

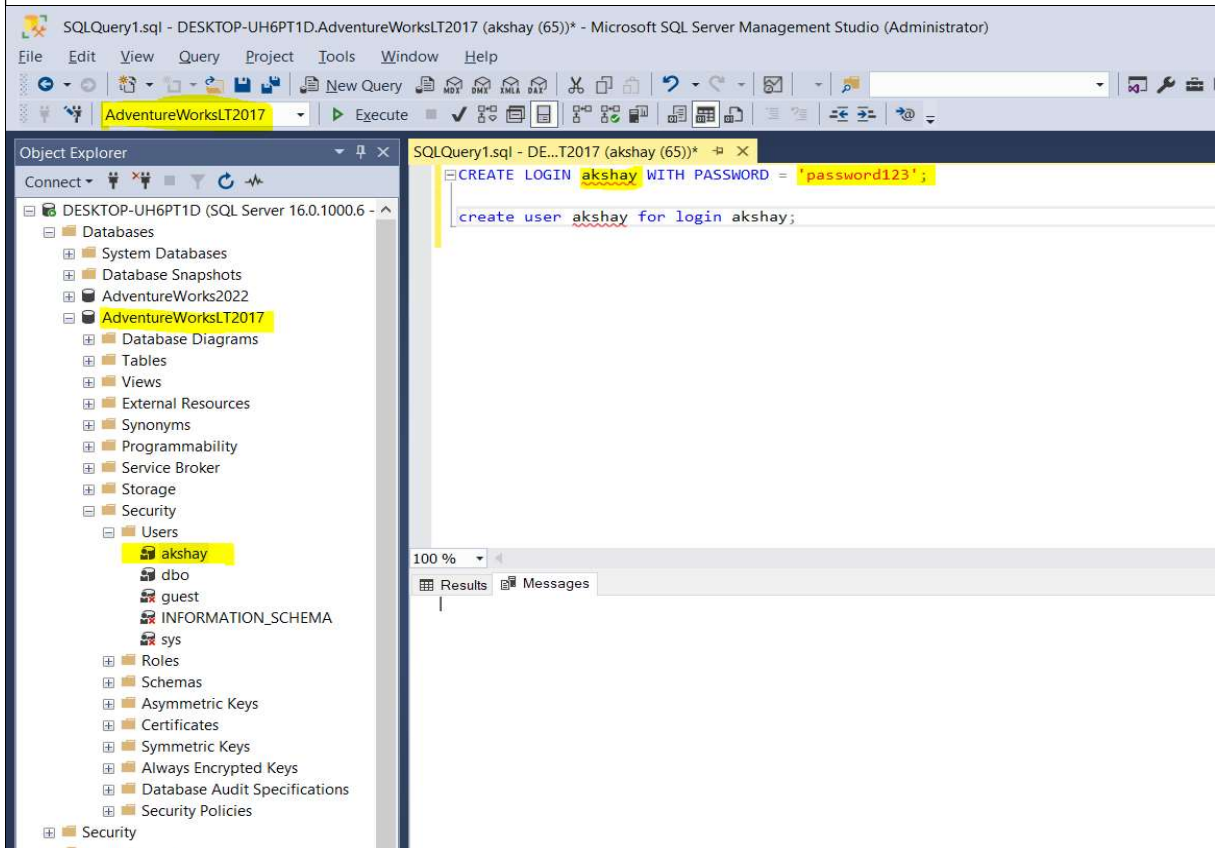
# Environmental Setup

## 1) On-Premises Database Configuration

- Create login credentials.

```
CREATE LOGIN akshay WITH PASSWORD = 'password123';
```

```
create user akshay for login akshay;
```



- Query to fetch the all the table names from the database.

```
SELECT  
s.name AS SchemaName,  
t.name AS TableName  
FROM sys.tables t  
INNER JOIN sys.schemas s  
ON t.schema_id = s.schema_id  
WHERE s.name = 'SalesLT'
```

