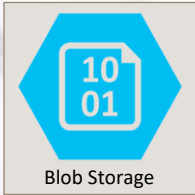


### Scalability

High performance and scalability  
for high performant applications

# Understanding Microsoft Azure Storage

## Azure Storage Data Services



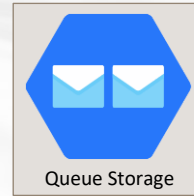
Blob Storage

Ideal for storing large unstructured files are stored, and can be accessed using the URL over HTTP/HTTPS



Files Storage

Ideal for storing highly accessible files accessed over SMB, allowing concurrent access from multiple VM's



Queue Storage

Ideal for storing millions of messages in the queue for asynchronous processing

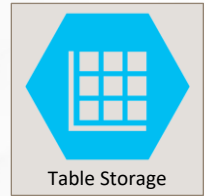


Table Storage

Ideal for storing structured NoSQL data with no need to write complex queries

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## Azure Storage Data Services



Blob Storage

- **Block Blobs**

1. Comprised of blocks
2. Blocks up to 100 MB size
3. 50,000 Blocks
4. Max size is 4.75 TB

- **Page Blobs**

1. Collection of 512-bytes pages
2. Max size is 8 TB
3. VHD's are stored

- **Append Blobs**

1. Max 4MB block size
2. Up to 50,000 blocks
3. Max size is 195 GB

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## Storage Account Kinds



Storage Account Type	Supported Services	Supported Performance Tiers	Supported Access Tiers	Replication Options	Deployment Model <sup>1</sup>	Encryption <sup>2</sup>
General-purpose V2	Blob, File, Queue, Table, and Disk	Standard, Premium	Hot, Cool, Archive	LRS, ZRS4, GRS, RA-GRS	Resource Manager	Encrypted
General-purpose V1	Blob, File, Queue, Table, and Disk	Standard, Premium	N/A	LRS, GRS, RA-GRS	Resource Manager, Classic	Encrypted
Block blob storage	Blob (block blobs and append blobs only)	Premium	N/A	LRS	Resource Manager	Encrypted
FileStorage (preview)	Files only	Premium	N/A	LRS	Resource Manager	Encrypted
Blob storage	Blob (block blobs and append blobs only)	Standard	Hot, Cool, Archive	LRS, GRS, RA-GRS	Resource Manager	Encrypted

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## Securing Storage Account



Azure Active Directory  
Integration for Blobs and  
Queue

Azure AD Authorization over  
SMB for Files

Shared Key Authorization

Authorization with Shared  
Access Signature

Anonymous Access to Blobs  
and Containers

# Understanding Microsoft Azure Storage

## Summary



### ✓ Microsoft Azure Storage

- Azure Storage Basics
- Azure Storage Data Services
- Types of Azure Storage
- Securing Azure Storage Accounts