Course : MySQL, advanced administration

Practical course - 2d - 14h00 - Ref. MYA
Price : 1360 € E.T.

5 / 5

This course will get you up and running on a range of advanced aspects of MySQL administration, such as comparing the MyISAM and InnoDB engines, SSL connections, configuring multiple instances on a single machine, replication and MySQL Cluster architecture.

Teaching objectives

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

- Installing multiple MySQL instances on a single server
- Learn about best practices for improving storage, such as table compression and defragmentation.
- Enhance security by using SSL to encrypt user connections
- Understand the principle of replication and implement it in MySQL
- Setting up a MySQL cluster architecture

Intended audience

System administrators and database administrators.

Prerequisites

Good knowledge of MySQL administration or knowledge equivalent to that provided by the course "MySQL, administration" (ref. MSA).

Practical details

Hands-on work

Theoretical sequences alternate with practical work.

Course schedule

PARTICIPANTS

System administrators and database administrators.

PREREQUISITES

Good knowledge of MySQL administration or knowledge equivalent to that provided by the course "MySQL, administration" (ref. MSA).

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.

1 Reminders

- MySQL architecture and different storage engines.
- Storage engines and plug-ins.
- Storage engines and indexes.
- MySQL server setup.
- Set up and manage the InnoDB engine.
- Statistics collection.
- MySQL logs.

2 Advanced administration functions

- Multiple instance startup management (mysqld_multi).
- Internal structure of MyISAM tables. Compressing MyISAM tables.
- Defragmentation of MyISAM table space. Repair of MyISAM tables.
- Internal structure of InnoDB transactional tables.
- Organization of InnoDB table space.
- Row organization in InnoDB tables.
- Transactional operation of the InnoDB engine.
- SSL user connections.

Hands-on work

Building and using MySQL instances with mysqld_multi. Compressing MyISAM tables. Defragmentation of MyISAM and InnoDB tablespace. Configure SSL user connections.

3 Replication

- Binary diary and transactional coherence.
- Binary logging formats: per instruction, per line, mixed.
- Simple master-slave replication. Advanced replication strategies. Implementation details.
- Thread status and relay files.
- Replication startup options.
- Solving common problems.

Hands-on work

Replication configuration, troubleshooting.

4 MySQL cluster

- Setting up a MySQL cluster.
- Architecture. Hardware and system configuration.
- Partition tables and distribute data across cluster nodes.
- The NDB engine. Processes and files. Management server. Implementation and administration.
- Backups and restores. Clustering and replication.
- Limitations and developments.

Hands-on work

MySQL cluster installation, configuration and administration.

Dates and locations

REMOTE CLASS
2026 : 4 June, 21 Sep.

PARIS LA DÉFENSE
2026 : 4 June, 21 Sep.

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.