



Cisco UCS™ with Intel®
Xeon® Processors

Benefits

- We span the spectrum of performance, memory, and capacity needs.
- Cisco® reference architectures and Cisco Validated Designs greatly reduce your risk by providing best-practice designs for you to follow.
- We partner with industry-leading vendors of data-intensive applications.
- Policy-based management increases operation efficiency and reduces total cost of ownership (TCO) by as much as 50 percent.

Cisco Solutions for Data Intensive Workloads

Digital transformation is driving dramatic growth in unstructured data. And it's growing more rapidly than most IT leaders believe, propelled by big data, Internet of Things (IoT), systems telemetry, collaboration, and streaming video. Everyone is challenged to forecast and be prepared for this vast wave of data. And end-user expectations for speed and agility are greater than ever.

The way your company consumes data is changing rapidly. Traditionally, data was stored in a warehouse and accessed intermittently. Now data has become the lifeblood of every organization. Your company needs to access and analyze data to quickly generate insights in real time. Data is getting “hotter” and more active than ever, moving from a stationary stack to a high-velocity flow.

Emerging applications that let you put your data to work demand a new balance of capacity and performance to tightly couple your data and computing capacity. This trend—in combination with new technologies such as software-defined storage and scale-out object storage—is shifting data from traditional storage to x86-architecture storage-optimized servers.

A Spectrum of Solutions

We offer a broad spectrum of solutions for data-intensive application workloads, including:

- Big data and analytics
- Media-streaming and film-production applications
- Video-surveillance applications
- Data-protection solutions
- Scale-out object storage, usually of unstructured data
- Collaboration and messaging applications

The key to cost-effective solutions is the capability to balance infrastructure so that it better matches the needs of your workloads. Then you must be able to expand storage quickly as your data grows.

We offer solutions that give you more freedom to adjust the ratios of CPU, memory, and disk capacity to efficiently accelerate your data-intensive applications. Together, Cisco UCS® C-Series Rack Servers and S-Series Storage Servers, both powered by Intel® Xeon® processors, let you establish the right balance between CPU core count, storage capacity, and memory footprint (Figure 1).

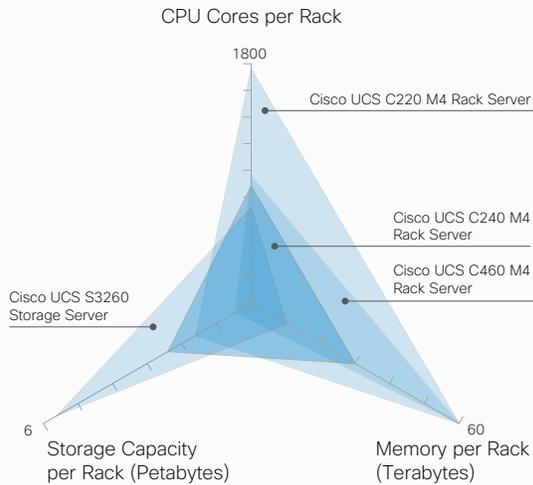


Figure 1 Our Solutions for Data-Intensive Workloads Offer a Comprehensive Set of Choices for Balancing Performance, Memory, and Storage Capacity

- **The Cisco UCS C240 M4 Rack Server** combines the highest ratio of CPU cores to disk storage in a rack for workloads such as big data.
- **The Cisco UCS C220 M4 Rack Server** provides higher core-to-spindle ratios with the best rack-level CPU density for highly parallelized workloads.
- **The Cisco UCS C460 M4 Rack Server** offers the highest ratio of memory to disk drives for memory-intensive applications.
- **The Cisco UCS S3260 M4 Storage Server** lets you concentrate the most storage in a single rack.

Cisco UCS C-Series and S-Series servers are powered by Intel Xeon processors and can be managed as standalone servers, but the real benefit of these servers is that they can be managed just like your other infrastructure with Cisco Unified Computing System™ (Cisco UCS) management.

Hybrid Cloud

Storing data in the public cloud is helpful for mobile applications, incubating new business opportunities and for archiving frozen data. But as your data grows and you access it more frequently, cloud services become more expensive, and the sovereignty of the data is not under your control. With Cisco UCS S-Series and Cisco ONE™ Enterprise Cloud Suite, we can help you implement a hybrid strategy that combines the best attributes of on-premises and public cloud storage to meet your needs and reduce total cost of ownership (TCO) by as much as 50 percent.

We Deliver

We help you activate your data with a spectrum of solutions that deliver:

- **Reduced risk and complexity:** We have already done the heavy lifting. All you have to do is follow the recipe for success. Cisco® scale-out object storage solutions are jointly designed and tested reference architectures for simplified solution procurement and fast deployment.
- **Versatility:** Cisco UCS S-Series servers scale from hundreds of terabytes to petabytes in minutes with the architectural flexibility for the best performance and capacity balance for scale-out storage needs.
- **Operational efficiency:** Cisco UCS management offers a consistent policy-based management framework for your computing, storage, and networking resources. Built-in automation makes it easy to add capacity as your data grows.
- **No lock-in:** We have developed a broad ecosystem of partners who offer proven modern object-storage solutions for enterprise and web-scale environments.

For More Information

Discover how our products can help you:

- cisco.com/go/ucs
- cisco.com/go/storage

Explore the solutions we offer:

- cisco.com/go/bigdata
- cisco.com/go/sds
- cisco.com/go/dataprotection