

Implement Azure Stream Analytics Data Visualization with Power BI



Reza Salehi

CLOUD CONSULTANT

@zaalion [linkedin.com/in/rezasalehi2008](https://www.linkedin.com/in/rezasalehi2008)



Overview



Azure Stream Analytics

- Microsoft Power BI
- Azure SQL Database

Power BI and Azure Stream Analytics

Introduction on Microsoft Power BI

- Resources to learn more

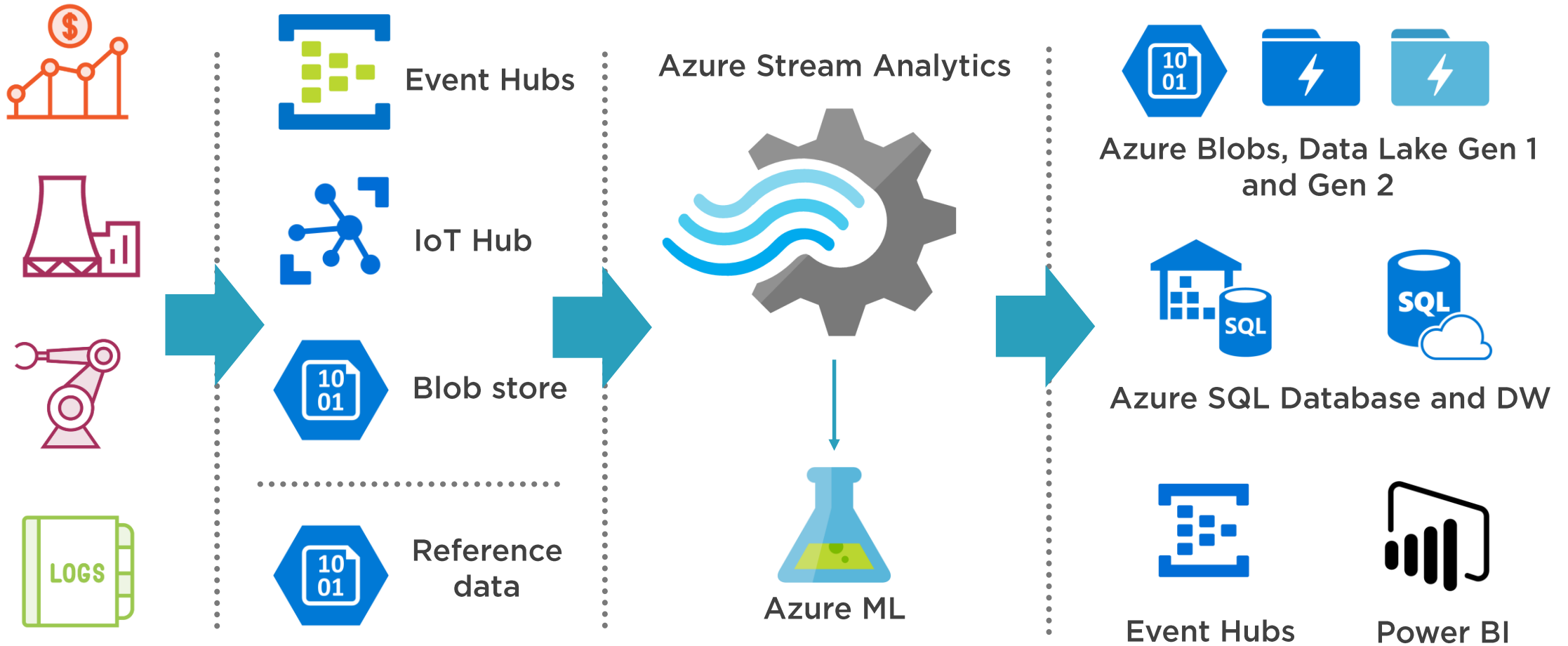
Configuring Power BI output for Azure Stream Analytics

