CISCO Connect

Modernize the Data Center for AI Without Starting Over

From VMs to Cloud-Native Workloads

Yon Burke
Solutions Engineer
@yon-burke



September 23, 2026


The world is experiencing the **largest expansion of data centers** in history

Modernization pressure is coming from existing infrastructure

Workload gravity

45%

IT workloads still run in corporate data centers

Platform Transition

VMs + containers are now part of the same modernization agenda

Lifecycle pressure

33%

of data center devices are past recommended refresh

Security Readiness Gap

66%

of security environments are not ready

Operators need to modernize in place:
keep core apps running, reduce risk, and create platform choice without adding complexity.

Modernization Drivers

Business Drivers

- **Continuity** — Keep mission-critical apps running
- **Velocity** — Launch new services faster
- **AI Readiness** — Create runway for AI workloads

IT Drivers

- **Cost Pressure** — Extend investments; avoid rebuilds
- **Complexity** — Standardize VMs, containers, and ops
- **Risk Control** — Modernize without disruption

Simplicity, Choice, and Flexibility with Cisco Compute

Three paths to modernize without starting over

Meet workloads where they are: stabilize today's VM estate, create platform choice, and build a runway to cloud-native and AI



Source: Cisco Platform Modernization Research | FY2026

UCS Platform Strategy Defined



Simplicity

- Less Hardware
- Cloud-Based Operating Model
- Policy Based Management
- Full Solutions with Cisco Validated Designs



Choice

- Any workload, any form factor
- Intel or AMD CPU
- NVIDIA, intel, or AMD GPU
- Third Party Storage for ANY use case
- Converged or Hyperconverged Choices



Flexibility

- Multiple Options for any solution
- Easy to start small and grow big to mitigate risk
- Consumption Models

© 2025 Cisco and/or its affiliates. All rights reserved.

Cisco Unified Computing System

Simpler, smarter, more agile

Retain



Cisco UCS Servers Managed by Cisco Intersight

Modular, sustainable, easily upgradeable solution

Fabric-based architecture with unified fabric connectivity

Cloud-based management to automate operations

Designed with sustainability and energy efficiency in mind



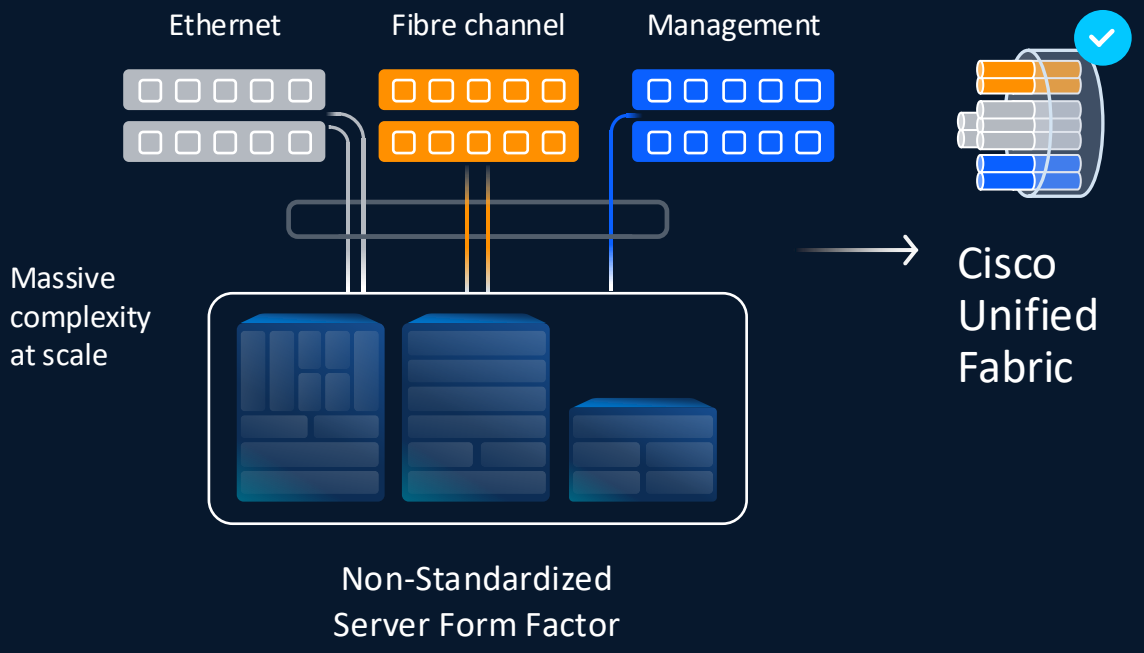
© 2025 Cisco and/or its affiliates. All rights reserved.