The screenshot displays the Microsoft SQL Server Management Studio (SSMS) interface. The title bar indicates the connection to 'DESKTOP-UH6PT1D\AdventureWorksLT2017 (akshay (65))'. The 'Object Explorer' on the left shows the database structure, with 'AdventureWorksLT2017' expanded to show 'Tables'. The 'Query Editor' in the center contains the following SQL query:

```
SELECT  
s.name AS SchemaName,  
t.name AS TableName  
FROM sys.tables t  
INNER JOIN sys.schemas s  
ON t.schema_id = s.schema_id  
WHERE s.name = 'SalesLT'
```

The 'Results' pane at the bottom shows the output of the query, which is a list of 10 tables from the SalesLT schema:

SchemaName	TableName
SalesLT	Address
SalesLT	Customer
SalesLT	CustomerAddress
SalesLT	Product
SalesLT	ProductCategory
SalesLT	ProductDescription
SalesLT	ProductModel
SalesLT	ProductModelProductDescription
SalesLT	SalesOrderDetail
SalesLT	SalesOrderHeader

The status bar at the bottom indicates 'Query executed successfully.' and '10 rows'.

- On-Premises database up and running

SELECT

\*

FROM

SalesLT.Product

SQLQuery1.sql - DESKTOP-UH6PT1D:AdventureWorksLT2017 (akshay (65)) - Microsoft SQL Server Management Studio (Administrator)

Object Explorer

Connect: DESKTOP-UH6PT1D (SQL Server 16.0.10006.6 - A)

AdventureWorksLT2017

SQLQuery1.sql - DE-...T2017 (akshay (65))

