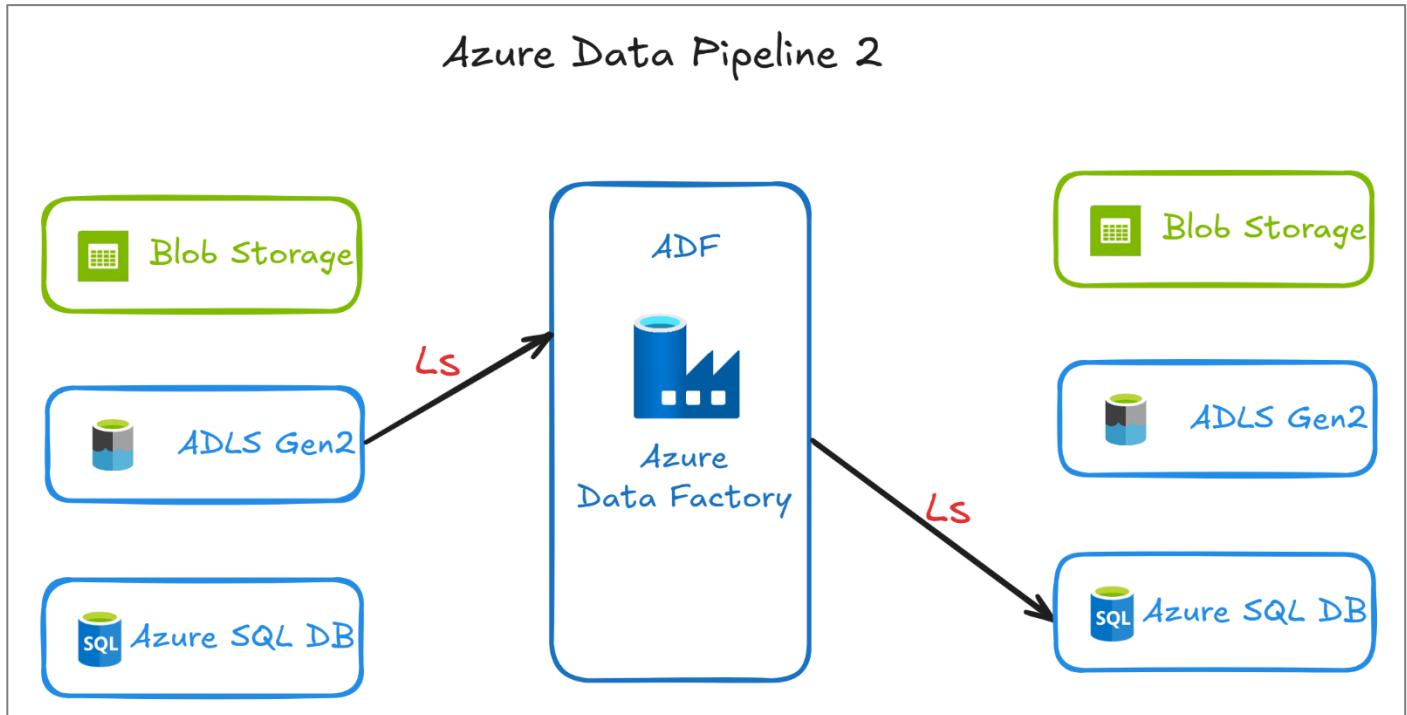


## Azure Data Pipelines Architecture -2

(Blob-ADF[PQ]-AzureSQL)



### Creation of ADLS Gen2:

- Step-1 : Click on storage account

The screenshot shows the Microsoft Azure portal's 'Create a resource' interface. The top navigation bar includes 'Microsoft Azure', a search bar, and various icons. Below the navigation is a breadcrumb trail: 'Home >'. The main area is titled 'Create a resource' with a '... more' button. On the left, a sidebar lists categories like AI + Machine Learning, Analytics, Blockchain, Compute, Containers, Databases, Developer Tools, DevOps, Identity, Integration, Internet of Things, IT & Management Tools, Media, Migration, Mixed Reality, Monitoring & Diagnostics, Networking, Security, Storage, and Web. A red box highlights the 'Storage' category, and a red arrow points from it to the 'Storage account' service card. The 'Storage account' card has a green icon and a 'Create' button. The center of the page displays popular Azure services and marketplace products, with a red box highlighting the 'Storage account' card.

- Step-2 : Fill the form

Azure Storage is a Microsoft-managed service providing cloud storage that is highly available, secure, durable, scalable, and redundant. Azure Storage includes Azure Blobs (objects), Azure Data Lake Storage Gen2, Azure Files, Azure Queues, and Azure Tables. The cost of your storage account depends on the usage and the options you choose below. [Learn more about Azure storage accounts](#)

**Project details**

Select the subscription in which to create the new storage account. Choose a new or existing resource group to organize and manage your storage account together with other resources.

Subscription \*: Azure subscription 1

Resource group \*: (New) sibabu

Storage account name \*: sibabustorage

Region \*: (Asia Pacific) Central India

Primary service: Azure Blob Storage or Azure Data Lake Storage Gen 2

Performance \*: Standard: Recommended for most scenarios (general-purpose v2 account)

Redundancy \*: Locally-redundant storage (LRS)

- Step-3 : Fill the form part 2. Here if you check the Enable hierarchical namespace, the it will create as ADLS Gen2

Configure security settings that impact your storage account.

Require secure transfer for REST API operations:

Allow enabling anonymous access on individual containers:

Enable storage account key access:

Default to Microsoft Entra authorization in the Azure portal:

Minimum TLS version: Version 1.2

Permitted scope for copy operations (preview): From any storage account

**Hierarchical Namespace**

Hierarchical namespace, complemented by Data Lake Storage Gen2 endpoint, enables file and directory semantics, accelerates big data analytics workloads, and enables access control lists (ACLs). [Learn more](#)

Enable hierarchical namespace:

**Access protocols**

Blob and Data Lake Gen2 endpoints are provisioned by default. [Learn more](#)

Enable SFTP:

Enable network file system v3:

**Blob storage**

Allow cross-tenant replication:

Cross-tenant replication and hierarchical namespace cannot be enabled simultaneously.

**Access tier**

Hot: Optimized for frequently accessed data and everyday usage scenarios

Cool: Optimized for infrequently accessed data and backup scenarios

Cold: Optimized for rarely accessed data and backup scenarios

- Step-4 : Fill the Networking form

**Microsoft Azure**

Home > Create a resource > Create a storage account

**Networking**

**Network connectivity**  
You can connect to your storage account either publicly, via public IP addresses or service endpoints, or privately, using a private endpoint.

**Network access \***

Enable public access from all networks  
 Enable public access from selected virtual networks and IP addresses  
 Disable public access and use private access  
Enabling public access from all networks might make this resource available publicly. Unless public access is required, we recommend using a more restricted access type. [Learn more](#)

**Private endpoint**  
Create a private endpoint to allow a private connection to this resource. Additional private endpoint connections can be created within the storage account or private link center.

+ Add private endpoint

Name	Subscription	Resource g...	Region	Target sub...	Subnet	Private DN...
Click on add to create a private endpoint						

**Network routing**  
Determine how to route your traffic as it travels from the source to its Azure endpoint. Microsoft network routing is recommended for most customers.

