

# Camel Integration and Development with Red Hat Fuse on OpenShift («AD421»)

Learn to develop, implement, test, and deploy enterprise integration patterns (EIP)-based applications using Apache Camel

**Duration:** 4 days

**Price:** 4'550.–

**Vendor code:** JB421

## Content

Camel Integration and Development with Red Hat Fuse on OpenShift (AD421) is a hands-on, lab-based course that gives Java™ developers and architects an understanding of Apache Camel and the enhancements and tools Red Hat offers in support of Camel development.

This course is based on Red Hat® Enterprise Linux® 7.5, Red Hat® OpenShift® Container Platform 3.9, Red Hat® Fuse 7.1, and Apache Camel 2.21.

### Outline:

#### Introduce Red Hat Fuse and Camel

Describe how Red Hat Fuse and Camel are used to integrate applications.

#### Create routes

Develop simple Camel routes.

#### Transform data

Convert messages between data formats using implicit and explicit transformation.

#### Create tests for routes and error handling with Camel

Develop reliable routes by developing route tests and handling errors.

#### Route with Java beans

Create dynamic routes in Camel using Java beans.

#### Implement REST services

Enable REST support on Camel with Java REST APIs.

#### Deploy Camel routes

Package and deploy Camel applications for deployment with Red Hat Fuse.

#### Implement transactions

Provide data integrity in route processing by implementing transactions.

#### Implement parallel processing

Improve route processing throughput using Camel parallel processing mechanisms.

#### Create microservices with Red Hat Fuse

Create microservices from Camel routes.

#### Deploy microservices with Red Hat Fuse on OpenShift

Deploy microservices based on Camel routes to an OpenShift cluster using Red Hat Fuse on OpenShift.

## Perform comprehensive review

Demonstrate use of the knowledge gained in this course by coding Camel routes.

## Key Learnings

- Create basic routes and integration solutions with Camel.
- Combine messages through aggregation.
- Develop tests with Camel test kit and mock components.
- Develop REST services with the REST DSL and Swagger.
- Deploy a route on Karaf, EAP, and Spring Boot.
- Increase route throughput with parallel processing.
- Deploy microservices with Red Hat Fuse on OpenShift.

## Target audience

- Java developers who need to learn how to use Camel, implement enterprise integration patterns (EIPs), and develop integration applications with Camel
- Java architects who need to understand how Apache Camel can be used in software architectures requiring integration between applications

## Further courses

- [Red Hat Certified Specialist in Camel Development \(«EX421»\)](#)

## Any questions?

We are happy to advise you on +41 44 447 21 21 or [info@digicomp.ch](mailto:info@digicomp.ch). You can find detailed information about dates on [www.digicomp.ch/courses-it-provider/red-hat/red-hat-fuse-decision-manager/course-camel-integration-and-development-with-red-hat-fuse-on-openshift-jb421](http://www.digicomp.ch/courses-it-provider/red-hat/red-hat-fuse-decision-manager/course-camel-integration-and-development-with-red-hat-fuse-on-openshift-jb421)