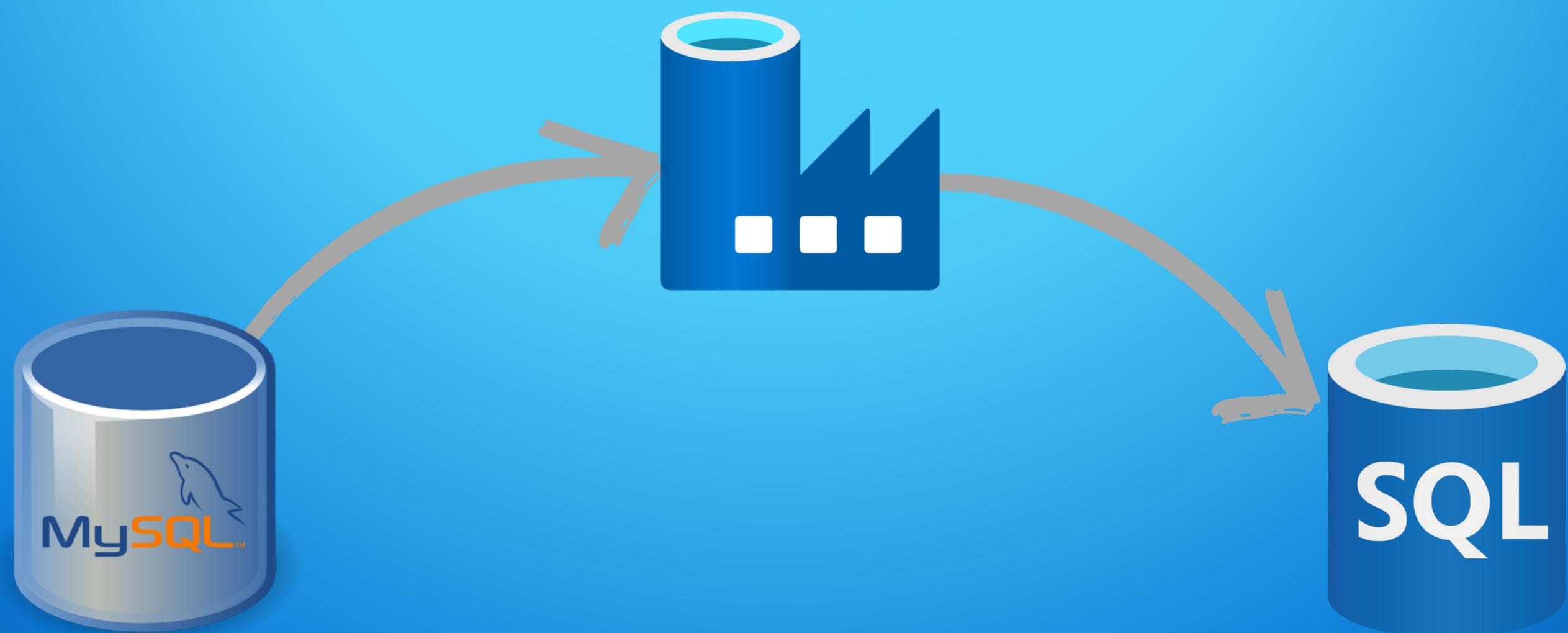




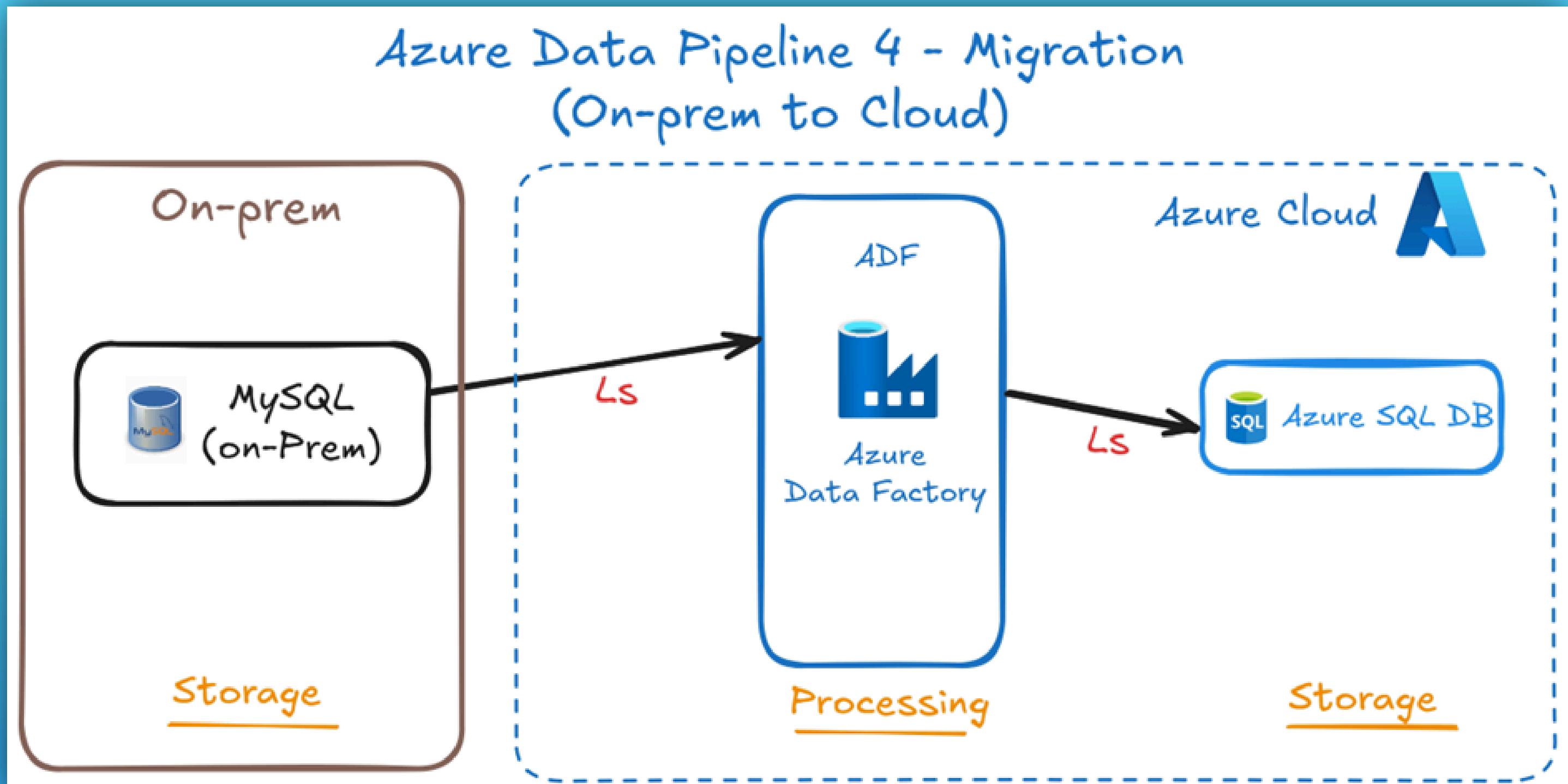
Migration of Data From On-Prem to Cloud End to End Data Engineering Project



Inturi Suparna Babu



MIGRATION OF DATA FROM ON-PREM to CLOUD END TO END DATA ENGINEERING PROJECT



STEPS INVOLVED

- MySQL On-premises Data
- Azure Data Factory Creation
- Azure SQL Database Creation
- Creating Linked services
- Creation of Pipeline
- Run the pipeline
- End to end testing



Inturi Suparna Babu

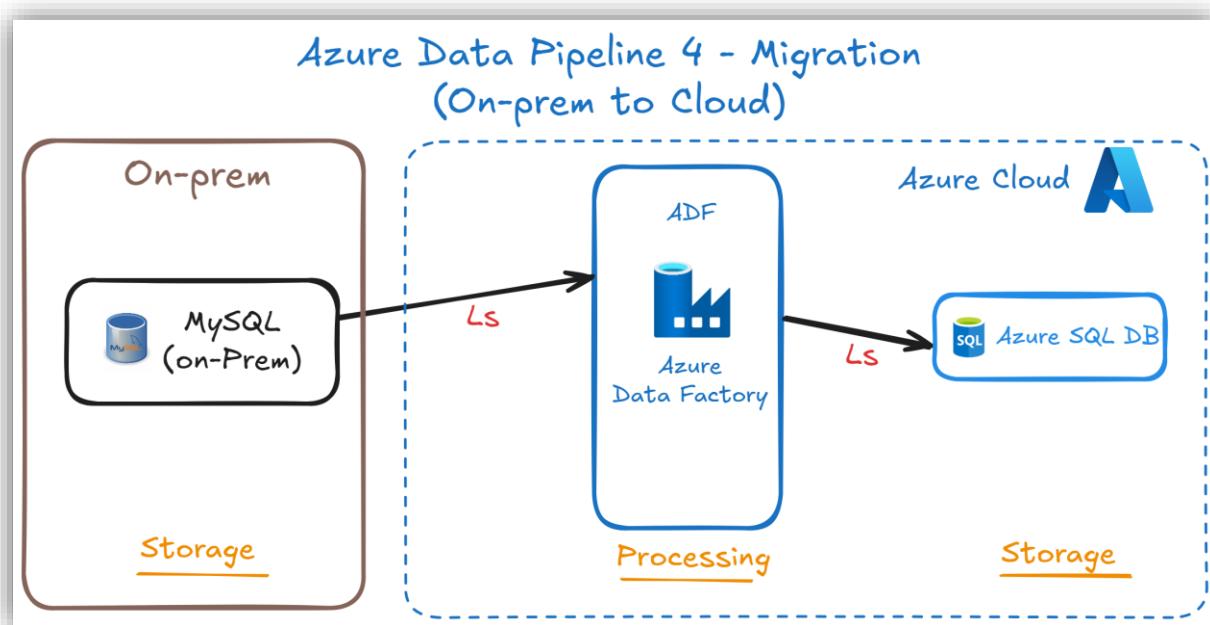


Inturi Suparna Babu

Azure Data Pipeline – Migration Project

(On-prem to Cloud)

Architecture Diagram



Creation of Azure Data Factory:

Step1: Create Data factories in red colour box

The screenshot shows the Microsoft Azure portal interface with the search bar at the top containing "Data factories". The sidebar on the left is expanded to show the "Analytics" category, which is highlighted in red. The main content area displays various data processing services, with the "Data factories" service highlighted by a red box.

All services | Analytics

Big data processing

- Analysis Services
- Data Lake Analytics
- HDInsight clusters
- Microsoft Graph Data Connect

Data exploration

- Azure Data Explorer Clusters
- Power BI Embedded

Real-time analytics

- Apache Kafka® & Apache Flink® on Confluent ...
- Managed Prometheus
- Azure Synapse Analytics

Service providers : All Release Status : All

Copilot Suparna APN/A

Suparna babu Inturi

Inturi Suparna Babu

Step 2: Create Data factories in red colour box

The screenshot shows the Microsoft Azure portal interface for 'Data factories'. The top navigation bar includes 'Microsoft Azure', 'Upgrade', 'Search resources, services, and docs (G+/-)', 'Copilot', and various icons. Below the navigation is a search bar and filter options: 'Filter for any field...', 'Subscription equals all', 'Type equals all', 'Resource group equals all', 'Location equals all', and 'Add filter'. The main content area displays a message: 'No data factories to display' with a factory icon. Below the message, it says: 'Integrate data silos with Azure Data Factory, a service built for all data integration needs and skill levels. Easily construct ETL and ELT processes code-free within the intuitive visual environment.' A prominent blue button labeled 'Create data factory' is centered, with a red box drawn around it. Other buttons include 'Learn more' and 'View all'.

Step 3: Fill the form accordingly and click on next

The screenshot shows the 'Create Data Factory' wizard in the 'Basics' step. The top navigation bar includes 'Microsoft Azure', 'Upgrade', 'Search resources, services, and docs (G+/-)', and a breadcrumb trail: 'All services > Data factories > Create Data Factory'. The main content area has tabs: 'Basics' (selected), 'Git configuration', 'Networking', 'Advanced', 'Tags', and 'Review + create'. A note says: 'One-click to create data factory with sample pipeline and datasets. Try it'. The 'Project details' section asks to select a subscription and resource group. The 'Subscription' dropdown shows 'Free Trial' and the 'Resource group' dropdown shows 'sibabu' with a 'Create new' option. The 'Instance details' section includes fields for 'Name' (set to 'ksrazuredf'), 'Region' (set to 'East US'), and 'Version' (set to 'V2'). At the bottom, there are 'Previous', 'Next', and 'Review + create' buttons, with the 'Next' button highlighted by a red box.

Suparna babu Inturi

Inturi Suparna Babu

Step 4: Check the Configure Git Later box and click next

Azure Data Factory allows you to configure a Git repository with either Azure DevOps or GitHub. Git is a version control system that allows for easier change tracking and collaboration.
[Learn more about Git integration in Azure Data Factory](#)

Configure Git later

Step 5: Keep the options as-is and click next

Choose whether you want the default AutoResolveIntegrationRuntime to be provisioned on demand inside an ADF-managed virtual network. If this setting is disabled, after the data factory is created, you can still choose whether to provision explicitly created Azure integration runtime inside an ADF-managed virtual network.
[Learn more](#)

Enable Managed Virtual Network on the default AutoResolveIntegrationRuntime

Self-hosted integration runtime inbound connectivity to Azure Data Factory service

Choose whether to connect your self-hosted integration runtime to Azure Data Factory via public endpoint or private endpoint. This applies to self-hosted integration runtime running either on-premises or inside customer managed Azure virtual network
[Learn more](#)

Connect via * Public endpoint Private endpoint

You can change this or configure another connectivity method after this resource is created. [Learn more](#)

Previous Next Review + create

Step 6: Keep the options as-is and click next

By default, data is encrypted with Microsoft-managed keys. For additional control over encryption keys, you can supply customer-managed keys to use for encryption of blob and file data. Customer-managed keys must be stored in an Azure Key Vault. You can either create your own keys and store them in a key vault, or you can use the Azure Key Vault APIs to generate keys. The storage account and the key vault must be in the same region, but they can be in different subscriptions.

