5th pipeline onprem mysql → azure data factory → azure sql database

Pipeline Architecture :

Services Required :

1. On prem mysql
2. Azure data factory
3. Azure sql database

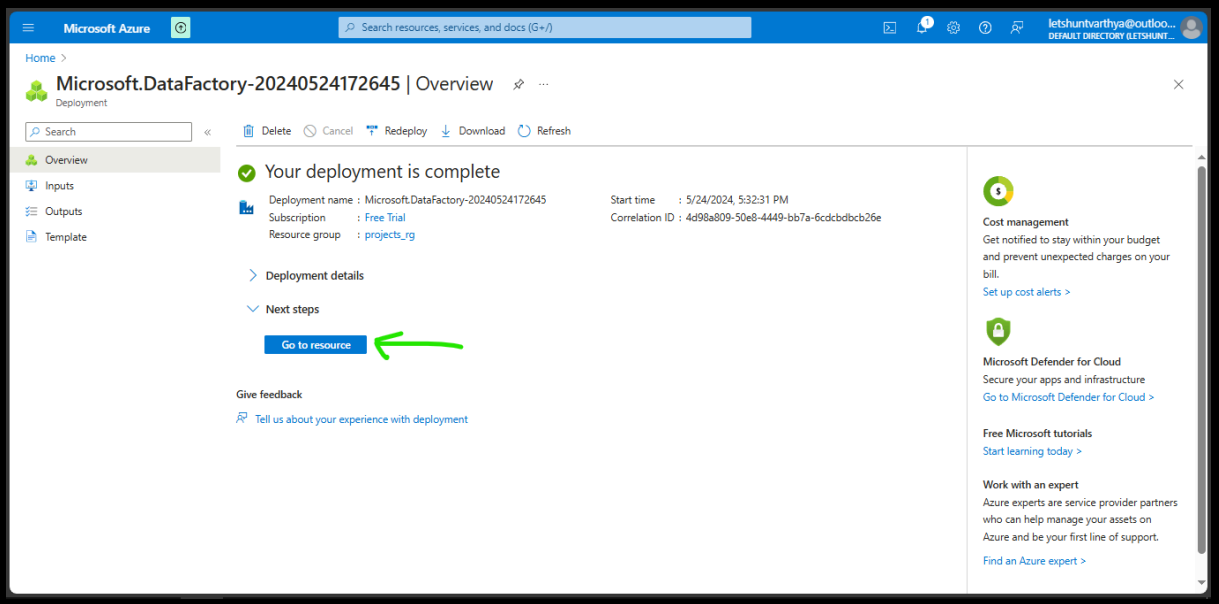
- Assuming product data is already there in onprem mysql.

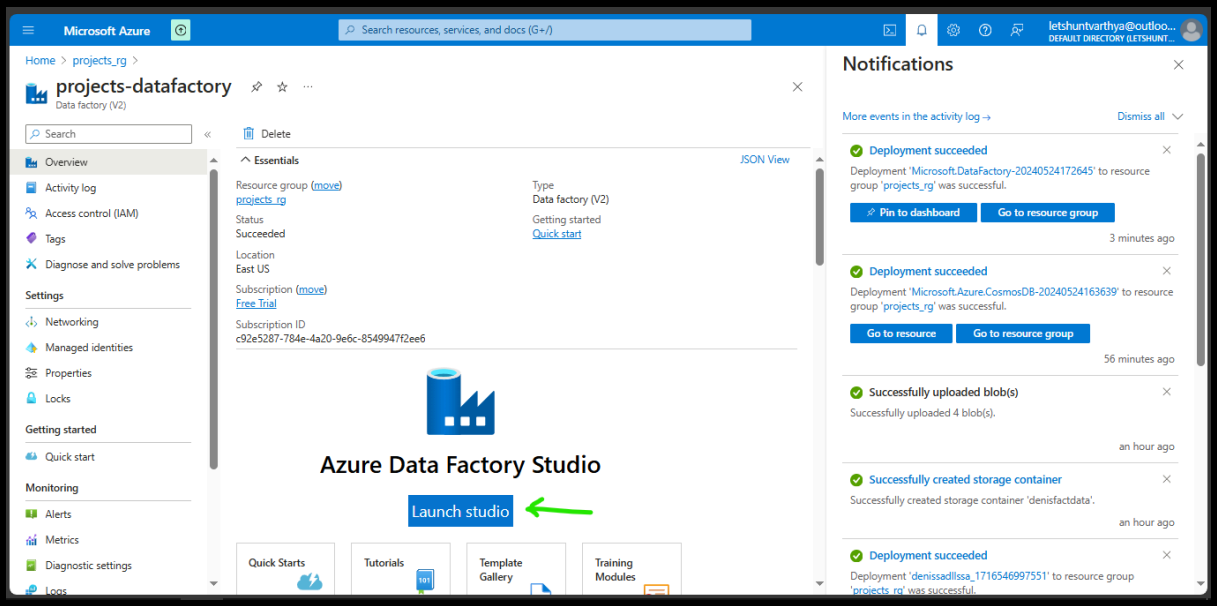
Azure SQL Database Creation :

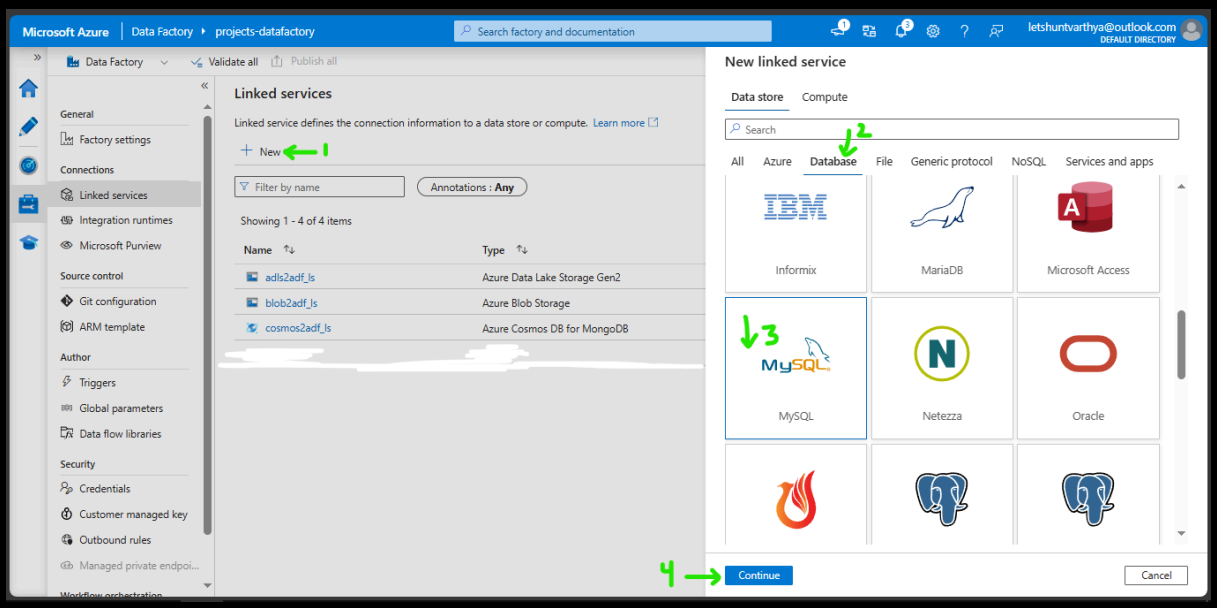
- Creation of an azure sql database is shown in the document below.
- Parameters used while creating azure sql database.
- Database name : sqldb
- Server name : projectsserver
- Server admin login : project_admin
- https://docs.google.com/document/d/16iB1EsGKHc6-bcgTPSfqkK6BVf3n8_fpbat42uNOvXc/edit?usp=drive_link