Demo:

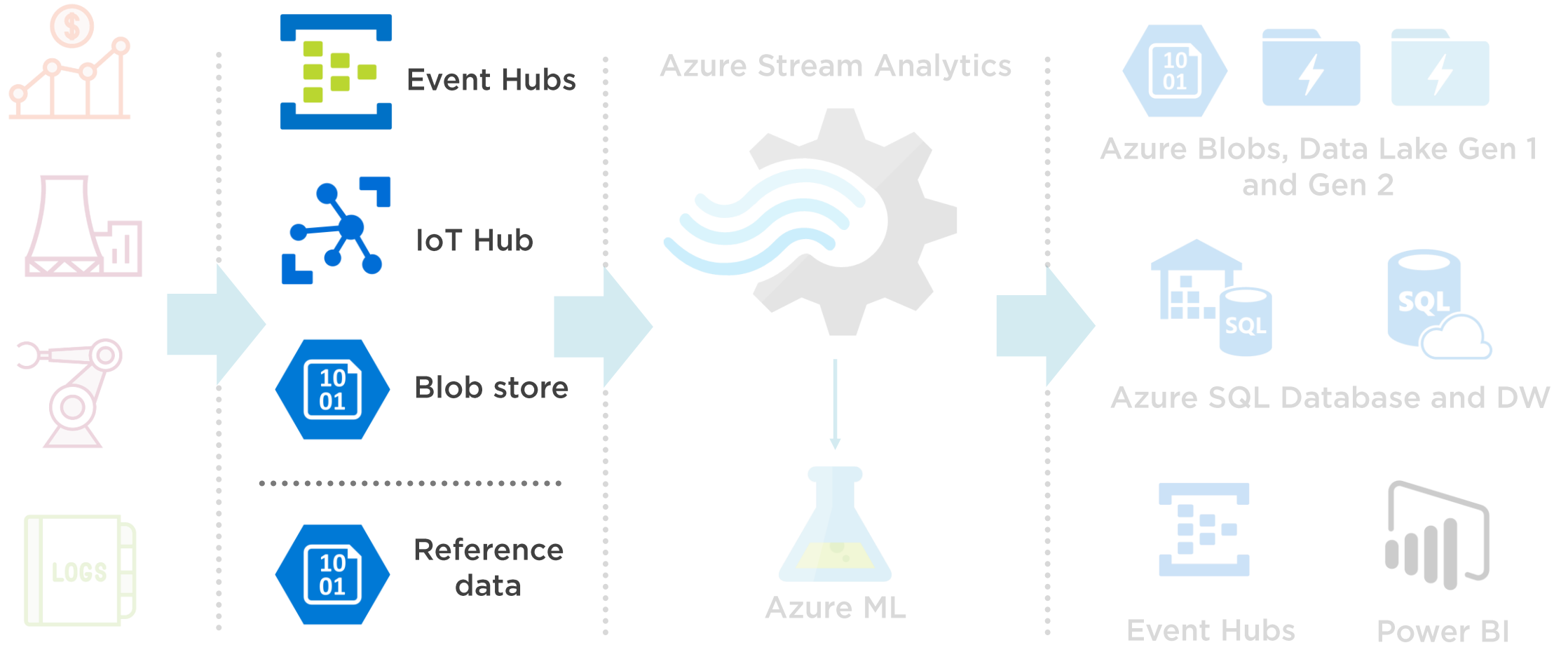
- Visualizing Stream Analytics output
- Configure Azure SQL Database output



