

S4D430

Data Modeling in ABAP Dictionary and ABAP Core Data Services

COURSE OUTLINE

Course Version: 24

Course Duration:

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Typographic Conventions

American English is the standard used in this handbook.

The following typographic conventions are also used.

This information is displayed in the instructor's presentation	
Demonstration	
Procedure	
Warning or Caution	
Hint	
Related or Additional Information	
Facilitated Discussion	
User interface control	<i>Example text</i>
Window title	<i>Example text</i>

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Course Overview

TARGET AUDIENCE

This course is intended for the following audiences:

- Development Consultant
- Developer

Lesson 1: Exploring ABAP Dictionary

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the basic tasks of the ABAP Dictionary
- Name the most important Dictionary objects

Lesson 2: Exploring ABAP Core Data Services

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the basic tasks of the ABAP Core Data Services
- Name the most important ABAP CDS objects

Lesson 1: Defining Domains and Data Elements

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the use of data elements and domains when defining database tables
- Create domains
- Create data elements

Lesson 2: Creating Database Tables

Lesson Objectives

After completing this lesson, you will be able to:

- Create a table definition
- Edit the field list of a database table
- Maintain additional table properties
- Define and use include structures

Lesson 3: Handling Changes to Database Tables

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the adjustment of database tables
- Adjust direct changes to database tables
- Describe the conversion process for database tables
- Adjust indirect changes to database tables

Lesson 1: Using Dictionary Objects as Data Types

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the use of dictionary objects as data types

Lesson 2: Defining Dictionary Structures

Lesson Objectives

After completing this lesson, you will be able to:

- Define dictionary structures

Lesson 3: Defining Dictionary Table Types

Lesson Objectives

After completing this lesson, you will be able to:

- Define a dictionary table type
- Define a nested table type

Lesson 1: Defining a Basic CDS View

Lesson Objectives

After completing this lesson, you will be able to:

- Create a data definition
- Maintain the FROM clause and element list

Lesson 2: Using ABAP Annotations in CDS Views

Lesson Objectives

After completing this lesson, you will be able to:

- Use ABAP annotations in CDS views
- Work with translatable texts in CDS

Lesson 3: Building Views on Views

Lesson Objectives

After completing this lesson, you will be able to:

- Define a CDS view that reads from another view
- Control the propagation of element annotations

Lesson 1: Defining Relationships Between Database Tables

Lesson Objectives

After completing this lesson, you will be able to:

- Understand relationships in data models
- Define foreign key dependencies in dictionary tables

Lesson 2: Defining Associations Between CDS Views

Lesson Objectives

After completing this lesson, you will be able to:

- Define associations
- Expose associations

Lesson 3: Using Associations in Path Expressions

Lesson Objectives

After completing this lesson, you will be able to:

- Use path expressions in CDS views
- Use filter conditions in path expressions
- Use path expressions in ABAP SQL

Lesson 1: Implementing SQL Expressions in CDS Views

Lesson Objectives

After completing this lesson, you will be able to:

- Motivate the use of code pushdown in CDS Views
- Use SQL expressions in CDS views

Lesson 2: Calling Built-in Functions in CDS Views

Lesson Objectives

After completing this lesson, you will be able to:

- Use built-in functions in ABAP CDS
- Use session variables

Lesson 3: Defining CDS Views with Input Parameters

Lesson Objectives

After completing this lesson, you will be able to:

- Define CDS views with input parameters
- Provide values for CDS view parameters
- Link parameters to ABAP system fields

Lesson 4: Processing Data Sets in CDS Views

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the techniques for processing datasets in ABAP CDS
- Use the DISTINCT addition in ABAP CDS views
- Include aggregations and grouping in CDS views
- Use joins and unions in CDS views

Lesson 1: Preventing Unauthorized Access to Data

Lesson Objectives

After completing this lesson, you will be able to:

- Create authorization fields and authorization objects
- Implement CDS access controls

Lesson 2: Extending Dictionary Objects

Lesson Objectives

After completing this lesson, you will be able to:

- Extend dictionary objects using append structures

Lesson 3: Extending CDS Views

Lesson Objectives

After completing this lesson, you will be able to:

- Extend CDS entities using CDS view extensions

Lesson 4: Creating Metadata Extensions

Lesson Objectives

After completing this lesson, you will be able to:

- Extend views using CDS metadata extensions