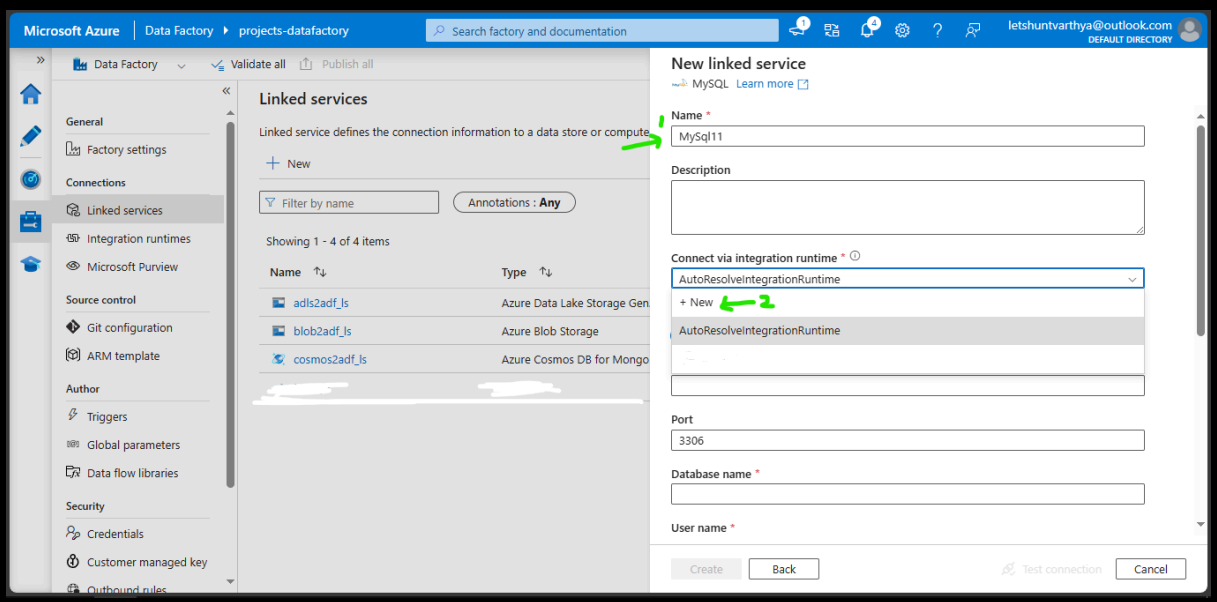
Azure Data Factory Creation :

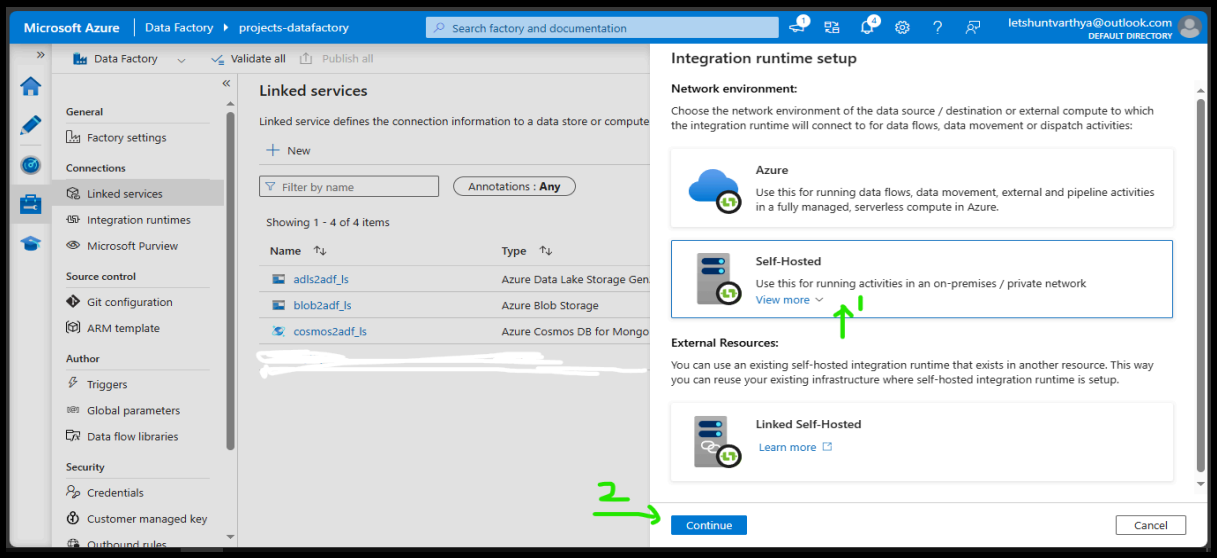
- Creation of the data factory is shown in the document below.
- Parameters used while creating azure data factory.
- Datafactory name : projects-datafactory
- https://docs.google.com/document/d/1IpvA7XumJjbIP0wPWWUlfd_gdvh6jTn_0a12HWv0jcM/edit?usp=sharing
- Click on Go to resource.
- Click on launch workspace.