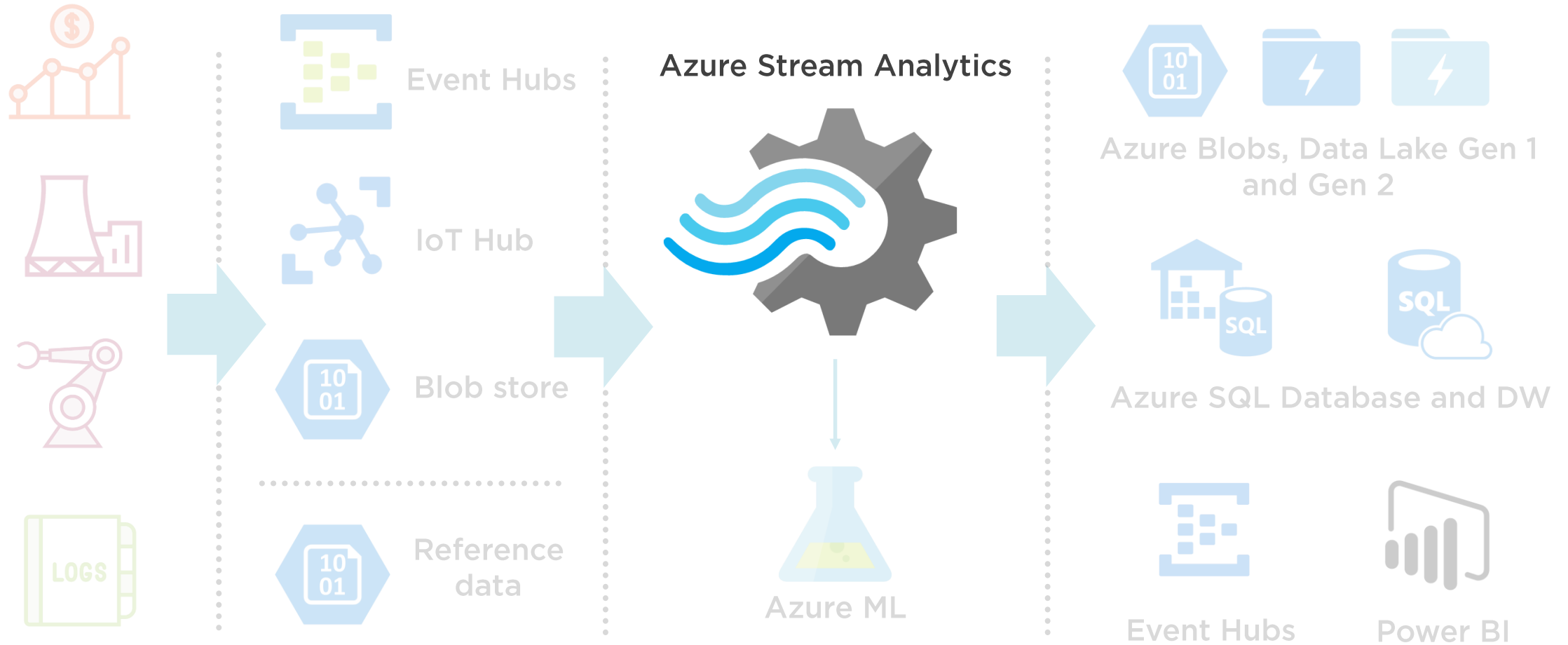
Azure Stream Analytics Data Flow



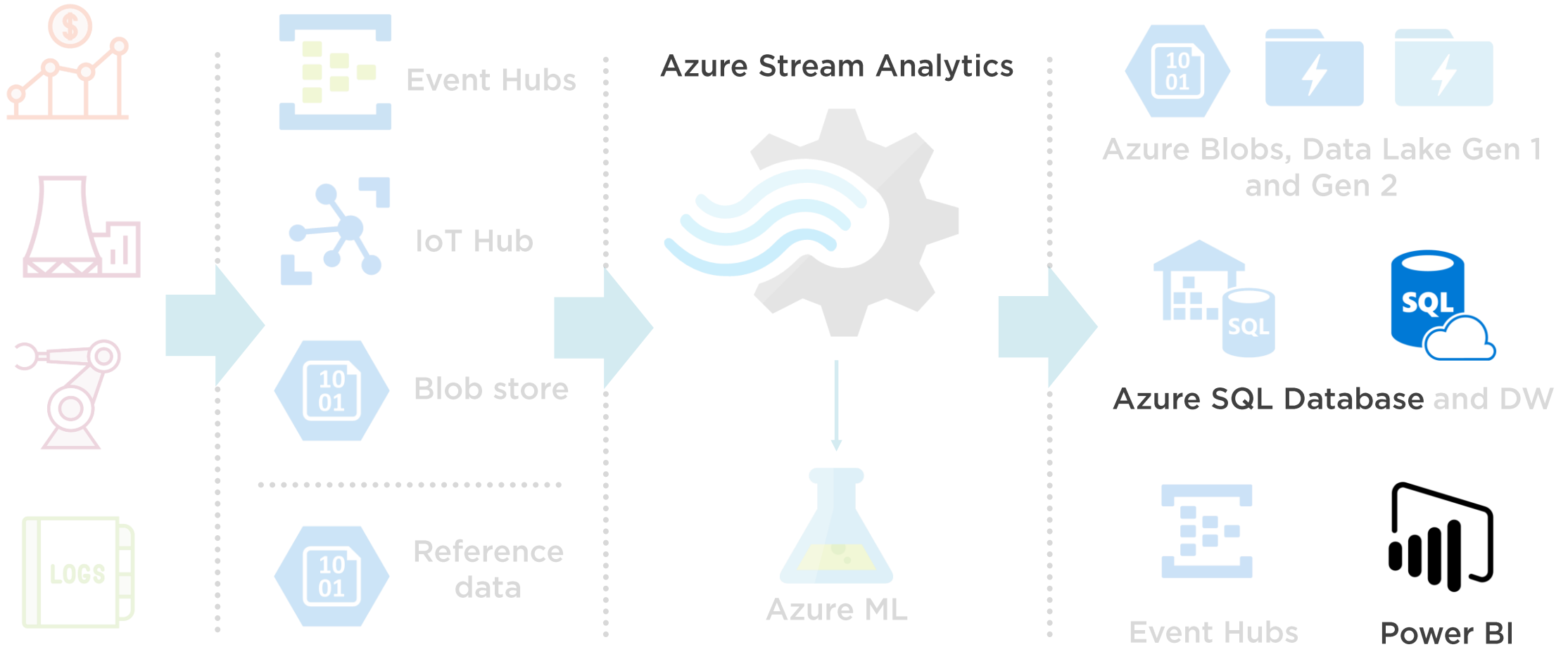
Azure Stream Analytics Data Flow



Azure Stream Analytics Data Flow



Azure Stream Analytics Data Flow



Power BI

Is a business analytics solution that lets you visualize your data.



Power BI



Visualize your data using advanced charts



Easily create reports on your data



Embed these charts and reports into your applications



Why use Power BI with
Azure Stream Analytics?



You can have real-time
insights into your data
using Power BI output.