100 %

Results Messages

	ProductID	Name	ProductNumber	Color	StandardCost	ListPrice	Size	Weight	ProductCategoryID	ProductModelID	SellStartDate	SellEndDate	DiscontinuedDate	ThumbNailPhoto
1	680	HL Road Frame - Black, 58	FR-R02B-58	Black	1059.31	1431.50	58	1016.04	18	6	2002-06-01 00:00:00.000	NULL	NULL	0x4749463339615000310
2	706	HL Road Frame - Red, 58	FR-R02R-58	Red	1059.31	1431.50	58	1016.04	18	6	2002-06-01 00:00:00.000	NULL	NULL	0x4749463339615000310
3	707	Sport-100 Helmet, Red	HL-I509-R	Red	13.0863	34.99	NULL	NULL	35	33	2005-07-01 00:00:00.000	NULL	NULL	0x4749463339615000310
4	708	Sport-100 Helmet, Black	HL-I509	Black	13.0863	34.99	NULL	NULL	35	33	2005-07-01 00:00:00.000	NULL	NULL	0x4749463339615000310
5	709	Mountain Bike Socks, M	SO-B909-M	White	3.3963	9.50	M	NULL	27	18	2005-07-01 00:00:00.000	2006-06-30 00:00:00.000	NULL	0x4749463339615000310
6	710	Mountain Bike Socks, L	SO-B909-L	White	3.3963	9.50	L	NULL	27	18	2005-07-01 00:00:00.000	2006-06-30 00:00:00.000	NULL	0x4749463339615000310
7	711	Sport-100 Helmet, Blue	HL-I509-B	Blue	13.0863	34.99	NULL	NULL	35	33	2005-07-01 00:00:00.000	NULL	NULL	0x4749463339615000310
8	712	AWC Logo Cap	CA-1068	Multi	6.9223	8.99	NULL	NULL	23	2	2005-07-01 00:00:00.000	NULL	NULL	0x4749463339615000310
9	713	Long-Sleeve Logo Jersey, S	LJ-G192-S	Multi	38.4923	49.99	S	NULL	25	11	2005-07-01 00:00:00.000	NULL	NULL	0x4749463339615000310
10	714	Long-Sleeve Logo Jersey, M	LJ-G192-M	Multi	38.4923	49.99	M	NULL	25	11	2005-07-01 00:00:00.000	NULL	NULL	0x4749463339615000310
11	715	Long-Sleeve Logo Jersey, L	LJ-G192-L	Multi	38.4923	49.99	L	NULL	25	11	2005-07-01 00:00:00.000	NULL	NULL	0x4749463339615000310
12	716	Long-Sleeve Logo Jersey, XL	LJ-G192-XL	Multi	38.4923	49.99	XL	NULL	25	11	2005-07-01 00:00:00.000	NULL	NULL	0x4749463339615000310
13	717	HL Road Frame - Red, 62	FR-R02R-62	Red	868.6342	1431.50	62	1043.26	18	6	2005-07-01 00:00:00.000	NULL	NULL	0x4749463339615000310
14	718	HL Road Frame - Red, 44	FR-R02R-44	Red	868.6342	1431.50	44	961.61	18	6	2005-07-01 00:00:00.000	NULL	NULL	0x4749463339615000310
15	719	HL Road Frame - Red, 48	FR-R02R-48	Red	868.6342	1431.50	48	979.75	18	6	2005-07-01 00:00:00.000	NULL	NULL	0x4749463339615000310
16	720	HL Road Frame - Red, 52	FR-R02R-52	Red	868.6342	1431.50	52	997.90	18	6	2005-07-01 00:00:00.000	NULL	NULL	0x4749463339615000310
17	721	HL Road Frame - Red, 56	FR-R02R-56	Red	868.6342	1431.50	56	1016.04	18	6	2005-07-01 00:00:00.000	NULL	NULL	0x4749463339615000310
18	722	LL Road Frame - Black, 58	FR-R38B-58	Black	204.6251	337.22	58	1115.83	18	9	2005-07-01 00:00:00.000	NULL	NULL	0x4749463339615000310
19	723	LL Road Frame - Black, 60	FR-R38B-60	Black	204.6251	337.22	60	1124.90	18	9	2005-07-01 00:00:00.000	NULL	NULL	0x4749463339615000310
20	724	LL Road Frame - Black, 62	FR-R38B-62	Black	204.6251	337.22	62	1133.98	18	9	2005-07-01 00:00:00.000	NULL	NULL	0x4749463339615000310
21	725	LL Road Frame - Red, 44	FR-R38R-44	Red	187.1571	337.22	44	1052.33	18	9	2005-07-01 00:00:00.000	2007-06-30 00:00:00.000	NULL	0x4749463339615000310
22	726	LL Road Frame - Red, 48	FR-R38R-48	Red	187.1571	337.22	48	1070.47	18	9	2005-07-01 00:00:00.000	2007-06-30 00:00:00.000	NULL	0x4749463339615000310
23	727	LL Road Frame - Red, 52	FR-R38R-52	Red	187.1571	337.22	52	1088.62	18	9	2005-07-01 00:00:00.000	2007-06-30 00:00:00.000	NULL	0x4749463339615000310
24	728	LL Road Frame - Red, 56	FR-R38R-56	Red	187.1571	337.22	56	1115.83	18	9	2005-07-01 00:00:00.000	2007-06-30 00:00:00.000	NULL	0x4749463339615000310
25	729	LL Road Frame - Red, 60	FR-R38R-60	Red	187.1571	337.22	60	1124.90	18	9	2005-07-01 00:00:00.000	2007-06-30 00:00:00.000	NULL	0x4749463339615000310
26	730	LL Road Frame - Red, 62	FR-R38R-62	Red	187.1571	337.22	62	1133.98	18	9	2005-07-01 00:00:00.000	2007-06-30 00:00:00.000	NULL	0x4749463339615000310
27	731	ML Road Frame - Red, 44	FR-R72R-44	Red	352.1394	594.83	44	1006.97	18	16	2005-07-01 00:00:00.000	2006-06-30 00:00:00.000	NULL	0x4749463339615000310
28	732	ML Road Frame - Red, 48	FR-R72R-48	Red	352.1394	594.83	48	1025.11	18	16	2005-07-01 00:00:00.000	2006-06-30 00:00:00.000	NULL	0x4749463339615000310
29	733	ML Road Frame - Red, 52	FR-R72R-52	Red	352.1394	594.83	52	1043.26	18	16	2005-07-01 00:00:00.000	2006-06-30 00:00:00.000	NULL	0x4749463339615000310

Query executed successfully.