Retain

UCS X-Series Unified Fabric Design Fabric Simplification

Conventional Approach

Silos of multiple ethernet and SAN fabrics and adapters



Legacy Rack vs. UCS X-Series

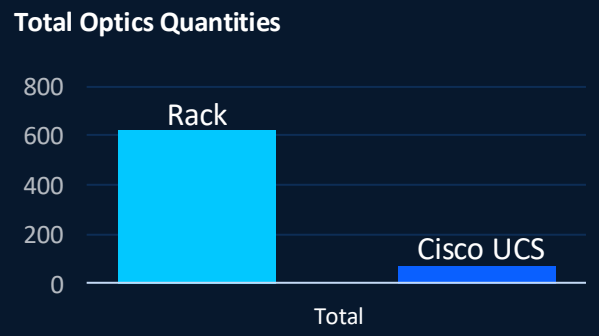
48 server comparison

Legacy Rack	X-Series
48 BMC Management cables	24 Chassis 100G cables
96 DP Ethernet cables	48 Chassis Optics
96 FC cables	
384 Optics (4 ethernet, 4 FC)	

624 cables/optics vs. 72 with X-Series

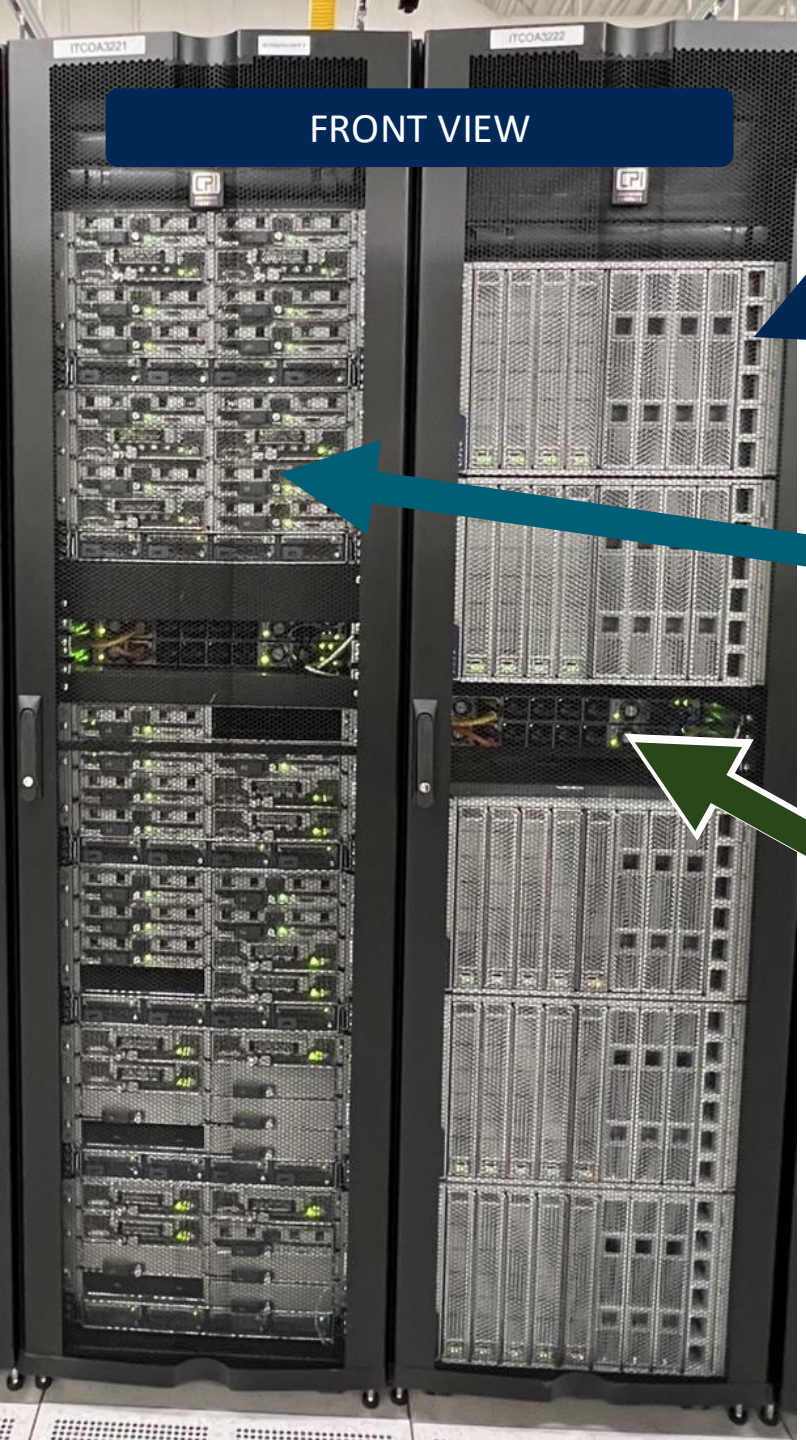
Unified IO and 100G for all servers reduces adapter, cabling, network and storage port needs