<https://powerbi.microsoft.com/en-us/>



Power BI

Products

Pricing

Solutions

Partners

Learn

Community

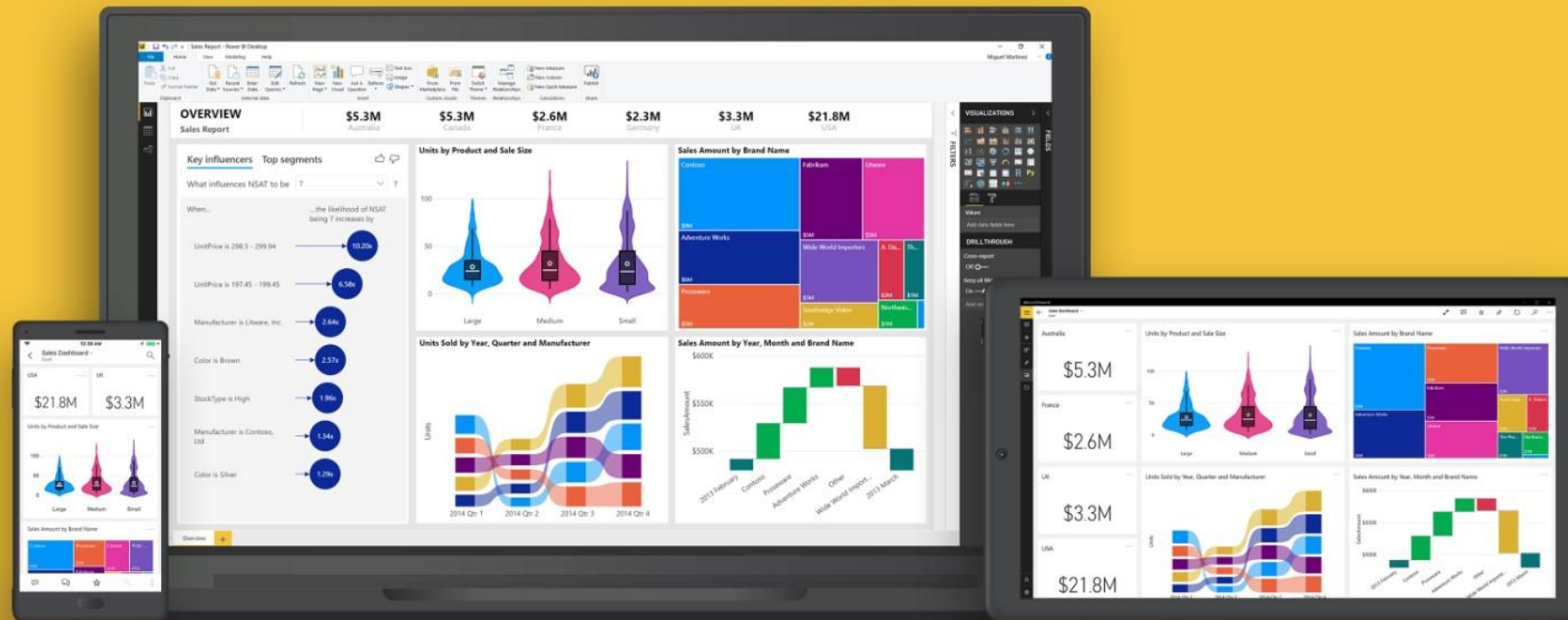
Sign in

Sign up free

Business intelligence like never before

Go from data to insights in minutes.
Any data, any way, anywhere. And all in one view.

