

## Talend Open Studio for ESB, service integration, routing and mediation



SII-340 3 Days (21 Hours)



### Description

This training will allow you to get to grips with the Talend Open Studio for ESB development environment. Its features will allow you to quickly design loosely coupled integration solutions based on message exchange, web services, intelligent routing and data transformation.

### Who is this training for ?

#### For whom

Developers, project managers, software architects.

#### Prerequisites

Aucune

### Training objectives

- Design data integration jobs using XML feeds and databases Develop SOAP and REST web services Create Camel routes leveraging a wide variety of protocols Leverage key enterprise integration design patterns (EIP) Deploy web services and routes on Talend ESB runtime (karaf) and audit their activity

### Training program

#### Introduction : ESB et intégration de services

- Service integration technologies: MOM, JCA.
- Mediation and intelligent routing.
- Expected functionalities of an ESB.
- Practical work Installation/configuration of Talend Open Studio for ESB, verification of correct operation.

#### Prise en main de Talend Open Studio for ESB

- Functionalities and architectural components.
- Main design elements of a TOS job.
- Reminders about XML: XSD schema and validation.
- Learning the tXmlMap component.
- Design of data integration jobs, export and deployment on the Talend ESB runtime.
- Produce logs.
- Exercise Store a multilevel XML flow in the base, reconstruct it from the elements present in the base.

### Concevoir des services Web SOAP et REST

- SOAP service versus REST service.
- Creation/import of WSDL, uploading schemas to the repository metadata.
- Design of jobs implementing SOAP services.
- Design of jobs implementing REST services.
- Simple orchestration of Web services.
- Deployment on the Talend ESB runtime: export.
- kar and activation of services.
- Testing correct operation via SoapUI.
- Exercise Development of CRUD in the form of SOAP and REST services.

### Se connecter aux systèmes existants

- The Apache Camel infrastructure (message, endpoint.
- ).
- The Mediation perspective: graphical editor and palette of EIP components.
- Overview of messaging-oriented components: File, FTP, CXF, JDBC, SEDA, Timer.
- JMS: producer/consumer and point-to-point models.
- Design of routes using different protocols.
- Route testing locally, deployment on the Talend ESB runtime and activation.
- Exercise Transfer files locally and via ftp , carry out broadcasts by email and via JMS.

### Route dynamique et transformation

- Carry out routings based on the content of messages and the execution context.
- Enrich the content of messages via calling a service and/or accessing a database.
- Adapt the message format and protocols.
- Manage exceptions thrown by routes.
- Exercise Implementation of the VETRO pattern.

### Utilisation des services d'infrastructure

- Administer the Talend ESB runtime via the karaf console.
- Audit activities (data services, routes).
- Manage security.
- Maintaining the availability of services.
- Exercise Implement an automatic failover strategy on a Web service.