Run Your Business in Real Time at Nearly Limitless Scale

With SGI UV 300H Systems From Cisco

Highlights

Single-Node Simplicity
- Deploy a single-node SGI® UV™ 300H system from Cisco and accelerate your SAP HANA deployments.

Nearly Limitless Scalability
- Scale up in 4-socket chassis increments, with up to 20-socket configurations with 15 terabytes (TB) of shared memory supported.
- Deploy the largest scale-up solution currently certified by SAP.

Keep Systems Running
- Deliver continuous operation with local automated system failover and remote system replication that supports five-nines application availability.

Gain Insight
- Run mission-critical applications on SAP HANA, including SAP Business Suite, SAP Bank Analyzer, SAP S/4HANA Finance, and other SAP S/4HANA applications with future-ready scalability.

Increase Efficiency
- Consolidate applications on SGI UV 300H systems to reduce silos of infrastructure, achieve real-time operations, and optimize return on investment (ROI).

When your core processes run in real time, the possibilities for business transformation are endless. SGI® UV™ 300H servers from Cisco unleash the power of SAP HANA to deliver insight and accelerate innovation.

Imagine the benefits if your operation, research, finance, and marketing teams could make informed decisions on a moment's notice. But this power is hard to achieve if you are running your important business applications on a system that can't deliver the performance and insight your users need. SGI UV 300H systems from Cisco give your large-scale enterprise the capability to run in real time by converging transactional and analytics workloads and eliminating the delay between the time when analytics data is captured and what's taking place now.

SGI UV 300H System

Available directly through Cisco and Cisco's global channel network as a single-node system, the SGI UV 300H is a purpose-built server for in-memory computing with SAP HANA. Using the Intel® Xeon® processor E7 v3 family and seventh-generation SGI NUMAlink® technology and preinstalled with SUSE Linux Enterprise Server or Red Hat Enterprise Linux for SAP HANA, the SGI UV 300H can be deployed as a fully preconfigured appliance or SAP HANA Tailored Datacenter Integration (TDI) solution. Table 1 summarizes the system's specifications.

Single-Node Simplicity
The SGI UV 300H uses a single-node architecture that supports the convergence of transaction-based and analytics workloads without sacrificing performance. You don't have any cluster nodes or network to configure and administer, and no associated added latency. And you don't need to segment nodes or rebalance I/O when you increase the size of the system because performance scales automatically and near linearly in proportion to each additional chassis.

Easy Scalability
If nearly limitless scale-up capacity can benefit your SAP HANA deployments, look no further. The SGI UV 300H scales up in 4-socket-chassis increments. It is currently certified by SAP for general availability in 4-, 8-, 12-, 16-, and 20-socket configurations with up to 15 TB of shared memory, making it the most scalable single-node solution for SAP HANA. Pending further certification, the system's future-ready architecture scales to 32 sockets and 24 TB of shared memory as a single node.

By simply adding sockets and memory, you can deploy the in-memory computing capacity you need today and easily scale the system as necessary, with low administrative overhead. You can also consolidate your applications on a larger system and reduce infrastructure silos for improved operation efficiency.

High Availability and Reliability
You need to keep your transactional systems running all day, every day, to support your business. Built for mission-critical applications, the SGI UV 300H is equipped with high fault-tolerance and robust reliability, availability, and serviceability (RAS) features to help ensure continuous operation.

Using local and remote single-node systems, your IT staff can reliably protect against logical, system, and site failures, as well as fully recover critical applications in seconds, resulting in application access and protection 24 hours a day. In addition, your highly available and disaster-recovery deployments can take advantage of SAP HANA system replication and Linux automation to achieve five-nines application availability.