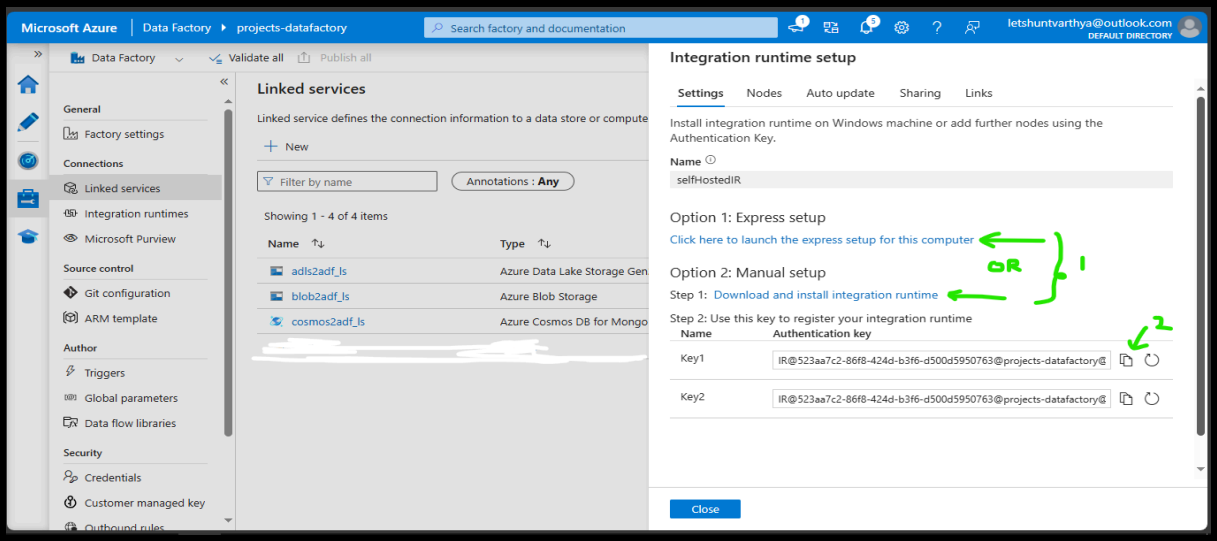



Microsoft Azure
Search resources, services, and docs (G+/)
Home > projects_rg >
projects-datafactory
Data factory (V2)
Search
Delete
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Networking
Managed identities
Properties
Locks
Getting started
Quick start
Monitoring
Alerts
Metrics
Diagnostic settings
Essentials
JSON View
Resource group (move)
projects_rg
Status
Succeeded
Location
East US
Subscription (move)
Free Trial
Subscription ID
c92e5287-784e-4a20-9e6c-8549947f2ee6
Type
Data factory (V2)
Getting started
Quick start
Azure Data Factory Studio
Launch studio
Quick Starts
Tutorials
Template Gallery
Training Modules
Notifications
More events in the activity log →
Dismiss all
Deployment succeeded
Deployment 'Microsoft.DataFactory-20240524172645' to resource group 'projects_rg' was successful.
Pin to dashboard
Go to resource group
3 minutes ago
Deployment succeeded
Deployment 'Microsoft.Azure.CosmosDB-20240524163639' to resource group 'projects_rg' was successful.
Go to resource
Go to resource group
56 minutes ago
Successfully uploaded blob(s)
Successfully uploaded 4 blob(s).
an hour ago
Successfully created storage container
Successfully created storage container 'denisfactdata'.
an hour ago
Deployment succeeded
Deployment 'denissadllssa_1716546997551' to resource group 'projects_rg' was successful.

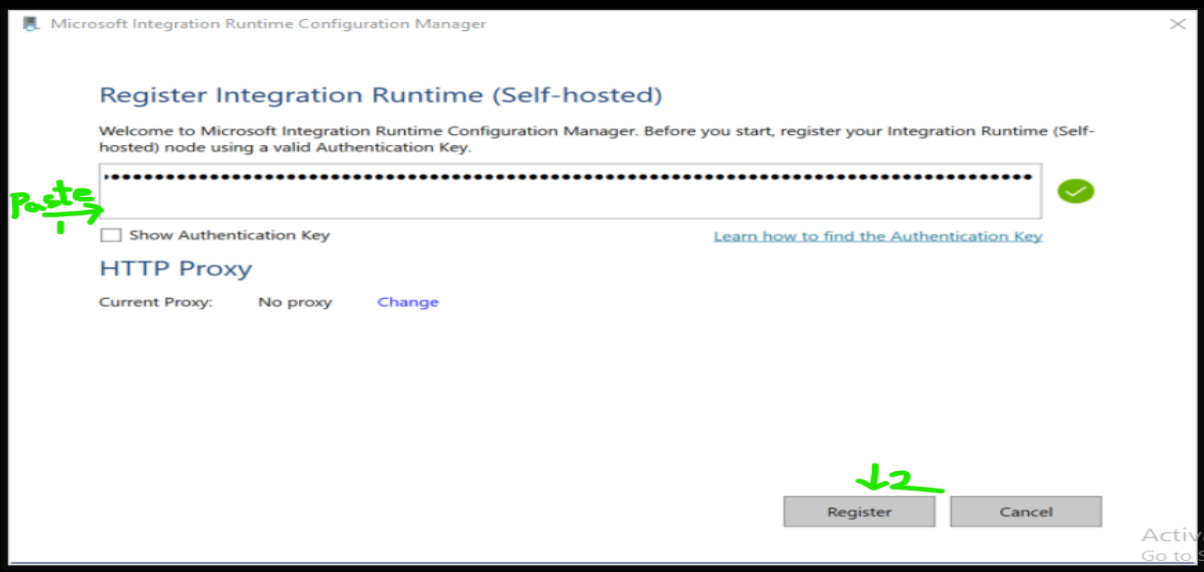

Microsoft Azure
Data Factory
projects-datafactory
Search factory and documentation
Data Factory
Validate all
Publish all
General
Factory settings
Connections
Linked services
Integration runtimes
Microsoft Purview
Source control
Git configuration
ARM template
Author
Triggers
Global parameters
Data flow libraries
Security
Credentials
Customer managed key
Outbound rules
Linked services
Linked service defines the connection information to a data store or compute. Learn more
New
Filter by name
Annotations : Any
Showing 1 - 4 of 4 items
Name
Type
adls2adf_ls
Azure Data Lake Storage Gen2
blob2adf_ls
Azure Blob Storage
cosmos2adf_ls
Azure Cosmos DB for MongoDB
New linked service
Data store
Compute
Search
All
Azure
Database
File
Generic protocol
NoSQL
Services and apps
Informix
MariaDB
Microsoft Access
MySQL
Netezza
Oracle
Continue
Cancel

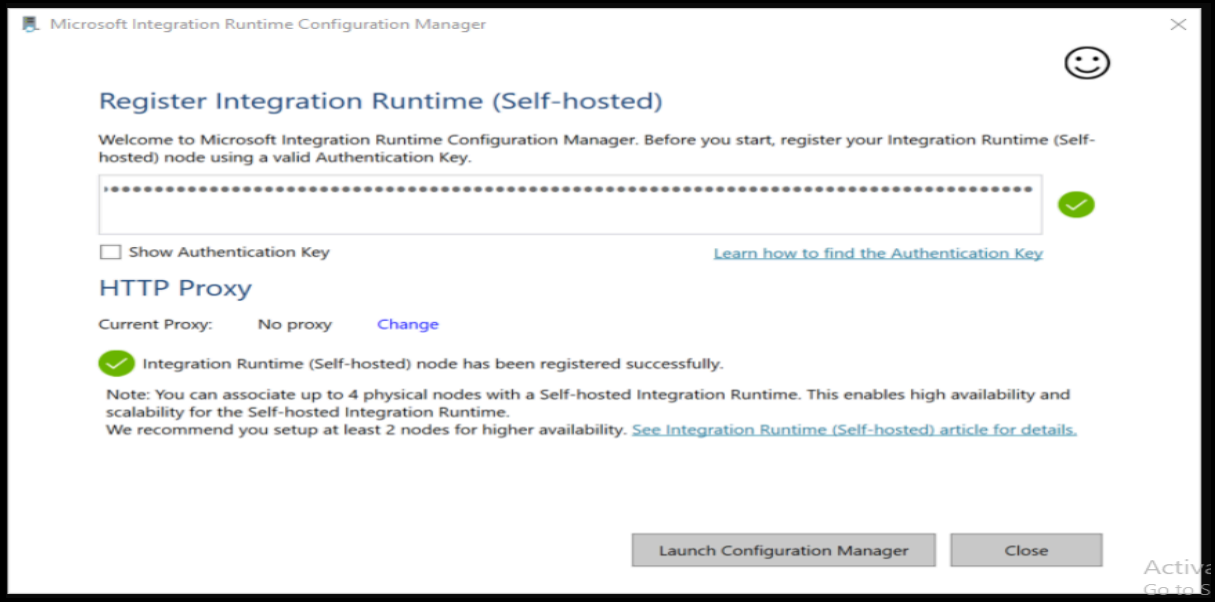

Microsoft Azure
Data Factory
projects-datafactory
Search factory and documentation
Data Factory
Validate all
Publish all
Linked services
Linked service defines the connection information to a data store or compute
New
Filter by name
Annotations : Any
Showing 1 - 4 of 4 items
Name
Type
adls2adf_ls
Azure Data Lake Storage Gen
blob2adf_ls
Azure Blob Storage
cosmos2adf_ls
Azure Cosmos DB for Mongo
New linked service
MySQL
Learn more
Name *
MySql11
Description
Connect via integration runtime *
AutoResolveIntegrationRuntime
+ New
AutoResolveIntegrationRuntime
Port
3306
Database name *
User name *
Create
Back
Test connection
Cancel

