

Cisco Unified Computing System

Cisco Unified Computing System: Redefine the potential of your data center

The Cisco Unified Computing System™ (Cisco UCS®) is a revolutionary computing architecture designed for IT innovation and business acceleration. It enables fast IT by combining computing, networking, and storage infrastructure with management and virtualization capabilities to offer exceptional speed, simplicity, and scalability. This unique Cisco architecture provides pools of policy-based composable infrastructure that customers can optimize for traditional workloads, data analytics, and cloud-native applications, all within a common operating environment with open APIs for broad interoperability and automation. Cisco UCS has redefined computing to enhance application performance and scalability, simplify infrastructure management, reduce costs, and accelerate IT delivery to the business (Figure 1).

IT agility delivered

With Cisco UCS, you can:

- Reduce your Total Cost of Ownership (TCO) at the platform, site, and organizational levels
- Deliver applications and services faster across physical and virtual environments
- Improve application performance
- Scale without complexity
- Eliminate redundant infrastructure
- Increase IT staff productivity and business agility

Challenges of increasing demand and complexity

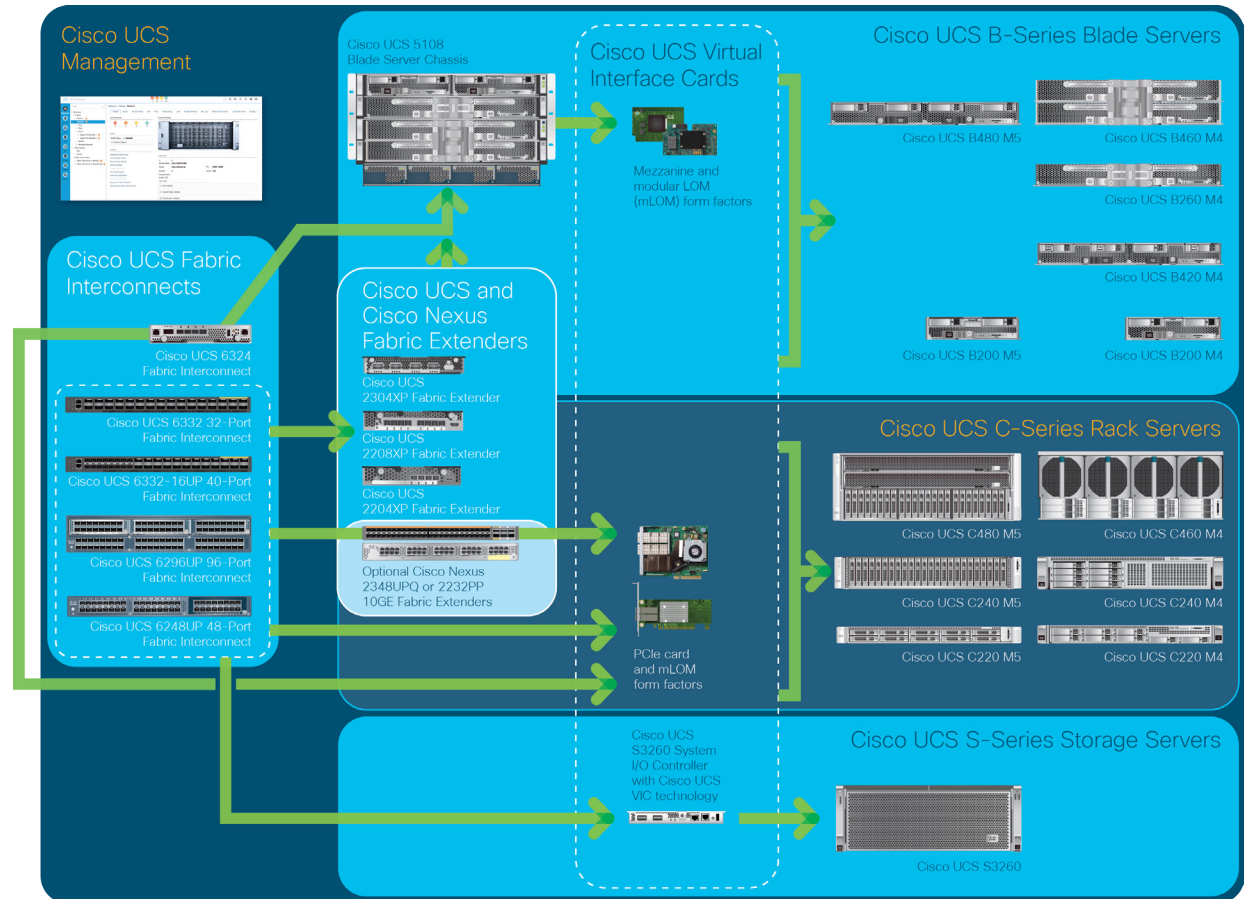
Complex data center infrastructure hampers performance, increases operating costs and risk, and saps resources otherwise available for innovation. Cisco addresses these challenges with a radically simplified, fabric-centric architecture packed with innovation designed to support a wide range of workloads and IT operating models: the Cisco UCS platform.

