



# Brian Børnk Rueløkke

Principal & Enterprise architect, Data & AI

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Microsoft

FastTrack Recognized  
Solution Architect  
Power BI  
2022 >>



Microsoft

Certified Trainer  
Data Platform

2018 >>

# Synapse Serverless vs Fabric



**Serverless**

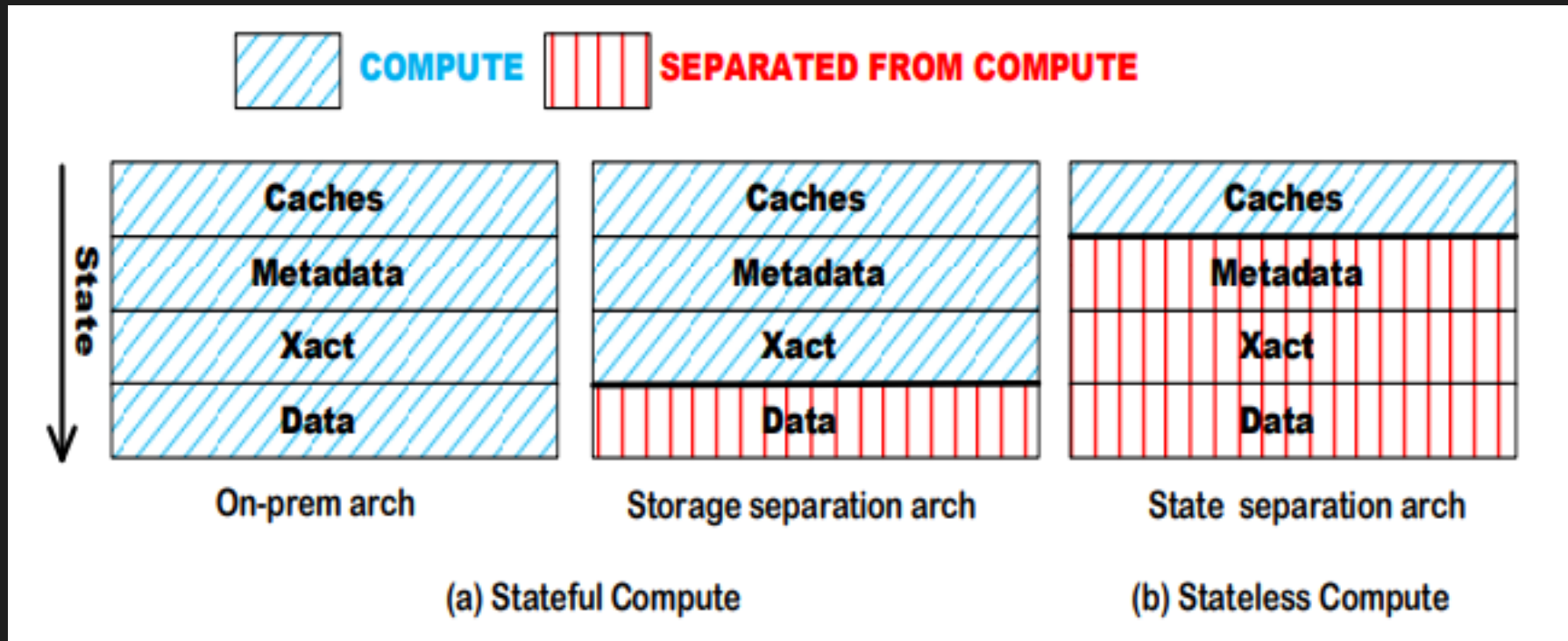


