

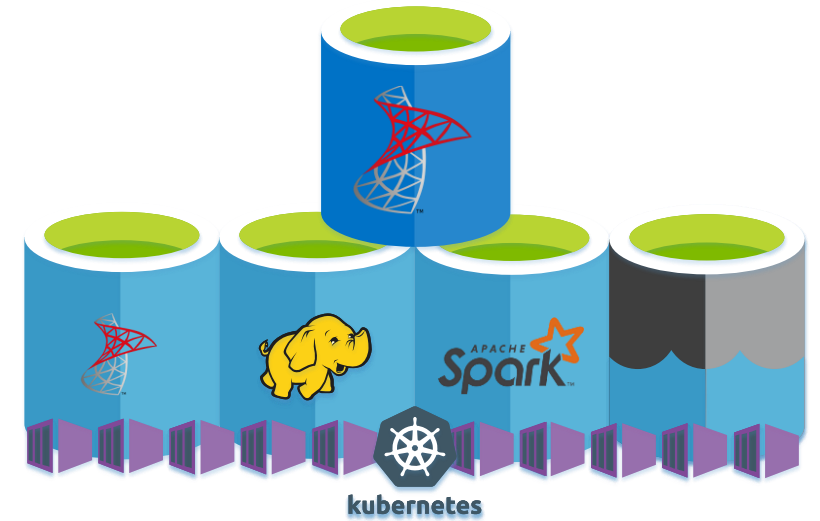
Paul Andrew

@MrPaulAndrew

Senior Data Analytics Consultant & Data Platform



SQL Server 2019



Big Data Clusters

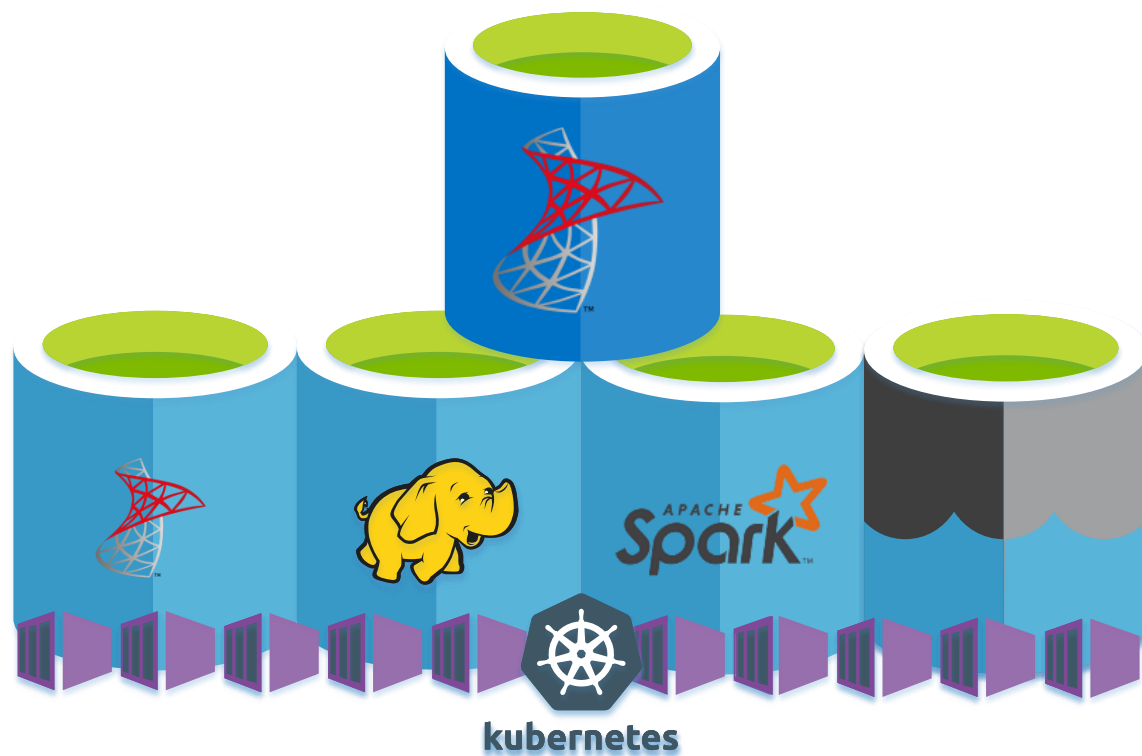


Gold Data Analytics
Gold Data Platform
Gold Cloud Platform



What

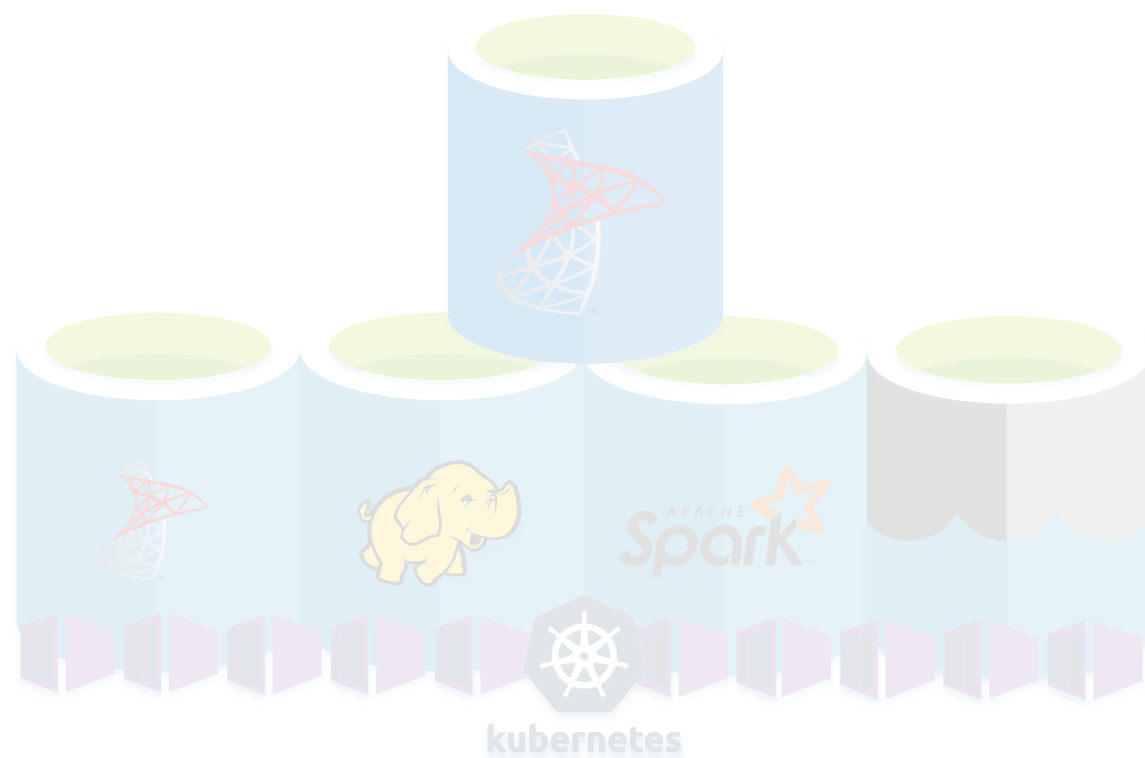
Why



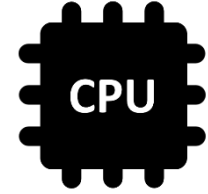
How

What

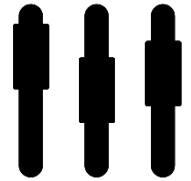
Why



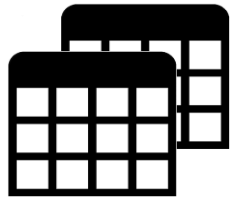
How



Distributed Computing



