

MCS-205 Microservices in depth

Course description: learn more in-depth details about some of the most important the microservices decomposition, the Saga pattern and integration testing.

Structure: as the course is designed to present some of the topics from the 'Microservices design & architecture' course, the discussed sessions will consist mainly from an in-depth presentation of some of the topics from the course description. The topics that will be presented will be chosen by each team, depending on their needs. Depending on the presented topic, the ratio between the theoretical and the practical parts are varying from ~70/30% to ~50/50%.

Target audience: Software Architects, Tech Leads, Developers

Prerequisites: basic Microservices knowledge, e.g. participating in our MCS-105 Microservices Design & Arcitecture training.

Duration: 5 days, 7 hours/day

Detailed Course Outline

DAY 1

- Identifying / decomposing the services using DDD (Domain Driven Design)

DAYS 2, 3, 4 (half)

- **The Saga pattern in depth**
 - Using compensating transactions to rollback changes
 - Coordinating Sagas - orchestration and choreography
 - Handling the lack of isolation - anomalies and their countermeasures
 - An example of the 'CreateOrder' Saga

DAYS 4 (half) and 5

- **Testing a microservices architecture**
 - Writing and integrating CDCT (Consumer Driven Contract Tests)
 - Integration, component and end-to-end-tests using BDD
 - If needed - load testing
- Training wrap-up & retrospective