

# Setting up Azure Data Lake Gen2 with Storage Explorer

## Step 1: Set Up Azure Storage Account with Data Lake Gen2

1. Login to Azure Portal.
2. Click “Create a Resource” → “Storage” → “Storage Account”.
3. Fill in the Basics:
  - o Subscription: Choose your subscription.
  - o Resource Group: Create or select one.
  - o Storage Account Name: e.g., hexastorageaz
  - o Region: Choose closest region to you.(Central India)
  - o Performance: Standard
  - o Redundancy: LRS (Locally Redundant Storage)
4. Click on the Advanced tab.
5. Enable Hierarchical Namespace (This turns it into Data Lake Gen2).

The screenshot shows the 'Create a storage account' wizard in the Microsoft Azure portal. The 'Project details' section is visible, showing the selected subscription ('MML Learners') and resource group ('rg-azuser4021\_mml.local-f1NgE'). The 'Instance details' section is also visible, showing the storage account name ('hexastorageaz'), region ('(Asia Pacific) Central India'), and redundancy ('Locally-redundant storage (LRS)'). The 'Performance' section shows 'Standard' selected as the primary service. At the bottom, there are navigation buttons for 'Previous', 'Next', 'Review + create', and a search bar.

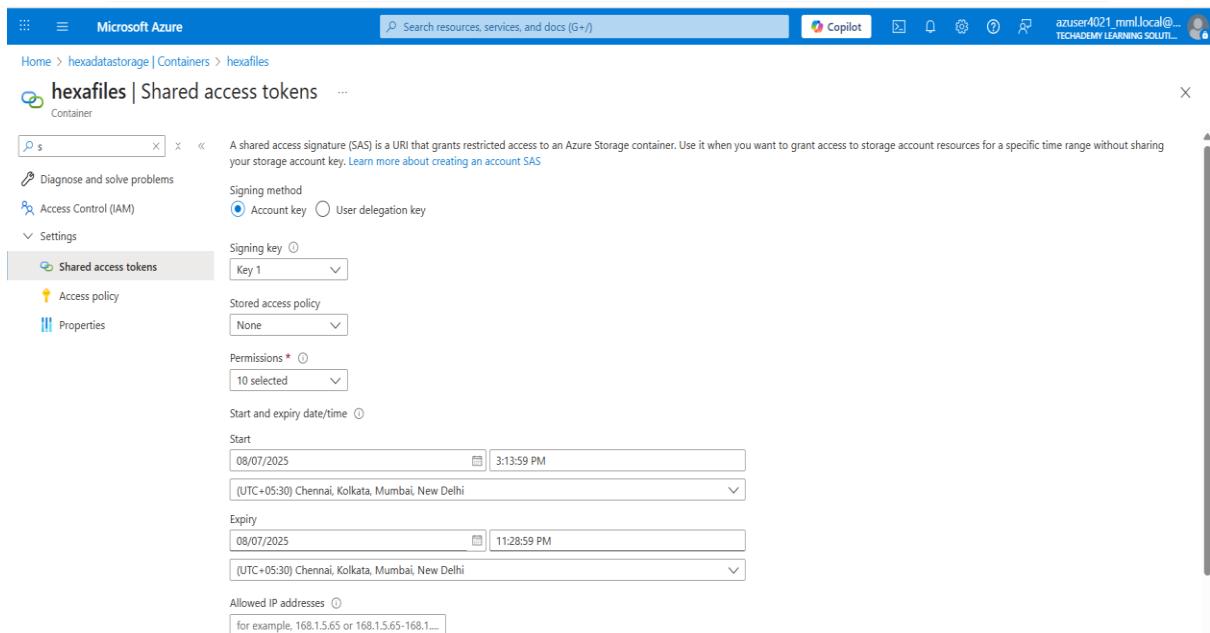
6. Review and hit Create.

## Step 2: Download & Install Azure Storage Explorer

1. Go to: <https://azure.microsoft.com/en-us/features/storage-explorer/>
2. Download and install it based on your OS (Windows, macOS, Linux).
3. Launch the app.