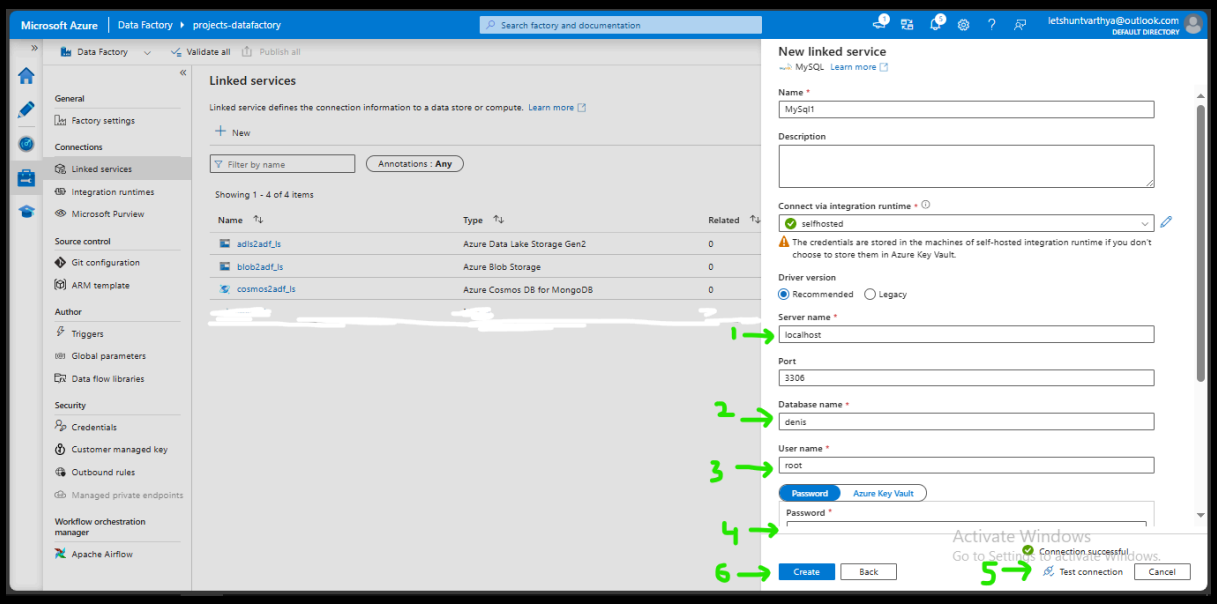


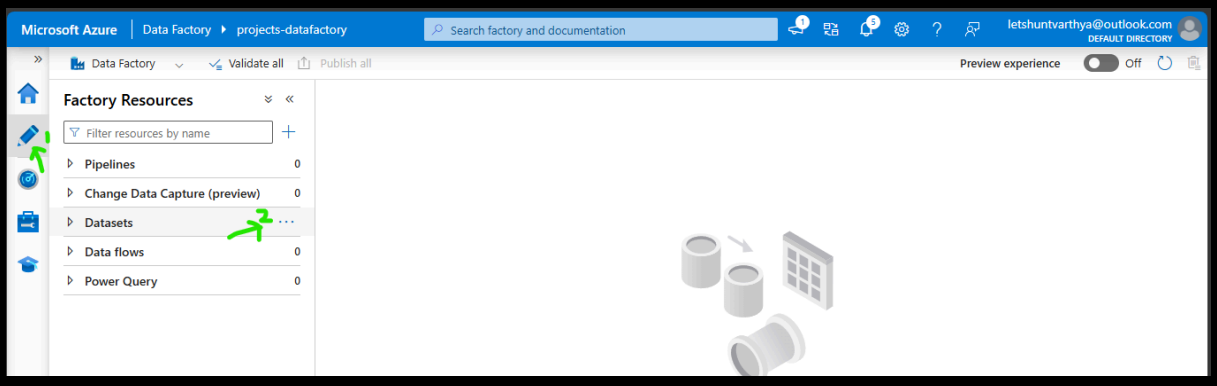


- After downloading the Self Integration Runtime, copy the key1 or key2 and paste in the self Integration Runtime.




Microsoft Integration Runtime Configuration Manager
Register Integration Runtime (Self-hosted)
Welcome to Microsoft Integration Runtime Configuration Manager. Before you start, register your Integration Runtime (Self-hosted) node using a valid Authentication Key.
Show Authentication Key
Learn how to find the Authentication Key
HTTP Proxy
Current Proxy: No proxy Change
Integration Runtime (Self-hosted) node has been registered successfully.
Note: You can associate up to 4 physical nodes with a Self-hosted Integration Runtime. This enables high availability and scalability for the Self-hosted Integration Runtime.
We recommend you setup at least 2 nodes for higher availability. See Integration Runtime (Self-hosted) article for details.
Launch Configuration Manager
Close


