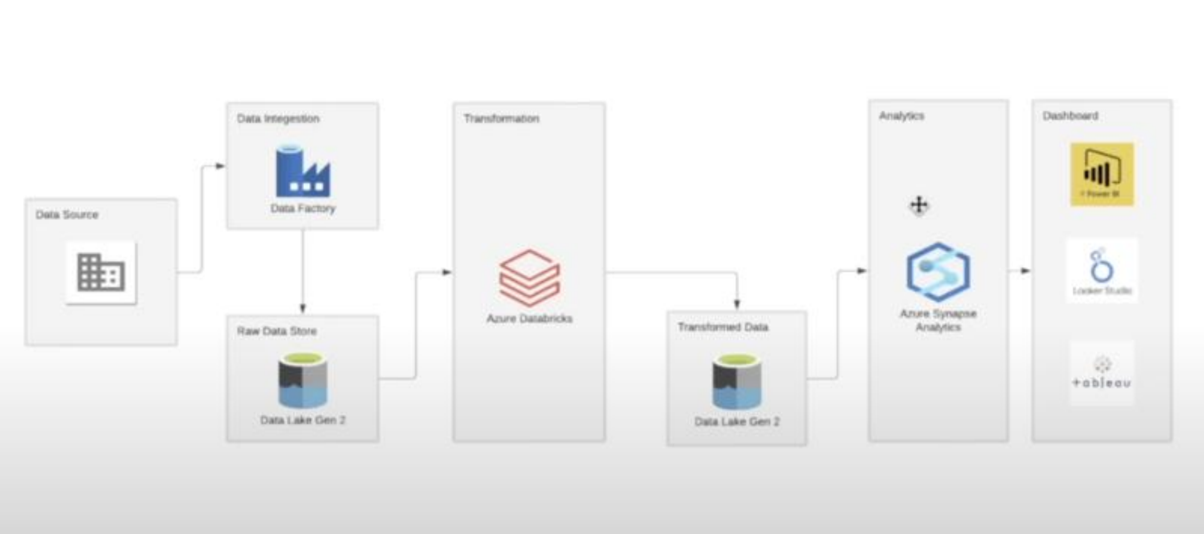
Azure End to End Data Engineering Project

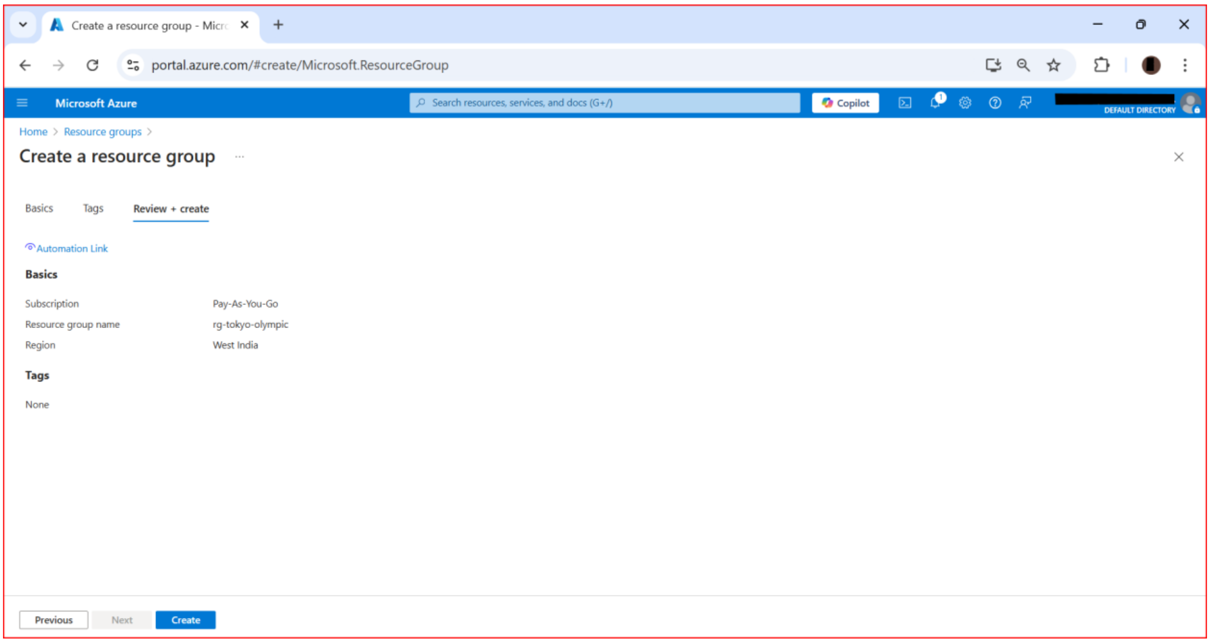
Project Flow



Steps to follow

1. Create Azure Portal Account and Login

2. Create New Resource Group


Create a resource group - Micr
portal.azure.com/#create/Microsoft.ResourceGroup
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
DEFAULT DIRECTORY
Home > Resource groups >

[redacted]

Create a resource group

Basics Tags **Review + create**

Automation Link

Basics

Subscription Pay-As-You-Go

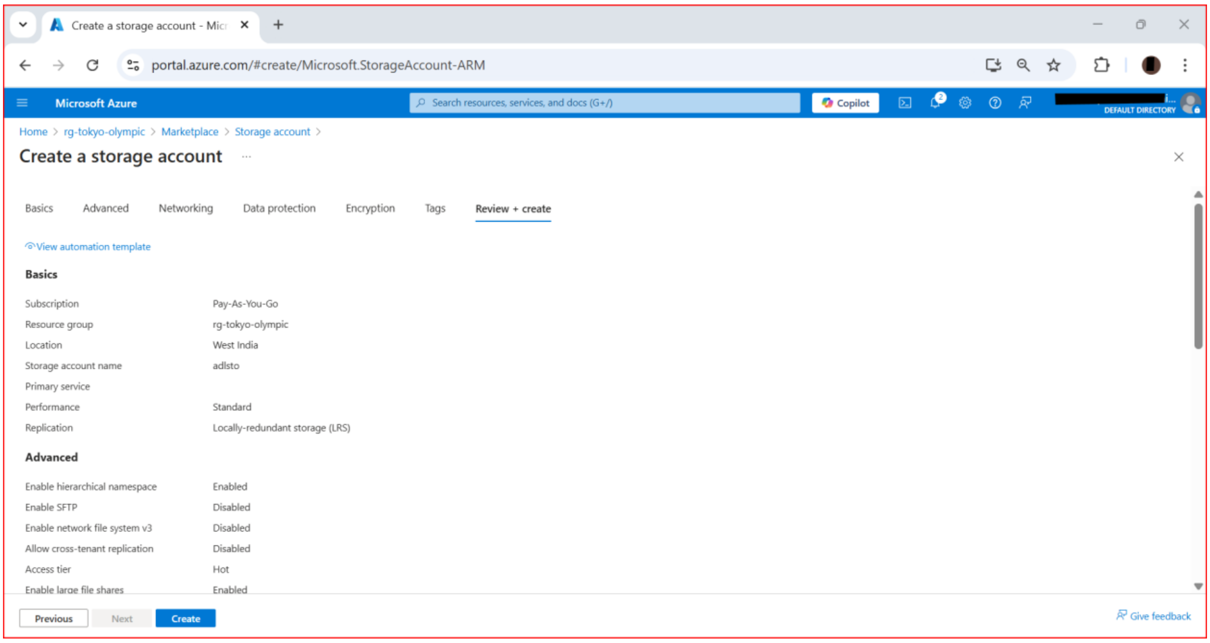
Resource group name rg-tokyo-olympic

Region West India

Tags

None

3. Goto new resource group, click create, and create Azure Data Lake Storage Gen2 Account
   Note: - Enable Hierarchical Namespace


Create a storage account - Micr
portal.azure.com/#create/Microsoft.StorageAccount-ARM
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
[redacted]
DEFAULT DIRECTORY
Home > rg-tokyo-olympic > Marketplace > Storage account >
Basics
Advanced
Networking
Data protection
Encryption
Tags
Review + create
View automation template
Previous
Next
Create
Give feedback

Create a storage account

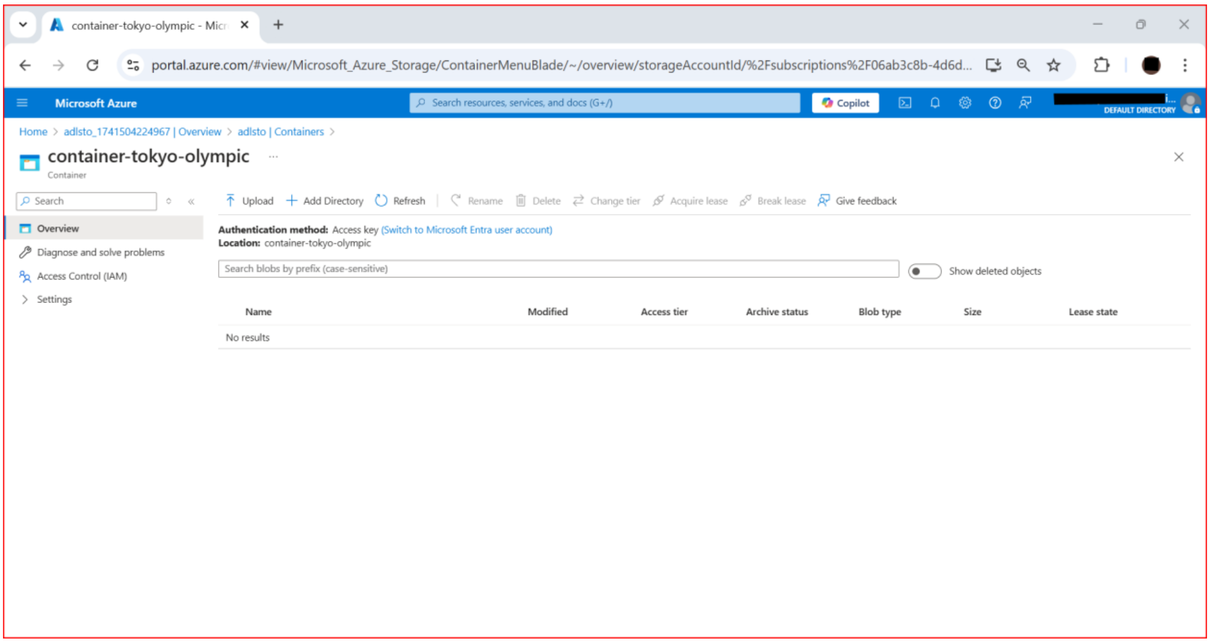
Basics

Subscription	Pay-As-You-Go
Resource group	rg-tokyo-olympic
Location	West India
Storage account name	adlsto
Primary service	
Performance	Standard
Replication	Locally-redundant storage (LRS)

Advanced

Enable hierarchical namespace	Enabled
Enable SFTP	Disabled
Enable network file system v3	Disabled
Allow cross-tenant replication	Disabled
Access tier	Hot
Enable large file shares	Enabled

