SAP® Business Suite Powered by SAP HANA®

Preface

This document provides answers to some of the most frequently asked questions about SAP® Business Suite powered by SAP HANA®.

With a foundation of more than 40 years of innovation with best-in-class business applications, enabling end-to-end business processes across all industries, SAP has yet again introduced a new element of innovation by providing the ability to run SAP Business Suite applications on the next-generation in-memory platform SAP HANA. This is the new paradigm of computing for the future, enabling companies to drive their entire business in real time for unprecedented value. This is especially relevant in an age characterized by a population enabled by mobile technology, and rapid data proliferation.

With the announcement in November 2012 of the SAP Customer Relationship Management (SAP CRM) application powered by SAP HANA, we formally commenced the journey to now having the entire SAP Business Suite on SAP HANA. SAP Business Suite powered by SAP HANA brings together transactions and analytics into a single in-memory platform for smarter business innovations, faster business processes, and simpler business interactions.

SAP has always delivered on the promise of continuing to add value to SAP Business Suite software. SAP Business Suite powered by SAP HANA is the logical next step in this journey, allowing customers to continue to innovate without disruption, on an open platform, with full support from SAP and a large ecosystem of partners. This document answers many questions about this journey that might arise in the minds of our customers, partners, and colleagues. It also contains key information about how best to keep abreast of this information on an ongoing basis.

Please note: SAP remains committed to support its customer's choice of database technologies and vendors. SAP Business Suite will continue to be offered on all currently certified databases. SAP will work with its database partners to support continuous innovation to provide real and effective choice for mutual customer benefit.

If customers choose to migrate to SAP HANA, SAP and its partners provide services to allow complete or partial migration and implementation of SAP HANA.

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The Best-Run Businesses Run SAP™

OVERVIEW

What is SAP Business Suite powered by SAP HANA?

SAP developed the game-changing SAP HANA platform – leveraging the power of in-memory technology to address concerns about growing data volume. It provides a modern platform for real-time applications and real-time analytics, while simplifying existing IT landscapes. With SAP HANA, customers also have a choice of deployment models and partners, providing lower cost and faster innovation from an open ecosystem.

SAP HANA represents the fastest-growing product in SAP's history. SAP Business Suite is a comprehensive family of applications designed to work together to help you run your business efficiently and effectively. More than 40,000 customers have strategically invested in SAP Business Suite software and expect SAP to protect and add value to this investment. This is why SAP Business Suite is now powered by SAP HANA, the next-generation platform. With SAP HANA, SAP provides a modern suite of applications unifying analytics and transactions into a single in-memory platform.

You can now leverage the suite to rethink your business processes as needed with embedded intelligence in your transactions, or simply invent business models not possible before. The suite can now also enable real-time planning, execution, reporting, and analysis across your end-to-end business processes. And business users can get unified, 360-degree views of real-time information – at their fingertips – on many devices, across all your SAP Business Suite applications and even beyond, such as information from machine sensors and social media.

The SAP HANA platform provides the basis to dramatically increase the performance of your SAP Business Suite applications now and continue to innovate without disruption on an open platform.

What are the major business benefits of SAP Business Suite powered by SAP HANA?

With SAP Business Suite powered by SAP HANA, SAP provides a modern suite of business applications unifying analytics and transactions into a single in-memory platform. With SAP HANA, you can drive your entire business in real time with:

- **Smarter business innovations** – Unlock new growth opportunities first. Rethink business processes as needed and invent business models.
- **Faster business processes** – Drive your business at market speed. Allow real-time planning, execution, reporting, and analytics on live data.
- **Simpler business interactions** – Empower people to decide and act. Provide real-time business insights on any device, anytime, anywhere.

What are the major technical benefits of SAP Business Suite powered by SAP HANA?

