

Using and Managing MySQL

Duration 5.0 days
Fees S\$1990 / student

Description

This course is a combination of the 2-day "Using MySQL" course and the 3-day "Managing MySQL" course.

Products covered

MySQL 4.0 and 4.1, Command-line and graphical clients/tools.

Format

Instructor led, highly interactive classroom setting, exercises, individual student PCs.

Using MySQL

Description

This course covers the fundamentals of MySQL.

Audience

Application developers, administrators, users who also need to work with the database server directly (table design, loading data, queries).

Objectives

At completion of this course, you should be able to:

- Find and effectively utilize resources such as the MySQL website, the online reference manual, mailing lists and others.
- Understand the fundamentals of relational databases and the client/server concept.
- List the major features and roadmap of MySQL.
- Perform a basic MySQL installation on Windows or Linux.
- Use the standard command-line and graphical clients to connect with the MySQL Server and execute basic commands.
- Identify column types and their characteristics, choosing the appropriate type.
- Understand automatic type and column conversions.
- Create and modify databases and tables (Data Definition Language).
- Import data from a file or via an ODBC connection.
- Understand and use most common functions and expressions.
- Write and execute basic SQL queries including joins and aggregation.
- Perform operations on data (Data Manipulation Language).
- Establish a basis for further MySQL training.

Certification

Combined with sufficient practical experience, this course prepares for the MySQL 4 Core Certification.

Prerequisites

Basic computer literacy. Understanding of SQL fundamentals is useful (the pace of this course is fast - we will shortly also be offering a longer course).

Managing MySQL

Description

This course covers administration and optimisation of MySQL servers and applications.

Audience

Advanced application developers, administrators.

Objectives

At completion of this course, you should be able to:

- Identify the various components of a MySQL Server and their function.
- Identify and navigate elements in the physical structure of a MySQL Server on disk and in memory.
- Understand the differences between MySQL RPM, binary and source distributions.
- Perform a custom installation on Windows or any standard Unix.
- Assess the various upgrade considerations and perform an upgrade.
- Know where to find/create configuration files and understand their structure.
- Set up appropriate logging and interpret log output.
- Understand the concepts of MySQL security, managing user privileges on different levels.
- Adequately and properly secure a default MySQL installation.
- List and describe the different (categories of) storage engines, their specific characteristics, choosing the appropriate type.
- Administer and maintain MyISAM and InnoDB tables on a live server.
- Create and restore backups, recovery of MyISAM and InnoDB tables.
- Understand transactions and concurrency control.
- Tune server settings for different storage engines and environments. Install and control replication and multiple servers.
- Describe how the MySQL server optimizes and processes queries, including index usage.
- Analyse query efficiency utilizing different tools and techniques.
- Compare different design decisions and work out the optimal solution.

Certification

Combined with sufficient practical experience, this course prepares for the MySQL 4 Professional Certification.

Prerequisites

Using MySQL course. Experience with MySQL required.