Component reduction (switches, cables, mgmt. modules)



© 2025 Cisco and/or its affiliates. All rights reserved.





UCS X-Series

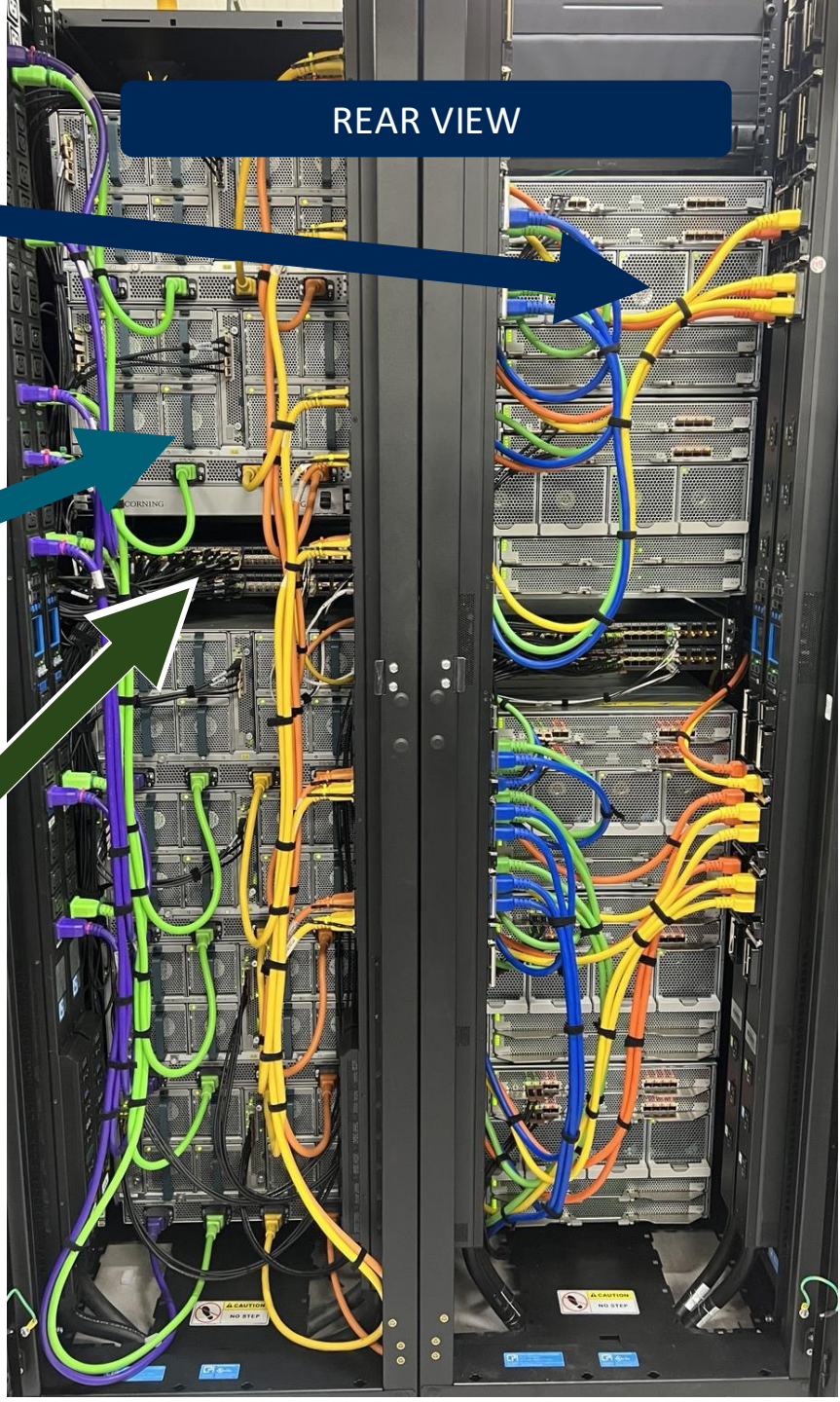
- Compute, HCI, GPU blades
- 8 blades per 7U chassis
- 6 x 2800W PSU

