

Shh, Keep Your Secrets in Azure Applications

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PLURALSIGHT



What are secrets

- Keys
- Certificates
- Passwords



Troubles with secrets

- Don't put them in your code!
 - Ok, config.
- Don't put them in your configuration files!
 - Ok, set at deployment
- Don't store them in your deployment files!
 - ARGhhhHH!
- But Matt, what about ASP.Net Core Secrets files??!!



Azure Key Vault



- Securely store secrets
- Accessible at deployment and/or runtime
- Permissions-based access

Demo: Key Vault Basics

- Create vault
- Create secret
- Read secret



Demo: Accessing key vault secrets

- Show code model in asp.net
- Show configuration model – easier
- What about permission to keys?



Managed Identities

- Run your code as an Azure AD identity
 - Simplifies permissions
- RBAC in Azure for resources
 - Scope access effectively



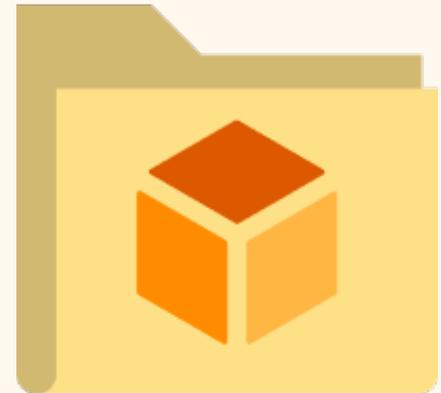
Demo: Web App with Managed Principal

- Running application without managed principal
 - Code fails to read the secret
- Setup application with managed identity
 - Create identity
 - Set for web app
 - Give key vault permissions to the identity

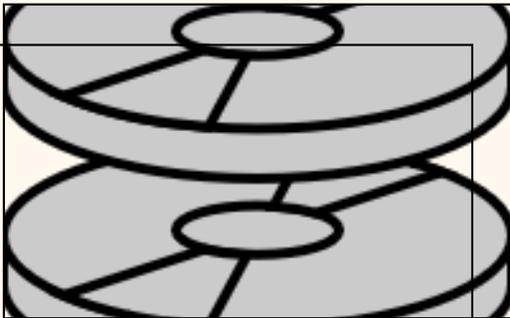


ARM Templates

- Create Key Vault Resources
- Reference Secrets in ARM templates
 - Enable vault for template deployments
- Reference Certificates for App Service



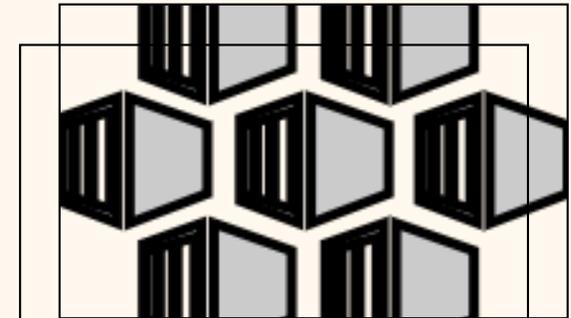
Where Else Can I use Key Vault



Azure Disk Encryption



SQL Server



AKS

Azure Key Vault



- Is it Serverless?

Questions?

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