Training for Analytics with Business Warehouse (BW) in SAP BW/4HANA

Courses Listed

Beginner

- HA100 - SAP HANA® – 360° Introduction

Advanced

- DBW462 - Data Warehousing with SAP BW/4HANA - Delta from SAP BW 7.5 classic to SAP BW/4HANA
- BW405 - SAP BW/4HANA Query Design and Analysis
- BW410 - SAP BW/4HANA Data Warehousing
- BW430 - SAP BW/4HANA Modeling
- BW450 - SAP BW/4HANA Data Acquisition
- BW465 - User Management and Authorizations for BW/4HANA

Certification Exam

- C_BW4H_211 - SAP Certified Associate - Reporting, Modeling and Data Acquisition with SAP BW/4HANA
- E_BW4HANA211 - SAP Certified Specialist - SAP BW/4HANA 2021 Delta

All available schedules in your selection

C_BW4H_211   SAP Certified Associate - Reporting, Modeling and Data Acquisition with SAP BW/4HANA

There are currently no events available for this course. Please feel free to register interest for this course on SAP Training. We will then notify you when a course has been scheduled.

E_BW4HANA211   SAP Certified Specialist - SAP BW/4HANA 2021 Delta

There are currently no events available for this course. Please feel free to register interest for this course on SAP Training. We will then notify you when a course has been scheduled.

BW465   User Management and Authorizations for BW/4HANA

There are currently no events available for this course. Please feel free to register interest for this course on SAP Training. We will then notify you when a course has been scheduled.

BW450   SAP BW/4HANA Data Acquisition

There are currently no events available for this course. Please feel free to register interest for this course on SAP Training. We will then notify you when a course has been scheduled.

BW430   SAP BW/4HANA Modeling

There are currently no events available for this course. Please feel free to register interest for this course on SAP Training. We will then notify you when a course has been scheduled.

DBW462   Data Warehousing with SAP BW/4HANA - Delta from SAP BW 7.5 classic to SAP BW/4HANA

There are currently no events available for this course. Please feel free to register interest for this course on SAP Training. We will then notify you when a course has been scheduled.

BW405   SAP BW/4HANA Query Design and Analysis

There are currently no events available for this course. Please feel free to register interest for this course on SAP Training. We will then notify you when a course has been scheduled.

BW410   SAP BW/4HANA Data Warehousing

There are currently no events available for this course. Please feel free to register interest for this course on SAP Training. We will then notify you when a course has been scheduled.

HA100   SAP HANA® – 360° Introduction

There are currently no events available for this course. Please feel free to register interest for this course on SAP Training. We will then notify you when a course has been scheduled.

BW465 - User Management and Authorizations for BW/4HANA

Course announcements

- This course describes how security is implemented in SAP BW/4HANA and in mixed scenarios between SAP BW/4HANA and SAP HANA.

Goals

- This course will prepare you to:
- Implement and manage security in an SAP BW/4HANA and SAP HANA (SAP BW specific) environment.

Audience

- Application Consultant
- Support Consultant
- Technology Consultant
- System/ Security Administrator
- Trainer

Essential

- BW410 – SAP BW/4HANA Data Warehousing

Course based on software release

- SAP BW/4HANA 2021 SP01
- SAP HANA 2.0 SPS05
- SAP S/4HANA 2020 SP01
- SAP HANA Studio 2.3.59
- SAP BW/4HANA Modeling Tools 1.24.13
- SAP Web IDE for SAP HANA 2.0 SPS05
- SAP Analysis for Microsoft Excel 2.8
- BI Platform - BI 4.3 SP2

Content

- Introduction to SAP BW4HANA
- Security Components for SAP BW
- Standard Authorization Objects for Reporting Users
- Special Authorization Objects for Reporting Users
- Analysis Authorizations
- Maintenance of Authorizations
- Data Access for Administrators and Users
- Overview of SAP HANA Authorizations
- Authorizations in mixed Scenarios
- Additional security topics include BPC and BW workspace authorizations
- SAP BusinessObjects BI Platform (Optional)

Notes

- This course provides you a very sound foundation of BW security concepts and contains many references to additional documents and information sources.
- This course now uses an S/4HANA source system and the HANA 2.0 database release, including the Web IDE for SAP HANA XSA calculation views.
- This course has a very strong focus on hands-on experience.

