

World's fastest medallion load



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Microsoft Fabric

Get data



Data Factory

Prepare data



Synapse Data
Engineering



Synapse Data
Warehouse



Synapse Data
Science



Real-Time
Intelligence

Use data



Power BI

Handle streams



Real-Time Hub

Store data



OneLake

KQL database

Key capabilities

Unlimited Scale
(query, ingestion
and storage)

Any data source

Any data format

Structured
Semi-structured
Free-text

Real-time
transformation of
complicated data
structures

Streaming analytics in
Near-Real-Time

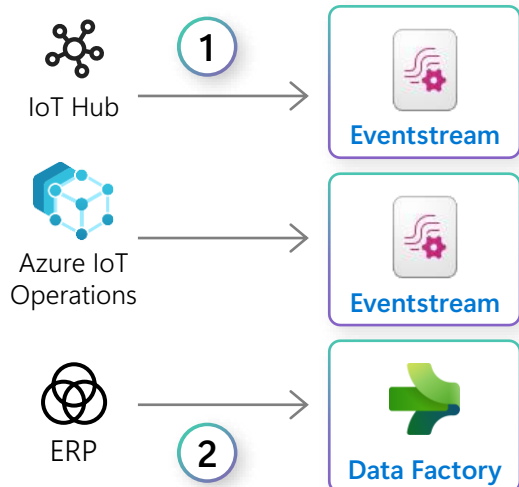
High performance
Low latency
High freshness

Timeseries database

Everything is indexed
and partitioned

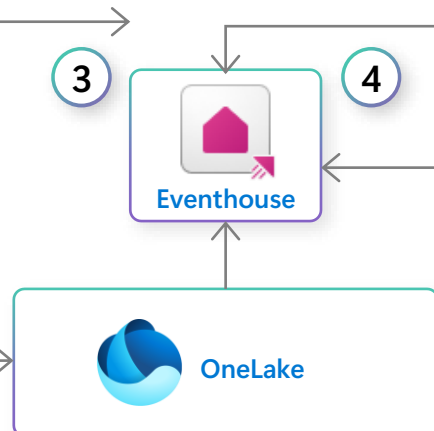
Ingest & process

1. Over 1M/1 HR IIoT events, 30k tags, from 40 factories are streamed in real time with sub-second latency
2. Contextualization data (OPC asset metadata, shift details, weather, component cost, etc.) mirrored into Fabric OneLake



Analyze & transform

3. IIoT events are enriched in-motion with the Contextualization data and asset hierarchy from OneLake, providing clean and meaningful views
4. Enriched data is aggregated on the fly for long-term view



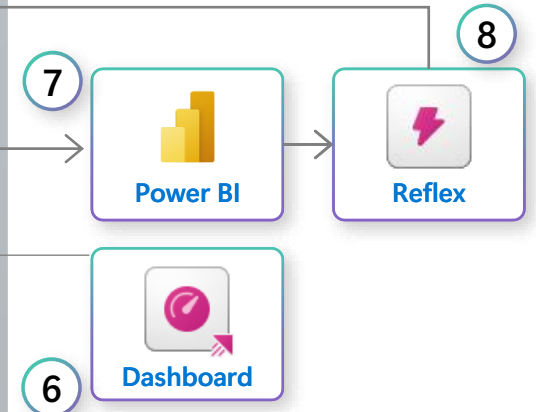
Train

5. Build, train, and score ML models in real time, persisting the scored data in OneLake



Visualize and activate

6. Real time dashboard of all factories with ability to easily shift from low granularity to high granularity view
7. Enhance organizational BI reports with high granularity enriched data
8. Notify users and activate automation in response to live indications from the factory floor



Sources



Eventstream



Pipeline



Shortcuts &
External tables



Eventhouse



KQL Database



Tables

Bronze



KQL Database



Tables

Silver





Update
policies

Sources



Eventstream




Pipeline



Shortcut



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Materialized
views

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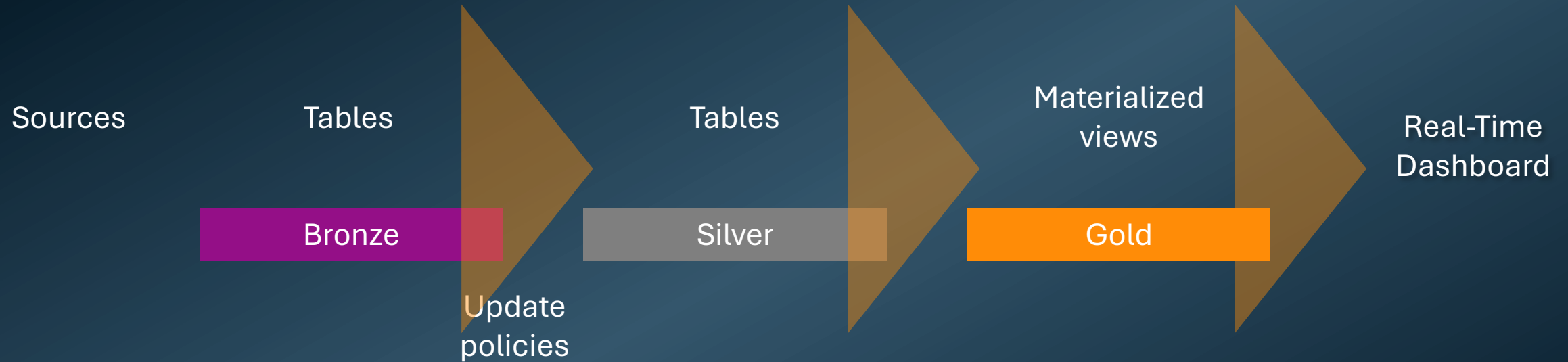


Materialized
views

Gold

Real-Time
Dashboard





Sub 1 second

Thank you

Connect with me at:

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Connect

