Using MySQL Workbench 8

Data Warehousing

School of Information

ISTE-434/724

Topics

- MySQL Workbench connections
- MySQL Extended Entity Relationship Diagrams (EER)
- LOAD DATA INFILE … INTO TABLE Statement

What is Workbench?

- MySQL Workbench provides a graphical tool for working with MySQL Servers and databases.
- MySQL Workbench provides three main areas of functionality:
  - SQL Development
  - Data Modeling
  - Server Administration

SQL Development

- Enables you to create and manage connections to database servers. As well as allowing you configure connection parameters
- MySQL Workbench provides the capability to execute SQL queries on the database connections using the built-in SQL Editor.

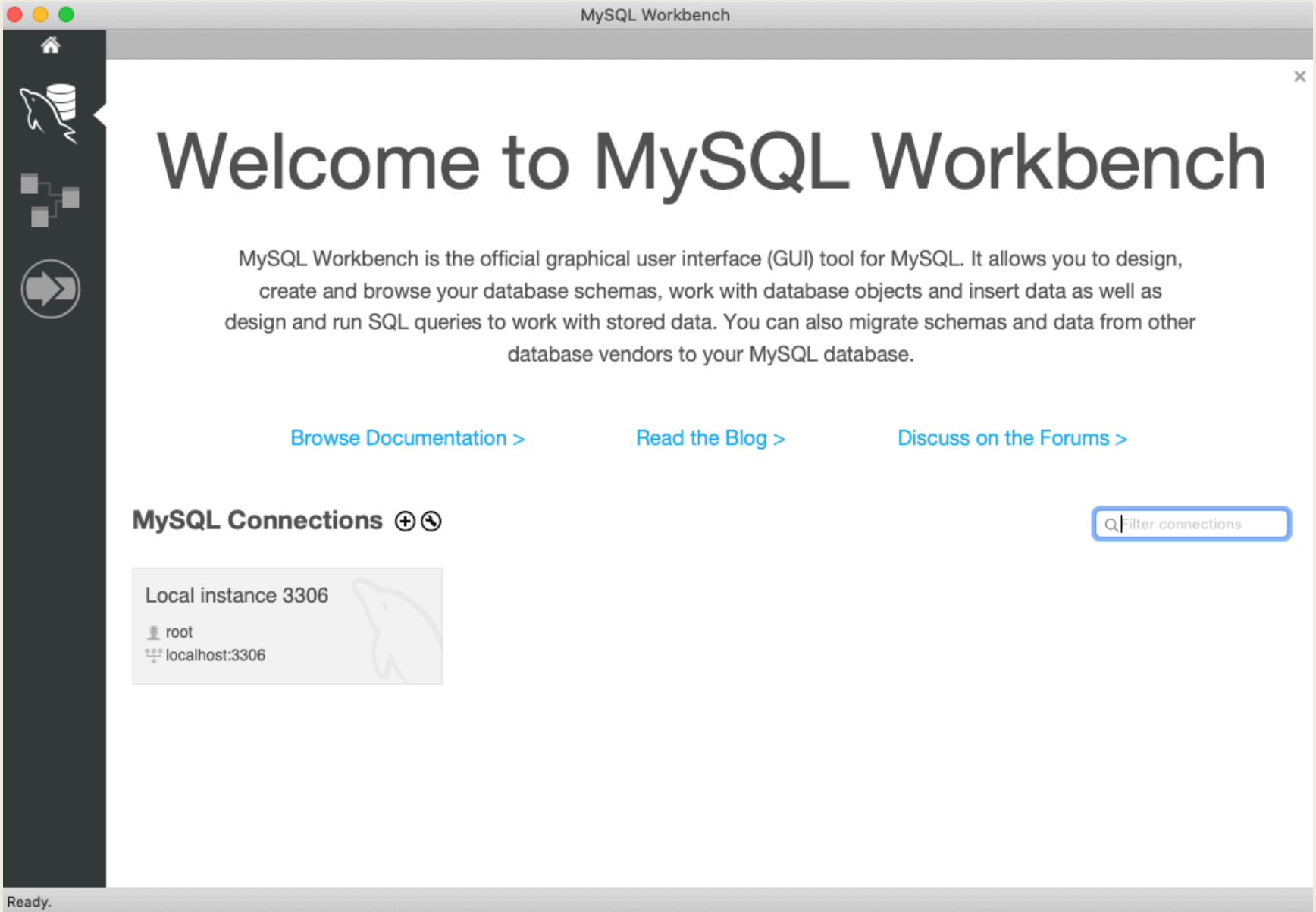
Data Modeling

- Enables you to create models of your database schema graphically
- Reverse and forward engineer between a schema and a live database
- Edit all aspects of your database using the comprehensive Table Editor which provides:
  - Easy-to-use facilities for editing Tables
  - Columns
  - Indexes
  - Triggers
  - Partitioning
  - Inserts
  - Privileges
  - Routines
  - Views.

Server Administration

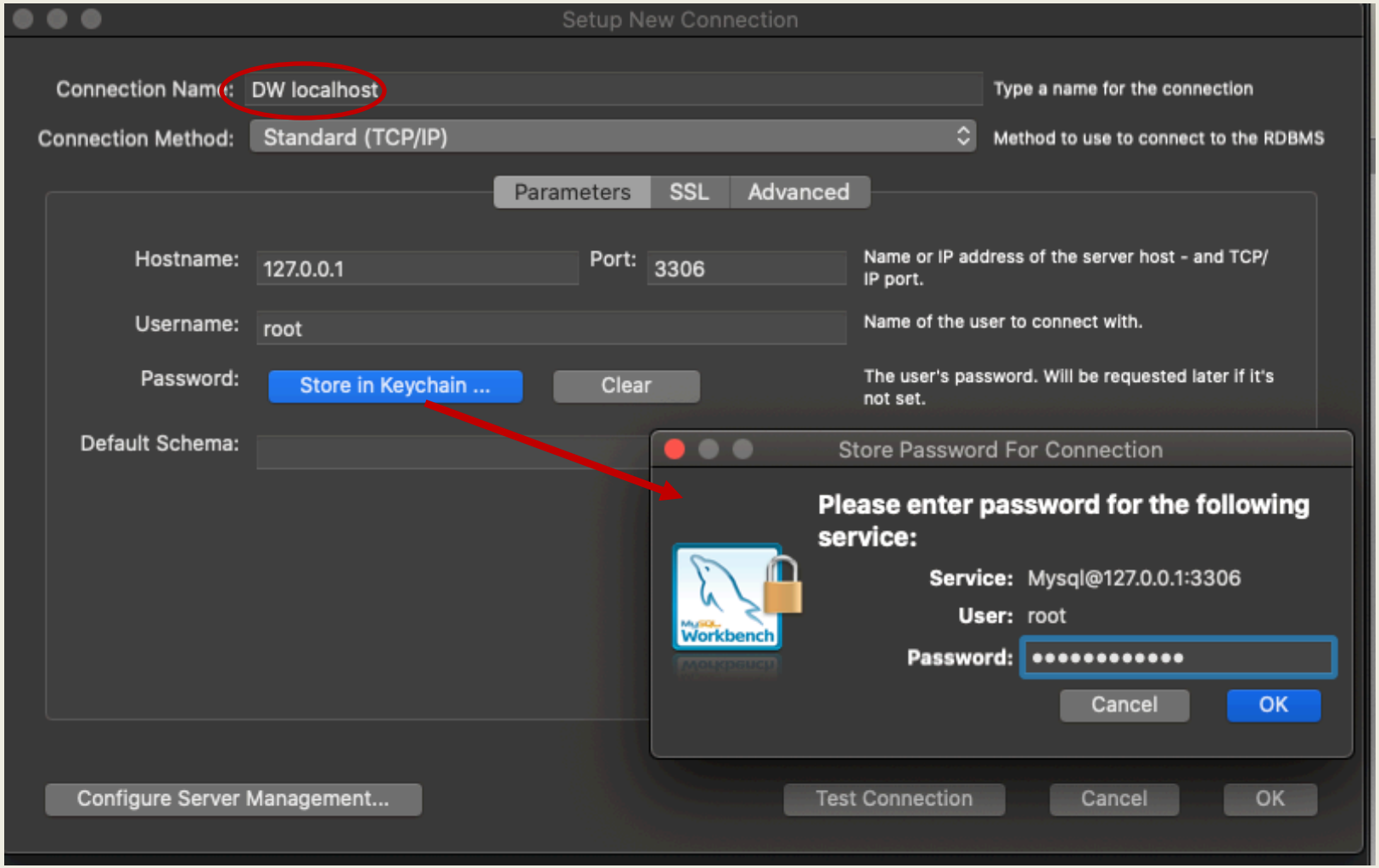
- Enables you to create and administer server instances.
  - Startup
  - Shutdown

