Connecting to Azure Storage

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What's in this module?
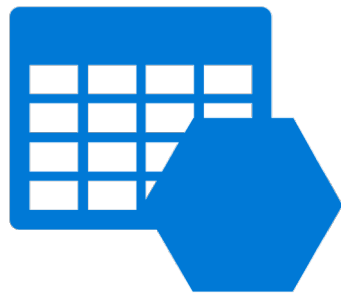
Azure Storage Services

Network Security Options

Authentication and Authorization

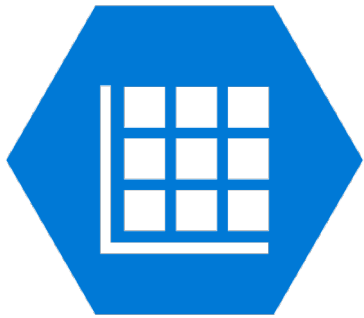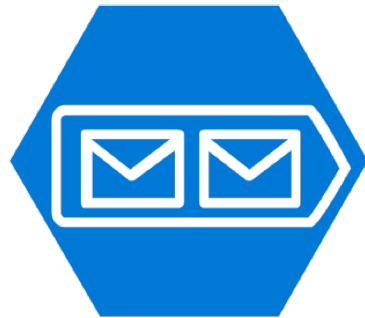Available Permissions

Azure Storage Service

Highly available, secure, durable, scalable, and redundant

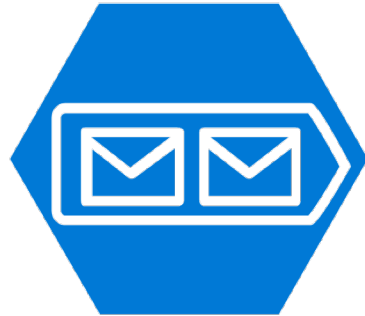# Includes These Services

Tables   **Queues**   **Files**   **Blobs**

Service Endpoints

https://******.table
.core.windows.net

https://******.queue
.core.windows.net

https://******.file
.core.windows.net

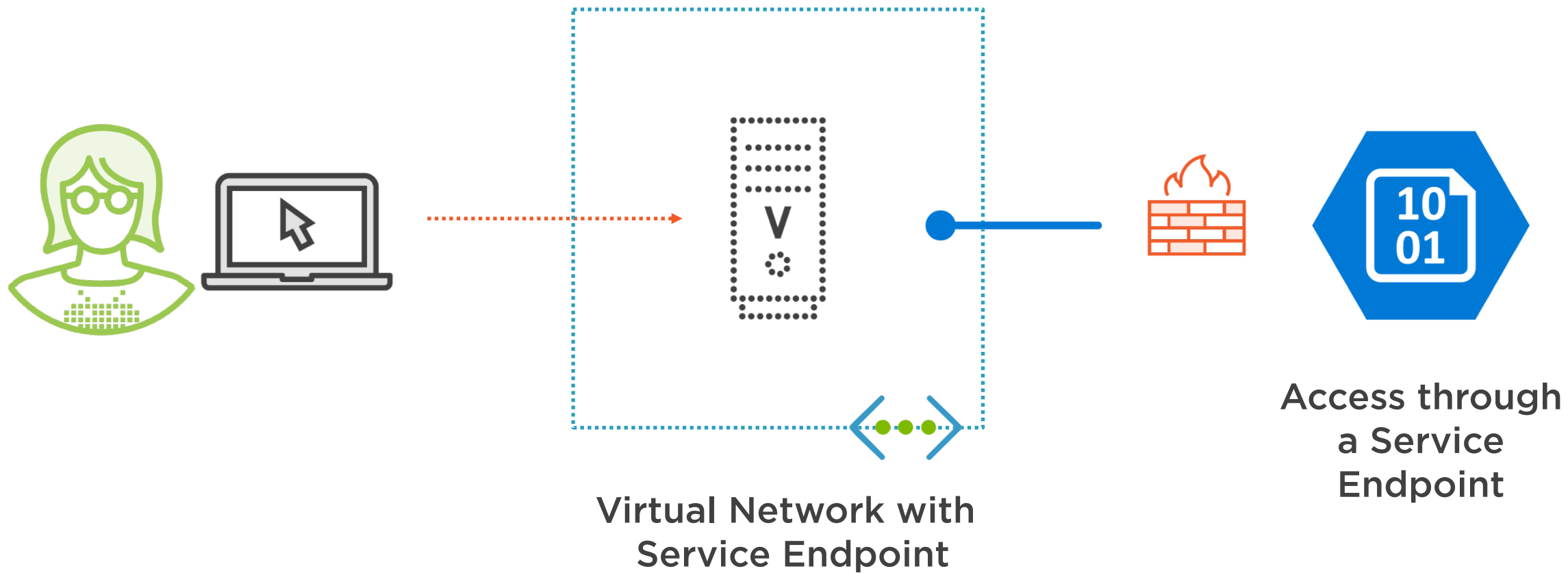https://******.blob
.core.windows.net

Network Security Options

Public Endpoint

Internet facing endpoint

Service Endpoint

Virtual Network with
Service Endpoint

Access through
a Service
Endpoint

Authentication and Authorization

Authorizing Access

Azure Active Directory (AAD)

Shared Keys

Shared Access Signature (SAS) Token

Anonymous Access

Role-based access control

Users, Groups or Applications

High security with ease of use

Root password of the storage account

There are always 2 active keys

No identity authentication

Shared keys should not be used unless absolutely necessary

Does not authenticate an identity

Granular control over the access granted

Configurable parameters

Can be revoked

Anonymous access is read-only

Network security is still verified

No identity or authorization check

Be extra cautious with the information placed in a storage account that allows anonymous access

Available Permissions

Fine-grained Access

Azure Active Directory (AAD)

Shared Access Signature (SAS) Token

Permissions

read

write

delete

list

and more...