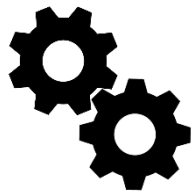
Quick Actionable Insights



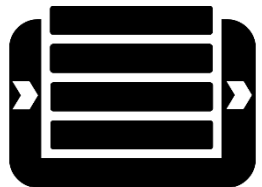
All Forms of Data Structure



Storage Management Overheads



Sampling & Data Quality



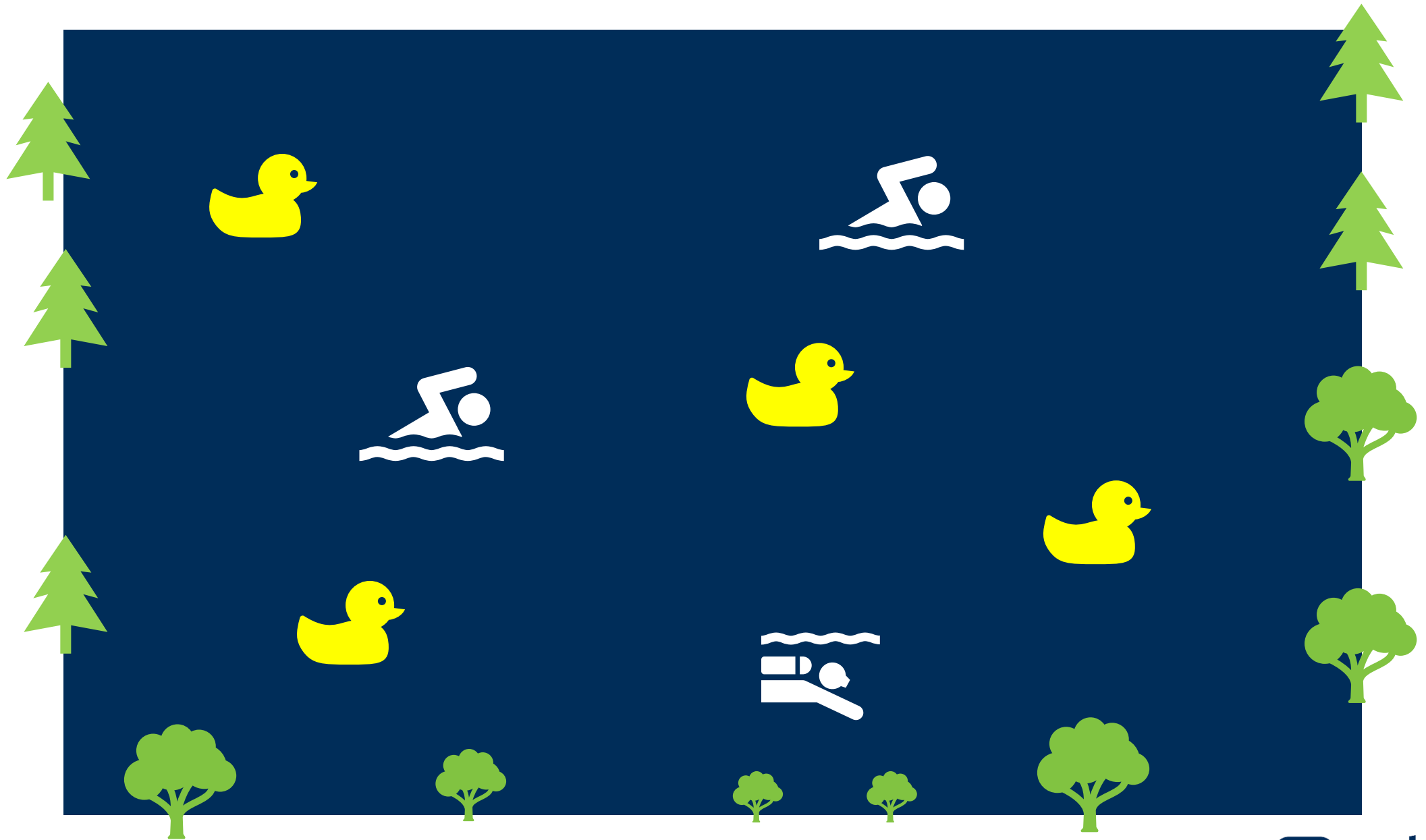
Ingesting Real-time Streams

Volume

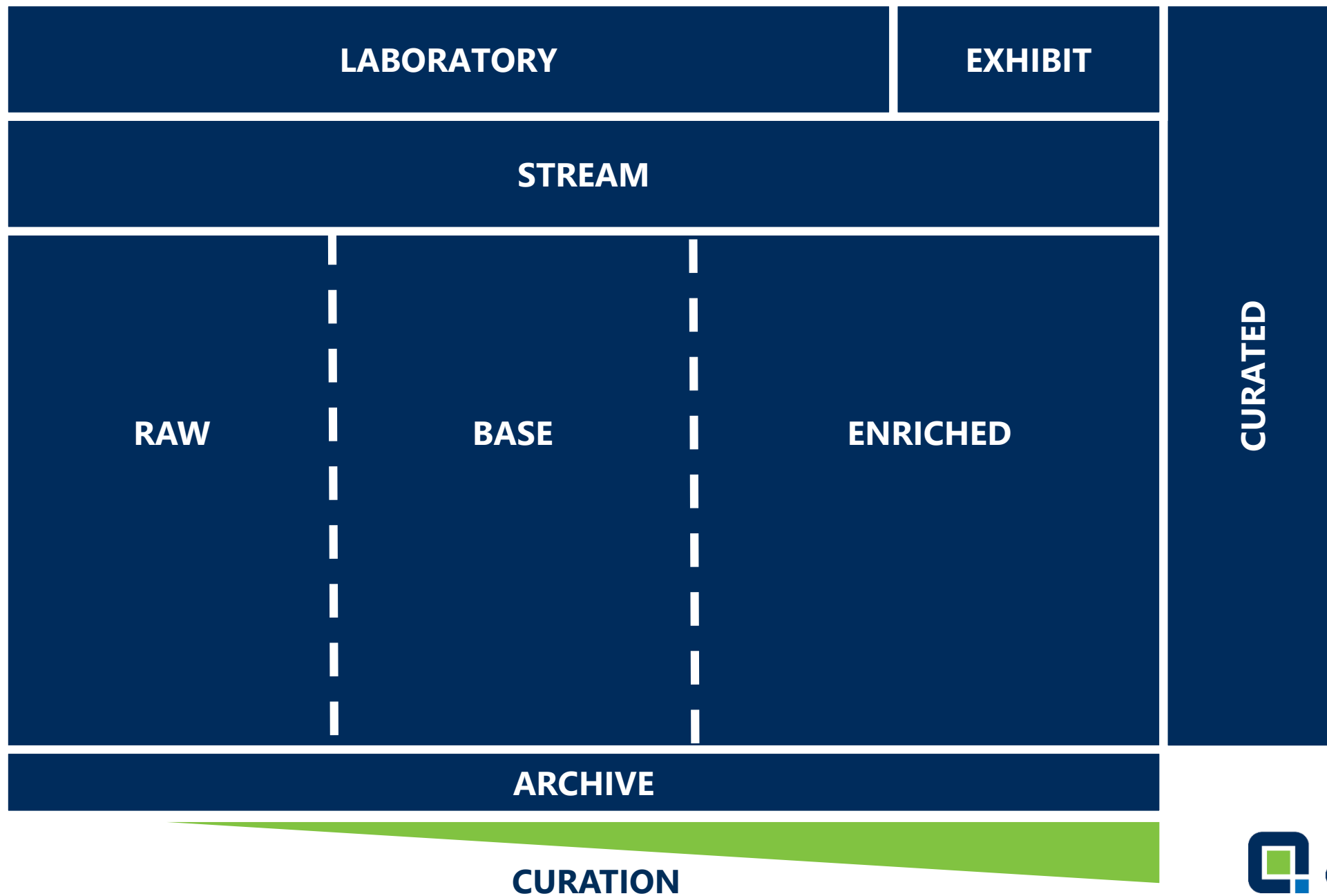
Velocity

Variety

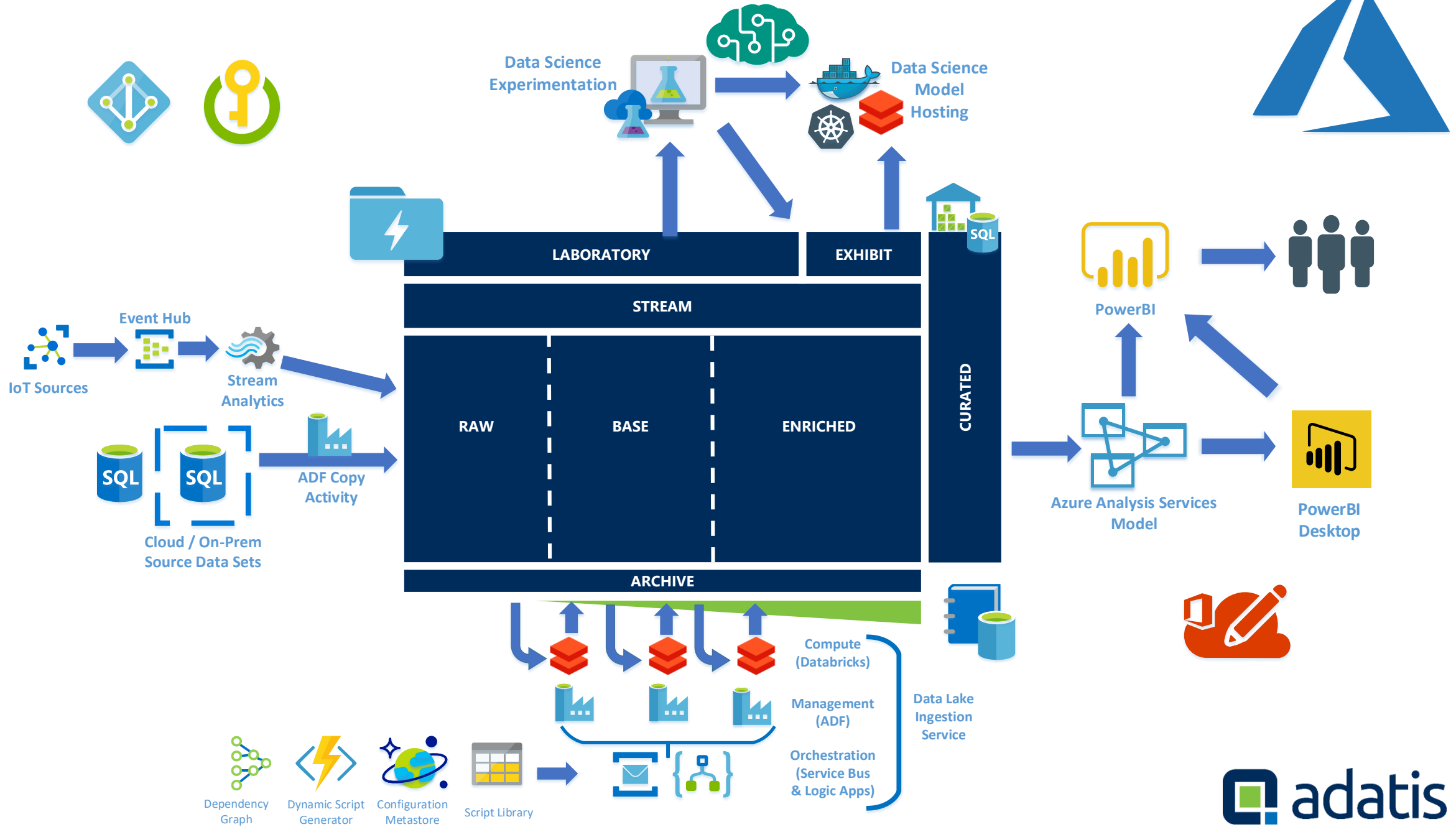
Veracity



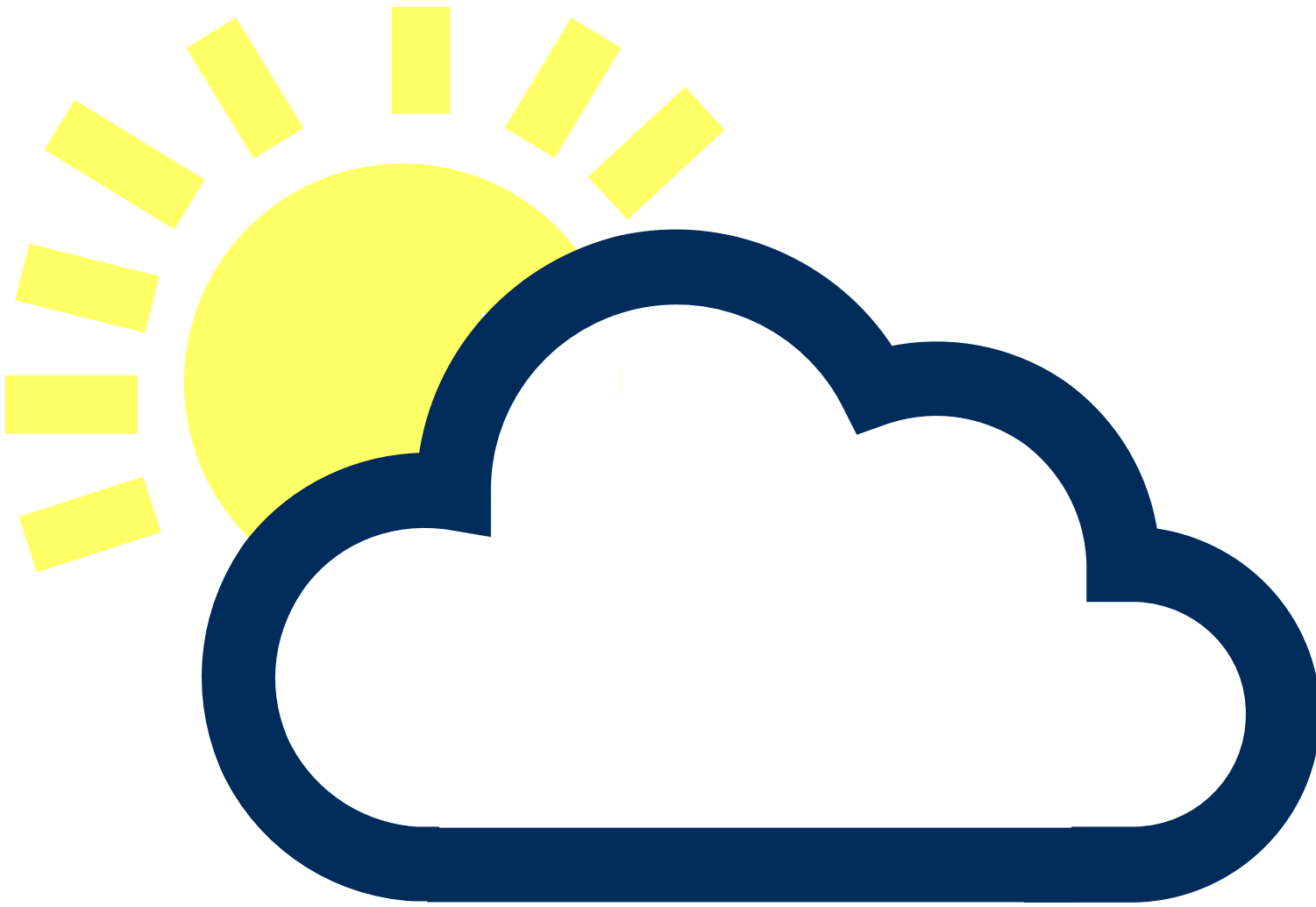




The Modern Data Warehouse

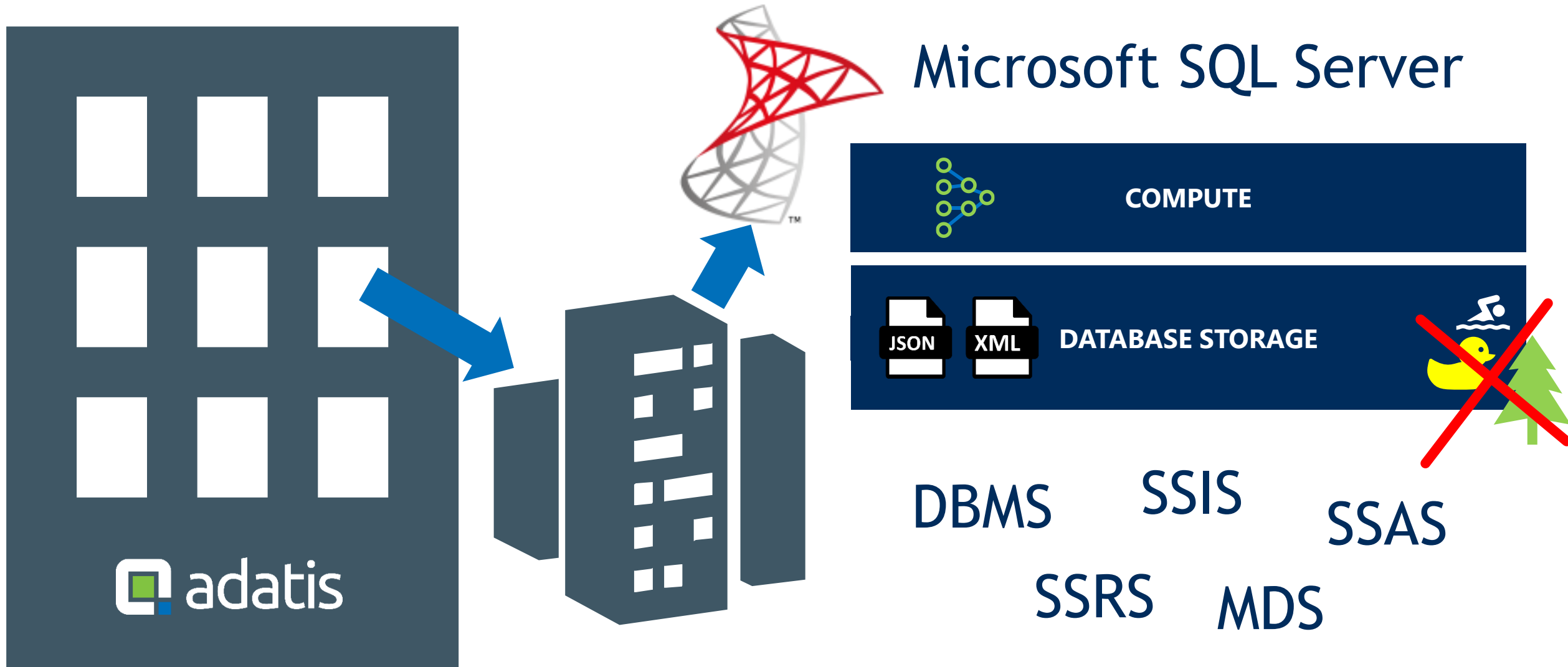


No Cloud?

