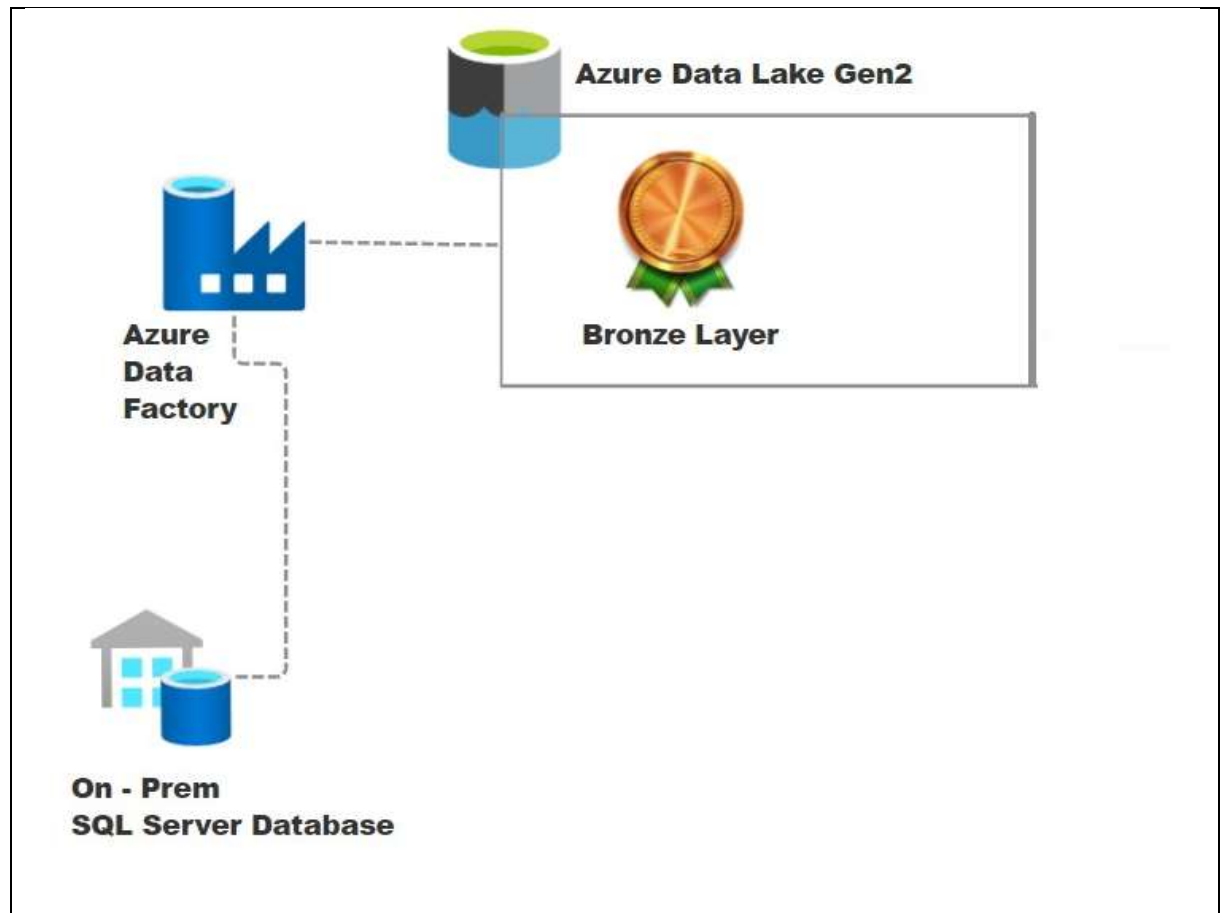


Data Ingestion



1) On Premises Database Tables

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

Object Explorer: Connect to DESKTOP-UH6PT1D (SQL Server 16.0.1000.6) - AdventureWorksLT2017 - Tables - SalesLT - Product