**Routing preference \***

Microsoft network routing  
 Internet routing

**Previous** **Next** **Review + create**

- Step-5 : Fill the Data Protection form

**Microsoft Azure**

Home > Create a resource > Create a storage account

**Data protection**

**Recovery**  
Protect your data from accidental or erroneous deletion or modification.

Enable point-in-time restore for containers  
Use point-in-time restore to restore one or more containers to an earlier state. If point-in-time restore is enabled, then versioning, change feed, and blob soft delete must also be enabled. [Learn more](#)

Enable soft delete for blobs  
Soft delete enables you to recover blobs and directories that were previously marked for deletion. [Learn more](#)

Days to retain deleted blobs ⓘ

Enable soft delete for containers  
Soft delete enables you to recover containers that were previously marked for deletion. [Learn more](#)

Days to retain deleted containers ⓘ

Enable soft delete for file shares  
Soft delete enables you to recover file shares that were previously marked for deletion. [Learn more](#)

Days to retain deleted file shares ⓘ

**Tracking**  
Manage versions and keep track of changes made to your blob data.

Enable versioning for blobs  
Use versioning to automatically maintain previous versions of your blobs. [Learn more](#)

Consider your workloads, their impact on the number of versions created, and the resulting costs. Optimize costs by automatically managing the data lifecycle. [Learn more](#)

Enable blob change feed  
Keep track of create, modification, and delete changes to blobs in your account. [Learn more](#)

**Access control**  
 Enable version-level immutability support  
Allows users to set time-based retention policies on the account level that will result in all blob versions. Enable this feature to enable

**Previous** **Next** **Review + create**

- Step-6 : Fill the Encryption form

Microsoft Azure

Search resources, services, and docs (G+/)

Home > Create a resource >

## Create a storage account

Basics Advanced Networking Data protection **Encryption** Tags Review + create

Encryption type \* ⓘ

Microsoft-managed keys (MMK)  
 Customer-managed keys (CMK)

Enable support for customer-managed keys ⓘ

Blobs and files only  
 All service types (blobs, files, tables, and queues)

⚠️ This option cannot be changed after this storage account is created.

Enable infrastructure encryption ⓘ

Previous Next **Review + create**

- Step-7 : Fill the Tags form

Microsoft Azure

Search resources, services, and docs (G+/)

Home > Create a resource >

## Create a storage account

Basics Advanced Networking Data protection **Encryption** Tags Review + create

Name	Value	Resource
<input type="text"/>	<input type="text"/> :	All resources selected

Previous Next **Review + create**

- Step-8 : Review and Create

**Basics**

Subscription	Azure subscription 1
Resource group	sibabu
Location	Central India
Storage account name	sibabustorage
Primary service	Azure Blob Storage or Azure Data Lake Storage Gen 2
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	Cool
Enable large file shares	Enabled

**Security**

Secure transfer	Enabled
Blob anonymous access	Disabled

**Buttons:** Previous, Next, Create

- Step-8 : Deployment in-progress

**Deployment**

**Deployment details**

Resource	Type	Status	Operation details
sibabustorage	Microsoft.Storage/storageAccounts	Accepted	<a href="#">Operation details</a>

**Give feedback**

[Tell us about your experience with deployment](#)

- Step-8 : Deployment in-progress

The screenshot shows the Microsoft Azure Storage account overview for 'sibabustorage\_1737998367325'. A red box highlights a success message: 'Deployment succeeded' with the note 'Deployment 'sibabustorage\_1737998367325' to resource group 'sibabu' was successful.' Below the message are 'Go to resource' and 'Pin to dashboard' buttons.

**Deployment Details:**

- Deployment name: sibabustorage\_1737998367325
- Subscription: Azure subscription 1
- Resource group: sibabu
- Start time: 27/01/2025, 22:50:05
- Correlation ID: aff1a248-69b1-4411-9395-69c5fd81165b

**Next steps:**

- Deployment details
- Next steps

**Feedback:**

- Give feedback
- Tell us about your experience with deployment

**Links and Resources:**

- Cost Management: Set up cost alerts >
- Microsoft Defender for Cloud: Secure your apps and infrastructure Go to Microsoft Defender for Cloud >
- Free Microsoft tutorials: Start learning today >

- Step-9 : Click on container

The screenshot shows the Microsoft Azure Storage account overview for 'sibabustorage'. The left sidebar has a red box around the 'Containers' link under 'Data storage'.

**Essentials:**

Resource group (move)	: sibabu	Performance	: Standard
Location	: centralindia	Replication	: Locally-redundant storage (LRS)
Subscription (move)	: Azure subscription 1	Account kind	: StorageV2 (general purpose v2)
Subscription ID	: 5f357587-9149-4320-a642-9a81c4a1e356	Provisioning state	: Succeeded
Disk state	: Available	Created	: 27/1/2025, 10:50:06 pm
Tags (edit)	: Add tags		

**Properties:**

- Monitoring
- Capabilities (5)
- Recommendations (0)
- Tutorials
- Tools + SDKs

**Data Lake Storage:**

Hierarchical namespace	Enabled
Default access tier	Cool
Blob anonymous access	Disabled
Blob soft delete	Enabled (7 days)
Container soft delete	Enabled (7 days)
Versioning	Disabled
Change feed	Disabled
NFS v3	Disabled

**Security:**

Require secure transfer for REST API operations	Enabled
Storage account key access	Enabled
Minimum TLS version	Version 1.2
Infrastructure encryption	Disabled

**Networking:**

Allow access from	All networks
Private endpoint connections	n

- Step-10 : Click on +container

Name	Last modified	Anonymous access level	Lease state
\$logs	27/01/2025, 22:50:37	Private	Available

- Step-11 : fill form and create button

New container

Name *	bikedata
Anonymous access level	Private (no anonymous access)
The access level is set to private because anonymous access is disabled on this storage account.	
Advanced	
<b>Create</b>	

- Step-12 : Now bikedata container created

Name	Last modified	Anonymous access level	Lease state
\$logs	27/01/2025, 22:50:37	Private	Available
bikedata	27/01/2025, 22:56:43	Private	Available

- Step-13 : Click on bikedata container

This screenshot shows the Microsoft Azure Storage Container Overview page for the 'bikedata' container. The top navigation bar includes 'Microsoft Azure', a search bar, and user information ('INTURI\_SUPARNA\_BAB...', 'KSRCONSULTANTSERVICES (KSR...)'). The left sidebar has options like 'Overview', 'Diagnose and solve problems', 'Access Control (IAM)', and 'Settings'. The main area displays container details: 'Authentication method: Access key (Switch to Microsoft Entra user account)' and 'Location: bikedata'. A search bar at the top says 'Search blobs by prefix (case-sensitive)'. Below it, a table header includes columns for Name, Modified, Access tier, Archive status, Blob type, Size, and Lease state. A message 'No results' is shown.

- Step-14 : Click on bikedata container

This screenshot shows the same Azure Storage Container Overview page for 'bikedata'. A green arrow points from the 'Upload' button in the top navigation bar to the 'Upload blob' dialog box on the right. The dialog box has a title 'Upload blob' and contains instructions 'Drag and drop files here or Browse for files'. A red box highlights the 'Browse for files' link. Other options in the dialog include 'Overwrite if files already exist' and an 'Advanced' section. The main container view on the left remains the same.

