

BW450

SAP BW/4HANA - Data Acquisition

COURSE OUTLINE

Course Version: 17

Course Duration:

SAP Copyrights, Trademarks and Disclaimers

© 2020 SAP SE or an SAP affiliate company. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. Please see <http://global12.sap.com/corporate-en/legal/copyright/index.epx> for additional trademark information and notices.

Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors.

National product specifications may vary.

These materials may have been machine translated and may contain grammatical errors or inaccuracies.

These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP SE or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP SE or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

In particular, SAP SE or its affiliated companies have no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP SE's or its affiliated companies' strategy and possible future developments, products, and/or platform directions and functionality are all subject to change and may be changed by SAP SE or its affiliated companies at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of their dates, and they should not be relied upon in making purchasing decisions.

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>

Contents

ix **Course Overview**

1 Unit 1: SAP BW/4HANA Strategy and Overview

- 1 Lesson: Describing the New SAP BW/4HANA Features that Affect Data Acquisition
- 1 Lesson: Explaining the Strategy for SAP BW/4HANA
- 1 Lesson: Introducing Integration Options with Cloud Sources
- 1 Lesson: Using BW Modeling Tools
- 1 Lesson: Outlining the Course Landscape

3 Unit 2: Data Acquisition into SAP BW/4HANA with Flat File Source System (FILE)

- 3 Lesson: Positioning the Flat File DataSource in SAP BW/4HANA

5 Unit 3: Data Acquisition into SAP BW/4HANA with Operational Data Provisioning (ODP_SAP)

- 5 Lesson: Describing Data Acquisition with Operational Data Provisioning (ODP)
- 5 Lesson: Explaining ODP_SAP Source Systems
- 5 Lesson: Debugging an SAP ECC DataSource
- 5 Lesson: Analyzing the Operational Delta Queue (ODQ) for ODP - SAP
- 5 Lesson: Loading Hierarchies from SAP ECC

7 Unit 4: Operational Data Provisioning Delta Management (ODP_SAP)

- 7 Lesson: Explaining Terms and Basic Processes of Delta Enabled DataSources
- 7 Lesson: Configuring the Logistics Data Extraction (LO Cockpit)
- 7 Lesson: Appending BI Content DataSources
- 7 Lesson: Managing the Delta Data Transfer Processes (DTPs)
- 7 Lesson: Discussing the New GL Data Extraction
- 8 Lesson: Configuring Generic Delta DataSources

9	Unit 5:	SAP BW/4HANA Data Extraction from SAP S/4HANA (ODP_CDS)
9		Lesson: Introducing SAP S/4HANA
9		Lesson: Describing the SAP S/4HANA Architecture
9		Lesson: Understanding the Positioning of SAP BW/4HANA with SAP S/4HANA
9		Lesson: Describing ABAP CDS Views in a BW Context
9		Lesson: Understanding Challenges/Opportunities After Updating to SAP S/4HANA from SAP ECC
11	Unit 6:	Other Types of Operational Data Provisioning in SAP BW/4HANA (ODP_SLT, ODP_BW, ODP_HANA)
11		Lesson: Implementing Realtime Data Acquisition (RDA) with ODP - SLT
11		Lesson: Connecting BW Data Marts with ODP - BW
11		Lesson: Extracting from ODP - SAP HANA Information Views
13	Unit 7:	Data Acquisition into SAP HANA and Data Access with SAP HANA Local Database Schema (HANA_LOCAL)
13		Lesson: Explaining Data Provisioning into SAP HANA
13		Lesson: Explaining Data Provisioning into SAP HANA via Flat Files
13		Lesson: Replicating Data to SAP HANA via SLT
13		Lesson: Explaining Virtual Data Provisioning into SAP HANA with Smart Data Access (SDA)
13		Lesson: Explaining Data Provisioning into SAP HANA via Smart Data Integration (SDI)
15	Unit 8:	Data Acquisition into SAP BW/4HANA with the SAP HANA Smart Data Access (HANA_SDA)
15		Lesson: Introducing the HANA_SDA Source System
15		Lesson: Streaming Data into SAP BW4/HANA with SAP HANA Smart Data Integration
17	Unit 9:	Manage and Optimize Data Flow Components in SAP BW/4HANA
17		Lesson: Comparing SAP BW/4HANA Data Acquisition Options
17		Lesson: Working with Enhanced Master Data Update
17		Lesson: Positioning InfoSources
17		Lesson: Debugging DTPs
17		Lesson: Working with SAP HANA Optimized Transformations
19	Unit 10:	Big Data Acquisition to SAP BW/4HANA and SAP Data Hub
19		Lesson: Introducing the SAP HANA Big Data Source System and SAP HANA Vora
19		Lesson: Introducing the SAP Data Hub