Microsoft Azure | Data Factory ▸ projects-datafactory
Search factory and documentation
letshuntvarthya@outlook.com
DEFAULT DIRECTORY
Data Factory
Validate all
Publish all
Linked services
Linked service defines the connection information to a data store or compute. Learn more
New
Filter by name
Annotations : Any
Showing 1 - 4 of 4 items
Name
Type
Related
adls2adf_ls
Azure Data Lake Storage Gen2
blob2adf_ls
Azure Blob Storage
cosmos2adf_ls
Azure Cosmos DB for MongoDB
New linked service
MySQL Learn more
Name *
MySql1
Description
Connect via integration runtime *
selfhosted
The credentials are stored in the machines of self-hosted integration runtime if you don't choose to store them in Azure Key Vault.
Driver version
Recommended
Legacy
Server name *
localhost
Port
3306
Database name *
denis
User name *
root
Password
Azure Key Vault
Password *
Connection successful
Test connection
Cancel
Create
Back
1
2
3
4
5
6
Activate Windows
Go to Settings to activate Windows.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Search factory and documentation
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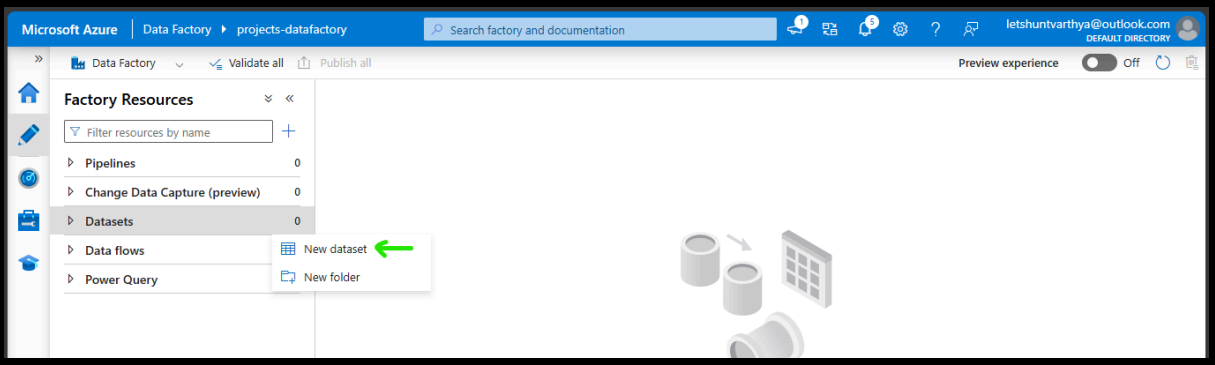
DEFAULT DIRECTORY
Data Factory
Validate all
Publish all
Preview experience
Off
Factory Resources
Filter resources by name
Pipelines 0
Change Data Capture (preview) 0
Datasets
Data flows 0
Power Query 0
1
2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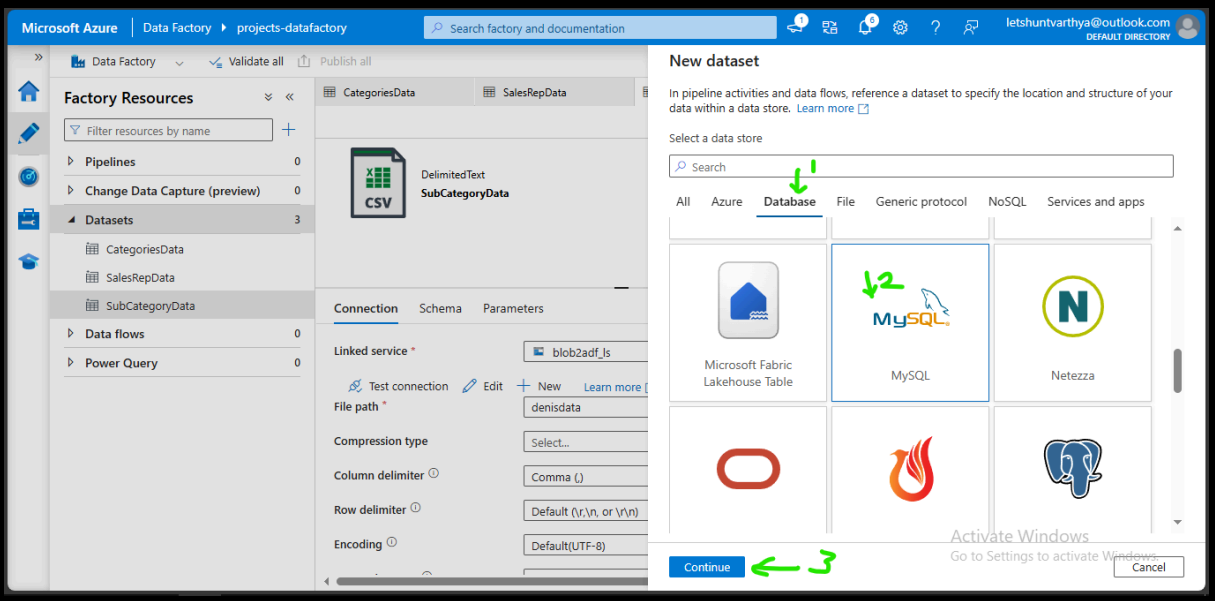
DEFAULT DIRECTORY
Data Factory
Validate all
Publish all
Preview experience
Off
Factory Resources
Filter resources by name
Pipelines 0
Change Data Capture (preview) 0
Datasets 0
Data flows
Power Query
New dataset
New folder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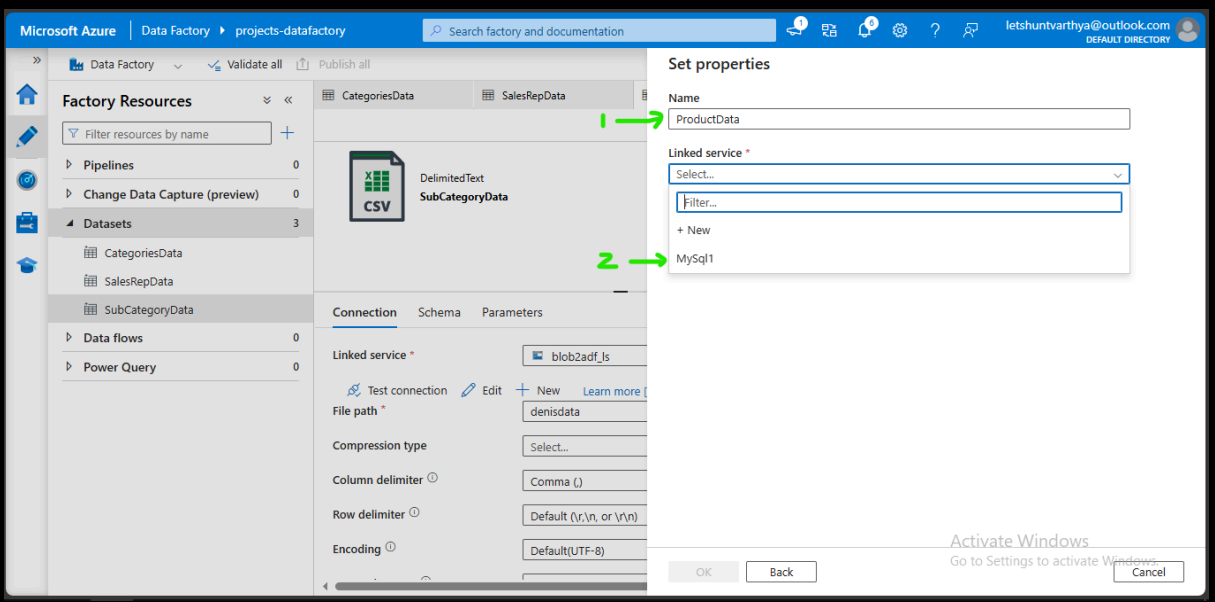
