SPRING FRAMEWORK

GURU

Spring Framework 5

Beginner to Guru

Connecting to MySQL Overview

Types of Connections

- Local Connection
  - You're connecting to MySQL from the command line on the machine running MySQL
  - Protocol depends on your Operating System
- Remote / Client Connection
  - You're using some type of client software on the same machine running MySQL
  - OR - Connecting to the MySQL Server from a different machine over the network

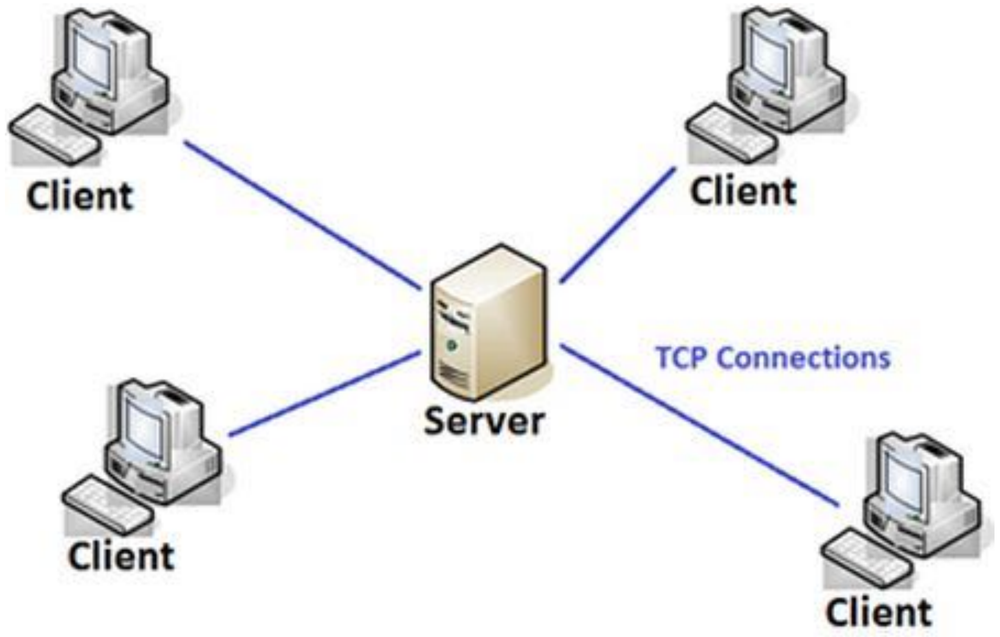
Client Protocols

- TCP/IP - Most common
- SOCKET - Unix/OSX/Linux Only
- PIPE - Windows Only
- MEMORY - Windows Only

TCP / IP

- TCP / IP - Transmission Control Protocol / Internet Protocol
- DNS - Domain Name Service - Associates an IP address with a human readable name
  - google.com = IP Address: 216.58.218.110
- “localhost” is the computer you are on. IP Address: 127.0.0.1
- A “port” is a logical connection endpoint of an IP Address.
- Ports range from 0 to 65535
- MySQL by default will connect on port 3306

