SAP BW/4HANA
the next generation Data Warehouse

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SAP BW/4HANA – Overview
The three approach-strategy for SAP HANA Data Warehousing

SAP BW/4 approach

- SAP Business Warehouse
  - SAP BW/4HANA

SAP HANA native SQL Data Warehouse

Mixed approach

SQL approach
(extendable by third-party-tools)

SAP HANA Platform

- SAP HANA Application Services
- SAP HANA Integration Services
- SAP HANA Processing Services
- SAP HANA Database Services
SAP BW/4HANA is…

- a new (innovation) code line
- not part of and does not depend on a NetWeaver delivery
- based on the ABAP application server and SAP HANA
- running on premise or in the cloud
- not the legal successor of SAP BW powered by SAP HANA
- the “logical successor” of SAP BW powered by SAP HANA
SAP BW/4HANA Simplifications

Simplifying the models

- Number of Modelling object types reduced from 10 to 4
- Field or InfoObject based Modelling
- Support for external, structured and unstructured data

Simplified Data Flows

- Reduced data layers
- Business and service level driven
- Report at any layer with speed and flexibility

Comprehensive access to all data

- Number of Source System types reduced from 10 to 4
- Flexible data access capabilities
- Load data using optimized processing
Simplicity: Simplifying the data aging process

Scale SAP BW/4HANA using Data Tiering Optimization (DTO)

- Consistent approach for Hot, Warm and Cold data
- Allocate temperature by partition
- Displace data automatically between hot, warm and cold storage

Automatic Displacement of Data

- **SAP HANA**
  - Hot Data
    - SAP HANA in-memory
    - Allocate by aDSO or aDSO partition
  - Warm Data
    - SAP HANA in-memory Extension Node with relaxed memory requirements
    - Allocate by aDSO or aDSO partition
  - Cold Data
    - SAP IQ / Hadoop storage
    - Allocate by aDSO or aDSO partition

* Planned for BW/4HANA 1.0, SP7
Modern Interface faster to learn, easier to use

Introducing the new Dataflow Modeller

BW/4HANA Administrator Cockpit planned Q4 ‘17
Modern Interface faster to learn, easier to use

Business User Interface – Integration with SAP Analytics (on-premise and cloud)
SAP BW/4HANA – Roadmap
**SAP BW/4HANA Roadmap: Planned for SP07 (Q4 ’17)**

**Simplicity**
- Data Tiering Optimization (DTO)
  - Vora support for write/read access and automatic data placement to Hadoop
  - Performance Optimization (Pruning, throughput)

**Openness**
- Big Data / Data Lake
  - Automation of complex Big Data flows with SAP BW/4HANA
  - Tight coupling between Hadoop and SAP BW/4HANA processes
  - Close Interaction with Big Data scenarios

**Modern Interface**
- BW/4HANA Modeling Tools
  - Transformation modeling
  - DTP Maintenance
  - Editor for Flatfile Source System
  - Document attached Query Cells
- Web based monitoring (e.g. Process Chains)
- Administration via SAP BW/4 Cockpit

**High Performance**
- Enhanced Master Data Loads
- Further Query Parallelization
- Query Read Mode Optimizer

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SAP BW/4HANA Roadmap: Future Innovations

**Simplicity**
- Integration with SAP’s cloud offering
  - SAP SuccessFactor
  - SAP Ariba
  - Cloud for Customers
  - ....

**Openness**
- Big Data / Data Lake
  - SAP BW/4HANA Analysis Process with Spark/Hadoop based execution
- Interoperability with native DW approach
  - Integration with Power Designer
  - HANA View generation for Open ODS Views

**Modern Interface**
- System health monitoring and prediction
- Machine-learning based DW administration

**High Performance**
- Further push down of OLAP capabilities
  - Stock coverage
  - Current member
SAP BW/4HANA – Additional information
SAP BW/4HANA conversion: Transfer Toolbox

In-Place Conversion

- Full system conversion of an existing SAP BW installation (keep same SID)
- Step-by-step in-place transfer of classic objects into their HANA-optimized counterparts
- Followed by a component conversion to SAP BW/4HANA
- Start release: SAP BW 7.5 SP 5 powered by SAP HANA

Remote Conversion

- Start with SAP BW/4HANA as green field installation (new SID)
- Support of carve-out and consolidation scenarios
- Transport data models and remote data transfer
- Risk mitigation due to parallel system
- Start release: SAP BW 7.0 or higher on AnyDB

To join the pilot program for In-Place- and Remote Conversion please contact SAP via Support Portal, component BW-B4H-CNV
SAP S/4HANA Embedded Analytics + SAP BW/4HANA

Comprehensive Operational + Historical Analytics and Planning Powered by SAP HANA

SAP BW, powered by SAP HANA or SAP BW/4HANA

- Strategic and tactical
- Integration, harmonization, cross-system consistency
- Consumption
- Planning Platform
- Multi-sourced data
- Preconfigured content
- Data lifecycle
- Data governance
- Complete analytical suite

SAP S/4HANA embedded analytics

- Operational data
- Real-time
- Lightweight modeling and consumption
- Extensible
- Uniform
- Basis for multiple embedded use cases
- Model reuse in analytical applications
- Lightweight planning solutions

All analytics requirements fulfilled with one unified solution
Data integration scenarios are possible in multiple hybrid system setups

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‘[SAP] delivers a powerful [Big Data Warehouse] BDW capability that brings together in-memory, Hadoop, data warehouses, integration, streaming, and scalability to support large-scale, real-time analytical requirements.’

Products Evaluated:
‘SAP HANA 2, SAP VORA 1, SAP BW/4HANA 1, SAP Data Services, SAP Cloud Platform Big Data Services’

See Full Report
SAP BW/4HANA: Training

BW462 – SAP BW/4HANA

Classroom or Virtual Live Classroom
Material in English; course in local language

- 5 days (available in several countries)
- Prerequisites:
  - Hands-on experience in data modeling with SAP BW 7.x
  - BW310 (SAP BW Enterprise Data Warehousing non-HANA)

For details, go to SAP Training

DBW4H – Data Warehousing with SAP BW/4HANA - Delta from SAP BW powered by SAP HANA to SAP BW/4HANA

Classroom or Virtual Live Classroom
Material in English; course in local language

- 2 days (available in several countries)
- Prerequisites:
  - SAP BW 7.4 / 7.5 and SAP HANA 1.0 knowledge is necessary
  - DBW74, BW362, HA100 or HA100e, BW310H

For details, go to SAP Training

SAP BW/4HANA in a Nutshell

Open Online Course
English

- 4 Units – 2-3 hours in total
- No prerequisites
- Free participation & certification

For details, go to openSAP
Thank you.

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SAP BW/4HANA – The Next Generation Data Warehouse

- **SAP BW 7.3** powered by SAP HANA
  - Performance optimization

- **SAP BW 7.4** powered by SAP HANA
  - Simplification and Virtualization

- **SAP BW 7.5** powered by SAP HANA
  - Simplification, HANA platform integration
  - Big Data scenarios

- **SAP BW/4HANA Starter Add-on**
  - For SAP BW/4HANA customers only
  - Use transfer tools to make system ready for SAP BW/4HANA
  - Requires SAP BW 7.5 SP 4 or higher

**Introducing SAP BW/4HANA**
- The Next Generation Data Warehouse
- Built for Cloud
- Logical Data Warehousing
- Internet of Things
- Integrates with Big Data

- **2012**
- **2013**
- **2015**
- **2016+**