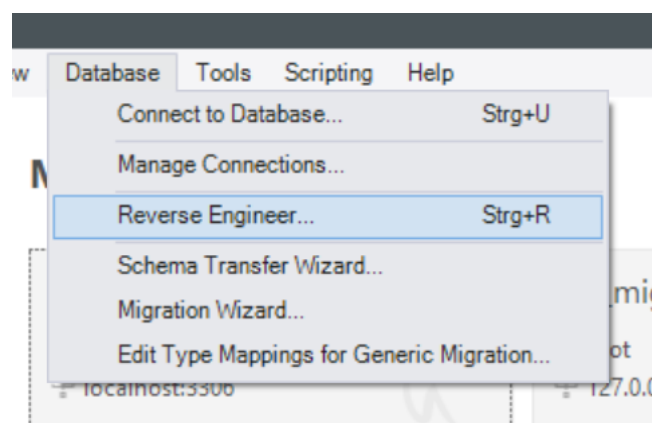
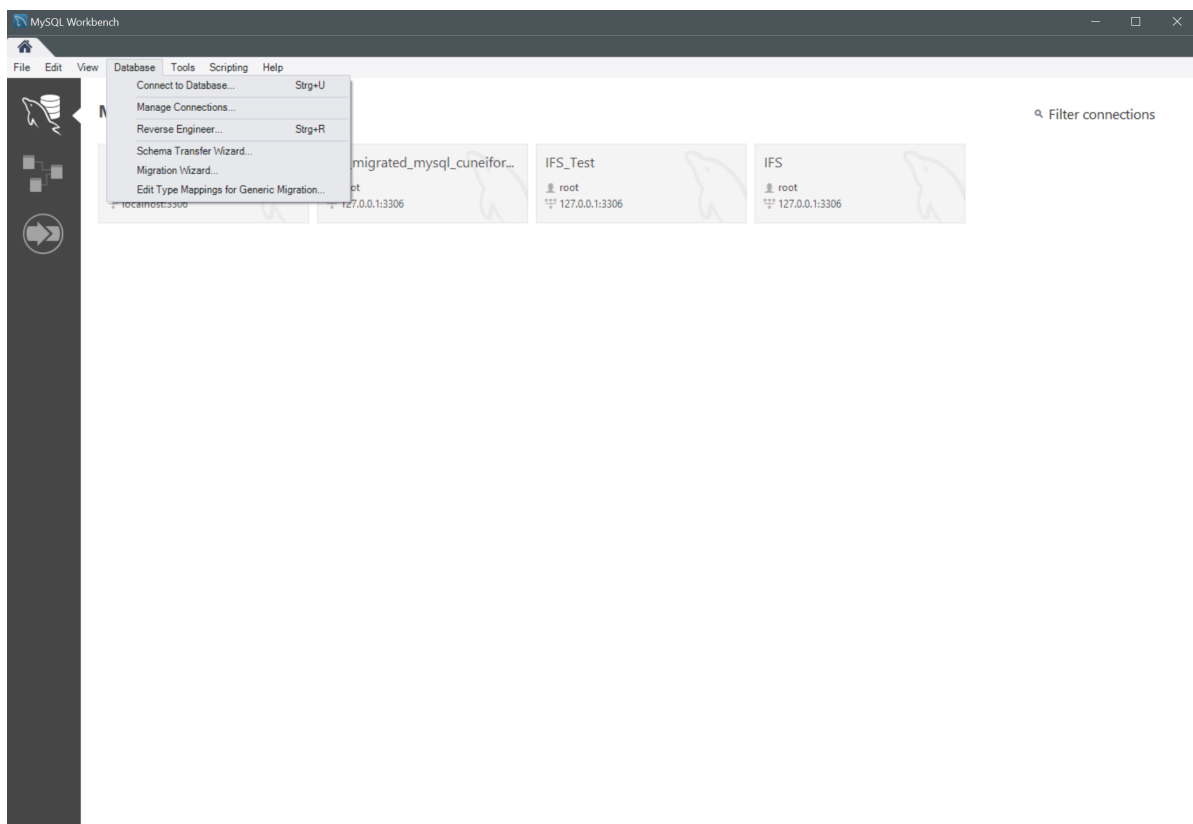


# Using the MySQL Workbench to Generate the ER-Diagram and managing the Tables

## Generating the ER-Diagram using the MySQL Workbench

1.

Menu -> Database -> Reverse Engineer...



