

SAP HANA 2.0 SPS07 Modeling

Course code: HA300

This course teaches the core capabilities of SAP HANA for calculation view modeling, and covers mainly graphical modeling, as well as SQL- based modeling (table functions and procedures) with a focus on performance. It also introduces Core Data Services as a flexible method to model a persistence layer. The participants will gain knowledge about the management of modeling content in the SAP Web IDE for SAP HANA, and the key principles of object and data access security in a modeling context.

Who is the course for

- Application Consultant
- Data Consultant / Manager
- Database Administrator
- Application Developer
- BI specialist

What we teach you

This course will prepare you to:

- Develop information models following SAP best practices for maximum performance and flexibility
- Get started with SQL and SQL-Script based modeling
- Manage projects and modeling content in the SAP Web IDE for SAP HANA
- Implement security and data access controls around SAP HANA data models

Required skills

Essential

- HA100 SAP HANA - 360° Introduction

Recommended

- HA150 SAP HANA 2.0 SPS07 - SQLScript for SAP HANA

Teaching materials

SAP guide book for this course.

Course based on software release

- SAP HANA 2.0 SPS07

Course outline

Preparing the Modeling Environment

- Getting Started with SAP Web IDE for SAP HANA
- Importing an Existing Project in SAP Web IDE for SAP HANA

Creating Calculation Views

- Understanding Basic Concepts and Terminology
- Checking the Output of a Calculation View
- Creating Dimension Calculation Views
- Creating Cube Calculation Views
- Creating SQL Access Only Calculation Views
- Choosing a Data Source for a Calculation View

Working with Common Features of Calculation Views

Defining the Top View Node

Working with Common Nodes in Calculation Views

GOPAS Praha

Kodáňská 1441/46
101 00 Praha 10
Tel.: +420 234 064 900-3
info@gopas.cz

GOPAS Brno

Nové sady 996/25
602 00 Brno
Tel.: +420 542 422 111
info@gopas.cz

GOPAS Bratislava

Dr. Vladimíra Clementisa 10
Bratislava, 821 02
Tel.: +421 248 282 701-2
info@gopas.sk



Copyright © 2020 GOPAS, a.s.,
All rights reserved

SAP HANA 2.0 SPS07 Modeling

- Using Projection Nodes
- Working with Aggregation Nodes

Joining Data Sources in Calculation Views

- Combining data sources using a join node
- Joining more than two tables in a single join node
- Creating Cube with Star Join Calculation Views
- Configuring non-equi joins
- Preventing incorrect aggregations using a dynamic join
- Filtering on Join Nodes
- Optimizing Joins

Working with Union Nodes in Calculation Views

- Working with the Union Node

Creating Data Slices

- Implementing Minus and Intersect Nodes

Ranking Data

- Implementing Rank Nodes

Embedding Functions in Calculation Views

- Generating Restricted Columns
- Generating Calculated Columns
- Filtering Data
- Implementing Currency Conversion

Creating Dynamic Calculation Views

- Implementing Variables
- Defining Value Help Views
- Implementing Input Parameters
- Mapping Variables and Input Parameters

Implementing Hierarchies in Calculation Views

- Modeling Hierarchies
- Creating Time-Based Dimension Calculation Views
- Using a Hierarchy for Value Help

Developing Custom Logic using SQL

- Introducing SAP HANA SQL Console
- Implementing SQL in Calculation Views
- Querying a Modeled Hierarchy Using SQL
- Working with SQLScript
- Creating and Using Functions
- Creating and Using Procedures

GOPAS Praha

Kodáňská 1441/46
101 00 Praha 10
Tel.: +420 234 064 900-3
info@gopas.cz

GOPAS Brno

Nové sady 996/25
602 00 Brno
Tel.: +420 542 422 111
info@gopas.cz

GOPAS Bratislava

Dr. Vladimíra Clementisa 10
Bratislava, 821 02
Tel.: +421 248 282 701-2
info@gopas.sk



Copyright © 2020 GOPAS, a.s.,
All rights reserved

SAP HANA 2.0 SPS07 Modeling

Applying Best Practices for Modeling

- Implementing Recommended Modeling Practices
- Implementing Best Practices in Calculation View Nodes

Using Tools to Check Model Performance

- Validating Calculation Views with Performance Analysis Mode
- Debugging Calculation Views with the Debug Query Mode
- Analyzing executions with the SQL Analyzer

Implementing Features to Improve Performance

- Implementing Union Pruning
- Controlling Parallelization
- Partitioning Tables

Storing Calculation View Results

- Implementing Static Cache to Improve Performance
- Creating Snapshots

Using Additional Modeling Productivity Tools

- Developing Calculation views more efficiently

Working with Modeling Content in a Project

- Working in a Modeling Project
- Explaining the Project Structure
- Building Models
- Managing modeling content

Managing the Lifecycle of a Modeling Project

- Creating a Project
- Enabling Access to External Data
- Using Git to Manage Source Code
- Deploying an application
- Migrating Modeling Content

Implementing Security in SAP HANA Modeling

- Defining Analytic Privileges
- Defining Roles
- Masking Sensitive Data
- Anonymizing Data

GOPAS Praha

Kodáňská 1441/46
101 00 Praha 10
Tel.: +420 234 064 900-3
info@gopas.cz

GOPAS Brno

Nové sady 996/25
602 00 Brno
Tel.: +420 542 422 111
info@gopas.cz

GOPAS Bratislava

Dr. Vladimíra Clementisa 10
Bratislava, 821 02
Tel.: +421 248 282 701-2
info@gopas.sk



Copyright © 2020 GOPAS, a.s.,
All rights reserved