21 Unit 11: Appendix: Topics Not Covered in the Training Class

- 21 Lesson: Optional: Implementing Open Hub Destinations
- 21 Lesson: Optional: Introducing SAP Agile Data Preparation
- 21 Lesson: Optional: Introducing the Data Protection Workbench

23 Unit 12: Glossary

- 23 Lesson: Glossary

Course Overview

TARGET AUDIENCE

This course is intended for the following audiences:

- Data Manager
- Systems Architect
- Project Manager
- Project Stakeholder
- Training Manager
- Application Consultant
- Development Consultant
- Technology Consultant
- Support Consultant
- Data Consultant
- Developer IT Administrator IT Support
- Database Administrator
- Solution Architect
- System Administrator
- Trainer

Lesson 1: Describing the New SAP BW/4HANA Features that Affect Data Acquisition

Lesson Objectives

After completing this lesson, you will be able to:

- Review SAP BW/4HANA terminology
- Describe the new features for SAP BW/4HANA that affect data acquisition

Lesson 2: Explaining the Strategy for SAP BW/4HANA

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the strategy for SAP BW/4HANA

Lesson 3: Introducing Integration Options with Cloud Sources

Lesson Objectives

After completing this lesson, you will be able to:

- Provide an overview of integration options with cloud applications

Lesson 4: Using BW Modeling Tools

Lesson Objectives

After completing this lesson, you will be able to:

- Review the Eclipse-based UI for SAP BW modeling

Lesson 5: Outlining the Course Landscape

Lesson Objectives

After completing this lesson, you will be able to:

- Get started in the course landscape

Lesson 1: Positioning the Flat File DataSource in SAP BW/4HANA

Lesson Objectives

After completing this lesson, you will be able to:

- Understand the Flat File DataSource in SAP BW/4HANA

Lesson 1: Describing Data Acquisition with Operational Data Provisioning (ODP)

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the ODP functionality

Lesson 2: Explaining ODP_SAP Source Systems

Lesson Objectives

After completing this lesson, you will be able to:

- Connect SAP source systems to SAP BW
- Describe the application component hierarchy
- Activate SAP ECC DataSources
- Manage ODP DataSources

Lesson 3: Debugging an SAP ECC DataSource

Lesson Objectives

After completing this lesson, you will be able to:

- Debug an SAP ECC DataSource
- Debug the ODP

Lesson 4: Analyzing the Operational Delta Queue (ODQ) for ODP - SAP

Lesson Objectives

After completing this lesson, you will be able to:

- Analyze ODP/ODQ

Lesson 5: Loading Hierarchies from SAP ECC

Lesson Objectives

After completing this lesson, you will be able to:

- Load a hierarchy from SAP ECC using a Delivered DataSource

Lesson 1: Explaining Terms and Basic Processes of Delta Enabled DataSources

Lesson Objectives

After completing this lesson, you will be able to:

- Explain the delta process

Lesson 2: Configuring the Logistics Data Extraction (LO Cockpit)

Lesson Objectives

After completing this lesson, you will be able to:

- Extract logistics data

Lesson 3: Appending BI Content DataSources

Lesson Objectives

After completing this lesson, you will be able to:

- Append BI Content DataSources

Lesson 4: Managing the Delta Data Transfer Processes (DTPs)

Lesson Objectives

After completing this lesson, you will be able to:

- Manage ODP DTPs for Delta Load
- Manage the ODQ for Delta Load

Lesson 5: Discussing the New GL Data Extraction

Lesson Objectives

After completing this lesson, you will be able to:

- Configure the new GL data extraction

Lesson 6: Configuring Generic Delta DataSources

Lesson Objectives

After completing this lesson, you will be able to:

- Analyze the use of Generic Delta Management

Lesson 1: Introducing SAP S/4HANA

Lesson Objectives

After completing this lesson, you will be able to:

- Describe SAP S/4HANA and its key features

Lesson 2: Describing the SAP S/4HANA Architecture

Lesson Objectives

After completing this lesson, you will be able to:

- Explain virtual data models (VDM)

Lesson 3: Understanding the Positioning of SAP BW/4HANA with SAP S/4HANA

Lesson Objectives

After completing this lesson, you will be able to:

