

Real-Time Data Agents and their integration

Mario Moeller, Cloud Solution Architect
Meinrad Weiss, Sr Solution Engineer

18.09.2025



Agenda

- Introduction
- Microsoft Fabric Realtime Intelligence
- Microsoft Fabric Data Agent
- Agent integration tools and technologies
- Copilot Studio in action
- Conclusion

Microsoft Fabric

The unified data platform for AI transformation



Data
Factory



Analytics



Databases



Real-Time
Intelligence



Power BI

Fabric Platform



AI



OneLake



Governance

Microsoft Fabric

The unified data platform for AI transformation



Data
Factory



Analytics



Databases



Real-Time
Intelligence



Power BI

Fabric Platform



AI



OneLake



Governance

Microsoft Fabric

The unified data platform for AI transformation



Real-Time
Intelligence



Real-Time Hub



Eventstream



Event House



Activator

Fabric Platform



AI



OneLake

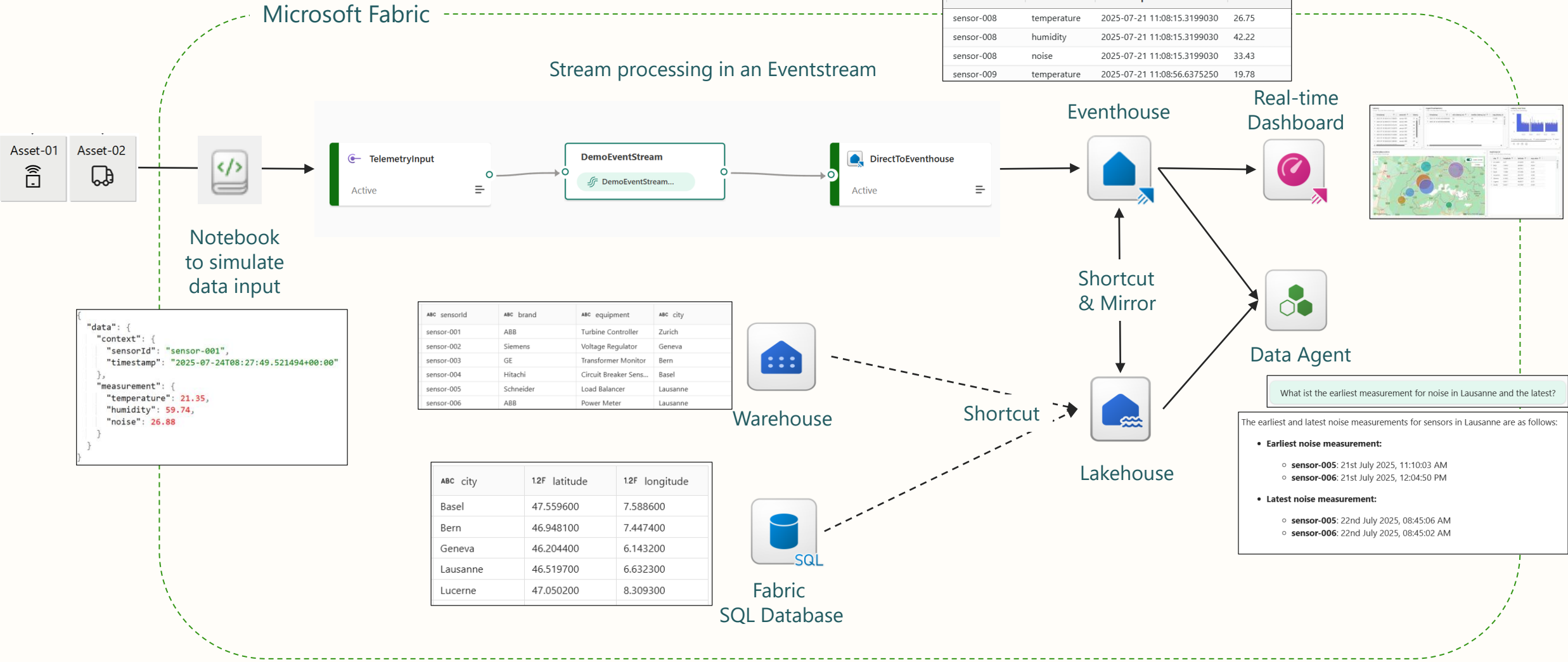


Governance

End to End Demo - Overview


timestamp	ingestion_time	sensorid	metric	value	brand	equipment	city	latitude	longitude
2025-07-21 11:08:15.3199030	2025-07-22 08:29:18.0181154	sensor-008	noise	33.43	GE	Cooling System Sensor	Lugano	46.0037	8.9511
2025-07-21 11:08:15.3199030	2025-07-22 08:29:18.0181154	sensor-008	humidity	42.22	GE	Cooling System Sensor	Lugano	46.0037	8.9511
2025-07-21 11:08:15.3199030	2025-07-22 08:29:18.0181154	sensor-008	temperature	26.75	GE	Cooling System Sensor	Lugano	46.0037	8.9511
2025-07-21 11:08:56.6375250	2025-07-22 08:29:18.0181154	sensor-009	noise	41.13	Hitachi	Switchgear Monitor	Thun	46.7512	7.6216
2025-07-21 11:08:56.6375250	2025-07-22 08:29:18.0181154	sensor-009	humidity	44.06	Hitachi	Switchgear Monitor	Thun	46.7512	7.6216
2025-07-21 11:08:56.6375250	2025-07-22 08:29:18.0181154	sensor-009	temperature	19.78	Hitachi	Switchgear Monitor	Thun	46.7512	7.6216

sensorid	metric	timestamp	value
sensor-008	temperature	2025-07-21 11:08:15.3199030	26.75
sensor-008	humidity	2025-07-21 11:08:15.3199030	42.22
sensor-008	noise	2025-07-21 11:08:15.3199030	33.43
sensor-009	temperature	2025-07-21 11:08:56.6375250	19.78



Create the Eventstream

New Eventstream

 Enhanced Eventstream optimizes event usage by reusing events, routing based on content, and more. [Learn more](#)

Name *


DemoEventStream

Creating


Cancel

Design a flow to ingest, transform, and route streaming events


Start by adding a source, custom endpoint, or explore using sample data



Connect data sources
Get events from data sources





Use sample data
Try out eventstream with sample data





Use custom endpoint
Start with connecting to your customized endpoint


Event Stream


 Amazon Kinesis Data Streams
Continuous data


 Apache Kafka
Continuous data


 Azure IoT Hub
Azure resources

 Confluent Cloud for Apache Kafka
Continuous data

 Google Cloud Pub/Sub
Continuous data

 MQTT
Continuous data

 PostgreSQL DB (CDC)
Database CDC

 Real-time weather
Public data

Today, 25 supported sources...

Details

Protocol:

Event Hub

AMQP

Kafka

Basic

Entra ID Authentication

SAS Key Authentication

Name

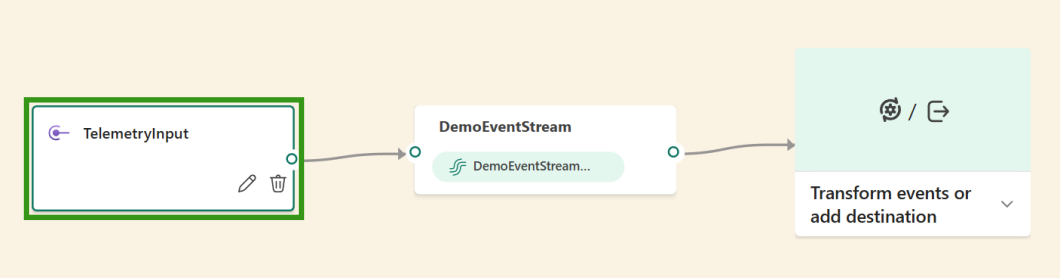
TelemetryInput

Type

Custom endpoint

Status

Active

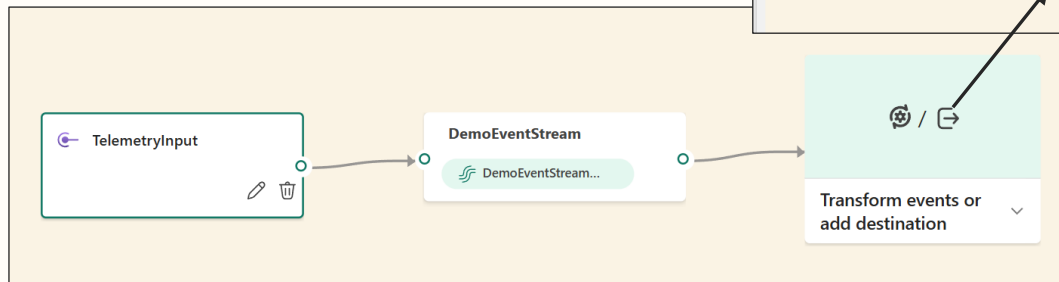
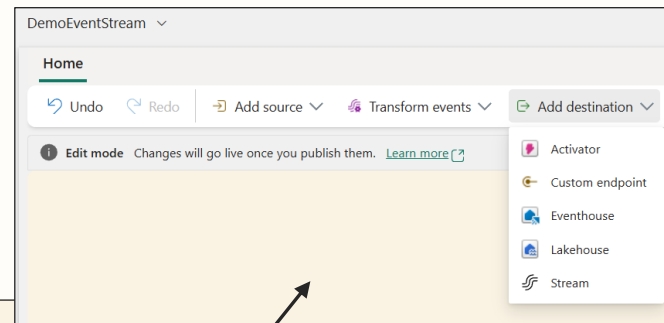


Create Eventhouse and ingest data from Eventstream

New Eventhouse

Eventhouse name

SensorData



Eventhouse

Data ingestion mode *

☒ Direct ingestion

☐ Event processing before ingestion

This cannot be changed once this KQL destination starts ingesting.

Destination name *

DirectToEventhouse

Workspace *

RTIEndToEndDemo

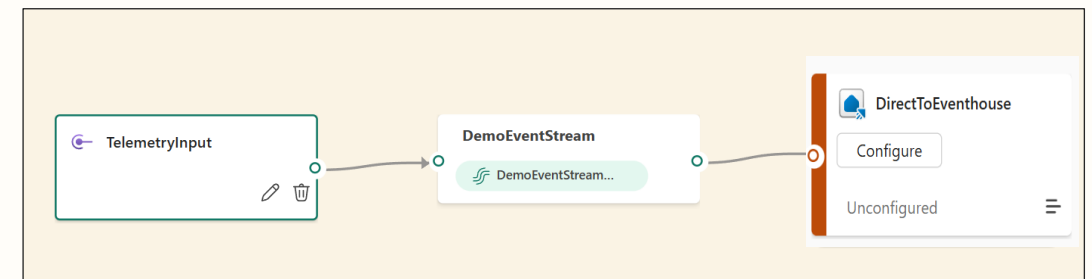
Eventhouse *

SensorData

KQL Database *

SensorData

Activation for **KQL database - direct ingestion mode** requires further actions after publish.



Create Eventhouse and ingest data from Eventstream - 2

Get data
Pick a destination table and configure the source

Eventstream → SensorData/BronzeMetrics

Select or create a destination table

▼ SensorData

+ ✓

Configure the data source

Create a data connection to ingest data from Eventstream.

Eventstream: DemoEventStream

Stream: DemoEventStream-stream

Data connection name * ⓘ: DemoEventStream_SensorData-B

Source

Configure

Inspect

Summary

Get data
Inspect the data

Eventstream → SensorData/BronzeMetrics

JSON ▼ Advanced ▼

✓ Data sample found. [Fetch more data](#) [Discard and fetch new data](#)

11 events found, 11 events match the selected settings. Open for more details.

BronzeMetrics_mapping ▼ Nested levels 0 ⓘ

Data
[{"data":{"context":{"sensorID":"sensor-002","timestamp":"2025-07-21T09:44:55.4551260Z"},"measurement":{"temperature":29.94,"humidity":35.76,"noise":58.63}}}]
[{"data":{"context":{"sensorID":"sensor-005","timestamp":"2025-07-21T09:45:03.5149060Z"},"measurement":{"temperature":25.13,"humidity":39.38,"noise":47.07}}}]
[{"data":{"context":{"sensorID":"sensor-001","timestamp":"2025-07-21T09:45:11.5390410Z"},"measurement":{"temperature":18.8,"humidity":36.13,"noise":39.09}}}]
timestamp":"2025-07-21T09:45:50.9194290Z"},"measurement":{"temperature":28.09,"humidity":30.32,"noise":40.85}}}]
timestamp":"2025-07-21T09:45:58.9444460Z"},"measurement":{"temperature":28.85,"humidity":61.11,"noise":46.46}}}]
timestamp":"2025-07-21T09:47:01.0229010Z"},"measurement":{"temperature":26.66,"humidity":45.06,"noise":27.77}}}]

TelemetryInput

Active

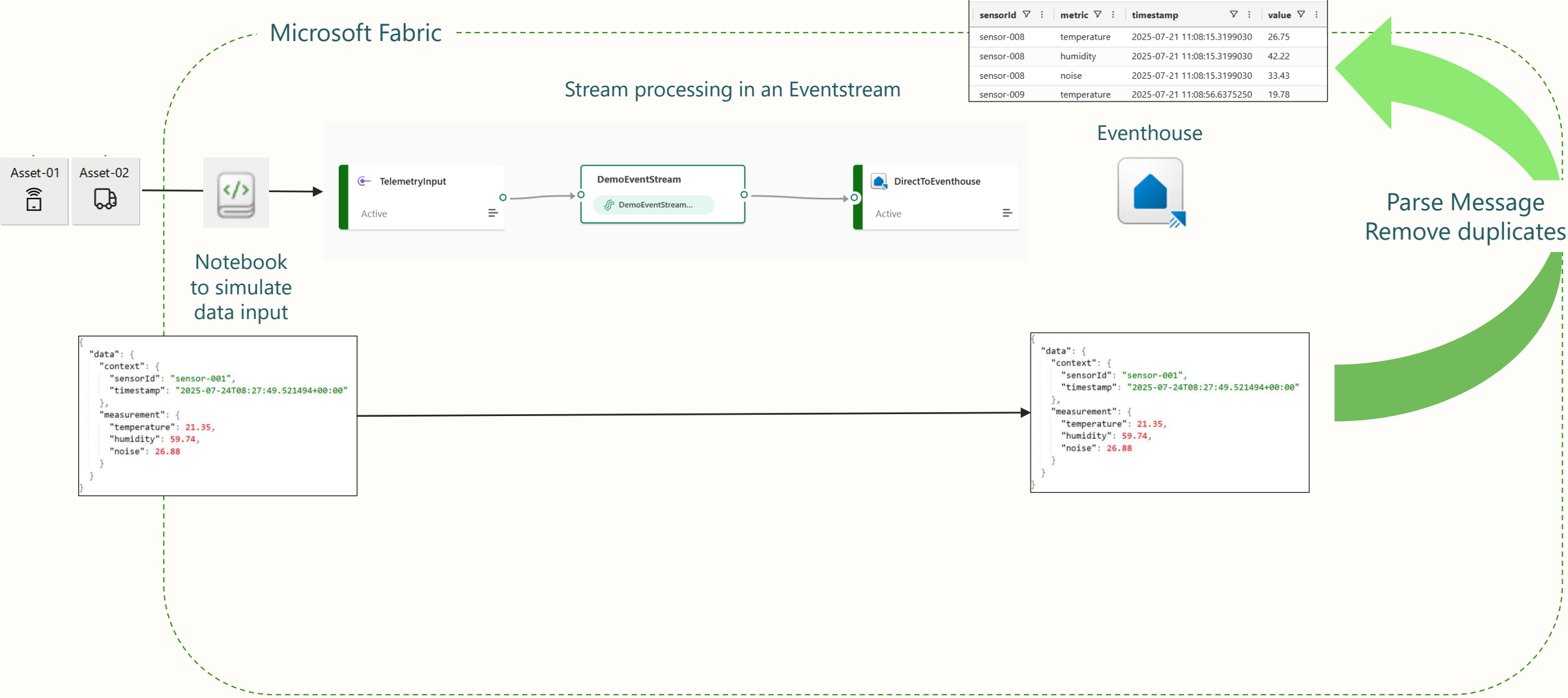
DemoEventStream

DemoEventStream...

