

Integration Advanced

DEV 251 - Course outline

AUTHOR: Stibo Systems MDM Academy

CONFIDENTIALITY LEVEL:

Public



Target Group

This course is targeted towards application developers, system architects, and others with similar experience who will be responsible for delivering complex integrations with STEP.



Pre-Requisites for Participation

Participants for the course will be expected to have:

- Stibo Systems Academy courses (or equivalent knowledge acquired by other means)
 - MDM 101 - MDM Solution Fundamentals.
 - DEV 250 - JavaScript Business Rules.
- Good practical experience using the STEP Workbench UI to control STEP.
- Familiarity using the STEP Workbench Import and Export Managers
- Familiarity with STEP Outbound and Inbound Integration Endpoints.
- A high level of expertise in writing and using STEP JavaScript Business Rules and familiarity with the relevant API documentation (see course DEV 250 above for those who do not already have this expertise).
- Familiarity with the XML document format.
- Awareness of common industry standards, protocols, and technologies - particularly HTTP, REST and JMS.
- Previous experience with design and development of enterprise software systems.
- Awareness of common integration techniques and patterns.



Course Duration

The course duration is 4.5 days.



Training Delivery Method

- ☒ In person classroom
- ☒ Virtual classroom
- ☐ Self-paced online

The course activities will be a combination of lectures, case studies in teams, problem solving exercises and presentations by the trainees.



Course Purpose

In this course, you will gain the information and expertise needed to design and develop STEP Integration Endpoint components and both STEPXML & JSON message specifications to meet complex STEP integration requirements.



Course Objectives

Upon completion of this course, participants will be able to:

1. Communicate the concepts of advanced integration and related STEP components.
2. Handle the integration of data using different data formats.
3. Control the data objects flowing between STEP and other systems.
4. Manipulate and transform in & outgoing data object content.
5. Build synchronous and asynchronous integrations.
6. Grasp the options for managing External Asset integration.
7. Manage integration design to meet performance objectives.



Learning Objectives

The objectives below describe precisely what is taught during the training: (please note that the learning objectives can belong to more than one course objective).



Course Objective 1 - Communicate the concepts of advanced integration and related STEP components.

Learning objectives:

- Summarize synchronous STEP integration capabilities and appropriate use cases.
- Summarize asynchronous STEP integration capabilities and appropriate use cases.



Course Objective 2 - Handle the integration of data using different data formats.

Learning objectives:

- Demonstrate the flexibility of STEPXML with data object types on an inbound interface
- Utilize the Advanced STEPXML Template outbound format.
- Utilize STEPXML to manage system setup objects.
- Use the generic JSON data format in inbound and outbound integrations.



Course Objective 3 - Control the data objects flowing between STEP and other systems.

Learning objectives:

- Use Business Rules to create or reject data objects on an inbound integration.
- Formulate Advanced STEPXML to control the scope of outbound data objects.
- Use Event Filters, Event Generators, and Event Pre-Processors on an outbound integration.
- Outline STEP integration error handling capabilities and best practice.

➤ **Course Objective 4 - Manipulate and transform in & outgoing data object content.**

Learning objectives:

- Formulate Advanced STEPXML to filter & re-structure data object content on export.
- Manipulate data using a Business Action in an inbound integration.
- Differentiate the available outbound Post-Processor options and their use cases (including XSLT transformation).
- Illustrate usage of the Business Rule Based Message Processor.

➤ **Course Objective 5 - Build synchronous and asynchronous integrations.**

Learning objectives:

- Demonstrate the ability to create and use a Gateway Integration Endpoint (GIEP) to invoke a REST service.
- Give examples of both "out of the box" and Extension API asynchronous delivery methods and receivers.
- Summarize STEP-supported authentication methods.

➤ **Course Objective 6 - Grasp the options for managing External Asset integration.**

Learning objectives:

- Articulate the STEP external integration options for Digital Assets.
- Outline the STEP Asset integration technical components.



Course Objective 7 - Specify integration design to meet performance objectives.

Learning objectives:

- Demonstrate the performance impact of event-based configuration options.
- Adapt integration design to avoid data content-related performance issues.
- Use Business Rules effectively for optimal Integration performance.
- Compare the performance impact of STEPXML data conversion per data format.
- Articulate the performance impact of general configuration options for inbound and outbound integrations.
- Illustrate the performance implications of synchronous integration.



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BETTER BUSINESS.
BETTER WORLD.

About Stibo Systems

Stibo Systems is a leading enabler of trustworthy data through AI-powered master data management. Built on a robust and flexible platform, our SaaS solutions empower enterprises around the globe to deliver superior customer and product experiences. Our trusted data foundation enhances operational efficiency, drives growth and transformation, supports sustainability initiatives and bolsters AI success. Headquartered in Aarhus, Denmark, Stibo Systems is a privately held subsidiary of Stibo Software Group, which guarantees the long-term perspective of the business through foundational ownership. More at www.stibosystems.com.