Data Modeling

APP 240 - Course outline

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CONFIDENTIALITY LEVEL:

Public

Target group

This course is targeted towards application consultants or other roles responsible for transforming the conceptual design of a STEP solution into a functional configuration.

Pre-requisites for participation

- Stibo Systems Academy courses (or the knowledge taught in this course acquired in other ways)
  - MDM 101 - MDM Solution Fundamentals

- Experience with relational databases, object-oriented design and general MDM knowledge will be helpful for participants in this course.

- At least one year of application consultancy experience and/or system implementation.

Course duration

- The in-person course duration is 4 days.

- For the online version of this training, we would recommend planning an effective duration of 2.5 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 be equipped with the knowledge and skills to build a data model in STEP, focusing on the product domain, built from a given conceptual design of the customer's requirements.

Course objectives

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

1. Build a data model in STEP based on common/good practices.

2. Maintain an existing data model in STEP over time.

3. Expand an existing data model in STEP.

4. Troubleshoot issues in STEP occurring during data model configuration.

5. Identify gaps between business requirements and STEP solutions.

6. Evaluate business requirements defined in the specification documents.

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 - Build a data model in STEP based on common/good practices.

Learning objectives:

- Apply attribute validation using List of Values (LOV).

- Recall attribute validation using List of Values (LOV).

- Define category-specific attributes to product hierarchy, allowing for inheritance of attribute values.

- Complete instantiated product, classification and entity hierarchies based on established data model configuration for testing the data model.

- Recall data validation on attributes using different attribute validation base types (e.g. Text, Number, Date, and List of Values).

- Apply reference inheritance to Product-to-Product reference types.

- Locate grouping of attributes.

- Add calculated attribute functions (i.e. extract and concatenate) on attribute values of a product.

- Add Entity to Entity Reference types.

- Exemplify when to use auto-generated IDs to object type instances.

Course objective 2 - Maintain existing data model in STEP over time.

Learning objectives:

- Identify the impact of modifying or expanding attributes, references and hierarchy structures (e.g. product, classification or entity) to an existing data model.

- Implement dimension dependency to attributes.

- Comprehend pros and cons of calculated attribute usage and when to use business rules alternatively.

- Adapt the data model to allow for bundling of products (e.g. for sales-promotion purposes).

- Apply configurations to the data model that control the order of attributes displayed in the Workbench and in the Web UI.

- Add Reference type for relationships between product and classification object types.

- Add Product to Asset Reference types.

- Extend an existing product hierarchy by configuring a family of product variants.

- Extend an existing product data model to allow for a buy-side/sell-side model

Course objective 3 - Expand an existing data model in STEP.

Learning objectives:

- Give examples of the STEP data model configurations for Retail, and Manufacturing.

Course objective 4 - Troubleshoot issues in STEP occurring during data model configuration.

Learning objectives:

- Reconstruct the data model attribution to avoid orphan attributes.

Course objective 5 - Identify gaps between business requirements and STEP solutions.

Learning objectives:

- Relate business requirements detailed in the data model documentation with existing STEP system functionality.

Course objective 6 - Evaluate business requirements defined in the specification documents.

Learning objectives:

- Establish Entity hierarchies.

- Implement Asset classification structures.

- Establish Product hierarchies.

- Establish Classification hierarchies.

About Stibo Systems

Stibo Systems, the master data management company, is the trusted source of MDM. Our solutions are the driving force behind forward-thinking companies around the world that have unlocked the strategic value of their master data, empowering them to improve the customer experience, drive innovation and growth and create an essential foundation for digital transformation. We give companies the transparency they require and desire – a single, accurate view of their master data – so they can make informed decisions and achieve goals of scale, scope and ambition. Stibo Systems is a privately-held subsidiary of the Stibo A/S group, founded in 1794, and is headquartered in Aarhus, Denmark. For more information, visit stibosystems.com

For questions regarding training:

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