Main Menu

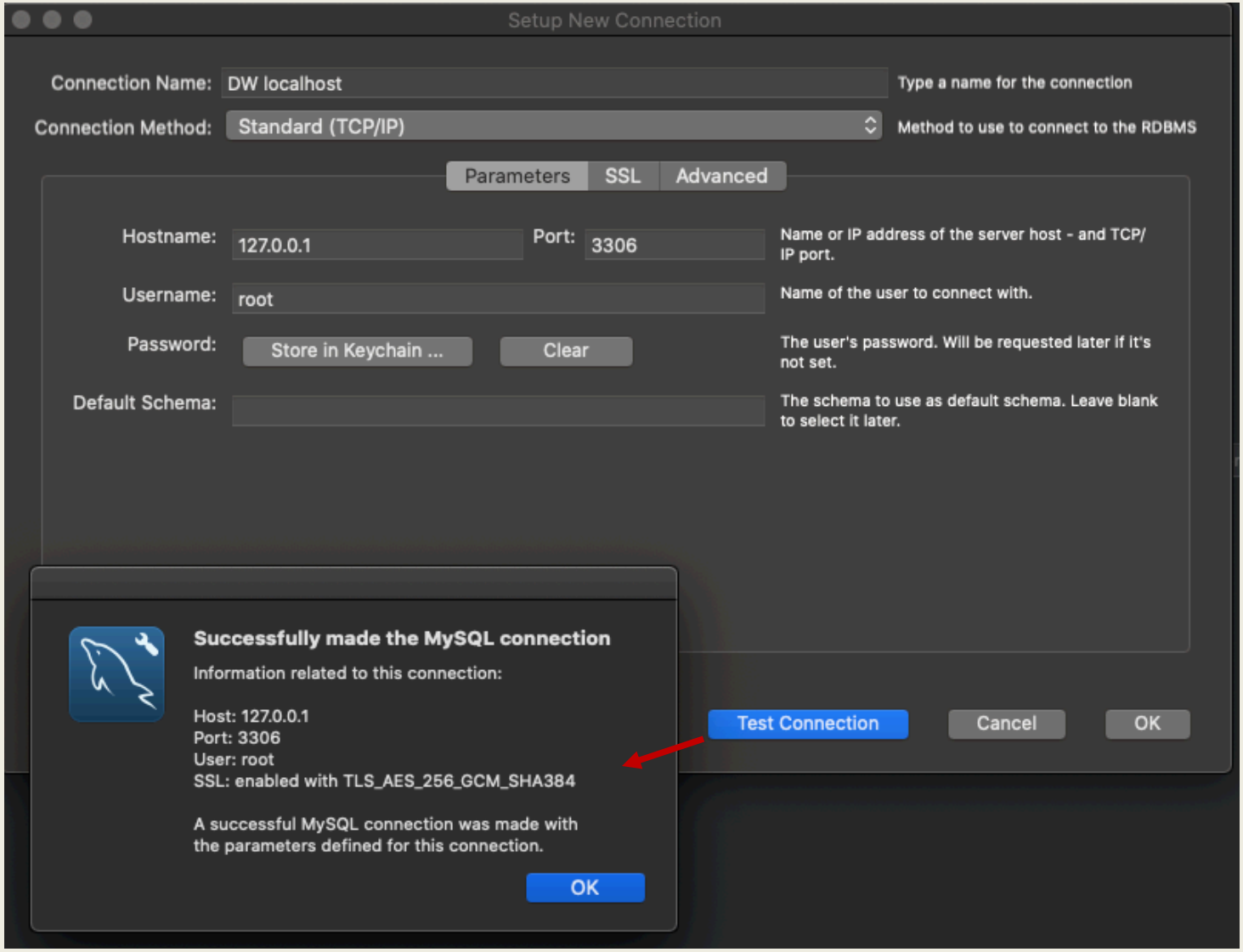

MySQL Workbench
Welcome to MySQL Workbench
MySQL Workbench is the official graphical user interface (GUI) tool for MySQL. It allows you to design, create and browse your database schemas, work with database objects and insert data as well as design and run SQL queries to work with stored data. You can also migrate schemas and data from other database vendors to your MySQL database.
Browse Documentation >
Read the Blog >
Discuss on the Forums >
MySQL Connections
Filter connections
Local instance 3306
root
localhost:3306
Ready.

Setting Up a Database Connection

(MySQL Workbench 8)