DirectToEventhouse

Active

Parse Message and remove duplicates



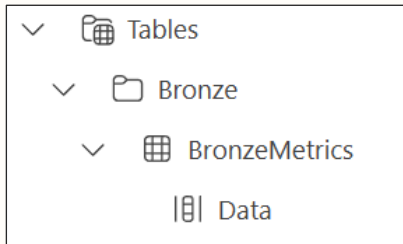
Parse Message and remove duplicates - 2



KQL,
user defined functions
& update policy

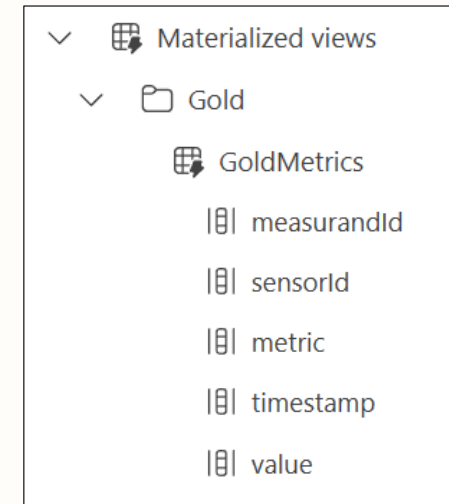
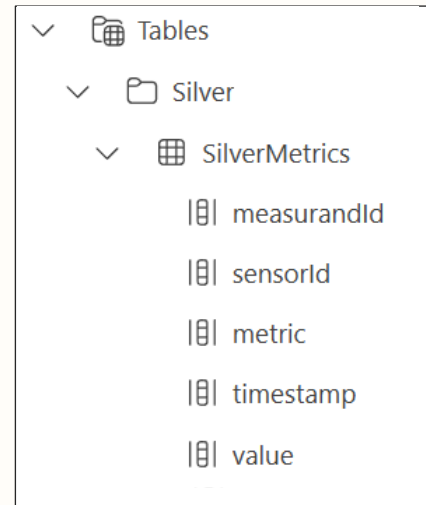


Materialized views



Data
> [{"data":{"context":{"sensorId":"sensor-005","timestamp":"2025-07-24T08:26:35.3217590Z"},"measurement":{"temperature":20.05,"humidity":61.18,"noise":68.2}}}]
> [{"data":{"context":{"sensorId":"sen{
> [{"data":{"context":{"sensorId":"sen{
> [{"data":{"context":{"sensorId":"sen{

```
{
  "data": {
    "context": {
      "sensorId": "sensor-001",
      "timestamp": "2025-07-24T08:27:49.521494+00:00"
    },
    "measurement": {
      "temperature": 21.35,
      "humidity": 59.74,
      "noise": 26.88
    }
  }
}
```



Parse Message



✓	Tables
✓	Bronze
✓	BronzeMetrics
	Data

```
{
  "data": {
    "context": {
      "sensorId": "sensor-005",
      "timestamp": "2025-07-24T08:26:35.321759+00:00"
    },
    "measurement": {
      "temperature": 20.05,
      "humidity": 61.18,
      "noise": 68.2
    }
  }
}
```

BronzeMetrics

```
| take 1
| evaluate bag_unpack(Data)
| evaluate bag_unpack(data)
| evaluate bag_unpack(context)
| extend keys = bag_keys(measurement)
| mv-expand key = keys
| extend metric = tostring(key)
| extend value = todouble(measurement[metric])
| extend measurandId = strcat(sensorId, '_', metric)
| project measurandId, sensorId, metric, timestamp, value
```



measurandId	sensorId	metric	timestamp	value
sensor-005_temperature	sensor-005	temperature	2025-07-24 08:26:35.3217590	20.05
sensor-005_humidity	sensor-005	humidity	2025-07-24 08:26:35.3217590	61.18
sensor-005_noise	sensor-005	noise	2025-07-24 08:26:35.3217590	68.2

Parse Message – Automate process



✓	Tables
✓	Bronze
✓	BronzeMetrics
	Data

```
{
  "data": {
    "context": {
      "sensorId": "sensor-005",
      "timestamp": "2025-07-24T08:26:35.321759+00:00"
    },
    "measurement": {
      "temperature": 20.05,
      "humidity": 61.18,
      "noise": 68.2
    }
  }
}
```

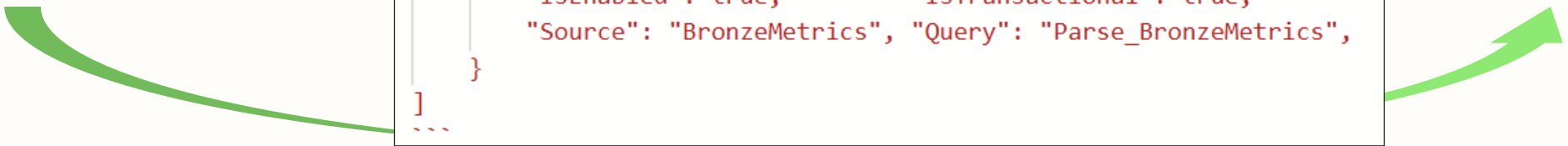
```
.create-or-alter function with (folder="Bronze") Parse_BronzeMetrics()
{
  BronzeMetrics
  /// take 1
  | evaluate bag_unpack(Data)
  | evaluate bag_unpack(data)
  | evaluate bag_unpack(context)
  | extend keys = bag_keys(measurement)
  | mv-expand key = keys
  | extend metric = tostring(key)
  | extend value = todouble(measurement[metric])
  | extend measurandId = strcat(sensorId, '_', metric)
  | project measurandId, sensorId, metric, timestamp, value
}
```



✓	Tables
✓	Silver
✓	SilverMetrics
	measurandId
	sensorId
	metric
	timestamp
	value

measurandId	sensorId	metric	timestamp	value
sensor-005_temperature	sensor-005	temperature	2025-07-24 08:26:35.3217590	20.05
sensor-005_humidity	sensor-005	humidity	2025-07-24 08:26:35.3217590	61.18
sensor-005_noise	sensor-005	noise	2025-07-24 08:26:35.3217590	68.2

```
.alter table SilverMetrics policy update
...
[
  {
    "IsEnabled": true,
    "IsTransactional": true,
    "Source": "BronzeMetrics", "Query": "Parse_BronzeMetrics",
  }
]
...
```



