

# SAP BI/BW Enterprise Data Warehousing Training (BW310)

Type: E-Learning (90% video 10% handouts) | Prerequisites: None | Duration: 12 Hours

## Course Description

Participants will gain SAP Business Warehouse knowledge necessary for successful project implementation and administration within the SAP NetWeaver BW system landscape.

Our BW310 offering is a step-by-step course that will take you into the incredible world of SAP BI/BW. Even after the first section of our course, you will understand how to develop with SAP BW.

Each section of our video training comes with a new dataset for you to download and a new set of lessons and exercises that will challenge you to learn in a fun and engaging way.

This training is designed for beginner to intermediate level users. If you have a technical or analytical background, and work with data, this course will allow you to fully understand how to design and build out solutions within SAP BW. No matter the skill level, all attendees will complete the course with a wealth of new skills.

In just 12 hours, attendees will be able to design and implement solutions within BW! The next step is to begin reporting on this data using BEx Analyzer (BW305) and Business Objects (BOW310-320).

**BONUS:** This course will be updated with brand new sections as SAP releases new versions of their software in the future. So when you enroll – you enroll for life! *Older versions also included with course enrollment free of charge*

## Learning Objectives:

At the end of this class, the student will be able to:

- Understand the BW Workbench (RSA1)
- Understand the Data Warehouse Architecture
- Explain the difference between OLTP and OLAP
- Understand Master Data Modeling
- Understand Master Data Loading
  - Describe Data Flow
  - Create Master Data Characteristics
  - Build DataSources and Transformations
  - Load Master Data
- Understand Transactional Data Loading
  - Describe the core InfoProviders
  - Create Characteristic InfoObjects
  - Create Key Figure InfoObjects
  - Create DataStore Objects (DSO)
  - Load Transactional Data into a DataStore Object (DSO)
  - Activate Data in a DataStore Object (DSO)
  - Understand the Extended Star Schema of an InfoCube (Fact, Dimension, SID tables)
  - Create InfoCubes
- Load Data from Flat File Data Sources
  - Load Data from Flat Files
  - Describe the Data Flow in Detail
  - Describe the Data Loading Process in Detail
- InfoProviders in SAP BW
  - Explain the different InfoProviders used in SAP BW
- SAP BI Content
  - Activate and use BI Content
- SAP BW Administration
  - Describe administrative tasks and tools
  - Administrate InfoCubes and DataStore Objects
  - Create Process Chains
  - Understand the transport process
  - Monitor and troubleshoot data loads
  - Optimize query performance
  - Compress InfoCubes
- In Memory Data Acceleration
  - Understand SAP HANA and Business Warehouse Accelerator (BWA)

Participants will gain SAP Business Warehouse knowledge necessary for successful project implementation and administration within the SAP NetWeaver BW system landscape. We encourage you to also enroll in the BW305 (BEx Query Design) course, which teaches front end BI/BW report development.

## Hands-on Learning:

This course will include extensive hands-on activities to re-enforce the skills and knowledge attained

## Course Topics:

### Introduction and Overview

- Why SAP BW
- OLTP vs OLAP
- Exploring the BW environment
  - Back End vs Front End
- Extraction, Transformation, Loading
- Commonly Used Objects
- InfoObjects (Characteristic and Key Figure)
  - Configuration and settings
- Master Data
- InfoCubes (Fact, Dimensions, and SIDs)
- Extended Star Schema
- Adding custom code within a transformation
- Source Systems
- DataSources
- DataStore Objects (DSO)
  - Uses, Types, and Tables Used
- Performance Optimization
  - Compression
  - Aggregation
  - BWA and In-Memory Acceleration
  - SAP HANA Overview
- Union your data with MultiProviders
- Joining data with InfoSets
- Database administration functions
- Using and Installing BI Content

### Documentation and Handouts

- BW Functional and Technical Design Document Samples
- BW Mapping Document Sample
- Important BW T-Codes, Tables, and Programs

### SAP BW Development Exercise (Project 1)

- Logging on and RSA1 Overview
- Creating an InfoArea
- InfoObject Catalogs – Characteristic and Key Figure
- InfoObject Creation – Characteristics
- InfoObject Creation – Key Figures and Units
- DataSource Creation
- InfoPackage Creation and PSA Overview
- DataStore Object (DSO) Creation
- Transformations and Formulas

- Data Transfer Process Creation and Load Monitoring
- DSO Data Activation and Table Contents Overview
- InfoCube Creation
- Transforming and Loading Cube Data
- Viewing InfoCube Data
- Process Chains
- Editing Data at the PSA Level
- Data Transfer Process (Full vs Delta)
- BW Transport Migration Overview

### SAP BW Development Exercise – Master Data with Transactional Data (Project 2)

- Introduction and Project Overview
- Creating InfoObject Catalogs
- Creating an InfoObject with Attributes – Customer, Material, Sales Rep
- Key Figure Creation and BI Content Activation
- Setting up InfoObjects to be Master Data InfoProviders
- DataSource Creation for Master Data InfoObjects
- Creating and Executing InfoPackages
- Master Data – Transformation Layer
- Master Data – DTP Execution and Load Verification
- Create DataSource and InfoPackage – Sales Transactions
- DataStore Object (DSO) – Create, Transform, Load, Activate/Verify Data
- InfoCube – Create, Transform, Load/Verify Data
- Process Chain – Load Master Data
- Process Chain – Load Transaction Data

### Certification Prep Material

- Includes Course Manuals (BW310, BW330, BW350, BW360, BW362)
- Commonly Asked Questions and Answers

### Exam

- Test your BW knowledge