

A decorative network diagram consisting of interconnected nodes and lines, with some nodes highlighted in blue and others in gray, positioned in the top-left and bottom-right corners of the slide.

# **Application Security Key Vault**

A decorative graphic in the top-left corner consisting of a network of interconnected nodes and lines, rendered in a light gray color. The nodes are represented by small circles, some of which are solid and others are hollow, connected by thin lines.

# Hello!

## I am Eng Teong Cheah

Microsoft MVP

A decorative network diagram in the top-left corner, featuring a complex web of interconnected nodes and lines. The nodes are represented by small circles, some of which are larger and have concentric circles, suggesting a hierarchical or central structure. The lines are thin and gray, connecting the nodes in a non-linear fashion.

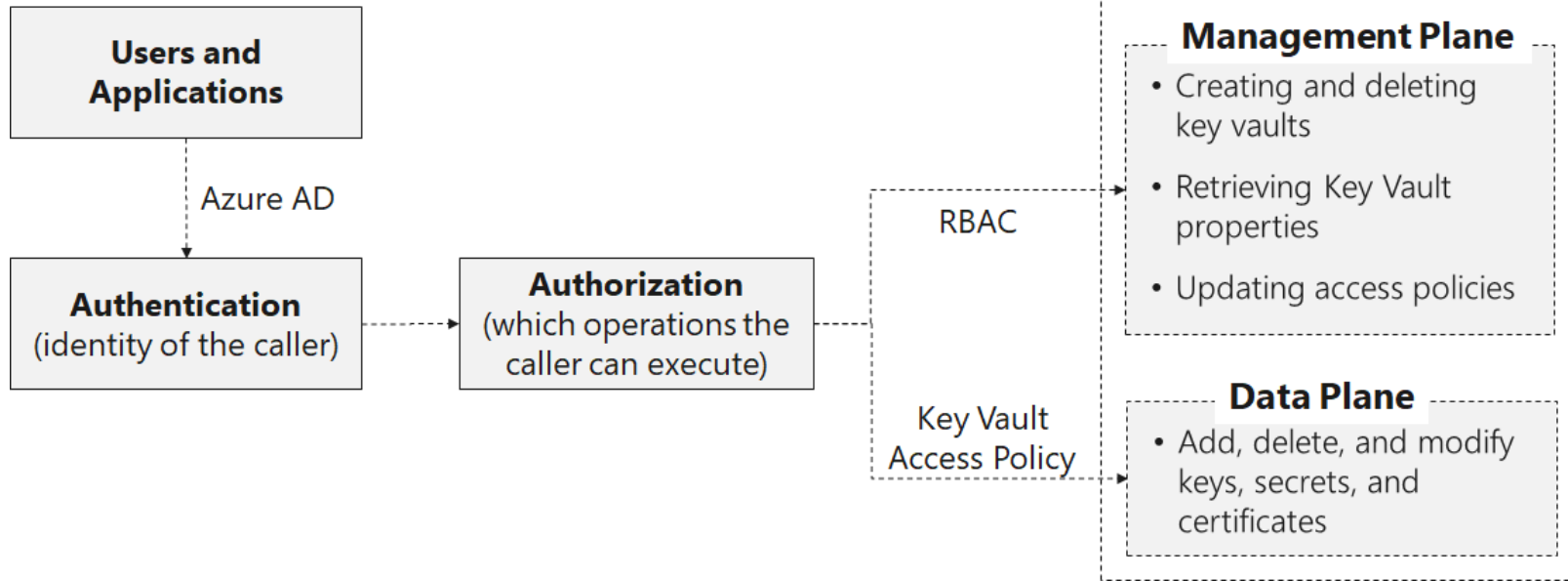
# Key Vault

## Azure Key Vault

Azure Key Vault helps solve the following problems:

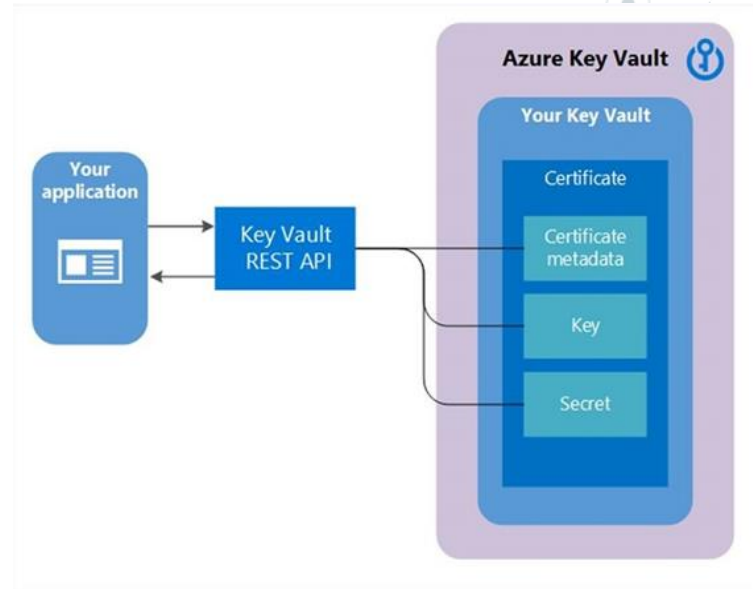
- ⦿ Secrets Management
- ⦿ Key Management
- ⦿ Certificate Management