- Step-15 : Click on browsefiles and upload bikedata csv file and then click on upload.

This screenshot shows the Azure Storage Container Overview page for 'bikedata'. The 'Upload' button in the top navigation bar is highlighted with a red box. The 'Upload blob' dialog box is open on the right, showing a file named 'Bike\_Data.CSV.csv' selected for upload. A red box highlights this file name. The dialog also includes the 'Overwrite if files already exist' checkbox and the 'Advanced' section. The main container view on the left remains the same.

- Step-16 : Now bike data successfully uploaded

The screenshot shows the Microsoft Azure Storage Overview page for the 'bikedata' container. The top navigation bar includes 'Microsoft Azure', a search bar, and user information for 'INTURI SUPARNA BABU KSRCONSULTANTSERVICES (ISR...)'. The main content area displays the 'Overview' tab selected. It shows the 'Authentication method' as 'Access key' and the 'Location' as 'bikedata'. A success message box in the top right corner states 'Successfully uploaded blob(s)' and 'Successfully uploaded 1 blob(s)'. Below the message are buttons for 'Search', 'Upload', 'Add Directory', 'Refresh', 'Rename', 'Delete', 'Change tier', 'Acquire lease', 'Break lease', and 'Give feedback'. A search bar for blobs by prefix is present, along with a toggle for 'Show deleted objects'. On the left, there's a sidebar with links for 'Diagnose and solve problems', 'Access Control (IAM)', and 'Settings'. The main table lists the uploaded blob:

Name	Modified	Access tier	Archive status	Blob type	Size	Lease state	...
<input type="checkbox"/> Bike_Data_CSV.csv	27/01/2025, 23:01:37	Cool (Inferred)		Block blob	6.69 MiB	Available	...

## Creation of Azure Data Factory:

- Step – 1 : Click on Analytics and click on Data Factories

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes 'Search resources, services, and docs (G+)', 'Copilot', and user information 'INTURLI SUPARNA BAB... KSRCONSULTANTSERVICES. (KSR...'. The main content area is titled 'All services | Analytics'. On the left, a sidebar lists various categories like 'Big data processing', 'Data exploration', and 'Real-time analytics', each with a list of services. A red box highlights the 'Analytics' category in the sidebar. A blue arrow points from the 'Analytics' category to the 'Data factories' service, which is also highlighted with a red box. Other visible services include Analysis Services, Data Lake Analytics, HDInsight clusters, Microsoft Graph, Apache Airflow™ on Astro, Data Lake Storage Gen1, Azure HDInsight on AKS clusters, Data Share Invitations, Power BI Embedded, Event Hubs, Stream Analytics clusters, Log Analytics workspaces, and Stream Analytics jobs.

- Step – 2 : After clicking on Data Factories window will display like below and then click on Create Data Factory

The screenshot shows the Microsoft Azure portal interface for 'Data factories'. The top navigation bar includes 'Search resources, services, and docs (G+)', 'Copilot', and user information 'INTURLI SUPARNA BAB... KSRCONSULTANTSERVICES. (KSR...'. The main content area is titled 'Data factories'. It features a search bar and filter options: 'Subscription equals all', 'Type equals all', 'Resource group equals all', 'Location equals all', and 'Add filter'. Below the filters, it says 'Showing 0 to 0 of 0 records.' and includes sorting options for 'Name ↑↓', 'Type ↑↓', 'Subscription ↑↓', 'Resource group ↑↓', and 'Location ↑↓'. The central area displays a factory icon and the text 'No data factories to display'. Below this, a descriptive message reads: '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 highlighted with a red box. There is also a 'Learn more' link.

- Step – 3 : Fill the basics form and click on next

**Microsoft Azure** Copilot

All services > Data factories > Create Data Factory

**Basics** Git configuration Networking Advanced Tags Review + create

One-click to create data factory with sample pipeline and datasets. [Try it](#)

**Project details**  
Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription \*  sibabudf

Resource group \*  Create new

**Instance details**

Name \*

Region \*

Version \*

[Previous](#) [Next](#) [Review + create](#)

- Step – 4 : Fill the form (Git configuration)

**Microsoft Azure** Copilot

All services > Data factories > Create Data Factory

**Basics** **Git configuration** Networking Advanced Tags Review + create

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

[Previous](#) [Next](#) [Review + create](#)

- Step – 5 : Fill the form (Networking)

**Microsoft Azure** Copilot

All services > Data factories > Create Data Factory

**Basics** Git configuration **Networking** Advanced Tags Review + create

**Managed virtual network**  
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 : Fill the form (Advanced)

Microsoft Azure

All services > Data factories > Create Data Factory ...

Basics Git configuration Networking Advanced Tags Review + create

**Datafactory Encryption**

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

Previous Next Review + create

- Step – 7 : Fill the form (Tags)

Microsoft Azure

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 <small>(Required)</small>	Value <small>(Required)</small>	Resource
<input type="text"/>	:	Data factory (V2)

Previous Next Review + create

- Step – 8 : Review and create. Click on Create

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

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	Azure subscription 1
Resource group	sibabu
Name	sibabudf
Region	Central India
Version	V2

**Networking**

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

[Previous](#) [Next](#) **Create**

- Step – 9 : Deployment in-progress

Suggested Sites [Web Slice Gallery](#) [Imported From IE](#) [Gmail](#) [Feed | LinkedIn](#) [Create and use anal...](#) [Easy to use Online P...](#) [Hacker Rank](#) [LinkedIn Text Forma...](#) [Excalidraw](#)

**Microsoft Azure** Search resources, services, and docs (G+/-) [Copilot](#) [1](#) [⚙️](#)

All services > **Microsoft.DataFactory-20250127230826 | Overview** ⚡ ...

**Deployment**

Search X < > Delete Cancel Redeploy Download Refresh

**Overview**

**Deployment is in progress**

Deployment name : Microsoft.DataFactory-20250127230826  
Subscription : Azure subscription 1  
Resource group : sibabu

Start time : 27/01/2025, 23:12:29  
Correlation ID : 49f84f06-f52f-45af-8c11-7bda05772115

**Deployment details**

Resource	Type	Status	Operation details
There are no resources to display.			

[Give feedback](#)  
[Tell us about your experience with deployment](#)

- Step – 10 : Deployment succeeded
- Step – 11 : Click on Go to resources

The screenshot shows the Microsoft Azure Data Factory Overview page for a deployment named "Microsoft.DataFactory-20250127230826". The deployment status is marked as "complete" with a green checkmark icon. Deployment details include a name of "Microsoft.DataFactory-20250127230826", a subscription of "Azure subscription 1", and a resource group of "sibabu". The start time was 27/01/2025, 23:12:29, and the correlation ID is 49f84f06-f52f-45af-8c11-7bda05772115. On the right side of the page, there are promotional links for Cost management, Microsoft Defender for Cloud, Free Microsoft tutorials, and Work with an expert.