DESKTOP-UH6PT1D (16.0 RTM) akshay (65) AdventureWorksLT2017 00:00:00 295 rows

Ready

Type here to search

Ln 5 Col 16

Ch 16

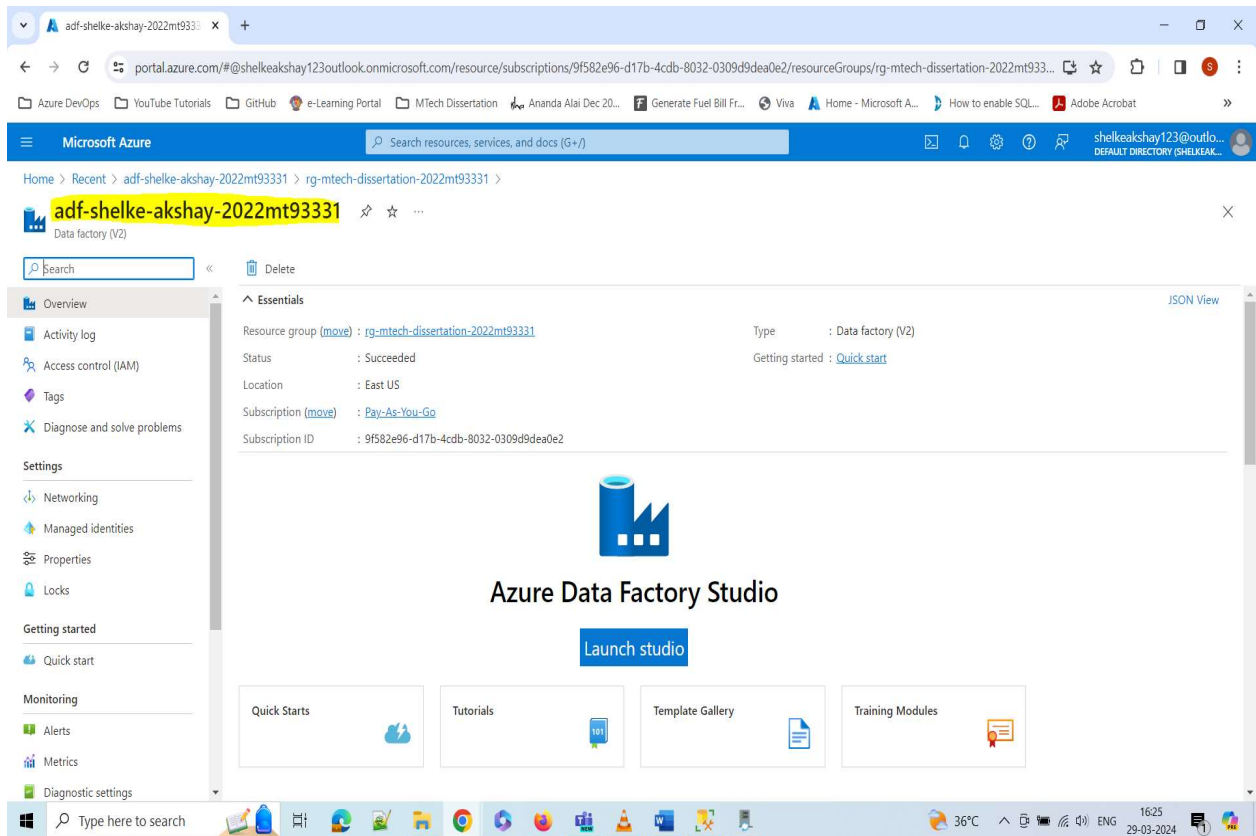
INS

36°C Mostly sunny

16:07

29-03-2024

## 2) Create AZURE DATA FACTORY resource in Azure Portal

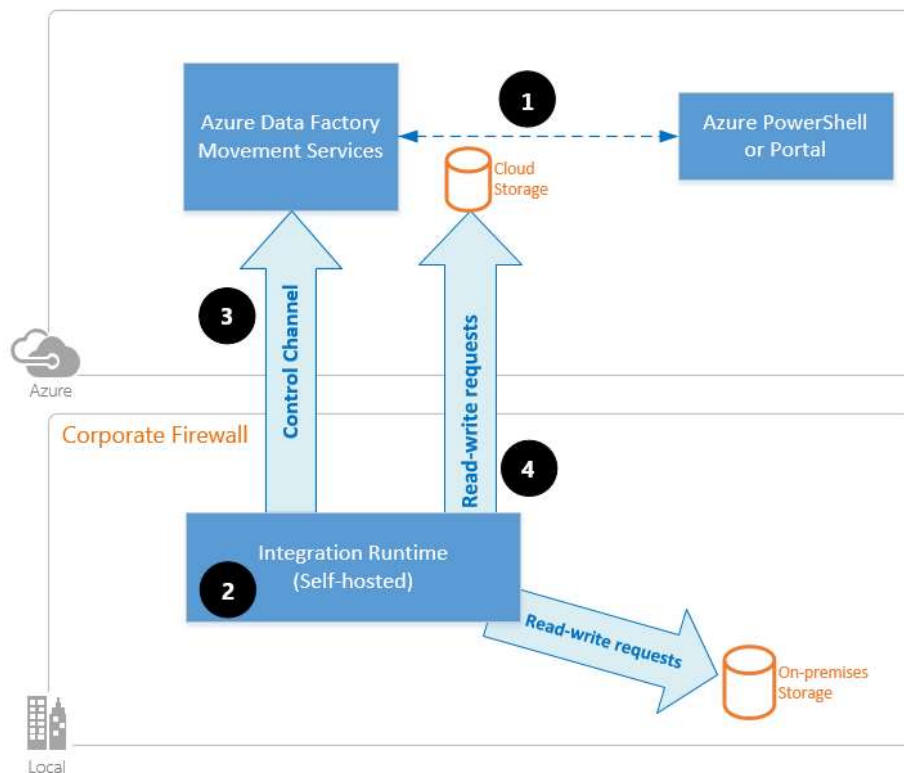


Please follow the Microsoft documentation : <https://learn.microsoft.com/en-us/azure/data-factory/tutorial-copy-data-portal#create-a-data-factory>

3) Create and configure a self-hosted integration runtime.

A self-hosted integration runtime can run copy activities between a cloud data store and a data store in a private network.

A self-hosted integration runtime is a component that allows Azure Data Factory to securely access data resources within a corporate network or a private network. It serves as a bridge between cloud-based data integration services and on-premises or private network data sources.



This setup allows Azure Data Factory to securely access and move data from on-premises or private network sources to cloud-based data stores, or vice versa, while maintaining control and security within the corporate network environment.

For More Details, please visit Microsoft Documentation : <https://learn.microsoft.com/en-us/azure/data-factory/create-self-hosted-integration-runtime?tabs=data-factory>

self-hosted integration runtime, up and running on on-premises machine