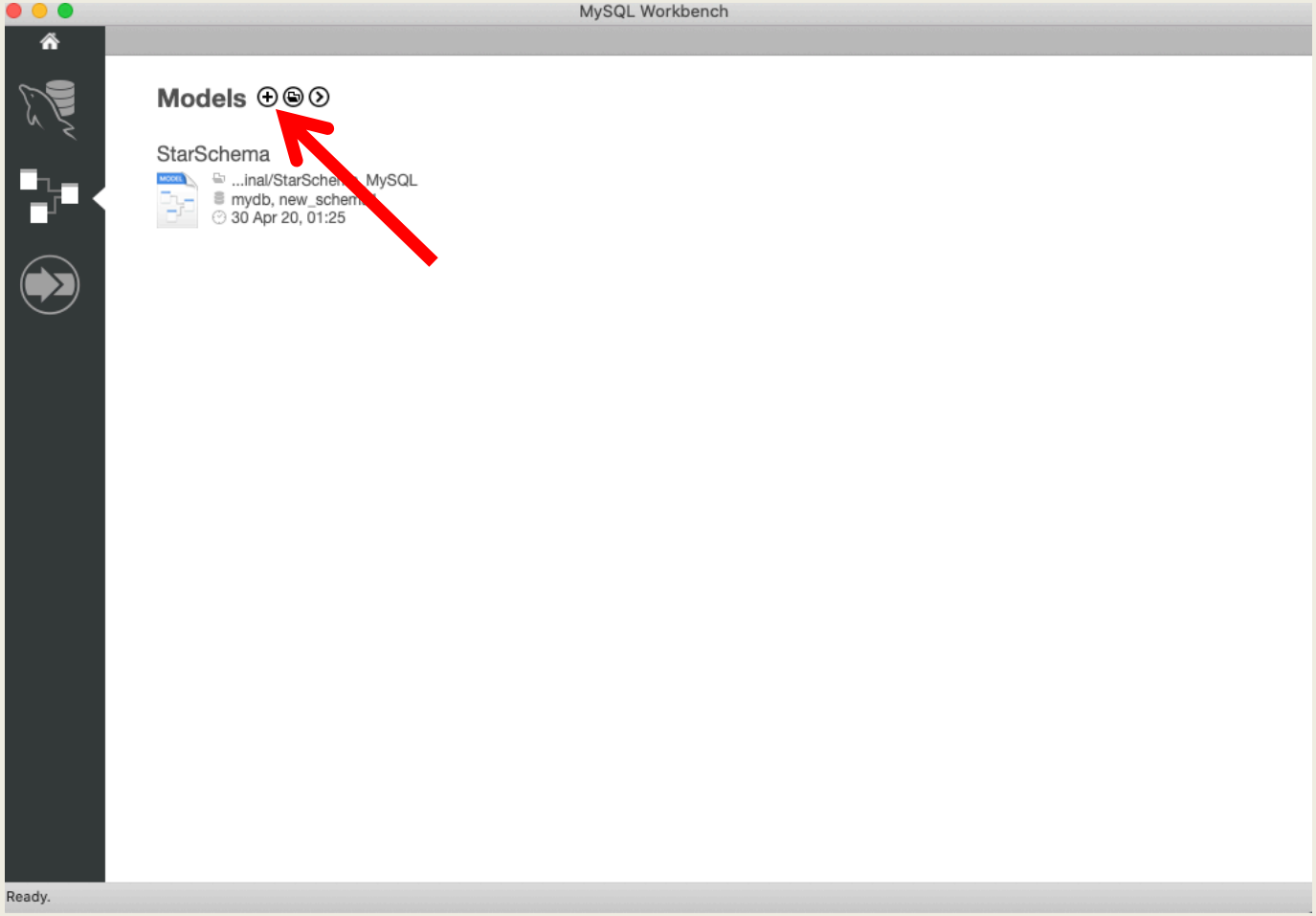


Testing Connection

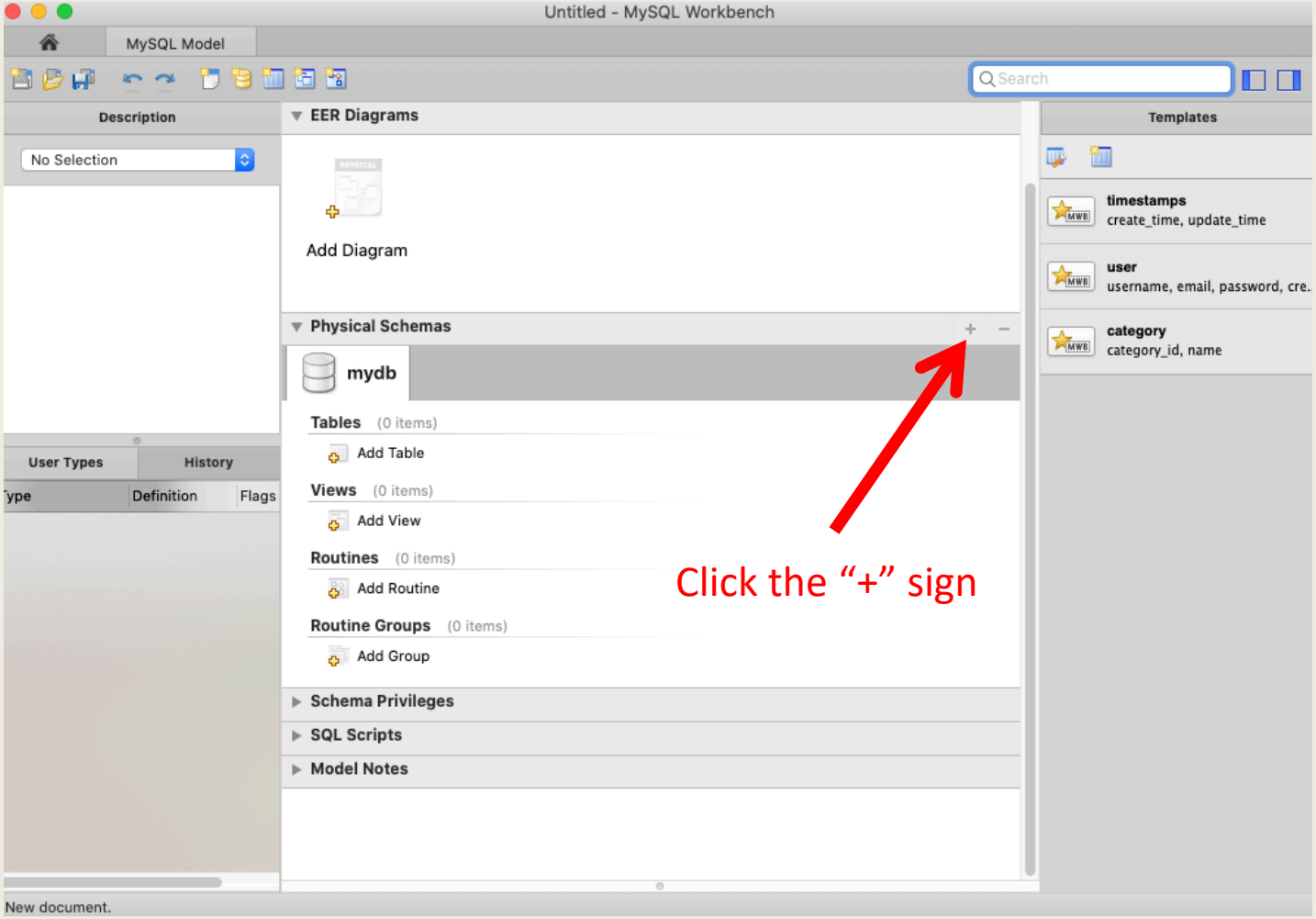


EER Modeling

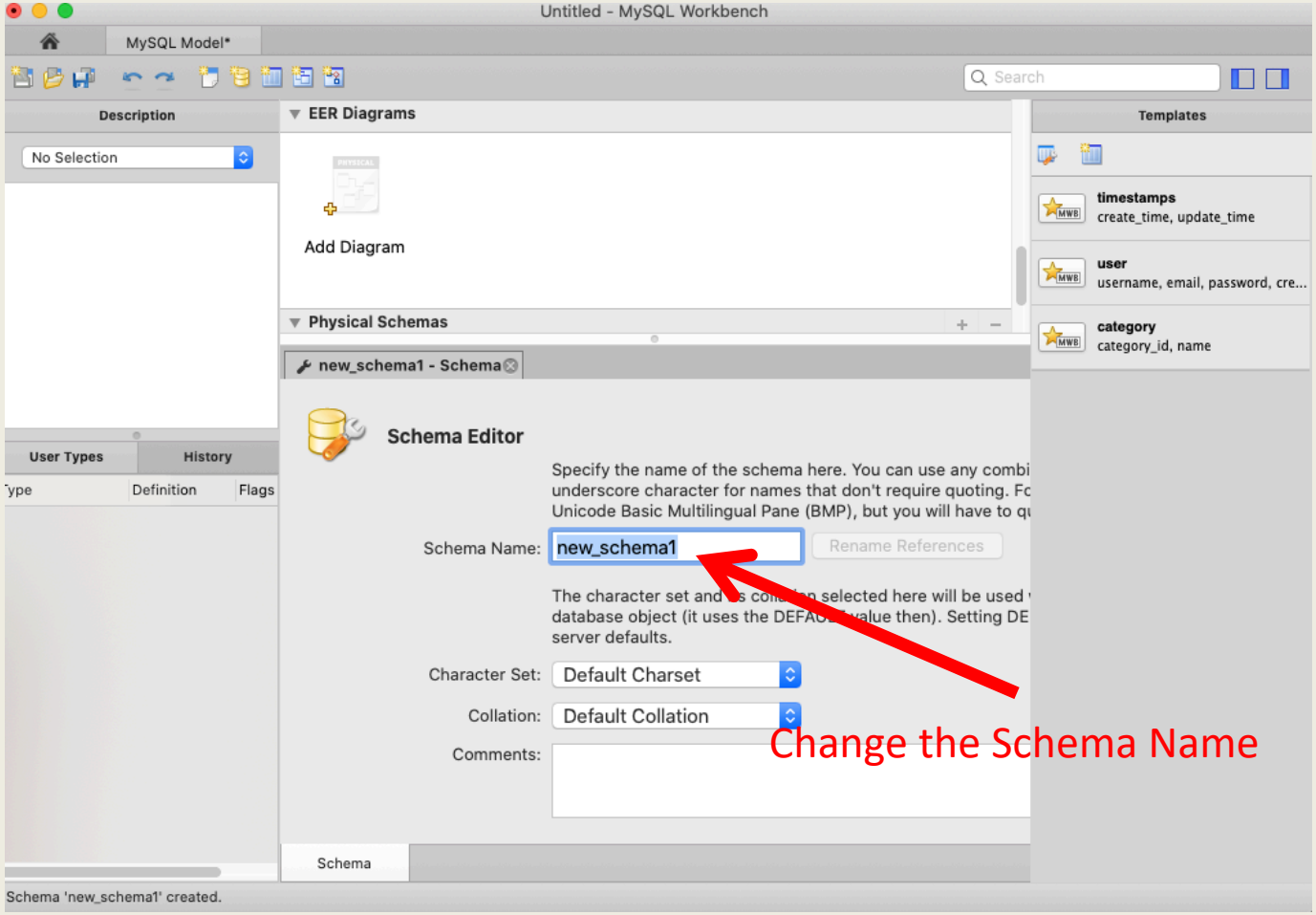
(MySQL Workbench 8)



