



**Databases**

# Introduction - Agenda

## **Connecting to a Database**

 Connectors

## **UiPath Database Activities**

## **SQL Statements**

 Parameters

 Command Types

***Best Practices***

***Q&A***

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***Online Resources***

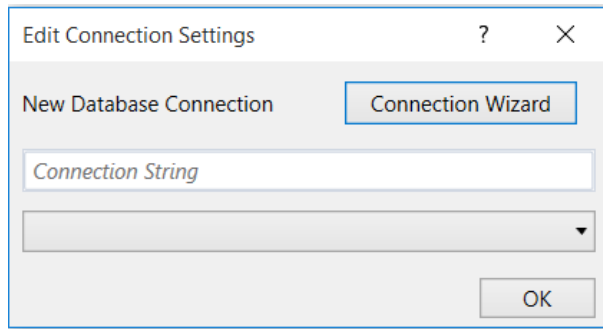
# Connecting to a database

## How does it work?

- Uses the built-in .NET Framework capabilities
- Compatible with several data sources and providers

## Ways to connect to a database:

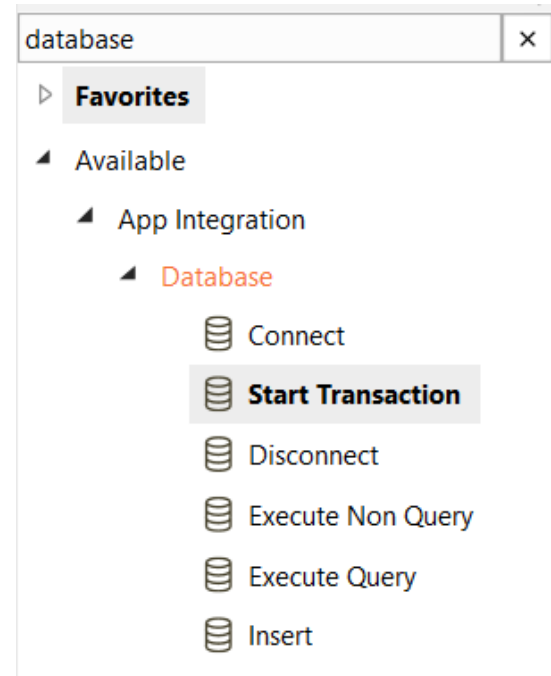
- Connection String
- Connection Wizard



# UiPath Database activities

## Possible actions:

- Open and close connection
- Act inside a transaction
- Execute queries and non-queries
- Bulk insert using a DataTable



# SQL statements

## Statements

- Non-Query
  - Insert, delete, update
  - Other non-query statements
- Queries
- Bulk insert

## Returned value

- Number of rows affected
- -1
- DataTable
- Number of rows affected

# Command Types & Parameters

**Statements are based on the .NET CommandType enumeration:**

- Text
- Stored Procedures
- Table Direct – available only for OLE DB data provider

**Each statement can be parametrized:**

- Define the parameters collection
- In the query, use @ before the name of the parameters

# SQL – create a new table

## Use the following syntax

```
"CREATE TABLE <tableName>
(
<fieldName> <fieldType>,
<fieldName> <fieldType>,
<fieldName> <fieldType>
...
);"
```

## Data types

```
Int
Varchar(255)
```

# Exercise

1. Connect to Employee.accdb
2. Execute a query in FTE table and find out which employee has Id = 2. Send the id, in the query as a parameter.
3. HR department provided a file with some new guys in the company. Load the data from NewFTE.xlsx in the FTE table.
4. Find out how many employees were added.
5. Display all the data from FTE.
6. The company intend to organize an internship in the summer time. Create a new table in the database called Students.





Q&A



Test

# Online Resources

- Ui [Export Data From Database to CSV file](#)
- Ui [How to query data from a SQL database](#)
- Ui [Exercise available here](#)