- Describe where SAP BW fits with SAP S/4HANA

Lesson 4: Describing ABAP CDS Views in a BW Context

Lesson Objectives

After completing this lesson, you will be able to:

- Describe ABAP CDS View Usage in a BW Context

Lesson 5: Understanding Challenges/Opportunities After Updating to SAP S/4HANA from SAP ECC

Lesson Objectives

After completing this lesson, you will be able to:

- Understand BW related challenges and opportunities after updating to SAP S/4HANA from SAP ECC

Lesson 1: Implementing Realtime Data Acquisition (RDA) with ODP - SLT

Lesson Objectives

After completing this lesson, you will be able to:

- Replicate data to SAP BW4HANA SAP Landscape Transformation (ODP-SLT)
- Stream data in real time with ODP - SLT

Lesson 2: Connecting BW Data Marts with ODP - BW

Lesson Objectives

After completing this lesson, you will be able to:

- Describe BW - ODP Data Marts

Lesson 3: Extracting from ODP - SAP HANA Information Views

Lesson Objectives

After completing this lesson, you will be able to:

- Describe Extractions from ODP - SAP HANA Information Views

Lesson 1: Explaining Data Provisioning into SAP HANA

Lesson Objectives

After completing this lesson, you will be able to:

- Explain how to deliver data into the SAP HANA database

Lesson 2: Explaining Data Provisioning into SAP HANA via Flat Files

Lesson Objectives

After completing this lesson, you will be able to:

- Load SAP HANA with the Flat File Wizard
- Load SAP HANA with the Flat File Bulk Loader

Lesson 3: Replicating Data to SAP HANA via SLT

Lesson Objectives

After completing this lesson, you will be able to:

- Describe SAP Landscape Transformation Replication

Lesson 4: Explaining Virtual Data Provisioning into SAP HANA with Smart Data Access (SDA)

Lesson Objectives

After completing this lesson, you will be able to:

- Leverage virtual tables in SAP HANA

Lesson 5: Explaining Data Provisioning into SAP HANA via Smart Data Integration (SDI)

Lesson Objectives

After completing this lesson, you will be able to:

- Describe SDI data loads into SAP HANA

- *Optional* Outline less important provisioning techniques for BW customers

Lesson 1: Introducing the HANA_SDA Source System

Lesson Objectives

After completing this lesson, you will be able to:

- Review SAP HANA SDI and SDQ / Focus on BW Integration

Lesson 2: Streaming Data into SAP BW4/HANA with SAP HANA Smart Data Integration

Lesson Objectives

After completing this lesson, you will be able to:

- Stream data with SDI: Set up the data flow

Lesson 1: Comparing SAP BW/4HANA Data Acquisition Options

Lesson Objectives

After completing this lesson, you will be able to:

- Compare SAP BW data acquisition options

Lesson 2: Working with Enhanced Master Data Update

Lesson Objectives

After completing this lesson, you will be able to:

- Work with Enhanced Master Data Update

Lesson 3: Positioning InfoSources

Lesson Objectives

After completing this lesson, you will be able to:

- Position InfoSources

Lesson 4: Debugging DTPs

Lesson Objectives

After completing this lesson, you will be able to:

- Debug with the DTP

Lesson 5: Working with SAP HANA Optimized Transformations

Lesson Objectives

After completing this lesson, you will be able to:

- Describe how transformation rules in SAP BW/4HANA can be SAP HANA-optimized

Lesson 1: Introducing the SAP HANA Big Data Source System and SAP HANA Vora

Lesson Objectives

After completing this lesson, you will be able to:

- Describe SAP Vora and the Big Data Source System

Lesson 2: Introducing the SAP Data Hub

Lesson Objectives

After completing this lesson, you will be able to:

- Describe the SAP Data Hub

Lesson 1: Optional: Implementing Open Hub Destinations

Lesson Objectives

After completing this lesson, you will be able to:

- Distribute SAP BW Data using Open Hub destinations

Lesson 2: Optional: Introducing SAP Agile Data Preparation

Lesson Objectives

After completing this lesson, you will be able to:

- Describe SAP Agile Data Preparation

Lesson 3: Optional: Introducing the Data Protection Workbench

Lesson Objectives

After completing this lesson, you will be able to:

- Understand the use case and handling of the Data Protection Workbench

Lesson 1: Glossary

Lesson Objectives

After completing this lesson, you will be able to:

- Provide an overview of the most important terms in this class