S4D430

Building Views in Core Data Services ABAP (CDS ABAP)

COURSE OUTLINE

Course Version: 10

Course Duration: 3 Day(s)

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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 | 2 3 |
| Warning or Caution | 1 |
| Hint | |
| Related or Additional Information | >> |
| Facilitated Discussion | - |
| User interface control | Example text |
| Window title | Example text |

Contents

| vii | Course Overview | | | |
|----------------------------------|-----------------|---|--|--|
| 1 | Unit 1: | Introduction | | |
| 1 1 1 | | Lesson: Motivating CDS Views and Understanding the Background Lesson: Working with ABAP Development Tools (ADT) Lesson: Analyzing and Using A CDS View | | |
| 3 | Unit 2: | Basic SQL Features in CDS Views | | |
| 3 3 3 | | Lesson: Define a Simple CDS View Lesson: Creating a CDS View with Inner Join, Projection, and Selection Lesson: Using ABAP Annotations in CDS Views | | |
| 5 | Unit 3: | More SQL Features in CDS Views | | |
| 5 5 5 5 | | Lesson: Using SQL Expressions in CDS Views Lesson: Using Built-in SQL Functions in CDS Views Lesson: Understanding Nested Views Lesson: Using Aggregations in CDS Views Lesson: Using Additional Join Types and UNION (ALL) | | |
| 7 | Unit 4: | Advanced Concepts | | |
| 7 7 7 7 | | Lesson: Defining CDS Views with Input Parameters Lesson: Building CDS Views with Associations Lesson: Enhancing a CDS View Lesson: Linking a CDS View with Authorization Rules | | |
| 9 | Unit 5: | Database-Specific Features of ABAP CDS | | |
| 9 | | Lesson: Understanding CDS Table Functions | | |
| 11 | Unit 6: | Consumption of CDS Views (Outlook) | | |
| 11 11 11 11 11 12 | | Lesson: Using a CDS View as Data Source for ALV IDA Lesson: Using CDS Views as Replacement Objects Lesson: Generating OData Services from CDS Views Lesson: Understanding the Consumption of CDS Views in SAP Fiori Lesson: Understanding Analytics Based on CDS Views Lesson: Understanding Virtual Data Models with CDS Views | | |



Course Overview

TARGET AUDIENCE

This course is intended for the following audiences:





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: Define a Simple CDS View

Lesson Objectives

After completing this lesson, you will be able to:

- Create a DDL Source
- 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

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, Group By And Having 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

Lesson 4: Linking a CDS View with Authorization Rules

Lesson Objectives

- Understand the Concept of CDS DCL
- · Create a DCL Source



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 Replacement Objects

Lesson Objectives

After completing this lesson, you will be able to:

· Understand Replacement 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)