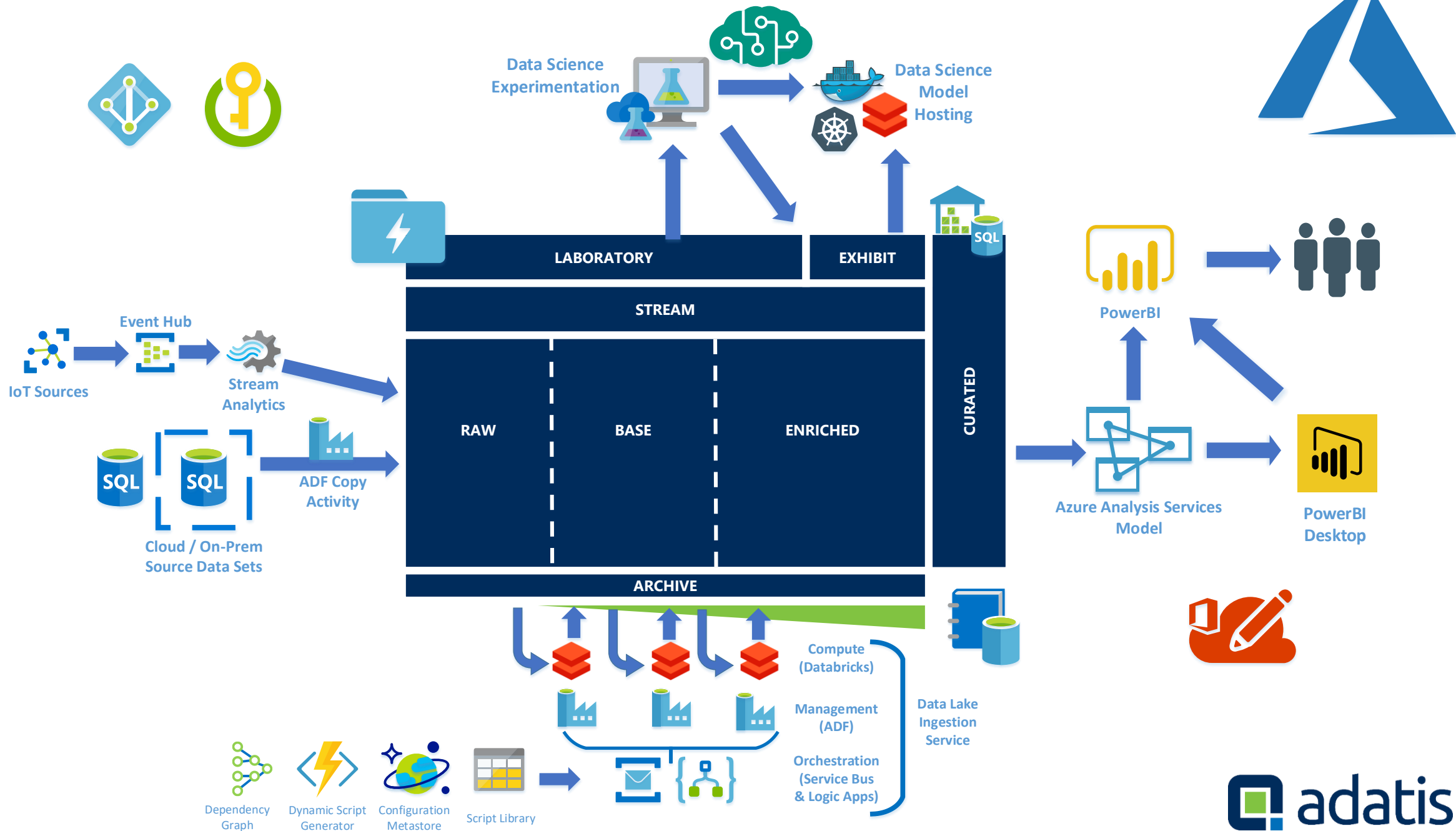




On Premises

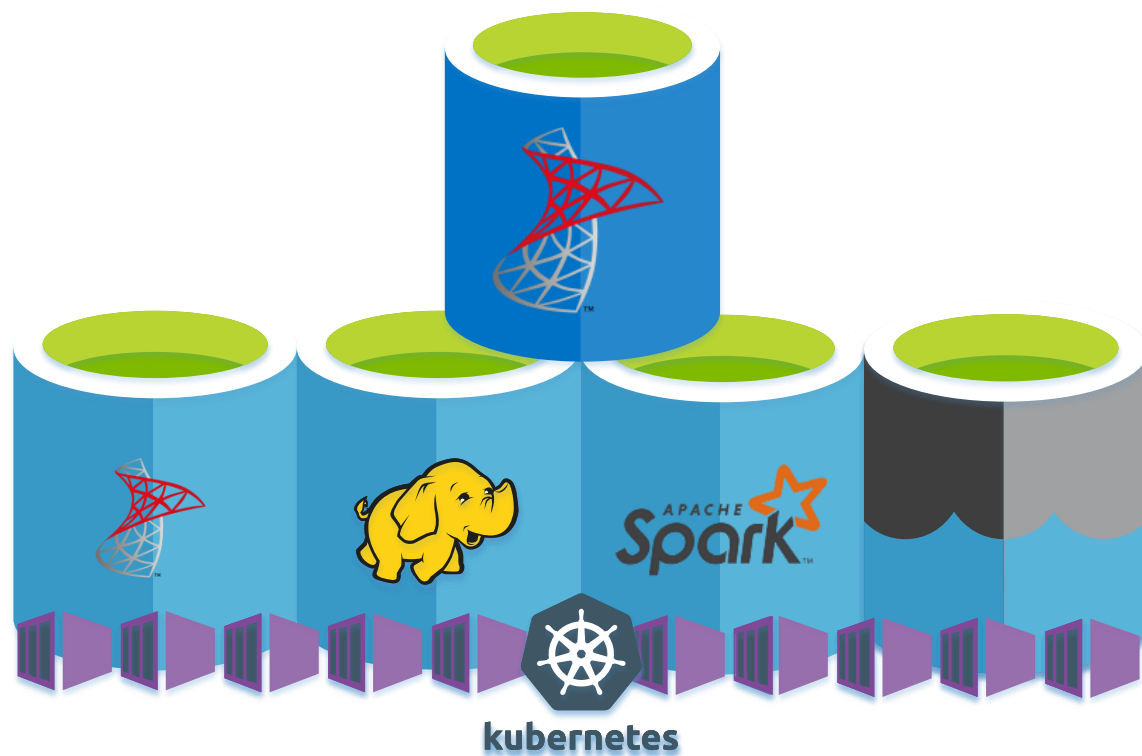


The Modern Data Warehouse



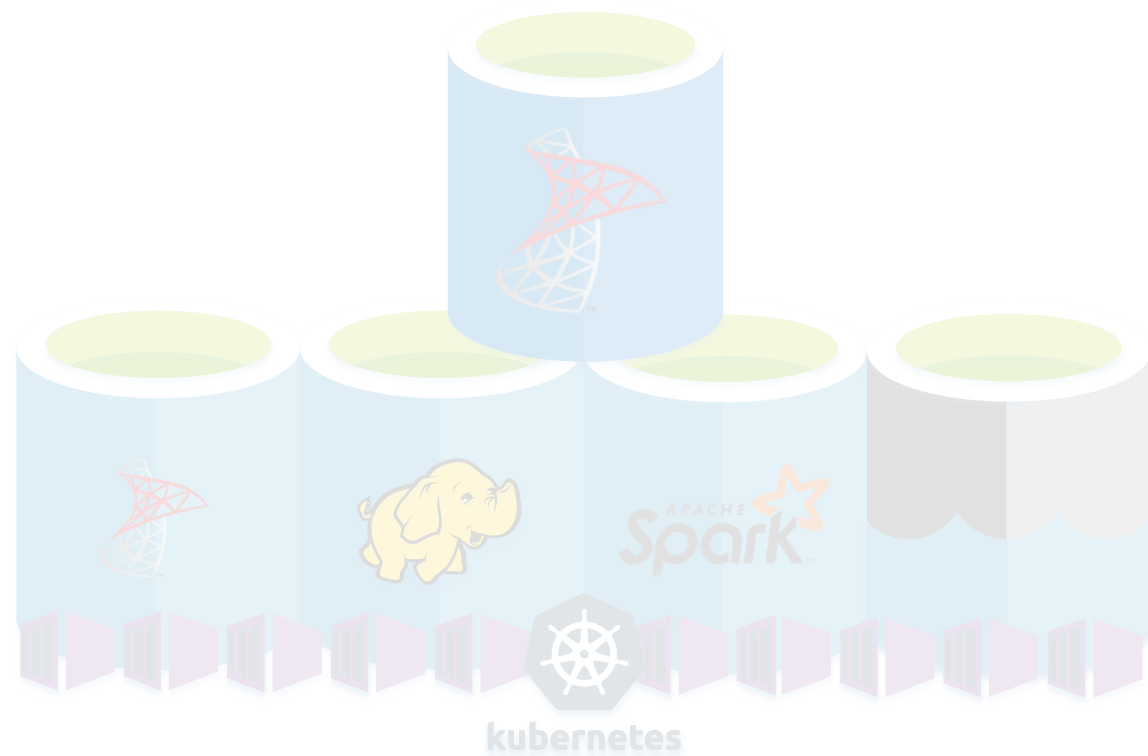
What

Why



How

What



Why

How

SQL Server - Product Evolution

Azure SQL Database (SQLDB)



T-SQL

Compute

Compute Node

Data

Database Storage

