

# MySQL, Administration

Hands-on course of 3 days - 21h Ref.: MSA - Price 2025: 2 010 (excl. taxes)

## **EDUCATIONAL OBJECTIVES**

At the end of the training, the trainee will be able to:

Installing the MySQL DBMS

Determining the main features of MySQL database administration

Creating and managing a database

Managing access to users

Managing database security.

**Participants** 

## THE PROGRAMME

last updated: 03/2024

### 1) » Introduction and installation

- Versions and types of licenses.
- Mysql, mysqlshow, myphpadmin tools.
- Configuring the server (my.cnf, sql mode, strict mode, etc.).
- Starting and stopping.
- Installations (binary, from source code, etc.).
- Mysqladmin.
- Installing MySQL Workbench.
- Changing versions, migration.
- Hands-on work ¤Installation in Linux/Windows. Installing MySQL Workbench.

## 2) » Objects of a MySQL database

- Types of tables (MyISAM, MEMORY, MERGE, etc.).
- Changing the definition of a table.
- Index.
- View management.
- The INFORMATION SCHEMA database.
- Hands-on work ¤Creating and using views. Changing the definition of a table.

## 3) » Connections, access rights, security

- User authentication
- Structure of "mySQL" database tables.
- Managing users and their privileges.
- Rights to views and stored workflows.
- Using SSL.
- Hands-on work ¤Complete securing of post-installation. Creating MySQL accounts. Managing privileges and passwords.

## 4) » Storage engines and plug-ins

- MyISAM and InnoDB storage engines.
- Architecture and configuration of InnoDB.
- Transactional operation of the InnoDB engine.
- Locking tables.

#### 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, handson 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.



- Plug-ins: Configuration and start-up.
- Hands-on work ¤Changing the InnoDB configuration. Implementing transactions

## 5) » Maintaining a MySQL server

- Session status (variables, "show status" command), force-killing a session.
- Loading: LOAD DATA, myimport, SELECT INTO OUTFILE, mysqldump.
- Logs (general, errors, slow queries, etc.).
- Backup strategies.
- InnoDB Hot Backup, mysqlbinlog.
- Incremental backup and restore.
- Scheduling.
- Hands-on work  $\tt mActivating$  logs. Using loading/unloading tools. Backup and restore with "mysqldump". Using the binary log

## **DATES**

REMOTE CLASS 2025: 08 sept., 03 nov.