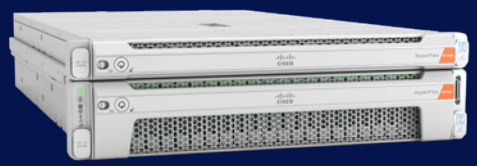
Modernize SAP Landscapes with Cisco HyperFlex Systems



If your SAP landscapes are siloed, sprawling, or running on outdated systems, it's time to modernize with Cisco HyperFlex™ systems.

Improved insight, decisions, and simplicity at lower cost

It's difficult to gain insight and make decisions when your SAP environments can't keep pace. Whether you need to run SAP applications and databases faster, migrate databases, manage data in a diverse landscape, or run SAP deployments locally or in containers in multicloud environments, Cisco® HyperFlex systems can help.

Our modernized hyperconverged infrastructure allows your data center to adapt to match the speed of your business at a lower total cost of ownership (TCO). This powerful platform offers hybrid, all-flash, and all-NVMe configurations, an integrated network fabric, and powerful data optimization features that bring the full potential of hyperconvergence to your SAP landscapes. The result is a cluster that powers up and configures itself in an hour or less and is ready to accept your SAP applications, databases, and related workloads.

Cisco and SAP: Innovation that delivers more for less

For years, we've worked with SAP to help ensure that SAP databases and applications run best on Cisco solutions. Our teams work together to produce best practices codified in Cisco Validated Designs that accelerate deployment and reduce risk, helping you improve your return on investment (ROI).

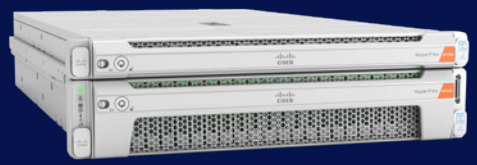
These innovations can help you:

- Modernize your SAP enterprise resource planning (ERP) platforms
- Run big data and analytic applications better and faster
- Accelerate the flow of information to decision-making processes
- Analyze information faster by distributing data-loading and analysis tasks across more servers
- Better access, process, and move information from multiple sources
- Unify management with your business application infrastructure

The hyperconverged infrastructure market is expected to reach USD$12.6 Billion by 2022, at a CAGR of 43.59% by 2022.

The Hyperconverged Market report, MarketsandMarkets

SAP HANA® Innovation Award Winner 2017



Cisco HyperFlex systems deliver consistent IT infrastructure performance to SAP applications.

Running SAP applications on high-performing hyperconverged systems saves time and money. You can tap into impressive capacity and performance improvements across CPU, memory, disk, and system I/O resources, without disrupting your operations or established business processes.

Simplicity

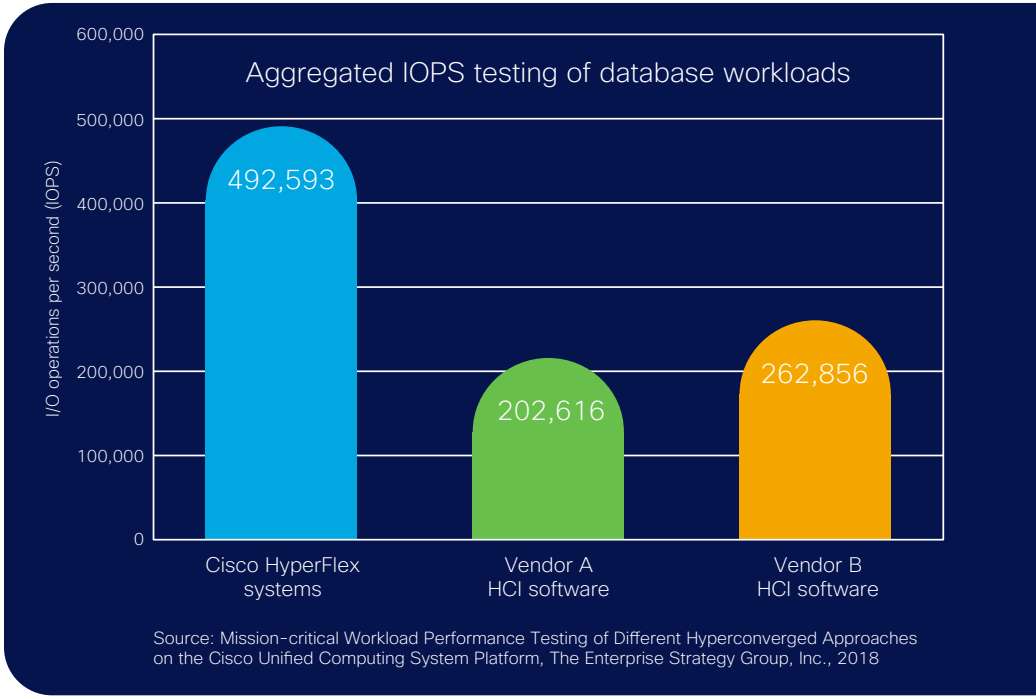
Cisco HyperFlex systems allow you to run your SAP applications and databases (Microsoft SQL, Oracle Database, and SAP HANA) on one platform and get predictable performance. All storage devices are combined into a distributed, multitier, object-based data store. A purpose-built, scale-out file system dynamically distributes data across the data store to accelerate read and write operations. As you scale, every new and existing component contributes processing power, storage capacity, and I/O responsiveness for faster results.