Azure SQL Data Warehouse (SQLDW)



D-SQL

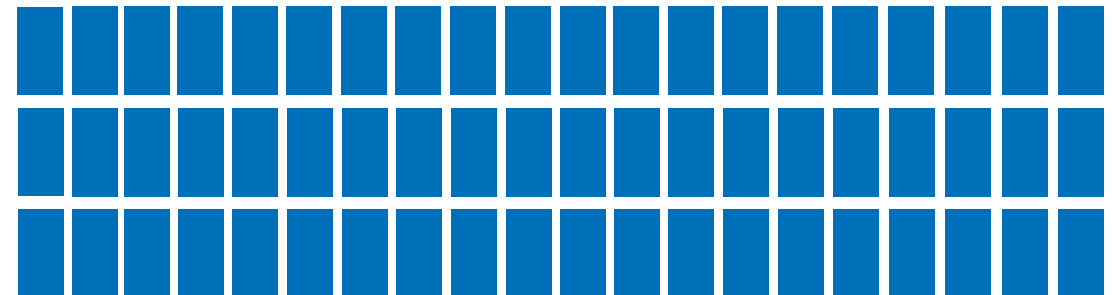
Control Node

Compute Node

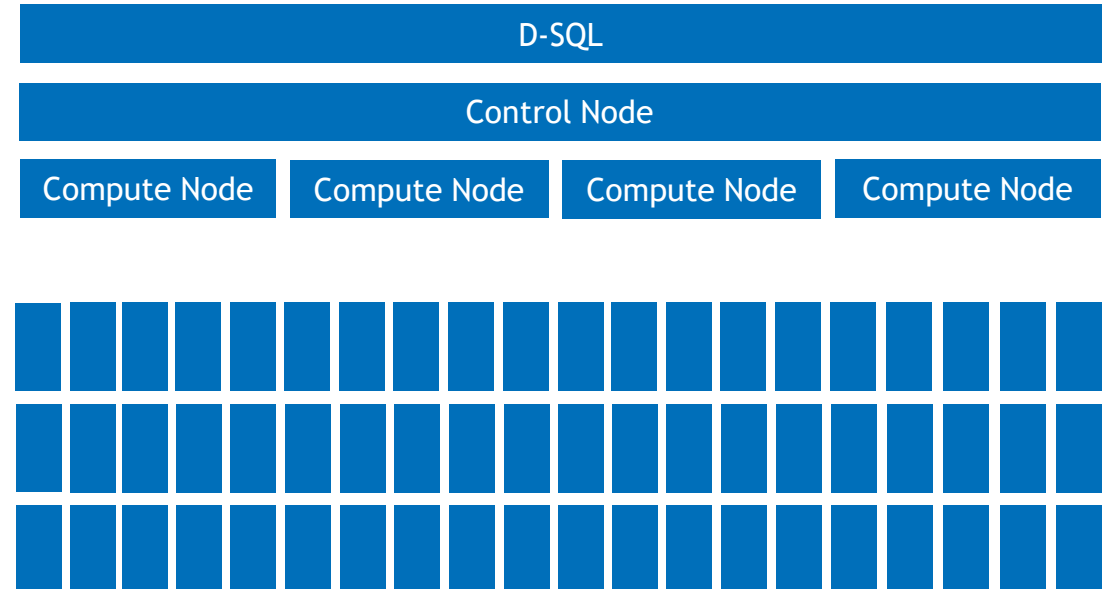
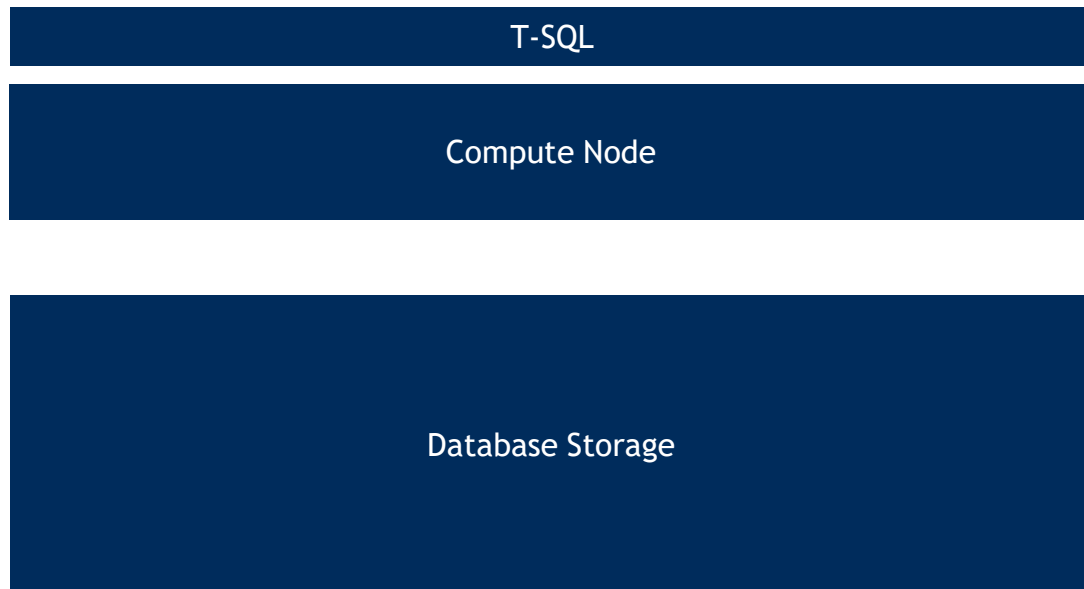
Compute Node

Compute Node

Compute Node

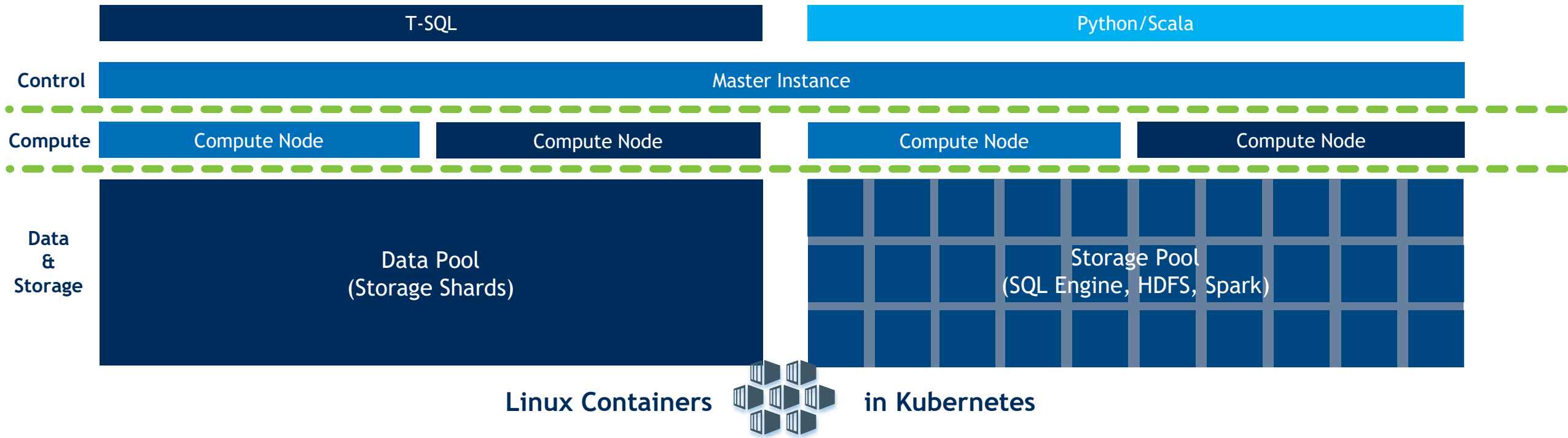
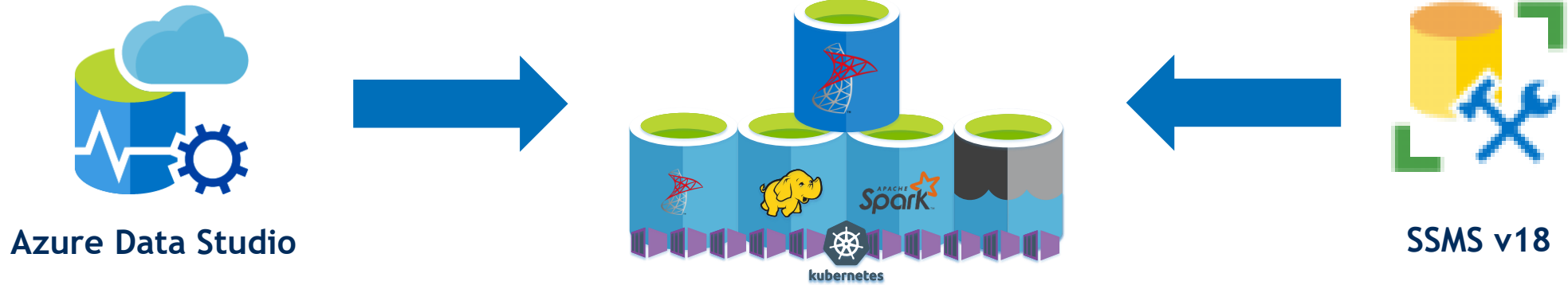