**Warehouse**



# Polaris

Stateless compute



Synapse and Fabric

# Polaris

Data abstraction



Data

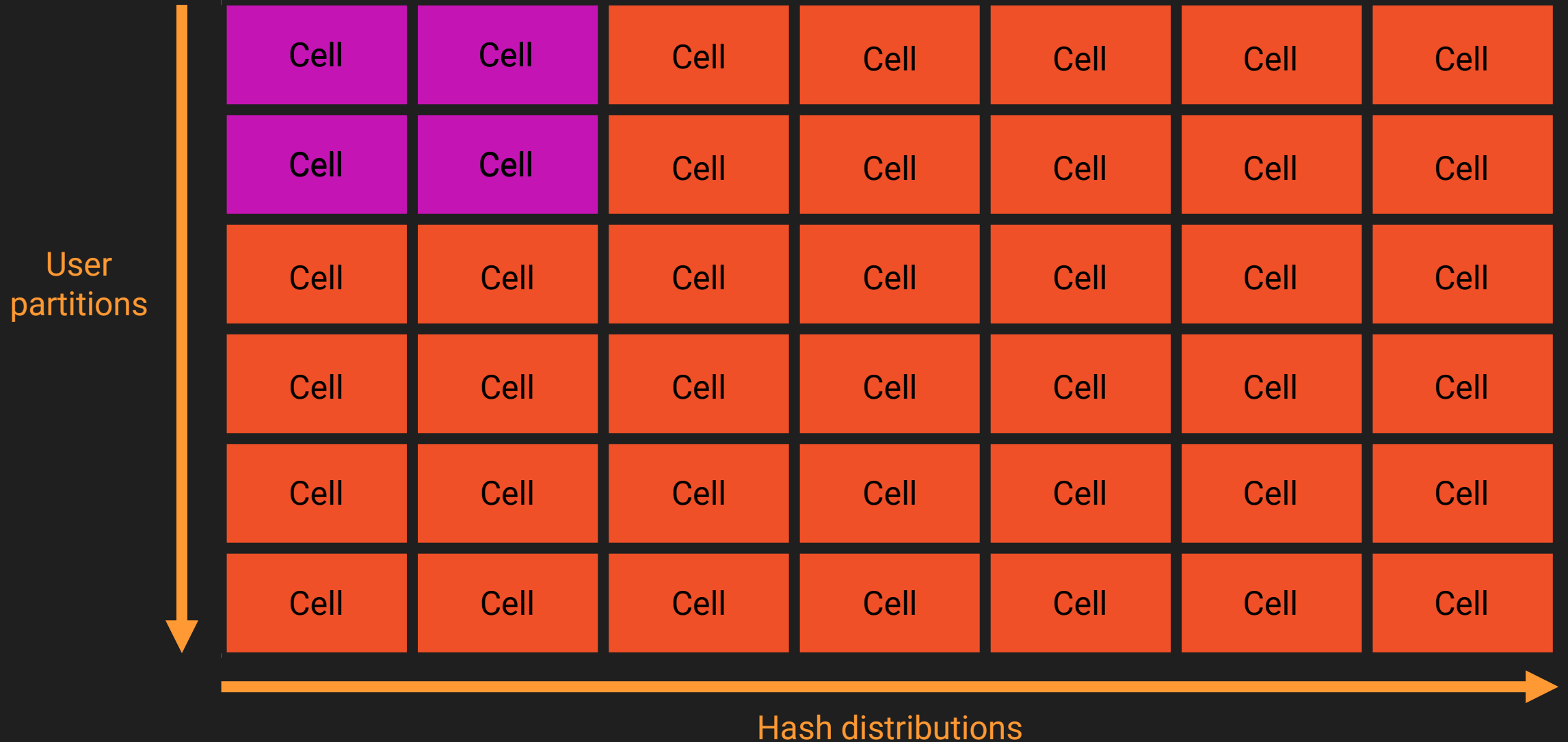
# Polaris

Data abstraction

User  
partitions



# Data abstraction



# Polaris

Data abstraction

Cell

Cell

Cell

Cell



# Polaris

Data abstraction

Distributed query processing



Data set  
(collection of data cells)

