



Advanced Data Queries

SQL



Topics

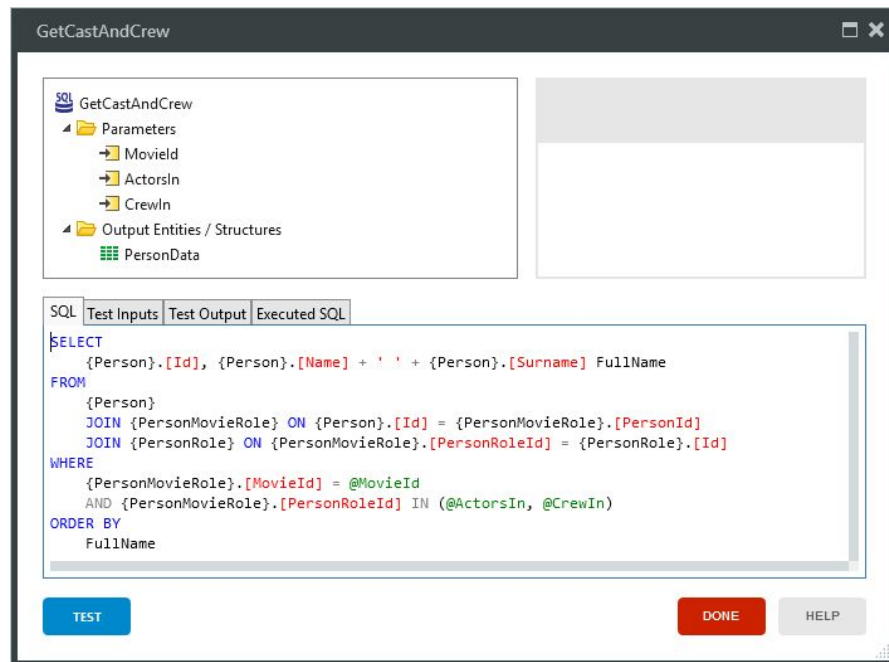
- Advanced Queries
- SQL Tool
 - Overview
 - Input / Outputs
 - Testing Queries
 - Non-Select Queries

Advanced Queries

Retrieving the correct data from the database can often be complex

Also possible to write SQL statements

- SQL Tool



SQL Tool Overview

Allows writing SQL statements

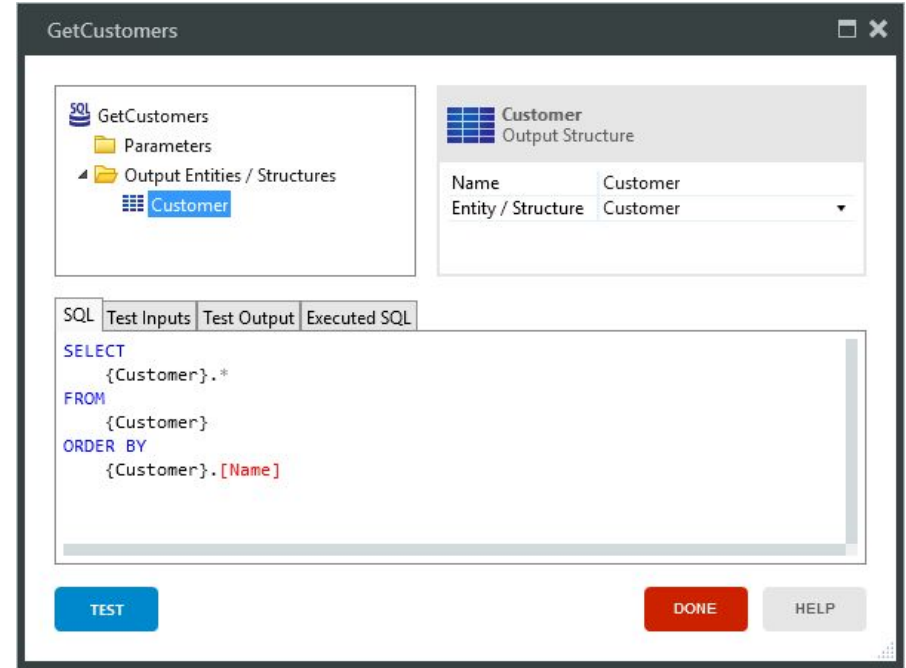
Inputs and outputs are specified visually

SQL is written manually

- SQL syntax checking
- Color highlighting
- SQL is DBMS-specific

Use of abstract names for
Entities and Attributes

- Write Entity names as {Entity}
- Write attribute names as {Entity}.[Attribute]



SQL Tool Inputs / Outputs

SQL Tools are “black boxes”

