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BSSE 7A

2280133

Lab 5

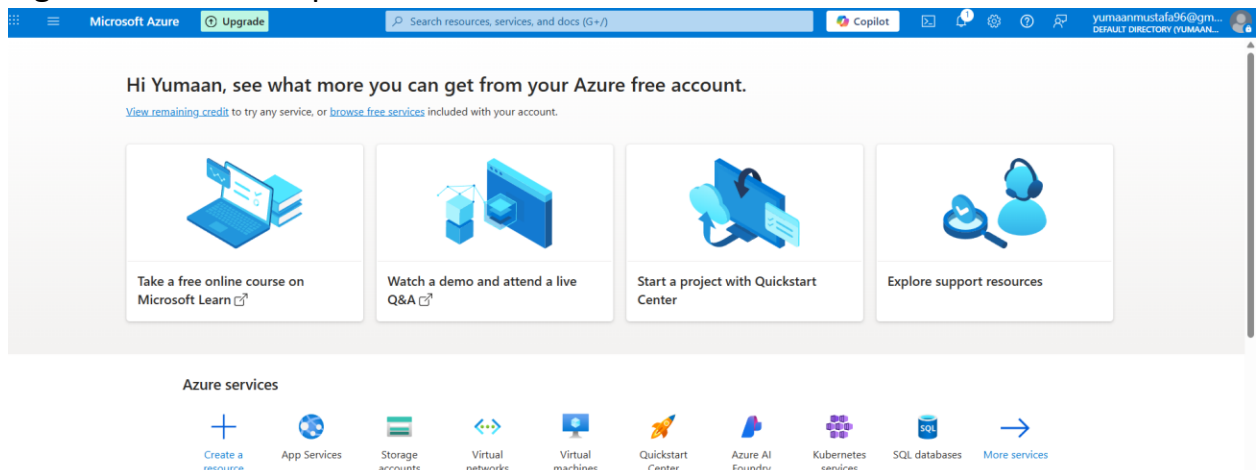## 05 - Implement Azure Key Vault (5 min):

In this walkthrough, we will create an Azure Key vault and then create a password secret within that key vault, providing a securely stored, centrally managed password for use with applications.

Task 1: Create an Azure Key Vault:

1. Sign in to the Azure portal.

2. From the All services blade, search for and select Key vaults, then select **+Add +New +Create **.
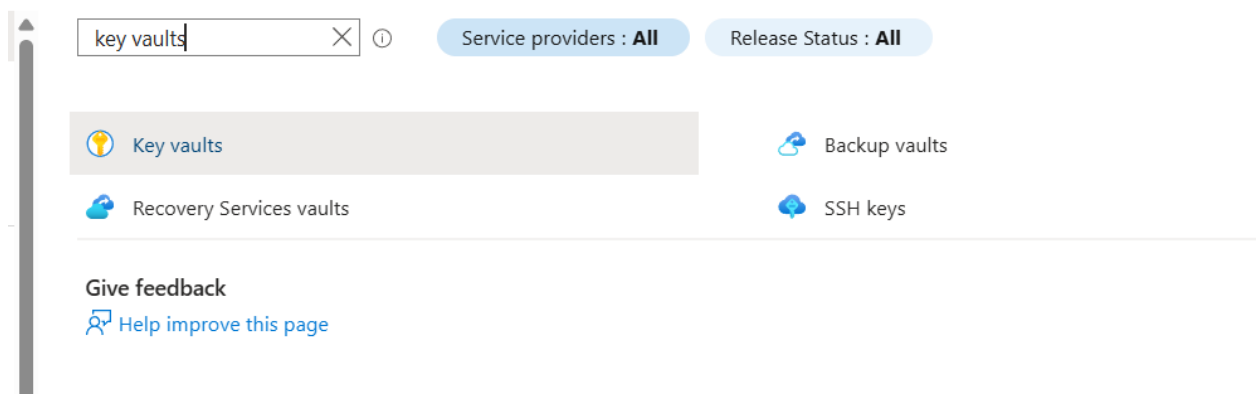
3. Configure the key vault (replace xxxx in the name of the key vault with letters and digits such that the name is globally unique). Leave the defaults

for everything else. Setting Subscription Value Use default supplied
Resource group Create new resource group Key vault name keyvaulttestxxx
Location East US Pricing tier Standard

Create a key vault   ...

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.

