Turbocharge Power BI using Azure Synapse Analytics

DataMinutes

DataMinutes #2
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SCAN ME

Session Overview

Dedicated SQL Pools

Serverless SQL Pools

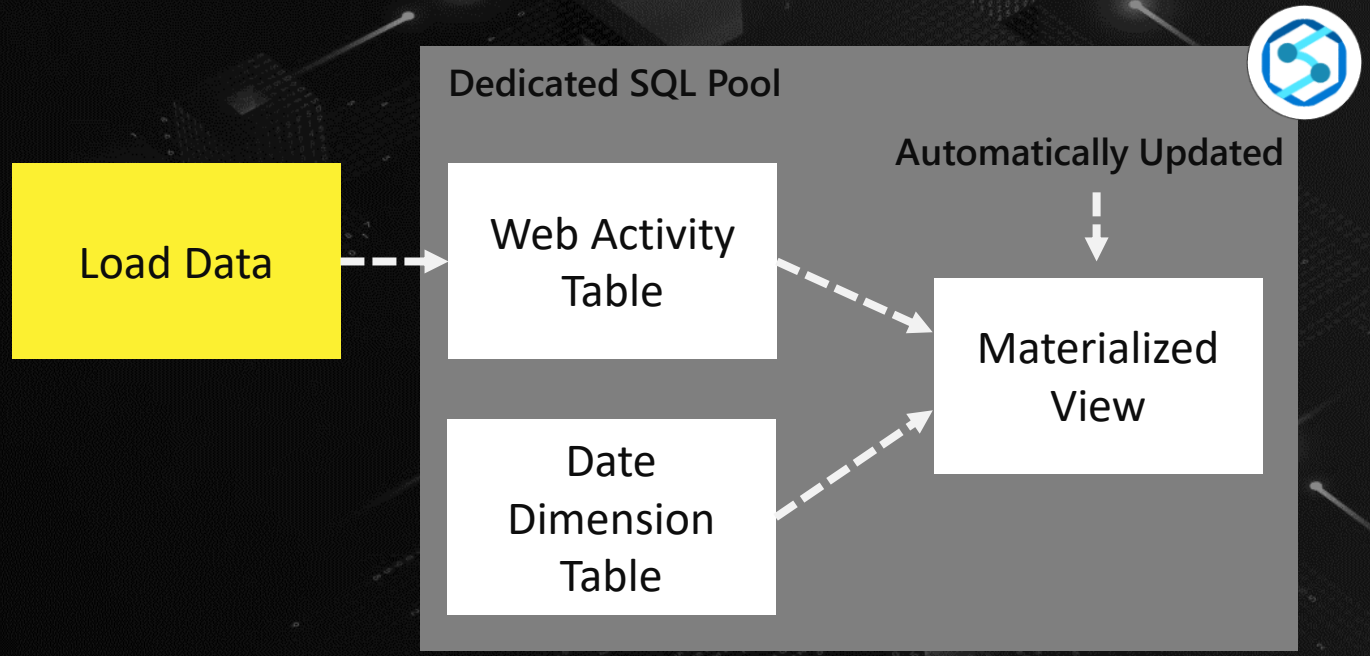
Dedicated SQL Pools

Data is imported into the database

Materialized Views can pre-process complex data to be available for querying

Materialized Views

- We can pre-aggregate data ready for querying
- Data is physically stored ready for querying
- We still need to be mindful of data distribution



Serverless SQL Pools

Connect to data in Data Lake

We can use CETAS to create a pre-processed dataset that can be consumed by SQL clients (Power BI etc)

