

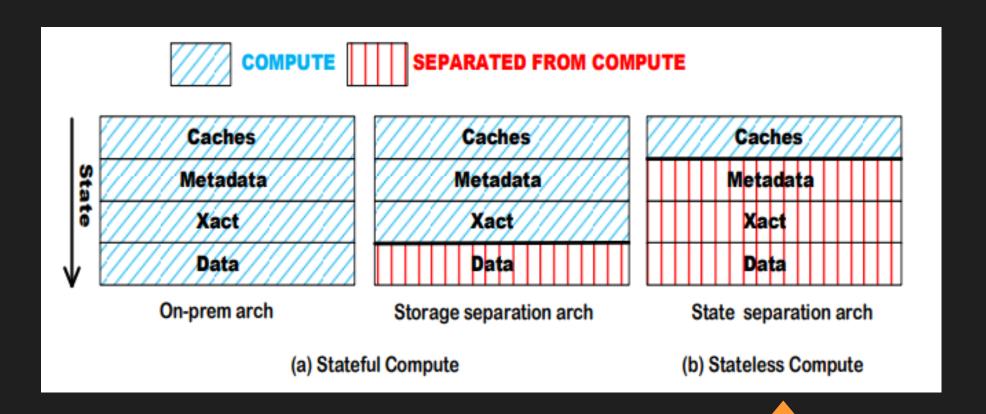
Synapse Serverless vs Fabric







Stateless compute



Synapse and Fabric

Data abstraction

Data

Data abstraction

User partitions

Data abstraction

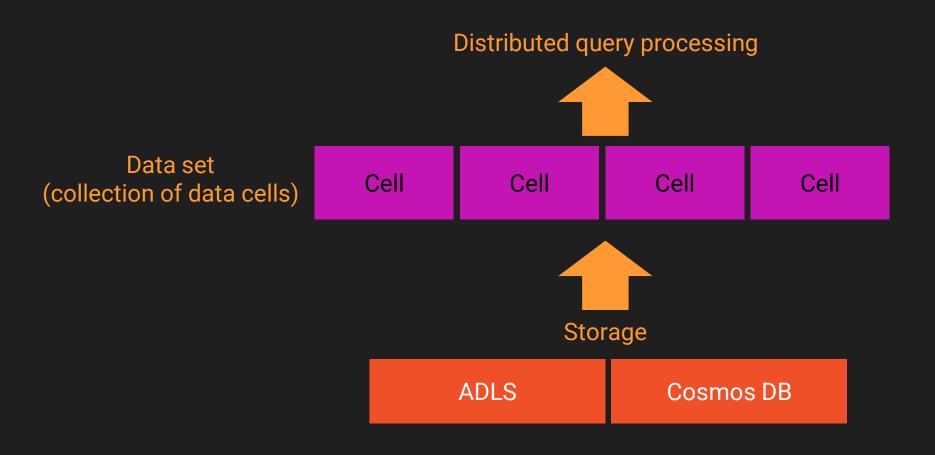
Cell Cell

User partitions

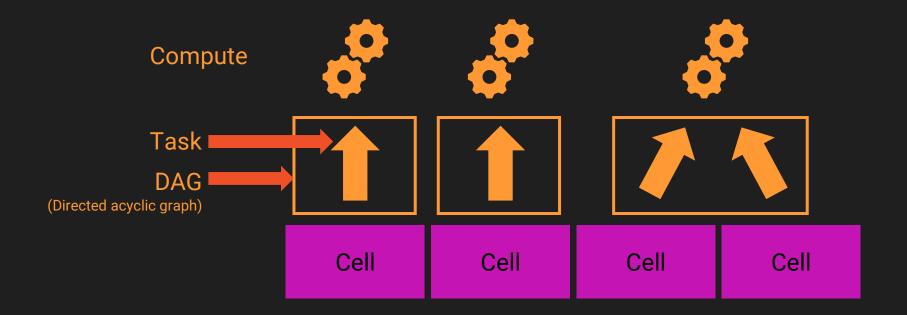
Data abstraction

Cell Cell Cell

