

Azure Synapse

- > Azure Synapse Analytics is a limitless analytics service, that brings together enterprise data warehouse and Big data analytics.
- > It gives you the freedom to query data on your terms, using either serverless on-demand or provisioned resources, at scale.
- > Azure Synapse - SQL Analytics
 - Best in class price per performance
 - Industry leading security.
 - World class query execution
 - Data flexibility
 - Developer productivity.
- > Integrating ISV partners with Azure Synapse Analytics
 - Full backward compatibility with Azure SQL Data warehouse for data integration and orchestration.
 - Additional analytics capabilities in Azure Synapse unlocks new ISV scenarios.
 - Azure Synapse + ISV can bring data continuity with Azure Machine Learning and Power BI
 - Reduce migration effort by reusing existing partner platforms.

②

→ Workloads that are not suitable?

① Operational Workloads (OLTP)

- High frequency reads and writes.
- Large no. of singleton selects.
- High Volume of single row inserts.

② Data Preparations

- Row by row processing needs
- Incompatible formats (XML)

→ Workloads that are suitable?

• Analytical:

- Store large volumes of data.
- Consolidate disparate data into a single location.
- Shape, model, transform and aggregate data.
- Batch/Micro-batch loads.
- Perform query analysis across large datasets.
- Ad-hoc reporting across large data volumes.
- All using simple SQL constructs.

→ Modern Data Warehouse.

on-premise data
Oracle, SQL, Teradata

cloud Data

Azure, AWS, GCP

Serverless data.

InfoSphere, Dyanium

Ingest	Prepare	Transform & enrich	Store	Visualize
Azure Data Factory	Azure Data Factory	ADF	raw SQL data warehouse	Power BI
	Azure Databricks	ADB		

Store Azure Data Lake Storage

→ Amazon Synapse Analytics.
Integrated data platform for BI, AI and continuous intelligence.

Synapse Analytics

①

AI/ML/IOT/Intelligence Apps/BI

Experience 1

Synapse Analytics Studio

BI

②

Platform

Management

Security

Monitoring

Metadata

Language

SQL

Python

DL

Spark

Scala

R

③

Compute

Provisioned

Managed

Serverless

On-demand

Data Integration

Spans

④

⑤

Amazon

Data Lake

Storage

Common Data

Model

Enterprise Security

Optimized for Analytics

Data Lake Integrated

and

Common data model

across

① Designed for analytics workloads at any scale.

② SaaS developer, experience for code-free and code-pro.

③ Multiple languages suited to different analytics workloads.

④ Integrated analytics engines available provisioned or serverless on demand.

SQL Analytics offering TSQL for better sharing

4.

⑤ Integrated platform services for management, security, monitoring and infrastructure

⇒ Connected Services

- Azure Data Catalog
- Azure Data Lake Storage
- Azure Data bricks
- Azure Data Flow
- Azure HDInsight
- Azure Machine Learning
- Power BI
- 3rd Party Integration.