

C_BW4H: SAP BW/4HANA Data Modelling

Design, load and query an SAP BW/4HANA data warehouse and prepare for the C_BW4H exam.

DURATION

5 days · 40 hours

LEVEL

Advanced

CURRICULUM

16 modules · 11 labs

DELIVERY

Live online, Onsite,
Corporate

Course overview

SAP BW/4HANA is the data warehouse for many SAP-centric enterprises, consolidating finance, sales and supply chain data for reporting in tools such as SAP Analytics Cloud. It replaces the older BW object zoo with a smaller, HANA-optimised set of objects, and BW specialists who can model cleanly remain in demand. This five-day course teaches modelling hands-on.

Day one covers architecture and design: the BW/4HANA landscape, the LSA++ layered architecture, BW Modelling Tools in Eclipse, and InfoObjects with their master data, texts and hierarchies.

Day two focuses on persistence and virtualisation: advanced DataStore objects and their modelling types, field-based modelling, CompositeProviders that union and join data, and Open ODS views for accessing external tables without full staging.

Day three is about loading data: source systems, DataSources, data flows, transformations with rules and routines at a conceptual level, data transfer processes, and error handling. Day four automates and exposes the warehouse with process chains, request management and BW queries designed in Eclipse.

Day five covers mixed modelling with SAP HANA calculation views, performance basics, housekeeping, and an exam readiness session. This course is aligned to the SAP Certified Associate exam for BW/4HANA data modelling (base code C_BW4H). Ace Skills is not an SAP partner and does not use official SAP courseware; confirm the current release-suffixed code on SAP Learning before booking.

Highlights

- 40 hours of live, trainer-led sessions
- Modelling in BW Modelling Tools for Eclipse
- aDSOs, CompositeProviders and Open ODS views
- Transformations, DTPs and process chains
- Mixed modelling with HANA calculation views
- Practice questions with review

What's included

- Guided labs in a BW/4HANA training system where available
- End-to-end data flow build from source to query
- aDSO and CompositeProvider design exercises
- Process chain automation lab
- Mixed modelling with HANA calculation views
- Course completion certificate from Ace Skills Consulting
- Post-training doubt support

Who this course is for

Who should attend

- BW consultants moving from classic BW to BW/4HANA
- Data warehouse and ETL developers
- SAP reporting and analytics consultants
- SAP functional consultants supporting reporting projects
- Data engineers working in SAP landscapes

Prerequisites

- Understanding of data warehousing concepts such as facts, dimensions and staging
- Basic SQL knowledge
- Familiarity with SAP business processes is helpful
- Prior SAP BW experience is helpful but not required

Detailed curriculum — 5 days, 40 hours, 16 modules, 11 hands-on labs

Day 1 Architecture, Tools and InfoObjects

8 hours

1.1 BW/4HANA architecture

- Evolution from classic BW to BW/4HANA
- The LSA++ layered architecture
- BW/4HANA and SAP Datasphere positioning
- Reduced object types and their purpose
- Data acquisition, propagation and virtual layers

1.2 BW Modelling Tools

- Eclipse and BW projects
- Data flow editor
- Transport overview
- Navigating the BW repository
- Object activation and versions

LAB Set up a BW project in Eclipse and explore a data flow · 40 min

1.3 InfoObjects

- Characteristics and key figures
- Compounding and reference characteristics
- Time and unit characteristics
- Master data attributes and texts
- Hierarchies
- Field-based alternatives

LAB Create characteristics with attributes, texts and a hierarchy · 55 min

Day 2 DataStore Objects, CompositeProviders and Open ODS Views

8 hours

2.1 Advanced DataStore objects

- aDSO modelling types
- Inbound, active and change log tables
- Partitioning and keys
- Standard, staging and data mart behaviour
- Field-based versus InfoObject-based modelling

LAB Model staging and reporting aDSOs · 55 min

2.2 CompositeProviders

- Union and join scenarios
- Associations and navigation attributes
- Using CompositeProviders as the reporting layer
- Mapping fields and InfoObjects
- Temporal joins overview