## 2.

Check the settings and adjust if necessary, then click

- “Next” (Windows)
- resp. “Continue” und Eingeben des root-Passwortes (Mac)

The screenshot shows the 'Reverse Engineer Database' application window. On the left is a sidebar with 'Connection Options' selected, containing links for 'Connect to DBMS', 'Select Schemas', 'Retrieve Objects', 'Select Objects', 'Reverse Engineer', and 'Results'. The main area is titled 'Set Parameters for Connecting to a DBMS'. It features two dropdown menus: 'Stored Connection' set to 'IFS' and 'Connection Method' set to 'Standard (TCP/IP)'. Below these are three tabs: 'Parameters' (active), 'SSL', and 'Advanced'. The 'Parameters' tab contains fields for 'Hostname' (127.0.0.1), 'Port' (3306), and 'Username' (root). The 'Password' field is empty, with 'Store in Vault ...' and 'Clear' buttons. At the bottom right are 'Back', 'Next', and 'Cancel' buttons.

Reverse Engineer Database

**Connection Options**

- Connect to DBMS
- Select Schemas
- Retrieve Objects
- Select Objects
- Reverse Engineer
- Results

**Set Parameters for Connecting to a DBMS**

Stored Connection: IFS Select from saved connection settings

Connection Method: Standard (TCP/IP) Method to use to connect to the RDBMS

Parameters SSL Advanced

Hostname: 127.0.0.1 Port: 3306 Name or IP address of the server host - and TCP/IP port.

Username: root Name of the user to connect with.

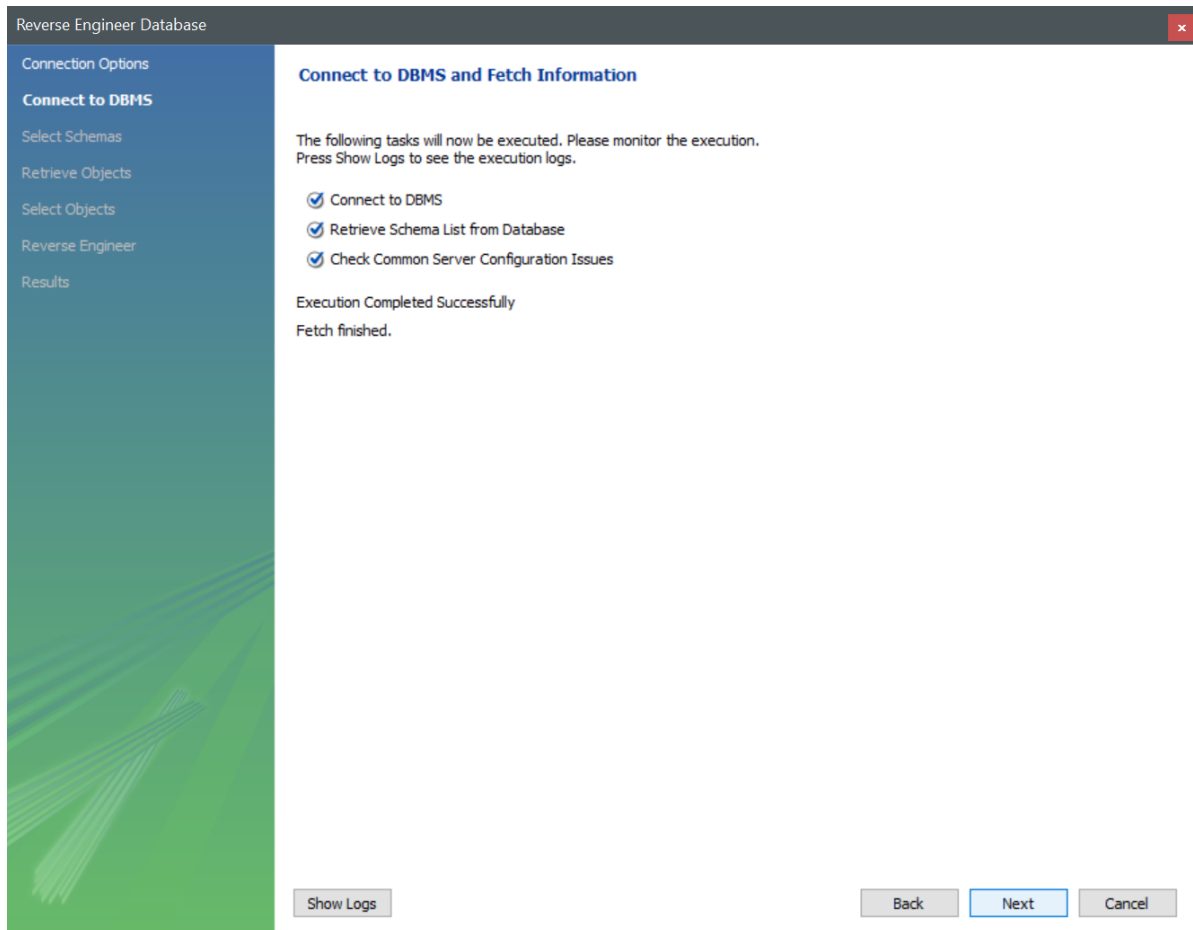
Password: Store in Vault ... Clear The user's password. Will be requested later if it's not set.