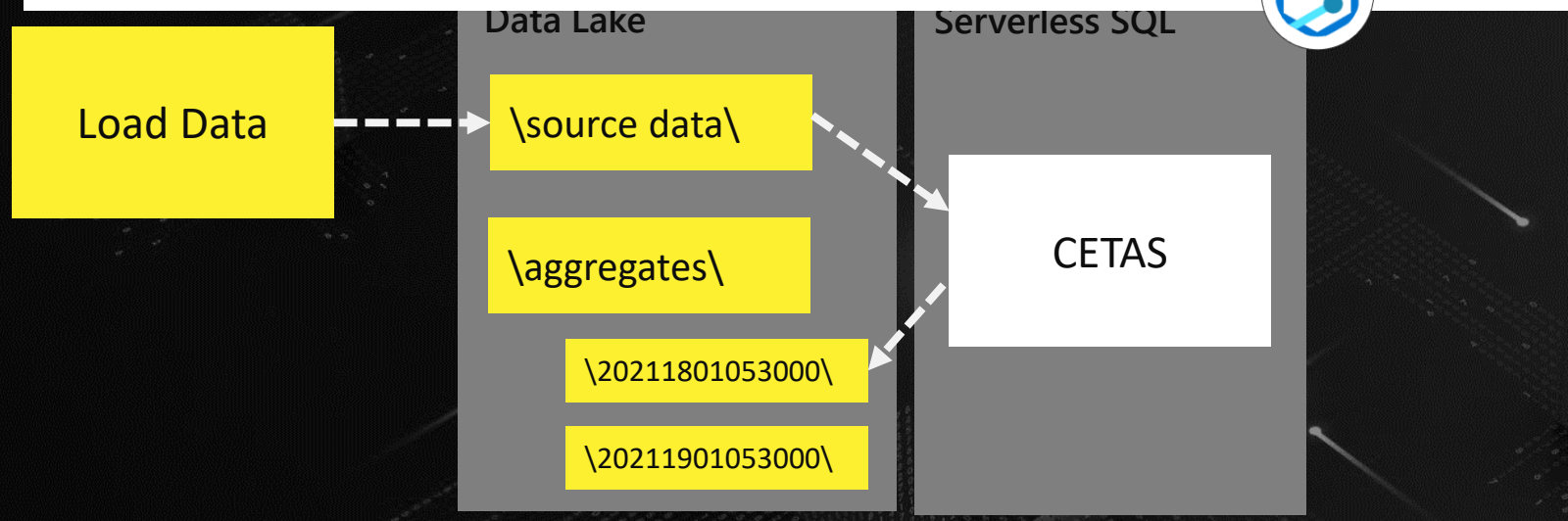
Create External Table As Select

Use CETAS to enhance query performance and joins

CETAS is one of the most important features available in serverless SQL pool. CETAS is a parallel operation that creates external table metadata and exports the SELECT query results to a set of files in your storage account.

You can use CETAS to materialize frequently used parts of queries, like joined reference tables, to a new set of files. You can then join to this single external table instead of repeating common joins in multiple queries.

As CETAS generates Parquet files, statistics are automatically created when the first query targets this external table. The result is improved performance for subsequent queries targeting table generated with CETAS.



Connection

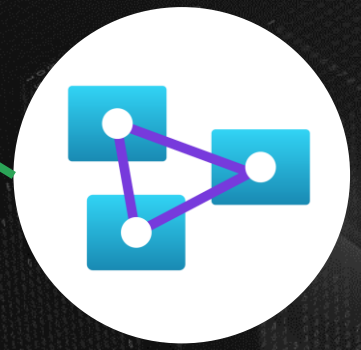
Serverless and Dedicated SQL Pools have separate endpoints that other data services and clients can connect to and issue SQL statements

Networking	: Show firewall settings	
Primary ADLS Gen2 acco...	: https://	.dfs.core.windows.net
Primary ADLS Gen2 file s...	: users	
SQL admin username	:	
SQL Active Directory ad...	: andycutler@datahai.co.uk	
Dedicated SQL endpoint	: :	.sql.azuresynapse.net
Serverless SQL endpoint	: :	-ondemand.sql.azuresynapse.net
Development endpoint	:	emodh.dev.azuresynapse.net

SQL
Endpoint

SQL Server Management Studio

Azure Data Studio



Azure Analysis Services

Power BI (Datasets & Dataflows)

Demo

Thank you