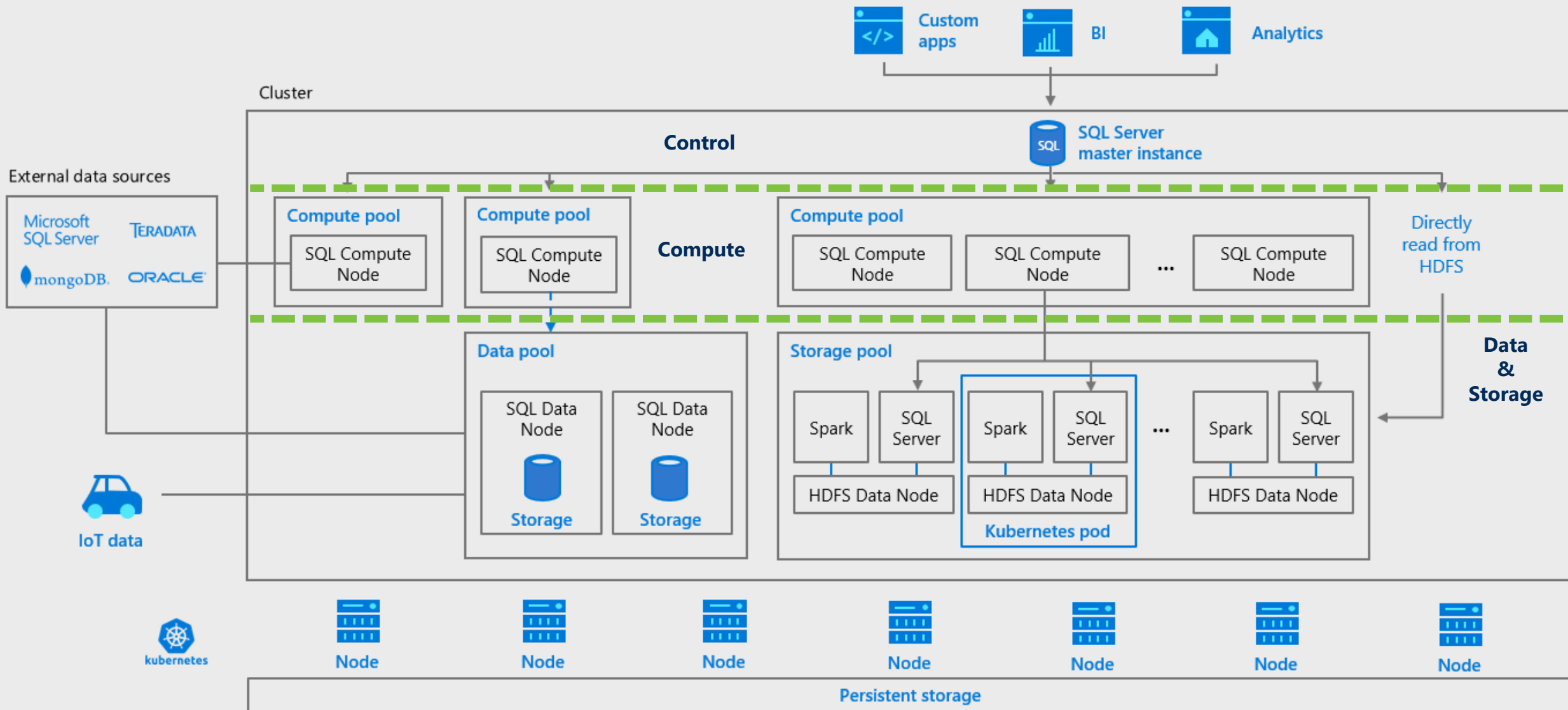
SQL Server - Product Evolution



SQL Server - Product Evolution

SQL Server 2019 Big Data Cluster

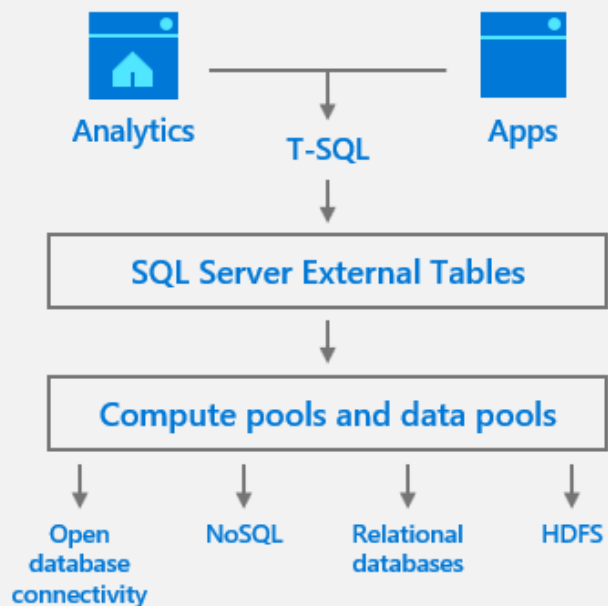




SQL Server 2019 Big Data Cluster

<https://cloudblogs.microsoft.com/sqlserver/2018/09/25/introducing-microsoft-sql-server-2019-big-data-clusters/>

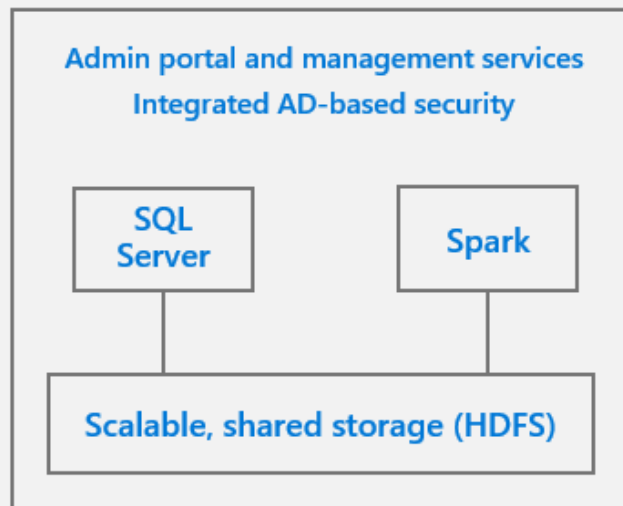
Data virtualization



Combine data from many sources without moving or replicating it

Scale out compute and caching to boost performance

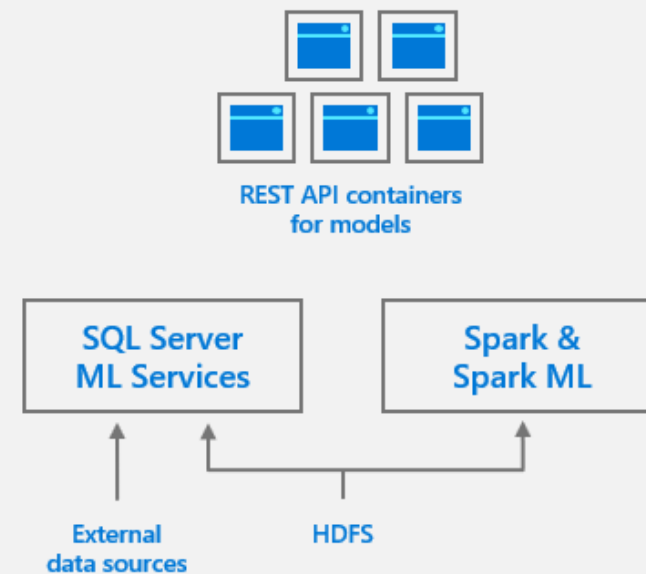
Managed SQL Server, Spark, and data lake



Store high volume data in a data lake and access it easily using either SQL or Spark

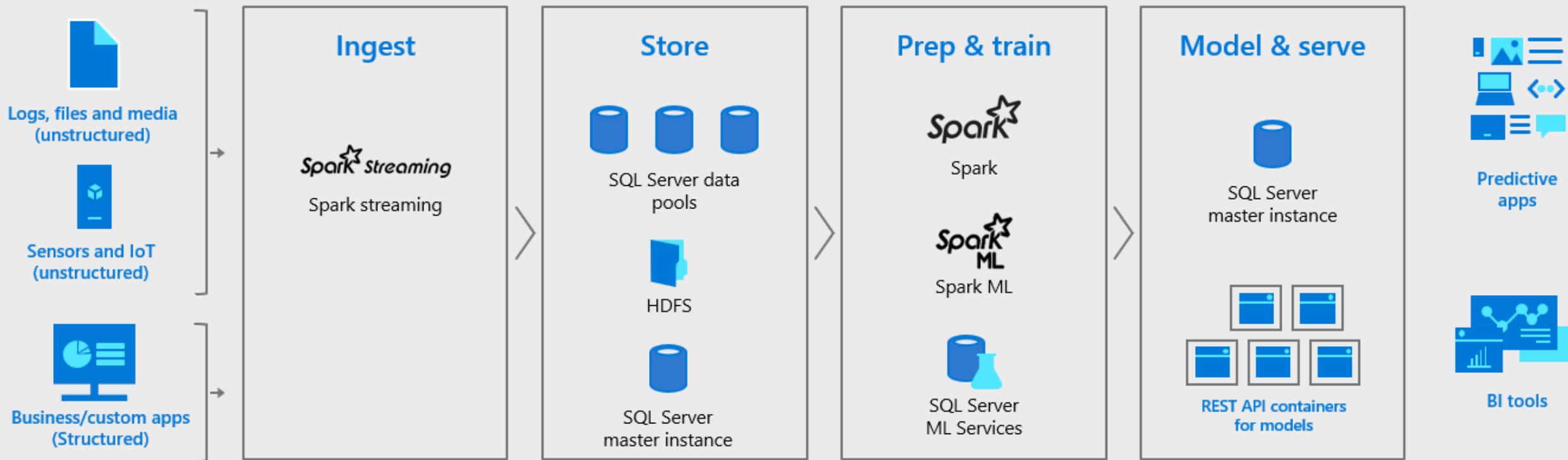
Management services, admin portal, and integrated security make it all easy to manage

Complete AI platform



Easily feed integrated data from many sources to your model training

Ingest and prep data and then train, store, and operationalize your models all in one system