- Step – 12 : Click on Launch Studio

This screenshot is similar to the one above, showing the Microsoft Azure Data Factory Overview page for the same deployment. However, it includes a prominent blue overlay message at the top right stating "Deployment succeeded" with a green checkmark icon. The message also notes that the deployment to resource group "sibabu" was successful. The rest of the page content, including deployment details and promotional links, remains the same.

Microsoft Azure

All services > Microsoft.DataFactory-20250127230826 | Overview >

**sibabudf** Data factory (V2)

Search Delete

**Overview**

Activity log Access control (IAM) Tags Diagnose and solve problems

> Settings > Getting started > Monitoring > Automation > Help

Resource group (move) : sibabu Status : Succeeded Location : Central India Subscription (move) : Azure subscription 1 Subscription ID : 5f357587-9149-4320-a642-9a81c4a1e356

Type : Data factory (V2) Getting started : Quick start

JSON View

Azure Data Factory Studio

Launch studio

Quick Starts Tutorials Template Gallery Training Modules

Monitoring

- Step – 13 : After click on Launch Studio, ADF UI will looks like this

Microsoft Azure | Data Factory > sibabudf

Search factory and documentation

INTURI\_SUPARNA\_BABU@ksrconsultantservices.com KSRCONSULTANTSERVICES

Would you like to see Data Factory inside of Microsoft Fabric, Microsoft's newest cloud-first data analytics SaaS platform? Click here to get started with Fabric Data Factory!

Set up code repository

Home Author Monitor Manage Learning Center

Data factory

**sibabudf**

New

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

## Creation of SQL Databases:

- Step – 1: Click on databases and the click on SQL Databases

- Step – 2: Click on Create SQL database

- Step – 3: Fill the form and click on Server create new

- Step – 4: Fill the form and create SQL database server and click ok

**Microsoft Azure**

All services > SQL databases > Create SQL Database >

## Create SQL Database Server

Microsoft

**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 \*  .database.windows.net

Location \*

**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 \*

Password \*

Confirm password \*

**OK**

- Step – 5: Click on Next

**Microsoft Azure**

All services > SQL databases >

## Create SQL Database

Microsoft

⚠️ Changing Basic options may reset selections you have made. Review all options prior to creating the resource.

**Basics** Networking Security Additional settings Tags Review + create

Create a SQL database with your preferred configurations. Complete the Basics tab then go to Review + Create to provision with smart defaults, or visit each tab to customize. [Learn more](#)

Want to try Azure SQL Database for free? Create a free serverless database with the first 100,000 vCore seconds, 32GB of data, and 32GB of backup storage free per month for the lifetime of the subscription. Limit ten free databases per subscription. [Learn more](#)

**Project details**

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription \*  Azure subscription 1  
 Resource group \*  [Create new](#)

**Database details**

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

Database name \*  (new) sibabuserver (Central India)

Server \*  Yes  No

Workload environment  Development

**Review + create** **Next : Networking >**

- Step – 6: Fill the form(Networking) Select Public endpoint and Choos Yes for Allow Azure services and resources to access this server and Add current client IP address

**Microsoft Azure** Search resources, services, and docs (G+/-) Copilot

All services > SQL databases > Create SQL Database

**Networking**

Configure network access and connectivity for your server. The configuration selected below will apply to the selected server "sibabuserver" 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 current IP address to the server firewall.

Allow Azure services and resources to 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

**Encrypted connections**

This server supports encrypted connections using Transport Layer Security (TLS). For information on TLS version and certificates, refer to connecting with TLS/SSL. [Learn more](#)

**Review + create** **< Previous** **Next : Security >**

- Step – 7: Fill the form (Security)

**Microsoft Azure** Search resources, services, and docs (G+/-) Copilot

All services > SQL databases > Create SQL Database

**Security**

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](#)

Database level key  Not configured [Configure transparent data encryption](#)

**Review + create** **< Previous** **Next : Additional settings >**

- Step – 8: Fill the form (Additional settings)

Microsoft Azure

All services > SQL databases >

## Create SQL Database

Microsoft

Basics Networking Security Additional settings Tags Review + create

Customize additional configuration parameters including collation & sample data.

**Data source**

Start with a blank database, restore from a backup or select sample data to populate your new database.

Use existing data \*  None  Backup  Sample

**Database collation**

Database collation defines the rules that sort and compare data, and cannot be changed after database creation. The default database collation is SQL\_Latin1\_General\_CI\_AS. [Learn more](#)

Collation \*  SQL\_Latin1\_General\_CI\_AS [Find a collation](#)

**Maintenance window**

Select a preferred maintenance window from the drop-down. During maintenance, databases remain available, but some updates may require a failover. The system default maintenance window (5pm to 8am) limits most activities to this time, but urgent updates may occur outside of it. To ensure all updates occur only during the maintenance window, select a non-default option. [Learn more](#)

Maintenance window



Cost summary

General Purpose (GP_S_Gen5_1)	10.91
Cost per GB (in INR)	x 41.6
Max storage selected (in GB)	
ESTIMATED STORAGE COST / MONTH	453.72 INR
COMPUTE COST / VCORE SECOND <sup>1</sup>	0.013263 INR

**NOTES**

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

- Step – 9: Fill the form (Tags)

Microsoft Azure

All services > SQL databases >

## Create SQL Database

Microsoft

Basics Networking Security Additional settings **Tags** Review + create

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

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

Name	Value	Resource
		2 selected



Cost summary

General Purpose (GP_S_Gen5_1)	10.91
Cost per GB (in INR)	x 41.6
Max storage selected (in GB)	
ESTIMATED STORAGE COST / MONTH	453.72 INR
COMPUTE COST / VCORE SECOND <sup>1</sup>	0.013263 INR

**NOTES**

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

- Step – 10: Review and Create. Click on create

**Microsoft Azure**

All services > SQL databases > Create SQL Database

**Create SQL Database**

Microsoft

Basics Networking Security Additional settings Tags Review + create

**Product details**

SQL database by Microsoft Terms of use | Privacy policy

**Estimated cost**

Storage cost 453.72 INR / month + Compute cost 0.013263 INR / vCore second

**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. For additional details see Azure Marketplace Terms.

**Cost summary**

General Purpose (GP_S_Gen5_1)	10.91
Cost per GB (in INR)	x 41.6
Max storage selected (in GB)	
ESTIMATED STORAGE COST / MONTH	453.72 INR
COMPUTE COST / VCORE SECOND <sup>1</sup>	0.013263 INR

**NOTES**

<sup>1</sup> Serverless databases are billed in vCore seconds based on a combination of CPU and memory utilization. Learn more about serverless billing

**Basics**

Subscription	Azure subscription 1
Resource group	sibabu
Region	Central India
Database name	sibabidatabase
Server	(new) sibabu\$server
Authentication method	SQL authentication
Server admin login	sibabu_sql
Compute + storage	General Purpose - Serverless: Standard-series (Gen5), 1 vCore, 32 GB storage, zone redundant disabled
Backup storage redundancy	Locally-redundant backup storage

**Networking**

Allow Azure services and resources to access this server	Yes
Add current client IP address	Yes
10.65.1.202.241	
Private endpoint	None
Minimum TLS version	1.2