DEFAULT DIRECTORY
Data Factory
Validate all
Publish all
Factory Resources
Filter resources by name
Pipelines 0
Change Data Capture (preview) 0
Datasets 3
CategoriesData
SalesRepData
SubCategoryData
Data flows 0
Power Query 0
CategoriesData
SalesRepData
DelimitedText
SubCategoryData
Connection
Schema
Parameters
Linked service *
blob2adf_ls
Test connection
Edit
New
Learn more
File path *
denisdata
Compression type
Select...
Column delimiter
Comma (,)
Row delimiter
Default (\r,\n, or \r\n)
Encoding
Default(UTF-8)
New dataset
In pipeline activities and data flows, reference a dataset to specify the location and structure of your data within a data store. Learn more
Select a data store
Search
All
Azure
Database
File
Generic protocol
NoSQL
Services and apps
Microsoft Fabric Lakehouse Table
MySQL
Netezza
Continue
Cancel
Activate Windows
Go to Settings to activate Windows.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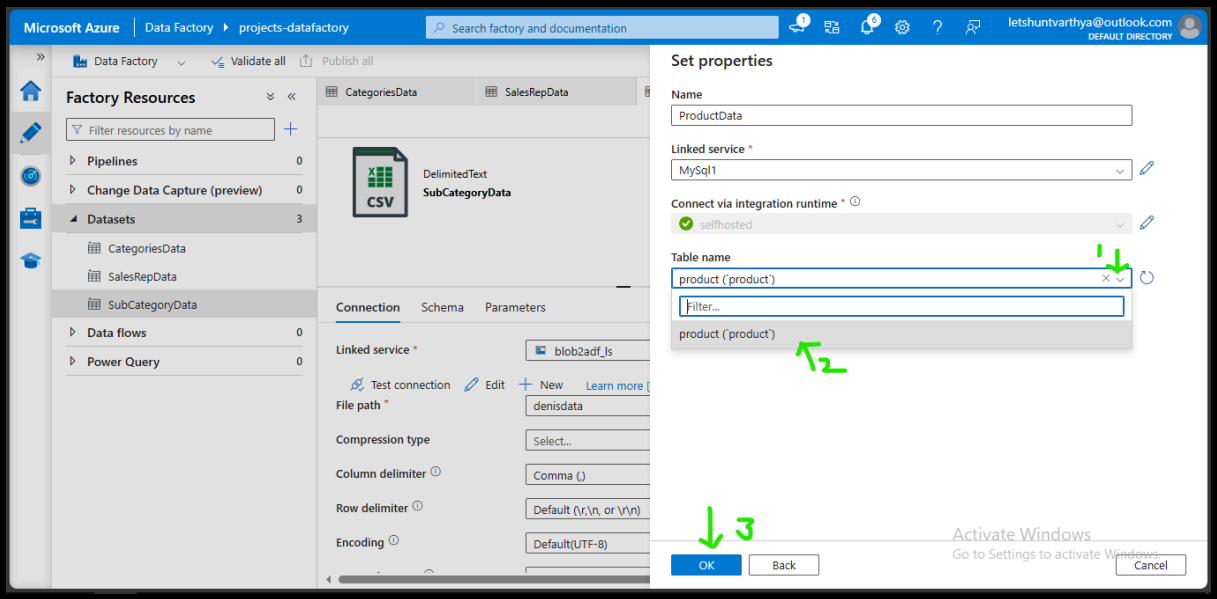
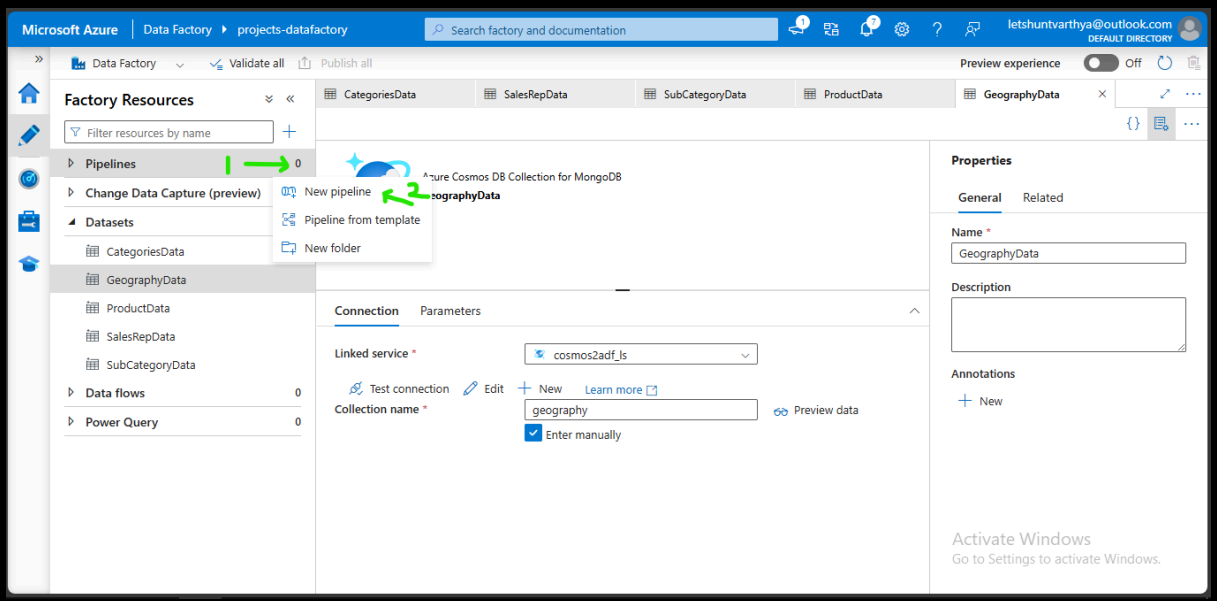
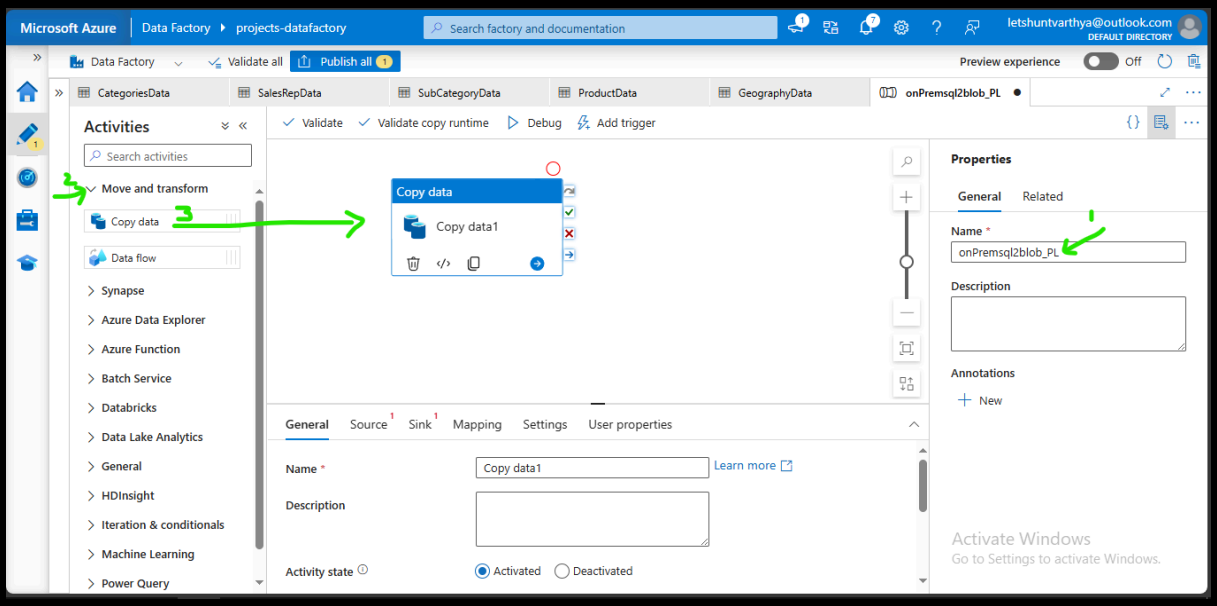
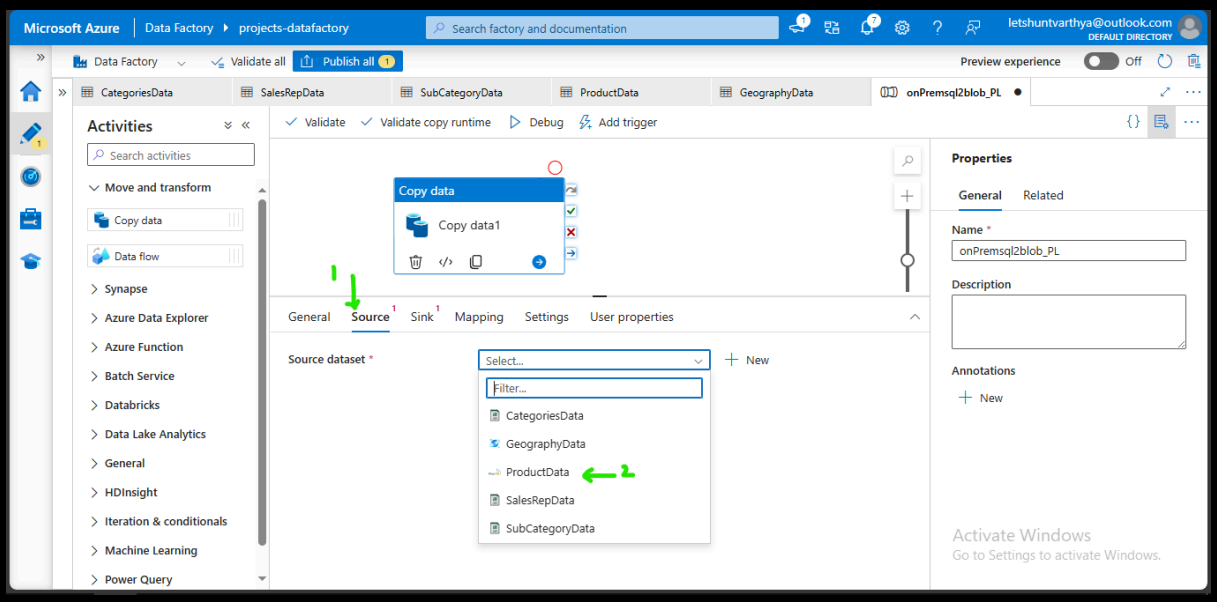
DEFAULT DIRECTORY
Data Factory
Validate all
Publish all
Factory Resources
Filter resources by name
Pipelines 0
Change Data Capture (preview) 0
Datasets 3
CategoriesData
SalesRepData
SubCategoryData
Data flows 0
Power Query 0
CategoriesData
SalesRepData
DelimitedText
SubCategoryData
Connection
Schema
Parameters
Linked service *
blob2adf_ls
Test connection
Edit
New
Learn more
File path *
denisdata
Compression type
Select...
Column delimiter
Comma (,)
Row delimiter
Default (\r,\n, or \r\n)
Encoding
Default(UTF-8)
Set properties
Name
ProductData
Linked service *
Select...
Filter...
+ New
MySql1
OK
Back
Cancel
Activate Windows
Go to Settings to activate Windows.



