kod szkolenia: MongoDB-01 / ENG AA 2d

Introduction to MongoDB database server

This training provides a practical introduction to MongoDB, one of the most widely used NoSQL document databases for building modern, data-driven applications. Participants learn the core concepts of MongoDB, including document-oriented data modeling, database architecture, MQL queries, basic administration, and the mechanisms that support performance, availability, and data management through hands-on exercises. After completing the training, you will be able to design and query MongoDB databases, perform essential administrative tasks, and confidently apply MongoDB in application development and data management projects.

Training recipients

The training provides you with a firm foundation in MongoDB database server deployment and management.
It is addressed to administrators , developers and data analysts.

Benefits

Training participants will gain knowledge about architecture, configuration, functionalities and operations of MongoDB database server, including but not limited to:

- MongoDB server installation and configuration,
- data structure design and implementation
- data processing using MQL query language and JavaScript scripts,
- basic administrative operations,

- query performance management fundamentals .

Training program

1. Introduction to NoSQL database systems (motivations, characteristics and classification of solutions, comparison to relational database systems)
2. Introduction to MongoDB (architecture, basic concepts, JSON format, MongoDB server installation, configuration and management)
3. Implementing logical database structures (databases, collections, indexes, data modelling)
4. Data processing on MongoDB server (inserting, modifying and deleting documents, searching documents, selection predcates, projection, sorting, aggregation, atomic modifications, data validation using JSON Schema)
5. Fundamentals of query performance management (execution plans, guidelines)
6. Configuring MongoDB database replication
7. Basic administrative operations (backups, server monitoring, data migration, security management)
8. Implementing data processing scripts (JavaScript language)

Expected preparation of the participant

- General knowledge of computer science topics and concepts related to databases, as well as an ability to use the computer successfully.
- Basic knowledge of SQL
- Basic knowledge of JavaScript

Training Includes

- 2 days of work with a trainer
- Trainer’s supervision
- Contact with community
- Coursebook
- Lab environment

Training method

- lecture
- workshops

Czas trwania

2 dni / 14 godzin

Language

- Training: **English**
- Materials: **English**