MySQL-Workbench



Serververbindung einrichten

MySQL-Server starten (z.B.: WAMP oder xampp (Windows), MAMP (Mac)) →i.d.R. kann Verwaltung der DBs auch über phpmyadmin erfolgen.

Startbildschirm: New Connection, Daten abhängig von Serversoftware.

WAMP (Windows)

User: root Passwort: root Hostname: 127.0.0.1 (oder *localhost*) Port: 3306

MAMP (Mac)

User: root Passwort: <leer> Hostname: 127.0.0.1 (oder *localhost*) Port: 8889

Welcome to MyS * What's New in This Re Read about all changes in	SQL Workbench elease? this MySQL Workbench release.
orkspace	
SQL Development Connect to existing databases and SQL Queries, SQL scripts, edit dat manage database objects.	Connection Name: wamp_lokal
Open Connection to Start Queryin Or click a DB connection to open the SQL Eq	Connection Method: Standard (TCP/IP) Parameters Advanced
Incalhost User: root Host: 127.0.0.1:3306	Hostname: 127.0.0.1 Port: 3306 Username: root Password: Store in Vault Clear Default Schema:
New Connection	

Voreinstellungen für ER-Modellierung

Edit -> Preferences (Windows) bzw. MySQLWorkbench -> Preferences (oder deutsch: "Einstellungen")

Reiter "Diagram"

unten "Hide Captions" abwählen, "Center Captions over line" anwählen

📉 Workb	ench Preferences							×
General	Administrator	SQL Editor	Model	MySQL	Diagram	Appearance		
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Relatic	nships/Connections — raw Line Crossings (sk ide Captions enter Captions Over L	iw in large diagrams)					
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Neue Datenbank anlegen

Möglichkeit 1) In ein SQL-Query-Fenster "CREATE DATABASE databasename" eingeben, Statement ausführen (entweder über entsprechendes Icon **oder** über Query -> Execute Current Query **oder** mit Tastenkürzel Strg + Eingabe (Strg + Shift + Eingabe für alle Statements im SQL-Editor))

Taucht dann in der linken Liste auf. Database Plugins Scriptin Ouerv Execute (All or Selection) ትዤኅ Execute (All or Selection) to Text Execute Current Statement ÷π Explain (All or Selection) ር ው ജ 🗗 Explain Current Statement ∼జ↩ Stop 00 👆 💽 🧭 🔝 🐻 Reconnect to Server New Tab to Current Server **☆**#T SQL Editor (mamp-ports) 8 Home SQL Query* Default: ۵ CREATE DATABASE 121021 anlegen test I01016-modx-spamschlucker 2 I01231_spamschlucker_modx Ilonation States State States Stat File 110412_lf_relaunch Field 110622_lf_ee2 Field 110630_lf_ee2_test 110701 lftest

Neue Datenbank anlegen



Neue Tabelle(n) anlegen

Entweder über Rechtsklick auf "Tables" → "Create Table"



... oder durch MySQL-Befehl (s.u.)

... oder via ERD \rightarrow Forward Engineering (s.u.)

SQL-Befehle ausführen

In einem Script-Tab (falls keiner offen: Strg T oder File -> New Script Tab)

MySQL Workbench SQL Editor (wamp_lokal) View Query Database Plugins Scripting Community Help 💭 : 😴 : 🗲 👧 🕵 🐼 🗛 : 📀 🗞 : 🚱 : 🚸 : 🚐 Object Browse ACTIONS Script-Tab 🌮 Execute SQL File 📑 Add Schema 📑 🔒 Add Table 👘 🗚 🕅 👘 🎌 Add Routini CHEMAS 🛚 🗐 121023 kundenorte mvisam 🔻 👘 Tables Output Query 1 Result 🕨 🔲 kunden orte 3 🛅 🔁 🖥 🖶 Views 📅 Routines 121023_kundenorte_myisam 121023 test kund 🛢 121023 test k Tables (2 items)

Achtung: Entweder gewünschte DB mit Punktnotation referenzieren (SELECT * FROM datenbankname.tabellenname) oder DB als default einstellen:



Neues ER-Diagramm erstellen

File -> New Model
 bei Bedarf Schema umbenennen
 Add Diagram

Model Overview	
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	Paste
👩 Add Table	Edit Schema
Views (0 item	Edit in New Window

ERD: Entitäten + Beziehungen anlegen

non-identifying relationships (gestrichelt)

-- Entitäten können autonom existieren

identifying relationships (durchgezogen)

-- Kind-Entität (z.B. "Buch") kann nicht ohne Eltern-Entität (z.B. "Autor") existieren.

siehe http://www.informatikzentrale.de/mysql-workbench.html

Verwenden Sie vorerst nur non-identifying (außer bei n:m)

→gestrichelt, wenn immer es geht



ERD: Tabellen bearbeiten

Doppelklick auf Tabelle

unten: Reiter "Table" → Name ändern

Reiter "Columns" → Attribute

Checkboxen: PK = PRIMARY KEY NN = NOT NULL AI = AUTO_INCREMENT

🗋 kunden - Table 🛛 🕲									
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ER-Diagramme: Notationsweise

Für einigermaßen klassische Ansicht nach Chen: Model → Relationship Notation → Classic

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ER-Diagramme: Symbole



ER-Diagramm speichern

File \rightarrow Save Model As ...

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Forward Engineering: Diagramm → MySQL-Code



Forward Engineering: Diagramm → MySQL-Code

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2x "Continue" ...

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	Select Objects to Forward Engineer										
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Forward Engineering:

Diagramm → MySQL-Code

000	Forward Engineer to Database	
	Review the SQL Script to be Executed	
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Commit Progress	CREATE SCHEMA IF NOT EXISTS `mydb` DEFAULT CHARACTER SET Ia CREATE SCHEMA IF NOT EXISTS `121021_autoverleih` ; USE `mydb` ; USE `121021_autoverleih` ;	tin1 COLLATE latin1_swedis
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	PRIMARY KEY ('plz')) ENGINE = InnoDB;	Server ausführen
	Table `121021_autoverleih`.`kunden`	
	Save to File Copy to Clipboard	
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Forward Engineering: Diagramm \rightarrow MvSQL-Code

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Options Select Objects Review SQL Script Connection Options Commit Progress	The following tasks will now be executed. Please Press Show Logs to see the execution logs. Connect to DBMS Execute Forward Engineered Script Forward Engineer Finished Successfully	▼ 📴 121021_autover ▼ Tables ▼ 🛄 kunden ◇ id

Meist ist Rechtsklick -> "Refresh" notwendig, anschließend Tabellen zu- und wieder aufklappen!

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Reverse Engineering Aus MySQL-DB ein ERD generieren

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Reverse Engineering Aus MySQL-DB ein ERD generieren



Reverse Engineering Aus MySQL-DB ein ERD generieren

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Achtung: Beziehungen werden je nach DB-Engine nicht dargestellt (z.B. bei MyISAM)