SAP Business Suite powered by SAP HANA can help customers simplify IT by bringing together analytics and transactions for reduced total cost of ownership. Since SAP HANA provides a unique ability to deal effectively with both transactional and analytical workloads, SAP Business Suite powered by SAP HANA can help customers achieve dramatic simplification of their IT landscape. In this integrated scenario, SAP HANA can be used as a primary database for SAP Business Suite applications. Since the same database is used for both analytical and transactional needs, there is no need for any replication of data.

SAP Business Suite powered by SAP HANA allows access to all data at any level of granularity, combined with the ability to perform predictive analysis, handle structured and unstructured data, and conduct a variety of resource-intensive operations in true real time. As business models evolve, customers can also push down heavy logical operations into the database layer.

The SAP HANA platform provides the foundation for customers to dramatically increase the performance of their SAP Business Suite applications now and continue to innovate without disruption by leveraging a new generation of real-time applications natively built on the platform. It is the perfect starting point to start taking advantage of a true real-time data platform.

What is delivered with SAP Business Suite powered by SAP HANA?	With SAP Business Suite powered by SAP HANA, SAP will be delivering the following:

SAP Business Suite applications* using SAP HANA as (the only) database
This means that applications including SAP ERP, SAP CRM, and SAP Supply Chain Management (SAP SCM) can fully run on top of SAP HANA in an integrated manner. As part of this first wave of innovations, SAP delivers optimizations for 23 business value scenarios across key lines of business (finance, sales, marketing, service, procurement, HR, and so on) and more than 400 reports to achieve unprecedented performance with SAP HANA in the context of your industry.

* As of January 2013, the SAP Supplier Relationship Management (SAP SRM) application is not available with SAP HANA. Future integration is planned.

New SAP HANA Analytics Foundation for SAP Business Suite
The new SAP HANA Analytics Foundation for SAP Business Suite provides an open environment allowing operational analytics and reporting on fresh SAP Business Suite data. Based on analytical views in a virtual data model, business users gain new ways to analyze operational data to build their own reports and documents. The current offering contains predefined analytical content for SAP Business Suite applications (for example, SAP ERP, SAP CRM). SAP HANA Analytics Foundation also serves as the foundation for a new class of analytic applications including SAP Working Capital Analytics, DSO scope; SAP Invoice and Goods Receipt Reconciliation; SAP Supply Chain Info Center; and SAP Access Control Role Analytics. Please note: SAP HANA Analytics Foundation is made available as a separate package for SAP Business Suite.

User-Driven Experiences
By combining analytics with transactions, business users can now get a unified view of real-time information within context. New people-centric interfaces based on design thinking have enabled simplified, user-driven experiences. Executives and employees can also interact in real time and access all data, of all types, on any device of their choice.

Real-Time Solutions Powered by SAP HANA
SAP and partners are delivering a new class of solutions on top of the SAP HANA platform that provide real-time insights on "Big Data" and state-of-the-art analysis such as machine learning, pattern recognition, and predictive capabilities. These solutions can help transform the way you run your business, from enabling rapid, sense-and-respond processes and targeted actions, to even rethinking business models in your industry. Furthermore, you can continue to take advantage of the SAP NetWeaver® Business Warehouse (SAP NetWeaver BW) component – also powered by SAP HANA – as your enterprise data warehouse.

Is SAP Business Suite powered by SAP HANA available today?	As of Q4 2012, SAP CRM powered by SAP HANA is available to customers as part of the ramp-up program. SAP ERP powered by SAP HANA and SAP SCM powered by SAP HANA are now also available as part of the same ramp-up program for SAP Business Suite powered by SAP HANA.

In addition, SAP shipped in Q4 2012 SAP HANA Analytics Foundation for SAP Business Suite along with new analytical applications. **SAP HANA Analytics Foundation is made available as a separate package for SAP Business Suite**.

SCOPE

What is SAP's strategy for SAP HANA accelerators and analytic content in the future?