Proven performance

Cisco HyperFlex systems were the first hyperconverged solutions to be tested on the SAP SD Standard Application Benchmark. Building on that success, the Enterprise Strategy Group tested Cisco HyperFlex systems using HCIBench, an industry-standard testing tool. Months of baseline and iterative testing showed that HyperFlex systems handle more I/O—and handle it faster—than other tested platforms.

The report revealed:

- 3 times better latency performance for mission-critical workloads
- 2 times higher input/output operations per second (IOPS) availability
- 96 percent higher virtual machine performance consistency
- 30 percent cost savings



Source: Mission-critical Workload Performance Testing of Different Hyperconverged Approaches on the Cisco Unified Computing System Platform, The Enterprise Strategy Group, Inc., 2018

SAP HANA can be deployed a number of ways to align with your business and data center needs.

The SAP HANA database takes advantage of the low-cost memory, fast access, and data processing capabilities of multicore processors to provide better performance for your analytical and transactional applications. That's why our Cisco® UCS standalone appliances and Tailored Data Center Integration (TDI) solutions that work with existing infrastructure have been preferred SAP HANA platforms for years. Working with SAP, we certified initial Cisco HyperFlex systems to run in SAP HANA deployments, with virtualized application servers running on Cisco HyperFlex all-flash systems, and the SAP HANA database platform running on a Cisco UCS certified SAP HANA appliance.

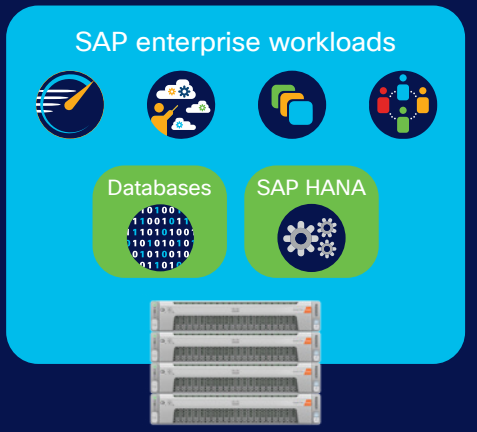
Now, SAP HANA is certified for use with Cisco HyperFlex systems. You can run your virtualized SAP application servers and your SAP HANA database on the same Cisco HyperFlex cluster to tap into massive amounts of data and processing power for faster analysis and results. If you need more computing power, you can add compatible compute-only Cisco UCS nodes to balance computing and storage needs.

Easy scalability. Cisco HyperFlex systems provide a single, massively scalable data store that puts your SAP HANA data in a place where it can be quickly retrieved and sent for processing. Independent scaling allows you to start small and scale to support hundreds or thousands of users and petabytes of data. As you add nodes to the cluster to expand capacity, data is automatically rebalanced across shared resources.

Access to capacity and bandwidth. The distributed architecture of Cisco HyperFlex sysems allows every virtual machine to use the storage input/output IOPS and capacity of the entire cluster, regardless of physical location. Running your SAP HANA database on the same cluster further reduces latency and delivers results.

Storage efficiency. Cisco HyperFlex systems optimize storage tiers for an excellent balance between price and performance. Data is continuously optimized with real-time, always-on deduplication, compression, and optional encryption, helping reduce your storage costs without affecting database or application performance.

All components deployed on Cisco HyperFlex systems



Need more computing power?

Add a fully compatible Cisco UCS compute-only node to your deployment.

Certified for SAP HANA

Check here to find the Cisco HyperFlex All Flash solution that is certified for SAP HANA.

