

# MySQL administration

Course code: GOC661

Students will acquire important information about the properties of the database system MySQL and acquire skills of effective management and maintenance. Among the important topics of the course include the setup process in Windows and Linux environments, backup and recovery strategy databases, security configuration, system monitoring and troubleshooting.

## Who is the course for

- IT specialists who want to manage MySQL database system

## After completing this course, students will be able to use new features in these areas:

- MySQL overview
- Install and configure MySQL on Windows
- Install and configure MySQL on Linux
- Configure and manage database
- Principles and use backup and recovery
- Database system security
- Monitoring
- Maintenance and automation tasks
- Data import and export
- Troubleshooting

## Required skills

- Basic knowledge of operating systems Microsoft Windows / Linux
- Basic knowledge of databases

## Course Outline

### MySQL overview

- Properties, versions, editions, components, compared with other DB
- Overview and tools for administrators
- Architecture of the MySQL database system

### Installation and configuration in a Windows environment

- Preparing for installation (Windows)
- Getting the installation media and the choice of distribution
- Using multiple instances of MySQL on a single server
- Installation procedure
- Recommended configuration (CPU, Memory, etc.)

### Installation and configuration in a Linux environment

- Installing from the repository distribution
- Installing from source package
- Configure and start the database system

### Configuration and database management

- Overview of database structure
- System database
- Database configuration

### Backing up and restoring databases

- Properties backup process
- Types of database backups and their combinations
- Using Tools

#### GOPAS Praha

Kodaňská 1441/46  
101 00 Praha 10  
Tel.: +420 234 064 900-3  
[info@gopas.cz](mailto:info@gopas.cz)

#### GOPAS Brno

Nové sady 996/25  
602 00 Brno  
Tel.: +420 542 422 111  
[info@gopas.cz](mailto:info@gopas.cz)

#### GOPAS Bratislava

Dr. Vladimíra Clementisa 10  
Bratislava, 821 02  
Tel.: +421 248 282 701-2  
[info@gopas.sk](mailto:info@gopas.sk)



Copyright © 2020 GOPAS, a.s.,  
All rights reserved

# MySQL administration

- Database recovery scenarios and practical use

## Security

- Authentication mode of user connections
- Creating and managing users
- Types and set permissions
- Audit, logging and tracking users

## MySQL monitoring

- Tools for Monitoring MySQL
- Monitoring active connections
- Analysis of performance indicators
- Solving performance problems

## Maintenance and automation tasks

- Reason for using automation
- Design and creation of automated tasks
- Maintenance database system (defragmentation, etc.)

## Data import and export

- Overview and application of methods for data import
- Overview and application of methods for data export

## Troubleshooting

- Methods and procedures to identify and solve problems
- Troubleshooting service level
- Solving the concurrency problems
- Troubleshooting the connection level

### GOPAS Praha

Kodaňská 1441/46  
101 00 Praha 10  
Tel.: +420 234 064 900-3  
[info@gopas.cz](mailto:info@gopas.cz)

### GOPAS Brno

Nové sady 996/25  
602 00 Brno  
Tel.: +420 542 422 111  
[info@gopas.cz](mailto:info@gopas.cz)

### GOPAS Bratislava

Dr. Vladimíra Clementisa 10  
Bratislava, 821 02  
Tel.: +421 248 282 701-2  
[info@gopas.sk](mailto:info@gopas.sk)



Copyright © 2020 GOPAS, a.s.,  
All rights reserved