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Section: 7B

Lab: 05

Task 1:

Microsoft Azure

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Create a key vault

Basics Access configuration Networking Tags Review + create

Azure Key Vault is a cloud service used to manage keys, secrets, and certificates. Key Vault eliminates the need for developers to store security information in their code. It allows you to centralize the storage of your application secrets which greatly reduces the chances that secrets may be leaked. Key Vault also allows you to securely store secrets and keys backed by Hardware Security Modules or HSMs. The HSMs used are Federal Information Processing Standards (FIPS) 140-2 Level 2 validated. In addition, key vault provides logs of all access and usage attempts of your secrets so you have a complete audit trail for compliance.

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * Azure for Students

Resource group * (New) KeyVaultGroup

Instance details

Key vault name * keyvaultcc2280

Region * Central India

Pricing tier * Standard

Recovery options

Soft delete protection will automatically be enabled on this key vault. This feature allows you to recover or permanently delete a key vault and secrets for the duration of the retention period. This protection applies to the key vault and the secrets stored within the key vault.

To enforce a mandatory retention period and prevent the permanent deletion of key vaults or secrets prior to the retention period elapsing, you can turn on purge protection. When purge protection is enabled, secrets cannot be purged by users or by Microsoft.

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Key vault created

Microsoft Azure

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Key vault

What is the overall service API latency for this Key Vault? How do I troubleshoot issues with this Key Vault? Show me overall vault saturation percentage metrics for this Key Vault.

Search Delete Move Refresh Open in mobile

Overview

Activity log Access control (IAM) Tags Diagnose and solve problems Access policies Resource visualizer Events Objects Settings Monitoring Automation Help

Essentials

Resource group (move) : KeyVaultGroup

Location : Central India

Subscription (move) : Azure for Students

Subscription ID : 9c95a83d-2817-48dc-9b2e-0c496f8b0cb

Tags (edit) : Add tags

Get started Properties Monitoring Tools + SDKs Tutorials

Vault URI : https://keyvaultcc2280.vault.azure.net/

SKU (Pricing tier) : Standard

Directory ID : 89f47bc-9df2-4468-b89e-876348a4f1cf

Directory Name : Default Directory

Soft-delete : Enabled

Purge protection : Disabled

Manage keys and secrets used by apps and services

Our recommendation is to use a vault per application per environment (Development, Pre-Production and Production). This helps you to not share secrets across environments and also reduces the threat in case of a breach.

Control access to key vault

Assign access policy and determine whether a given service principal, namely an application or user group, can perform different operations on key vault keys, secrets or certificates.

Access configuration

Access policies Access control (IAM)

Enable logging and set up alerts

Enable logging to monitor how, when and by whom your key vaults are accessed. Monitor performance and configure alerts for key vault metrics e.g., service API latency, error code, throttling.

View

Turn on recovery options

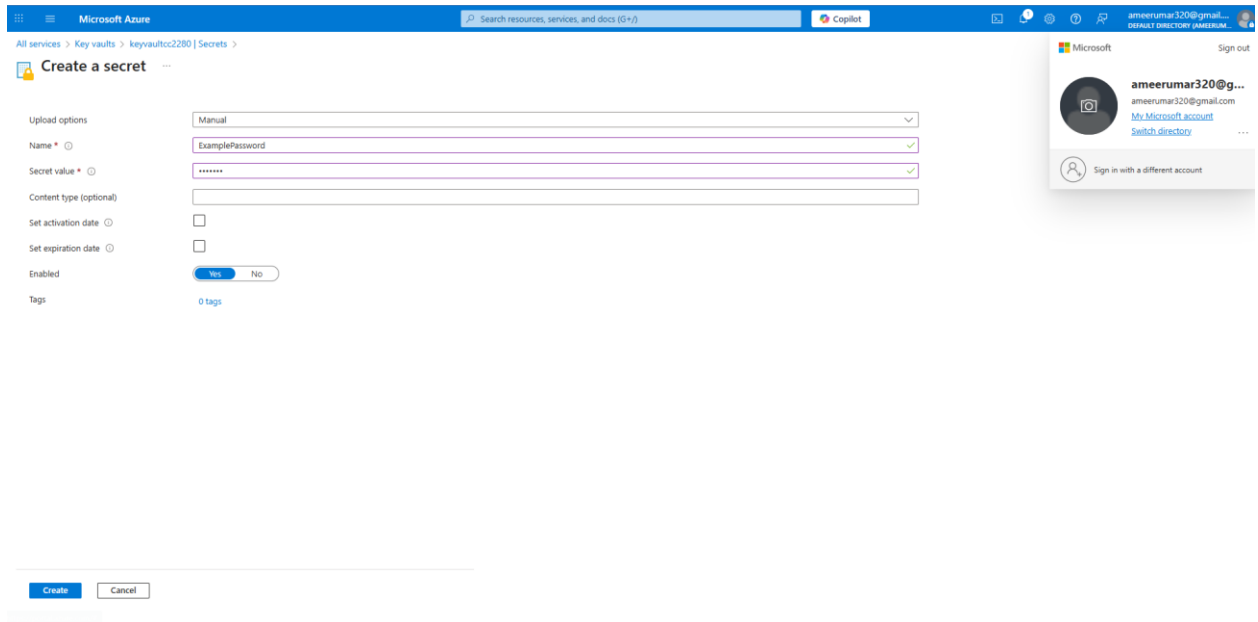
For protection against accidental or malicious deletion, soft-delete is enabled. Turn on purge protection to guard against manual purging of deleted key vaults and items. Learn more >