HOME

With Cisco HyperFlex systems, you can develop and run any SAP application anywhere and access all your data.

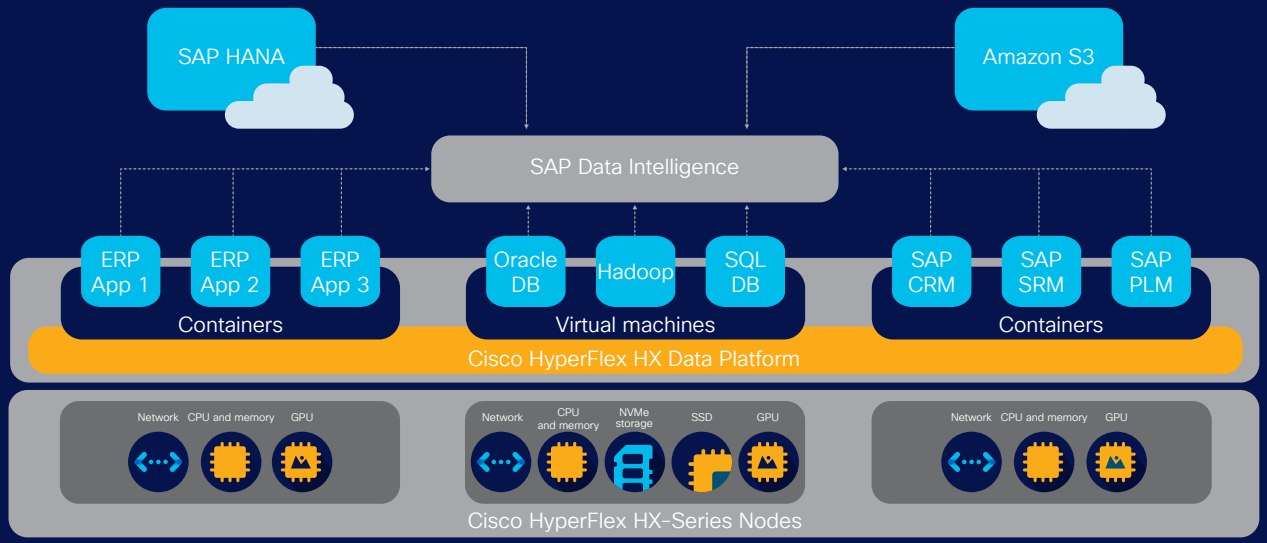
Containers

Containers are one of the most powerful technologies to emerge and change the way you develop, deploy, and manage applications. Working with SAP, we've helped ensure that Cisco Container Platform supports your SAP applications and workloads. This lightweight integrated stack addresses container orchestration, management, networking, load balancing, storage, security, and analytics and in a simple, easy-to-use platform. Based on open source components, there's no vendor lock-in and the platform runs anywhere, with consistent deployment across hyperconverged infrastructure, virtual machines, bare-metal systems, and public and private clouds.

SAP Data Intelligence

With SAP Data Hub and Cisco Container Platform running on Cisco HyperFlex systems, you can tap into your data wherever it is located. Data Intelligence is SAP's big data visualization and management tool. It allows your users to see data across your entire data landscape, pulling it from sources like Hadoop, Amazon S3, and SAP HANA and ERP. The comprehensive view it creates helps your users understand data, see the opportunities it presents, and get it to the teams who can leverage it most powerfully.

Read more about the Cisco Container Platform for SAP Data Intelligence.



Cisco HyperFlex systems and SAP Data Intelligence bring a new level of data access and insight to your business.

Proven solution

Cisco and SAP worked together to build an end-to-end validated and tested architecture so that you can run production-grade SAP Data Hub environments safely. Integrating SAP Data Hub with Cisco Container Platform, powered by Kubernetes and running on Cisco HyperFlex systems, you get persistent storage for your containers in a high-performance, easily managed environment. And you can run your production-grade environments safely on premises or in a hybrid cloud.

