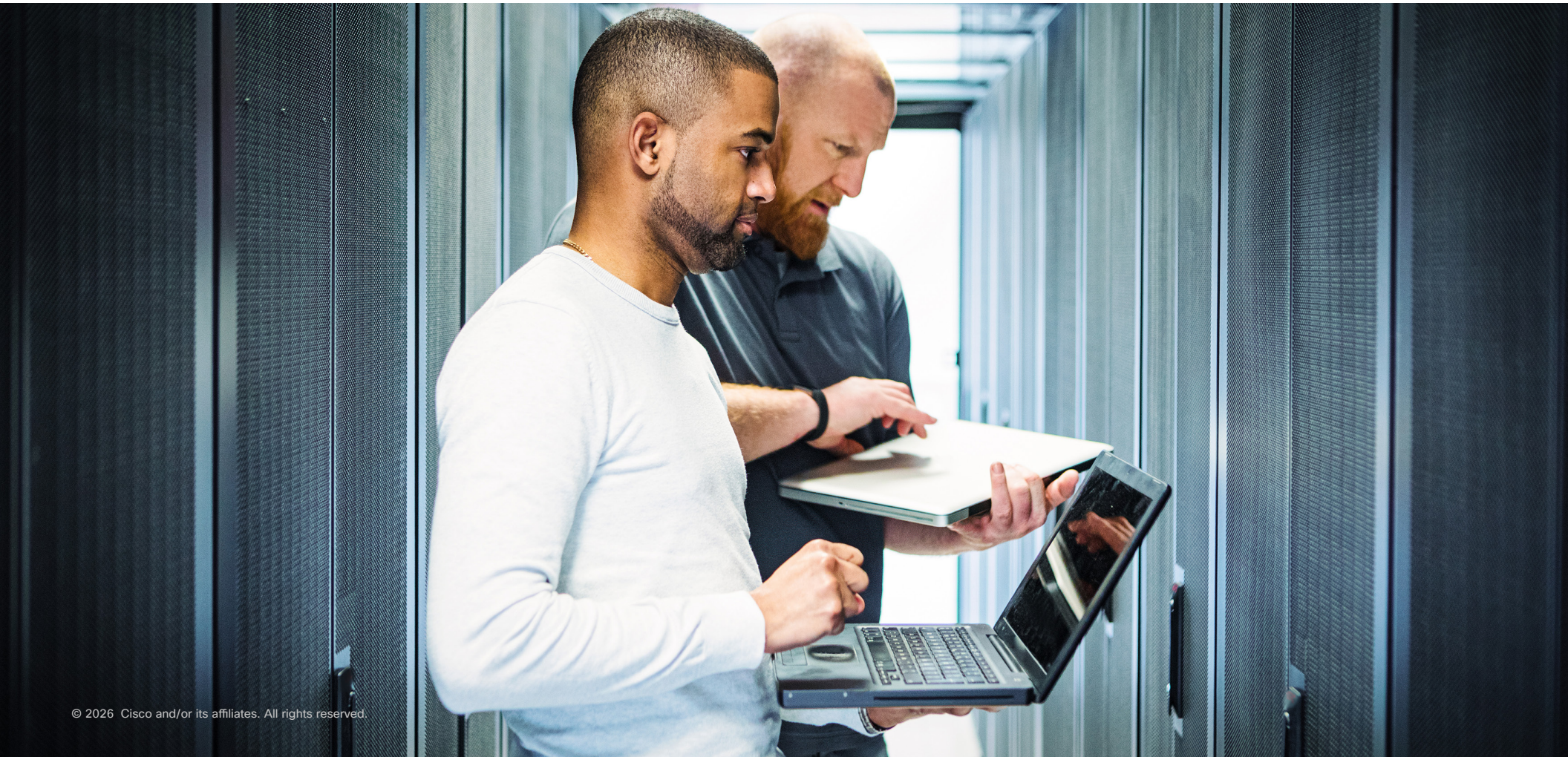
Cisco HCI X-Series with Nutanix on AMD EPYC



Benefits

- **Consistent, policy-driven deployment** across data center, edge, and ROBO environments.
- **Higher performance and efficiency** with NEW Cisco UCS® X215c M8 All-NVMe Nodes powered by 5th Gen AMD EPYC™ processors.
- **Unified, cloud-operated lifecycle management** through Cisco Intersight® and Nutanix Prism Central.
- **Flexible cluster design** supporting Cisco UCS X-Series modular servers and Cisco UCS C-Series rack servers in the same Nutanix cluster (IMM).
- **Reduced operational complexity** with automated BIOS, identity, network, and boot policies aligned to Cisco and Nutanix best practices.
- **Optimized density** through support for up to eight hyperconverged infrastructure (HCI) nodes in the 7RU Cisco UCS X9508 Chassis.