Remove Duplicate Values



Materialized views

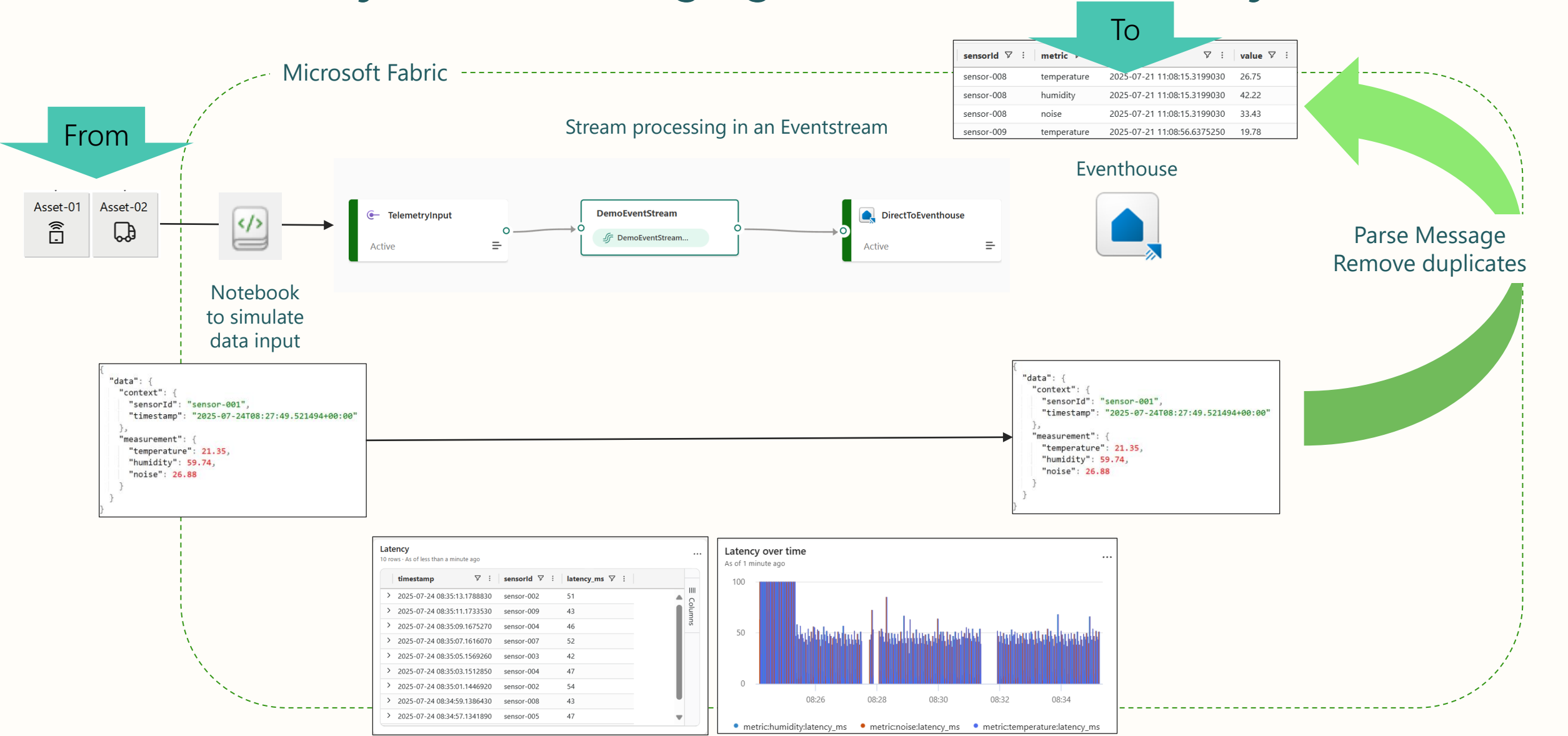


✓	🗃️	Tables
✓	📁	Silver
✓	🗃️	SilverMetrics
	🗃️	measurandId
	🗃️	sensorId
	🗃️	metric
	🗃️	timestamp
	🗃️	value

```
.create materialized-view with (folder = "Gold", backfill = true) GoldMetrics
|
|   on table SilverMetrics
|
|   {
|       SilverMetrics
|       | extend ingestion_time = ingestion_time()
|       | summarize arg_max(ingestion_time, *) by measurandId, timestamp
|   }
```

✓	🗃️⚡	Materialized views
✓	📁	Gold
	🗃️⚡	GoldMetrics
	🗃️⚡	measurandId
	🗃️⚡	sensorId
	🗃️⚡	metric
	🗃️⚡	timestamp
	🗃️⚡	value

Fabric latency from Message generation to Gold Layer



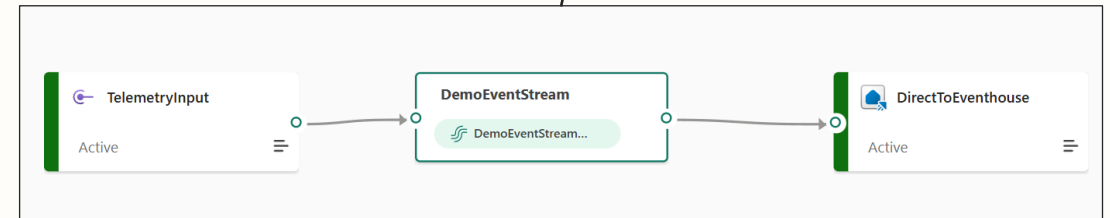
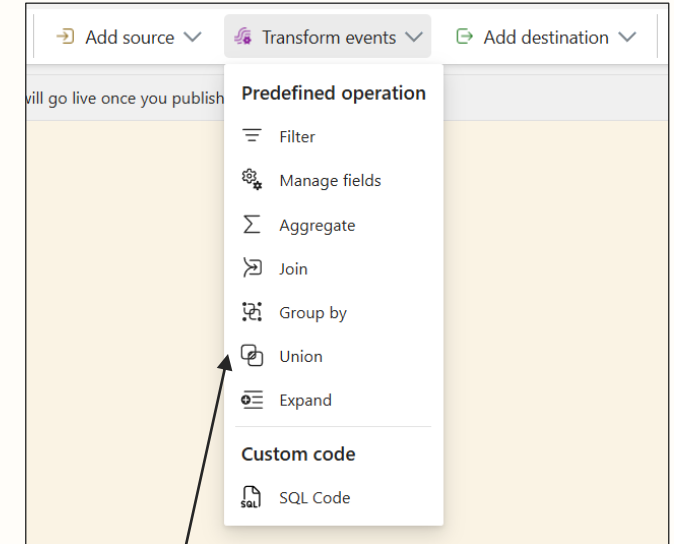
Eventstream, add logic to stream

Transformations are logic blocks applied to incoming event data to:

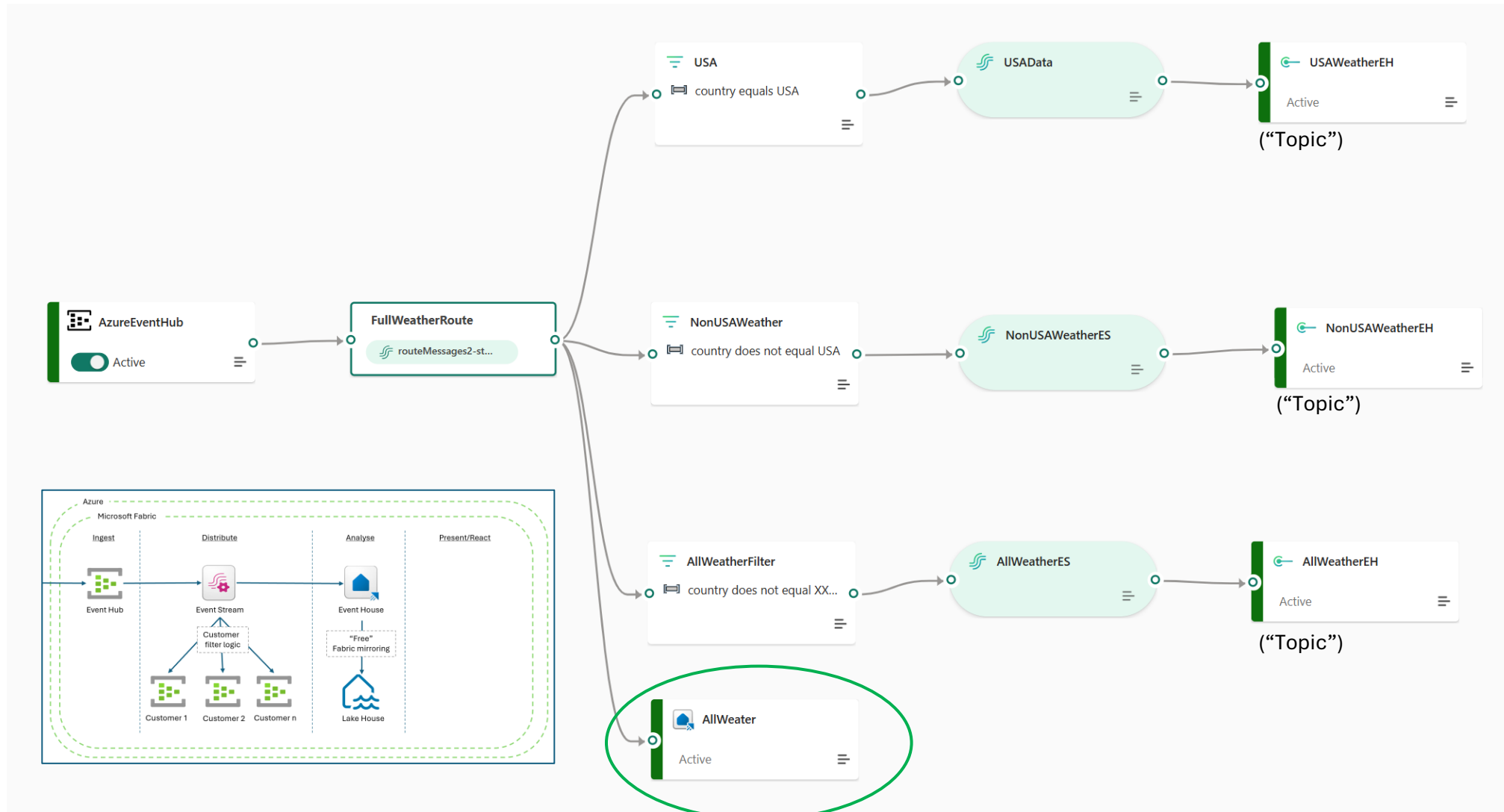
- Filter out irrelevant events
- Project only specific fields
- Enrich data with calculated fields or external lookups
- Aggregate or window data over time (e.g., rolling averages)