Enable encryption using a Customer Managed Key

Next

Inturi Suparna Babu

Step 7: Keep the options as-is and click next

All services > Data factories >

Create Data Factory

Basics Git configuration Networking Advanced Tags Review + create

Tags are name/value pairs that enable you to categorize resources and view consolidated billing by applying the same tag to multiple resources and resource groups. [Learn more about tags](#)

Note that if you create tags and then change resource settings on other tabs, your tags will be automatically updated.

Name ⓘ	Value ⓘ	Resource
	:	Data factory (V2)

Step 8: Now validation completed and click on create

All services > Data factories >

Create Data Factory

Basics Git configuration Networking Advanced Tags Review + create

ⓘ View automation template

TERMS

By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. See the [Azure Marketplace Terms](#) for additional details.

Basics

Subscription	Free Trial
Resource group	sibabu
Name	ksrazuredf
Region	East US
Version	V2

Networking

Connect via	Public endpoint
-------------	-----------------

Previous Next **Create**

Inturi Suparna Babu

Step 9: Now Deployment in-progress

The screenshot shows the Microsoft Azure Data Factory Overview page for a deployment named "Microsoft.DataFactory-20250131170656". The status bar at the top indicates "Deployment is in progress". The deployment details table shows one resource, "ksrazuredf", which is a "Data factory (V2)" type in "OK" status. The deployment started at 1/31/2025, 5:13:19 PM with a correlation ID of 68734756-bd69-42ca-b75b-3097e37aab65.

Step 10: Now deployment completed and click on Go to resource.

The screenshot shows the Microsoft Azure Data Factory Overview page for the same deployment. The status bar now indicates "Your deployment is complete". The deployment details table remains the same. A red arrow points to the "Go to resource" button under the "Next steps" section.

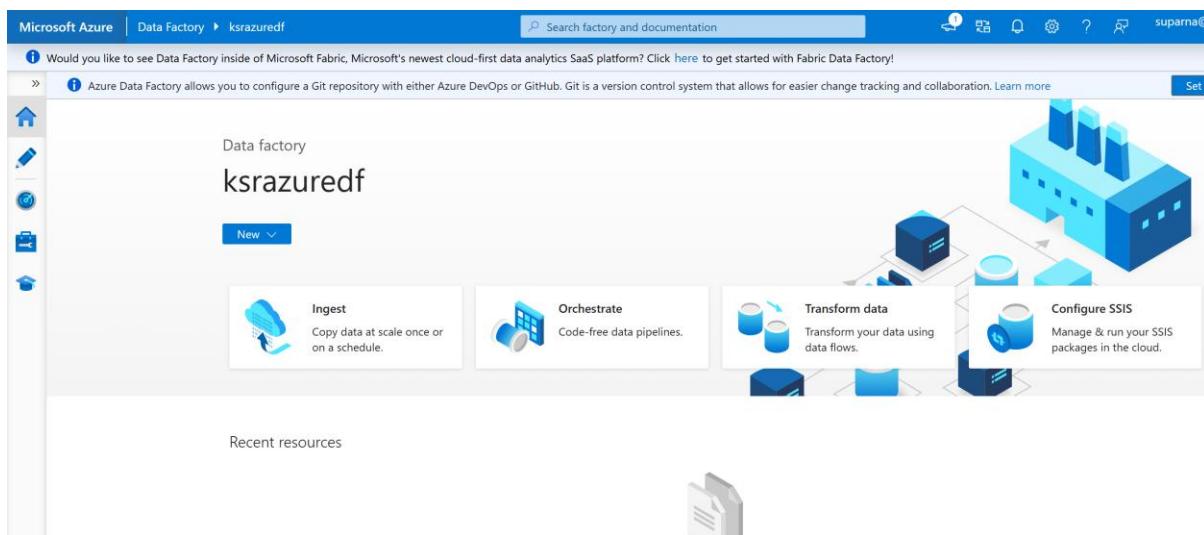
Step 11: Now you'll be see this and click on Launch studio.

The screenshot shows the Microsoft Azure Data Factory resource page for "ksrazuredf". The left sidebar includes options like Activity log, Access control (IAM), Tags, Diagnose and solve problems, Settings, Getting started, Monitoring, Automation, and Help. The main area displays "Essentials" information: Resource group (move) is "sibabu", Status is "Succeeded", Location is "East US", Subscription (move) is "Free Trial", and Subscription ID is "8cf3a5e-3732-4d83-91b1-3204336746ff". Below this is a large "Azure Data Factory Studio" logo with a "Launch studio" button underneath, which is highlighted with a red box.

Suparna babu Inturi

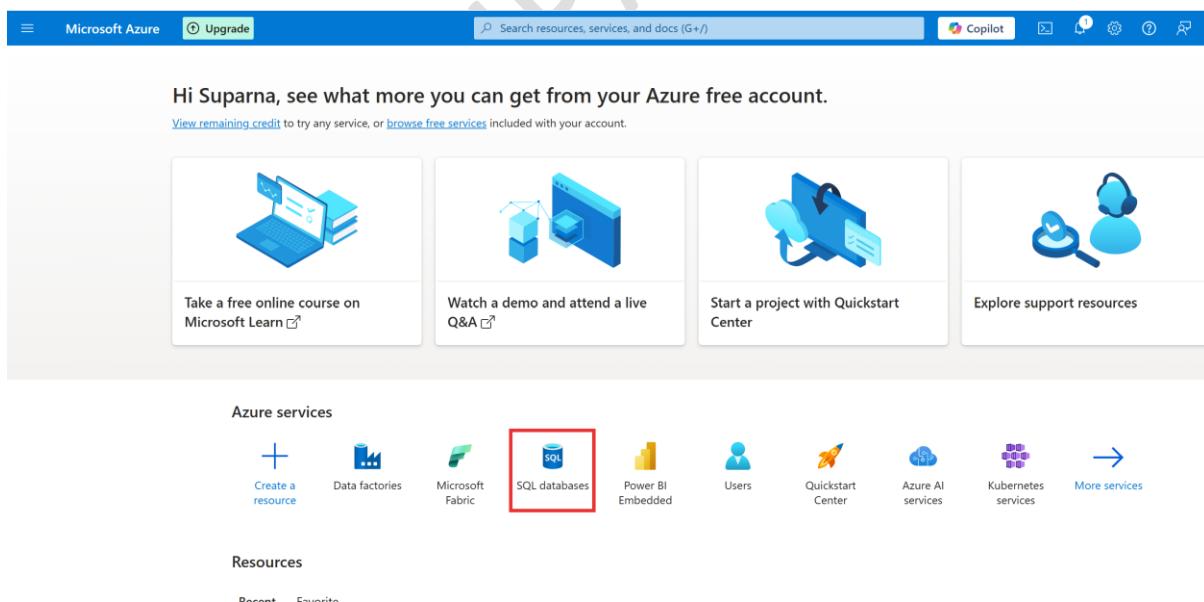
Inturi Suparna Babu

Step 12: Now you'll be able see the UI of ADF.



Creation of Azure SQL Database:

Step 1: Click on SQL Databases



Suparna babu Inturi

Inturi Suparna Babu

Step 2: Click on Create SQL database

The screenshot shows the Microsoft Azure SQL databases management interface. At the top, there's a search bar and various navigation links. Below it, a table header includes columns for Name, Server, Replica type, Pricing tier, Location, and Subscription. A large central message states 'No SQL databases to display' with a sub-message about utilizing a fully managed relational database service. A prominent blue button labeled 'Create SQL database' is highlighted with a red box.

Step 2: Fill the form accordingly and Click on Create New server

The screenshot shows the 'Create SQL Database' wizard on the 'Basics' tab. It includes tabs for Basics, Networking, Security, Additional settings, Tags, and Review + create. A note says to complete the Basics tab before proceeding. A purple callout box highlights a free offer for Azure SQL Database. The 'Project details' section allows selecting a subscription and resource group. The 'Database details' section requires entering a database name and selecting a server, with a 'Create new' option highlighted with a red box.

Suparna babu Inturi

Inturi Suparna Babu

Step 3: Fill the form and click ok

Microsoft Azure Upgrade Search resources, services, and docs (G+/)

Home > SQL databases > Create SQL Database > Create SQL Database Server ...

Server details

Enter required settings for this server, including providing a name and location. This server will be created in the same subscription and resource group as your database.

Server name * migrationonprem .database.windows.net

Location * (Asia Pacific) Central India

Authentication

Azure Active Directory (Azure AD) is now Microsoft Entra ID. [Learn more](#)

Select your preferred authentication methods for accessing this server. Create a server admin login and password to access your server with SQL authentication, select only Microsoft Entra authentication [Learn more](#) or using an existing Microsoft Entra user, group, or application as Microsoft Entra admin [Learn more](#), or select both SQL and Microsoft Entra authentication.

Authentication method Use Microsoft Entra-only authentication Use both SQL and Microsoft Entra authentication Use SQL authentication

Server admin login * mig_sql

Password * *****

Confirm password * *****

OK

Step 4: Fill the remaining portion of step 2 and click next

Microsoft Azure Upgrade Search resources, services, and docs (G+/)

Home > SQL databases >

Create SQL Database ...

Enter required settings for this database, including picking a logical server and configuring the compute and storage resources

Database name * migration

Server * (new) migrationonprem (Central India) [Create new](#)

Want to use SQL elastic pool? Yes No

Workload environment Development Production

Default settings provided for Development workloads. Configurations can be modified as needed.

Compute + storage * General Purpose - Serverless
Standard-series (Gen5), 1 vCore, 32 GB storage, zone redundant disabled [Configure database](#)

Backup storage redundancy Locally-redundant backup storage Zone-redundant backup storage Geo-redundant backup storage Geo-Zone-redundant backup storage [Preview]

Review + create **Next : Networking >**

Inturi Suparna Babu

Step 5: Select Public-end point and select Yes and then click on next

Microsoft Azure Upgrade Search resources, services, and docs (G+/)

Home > SQL databases > Create SQL Database ...

Networking

Configure network access and connectivity for your server. The configuration selected below will apply to the selected server 'migrationonprem' and all databases it manages. [Learn more](#)

Network connectivity

Choose an option for configuring connectivity to your server via public endpoint or private endpoint. Choosing no access creates with defaults and you can configure connection method after server creation. [Learn more](#)

Connectivity method * No access Public endpoint Private endpoint

Firewall rules

Setting 'Allow Azure services and resources to access this server' to Yes allows communications from all resources inside the Azure boundary, that may or may not be part of your subscription. [Learn more](#)
Setting 'Add current client IP address' to Yes will add an entry for your client IP address to the server firewall.

Allow Azure services and resources access this server * No Yes

Add current client IP address * No Yes

Connection policy

Configure how clients communicate with your SQL database server. [Learn more](#)

Connection policy Default - Uses Redirect policy for all client connections originating inside of Azure (except Private Endpoint connections) and Proxy for all client connections originating outside Azure Proxy - All connections are proxied via the Azure SQL Database gateways Redirect - Clients establish connections directly to the node hosting the database

[Review + create](#) [< Previous](#) [Next : Security >](#)

Cost summary

General Purpose (GP_S_Gen5_1)
Cost per GB (in INR) 10.91
Max storage selected (in GB) x 41.6
ESTIMATED STORAGE COST / MONTH 453.72 INR
COMPUTE COST / VCORE SECOND 0.013263 INR

NOTES
1 Serverless databases are billed in vCore seconds based on a combination of CPU and memory utilization. [Learn more about serverless billing](#)

Step 6: Keep this page as-is and click on next.

Microsoft Azure Upgrade Search resources, services, and docs (G+/)

Home > SQL databases > Create SQL Database ...

Security

Microsoft Defender for SQL

Protect your data using Microsoft Defender for SQL, a unified security package including vulnerability assessment and advanced threat protection for your server. [Learn more](#)

Get started with a 30 day free trial period, and then 1247.9202 INR/server/month.

Enable Microsoft Defender for SQL * Start free trial Not now

Ledger

Ledger cryptographically verifies the integrity of your data and detects any tampering that might have occurred. [Learn more](#)

Ledger Not configured [Configure ledger](#)

Server identity

Use system assigned and user assigned managed identities to enable central access management between this database and other Azure resources. [Learn more](#)

Server identity Not enabled [Configure Identities](#)

Transparent data encryption key management

Transparent data encryption encrypts your databases, backups, and logs at rest without any changes to your application. To enable encryption, go to each database. Database level settings if enabled, will override the server level setting. [Learn more](#)

Server level key Service-managed key selected [Configure transparent data encryption](#)

[Review + create](#) [< Previous](#) [Next : Additional settings >](#)

Cost summary

General Purpose (GP_S_Gen5_1)
Cost per GB (in INR) 10.91
Max storage selected (in GB) x 41.6
ESTIMATED STORAGE COST / MONTH 453.72 INR
COMPUTE COST / VCORE SECOND 0.013263 INR

NOTES
1 Serverless databases are billed in vCore seconds based on a combination of CPU and memory utilization. [Learn more about serverless billing](#)

Inturi Suparna Babu

Step 7: Keep this page as-is and click on next.

The screenshot shows the 'Create SQL Database' wizard in Microsoft Azure. The current step is 'Additional settings'. The 'Collation' section is set to 'SQL_Latin1_General_CI_AS'. The 'Maintenance window' dropdown is set to 'System default (5pm to 8am)'. On the right, there's a 'Cost summary' panel showing the following details:

General Purpose (GP_S_Gen5_1)	
Cost per GB (in INR)	10.91
Max storage selected (in GB)	x 41.6
ESTIMATED STORAGE COST / MONTH	453.72 INR
COMPUTE COST / VCORE SECOND	0.013263 INR

NOTES
Serverless databases are billed in vCore seconds based on a combination of CPU and memory utilization. [Learn more about serverless billing](#)

At the bottom, the 'Next : Tags >' button is highlighted with a red box.