MySQL Server - Server address 127.10.10.4; Clients Connecting on port 3306

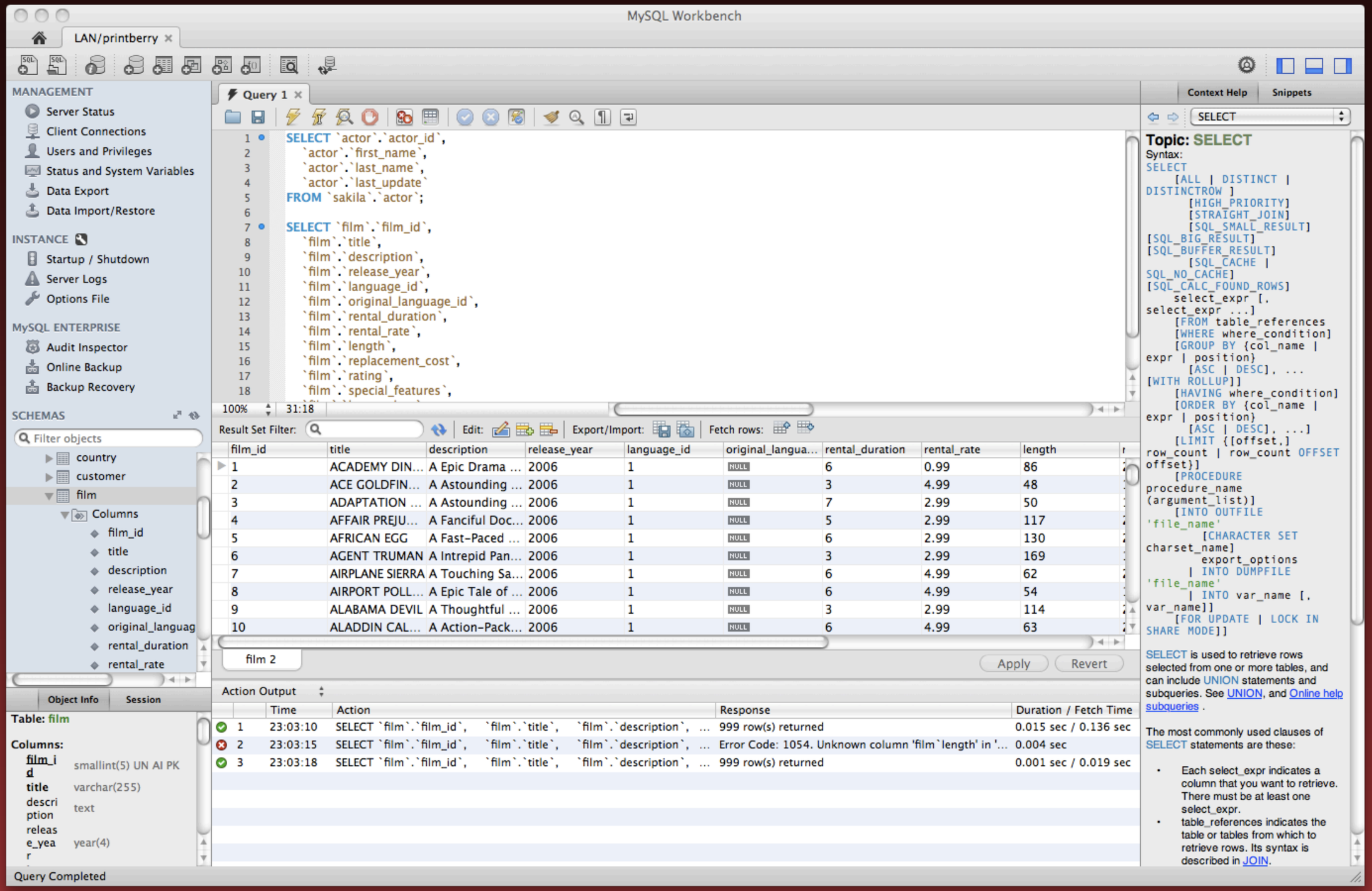


Connecting to MySQL in this Course

- 'localhost' port 3306
- 127.0.0.1 port 3306
  - The host name 'localhost' will resolve to the IP Address 127.0.0.1

MySQL Command Line / MySQL Workbench

- From the operating system command line, we can use the program “mysql” to connect to the MySQL database.
- This is a client program for the command line which gives you a shell to interact with the database.
- MySQL Workbench is a graphical user interface for working with the MySQL database.
- The majority of the course work will be done with MySQL Workbench.