4. Create container under newly created ADLS Gen2 account

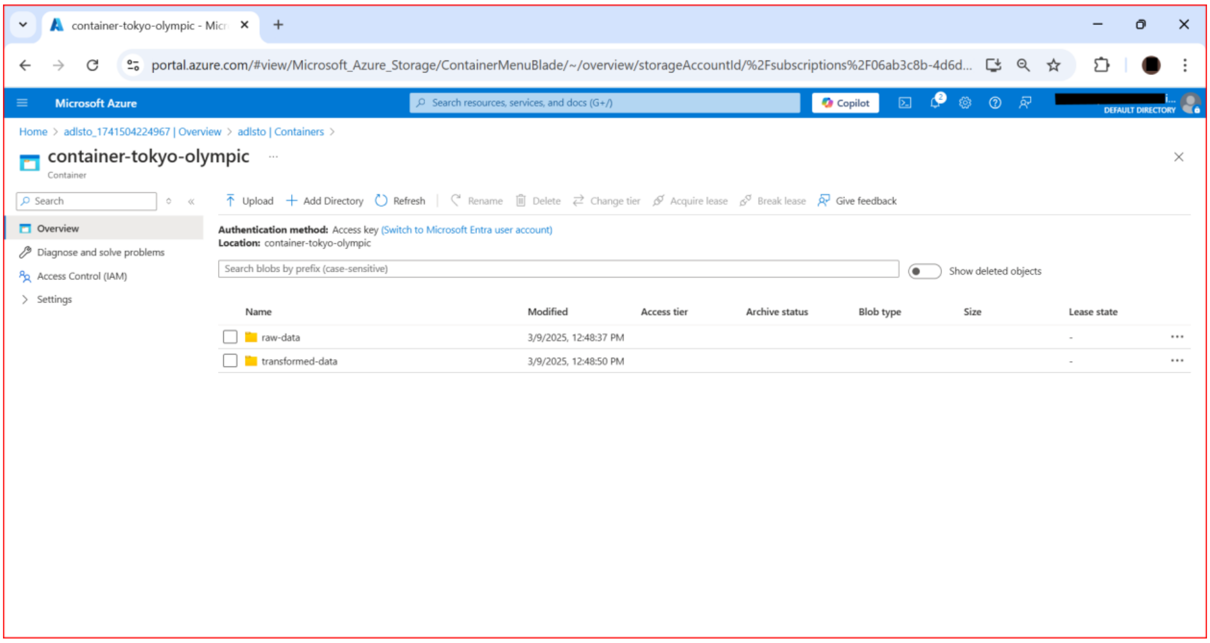

container-tokyo-olympic - Micr
portal.azure.com/#view/Microsoft_Azure_Storage/ContainerMenuBlade/~/overview/storageAccountId/%2Fsubscriptions%2F06ab3c8b-4d6d...
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
[redacted]
DEFAULT DIRECTORY
Home > adlsto_1741504224967 | Overview > adlsto | Containers >
Container
Search
Overview
Diagnose and solve problems
Access Control (IAM)
Settings
Upload
Add Directory
Refresh
Rename
Delete
Change tier
Acquire lease
Break lease
Give feedback
Search blobs by prefix (case-sensitive)
Show deleted objects

container-tokyo-olympic

Authentication method: Access key (Switch to Microsoft Entra user account)
Location: container-tokyo-olympic

Name	Modified	Access tier	Archive status	Blob type	Size	Lease state
No results						

5. Create Directories under container, raw-data, transformed-data


container-tokyo-olympic - Micr
portal.azure.com/#view/Microsoft_Azure_Storage/ContainerMenuBlade/~/overview/storageAccountId/%2Fsubscriptions%2F06ab3c8b-4d6d...
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
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DEFAULT DIRECTORY
Home > adlsto_1741504224967 | Overview > adlsto | Containers >
container-tokyo-olympic
Container
Search
Overview
Diagnose and solve problems
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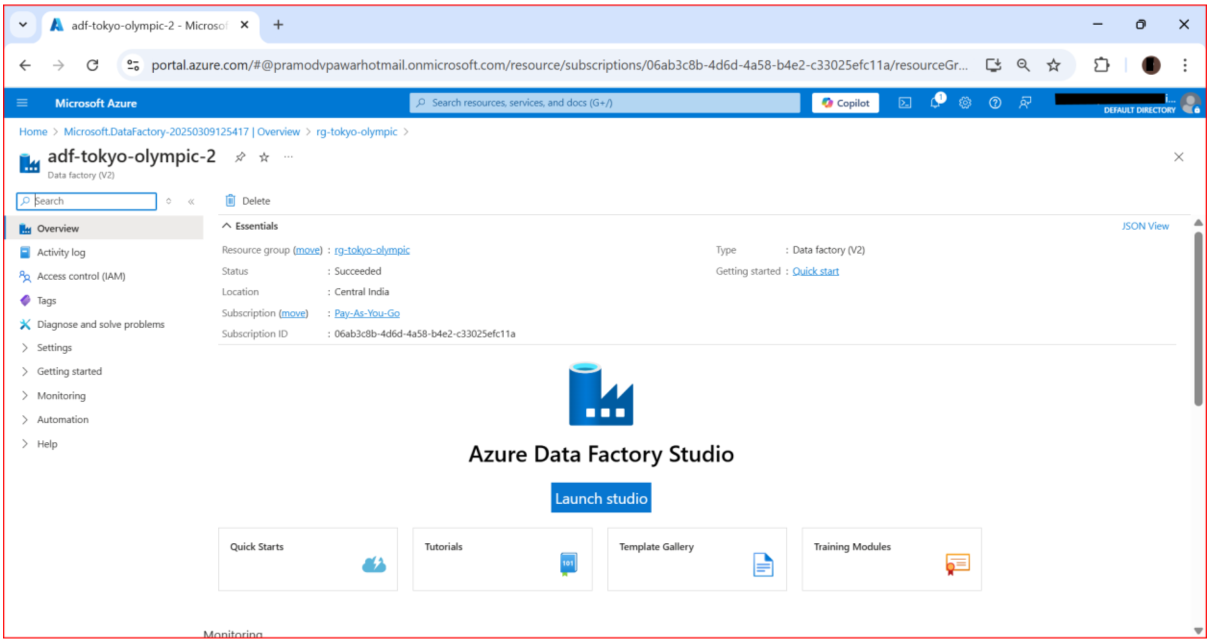
Delete
Change tier
Acquire lease
Break lease
Give feedback
Search blobs by prefix (case-sensitive)
Show deleted objects

Authentication method: Access key (Switch to Microsoft Entra user account)
Location: container-tokyo-olympic

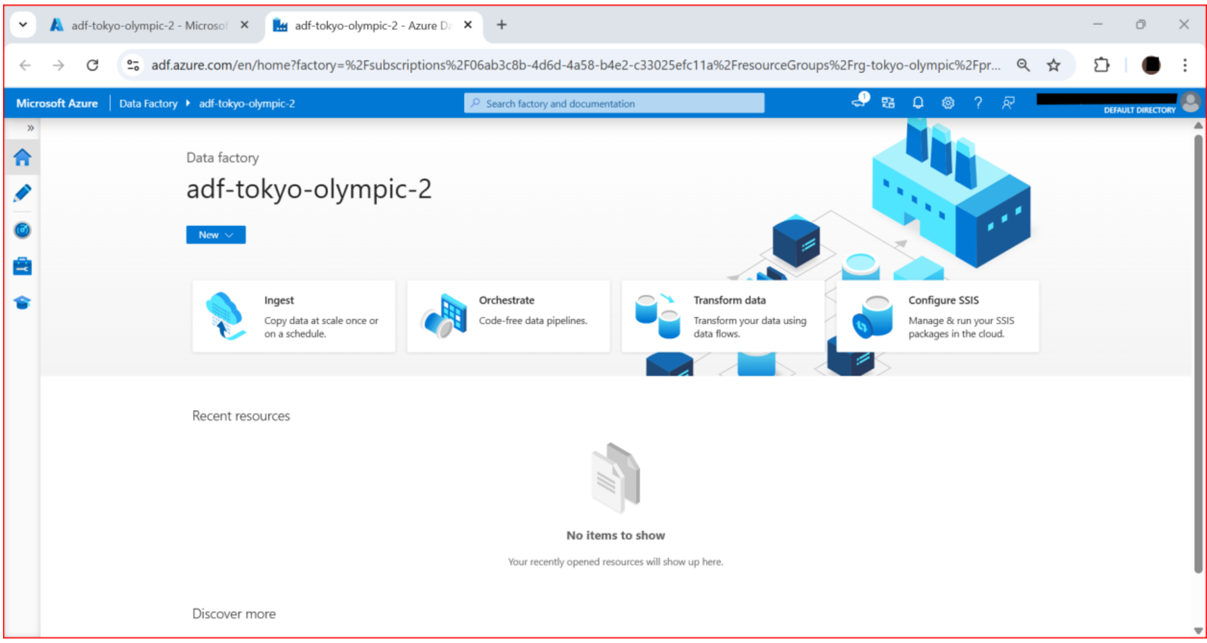
Name	Modified	Access tier	Archive status	Blob type	Size	Lease state
raw-data	3/9/2025, 12:48:37 PM					-
transformed-data	3/9/2025, 12:48:50 PM					-

6. Open Azure Data Factory to ingest data
   a. Search Data factories and create new data factory


adf-tokyo-olympic-2 - Microso
portal.azure.com/#@pramodvpawarhotmail.onmicrosoft.com/resource/subscriptions/06ab3c8b-4d6d-4a58-b4e2-c33025efc11a/resourceGr...
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
[redacted]
DEFAULT DIRECTORY
Home > Microsoft.DataFactory-20250309125417 | Overview > rg-tokyo-olympic >
adf-tokyo-olympic-2
Data factory (V2)
Search
Delete
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Getting started
Monitoring
Automation
Help
Essentials
JSON View
Azure Data Factory Studio
Launch studio
Quick Starts
Tutorials
Template Gallery
Training Modules
Monitoring

Resource group (move) : rg-tokyo-olympic
Status : Succeeded
Location : Central India
Subscription (move) : Pay-As-You-Go
Subscription ID : 06ab3c8b-4d6d-4a58-b4e2-c33025efc11a
Type : Data factory (V2)
Getting started : Quick start

   b. Launch Azure Studio


adf-tokyo-olympic-2 - Microsof
adf-tokyo-olympic-2 - Azure D
adf.azure.com/en/home?factory=%2Fsubscriptions%2F06ab3c8b-4d6d-4a58-b4e2-c33025efc11a%2FresourceGroups%2Frg-tokyo-olympic%2Fpr...
Microsoft Azure
Data Factory
adf-tokyo-olympic-2
Search factory and documentation
[redacted]
DEFAULT DIRECTORY
New

Data factory

adf-tokyo-olympic-2

Ingest — Copy data at scale once or on a schedule.

Orchestrate — Code-free data pipelines.

Transform data — Transform your data using data flows.

Configure SSIS — Manage & run your SSIS packages in the cloud.

Recent resources

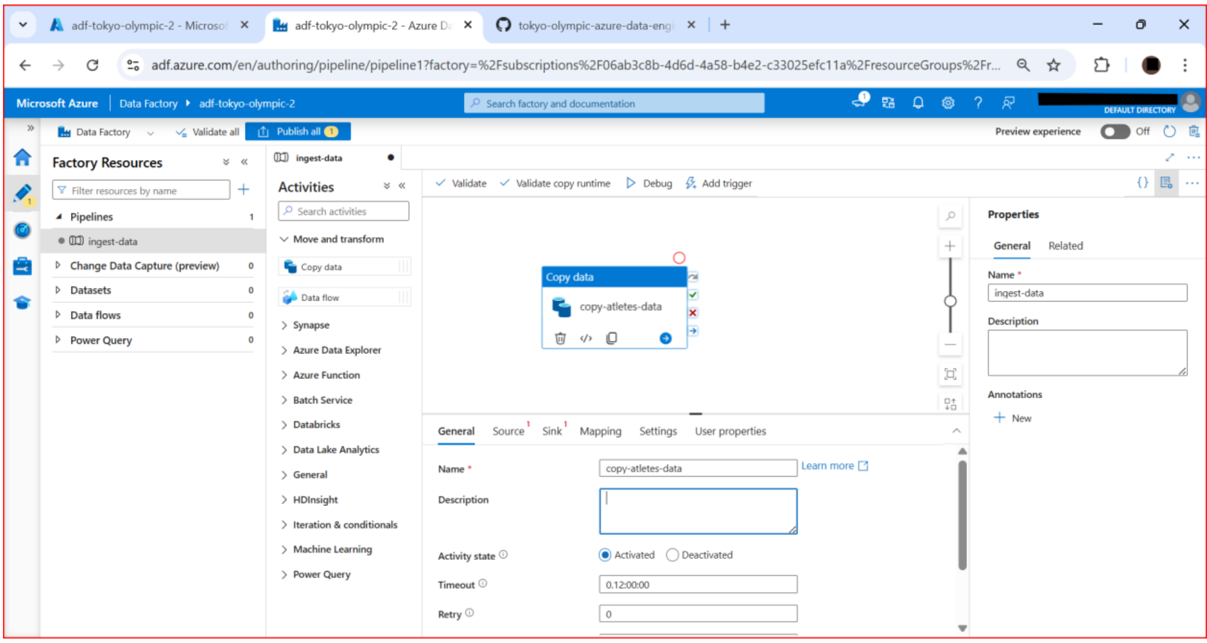
No items to show

Your recently opened resources will show up here.

