

BatchMaster ERP with SAP Business One

HANA vs MS SQL

>> What are they? What does HANA offer? Which should I use?

The Difference:

The essential difference between the HANA and Microsoft SQL versions of SAP Business One is the database technology. Put simply, the MS SQL version uses disk storage technology, whereas the HANA version uses inmemory technology. For HANA, the data is loaded into the memory of the server so all processing is done at speeds more than 100 times faster than that of disk-technology based MS SQL. It supports those functions and applications that require a lot of processing power.

Reporting:

In the MS SQL version, reporting is done through Crystal Reports or Jet. HANA is its own reporting medium, with more than 60 dashboards and KPIs already pre-packaged. HANA's Excel-based Interactive Analytics lets users slice and dice their business data; change grouping/pivot table/sorting sequence on-the-fly; and the 'reporting format' is not fixed.



Most Business Intelligence tools are unable to perform analytics in real time if they're running on Microsoft SQL. They can only perform this function at set schedules. A business intelligence solution for MS SQL usually has its own database. Data is extracted from an ERP software, transformed and loaded into the BI database, stored in "cubes" or other BI friendly data storage types, and then processed for dashboard reporting, or any other analytics.

SAP Business One HANA does not require a separate database for analytics. As data is stored in-memory, BI software (such as Lumira from SAP, Crystal Reports or the in-built dashboard designer) can access the data immediately and run analytical reports on the data without performance degradation for the other ERP users performing normal transactions. Reports can be developed on the fly, and run on the ERP transactions directly.



Unique to HANA:

While you may not immediately need some of the functions and applications available in HANA, keep in mind that they are available only in HANA when you do need them.

HANA only functionality includes:

1. Improved and additional analytical options – Pervasive Analytics, Interactive Analysis and Analytical Portal.

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- 2. Additional integration options. SAP OData is a standard Web protocol used for applying and building on Web technologies such as HTTP to provide access to information from a variety of external applications, platforms and devices.
- 3. Added functionality Intelligent Forecasting, Advanced Available to Promise, Delivery Schedule Management, and much more.
- 4. Ad-hoc and interactive analysis to improve productivity and insight for end-users
- 5. Enterprise "Google-like" search
- 6. Unique mobile app scenarios for the iPad
- 7. Modern HTML cockpit interface many new templates plus build your own.
- 8. Enterprise HANA features in-memory technology, real-time data modelling (aggregations)



Future-proofing:

SAP has heavily invested in HANA, and will continue to push innovation on the business application side for the in-memory database. New innovations (specifically with respect to mobility, usability and dashboard reporting capability) will be developed either with HANA in mind, or will require the use of HANA (and won't be available on the MS SQL platform). For customers that want to take advantage of SAP's on-going innovation process and new functionality, HANA is the database platform to choose.

Cost considerations:

License costs are the same for both BatchMaster ERP with SAP Business One licenses and for the database licenses. BatchMaster ERP with SAP Business One on a cloud platform will cost exactly the same on either a HANA or MS SQL platform.

Where HANA costs more is when you are running it on-premise (in-house). Because SAP HANA delivers far superior power and functionalities than Microsoft SQL, the server specifications needed for SAP HANA are also higher. To deploy HANA, you need at least 64GB of RAM as it needs to consolidate all ERP transactions in your RAM. Basically, you're paying for power, and can expect higher investment for SAP HANA than Microsoft SQL. Basically, hard disk storage costs less than RAM.

>> Which version and deployment is right for me?

SAP HANA is the best option to consider if you are a small and midsized enterprise (SME) that needs to speedily process massive volume of data and transactions, gain insights into data in real-time, and utilise bonus features in BatchMaster ERP with SAP Business One. SAP Business One on HANA will yield a greater ROI and value for your company. The best ROI will come from deploying on a Cloud platform, where both license and hosting costs are the same.

However, if those factors aren't highly crucial to your business or if your preference is to host your ERP system in-house, then it will be more cost-effective to deploy BatchMaster ERP with SAP Business One on Microsoft SQL. Microsoft SQL has also been in the market for a long time, so you're more likely to find a third-party vendor who knows how to support and maintain it.