MySQL Workbench
LAN/printberry
MANAGEMENT
Server Status
Client Connections
Users and Privileges
Status and System Variables
Data Export
Data Import/Restore
INSTANCE
Startup / Shutdown
Server Logs
Options File
MySQL ENTERPRISE
Audit Inspector
Online Backup
Backup Recovery
SCHEMAS
Filter objects
country
customer
film
Columns
film_id
title
description
release_year
language_id
original_languag
rental_duration
rental_rate
Object Info
Session
Table: film
Columns:
film_id smallint(5) UN AI PK
title varchar(255)
description text
release_year year(4)
Query 1
SELECT `actor`.`actor_id`,
`actor`.`first_name`,
`actor`.`last_name`,
`actor`.`last_update`
FROM `sakila`.`actor`;
SELECT `film`.`film_id`,
`film`.`title`,
`film`.`description`,
`film`.`release_year`,
`film`.`language_id`,
`film`.`original_language_id`,
`film`.`rental_duration`,
`film`.`rental_rate`,
`film`.`length`,
`film`.`replacement_cost`,
`film`.`rating`,
`film`.`special_features`,
100%
31:18
Result Set Filter:
Edit:
Export/Import:
Fetch rows:
film_id | title | description | release_year | language_id | original_langua... | rental_duration | rental_rate | length
1 | ACADEMY DIN... | A Epic Drama ... | 2006 | 1 | NULL | 6 | 0.99 | 86
2 | ACE GOLDFIN... | A Astounding ... | 2006 | 1 | NULL | 3 | 4.99 | 48
3 | ADAPTATION ... | A Astounding ... | 2006 | 1 | NULL | 7 | 2.99 | 50
4 | AFFAIR PREJU... | A Fanciful Doc... | 2006 | 1 | NULL | 5 | 2.99 | 117
5 | AFRICAN EGG | A Fast-Paced ... | 2006 | 1 | NULL | 6 | 2.99 | 130
6 | AGENT TRUMAN | A Intrepid Pan... | 2006 | 1 | NULL | 3 | 2.99 | 169
7 | AIRPLANE SIERRA | A Touching Sa... | 2006 | 1 | NULL | 6 | 4.99 | 62
8 | AIRPORT POLL... | A Epic Tale of ... | 2006 | 1 | NULL | 6 | 4.99 | 54
9 | ALABAMA DEVIL | A Thoughtful ... | 2006 | 1 | NULL | 3 | 2.99 | 114
10 | ALADDIN CAL... | A Action-Pack... | 2006 | 1 | NULL | 6 | 4.99 | 63
film 2
Apply
Revert
Action Output
Time | Action | Response | Duration / Fetch Time
1 | 23:03:10 | SELECT `film`.`film_id`, `film`.`title`, `film`.`description`, ... | 999 row(s) returned | 0.015 sec / 0.136 sec
2 | 23:03:15 | SELECT `film`.`film_id`, `film`.`title`, `film`.`description`, ... | Error Code: 1054. Unknown column 'film`length' in '... | 0.004 sec
3 | 23:03:18 | SELECT `film`.`film_id`, `film`.`title`, `film`.`description`, ... | 999 row(s) returned | 0.001 sec / 0.019 sec
Query Completed
Context Help
Snippets
SELECT
Topic: SELECT
Syntax:
SELECT
[ALL | DISTINCT | DISTINCTROW]
[HIGH_PRIORITY]
[STRAIGHT_JOIN]
[SQL_SMALL_RESULT]
[SQL_BIG_RESULT]
[SQL_BUFFER_RESULT]
[SQL_CACHE | SQL_NO_CACHE]
[SQL_CALC_FOUND_ROWS]
select_expr [, select_expr ...]
[FROM table_references
[WHERE where_condition]
[GROUP BY {col_name | expr | position}
[ASC | DESC], ... [WITH ROLLUP]]
[HAVING where_condition]
[ORDER BY {col_name | expr | position}
[ASC | DESC], ...]
[LIMIT {[offset,] row_count | row_count OFFSET offset}]
[PROCEDURE procedure_name (argument_list)]
[INTO OUTFILE 'file_name'
[CHARACTER SET charset_name]
export_options
| INTO DUMPFILE 'file_name'
| INTO var_name [, var_name]]
[FOR UPDATE | LOCK IN SHARE MODE]]
SELECT is used to retrieve rows selected from one or more tables, and can include UNION statements and subqueries. See UNION, and Online help subqueries .
The most commonly used clauses of SELECT statements are these:
Each select_expr indicates a column that you want to retrieve. There must be at least one select_expr.
table_references indicates the table or tables from which to retrieve rows. Its syntax is described in JOIN.

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