Serverless SQL pool in Azure Synapse Analytics

Every Azure Synapse Analytics workspace comes with a Serverless SQL pool endpoints that you can use to query data in the Azure Data Lake ([Parquet](https://learn.microsoft.com/en-us/azure/synapse-analytics/sql/query-data-storage#query-parquet-files), [Delta Lake](https://learn.microsoft.com/en-us/azure/synapse-analytics/sql/query-delta-lake-format), [delimited text](https://learn.microsoft.com/en-us/azure/synapse-analytics/sql/query-data-storage#query-csv-files) formats), [Azure Cosmos DB](https://learn.microsoft.com/en-us/azure/synapse-analytics/sql/query-cosmos-db-analytical-store?toc=/azure/synapse-analytics/toc.json&bc=/azure/synapse-analytics/breadcrumb/toc.json&tabs=openrowset-key), 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](https://learn.microsoft.com/en-us/azure/synapse-analytics/sql/on-demand-workspace-overview#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 (formerly SQL DW) 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).

Serverless SQL pools:  
Idle for either structure or unstructured data. Data can be stored in different file formats (raw or parquet)  
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)

Basic differences between Serverless and Dedicated SQL:

* While the serverless does not store data, only access data from storage accounts and scale 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.