

Certainly! Below is a step-by-step documentation for your bulk data migration scenarios using Azure Data Factory.

Bulk Data Migration from SQL Server to ADLS Gen2:

Step 1: Create Azure Data Factory

1. Navigate to the Azure Portal.
2. Click on "+ Create a resource," search for "Data + Analytics," and select "Data + Analytics" from the results.
3. Choose "Data + Analytics" and then "Data + Analytics" again.
4. Fill in the required details to create your Azure Data Factory.

Step 2: Create ADLS Gen2

1. In the Azure Portal, go to the Storage accounts.
2. Click on "+ Add" to create a new Storage Account.
3. Choose Storage account type as "StorageV2 (general-purpose v2)" and enable Hierarchical namespace to create ADLS Gen2.

Step 3: Create Self-Hosted IR

1. In your Azure Data Factory, go to the "Author & Monitor" section.
2. Under the "Author" tab, click on the "Connections" tab, and then "New Self-Hosted IR."
3. Follow the wizard to set up a self-hosted Integration Runtime for on-premises data access.

Step 4: Create Linked Services

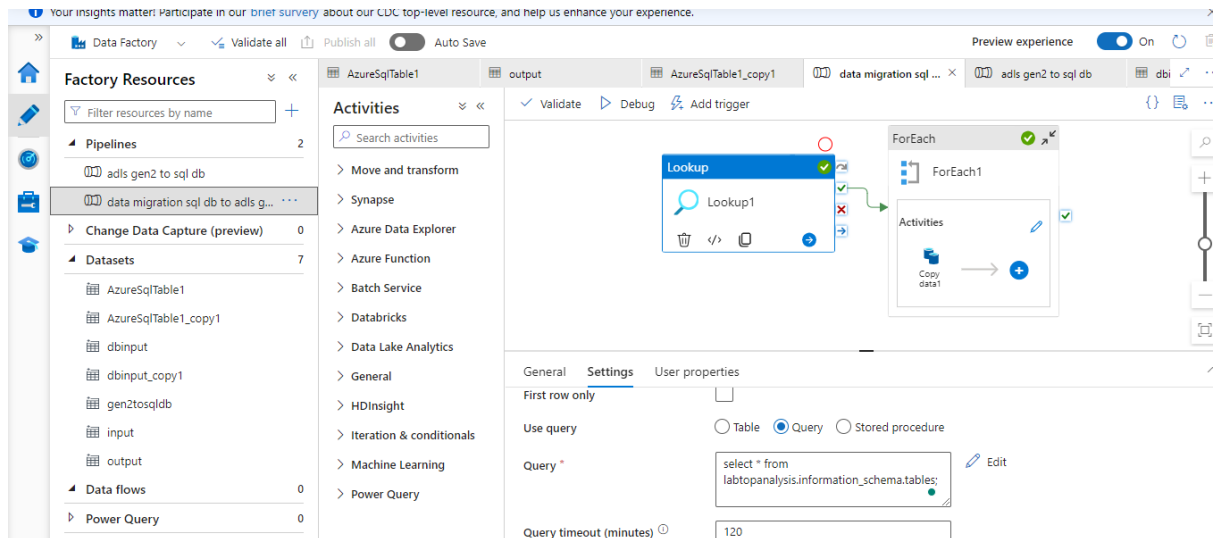
1. Create a Linked Service for SQL Server and another for ADLS Gen2 in the Author section of Azure Data Factory.