UCS B-Series

- “Legacy” blades
- 8 blades per 6U chassis
- 4 x 2500W PSU

Fabric interconnects

- 10/25/40/100 Gb Ethernet
- 14.84 Tbps per domain
- 1.6 Tbps per chassis



Retain

Cisco UCS Server Consolidation Advantage

Consolidate compute and connectivity to reduce hardware footprint, lower run-rate costs, and protect infrastructure investments.

01

Lower the infrastructure footprint

Consolidate servers, ports, cabling, power, cooling, and rack space.

02

Simplify lifecycle operations

Use policy-based automation to standardize deployment, upgrades, and recovery.

03

Extend investment runway

Modernize the platform under existing workloads while preserving flexibility for future apps and AI.

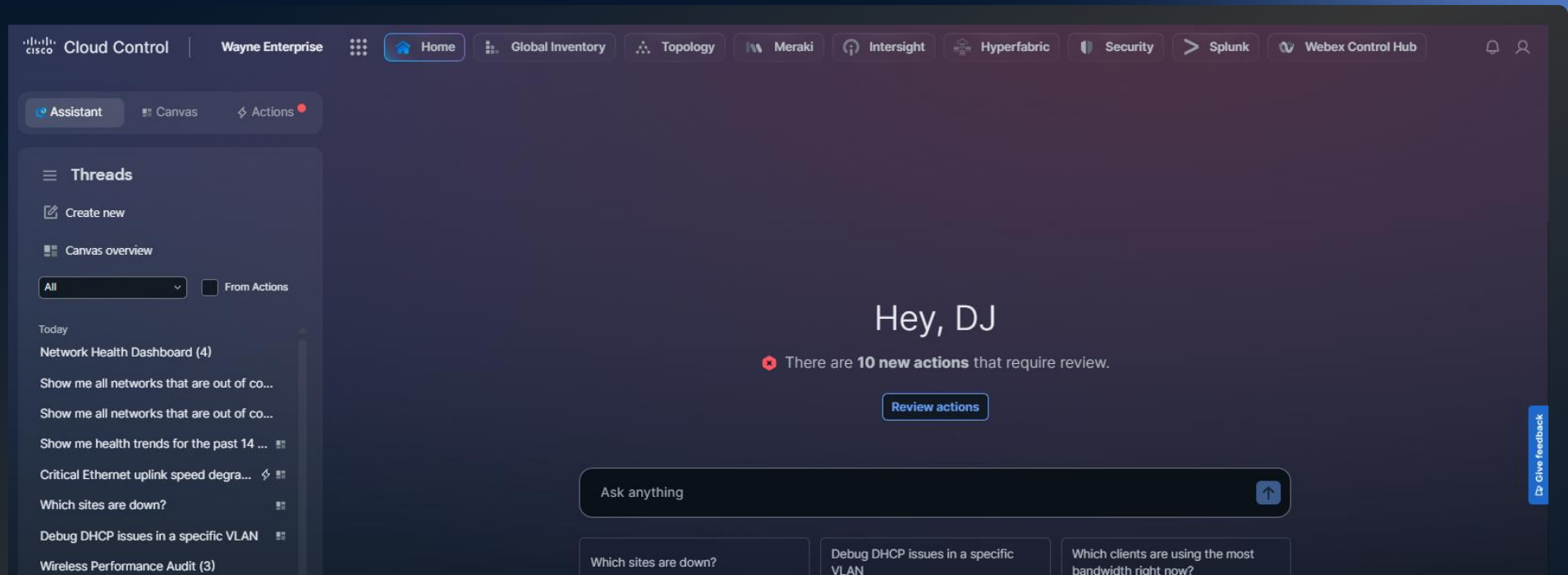
Financial takeaway: fewer servers + fewer ports + less power/cooling + automated operations = lower long-term TCO.

