

# Course : Talend Open Studio: Implementing Data Integration

Practical course - 3d - 21h00 - Ref. TOT

Price : 2160 CHF E.T.

 4 / 5

BEST

Talend Open Studio (TOS) is a free, open-source ETL application designed for large-scale data synchronization between databases. This training course will teach you how to design, model, and develop TOS "jobs" to address a wide range of integration challenges. Please note: this course focuses exclusively on Talend Open Studio (the free, community, open-source version). It does not cover the commercial Talend Studio edition, which is subscription-based and integrated into the Qlik-Talend Cloud portal.

## Teaching objectives

At the end of the training, the participant will be able to:

- Design and develop jobs in the application ETL Talend
- Optimize the jobs developed by using contexts and datasets.
- Carrying out more complex transformations by using variables, expressions, and joins
- Execute and debug a job, track execution statistics

## Intended audience

Developers, project managers, decision-making IT consultants, database administrators.

## Prerequisites

Good knowledge of RDBMs and SQL. Knowledge of the Java language is a plus.

## Practical details

### Hands-on work

Series of mini-projects used to design increasing elaborate Talend jobs.

### Teaching methods

Theoretical contributions illustrated with example implementations, then consolidated by creating mini-Talend projects.

## Course schedule

### PARTICIPANTS

Developers, project managers, decision-making IT consultants, database administrators.

### PREREQUISITES

Good knowledge of RDBMs and SQL. Knowledge of the Java language is a plus.

### TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

### ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.

Participants also complete a placement test before and after the course to measure the skills they've developed.

## 1 Presentation

- Data integration ETL solutions.
- TOS: Installation, user preferences. Reference documentation.
- Product philosophy. Designing a job.

### Hands-on work

Getting started with the tool. Overview of the specifications of the generic project.

## 2 Model the need, design a first job

- Business Modeler. Job Designer.
- Main connections. CSV and XML components.
- Simple transformation components.
- Viewing the generated code, executing a job.

### Exercise

Developing a job that sorts a CSV source, filtering data, and storing the result in an XML file.

## 3 Optimize job development

- Configuring reusable connections using metadata.
- Updating the metadata and propagating it to jobs, importing/exporting metadata.
- Configuring jobs with contexts.
- Externalizing context variables in ".properties" and ".ini" files.
- Creating and managing your own variables.
- Generating data sets for tests.

### Exercise

Refactoring a job using metadata and contexts. Generating a test data set for this job.

## 4 Working with databases

- Supported databases and main components.
- Configuring operations on tables.
- Metadata and context of connecting to a database schema.
- Sharing connections and managing transactions.
- Creating queries using SQLBuilder.

### Exercise

Reading and updating a data repository hosted on a MySQL server.

## 5 Working with multisource data

- Overview of the tMap component.
- Configuring input flows, creating joins.
- Carrying out more transformations using variables, expressions and joins.
- Qualifying data using filters.
- Generating multiple outputs, managing rejects.

### Exercise

Consolidating multisource data and generating a warehouse.

## TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

## TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

## ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at [psh-accueil@orsys.fr](mailto:psh-accueil@orsys.fr) to review your request and its feasibility.

## 6 Add-ons

- Breaking a job down into sub-jobs, using tRunJob. Launching jobs in the command line. Periodic execution.
- Debugging a job, tracking execution statistics
- tJasperOutput reporting.

### Exercise

Generating a Jasper Report from a warehouse.

## Dates and locations

### REMOTE CLASS

2026: 25 Mar., 18 May, 18 May, 14 Oct., 14 Oct.,  
2 Dec., 2 Dec.