Discover more

c. Create new pipeline: data-ingestion

d. Select Move and Transform → Copy Data



Name * copy-atletes-data

Description

Activity state ● Activated ○ Deactivated

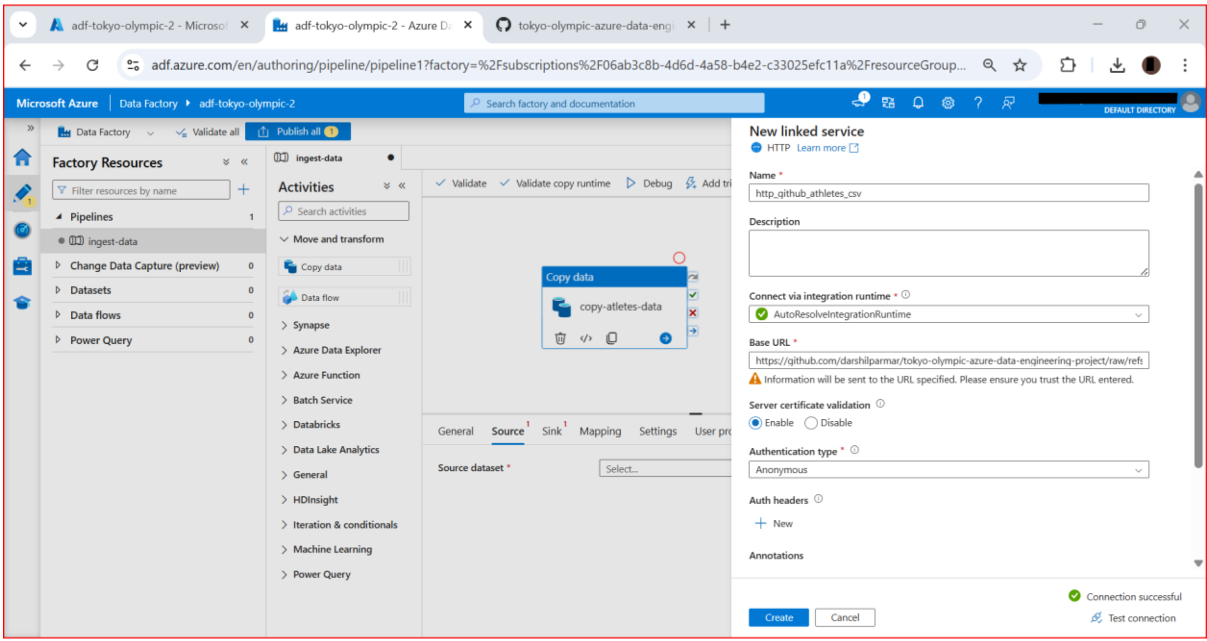
Timeout 0.12:00:00

Retry 0

Properties — Name * ingest-data

Description

e. Source → New Dataset → http → file format as CSV → Create Linked Service → Give Base URL (raw URL from GitHub) → First Row as Header → Click OK → Preview Data



New linked service

HTTP Learn more

Name *
http_github_athletes_csv

Description

Connect via integration runtime *
AutoResolveIntegrationRuntime

Base URL *
https://github.com/darshilparmar/tokyo-olympic-azure-data-engineering-project/raw/refs

Information will be sent to the URL specified. Please ensure you trust the URL entered.

Server certificate validation
● Enable ○ Disable

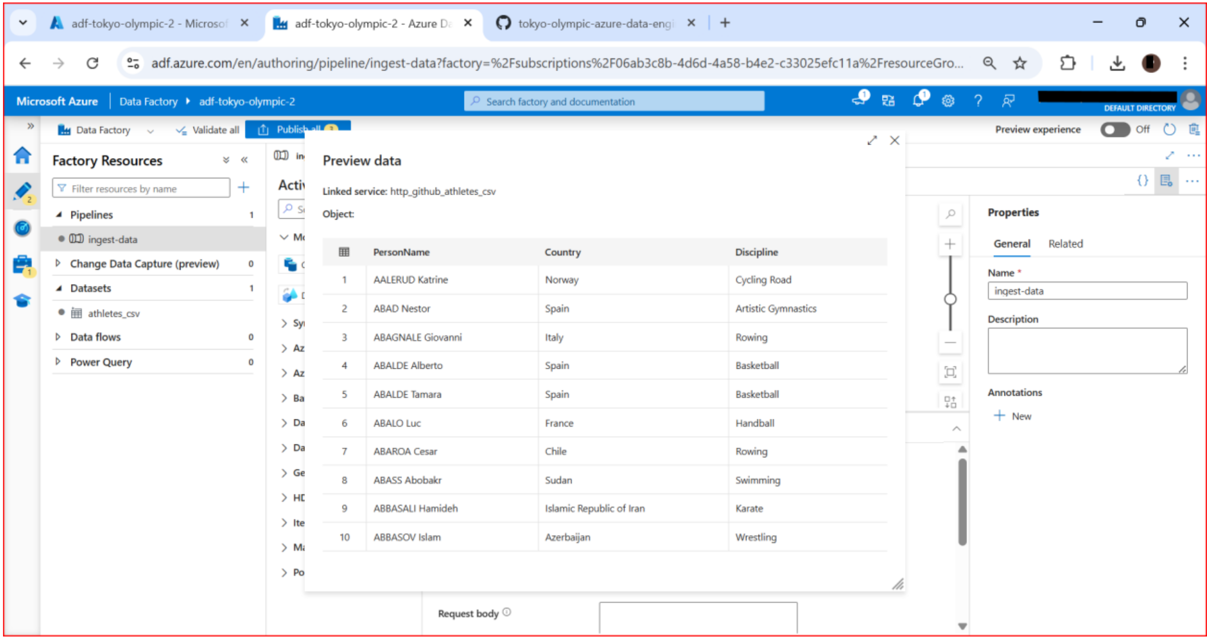
Authentication type *
Anonymous

Auth headers
+ New

Annotations

Connection successful

Create Cancel Test connection



adf-tokyo-olympic-2 - Microsof
adf-tokyo-olympic-2 - Azure D
tokyo-olympic-azure-data-engi
adf.azure.com/en/authoring/pipeline/ingest-data?factory=%2Fsubscriptions%2F06ab3c8b-4d6d-4a58-b4e2-c33025efc11a%2FresourceGro...
Microsoft Azure
Data Factory
adf-tokyo-olympic-2
Search factory and documentation
DEFAULT DIRECTORY
Validate all
Publish all
Factory Resources
Filter resources by name
Pipelines 1
ingest-data
Change Data Capture (preview) 0
Datasets 1
athletes_csv
Data flows 0
Power Query 0
Preview experience
Off
Properties
General
Related
Request body

Preview data

Linked service: http_github_athletes_csv

Object:

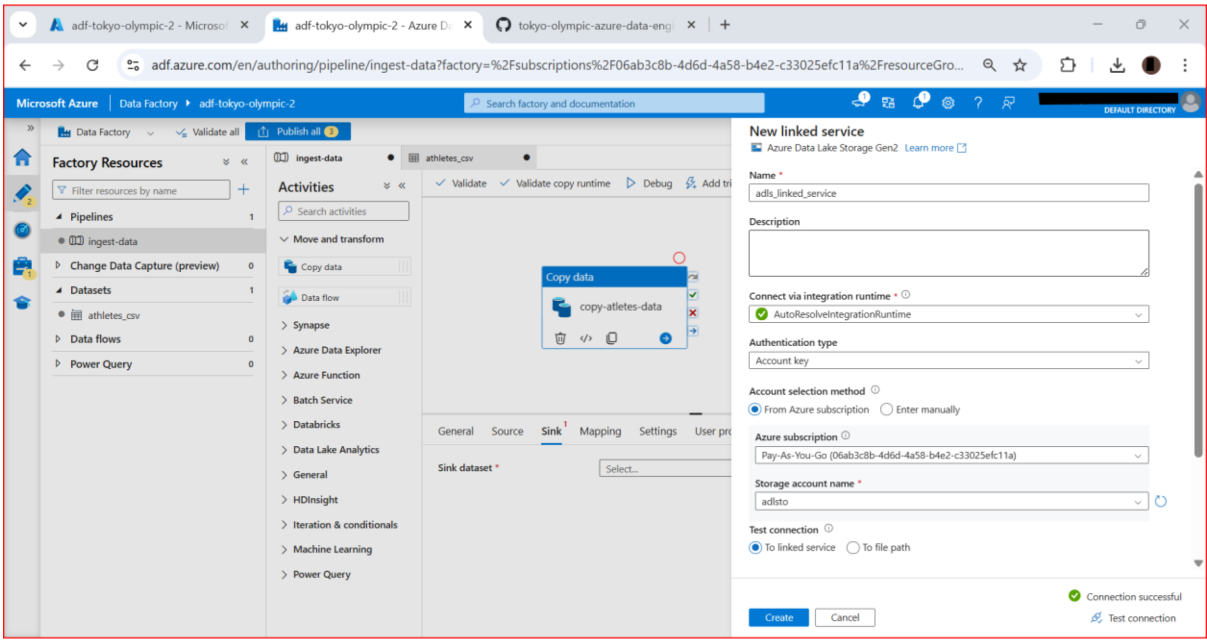
	PersonName	Country	Discipline
1	AALERUD Katrine	Norway	Cycling Road
2	ABAD Nestor	Spain	Artistic Gymnastics
3	ABAGNALE Giovanni	Italy	Rowing
4	ABALDE Alberto	Spain	Basketball
5	ABALDE Tamara	Spain	Basketball
6	ABALO Luc	France	Handball
7	ABAROA Cesar	Chile	Rowing
8	ABASS Abobakr	Sudan	Swimming
9	ABBASALI Hamideh	Islamic Republic of Iran	Karate
10	ABBASOV Islam	Azerbaijan	Wrestling

Name *
ingest-data

Description

Annotations
+ New

f. Go to Sink → New Dataset → New Linked Service → ADLS Gen 2 (Select ADLS Gen 2 created before) → Select Folder raw-data



adf.azure.com/en/authoring/pipeline/ingest-data?factory=%2Fsubscriptions%2F06ab3c8b-4d6d-4a58-b4e2-c33025efc11a%2FresourceGro...

