



AZURE STORAGE EXPLORER

(USING ACCESS KEYS)

Access keys in Azure are a means of securing and authenticating access to your Azure Storage account. Each storage account has two access keys, which can be used to authorize access to data within your account programmatically. Here's an overview of what access keys are and how they work:

Key Features of Access Keys:

1. Authentication:

- Access keys are used to authenticate requests made to Azure Storage services, ensuring that only authorized users and applications can access your storage resources.

2. Authorization:

- By including the access key in the request, you authorize operations such as reading, writing, and deleting data within your storage account.

3. Two Keys:

- Azure provides two access keys (Key1 and Key2) for each storage account. This allows you to regenerate keys periodically without downtime, ensuring continuous access.

4. Use Cases:

- **Programmatic Access:** Access keys are often used in code or scripts to authenticate and interact with Azure Storage services.
- **Service Integration:** They can be used to integrate Azure Storage with other services and tools that require authenticated access.

Security Considerations:

1. Keep Keys Secure:

- Access keys should be treated like passwords. Keep them secure and avoid sharing them unnecessarily.

2. Regenerate Periodically:

- Regularly regenerate your access keys to enhance security. Azure allows you to regenerate one key while still using the other, preventing downtime.

3. Use Shared Access Signatures (SAS):

- Instead of using access keys directly in your applications, consider using SAS tokens. SAS provides more granular and time-limited access to your storage resources.

4. Monitor and Audit:

- Monitor the usage of your access keys and regularly audit access to ensure that only authorized users and applications have access.

Steps to Retrieve Access Keys:

1. Navigate to Storage Account:

- In the Azure Portal, go to your storage account.

2. Access Keys Section:

- In the storage account settings, find the "Access keys" section under "Security + networking".

3. View and Copy Keys:

- Here, you can view and copy Key1 and Key2. You can also regenerate keys from this section.



What are we doing in this lab?

The steps below provide a guide on how to use Azure Storage Explorer to connect to and manage your Azure Storage account using a connection string. Here's a brief summary of the process and its goals:

1. Create an Azure Storage Account:

- Login to the Azure Portal and create a new storage account.
- Upload some temporary files to your Blob Storage within this account.

2. Open and Set Up Azure Storage Explorer:

- Launch Azure Storage Explorer on your desktop.
- Click on the "Switch Logo" or "Connect to Azure Storage" to start the connection process.
- Select "Storage account or service" as the connection method.

3. Connect Using Connection String:

- On your Azure Storage account page, navigate to the "Access Keys" section.
- Copy the Storage Account name and Connection String from either Key 1 or Key 2.
- Paste the Connection String into Azure Storage Explorer and proceed with the connection.

4. Verify Connection and Manage Storage:

- Confirm the account name and key in Azure Storage Explorer and continue.
- After connecting, check the status at the bottom to ensure the connection is successful.
- You can now perform various operations on your storage account using Azure Storage Explorer. These changes will be reflected in your Azure Storage account in the Azure Portal.

End Goal

The main objective of this process is to demonstrate how to connect Azure Storage Explorer to your Azure Storage account using a connection string. This setup allows you to efficiently manage your storage resources through a graphical user interface. You can perform tasks such as uploading, downloading, organizing files, and other storage operations, with all changes synchronized between Azure Storage Explorer and your Azure Storage account.

To begin with the Lab:

