Cisco Compute-Only C225 M8 All NVMe Node Family

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Cisco and Nutanix have partnered to introduce the IT industry's most complete hyperconverged solution by integrating and validating Cisco® servers, storage, networking, and SaaS operations with the Nutanix hybrid multicloud platform. Cisco Compute Hyperconverged with Nutanix is built, managed, and supported holistically to deliver a more seamless experience, foster innovation, and accelerate customers' hybrid-cloud journeys. Modern workloads require modern flexibility. Traditional hyperconverged solutions require scaling compute and storage together. When you need to scale compute capacity without adding storage, Cisco Compute-Only (CO) nodes provide that critical capability — empowering you to design clusters that match your exact requirements.

Product overview

Cisco Compute-Only C225 M8 Node family

Expanding Cisco Compute Hyperconverged node cluster with Cisco Compute-Only nodes

The Cisco Compute-Only node solution enables you to expand the compute resources of Cisco hyperconverged clusters running Nutanix by adding Cisco UCS®-certified servers without additional storage. These storage-less, Compute-Only (CO) servers certified by Cisco integrate seamlessly into your existing or new hyperconverged Nutanix cluster, allowing organizations to efficiently support compute intensive applications by scaling compute resources independently of storage infrastructure.

Key benefits

- Cost-effective scaling for compute-heavy workloads
- Flexibility in cluster design

Table 1. Minimum cluster requirements for Cisco Compute-Only nodes

Cluster attributes	Hyperconverged (HCI) node with Cisco Compute-Only node
Number of nodes	Minimum of 3 HCI nodes and minimum of 2 CO nodes
Nodes ratio	Nutanix recommends the following nodes ratio: 1 CO: 2 HCI (default) 1 CO: 1 HCI (This is supported only when the total number of VMs is less than or equal to 128 times the number of HCI nodes)
Hypervisor	Hyperconverged node: Nutanix Acropolis Hypervisor (AHV) only Compute-only node: Nutanix Acropolis Hypervisor (AHV) only
Management	Cisco Intersight® Managed Mode (IMM)
Licensing	NCI licenses on a per-core basis For more information about NCI licenses, see NCI section in Nutanix Cloud Platform Software Options.
Nutanix Cloud Platform software	The same as Cisco Compute Hyperconverged with Nutanix

Cisco Compute-Only node connected to Everpure Flash Array (FlashStack with Nutanix)

Everpure FlashArray//X and FlashArray//XL deliver mission-critical performance with the efficiency and resiliency that is missing from legacy arrays. FlashArray//X and FlashArray//XL pack more IOPS, ultra-consistent latency, and greater scale into a smaller footprint. Nondisruptive upgrades, always-on availability, and built-in data protection ensure workloads are always running while cutting risk. FlashArray//XL is designed to provide the highest performance density with a level of operational and management simplicity. FlashArray//C delivers a balanced all-flash storage solution optimized for file services and general-purpose workloads. With predictable performance, streamlined operations, and built-in cyber resiliency, it keeps applications consistently secure and positions organizations to outperform capacity-optimized, all-flash, and hybrid storage alternatives.

Nutanix Cloud Platform (NCP) consolidates computing, storage, and networking into a unified pool. It uses Nutanix Acropolis Operating System (AOS) for storage, Nutanix Acropolis Hypervisor (AHV) for virtualization, and Nutanix Prism Central for centralized management across environments.

The Cisco Compute-Only node with Nutanix Cloud Platform (NCP) and Everpure FlashArray solution delivers a disaggregated infrastructure architecture that enables independent scaling of compute and storage resources. This solution combines industry-standard Cisco Compute-Only node servers running Nutanix AHV and AOS connected to external Everpure FlashArray. This architecture leverages Everpure technology that is optimized for enterprise workloads. The FlashStack solution with Nutanix integration provides organizations with the agility to adapt infrastructure resources dynamically while maintaining enterprise-level reliability and performance.

Key benefits

- **Independent scalability:** Scale compute and storage resources separately based on workload demands.
- **Enterprise-grade protection:** Utilize built-in data protection and disaster recovery capabilities.
- **Hybrid-cloud readiness:** Seamlessly extend operations across on-premises and cloud environments.
- **Investment protection:** Use Nutanix Cloud Platform with existing external storage.