Step 9: Keep this page as-is and click on review+create.

The screenshot shows the 'Create SQL Database' wizard in Microsoft Azure. The current step is 'Review + create'. The 'Tags' section shows one tag named '2 selected'. On the right, there's a 'Cost summary' panel showing the same details as the previous step:

General Purpose (GP_S_Gen5_1)	
Cost per GB (in INR)	10.91
Max storage selected (in GB)	x 41.6
ESTIMATED STORAGE COST / MONTH	453.72 INR
COMPUTE COST / VCORE SECOND	0.013263 INR

NOTES
Serverless databases are billed in vCore seconds based on a combination of CPU and memory utilization. [Learn more about serverless billing](#)

At the bottom, the 'Next : Review + create >' button is highlighted with a red box.

Suparna babu Inturi

Inturi Suparna Babu

Step 9: Now click on create

The screenshot shows the 'Create SQL Database' wizard. The 'Review + create' tab is active. On the right, there's a 'Cost summary' section showing a General Purpose (GP_S_Gen5_1) database with 10.91 vCore seconds and 41.6 GB storage, totaling 453.72 INR per month. Below it, a note states: 'Serverless databases are billed in vCore seconds based on a combination of CPU and memory utilization. Learn more about serverless billing.' At the bottom left, a red box highlights the 'Create' button.

Step 10: Deployment is in progress

The screenshot shows the 'Deployment' page for a resource named 'Microsoft.SQLDatabase.newDatabaseNewServer_7f4699618fd54a9dbb642'. The status bar at the top says 'Deployment is in progress'. Below it, the deployment details show the deployment name, subscription, and resource group. A red box highlights the status message 'Deployment is in progress'.

Step 11: Deployment succeeded and click on Go to resource

The screenshot shows the 'Deployment' page again, but this time the status bar at the top says 'Deployment succeeded'. The deployment details show the deployment name, subscription, and resource group. A red box highlights the 'Go to resource' button at the bottom left. To the right, there are promotional cards for cost management, Microsoft Defender for Cloud, free Microsoft tutorials, and working with experts.

Suparna babu Inturi

Inturi Suparna Babu

Step 12: Now you are able to view SQL Database UI and click on Query editor

The screenshot shows the Microsoft Azure SQL Database Overview page for a database named 'migration'. The left sidebar has a 'Query editor (preview)' link under 'Diagnose and solve problems' which is highlighted with a red box. The main content area displays database details like Resource group (sibabu), Status (Online), Location (Central India), and Subscription (Free Trial). It also shows options to 'Configure access', 'Connect to application', 'Start developing', and 'Mirror database i'. A large watermark 'DATA' is visible across the page.

Step 13: Now enter your credentials and click on OK

The screenshot shows the Microsoft Azure SQL Database Query editor (preview) page. The left sidebar has a 'Query editor (preview)' link under 'Diagnose and solve problems' which is highlighted with a red box. The main content area shows a 'Welcome to SQL Database Query Editor' dialog box with 'SQL server authentication' selected. It asks for 'Login' (mig_sq) and 'Password'. There is also an option for 'Microsoft Entra authentication' and a 'Continue as suparna@ajaybabu.onmicrosoft.com' button. A large watermark 'DATA' is visible across the page.

Step 14: Now you are able to view SQL Database Editor.

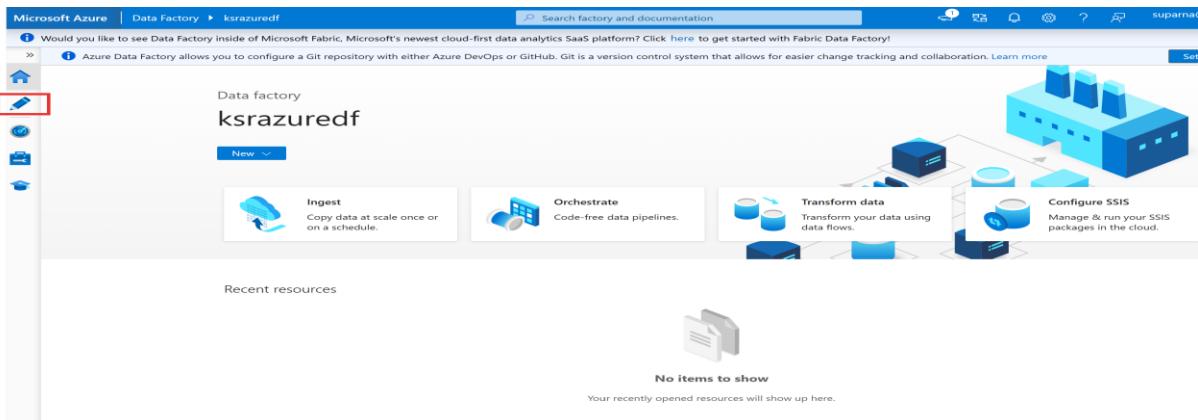
The screenshot shows the Microsoft Azure SQL Database Query editor (preview) page. The left sidebar has a 'Query editor (preview)' link under 'Diagnose and solve problems' which is highlighted with a red box. The main content area shows the 'Query 1' editor window with a single digit '1' entered. Below it is the 'Results' pane. A large watermark 'DATA' is visible across the page.

Suparna babu Inturi

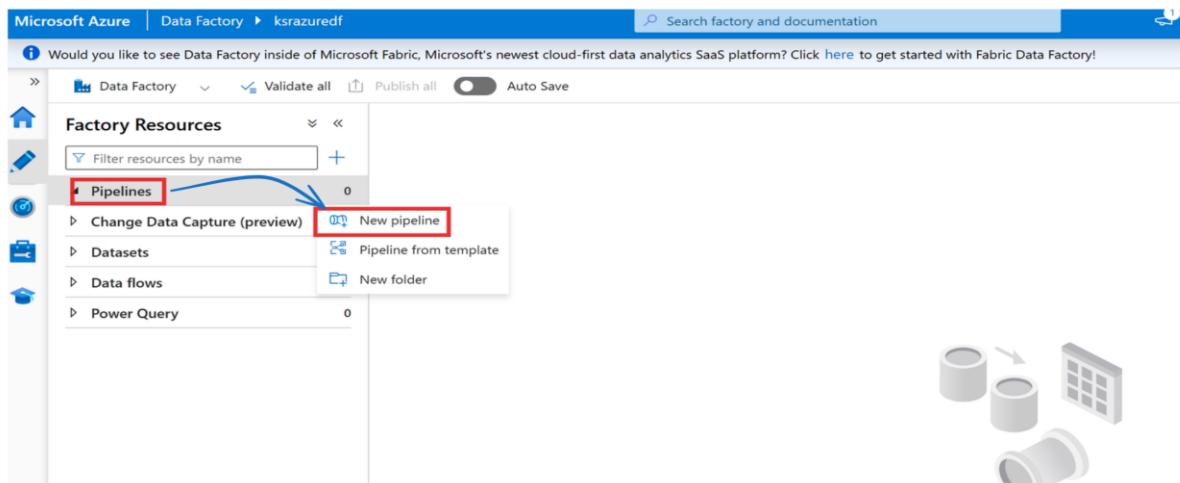
Inturi Suparna Babu

Now we can start the process of implementing the process of migration

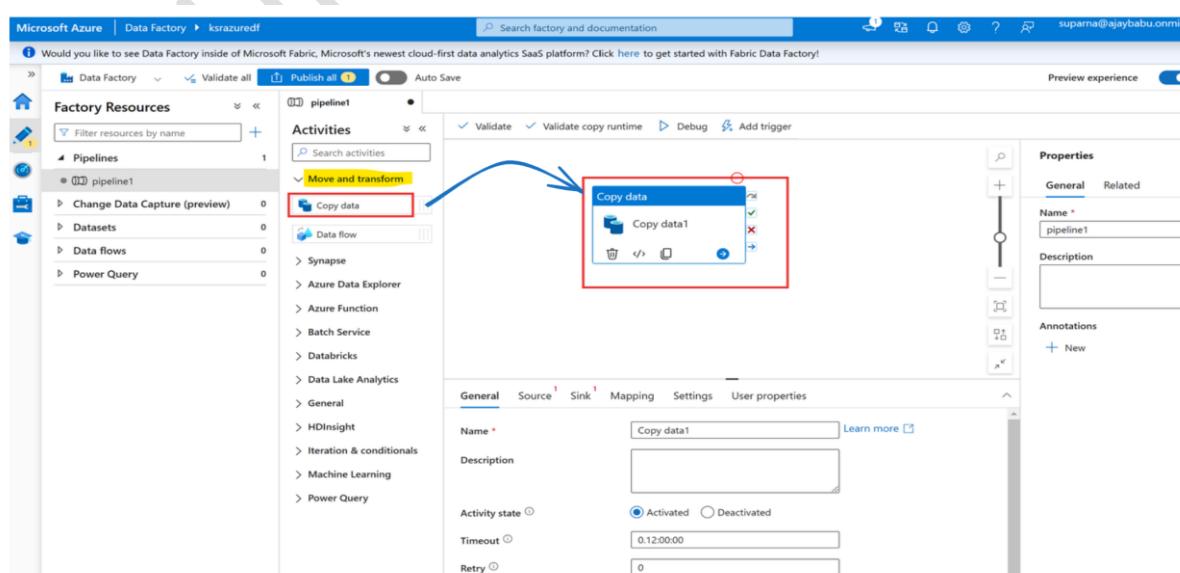
Step 1: Click on pencil icon



Step 2: After clicking Pencil Icon Now you click on Pipelines and click on New pipeline



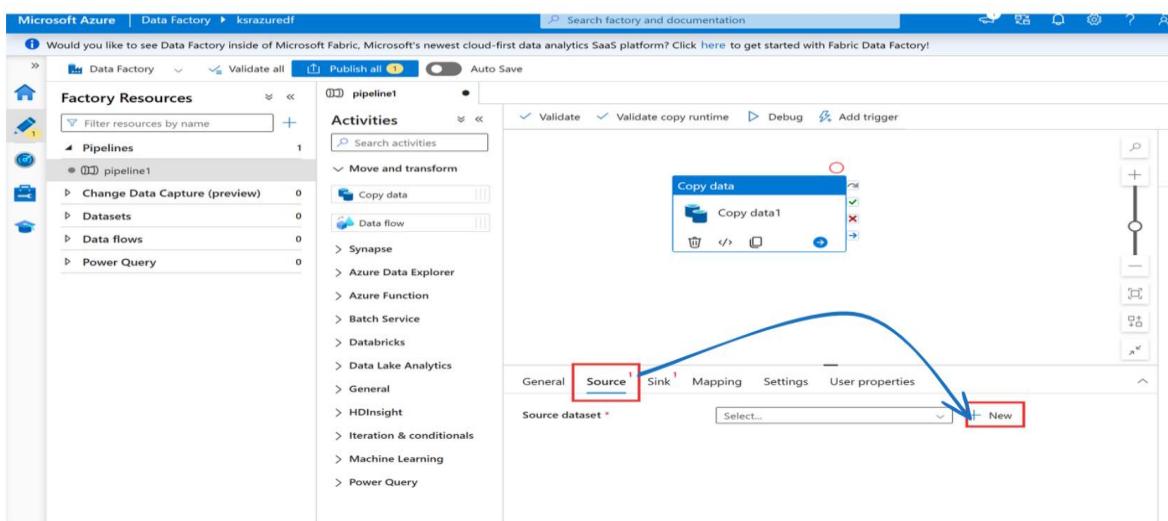
Step 3: Click on dropdown of Move and Transform then drag the Copy data into canvas