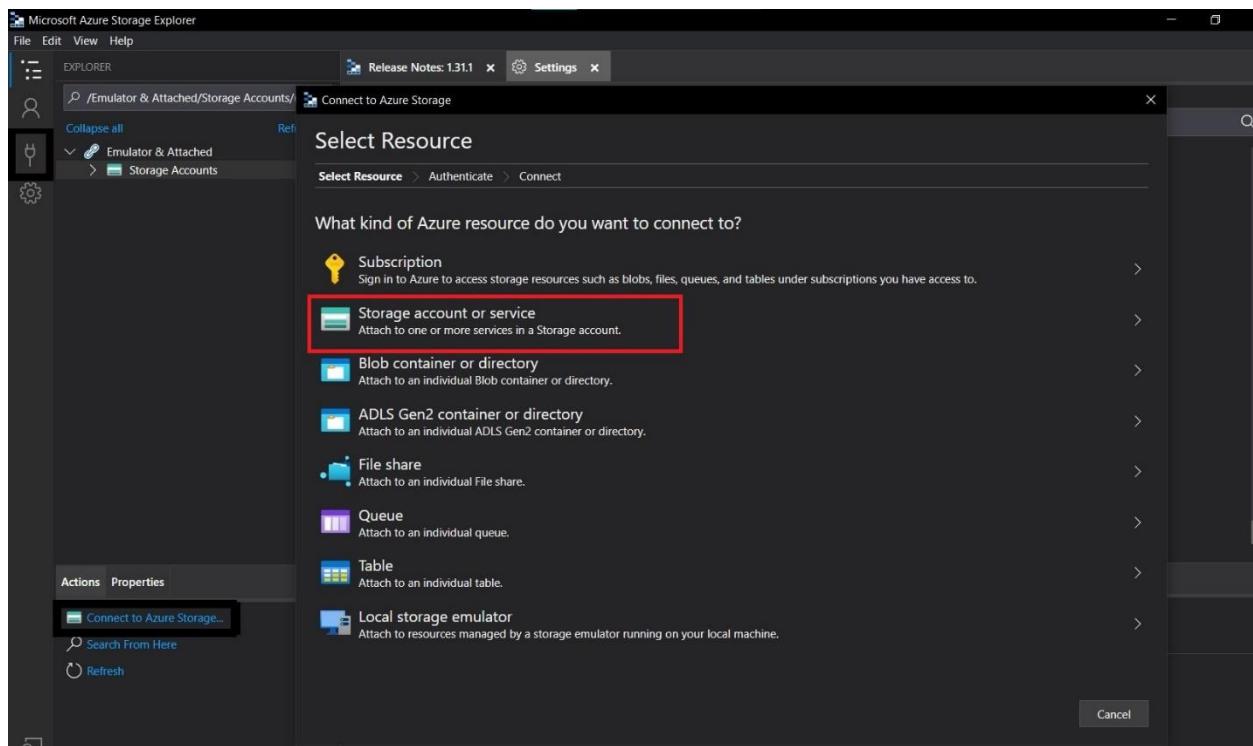
Login to Azure Portal and create a Storage Account.

