Cisco UCS X-Fabric Is Here

Support a wide range of workloads with the Cisco UCS X-Series Modular System

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Adaptable

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Cloud operated

Applications are the heartbeat of your business

But many applications need specialized infrastructure to make them perform at their best. In-memory databases need large amounts of nonvolatile memory. Big data applications need vast amounts of local disk storage. Artificial intelligence and machine learning apps need GPU accelerators. Virtual desktop environments need GPUs to enhance user experience. Supporting this range of applications once required a diverse set of server types including blade and rack servers—until now. Today you can support the entire range of requirements with the Cisco UCS® X-Series Modular System with Intersight™

Cisco UCS X-Fabric Technology gives you the capability to support a wider range of workloads—including those typically supported on rack servers—with the benefits of shared power, cooling, networking, and Cisco Intersight management. This first generation of X-Fabric Technology extends each compute node's PCIe Gen4 capacity to include devices such as NVIDIA® GPUs.

Benefits

- **Adapt to any application** with a single platform that blurs the line between blade or rack servers
- **Future ready** for new X-Fabric devices as they are made available
- **Cloud operated** with the Cisco Intersight™ cloud operations platform

Blurring the line

The Cisco UCS X-Series modular system flexible design combines the density and efficiency of blade servers with the expandability of rack servers for better performance, automation, and efficiency. With compute nodes only, you can support applications such as big data and in-memory databases with their exceptional on-board storage and memory capacity. PCIe expansion nodes connected to compute nodes through Cisco UCS X-Fabric Technology can support applications such as artificial intelligence, machine learning, and virtual desktop infrastructure. These applications are enhanced through GPU accelerators that populate the node.

This approach helps you:

- **Standardize** on a single system to support a wider range of applications, reducing staff and support costs
- **Simplify operations** by eliminating silos and blurring the line between blade and rack servers
- **Increase operational efficiency and reliability** through shared power, cooling, and management

Future ready

Cisco UCS X-Fabric Technology is how we have engineered the Cisco UCS X-Series to be ready for whatever connectivity innovations the future brings. We chose 'X' because it is the variable that can change over time.

In this first generation of X-Fabric Technology, Cisco UCS 9416 X-Fabric Modules connect server nodes to Cisco UCS X440p PCIe Nodes. The first tested and validated devices are NVIDIA GPUs appropriate for accelerating AI/ML and VDI applications. As time goes on, we plan to add more PCIe cards to our list of qualified devices.

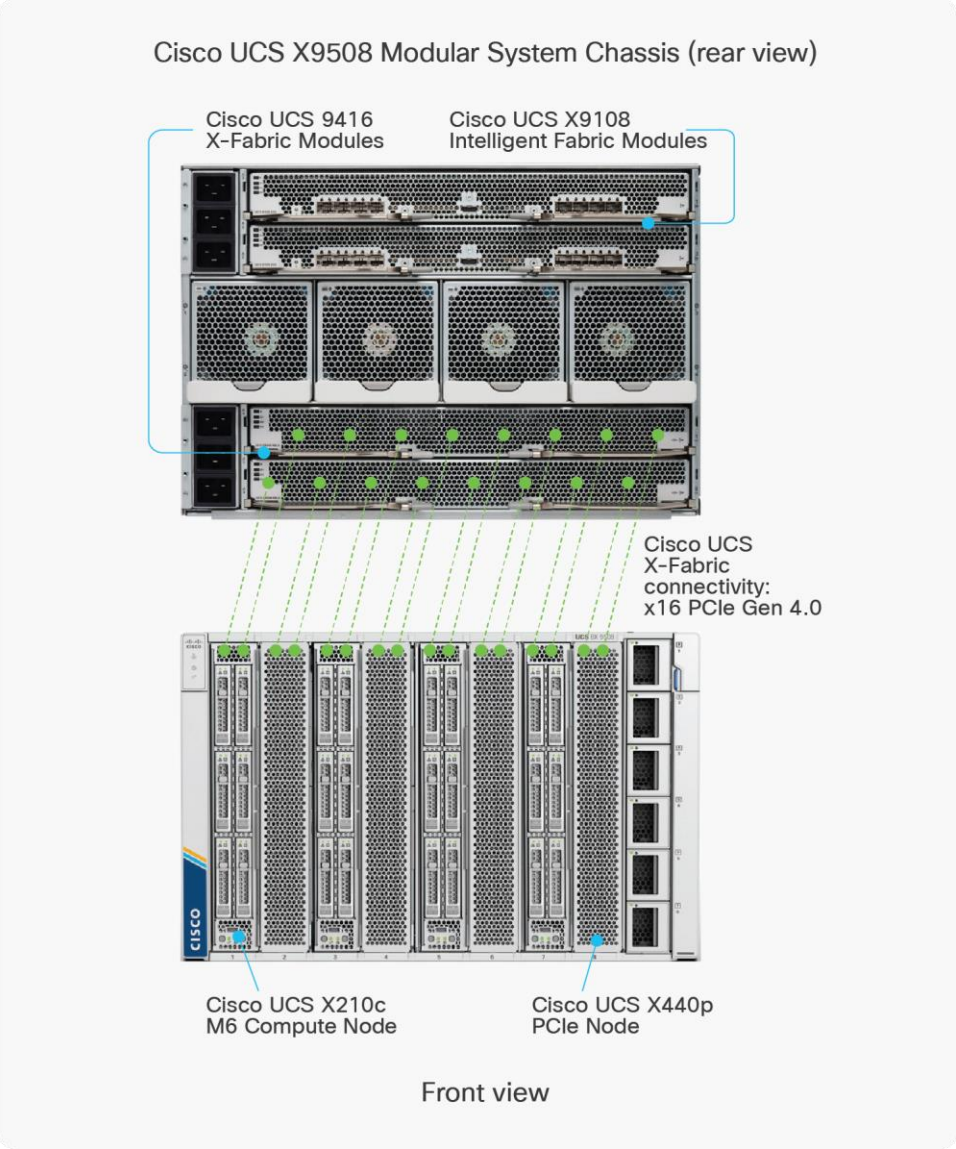
As new interconnect technologies emerge, such as PCIe Gen 5.0 and CXL, new X-Fabric modules can provide more sophisticated capabilities.

Cloud operated

Cisco UCS X-Series is powered by the Cisco Intersight cloud operations platform. This software-as-a-service (SaaS) offering helps you define and shape compute, GPU, and fabric resources to the needs of your applications.

Cisco UCS X-Series with Intersight is designed to change and evolve as new technologies become available. Enhanced I/O, expanded NVMe capacity, pools of nonvolatile memory, liquid cooling, silicon photonics—all of these are future possibilities that the Cisco UCS X-Series is ready to support. With SaaS-based management, you get a constant stream of management innovations with new features to drive better outcomes. You don't have to worry about inconsistency from product to product or management that doesn't support new hardware features. They all arrive at the same time and they all work together.

Cisco UCS X-Fabric connectivity



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