HA300

SAP HANA 2.0 SPS04 - Modeling

COURSE OUTLINE

Course Version: 16
Course Duration:

SAP Copyrights, Trademarks and Disclaimers

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	*Example text*
Window title	*Example text*

Contents

Course Overview

TARGET AUDIENCE

This course is intended for the following audiences:

- Database Administrator

UNIT 1 Calculation Views

Lesson 1: Introducing Calculation Views

Lesson Objectives

After completing this lesson, you will be able to:

- Explain modeling objects

Lesson 2: Understanding the Different Types of Views

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the types of views used in graphical modeling

Lesson 3: Working with Common View Design Features

Lesson Objectives

After completing this lesson, you will be able to:

- Use common features to design calculation views
- Get an overview of the different types of nodes

UNIT 2 Using Nodes in Calculation Views

Lesson 1: Using Projection Nodes

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

- Use a projection node

Lesson 2: Using Joins Nodes

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

- Use joins to combine data sources
- Join more than two tables in a single join node
- Work with non-equi joins
- Use a Dynamic Join
- Define Join Columns Optimization

Lesson 3: Working with Data Sets

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

- Use Union Nodes to combine data sets
- Use Set Operations: Minus and Intersect

Lesson 4: Aggregating Data

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

- Use Aggregation Nodes
- Control the behavior of the Aggregation Node

Lesson 5: Creating CUBE with Star Join Calculation Views

Lesson Objectives

After completing this lesson, you will be able to:

- Use a Star Join in a CUBE calculation view

Lesson 6: Extracting Top Values with Rank Nodes

Lesson Objectives

After completing this lesson, you will be able to:

- Use a rank node to extract the top values of a data set

UNIT 3 Modeling Functions

Lesson 1: Creating Restricted and Calculated Columns

Lesson Objectives

After completing this lesson, you will be able to:

- Create restricted and calculated columns

Lesson 2: Filtering Data

Lesson Objectives

After completing this lesson, you will be able to:

- Filter data

Lesson 3: Using Variables and Input Parameters

Lesson Objectives

After completing this lesson, you will be able to:

- Use variables and input parameters

Lesson 4: Using Hierarchies

Lesson Objectives

After completing this lesson, you will be able to:

- Use hierarchies

Lesson 5: Implementing Currency Conversion

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the general principles of currency conversion

UNIT 4 Using SQL in Models

Lesson 1: Introducing SAP HANA SQL

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

- Describe SAP HANA SQL

Lesson 2: Query a Modeled Hierarchy Using SQL

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

- Query a modeled hierarchy using SQL

Lesson 3: Working with SQLScript

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

- Work with SQLScript

Lesson 4: Creating and Using Functions

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

- Work with functions

Lesson 5: Creating and Using Procedures

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

- Create and use procedures

UNIT 5 Modeling the Persistence Layer

Lesson 1: Defining the Persistence Layer Using CDS

Lesson Objectives

After completing this lesson, you will be able to:

- Define tables using source fles

Lesson 2: Creating Views with CDS

Lesson Objectives

After completing this lesson, you will be able to:

- Understand CDS Views

UNIT 6 Optimization of Models

Lesson 1: Implementing Good Modeling Practices

Lesson Objectives

After completing this lesson, you will be able to:

- Implementing good modeling practices

Lesson 2: Using Tools to Check Model Performance

Lesson Objectives

After completing this lesson, you will be able to:

- Use tools to check model performance

Lesson 3: Developing a Data Management Architecture

Lesson Objectives

After completing this lesson, you will be able to:

- Implement Good Data Management Architecture

UNIT 7 Management and Administration of Models

Lesson 1: Working with Modeling Content in a Project

Lesson Objectives

After completing this lesson, you will be able to:

- Analyze and document information models
- Explain the structure of a project
- Build modeling content
- Modify and move modeling content

Lesson 2: Creating and Managing Projects

Lesson Objectives

After completing this lesson, you will be able to:

- Define the key settings of a project
- Manage the lifecycle of a project

Lesson 3: Enabling Access to External Data

Lesson Objectives

After completing this lesson, you will be able to:

- Set up access to external data

Lesson 4: Working with GIT Within the SAP Web IDE

Lesson Objectives

After completing this lesson, you will be able to:

- Use the Native Git Integration of the SAP Web IDE

Lesson 5: Migrating Modeling Content

Lesson Objectives

After completing this lesson, you will be able to:

- List the deprecated modeling artifacts
- Explain how to migrate modeling content

UNIT 8 Security in SAP HANA Modeling

Lesson 1: Understanding Roles and Privileges

Lesson Objectives

After completing this lesson, you will be able to:

- Understand roles and privileges

Lesson 2: Defining Analytic Privileges

Lesson Objectives

After completing this lesson, you will be able to:

- Define analytic privileges

Lesson 3: Defining Roles

Lesson Objectives

After completing this lesson, you will be able to:

- Create a design-time role

Lesson 4: Masking Sensitive Data

Lesson Objectives

After completing this lesson, you will be able to:

- Restrict access to columns containing sensitive data within a View

Lesson 5: Anonymizing Data

Lesson Objectives

After completing this lesson, you will be able to:

- Protect sensitive data with anonymization

UNIT 9 Introduction to Advanced Modeling

Lesson 1: Introducing Advanced Data Modeling

Lesson Objectives

After completing this lesson, you will be able to:

- Develop awareness of advanced modeling possibilities