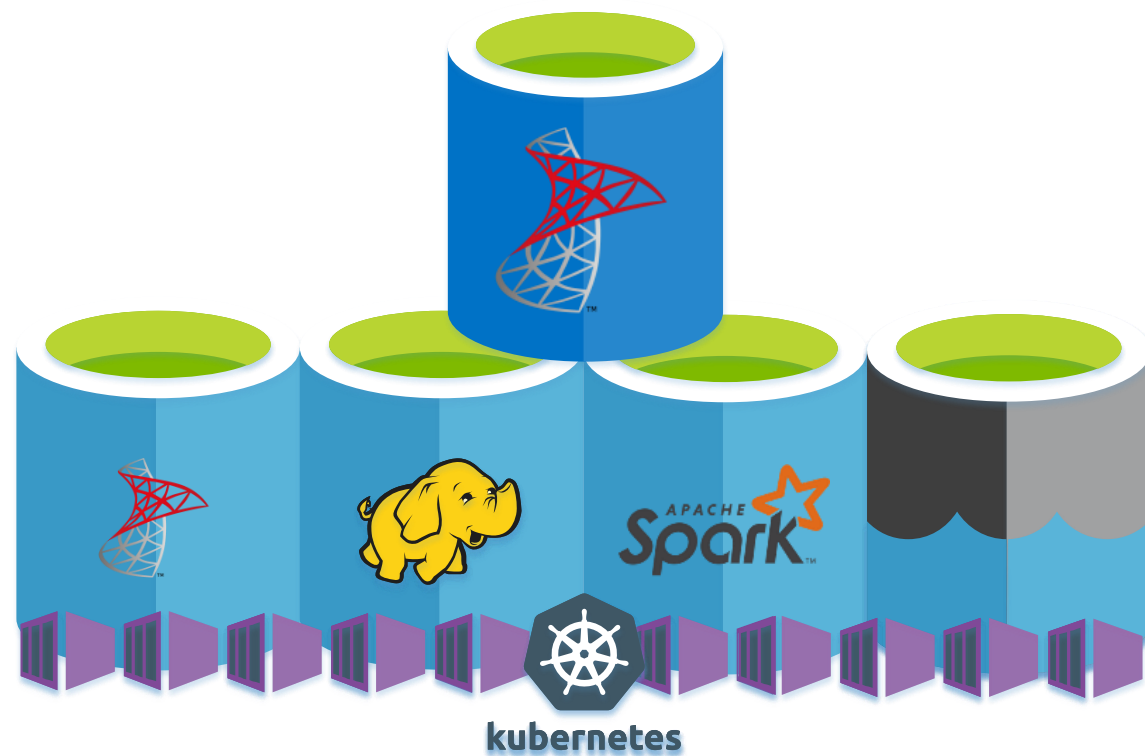


SQL Server 2019 Big Data Cluster

<https://cloudblogs.microsoft.com/sqlserver/2018/09/25/introducing-microsoft-sql-server-2019-big-data-clusters/>