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BW450 - SAP BW/4HANA Data Acquisition

Course announcements

- This course enables SAP BW/4HANA customers and consultants to provision (load, replicate) data into SAP BW/4HANA. It highlights the simplified data flow of BW/4HANA, and data provision techniques targeting the underlying SAP HANA database directly. The emphasis is on learning and practicing various technologies in support of data acquisition including Operational Data Provisioning, Smart Data Integration and CDS views. Special topics are changing a hierarchy via upload, enhanced master data upload, creating a Process Chain from a BW DataFlow, and error handling. In addition, a brief excursion to SAP Data Hub is also covered.

Goals

- This course will prepare you to:
- Learn how to extract data from SAP source systems and another BW with Operational Data Provisioning (ODP) and how to manage delta data with ODP
- Acquire data using different interfaces such as: SDI - Smart Data Integration, SDA - Smart Data Access, Flat File and CDS views
- Design and maintain Data Flows with advanced techniques
- Learn about advanced features of Streaming Process Chains
- Integrate data from SAP HANA via BW Source Systems to BW/4HANA
- Being able to position related provisioning technologies under the SAP Data Hub umbrella, including SAP Vora

Audience

- Developer
- Solution Architect
- System Administrator

- Technology Consultant
- Trainer

Essential

- BW410-SAP BW/4HANA Data Warehousing

Course based on software release

- SAP BW/4HANA 2.0 SP07
- SAP HANA 2.0 SPS05
- SAP S/4HANA 2020 FP01
- SAP HANA Studio 2.3.56
- SAP BW/4HANA Modeling Tools 1.23
- SAP Web IDE for SAP HANA 2.0 SPS05
- SAP Analysis for Microsoft Excel 2.8

Content

- SAP BW/4HANA Strategy and Overview
- Data Acquisition into SAP BW/4HANA with Operational Data Provisioning (ODP_SAP)
- Operational Data Provisioning Delta Management (ODP_SAP)
- SAP BW/4HANA Data Extraction from SAP S/4HANA (ODP_CDS)
- Other Types of Operational Data Provisioning in SAP BW/4HANA (ODP_SLT, ODP_BW, ODP_HANA)
- Data Acquisition into SAP HANA and the HANA_LOCAL source system
- Data Acquisition into BW/4HANA with the HANA_SDA source system
- Manage and Optimize Data Flow Components in SAP BW/4HANA
- Big Data Acquisition to SAP BW/4HANA and SAP Data Hub

Notes

- This course provides you a very sound foundation of newer and existing BW data acquisition concepts and contains many references to additional documents and information sources.
- This course now uses an S/4HANA source system and the HANA 2.0 database release, including the Web IDE for SAP HANA XSA calculation views.
- This course has a very strong focus on hands-on experience.

BW430 - SAP BW/4HANA Modeling

Course announcements

- This course is designed for users with some experience in BW/4HANA or for users who have visited BW410 and know the BW/4HANA terms and basic data warehousing tasks. They learn to design BW/4HANA data models based on the LSA++ layered scalable architecture model and using SAP BW/4HANA and SAP HANA modeling objects. Focus topics are master data (especially time-dependency and hierarchies), Open ODS Views, different types of DataStore Objects (advanced), and different Composite Provider scenarios, staging scenarios with InfoSources, currency and unit conversion, and hybrid models with SAP HANA Calculation views.

