GALILEU

MongoDB for Developers

Tecnologias de Informação - Data & Analytics

Live Training (também disponível em presencial)

- **Localidade:** Imprimir Curso
- **Data:** 06 Nov 2023
- **Preço:** 1170 € (Os valores apresentados não incluem IVA. Oferta de IVA a particulares e estudantes.)
- **Horário:** Laboral das 09h30 - 16h30
- **Nível:**
- **Duração:** 18h

Sobre o curso

This two-day MongoDB for Developers course spans the MongoDB gamut, covering CRUD, schema design, performance tuning, map-reduce, replication, and sharding.

By end of this MongoDB for Developers course, you will be ready to start building real- world applications on MongoDB and to recommend the best deployment strategies for those applications

Objetivos

- Understand the MongoDB command shell, query API, and driver tools.
- Design schemas that take advantage of the document data model and of MongoDB's core features.
- Understand how typical RDBMS schemas can be migrated to MongoDB.
- Build efficient indexes and troubleshoot slow queries.
- Configure both master/slave replication and replica sets.
- Determine when to set up a shard cluster and how to configure it.
- Troubleshoot common issues and failure scenarios.

Programa

- MongoDB Overview
- Working with documents

- Schema Design

- Performance Tuning I – Indexing and Query Optimization

- GridFS for managing large binary objects

- Aggregation

- Replication and Durability

- Auto-Sharding

- Performance Tuning II

- Administration and Troubleshooting

- Introduction to drivers (Java/Python/Ruby/PHP/Perl)

MongoDB Overview

- Origin, design goals

- Key features

- Production use cases and sample applications

- Import sample data sets

Working with documents

- Origin, design goals

- Documents and data types

- CRUD (inserts, queries, updates and atomic modifier, and deletes)

Schema Design

- Schema comparisons: MongoDB vs. RDBMS

- Normalizing / De-normalizing

- Common schema scenarios (one-many, many-many, lists, trees, etc.)

- Import sample data sets

Performance Tuning I — Indexing and Query Optimization

- Index

- Understanding your query execution plan

GridFS for managing large binary objects

Aggregation

- Built-in functions (count, group, distinct)

- Map-reduce

Replication and Durability

- Master-slave replication
- Replica sets
- Using write concern for durability

Auto-Sharding

- When does sharding make sense?
- How does sharding work?
- Setting up a MongoDB shard cluster?
  - Choosing a shard key and indexes
  - Performance and use-case considerations
- Administering a sharded cluster

Performance Tuning II

- Getting the best performance out of MongoDB
- Hosting MongoDB in the cloud
- Using write concern for durability

Administration and Troubleshooting

Introduction to drivers: (Java/Python/Ruby/PHP/Perl)

- How the drivers and shell communicate with MongoDB
- BSON
- MongoDB Wire Protocol