

# Configure Azure Stream Analytics with Event Hub and Blob Storage Inputs

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# Overview



## Overview of Azure Stream Analytics inputs

### Input categories

- Reference and stream inputs

### Supported reference inputs

- Azure Blob and Azure SQL Database

### Supported stream inputs

- Azure Event Hubs, IoT Hub, and Blob

### Steps to configure inputs

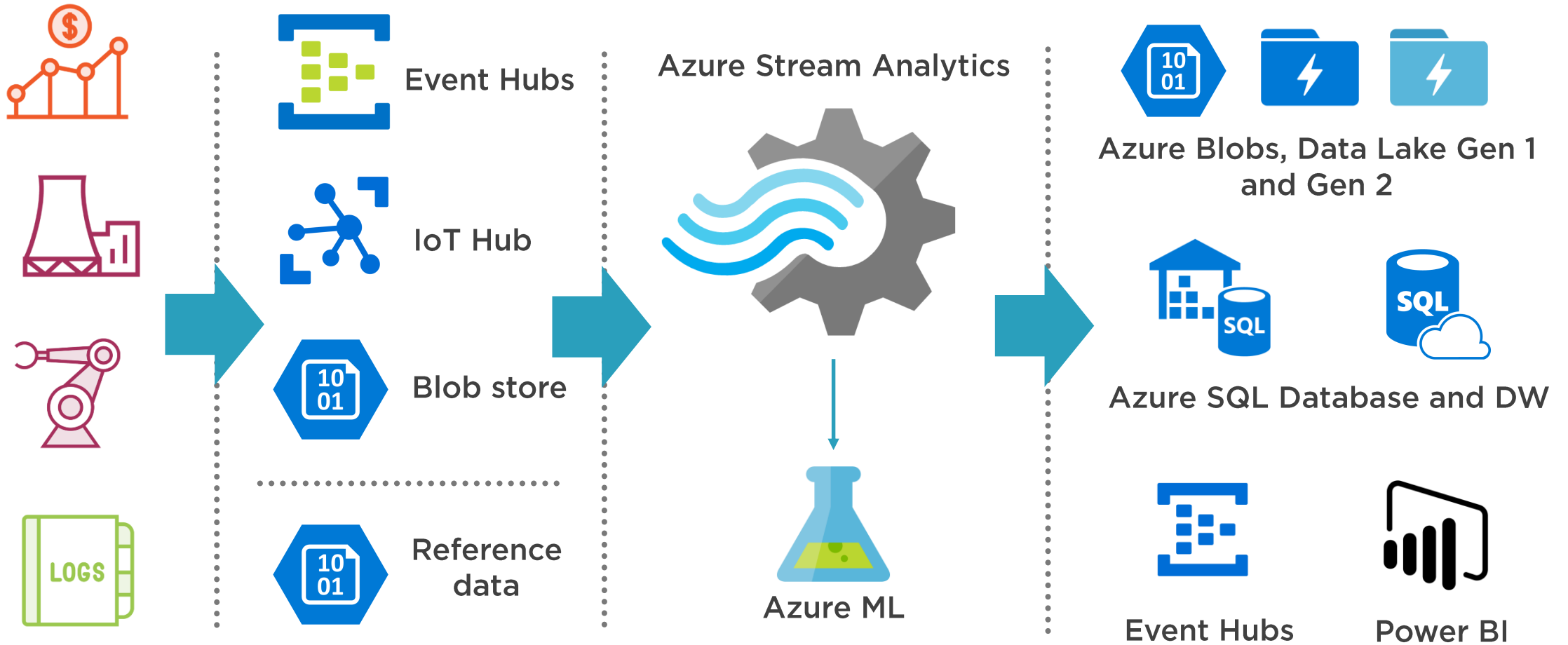
### Demo: Working with Azure Stream Analytics inputs