Query:

```
SELECT * FROM SalesLT.Product
```

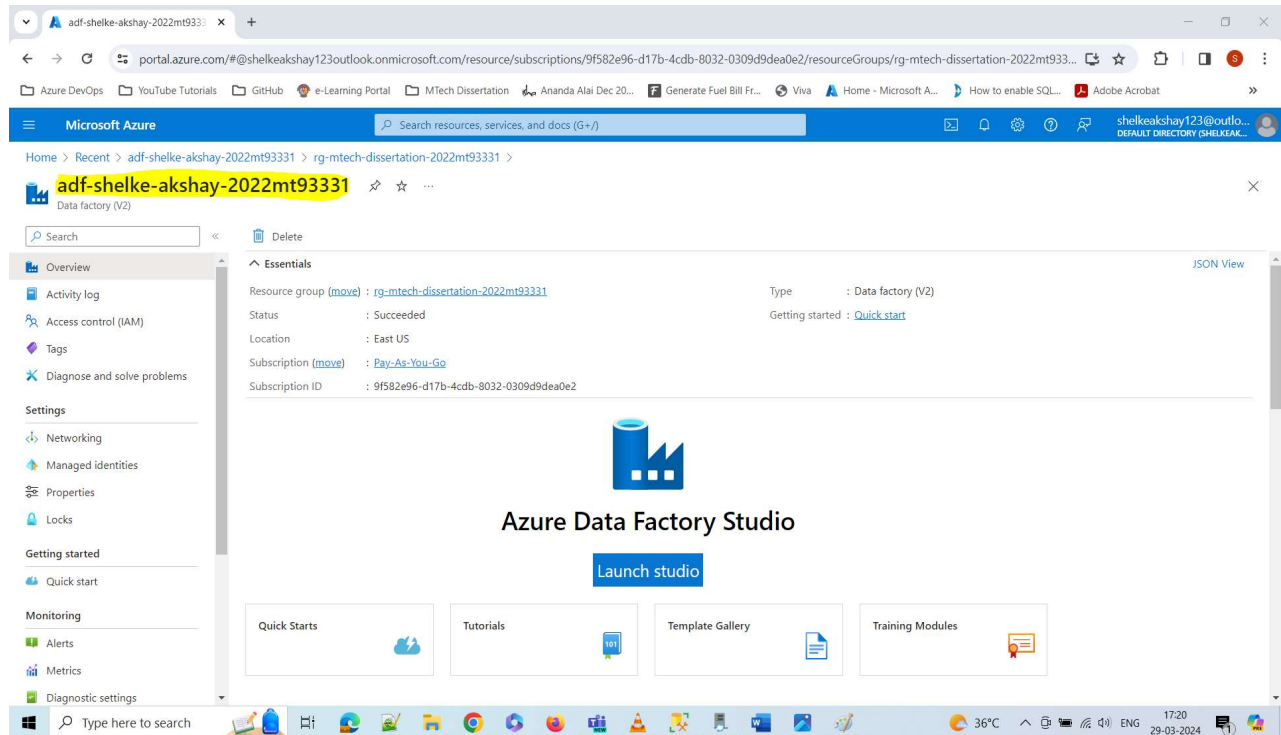
Results (295 rows):

ProductID	Name	ProductNumber	Color	StandardCost	ListPrice	Size	Weight	ProductCategoryID	ProductModelID	SellStartDate	SellEndDate	DiscontinuedDate	ThumbnailPhoto
680	HL Road Frame - Black, 58	FR-R52B-58	Black	1059.31	1431.50	58	1016.04	18	6	2002-06-01 00:00:00.000	NULL	NULL	0x7494633b9615000310
706	HL Road Frame - Red, 58	FR-R52R-58	Red	1059.31	1431.50	58	1016.04	18	6	2002-06-01 00:00:00.000	NULL	NULL	0x7494633b9615000310
707	Sport-100 Helmet, Red	HL-U50R-R	Red	13.0863	34.99	NULL	NULL	35	33	2005-07-01 00:00:00.000	NULL	NULL	0x7494633b9615000310
708	Sport-100 Helmet, Black	HL-U50B-B	Black	13.0863	34.99	NULL	NULL	35	33	2005-07-01 00:00:00.000	NULL	NULL	0x7494633b9615000310
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	0x7494633b9615000310
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	0x7494633b9615000310
711	Sport-100 Helmet, Blue	HL-U50B-B	Blue	13.0863	34.99	NULL	NULL	35	33	2005-07-01 00:00:00.000	NULL	NULL	0x7494633b9615000310
712	AWC Logo Cap	CA-109B	Multi	6.9223	8.99	NULL	NULL	23	2	2005-07-01 00:00:00.000	NULL	NULL	0x7494633b9615000310
713	Long-Sleeve Logo Jersey, S	LJ-0192-S	Multi	38.4923	49.99	S	NULL	25	11	2005-07-01 00:00:00.000	NULL	NULL	0x7494633b9615000320
714	Long-Sleeve Logo Jersey, M	LJ-0192-M	Multi	38.4923	49.99	M	NULL	25	11	2005-07-01 00:00:00.000	NULL	NULL	0x7494633b9615000320
715	Long-Sleeve Logo Jersey, L	LJ-0192-L	Multi	38.4923	49.99	L	NULL	25	11	2005-07-01 00:00:00.000	NULL	NULL	0x7494633b9615000320
716	Long-Sleeve Logo Jersey, XL	LJ-0192-X	Multi	38.4923	49.99	XL	NULL	25	11	2005-07-01 00:00:00.000	NULL	NULL	0x7494633b9615000320
717	HL Road Frame - Red, 62	FR-R52R-62	Red	888.6342	1431.50	62	1043.26	18	6	2005-07-01 00:00:00.000	NULL	NULL	0x7494633b9615000310
718	HL Road Frame - Red, 44	FR-R52R-44	Red	888.6342	1431.50	44	981.81	18	6	2005-07-01 00:00:00.000	NULL	NULL	0x7494633b9615000310
719	HL Road Frame - Red, 48	FR-R52R-48	Red	888.6342	1431.50	48	979.75	18	6	2005-07-01 00:00:00.000	NULL	NULL	0x7494633b9615000310
720	HL Road Frame - Red, 52	FR-R52R-52	Red	888.6342	1431.50	52	997.90	18	6	2005-07-01 00:00:00.000	NULL	NULL	0x7494633b9615000310
721	HL Road Frame - Red, 56	FR-R52R-56	Red	888.6342	1431.50	56	1016.04	18	6	2005-07-01 00:00:00.000	NULL	NULL	0x7494633b9615000310
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	0x7494633b9615000310
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	0x7494633b9615000310
724	LL Road Frame - Black, 62	FR-R38B-62	Black	204.6251	337.22	62	1133.96	18	9	2005-07-01 00:00:00.000	NULL	NULL	0x7494633b9615000310
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	0x7494633b9615000310
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	0x7494633b9615000310
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	0x7494633b9615000310
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	0x7494633b9615000310
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	0x7494633b9615000310
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	0x7494633b9615000310
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	0x7494633b9615000310
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	0x7494633b9615000310
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	0x7494633b9615000310

