

# **Lab: Manage and configure the secrets in Azure Key Vault**

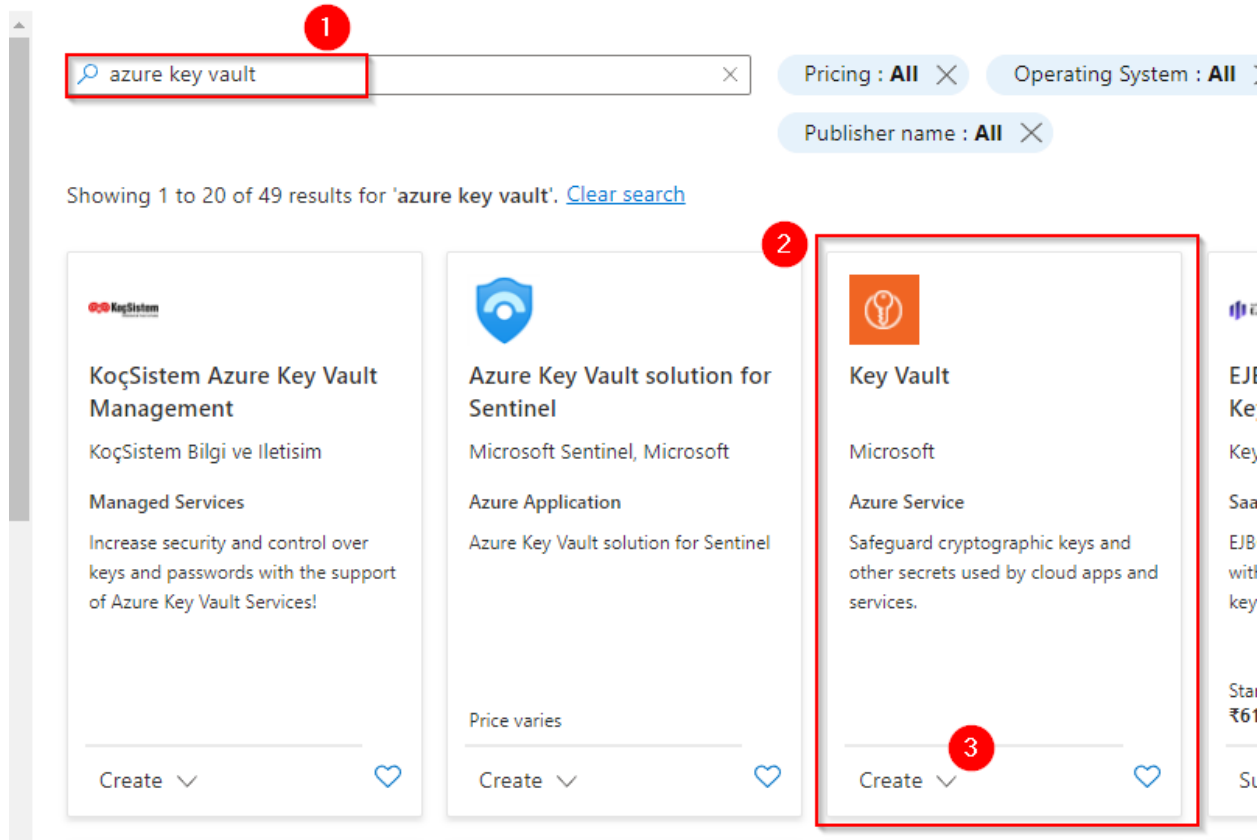
Duration: 20 minutes

The main task for this exercise is as follows:

1. Create a key vault
2. Assign access policy in AKV for Synapse workspace
3. Access secret from key vault to create linked service