Cell

Cell

Cell

Cell



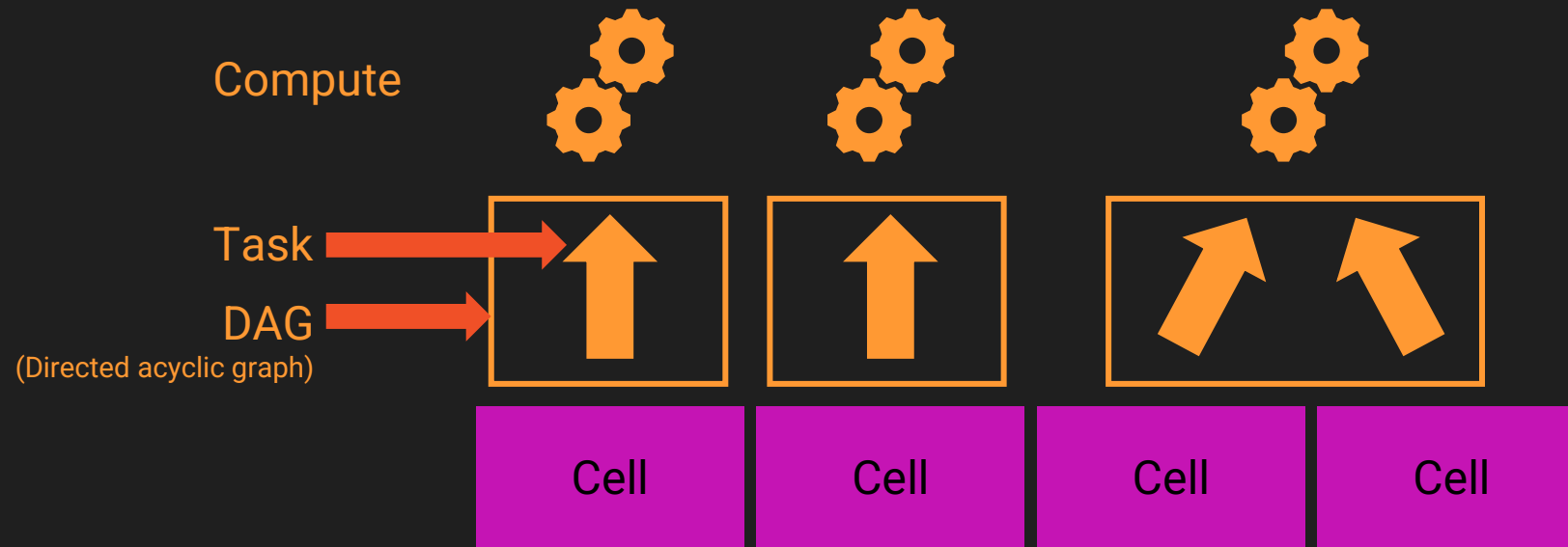
Storage

ADLS

Cosmos DB

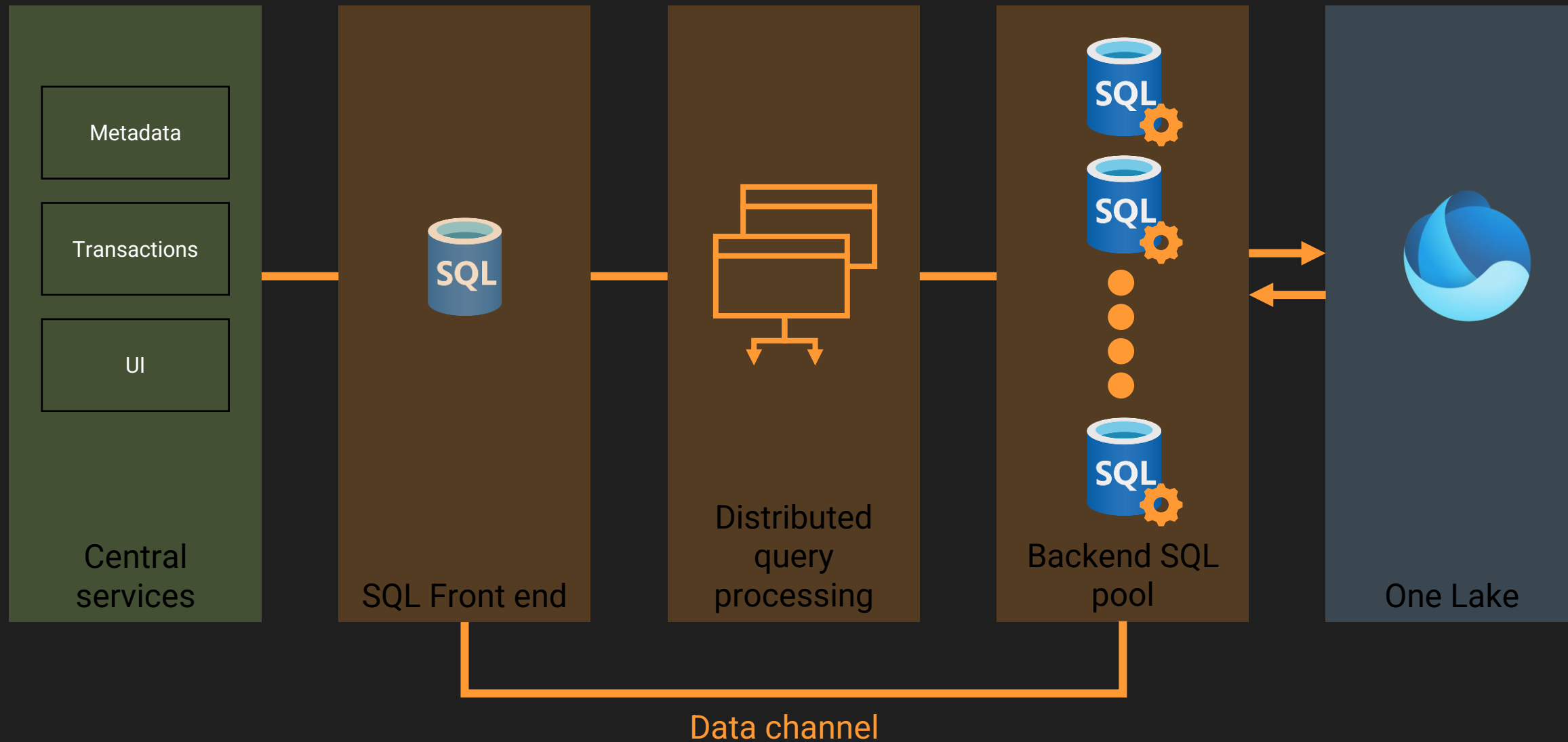
# Polaris

Query processing and compute



# Polaris

Service architecture



# Polaris

Read more here

Whitepaper on Polairs:

<https://www.vldb.org/pvldb/vol13/p3204-saborit.pdf>

Broken down to a blogpost:

<https://www.linkedin.com/pulse/microsoft-fabric-data-warehouse-polaris-engine-tiago-balabuch/>

