DEV355
Data Modeling with PowerDesigner 16.5

COURSE OUTLINE

Course Version: 15
Course Duration: 4 Day(s)
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Typographic Conventions

American English is the standard used in this handbook. The following typographic conventions are also used.

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TARGET AUDIENCE
This course is intended for the following audiences:

- Business Analyst
- Data Consultant/Manager
- Database Administrator
- Developer
- Development Consultant
Lesson 1: Identifying Key Components of the SAP PowerDesigner Environment

Lesson Objectives
After completing this lesson, you will be able to:

- Explain data modeling
- Identify key components of the SAP PowerDesigner environment
- Explain the main object properties

Lesson 2: Creating a Project in the Workspace

Lesson Objectives
After completing this lesson, you will be able to:

- Create a project in the workspace
UNIT 2
Conceptual Data Models (CDMs) and Logical Data Models (LDMs)

Lesson 1: Applying Model Properties and Options
Lesson Objectives
After completing this lesson, you will be able to:

- Explain CDMs and LDMs
- Set model options and preferences

Lesson 2: Creating Entities and Domains
Lesson Objectives
After completing this lesson, you will be able to:

- Create an entity
- Create entity attributes
- Create a domain

Lesson 3: Creating Relationships in CDMs and LDMs
Lesson Objectives
After completing this lesson, you will be able to:

- Explain entity relationships
- Create relationships

Lesson 4: Creating Inheritance Links in a Model
Lesson Objectives
After completing this lesson, you will be able to:

- Create inheritance links

Lesson 5: Checking a CDM
Lesson Objectives
After completing this lesson, you will be able to:
• Check a CDM
Lesson 1: Generating a PDM from Another Model

Lesson Objectives
After completing this lesson, you will be able to:

- Describe data model transformation
- Generate a PDM from another model

Lesson 2: Implementing Data Integrity Checks in a PDM

Lesson Objectives
After completing this lesson, you will be able to:

- Explain PDM modification
- Implement data integrity checks
- Implement referential integrity

Lesson 3: Creating Views, Stored Procedures, and Triggers

Lesson Objectives
After completing this lesson, you will be able to:

- Create views
- Create stored procedures and triggers

Lesson 4: Creating Indexes and Alternate Keys

Lesson Objectives
After completing this lesson, you will be able to:

- Create an alternate key
- Create an index

Lesson 5: Checking a PDM

Lesson Objectives
After completing this lesson, you will be able to:

- Check a PDM

**Lesson 6: Generating a Database from a PDM**

**Lesson Objectives**

After completing this lesson, you will be able to:

- Generate a database

**Lesson 7: Reverse Engineering from a Database**

**Lesson Objectives**

After completing this lesson, you will be able to:

- Explain reverse engineering
- Reverse engineer a PDM from a database creation script
- Reverse engineer a CDM from a PDM
Lesson 1: Comparing Models
Lesson Objectives
After completing this lesson, you will be able to:

- Compare models

Lesson 2: Merging Models
Lesson Objectives
After completing this lesson, you will be able to:

- Merge models
- Synchronize objects manually

Lesson 3: Synchronizing Models
Lesson Objectives
After completing this lesson, you will be able to:

- Explain data synchronization
- Synchronize data models
- Synchronize models with a database
Lesson 1: Creating and Modifying a Package

Lesson Objectives
After completing this lesson, you will be able to:

- Create a package
- Modify a package

Lesson 2: Creating a Diagram

Lesson Objectives
After completing this lesson, you will be able to:

- Identify tools for diagram creation
- Create a diagram

Lesson 3: Creating a Package from a Diagram

Lesson Objectives
After completing this lesson, you will be able to:

- Create a package from a diagram

Lesson 4: Creating a Dependency Matrix

Lesson Objectives
After completing this lesson, you will be able to:

- Create a dependency matrix
Lesson 1: Creating a Report Template

Lesson Objectives
After completing this lesson, you will be able to:

- Create a custom report template

Lesson 2: Creating a Report

Lesson Objectives
After completing this lesson, you will be able to:

- Create a report

Lesson 3: Generating a Report

Lesson Objectives
After completing this lesson, you will be able to:

- Generate a report

Lesson 4: Creating a Multi-Model Report

Lesson Objectives
After completing this lesson, you will be able to:

- Create a multi-model report
Lesson 1: Creating Requirements

Lesson Objectives
After completing this lesson, you will be able to:

- Describe the features of the requirements model (RQM)
- Manage requirements
- Link model objects to the RQM

Lesson 2: Creating a Link Between Models

Lesson Objectives
After completing this lesson, you will be able to:

- Explain link types
- Create a link between models with the Mapping Editor

Lesson 3: Generating an Impact Analysis Model (IAM)

Lesson Objectives
After completing this lesson, you will be able to:

- Generate an IAM
UNIT 8

The Repository

Lesson 1: Modifying Documents in the Repository
Lesson Objectives
After completing this lesson, you will be able to:

● Check a document in and out of the repository

Lesson 2: Setting up a Repository Workflow
Lesson Objectives
After completing this lesson, you will be able to:

● Set up a repository workflow

Lesson 3: Integrating Changes Across Repository Branches
Lesson Objectives
After completing this lesson, you will be able to:

● Integrate changes across repository branches

Lesson 4: Managing a Repository
Lesson Objectives
After completing this lesson, you will be able to:

● Explain repository management
● Compare models in the repository
● Access the PowerDesigner Portal

Lesson 5: Adding a Model to the Library
Lesson Objectives
After completing this lesson, you will be able to:

● Add a model to the library
Lesson 6: Creating a Glossary

Lesson Objectives
After completing this lesson, you will be able to:

• Describe the content of a glossary
• Create a glossary
• Explain glossary management