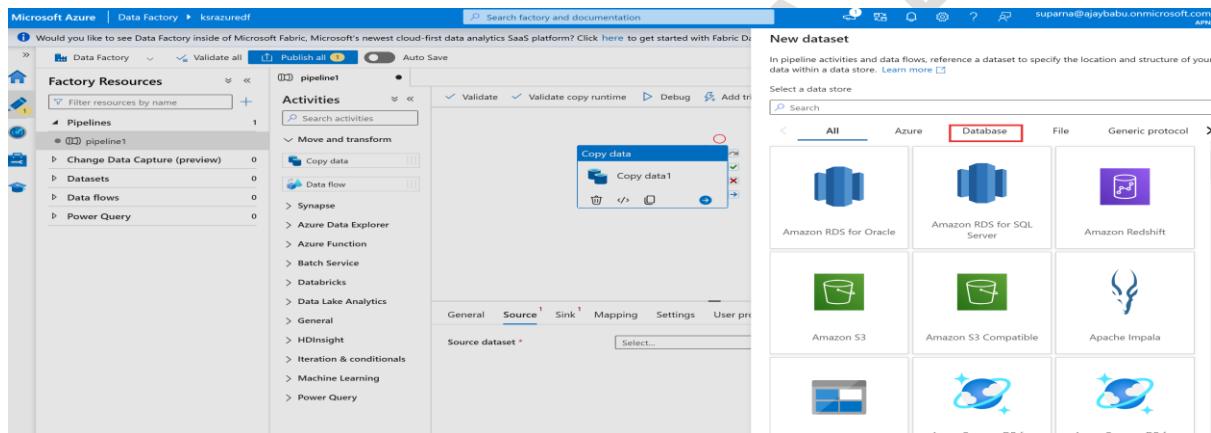
Suparna babu Inturi

Inturi Suparna Babu

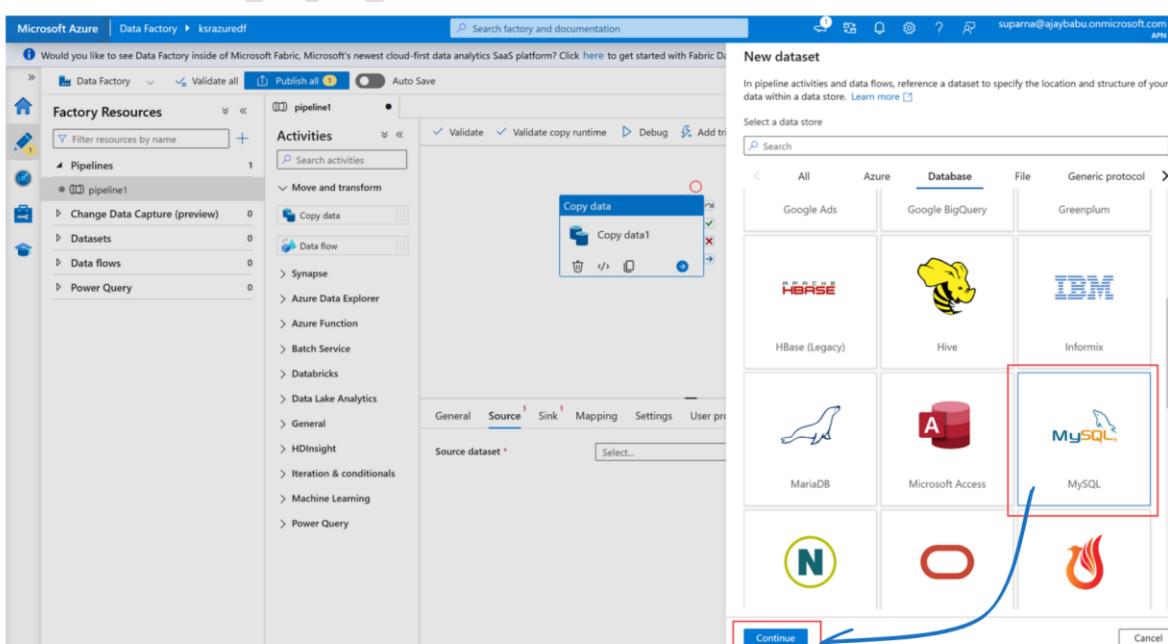
Step 4: Now click on Source followed by New



Step 5: After clicking on new it'll show like this now click on Database



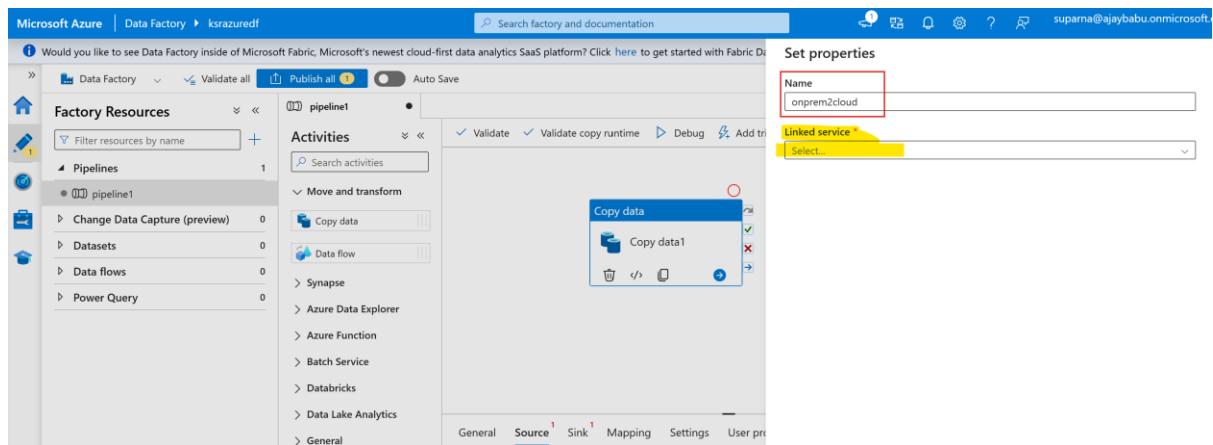
Step 6: Scroll down and choose MySQL and click continue



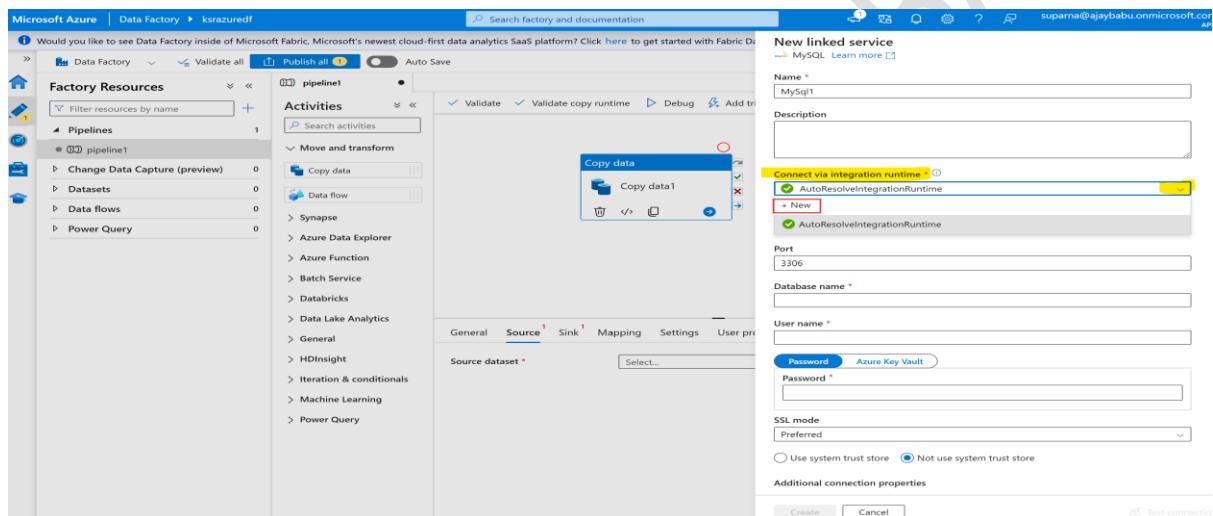
Suparna babu Inturi

Inturi Suparna Babu

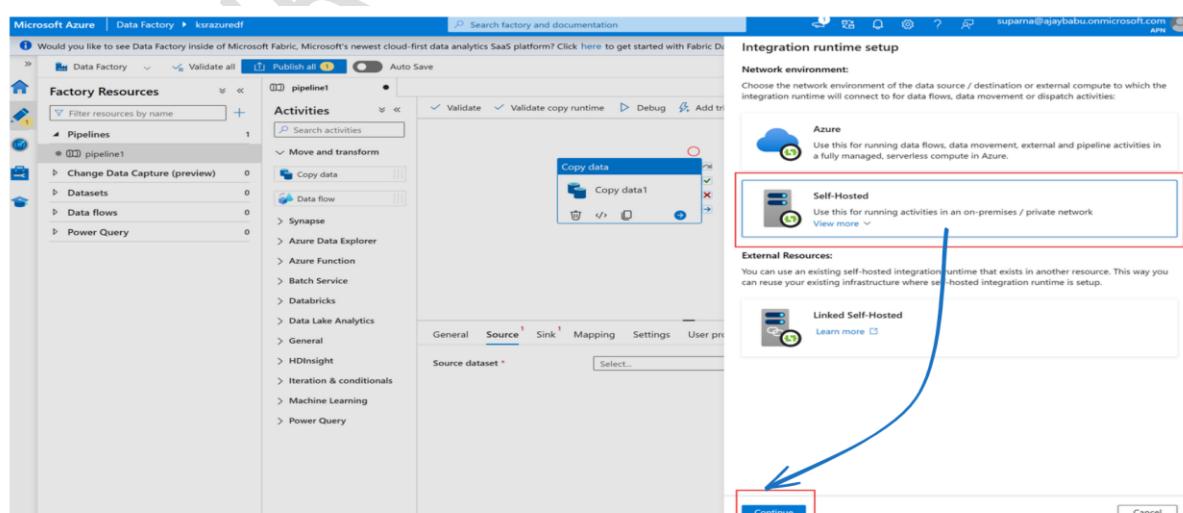
Step 7: Keep a proper name and click on drop down and create new linked service



Step 8: Now you'll be see this screen, click on Connect via integration runtime dropdown and click new



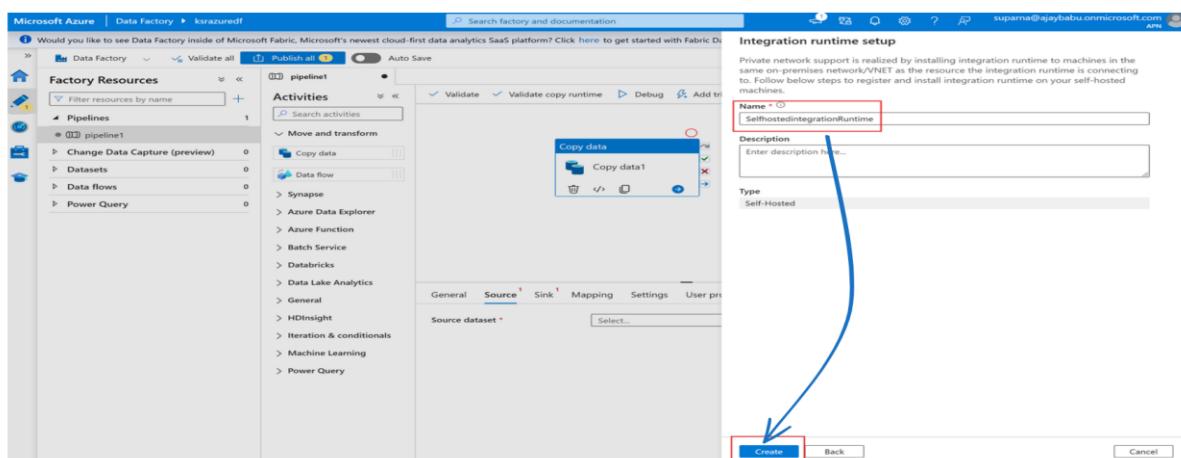
Step 9: Select Sel-Hosted integration runtime setup and click continue



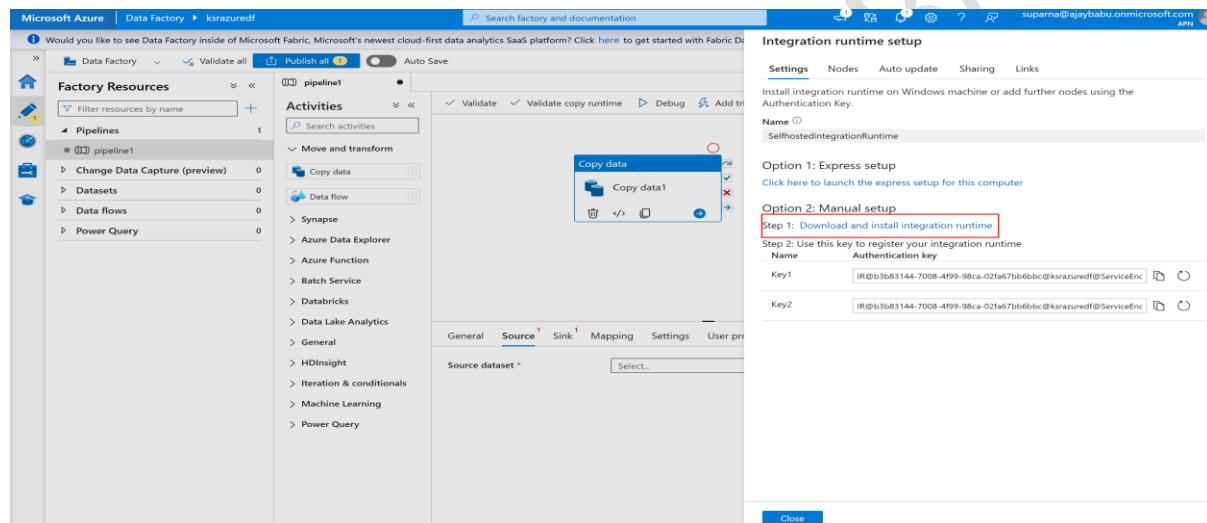
Suparna babu Inturi

Inturi Suparna Babu

Step 11: Put proper name and click on Create



Step 12: Now Click on download and install integration runtime software



Step 13: After clicking on it now you will see this screen and click on download.

Microsoft Integration Runtime

The Microsoft Integration Runtime is a customer managed data integration infrastructure used by Azure Data Factory and Azure Synapse Analytics to provide data integration capabilities across different network environments.

Important! Selecting a language below will dynamically change the complete page content to that language.

Select language: English [Download](#)

[Expand all](#) | [Collapse all](#)

▼ Details

Version: 5.50.9144.2	Date Published: 1/26/2025
File Name: IntegrationRuntime_5.45.8999.1.msi	File Size: 1.2 GB
IntegrationRuntime_4.46.9020.1.msi	1.2 GB
IntegrationRuntime_5.47.9060.1.msi	1.1 GB
IntegrationRuntime_5.48.9106.2.msi	1.1 GB

Suparna babu Inturi

Inturi Suparna Babu

Step 14: Select proper version and click on download



Step 15: Software download is in progress

The screenshot shows a Microsoft browser window with the URL microsoft.com/en-us/download/details.aspx?id=39717. The page title is 'Microsoft Integration Runtime'.