# Key Vault Access



## Key Vault Certificates

- Manages X509 v3 certificates (PFX, PEM)
  - Created by the Key Vault or by import
  - Self-signed and Certificate Authority certificates
  - Lifecycle management including automatic renewal and contact notification
- Minimum 2048-bit encryption  
RSA or RSA HSM with certificates



## Key Vault Keys

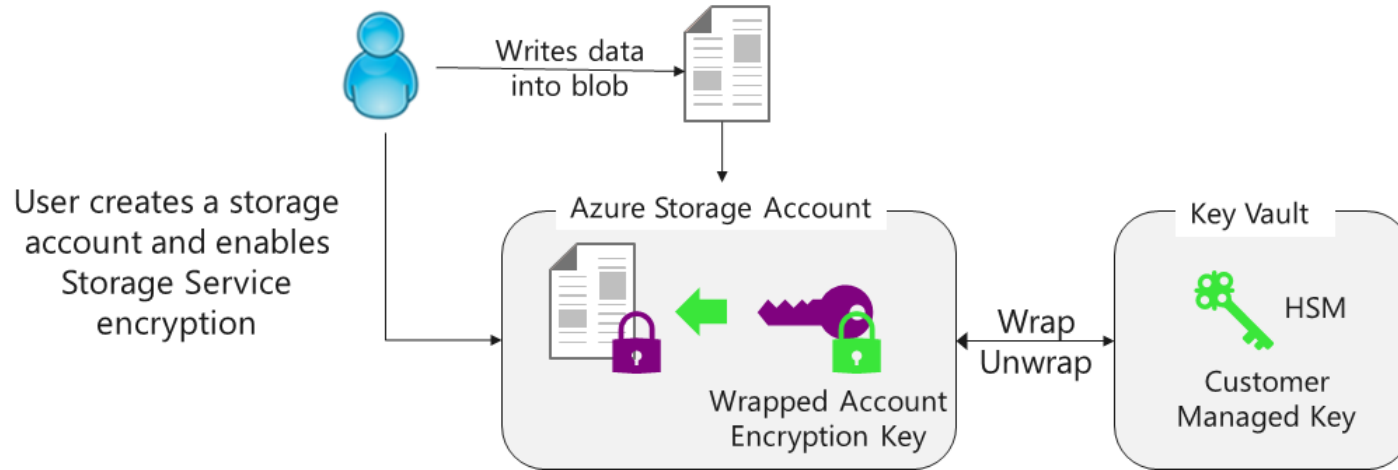
- ◎ Soft (Key vault) and Hard (HSM) keys
- ◎ Supports operations like create, delete, update, and list
- ◎ Supports cryptographic operations like sign and verify, key encryption/wrapping, and encrypt and decrypt

## Key Vault Keys

- ◎ Support secure transfer of existing keys in Bring Your Own Key (BYOK) scenarios
- ◎ Premium supports HSM- protected keys
- ◎ RSA and Elliptic Curve



# Customer Managed Keys



## Key Vault Secrets

- ◎ Name-value pair
- ◎ Name must be unique in the vault
- ◎ Value can be any UTF-8 string – max 25 KB in size
- ◎ Manual or certificate creation

Home > Key vaults > AZ500DemoKeyVault | Secrets > Create a secret

### Create a secret

Upload options

Manual

Upload options

Manual

Certificate

Name \* ⓘ

Value \* ⓘ

Enter the secret.

Content type (optional)

Set activation date? ⓘ ☐

Set expiration date? ⓘ ☐

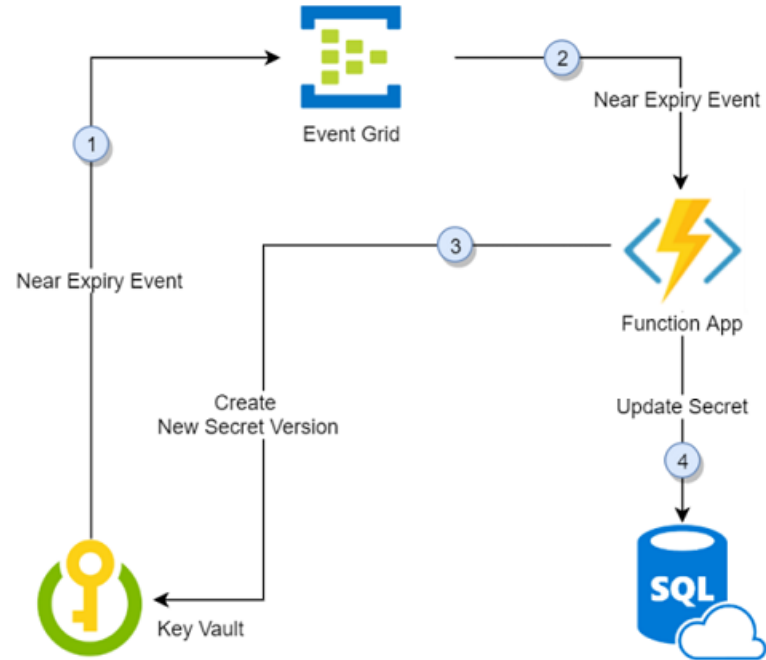
Enabled? ☒ Yes ☐ No

# Key and Secret Rotation

Update keys and secrets without affecting your application

Rotate keys and secrets in several ways:

- ⦿ As part of a manual process
- ⦿ Programmatically with the REST API
- ⦿ With an Azure Automation script



# Demonstrations


Key Vault



# Thanks!

## Any questions?

You can find me at:  
[@walkercet](#)



## References

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