Step 5: Create Datasets

1. Create input and output datasets for SQL Server and ADLS Gen2 in the Author section.

Step 6: Create a New Pipeline

1. Navigate to the Author section in Azure Data Factory.

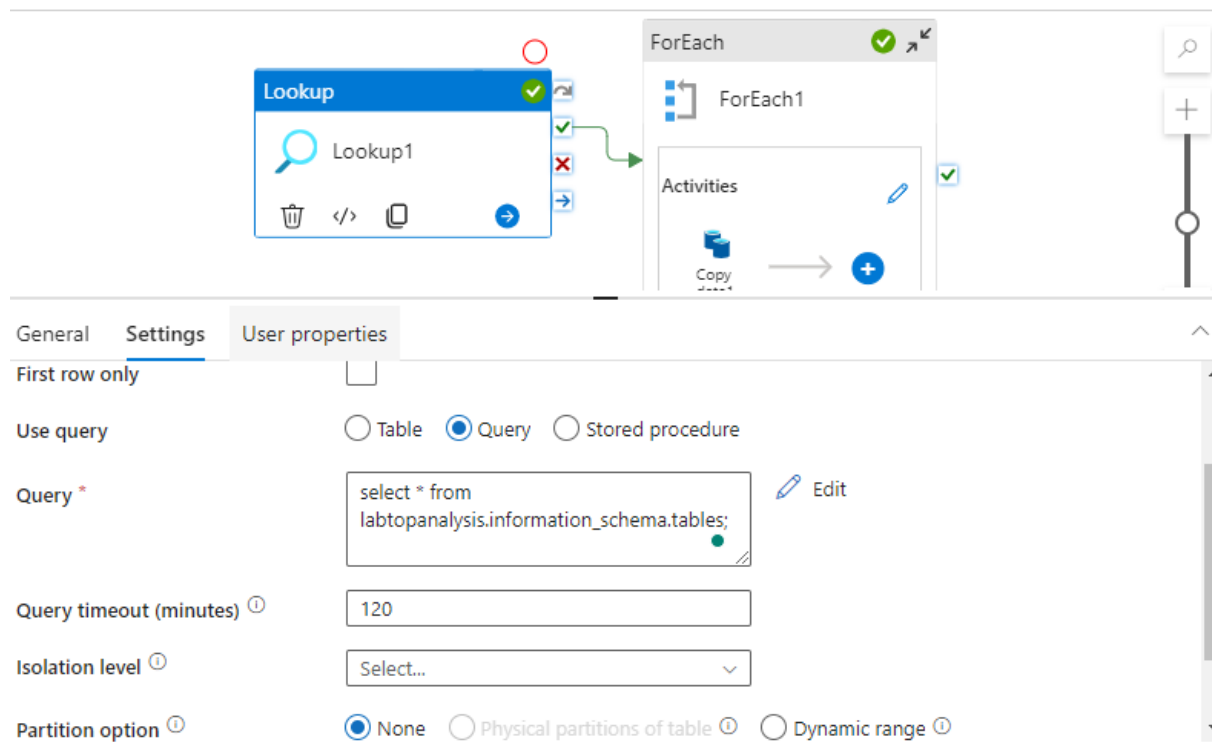


2. Click on the "+" sign and select "Pipeline" to create a new pipeline.

Step 7: Open Pipeline

1. Open the pipeline, and inside it, add a "Lookup" activity with the following settings:

- Source: SQL Server linked service
- Query: ``select * from <databasename>.information_schema.tables;``

