

**Getting Started  
with  
Real-Time  
Intelligence  
In  
Microsoft Fabric**







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- Data Architect

- SQL Server
  - Since 2002
- Microsoft Azure
  - Since 2015
- Microsoft Fabric
  - Since 2022





# Slides



# Agenda

Introduction

Identify the Source

Setting up the Destination

Connecting the source and destination

Taking action – based on data

Real-Time dashboards

Summary



# Introduction





# Microsoft Fabric



Data  
Factory



Real-Time  
Intelligence



Databases



Analytics



Industry  
Solutions



Power BI



Partner  
solutions



Copilot in Fabric



OneLake



Microsoft Purview





# Microsoft Fabric

## Intelligent data foundation



Data  
Factory



Data  
Engineering



Data  
Warehouse



Data  
Science



Real-Time  
Intelligence



Power  
BI



Industry  
Solutions



Powered by AI with Copilot in Microsoft Fabric



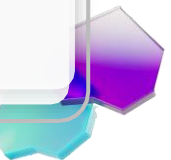
**Catalog for data in motion**

Real-Time Hub



**Unified data foundation**

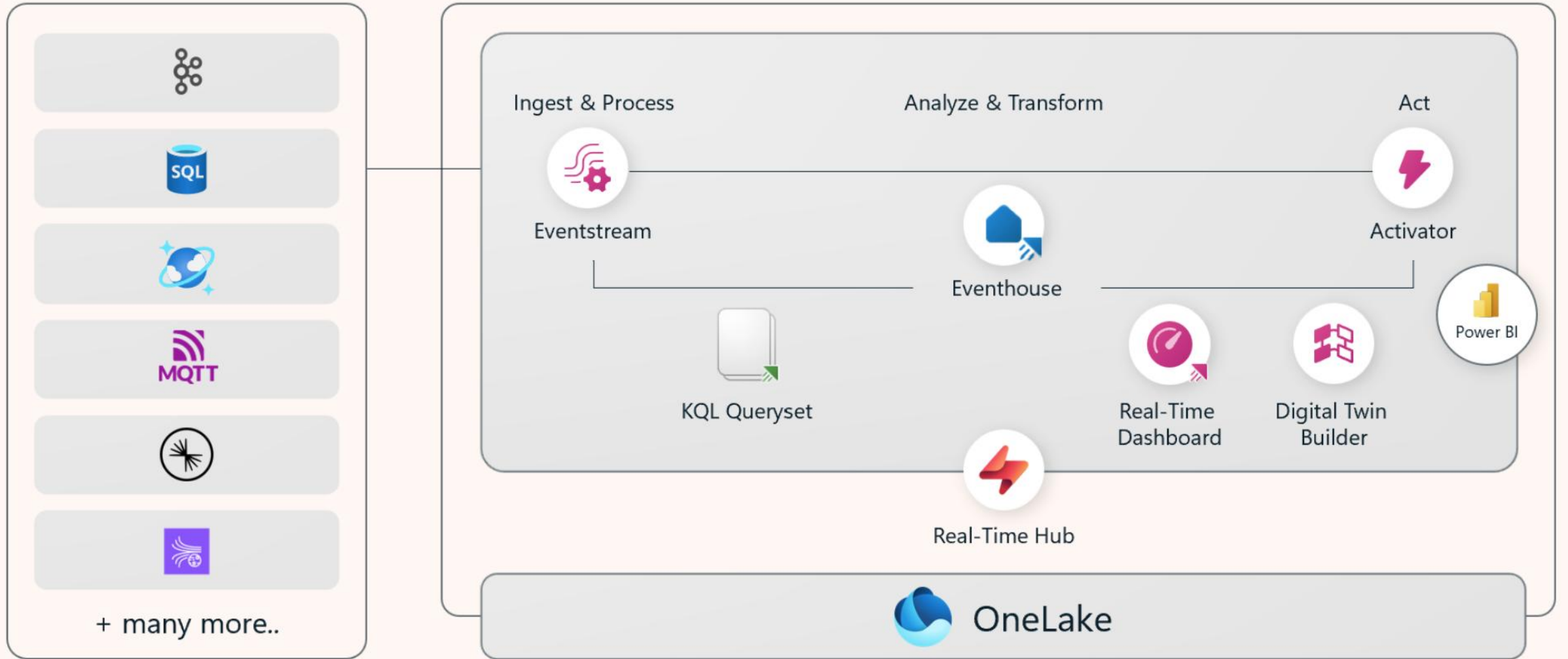
OneLake







# Real-Time Intelligence in Microsoft Fabric





# The Kusto Engine

Appearing in the following products

Azure Monitor (Log Analytics)

