



# **DESCRIPTION:**

#### **Course overview**

Attendees will learn the skills to develop, implement, test, and deploy EIP-based applications using Camel. Camel development is organized around:

- Routes that define a sequence or flow of processing through one or more processors and endpoints
- Processors that massage, interpret, and modify messages within a Camel flow.
- Components used to create endpoints that interact with the outside world for acquiring and transmitting messages.

This course can also help you in your preparation for the Red Hat Certified Specialist in Camel Development exam (EX421).

#### **Course content summary**

- Introduce Camel
- Create routes
- Transform data
- Route with Java Beans
- Implement representational state transfer (REST) services
- Deploy Camel routes
- Implement transactions
- Implement parallel processing

### AUDIENCE AND PREREQUISITES:

- Java developers and architects who need to learn how to implement EIPS with Camel and public custom components with Camel Fabric
- Java architects who need to understand how to use Apache Camel in software architectures requiring integration between applications **Prerequisites for this course**



- Experience developing and deploying Java EE 7 applications
- Familiarity with relational databases, Java database connectivity, and SQL
- Familiarity with Java development tools such as Maven and Eclipse
- Basic knowledge of Spring Framework

## **OUTLINE:**

#### **Outline for this course**

#### Introduction to Camel

Learn to integrate applications and create simple routes with Camel.

#### **Create routes**

Develop Camel routes and deploy them on JBoss Enterprise Application Platform and Karaf.

#### **Transform data**

Convert messages between data formats using implicit and explicit transformation.

#### 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 in different environments.

#### Implement transactions

Provide data integrity in route processing by implementing transactions.

#### Implement parallel processing

Improve route processing throughput using Camel parallel processing mechanisms **Red** Hat JBoss Fuse Camel development comprehensive review



Implement three projects that address integration requirements of a real world integration application.

# OUTCOMES:

#### Impact of this training

#### Impact on the organization

This course is intended to develop the Camel skills needed to minimize the amount of development work by providing a rich set of reusable components to connect data from multiple systems such as databases, social media, and enterprise resource planning systems.

#### Impact on the individual

As a result of attending this course, students should be able to develop routes and mediation rules to integrate message queues, filesystems, databases, among other systems via use cases, using Apache Camel.

Students should be able to demonstrate the following skills:

- Develop routes with some components provided by Camel.
- Identify components supporting an integration use case.
- Deploy Camel routes on Red Hat JBoss EAP, Red Hat JBoss Fuse, and OpenShift with Fuse Integration Services
- Create REST endpoints to expose Camel integration points.
- Integrate Message Queues and File systems with database components.
- Convert common data formats (such as CSV, XML, Java Objects, JSON formats) using Camel's embedded converters.

Integrate Camel with the Contexts and Dependency Injection (CDI) APIs



# Thank You

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