

## Highlights

### A New Option

- Use a flexible pool of computing and storage resources to support SAP HANA, SAP HANA Vora, SAP applications, and third-party applications.

### Appliance and TDI Options

- Deploy the appliance model with Cisco® storage, SAP HANA Tailored Datacenter Integration (TDI) with Cisco storage, or TDI with storage from our certified enterprise storage vendors.

### Lower Total Cost of Ownership

- Now the lower total cost of ownership (TCO) benefits of the Cisco Unified Computing System™ (Cisco UCS®) apply not just to your server and networking infrastructure, but to your storage as well.

### Higher Performance

- Our 40-Gbps network fabric gives you the capability to connect your SAP applications in a single domain with high-bandwidth, low-latency connectivity.
- Our servers exceed SAP's specifications for certification and have won more than 100 world records on industry-standard benchmarks.

### Multidimensional Scalability

- You can scale your solution in small increments, and as you scale you increase storage capacity, network connectivity, and storage controller capability.

### Greater Flexibility

- We offer greater flexibility because your servers can act as interchangeable parts in your infrastructure. Use a single type of server for storage-intensive applications such as SAP HANA, SAP HANA Vora, and Hadoop clusters.

## A flexible pool of resources to support your entire SAP environment with scalability, flexibility, performance, and lower total cost of ownership (TCO) can be yours—today.

### A New Cisco UCS Integrated Infrastructure Solution

We have been leaders in providing scale-up and scale-out integrated infrastructure solutions for SAP HANA that incorporate enterprise shared storage in a single, easy-to-order, and easy-to-deploy configuration. Today we add an SAP-certified appliance, an SAP HANA Tailored Datacenter Integration (TDI) shared storage solution with our enterprise storage partners, an SAP HANA TDI shared storage solution with a cluster of Cisco UCS® C240 M4 Rack Servers, and a TDI shared network solution supporting multiple data center workloads on a single shared network. We unify the storage cluster using the MapR Converged Data Platform to deliver Network File System (NFS) access to your data. Now you can create a pool of Cisco UCS C240 M4 servers that can be deployed on demand for your computing or storage needs. The same server can be deployed as a member of a storage cluster, an SAP HANA Vora node, as part of a Hadoop cluster, or to run third-party applications. All of your servers can be repurposed in minutes because they all reside in the same Cisco UCS management domain, greatly simplifying your environment.

### Start Small and Scale on Demand

You can start with an SAP HANA storage cluster with as few as three servers and scale as your capacity needs increase. The appliance model allows you to scale to up to 16 servers at 33 terabytes (TB) each. The TDI model allows you to scale to 16 servers and beyond. Cisco is certified to deliver shared network TDI services, so we can deploy the solution with your SAP and even third-party applications in the same Cisco Unified Computing System™ (Cisco UCS) domain with high-bandwidth and low-latency connectivity that increases performance, flexibility, and scalability, all while reducing your TCO.

### Imagine the Possibilities

Moving to Cisco UCS Integrated Infrastructure for SAP HANA opens up a new level of flexibility, scalability, efficiency, and performance to your data center. Imagine the possibilities in the TDI deployment illustrated in Figure 1:

- Support your SAP HANA environment with a dedicated storage cluster, allowing you to scale computing and storage resources independently
- Support SAP and third-party applications from a global storage pool
- Repurpose Cisco UCS C240 M4 servers as SAP HANA Vora nodes
- Maintain a pool of available servers that can be called into service to handle

workload spikes or scale applications or storage in resources minutes with Cisco UCS management and Cisco UCS service profiles.

## Enjoy the Benefits in Your Organization

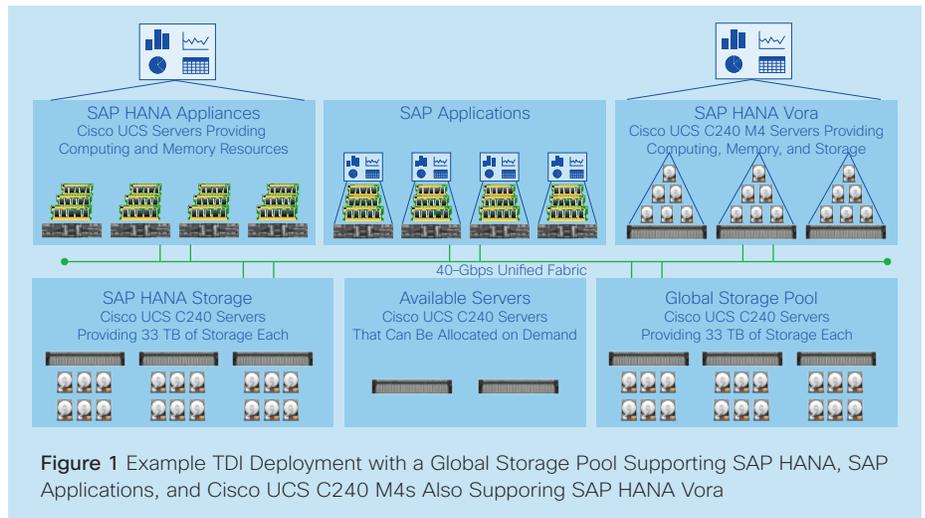
### Lower TCO

All the benefits of lower TCO that Cisco UCS offers apply across your server, networking, and now storage infrastructure: simplified infrastructure, unified management, and more efficient staff. According to IDC (document [US41084916](#)), Cisco UCS Integrated Infrastructure solutions deliver a 528 percent return on investment (ROI) over five years, a 48 percent reduction in infrastructure costs, and a 67 percent reduction in staff time to keep your infrastructure running.

### 40-Gbps Network Performance

Our solution is built around a 40-Gbps network fabric that has low latency and high bandwidth to speed data ingestion, large analytic searches, and snapshot-based backup operations. Our network is so capable that you can host your SAP applications in the same Cisco UCS domain and connect directly to your enterprise network for fast communication with your other applications.

In addition, our servers have captured more than 100 world records on industry-standard benchmarks, many of



them on the [SAP Sales and Distribution Benchmark](#). As a storage appliance, our configuration exceeds SAP's certification requirements in terms of SAPs.

### Multidimensional Scalability

Our solution scales in multiple dimensions. As you add servers to your cluster, you add storage capacity in small increments that don't strain your budget. You also add storage processing and I/O capacity, so your storage performance increases linearly. It's like incrementally growing your storage controller as you add capacity.

### Greater Flexibility

Standardizing on blade servers for your compute-intensive SAP workloads and the Cisco UCS C240 M4 for your storage-intensive workloads gives you

flexibility to support SAP and other third-party applications with on-demand scalability achieved simply by allocating servers from one application to another or from a pool of available servers.

## Support Options

Your Cisco® hardware can be supported by your choice of nonproduction, production, and business-critical levels of Cisco SMARTnet™ Service. Cisco Managed Services for SAP HANA is a comprehensive managed service that includes a single point of contact for managing the overall solution.

## For More Information

- For more information about Cisco Solutions for SAP HANA, visit <http://www.cisco.com/go/sap>.



**Americas Headquarters**  
Cisco Systems, Inc.  
San Jose, CA

**Asia Pacific Headquarters**  
Cisco Systems (USA) Pte. Ltd.  
Singapore

**Europe Headquarters**  
Cisco Systems International BV Amsterdam,  
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