**Create** < Previous Download a template for automation

- Step – 11: Deployment in progress

**Microsoft Azure**

All services > Microsoft.SQLDatabase.newDatabaseNewServer\_5023de1ce19f439cb40fe | Overview

**Deployment**

Search Delete Cancel Redeploy Download Refresh

**Overview**

\*\*\* Deployment is in progress

Deployment name : Microsoft.SQLDatabase.newDatabaseNewServer\_5023de1ce19f439cb40fe  
Subscription : Azure subscription 1  
Resource group : sibabu

Start time : 27/01/2025, 23:30:14  
Correlation ID : d23bfff02-28d2-4d9c-8db1-d5634e238f3e

**Deployment details**

Resource	Type	Status	Operation details
sibabu\$server	Microsoft.Sql/servers	Accepted	Operation details

Give feedback  
Tell us about your experience with deployment

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- Step – 12: Deployment Succeeded and click on Go to resources

**Microsoft Azure**

All services > Microsoft.SQLDatabase.newDatabaseNewServer\_5023de1ce19f439cb40fe | Overview

**Deployment**

Search Delete Cancel Redeploy Download Refresh

**Overview**

>Your deployment is complete

Deployment name : Microsoft.SQLDatabase.newDatabaseNewServer\_5023de1... Start time : 27/01/2025, 23:30:14  
Subscription : Azure subscription 1 Correlation ID : d23bfff02-28d2-4d9c-8db1-d5634e238f3e  
Resource group : sibabu

**Deployment details**

Resource	Type	Status	Operation details
sibabu\$server/AllowAllWindowsAzureIps	Microsoft.Sql/servers/firewallrule	OK	Operation details
sibabu\$server/ClientIp-2025-1-27_23-30-10	Microsoft.Sql/servers/firewallrule	OK	Operation details
sibabu\$server/sibabidatabase	Microsoft.Sql/servers/databases	Created	Operation details
sibabu\$server/Default	Microsoft.Sql/servers/connection	OK	Operation details
sibabu\$server	Microsoft.Sql/servers	Created	Operation details

**Next steps**

Go to resource

Give feedback  
Tell us about your experience with deployment

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- Step – 13: Now you are on SQL database page and click on Query Editor

Microsoft Azure

All services > Microsoft.SQLDatabase.newDatabaseNewServer\_5023de1ce19f439cb40fe | Overview >

### sibabidatabase (sibabuserver/sibabidatabase)

SQL database

**Overview**

- Activity log
- Tags
- Diagnose and solve problems
- Query editor (preview)**
- Mirror database in Fabric (preview)
- Settings
- Data management
- Integrations
- Power Platform
- Security
- Intelligent performance
- Monitoring
- Automation
- Help

**Essentials**

Resource group (move)	: sibabu	Server name	: sibabuserver.database.windows.net
Status	: Online	Connection strings	: Show database connection strings
Location	: Central India	Pricing tier	: General Purpose - Serverless: Gen5, 1 vCore
Subscription (move)	: Azure subscription 1	Auto-pause delay	: 1 hour
Subscription ID	: 5f357587-9149-4320-a642-9a81c4a1e356	Earliest restore point	: No restore point available
Tags (edit)	: Add tags		

**Getting started**    Monitoring    Properties    Features    Notifications (0)    Integrations    Tutorials

**Start working with your database**

Connect to your database and start working with data with a few simple steps. [Learn more](#)

 Configure access     Connect to application     Start developing     Mirror database in Fabric

- Step – 13: enter your login credentials

Microsoft Azure

All services > Microsoft.SQLDatabase.newDatabaseNewServer\_5023de1ce19f439cb40fe | Overview > sibabidatabase (sibabuserver/sibabidatabase)

### sibabidatabase (sibabuserver/sibabidatabase) | Query editor (preview)

SQL database

**Query editor (preview)**

**Welcome to SQL Database Query Editor**

Query editor (preview) is a tool to run SQL queries against Azure SQL Database in the Azure portal. It is designed for lightweight querying and object exploration in your database. For more information and troubleshooting, [Learn more](#)



**SQL server authentication**

Login \*

OR

Microsoft Entra authentication

Continue as INTURI\_SUPARNA\_BABU@...

OK

## Step – 13: Now here you can query the tables with SQL

The screenshot shows the Microsoft Azure portal interface for a SQL database named 'sibabidatabase'. The left sidebar contains navigation links for Overview, Activity log, Tags, Diagnose and solve problems, and Query editor (preview). The main area is titled 'Query 1' and contains a single digit '1'. At the top of the query window are buttons for Run, Cancel query, Save query, Export data as, Show only Editor, and Open Copilot.

## Pipeline Execution

Step-1: In the data factory studio , click on author->Datasets->Newdataset

The screenshot shows the Microsoft Data Factory studio interface. On the left, there is a navigation menu with 'Home', 'Author' (highlighted with a red box), 'Monitor', 'Manage', and 'Learning Center'. The main area is titled 'Factory Resources' and shows a list of resources: Pipelines, Change Data Capture (preview), Datasets (highlighted with a red box), Data flows, and Power Query. A blue arrow points from the 'Author' menu item to the 'Datasets' resource. Another blue arrow points from the 'Datasets' resource to the 'New dataset' button, which is also highlighted with a red box. The top right corner shows the user's email (INTURI\_SUPARNA\_BABU@ksrconsultantservices.com) and a 'Preview experience' toggle switch set to 'Off'.

## Step-2: After clicking on New dataset->select ADLS Gen2->click create

The screenshot shows the Microsoft Azure Data Factory interface. In the left sidebar, under 'Factory Resources', the 'Datasets' option is selected. On the right, a 'New dataset' wizard is open. It asks to 'Select a data store' and shows a grid of options: Azure AI Search, Azure Blob Storage, Azure Cosmos DB for MongoDB, Azure Cosmos DB for NoSQL, Azure Data Explorer (Kusto), Azure Data Lake Storage Gen2 (highlighted with a red box), Azure Database for MariaDB (Legacy), Azure Database for MySQL, and Azure Database for PostgreSQL. At the bottom of the wizard, there is a 'Continue' button.

## Step-3: Select csv->Continue

The screenshot shows the 'Select format' step of the dataset creation wizard. It asks to 'Choose the format type of your data' and lists several options: Avro, Binary, DelimitedText (highlighted with a red box), Excel, Iceberg, JSON, ORC, Parquet, and XML. At the bottom of the wizard, there is a 'Continue' button.

## Step-4: Create a new linked service

Microsoft Azure | Data Factory > sibabudf

Search factory and documentation

Would you like to see Data Factory inside of Microsoft Fabric, Microsoft's newest cloud-first data analytics SaaS platform? Click [here](#) to get started with Fabric Data.

Home Author Monitor Manage Learning Center

Data Factory Validate all Publish all

Factory Resources Filter resources by name +

- Pipelines 0
- Change Data Capture (preview) 0
- Datasets 0
  - Data flows 0
  - Power Query 0

Set properties

Name: inputdata

Linked service\*: Select...

## Step-5: Fill the form of Linked service

Microsoft Azure | Data Factory > sibabudf

Search factory and documentation

Would you like to see Data Factory inside of Microsoft Fabric, Microsoft's newest cloud-first data analytics SaaS platform? Click [here](#) to get started with Fabric Data.