- Migration of product data to Azure sql database.



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Data Factory
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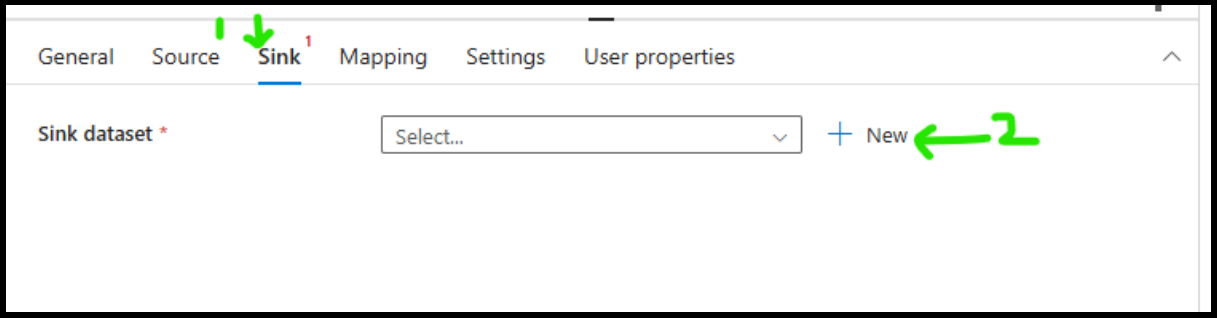
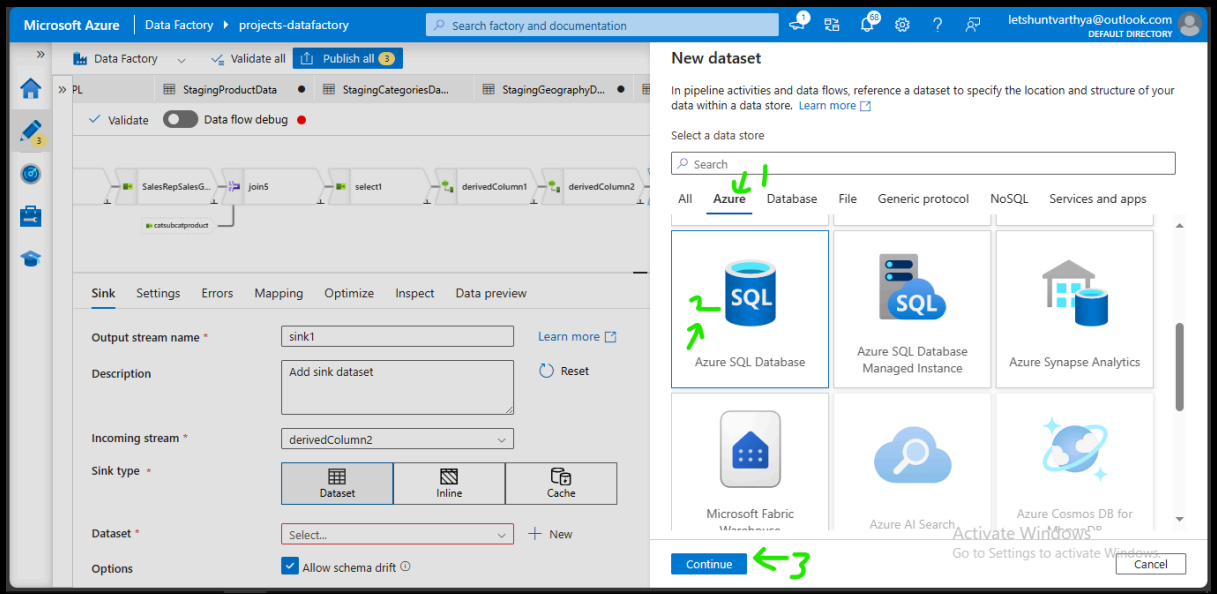
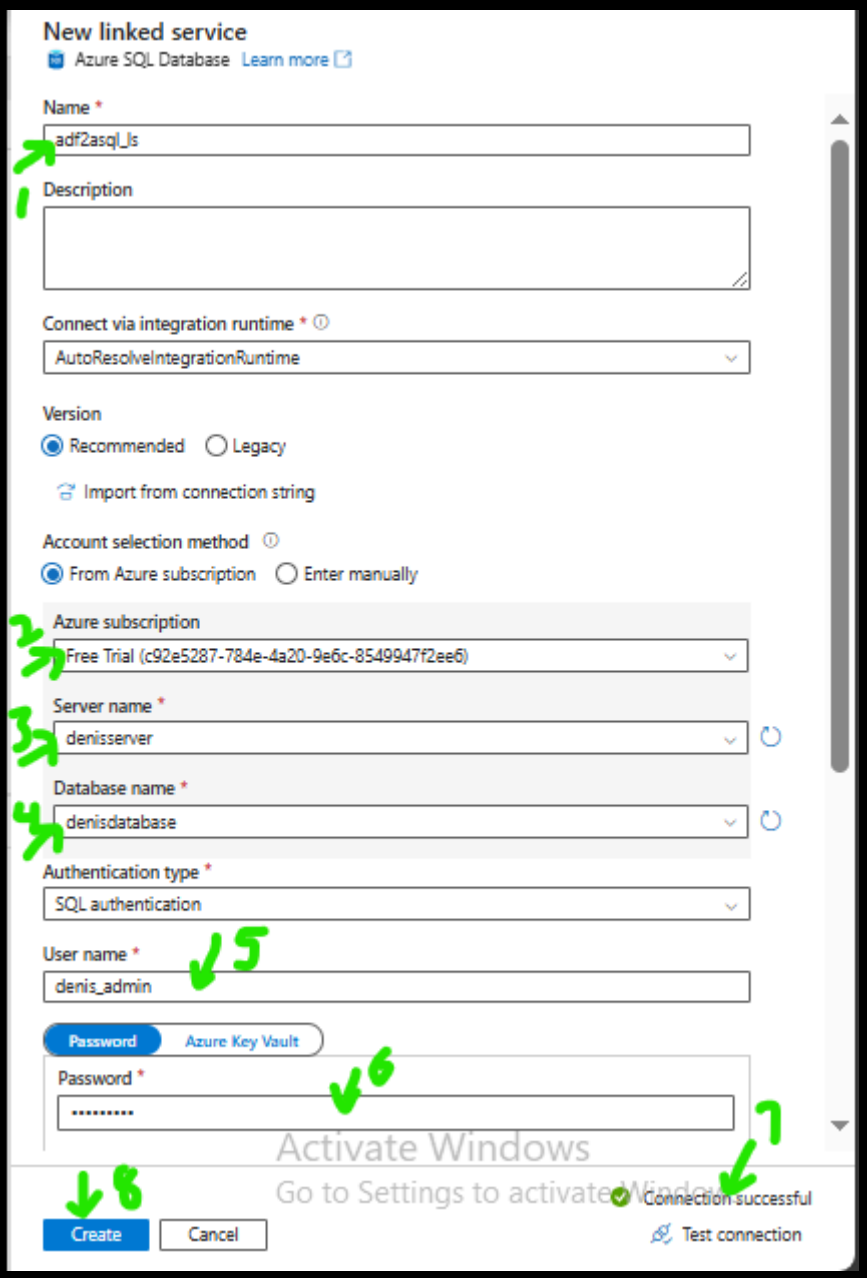
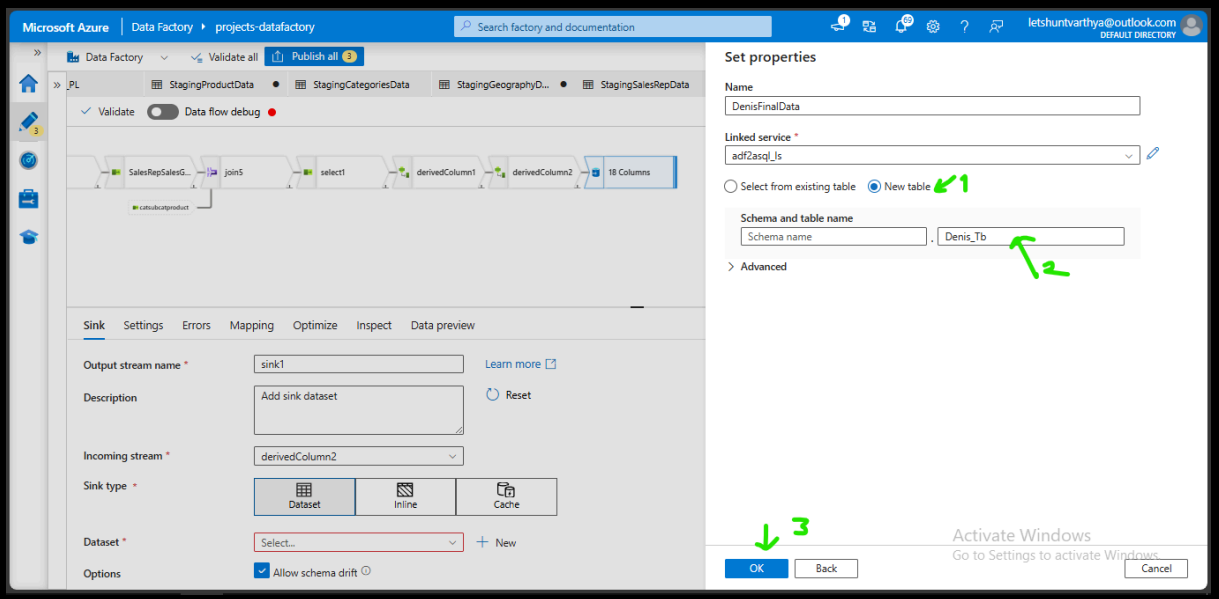
DEFAULT DIRECTORY
Validate all
Publish all 1
Preview experience
Off
CategoriesData
SalesRepData
SubCategoryData
ProductData
GeographyData
onPremsql2blob_PL
Activities
Search activities
Move and transform
Copy data
Data flow
Synapse
Azure Data Explorer
Azure Function
Batch Service
Databricks
Data Lake Analytics
General
HDInsight
Iteration & conditionals
Machine Learning
Power Query
Validate
Validate copy runtime
Debug
Add trigger
Copy data
Copy data1
General
Source
Sink
Mapping
Settings
User properties
Source dataset *
Select...
New
Filter...
CategoriesData
GeographyData
ProductData
SalesRepData
SubCategoryData
Properties
General
Related
Name *
onPremsql2blob_PL
Description
Annotations
New
Activate Windows
Go to Settings to activate Windows.