## Step 3: Connect Azure Storage Explorer to Your Azure Account

1. Open Azure Storage Explorer.
2. Click the plug icon (Manage Accounts) on the left.
3. Choose: "Add an Account" → Sign in to your Azure account.
4. Select the subscription where your storage account was created.
5. Now your storage account will appear in the Explorer view.



## Step 4: Create a File System (Blob Container)

1. In the left pane:
  - o Expand: Subscriptions > Storage Accounts > Blob Containers.
2. Right-click Blob Containers → "Create Blob Container".
3. Name it hexafiles → Press Enter.
4. Double-click on hexafiles to open it.

Home > hexadatastorage | Containers > hexafiles

### hexafiles | Shared access tokens

Container

s

Signing key

Key 1

Diagnose and solve problems

Access Control (IAM)

Settings

Shared access tokens

Access policy

Properties

Permissions \* 10 selected

Start and expiry date/time

Start: 08/07/2025 3:13:59 PM (UTC+05:30) Chennai, Kolkata, Mumbai, New Delhi

Expiry: 08/07/2025 11:28:59 PM (UTC+05:30) Chennai, Kolkata, Mumbai, New Delhi

Allowed IP addresses: for example, 168.1.5.65 or 168.1.5.65-168.1...

Allowed protocols:  HTTPS only  HTTPS and HTTP

Generate SAS token and URL

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Generate SAS token and URL

Blob SAS token: sp=racwdlmeop&st=2025-08-07T09:43:59Z&se=2025-08-07T17:58:59Z&spr=https&sv=2024-11-04&sr=c&sig=clyaz25etilMnglnQ32StE3JN5DnWMQpW2BxraDy0B%zB30%3D

Blob SAS URL: https://hexadatastorage.blob.core.windows.net/hexafiles?sp=racwdlmeop&st=2025-08-07T09:43:59Z&se=2025-08-07T17:58:59Z&spr=https&sv=2024-11-04&sr=c&sig=clyaz25etilMnglnQ32StE3JN5DnW...

## Step 5: Create Folders Inside the Blob Container

1. Inside hexafiles, click "New Folder" from the top menu.
2. Name the folder sample.
3. Double-click into sample.
4. Again, click "New Folder" → name it data.

Final structure: hexafiles /sample/data

Microsoft Azure Storage Explorer

File Edit View Help

EXPLORER

Get Started hexadatastorage hexafiles

Get Started

Sign in with Azure

Sign in with your Azure account to access all of your Azure resources.

Attach to a resource

Don't have permissions to access Azure subscriptions? You can connect to individual storage resources using various authentication methods.

Tasks

View Azure resources

See your subscriptions and Azure resources all in one place.

Manage accounts and subscriptions

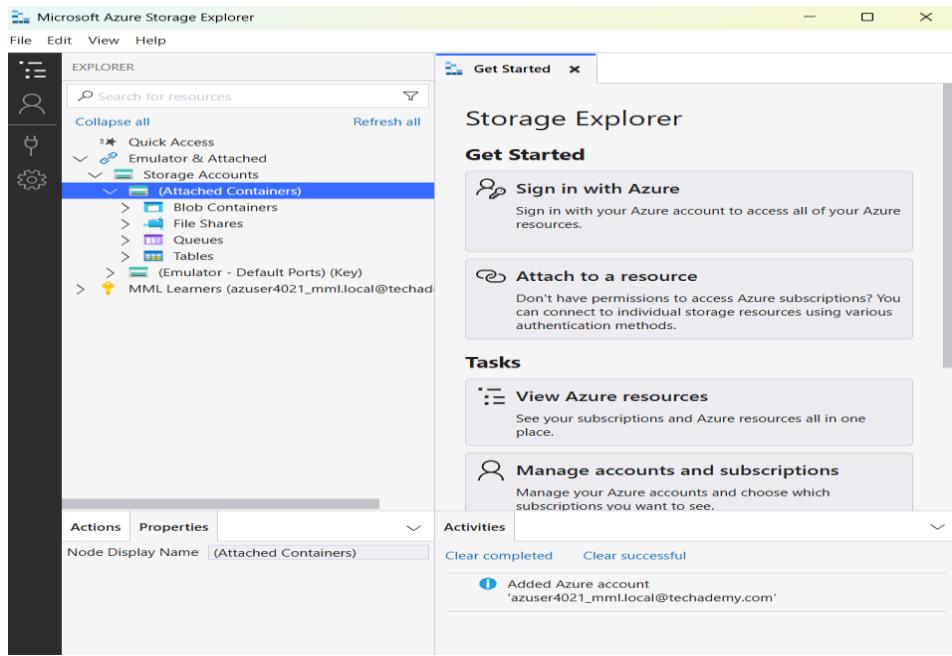
Manage your Azure accounts and choose which subscriptions you want to see.