Goals

- This course will prepare you to:
- Outlining advantages of the new SAP "In-Memory" database foundation for SAP BW/4HANA in general.
- Understanding modeling requirements and comparing modeling approaches
- Discussing Best Practices guidelines such as LSA++ and separating master and transactional data.
- Describing steps in developing an SAP BW/4HANA data model.
- Applying SAP Business Content.
- Using the power of SAP BW/4HANA modeling artifacts.
- Leveraging the advantages of field-based modeling.
- Creating and using hierarchies with SAP BW/4HANA InfoObjects or and with native SAP HANA XSA Calculation Views.
- Harmonizing transactional data from different source systems.
- Implementing Currency and Unit Conversion with SAP BW/4HANA or and with native SAP HANA XSA Calculation Views.
- Using Data Tiering Optimization
- Generating external SAP HANA views and understanding "Mixed Scenarios", based on XSA.
- Creating and using an SAP HANA Analysis Process.
- Outlining Inventory Management and Stock coverage scenarios

Audience

- Application Consultant
- Business Analyst

- Solution Architect
- System Architect
- Technology Consultant

Essential

- Hands-on experience in data warehousing with SAP BW/4HANA
- BW410 (SAP BW Enterprise Data Warehousing with SAP BW/4HANA)

Course based on software release

- SAP HANA 2.0 SP05
- SAP BW/4HANA 2021 SP01
- SAP HANA Studio 2.3.59
- SAP BW/4HANA Modeling Tools 1.24.13
- ABAP Development Tools 3.18.1
- SAP Analysis for Microsoft Office 2.8
- SAP NW Business Client 3.6.3
- SAP S/4HANA 2021 SP2
- BI Platform - BI 4.3 SP2-

Content

- Introduction to Data Modelling, Challenges, Conflicts
- Overview about the Business Case (Case Study)
- Comparing Modeling approaches

- SAP HANA modeling
- SAP BW/4HANA modeling
- Mixed strategies

- Best Practice Standards in BW/4HANA Modeling

- Understanding Object Changeability
- Separating Master Data and Transactional Data
- Using Time-Dependent Master Data, Tracking History
- Harmonizing Data
- Designing a BW/4HANA Layered Scalable Architecture (LSA++)
- Understanding Physical and Logical Partitioning
- Process of Modeling

- Defining the Sequence and Phases of SAP BW Projects
- Developing an SAP BW/4HANA Data Model
- SAP BW/4HANA Content Add-On

- Working with SAP Business Content
- Introducing ABAP CDS Views provided by SAP BW/4HANA
- Implementing SAP BW/4HANA Field-Based Models

- Implementing Field-Based Modeling with Open ODS Views
- Understanding Snapshot and Corporate Memory Models
- Implementing Models in SAP BW/4HANA

- Modeling and Implementing SAP BW/4HANA Master Data
- Modeling and Implementing Advanced DataStore Objects (ADSOs)
- Modeling and Implementing InfoSources and Transformations
- Modeling and Implementing Composite Providers

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- SAP BW/4HANA Lifecycle Management

- Describing Multi-Temperature Data Management
- Introducing SAP BW/4HANA Data Tiering Optimization (DTO)
- Implementing Native SAP HANA Views and Mixed Scenarios

- Modeling Master Data and Transactional Data in SAP HANA Views
- Generating External SAP HANA Views for SAP BW/4HANA Objects
- Implementing Mixed Scenarios
- Additional Modeling aspects in SAP BW/4HANA

- Introducing the HANA Analysis Process (HAP)
- Defining Inventory Scenarios

Notes

- This course provides you a very sound foundation of BW/4HANA modeling concepts and contains references to additional documents and information sources.
- This course has a focus on presenting concepts and a variety of hands- on-tasks partially based on a case study. The trainer will choose 20 – 30 suitable exercises out of more than 30 available exercises.

