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WHITE PAPER

Simplify Business: SAP S/4HANA and Converged Infrastructure

Optimize Your SAP Landscape With Powerful
Hitachi Converged Solutions

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Simplify Business: SAP S/4HANA and Converged Infrastructure

Executive Summary

Research indicates that businesses lose 10% of profit each year due to the hidden costs of complexity.¹ The opposite statistic is staggering. If you can manage complexity, your company could enjoy a 25-100% increase in profit margins, according to a study by The Boston Consulting Group (BCG).² Businesses cannot afford inefficiency and complexity. SAP Business Suite 4 SAP HANA (SAP S/4HANA) removes complexity and greatly simplifies business. However, to realize the benefits of SAP S/4HANA software, businesses need infrastructure that is up to the task. Hitachi Unified Compute Platform (UCP) works with SAP HANA to optimize the simplicity of SAP S/4HANA with a resilient and scalable architecture.

Run Simple With SAP HANA

Expose and Eliminate Customer Complexity

What complexities are hiding throughout your company? Siloed information and multiple sources of truth bottleneck day-to-day operations, which causes missed opportunities for growth and makes it difficult to get profitable ideas to market quickly.

Many enterprises adopt overly standardized business processes that use outdated and inflexible technologies, which contribute to more complexities in the long run. You need to architect your infrastructure to meet today's requirements, but you also need to ensure that it has the agility to support new requirements and technologies.

INFOSYS GOES LIVE WITH SAP BUSINESS SUITE POWERED BY SAP HANA

Overview

Global leader in consulting, technology and outsourcing solutions.

Enables clients in more than 50 countries through mobility, sustainability, big data and cloud computing solutions.

42 million accounts, 70,000 servers and 11 million contracts.

US\$8.25 billion in fiscal year 2014 (FY14) revenue and more than 165,000 employees.

Challenge – Customer Goals

Achieve real-time visibility across the enterprise.

Deliver order-of-magnitude improvement in the reliability and performance of critical processes.

Build a real-time platform that provides the ability to use and build new and innovative end-user applications.

Why a Hitachi Platform for SAP HANA

Provides a common building block for scale up and scale out using Hitachi Compute Blade servers plus Hitachi Unified Storage VM and the Hitachi Virtual Storage Platform family.

Enterprise-class reliability.

Capable of consolidating the appliances by using logical partitioning (LPAR) technology.

Only vendor that supports 3-data-center (3DC) replication for scale-out systems.

To address the complexity-related challenges that businesses face, SAP S/4HANA features entirely new, mission-critical apps designed to simplify how you work in a digitally connected world.

Many SAP HANA customers use SAP HANA for non-mission-critical purposes, such as data analytics and business intelligence. SAP S/4HANA extends the value and reach of SAP HANA by expanding its usefulness beyond data analytics and into mission-critical apps.

SAP Simple Finance is an example of this approach. Simple Finance takes full advantage of the in-memory SAP HANA platform to drive real-time insights to CFOs and finance departments so that they can make better, transformative business decisions. Because Simple Finance is built on SAP HANA in SAP HANA Enterprise Cloud, it allows finance departments to run their mission-critical processes in real time, including planning, analysis, accounting, consolidation and more.

Similarly, SAP S/4HANA helps drive the value of in-memory processing into mission-critical applications while simplifying user interfaces, business solutions and data models:

- **Simple user interface (UI):** SAP S/4HANA delivers a role-based, consistent user experience. That experience includes the ability to access and use SAP S/4HANA from any device.
- **Simple business solutions:** SAP S/4HANA is built to empower the way that businesses want to work with real time insights and processes across a digitally connected network.
- **Simple data model:** SAP S/4HANA enables applications to offer the best level of performance with the lowest data footprint.

Reimagine Simple

SAP S/4HANA provides a simple way to connect employees and technology, save costs and time, drive faster business impact, adapt quickly and increase productivity.