Back Next Cancel

### 3.

Let it process, then click

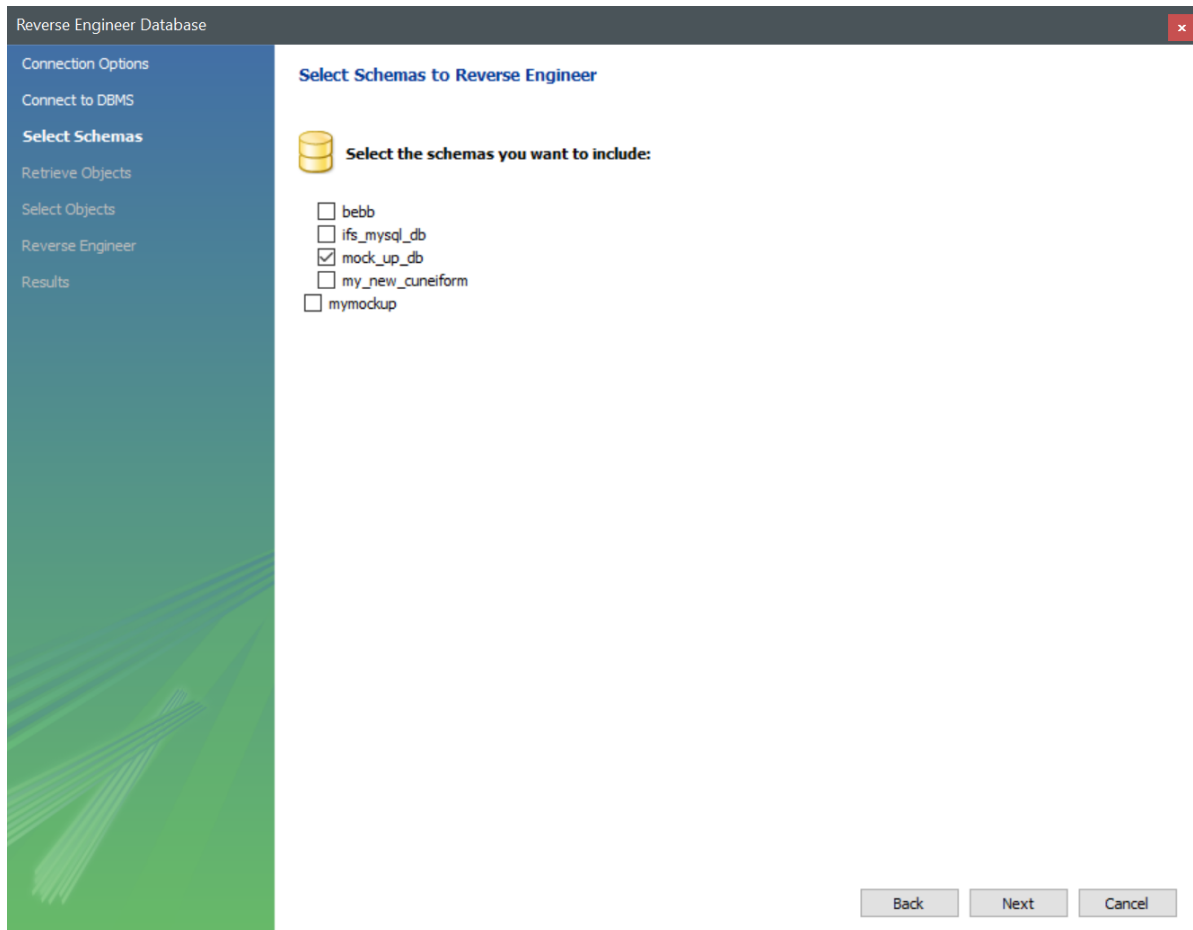
- “Next” (Windows)
- resp. “Continue” (Mac)



