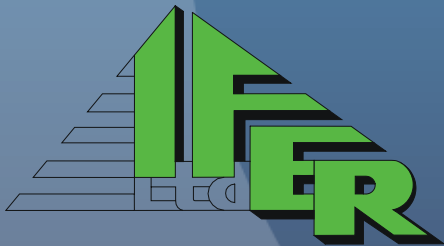


Database Query Tool



IFER - Monitoring and Mapping Solutions Ltd.

<http://www.field-map.com>

Database Query Tool

- Enables querying the Field-Map database

Field-Map Data Management and Data Processing Tools

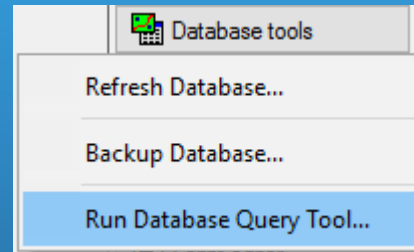
- Query builder
 - Check data function
 - Check database integrity
-
- Firebird Desktop

Database Query Tool

- Enables querying the Field-Map database
 - Enables complex data selection
 - Does not require SQL knowledge
-
- Enables saving query results to excel
 - Enables saving query results to Field-Map Navigator file

How to run DQT

- 1. Run *DatabaseQueryTool.exe*

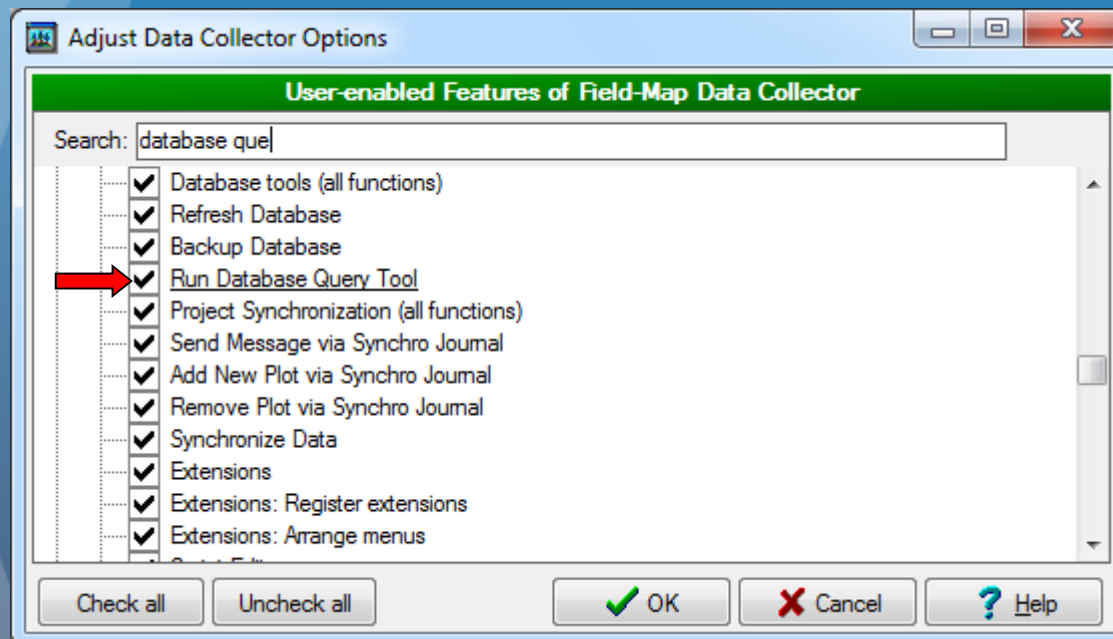


- 2. Field-Map Data Collector

- 3. Call scripting function `Project.RunDatabaseQueryTool`

DQT in Field-Map Data Collector

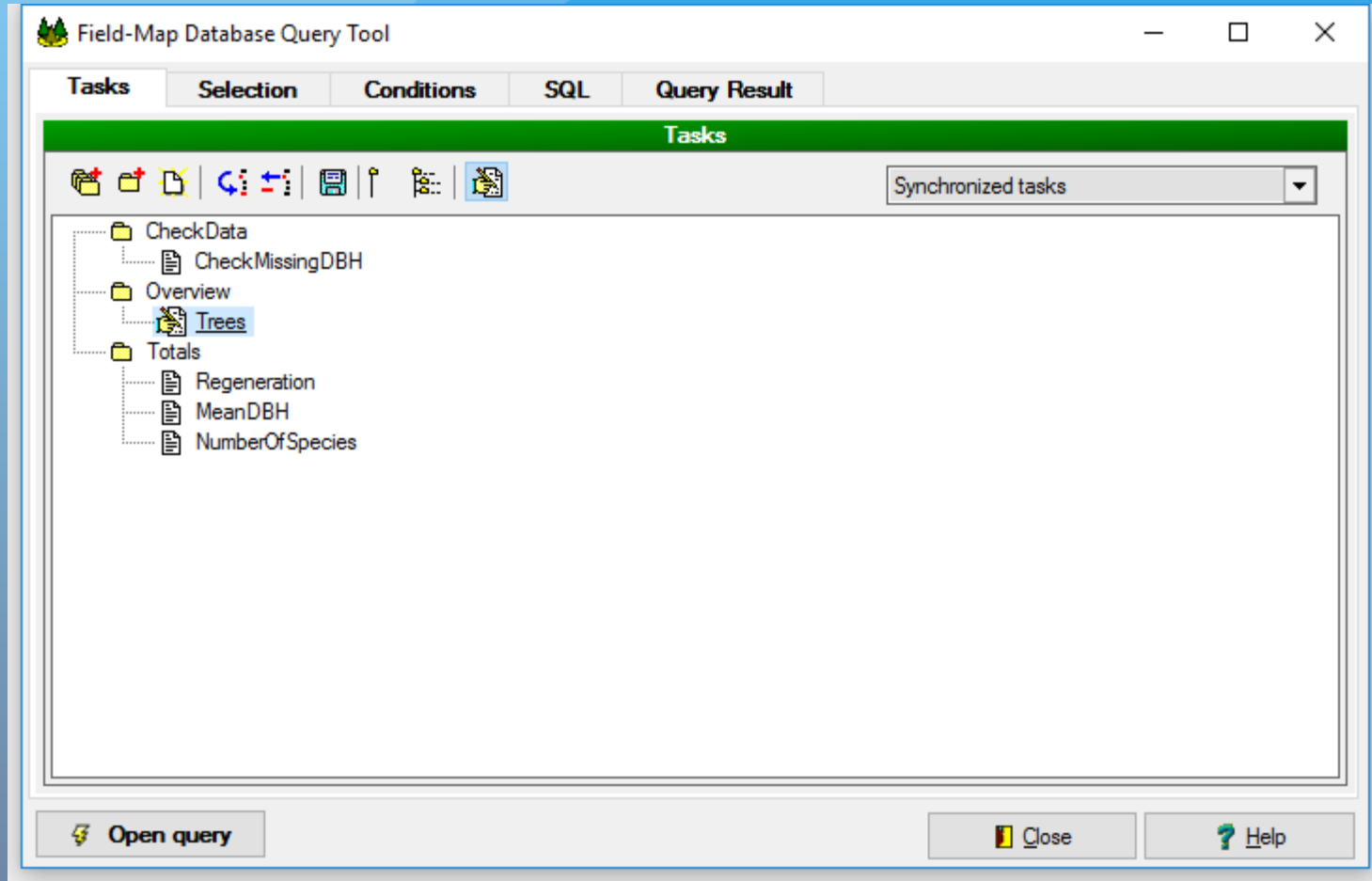
- Activate / deactivate in Field-Map Project Manager / *Adjust Data Collector Options*



