

Objetivos Didácticos

Este curso de Administración de bases de datos de MariaDB está diseñado para administradores de bases de datos MariaDB que tienen una comprensión básica de una base de datos MariaDB o MySQL y de comandos SQL.

Audiencia

El curso proporciona experiencia práctica (introdutoria) en la administración de BBDD MariaDB, incluyendo copia de seguridad, recuperación, configuración y ajuste. Proporcionar las habilidades necesarias para realizar consultas sobre la BBDD y la optimización y ajustes del rendimiento.

Requisitos previos

Se requiere un conocimiento práctico de MariaDB y/o MySQL. Esto se puede obtener por la asistencia al curso Introducción a MariaDB o Introducción al curso MySQL.

Metodología

Presencial (TILT) – OnLine LIVE (OLL)

Duración

5 days /35 Horas

Contenidos

1. Introduction to MARIADB

1.1 MYSQL WORKBENCH

- Installation
- Connecting
- Screens
- Other GUI Tools
- Exercises: Using MySQL Workbench

2. Administrating MARIADB (INTRODUCTION)

2.1 TABLE MAINTENANCE

- Table Maintenance Operations
- Check Table
- Repair Table
- Analyze Table
- Optimize Table
- mysqlcheck
- MYISAMCHK
- Repairing Innodb Tables
- Enabling MYISAM AutoRepair
- Exercises: Maintaining Tables

2.2 BACKUP AND RECOVERY

- The Advantages and Disadvantages of Different Methods
- Binary Backups of MYISAM Tables
- Binary Backups of Innodb Tables
- Recovery
- Import and Export Operations
- Exporting Using SQL



Importing Using SQL
Exporting from the Command Line using mysqldump
Importing from the Command Line using mysqlimport
Exercises: Backing Up and Recovery

2.3 USER MANAGEMENT

Introduction
User Accounts
Creating Users
Renaming Users
Changing Passwords
Dropping Users
Granting Privileges
The User Table
Connection Validation
Exercises: Creating, Managing and Dropping Users

3. QUERIES (intermediate/advanced)

3.1 MASTERING QUERIES with MARIADB (I)

Sorting and Filtering Data
Working with different Data Types
Using Built-In Functions

3.2 MASTERING QUERIES with MARIADB (II)

Grouping and Aggregating Data
Using Set Operators
Using Subqueries
Using Table Expressions
Using Window Functions

4. OPTIMIZATION AND PERFORMANCE TUNING

4.1 INTRODUCTION TO PERFORMANCE TUNING

Tuning Overview
Resolving Performance Issues
Recommended Approach to Tuning
Items to Evaluate
Where to look
Planning a Monitoring Routine
Building a New Database for Performance
Tuning an Existing Database
Setting Suitable Goals

4.2 MARIADB OPTIMIZATION TOOLS

Administration Tools
The Information Schema
Performance-related SHOW Commands
Benchmarking Tools
The MariaDB Performance Schema



Exercises: Obtaining Performance Information

4.3 STATEMENT TUNING

Overview of Statement Tuning

Identifying Problem Queries

The Optimizer

Explain

Explain Extended

Exercises: Identifying Problem Queries and Using Explain

4.5 INDEXES

Index Overview

Types of Index

Index Tuning

Indexes and Joins

Exercises: Indexes and Performance