DBW462 - Data Warehousing with SAP BW/4HANA - Delta from SAP BW 7.5 classic to SAP BW/4HANA

Course announcements

- This course enables experienced SAP BW users, developers as well as administrators to run and work with SAP BW/4HANA. The emphasis on how to migrate an existing SAP BW architecture and leverage new data models and functions provided by SAP BW/4HANA in comparison to SAP BW 7.x

Goals

- This course will prepare you to:
- Outlining advantages of the SAP "In-Memory" database foundation for SAP BW/4HANA in general.
- Introducing new user interfaces for working with SAP BW/4HANA: SAP BW/4HANA Cockpit and SAP BW/4HANA Modeling Tools.
- Outlining the SAP BW/4HANA conversion approaches and the related tools for a transformation project.
- Introducing native SAP HANA XS Advanced modeling in the SAP Web IDE for SAP HANA.
- Explaining the data models in SAP BW/4HANA and position them in the context of SAP´s reference architecture Layered Scalable Architecture (LSA++).
- Describing so-called "mixed scenarios" where how both, SAP HANA Calculation Views as well as SAP BW/4HANA objects can complement each other.
- Outlining other areas of innovation with focus on Business Content, Process Chains, Analysis Processes or Transformations.
- Describing Multi-Temperature Data Lifecycle Management concepts and its implementation in SAP BW/4HANA.
- Providing an overview of all source system interfaces and data provisioning methods for consuming data in SAP BW/4HANA.
- Introducing SAP Core Data Services and related use cases in the context of SAP BW/4HANA: Extraction from SAP S/4HANA including available SAP Content, Statistical Analysis of the Data Warehouse Infrastructure and SAP S/4HANA Embedded Analytics.
- Describing the impact SAP S/4HANA might have on your SAP BW strategy.

Audience

- Application experts and consultants with a sound experience in SAP BW (non-HANA)
- Project team members implementing and maintaining SAP BW/4HANA

Essential

- Several years of hands-on experience in data modeling with SAP BW 7.x
- BW310 (SAP BW Enterprise Data Warehousing)

Course based on software release

- SAP BW/4HANA 2023 SP00
- SAP HANA 2.0 SPS07
- SAP S/4HANA 2023
- SAP HANA Studio 2.3.75
- SAP BW Modeling Tools 1.25.33
- SAP Web IDE for SAP HANA 2.0 SPS07
- SAP Analysis for Microsoft Excel 2.8

Content

- Getting started

- Training Environment
- SAP Data Warehousing
- SAP BW/4HANA
- SAP BW/4HANA Modeling Tools
- SAP BW/4HANA Cockpit
- Paths to SAP BW/4HANA

- Conversion Strategies and Tools
- Conversion Approaches

- SAP HANA Modeling

- SAP HANA Introduction
- SAP Web IDE for SAP HANA
- SAP HANA native Modeling of Calculation Views
- Differences of HANA Modeling XS classic vs. XS advanced
- Core Modeling Artifacts in SAP BW/4HANA

- InfoObjects
- Advanced DataStore objects
- CompositeProviders
- Open Hub Destinations
- Open ODS Views
- BAdI-Providers
- Positioning of these Artifacts in the SAP Layered Scalable Architecture (LSA++)
- Hybrid Modeling in Mixed Scenarios

- Generation of external SAP HANA Views for BW/4HANA objects
- Integration of external SAP HANA Views into XSA modeling
- Typical use cases for Mixed Scenarios

- Innovations for Selected SAP BW/4HANA Areas

- SAP BW/4HANA Content Add-on
- SAP HANA Analysis Processes
- Analytic Manager (OLAP engine)
- SAP HANA-optimized Transformations
- Process Chains
- Authorizations
- Data Protection Workbench (optional)
- SAP BW/4HANA Data Lifecycle Management

- Multi-Temperature Data Management
- SAP BW/4HANA Data Tiering Optimization (DTO)
- Data Provisioning into SAP HANA and SAP BW/4HANA

- SAP HANA Smart Data Access
- SAP HANA Smart Data Integration incl. real-time Streaming
- Operational Data Provisioning (ODP)
- Integration Options with Cloud Sources
- SAP LT Replication into SAP HANA (optional)
- SAP BW/4HANA and ABAP Core Data Services