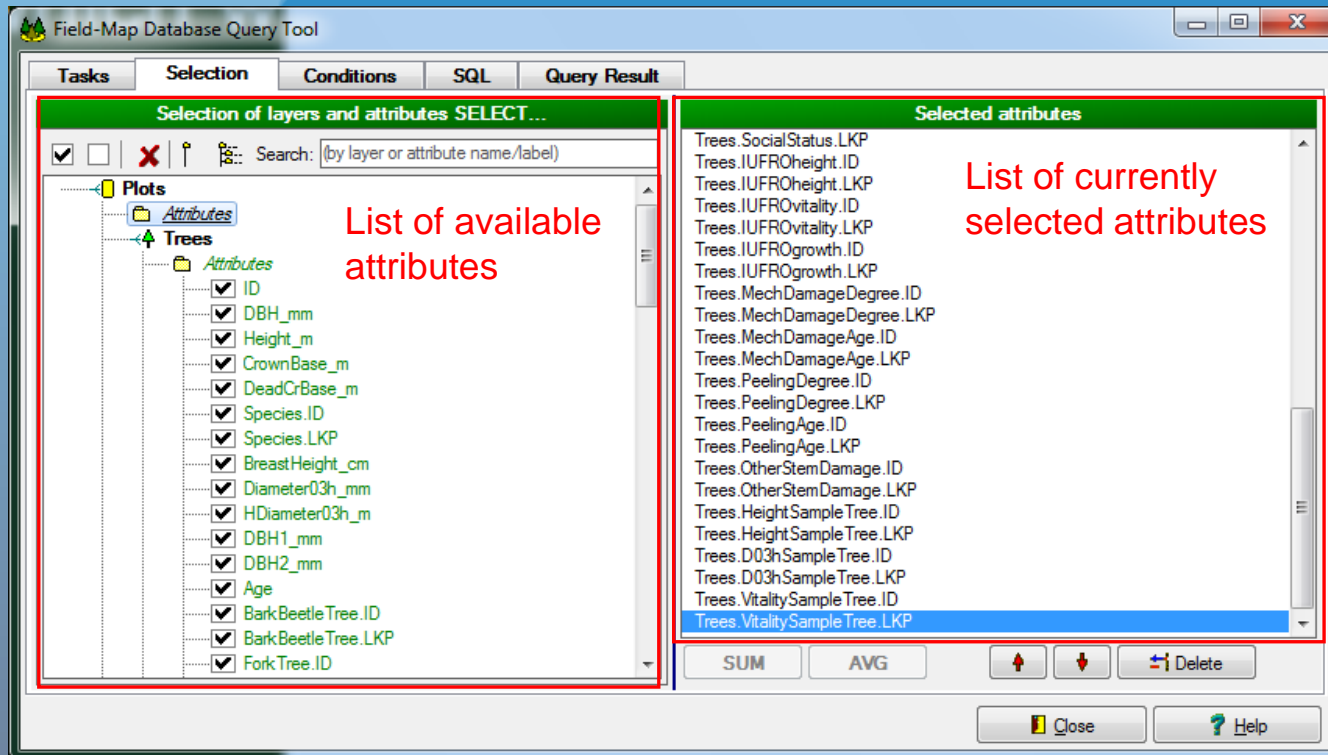
Steps to build a query

- Set up a task
- Select attributes
- Define conditions
- Preview SQL
- Inspect results

Setting up a task



Attributes Selecting





Defining conditions

Field-Map Database Query Tool

Tasks Selection **Conditions** SQL Query Result

Conditions WHERE...



 () | 

Limit selection to current item of "Plots" No predefined limits for selection

Date limit Define date limit Define date limit at runtime

Trees DBH_mm > 100

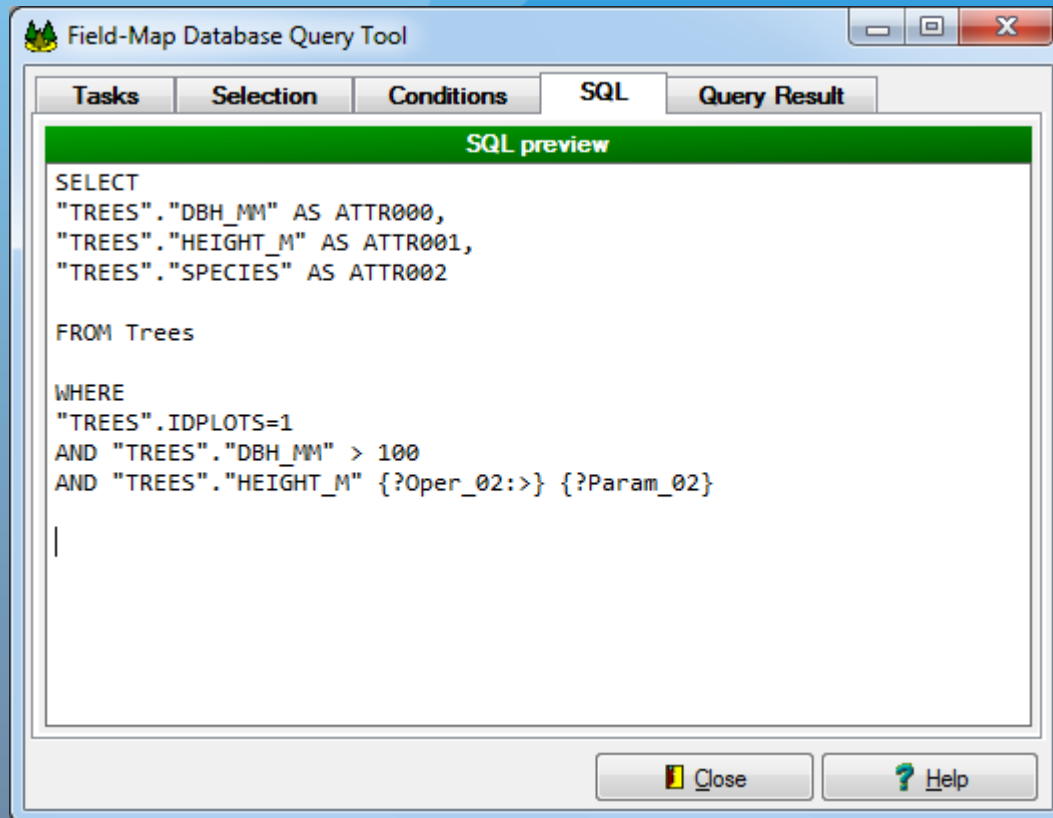
AND Trees Height_m > ?