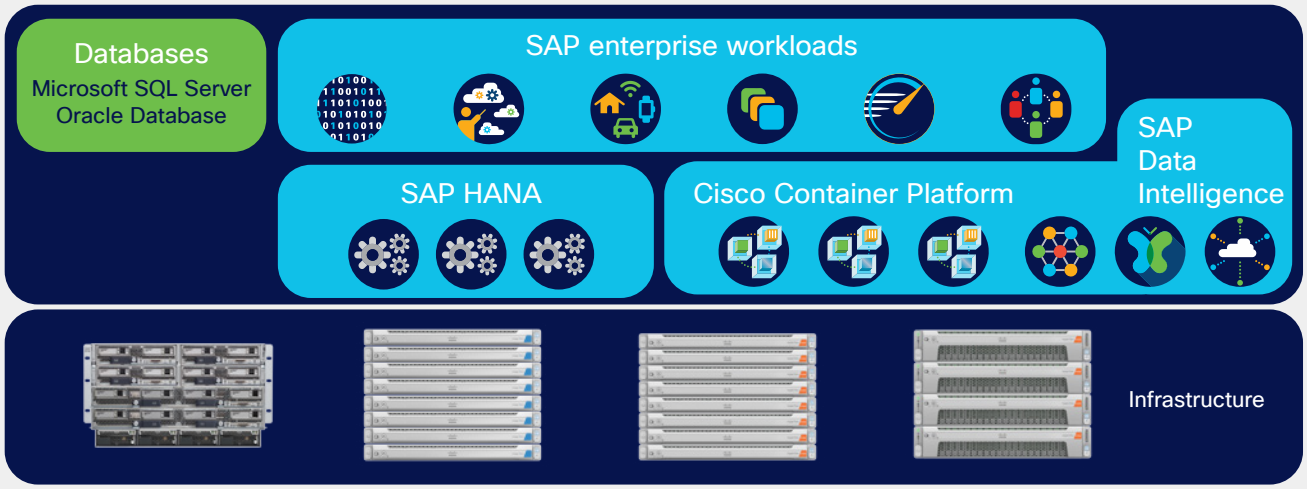
Solution architecture

With our solution, you simply run your production-grade SAP Data Hub environments on premises and extend those environments to where your data resides. That means your SAP and other applications remain as deployed, whether they run in bare-metal, virtualized, containerized, or cloud environments. SAP Data Hub extracts information from them and presents it so that your users can create powerful computation libraries, connect widely varying data types, and more.

Fast execution and insight

SAP Data Hub accelerates data processing by distributing tasks to the environments in which the data resides. Data is processed in place, eliminating the multistep process of reading, transferring, processing, and returning data to its source location.

By bringing together data from disparate sources and processing it in new ways, your teams can access information and turn it into wisdom, regardless of location, application, or format, for better business results.



Cisco HyperFlex solutions for SAP help you reveal the insights hidden in your data in less time and at lower cost.

Operate efficiently

With Cisco HyperFlex systems, your IT staff can:

- Integrate. A unified management API connects our systems into existing environments, operations processes, and higher-level management tools from Cisco and other vendors.
- Simplify. Whether your organization uses Oracle Database, Microsoft SQL Server, or SAP HANA, you can run your database and SAP applications on the same platform.

"HyperFlex's approach ensures high performance of Microsoft SQL and Oracle databases and critical [SAP] applications with faster delivery of the environment, lower costs, and more effective management."

Edivaldo Rocha, CEO, CorpFlex

Learn more

For more information

We can help you build a bridge between SAP data and intelligence. With Cisco data center solutions for SAP, you can unleash the potential of your SAP application data, accelerate SAP application delivery, and produce better business outcomes.

Cisco Validated Designs

Cisco makes it easy to build cost-effective IT infrastructure for SAP environments. Verified, lab-tested architectures provide detailed design and implementation guidebooks that help reduce risk and guesswork by giving your architects and administrators step-by-step guidance. By following the guidelines in these Cisco Validated Designs, you can use a proven approach for the deployment, use, and management of your SAP infrastructure resources.

To search the library of Cisco Validated Designs, visit the Cisco Design Zone.

Website and collateral library

- Cisco HyperFlex SAP Modernization Platform
- SAP Applications on Cisco UCS
- Cisco Container Platform

Infographics

- ROI Summary for Cisco UCS as a Platform for SAP HANA and Other SAP Mission Critical Applications

Solution overviews

- Cisco UCS Integrated Infrastructure for Big Data with SAP Vora
- FlashStack for SAP

White papers

- Cisco C880 M4 Server with SAP HANA Tailored Data Center Integration
- Deploy a Cisco HyperFlex All-NVMe Hyperconverged Infrastructure Solution for SAP HANA
- Running SAP Production Landscapes in a Cisco HyperFlex 2.0 All-Flash System with an SAP HANA Appliance