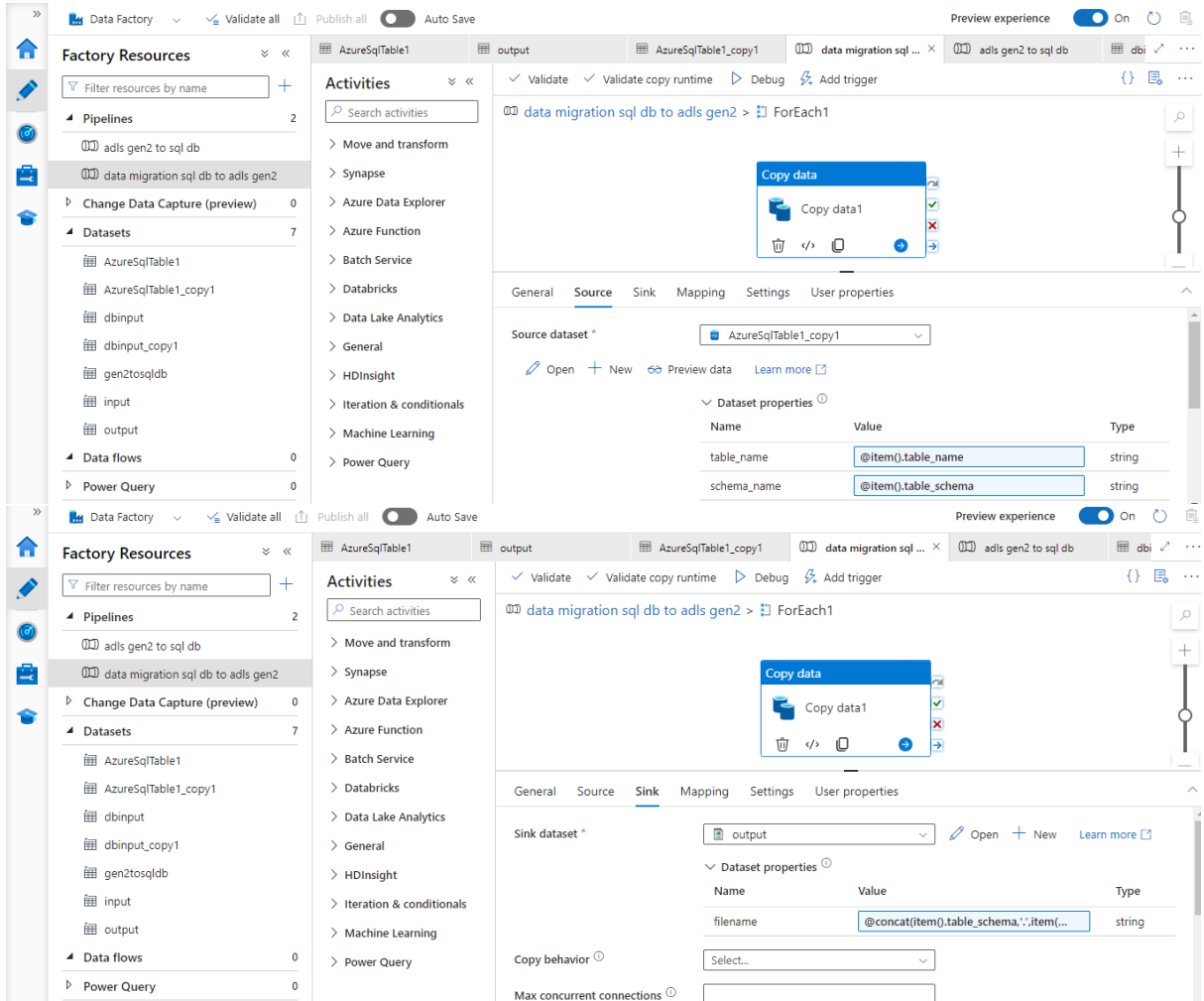


Step 8: Create ForEach Activity

1. Inside the pipeline, add a "ForEach" activity, and configure it to loop over the output of the Lookup activity.

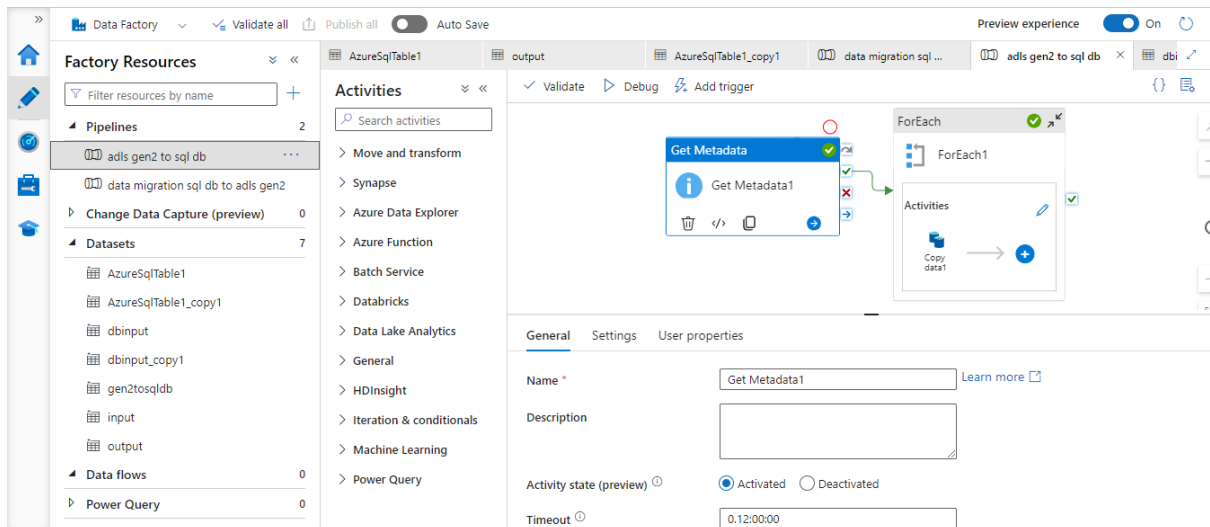
Step 9: Inside ForEach, Create Copy Activity

