

Integration Advanced

DEV 251 - Course Outline

Version 10.0

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CONFIDENTIALITY LEVEL:

Public



Target group

This course is targeted towards application developers, application consultants and system designers who will be responsible for delivering complex integration interfaces 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.
- A high level of expertise in writing and using STEP JavaScript Business Rules and familiarity with the relevant API documentation (see courses above for those who do not already have this).
- Familiar 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 3 days.



Training form

- Instructor led class room training.
- E-learning
- Online training
- Self-study

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 STEPXML message specifications to meet complex STEP integration requirements.



Course objectives

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

1. Control the data records flowing between STEP and other systems.
2. Produce STEPXML inbound and outbound message specifications.
3. Specify post-processors and additional settings for outbound interfaces.
4. Build interfaces with external REST services.
5. Manage interface design to meet performance objectives.



Detailed 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 - Control the data records flowing between STEP and other systems.

Learning objectives:

- Use Business Conditions in an inbound interface to reject data.
- Formulate Advanced STEPXML to filter data on export (e.g. attribute definitions, object types, references, metadata).
- Differentiate the effect of Event Filters, Pre-Processors, and Event Generators on an outbound interface.
- Utilize Event Filters in an outbound interface.
- Utilize Event Generators in an outbound interface.
- Utilize Pre-Processors in an outbound interface.
- Manipulate data using a Business Action in an inbound interface (e.g. fill in parts of the data structure or re-parent).

Course objective 2 - Produce STEPXML inbound and outbound message specifications.

Learning objectives:

- Demonstrate the flexibility of STEPXML in respect of standard data operations - create/read/update/delete.
- Construct STEPXML messages with multiple data types.
- Manipulate system setup objects using STEPXML (e.g. add LOV entries; change attribute validation; add attributes to a group).
- Manage dimensional data using STEPXML.

Course objective 3 - Specify post-processors and additional settings for outbound interfaces.

Learning objectives:

- Demonstrate the impact of batch size settings.
- Differentiate the available Post-Processor options and their use cases.
- Determine when multi-threading is appropriate.
- Establish use cases requiring the use of the Extension API.

Course objective 4 - Build interfaces with external REST services.

Learning objectives:

- Explain the performance implications of invoking an external REST service synchronously.
- Demonstrate the ability to create and use a Gateway Integration Endpoint (GIEP) to invoke a REST service.
- Reference the authentication model supported by the GIEP component.

Course objective 5 - Manage interface design to meet performance objectives.

Learning objectives:

- Indicate potential bottle necks on integration interfaces.
- Outline how the data model and attribute inheritance can impact outbound interface performance.
- Illustrate how inbound interface validations can affect performance.

About Stibo Systems

Stibo Systems provides global organisations with a leading multi-domain Master Data Management (MDM) solution. Stibo Systems enables its customers to better manage enterprise intelligence on a global scale, improve sales, and quickly adjust to changes in business requirements. Stibo Systems' STEP technology is a flexible MDM solution that provides a single trusted source of operational information for the entire enterprise. Stibo Systems offers industry-specific solutions, engineered and supported to meet the strategic information needs of global customers including: GE, Sears, Siemens, Target and Thule. Stibo Systems is a subsidiary of the privately held Stibo A/S group, originally founded in 1794 with corporate headquarters in Aarhus, Denmark.

For more information, visit www.stibosystems.com

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