## Task 1: Create a key vault

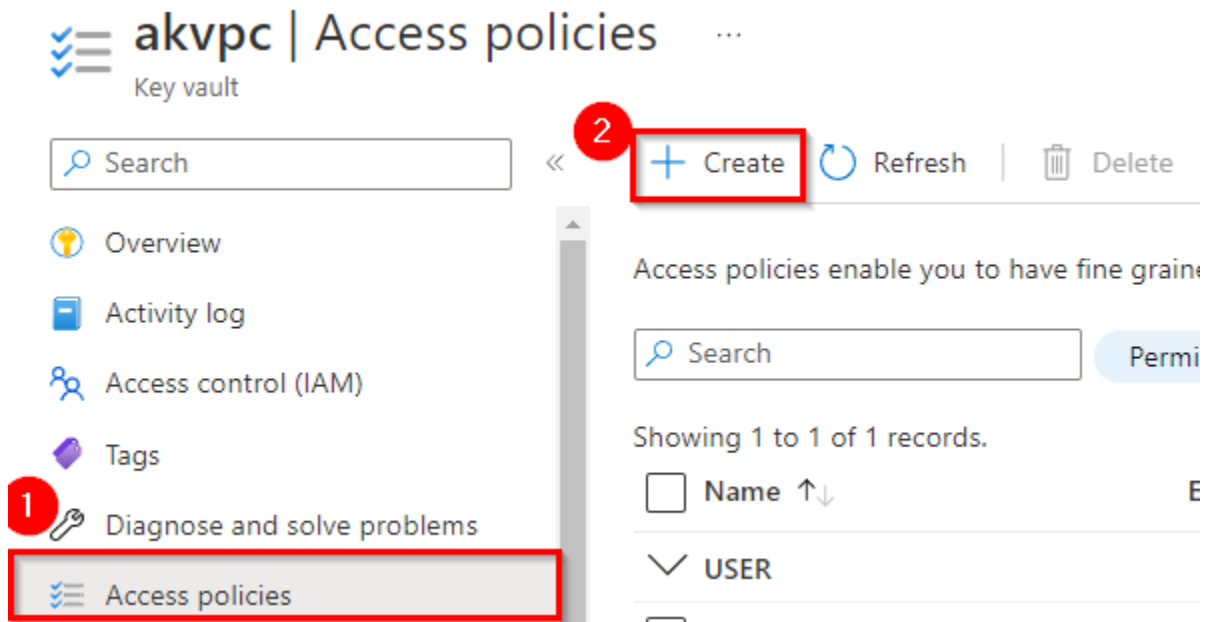
1. In the Azure portal, navigate to the **+ Create a resource** blade.
2. In the New screen, click the **Search services and marketplace** text box, and type the word **Key Vault**. Click **Azure Key Vault** in the list that appears.
3. In the **Key Vault** screen, click **Create**.



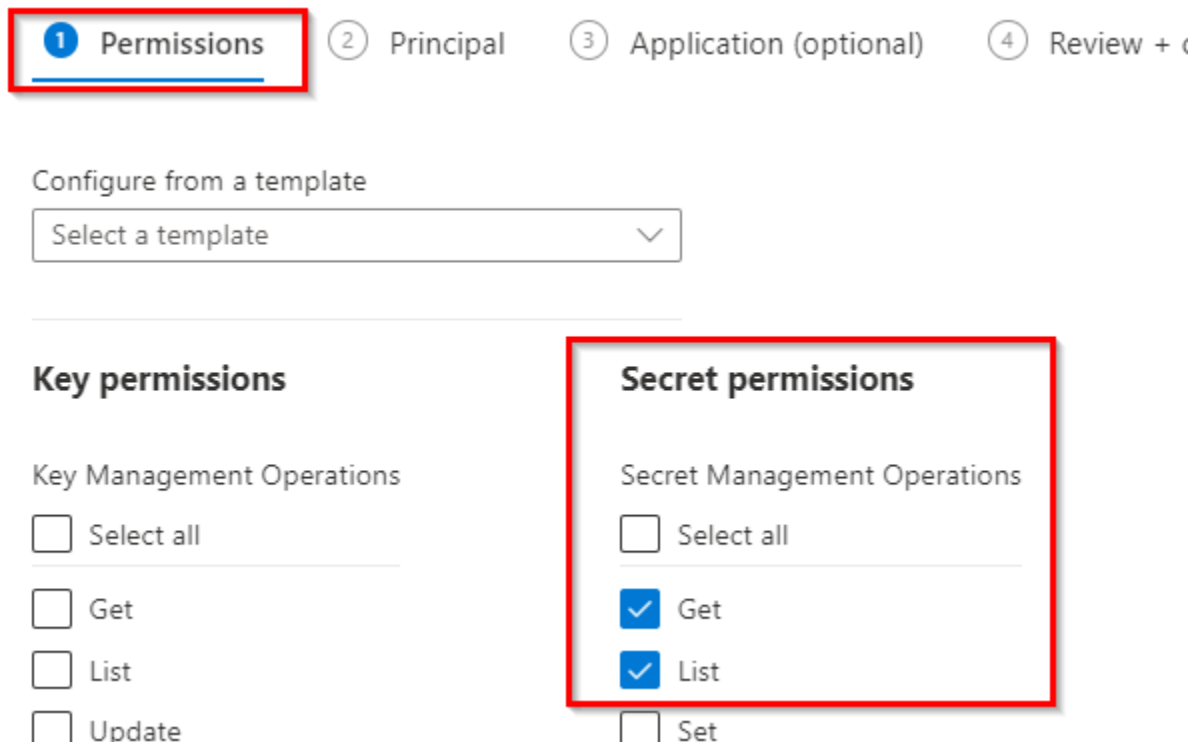
4. In Basic Tab fill the following details:
  - a. Resource Group: synapse-xx-rg, where xx is your initials
  - b. Key vault name: akvxx
  - c. Region: same as the resource group
  - d. Pricing Tier: Standard
  - e. Click on Review + create and create