1. Add a "Copy Data" activity inside the ForEach activity.



2. Configure the Copy Data activity to move data from SQL Server to ADLS Gen2 using the appropriate datasets.

Bulk Data Migration from ADLS Gen2 to Azure SQL Database:



Step 1: Create Azure Data Factory

(Repeat Step 1 from the previous scenario.)

Step 2: Create ADLS Gen2

(Repeat Step 2 from the previous scenario.)

Step 3: Create Azure IR

1. In your Azure Data Factory, go to the "Author & Monitor" section.
2. Under the "Author" tab, click on the "Connections" tab, and then "New Azure IR."
3. Follow the wizard to set up an Azure Integration Runtime for Azure SQL Database access.

Step 4: Create Linked Services

1. Create a Linked Service for ADLS Gen2 and another for Azure SQL Database in the Author section of Azure Data Factory.

Step 5: Create Datasets

1. Create input and output datasets for ADLS Gen2 and Azure SQL Database in the Author section.

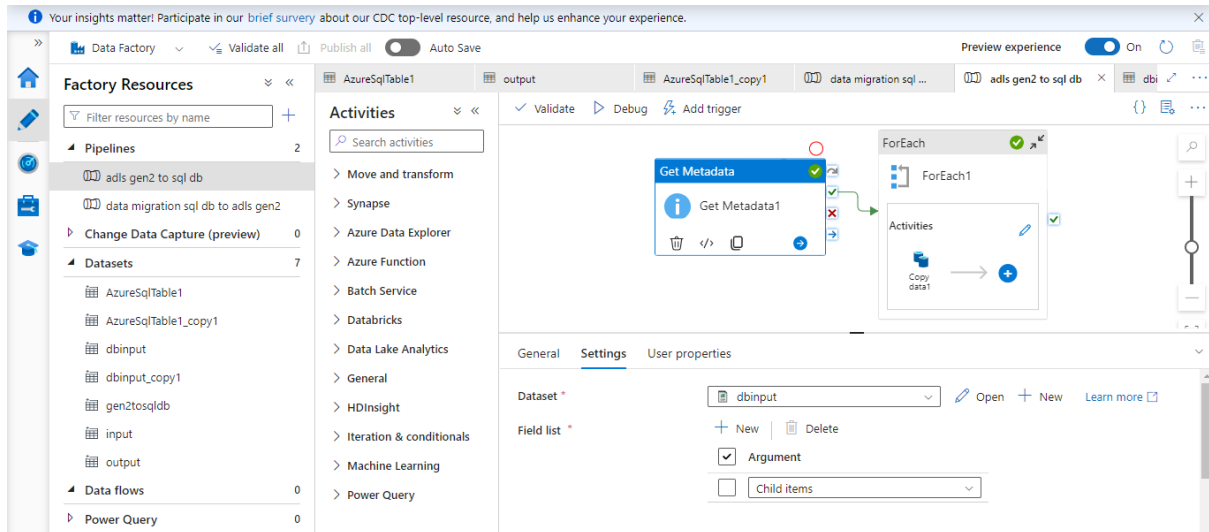
Step 6: Create a New Pipeline

(Repeat Step 6 from the previous scenario.)