**Serverless**



**Warehouse**



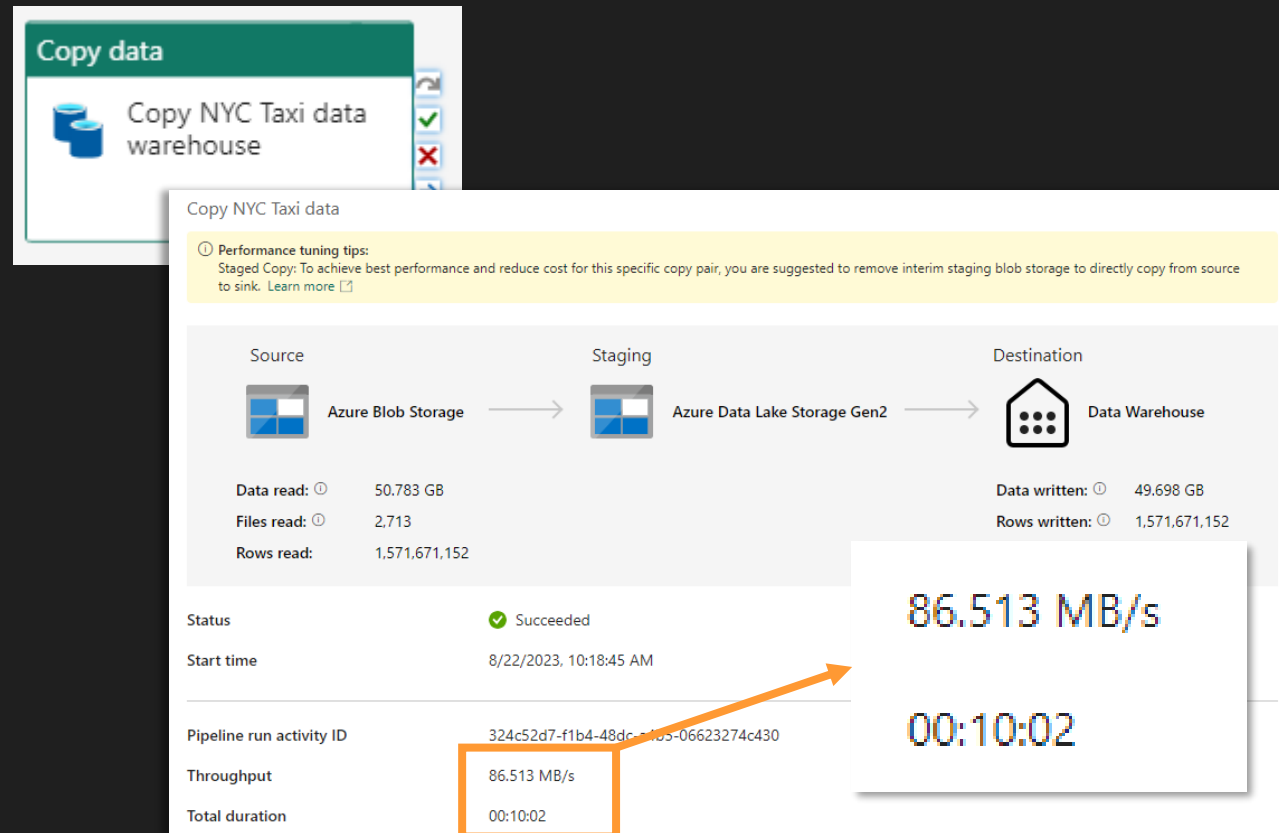
Compute engine

Polaris distributed SQL Query engine

# Performance load

Source data from opendatastorage

<https://opendatastorage.blob.core.windows.net>



**DEMO**

# The choice and migration options

From current setup to Fabric



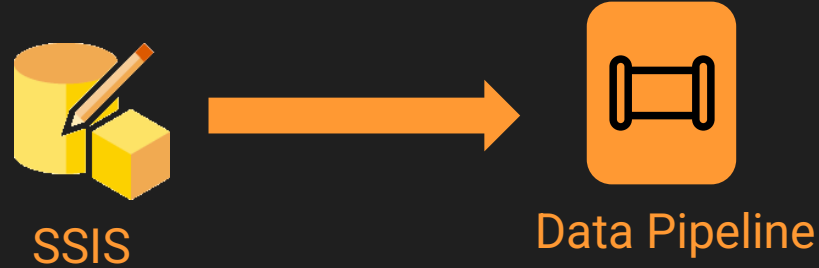
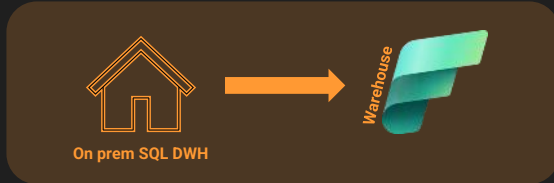
On prem SQL DWH