## 4.

Choose the desired database by placing the check-mark, then clickt

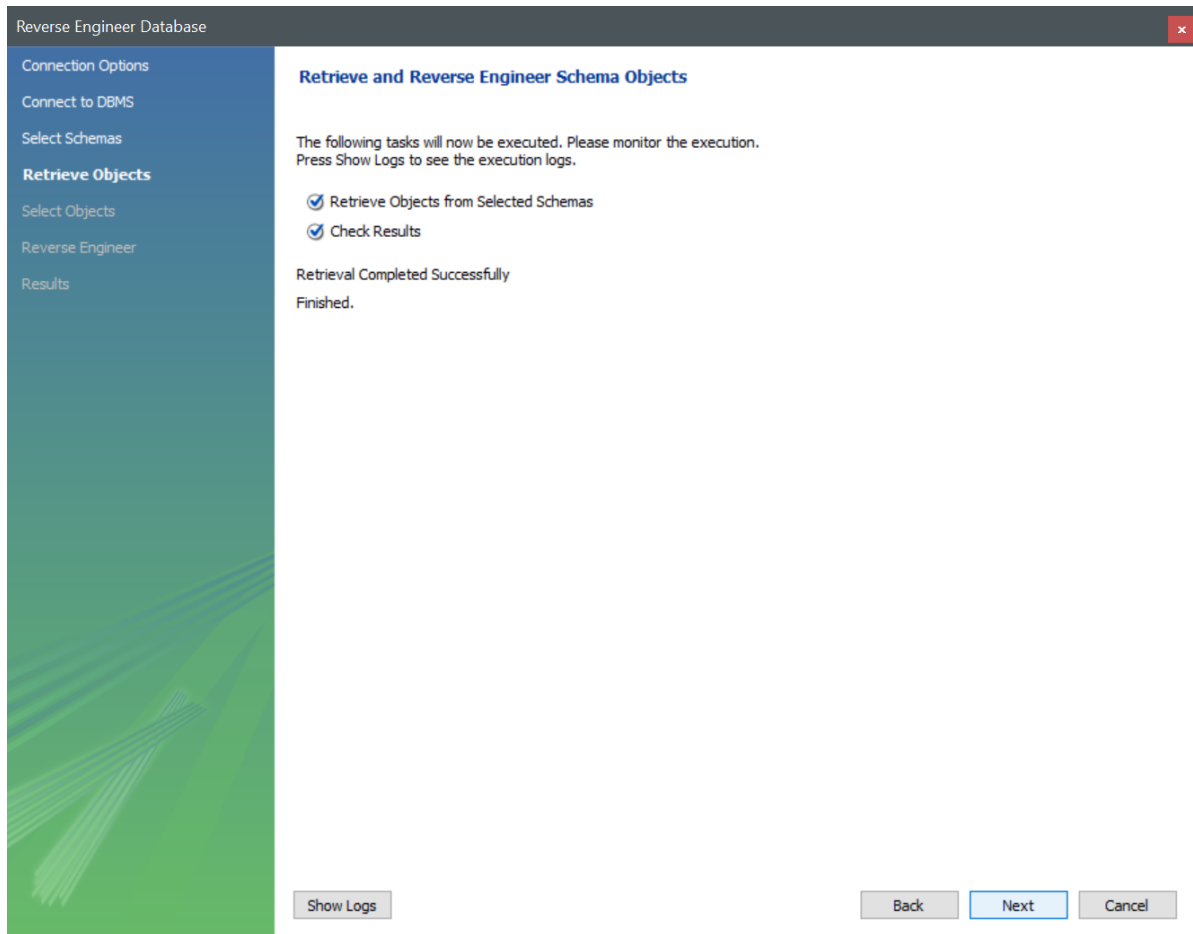
- “Next” (Windows)
- resp. “Continue” and enter the root-password (Mac)



## 5.

Let it process, then click

- “Next” (Windows)
- resp. “Continue” (Mac)



## 6.

Confirm the selection and place the check-mark for “Place imported objects on a diagram”, then click “Execute”

