



Azure Stream Analytics **Deep Dive**

Learning Objectives

Azure Stream Analytics: Deep Dive



- **What is a Streaming Unit?**
- **What are the key components of an ASA job?**
- **What input and output types can I select in ASA?**
- **How can queries help me obtain the data I need?**
- **How do I use the ASA portal to explore a job and select data inputs / outputs?**

Key Components

Azure Stream Analytics: Deep Dive



DEVICES



SENSORS



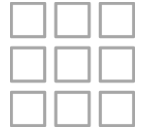
WEBSITES



SOCIAL MEDIA



APPLICATIONS



INFRASTRUCTURE
SYSTEMS



REAL-TIME STREAMING
DATA

Key Components

Azure Stream Analytics: Deep Dive



2 Input Types

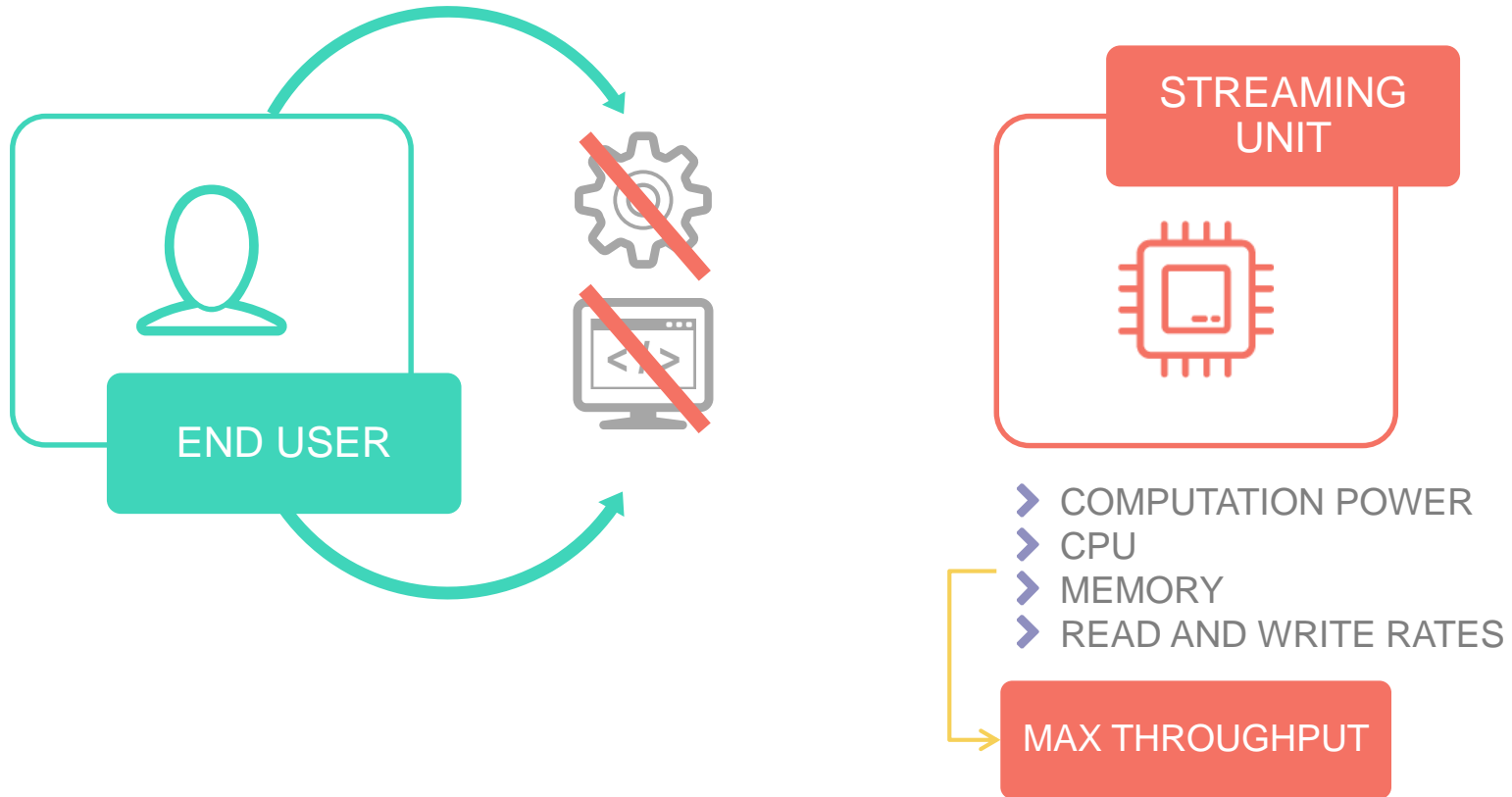
3 Data Sources

Similar to **SQL** Query Language

Output to Other **AZURE** Services

Key Components

Azure Stream Analytics: Deep Dive



DEMO

ASA Job Features

- Overview
- Activity Log
- Access Control (IAM)
- Tags & Locks



DEMO

Job Topology

- Inputs
- Functions
- Query
- Output



DEMO

Other ASA Job Features

- Configure
- General
- Monitoring
- Support +
- Troubleshooting

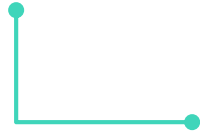


Input Types