With SAP Business Suite powered by SAP HANA, SAP will now give customers the choice to deploy a fully **integrated scenario** by replacing the traditional databases of their SAP Business Suite applications with SAP HANA. This also means that in this scenario, customers will no longer need any additional accelerators since these will become part of SAP Business Suite powered by SAP HANA.

However, SAP intends to continue to support the initial **side-by-side scenarios**, allowing customers to take advantage of standard solutions delivered on top of SAP HANA while keeping their current databases.

What does this announcement mean for the role of SAP NetWeaver BW going forward?

SAP HANA Analytics Foundation for SAP Business Suite and SAP NetWeaver BW powered by SAP HANA complement each other. Together they cover all analytic use cases on one data source. SAP HANA Analytics Foundation provides operational reporting and analytics capability directly on the original transactional data, whereas SAP NetWeaver BW empowers strategic and tactical analytics scenarios with complex logic, sophisticated key performance indicators (KPIs), and benchmarking.

Does this announcement mean that in the future, SAP Business Suite will only run on SAP HANA or only on SAP databases?

No. SAP Business Suite is, and will remain, database-agnostic. Staying true to the principles of "innovation without disruption and open choices to customers," SAP gives customers a choice. We continue to support the existing databases a customer may have licensed from SAP for use with SAP Business Suite applications, and allow complete or partial licensing of SAP HANA.

SAP Business Suite on Amazon was recently announced as well as SAP HANA One on Amazon. Can I run SAP Business Suite on SAP HANA One on Amazon?

No. SAP Business Suite does not run on SAP HANA One. SAP Business Suite powered by SAP HANA is currently optimized to run on premise and not on SAP HANA One on Amazon.

MIGRATING THE DATABASE TO SAP HANA

How can customers migrate their database to SAP HANA?

SAP provides customers with choice. If a customer chooses to migrate to SAP HANA, then there are three steps a customer needs to take to bring its existing SAP Business Suite on top of SAP HANA:
1. Update to the latest non-SAP HANA enhancement package and the latest version of the SAP NetWeaver technology platform
2. Update to latest enhancement package, version for SAP HANA
3. Migrate from any database to SAP HANA

SAP remains committed to support its customer's choice of database technologies and vendors. SAP Business Suite will continue to be offered on all currently certified databases. SAP will work with its database partners to support continuous innovation to provide real and effective choice for mutual customer benefit. If customers choose to migrate to SAP HANA, SAP and its partners provide services to allow complete or partial migration and implementation of SAP HANA.

What are the services available from SAP to help a customer migrate to the SAP HANA database?	The SAP Services organization brings together thought leaders, senior consultants, and technology experts from across the globe. It provides comprehensive support to help customers plan, deploy, and optimize their investment in SAP Business Suite powered by SAP HANA.

Certified consultants and developers with SAP Services can help a customer with technical and business transformation, and with planning, building, and using SAP Business Suite powered by SAP HANA. They help a customer assess the current situation, determine the first use case for in-memory technology, and create a comprehensive, multiyear road map to execute a long-term implementation strategy. The portfolio of services includes steps to:
• Design and plan
• Implement, upgrade, and migrate
• Optimize, innovate, and develop
• Support and educate

Service offerings for SAP HANA projects include standard offerings with regional flexibility, along with services for packaged rapid-deployment solutions that help jump-start the delivery effort. SAP Services can also help address the most complex business problems by extending existing applications or creating custom solutions. |
| **Are these services also available from SAP implementation partners?** | SAP implementation partners are ready to help, advise, and lead a customer on the innovation journey from day one with products, solutions, and support. Working with SAP, partners have gained valuable expertise to enable a smooth implementation of the migration project. Customers should leverage the partners' industry-specific expertise as they transform their business with SAP Business Suite powered by SAP HANA. |
| **Will there be a rapid-deployment solution package for facilitating the migration to SAP HANA?** | Yes. Similar to SAP NetWeaver Business Warehouse powered by SAP HANA, we will also have rapid-deployment solution packages to help customers using SAP Business Suite with a rapid database migration to SAP HANA. |