What

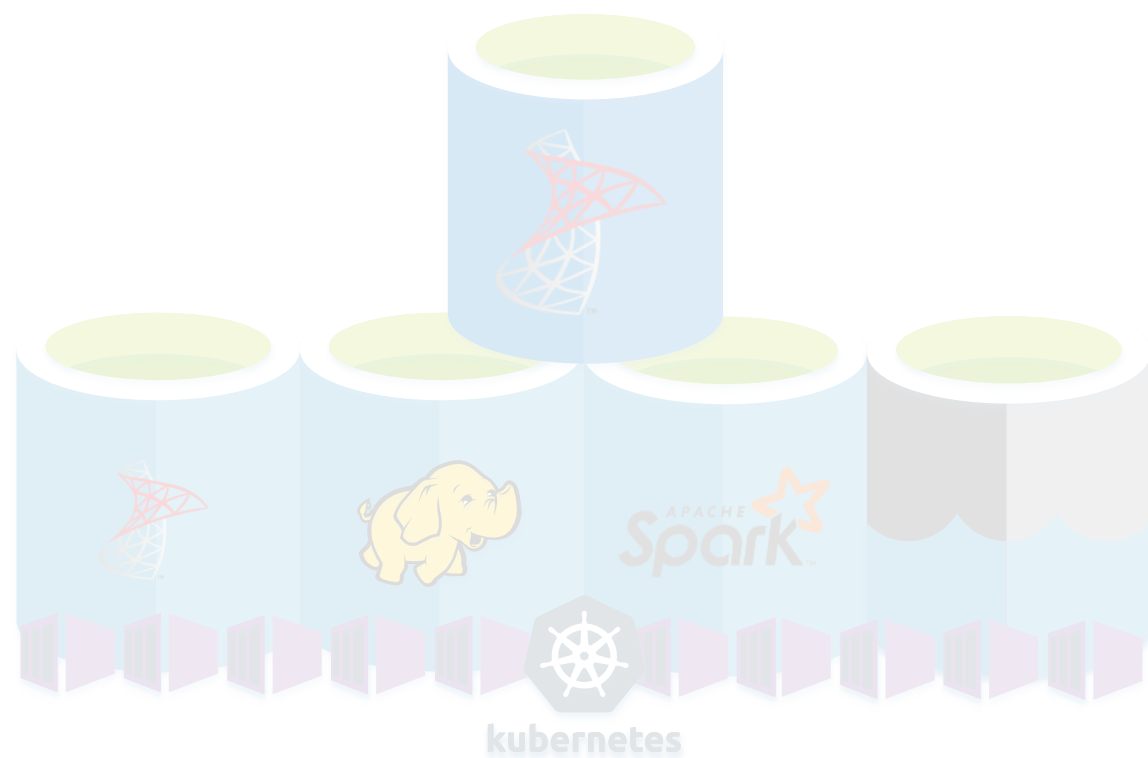
Why



How

What

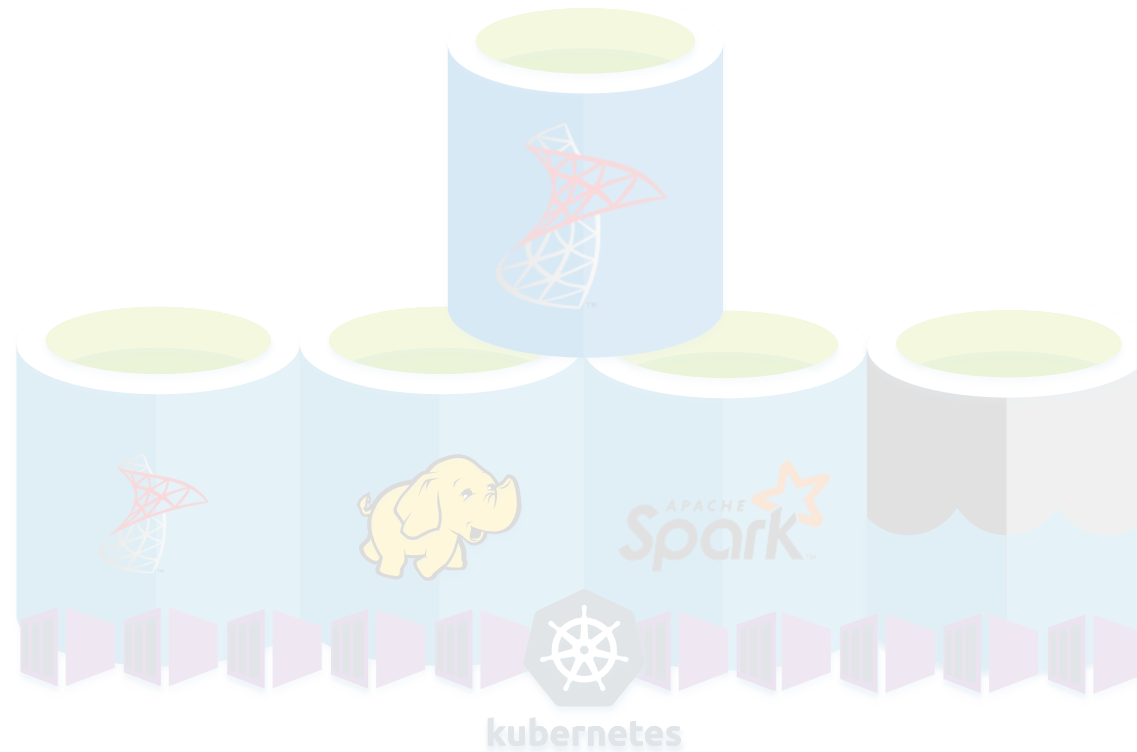
Why



How

What

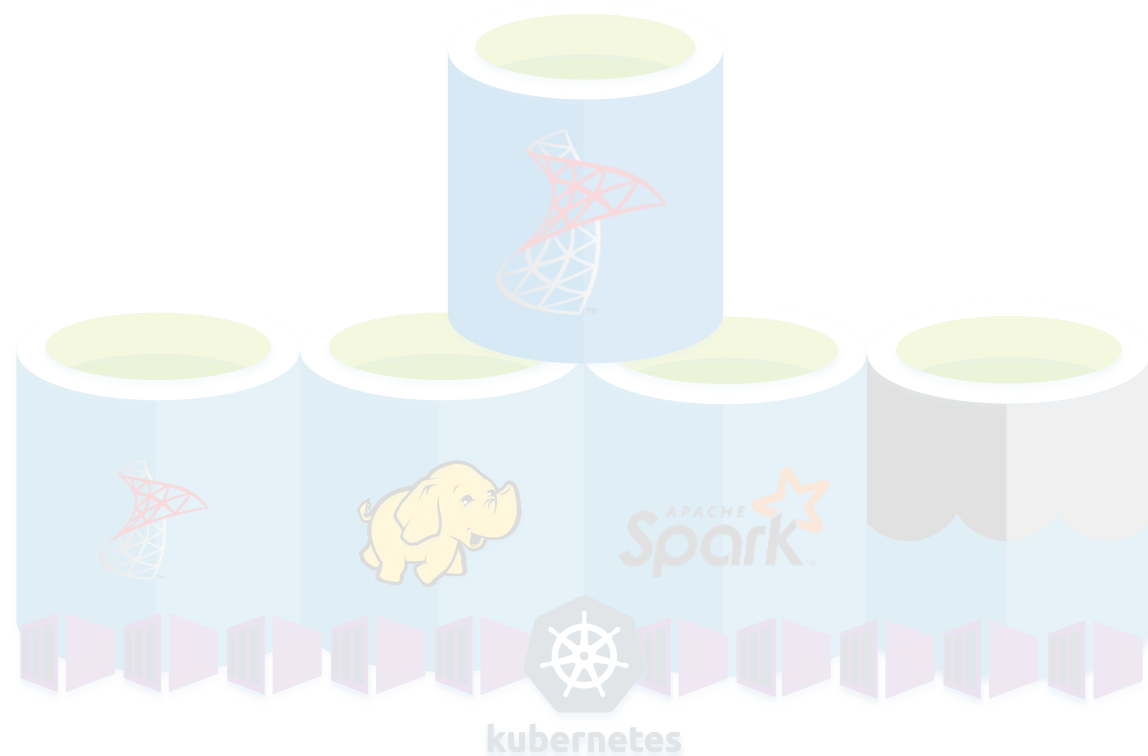
Why



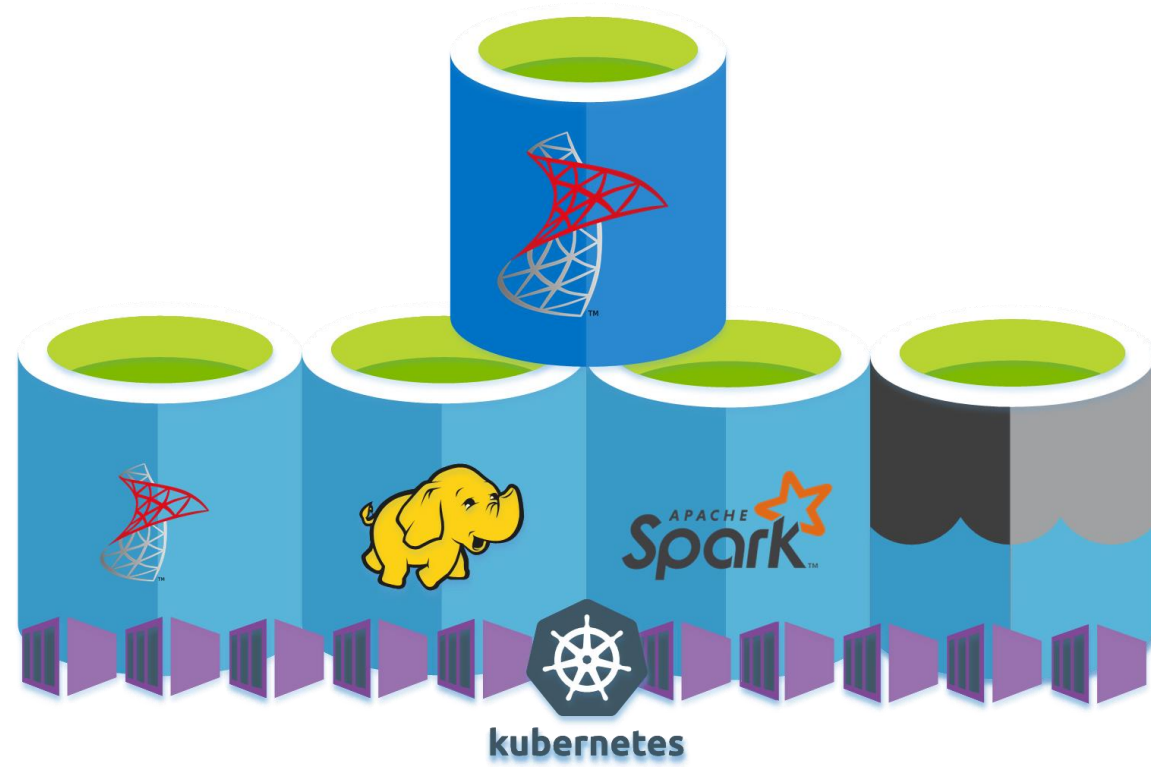
How... does a SQL Server Big Data Cluster address our big data problems?
do we implement this new product architecture?

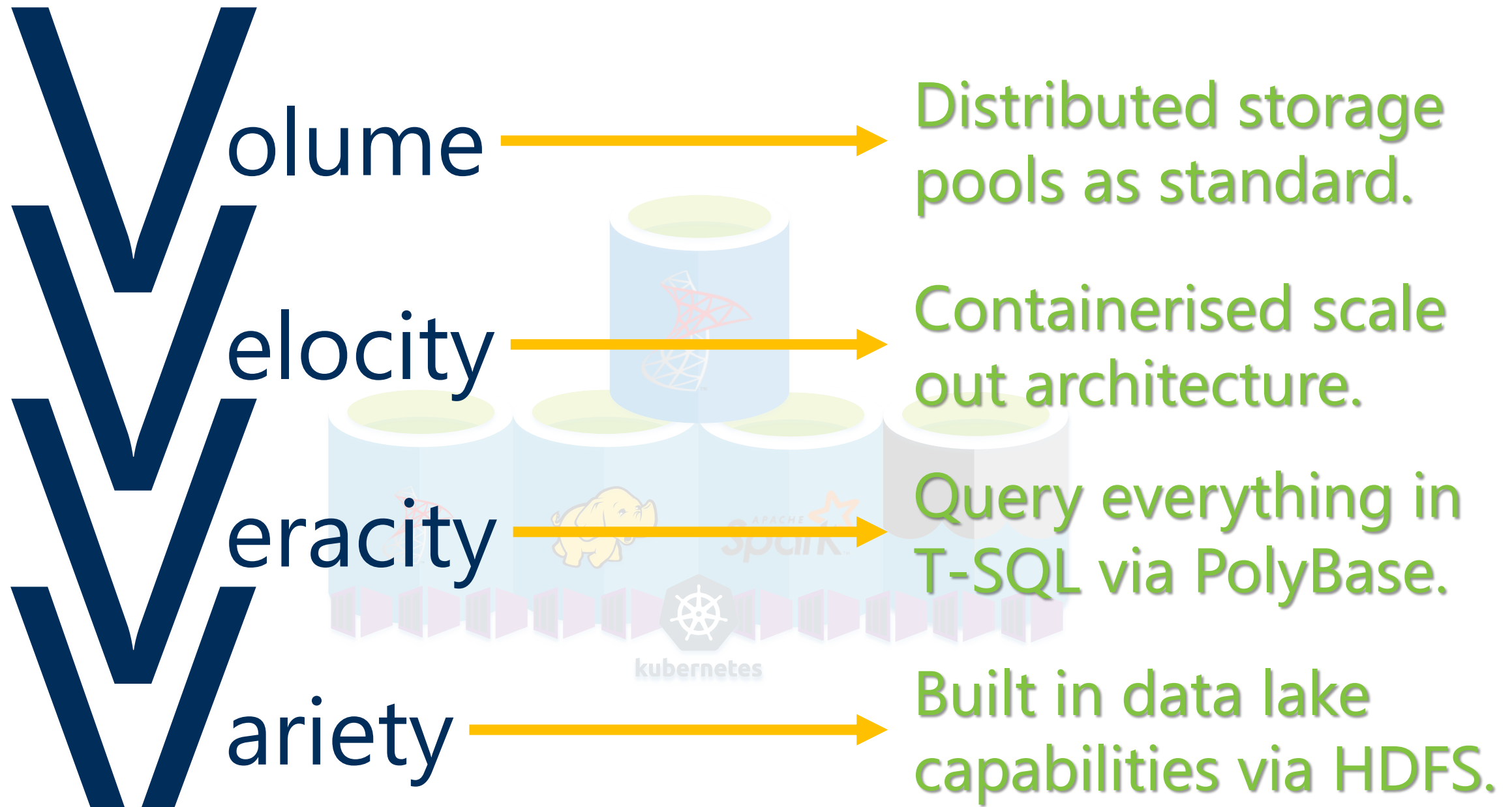
What

Why



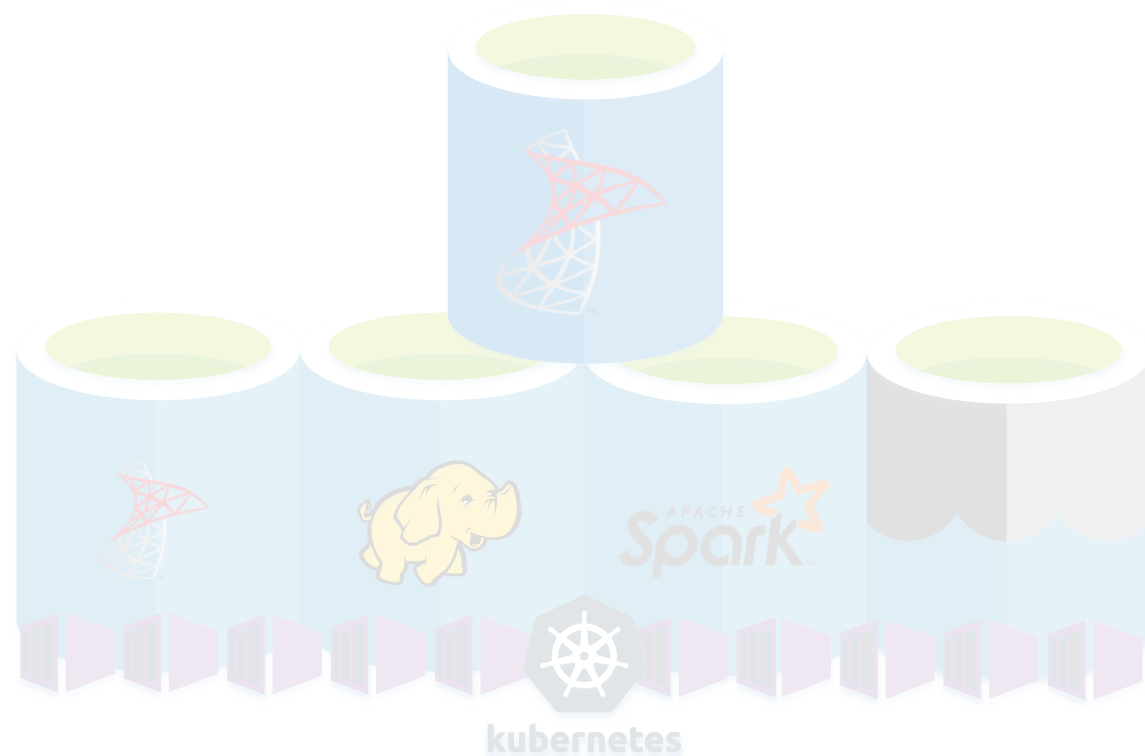
How... does a SQL Server Big Data Cluster address our big data problems?
do we implement this new product architecture?