# The choice and migration options

From current setup to Fabric



# The choice and migration options

From current setup to Fabric



**Synapse Serverless**



# The choice and migration options

From current setup to Fabric



Data Pipeline



Data Pipeline



SQL View



SQL View



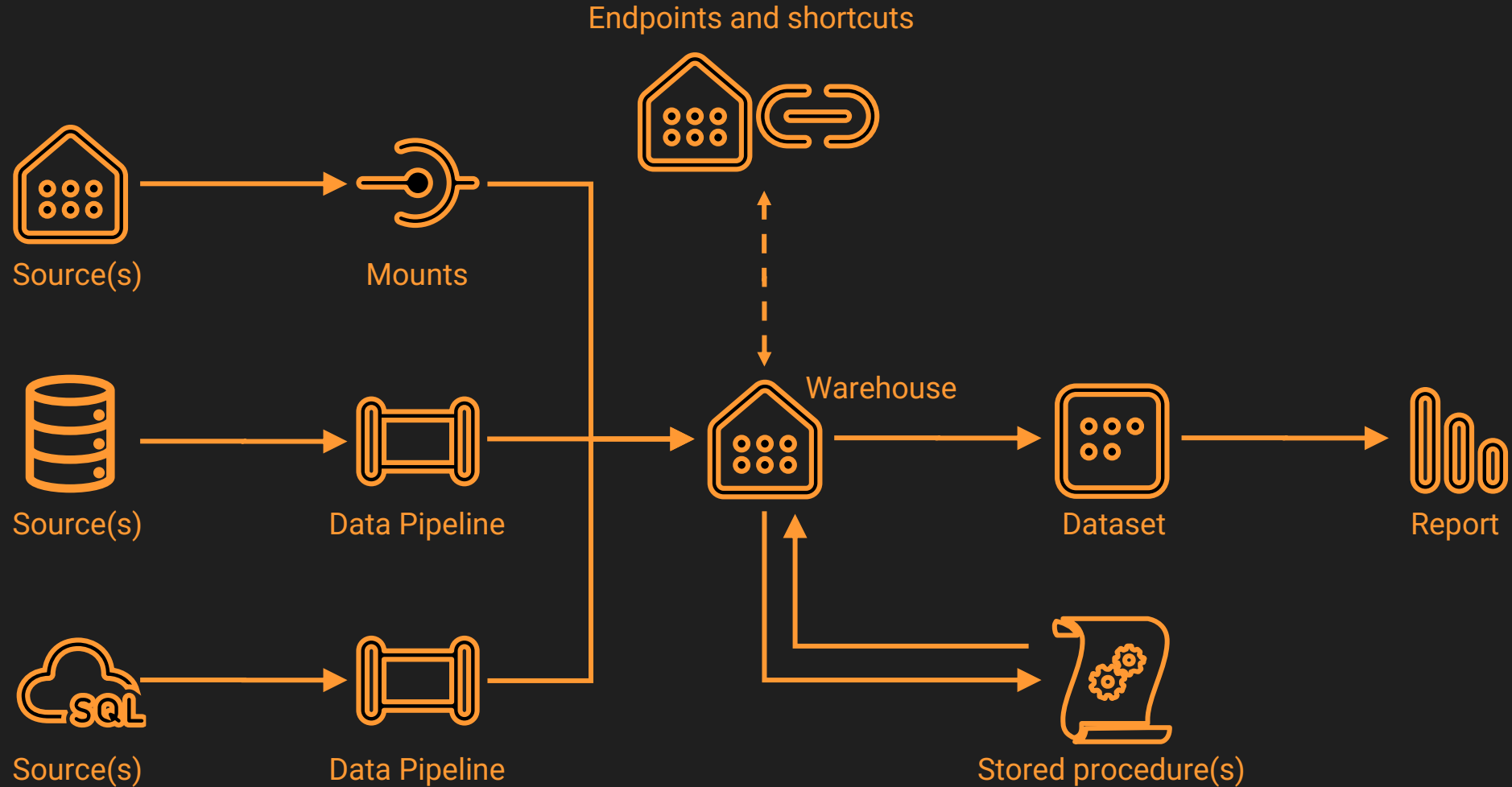
Notebook



Notebook

# Fabric Warehouse

Architecture example



# Scaling of Fabric



Trial

SKU	Capacity unit (CU)	Pay-as-you-go (hourly)	Pay-as-you-go (monthly)
F 2	2	\$0.36	\$262.80
F 4	4	\$0.72	\$525.60
F 8	8	\$1.44	\$1,051.20
F 16	16	\$2.88	\$2,102.40
F 32	32	\$5.76	\$4,204.80
F 64	64	\$11.52	\$8,409.60
F 128	128	\$23.04	\$16,819.20
F 256	256	\$46.08	\$33,638.40
F 512	512	\$92.16	\$67,276.80
F 1024	1024	\$184.32	\$134,553.60
F 2048	2048	\$368.64	\$269,107.20

Table 1: Pricing of Fabric capacity SKUs at US west 2



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