Home Author Monitor Manage Learning Center

Data Factory Validate all Publish all

Factory Resources Filter resources by name +

- Pipelines 0
- Change Data Capture (preview) 0
- Datasets 0
  - Data flows 0
  - Power Query 0

New linked service

Azure Data Lake Storage Gen2 [Learn more](#)

Name: adls2adf

Description:

Connect via integration runtime: AutoResolveIntegrationRuntime

Authentication type: Account key

Account selection method: From Azure subscription

Azure subscription: Azure subscription 1 (5f357587-9149-4320-a642-9a81c4a1e356)

Storage account name: sibabustorage

Test connection: To linked service

Annotations: New

Parameters: + New

Create Cancel

Connection successful

Test connection

## Step-6: Click on Folder symbol

Set properties

Name: inputdata

Linked service: adls2adaf

File path: File system / Directory / File name

Import schema: From connection/store (radio button) / From sample file (radio button) / None (radio button)

OK Back Cancel

## Step-7: Click on Bikedata folder

Browse

Select a file or folder.

Root folder: bikedata

Showing 1 item

OK Cancel

## Step-8: Select BikedataCsv and click ok

Browse

Select a file or folder.

Root folder: bikedata

Bike\_Data\_CSVC.csv

Showing 1 item

OK Cancel

## Step-9: Click ok

Microsoft Azure | Data Factory > sibabudf

Search factory and documentation

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Home Author Monitor Manage Learning Center

Data Factory Validate all Publish all

Factory Resources < <

Pipelines 0

Change Data Capture (preview) 0

Datasets 0

Data flows 0

Power Query 0

Filter resources by name +

Set properties

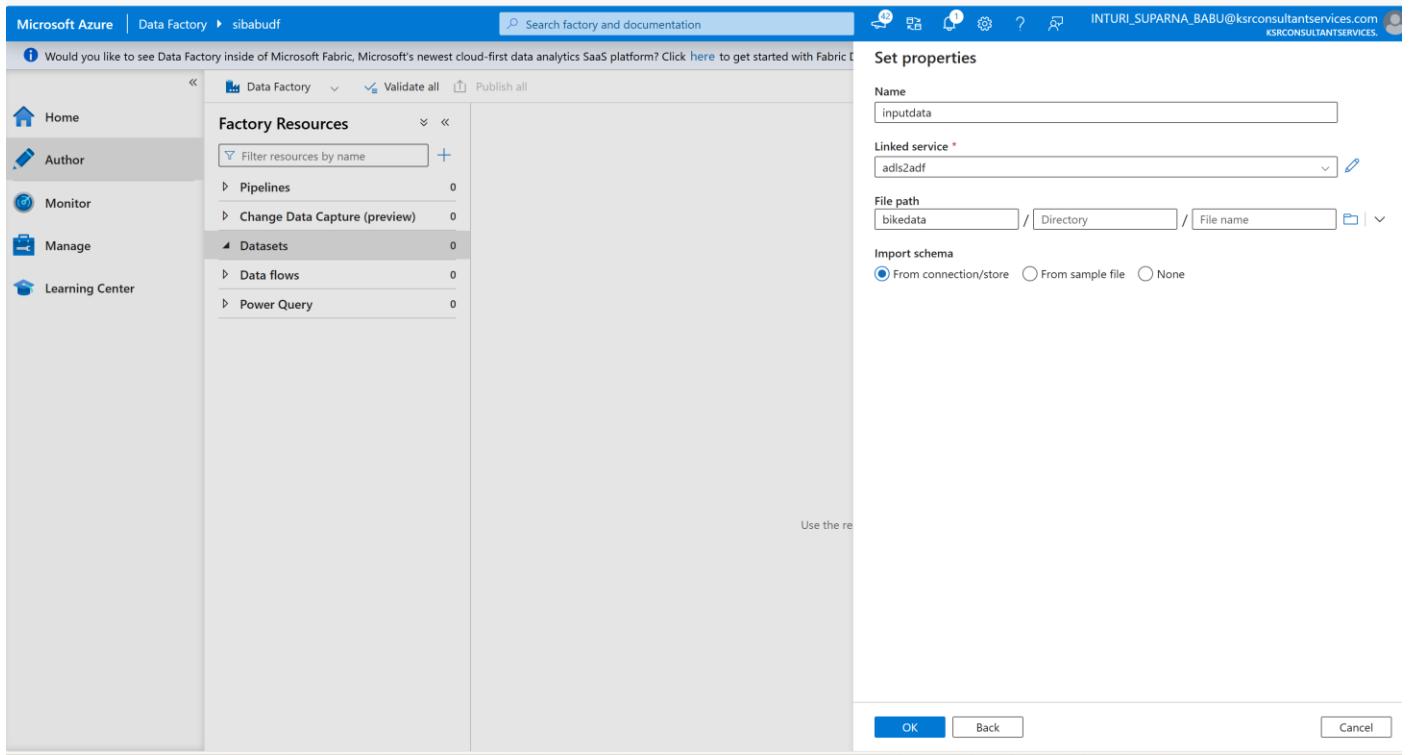
Name: inputdata

Linked service: adls2adf

File path: bikedata / Directory / File name

Import schema: From connection/store (radio button selected), From sample file, None

OK Back Cancel



## Step-9: Publish all

Microsoft Azure | Data Factory > sibabudf

Search factory and documentation

Would you like to see Data Factory inside of Microsoft Fabric, Microsoft's newest cloud-first data analytics SaaS platform? Click [here](#) to get started with Fabric Data Factory!

Preview experience: Off

Home Author Monitor Manage Learning Center

Data Factory Publish all

Factory Resources < <

Pipelines 0

Change Data Capture (preview) 0

Datasets 1

inputdata

Data flows 0

Power Query 0

inputdata

Properties

General Related

Name: inputdata

Description:

Annotations

CSV DelimitedText inputdata

Connection Schema Parameters

Test connection Edit New Learn more

File path: bikedata / Directory / Bike\_Data\_CSV.csv

Compression type: No compression

Column delimiter: Comma (,)

Row delimiter: Default (\r\n, or \r\r\n)

