Managing Azure Storage

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Module Overview

Managing Azure Storage

Storage Account Keys

Snapshots

Bulk data operations

Azure Storage Portal Management

Typically provisioning and management of all resources should be done through templates or PowerShell

- Enables automation
- Bulk operations that are repeatable

Portal enables many aspects of management including:

- Provisioning
- Configuration
- Enumerating content

Storage Account Keys

Provide a means to authenticate to enable access to storage accounts with full control

Storage Account Keys

Two keys are provided; a primary and a secondary

This enables a key to be changed without interruption to access

Keys should be protected and reset if compromised

Can be accessed through the portal, PowerShell and REST

It's possible to build complete solutions to store, roll and access

PowerShell Management

- Requires the AzureRM PowerShell Module installed
- Different modules for ASM vs ARM storage
- ASM cmdlets will not work with ARM storage accounts
- Certain actions are performed very differently for ASM vs ARM storage accounts
- Actions that leverage a storage context work consistently

Shared Access Signatures

Anonymous public access is also possible but typically better to delegate access

Shared Access Signatures

Provide delegated access to resources in a storage account that can be time bombed and IP-scoped

Shared Access Signatures

Avoids sharing the Storage Account Key and has limited resource scope

Account or service SAS

Ad hoc and stored access policy based SAS

Demo

Using graphical utilities for management

Snapshots

There is no VM checkpoint capability in Azure

It is possible to perform blob snapshots which would not integrate with VSS inside the VM

Through PowerShell can create a solution that creates and reverts to snapshots as required

Snapshots cannot outlive the source blob

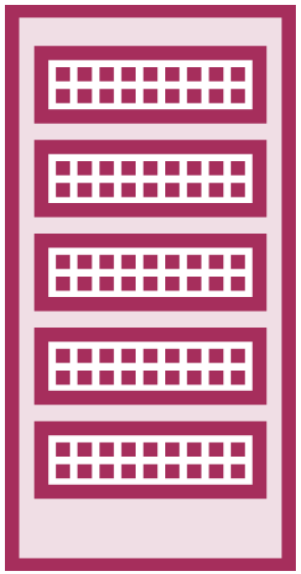
Can copy snapshots to other locations

Consider Azure Backup or Capture VM

Azure IaaS VM Snapshot Usage

https://www.youtube.com/user/NTFAQGuy

Server-side Copy



Possible to copy via client resulting in slow operation and egress charges

When moving or copying large amounts of data between storage accounts can use Azure server-side asynchronous copy

When copied between accounts in same region no egress charges

Copy across subscriptions and regions

Use PowerShell, AzCopy or other utilities

Azure Import/Export

Networks are overrated

Bandwidth constraints may make some data move operations impractical

Enables data to be transferred to blob storage "the old fashioned way"

BitLocker protected hard disks are transported between your premises and an Azure datacenter

8 TB max disk, 10 disk per job

Summary

- Managing Azure Storage
- Storage Account Keys
- Snapshots
- Bulk data operations

Next Up:
Using StorSimple