Query executed successfully. DESKTOP-UH6PT1D (16.0 RTM) akshay (65) AdventureWorksLT2017 00:00:00 295 rows

2) Azure Data Factory (ADF)

To Create Azure data factory resource, 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 run Azure data factory pipeline, to pull all database tables from OnPrem to Azure Blob Storage in parquet format

The screenshot shows the 'copy_all_tables' pipeline in the Microsoft Azure Data Factory portal. The pipeline is composed of the following activities:

- Lookup**: 'Look for all tables'.
- ForEach**: 'For Each Schema Table'.
- Copy Each Table**: A copy activity within the ForEach loop.

The left sidebar shows the 'Factory Resources' pane with 'Pipelines' expanded, listing 'copy_all_tables' and 'copy_pipeline'. The 'Activities' pane on the right lists various activity types including 'Move and transform', 'Synapse', 'Azure Data Explorer', 'Azure Function', 'Batch Service', 'Databricks', 'Data Lake Analytics', 'General', 'HDInsight', 'Iteration & conditionals', 'Machine Learning', and 'Power Query'.

The screenshot shows the 'copy_all_tables - Activity runs' monitoring view in the Microsoft Azure Data Factory portal. The pipeline run ID is 61d707ff-6d81-4023-b805-7d8f8386d064. The activity runs are listed in a table below.

Activity name	Activity status	Activity type	Run start	Duration	Integration runtime	User properties	Activity run ID	Log
Look for all tables	Succeeded	Lookup	3/29/2024, 5:12:20 PM	14s	SHIR-06-03-2024		5f1c9250-fc3-4b3c-b0da-fa52c7bae2ed	
For Each Schema Table	Succeeded	ForEach	3/29/2024, 5:12:36 PM	39s	SHIR-06-03-2024		3c4506d8-98a5-4824-85d4-15cc45b05692	
Copy Each Table	Succeeded	Copy data	3/29/2024, 5:12:37 PM	27s	SHIR-06-03-2024		d4a1d91f-52ab-4ce7-871f-f849394ed934	
Copy Each Table	Succeeded	Copy data	3/29/2024, 5:12:37 PM	30s	SHIR-06-03-2024		41c176ac-11c4-42b4-ad72-968fd766f286	
Copy Each Table	Succeeded	Copy data	3/29/2024, 5:12:37 PM	25s	SHIR-06-03-2024		c916a363-4790-4a87-90e8-069ce2b7fc9c	
Copy Each Table	Succeeded	Copy data	3/29/2024, 5:12:37 PM	30s	SHIR-06-03-2024		350bcd71-3ba3-47fc-8662-3405201d76b5	
Copy Each Table	Succeeded	Copy data	3/29/2024, 5:12:37 PM	24s	SHIR-06-03-2024		0e5bf1f1-adb0-4cb2-881c-e0ac7cfdaf9a	

4) Storing all tables from on premises database to AZURE BLOB STORAGE in parquet file format

Home > Storage accounts > storageacctechdemo | Containers >

bronze Container

Search

Authentication method: Access key (Switch to Microsoft Entra user account)
Location: **bronze / SalesLT**

Search blobs by prefix (case-sensitive) ☐ Show deleted blobs

+ Add filter

Name	Modified	Access tier	Archive status	Blob type	Size	Lease state
<input type="checkbox"/> [-]						...
<input type="checkbox"/> Address						-
<input type="checkbox"/> Customer						-
<input type="checkbox"/> CustomerAddress						-
<input type="checkbox"/> Product						-
<input type="checkbox"/> ProductCategory						-
<input type="checkbox"/> ProductDescription						-
<input type="checkbox"/> ProductModel						-
<input type="checkbox"/> ProductModelProductDescription						-
<input type="checkbox"/> SalesOrderDetail						-
<input type="checkbox"/> SalesOrderHeader						-

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bronze Container

Search

Authentication method: Access key (Switch to Microsoft Entra user account)
Location: **bronze / SalesLT / Product**

Search blobs by prefix (case-sensitive) ☐ Show deleted blobs

+ Add filter

Name	Modified	Access tier	Archive status	Blob type	Size	Lease state
<input type="checkbox"/> [-]						...
<input type="checkbox"/> Product.parquet	29/03/2024, 17:12:58	Hot (Inferred)		Block blob	191.45 KiB	Available