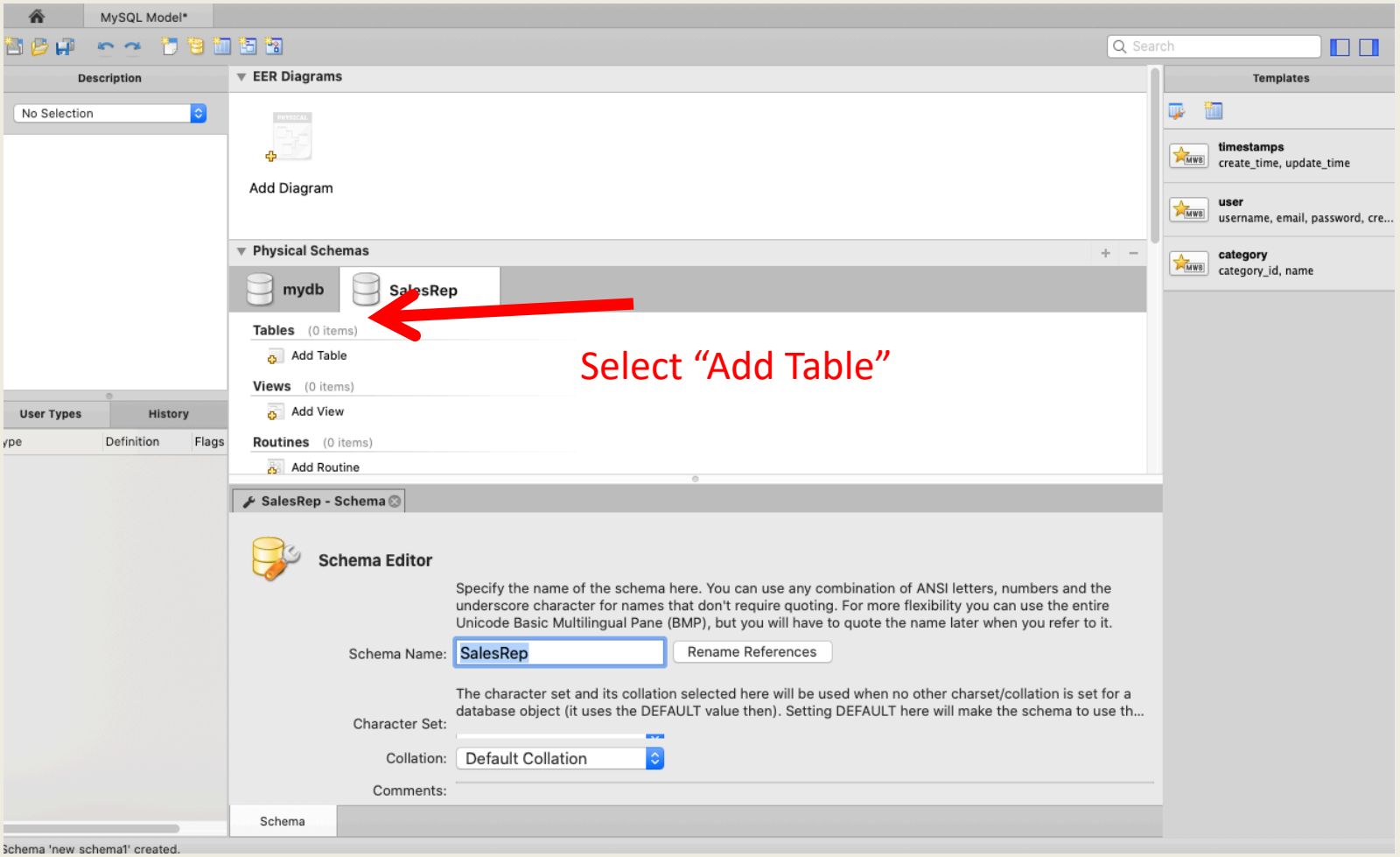
Create a New Schema



Change Schema Name



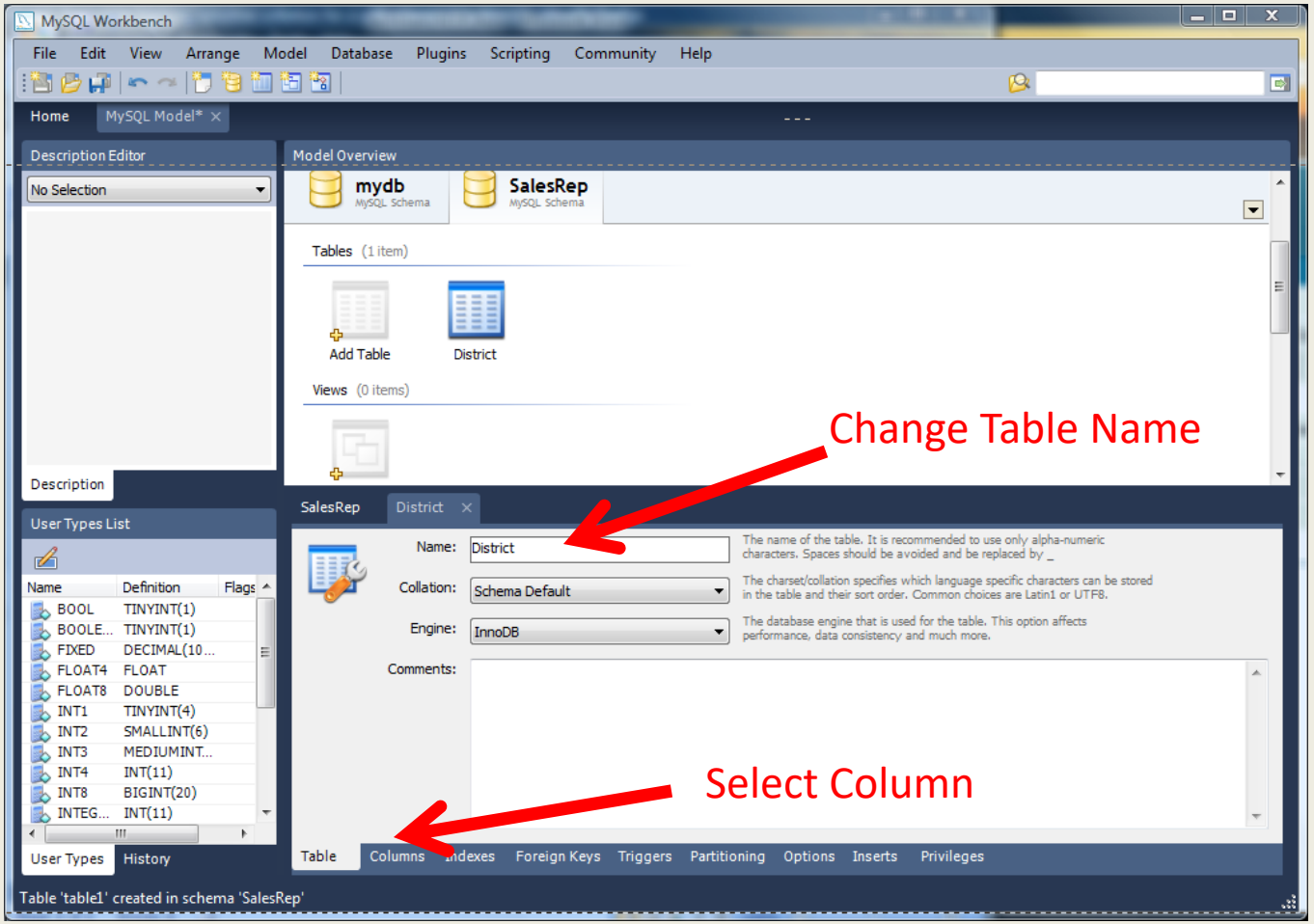
SalesRep Database



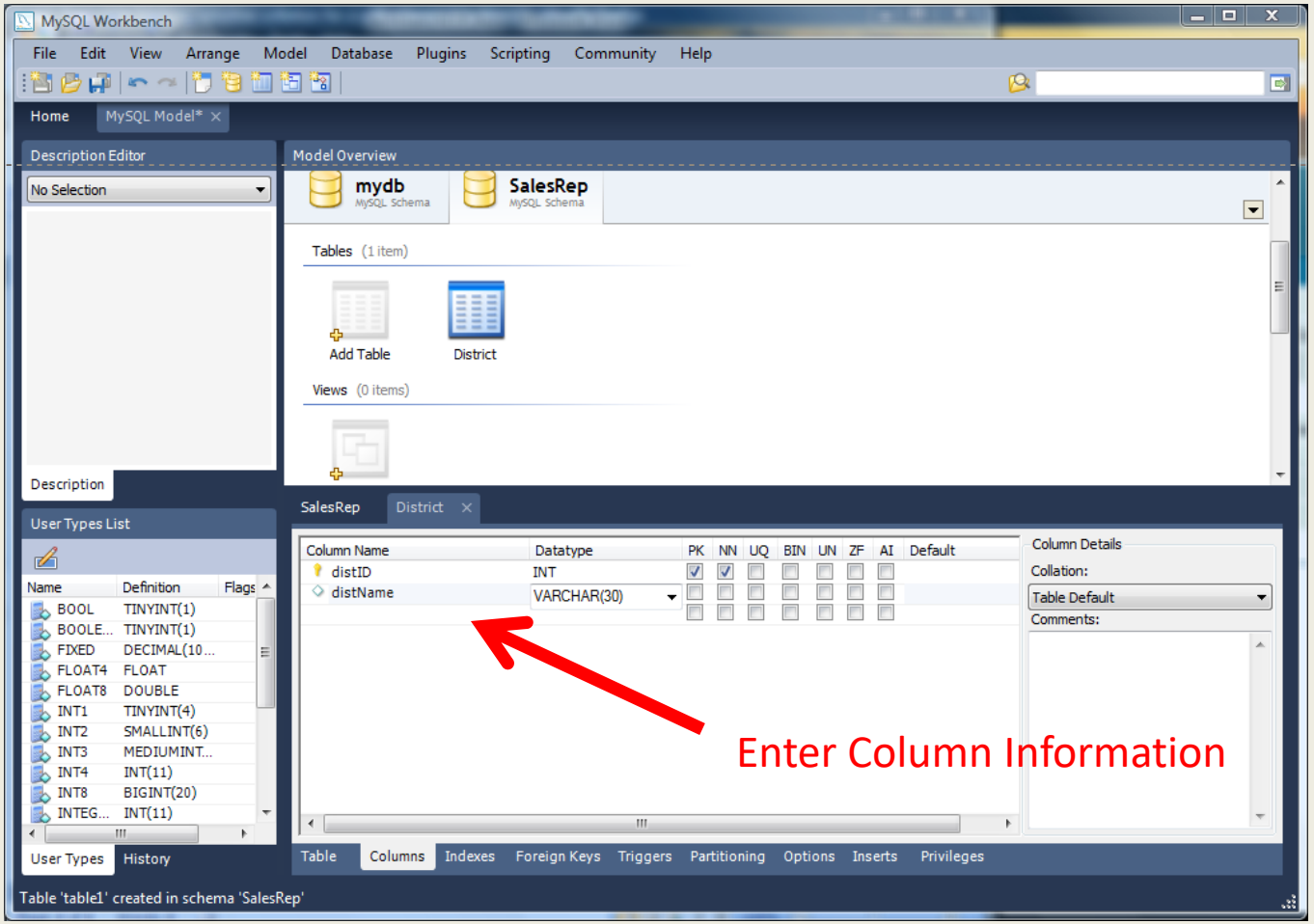
Select “Add Table”