Cisco UCS helps organizations:

- Deliver critical applications with industry-leading performance, availability, scalability, and security
- Accelerate the delivery of new application services
- Incorporate a wide range of storage, operating system, hypervisor, and management tools to address any application requirement
- Advance migration to a unified computing architecture with a complete set of plan-build-manage IT lifecycle services designed to reduce risk and increase performance

Cisco's innovative fabric-centric solution provides industry-leading application performance, lower-cost computing, and opportunity for real IT innovation.

Figure 1. Cisco Unified Computing System



Innovations that support business benefits

Cisco UCS is a radically simplified architecture that supports a wide range of workloads and IT operating models. Whether your data center consists of 5 servers or 10,000, all resources are interconnected and centrally managed.

Why Cisco?

Cisco UCS continues our long history of innovation in architecture, technology, partnerships, and services. We take a systems approach to computing that combines network intelligence and scalability through innovative Application-Specific Integrated Circuits (ASICs), integrated management, and standard computing components. Cisco offers a complete set of plan-build-manage IT lifecycle services designed to reduce risk and increase performance to accelerate your migration to unified computing.

System features include the following:

- Single unified system: Our approach offers the only true unification of servers, networking, and storage. All the connections are already made for you through a high-performance computing fabric and centralized management.
- Intelligent infrastructure: Hardware is automatically configured by application-centric policies, ushering in a new era of speed, consistency, and simplicity for data center operations. Cisco UCS brings the flexibility of virtualized systems to the physical world in a way that no other server architecture can.
- Integrated management: Cisco UCS has an automation-friendly design that lets an entire ecosystem of high-level tools configure and manage servers through a complete, open, and fully documented API.
- Interoperability: Cisco UCS supports tens of thousands of applications through certifications and integration with partners such as Microsoft, VMware, Red Hat, Citrix, Splunk, Cloudera, Hortonworks, MapR, SAP, and Oracle.
- Integrated infrastructure: Cisco has partnered with major storage leaders Pure Storage, NetApp, IBM, and Dell EMC to integrate their systems with the Cisco UCS and Cisco Nexus® switches to deliver validated infrastructure for any application, reducing time and risk for your deployments.

Customer case studies

Logistics leader improves availability and reduces costs with Cisco UCS and Cisco Nexus data center technology

Estafeta moved from RISC-based servers that were costly and hard to configure to an easy-to-deploy and easy-to-maintain Cisco UCS solution.

- Reduced system administration time by up to 45 percent
- Reduced time needed to deploy new servers by 20 percent
- Reduced overall IT costs by 30 percent

“The move’s success was easy to measure—no news was good news. It was completely transparent,” says José Luis Camacho, IT infrastructure manager at Estafeta.

For full details, visit the [Estafeta case study](#).

Hospital builds reliable, secure EHR infrastructure with Cisco UCS and Splunk

With Cisco UCS, Union Hospital of Cecil County experienced dramatic results:

- Freed time for patient care by keeping access to Electronic Health Records (EHR) fast
- Decreased IT footprint by 75 percent, reducing power and cooling costs
- Fulfilled server requests in one day instead of one week

For more information

For more information, visit [Cisco Unified Computing System](#).

“We can do more with our electronic health records system because we’ve built a solid foundation with Cisco and Splunk,” says Anne Lara, CIO of Union Hospital of Cecil County.

For full details, visit the [Union Hospital of Cecil County case study](#).

T2 Systems helps customers improve parking with unified data center solution

“We’re spending far less time on hardware management—the equivalent of nearly two full-time employees. That’s allowing us to focus 90 percent of our team’s efforts on creating new tools and adding value,” says Grant Dawson, vice president for information technology at T2 Systems.

Additionally, T2 Systems has:

- Achieved a 60 percent smaller hardware footprint than what would have been required with another vendor
- Reduced electric bills with a 40 percent reduction in kilowatt hours

For full details, visit the [T2 Systems case study](#).