What are the major business benefits that would accrue from a rapid-deployment solution package for SAP Business Suite powered by SAP HANA? What packages are available?	A customer can benefit from SAP Business Suite powered by SAP HANA via a rapid-deployment solution that addresses the most urgent business needs, by providing SAP-supported best practices, templates and tools, guides, and educational material, at a fixed scope and price. Several SAP Business Suite applications are offered with SAP HANA as rapid-deployment solutions, which speed implementation and lower risk. A customer can realize value quickly at a predictable low total cost of deployment. Rapid-deployment solutions include services to help: • Evaluate and prioritize functionality and analyze costs through offerings for planning and assessment • Migrate functionality through such activities as Unicode conversion and business warehouse upgrade • Innovate to develop functionality unique to the business – for example, to write a predictive algorithm for behavior of a specific market segment • Support and educate all users through a wide array of certification and technical training packages The following packages will be available in 2013: • SAP CRM rapid-deployment solution with SAP HANA (Q4 2012) • SAP ERP rapid-deployment solution powered by SAP HANA (Q1 2013) • SAP HANA Analytics Foundation rapid-deployment solution (Q2 2013) • Rapid database migration of SAP Business Suite to SAP HANA (Q3 2013)
What is the rapid-deployment solution strategy for SAP Business Suite powered by SAP HANA packages?	The strategy for rapid-deployment solutions is aligned with the overall SAP strategy for SAP Business Suite powered by SAP HANA. SAP regards the rapid-deployment solution packages for SAP Business Suite powered by SAP HANA as strategic investments and will continue to invest in the future to bring the best quality to our customers.
Are SAP Business Suite powered by SAP HANA rapid-deployment solution packages available during ramp-up?	Yes, if customers sign up for the ramp-up of the available SAP Business Suite powered by SAP HANA product, they can choose the rapid-deployment solution for their implementation projects.
How can customers running SAP ERP and other SAP Business Suite applications determine which business scenarios are relevant for their landscape?	SAP can provide such a customer with a tailored recommendation report called **business scenario recommendations for SAP Business Suite powered by SAP HANA**. The report provides the customer with all business scenarios based upon their current usage of SAP ERP and SAP Business Suite application components. A customer may request the report **free of charge** and find out which business scenarios are the most **relevant** for the specific situation and which scenarios SAP recommends investigating further for potential usage. Furthermore, the report provides links to relevant information, demos, and videos that help customers get a clear understanding about the value and innovation offered by SAP Business Suite powered by SAP HANA. To request the report, click: www.suiteonhana.com.

Will third-party solution extensions, such as SAP Interactive Forms software by Adobe or the SAP Archiving application by OpenText, work if the customer is using SAP HANA as the database for SAP Business Suite?	There will be a road map available on the support of third-party solutions for SAP Business Suite powered by SAP HANA.
How will my partner be trained in SAP HANA to support us in the migration?	SAP Ecosystem and Channels is delivering on a thorough education plan for partners. Prioritization of which partners to train first will be driven largely by the customers in the ramp-up program.
As a customer, we have a large staff that is highly trained in another database technology, and they cross-support non-SAP applications on that database. Do we need to retrain them? If so, what are the education classes we need to take now?	Yes, specific training is required to enable database administrators to properly support SAP HANA scenarios. Please refer to https://training.sap.com/sa/en/curriculum/hana-sap-hana-g-en for an overview of the recommended curriculum.
For running SAP Business Suite powered by SAP HANA, will end users have to undergo additional training?	There are no changes in already existing processes that lead to additional training effort. If business functions are activated to unleash the full potential of SAP HANA, some minor changes may appear in process logic or on the UI. These changes are well documented in the business function documentation and should not result in additional training effort on the part of the customer.

ROLLOUT AND AVAILABILITY

When will the ramp-up program for SAP Business Suite powered by SAP HANA be available?	The ramp-up has already commenced at the end of 2012 for SAP ERP (including the SAP Product Lifecycle Management), SAP CRM, and SAP SCM applications powered by SAP HANA.