Azure Data Explorer (ADX) (Synapse Data Explorer Pools)

Microsoft Defender

Microsoft Sentinel (Azure Sentinel)

Microsoft Fabric's Real-Time Intelligence capabilities



# The Kusto Engine

Internal Microsoft development – began ~2014

Codename “Kusto”

Investigating massive amounts of telemetry data

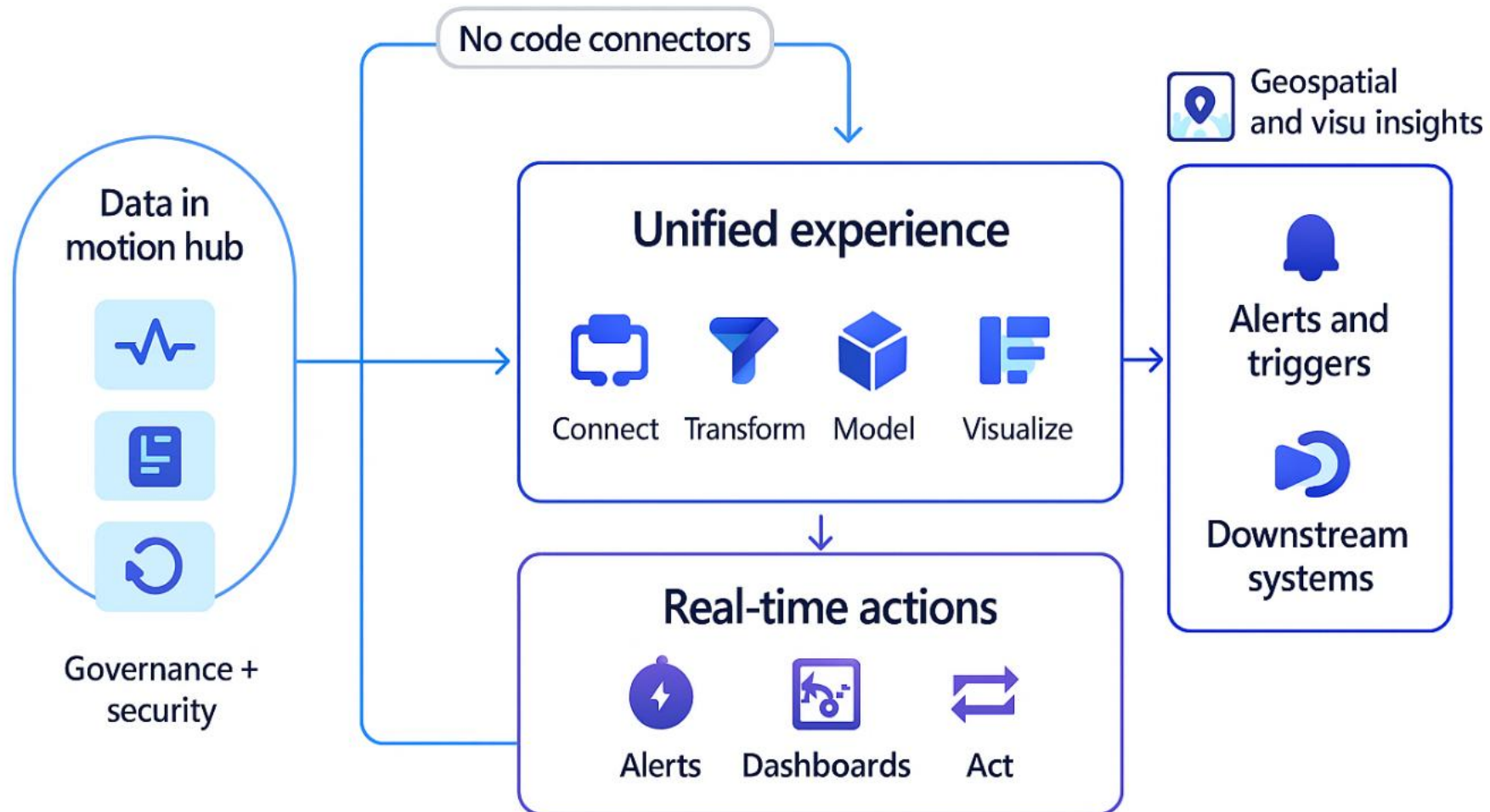
Public Launch ~2018 – Azure Data Explorer (ADX)

