



Azure Stream Analytics

Understanding Queries

Learning Objectives

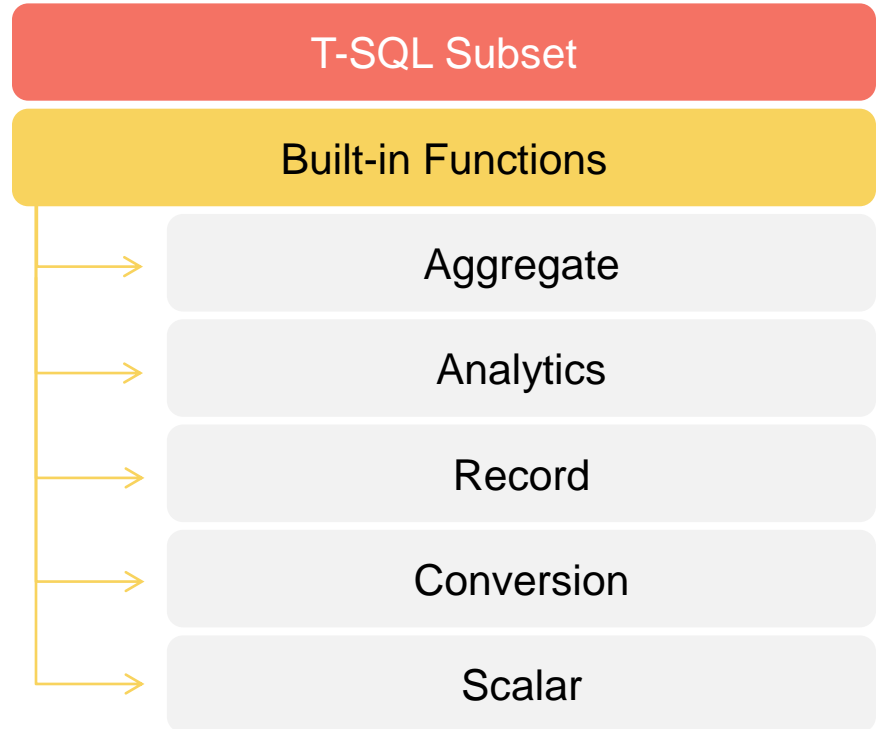
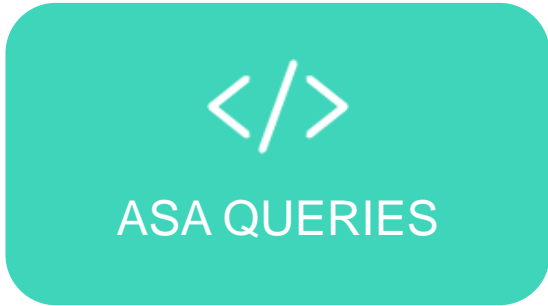
Azure Stream Analytics: Understanding Queries



- **How are ASA queries structured?**
- **What are the key functions in an ASA query?**
- **How do I filter data using ASA queries?**

Stream Analytics Query

Azure Stream Analytics: Understanding Queries



DataTypes

Azure Stream Analytics: Understanding Queries



BIGINT > Large integer values

FLOAT > Large decimal values

NAVCHAR > Variable length character

DATETIME > Date/time data or time stamps

RECORD > Store different numbers of data

ARRAY > Store multiple units into a single object

Query Language Elements

Azure Stream Analytics: Understanding Queries



ASA QUERIES

SELECT

FROM

INTO

DEMO

Query Language Elements

- ASA QUERY
- SELECT
- FROM



DEMO

Filter Columns in Query

- Review Input JSON File
- Modify SELECT
- Review Power BI Output



Query Language Elements

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ASA QUERIES

JOIN

WHERE

GROUP BY

CASE

DEMO

More Query Elements

- Where Clause
- Implement Alias
- Group by Clause
- Case Statement



Important Notes

Azure Stream Analytics: Understanding Queries



REMEMBER

ASA works in conjunction with
other Azure services

Inputs must come from Azure services

Azure provides support for
Azure Machine Learning

Complex DataTypes

Azure Stream Analytics: Understanding Queries



- JSON ARRAYS
- AVRO ARRAYS

SAMPLE RECORD

```
1
2 {
3   "DeviceName": "Dev1",
4   "Stats": {
5     "Temp": 47,
6     "Frequency": 122
7   }
8 }
9
```

SAMPLE QUERY TO

ISOLATE DATA
SELECT DeviceName,

Stats.Temp,

From input



Query Language: Similar to SQL

Data Types

Query Elements

Complex Data Types