Transformations can be added via:

- No-Code UI (Power Query-like experience)
 - Fabric provides a visual interface to define transformations using a drag-and-drop, similar to Power Query
- SQL-based Expressions (like Stream Analytics)
 - You can define transformations using SQL-like syntax to manipulate the event payloads

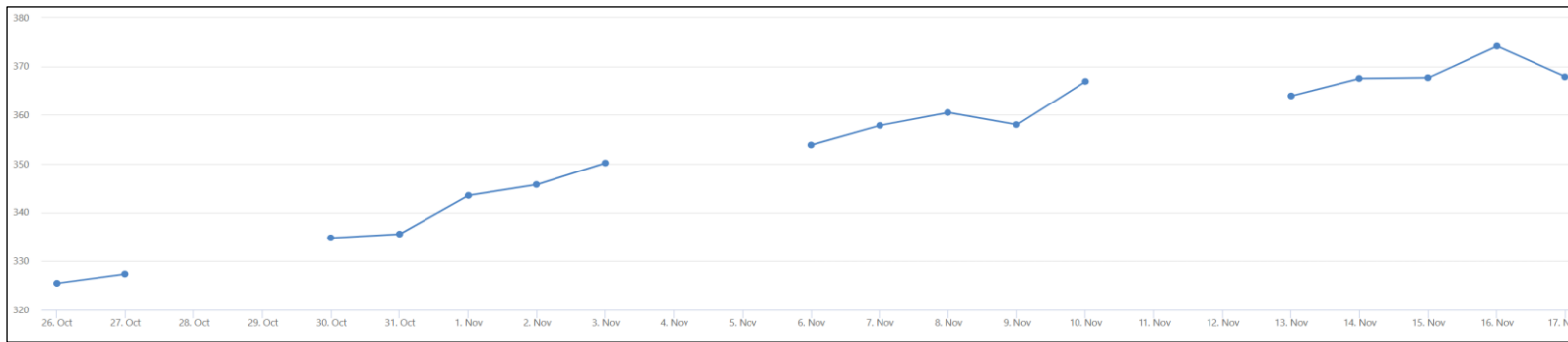


Sample, Weather data/Country (customer)

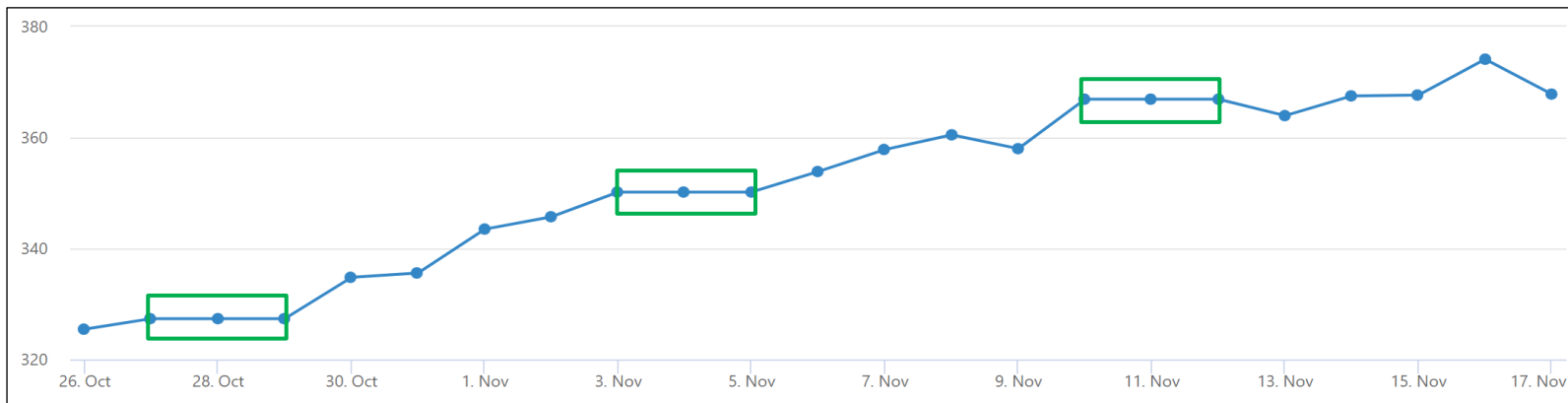


KQL Magic – series_fill_(forward, linear, ...)

```
Stock
| where Symbol in ('MSFT')
| where valueTimestamp between (datetime(2023-10-26) .. datetime(2023-11-17))
| make-series sValue = take_any(close) default=real(null) on valueTimestamp step 1d by Symbol
| render linechart with(xcolumn=valueTimestamp, series=Symbol)
```



```
| extend sValue = series_fill_forward(sValue)
| render linechart with(xcolumn=valueTimestamp, series=Symbol)
```



series_fill_backward()

series_fill_const()

series_fill_forward()

series_fill_linear()

Some ADX Functions

Time Series Analysis - Azure Data Explorer | Microsoft Learn

▼ Kusto Query Language

- Kusto query overview
- Quick reference guide
- Tutorial
- Samples
- › Query best practices
- › Cross-cluster queries
- › Entities
- › Data types
- › Functions
- › Query statements
- › Tabular operators
- › Special functions
- › Scalar operators
- › Scalar functions
- › Aggregation functions
- › **Geospatial**
- › Time series analysis
- › Plugins
- › Window functions
- › Limits and Errors
- › Reference material for Kusto Query Language
- › Query tools

▼ Time series analysis

Time series analysis overview

make-series operator
series_abs()
series_acos()
series_add()
series_asin()
series_atan()
series_cos()
series_decompose()
series_decompose_anomalies()
series_decompose_forecast()
series_divide()
series_equals()
series_exp()
series_fft()
series_fill_backward()
series_fill_const()
series_fill_forward()
series_fill_linear()
series_fir()
series_fit_2lines()
series_fit_2lines_dynamic()
series_fit_line()
series_fit_line_dynamic()

series_fit_poly()
series_greater()
series_greater_equals()
series_ifft()
series_iir()
series_less()
series_less_equals()
series_multiply()
series_not_equals()
series_outliers()
series_pearson_correlation()
series_periods_detect()
series_periods_validate()
series_pow()
series_seasonal()
series_sign()
series_sin()
series_stats()
series_stats_dynamic()
series_subtract()
series_tan()

▼ Geospatial

Geospatial clustering overview
Geospatial visualizations
geo_distance_2points()
geo_distance_point_to_line()
geo_distance_point_to_polygon()
geo_intersects_2lines()
geo_intersects_2polygons()
geo_intersects_line_with_polygon()
geo_intersection_2lines()
geo_intersection_2polygons()
geo_intersection_line_with_polygon()
geo_line_centroid()
geo_line_densify()
geo_line_length()
geo_line_simplify()
geo_polygon_area()
geo_polygon_centroid()
geo_polygon_densify()
geo_polygon_perimeter()
geo_polygon_simplify()
geo_polygon_to_s2cells()
geo_point_in_circle()
geo_point_in_polygon()
geo_point_to_geohash()
geo_point_to_h3cell()

geo_point_to_s2cell()
geo_geohash_to_central_point()
geo_geohash_neighbors()
geo_geohash_to_polygon()
geo_s2cell_to_central_point()
geo_s2cell_neighbors()
geo_s2cell_to_polygon()
geo_h3cell_to_central_point()
geo_h3cell_neighbors()
geo_h3cell_to_polygon()
geo_h3cell_children()
geo_h3cell_level()
geo_h3cell_rings()
geo_simplify_polygons_array()
geo_union_lines_array()
geo_union_polygons_array()

Agenda

- Introduction
- Microsoft Fabric Realtime Intelligence
- Microsoft Fabric Data Agent
- Agent integration tools and technologies
- Copilot Studio in action
- Conclusion

Data Agent

Transform
/Store



Eventhouse

Shortcut
& Mirror



Lakehouse

Present/React



Real-Time
Dashboards



Data Agent



Power BI



Data engineering
notebook



Data
Activator

What ist the earliest measurement for noise in Lausanne and the latest?

