

# HA300

## SAP HANA 2.0 SPS04 - Modeling

### COURSE OUTLINE

Course Version: 16

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:

- Database Administrator





## 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



## 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

## 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



## 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





## Lesson 1: Defining the Persistence Layer Using CDS

### Lesson Objectives

After completing this lesson, you will be able to:

- Define tables using source files

## Lesson 2: Creating Views with CDS

### Lesson Objectives

After completing this lesson, you will be able to:

- Understand CDS Views



## 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



## 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

## 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





## Lesson 1: Introducing Advanced Data Modeling

### Lesson Objectives

After completing this lesson, you will be able to:

- Develop awareness of advanced modeling possibilities