- Overview of SAP ABAP Core Data Services
- SAP BW/4HANA Statistical Analysis
- SAP S/4HANA Extraction based on CDS Views
- SAP S/4HANA Standard CDS Extractors
- SAP S/4HANA Embedded Analytics

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- Relation of SAP S/4HANA to SAP BW
- Impact of SAP S/4HANA on your SAP BW strategy
- Appendix (optional)
- SAP BW Workspaces
- SAP BW/4HANA Transaction Codes
- Glossary of Terms

Notes

- This course provides a very sound foundation of SAP BW/4HANA and contains many references to additional documents and information sources. This course has a very strong focus on hands-on experience based on 29 exercises The intended audience for this training are experts which have several years of experience in developing and maintaining applications with SAP BW 7.x (classic).

BW405 - SAP BW/4HANA Query Design and Analysis

Course announcements

- This course provides an overview of SAP BW/4HANA and detailed knowledge to design BW Queries in both SAP BW/4HANA and SAP BW powered by SAP HANA. Users of either system will gain the knowledge to create query definitions using the eclipse-based BW Query Designer in SAP HANA Studio and to make them available for analysis.

Goals

- This course will prepare you to:
- Provide an overview of SAP BW/4HANA
- Provide knowledge to create query definitions using eclipse-based BW Query Designer in SAP HANA Studio and to make them available for analysis
- Provide an overview of SAP Analytics including SAP Analytics Cloud

Audience

- Application Consultant
- Business Analyst
- Power User
- Data Consultant
- User

Essential

- none

Course based on software release

- SAP HANA 2.0 SP05
- SAP BW/4HANA 2021 SP01
- SAP S/4HANA S4CORE106 SP02
- SAP HANA Studio 2.3.62
- SAP BW/4HANA Modeling Tools 1.24.17

- ABAP Development Tools 3.24.0
- SAP Analysis for Microsoft Office 2.8
- SAP BI Platform 4.3 SP2
- SAP HANA 2.0 SP05
- SAP BW/4HANA 2021 SP01
- SAP S/4HANA S4CORE106 SP02
- SAP HANA Studio 2.3.62
- SAP BW/4HANA Modeling Tools 1.24.17
- ABAP Development Tools 3.24.0
- SAP Analysis for Microsoft Office 2.8
- SAP BI Platform 4.3 SP2

Content

- Introduction to SAP HANA and SAP BW/4HANA
- Report Launching and Navigation in Reports
- Simple Queries
- Key Figures in Queries
- Structures in Queries
- Characteristics, Attributes, and Hierarchies in Queries
- Variables in Queries
- Exceptions and Conditions in Queries
- Report-Report Interface
- Query Performance Optimization
- Query Management

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- Authorizations Overview
- SAP Analytics Overview
- SAP Analytics Cloud Overview

BW410 - SAP BW/4HANA Data Warehousing

Course announcements

- The course introduces SAP BW/4HANA and supports the development of foundation knowledge. InfoProviders such as DataStore Objects (advanced), Open ODS Views and CompositeProviders are explained and created. Data Extraction and Provisioning is executed with Operational Data Provisioning Framework (ODP) and loading from Flat File. Native SAP HANA data models are introduced and combined with SAP BW/4HANA data models.