Step 7: Open Pipeline

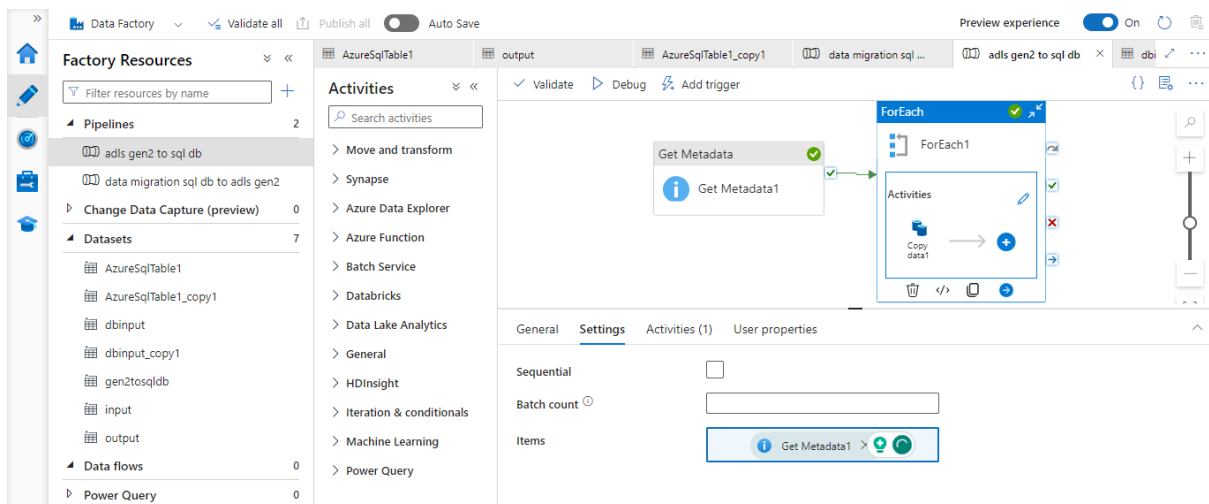
1. Open the pipeline, and inside it, add a "Get Metadata" activity with the following settings:

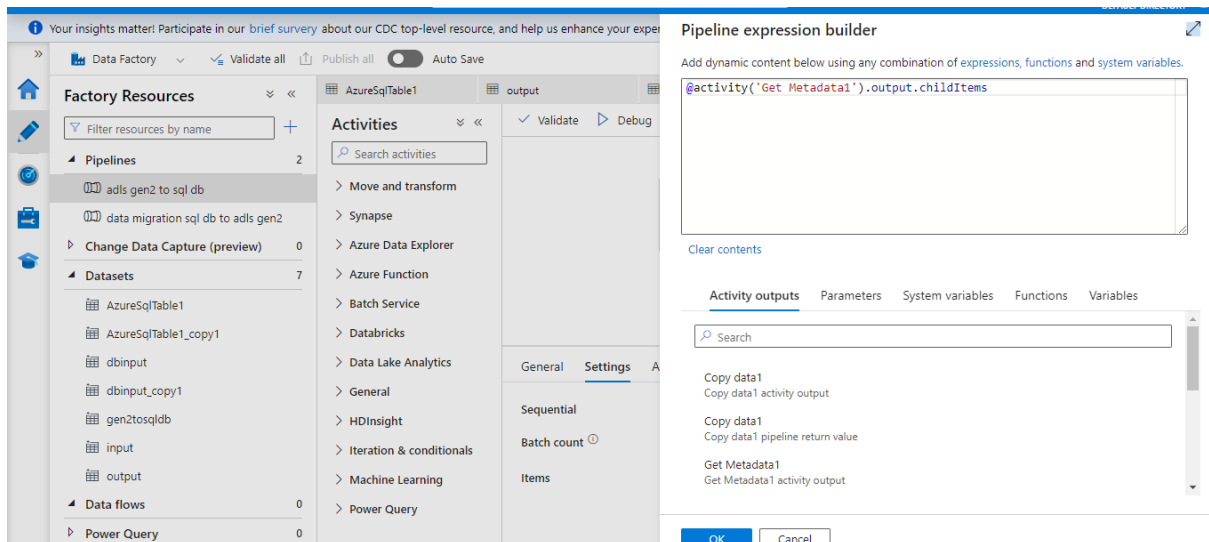
- Source: ADLS Gen2 linked service
- Dataset: Set to the ADLS Gen2 dataset containing your data.