Servers • Network & SAN ports • Optics / NICs / HBAs • Power & cooling • Rack space • Ops labor

Cisco Cloud Control

One platform. Every domain. The foundation everything else is built on.

Meraki • ThousandEyes • Security Cloud Control • Splunk • Nexus Dashboard • Catalyst SD-WAN • Intersight • Webex • IQ • & more



Cisco Cloud Control

The power of one

One login

Sign in once. See everything.

One inventory and topology

Every asset. See how it all connects, in real time.

One view for alerts

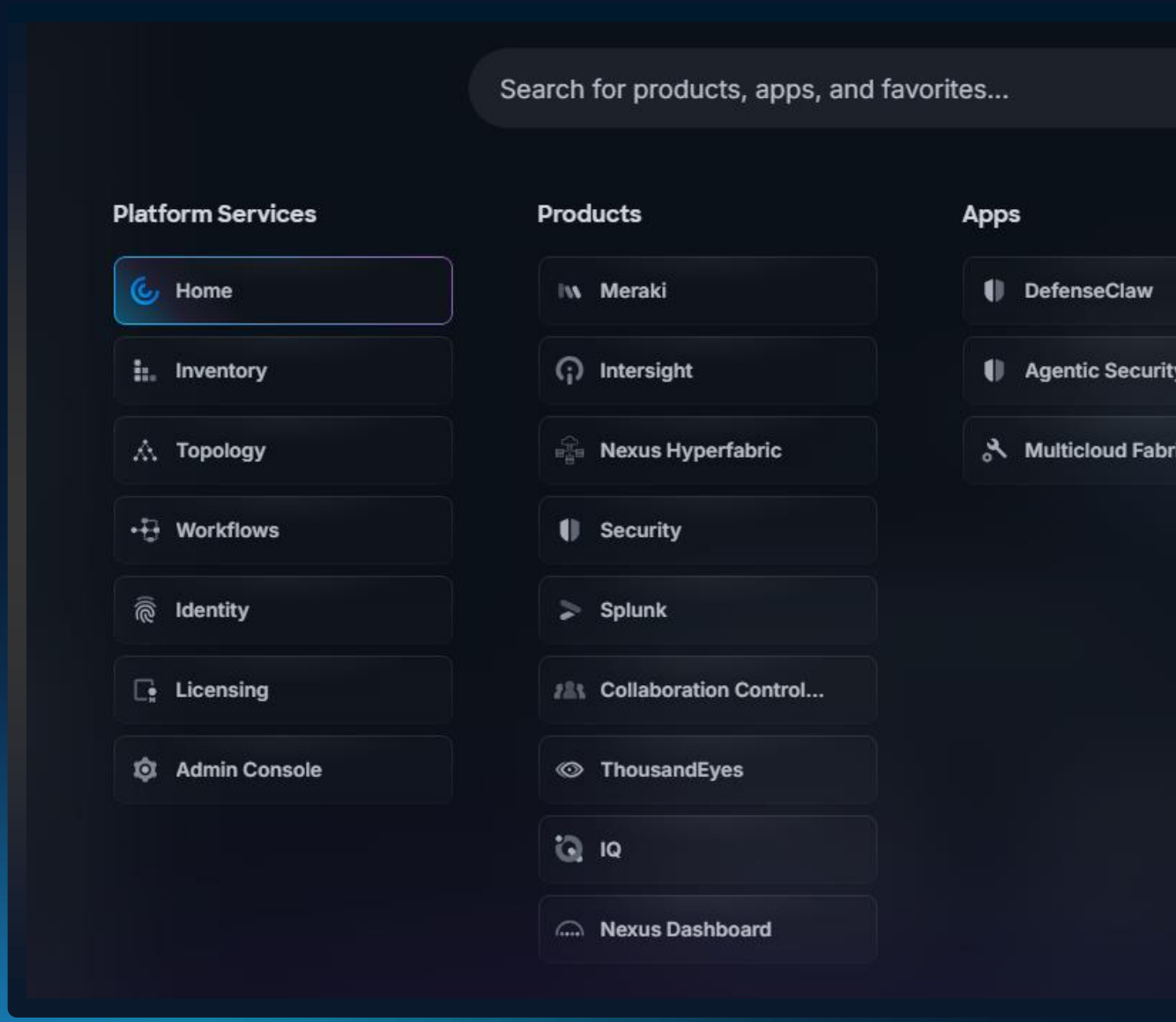
Actions correlates alerts across every product.