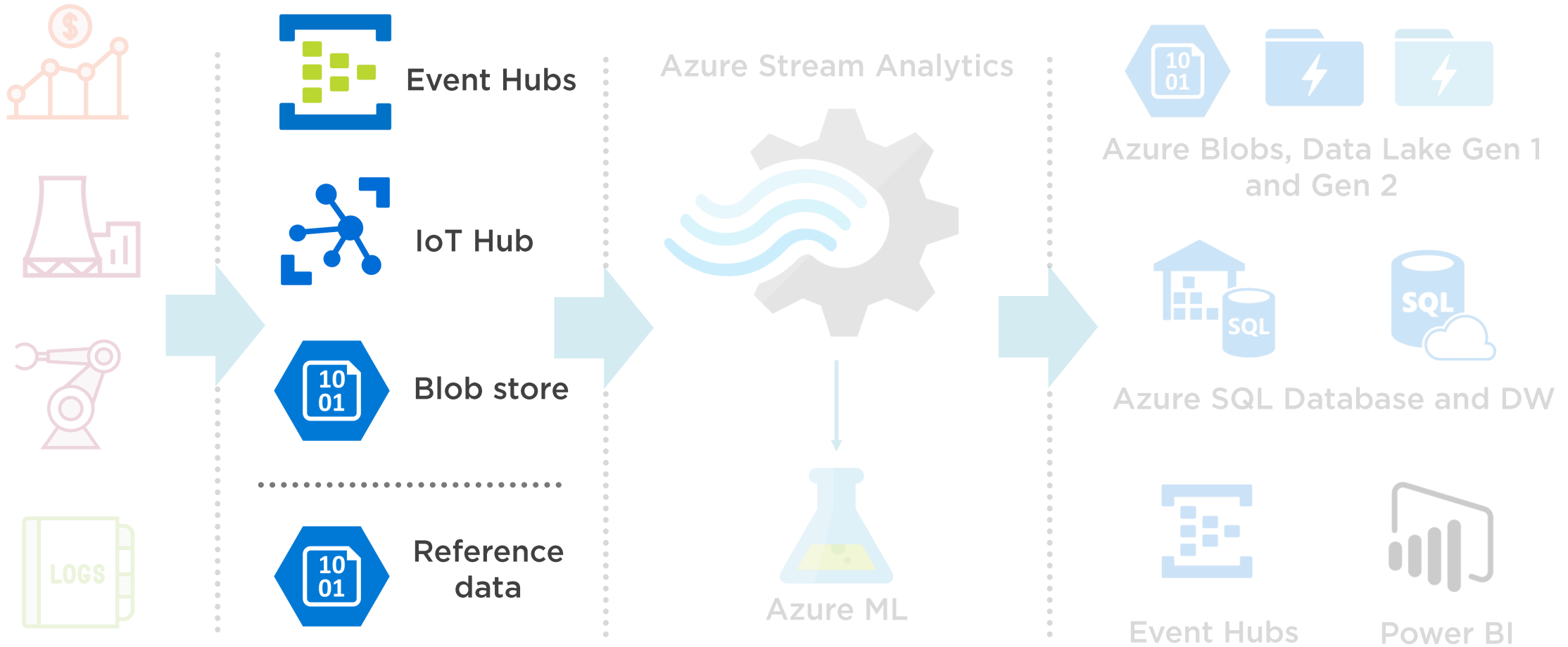
# Azure Stream Analytics Data Flow



# Azure Stream Analytics Data Flow



# Azure Stream Analytics Inputs



# Azure Stream Analytics Input Categories

**Data stream input**

**Reference data input**



# Data Stream Input

Any data stream which you need to process in real-time and act upon.





A data stream is an ongoing sequence of events over time

At least one data stream input for a Stream Analytics job

- Azure Event Hubs
- Azure IoT Hub
- Azure Blob storage



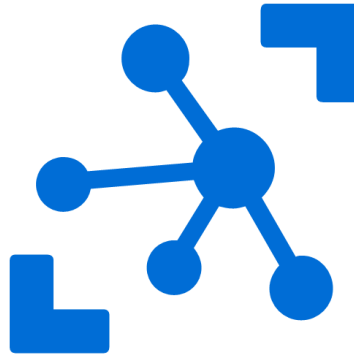


# Data Stream Inputs



## Azure Event Hubs

Any custom application



## Azure IoT Hub

Optimized for Internet of Things (IoT)