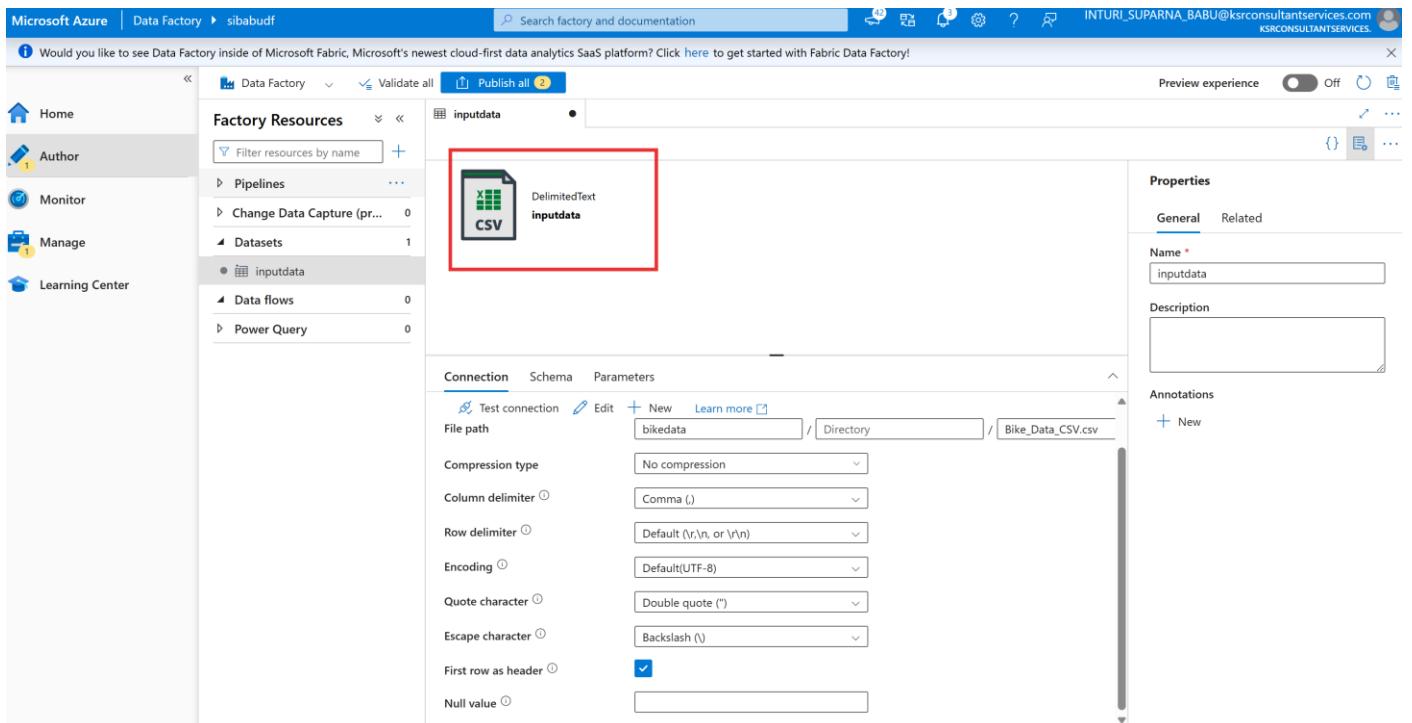
Encoding: Default(UTF-8)

Quote character: Double quote ("")

Escape character: Backslash (\)

First row as header:

Null value:



## Step-10: Publish

The screenshot shows the Microsoft Azure Data Factory interface. On the left, the navigation bar includes Home, Author (selected), Monitor, Manage, and Learning Center. Under 'Factory Resources', there are sections for Pipelines, Change Data Capture (0), Datasets (1), Data flows (0), and Power Query (0). A dataset named 'inputdata' is selected, shown as a 'DelimitedText' type with a CSV icon. At the top right, there is a 'Publish all' button with a red box and a blue arrow pointing to it. The 'Properties' panel on the right shows the dataset's name as 'inputdata' and other details like 'Description' and 'Annotations'. The 'Connection' tab of the properties panel is active, displaying file path settings for 'bikedata'.

## Step-11: Click on Power query and select new power query

This screenshot is similar to the previous one but focuses on the 'Power Query' section. The 'Power Query' option is highlighted with a red box and a blue arrow pointing to the 'New power query' button below it. The rest of the interface, including the dataset properties and connection settings, remains the same.

## Step-12: Rename power query and select input data

The screenshot shows the Microsoft Azure Data Factory Author interface. On the left sidebar, under 'Factory Resources', 'Power Query' is selected, and a single item 'bikedatatransform\_PQ' is listed. The main workspace displays a Power Query editor window for 'bikedatatransform\_PQ'. The 'General' tab in the Properties panel shows the name 'bikedatatransform\_PQ' highlighted with a red box. Below it, the 'Description' field is empty. In the 'Settings' tab, under 'Source dataset\*', there is a dropdown menu also highlighted with a red box, showing 'inputdata' selected. A blue arrow points from the 'inputdata' dropdown in the settings back to the 'inputdata' entry in the 'Dataset' section of the properties panel.

## Step-13: Now Power query editor window opens

The screenshot shows the Microsoft Power Query editor window. At the top, a warning message states: 'The Power Query is invalid. Could not find "UserQuery" in the mashup. "UserQuery" is mandatory in Power Query.' Below this, the 'inputdata' dataset is displayed as a table with columns: Region, Country, Customer, Business Segment, Category, Model, Color, SalesDate, ListPrice, and UnitPrice. The table contains three rows of data. The 'Settings' tab in the bottom-left shows the 'Source dataset\*' dropdown set to 'inputdata', also highlighted with a red box. The 'Applied steps' section on the right shows a step labeled 'Source'.

## Step-14: After transformations click on publishall

The screenshot shows the Microsoft Azure Data Factory Power Query Editor interface. At the top, there is a navigation bar with 'Microsoft Azure | Data Factory > sibabudf'. Below it, a message bar asks if you want to see Data Factory inside of Microsoft Fabric. A red box highlights the 'Publish all' button in the top right corner of the editor area. A blue arrow points from the text 'Step-15: After transformations click on publish' to this button. The main area shows a Power Query transformation step named 'bikedatatransform\_PQ'. The 'Queries [2]' pane contains a single query named 'Bikedata'. The query preview shows a table with columns: Business Segment, Category, Model, Color, SalesDate, 1.2 ListPrice, 1.2 UnitPrice, 1.2 OrderQty, 1.2 Cost, 1.2 Sales, and 1.2 Profit. The 'Settings' tab is selected, showing the source dataset 'inputdata' and other settings. The 'Applied steps' section on the right lists 'Renamed columns'.

## Step-15: After transformations click on publish

The screenshot shows the Microsoft Azure Data Factory Power Query Editor interface after publishing. The top navigation bar now shows 'Microsoft Azure | Data Factory > sibabudf' and the status 'Publishing (1)'. The main area shows the same Power Query transformation step 'bikedatatransform\_PQ'. The 'Queries [2]' pane now includes a 'UserQuery' entry. The 'Pending changes (1)' section on the right shows a single change for the 'Data flows' category, specifically for the 'bikedatatransform\_PQ' data flow. The 'Publish' and 'Cancel' buttons are visible at the bottom right of the editor.

## Step-16: Pipelines->PowerQuery->Settings->

The screenshot shows the Microsoft Azure Data Factory pipeline editor. On the left, the 'Factory Resources' sidebar lists 'Pipelines' (1), 'Datasets' (2), 'Data flows' (0), and 'Power Query' (1). The main area displays 'pipeline1' with one activity: 'Power Query' (Power Query1). A red box highlights the 'Power Query' section in the sidebar. Another red box highlights the 'Settings' tab in the activity configuration pane. The 'Sink' tab is also visible. The 'Properties' panel on the right shows the pipeline name as 'pipeline1'. Annotations and a new button are listed under 'Annotations'.