The 'Recent download history' sidebar shows the download progress for 'IntegrationRuntime_5.48.9106.2.msi':
1.0/1.1 GB • 54 seconds left

The main content area includes:

- An important note: 'Important! Selecting a language below will dynamically change the complete page content to that language.'
- A 'Select language' dropdown set to 'English'.
- A 'Downloaded' button.
- A message: 'If your download does not start in 30 seconds, [click here to download manually.](#)'
- A 'Install Instructions' section with the note: 'Download and run the IntergrationRuntime.msi (64-bit) to install the Integration Runtime on your computer. You may also save IntegrationRuntime.msi to your local disk to install later.'
- Links: 'Expand all' and 'Collapse all'.

Step 16: Download completed

The screenshot shows a Microsoft browser window with the URL microsoft.com/en-us/download/details.aspx?id=39717. The page title is 'Microsoft Integration Runtime'.

The 'Recent download history' sidebar shows the download status for 'IntegrationRuntime_5.48.9106.2.msi':
1.1 GB • Done

The main content area includes:

- An important note: 'Important! Selecting a language below will dynamically change the complete page content to that language.'
- A 'Select language' dropdown set to 'English'.
- A 'Downloaded' button.
- A message: 'If your download does not start in 30 seconds, [click here to download manually.](#)'
- A 'Install Instructions' section with the note: 'Download and run the IntergrationRuntime.msi (64-bit) to install the Integration Runtime on your computer. You may also save IntegrationRuntime.msi to your local disk to install later.'

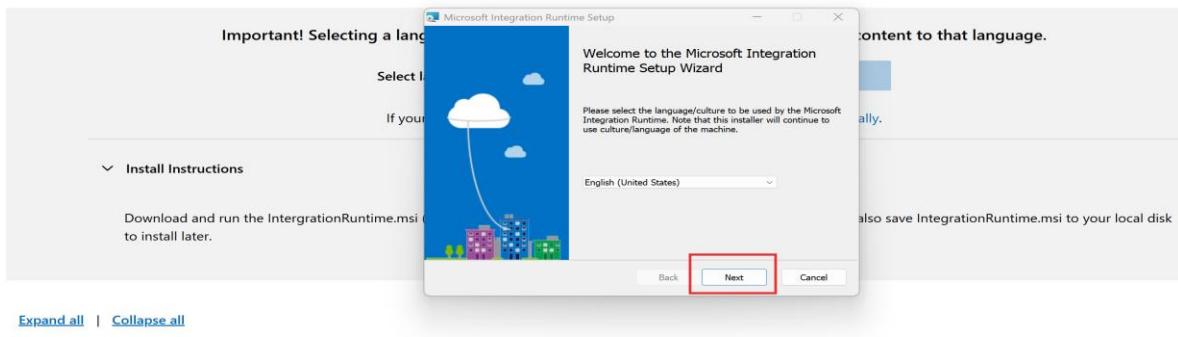
Suparna babu Inturi

Inturi Suparna Babu

Step 17: Now install the software by clicking next

Microsoft Integration Runtime

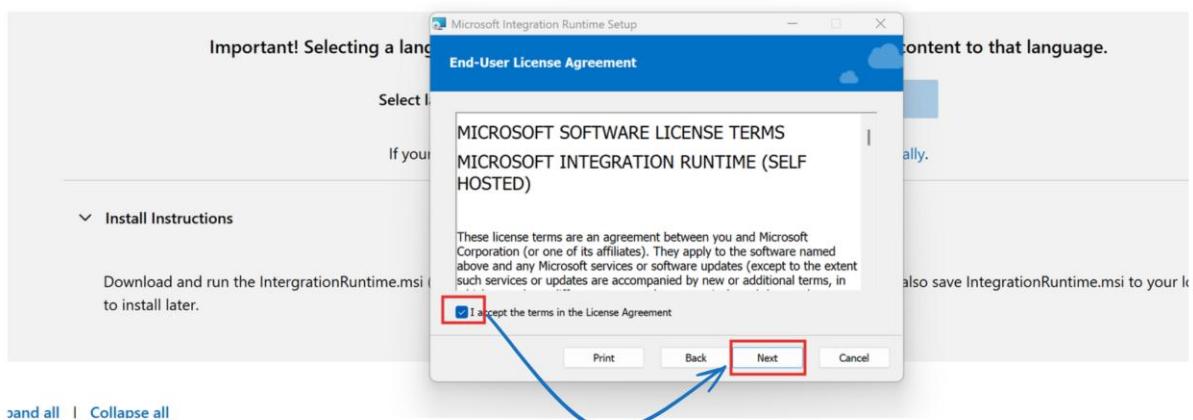
The Microsoft Integration Runtime is a customer managed data integration infrastructure used by Azure Data Factory and Azure Synapse Analytics to provide data integration capabilities across different network environments.



Step 18: Select check box and click next

MICROSOFT Integration Runtime

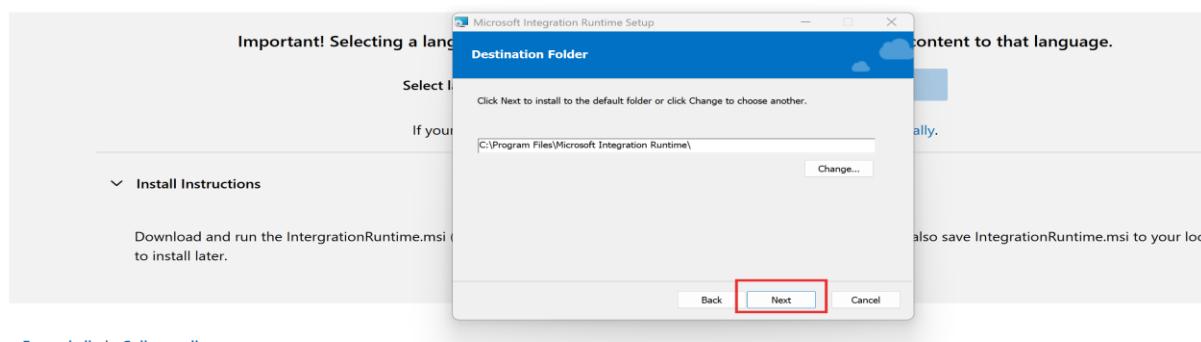
The Microsoft Integration Runtime is a customer managed data integration infrastructure used by Azure Data Factory and Azure Synapse Analytics to provide data integration capabilities across different network environments.



Step 19: Again, click next

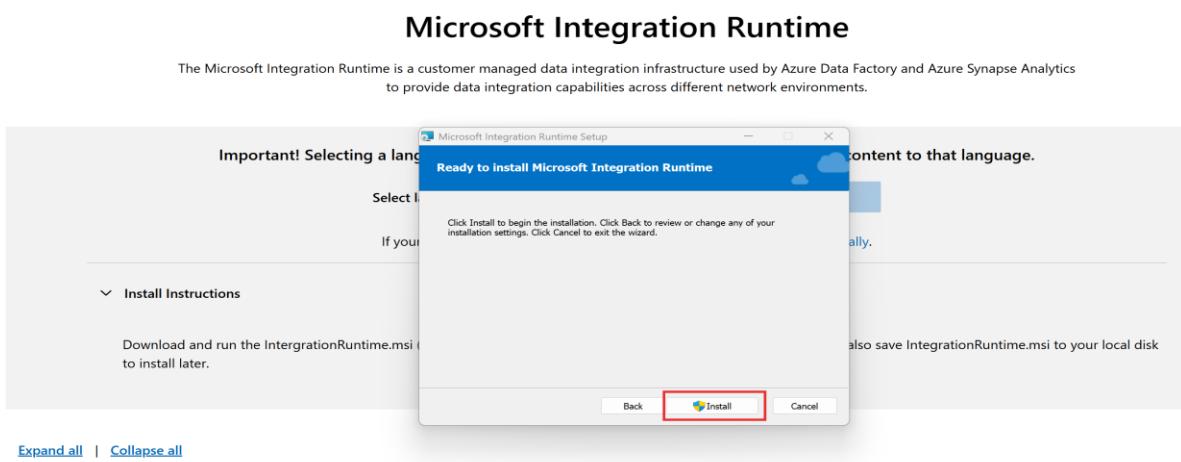
Microsoft Integration Runtime

The Microsoft Integration Runtime is a customer managed data integration infrastructure used by Azure Data Factory and Azure Synapse Analytics to provide data integration capabilities across different network environments.

