

Lakehouse Federation

Learning Objectives

- ▶ Data ingestion challenges
- ▶ Lakehouse Federation

Data Ingestion Challenges

- ▶ Data ingestion is recommended for most use cases
 - ▶ high data volumes
 - ▶ low-latency querying
 - ▶ third-party API limits.
- ▶ Ingestion results in duplicate data that may become stale
 - ▶ Use Delta Sharing to receive live data from the source

Lakehouse Federation

- ▶ Run queries against multiple data sources
- ▶ No data migration



Query Federation

External sources



Establish connection

`SELECT * FROM mysql-schema.table1`

Query Federation Platform



**Unity
Catalog**

foreign-catalog
mysql-schema
table1
table2

Use case

- ▶ Maintain live access to external systems.
- ▶ Ad hoc reporting or proof-of-concept access to operational data stored in external databases.

Limitations

- ▶ Complex queries don't benefit from the power of Databricks