New linked service

Azure Data Lake Storage Gen2 Learn more

Name * adls_linked_service

Description

Connect via integration runtime * AutoResolveIntegrationRuntime

Authentication type Account key

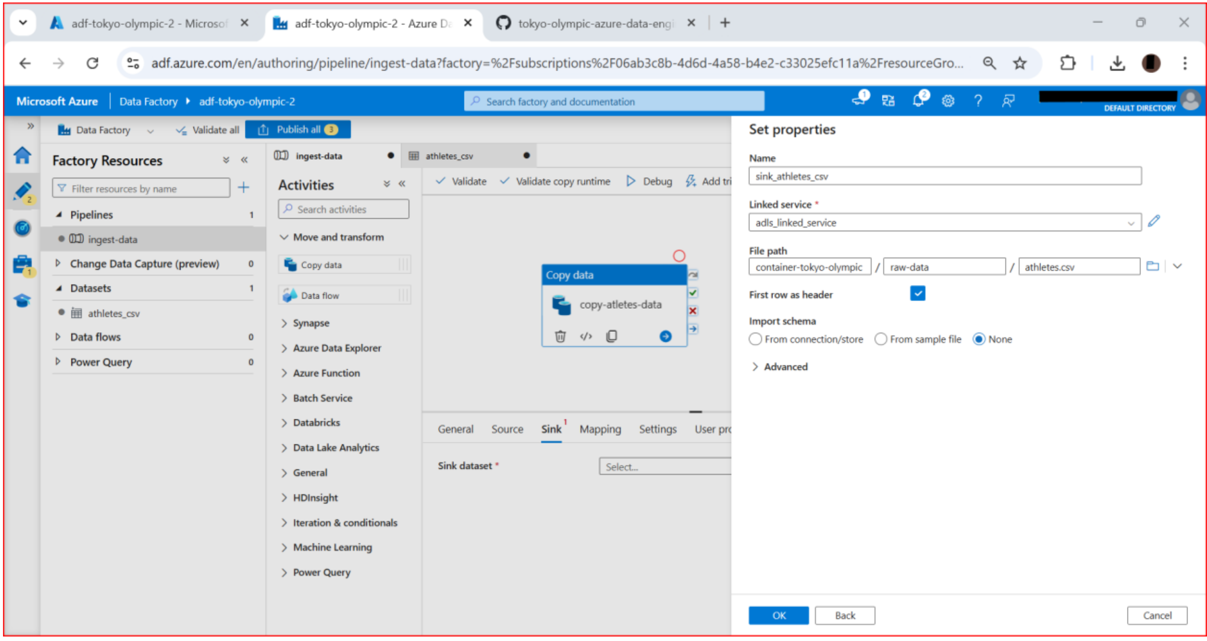
Account selection method ● From Azure subscription ○ Enter manually

Azure subscription Pay-As-You-Go (06ab3c8b-4d6d-4a58-b4e2-c33025efc11a)

Storage account name * adlsto

Test connection ● To linked service ○ To file path

Connection successful



adf.azure.com/en/authoring/pipeline/ingest-data?factory=%2Fsubscriptions%2F06ab3c8b-4d6d-4a58-b4e2-c33025efc11a%2FresourceGro...

Set properties

Name sink_athletes_csv

Linked service * adls_linked_service

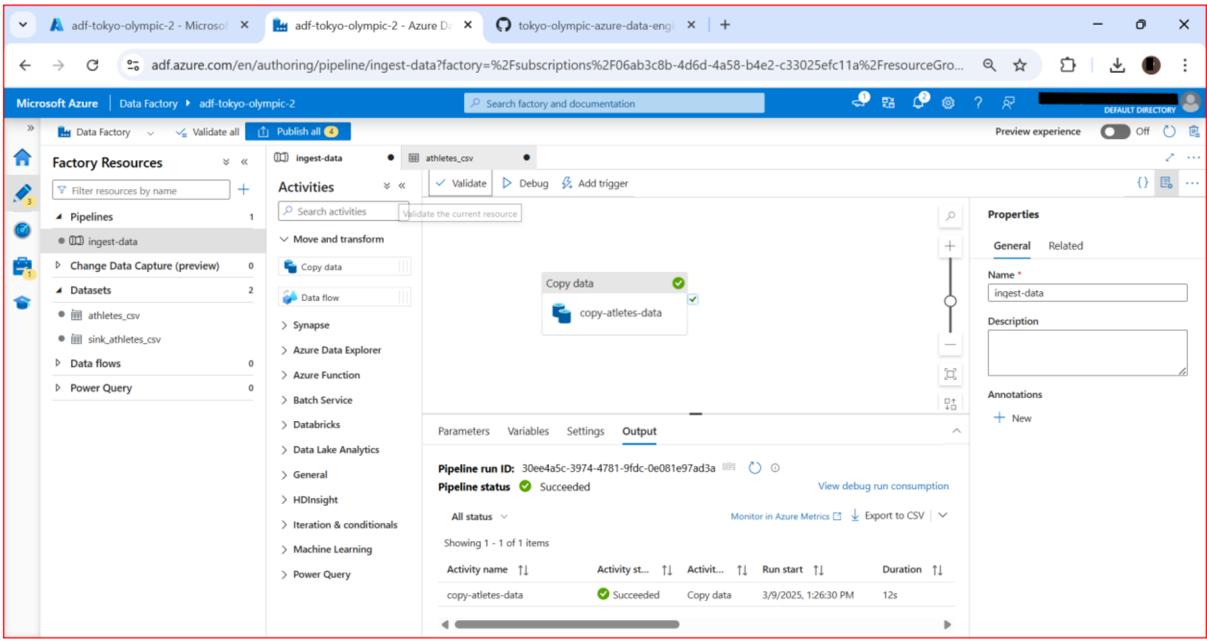
File path container-tokyo-olympic / raw-data / athletes.csv

First row as header ☑

Import schema ○ From connection/store ○ From sample file ● None

Advanced

g. Click Validate and Debug to see if data is getting loaded from http source to ADLS Gen2 target location



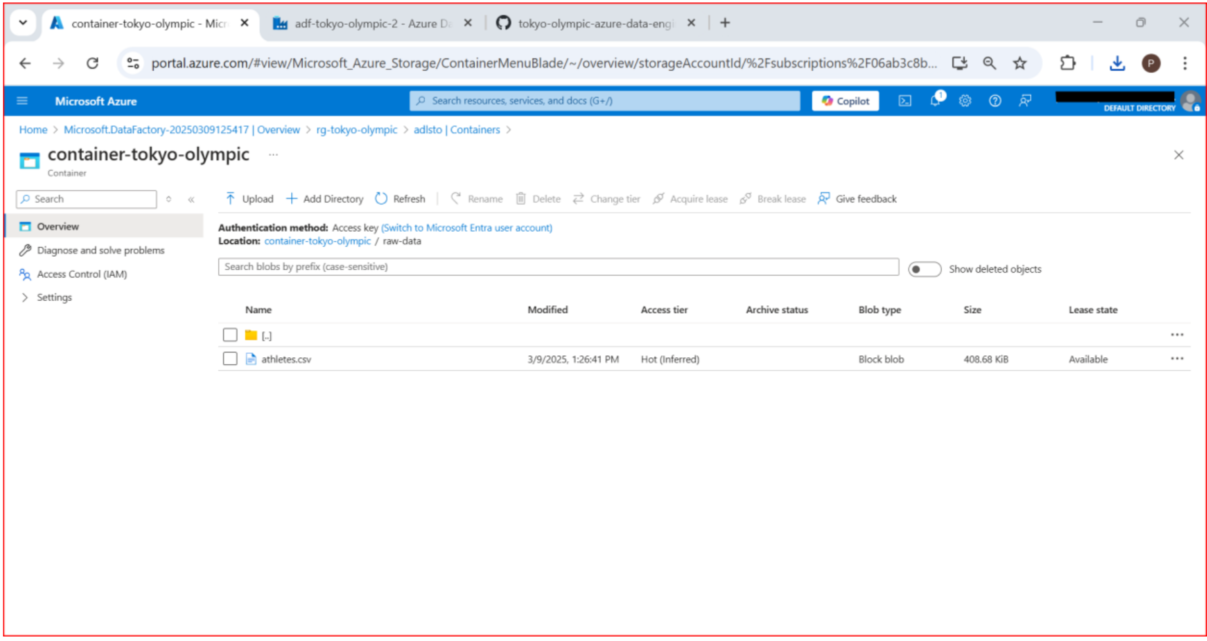
Name: ingest-data

Pipeline run ID: 30ee4a5c-3974-4781-9fdc-0e081e97ad3a

Pipeline status ✓ Succeeded

Showing 1 - 1 of 1 items

Activity name	Activity st...	Activit...	Run start	Duration
copy-atletes-data	✓ Succeeded	Copy data	3/9/2025, 1:26:30 PM	12s


container-tokyo-olympic - Micr
adf-tokyo-olympic-2 - Azure D
tokyo-olympic-azure-data-engi
portal.azure.com/#view/Microsoft_Azure_Storage/ContainerMenuBlade/~/overview/storageAccountId/%2Fsubscriptions%2F06ab3c8b...
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
[redacted]
Home > Microsoft.DataFactory-20250309125417 | Overview > rg-tokyo-olympic > adlsto | Containers >
container-tokyo-olympic
Container
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Diagnose and solve problems
Access Control (IAM)
Settings
Upload
Add Directory
Refresh
Rename
Delete
Change tier
Acquire lease
Break lease
Give feedback
Search blobs by prefix (case-sensitive)
Show deleted objects

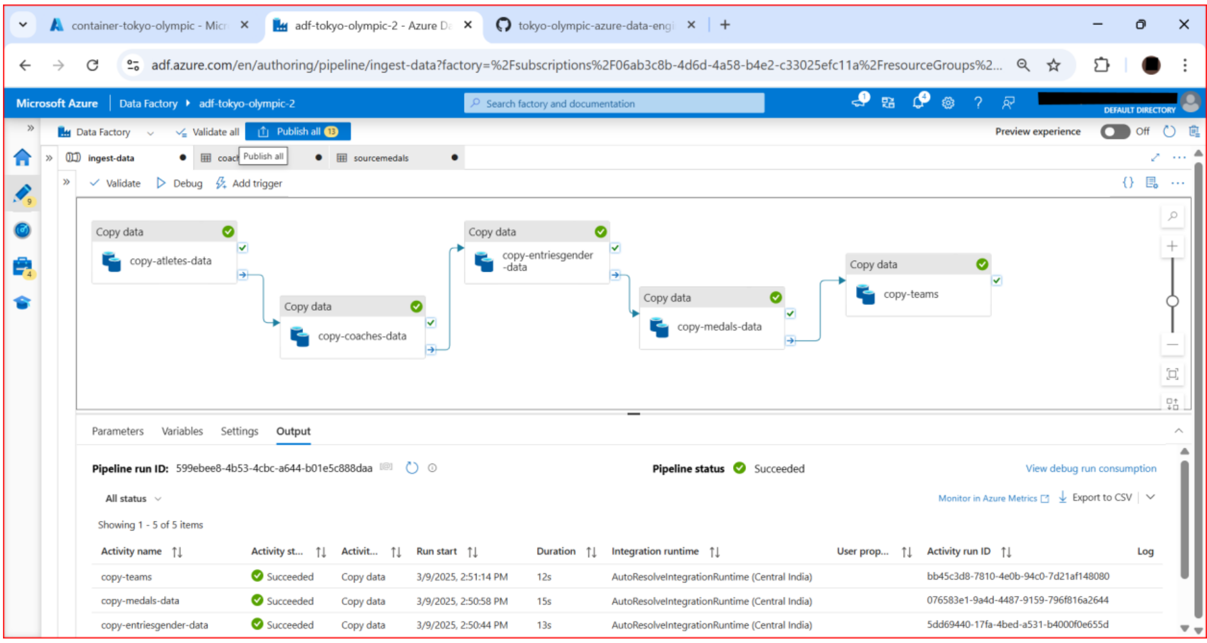
Authentication method: Access key (Switch to Microsoft Entra user account)