- **Reimagined business models can save costs:** With SAP S/4HANA, the Internet of Things (IoT) and big data become accessible to any business. SAP S/4HANA connects people, devices and business networks in real time, which greatly simplifies modern business. Additionally, it helps reduce the data footprint and work associated with larger data sets stored in one system, which saves time and money.
- **Reimagined business decisions can drive faster impact:** SAP S/4HANA makes it simple to gain insight on any data from anywhere in real time, which lets you drive a fast business impact. Plan, execute, predict and simulate on the fly so that you can make important decisions today that will still apply in the future.
- **Get work done faster with reimagined business processes:** Simplify your business processes to gain new efficiencies across your organization. Use SAP S/4HANA to help you focus on the most essential tasks in real time and to adapt quickly.
- **Improve employee engagement with a reimagined user experience:** SAP S/4HANA is natively designed with the most modern, role-based user experience: SAP Fiori. SAP Fiori makes it simple to get the job done across lines of business with a personalized, simple UI available on any device.

SOME FACTS ABOUT SAP S/4HANA

- 10x smaller data footprint.
- 7x higher throughput.
- 1,800x faster analytics and reporting.
- 4x less process steps.

Why Your Infrastructure Matters Across the SAP Landscape

Even if you have no immediate plans to deploy SAP S/4HANA, your organization might use SAP Business Suite for operations or SAP HANA for analytics, which means that SAP HANA will eventually touch your mission-critical business applications. If your SAP Business Suite implementation uses SAP ERP 6.0, SAP S/4HANA is just three steps away. You need to move to the latest enhancement package for SAP Business Suite, migrate from your current database to SAP HANA and then deploy the new code. If you currently use SAP Business Suite powered by SAP HANA, you can just deploy the new code. Hitachi Data Systems and our partners have the expertise to help you as you plan your path to SAP S/4HANA.

If you plan to migrate your SAP implementation to the cloud, SAP preferred partners, including Hitachi Data Systems, can be engaged to simplify that process. Preferred partners can deliver quicker time to value through predefined migration routes, system conversion in the cloud and deployment packages.

Whatever your approach, you'll want to consider a converged infrastructure that provides optimal support for SAP HANA now and that is resilient and scalable enough to support you when you move to SAP S/4HANA. As you evaluate your pathway to this new digital transformation and SAP S/4HANA, it is critical that you understand how your infrastructure can accelerate this transformation.

What Is a Converged Infrastructure?

Converged infrastructure combines multiple IT components, such as servers and networking devices, into one optimized package. Converged-infrastructure solutions take the burden of systems integration off your IT team by offering resilient, integrated, full-stack solutions of compute, storage, networking and virtualization. Factory tested and configured, they are ready to deploy in your data center, and they can be up and running much more quickly than comparable infrastructure that you build from scratch. Hitachi Unified Compute Platform (UCP) is a converged infrastructure.

A converged infrastructure like Hitachi UCP can accelerate adoption and achieve faster time to value for new deployments of SAP HANA, or it can help you gain additional returns on existing SAP HANA implementations. A converged infrastructure can enhance your ability to gain real-time business insights and can free your organization to focus on innovation instead of tuning the infrastructure. These benefits are especially valuable in times of business growth, when you need to scale compute services quickly in order to remain competitive.

TOP 10 REASONS TO CHOOSE HITACHI UNIFIED COMPUTE PLATFORM FOR SAP HANA

1. Future-proof scalability and investment protection.
2. Robust, cost-effective performance.
3. Fresher data for smarter, faster decisions.
4. Ease of management unburdens IT.
5. 24/7 mission-critical availability and reliability.
6. Rapid time to value and lower total cost of ownership (TCO).
7. More power to more people.
8. Next-generation technology to accelerate the speed of business.
9. Proof-of-concept services to demonstrate return on investment (ROI) and to mitigate risks.
10. Global partners committed to customer success since 1994.

Learn more at:

<http://www.hds.com/go/top-10-reasons-chose-hitachi-ucp-for-sap-hana-infographic/>.

Support SAP HANA and Mission-Critical SAP S/4HANA by Using Hitachi Unified Compute Platform

Hitachi Unified Compute Platform (UCP), for use with the SAP HANA Platform, is preconfigured, tested and optimized to provide industry-leading, real-time data processing performance in a form factor that can be deployed quickly and easily. It combines Hitachi Compute Blade server technology and Hitachi storage technology with leading network components from Brocade and Cisco.