START FREE >



<https://powerbi.microsoft.com/en-us/get-started/>



Power BI

Products

Pricing

Solutions

Partners

Learn

Community

Sign in

Sign up free

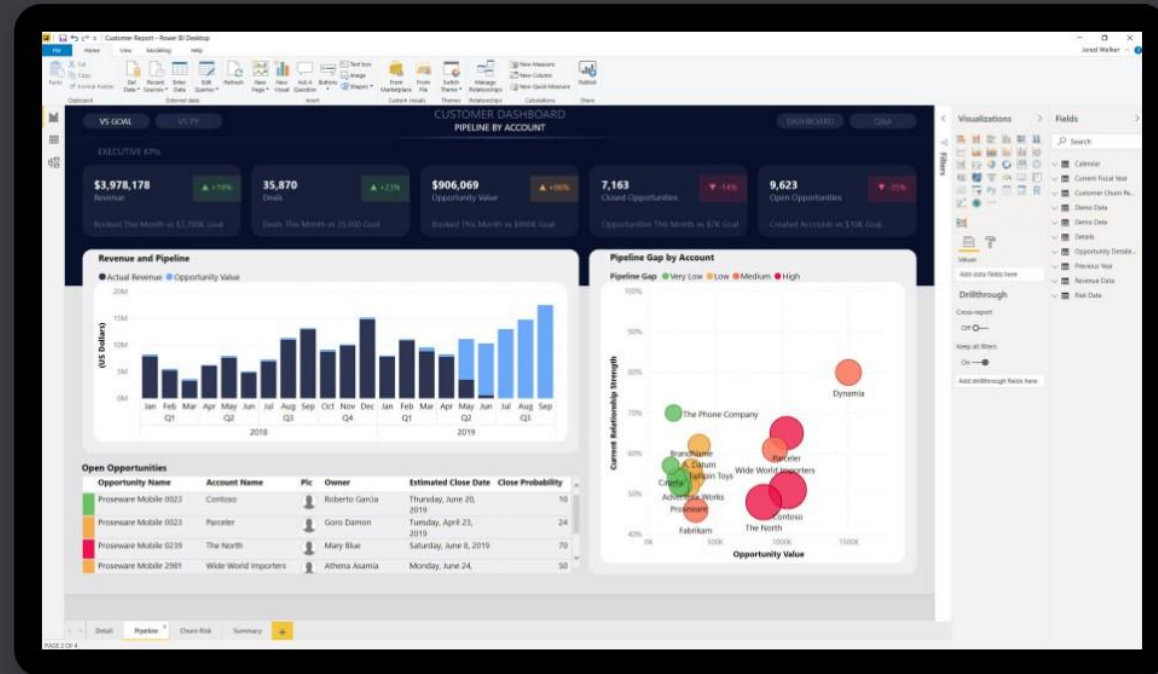
Getting started with Power BI Desktop

Less data prep, more data wow

Visually explore your data with a freeform drag-and-drop canvas, modern data visualizations, and simple report authoring.

Download free >

Advanced download options >



Start sharing your data visualizations and insights



Power BI pricing

Analytics for every organization

US Dollar (\$)

Do you need self-service BI?

Choose Power BI Pro

- Self-service and modern BI in the cloud
- Collaboration, publishing, sharing, and ad hoc analysis
- Fully managed by Microsoft

Power BI Pro

\$9.99

Monthly price per user

[Get started >](#)

Do you need advanced analytics, big data support, and on-premises and cloud reporting?

Add Power BI Premium

- Enterprise BI, big data analytics, cloud and on-premises reporting
- Advanced administration and deployment controls
- Dedicated cloud compute and storage resources
- Allow any user to consume Power BI content

Power BI Premium

\$4,995

Monthly price per dedicated cloud compute and storage resource

[Request a consultation >](#)

[Compare features](#)



A Power BI account is needed
to set up Azure Stream
Analytics output.



MyDemoSAJob01 - Outputs - M

portal.azure.com/#@zaalion.com/resource/subscriptions/19969c81-e8ff-4585-8c2f-3f196b588227/resourceGroups/SADemoRG/providers/Microsoft.StreamAnalytics/streamingjobs/MyDemoSAJob01/outputs

Microsoft Azure

Search resources, services, and docs (G+)

zaalion@outlook.com
ZAALION (DEFAULT DIRECTORY)

+

Create a resource

Home

Dashboard

All services

FAVORITES

Resource groups

Managed databases

SQL databases

Application Insights

App Services

Monitor

App Service plans

Security Center

Azure DevOps

Cost Management + Billing

Storage accounts

Stream Analytics jobs

Home > Stream Analytics jobs > MyDemoSAJob01 - Outputs

MyDemoSAJob01 - Outputs

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

Storage account settings

Scale

+ Add

NAME	SINK
------	------



MyDemoSAJob01 - Outputs - M x +

portal.azure.com/#@zaalion.com/resource/subscriptions/19969c81-e8ff-4585-8c2f-3f196b588227/resourceGroups/SADemoRG/providers/Microsoft.StreamAnalytics/streamingjobs/MyDemoSAJob01/outputs