Location: container-tokyo-olympic / raw-data

Name	Modified	Access tier	Archive status	Blob type	Size	Lease state
[..]						
athletes.csv	3/9/2025, 1:26:41 PM	Hot (Inferred)		Block blob	408.68 KiB	Available

h. Repeat the activity for other CSV files

i. Connect different activity with arrows to run them one after the another



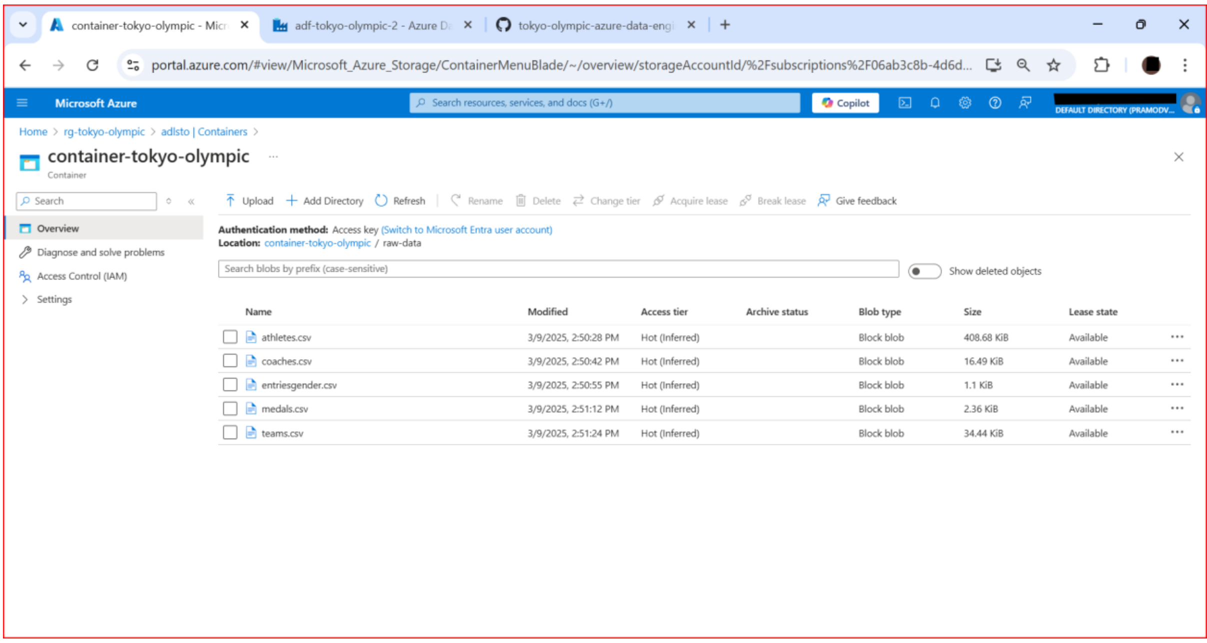
Pipeline run ID: 599ebee8-4b53-4cbc-a644-b01e5c888daa

Pipeline status Succeeded

Showing 1 - 5 of 5 items

Activity name	Activity st...	Activit...	Run start	Duration	Integration runtime	User prop...	Activity run ID	Log
copy-teams	Succeeded	Copy data	3/9/2025, 2:51:14 PM	12s	AutoResolveIntegrationRuntime (Central India)		bb45c3d8-7810-4e0b-94c0-7d21af148080	
copy-medals-data	Succeeded	Copy data	3/9/2025, 2:50:58 PM	15s	AutoResolveIntegrationRuntime (Central India)		076583e1-9a4d-4487-9159-796f816a2644	
copy-entriesgender-data	Succeeded	Copy data	3/9/2025, 2:50:44 PM	13s	AutoResolveIntegrationRuntime (Central India)		5dd69440-17fa-4bed-a531-b4000f0e655d	

Check if all the source files are copied to ADLS location



portal.azure.com/#view/Microsoft_Azure_Storage/ContainerMenuBlade/~/overview/storageAccountId/%2Fsubscriptions%2F06ab3c8b-4d6d...
Microsoft Azure
Copilot
[redacted]
DEFAULT DIRECTORY (PRAMODV...
Home > rg-tokyo-olympic > adlsto | Containers >
Overview
Diagnose and solve problems
Access Control (IAM)
Settings
Upload
Add Directory
Refresh
Rename
Delete
Change tier
Acquire lease
Break lease
Give feedback

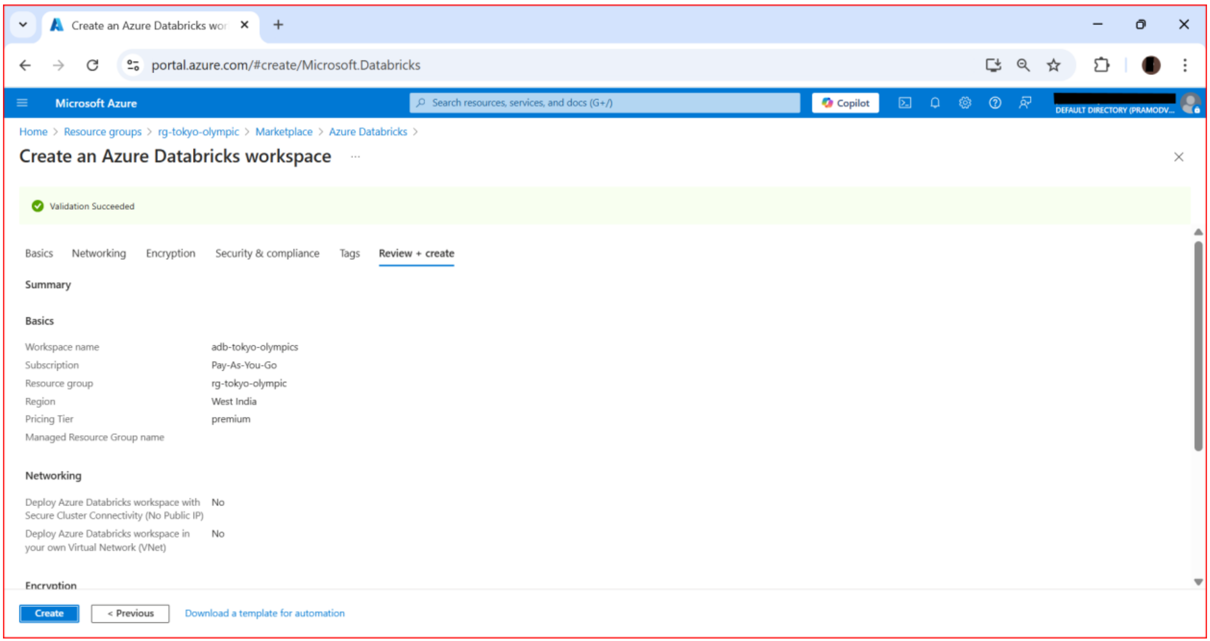
container-tokyo-olympic

Container

Authentication method: Access key (Switch to Microsoft Entra user account)
Location: container-tokyo-olympic / raw-data

Name	Modified	Access tier	Archive status	Blob type	Size	Lease state
athletes.csv	3/9/2025, 2:50:28 PM	Hot (Inferred)		Block blob	408.68 KiB	Available
coaches.csv	3/9/2025, 2:50:42 PM	Hot (Inferred)		Block blob	16.49 KiB	Available
entriesgender.csv	3/9/2025, 2:50:55 PM	Hot (Inferred)		Block blob	1.1 KiB	Available
medals.csv	3/9/2025, 2:51:12 PM	Hot (Inferred)		Block blob	2.36 KiB	Available
teams.csv	3/9/2025, 2:51:24 PM	Hot (Inferred)		Block blob	34.44 KiB	Available

7. Create an Azure Databricks Workspace.


Create an Azure Databricks wor
portal.azure.com/#create/Microsoft.Databricks
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
[redacted]
DEFAULT DIRECTORY (PRAMODV...

Home > Resource groups > rg-tokyo-olympic > Marketplace > Azure Databricks >

Create an Azure Databricks workspace

✓ Validation Succeeded

Basics | Networking | Encryption | Security & compliance | Tags | **Review + create**

Summary

Basics

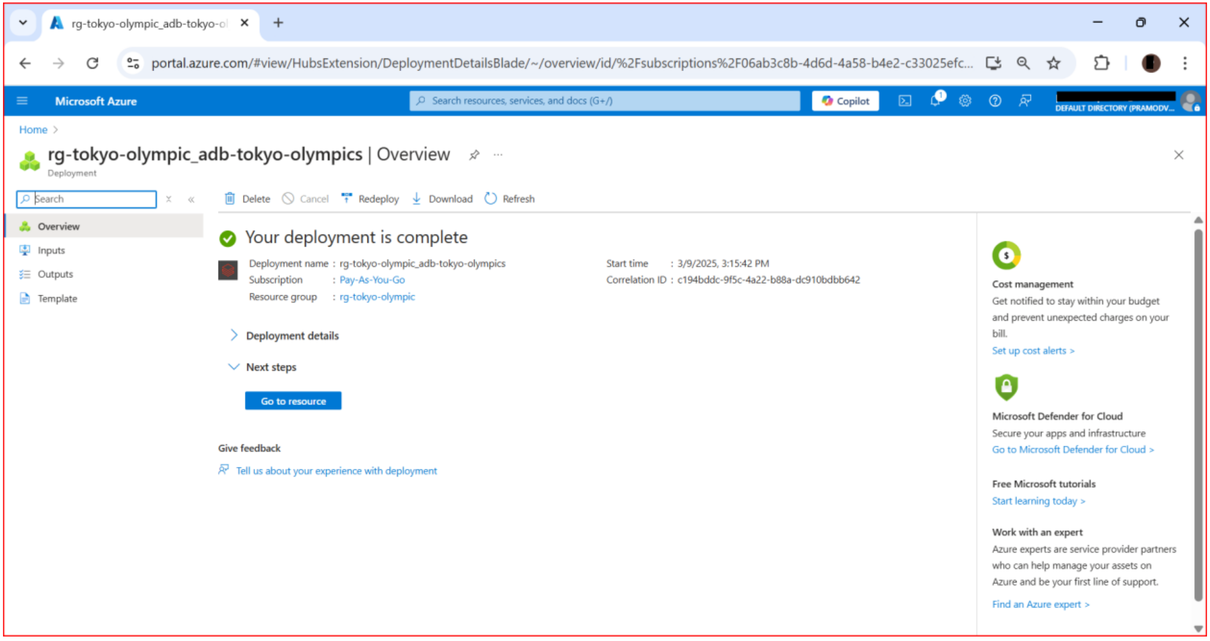
Workspace name	adb-tokyo-olympics
Subscription	Pay-As-You-Go
Resource group	rg-tokyo-olympic
Region	West India
Pricing Tier	premium
Managed Resource Group name	

Networking

Deploy Azure Databricks workspace with Secure Cluster Connectivity (No Public IP)	No
Deploy Azure Databricks workspace in your own Virtual Network (VNet)	No

Encryption

Create
< Previous
Download a template for automation


rg-tokyo-olympic_adb-tokyo-ol
portal.azure.com/#view/HubsExtension/DeploymentDetailsBlade/~/overview/id/%2Fsubscriptions%2F06ab3c8b-4d6d-4a58-b4e2-c33025efc...
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
[redacted]
DEFAULT DIRECTORY (PRAMODV...
Home >
Search
Overview
Inputs
Outputs
Template
Delete
Cancel
Redeploy
Download
Refresh

rg-tokyo-olympic_adb-tokyo-olympics | Overview

Deployment

✓ Your deployment is complete

Deployment name : rg-tokyo-olympic_adb-tokyo-olympics
Subscription : Pay-As-You-Go
Resource group : rg-tokyo-olympic