Explore

Add or remove favorites by pressing Ctrl + Shift + F

Task 2

Adding secret to key vault

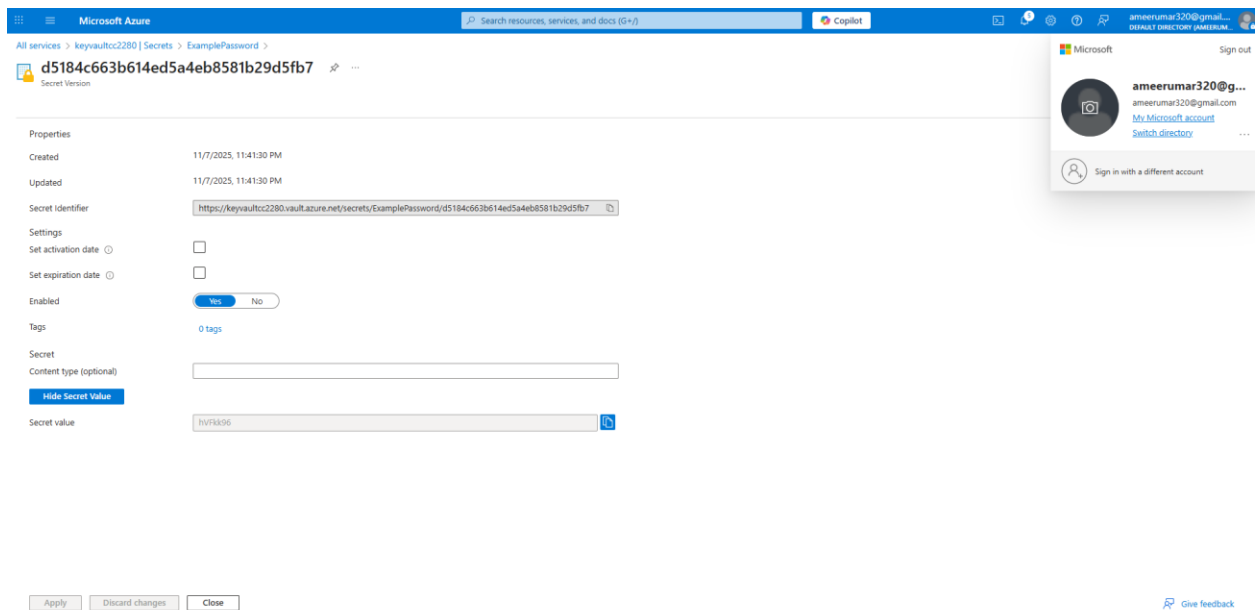


The screenshot shows the 'Create a secret' page in the Microsoft Azure portal. The breadcrumb navigation is 'All services > Key vaults > keyvaultcc2280 | Secrets >'. The page title is 'Create a secret'. The form includes the following fields and options:

- Upload options:** A dropdown menu set to 'Manual'.
- Name:** A text input field containing 'ExamplePassword'.
- Secret value:** A text input field containing '*****'.
- Content type (optional):** An empty text input field.
- Set activation date:** An unchecked checkbox.
- Set expiration date:** An unchecked checkbox.
- Enabled:** A toggle switch set to 'Yes'.
- Tags:** A section showing '0 tags'.

At the bottom of the form are 'Create' and 'Cancel' buttons. On the right side, there is a Microsoft account sign-in overlay for 'ameerumar320@g...' with a 'Sign out' link and a 'Sign in with a different account' option.

Viewing the secret



The screenshot shows the 'Viewing the secret' page in the Microsoft Azure portal. The breadcrumb navigation is 'All services > keyvaultcc2280 | Secrets > ExamplePassword >'. The page title is 'd5184c663b614ed5a4eb8581b29d5fb7'. The page displays the following information:

- Properties:**
 - Created:** 11/7/2025, 11:41:30 PM
 - Updated:** 11/7/2025, 11:41:30 PM
 - Secret identifier:** <https://keyvaultcc2280.vault.azure.net/secrets/ExamplePassword/d5184c663b614ed5a4eb8581b29d5fb7>
- Settings:**
 - Set activation date:** An unchecked checkbox.
 - Set expiration date:** An unchecked checkbox.
 - Enabled:** A toggle switch set to 'Yes'.
 - Tags:** A section showing '0 tags'.
- Secret:**
 - Content type (optional):** An empty text input field.
 - Hide Secret Value:** A button.
 - Secret value:** A text input field containing 'TVV3k896'.

At the bottom of the page are 'Apply', 'Discard changes', and 'Close' buttons. On the right side, there is a Microsoft account sign-in overlay for 'ameerumar320@g...' with a 'Sign out' link and a 'Sign in with a different account' option.