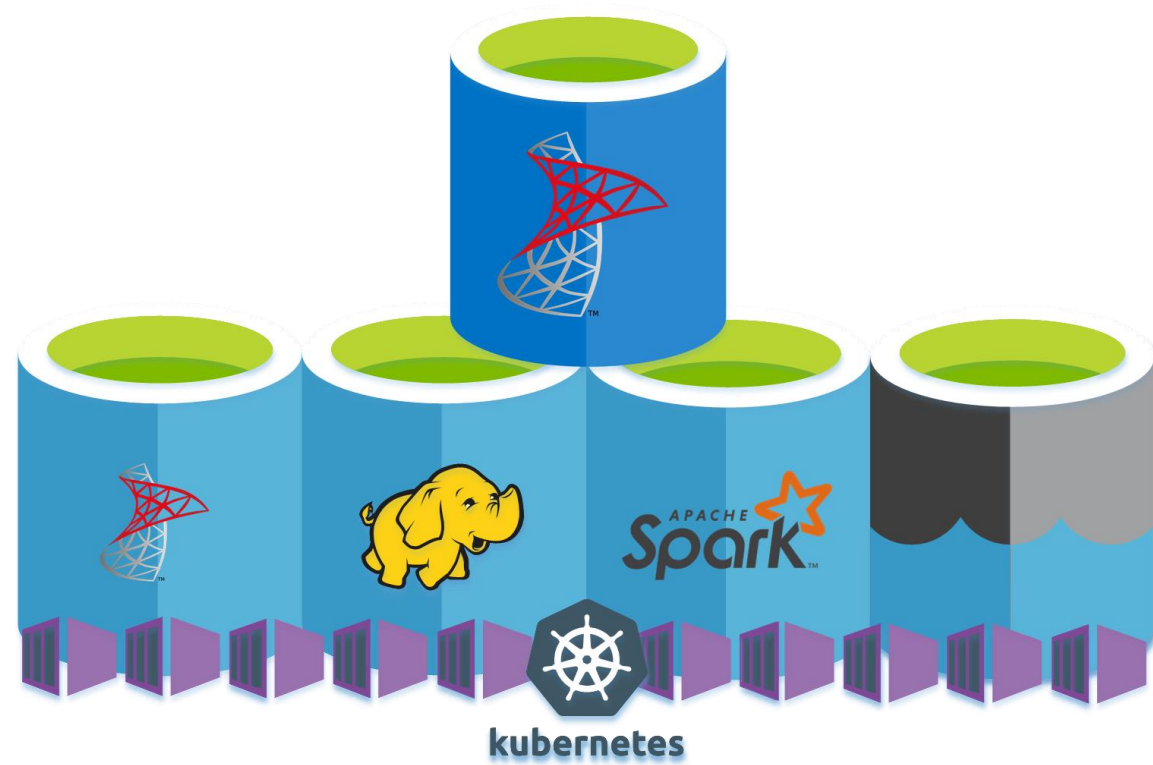
What

Why

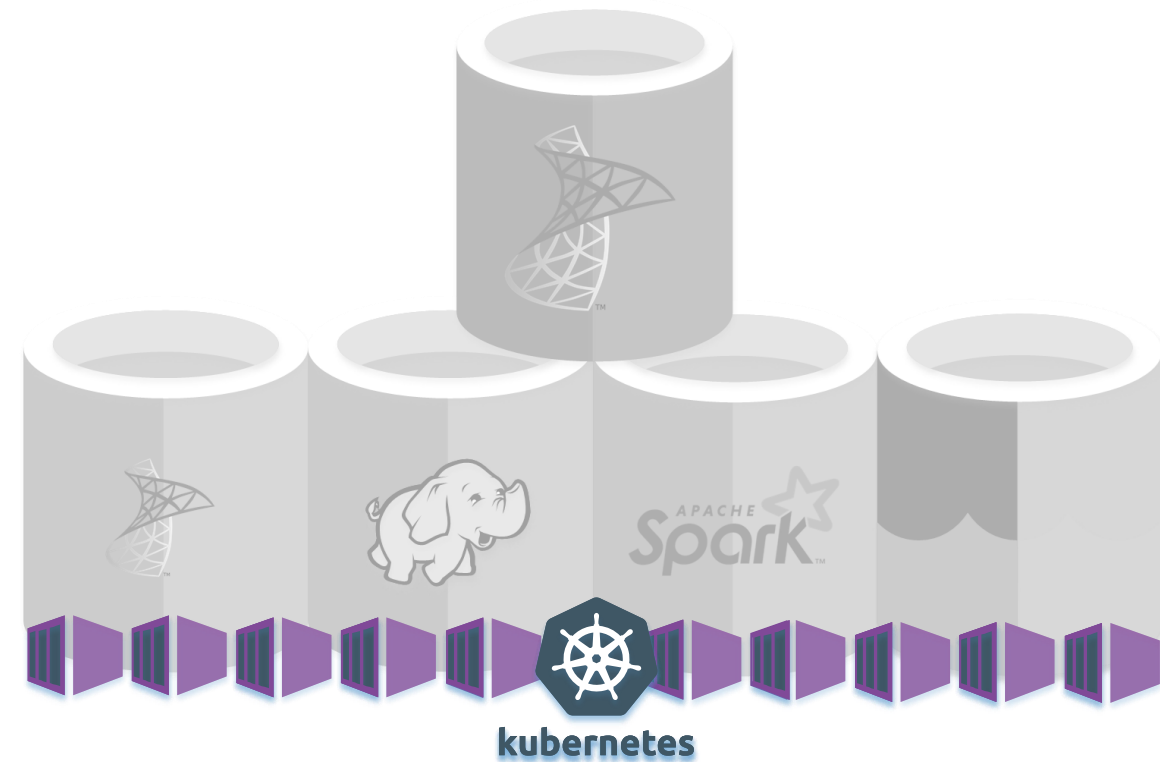


How...

does a SQL Server Big Data Cluster address our big data problems?
do we implement this new product architecture?



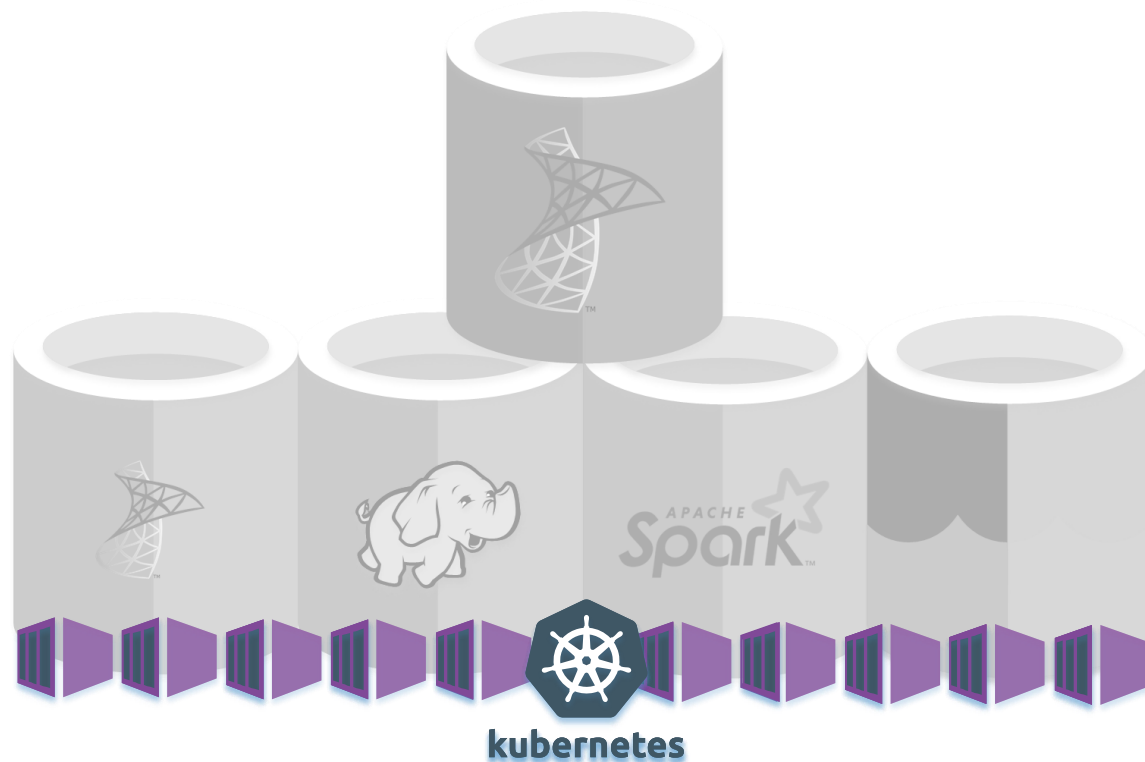
kubernetes   minikube



kubernetes



minikube



Azure



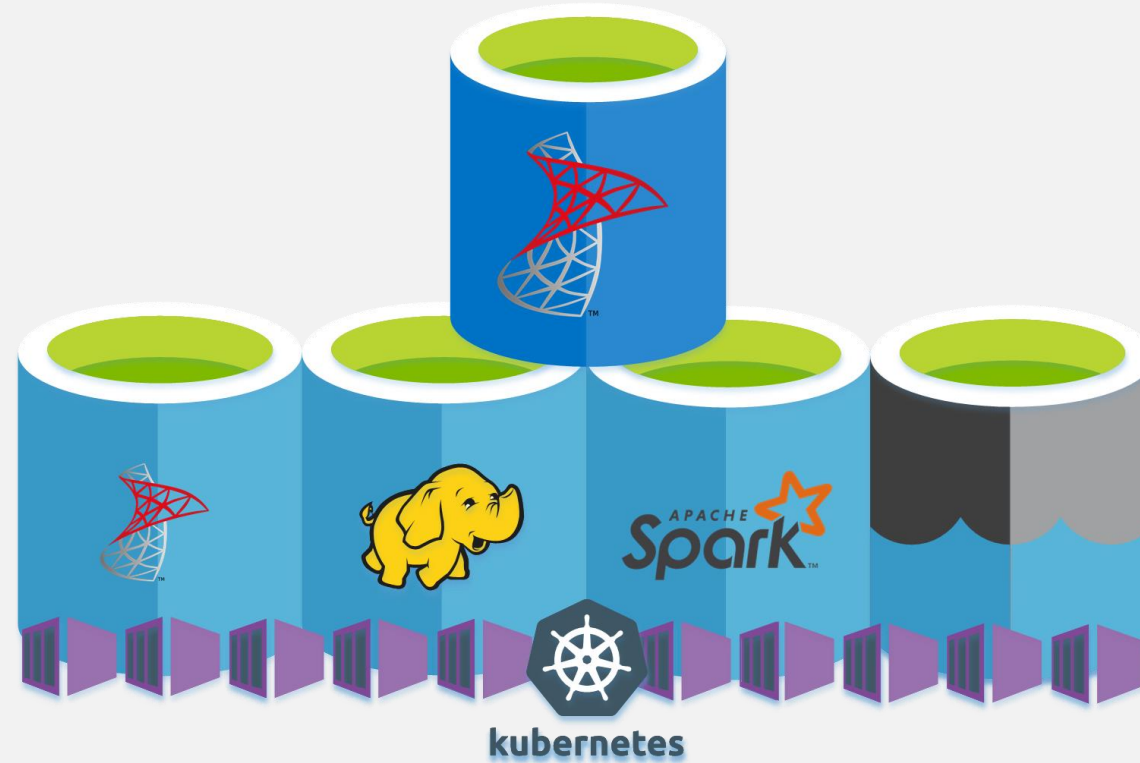
Google Cloud Platform



SQL Server 2019 Big Data Clusters

Cloud tech, using cloud concepts, now available on premises.

Not only cloud.



Reference Material

What's new in SQL Server 2019?

<https://docs.microsoft.com/en-us/sql/sql-server/what-s-new-in-sql-server-ver15?view=sql-server-ver15>

SQL Server 2019 White Paper

<https://info.microsoft.com/ww-landing-SQLDB-Microsoft-SQL-Server-WhitePaper.html>

Introducing SQL Server 2019 Big Data Clusters – Travis Wright

<https://cloudblogs.microsoft.com/sqlserver/2018/09/25/introducing-microsoft-sql-server-2019-big-data-clusters/>

MS Ignite Session – The future of querying big data with PolyBase and SQL Server

<https://myignite.techcommunity.microsoft.com/sessions/66201>

MS Ignite Session – Deep dive on SQL Server and big data

<https://myignite.techcommunity.microsoft.com/sessions/65967>

How to deploy SQL Server big data cluster on Kubernetes

<https://docs.microsoft.com/en-us/sql/big-data-cluster/deployment-guidance?view=sql-server-ver15>

Deploy SQL Server big data cluster on Azure Kubernetes Service

<https://docs.microsoft.com/en-us/sql/big-data-cluster/quickstart-big-data-cluster-deploy?view=sql-server-ver15>

Thanks for Listening

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