Table 2. [Need caption]

Attributes	Cisco Compute-Only (CO) node connected to Everpure FlashArray
Cisco Compute-Only nodes	Nutanix Foundation allocates the following minimum resources to the CVM: CVM logical cores: 16 CPU physical cores per socket: 16 vRAM (in GiB): 32 (Please leverage Nutanix Sizer for all customer workload sizing) M.2 boot drives with M.2 RAID controller (A minimum 480 GB is recommended) Storage protocol: NVMe over Fabric (NVMeoF) over TCP A 25Gb Ethernet network connection is recommended between Cisco Nutanix Compute cluster and Everpure FlashArray. (10Gb will be supported) A minimum of 3 CO nodes
Hypervisor	Nutanix AHV only
Management	Cisco Intersight Managed Mode (IMM)
Everpure	FlashArray//, FlashArray//XL, FlashArray//C
Nutanix Cloud Platform software	Supported Nutanix software: • Nutanix Cloud Infrastructure (NCI) • Nutanix Cloud Manager (NCM) • Nutanix Cloud Platform (NCP) • Nutanix Kubernetes Platform (NKP)
Licensing	Nutanix Cloud Infrastructure (NCI) licenses on a per-core basis Nutanix Cloud Infrastructure: Compute (NCI-C) (2000 cores minimum) For more information about NCI licenses, see NCI section in Nutanix Cloud Platform Software Options.

The Cisco Compute-Only C225 M8 Node family incorporates 5th Gen AMD EPYC Processors with 150 percent more cores per socket designed using AMD's chiplet architecture. With advanced features such as AMD Infinity Guard, compute-intensive applications can see significant performance improvements and reap other benefits such as power and cost efficiencies.

The Cisco Compute-Only C225 M8 Node can be repurposed as an HCI node by adding a drive controller and drives. For more information, please refer to Cisco Compute Hyperconverged with Nutanix-HCINX225 M8 All-NVMe Server specification document.

These servers can be interconnected and managed in:

- **Intersight Managed mode:** The nodes are connected to a pair of Cisco UCS 6400 Series, a pair of Cisco UCS 6500 Series, or a pair of Cisco UCS 6600 fabric interconnects that are entirely managed from Intersight (SaaS, PVA, or CVA). All servers are connected to the same pair of fabric interconnects.

Features

Table 3. Summary of features of Cisco Compute-Only C225 M8 Node

Feature	Benefits	
Memory	• High memory capacity • Up to 3 TB memory (12 x 256 GB DDR5 DIMMs)	
Processors	5th Gen AMD EPYC processors (Turin) • Massive processing power with up to 160 cores per socket • High-speed DDR5 memory technology for up to 6400 MT/s • Advanced capabilities, such as AMD Infinity Guard, enhance security in virtualized environments • Designed for compute-intensive applications	
Unified network fabric	• Wire-once deployment model, eliminating the need to install adapters and re-cable racks and switches when changing I/O configurations • Fewer interface cards, cables, and upstream network ports to purchase, power, configure, and maintain	
Cloud-based services and management	Cisco Intersight simplifies infrastructure operations across on-premises data centers, edge sites, and public clouds • Use a software-as-a-service platform that bridges applications with infrastructure • Correlate visibility and management across bare-metal servers, hypervisors, and application components • Transform operations with artificial intelligence to reach needed scale and velocity	Nutanix Cloud Platform (NCP) includes Nutanix Cloud Infrastructure (NCI or NCI-C), Nutanix Cloud Management (NCM), and desktop services • NCI unifies compute, storage, and network, hypervisors, and containers, in public or enterprise clouds • NCM offers customers simplicity and ease of use to build and grow their cloud deployments and realize rapid ROI, by providing intelligent operations, self- service and orchestration, visibility, and governance
Security	• Trusted Platform Module (TPM), a chip (microcontroller) that can securely store artifacts, including passwords, certificates, and encryption keys, which are used to authenticate the platform (node). Supports TPM 2.0 • Software-based data-at-rest encryption and microsegmentation	