LAB Combine actuals and plan data in a CompositeProvider · 50 min

2.3 Open ODS views

- Virtual access to external tables
- Associations
- Semantics: facts, master data and texts
- Generating BW objects from Open ODS views

LAB Expose a HANA table through an Open ODS view · 35 min

Day 3 Data Acquisition and Transformations

8 hours

3.1 Source systems and DataSources

- Source system types
- Flat-file and database sources
- Delta mechanisms
- ODP framework and SAP sources
- DataSource definition and preview

LAB Create a flat-file DataSource and preview data · 40 min

3.2 Transformations

- Rule types and mappings
- Start, end and field routines overview
- Master data reading
- Formulas, lookups and constants
- Transformation in HANA versus ABAP runtime

LAB Build a transformation with lookups and formulas · 55 min

3.3 Data transfer processes

- DTP types and extraction modes
- Filters and semantic groups
- Request monitoring
- Full and delta loads
- Error handling and error DTPs

LAB Load data with full and delta DTPs and fix an error · 50 min

Day 4 Process Chains, Request Management and Queries

8 hours

4.1 Process chains

- Process chain concepts and variants
- Common process types
- Monitoring and alerts
- Start conditions and scheduling
- Decision and interrupt processes

LAB Automate a nightly load with a process chain · 50 min

4.2 Request management

- Request status and handling
- Deleting and reloading requests
- Activation of aDSO data
- Housekeeping tasks

4.3 BW queries

- Query designer in Eclipse
- Restricted and calculated key figures
- Exceptions and conditions
- Rows, columns and free characteristics
- Variables and filters
- Consuming queries in reporting tools

LAB Design a query with variables and calculated key figures · 55 min

Day 5 Mixed Modelling, Performance and Exam Readiness

8 hours

5.1 Mixed modelling with SAP HANA

- Mixed modelling concepts
- Using calculation views in CompositeProviders
- Generating HANA views from BW objects
- Security considerations across BW and HANA

LAB Combine a HANA calculation view with BW data · 45 min

5.2 Performance basics

- Pushdown to HANA
- Query performance analysis
- Monitoring tools overview

5.3 Authorisations and operations

- Analysis authorisations overview
- System health checks

5.4 Exam readiness

- Exam topic review
- Practice questions with review

- Partitioning and data tiering overview
- Modelling choices that affect performance
- Transports and change management
- Question styles

Skills and tools

Skills you will build

SAP BW/4HANA

LSA++

BW Modelling Tools

InfoObjects

Advanced DataStore objects

CompositeProviders

Open ODS views

Data flows

Transformations

DTPs

Process chains

BW queries

Mixed modelling

HANA calculation views

Performance tuning

Tools used in class

SAP BW/4HANA

BW Modelling Tools (Eclipse)

SAP HANA Studio or Web IDE

SAP Analytics Cloud

Certification exam

This course is aligned to the exam below and prepares you for it. The exam itself is booked and taken with the vendor.

Exam	SAP Certified Associate – SAP BW/4HANA
Exam code	C_BW4H
Official page	https://learning.sap.com/certifications

Exam skill areas covered

SAP BW/4HANA: InfoObjects and LSA++
SAP BW/4HANA: Open ODS views

Exam details are pending verification. Confirm the current exam code, format and fee on the official vendor page before booking.

Frequently asked questions

Which exam code should I book?

SAP adds a release suffix to the base code C_BW4H and changes it over time, sometimes along with the exam title. Confirm the current code and title on SAP Learning before booking.

Is this an official SAP course?

No. It is an independent Ace Skills course aligned to the C_BW4H exam topics.

Will I have system access?

BW/4HANA systems are licensed, so access depends on the batch. Where a training system is not available, labs use detailed walkthroughs and trainer demonstrations.

I know classic BW. Is this course still useful?

Yes. Day one maps classic objects to their BW/4HANA replacements so you can focus on what has changed.

Do I need ABAP?

No. Routines are explained conceptually, and most BW/4HANA modelling is done without custom code.

Book a batch or talk to an advisor

Course page: aceskillsconsulting.com/course/c-bw4h-sap-bw4hana-data-modelling · Email: info@aceskillsconsulting.com

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