Change to UTF8

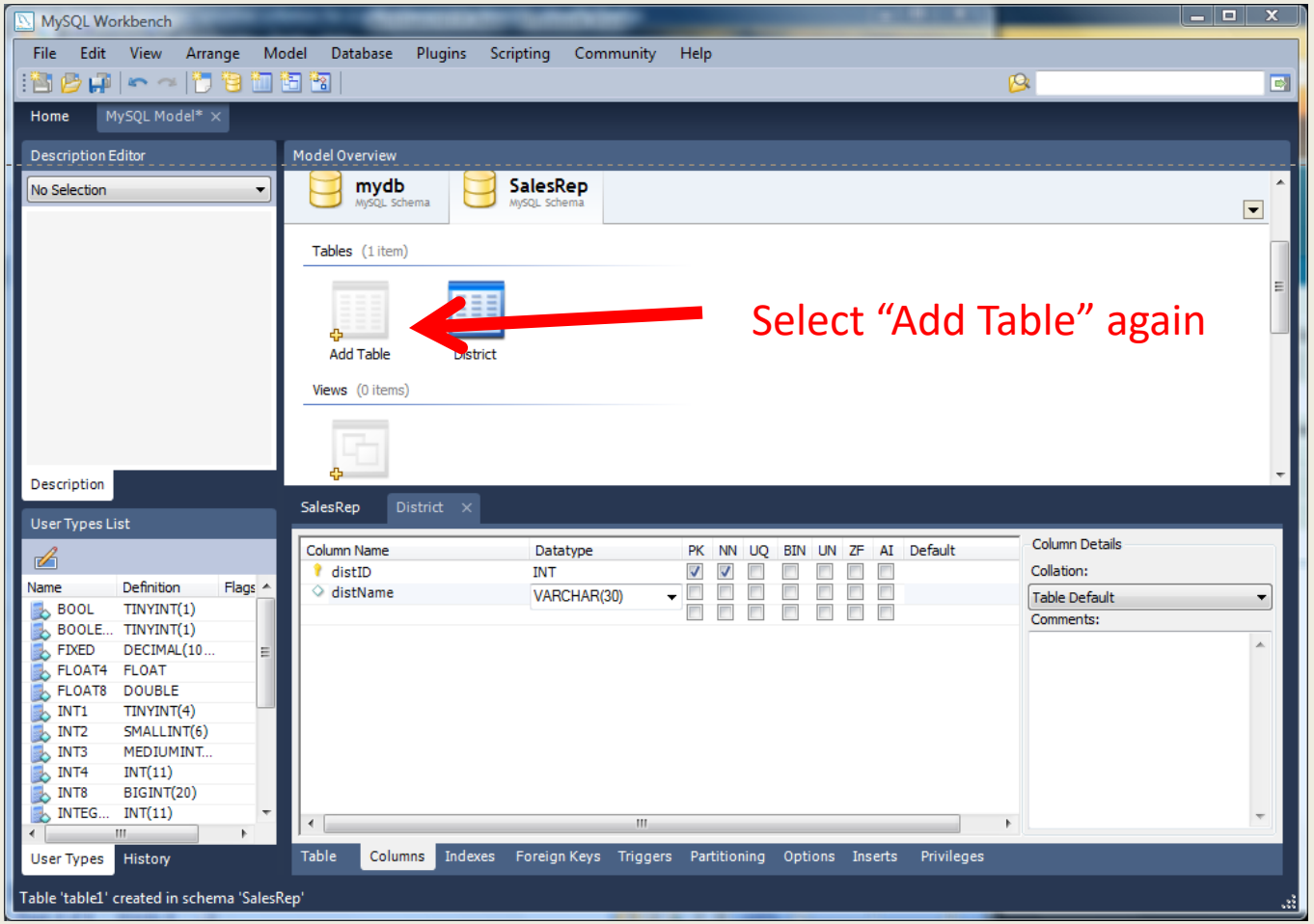
Configure Table



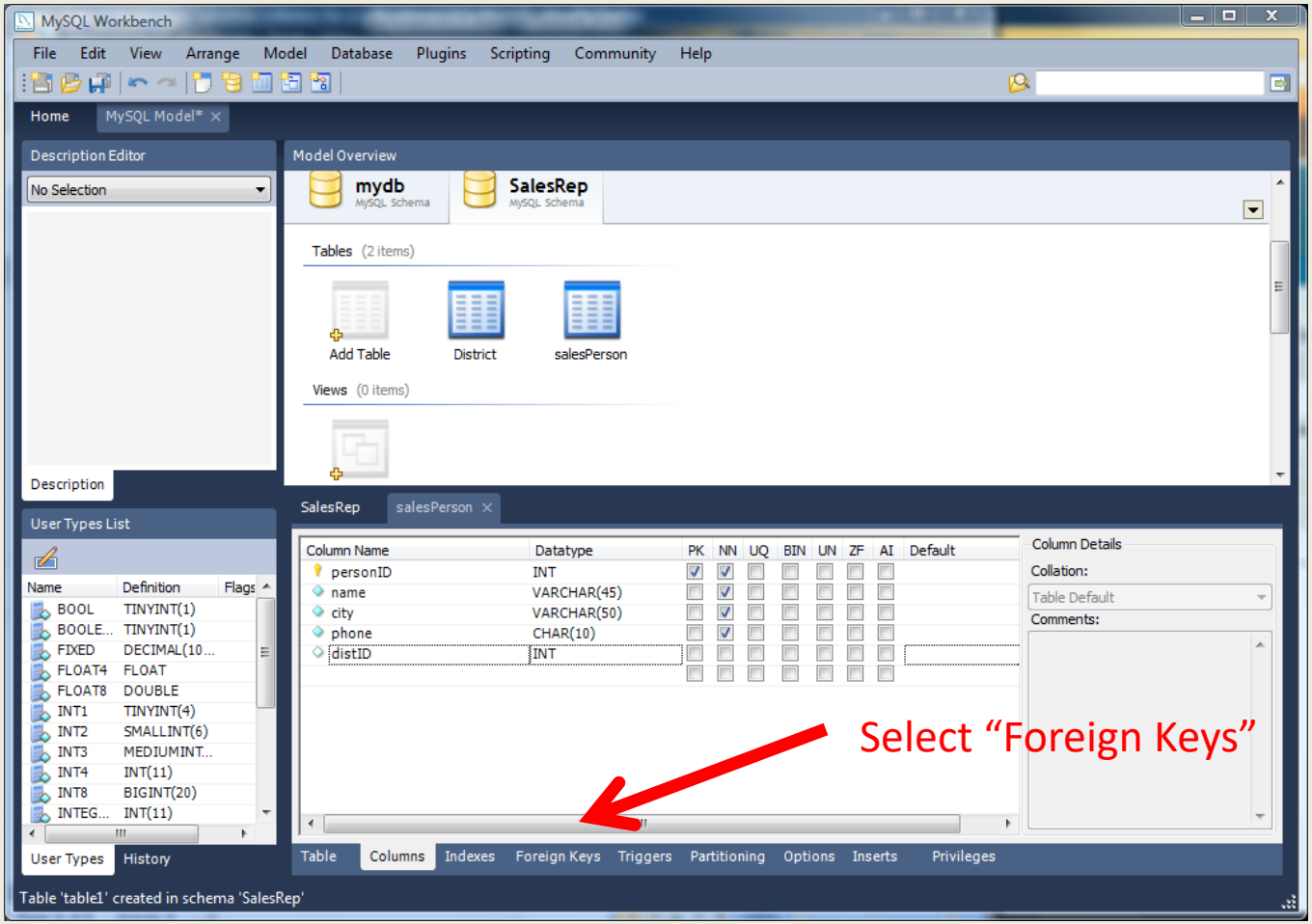
Columns


MySQL Workbench
File Edit View Arrange Model Database Plugins Scripting Community Help
Home
MySQL Model*
Description Editor
No Selection
Description
Model Overview
mydb
MySQL Schema
SalesRep
MySQL Schema
Tables (1 item)
Add Table
District
Views (0 items)
User Types List
Name Definition Flags
BOOL TINYINT(1)
BOOLE... TINYINT(1)
FIXED DECIMAL(10...
FLOAT4 FLOAT
FLOAT8 DOUBLE
INT1 TINYINT(4)
INT2 SMALLINT(6)
INT3 MEDIUMINT...
INT4 INT(11)
INT8 BIGINT(20)
INTEG... INT(11)
User Types
History
SalesRep
District
Column Name Datatype PK NN UQ BIN UN ZF AI Default
distID INT
distName VARCHAR(30)
Column Details
Collation:
Table Default
Comments:
Enter Column Information
Table
Columns
Indexes
Foreign Keys
Triggers
Partitioning
Options
Inserts
Privileges
Table 'table1' created in schema 'SalesRep'

