Learning objective

- **Authentication**
  - Storage Account keys
  - Shared access signature (SAS)
  - Azure Active Directory (Azure AD)
- **Access Control**
  - Role based access control (RBAC)
  - Access control list (ACL)
- **Network access**
  - Firewall and virtual network
- **Data Protection**
  - Data encryption in transit
  - Data encryption at rest
- **Advanced threat Protection**

Storage Account Access Keys

Authentication

Shared Access Signature (SAS)

Authentication

Shared Access Signature (SAS)

Shared Access Signature

Security token string

“SAS Token”

Contains permission like start and end time

Azure doesn’t track SAS after creation

To invalidate, regenerate storage account key used to sign SAS

Stored access policy

Stored access policy

Reused by multiple SAS

Defined on a resource container

Permissions + validity period

Service level SAS only

Stored access policy can be revoked

Azure Active Directory

Authentication

Azure Active Directory

Azure Active Directory

Azure Active Directory (AD)

- Grand access to Azure Active directory (AD) Identities
- AD is an enterprise identity provider, Identity as a Service (IDaaS)
- Globally available from virtually any device
- Identities – user, group or application principle
- Assign role at Subscription, RG, Storage account, container level.
- No longer need to store credentials with application config files
- Similar to IIS Application pool identity approach

Azure Active Directory

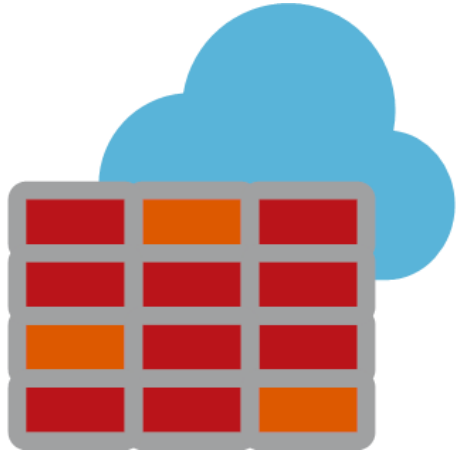
Role based access control (RBAC)

Access Control

Role based access control (RBAC)

Access control

Firewalls and Virtual Networks



Firewalls and Virtual Networks