One assistant

Quick answers and tasks with AI Assistant.

One agentic workspace

Investigate, execute and resolve with AI Canvas.



© 2026 Cisco and/or its affiliates. All rights reserved.

End-to-end management platform: Cisco Intersight

One platform:

Unified, intelligent management of all Cisco UCS® compute infrastructure.

All locations:

Across data centers, co-location facilities, and edge locations.

Simplifies operations:

Cloud-native platform consolidates tools, automates tasks, delivers proactive insights.

Business outcomes:

Accelerate traditional deployments and new AI initiatives, strengthen security, free up IT resources.

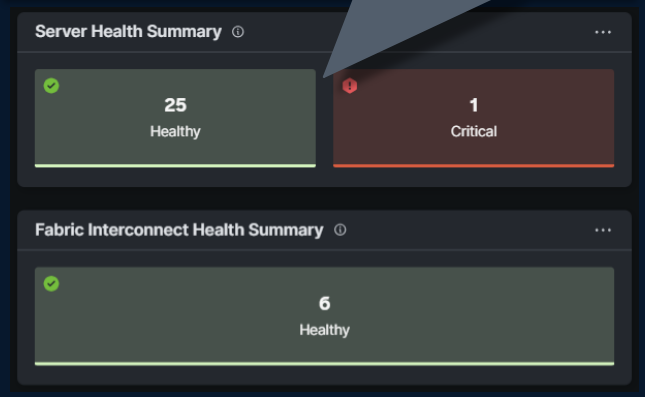
From reactive to proactive with Cisco Intersight®



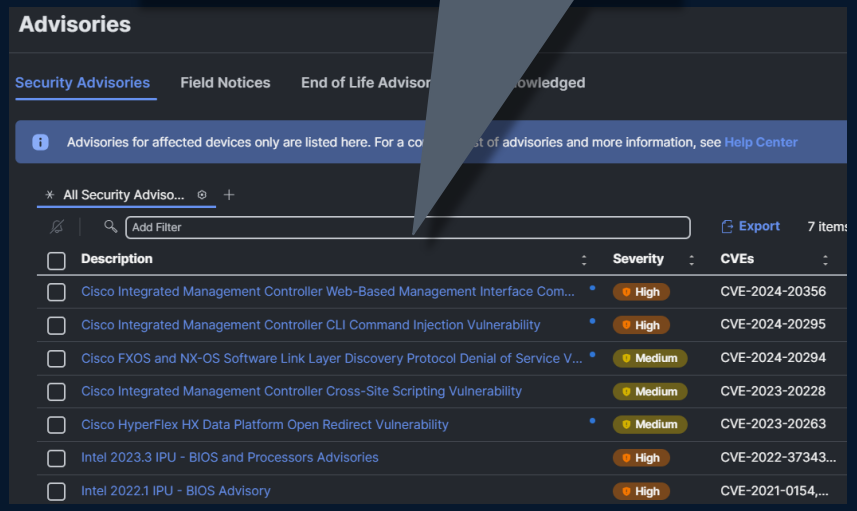
© 2026 Cisco and/or its affiliates. All rights reserved.