Reverse Engineer Database

Connection Options

Connect to DBMS

Select Schemas


Retrieve Objects

**Select Objects**

Reverse Engineer

Results

Select Objects to Reverse Engineer

☒ Import MySQL Table Objects

159 Total Objects, 159 Selected

Show Filter

☒ Place imported objects on a diagram

Back

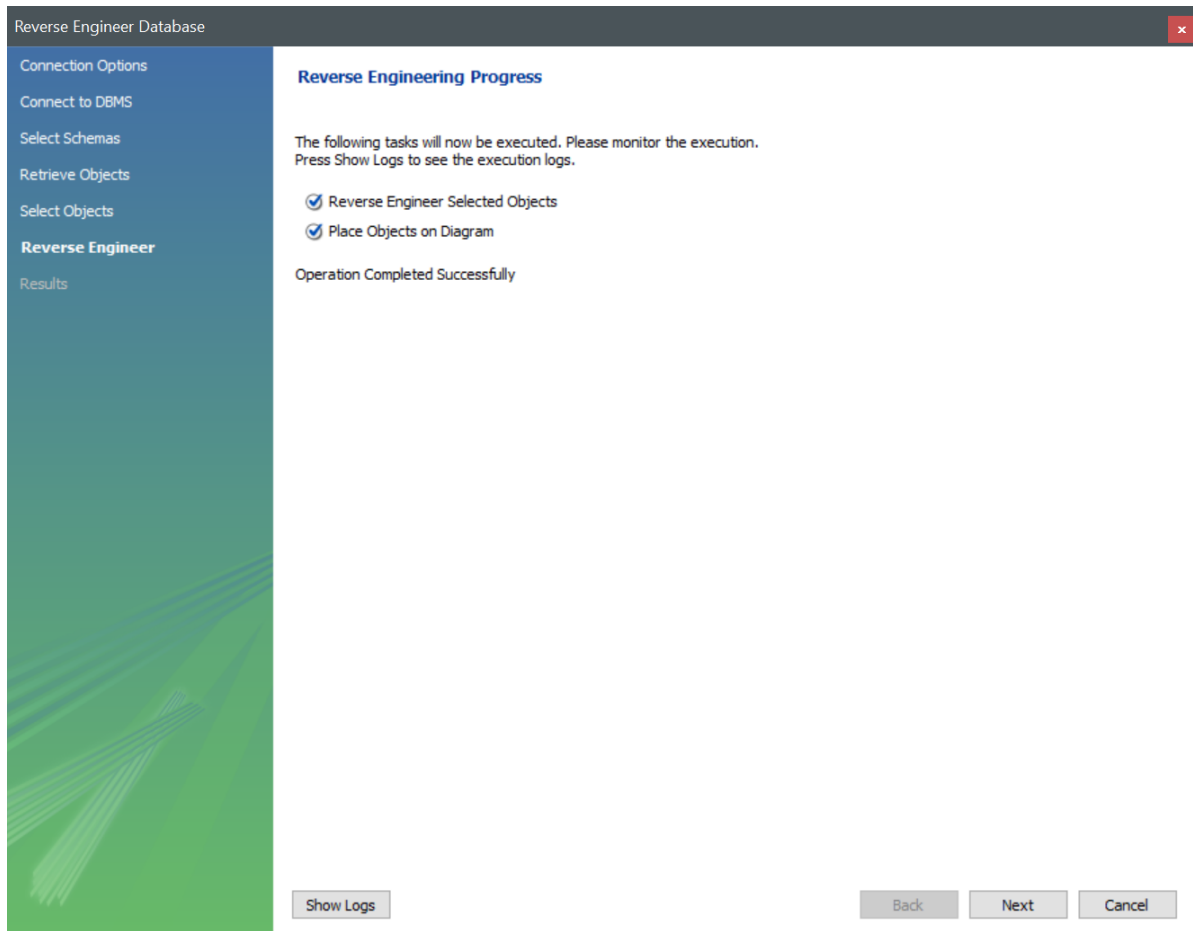
Execute >

Cancel

## 7.

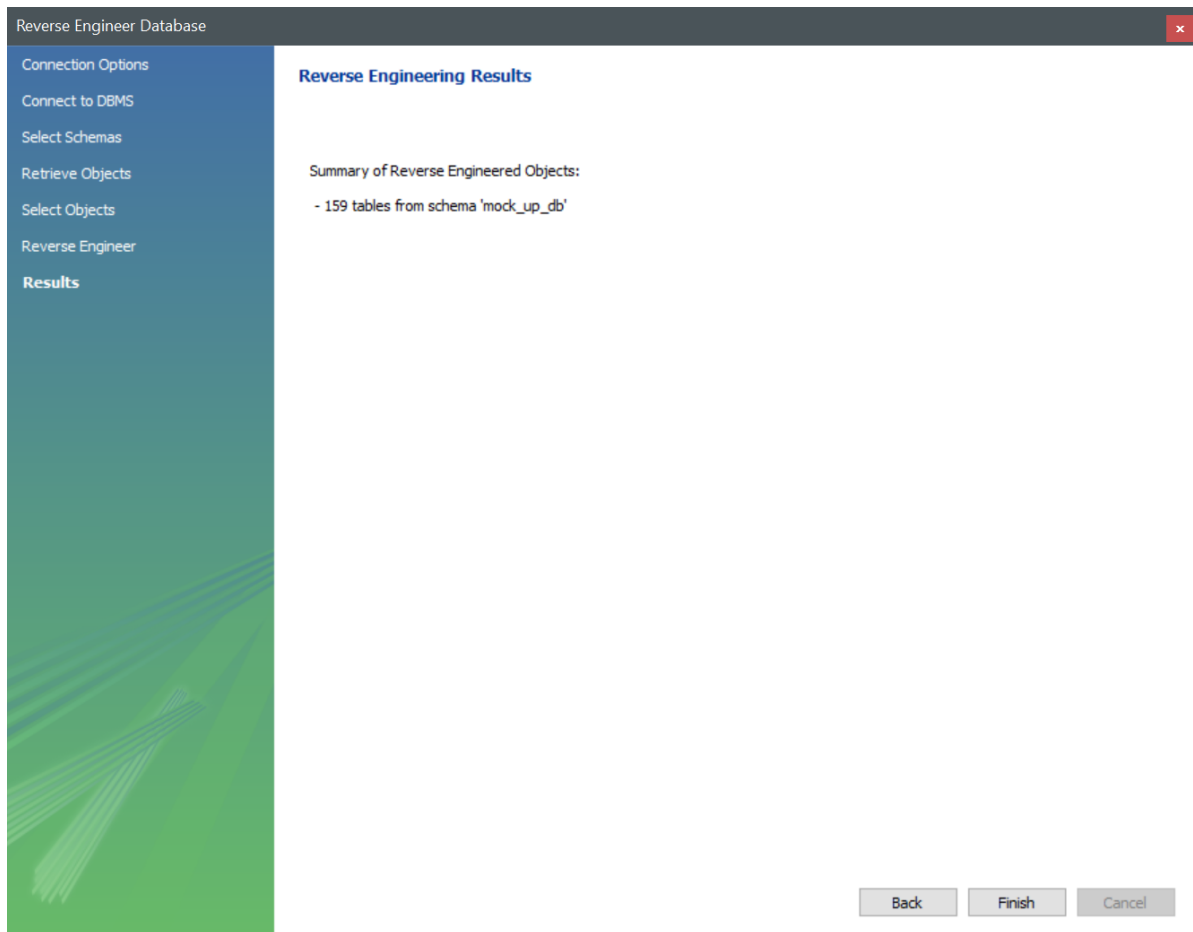
Let it process, then click

- “Next” (Windows)
- resp. “Continue” (Mac)



8.

- "Finish" (Windows)
- "Close" (Mac)

