Cisco Delivers Exceptional Value to SAP and SAP HANA Environments

Are traditional vendors delivering less than what you need for your SAP and SAP HANA environments? We deliver advantages that no other vendor can.

Cisco Momentum

In just five years, the Cisco Unified Computing System™ (Cisco UCS®) has become the fastest growing product in the data center market. More than 75 percent of Fortune 500 companies and 28,000 customers have invested in Cisco UCS. This momentum has propelled Cisco to number two in worldwide market share for x86-architecture blade servers and has placed us among the top-five server vendors. Our superior economics and operations deliver direct benefits to SAP and SAP HANA solutions, with our customers reporting 84 percent shorter provisioning times, 77 percent less cabling, 61 percent lower management costs, and 54 percent lower power and cooling costs.

Cisco® solutions for SAP and SAP HANA are designed to interoperate with the data center you have today. Using industry-standard architectures and recognized best practices, no special

IT processes are needed to incorporate or maintain Cisco solutions in your data center. Cisco solutions are designed to support data center readiness requirements, including high availability, reliability, and business continuance. In contrast to vendors that lock you in with proprietary storage and file systems, Cisco works with industry leaders EMC and NetApp to develop prepackaged and reduced-price solutions that you can deploy using a predefined bill of materials with help from Cisco or with integrated infrastructure in the form of FlexPod or Virtual Computing Environment (VCE) coalition Vblock™ Systems. Having claimed more than 80 world records on industry-standard benchmarks, we offer more than flexibility, efficiency, scalability, and low total cost of ownership (TCO): we deliver the performance you need, too.

Fast and Easy to Deploy

Time is money. Whether you are implementing SAP or SAP HANA

for a production, development, or test environment, our centralized, integrated, and automated management can configure your bare-metal servers and get them running SAP HANA in as little as 45 minutes.

Record-Setting Performance

We've set 90 performance records on industry-standard benchmarks that indicate just how responsive and flexible your SAP environments can be. In addition to claiming three world-record SAP Sales and Distribution Benchmark results, we've also claimed the best TPC-H performance results for the SAP Sybase IQ database. Our record-setting virtualized SAP performance demonstrates how you can increase flexibility by running SAP in a virtualized environment with almost no performance penalty.

Radical Simplification

Cisco UCS solutions for SAP and SAP HANA are substantially less complex

than traditional solutions and can quickly integrate with the data center you have today. You don't have to adjust either your infrastructure or best practices to incorporate Cisco UCS into your data center. Compare our solution to IBM's solution, which requires a nonstandard architecture with a proprietary file system, 10 times the number of management points, and scaling that requires complex clustering. Compare our offerings to the latest converged system offerings from both HP and IBM, in which complexity increases dramatically as solutions scale to support 160 servers.

Simplified, Cost-Effective Scaling

Cisco UCS solutions for SAP and SAP HANA easily scale to meet business needs. Cisco UCS is not limited by the constraints of racks or blade chassis; it
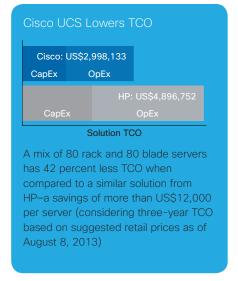
incorporates both, giving organizations more deployment flexibility and scalability. Its radically simplified architecture yields a massively scalable system whose complexity does not increase with size, helping contain administration costs.

Tailored Data Center Integration

SAP HANA tailored data center integration (TDI) helps customers implement SAP HANA on shared resources, including computing, networking, and storage resources. SAP TDI reduces capital and operating costs by sharing hardware and operation processes. TDI promises large TCO savings because no reinvestment in skills, materials, or operating equipment is required. Because of our leadership in secure, multitenant configurations, Cisco UCS is being used by SAP to validate this integration.