Connect to Azure resources

Sign into Azure or attach to individual storage resources.

Show this page on startup

Actions Properties Activities



## Step 6: Prepare a Sample File to Upload

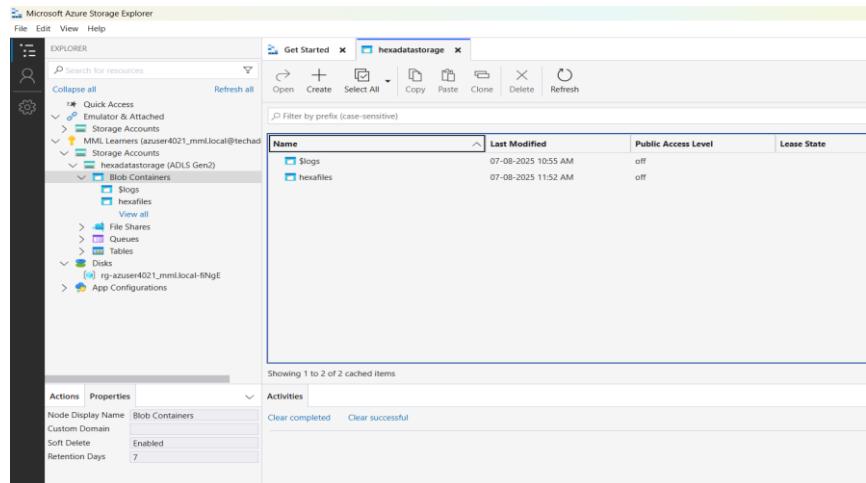
1. On your local machine, open any files that wanted to be uploaded.

## Step 7: Upload the File to Azure Data Lake (Using Storage Explorer)

1. In Storage Explorer, go to: hexadatadstorage /sample/data.
2. Click Upload > Upload Files.
3. Browse and select the file.
4. Click Upload.

Your file will appear in the data folder.

Name	Last Modified	Blob Type	Content Type
owid-energy-data.csv	07-08-2025 12:08 PM	Block Blob	text/csv



## Step 8: Download File from Azure to Local Machine

1. Right-click on the file inside Storage Explorer.
2. Click Download.
3. Choose a location on your computer to save the file.

Name	Access Tier	Access Tier Last Modified	Last Modified	Blob Type
Data lake gen 2 & Azure storage explorer.docx	Hot (inferred)	07-08-2025 03:38 PM	07-08-2025 03:38 PM	Block Blob
owid-energy-data.csv	Hot (inferred)	07-08-2025 12:08 PM	07-08-2025 12:08 PM	Block Blob

Name	Last modified	Access tier	Blob type	Size	Lease state
Data lake gen 2 & Azure storage explorer.docx	8/7/2025, 3:38:38 PM	Hot (Inferred)	Block blob	668.09 KB	Available
owid-energy-data.csv	8/7/2025, 12:08:34 PM	Hot (Inferred)	Block blob	8.03 MB	Available

## Tasks completed:

- Created a Data Lake Gen2 account.
- Connected it using Azure Storage Explorer.
- Built a folder structure.
- Uploaded and downloaded files.