The earliest and latest noise measurements for sensors in Lausanne are as follows:

- **Earliest noise measurement:**

- **sensor-005:** 21st July 2025, 11:10:03 AM
- **sensor-006:** 21st July 2025, 12:04:50 PM

- **Latest noise measurement:**

- **sensor-005:** 22nd July 2025, 08:45:06 AM
- **sensor-006:** 22nd July 2025, 08:45:02 AM

how warm is it in Basel

The temperature measurements from the sensor in Basel (sensor-004) show that the recent temperature readings are around 23.56°C and 24.57°C. So, it is currently warm in Basel, with temperatures in the mid-20s°C.

Was ist die letzte bekannte Temperatur in Basel

Die letzte bekannte Temperatur in Basel, gemessen von Sensor-004, beträgt 24.57°C.

sensorid	metric	timestamp	value
sensor-008	temperature	2025-07-21 11:08:15.3199030	26.75
sensor-008	humidity	2025-07-21 11:08:15.3199030	42.22
sensor-008	noise	2025-07-21 11:08:15.3199030	33.43
sensor-009	temperature	2025-07-21 11:08:56.6375250	19.78

ABC sensorid	ABC brand	ABC equipment	ABC city
sensor-001	ABB	Turbine Controller	Zurich
sensor-002	Siemens	Voltage Regulator	Geneva
sensor-003	GE	Transformer Monitor	Bern
sensor-004	Hitachi	Circuit Breaker Sens...	Basel
sensor-005	Schneider	Load Balancer	Lausanne
sensor-006	ABB	Power Meter	Lausanne

ABC city	12F latitude	12F longitude
Basel	47.559600	7.588600
Bern	46.948100	7.447400
Geneva	46.204400	6.143200
Lausanne	46.519700	6.632300
Lucerne	47.050200	8.309300

Data Agent

Transform
/Store



Eventhouse

Shortcut
& Mirror



Lakehouse

Present/React



Real-Time
Dashboards



Data Agent



Power BI



Data engineering
notebook



Data
Activator

What ist the earliest measurement for noise in Lausanne and the latest?

The earliest and latest noise measurements for sensors in Lausanne are as follows:

- **Earliest noise measurement:**

- **sensor-005:** 21st July 2025, 11:10:03 AM
- **sensor-006:** 21st July 2025, 12:04:50 PM

- **Latest noise measurement:**

- **sensor-005:** 22nd July 2025, 08:45:06 AM
- **sensor-006:** 22nd July 2025, 08:45:02 AM

how warm is it in Basel

The temperature measurements from the sensor in Basel (sensor-004) show that the recent temperature readings are around 23.56°C and 24.57°C. So, it is currently warm in Basel, with temperatures in the mid-20s°C.

Was ist die letzte bekannte Temperatur in Basel

Die letzte bekannte Temperatur in Basel, gemessen von Sensor-004, beträgt 24.57°C.

sensorid	metric	timestamp	value
sensor-008	temperature	2025-07-21 11:08:15.3199030	26.75
sensor-008	humidity	2025-07-21 11:08:15.3199030	42.22
sensor-008	noise	2025-07-21 11:08:15.3199030	33.43
sensor-009	temperature	2025-07-21 11:08:56.6375250	19.78

ABC sensorid	ABC brand	ABC equipment	ABC city
sensor-001	ABB	Turbine Controller	Zurich
sensor-002	Siemens	Voltage Regulator	Geneva
sensor-003	GE	Transformer Monitor	Bern
sensor-004	Hitachi	Circuit Breaker Sens...	Basel
sensor-005	Schneider	Load Balancer	Lausanne
sensor-006	ABB	Power Meter	Lausanne

ABC city	12F latitude	12F longitude
Basel	47.559600	7.588600
Bern	46.948100	7.447400
Geneva	46.204400	6.143200
Lausanne	46.519700	6.632300
Lucerne	47.050200	8.309300

Data Agent

Transform
/Store

Present/React



Eventhouse



Data Agent



Lakehouse

Powr BI

What ist the earliest measurement for noise in Lausanne and the latest?

The earliest and latest noise measurements for sensors in Lausanne are as follows:

- **Earliest noise measurement:**

- **sensor-005:** 21st July 2025, 11:10:03 AM
- **sensor-006:** 21st July 2025, 12:04:50 PM

- **Latest noise measurement:**

- **sensor-005:** 22nd July 2025, 08:45:06 AM
- **sensor-006:** 22nd July 2025, 08:45:02 AM

how warm is it in Basel

The temperature measurements from the sensor in Basel (sensor-004) show that the recent temperature readings are around 23.56°C and 24.57°C. So, it is currently warm in Basel, with temperatures in the mid-20s°C.

Was ist die letzte bekannte Temperatur in Basel

Die letzte bekannte Temperatur in Basel, gemessen von Sensor-004, beträgt 24.57°C.

sensorid	metric	timestamp	value
sensor-008	temperature	2025-07-21 11:08:15.3199030	26.75
sensor-008	humidity	2025-07-21 11:08:15.3199030	42.22
sensor-008	noise	2025-07-21 11:08:15.3199030	33.43
sensor-009	temperature	2025-07-21 11:08:56.6375250	19.78

ABC sensorid	ABC brand	ABC equipment	ABC city
sensor-001	ABB	Turbine Controller	Zurich
sensor-002	Siemens	Voltage Regulator	Geneva
sensor-003	GE	Transformer Monitor	Bern
sensor-004	Hitachi	Circuit Breaker Sens...	Basel
sensor-005	Schneider	Load Balancer	Lausanne
sensor-006	ABB	Power Meter	Lausanne

Create Agent

Create data agent

TelemetryAgent

CreateCancel

2

Explorer

+ Datenquelle

▼ SensorData

> ☐ BronzeMetrics

☒ SilverMetrics

measurandId

metric

sensorId

timestamp

value

▼ VPP_LH

▼ dbo

> ☐ CityCoordinates

☒ SensorInfo

brand

city

equipment

sensorId

> ☐ SilverMetrics

sensorId	metric	timestamp	value
sensor-008	temperature	2025-07-21 11:08:15.3199030	26.75
sensor-008	humidity	2025-07-21 11:08:15.3199030	42.22
sensor-008	noise	2025-07-21 11:08:15.3199030	33.43
sensor-009	temperature	2025-07-21 11:08:56.6375250	19.78

3

ABC sensorId	ABC brand	ABC equipment	ABC city
sensor-001	ABB	Turbine Controller	Zurich
sensor-002	Siemens	Voltage Regulator	Geneva
sensor-003	GE	Transformer Monitor	Bern
sensor-004	Hitachi	Circuit Breaker Sens...	Basel
sensor-005	Schneider	Load Balancer	Lausanne
sensor-006	ABB	Power Meter	Lausanne

Data agent instructions

Help the data agent understand your data by writing a detailed system prompt.

Example queries

For each data source, add common questions and how to interpret them.

The lakehouse VPP_LH contains metadata about the sensors used in the eventhouse SensorData. These datasets are linked via the sensorId column in both SensorData.SilverMetrics and VPP_LH.SensorInfo.

Data agent instructions

Help the data agent understand your data by writing a detailed system prompt.

×

To find sensors (sensorId) and their corresponding locations (city), use the VPP_LH.SensorInfo table.

To get a count of measurements (e.g., temperature) per city:

1. Count the measurements in SensorData per sensorId.
2. Link the results to the corresponding city using SensorInfo.

If someone asks for the value of a measurement in a specific city:

Always start with SensorInfo and filter by city to find relevant sensorIds (there may be more than one).

2. Use these sensorIds to query SilverMetrics for the measurement values.

If you are asked for measured metrics, e.g. Temperatur, Lärm, Luftfeuchtigkeit, you can use the metric attribute in the SilverMetrics table. The terms in this table are recorded in English, e.g., "temperature", "humidity", "noise".

Meta data is always in english, don't translate them

If you are asked in English, then please provide the answers also in English, if you are asked in German then use German for the answer. But please don't translate values coming from tables.

Always use in (,) if you have to filter for multiple items, instead of running multiple where = queries

Example queries

For each data source, add common questions and how to interpret them.