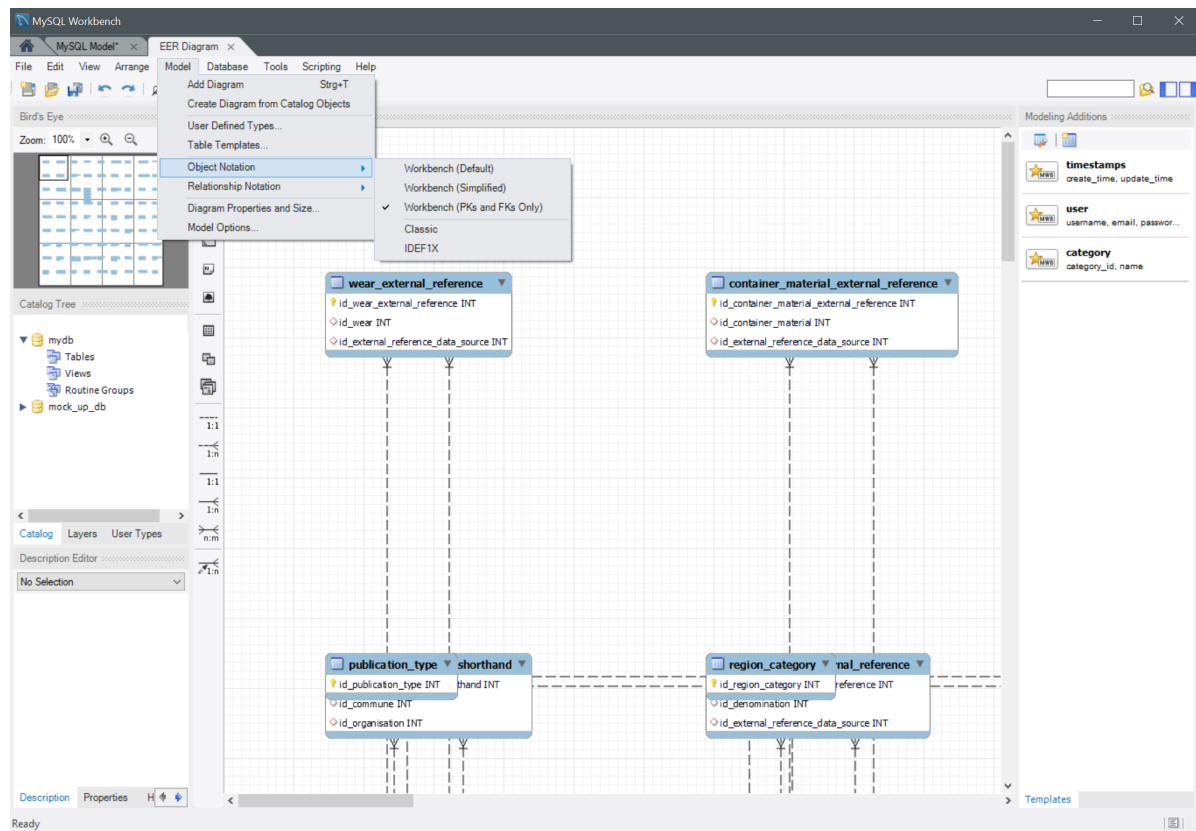




## 9.

In the menu "Model" -> "Object Notation" the choice is offered whether all attributes or just a reduced list (PK = Primary Keys, FK= Foreign Keys) should be shown.

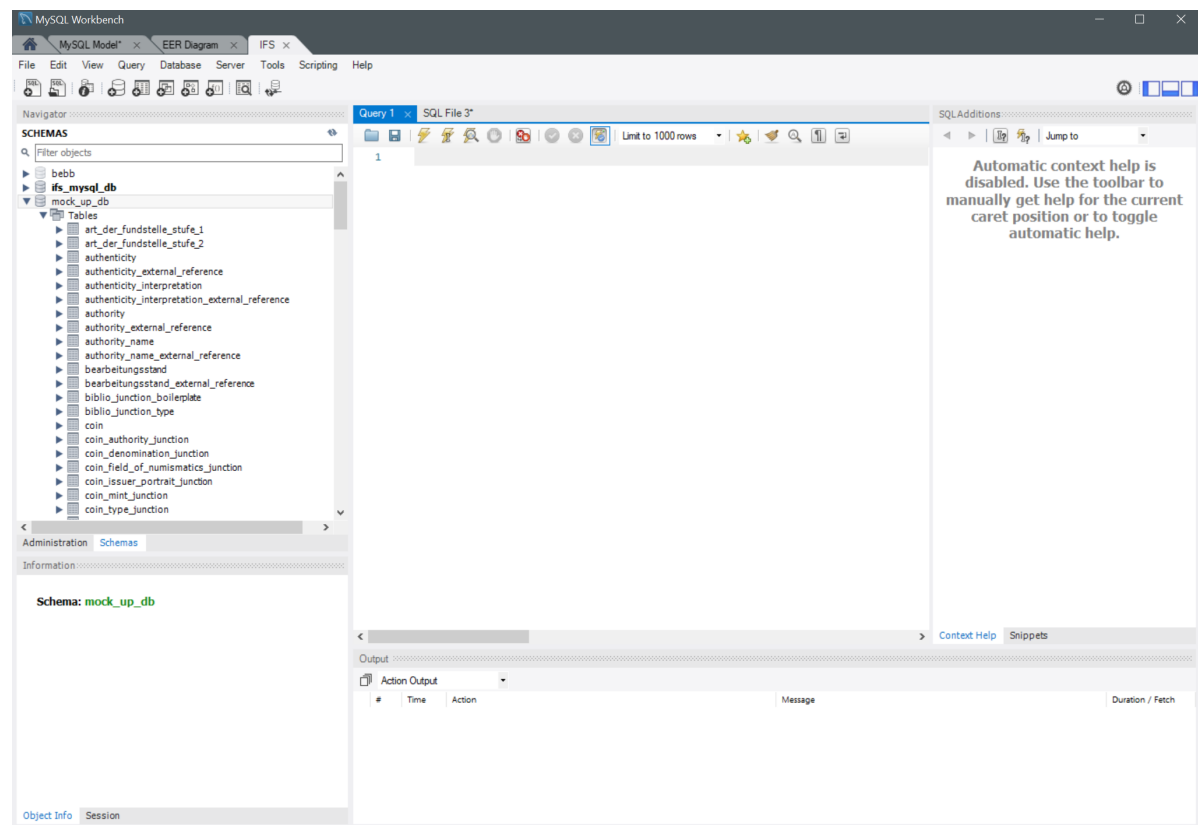
The menu "Diagram Properties and Size..." offers the option to set the size of the diagram (number of A4-sheets per width and height)