 **Step 1:** For this Activity it's mandatory to have an Azure Storage Account.

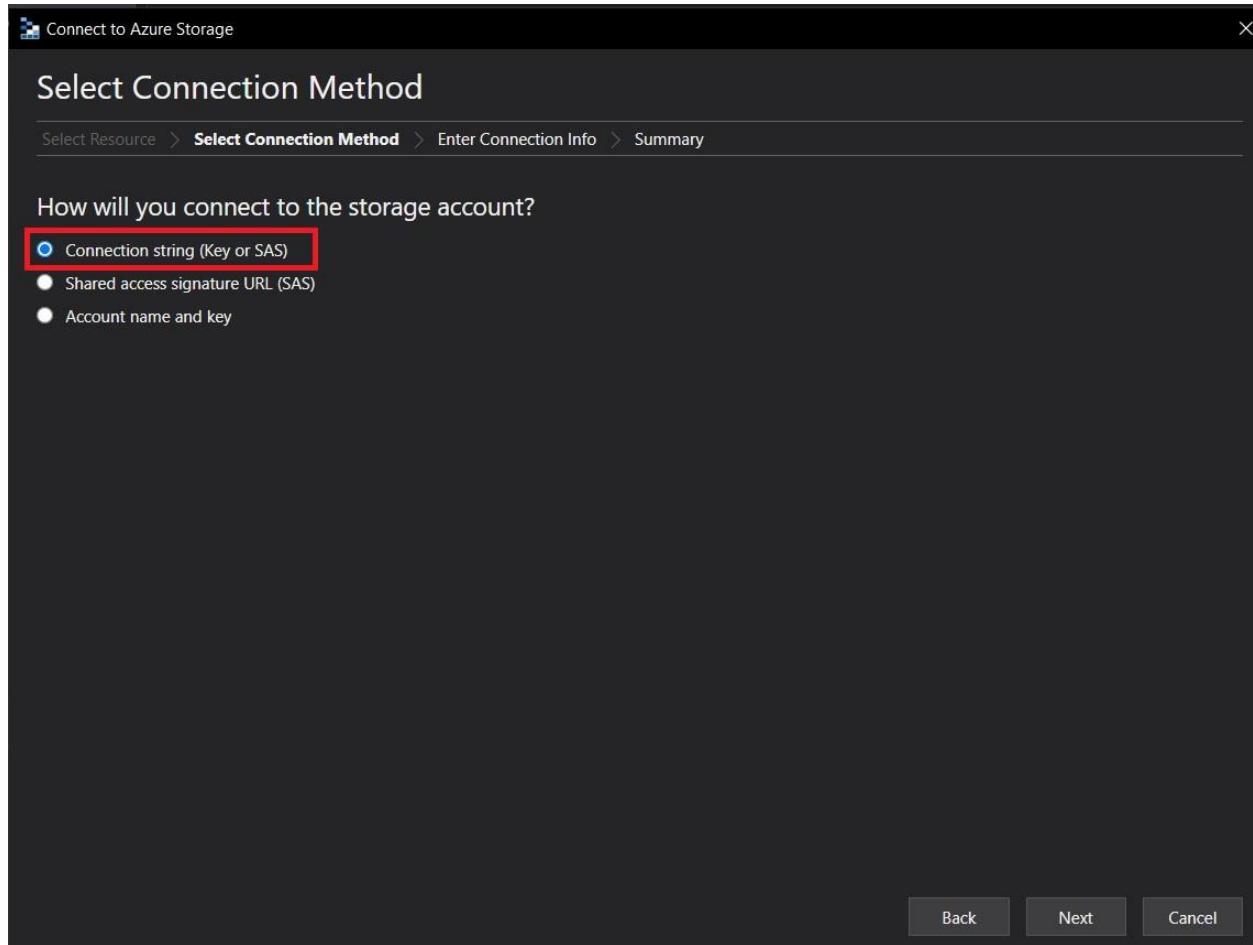
- Upload some Temporary files in your Blob Storage.

Step 2: Open Azure Storage Explorer, open Explorer, and Click on Switch Logo/ Connect to Azure Storage.

- Select Storage account or Service.



- As of now, we will connect using the key. Choose the Connection string and Click on Next.
- The same thing will work for the Account name and key Connection method.



👉 **Step 3:** On your Azure Storage Account page, scroll down on left-hand side pane and click on Access Keys. Copy the Storage Account name and Connection String.

- Here you have two options Key 1 & Key 2. You can go with any one of them.

The screenshot shows the 'Access keys' section of the Azure Storage account 'iisscript'. It displays two keys: 'key1' and 'key2'. Key1 was last rotated on 8/21/2023. Its connection string is partially visible. Key2 was also last rotated on 8/21/2023. Both keys have their connection strings hidden.

Step 4: Paste on the Text Box and Click on Next.

The screenshot shows the 'Enter Connection Info' dialog in the Microsoft Azure Storage Explorer. The 'Display name' field contains 'iisscript'. The 'Connection string' field contains a long, redacted connection string starting with 'DefaultEndpointsProtocol=https;AccountName=iisscript...'. This connection string is highlighted with a red box.

- Confirm the Account Name and Key, Click on Continue.