 Close  Help

Condition possibilities

- Limit query to current plot / all plots
- Set up a date limit
- Combine more conditions (AND or OR, brackets)
- Filtering conditions (<; >; <>; >=; <=; IS NULL; IS NOT NULL)
- Dynamic queries

Sql preview



The screenshot shows a software window titled "Field-Map Database Query Tool". It has a menu bar with "Tasks", "Selection", "Conditions", "SQL", and "Query Result". The "SQL" tab is active, and the "SQL preview" section is highlighted in green. The SQL query displayed is:

```
SELECT
"TREES"."DBH_MM" AS ATTR000,
"TREES"."HEIGHT_M" AS ATTR001,
"TREES"."SPECIES" AS ATTR002

FROM Trees

WHERE
"TREES".IDPLOTS=1
AND "TREES"."DBH_MM" > 100
AND "TREES"."HEIGHT_M" {?Oper_02:>} {?Param_02}

|
```

At the bottom of the window, there are two buttons: "Close" and "Help".

Query Result

The screenshot shows the 'Field-Map Database Query Tool' window. The 'Query Result' tab is active, displaying a table with columns: ID, DBH_mm, Height_m, and Species. The table contains 13 rows of data, all for 'Fagus silvatica'. A red box highlights the table, and a vertical red text label 'The list of filtered records' is placed to its right. To the right of the table is a 'Trees.Height_m' section with a text input field containing 'Height_m >'. Below this is an 'Update query' button. At the bottom, a 'Statistics' section shows 'COUNT' with a value of 135. A red box highlights the 'Save to file and open' button, with the text 'i.e. to XLS' next to it.

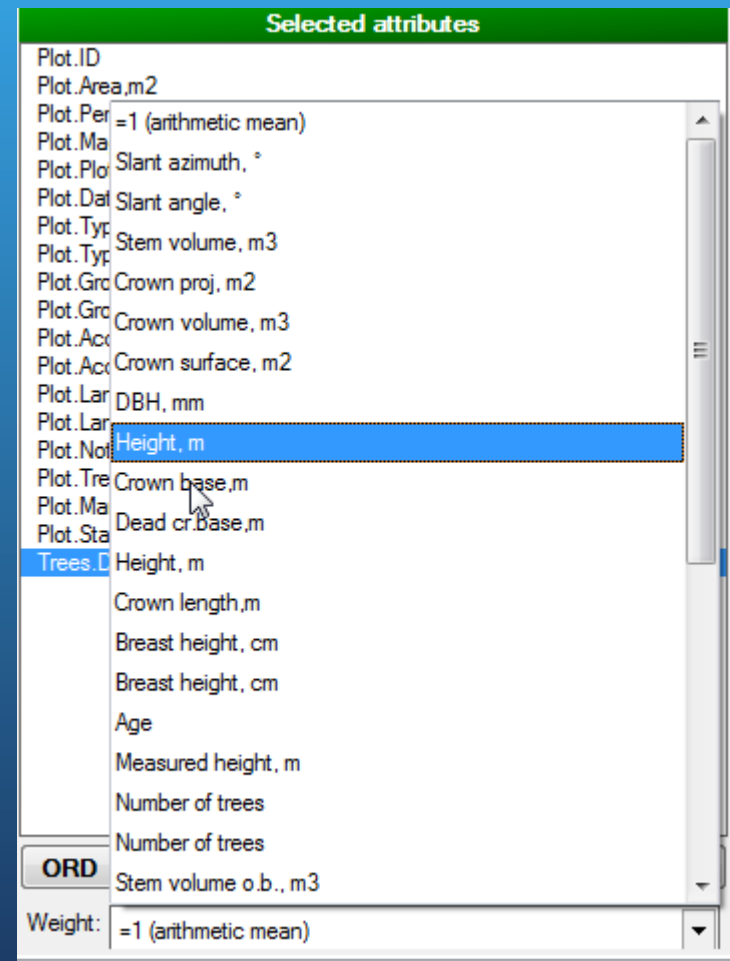
ID	DBH_mm	Height_m	Species
2	125	10,86	Fagus silvatica
3	103	8,30	Fagus silvatica
7	191	11,05	Fagus silvatica
5	146	12,85	Fagus silvatica
12	245	12,73	Fagus silvatica
6	120	10,80	Fagus silvatica
19	106	10,75	Fagus silvatica
17	148	14,31	Fagus silvatica
13	103	10,75	Fagus silvatica
16	116	13,71	Fagus silvatica
18	158	14,15	Fagus silvatica