Product specifications

Table 4. Specifications for Cisco Compute-Only C225 M8 Node

Feature	Common specifications across the Cisco Compute-Only C225 M8 Node family
Chassis	1RU of rack space per node
Processors	One 5th Gen AMD EPYC Processors
Memory	24 DDR5-5600 DIMM slots (12 DIMMS per CPU): 16, 32, 48, 64, 96, or 128 GB at up to 6400 MT/s for up to 3 TB of memory with 5th Gen AMD processors
Boot drives	• Dual M.2 SATA SSDs with HW RAID support • 480GB M.2 SATA SSD (480GB is recommended)
PCIe	• 3 PCIe 4.0 slots or up to 2 PCIe 5.0 slots plus 1 dedicated 12-Gbps RAID controller slot and 1 dedicated mLOM slot
Graphics processing units (GPUs)	• NVIDIA L4 GPU card (optional)
Network	• Cisco UCS Virtual Interface Card 15427 or 15237 (modular LAN on motherboard) • Quad 10/25/50 G or Dual 40/100 G Ethernet VIC (Cisco UCS Virtual Interface Card 15425 or 15235) (optional)
Management	• Cisco Intersight • Cisco Integrated Management Controller (CIMC)
Advanced Reliability, Availability, and Serviceability (RAS) features	• Robust reporting and analytics • Dual-redundant fans and hot-swappable, redundant power supplies for enterprise-class reliability and a convenient latching lid for easy access to internal server • Tool-free CPU insertion, enabling processor upgrades and replacements with less risk of damage • Tool-free access to all serviceable items and color-coded indicators to guide users to hot-pluggable and serviceable items • Nondisruptive rolling upgrades using Nutanix Life-Cycle Manager (LCM)
Front-panel connector	• 1 KVM console connector per node (Each connector supplies 2 USB connectors, 1 VGA connector, and 1 serial connector)
Front-panel locator LED	• Helps direct administrators to specific servers in large data-center environments

Feature	Common specifications across the Cisco Compute-Only C225 M8 Node family
Additional rear connectors	• 1 Gigabit Ethernet management port • 1 RS-232 serial port (RJ45 connector) • 1 video graphics array (VGA) video port (DB15 connector) • 2 USB 3.0 ports
Power and cooling	• One or two hot-pluggable power supplies • Second power supply provides 1+1 redundancy • 770W, 1200W, 1600W, or 2300W AC power supplies or 1050 DC power supply • 8 hot-swappable fans for front to rear cooling
Rail-kit options	• Cisco ball-bearing rail kit with optional reversible cable-management arm

Ordering information

Table 5 provides ordering information for the Cisco Compute-Only C225 M8 All NVMe Node.

Table 5. Ordering information

Part number	Description
HCI-M8-NTNX-MLB	Cisco Compute Hyperconverged and Compute-Only Node C-Series M8 with Nutanix MLB
HCOXNX225C-M8SN	Cisco Compute-Only C225 M8 Node w/o CPU, memory, storage, mezzanine
HCOXNX225C-M8SN-U	Cisco Compute-Only C225 M8 Node UPG w/o CPU, memory, storage, mezzanine

For information about installing or upgrading your server, see the Hardware Installation Guide.

For a complete list of part numbers, refer to the Cisco Compute-Only node spec sheet.

Cisco services

Cisco, Nutanix, and our industry-leading partners deliver services that accelerate your transition to Cisco Compute Hyperconverged systems. Professional services can help you create an agile infrastructure, accelerate time to value, reduce costs and risks, and maintain availability during deployment and migration. After you have deployed your system, our services can help you improve performance, availability, and resiliency as your business needs evolve.

Product sustainability

Information about Cisco's Environmental, Social, and Governance (ESG) initiatives and performance is provided in Cisco's Corporate Social Responsibility (CSR) and sustainability reporting.

Table 6. Cisco environmental sustainability information

Sustainability topic		Reference
General	Information on product-material-content laws and regulations	Materials
	IInformation on electronic waste laws and regulations, including our products, batteries, and packaging	WEEE Compliance
	Information on product takeback and reuse program	Cisco Takeback and Reuse Program
	Sustainability inquiries	Contact: csr_inquiries@cisco.com

Cisco makes the packaging data available for informational purposes only. It may not reflect the most current legal developments, and Cisco does not represent, warrant, or guarantee that it is complete, accurate, or up to date. This information is subject to change without notice.

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Document history

New or Revised Topic	Described In	Date
Cisco Compute-Only (CO) C225 M8 Node	New	April 2026