**Custom Training - Day 10**

**September 12, 2023**

**Serverless SQL Pool in the Azure Synapse Analytics:** Every Azure Synapse workspace comes with the serverless **serverless SQL pool endpoints** that you can use to query data in the Azure Data Lake (Parquet, Delta the Azure Data Lake (Parquet, Delta Lake, delimited text formats), Azure Cosmos DB, or Dataverse.)

Serverless SQL pool is a query service over the data in your data lake. It enables you to access your data through the following functionalities:

* A familiar [T-SQL syntax](https://learn.microsoft.com/en-us/azure/synapse-analytics/sql/overview-features) to query data in place without the need to copy or load data into a specialized store. To learn more, see the T-SQL support section.
* Integrated connectivity via the T-SQL interface that offers a wide range of business intelligence and ad-hoc querying tools, including the most popular drivers. To learn more, see the [Client tools](https://learn.microsoft.com/en-us/azure/synapse-analytics/sql/on-demand-workspace-overview#client-tools) section.

Dedicated SQL Pool refers to the enterprise data warehousing features that are available in the azure synapse analytics. Dedicated SQL Pool represents a collection of analytic resources that are provisioned when using Synapse SQL. The size of a dedicated SQL pool (formerly SQL DW) is determined by Data Warehousing Units (DWU).

**Synapse Serverless vs Dedicated Pool:**

* While the serverless do not store data and only access data from the storage account and scale the MPP environment automatically, the dedicated sql pool keeps a static number of servers according to the service level we choose and a constant number of distributions – always 60.

**Serverless SQL Pool:**

* Idle for either structured or unstructured data. Data can be stored in different file formats like parquet or raw.
* The compute associated with the serverless sql pool is managed and allocated by Microsoft
* Seamless data transformation without any infrastructure in place

**Dedicated SQL pools:**

* Data is stored in relational tables
* If you need an optimized compute strategy for performance requirements, go with
* Dedicated(option to increase the Data warehouse units)
* Require dedicated servers before performing any operation
* The performance is based on DWU (Data Warehouse Units)