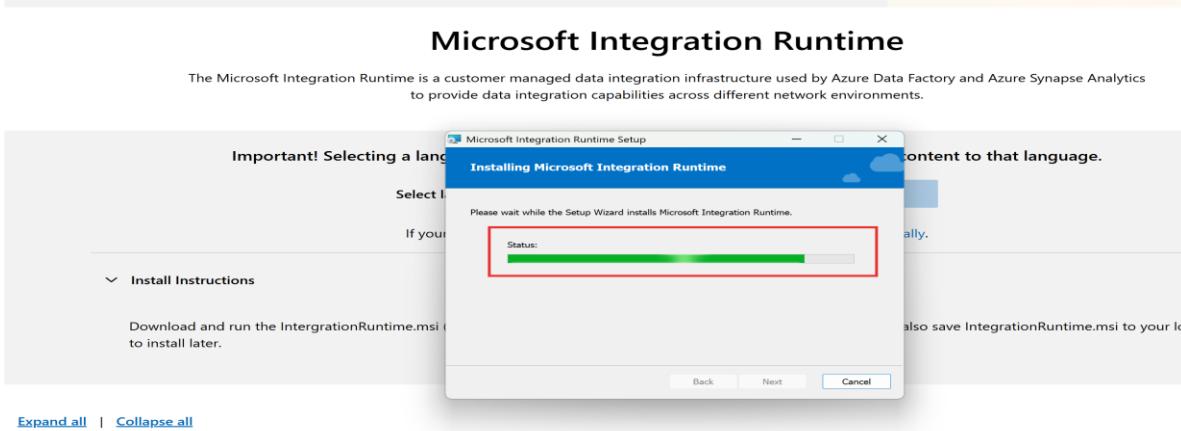


Inturi Suparna Babu

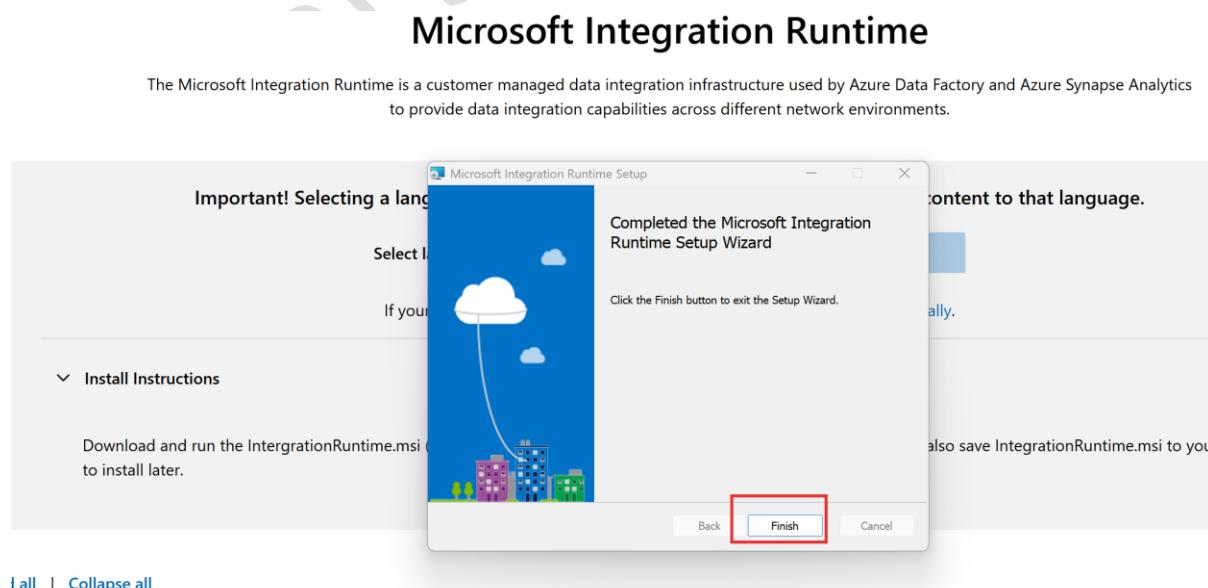
Step 20: Now click on Install



Step 21: Now installation is in progress

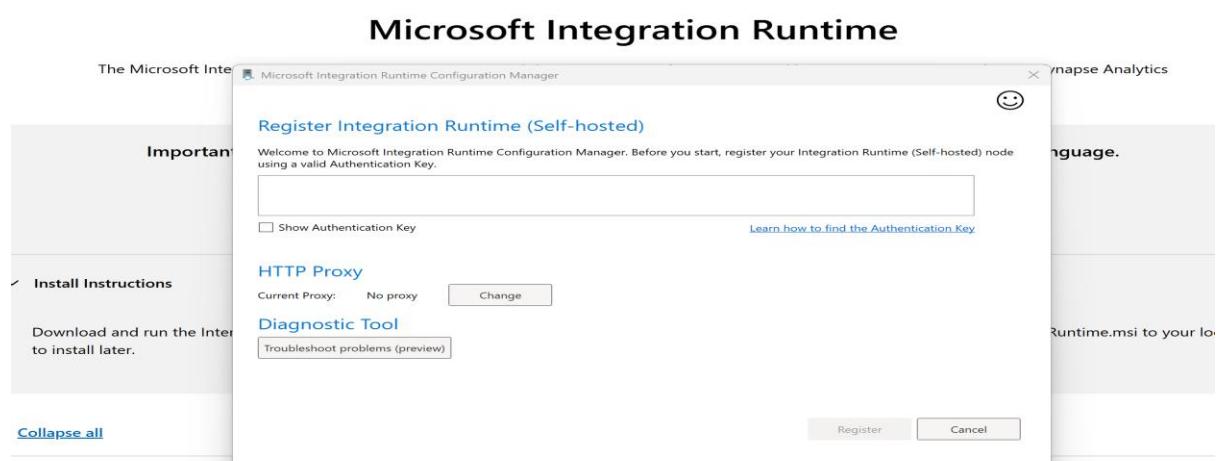


Step 22: Now installation completed and click on Finish

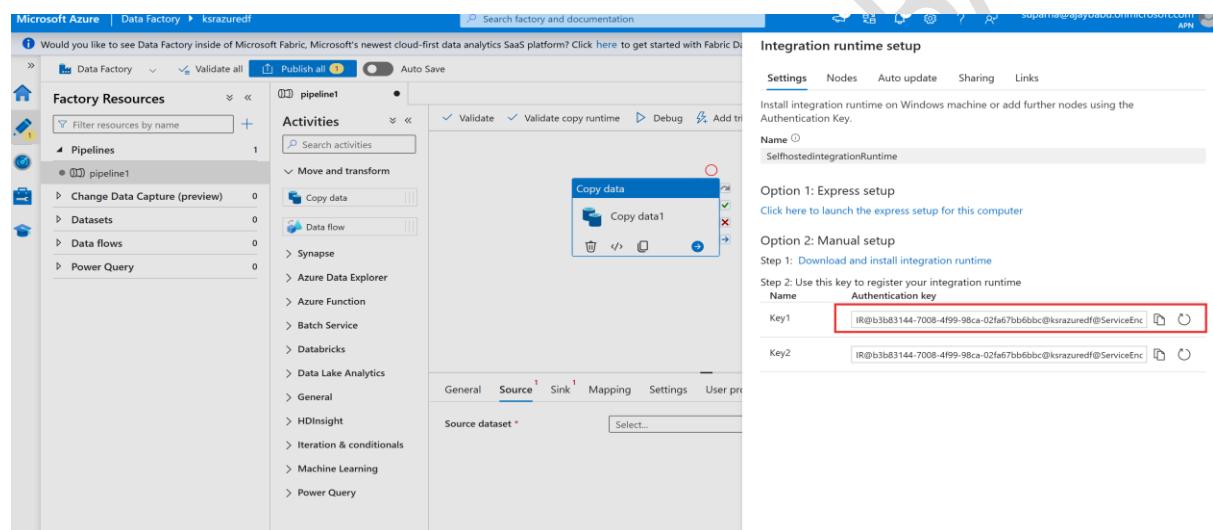


Inturi Suparna Babu

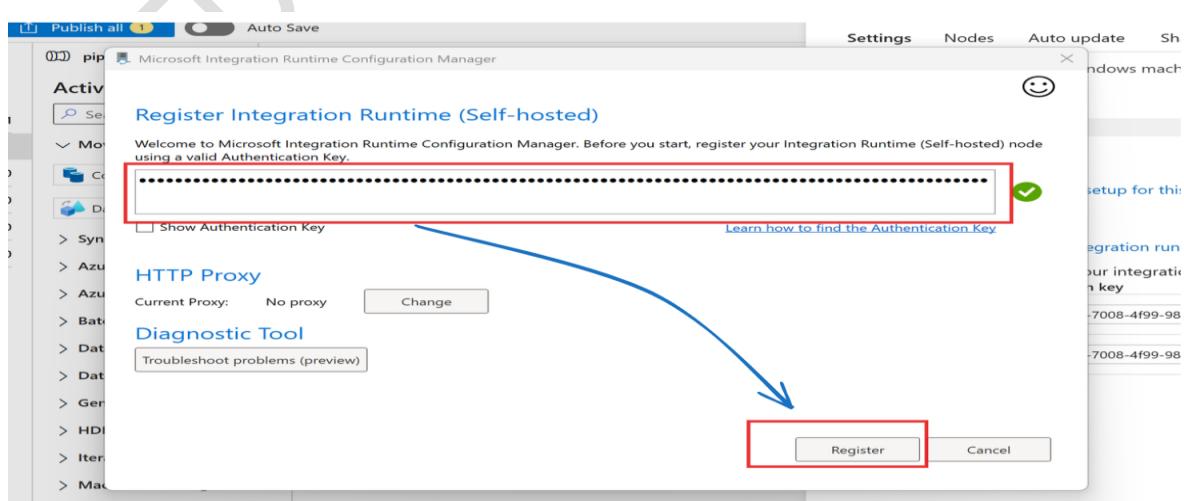
Step 23: After clicking finish then it will open like this.



Step 24: Now navigate to ADF tab and copy the code



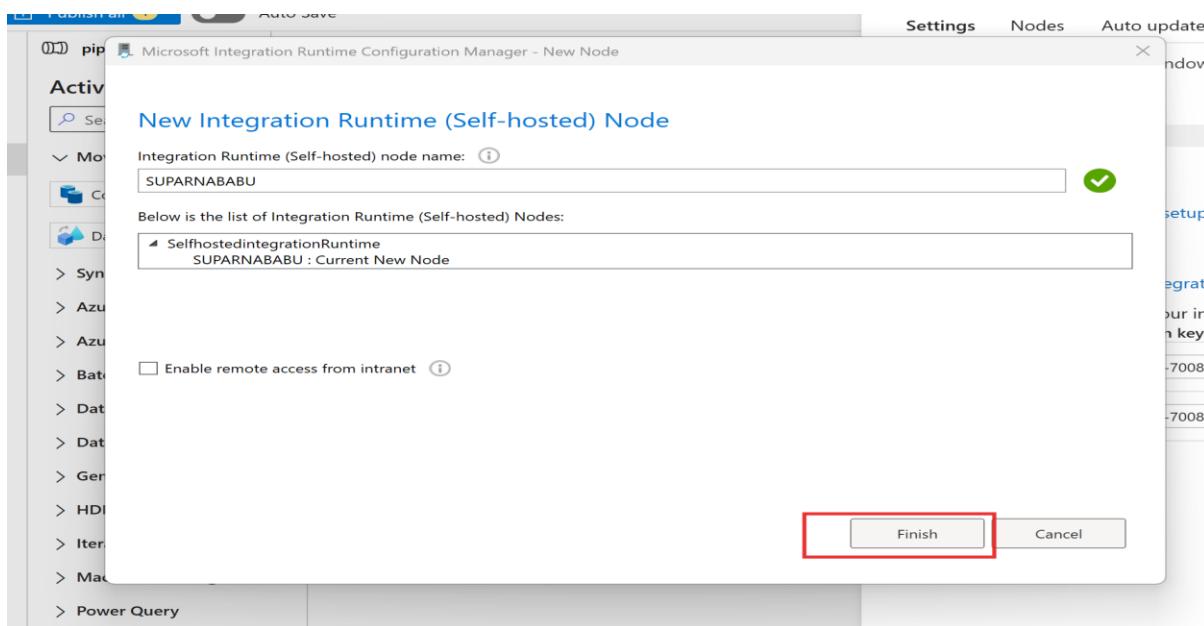
Step 25: Paste that key in the box and click on register



