

# Getting Started with MySQL

Hands-on course of 3 days - 21h

Ref.: MSQ - Price 2024: CHF1 970 (excl. taxes)

## THE PROGRAMME

last updated: 01/2018

### 1) Introduction and getting started

- Versions, overview of features and tools.
- Resources and documentation.
- Installation procedure.
- Post-installation settings and first tests.
- The mysql command line client tool.
- The MySQL Query Browser graphical tool.

### 2) Relational model, designing and creating a database

- Design elements of a database schema
- Integrity constraints.
- MySQL data types (digital, chains, dates, specific types, etc.).
- Integrated MySQL functions.
- Types of tables (MyISAM, MEMORY, MERGE, InnoDB, etc.).
- Creating databases and tables.
- The INFORMATION\_SCHEMA database.
- Character sets, internationalization.

*Hands-on work* : Designing and creating a database with MyISAM tables.

### 3) Using SQL with MySQL

- Single selections, comparisons, sorts.
- Multitable selections, different types of joins.
- Embedded queries, prepared queries.
- Changes and view management.

*Hands-on work* : Single selections, Multiple selections, internal and external joins, embedded requests. Data changes and deletions.

### 4) InnoDB transactional tables

- Notion of a transaction, isolation levels.
- Physical structure of tables.
- Transaction programming (START TRANSACTION, COMMIT, ROLLBACK).

*Hands-on work* : Implementing transactions

### 5) Procedural SQL

- Stored procedures and functions.
- Defining procedures Triggers.
- Managing errors.

*Hands-on work* : Writing stored procedures. Retrieving results using cursors. Creating and using triggers.

### 6) Connections, access rights, security

- Privilege levels and verifying rights.
- Managing users and their privileges.

#### TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

#### ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more. Participants also complete a placement test before and after the course to measure the skills they've developed.

#### TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

#### TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

#### ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@ORSYS.fr to review your request and its feasibility.

- Making stored procedures and views secure.
- Hands-on work : Managing privileges and passwords.*

## 7) Introduction to administration

- Exporting data.
- Back-ups, the mysqldump command.
- Overview of MySQL installation.

*Hands-on work : Exporting data.*

# DATES

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## REMOTE CLASS

2024 : 24 Jun, 25 Sep, 27 Nov