## Azure Blob storage

Bulk data such as log files



# Data Stream Inputs

Stock trade data

Azure SQL  
Database  
activities

Data generated by  
a gaming engine

Online banking  
activities

Data from heat  
sensors in a  
power plant

Log files from  
a custom  
application

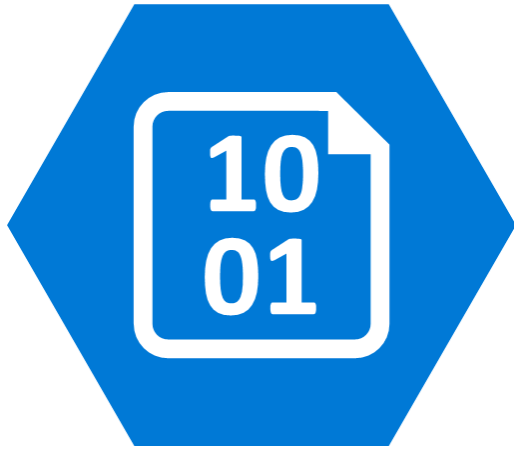


# Reference Data Input

Data which does not change or changes very slowly, such as metadata lookups.



# Reference Data Inputs



**Azure Blob storage**



**Azure SQL Database**

# Reference Data Inputs

**Metadata lookups**  
(device capacity, name, etc.)

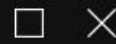
**Trusted entities**  
(registered devices)

**Acceptable thresholds**  
(allowed temperature, etc.)

**Any lookup or slow  
changing data**



## New Stream Analytics job



\* Job name

MyDemoSAJob01



\* Subscription

Pay-As-You-Go



\* Resource group

SADemoRG



[Create new](#)

\* Location

West US



Hosting environment ⓘ

Cloud

Edge

Streaming units (1 to 192) ⓘ



3

Create

[Automation options](#)



# Stream Analytics jobs

zaalion (Default Directory)



Add Edit columns Refresh | Assign tags

**Subscriptions:** Pay-As-You-Go – Don't see a subscription? [Open Directory](#) + [Subscription settings](#)

1 items

<input type="checkbox"/>	NAME	STATUS	CREATED	SUBSCRIPTION	TYPE	
<input type="checkbox"/>	<a href="#">MyDemoSAJob01</a>	Created	2019-10-05T18:12:54.483Z	<a href="#">Pay-As-You-Go</a>	Stream Analytics job	





# MyDemoSAJob01

Stream Analytics job

Search (Ctrl+/)

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Settings

Locks

Job topology

Inputs

Functions

Query

Outputs

Configure



Start



Stop



Delete



To start your job, you need to add an input. →

Resource group (change)  
SADemoRG

Status

---

Location

West US

Subscription (change)  
Pay-As-You-Go

Subscription ID  
19969c81-e8ff-4585-8c2f-3f196b588227

Send feedback  
UserVoice

Created

---

Started

---

Output watermark

---

Hosting environment  
Cloud



Inputs

0



Outputs

0



Query

Edit query

```
1 SELECT
2   *
3 INTO
4   [YourOutputAlias]
5 FROM
6   [YourInputAlias]
```





## MyDemoSAJob01 - Inputs

Stream Analytics job



Search (Ctrl+/)



Add stream input

Add reference input



Overview



Activity log



Access control (IAM)



Tags



Diagnose and solve problems

### Settings



Locks

### Job topology



Inputs



Functions



Query



Outputs

### Configure



Configure

NAME

SOURCE TYPE

SOURCE





## MyDemoSAJob01 - Inputs

Stream Analytics job



Search (Ctrl+/)



Add stream input

Add reference input



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Diagnose and solve problems

### Settings



Locks

### Job topology



Inputs



Functions



Query



Outputs

### Configure



Configure

Event Hub

IoT Hub

Blob storage

SOURCE TYPE

SOURCE





## MyDemoSAJob01 - Inputs

Stream Analytics job



Search (Ctrl+/)



+ Add stream input

+ Add reference input



Overview



Activity log



Access control (IAM)



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Diagnose and solve problems

### Settings



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Inputs



Functions



Query



Outputs

### Configure



Stream Analytics

NAME

Blob storage

SOURCE

SQL Database



## Event Hub


New input

\* Input alias


- ☐ Provide Event Hub settings manually
- ☒ Select Event Hub from your subscriptions

Subscription

Pay-As-You-Go 

\* Event Hub namespace 

StreamInput01 

\* Event Hub name 

- ☐ Create new ☒ Use existing

No Event Hubs available 

\* Event Hub policy name 

Loading... 

Event Hub policy key

.....

Save



# Demo



## Setting the stage

- Provisioning an Event Hubs instance
- Creating a .NET application to send telemetry data to Azure Event Hubs



# Demo



## Configuring Azure Event Hubs input for Azure Stream Analytics



# Summary



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