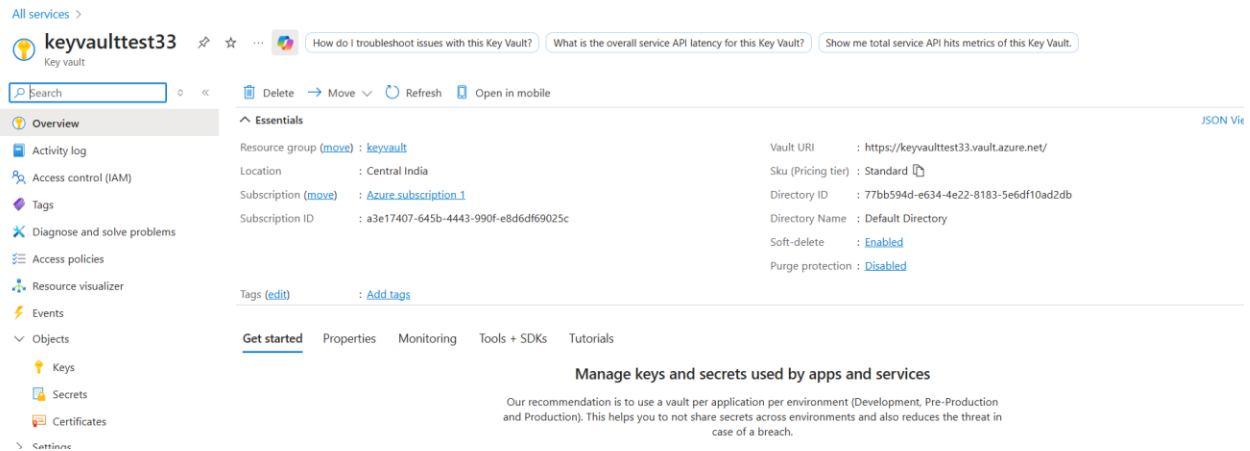|	
Subscription *	Azure subscription 1 ⌄
Resource group *	(New) keyvault ⌄
	Create new

Instance details

Key vault name * ⓘ	keyvaulttest33 ✓
Region *	Central India ⌄
Pricing tier * ⓘ	Standard ⌄

4. Note replace xxxx to find a unique name.

5. Click Review + create, and then click Create.

6. Once the new key vault is provisioned, click Go to resource. Or you can locate
your new key vault by searching for it.

7. Click on the key vault Overview tab and take note of the Vault URI. Applications
that use your vault through the REST APIs will need this URI.

All services >

keyvaulttest33
Key vault

Overview | Activity log | Access control (IAM) | Tags | Diagnose and solve problems | Access policies | Resource visualizer | Events | Objects | Keys | Secrets | Certificates | Settings

Essentials — JSON View

Resource group (move) : keyvault
Location : Central India
Subscription (move) : Azure subscription 1
Subscription ID : a3e17407-645b-4443-990f-e8d6df69025c

Vault URI : https://keyvaulttest33.vault.azure.net/
Sku (Pricing tier) : Standard
Directory ID : 77bb594d-e634-4e22-8183-5e6df10ad2db
Directory Name : Default Directory
Soft-delete : Enabled
Purge protection : Disabled

Tags (edit) : Add tags

Get started   Properties   Monitoring   Tools + SDKs   Tutorials

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.

8. Take a moment to browse through some of the other key vault options. Under Settings review Keys, Secrets, Certificates, Access Policies, Firewalls and virtual networks. Note: Your Azure account is the only one authorized to perform operations on this new vault. You can modify this if you wish in the Settings and then the Access policies section.

Task 2: Add a secret to the Key Vault:

In this task, we will add a password to the key vault.

1. Under Settings click Secrets, then click + Generate/Import.

2. Configure the secret. Leave the other values at their defaults. Notice you can set an activation and expiration date. Notice you can also disable the secret. Setting Value Upload options Manual Name Example Password Value hVFkk96

🔐 Create a secret ···

Upload options	Manual ⌄
Name * ⓘ	ExamplePassword ✓
Secret value * ⓘ	•••••••• ✓
Content type (optional)	
Set activation date ⓘ	☐
Set expiration date ⓘ	☐
Enabled	Yes No
Tags	0 tags

Create   Cancel

---

3. Click Create.

4. Once the secret has been successfully created, click on the ExamplePassword, and note it has a status of Enabled

4. Select the secret you just created, note the Secret Identifier. This is the url value that you can now use with applications. It provides a centrally managed and securely stored password.

db5a9eeab53e4a3ebb2b7137a311deb4 📌 ⋯
Secret Version

Properties

Created	11/6/2025, 5:35:06 PM
Updated	11/6/2025, 5:35:06 PM
Secret Identifier	https://keyvaulttest2280133.vault.azure.net/secrets/ExamplePassword/...

Copy to clipboard

Settings

Set activation date ⓘ ☐

Set expiration date ⓘ ☐

Enabled [Yes   No]

Tags 0 tags

Secret

Content type (optional)

Show Secret Value

Secret value

---

5. Click the button Show Secret Value, to display the password you specified earlier.

Tags 0 tags

Secret

Content type (optional)

Hide Secret Value

Secret value hVFkk96

[Apply] [Discard changes] [Close]