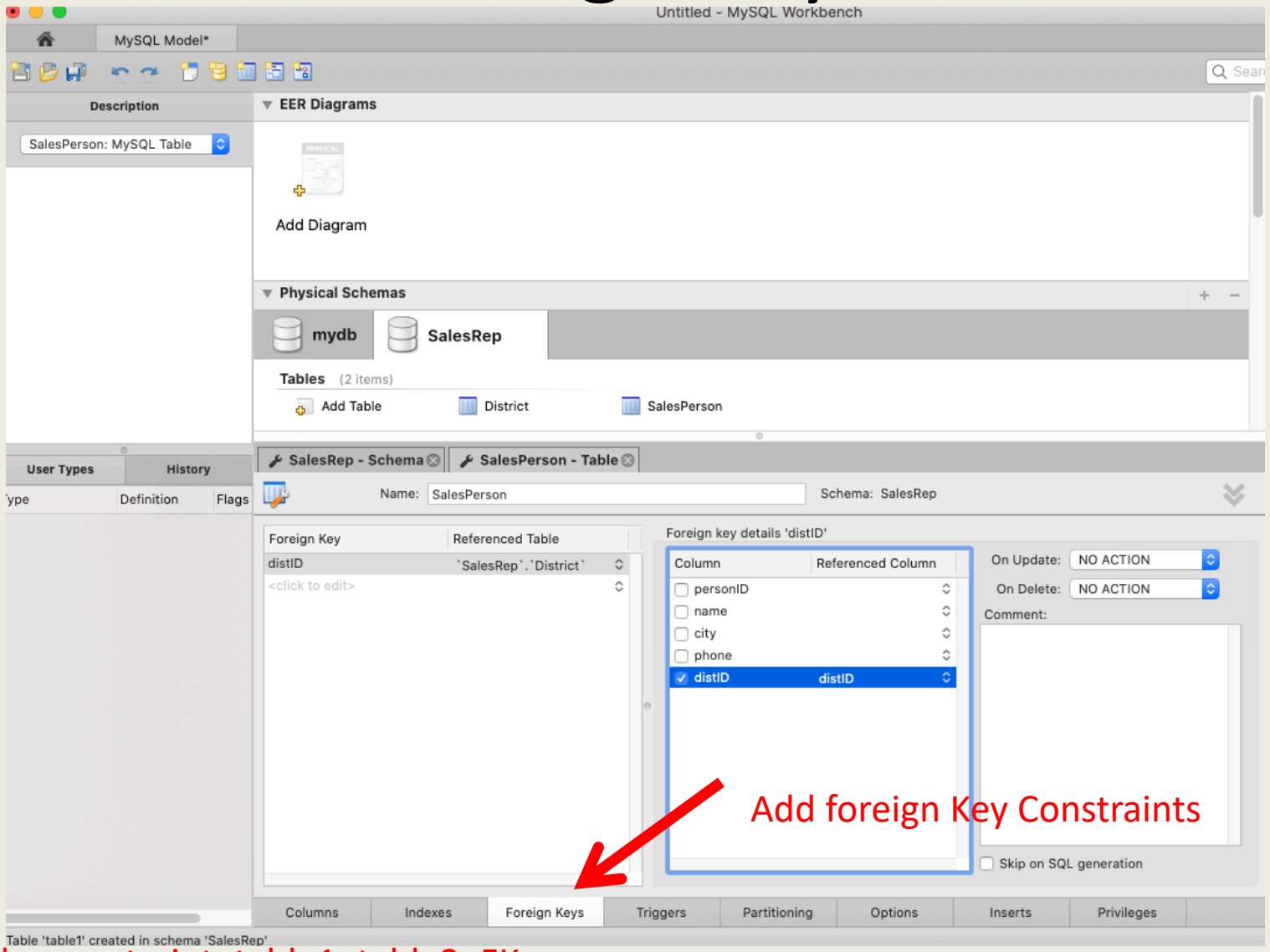
Add a Second table



The Second Table

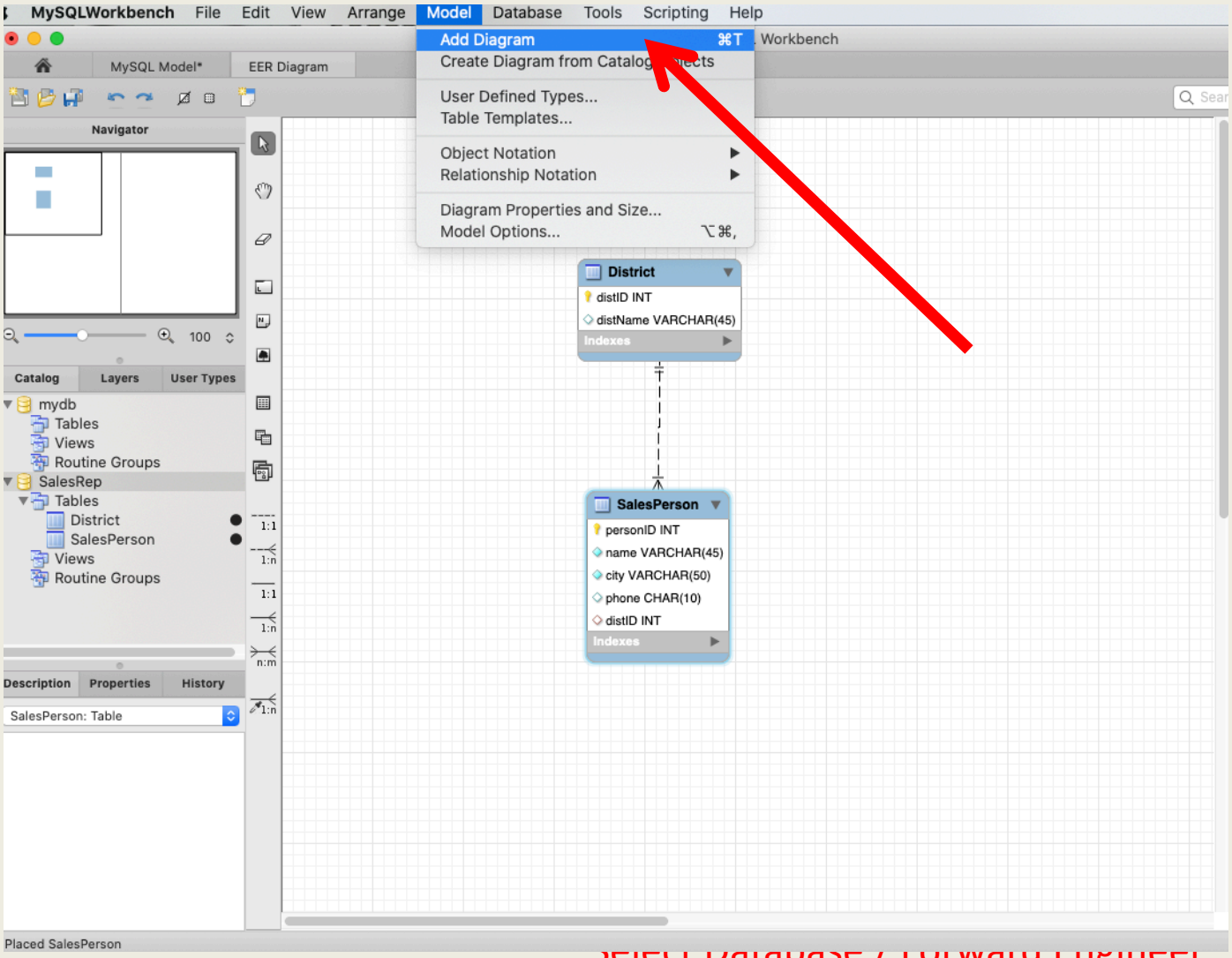


Foreign Keys



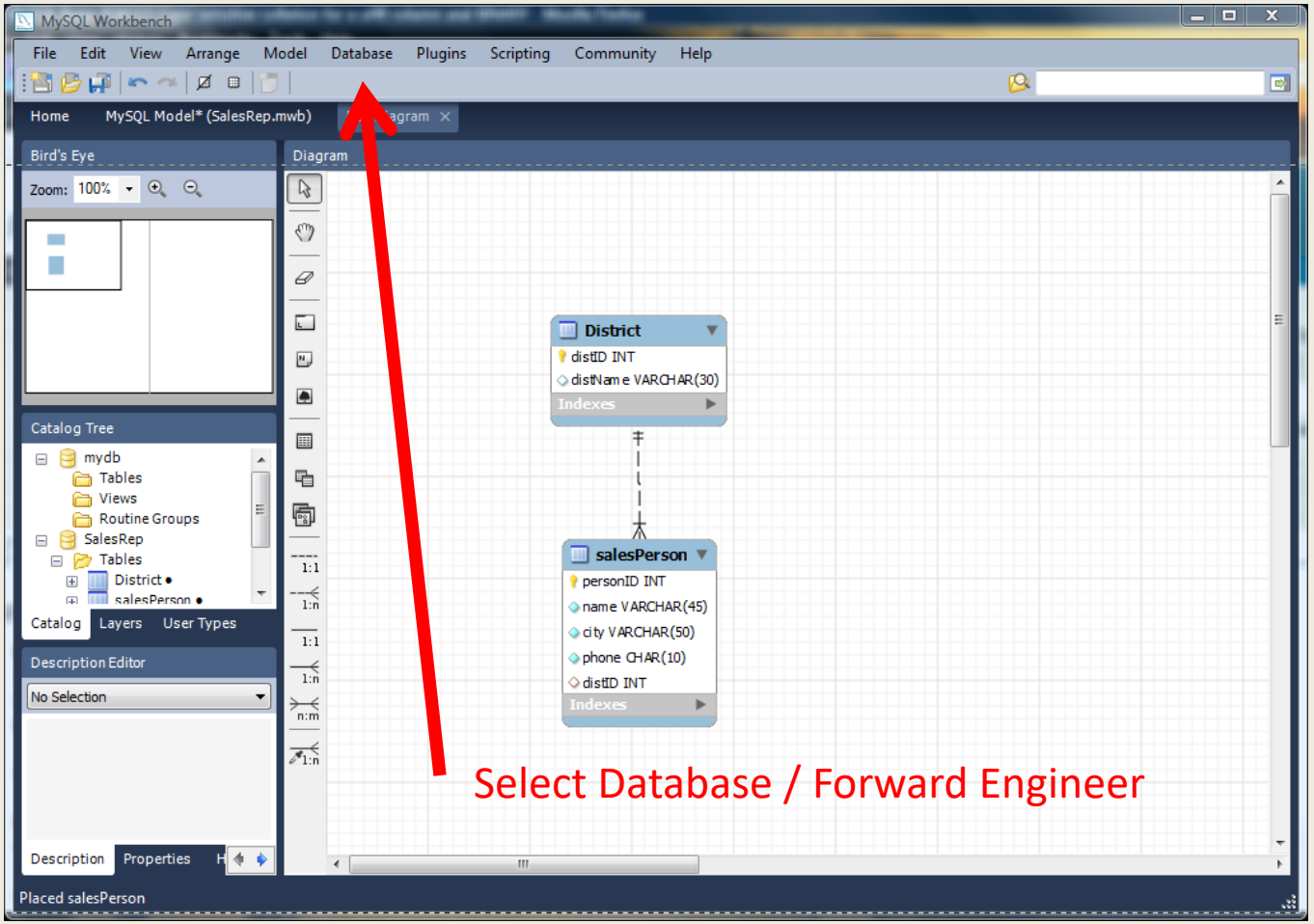
Name the constraint: table1_table2_FK

Diagram Representation

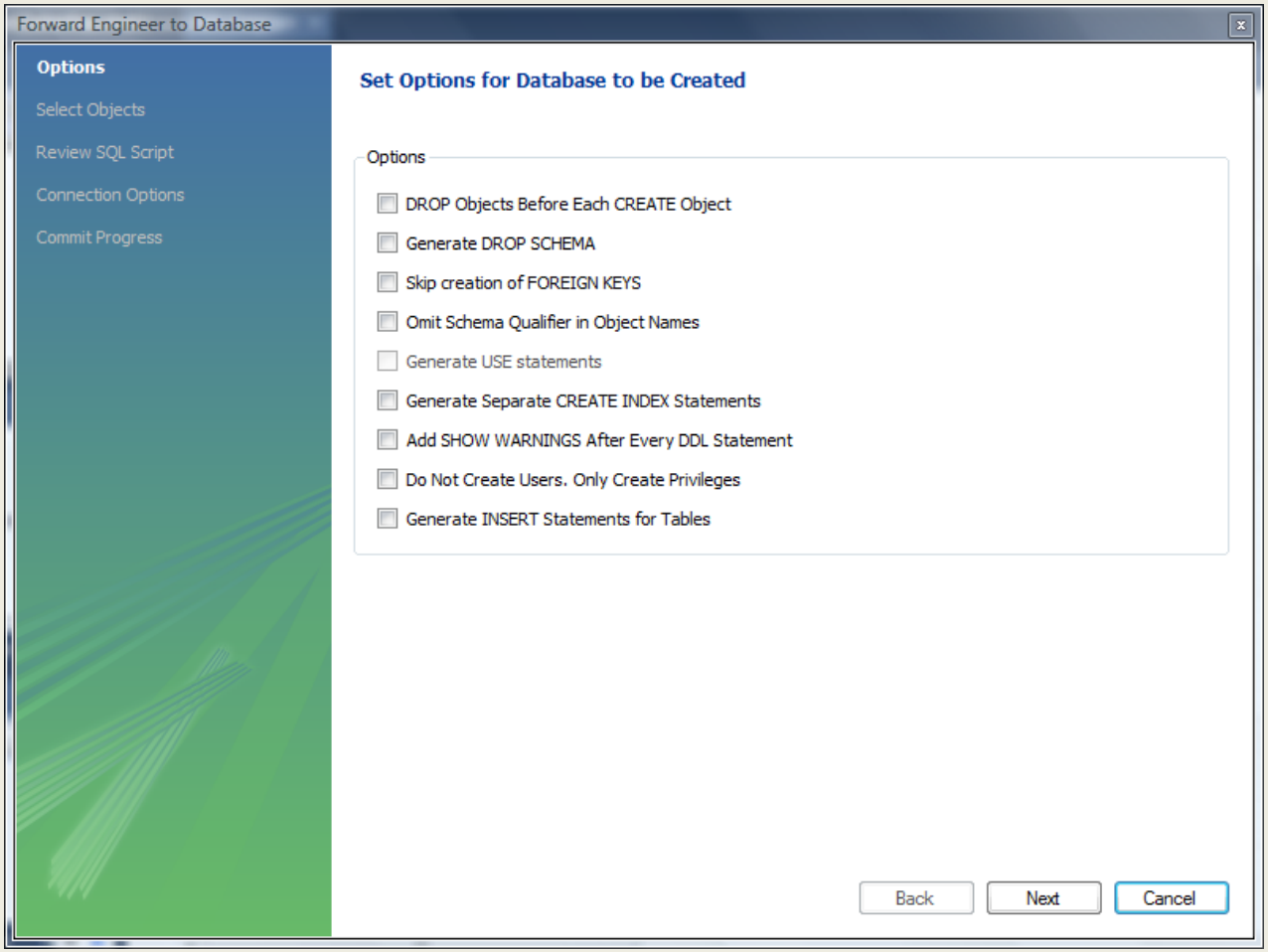


Select Database / Forward Engineer

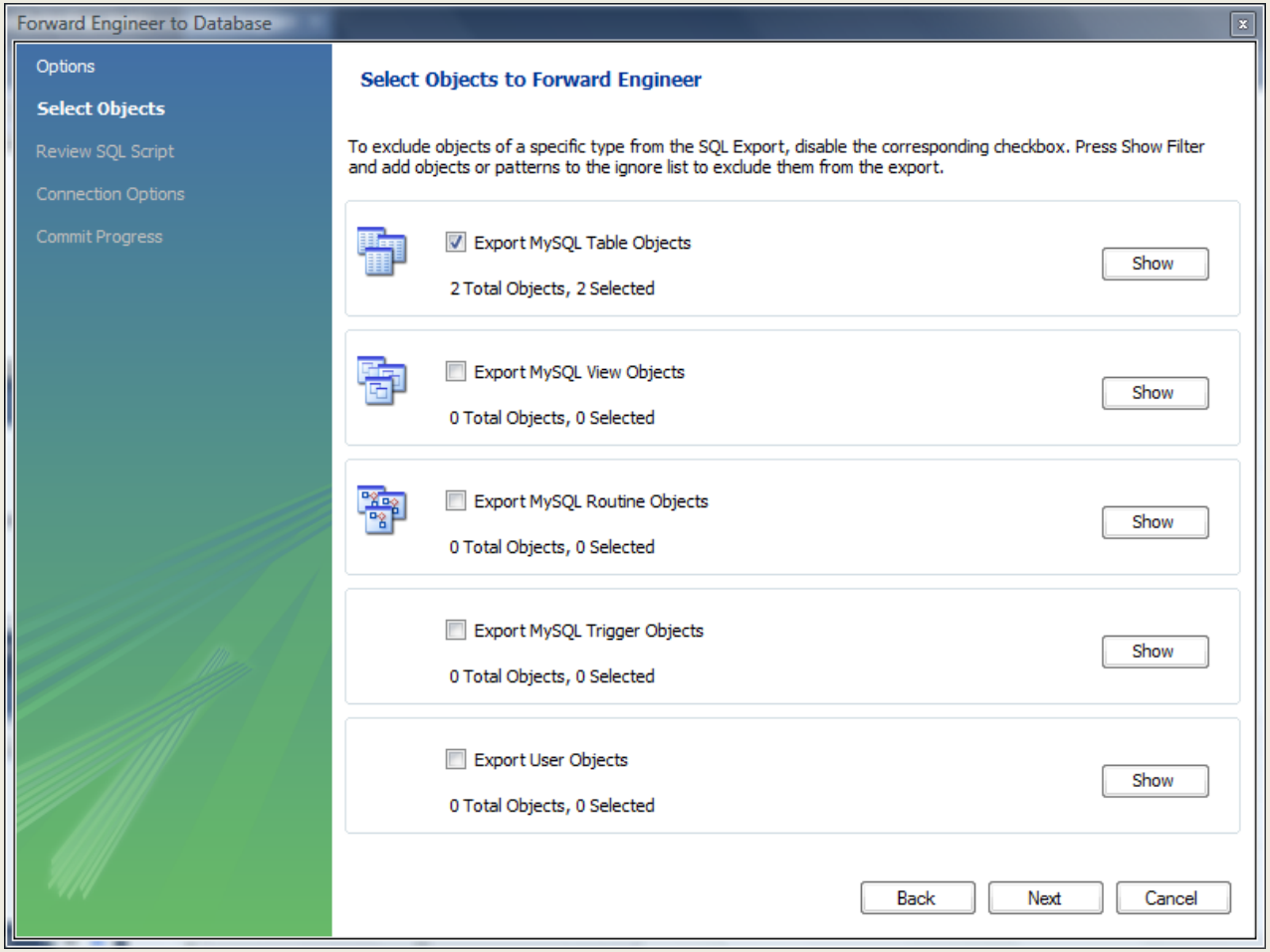