Azure Stream Analytics: Deep Dive



DATA STREAM



REFERENCE
DATA

DATA STREAM



EVENT HUB



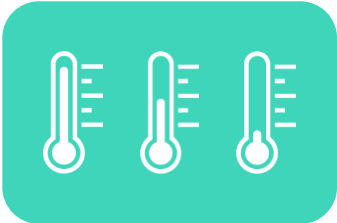
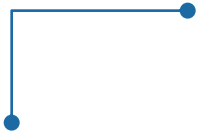
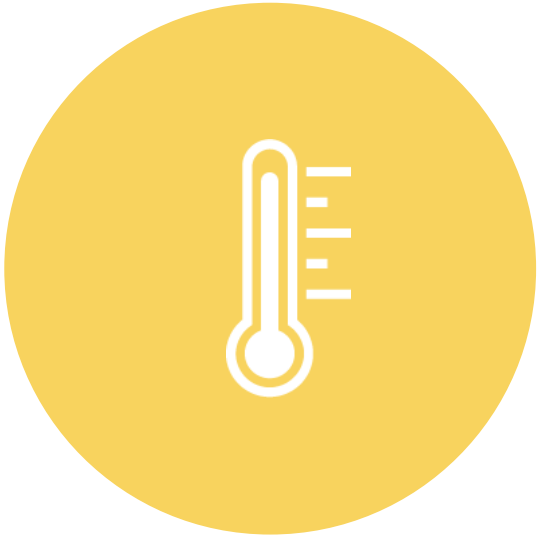
IOT HUB



BLOB STORAGE

Reference Data

Azure Stream Analytics: Deep Dive



- CSV
- JSON
- AVRO

Reference Data

Azure Stream Analytics: Deep Dive



Big File: **150 Mb**

 **75 Mb**

 **75 Mb**

DEMO

Input Types

- Input Alias
- Source Type
- Source > Data Stream
- Source > Reference
Data



Queries

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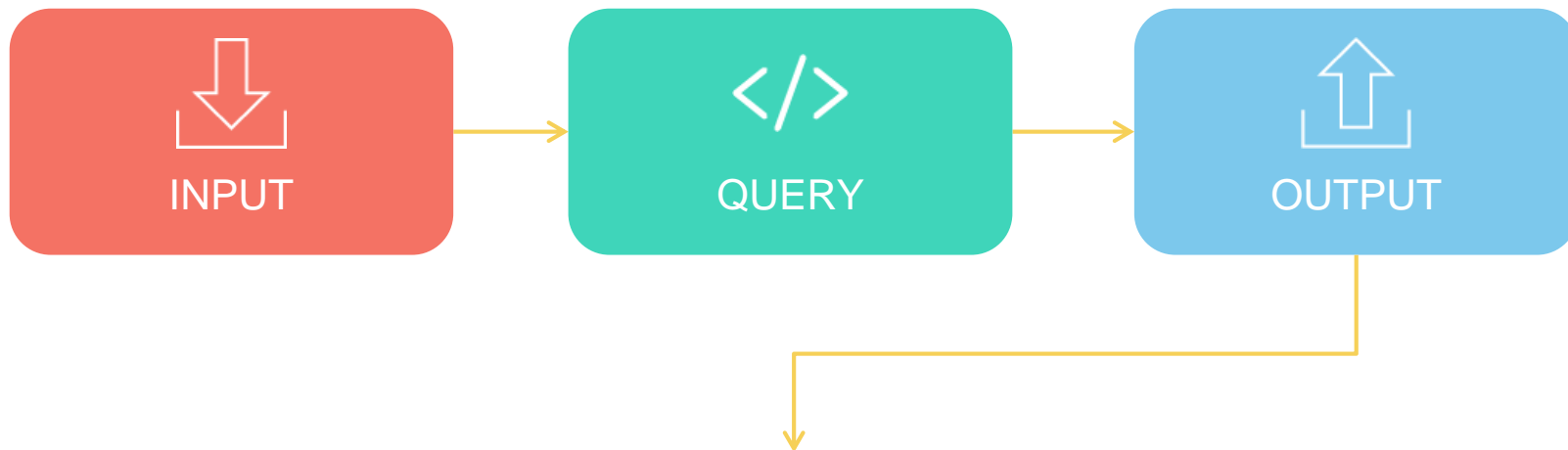
Similar to T-SQL query language

Multiple jobs – Multiple inputs and outputs

Static Data

Outputs

Azure Stream Analytics: Deep Dive



SQL DATABASE
BLOB
STORAGE
EVENT HUBS

TABLE STORAGE
SERVICE BUS
QUEUE
SERVICE BUS

DOCUMENTDB
POWER BI
AND DATA LAKE
STORE

DEMO

Output Types

- Power BI
- SQL Database





Streaming Units

Key Components of an ASA Job

Input Types > Data Streams / Reference Data

Queries > Language Similar to T-SQL

Output Types > SQL Database / Power BI, among others

Application in the ASA portal