Hitachi Compute Blade servers, built on Intel® Xeon® processor technology, use symmetric multiprocessing and advanced logical partitioning to deliver superior performance and resiliency for critical analytic processes in physical and virtualized environments. The latest edition of Hitachi UCP, designed for use with SAP HANA, includes the new Hitachi Compute Blade CB520X B2 server blade, which is based on the Intel® Xeon® processor E7-8800 v3 product family and the Hitachi Virtual Storage Platform (VSP) family. The SAP HANA platform and Intel® Xeon® processors take advantage of each other's unique feature sets to provide the best balance of performance and power efficiency. For example, one technology built into the Intel® Xeon® processor E7 v3 family is Intel Transactional Synchronization Extensions (Intel TSX). It helps improve performance of transactional in-memory database processing, like that of SAP HANA, on systems with high core counts.

Hitachi UCP offers multiple scale-out and scale-up models so that your SAP HANA environment can grow and change along with your business needs without infrastructure replacements or upgrades. If scaling up is your priority, Hitachi UCP, used with SAP HANA and the latest Intel® Xeon® processor family, is certified to run SAP Business Warehouse powered by SAP HANA in a single node with up to 3TB of memory, and is certified for SAP Business Suite with up to 6TB of memory. If scaling out is what you require, Hitachi UCP supports up to 168TB using 56 scale-out nodes.

With Hitachi UCP, you can virtualize SAP HANA with confidence. UCP supports all major hypervisors. In addition, with Hitachi Compute Blade and logical partitioning (LPAR), you can run multiple instances of SAP HANA on a single platform, which helps drive down the total cost of ownership (TCO).

Hitachi Unified Compute Platform (UCP) delivers immediate business value for mission-critical applications. By using high-end blades and a Tier 1 Fibre Channel storage platform, Hitachi already provides the same service-level agreements (SLAs) and operational excellence for SAP HANA today that you will need for your mission-critical applications supported by the new SAP S/4HANA. Additionally, Hitachi UCP with Intel technology is an ideal platform with which to achieve a software-defined infrastructure (SDI).

Hitachi UCP, for use with SAP HANA, offers faster performance at lower costs, providing a resilient, scalable solution with rapid time to value:

- **Resilient:** Deploy SAP HANA on resilient architecture comprised of the most reliable compute elements teamed with true enterprise-class storage. To get the robust operational performance you need to succeed, Hitachi provides high-availability technologies in both its server and storage components of UCP for use with SAP HANA.
- **Scalable:** UCP offers extensive scalability and consolidation with over 25 scale-up configurations. Single-node configurations support up to 6TB of platform memory. Additionally, Hitachi is certified for support for up to 56 active scale-out nodes (112TB for UCP 4000 and 168TB for UCP 6000) and four standby nodes.
- **Value:** With end-to-end hardware and software integration helping to streamline complex tasks, your organization can achieve rapid time to value. The combination of enterprise-class storage systems, compute blades and networking components simplifies deployment and helps ensure predictable results.

Reimagine Resilience, Scalability and Value With Hitachi Unified Compute Platform for Use With SAP S/4HANA

SAP S/4HANA is truly game changing. It dramatically simplifies the software landscape, while Hitachi addresses the complexity hidden in infrastructure. With Hitachi UCP, you get preconfigured and pretested infrastructure that is ready to optimize your current SAP software implementation. Additionally, this preconfigured and pretested infrastructure can expand as you accelerate your journey toward the simplicity of SAP S/4HANA.

¹ Siegal and Gale. "Global Brand Simplicity Index 2013." 2013.

<http://simplicity.siegelgale.com/wp-content/uploads/2013/10/Global-Brand-Simplicity-Index-2013-eBook-spreads-FINAL.pdf>.

² The Boston Consulting Group (BCG). "Mastering Complexity." July 2010.

https://www.bcgperspectives.com/content/articles/operations_cost_efficiency_asset_optimization_mastering_complexity/.

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