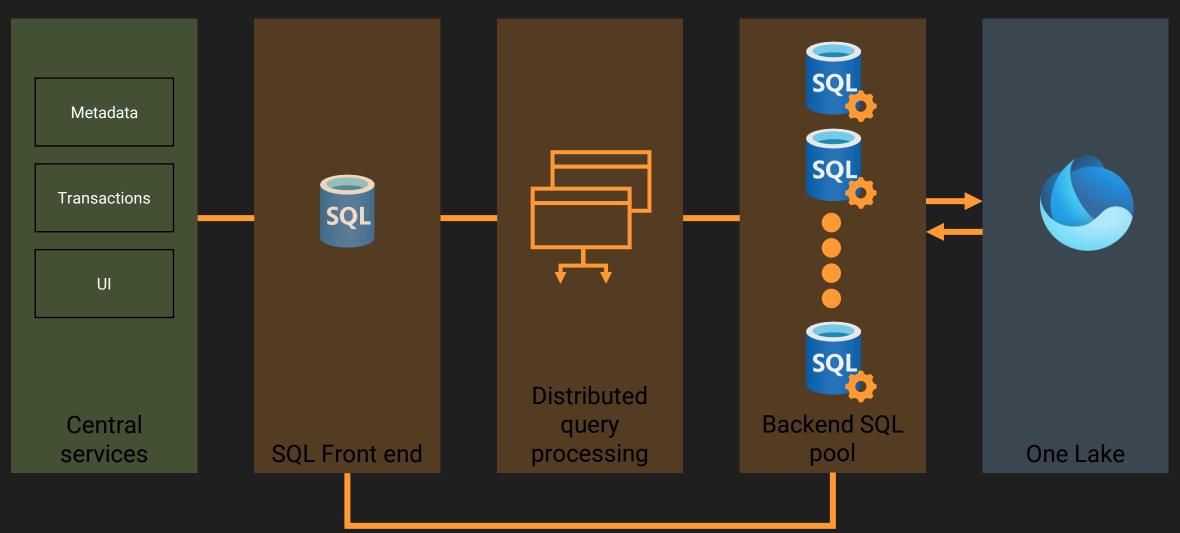
Data abstraction



Query processing and compute



Service architecture



Data channel



Whitepaper on Polairs: https://www.vldb.org/pvldb/vol13/p3204-saborit.pdf

Broken down to a blogpost: https://www.linkedin.com/pulse/microsoft-fabric-datawarehouse-polaris-engine-tiago-balabuch/