Dynamic queries
Fill in desired threshold value
and press Update query
button

Save to file and open Save to file i.e. to XLS Close Help

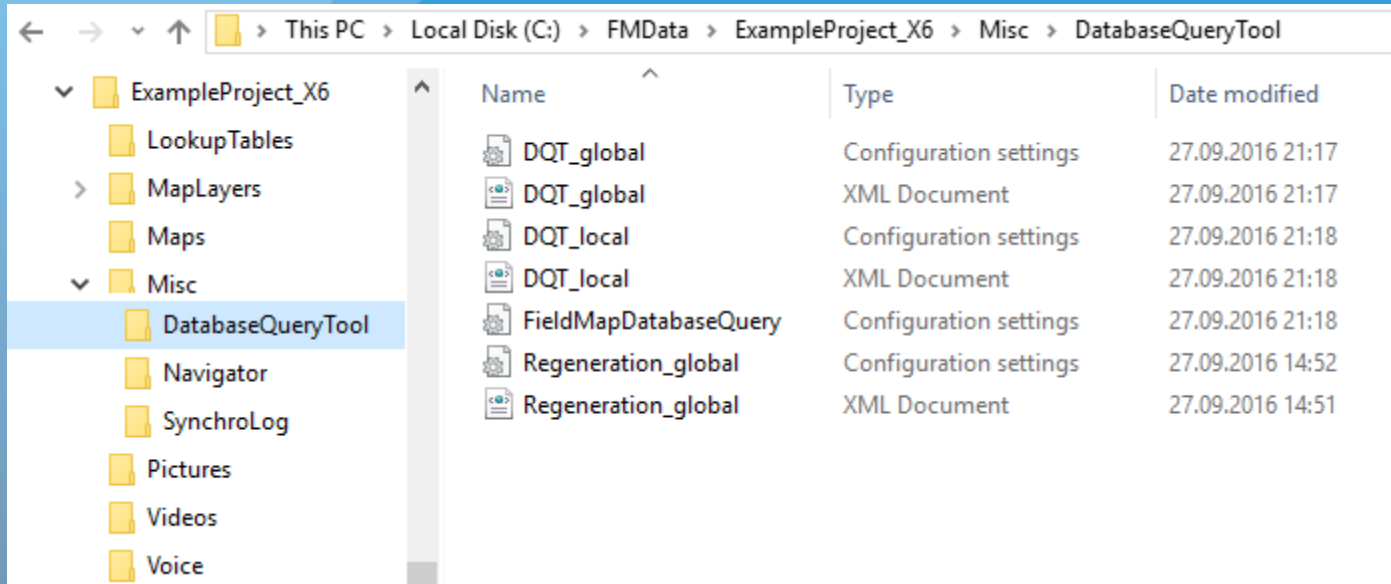
Average Calculating

- New user defined options of calculating Average
 - Arithmetic mean
 - Weighthed mean
 - All numeric attributes of specific layer are available as possible weights



Storing queries

- Project folder / Misc / DatabaseQueryTool



- Synchronized (global) and unsynchronized (local) queries

Thank you for your attention