Subsequently incorporated into many products



# Real-Time Intelligence

Ingest, process, model and act on real-time and event-driven data in Microsoft





# Eventstream



# An analogy

## with Batch Data

Copy data

SQL to Dataverse

General **Source** Destination Mapping Settings

Connection \*  Refresh Edit

Connection type  Test connection

Database  Refresh

Use query ☒ Table ☐ Query ☐ Stored procedure

Table \*  Refresh Preview data

☐ Enter manually

> Advanced

Copy data

SQL to Dataverse

General Source **Destination** Mapping Settings

Connection \*  Refresh Open

Root folder ☒ Tables ☐ Files

Table \*   Preview data New

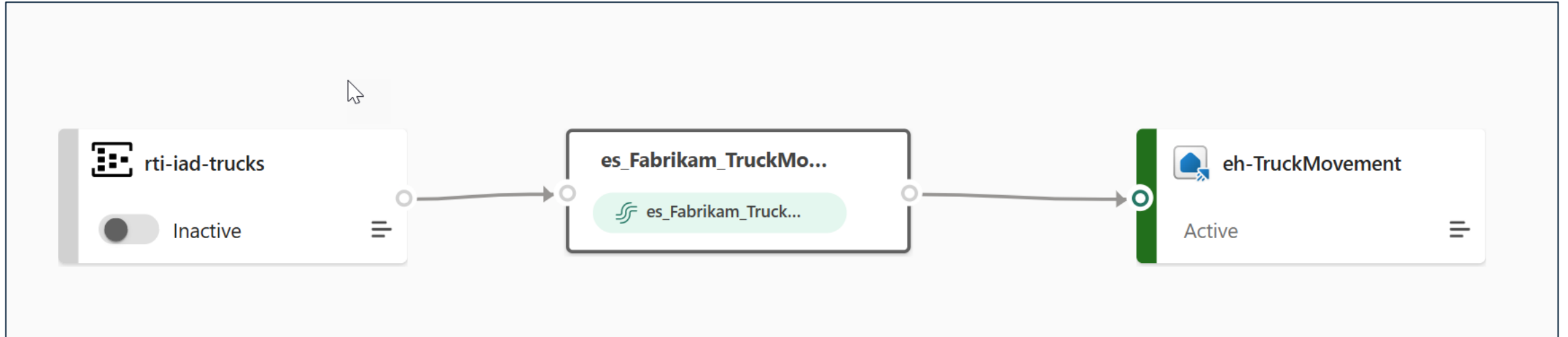
☒ Enter manually

Table action ☒ Append ⓘ ☐ Overwrite ⓘ ☐ Upsert (Preview) ⓘ

> Advanced



# The Eventstream





# Eventstream Sources



# Eventstream Destinations



# Eventstream Formats and Schema



# Eventstreams

Connect to live streaming sources

Ingestion modes

- Direct Ingestion

- Event processing before ingestion

Schema management



# Eventstreams

## Stateless

Examine data based on a single discrete value

Filter

## Statefull

Examine data a stream of values

Aggregates

Group by



# Eventhouse



# Policy



# Real-Time Dashboards



# Resources



[Microsoft Fabric documentation - Microsoft Fabric | Microsoft Learn](#)

[Real-Time Intelligence in Microsoft Fabric documentation - Microsoft Fabric | Microsoft Learn](#)

[Performance and Cost Benchmarking of Real-Time Data Platforms | GigaOm](#)

[FabricRTA-in-a-Day/Lab1.md at main · microsoft/FabricRTA-in-a-Day · GitHub](#)