Get the Insight You Need

The scale-up architecture and revolutionary coherent shared memory approach of the SGI UV 300H delivers the performance you need to combine your online transaction processing (OLTP) and online analytical processing (OLAP) workloads. As a result, you can:

- Run mission-critical applications on SAP HANA, including SAP Business Suite, SAP Bank Analyzer, SAP S/4HANA Finance, and other SAP S/4HANA applications with future-ready scalability

- Add SAP Vora and SAP Predictive Maintenance solutions to support contextually aware decision making and transform service and asset management

- Eliminate time-consuming extract, transform, and load (ETL) processes to access information value in real time

- Perform complex join operations and run multiple analytics engines simultaneously for workloads including text information, geospatial data, and live data streaming

Optimize Return on Investment

As you increasingly rely on IT to get the business insight you need, your IT infrastructure must be more powerful and cost effective than ever. SAP HANA TDI lets you step away from the constraints of an appliance, allowing you to use your SGI UV 300H systems with your existing SAP certified data center resources. As a result, you can maintain your existing data center standards and procedures, capitalize on the value of your existing storage and network resources, and gain access to secure and proactive remote services

SGI UV 300H Systems Can Help You

With SGI UV 300H systems, you can achieve timely insight across your organization to make faster and smarter decisions and accelerate innovation to gain competitive advantage. These systems can help you:

- Stream Internet of Things (IoT) data and analyze it instantly

- Identify customer behaviors and buying trends as they occur, on demand

- Spot market changes early and adjust with precision

- Manage supply chain, inventory, and staffing resources with greater precision

- Monitor financial conditions in real time and save money by reducing reconciliation tasks

- Identify security threats, attacks on IT systems, and fraud before experiencing harm to the business

- Analyze clinical data faster and with greater accuracy to improve patient care

- Reduce government waste and abuse with broader impact

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to help you resolve problems quickly and without application interruption. In addition, the future-ready architecture of SGI UV 300H equips your business for tomorrow without the need for overprovisioning or major equipment upgrades. You can expand your view, consolidate applications, reduce the number of infrastructure silos, achieve real-time operations, and optimize return on investment (ROI).

For More Information

For more information about SGI UV 300H systems from Cisco, visit http://www.cisco.com/go/sap.

Table 1 SGI UV 300H System Specifications

System Components	
Processors	• Intel Xeon processor E7-8890 v2 or v3 product family • v2 processor: 15-core CPUs at 2.8 GHz • v3 processor: 18-core CPUs at 2.5 GHz
Memory	• v2 processor: 16 or 32 GB with up to 1333 megatransfers per second (MT/s) error correcting code (ECC) DDR3 DIMMs • v3 processor: 16 or 32 GB with up to 1600 MT/s ECC DDR3 DIMMs or ECC DDR4 DIMMs • 1, 1.5, 2, or 3 TB per 4-socket chassis

Persistent Storage	• 4-socket appliance:
	  • 21.6-TB of 6-Gb SAS storage (900 GB x 24; with RAID 6)
	  • 2.5-inch SAS SSD x 4 (v2 processor only; not applicable to v3)
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	• 8-socket appliance or larger:
	  • v2 processor: 21.6 TB of 6-Gb SAS storage (900 GB x 24; with RAID 6) per 4-socket chassis
	  • v3 processor: 18 TB of 6-Gb SAS storage (900 GB x 20; with RAID 6) per 4-socket chassis
	•
	• SAP HANA TDI solution
	• SAP certified third-party hardware

Interconnect	• SGI NUMAlink 7 (NL7; 14.94 GBps bidirectional)

I/O Expansion Options	• 8-slot option plus disk riser (base chassis):
	  • 4 SATA or SAS 2.5-inch hard-disk drive (HDD) or solid-state disk (SSD) drive slots
	  • Up to 4 x8 and 4 x16 full-height slots
	• 12-slot option (expansion chassis):
	  • Up to 8 x8 and 4 x16 full-height slots

System Software	• SUSE Linux Enterprise Server for SAP Release 11 SP3 and 12 • Red Hat Enterprise Linux Release 6.6 and 6.7 for SAP HANA