TECHNICAL ASPECTS

What is the technical migration scenario?	From a technical perspective, moving to SAP Business Suite powered by SAP HANA will essentially be a database migration. The maximum current database size will vary due to different compression rates (depending on the structure of the data as well). Other restrictions will apply in terms of supported add-ons and industry solutions in the first wave of delivery.
Once the database of SAP Business Suite applications is migrated to SAP HANA, do we still need any additional databases?	No. Once SAP HANA becomes the database for an SAP Business Suite application, you will not need any other database for that purpose.

What are the disaster recovery (DR) and high availability (HA) strategies when running SAP Business Suite powered by SAP HANA?	Business continuity, which includes DR and HA, has highest priority for SAP's strategy in the context of SAP Business Suite powered by SAP HANA. Depending on their data center operations, hardware configuration, and software landscape, customers can select among several options. SAP is closely working with hardware partners to provide customers a flexible choice among different, but best-suited hardware-software solutions for DR and HA scenarios. Current capabilities include, for example, single-node failover with multiple standby servers within one-cluster configuration and storage-based mirroring of SAP HANA disk areas even across data centers. SAP is continuously working on minimizing take-over times and optimizing the data transfer process in the upcoming SAP HANA database support packages. This strategy is complemented by extended tool support, such as SAP HANA studio.
We have a highly customized SAP implementation. Will SAP ERP powered by SAP HANA perform per expectations in this case? Will we need to redo the customizations?	SAP has performed a number of proof-of-concept (PoC) tests with customer systems including their enhancements as well as respective copies of their productive data. The results are very encouraging. So in general, the expectation is that most customizations should not be impacted. However, a detailed review of the customer's customizations will better inform us of any potential impact.
What needs to be retested when migrating to SAP Business Suite powered by SAP HANA?	Mainly, functional correctness needs to be tested in areas where SAP has done optimizations (see note 1761546).
We have several interfaces to other services that we have developed, and many are mission critical. What happens to our SAP NetWeaver Process Integration implementation? Do we need to make changes to interfaces?	From the perspective of SAP Business Suite, there is no change. Once data is fetched from the database, the application server takes over to communicate with SAP NetWeaver Process Integration technology, and that was not changed at all.
What version of SAP Business Suite do we need to be on in order to migrate our database to SAP HANA?	The solution comes as a new enhancement package. Therefore you need to move SAP ERP to: • SAP ERP 6.0 enhancement package 6 • SAP CRM 7.0 enhancement package 2 • SAP SCM 7.0 enhancement package 2