Scope
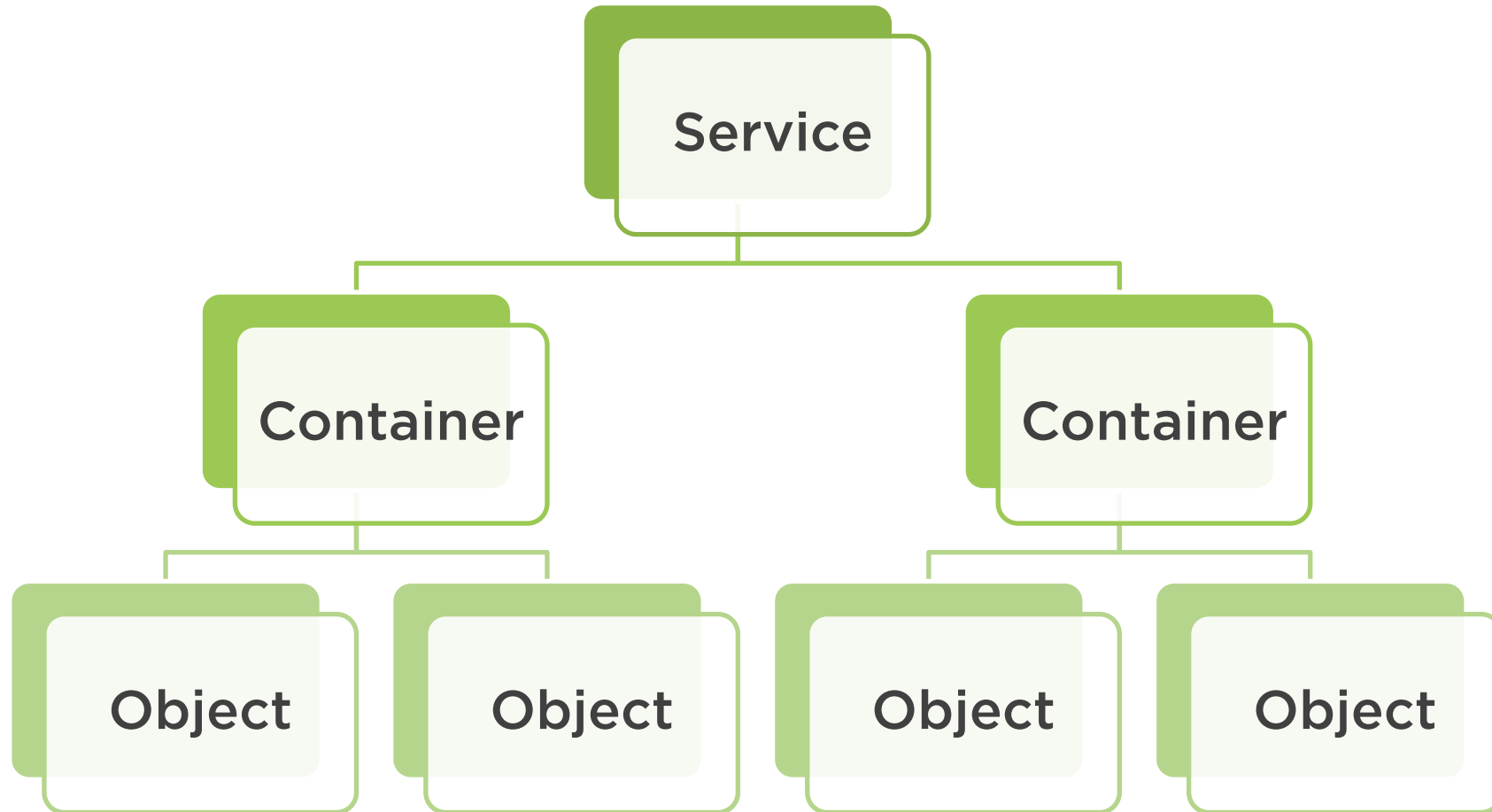
Azure AD Built-in Roles

Blob Data Contributor

Blob Data Reader

Queue Data Contributor

Queue Data Reader

Create your custom role

Azure AD should be used over SAS tokens whenever possible

Putting Everything Together

It has a public endpoint and our client is on the Firewall

We have the storage account name

We have administrator access to the account

We want to upload a file using the SAS

Azure Storage Explorer

Demo

Connecting and uploading a file to Blob Storage using Azure Storage Explorer

Summary

The service offers public or VNET service endpoints

Authentication and authorization can be done through AAD, Keys, SAS tokens or anonymously

AAD and SAS tokens are preferred

Put it all together to upload a file to Blob Storage

Next Module:
Connect to Azure Databases