Goals

- This course will prepare you to:
- Understand the architecture and fundamentals of SAP BW/4HANA
- Create and maintain InfoObjects, DataStore Objects (advanced), CompositeProviders, and Open ODS Views
- Perform master data and transaction data load into SAP BW/4HANA
- Understand SAP HANA native models and how to combine them with SAP BW /4HANA models

Audience

- Application Consultant
- Data Consultant/Manager
- Database Administrator
- Developer
- Enterprise Architect
- Solution Architect
- System Architect
- Technology Consultant

Essential

- none

Course based on software release

- SAP BW/4HANA 2021 SP01
- SAP HANA 2.0 SPS05
- SAP S/4HANA 2021 FP02
- SAP HANA Studio 2.3.62
- SAP BW/4HANA Modeling Tools 1.24.17
- SAP Web IDE for HANA 2 SPS 05 Patch 4 (Build 4.5.18)
- SAP Analysis for MS Office: 2.8.1100.97454
- SAP BW/4HANA 2021 SP01
- SAP HANA 2.0 SPS05
- SAP S/4HANA 2021 FP02
- SAP HANA Studio 2.3.62
- SAP BW/4HANA Modeling Tools 1.24.17
- SAP Web IDE for HANA 2 SPS 05 Patch 4 (Build 4.5.18)
- SAP Analysis for MS Office: 2.8.1100.97454

Content

- Introduction to positioning and key concepts of SAP BW/4HANA
- Introduction to BW Modeling Tools, Data Warehousing Workbench and SAP BW/4HANA Cockpit
- Model InfoObjects: Characteristics and Key Figures
- Generic DataSources
- Transformation and Data Transfer Process

- Master Data Loading from SAP source system with Operational Data Provisioning (Attributes, Texts, Hierarchy)
- Model DataStore Objects (advanced)
- Transaction Data Loading from SAP source system with Operational Data Provisioning and from Flat File
- Model CompositeProviders
- Model Open ODS Views
- Administrate Master Data and DataStore Objects (advanced)
- Use Process Chains
- SAP HANA Delta Merge
- Integrate SAP HANA Native Models with SAP BW/4HANA

Notes

- BW410 is strongly recommended before taking the advanced courses BW430, BW450, BW465
- Knowledge gained in BW410 will support your understanding of the topics covered in BW405

HA100 - SAP HANA® – 360° Introduction

Course announcements

- This course introduces SAP HANA. Through lectures and exercises you will quickly develop a broad understanding of all key areas of SAP HANA including technology, architecture, data modeling, data management and application development. This course is an important prerequisite for many detailed, follow-on SAP HANA courses. Topics covered in this course are included in most SAP HANA certifications.

Goals

- This course will prepare you to:
- Understand the key technology of SAP HANA
- Understand the key roles and their responsibilities in an SAP HANA project
- Work with the various SAP HANA interfaces used by developers and administrators
- Create a data model using SAP HANA modeling tools
- Acquire and enrich data and load to SAP HANA
- Build a report that runs on an SAP HANA data model
- Get started with the application development environment

Audience

- Application Consultant
- Business Analyst
- Change Manager
- Database Administrator
- Application Developer
- BI / BW consultant
- Data Scientist
- SAP HANA Project Manager

- SAP HANA Support Staff

Essential

- None

Course based on software release

- SAP HANA 2.0 SPS07

Content

- Describing SAP HANA
- Technical requirements of SAP HANA
- Data management with SAP HANA
- Analytical processing with SAP HANA
- Powering data warehouses with SAP HANA
- Running SAP applications on SAP HANA
- Developing Applications of SAP HANA
- Monitoring SAP HANA
- Security and data privacy with SAP HANA
- Migration to SAP HANA

C_BW4H_211 - SAP Certified Associate - Reporting, Modeling and Data Acquisition with SAP BW/4HANA

Description

Number of questions

Notes

- To ensure success, SAP recommends combining education courses and hands-on experience to prepare for your certification exam as questions will test your ability to apply the knowledge you have gained in training.
- You are not allowed to use any reference materials during the certification test (no access to online documentation or to any SAP system).

Duration

E_BW4HANA211 - SAP Certified Specialist - SAP BW/4HANA 2021 Delta

Description

Number of questions

Notes

- To ensure success, SAP recommends combining education courses and hands-on experience to prepare for your certification exam as questions will test your ability to apply the knowledge you have gained in training.
- You are not allowed to use any reference materials during the certification test (no access to online documentation or to any SAP system).

Duration