SAP CRM POWERED BY SAP HANA

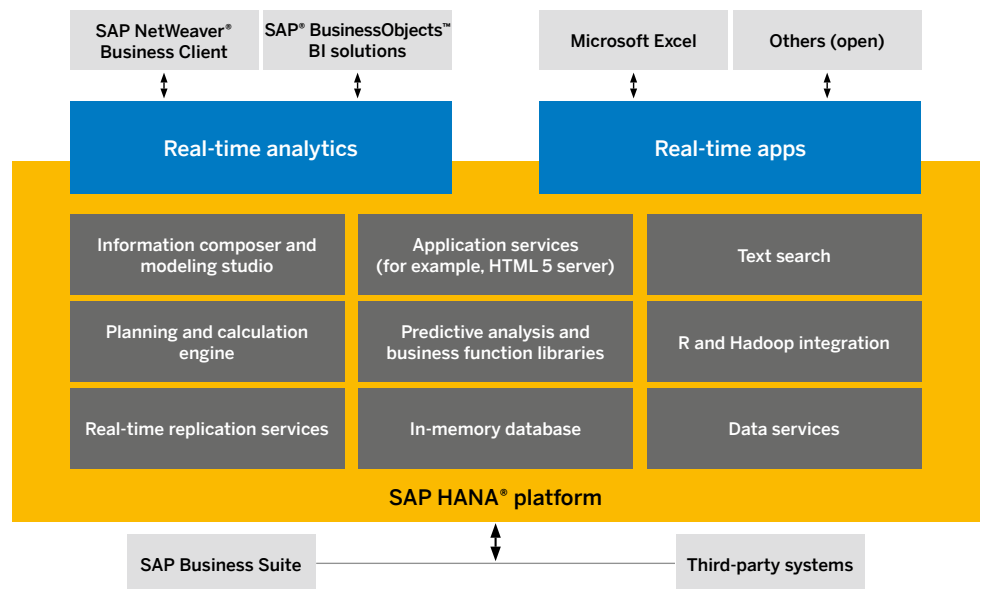|	
Has SAP launched a new version of SAP CRM?	In November 2012, SAP launched the SAP 360 Customer solution. With SAP CRM powered by SAP HANA as the backbone, this solution delivers an unparalleled offering for customer relationship management leveraging the power of new technologies including mobile, in-memory, and cloud.
How can I find more details about SAP CRM powered by SAP HANA?	There is a dedicated page on sap.com about SAP 360 Customer. (SAP CRM powered by SAP HANA is the central backbone of this solution.) You may access it at: Link to SAP 360 Customer information

SAP HANA PLATFORM

What is the SAP HANA platform?

SAP HANA is an in-memory data platform that is deployable as an on-premise appliance or in the cloud. It is a revolutionary platform that's best suited for performing real-time analytics and now real-time transactions, but also for developing and deploying real-time applications. At the core of this real-time data platform is the SAP HANA database, which is fundamentally different from any other database engine in the market today (see the figure).

Figure: A Platform for a New Class of Real-Time Analytics and Transactions

SAP NetWeaver® Business Client	SAP® BusinessObjects™ BI solutions		Microsoft Excel	Others (open)
Real-time analytics			**Real-time apps**	
Information composer and modeling studio	Application services (for example, HTML 5 server)	Text search		
Planning and calculation engine	Predictive analysis and business function libraries	R and Hadoop integration		
Real-time replication services	In-memory database	Data services		

SAP HANA® platform

SAP Business Suite ←——→ Third-party systems

What is different about SAP HANA that enables it to deliver such differentiated value?	Other database management systems (DBMS) on the market are typically either good at transactional workloads, or analytical workloads, but **not both**. When transactional DBMS products are used for analytical workloads, they require you to separate your workloads into different databases (OLAP and OLTP). You have to extract data from your transactional system (ERP), transform that data for reporting, and load it into a reporting database. The reporting database still requires significant effort in creating and maintaining tuning structures such as aggregates and indexes to provide even moderate performance.

Due to its hybrid structure for processing transactional workloads and analytical workloads fully in-memory, SAP HANA combines the best of both worlds. You don't need to take the time to load data from your transactional database into your reporting database, or even build traditional tuning structures to enable that reporting. As transactions are happening, you can report against them live. By consolidating two landscapes (OLAP and OLTP) into a single database, SAP HANA provides companies with massively lower total cost of ownership in addition to astounding speed.

But even more important is the new application programming paradigm enabled for "extreme" applications. Since the SAP HANA database resides entirely in-memory all the time, additional complex calculations, functions, and data-intensive operations can happen on the data directly in the database, without requiring time-consuming and costly movements of data between the database and applications. |
| **What are the various use cases for deploying SAP HANA with SAP applications?** | There are many ways in which SAP HANA delivers value (refer to 1.3–1.5 in this document). You may also get additional information on use cases from the www.saphana.com site: www.saphana.com/community/resources. |

FURTHER INFORMATION

Where can I find current information on SAP Business Suite powered by SAP HANA on an ongoing basis?	Go to saphana.com and to www.sap.com/suiteonhana.

CONTACTS

To learn more about how SAP Business Suite powered by SAP HANA can help your organization, call your SAP representative today.

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