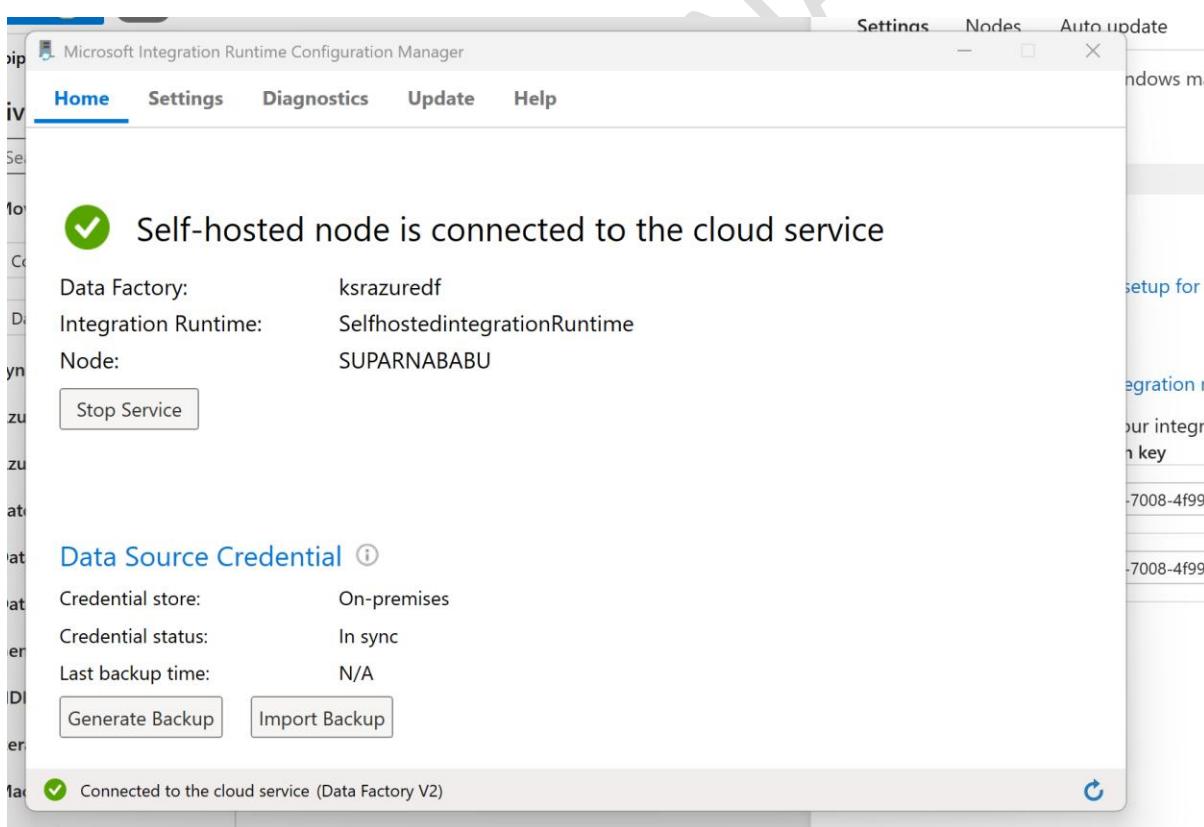
Suparna babu Inturi

Inturi Suparna Babu

Step 26: Now click on Finish

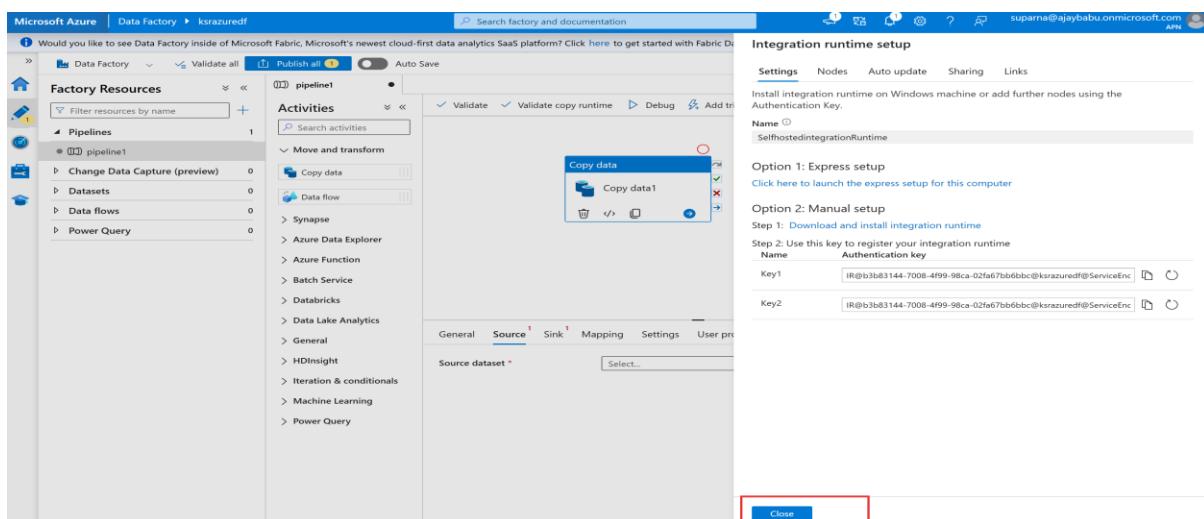


Step 27: After clicking on Finish then click Launch Configuration manager

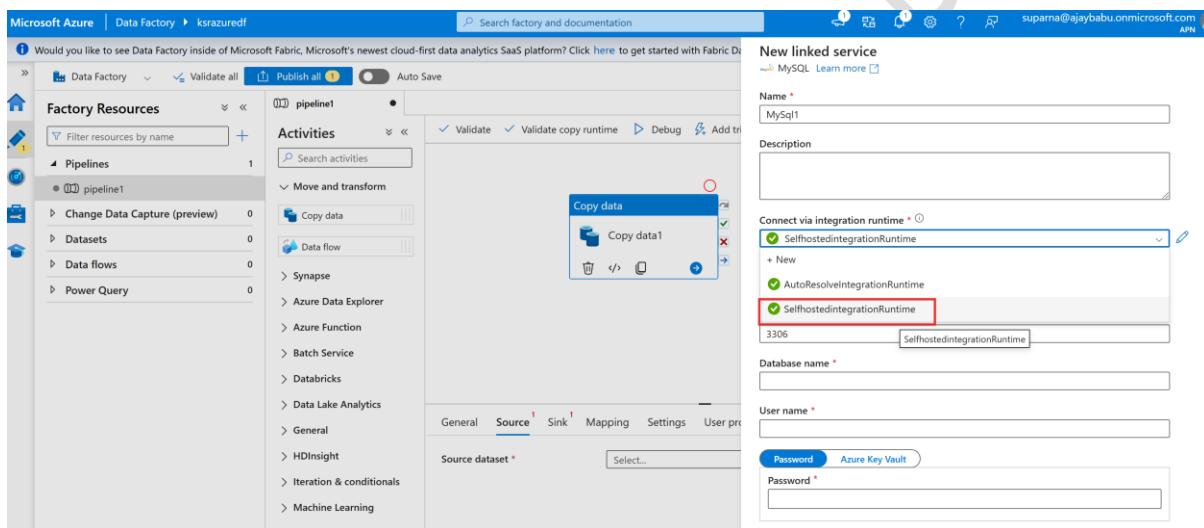


Inturi Suparna Babu

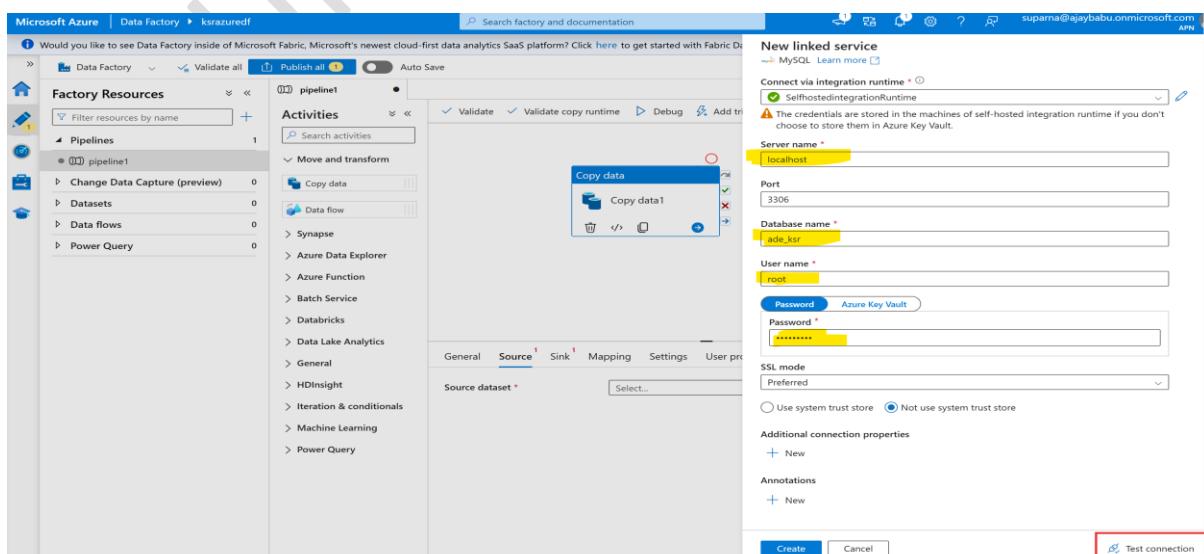
Step 28: Now navigate to ADF tab and click close



Step 29: Now select selfhosted integration run time



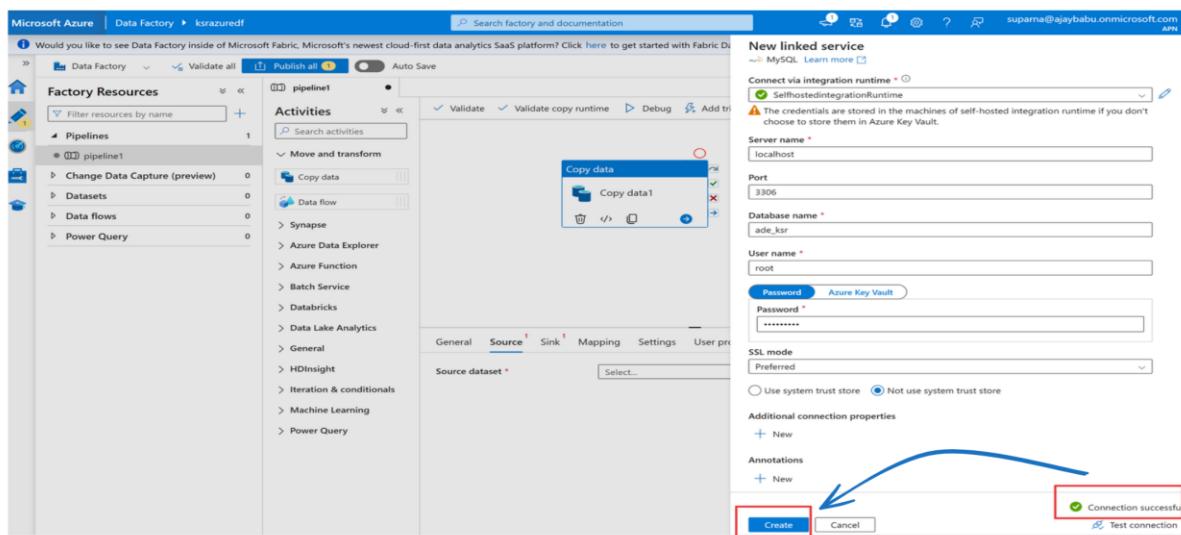
Step 30: After filling the form Click on test connection



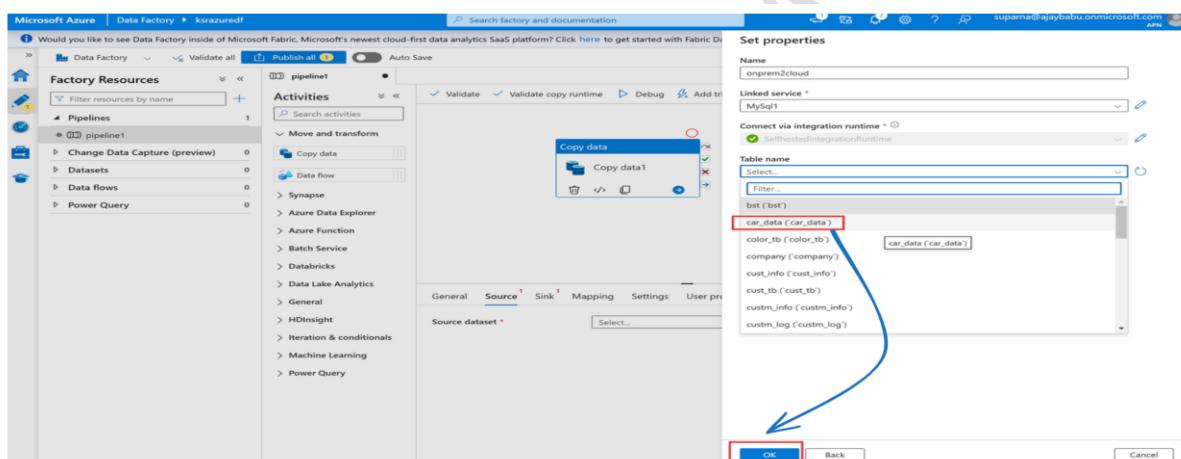
Suparna babu Inturi

Inturi Suparna Babu

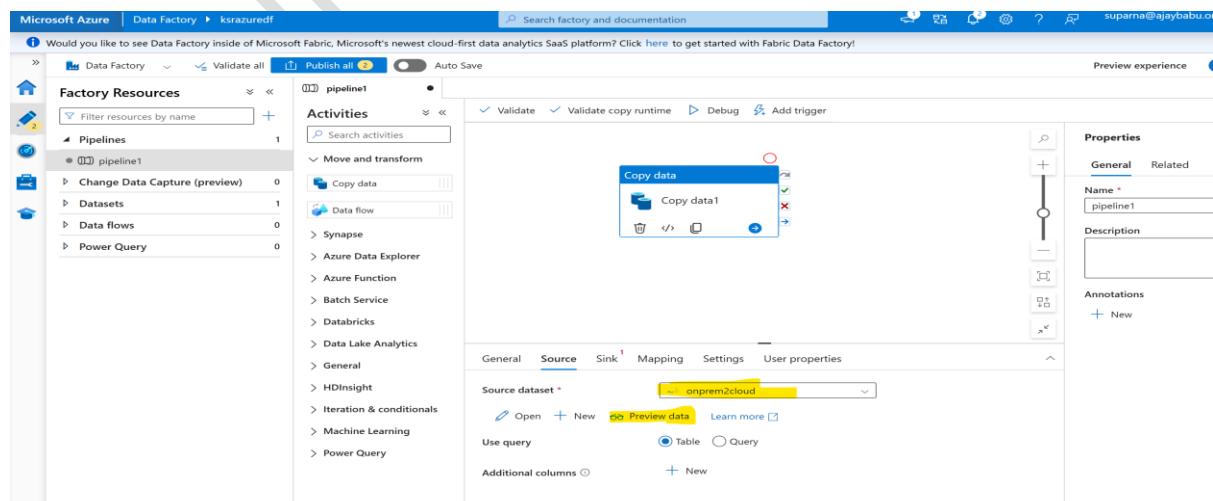
Step 31: Once test connection successful click on Create



Step 32: select any one of table and click ok



Step 33: Now click on Preview Data to view the sample data



Inturi Suparna Babu

Step 34: Now you will be able to view the sample data

Car_Name	Year	Selling_Price	Present_Price	Kms_Driven	Fuel_Type	Seller_Type	Transmission
ritz	2014	3.35	5.59	27000	Petrol	Dealer	Manual
sx4	2013	4.75	9.54	43000	Diesel	Dealer	Manual
ciaz	2017	7.25	9.85	6900	Petrol	Dealer	Manual
wagon r	2011	2.85	4.15	5200	Petrol	Dealer	Manual
swift	2014	4.6	6.87	42450	Diesel	Dealer	Manual
vitara brezza	2018	9.25	9.83	2071	Diesel	Dealer	Manual
ciaz	2015	6.75	8.12	18796	Petrol	Dealer	Manual
s cross	2015	6.5	8.61	33429	Diesel	Dealer	Manual
ciaz	2016	8.75	8.89	20273	Diesel	Dealer	Manual
ciaz	2015	7.45	8.92	42367	Diesel	Dealer	Manual

Step 35: Now close the sample data and click on sink followed by click on New

The screenshot shows the 'Copy data' activity configuration in the Azure Data Factory pipeline editor. The 'Sink' tab is selected, and a red box highlights the 'New' button in the Sink dataset dropdown menu.

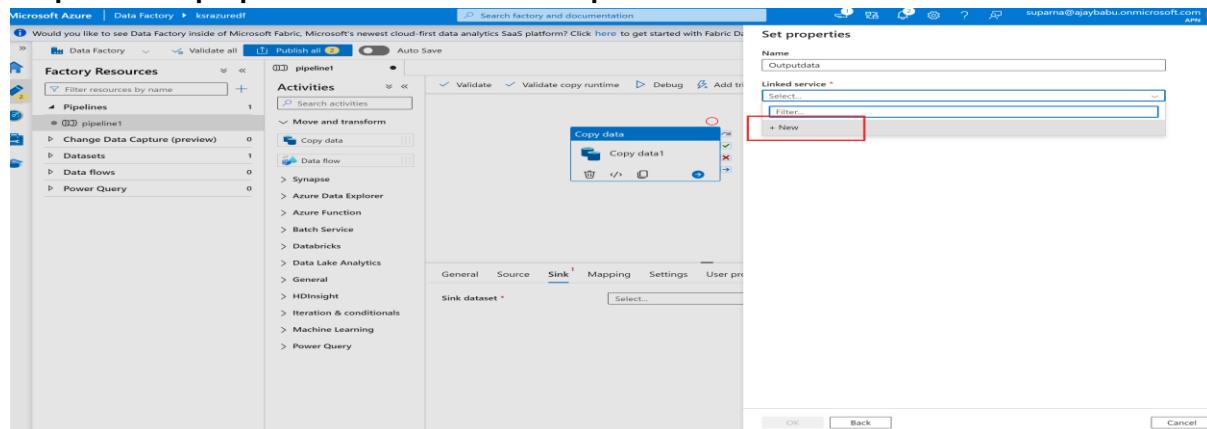
Step 36: Now select Azure SQL Database and click on Continue

The screenshot shows the 'New dataset' dialog box in the Azure Data Factory pipeline editor. The 'Database' tab is selected, and a red box highlights the 'Azure SQL Database' option. A blue arrow points from the 'Continue' button at the bottom to the highlighted option.