Four KQL Sample Queries

Example KQL queries

Add examples of how a natural language question would become a KQL query for your data. The data agent will automatically select up to three valid examples to share with the model each time it handles a user question. [Learn more](#)

+ Add example ↑ Import from .json ↓ Download all as .json 🗑 Delete

🔍 Filter by keyword

Showing 4 items (0 selected)

☐ Question

KQL query



What was the highest temperature and at wich day does it occur

63/500 characters used

```
SilverMetrics
| where metric == 'temperature'
| order by value
| take 1
| project timestamp, value
```

103/1000 characters used



what was the highest measured temperature and what was the sensor reporting it?

79/500 characters used

```
SilverMetrics
| where metric == 'temperature'
| order by value
| take 1
| project timestamp, sensorId, value
```

113/1000 characters used

Example queries

For each data source, add common questions and how to interpret them.

Two SQL Sample Queries

Example SQL queries

Add examples of how a natural language question would become a SQL query for your data. The data agent will automatically select up to three valid examples to share with the model each time it handles a user question. [Learn more](#)

+ Add example ↑ Import from .json ↓ Download all as .json 🗑 Delete

🔍 Filter by keyword

Showing 2 items (0 selected)

☐ Question

SQL query

☐

what are the sensors installed in a certain city, e.g. Bern

59/500 characters used

```
SELECT sensorId
FROM SensorInfo
WHERE city = 'Bern'
```

54/1000 characters used

☐

Give me all details to sensors (sensorId, brand, equipment, city) in a certain city, e.g. Lausanne

98/500 characters used

```
SELECT *
FROM SensorInfo
WHERE city = 'Lausanne'
```

51/1000 characters used

Task Decomposition Analysis

How many measurement data points do you have for temperature

There are 2,099 measurement data points for temperature in the dataset.

1 Schritt abgeschlossen ▼

🕒 Antwortzeit: 11 Sek

how many of them are coming from lausanne

There are 481 temperature measurement data points coming from Lausanne.

2 Schritte abgeschlossen ▼

🕒 Antwortzeit: 22 Sek

Task Decomposition Analysis

How many measurement data points do you have for temperature

There are 2,099 measurement data points for temperature in the dataset.

1 Schritt abgeschlossen ▾

🕒 Antwortzeit: 11 Sek

✓ Analysiert SensorData Kusto für: „Count the total number of measurement data points where the metric is 'temperature'.“

</> Abfragecode

KQL

```
SilverMetrics
| where metric == "temperature"
| summarize countTemperatureMeasurements=count()
```

📊 Abfrageausgabe

countTemperatureMeasurements

2099

Task Decomposition Analysis - 2

how many of them are coming from lausanne

There are 481 temperature measurement data points coming from Lausanne.

2 Schritte abgeschlossen ^

🕒 Antwortzeit: 22 Sek



Analysiert VPP_LH Lakehouse für: „List all sensorIds that are located in the city of Lausanne.“



Analysiert
is in (ser



Analysiert VPP_LH Lakehouse für: „List all sensorIds that are located in the city of Lausanne.“



</> Abfragecode

Sql



```
SELECT sensorId
FROM SensorInfo
WHERE city = 'Lausanne'
```

Task Decomposition Analysis - 3

how many of them are coming from lausanne

There are 481 temperature measurement data points coming from Lausanne.

2 Schritte abgeschlossen ^

⌚ Antwortzeit: 22 Sek

- ✓ Analysiert VPP_LH Lakehouse für: „List all sensorIds that are located in the city of Lausanne.“
- ✓ Analysiert SensorData Kusto für: „Count all temperature measurement data points where the sensorId is in (sensor-005, sensor-006).“

✓ Analysiert SensorData Kusto für: „Count all temperature measurement data points where the sensorId is in (sensor-005, sensor-006).“

</> Abfragecode

KQL

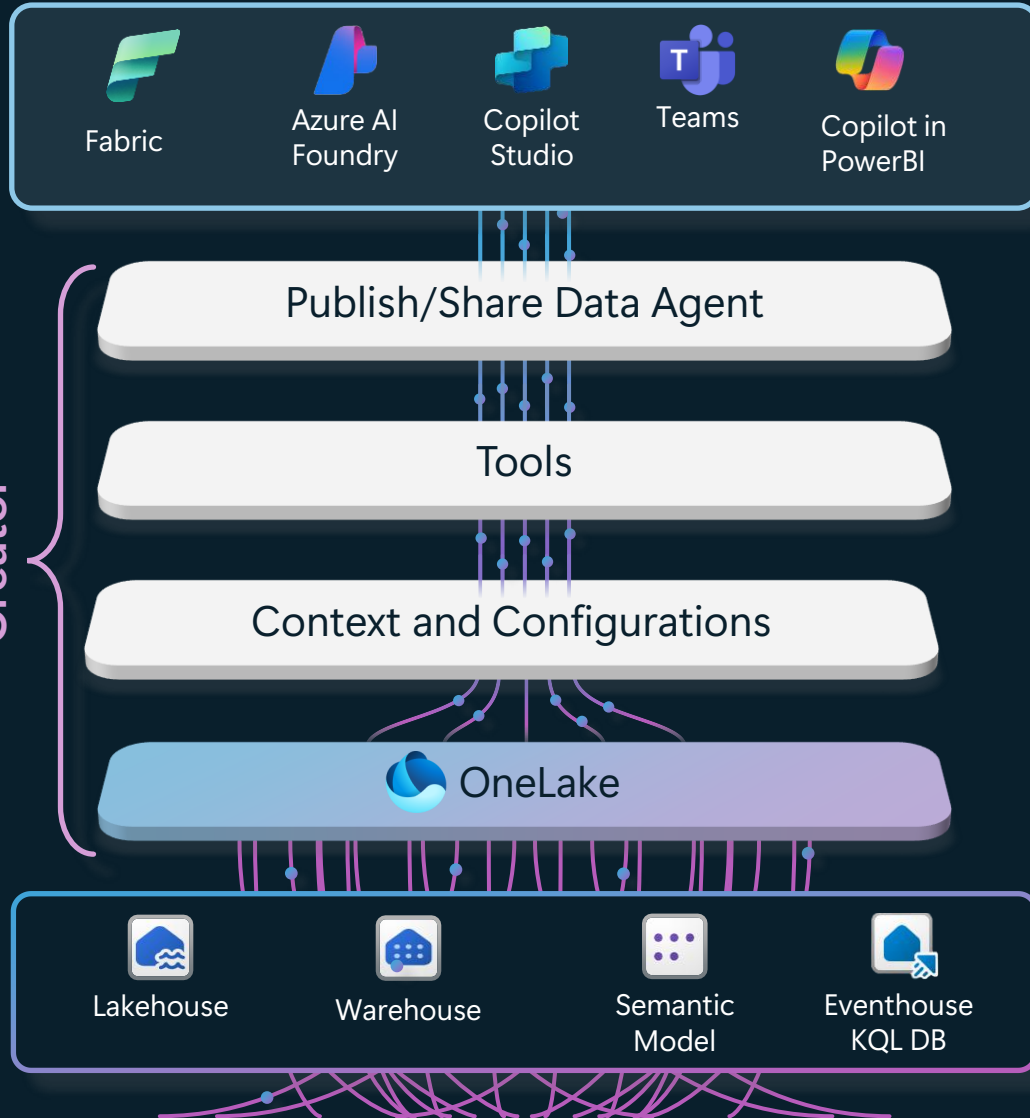
```
SilverMetrics
| where metric == "temperature" and sensorId in ("sensor-005", "sensor-006")
| summarize countTemperatureMeasurements=count()
```

Abfrageausgabe

countTemperatureMeasurements
481

Fabric data agents

 Consumer



The **conversational data agent** allows users to interact and analyze data with natural language, enhancing accessibility and usability.



Chat canvas for creators with **new debugging capabilities**, making it easier to understand and refine responses.



Seamlessly reason over **multiple** data sources, including **Data Warehouse, Lakehouse, Semantic models** and **Eventhouse KQL databases**, to create a powerful Data Expert tailored to your data domain.



Your Data Agent can be consumed inside and outside of Fabric. Stay tuned for **upcoming integrations** with your own custom applications.

Fabric Data Agent Python SDK

The Fabric Data Agent Python SDK library facilitates programmatic access to Fabric Data Agent artifacts. The SDK is designed for code-first users, and it simplifies the creation, management, and utilization of Fabric data agents within Microsoft Fabric notebooks.

