



SAP BW/4HANA vs. SAP BW on HANA

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Openness - Easy integration with Big Data scenarios

BW/4HANA provides seamless integration of Big Data scenarios through a dedicated source system type; the Big Data source system. The Big Data Source system leverages Spark SQL and SAP VORA to enable virtualised access or provide more traditional data movement for big data scenarios. In addition to this, BW/4HANA integrates natively with the SAP Data Hub, helping to orchestrate and govern the flow of data between BW/4HANA and data lakes.

With BWoH, there is no dedicated source system type for Hadoop. Big data scenarios can be created by using a combination of HANA SDA (for virtualisation) and HANA EIM (for data persistency). The initial technology setup and development in this case is cumbersome and due to the disjointed modelling approach, switching from persistency to virtualisation requires significant development effort.

Big data has become a fundamental aspect of a customer's system architecture. By expanding the scope of the data warehouse through big data scenarios, BW/4HANA can provide new and valuable business insights.

Key Value Drivers – Development Productivity, New Capabilities

Openness - Data Integration SAP BW/4HANA 2.0

1) New setting in ADSO "Write Interface Enabled"

The new write interface of the ADSO allows direct replication of data into the Inbound Queue of the ADSO. This new interface replaces the Webservice Source system and the DataServices Source System in SAP BW/4HANA 2.0.

Integration for:

- SAP Data Services
- SAP Cloud Platform Integration (CPI)
- SAP NetWeaver PI
- SAP Data Hub Integration (planned for H2/2019)

2) Data Integration from SAP S/4HANA Cloud to SAP BW/4HANA 2.0

A new technical framework and connectivity between SAP BW/4HANA and SAP S/4HANA Cloud is available with SAP BW/4HANA. Based upon that additional content will be delivered gradually in terms of ABAP CDS views to extract data from the S/4HANA Cloud applications (e.g. financials, logistics) in a meaningful way. See [SAP Note 2674373](#)

Key Value Drivers – Openness, cost savings, simplification

Simplicity - Highly optimized data tiering

BW/4HANA introduces a new concept for data aging and archiving referred to as Data Tiering Optimization (DTO). Instead of using costly in-memory storage for all data, partitions of data can be automatically displaced into hot, warm and cold data storage based on customer requirements.

In comparison, BWoH provides multi-temperate data management at the object level only, not by partition. In this case an object can use either hot or cold storage, which often results in customers creating additional objects specifically for data aging purposes.

Some customers have also opted to use the DLM capabilities in the Data Warehousing Foundation (DWF), independent from the BW application. This scenario also requires manual setup and on-going administration (procedures and archiving schedules) and disconnects the housekeeping task from the core application.

DTO is an automated tool which is easily maintained and managed through the BW/4HANA application, significantly reducing the development and administration effort usually associated with data aging.

Key Value Driver - Storage Costs, Support Costs

Simplicity - Less governance and faster time to value via simplified and reduced data modelling patterns and source system reduction

With BW/4HANA, the number of modelling objects in the system is reduced from 10 to 4. The BW/4HANA modelling objects are fully optimised for SAP HANA and are simple to use; designed to significantly reduce development time. Similarly, BW/4HANA simplifies data integration scenarios consolidating 10 source system types into 4. This enables easier and more comprehensive access to both SAP source and non-SAP source data, reducing overall complexity.

BWoH supports 10 modelling objects including classic objects (non-HANA optimised), transient objects (partially HANA optimised) and the HANA optimised objects. Over the years BWoH has incorporated several different integration technologies (DB connect, UD connect etc) which can be complex to use. In this case a customer must create a governance framework to ensure that only fully optimised objects and only new integration technologies are being used with all associated effort.

BW/4HANA ensures that every development makes use of the very latest and most simplified tools and objects. Customers no longer need to worry about closely governing every dataflow or worrying that they are not using the most optimal objects. One of BW/4HANA's driving principles is – Simplicity – Easy dataflow governance and modelling is key to this approach.

Key Value Driver - Development Productivity, Faster time to value

Simplicity – Improved integration with SAP BW/4HANA and SAP Analysis For Office

BW/4HANA introduces new functionality for users of SAP Analysis for Office. Business commentary can be added within Analysis for Office at the cell or hierarchy level. Other enhancements have been added to improve usability and planning.

With more comprehensive commentary and planning functionality, BW/4HANA and AO and improves collaboration of data across business users.

Key Value Driver – New Capabilities

Simplicity – Simplified Landscape

BW/4HANA is a *new* product with a *new* optimised code line, designed to fully leverage the SAP HANA platform without compromise (no support for anyDB).

BW/4HANA does not use a Java stack and is not based on the NetWeaver Platform, significantly simplifying the overall landscape.

BW/4HANA no longer requires NetWeaver, nor is it part of a NetWeaver shipment. BW/4HANA supports its own release cycles allowing SAP development to deliver faster and more comprehensive functionality without compromise.

Key Value Driver - Support Costs, Storage Costs, Operational Staff Costs

Simplicity: New Chart Types for SAP Analytics Cloud on SAP BW/4HANA 2.0

With SAP BW/4HANA 2.0 new chart types have been introduced to SAP Analytics Cloud running on SAP BW/4HANA 2.0.

Support for additional chart types with SAC Live connection

- Waterfall Chart
- Geospatial
- Time Series
- Variance Chart
- Linked Analysis with more than one dimension
- Conditions
- Tuple Filter

Key Value Driver - New visualization capabilities

High Performance – Embedded Machine Learning to Optimize Query Execution

BW/4HANA uses machine learning to determine the optimal query execution mode, a task performed manually in BWoH. This reduces administration effort and ensure queries are always running in the optimal execution mode.

Key Value Driver - Support Costs, Operational Staff Costs

Modern UI for Developers

BW/4HANA provides an easy-to-use Eclipse based tool which introduces a new paradigm for dataflow modelling; the dataflow modeler. In conjunction with the simplified modelling objects, the new dataflow modeler enables faster time to value when creating new business models or making changes to existing models. The new dataflow modeler is key to SAP's overall data warehouse simplification. Feedback from early adopting customers is that this can reduce development effort by 50%. In addition, BW/4HANA provides a modern user experience for all user types:

For BW Modelers, BW/4HANA provides end-to-end modeling capabilities using the eclipse-based BW modeling tools.

For Administrators, the UI5 based BW/4HANA cockpit provides a single interface for management and admin tools.

BWoH does not have an equivalent modelling environment to the dataflow modeler and provides only some of the modelling objects in the eclipse-based BW modeling tools.

Key Value Driver – Development Productivity, Faster time to value

The BW/4HANA roadmap

The above features and differentiators are available today.

BW/4HANA, as the new innovation codeline will continue to deliver new features according to the BW/4HANA roadmap (see [link](#)). These features are specific to BW/4HANA and will not be available in future releases of BWoH.

BWoH is frozen in 2016 !