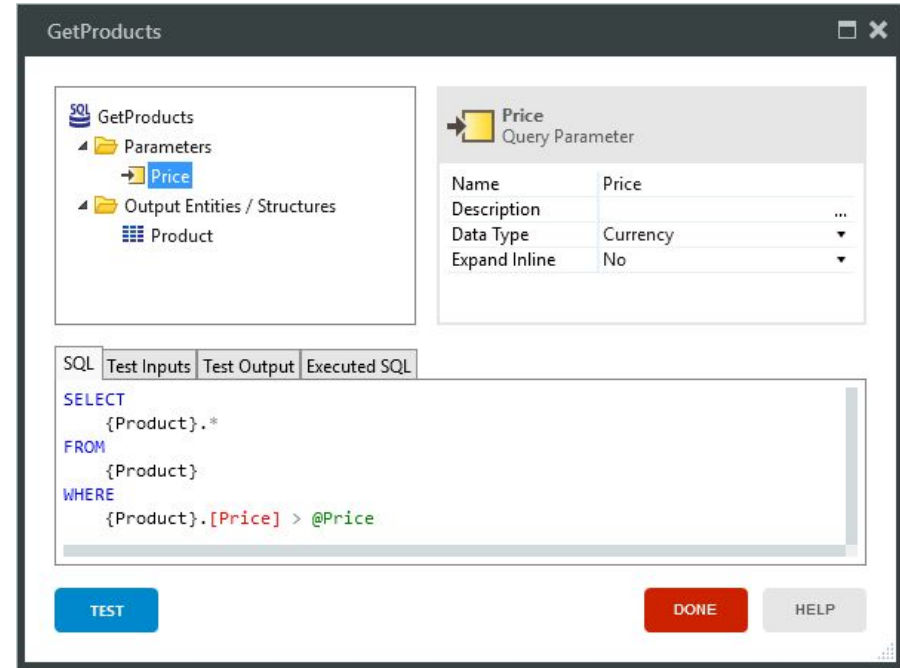
- Query Parameters pass information to it

Output Entities / Structures

- Mandatory to have at least one
- Need to map the columns in the SELECT clause
- Can use Structures and Entities

The Output of the SQL Tool is the same as in Aggregates

- List
- Count



Testing SQL Tool Queries

Setting Input Parameters

SQL	Test Inputs	Test Output	Executed SQL
Parameter	Test Value		
Price	20		
Test Max. Records <input type="text" value="100"/>			
<button>TEST</button>			

Testing the SQL Tool query

SQL	Test Inputs	Test Output	Executed SQL
Product.Id	Product.Name	Product.Price	
3	24" Series 4 LED Business Monitor	120.89	
4	Chat Headset	23.99	
6	Laptop Intel Core i7 - 8GB	737.21	
8	Network Storage Server	350.6	
15	2TB External USB Hard Drive	99.9	
5 rows returned.			
<button>TEST</button>			

Non-SELECT Queries

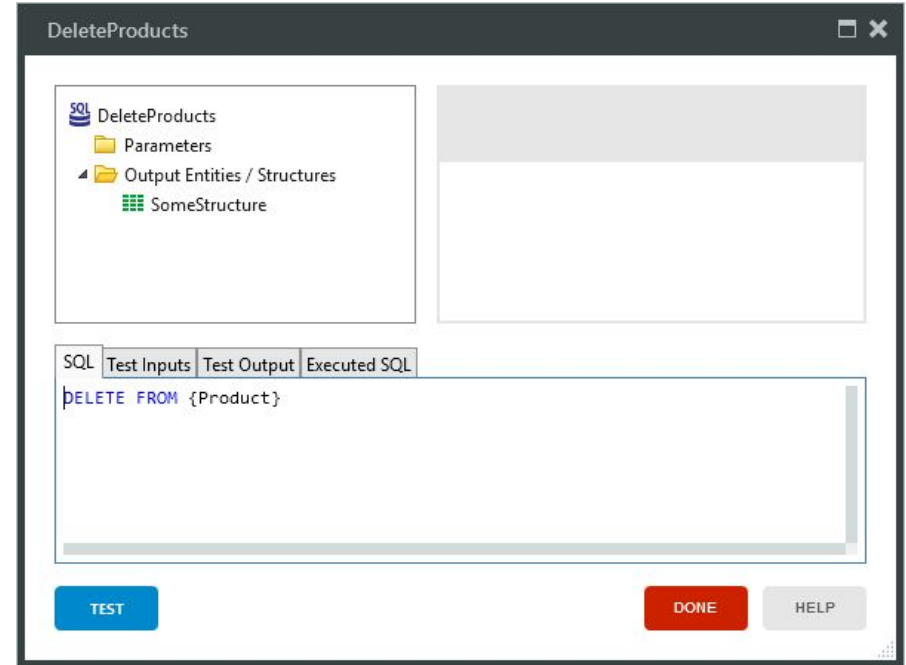
SQL Tools can also be used for non-SELECT statements

- Delete
- Insert
- Update

SQL statement can be written normally

A “dummy” Output Structure still needs to be provided

- Structure attributes are irrelevant



Summary

- Advanced Queries
- SQL Tool
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 - Non-Select Queries



Advanced Data Queries
Thank You!