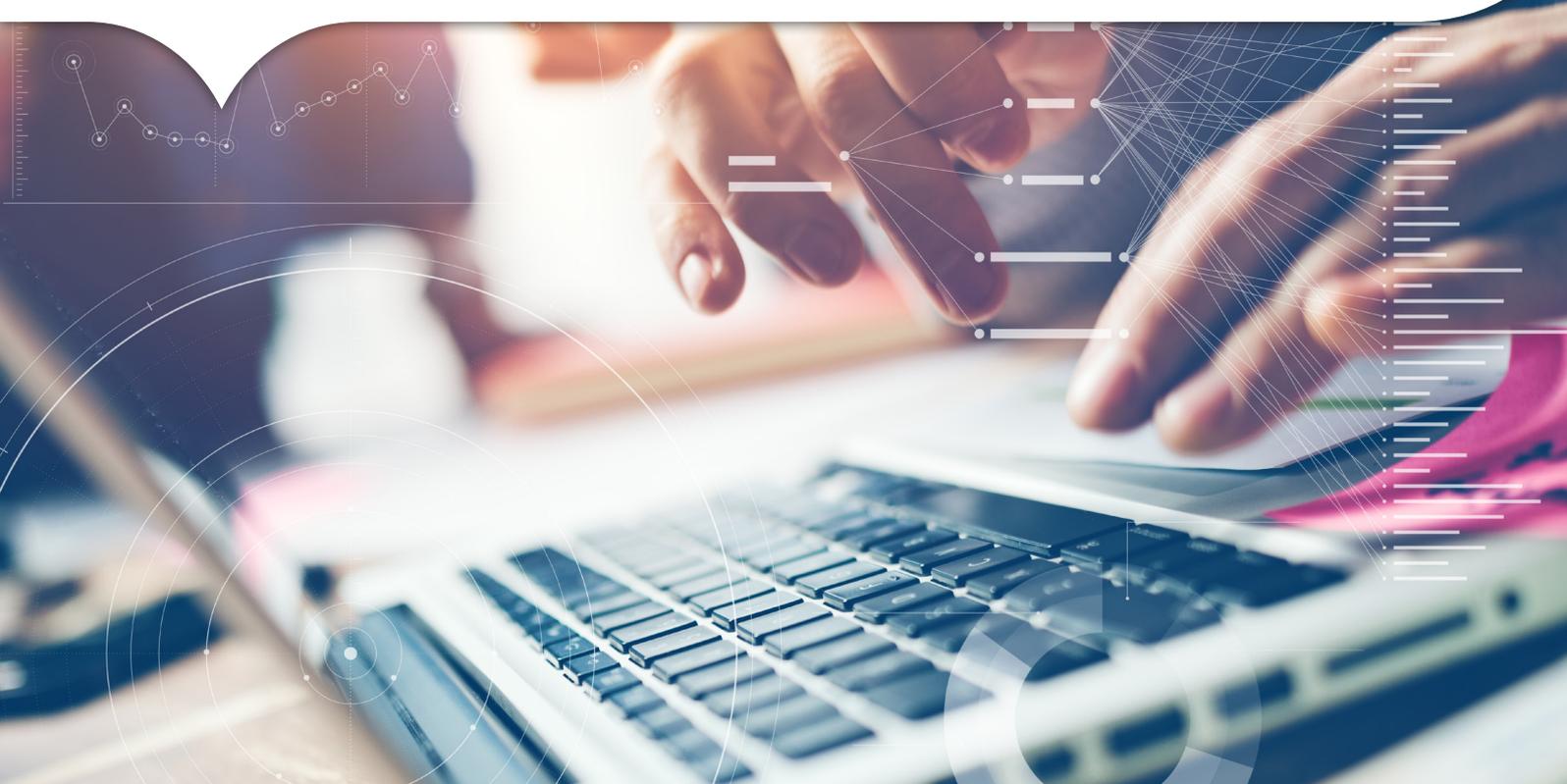


# SAP BW/4HANA

## Why do I need it? Why do I want it?



### The next generation of Enterprise Data Warehousing offers simplicity, openness and higher performance

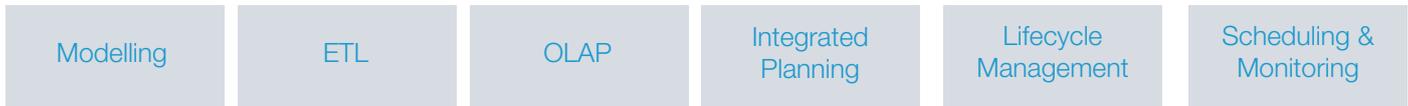
SAP BW/4HANA builds on a long history of data warehousing at SAP. In 2011, SAP HANA revolutionised data warehousing, bringing in-memory performance to over 3,500 customers who are running BW-on-HANA. SAP BW/4HANA is SAP's next generation of SAP Business Warehouse designed to only run on SAP HANA and to leverage key HANA capabilities and performance. It is a logical continuation of SAP BW Powered by HANA but is not its legal successor.