Cisco UCS Lowers TCO

Cisco: US$2,998,133 — CapEx, OpEx
HP: US$4,896,752 — CapEx, OpEx
Solution TCO

A mix of 80 rack and 80 blade servers has 42 percent less TCO when compared to a similar solution from HP—a savings of more than US$12,000 per server (considering three-year TCO based on suggested retail prices as of August 8, 2013)

- SAP has validated our shared storage configuration. Therefore, SAP HANA can share storage with other applications rather than requiring dedicated storage.
- SAP is piloting shared networking rather than dedicated and shared computing through virtualization. This approach allows multiple instances of SAP HANA on the same system through our virtualization optimization and tight integration with the leading hypervisors.

Lower Management Cost

With Cisco UCS, your operating costs are less because our unified management is integrated into the system. This integration simplifies deployment and reduces the risk of configuration errors that can cause downtime. Integrated management means that you can deploy servers in

Table 1. Cisco UCS is Radically Simplified Compared to the Latest Offerings from Both IBM and HP, Which Require a Vast Number of Switching Devices and Management Points to Support 160 Servers

System	Number of Systems to Support 160 Blade Servers	Number of Switching Devices	Number of Management Points (Managed Devices wtih IP Addresses)
Cisco UCS	1	2	1
HP Converged-System 700x	3	44	62
IBM PureFlex Enterprise	4	48	76

minutes, rather than the days or weeks required in traditional environments. Compare our zero-cost management to the software-only cost of managing two chassis for three years with HP OneView (US$31,968) or HP Flex System Manager ($25,200), based on pricing from the respective websites as of January 15, 2014. With lower capital and operating costs, Cisco UCS delivers better TCO than the competition.

Automate Best Practices

Cisco Intelligent Automation for SAP software helps you standardize, unify, and automate best practices for IT processes in complex, heterogeneous environments. Ultimately, our solution helps you administer your environment more quickly and more easily. By using Cisco Intelligent Automation for SAP to automate SAP administration, you can view management in the context of end-to-end IT processes that span the data center. This broader context helps you confidently automate tasks across the application service management lifecycle. With Cisco Intelligent Automation for SAP, you gain:

- Increased operation efficiency by separating the automation engine from the application management content; this feature helps you more easily extend, update, and access SAP and other application-related content

- Reduced risk through automation of standardized processes and increased regulatory compliance, with automated alerts identifying possible problems before they happen

- Reduced downtime with automated proactive, preventative, and continuous application service management tasks

- Lower TCO through simplified automation tools that reduce time-consuming and manual tasks, allowing the SAP administration team to focus on strategic business priorities

Why Cisco

Before you assume that a traditional vendor can deliver the most effective SAP and SAP HANA platforms, take a look at Cisco. As the world leader in enterprise networking, we understand how to integrate solutions into the data center infrastructure you already have. As a rising star in the server business, we've been able to reach beyond the state of the art because we do not have an existing traditional product line to support. Thus, we have been able to create a system that supports your SAP environments with high performance, easier deployment, lower capital and operating costs, rapid scaling, lower management costs, and IT process automation that helps you stay ahead of your competitors.

For More Information

- To learn more about Cisco UCS, visit http://www.cisco.com/go/ucs.

- To learn more about Cisco UCS and SAP environments, visit http://www.cisco.com/go/sap.

Disclosures

Cone Health experienced 84 percent less time to provision servers.ExamWorks used 77 percent less cabling. The 53 percent reduction in power and cooling costs and 77 percent reduction in ongoing management costs were averages from Cisco Unified Computing case studies.

Cisco has set top SAP Sales and Distribution (SD) benchmark scores compared to other results posted at http://www.sap.com/campaigns/benchmark/index.epx at the time of benchmark dates of September 9, 2013, March 19, 2013, and January 8, 2013.

The Cisco UCS C420 M3 Rack Server achieved 230,119.9 QphH@3000GB and US$1.29 per QphH@3000GB on the TPC-H benchmark with the SAP Sybase IQ database. This is the best single-system price-to-performance ratio at the 3000-GB scaling factor. This comparison is based on performance results available as of October 31, 2013 at http://www.tpc.org/tpch/default.asp. TPC-H, QphH, and $/QphH are trademarks of the Transaction Processing Performance Council (TPC). For more information about Cisco UCS performance, visit http://www.cisco.com/go/ucsatwork.