Lab description

Azure Synapse Analytics is an integrated analytics platform that gives you the ability to gain insight into the data collected from various sources. It comes with features such as data warehousing, big data analytics, data integration, and visualization.

Data Analytics is one of the fundamental drivers of business decisions. The ability to search through the data and make critical business decisions is super powerful to make a significant impact. The ability to visualize the current analytics and do predictive analytics is possible with the Azure Synapse Spark engine pool. It also supports modern data warehousing, advanced analytics, data exploration, real-time analytics, and data ingestion from multiple sources to provide a seamless integration to connect to your data source.

In this lab, you will learn how to deploy Azure Synapse Analytics and use serverless SQL to execute queries against the data stored in a data lake storage account.

Learning Objectives

Upon completion of this intermediate-level lab, you will be able to:

- Create and manage Azure Synapse Analytics workspace
- Work with Data Lake to store data files
- Interact with Synapse Studio
- Create queries to analyze data using SQL query
- Create SQL View using Serverless SQL pool

Intended Audience

- Candidates for Azure Data Engineer (DP-203)
- Cloud Architects
- Data Engineers
- Database Administrators
- Anyone with a need to visualize and analyze data in Azure

Prerequisites

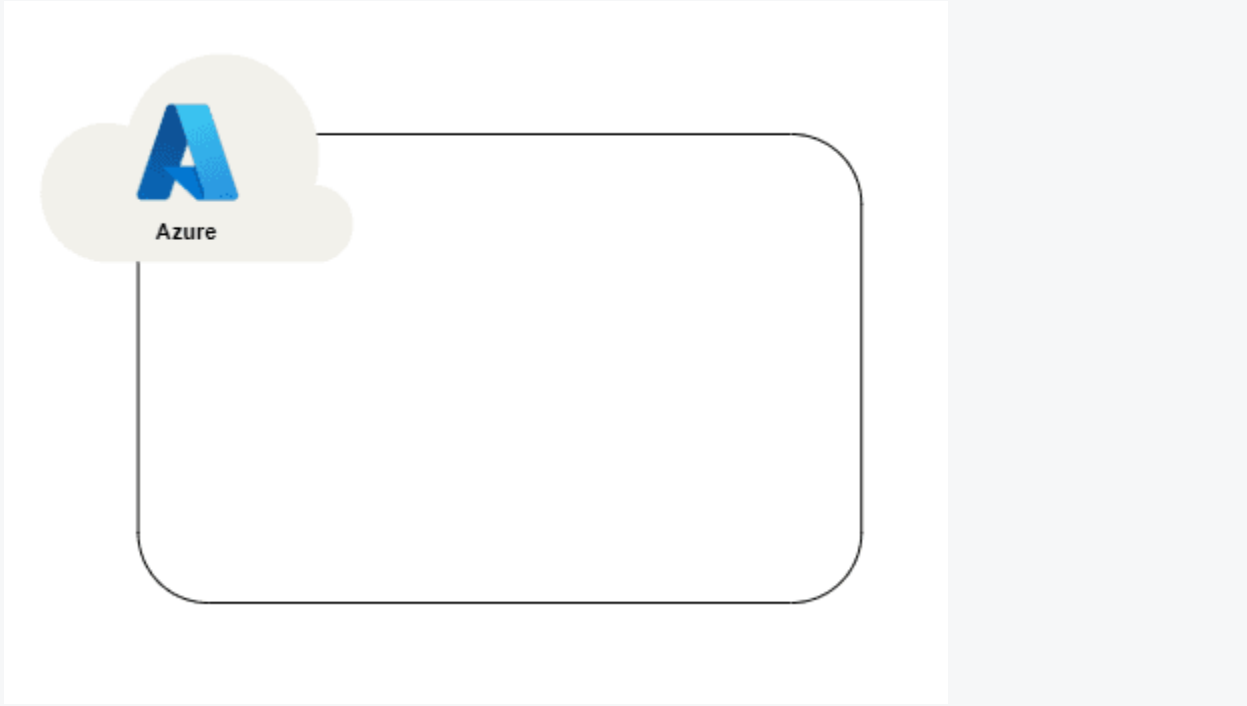
Familiarity with the following will be beneficial but is not required:

- Basic knowledge of Azure Storage Services
- Basic knowledge of Running SQL Queries
- Basic knowledge of AzCopy command & Azure Cloud Shell

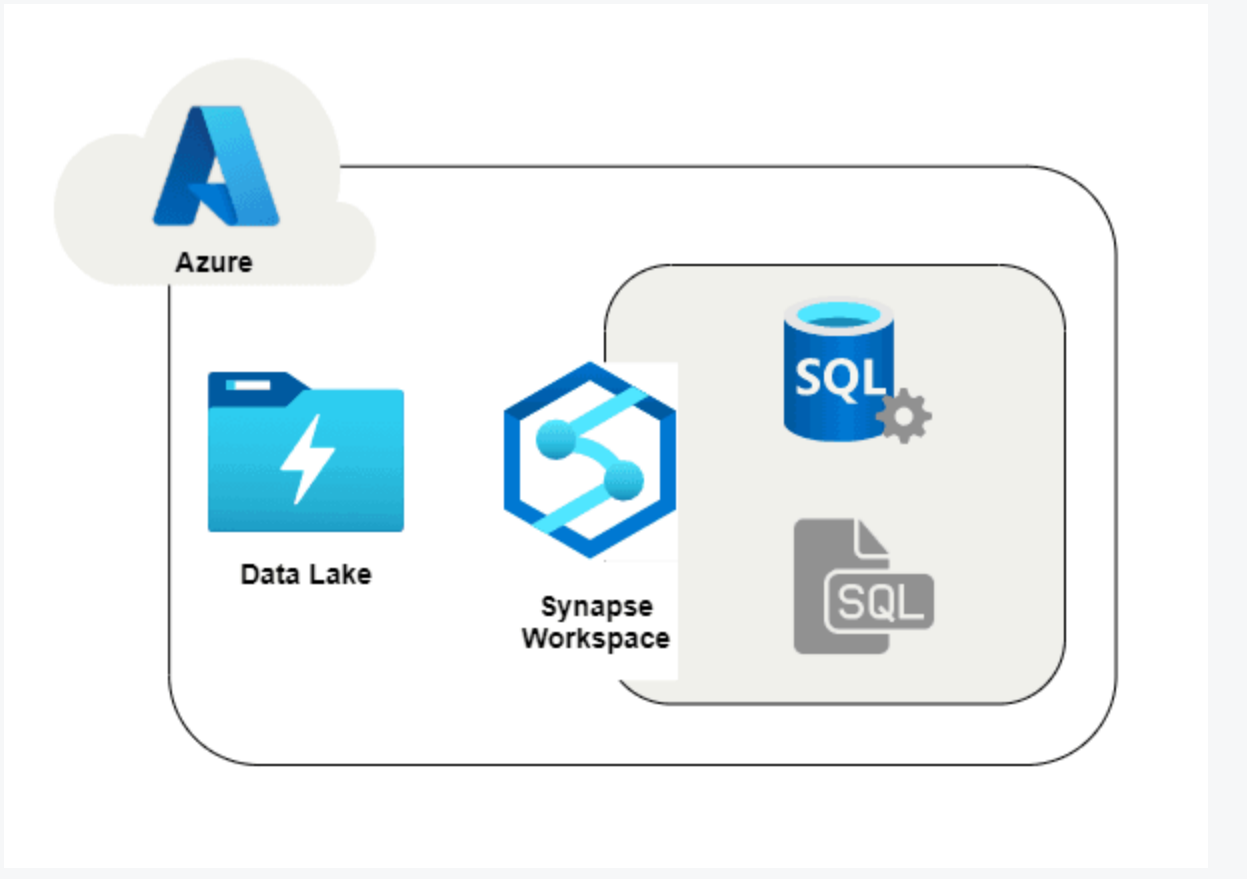
The following courses/courses and labs can be used to fulfill the prerequisite:

- Introduction to Azure Synapse Analytics
- Using Azure Data Lake Storage Gen2

Environment before



Environment after



Lab steps

1. Logging in to the Microsoft Azure Portal
2. Creating Azure Synapse Analytics Workspace
3. Uploading Sample Data into Data Lake Storage
4. Exploring Azure Synapse Workspace and Studio
5. Querying a Data Lake Store using serverless SQL pools in Azure Synapse Analytics
6. Creating a View for CSV Data with a Serverless SQL Pool