SAP BW/4HANA is a new product with a new code base, which is not part of SAP NetWeaver, meaning it is decoupled from the SAP NetWeaver Release Cycle and not all components are part of BW/4HANA. However, certain NetWeaver components are still part of the BW/4HANA shipment. For example, Application Lifecycle Management, such as patching, and Service Packs and Transports of BW models through the environment landscape, will still be handled in the same way as currently the NetWeaver infrastructure. Conversely, NetWeaver shipments will not contain BW/4HANA.

**“Organisations now require data management solutions for analytics that are capable of managing and processing internal and external data of diverse types in diverse formats, in combination with data from traditional internal sources.”**

Source: Gartner Inc, Magic Quadrant for Data Management Solutions for Analytics, Roxane Edjlali, Adam M. Ronthal et al, 20th February 2017

The fundamental aspects of SAP BW continue to apply for BW/4HANA:

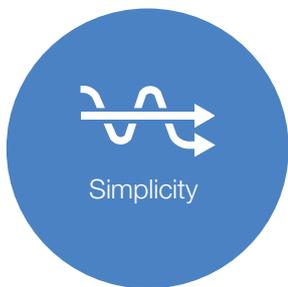


Therefore there will be user familiarity with the aspects of how it integrates data, transforms data, and the definition of queries.

## Design Principles

SAP approach for positioning SAP BW/4HANA emphasises that is built on the following 4 design principles: Simplicity, Openness, High Performance and Modern Interface.

- Simplicity
- Openness
- High Performance
- Modern Interface



### Simplicity

SAP BW/4HANA aims to reduce the complexity of the development environment and decrease the end-to-end development time. BW/4HANA has reduced the number of modelling objects from 10 to 4. Two of the objects will allow for persistency of data and 2 objects are for virtualisation that allows for fewer layers. This simplification helps to make the architecture leaner and more flexible, and less development effort. The reduction in persistence of data cuts down the data foot print. Along with SAP's increased capability for Cloud deployment, including HANA Enterprise Cloud, Microsoft Azure and Amazon Web Services, this all leads to helping bring down the TCO for BW/4HANA.

### Openness

There are two aspects to openness:

- Bringing data into BW from different data sources and
- Being able to consume data from BW.

The integration of data and solutions from data sources, including 3rd party applications and data stores in Hadoop or cloud, whether structured and unstructured, has been made easier. In terms of utilising data, the BW objects easily allow for exposing of data for SQL consumption by front-end tools.

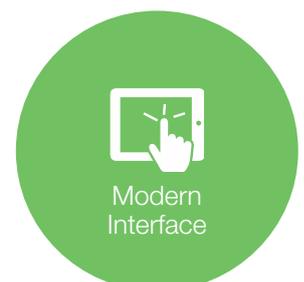


### High Performance

BW/4HANA is designed to push an increased amount of OLAP functionality and computation to the HANA database as well as for the Planning and Data Management elements. But the higher performance for BW/4HANA is not just about pushing the workload to the HANA engine. It is also about the greater integration to leverage the HANA platform capabilities within BW, for example, integrating data from a HANA model into a BW model. In addition, BW/4HANA provides the capability to leverage various advanced analytical libraries and algorithms for data mining or predictive analytic scenarios.

### Modern Interface

To align to the changes in the BW/4HANA, simpler and more modern interfaces are available for business users, developers and administrators. For Business users, the BEx interface is no longer available (although BEx Queries still form part of the solution), and BW/4HANA has tighter integration with the SAP Business Objects BI toolset, as well as SAP Business Objects Cloud. The developer interface is via the Modelling tools integrated into SAP HANA Studio and Eclipse, and from an administrator perspective, UI5 tools such as the UI5-based Process Chain Monitor are available as a replacement for the ABAP Process Chain Monitor.