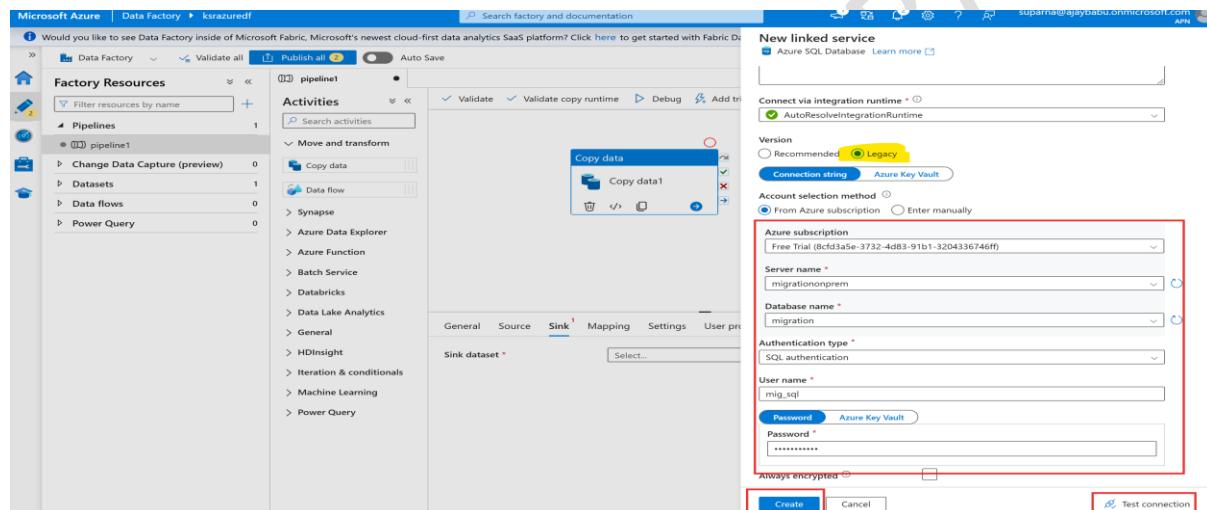
Suparna babu Inturi

Inturi Suparna Babu

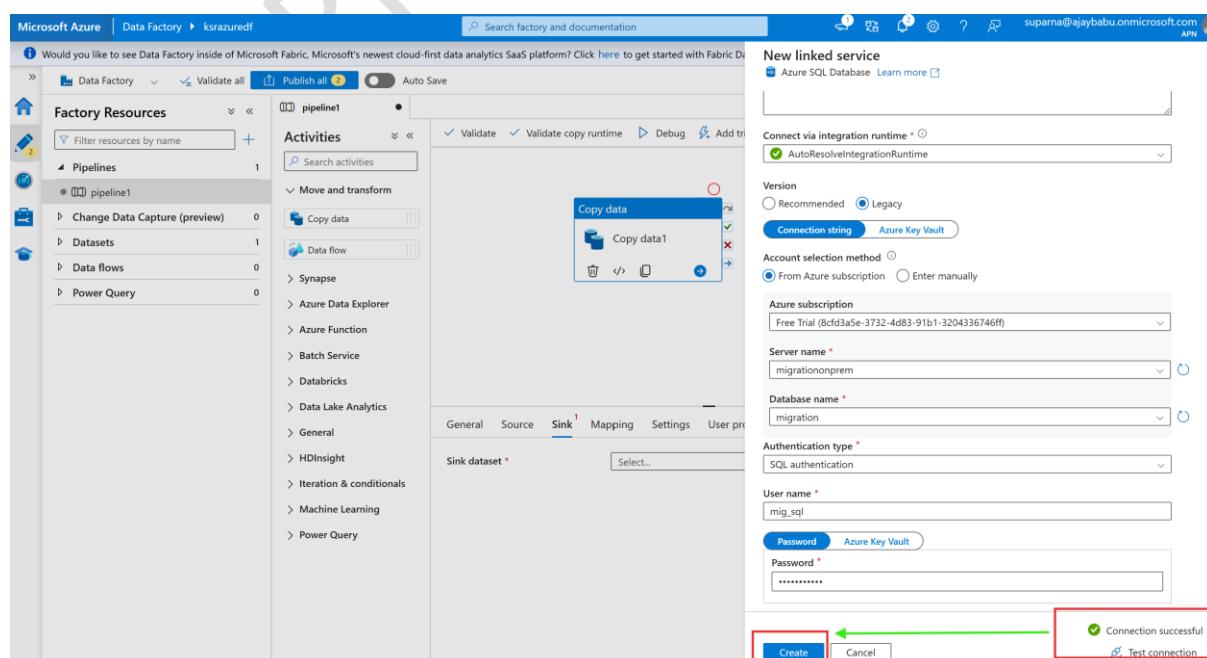
Step 37: Give proper name and Click on Dropdown of linked service and select new.



Step 38: Fill the form and click on Test Connection



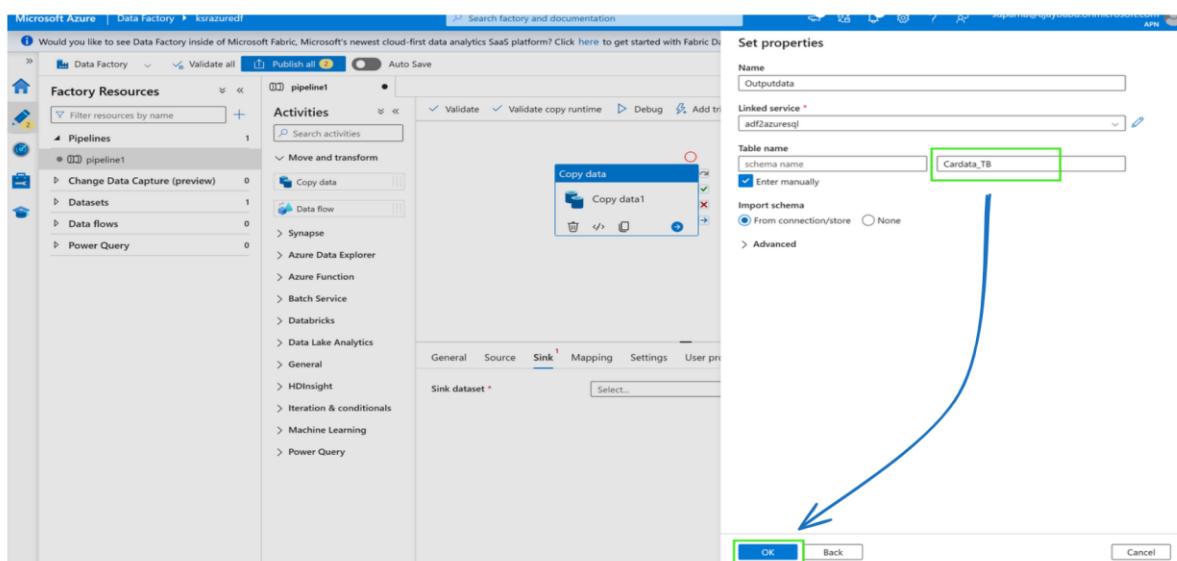
Step 39: Test Connection successful and now click on Create



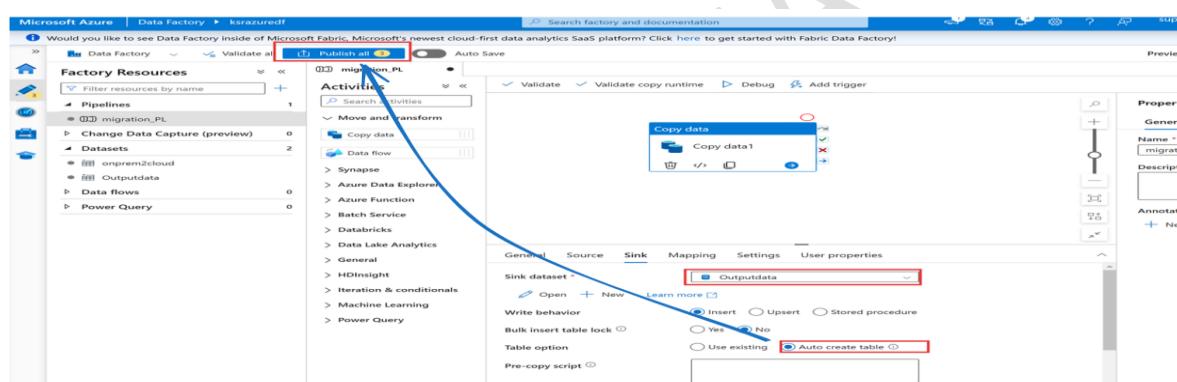
Suparna babu Inturi

Inturi Suparna Babu

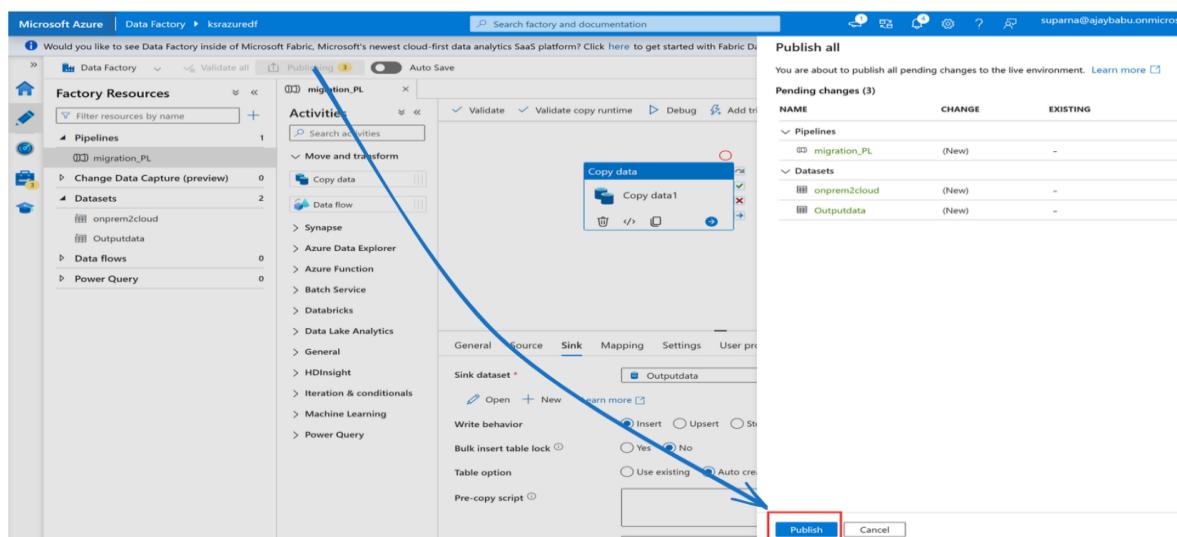
Step 40: Give proper table name and Click Ok



Step 41: Select Auto Create Table the click on Publish all



Step 42: After clicking on Publish now click on Publish



Suparna babu Inturi

Inturi Suparna Babu

Step 43: Published successfully

The screenshot shows the Microsoft Azure Data Factory interface. On the left, the 'Factory Resources' pane lists Pipelines, Datasets, and other components. In the center, a pipeline named 'migration_PL' is being edited. A 'Copy data' activity is selected. The 'Sink' tab is active, showing 'Outputdata' as the sink dataset. On the right, a 'Notifications' panel displays a green checkmark for 'Publishing completed' with the message 'Successfully published a few seconds ago'. Other notifications show successful creation of linked services and saving of integration runtime.

Step 44: Add trigger-> Trigger now

The screenshot shows the Microsoft Azure Data Factory interface. A 'Trigger now' button is highlighted with a red box. The pipeline 'migration_PL' is open, showing a 'Copy data' activity. The 'Properties' pane on the right shows the pipeline name as 'migration_PL'. A large watermark 'DAV' is visible across the screen.

Step 45: Click on ok

The screenshot shows the Microsoft Azure Data Factory interface. A confirmation dialog box titled 'Pipeline run' is displayed. It contains a warning message: 'Trigger pipeline now using last published configuration.' Below it is a 'Parameters' section with a table showing 'No records found'. At the bottom of the dialog are 'OK' and 'Cancel' buttons, with 'OK' highlighted with a red box. A large watermark 'DAV' is visible across the screen.

Suparna babu Inturi

Inturi Suparna Babu

Step 46: Pipeline running and click on View pipeline to view the status

The screenshot shows the Microsoft Azure Data Factory pipeline editor. On the left, the 'Factory Resources' sidebar lists 'Pipelines' (migration_PL), 'Datasets' (onprem2cloud, Outputdata), 'Data flows', and 'Power Query'. The main workspace displays the 'migration_PL' pipeline with a single 'Copy data' activity. The 'Sink' tab is selected, showing settings for 'Sink dataset' (Outputdata), 'Write behavior' (Insert), and 'Table option' (Auto create). To the right, the 'Notifications' panel shows a 'Running' notification for the pipeline run, indicating it is successfully running.

Step 47: Pipeline run succeeded

The screenshot shows the 'Pipeline runs' page in Microsoft Azure Data Factory. The left sidebar includes 'Runs', 'Pipeline runs' (selected), 'Trigger runs', 'Change Data Capture', 'Runtimes & sessions', 'Integration runtimes', 'Data flow debug', 'Notifications', and 'Alerts & metrics'. The main area shows the 'migration_PL - Activity runs' section with a 'List' view. A 'Run succeeded' message is displayed on the right. Below, the 'Activity runs' table shows one item: 'Copy data1' with a status of 'Succeeded'. The 'Pipeline run details' pane on the right provides information about the run, including start and end times, status (Succeeded), and parameters.

Suparna babu Inturi

Inturi Suparna Babu

Step 48: Now navigate to Azure SQL Database editor tab. You'll be able to view the table which was in on-prem moved to Cloud.

The screenshot shows the Microsoft Azure portal interface for a SQL database named 'migration'. The left sidebar has a 'Query editor (preview)' section selected. Under 'Tables', the 'dbo' folder is expanded, and the 'Cardata_TB' table is listed. A red box highlights both the 'Tables' node and the 'Cardata_TB' table.

Step 49: Now click on table ... and select Top 1000 rows

The screenshot shows the same Azure portal interface. A context menu is open over the 'Cardata_TB' table in the 'Tables' list. The 'Select Top 1000 rows' option is highlighted with a red box.

Step 50: Now you'll be able to view the data in table

The screenshot shows the Azure portal with the 'migration' database selected. The 'Tables' node under 'dbo' is selected. In the 'Query 2 X' window, the following SQL query is shown:

```
1. SELECT TOP (1000) * FROM [dbo].[Cardata_TB]
```

The results pane displays a table with the following data:

Car_Name	Year	Selling_Price	Present_Price	Kms_Driven	Fuel_Type	Seller_Type	Transmission
ritz	2014	3.35	5.59	27000	Petrol	Dealer	Manual
sx4	2013	4.75	9.54	43000	Diesel	Dealer	Manual
ciaz	2017	7.25	9.85	6900	Petrol	Dealer	Manual
wagon r	2011	2.85	4.15	5200	Petrol	Dealer	Manual
swift	2014	4.6	6.87	42450	Diesel	Dealer	Manual
vitara brezza	2018	9.25	9.83	2071	Diesel	Dealer	Manual
ciaz	2015	6.75	8.12	18796	Petrol	Dealer	Manual
s cross	2015	6.5	8.61	33429	Diesel	Dealer	Manual
ritz	2014	8.75	8.89	90773	Petrol	Dealer	Manual

Suparna babu Inturi

MIGRATION OF DATA FROM ON-PREM to CLOUD END TO END DATA ENGINEERING PROJECT



THANK YOU FOR WATCHING

Follow

Save



If you find this post helpful, I'd appreciate it if you could like, share, and follow me for more updates and insights

React

Share



Inturi Suparna Babu

