

Updated on 16/05/2023

Sign up

AxonIQ Training

3 days (21 hours)

Presentation

AxonIQ is a framework for building microservices based on the principles of Domain Driven Design (DDD), Command-Query Responsibility Segregation (CQRS) and Event Sourcing. With Axon, you can increase the operational efficiency and reliability of Axon-based solutions. Together, these three principles make Axon-based applications more robust and adaptable to change. This framework is designed for both large monolithic applications and microservices. It provides you with the building blocks you need to follow these principles. This course will show you how AxonIQ helps us to implement applications with CQRS and Event Sourcing. You'll be using both Axon Framework and Axon Server. The former will contain the implementation and the latter will be the dedicated event storage and message routing solution. At the end of this training course, you'll be able to create well-structured applications without having to worry about infrastructure, allowing you to concentrate on the functionality of your business. As with all our training courses, this one will feature the latest version of [Axon 4.5](#).

Objectives

- Installing and configuring Axon
- Master CQRS and Event Sourcing architecture models
- Develop structured enterprise applications with CQRS and Event Sourcing

Target audience

- Developers
- Security architects
- Corporate architects

Prerequisites

Knowledge and practical experience in Java

AxonIQ training program

Introduction

- What is Axon?
- These main advantages
- DDD and CQRS architecture principles
- AxonIQ and Spring Boot
- Using the Axon ecosystem

Creating an application

- Configuring messaging components
- Design application components
- Component structure
- Third-party application integration
- Dependency injection
- Maven dependencies

Application security

- Authentication
- Access control
- Encryption and SSL
- Securing Axon server deployment

Axon server

- Order routing solution
- Event storage
- Connecting multiple instances
- Configuring RabbitMQ and Kafka to distribute messages

Ordering service API

- Configuring the order service with CQRS
- Creating a new order
- Order confirmation
- Shipping an order

- Best practices in message implementation

Order message

- Message concepts
- Message types
 - Controls
 - Aggregate structure
 - Multi-entity aggregates
 - Polymorphism
 - Requests
 - Message interceptor and monitoring
 - Events
 - Order management
 - Event types
 - Order models

Spring Core Training

Kotlin training

Kafka training

Companies concerned

This course is aimed at companies, large or small, wishing to train their teams in a new, advanced computer technology.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.