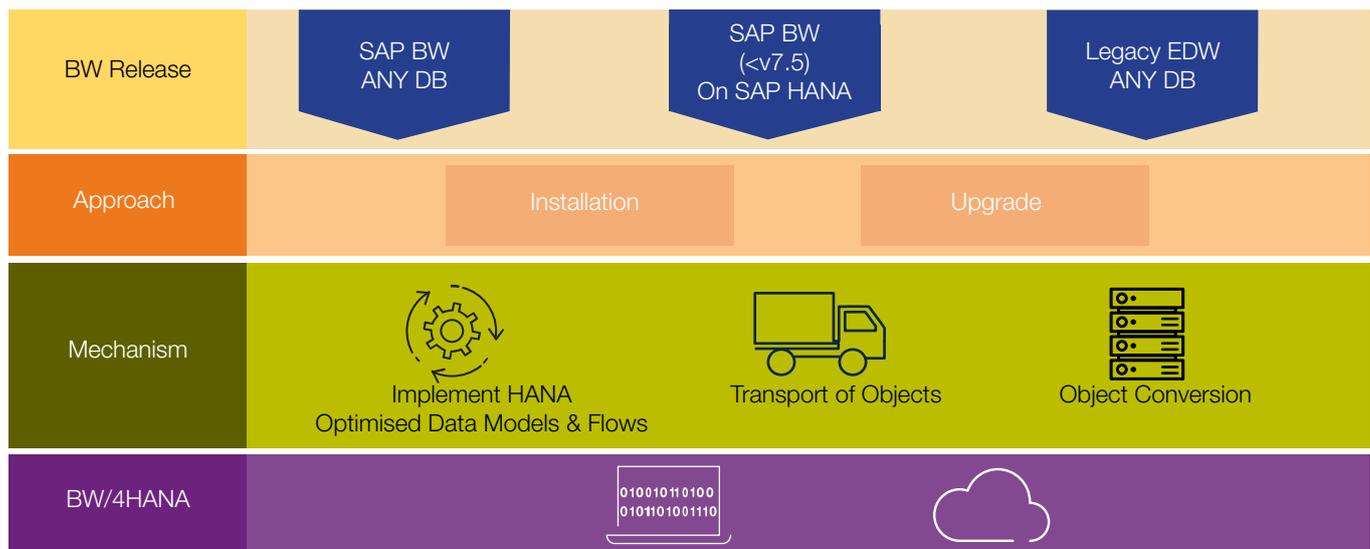
## Why do I need SAP BW/4HANA?

SAP BW/4HANA supports only SAP HANA-Optimised objects, which will drive higher performance and allows provision via an open SQL interface for managing the data in SAP applications or other SQL systems. This enables BW/4HANA to take a wider remit in the enterprise than SAP BW Netweaver could. But it does mean that much of the content in existing instances will need to be revisited.

All SAP BW customers need a roadmap for adopting and implementing this new platform. For new instances, the choice to start out on BW/4HANA is becoming more compelling every quarter. For established instances, a transition is a significant investment but that doesn't stop you preparing for the change now.

It is important to note that some of SAP's design principles for BW/4HANA are readily available in versions 7.4 and 7.5. Most notably the 4 modelling objects that are the cornerstone of solution development in BW/4HANA are supplementary to the existing codebase in versions 7.4 and 7.5. You can start migrating your content in BAU before implementing a new platform.

Depending on your starting point, there are several migration paths and options for the move, not just from a prior version of BW but also from an EDW to BW/4HANA. This is influenced by multiple factors such as your wider SAP roadmap, your cloud strategy and the functions that your system covers.



Capgemini can help you determine the right strategy and roadmap for your enterprise to minimise the impact of this change on your business and your budget.

BW4/HANA relies far more on the HANA Studio toolset traditional SAP GUI and BEX Analyser and its Excel add in are no longer supported by BW/4HANA. As customers make the transition, market skills will reflect the new toolsets released over the next 2-3 years. Even though the lifespan of SAP BW Netweaver stretches into the next decade, the most talented resources will be moving to BW/4HANA, just as we saw a similar shift to SAP BW 7, from SAP BW 3.5, within 2 years of its release.

## Why do I want SAP BW/4HANA?

SAP BW/4HANA is positioned as the next generation of data warehousing, which enables the Logical Data Warehouse (LDW). The LDW complements the primary functions of a traditional data warehouse, such as data aggregation, transformation and persistence, with additional functions that in real-time (or near real-time) fetch and transform data, instantiating non-persisted data models.

SAP BW/4HANA has a best-of-both worlds' ability to construct an EDW either by using the highly-integrated Business Warehouse tools and editors, or a freestyle SQL approach typical. The simplified and enhanced modelling capability affords greater business agility whereby users can create their own views from BW modelling objects to be consumed by any SQL tool, or visualised using a front-end tool. This enables agile data warehouse development as well as better real-time business insights.

SAP's position is that all new innovation will take place in SAP

BW/4HANA, and prior releases of SAP BW powered by HANA will move into maintenance, receiving little development or new functionality moving forward. SAP BW/4HANA already has specific HANA-optimised Business Content Packages to accelerate development.

SAP BW/4HANA now comes with more deployment options including SAP HANA Enterprise Cloud, Amazon Web Services and Microsoft Azure, providing a more flexible landscape management solution.

SAP BW/4HANA has native integration for the BusinessObjects suite of tools, providing a wider spectrum of BI and Analytics capability including reporting, dashboarding, self-service discovery, budgeting and planning, and predictive analytics.

## What are the next steps to learn more and maximise your BW/4HANA investment?

With almost 190,000 people in over 40 countries, including more than 19,000 consultants across our SAP and Insights & Data Global Practices, Capgemini is one of the world's foremost providers of consulting, technology and outsourcing services.

Come and discuss your needs with our Insights & Data SAP BI team to understand how our expertise can help you make the right decisions for your organisation. Talk to us about the development of your roadmap and strategy for BW/4HANA and be ready to exploit the capabilities of SAP's next generation data warehouse.

### For more information on Real-time Embedded Analytics with S/4HANA, please contact:

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