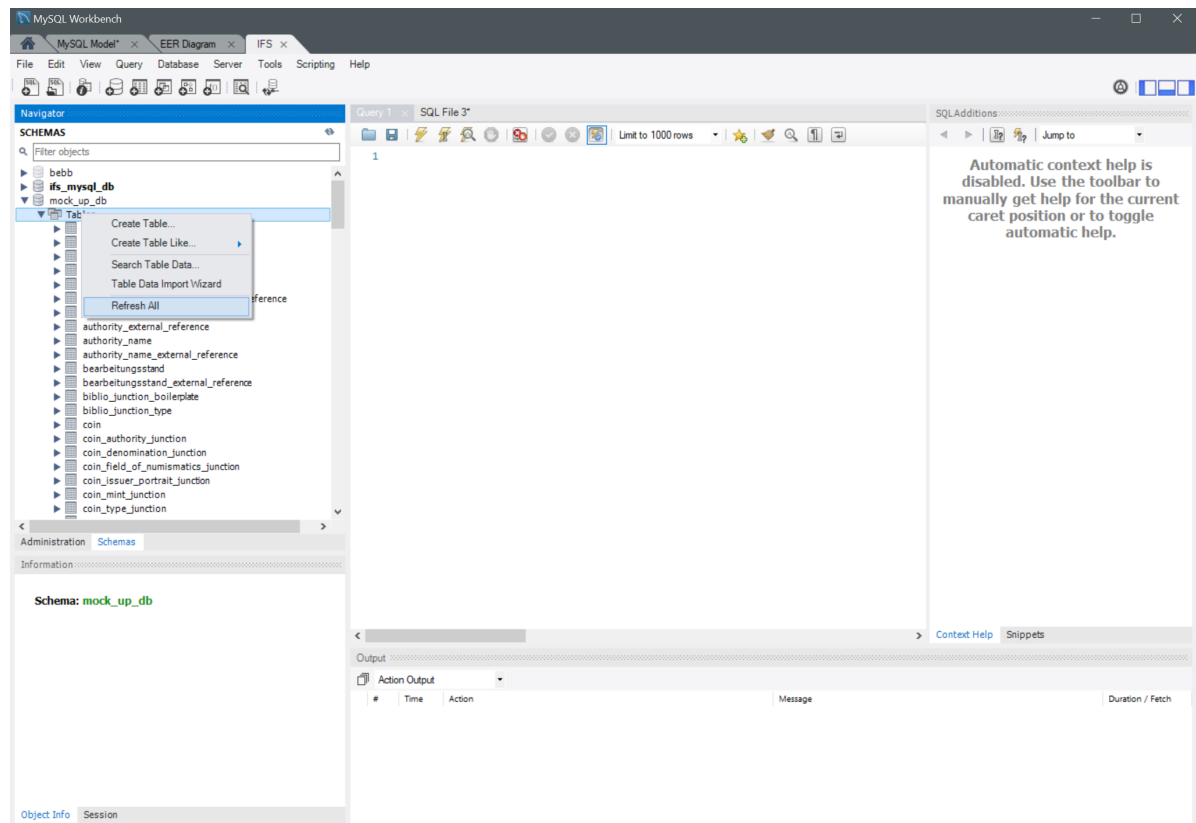
# Tables in the Database

If, for instance, in the python main-script the drop-tables functions only are run, and it is desired to see the current state of the database in the MySQL Workbench, that display has to be updated.

By opening the Connection “IFS” the mock\_up\_db can be found within the Schemas-list.



By right-clicking “Tables” a menu opens. By clicking “Refresh All” the current state is loaded.



If all tables have been dropped “Refresh ALL” should lead to an empty tables list.

If there are still tables left the reason might be that at some point a table was renamed and the drop-tables function doesn’t hold the instruction to drop the table of the old name anymore. If that happens the remaining tables can be dropped manually by right-clicking and choosing “Drop Table...” in the opened menu.

