S4D430

Building Views in Core Data Services ABAP (CDS ABAP)

COURSE OUTLINE

Course Version: 22 Course Duration:

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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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Course Overview

TARGET AUDIENCE

This course is intended for the following audiences:

- Development Consultant
- Developer



UNIT 1 Introduction

Lesson 1: Motivating CDS Views and Understanding the Background

Lesson Objectives

After completing this lesson, you will be able to:

- Know the Background for Core Data Services
- · Understand the Basics of CDS

Lesson 2: Working with ABAP Development Tools (ADT)

Lesson Objectives

After completing this lesson, you will be able to:

• Work with ABAP Development Tools

Lesson 3: Analyzing and Using A CDS View

Lesson Objectives

- Read a Data Definition
- Use CDS-related Tools in ADT
- Use Open SQL to Read From a CDS View



UNIT 2 Basic SQL Features in CDS **Views**

Lesson 1: Defining a Simple CDS View

Lesson Objectives

After completing this lesson, you will be able to:

- Create a Data Definition
- Understand the DDL Syntax Rules

Lesson 2: Creating a CDS View with Inner Join, Projection, and Selection

Lesson Objectives

After completing this lesson, you will be able to:

Define a CDS View That Reflects a Database View

Lesson 3: Using ABAP Annotations in CDS Views

Lesson Objectives

- Use ABAP Annotations in CDS Views
- Work with Translatable Texts in CDS



UNIT 3 More SQL Features in CDS **Views**

Lesson 1: Using SQL Expressions in CDS Views

Lesson Objectives

After completing this lesson, you will be able to:

• Use SQL Expressions in CDS Views

Lesson 2: Using Built-in SQL Functions in CDS Views

Lesson Objectives

After completing this lesson, you will be able to:

• Use Built-in SQL Functions in CDS Views

Lesson 3: Understanding Nested Views

Lesson Objectives

After completing this lesson, you will be able to:

Define CDS Views Based on Other CDS Views

Lesson 4: Using Aggregations in CDS Views

Lesson Objectives

After completing this lesson, you will be able to:

Use Aggregate Functions and Group By in CDS Views

Lesson 5: Using Additional Join Types and UNION (ALL)

Lesson Objectives

- Understand Additional Join Types
- Understand UNION and UNION ALL





UNIT 4 Advanced Concepts

Lesson 1: 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 Input Parameters of a CDS View
- Specify a Default Value for an Input Parameter

Lesson 2: Building CDS Views with Associations

Lesson Objectives

After completing this lesson, you will be able to:

- Define Views with Associations
- **Expose Associations**
- Use Exposed Associations in Path Expressions
- Understand Filtered Associations

Lesson 3: Enhancing a CDS View

Lesson Objectives

After completing this lesson, you will be able to:

- Understand the Concept of CDS View Enhancements
- Enhance a CDS View
- **Understand Metadata Extensions**

Lesson 4: Linking a CDS View with Authorization Rules

Lesson Objectives

- Understand the Concept of CDS DCL
- Create a Access Control



UNIT 5 Database-Specific Features of **ABAP CDS**

Lesson 1: Understanding CDS Table Functions

Lesson Objectives

- Understand the AMDP Framework
- Define CDS Table Functions
- Read Data From CDS Table Functions



UNIT 6 Consumption of CDS Views (Outlook)

Lesson 1: Using a CDS View as Data Source for ALV IDA

Lesson Objectives

After completing this lesson, you will be able to:

- Understand ALV with Integrated Data Access (ALV IDA)
- Display Data with ALV IDA
- Use CDS Views as Data Source for ALV IDA

Lesson 2: Using CDS Views as Proxy Objects

Lesson Objectives

After completing this lesson, you will be able to:

Understand Proxy Objects

Lesson 3: Generating OData Services from CDS Views

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the benefits of SAP Gateway and OData
- Publish Gateway Services via CDS View Annotation

Lesson 4: Understanding the Consumption of CDS Views in SAP Fiori

Lesson Objectives

After completing this lesson, you will be able to:

Understand the Consumption of CDS Views in SAP Fiori

Lesson 5: Understanding Analytics Based on CDS Views

Lesson Objectives

After completing this lesson, you will be able to:

Understand Analytics with CDS Views

Lesson 6: Understanding Virtual Data Models with CDS Views

Lesson Objectives

After completing this lesson, you will be able to:

• Understand Virtual Data Models (VDM)