Start time : 3/9/2025, 3:15:42 PM
Correlation ID : c194bddc-9f5c-4a22-b88a-dc910bdbb642

> Deployment details

∨ Next steps

Give feedback

Tell us about your experience with deployment

Cost management
Get notified to stay within your budget and prevent unexpected charges on your bill.
Set up cost alerts >

Microsoft Defender for Cloud
Secure your apps and infrastructure
Go to Microsoft Defender for Cloud >

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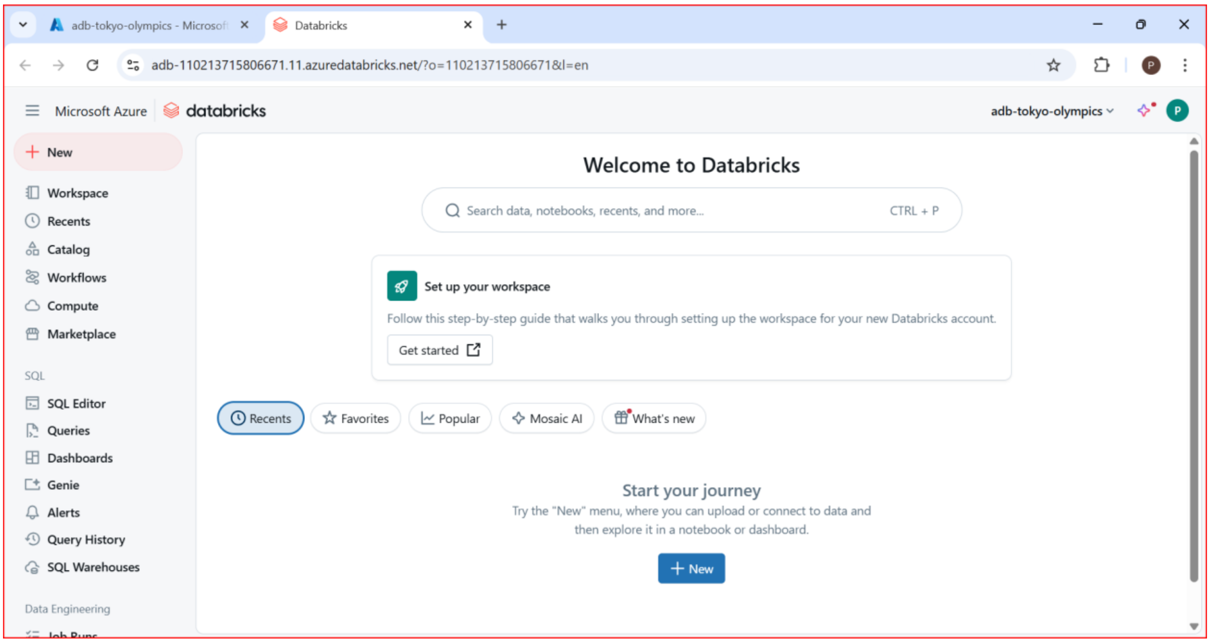
Start learning today >

Work with an expert
Azure experts are service provider partners who can help manage your assets on Azure and be your first line of support.
Find an Azure expert >

8. Once deployment is complete; Goto resource and click Launch workspace



Welcome to Databricks

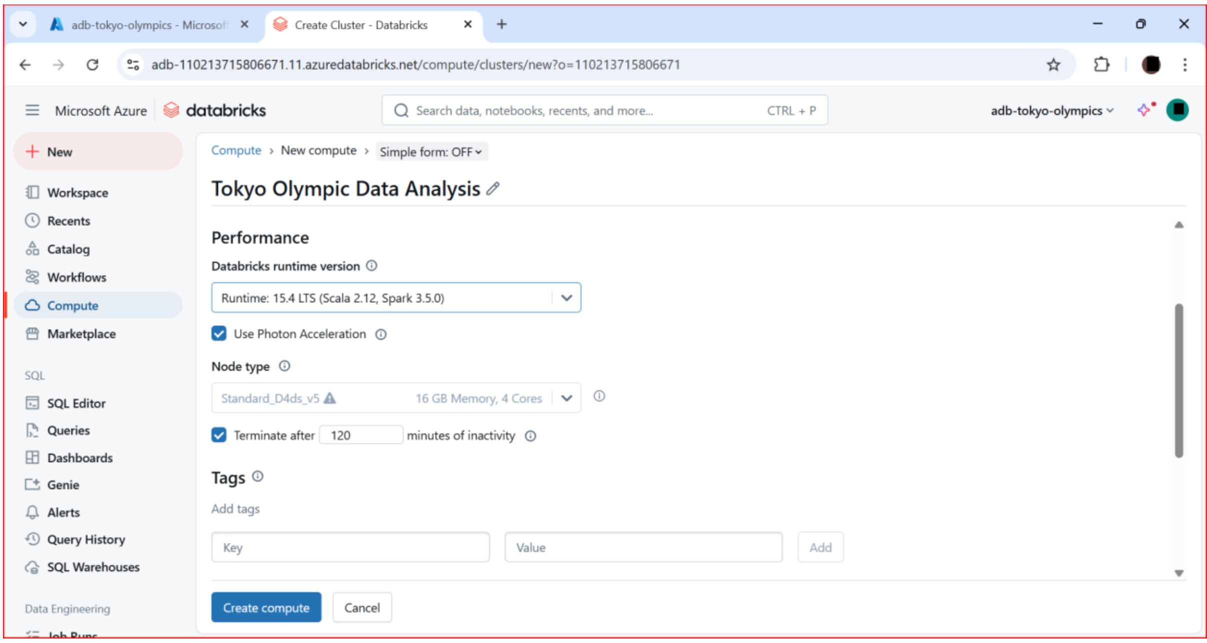
Set up your workspace

Follow this step-by-step guide that walks you through setting up the workspace for your new Databricks account.

Start your journey

Try the "New" menu, where you can upload or connect to data and then explore it in a notebook or dashboard.

9. Click Compute → Create Compute
    a. Select Single node
    b. Select runtime
    c. Select node type
    d. Create compute



Tokyo Olympic Data Analysis

Performance

Databricks runtime version: Runtime: 15.4 LTS (Scala 2.12, Spark 3.5.0)

☑ Use Photon Acceleration

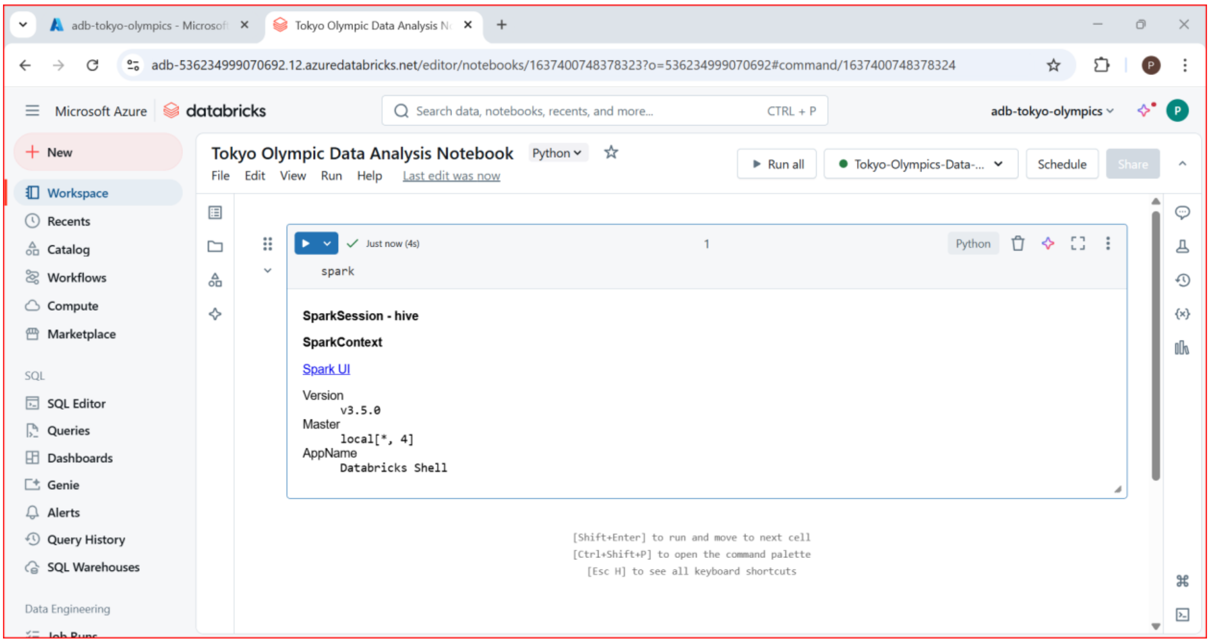
Node type: Standard_D4ds_v5 16 GB Memory, 4 Cores

☑ Terminate after 120 minutes of inactivity

Tags

Important Note: - I received Quota Exceeded error while creating compute. I raised the Quota increase requested as suggested in error message. After some time, the request got approved and I was able to create compute.

10. Create notebook: New → Notebook → Rename notebook. Select Spark Cluster that is newly created



```
spark
```

```
SparkSession - hive
SparkContext
Spark UI
Version
    v3.5.0
Master
    local[*, 4]
AppName
    Databricks Shell
```

```
[Shift+Enter] to run and move to next cell
[Ctrl+Shift+P] to open the command palette
[Esc H] to see all keyboard shortcuts
```

11. Create new App (to be used for connecting Azure Databricks with ADLS Gen2)
    a. Go to Azure Portal → Search for App Registry
    b. Register App → Give some name → Click Register
    c. Copy Client ID, Tenant ID
    d. Click on Manage → Certificates and Secrets
    e. New Client Secrets → Give some name → Copy secret value

12. Go back to Databricks → Create new cell → Copy standard config from Azure documentation (https://learn.microsoft.com/en-us/azure/databricks/connect/storage/tutorial-azure-storage)

```
configs = {"fs.azure.account.auth.type": "OAuth",
"fs.azure.account.oauth.provider.type":
"org.apache.hadoop.fs.azurebfs.oauth2.ClientCredsTokenProvider",
"fs.azure.account.oauth2.client.id": "<YOUR CLIENT ID>",
"fs.azure.account.oauth2.client.secret": 'YOUR APP SECRET VALUE',
"fs.azure.account.oauth2.client.endpoint": "https://login.microsoftonline.com/<YOUR
TENANT ID>/oauth2/token"}
```

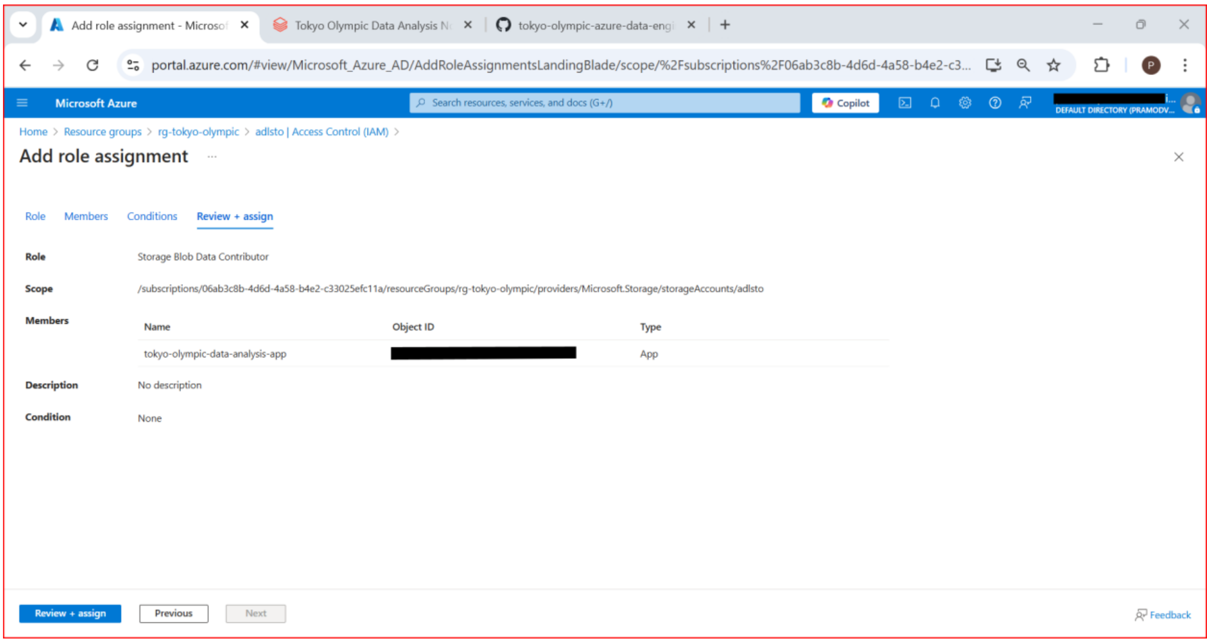
13. Replace the tenant id and other details and ensure the connection is successful.