## Task 2: Assign access policy in AKV for Synapse workspace

1. In azure portal, go to **synapse-xx-rg** resource group and click on **akvxx** key vault.
2. Select **Access policies** in key vault and then click in **+ Create**



3. In permission tab select **Secret permission** for **Get & List**. Then click **Next**



4. In **Principal Tab**, type synapse in the search box and select your synapse workspace name and then select **Next**.

## Create an access policy


akvpc

1 2 3 4

✓ Permissions 2 **Principal** 3 Application (optional) 4 Review + create

Only 1 principal can be assigned per access policy.  
Use the new embedded experience to select a principal. The previous popup experience can't be used.

2

3  **synapse-pc**  
dca94e62-584f-4ab8-b02b-c282dd9de751

5. Then Go Next -> Next -> Create

6. Verify that workspace is listed in Access Policies with Get & List Secret Permissions.

## akvpc | Access policies

Key vault

Overview  
Activity log  
Access control (IAM)  
Tags  
Diagnose and solve problems  
**Access policies**  
Events

+ Create Refresh Delete Edit

Access policies enable you to have fine grained control over who can access your key vault.

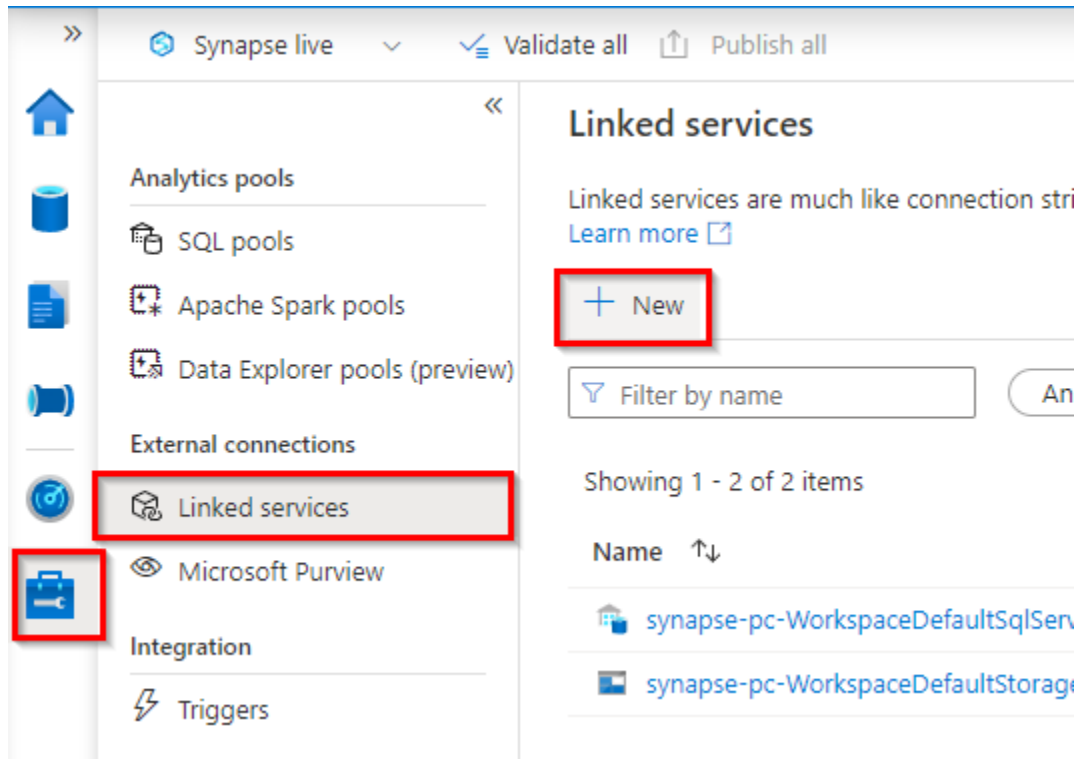
Permissions

Showing 1 to 2 of 2 records.

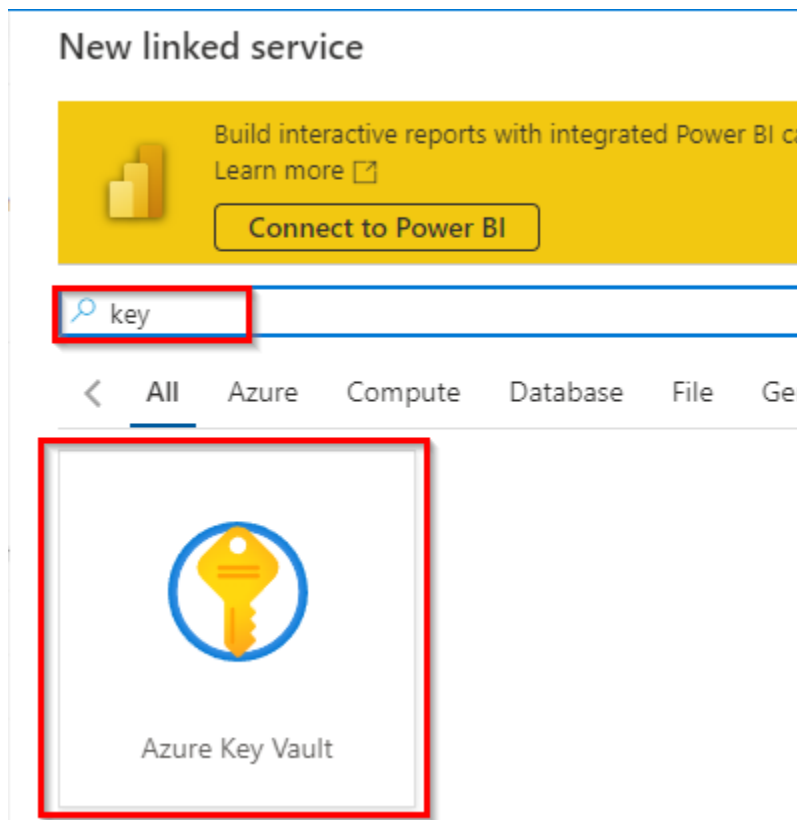
<input type="checkbox"/>	Name ↑↓	Email 1
<input checked="" type="checkbox"/>	APPLICATION	
<input type="checkbox"/>	synapse-pc	
<input checked="" type="checkbox"/>	USER	

## Task 3: Access secret from key vault to create linked service

1. Go Back to Synapse Studio, if already open or open it <https://web.azuresynapse.net/>
2. Click on Manage hub -> Linked Service -> + New



3. Search for Key Vault and select the **Azure Key Vault** and click **Continue**.



4. Provide the following details.

- a. Name: **AzureKeyVault**
- b. Azure key vault selection method: **From Azure subscription**
  - Azure Subscription: **Select you subscription**
  - Azure Key Vault Name: **akvxx**
- c. Authentication method: **System Assigned Managed Identity**
- d. Leave rest of the setting to default.
- e. Click on Test Connection, if successful the click on create.