General
Source
Sink
Mapping
Settings
User properties
Sink dataset *
Select...
New


Microsoft Azure
Data Factory
projects-datafactory
Search factory and documentation
letshuntvarthya@outlook.com
DEFAULT DIRECTORY
Data Factory
Validate all
Publish all 3
StagingProductData
StagingCategoriesDa...
StagingGeographyD...
Validate
Data flow debug
SalesRepSalesG...
join5
select1
derivedColumn1
derivedColumn2
catsubcatproduct
Sink
Settings
Errors
Mapping
Optimize
Inspect
Data preview
Output stream name *
sink1
Learn more
Description
Add sink dataset
Reset
Incoming stream *
derivedColumn2
Sink type *
Dataset
Inline
Cache
Dataset *
Select...
New
Options
Allow schema drift
New dataset
In pipeline activities and data flows, reference a dataset to specify the location and structure of your data within a data store. Learn more
Select a data store
Search
All
Azure
Database
File
Generic protocol
NoSQL
Services and apps
Azure SQL Database
Azure SQL Database Managed Instance
Azure Synapse Analytics
Microsoft Fabric
Azure AI Search
Azure Cosmos DB for
Continue
Cancel
Activate Windows
Go to Settings to activate Windows.


New linked service
Azure SQL Database Learn more
Name *
adf2asql_ls
Description
Connect via integration runtime *
AutoResolveIntegrationRuntime
Version
Recommended
Legacy
Import from connection string
Account selection method
From Azure subscription
Enter manually
Azure subscription
Free Trial (c92e5287-784e-4a20-9e6c-8549947f2ee6)
Server name *
denisserver
Database name *
denisdatabase
Authentication type *
SQL authentication
User name *
denis_admin
Password
Azure Key Vault
Password *
Activate Windows
Go to Settings to activate Windows.
Connection successful
Test connection
Create
Cancel

- Give the table name as product_tb



- Publish all → publish
- Add trigger → Trigger now
- We can see the data in azure sql database by querying it.