14. Copy the mount point code given below. Replace the container name and ADLS Gen2 Storage account name

```
dbutils.fs.mount(
source = "abfss://your_container_name@your_adls_storage_name.dfs.core.windows.net", #
contrainer@storageacc
mount_point = "/mnt/tokyoolymic",
extra_configs = configs)
```

15. We need to give permission to the app we created in order to access ADLS Gen2 storage from Azure databricks

a. Goto ADLS Gen2 → select container → Click Access Control (IAM) → Click Add Role Assignment → Select "Storage Blob Data Contributor" → Click Next → Select Member → Type App Name (The App we created before) → Click Next → Review and assign → Wait for some time and revisit Azure Data Bricks



Add role assignment - Microsoft
Tokyo Olympic Data Analysis N
tokyo-olympic-azure-data-engi
portal.azure.com/#view/Microsoft_Azure_AD/AddRoleAssignmentsLandingBlade/scope/%2Fsubscriptions%2F06ab3c8b-4d6d-4a58-b4e2-c3...
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
DEFAULT DIRECTORY (PRAMODV...
Home > Resource groups > rg-tokyo-olympic > adlsto | Access Control (IAM) >

Add role assignment

Role
Members
Conditions
Review + assign

Role: Storage Blob Data Contributor

Scope: /subscriptions/06ab3c8b-4d6d-4a58-b4e2-c33025efc11a/resourceGroups/rg-tokyo-olympic/providers/Microsoft.Storage/storageAccounts/adlsto

Members

Name	Object ID	Type
tokyo-olympic-data-analysis-app	[redacted]	App

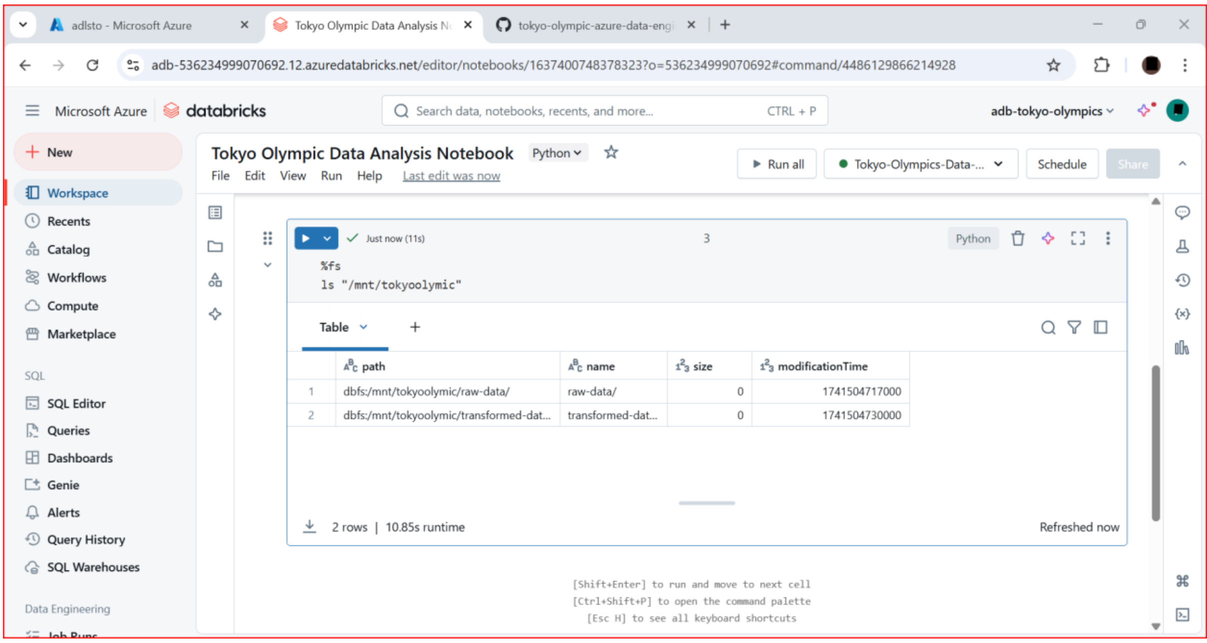
Description: No description

Condition: None

Review + assign
Previous
Next
Feedback

16. Test the Azure Databricks and ADLS Gen2 connection again

%fs
ls "/mnt/name_of_container"



```
%fs
ls "/mnt/tokyoolymic"
```

	path	name	size	modificationTime
1	dbfs:/mnt/tokyoolymic/raw-data/	raw-data/	0	1741504717000
2	dbfs:/mnt/tokyoolymic/transformed-dat...	transformed-dat...	0	1741504730000

2 rows | 10.85s runtime

Refreshed now

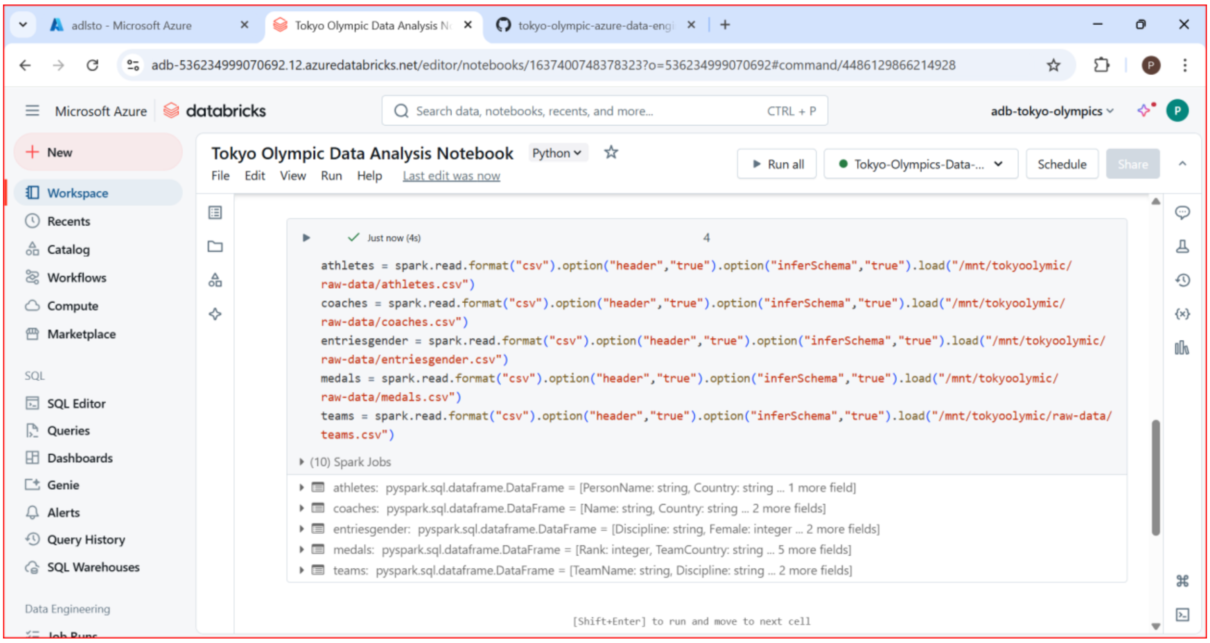
```
[Shift+Enter] to run and move to next cell
[Ctrl+Shift+P] to open the command palette
[Esc H] to see all keyboard shortcuts
```

17. We can now start reading CSV files in Spark from ADLS Gen2

athletes = spark.read.format("csv").option("header","true").load("/mnt/container/folder/filename.csv")

We can use printSchema to check the data type

We can use withColumn and col operator to convert string column to Integer. We will need to add import from pyspark.sql to use these operators
gender = gender.withColumn(“Female”), col(“Female”).cast(IntegerType))

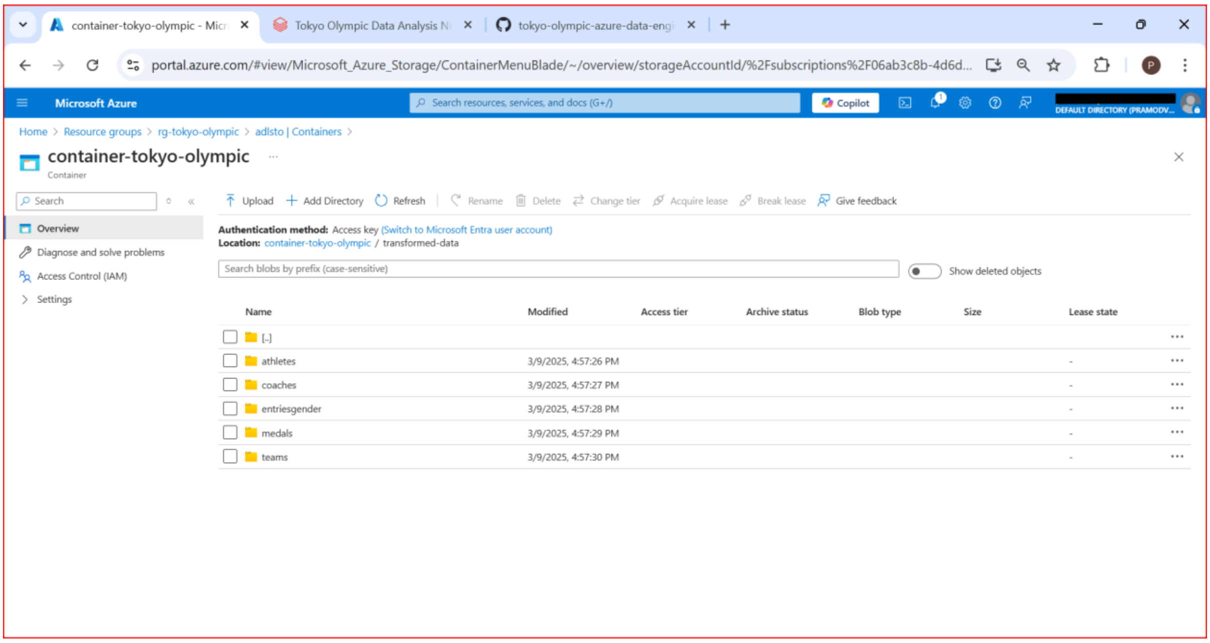


```
athletes = spark.read.format("csv").option("header","true").option("inferSchema","true").load("/mnt/tokyoolymic/
raw-data/athletes.csv")
coaches = spark.read.format("csv").option("header","true").option("inferSchema","true").load("/mnt/tokyoolymic/
raw-data/coaches.csv")
entriesgender = spark.read.format("csv").option("header","true").option("inferSchema","true").load("/mnt/tokyoolymic/
raw-data/entriesgender.csv")
medals = spark.read.format("csv").option("header","true").option("inferSchema","true").load("/mnt/tokyoolymic/
raw-data/medals.csv")
teams = spark.read.format("csv").option("header","true").option("inferSchema","true").load("/mnt/tokyoolymic/raw-data/
teams.csv")
```

```
(10) Spark Jobs
athletes:  pyspark.sql.dataframe.DataFrame = [PersonName: string, Country: string ... 1 more field]
coaches:  pyspark.sql.dataframe.DataFrame = [Name: string, Country: string ... 2 more fields]
entriesgender:  pyspark.sql.dataframe.DataFrame = [Discipline: string, Female: integer ... 2 more fields]
medals:  pyspark.sql.dataframe.DataFrame = [Rank: integer, TeamCountry: string ... 5 more fields]
teams:  pyspark.sql.dataframe.DataFrame = [TeamName: string, Discipline: string ... 2 more fields]
```