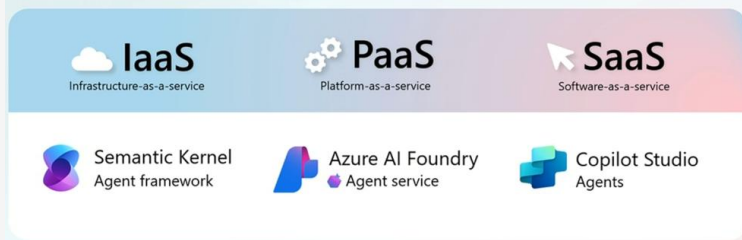
Use for:

- ✓ Automate Fabric Data Agent creation
- ✓ Automate Data Agent testing

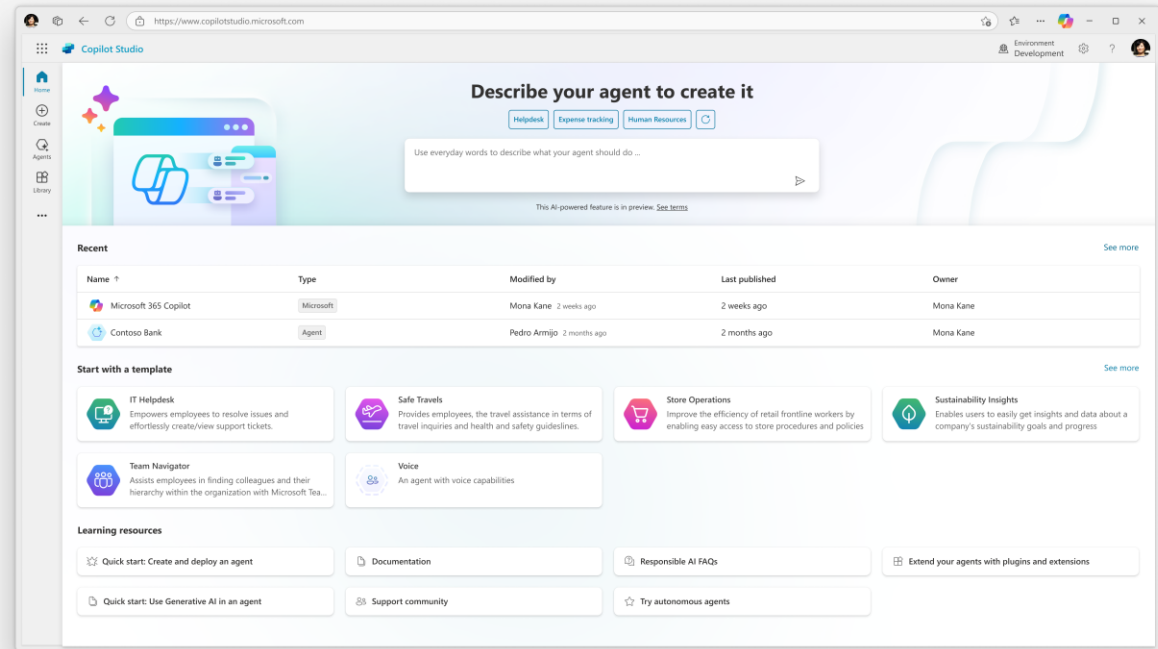
[Fabric data agent Python SDK \(preview\) - Microsoft Fabric | Microsoft Learn](#)



Copilot Studio



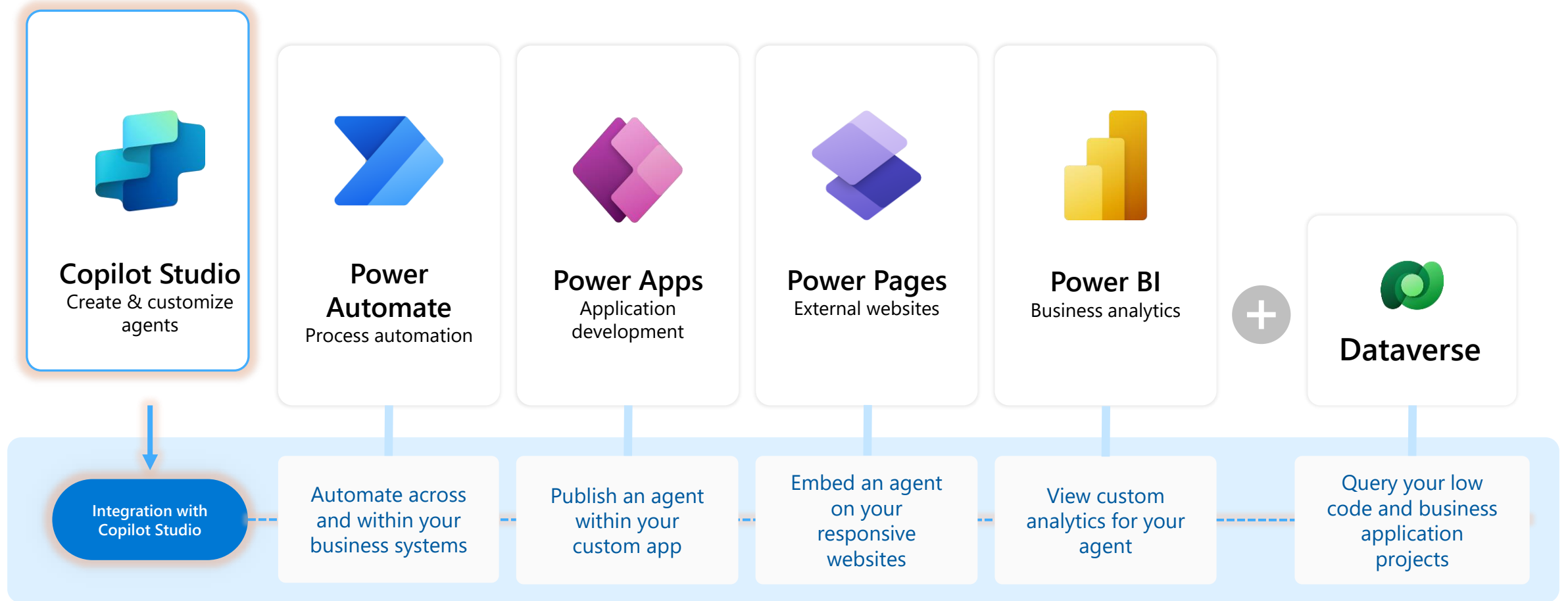
Copilot Studio is a low code tool for **building agents** and **extending Microsoft 365 Copilot**.



- ✔ Meet your users where they already are
- ✔ Access everything in one place
- ✔ Automate your workflows
- ✔ Integrate with your external apps
- ✔ Connect to your data in Microsoft 365

Microsoft Power Platform

Accelerate app development, automate workflows, visualize data, and reduce repetitive tasks with AI-powered tools



Microsoft 365

Copilot Studio



Microsoft



Multi-Channel Platform

Dynamics for Customer Service



Voice



Teams



Custom

SMS



Azure
Communication
Services



TeleSign



Twilio

SOCIAL CHANNELS



Apple Messages
for Business



Facebook



Google's Business
Messages



WhatsApp
through Twilio



Line



WeChat

Microsoft Partners



Native to Copilot Studio



Microsoft Copilot (preview)
Publish plugins to a Microsoft
Copilot for a unified experience.



Microsoft Teams
Chat with your bot through a Teams
app.



Demo website
Try out your bot and invite team
members to do the same.



Custom website
Activate your bot on your own
website.



Skype
Expand your bot's reach to
customers on Skype.



Slack
Expand your bot's reach to
customers on Slack.



Telegram
Chat with your bot through a Teams
app.



Twilio
Add your bot to a native or
web-based mobile app.



DirectLine Speech
Expand your bot's reach to
customers on DirectLineSpeech.



Mobile app
Add your bot to a native or
web-based mobile app.



Facebook
Connect with your customers on
Messenger.



LINE
Add your bot to a native or
web-based mobile app.



GroupMe
Expand your bot's reach to
customers on GroupMe.



Live Demo

Satya Nadella

Microsoft CEO



“What we are building is an **agentic world**... defined by a rich tapestry of AI agents, including

- personal agents which you will use across work and life,
- business process agents,
- and cross-organizational ones.

These agents are overlaid on top of the entire digital systems infrastructure we’ve already built”