The screenshot displays the Microsoft Integration Runtime Configuration Manager application window. The title bar reads "Microsoft Integration Runtime Configuration Manager". The interface includes a navigation menu with "Home", "Settings", "Diagnostics", "Update", and "Help". The "Home" tab is active, showing a green checkmark icon and the message "Self-hosted node is connected to the cloud service". Below this, configuration details are listed: "Data Factory: adf-shelke-akshay-2022mt93331", "Integration Runtime: SHIR-06-03-2024", and "Node: DESKTOP-UH6PT1D". A "Stop Service" button is present. The "Data Source Credential" section, marked with an information icon, shows "Credential store: On-premises", "Credential status: In sync", and "Last backup time: N/A". It includes "Generate Backup" and "Import Backup" buttons. A status bar at the bottom indicates "Connected to the cloud service (Data Factory V2)" with a green checkmark and a refresh icon.

Microsoft Integration Runtime Configuration Manager

Home Settings Diagnostics Update Help

✓ Self-hosted node is connected to the cloud service

Data Factory: adf-shelke-akshay-2022mt93331

Integration Runtime: SHIR-06-03-2024

Node: DESKTOP-UH6PT1D

Stop Service

Data Source Credential ⓘ

Credential store: On-premises

Credential status: In sync

Last backup time: N/A

Generate Backup Import Backup

✓ Connected to the cloud service (Data Factory V2) ↻