18. We can use data type manually as mentioned above or we can use inferSchema for conversion by Spark

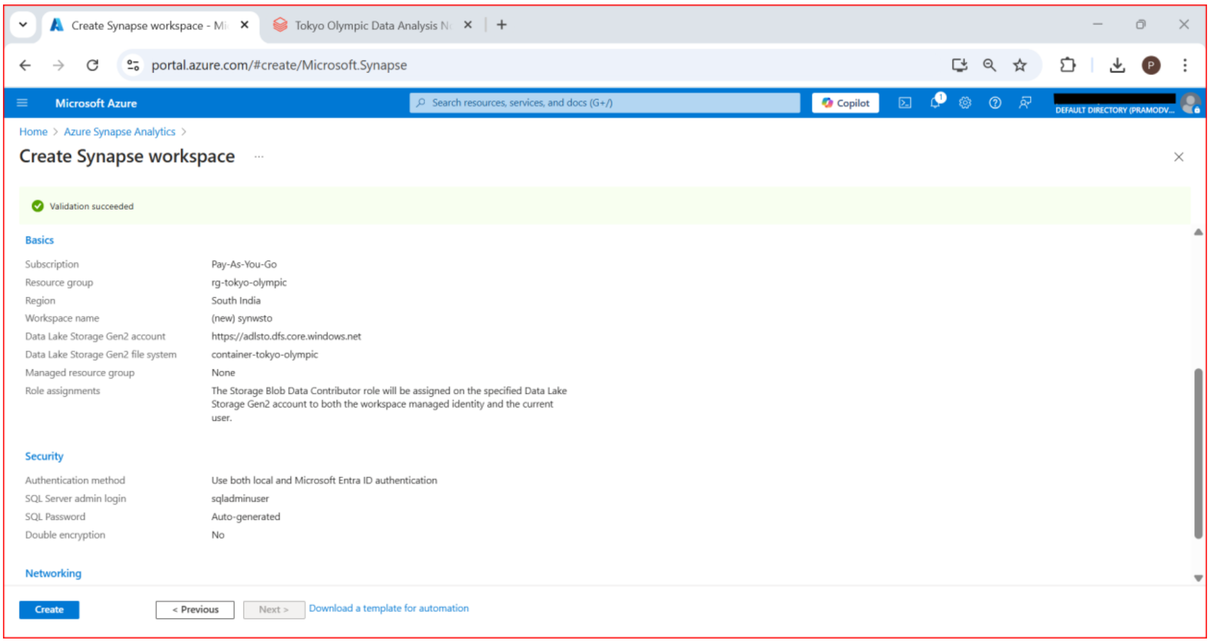
19. After doing some transformations, we can write data back to ADLS Gen2 in transformed-data folder



Authentication method: Access key (Switch to Microsoft Entra user account)
Location: container-tokyo-olympic / transformed-data

Name	Modified	Access tier	Archive status	Blob type	Size	Lease state
[..]						
athletes	3/9/2025, 4:57:26 PM					-
coaches	3/9/2025, 4:57:27 PM					-
entriesgender	3/9/2025, 4:57:28 PM					-
medals	3/9/2025, 4:57:29 PM					-
teams	3/9/2025, 4:57:30 PM					-

20. We can now open Azure Synapse Analytics. Create Workspace → Give unique workspace name → Select ADLS Gen 2 Account which is created before → Next → Review and Create. Wait for few minutes for workspace to be created


Create Synapse workspace - Mi
Tokyo Olympic Data Analysis N
portal.azure.com/#create/Microsoft.Synapse
Microsoft Azure
Search resources, services, and docs (G+/)
Copilot
[redacted]
DEFAULT DIRECTORY (PRAMODV...
Home > Azure Synapse Analytics >

Create Synapse workspace

Validation succeeded

Basics

Subscription	Pay-As-You-Go
Resource group	rg-tokyo-olympic
Region	South India
Workspace name	(new) synwsto
Data Lake Storage Gen2 account	https://adlsto.dfs.core.windows.net
Data Lake Storage Gen2 file system	container-tokyo-olympic
Managed resource group	None
Role assignments	The Storage Blob Data Contributor role will be assigned on the specified Data Lake Storage Gen2 account to both the workspace managed identity and the current user.

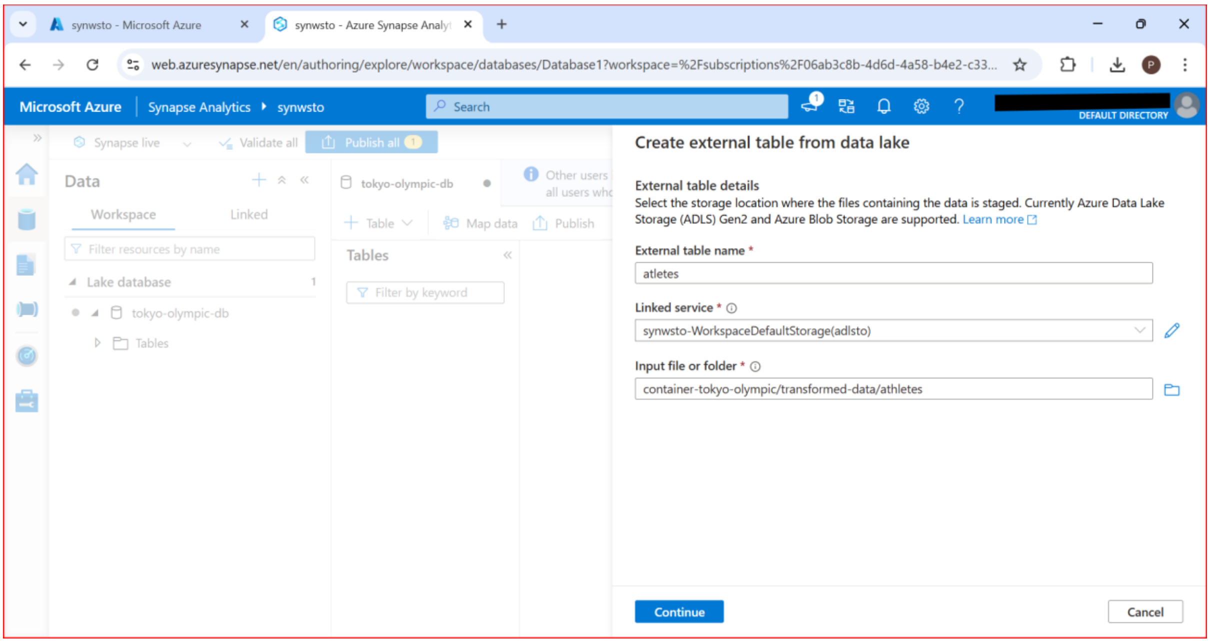
Security

Authentication method	Use both local and Microsoft Entra ID authentication
SQL Server admin login	sqladminuser
SQL Password	Auto-generated
Double encryption	No

Networking

21. Open Synapse Studio → Click Data → Click Lake Database → Give DB Name

22. Create Table → From Data Lake → Give Table Name → Select Storage Account → Select Container → Folder → transformed-data → Click Validate and Publish. Create tables for other files.



Create external table from data lake

External table details

Select the storage location where the files containing the data is staged. Currently Azure Data Lake Storage (ADLS) Gen2 and Azure Blob Storage are supported. Learn more

External table name *

atletes

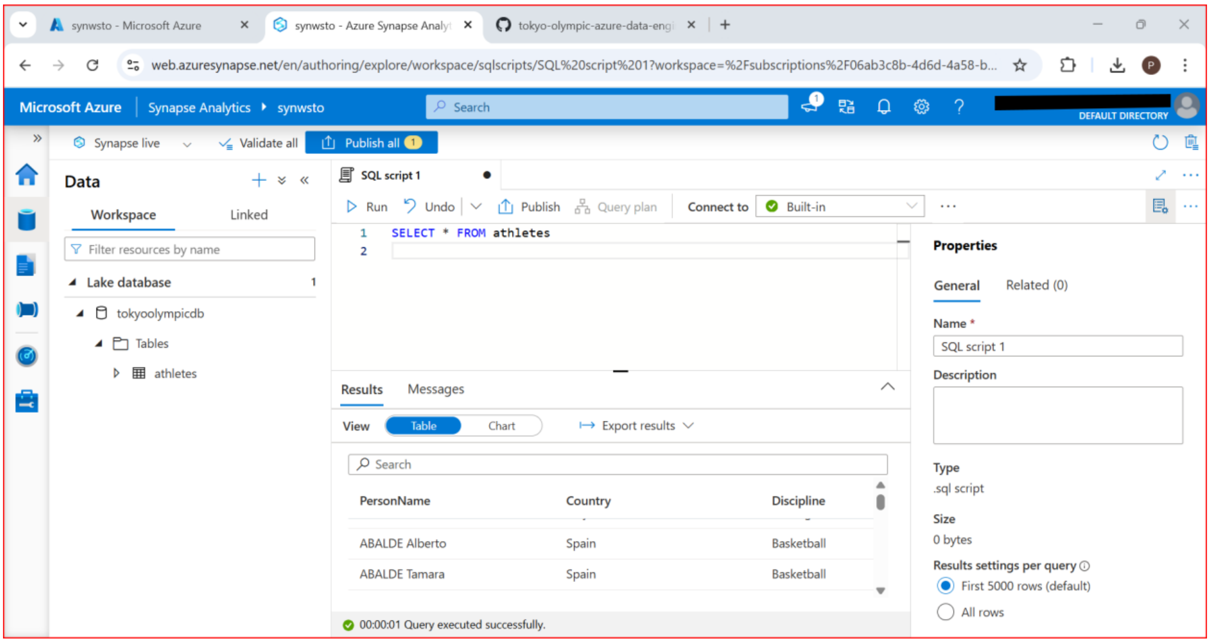
Linked service *

synwsto-WorkspaceDefaultStorage(adlsto)

Input file or folder *

container-tokyo-olympic/transformed-data/athletes

23. We can run queries against newly created tables. Perform some basic analytics on newly created table



```
SELECT * FROM athletes
```

PersonName	Country	Discipline
ABALDE Alberto	Spain	Basketball
ABALDE Tamara	Spain	Basketball

00:00:01 Query executed successfully.

Name * SQL script 1

Description

Type .sql script

Size 0 bytes

Results settings per query

● First 5000 rows (default)

○ All rows

24. Create Dashboards using any visualization tool

25. Cleanup – Remove the resource group