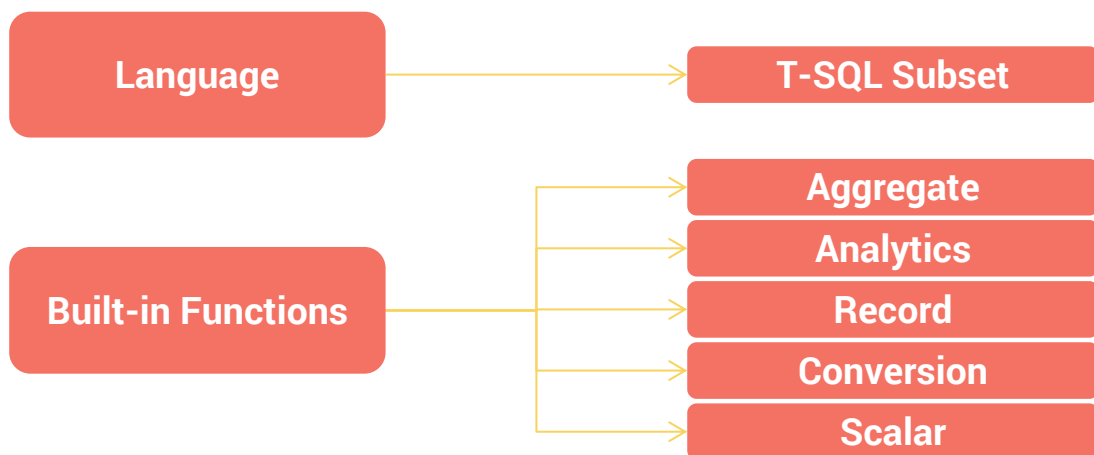




Azure Stream Analytics

Key Considerations

Queries in Azure Stream Analytics are aimed to provide you with an easy to use and familiar language base to work with. This is why queries in Azure Stream Analytics include the following characteristics:



Data Types

Azure Stream Analytics supports six types of data:



- **BIGINT** for large integer values
- **FLOAT** for large decimal values
- **NAVCHAR** for variable length characters
- **DATETIME** for Date/time data or time stamps
- **BIGINT** to store different numbers of data
- **ARRAY** to store multiple units into a single object





Azure Stream Analytics

Query Elements

A basic query includes three key statements, in which you can apply different key words for specific functions.

Use this guide to help you as you set up your own queries.

Select

Define your data **Columns**

DB.DeviceName,

Case

When DB.Frequency > 50 **as** 'High',
else 'Low',

DB.DateTime **as** OrderDate,

- Use the **dot** operator to call an alias into the query.
- Use the **case** function to set parameters for data selection
- Use the **as** function to set a new name for a field in your output.

Into

Select your **Output**

MyOutput

From

Define your **Input**

MyDatabase DB

Where Mname=E001
Groupby OrderDate

- Add an **Alias** to your input for easy reference in your queries.
- Use the **Where** function to filter specific rows in a query.





Azure Stream Analytics

Complex Data Types

Some data types, such as Record, include different data elements from which we may only need to capture a few.

When this happens, using the correct statements and key words in your query is key to making your jobs effective.

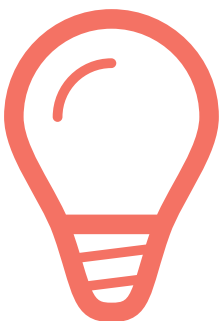
SAMPLE RECORD

```
{ "DeviceName" : "Dev1",  
  "Stats" : {"Temp": 47,  
            "Frequency": 122 }
```

SAMPLE QUERY TO ISOLATE DATA

```
SELECT DeviceName,  
       Stats.Temp,  
From input
```

Takeaway Tips



REMEMBER

ASA works in conjunction with other Azure services

Inputs must come from Azure services

Azure provides support for Azure Machine Learning

