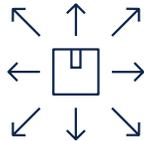ılıılı
CISCO

The bridge to possible

Cisco UCS X-Fabric Technology

Adaptable

Future-ready

Cloud-operated

Applications are the heartbeat of your business

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 applications need GPU accelerators. Virtual desktop environments need GPUs to enhance user experiences. 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 Gen 4.0 capacity to include devices such as Intel® and NVIDIA GPUs.
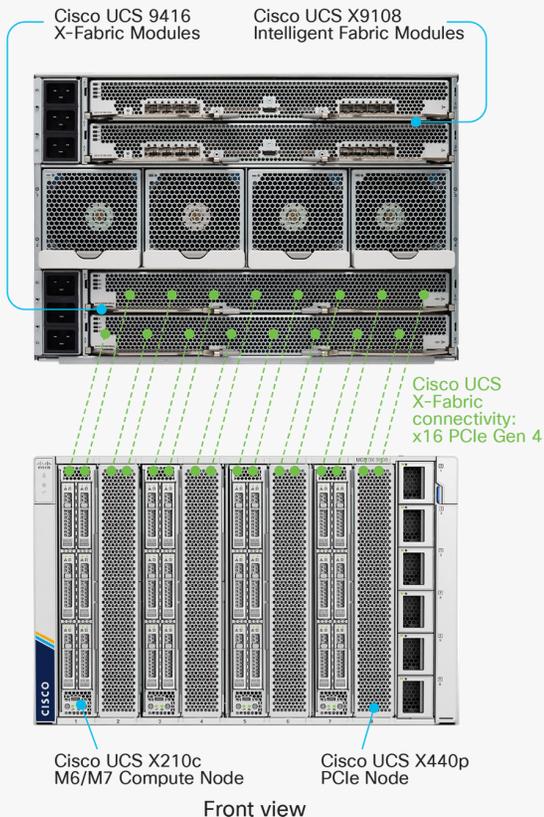
Blurring the line

The Cisco UCS X-Series modular system's 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.

Benefits

- Adaptable to any application with a single platform that blurs the line between blade and rack servers

- Future-ready for new X-Fabric devices as they are made available

- Cloud-operated with Cisco Intersight™

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CISCO

The bridge to possible

Cisco UCS X-Fabric connectivity

Cisco UCS X9508 Modular System Chassis (rear view)

Cisco UCS 9416
X-Fabric Modules

Cisco UCS X9108
Intelligent Fabric Modules

Cisco UCS
X-Fabric
connectivity:
x16 PCIe Gen 4

Cisco UCS X210c
M6/M7 Compute Node

Cisco UCS X440p
PCIe Node

Front view

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
- Achieve your sustainability goals when modernizing your infrastructure

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.

The first generation of X-Fabric Technology, Cisco UCS 9416 X-Fabric Modules connect UCS X210c and X410c server nodes to Cisco UCS X440p PCIe Nodes. Tested and validated devices are Intel and 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.

Learn more

For more information about modernizing your infrastructure with Cisco UCS X-Fabric Technology, go to https://cisco.com/go/ucsx. For all Cisco UCS Servers, please visit https://www.cisco.com/go/ucs.