Connect to Azure Storage

Summary

Select Resource > Select Connection Method > Enter Connection Info > **Summary**

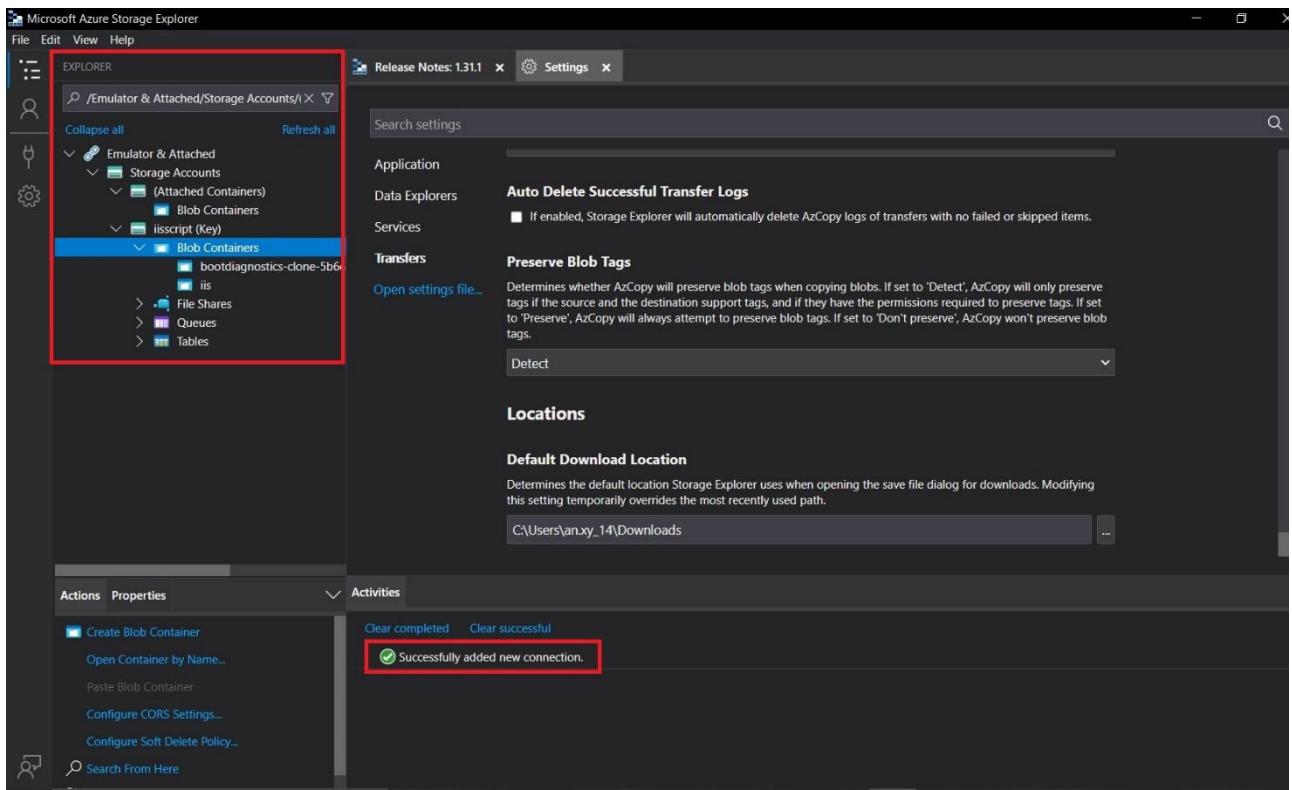
The following settings will be used to connect to your resource:

Display name:	iisscript
Account name:	iisscript
Account key:	+eZoTCKTiLxJ6dYs3v8wfKO: eGbNdum8uUNfsm+pYwltn+AStBiCHzA==
Default endpoints protocol:	https

 Make sure you only connect to resources you trust.

Back **Connect** **Cancel**

 **Step 5:** Soon after connecting, See the status at the bottom. Now, you have full access to your Storage Account.



- You can now Perform any operations in your storage account using Storage Explorer and the changes will also be reflected in your azure storage account too.