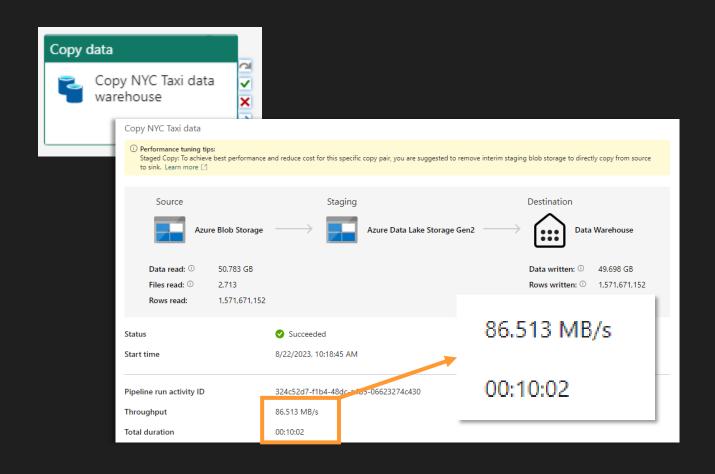


Compute engine

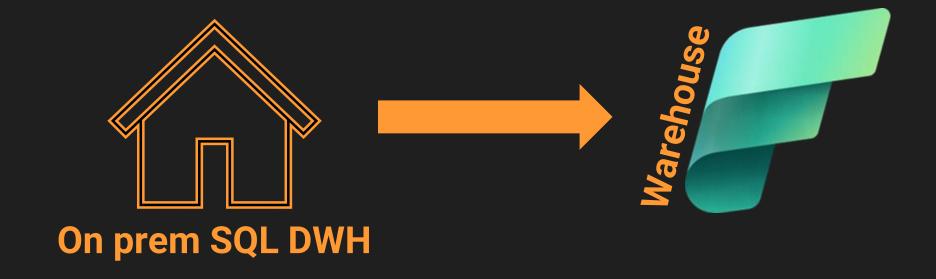
Polaris distributed SQL Query engine

Performance load

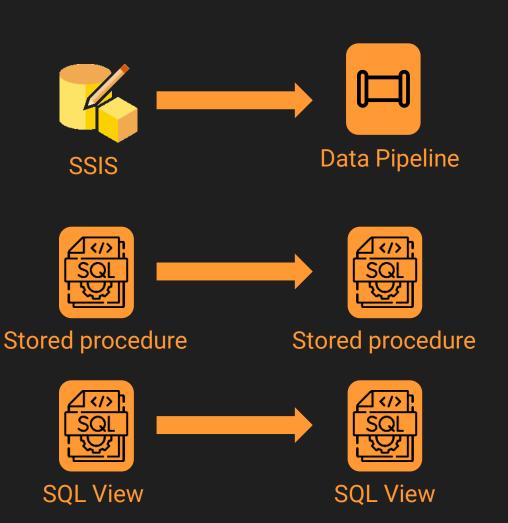
Source data from opendatastorage https://opendatastorage.blob.core.windows.net





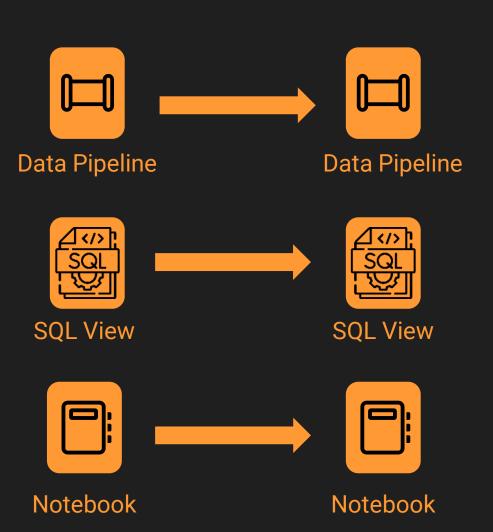






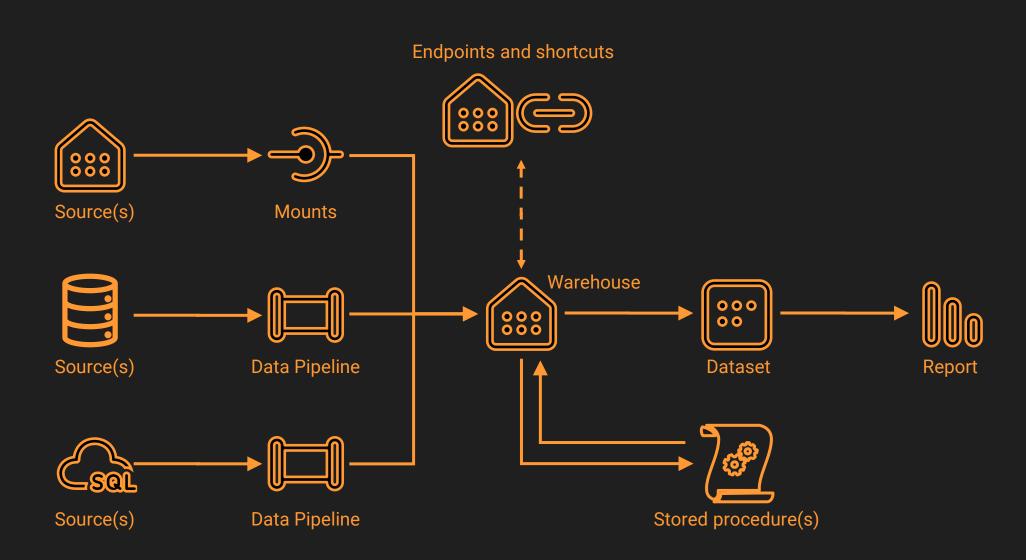






Fabric Warehouse

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