**New linked service**  
Azure Key Vault

Name \* 1

Description

Azure key vault selection method 2  
☒ From Azure subscription ☐ Enter manually

Azure subscription 3

Azure key vault name \* 4  
 [Edit key vault](#)

Authentication method 5

Managed identity name: **synapse-pc**  
Managed identity object ID: **93fa77b0-ea7c-435e-b3d0-e5695b48f444**  
Grant workspace service managed identity access to your Azure Key Vault. [Learn more](#)

Test connection  
☒ To linked service ☐ To secret

Annotations  
[+ Add...](#)

7

6   ✓ Connection successful

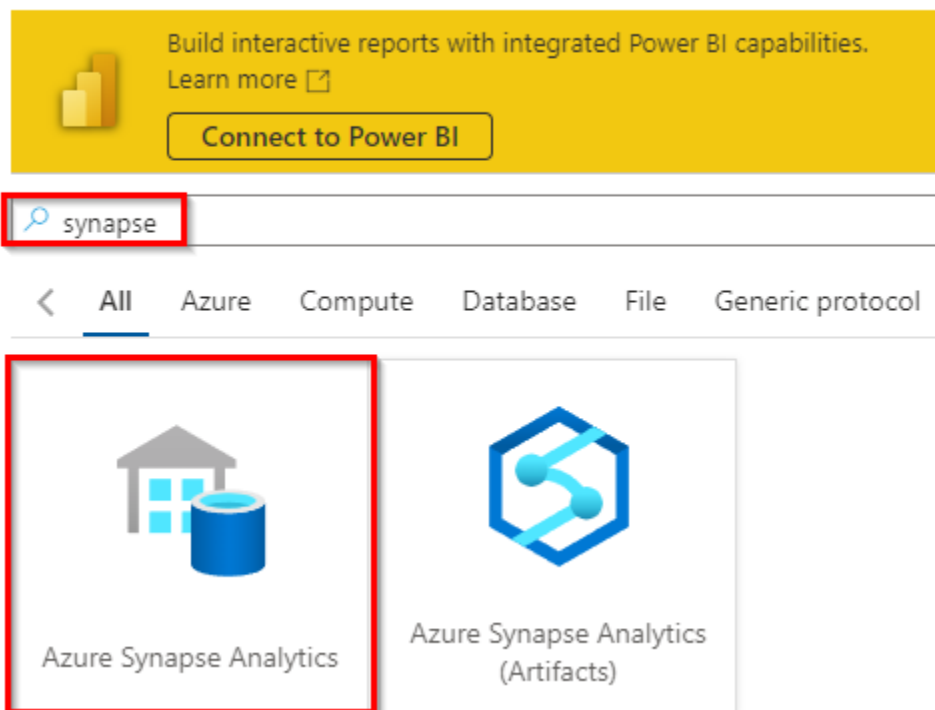
5. Click on Publish All to save changes.

6. Go back to portal, In resource group synapse-pc-rg, open akvxx.
7. In Object, click secret -> + Generate/Import and provide the following details.
  - a. Upload option: **Manual**
  - b. Name: **SQL-USER-PWD**
  - c. Secret Value: Enter the password of Dedicated SQL Pool. (P@55w.rd123)
  - d. **Click Create**

## Create a new Linked Service for Dedicated SQL Pool

1. In Synapse studio, Click on Manage hub -> Linked Service -> + New
2. Search for synapse and select the **Azure Synapse Analytics** and click **Continue**.

### New linked service



3. Provide the following details.
  - a. Name: AzureSynapseAnalytics
  - b. Connect via integration runtime: AutoResolveIntegrationRuntime
  - c. Account selection method
    - Azure subscription: Select your subscription
    - Server name: Your workspace name

- Database Name: SQLPool01
- Authentication type: SQL Authentication
- User name: sqladminuser
- Password: Azure Key Vault
  - AKV linked service: AzureKeyVault
  - Secret name: SQL-USER-PWD
  - Secret version: Latest version

d. Test Connect and Create

Note: If your Dedicate SQL Pool is paused test connection will failed, you can create the linked service but test it later.

4. Click on **Publish All** to save changes

This linked service we can use to create datasets for Synapse pipeline or Mapping Data flow.