SAP HANA

Introducing SAP HANA™ Appliance Software

Innovation Through Partnership with Hitachi

What if a retail organization had the power to analyze purchase orders in real time to more accurately manage production and avoid problems such as overstock? How important is it for an apparel manufacturer to know which suppliers are providing the highest-quality, lowest-cost raw materials on time at that very moment, based upon in-depth analysis? Or the importance for a utility company to combine internal planning metrics with real-time consumption statistics from smart meters, integrated with key weather data to ensure that business and residential rates are continuously optimized?

In today's highly competitive business climate, immediate access to and analysis of all operational data ultimately determines the success of an organization. Organizations demand insight into business operations as – not after – they happen, in order to react quickly to changing market conditions. But the volume of operational data available for business insight often exceeds the amount of data that traditional disk-based systems can process within a reasonable time.

Organizations are not able to provide immediate access to the full volume of data needed, or instead must reduce the data from operational applications and analytic models. The result is inadequate access to the full spectrum of information needed, and unacceptable lag times between gathering data and the insight into that data.

INTRODUCING SAP HANA™

With the introduction of SAP HANA™ appliance software, what was once just a possibility now becomes a reality. SAP HANA is multipurpose, data source–agnostic in-memory appliance software that combines SAP® software optimized on proven hardware delivered by SAP's leading hardware partners. Organizations now have the power to gain instant insight into business operations, while reacting quickly to changing

business conditions. SAP HANA lets business users immediately access, model, and analyze all of their transactional and analytical data in real time – from virtually any data source – in a single environment, without affecting existing applications or systems.

SAP HANA realizes the efficient processing and analysis of massive amounts of data by packaging SAP's intelligent use of in-memory technology, columnar database design, data compression, and massive parallel processing. The appliance software provides a flexible, cost-effective, real-time approach for managing large data volumes. Your organization can dramatically reduce the hardware and maintenance costs associated with running multiple data warehouses and operational and analytical systems.

SAP HANA will form the future technology foundation for new, innovative applications based on in-memory technology, enabling better-performing business applications such as planning, forecasting, operational performance, and simulation. The SAP BusinessObjects™ Strategic Workforce Planning application, powered by SAP HANA, dramatically benefits from high-performance and real-time access to large volumes of transactional information.

SAP HANA appliance software includes:

- A high-performance, in-memory computing database and a powerful data calculation engine
- A real-time replication service to access and replicate data in the SAP ERP application
- Data integration services to access and index information from virtually any data source
- A data repository to persist views of business information
- Highly tuned integration with SAP BusinessObjects business intelligence (BI) solutions for insight and analytics
- SQL and MDX interfaces for third-party application access
- A unified information modeling and design environment

INNOVATION THROUGH PARTNERSHIP

SAP HANA is another example of how SAP's partner ecosystem approach – industry-focused, community-powered, and highly collaborative – delivers orchestrated innovation and breakthrough results for our joint customers. Emerging business challenges require holistic thinking across corporate boundaries. SAP partner solutions become part of the "whole" solution for customers where shared interests and goals are realized and new opportunities are revealed.

SAP AND HITACHI: A PROVEN PARTNERSHIP

Since 1994 Hitachi Ltd. and its subsidiaries, including Hitachi Data Systems, have had a strategic relationship with SAP that includes the sale, integration, and implementation of SAP solutions. During this time, Hitachi has won numerous SAP awards for exceptional customer satisfaction. In 2011 Hitachi became an SAP global technology partner – the highest level of partnership SAP offers. Leading businesses around the globe trust their most critical data to SAP and Hitachi.

With Hitachi Converged Platform for SAP HANA, technology leaders benefit from an optimally configured appliance that allows scaling for additional capacity without adding complexity to the environment. The platform provides the necessary storage performance and high throughput to meet the

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stringent demands of in-memory computing. By dramatically reducing the traditional delay between operations and analytics, business leaders gain near-real-time insights to make smarter business decisions more quickly.

In-memory computing – the technology that enables the near-real-time business intelligence of SAP HANA – demands processing, storage, and transport at unprecedented speeds and volumes. Running SAP HANA technology on Hitachi Compute Blade 2000 blade servers and Hitachi Adaptable Modular Storage provides a solution that is fast and reliable and scales easily to accommodate dynamic workloads.

Hitachi delivers an advanced blade server solution for SAP HANA. By using this solution, customers protect their original platform investment and can expand their environments by simply growing inside the blade center chassis. Hitachi converged data center solutions, including this solution for SAP HANA, accelerate the delivery of business value through the use of innovative technologies. Hitachi integrates compute, storage, and networking resources to meet the most demanding applications in either a physical or virtual computing environment. As this new converged infrastructure approach proves itself within organizations, and additional applications and business units utilize SAP HANA technology, a blade server–based solution allows the enterprise to scale up processing and scale out bandwidth and connectivity at will.

What SAP HANA means for you:

- Within seconds, bring all relevant data to decision makers, in a format that is easy to understand and use, supporting decision making in real time.
- Enable innovative new applications, combining high-volume transactions with real-time analytics, to dramatically improve existing planning, forecasting, pricing optimization, and other complex processes.
- Accelerate business performance while reducing total cost of ownership due to less hardware, maintenance, and testing.

PROVEN, INNOVATIVE TECHNOLOGY

SAP HANA is based on proven technology delivered on demand or via appliances, offering you:

- **High-performance analytics for SAP ERP data** – Directly access SAP ERP data, or combine it with other data sources for real-time analytics and insight into the business.
- **Accelerated business intelligence** – SAP BusinessObjects BI solutions are integrated directly on top of SAP HANA appliance software.
- **360-degree view of business operations** – Integrate and model data from virtually any data source for complete real-time insight into the entire business.
- **Next generation in-memory technology** – Build a foundation for your current and future deployments of the SAP NetWeaver® Business Warehouse component and SAP ERP.

GETTING STARTED WITH SAP HANA

SAP HANA will change the way your company does business by enabling real-time insight into business operations as they happen. Talk with us to discover how SAP HANA will allow your organization to run smarter, simpler, and bolder.

FOR MORE INFORMATION

Call your SAP or Hitachi representative or visit us at www.hds.com/go/sap.

www.sap.com/contactsap

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The Best-Run Businesses Run SAP™