Diagram Representation



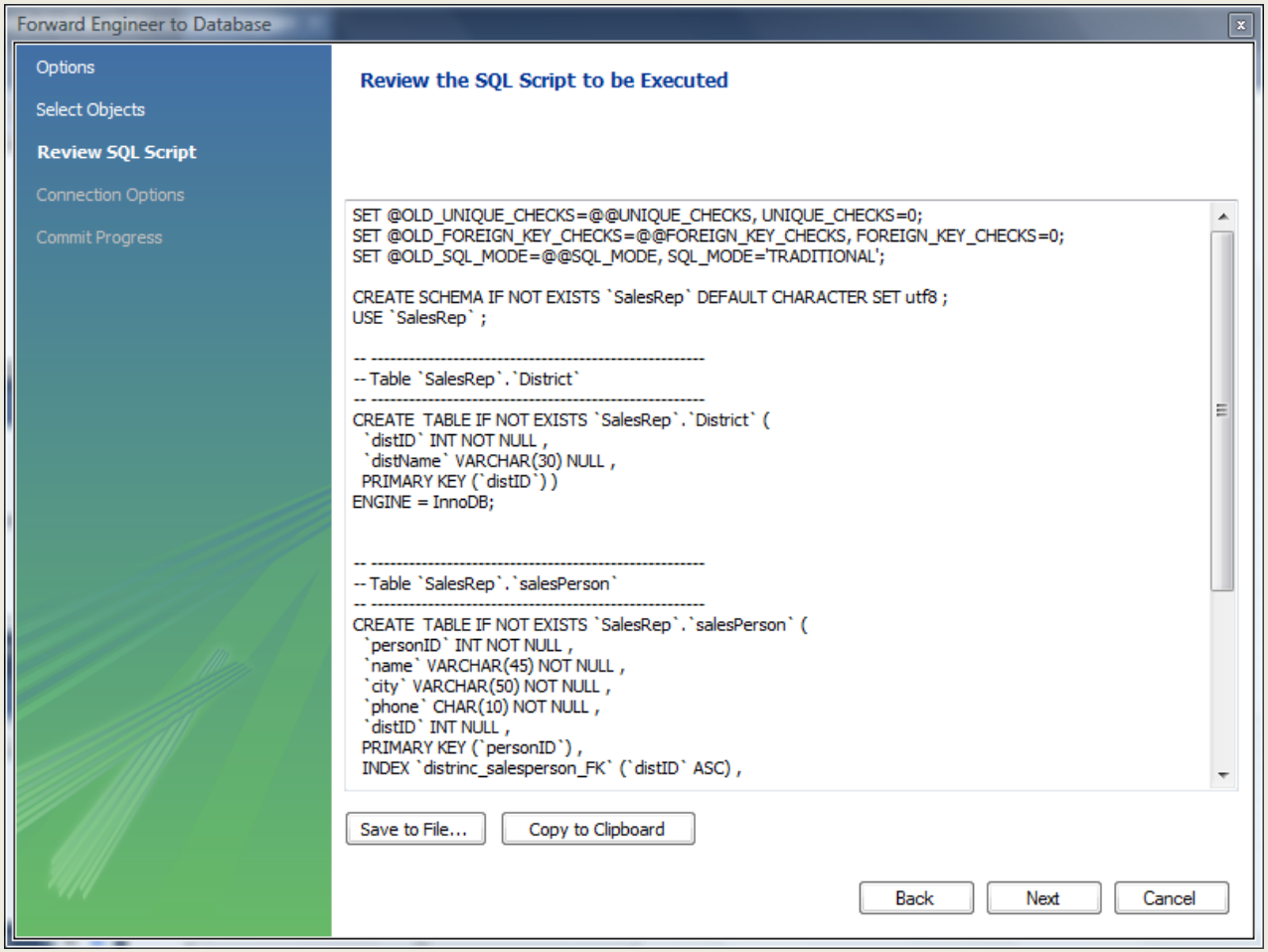
Choose How to Generate SQL Code



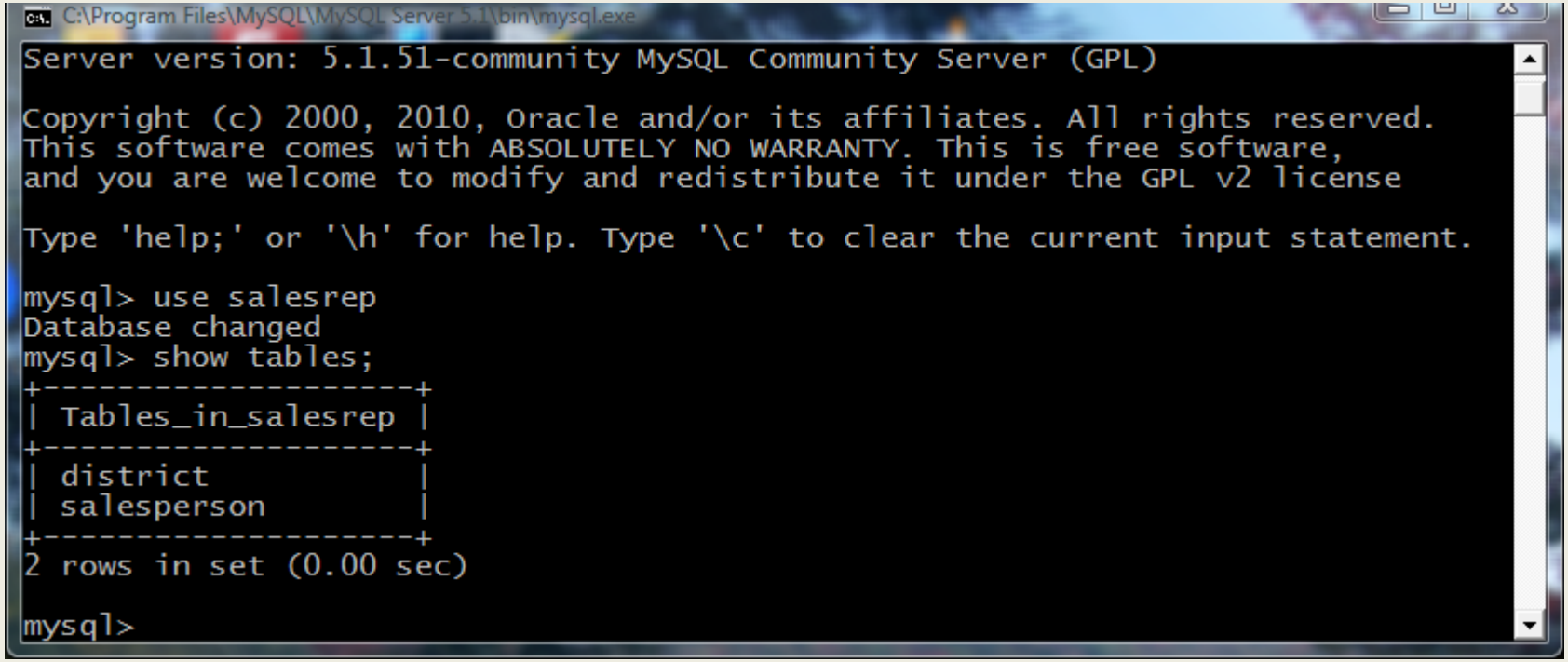
Export the Objects



Schema Creation Code



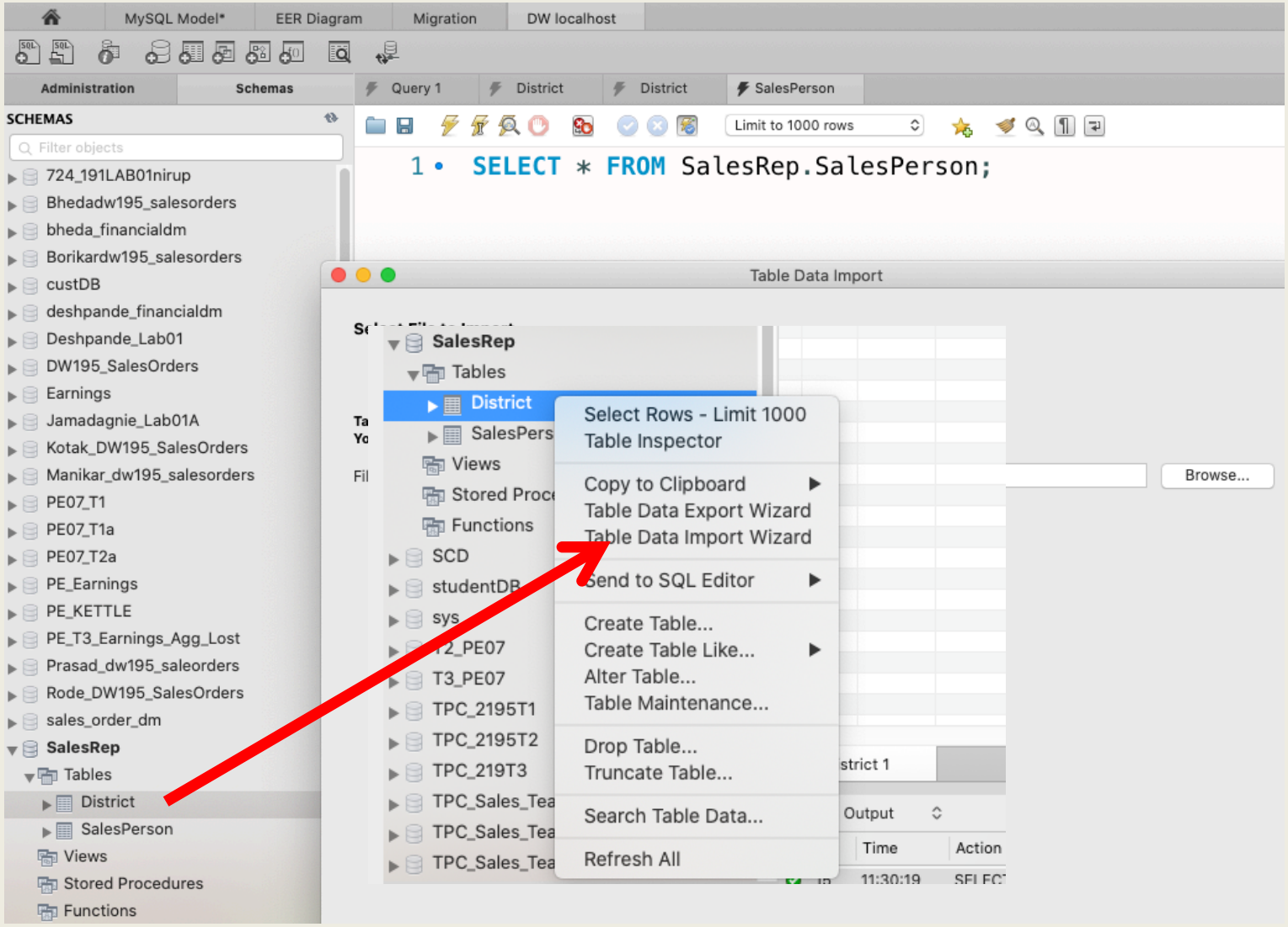
The Tables Have Been Created



Save

- Don’t forget to SAVE your Workbench Model
  - File / Save As
- Will create a .mwb file

Table Data Import



LOAD DATA SQL Statement

```
LOAD DATA INFILE 'c:/11ASQL/DistrictData.csv‘
INTO TABLE District
FIELDS TERMINATED BY ';'
ENCLOSED BY '"'
LINES TERMINATED BY '\r\n'
IGNORE 1 LINES;
```

- Mac OS X, you would likely want to use LINES TERMINATED BY '\r'.)
- Can use OPTIONALLY ENCLOSED BY
- Don’t have extra blanks in data file