## Step-17: Select Azure SQL DB

The screenshot shows the Microsoft Azure Data Factory pipeline editor. The 'Sink' tab is selected for the Power Query activity. A red box highlights the 'Sink' tab in the activity configuration pane. The 'New dataset' dialog is open, prompting to 'Select a data store'. The 'All' tab is selected, showing various options: Amazon S3, Azure Blob Storage, Azure Cosmos DB for NoSQL, Azure Data Explorer (Kusto), Azure Data Lake Storage Gen2, Azure Database for MySQL (highlighted with a blue border), Azure Database for PostgreSQL, Azure SQL Database, and Azure SQL Database Managed Instance.

## Step-18: Create Linked service

The screenshot shows the Microsoft Azure Data Factory interface. On the left, the 'Factory Resources' sidebar is visible with options like Home, Author, Monitor, Manage, and Learning Center. The main area displays a dataset named 'inputdata' and a Power Query editor window. In the top right, a 'Set properties' dialog is open. Inside the dialog, the 'Name' field is populated with 'Azuresql' and the 'Linked service' dropdown is set to 'Select...'. A red box highlights these two fields. At the bottom right of the dialog are 'OK', 'Back', and 'Cancel' buttons.

## Step-19: Create Linked service from adf2azureSQL database and click create

The screenshot shows the 'New linked service' dialog in the Microsoft Azure Data Factory interface. The 'Type' dropdown is set to 'Azure SQL Database'. The 'Version' section has 'Recommended' selected. The 'Account selection method' section has 'From Azure subscription' selected. The 'Azure subscription' dropdown is set to 'Azure subscription 1 (5f357587-9149-4320-a642-9a81c4a1e356)'. The 'Server name' field is filled with 'sibabu\_sql'. The 'Database name' field is filled with 'sibabudatabase'. The 'Authentication type' is set to 'SQL authentication'. The 'User name' field is filled with 'sibabu\_sql'. The 'Password' field contains '\*\*\*\*\*'. The 'Always encrypted' checkbox is unchecked. At the bottom, there are 'Create' and 'Cancel' buttons, and a 'Connection successful' message with a green checkmark and a 'Test connection' link is displayed. Red arrows point from the 'Create' button to the 'Connection successful' message.

## Step-20: Fill form and create ok

The screenshot shows the Microsoft Azure Data Factory interface. On the left, the 'Factory Resources' sidebar is open, showing a list of pipelines, datasets, and power query activities. In the center, a pipeline named 'bikedata\_PL' is selected. A 'Power Query' activity named 'Power Query1' is highlighted. To the right, a 'Set properties' dialog is open, titled 'Set properties'. It contains fields for 'Name' (set to 'AzureSqlTable1'), 'Linked service' (set to 'adf2sqlldb'), and 'Schema and table name' (with 'Schema name' and 'Table name' both set to empty). A blue box highlights the 'Schema and table name' section. At the bottom of the dialog are 'OK', 'Back', and 'Cancel' buttons.

## Step-21: Publish all->Publish

The screenshot shows the Microsoft Azure Data Factory interface after publishing. The 'Factory Resources' sidebar now lists the published pipeline 'bikedata\_PL'. The pipeline is shown in the main workspace with its activities: 'Power Query1' and 'outputdata'. The 'Properties' pane on the right shows the pipeline's name is 'bikedata\_PL'. The 'Sink' tab of the pipeline's properties is selected, showing the 'Query name' as 'UserQuery' and the 'Sink' as 'outputdata'. The 'General' tab shows the pipeline has 1 activity and 0 triggers. The 'Settings' tab shows the pipeline has 2 datasets. The 'User properties' tab is also visible.

## Step-22: Pipelines->Trigger Now

The screenshot shows the Microsoft Azure Data Factory pipeline editor. On the left, the 'Factory Resources' sidebar lists 'Pipelines' (bikedata\_pipeline1), 'Datasets' (inputdata, Outputdata), 'Data flows' (0), and 'Power Query' (bikedatapowerquery1). The main workspace displays a pipeline named 'bikedata\_pipeline1' with three activities: 'inputdata', 'bikedatapowerquery1', and 'bikedata\_pipeline1'. The 'bikedata\_pipeline1' activity is selected, showing a 'Power Query' step named 'BikedataTransformre d'. The 'Properties' pane on the right shows the pipeline's name as 'bikedata\_pipeline1'. The status bar at the bottom indicates 'Preview exp'.

## Step-23: Pipeline run in-progress

The screenshot shows the 'Pipeline runs' section of the Microsoft Azure Data Factory interface. The left sidebar includes 'Runs', 'Pipeline runs' (selected), 'Trigger runs', 'Change Data Capture (previ...)', 'Runtimes & sessions', 'Integration runtimes', 'Data flow debug', 'Notifications', and 'Alerts & metrics'. The main area shows 'Activity runs' for pipeline run ID 023b42f2-d3cc-4fed-9a23-337e5fa724ca. A table lists one activity run: 'BikedataTransformred' (Status: In progress, Activity start: Power Query, Run start: 1/28/2025, 9:29:24 PM, Duration: 38s). A red box highlights the 'In progress' status. Buttons for 'List' and 'Gantt' views are visible above the table. A 'Monitor in Azure Metrics' link is at the top right.

## Step-24: Pipeline run succeeded

The screenshot shows the Microsoft Azure Data Factory interface. The left sidebar has a tree view with 'Dashboards', 'Runs', 'Pipeline runs' (selected), 'Trigger runs', 'Change Data Capture (previ...)', 'Runtimes & sessions', 'Integration runtimes', 'Data flow debug', and 'Notifications'. The main area shows 'All pipeline runs > pipeline1 - Activity runs'. A Gantt chart at the top indicates a single task named 'Power Query1' is completed successfully. Below it, the 'Activity runs' section shows one item: 'Power Query1' succeeded on 1/28/2025, 10:07:17 PM, using 'AutoResolveIntegrationRuntime (East US)'. On the right, 'Pipeline run details' show: Run by 'Manual trigger', Start time '1/28/2025, 10:07:13 PM', End time '1/28/2025, 10:11:24 PM', Status 'Succeeded', Parameters '0', and Pipeline run ID '2848ad06-cd08-4940-8529-326330aff0f6'.

## Step-25: Data populated in SQL Database

The screenshot shows the Microsoft Azure SQL Database Query editor. The left sidebar has 'Overview', 'Activity log', 'Tags', 'Diagnose and solve problems', 'Query editor (preview)' (selected), 'Mirror database in Fabric (preview)', 'Settings', 'Data management', 'Integrations', 'Power Platform', 'Security', 'Intelligent performance', 'Monitoring', 'Automation', and 'Help'. The main area shows 'sibabu\_db (suparna@ajaybabu.onmicrosoft.com) | Query editor (preview)'. It displays a query window with 'Query 3' selected, containing the SQL command: 'SELECT TOP (1000) \* FROM [dbo].[emptb]'. Below it, the 'Results' tab shows a table with data:

Start Date	Course Code	Course Name	Employee ID	Cost	Supplier
18-09-2015	1	Communication Worksh...	1	1300	Communication Experts
18-09-2015	1	Communication Worksh...	4	1300	Communication Experts
18-09-2015	1	Communication Worksh...	25	1300	Communication Experts
18-09-2015	1	Communication Worksh...	33	1300	Communication Experts
18-09-2015	1	Communication Worksh...	44	1300	Communication Experts
18-09-2015	1	Communication Worksh...	22	1300	Communication Experts