Microsoft Azure

Search resources, services, and docs (G+)

zaalion@outlook.com
ZAALION (DEFAULT DIRECTORY)

Home > Stream Analytics jobs > MyDemoSAJob01 - Outputs

MyDemoSAJob01 - Outputs

Stream Analytics job

Search (Ctrl+)

+ Add

- Event Hub
- SQL Database
- Blob storage/Data Lake Storage
- Table storage
- Service Bus topic
- Service Bus queue
- Cosmos DB
- Power BI

SINK

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Settings

Locks

Job topology

Inputs

Functions

Query

Outputs

Configure

Storage account settings

Scale



Power BI - Microsoft Azure

portal.azure.com/#@zaalion.com/resource/subscriptions/19969c81-e8ff-4585-8c2f-3f196b588227/resourceGroups/SADemoRG/providers/Microsoft.StreamAnalytics/streamingjobs/MyDemoSAJob01/outputs

Microsoft Azure

Search resources, services, and docs (G+)

zaalion@outlook.com
ZAALION (DEFAULT DIRECTORY)

Create a resource

Home

Dashboard

All services

FAVORITES

Resource groups

Managed databases

SQL databases

Application Insights

App Services

Monitor

App Service plans

Security Center

Azure DevOps

Cost Management + Billing

Storage accounts

Stream Analytics jobs

Home > Stream Analytics jobs > MyDemoSAJob01 - Outputs

MyDemoSAJob01 - Outputs
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

Storage account settings

Scale

+ Add

NAME

Power BI

New output

* Output alias

Group workspace

Authorize connection to load workspaces

* Dataset name

* Table name

Authorize connection

You'll need to authorize with Power BI to configure your output settings.

Authorize

Don't have a Microsoft Power BI account yet?

Sign up

Note: You are granting this output permanent access to your Power BI dashboard. Should you need to revoke this access in the future you can do one of the following:

1. Change the user account password

Save



Getting Started with Power BI

by Stacia Misner Varga

This course teaches you the basic skills required for using Power BI to acquire and transform data, enhance the data for analysis, and produce reports and dashboards.



Start Course



Bookmark

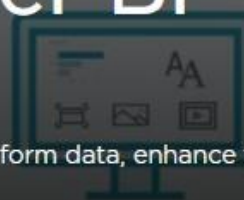


Add to Channel



Download Course

Exploring a Dashboard



Tiles

Combine content of different types from one or more datasets or external sources

Which customers are in Bellingham, Washington?

CustomerID	Age	Trips	Season	Customer	Trip	Season
1000	35	1	Spring	John	1	Spring
1001	35	1	Spring	John	1	Spring
1002	35	1	Spring	John	1	Spring
1003	35	1	Spring	John	1	Spring
1004	35	1	Spring	John	1	Spring
1005	35	1	Spring	John	1	Spring
1006	35	1	Spring	John	1	Spring
1007	35	1	Spring	John	1	Spring
1008	35	1	Spring	John	1	Spring
1009	35	1	Spring	John	1	Spring
1010	35	1	Spring	John	1	Spring

Q&A

Ask questions of the data using natural language

Table of contents

Description

Transcript

Exercise files

Discussion

Recommended

Expand All



Course Overview



1m 28s



Introducing Power BI



29m 17s



Getting Data



18m 10s



Transforming Data



32m 30s



Modeling Data for Analysis



34m 0s



Enhancing the Data Model



22m 18s



Demo



**Visualizing Azure Stream Analytics
output with Power BI**



Demo



Configuring Azure SQL Database output for Azure Stream Analytics

- Power BI to use SQL data



Summary



Azure Stream Analytics

- Microsoft Power BI
- Azure SQL Database

Introduction on Microsoft Power BI

- Resources to learn more

Configuring Power BI output for Azure Stream Analytics

Demo:

- Visualizing Stream Analytics output
- Configure Azure SQL Database output