Modern, cloud-managed HCI with new AMD EPYC Compute for Cisco UCS X-Series

Cisco Compute Hyperconverged X-Series with Nutanix integrates Cisco UCS compute, unified fabric, and cloud-operated management with the Nutanix Cloud Platform to deliver a modern, adaptable HCI architecture for distributed environments—from core data centers to remote and edge locations.

This release introduces the **Cisco UCS X215c M8 All-NVMe** compute node, **powered by 5th Gen AMD EPYC processors**, bringing a new high-performance, high-efficiency compute option to the Cisco UCS X9508 Chassis. The X215c M8 enhances the HCI platform with improved performance-per-watt, large core counts, and low-latency NVMe storage—ideal for scale-out workloads and distributed applications.

The solution supports:

- **Cisco UCS X-Series** modular servers with Intelligent Fabric Modules (IFM) or Cisco UCS X-Series Direct for smaller footprints.
- **Cisco UCS C-Series** rack servers in both Intersight Standalone Mode and Intersight Managed Mode.
- **Mixed clusters**, where modular and rack servers operate together when connected to the same pair of Cisco UCS fabric interconnects.

Because Intersight manages the entire Cisco UCS domain, organizations gain a uniform operational model for deployment, monitoring, and lifecycle management across all connected servers.

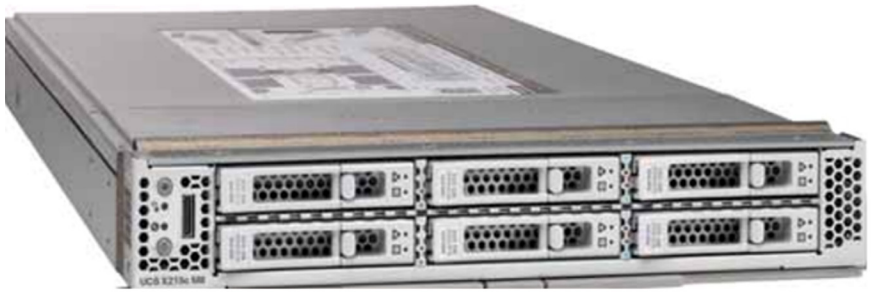


Figure 1. Cisco UCS X215c M8 All-NVMe Node

Automated, cloud-operated HCI featuring AMD-Based Cisco UCS X-Series Nodes

Cisco Intersight integrates with Nutanix Prism Central and Nutanix Foundation Central to create a unified automation workflow for Nutanix cluster deployment. Once servers are claimed, Intersight automatically builds all required configuration policies—identity pools, networking, BIOS settings, boot order, and connectivity—according to Cisco and Nutanix best practices.

With these policies applied, Nutanix Foundation Central orchestrates the full cluster build, including imaging the hypervisor (Nutanix AHV hypervisor or ESXi), deploying Nutanix AOS, and provisioning the cluster without manual intervention.

What is uniquely enabled by this solution

1. **Introduction of AMD EPYC** compute in Cisco UCS X-Series HCI

The Cisco UCS X215c M8 All-NVMe Node provides:

- High-density AMD EPYC cores for performance-intensive workloads.
- NVMe-only storage for low-latency I/O.
- Greater efficiency for distributed HCI and edge environments.
- A new compute choice that expands the Cisco UCS X-Series portfolio

2. Zero-touch Nutanix cluster creation: Server discovery, firmware upgrades, profile creation, and imaging are unified under Cisco Intersight and Nutanix Foundation Central.

3. Multi-form-factor flexibility: Cisco UCS X-Series modular servers and Cisco UCS C-Series rack servers can be used together in the same Nutanix cluster, providing investment protection and deployment choice.

4. High-density, scalable architecture: Up to eight HCI nodes fit in a single X9508 chassis, creating one of the industry's highest-density modular HCI platforms.

5. Edge-to-core consistency: Cisco UCS X-Series Direct minimizes hardware at the edge while preserving the same management and deployment model used in larger data centers.

This creates an HCI platform that is simple to operate, consistently deployed, and flexible enough for modern application demands.

Learn more

- Cisco Hyperconverged with Nutanix: https://www.cisco.com/go/hci.
- Cisco Intersight: https://www.cisco.com/go/intersight.
- Cisco UCS X-Series systems: https://www.cisco.com/c/en/us/products/collateral/hyperconverged-infrastructure/compute-hyperconverged/x215c-m8-all-nvme-node-ds.html.
- Cisco Compute Hyperconverged X-Series with Nutanix X215c M8 All-NVMe Compute Node guide as: https://www.cisco.com/c/dam/en/us/products/collateral/hyperconverged-infrastructure/compute-hyperconverged-hcixnx215c-m8-specsheet.pdf.
- Cisco Compute Hyperconverged X-Series M8 with Nutanix (CCHC + N) Ordering Guide: https://www.cisco.com/c/en/us/td/docs/HCI-Series/HCI-ordering-guide/hcix_m8_ordering-guide-nutanix-compute.html.
- Nutanix Documentation: http://www.portal.nutanix.com.

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