Step 8: Create ForEach Activity

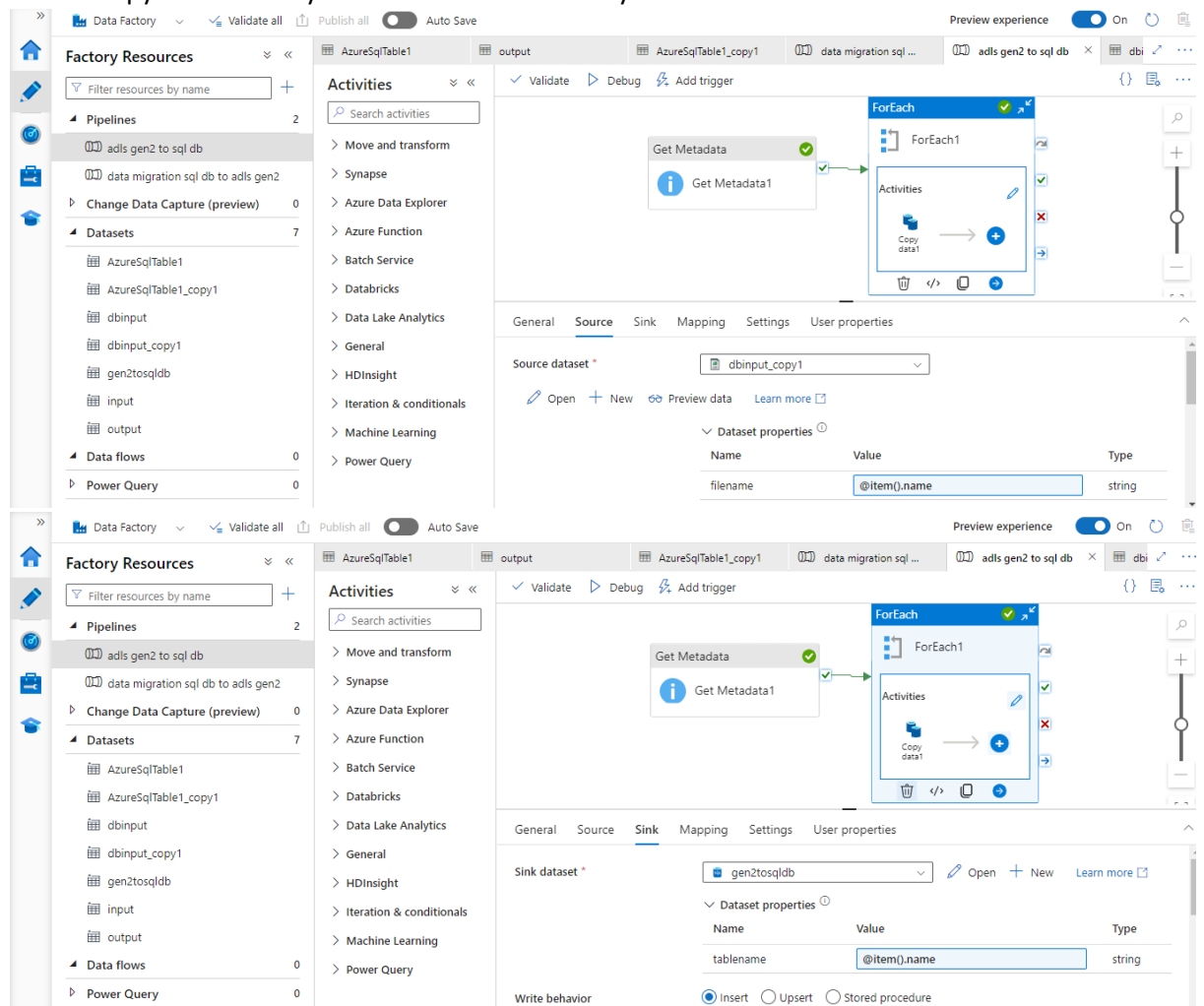
1. Inside the pipeline, add a "ForEach" activity, and configure it to loop over the output of the Get Metadata activity.





Step 9: Inside ForEach, Create Copy Activity

1. Add a "Copy Data" activity inside the ForEach activity.



2. Configure the Copy Data activity to move data from ADLS Gen2 to Azure SQL Database using the appropriate datasets.

This documentation provides a high-level overview. For detailed configuration settings and step-by-step guidance, refer to the official Azure Data Factory documentation: [Azure Data Factory Documentation](<https://docs.microsoft.com/en-us/azure/data-factory/introduction>).