Intersight answers critical operational questions

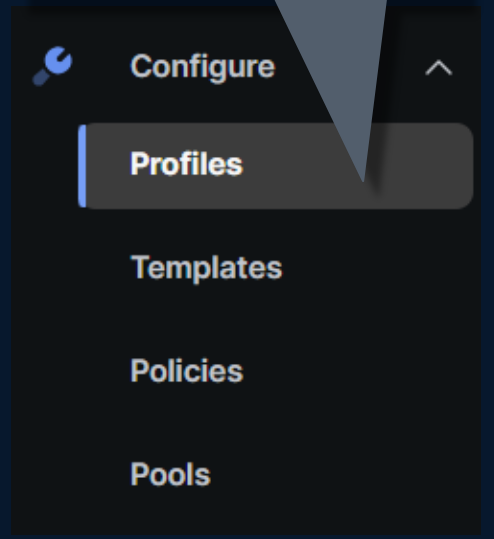
Are there issues or potential failures?



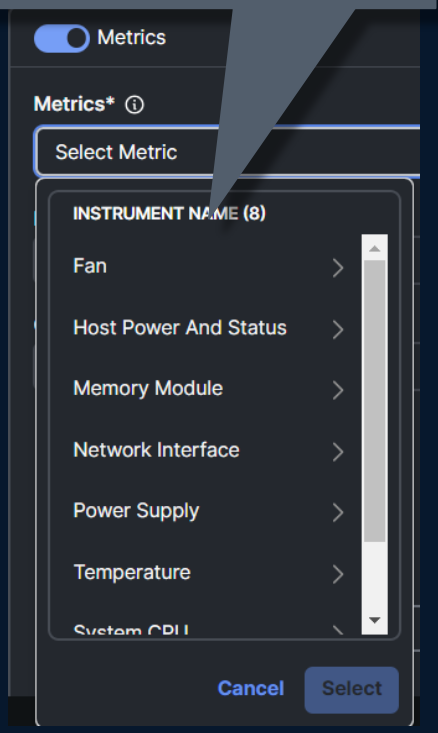
Am I impacted by any advisories?



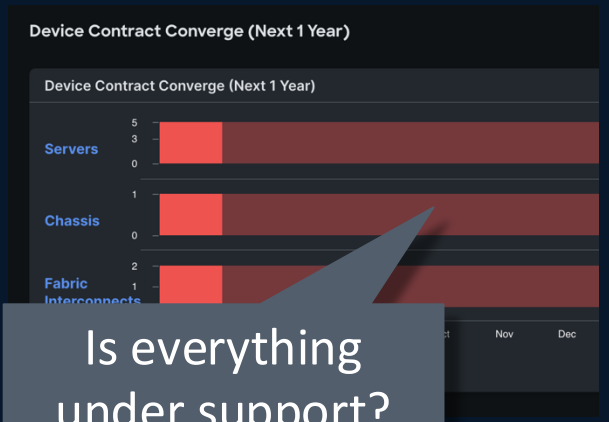
How can I deploy faster?



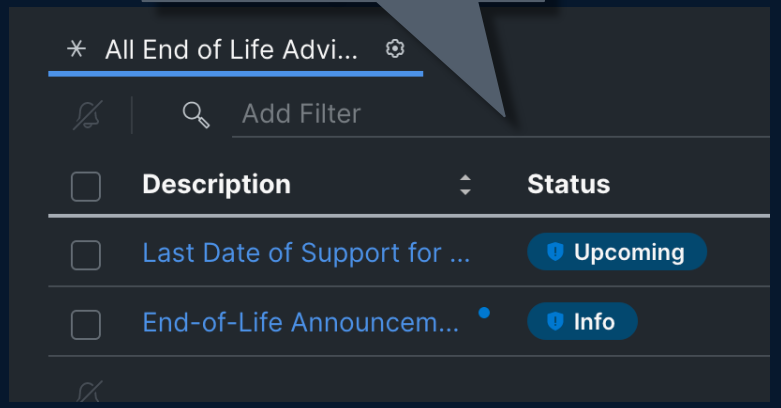
Power, cooling and connectivity ok?



Is everything under support?



Any pending EoS/EoL?





Are my systems up to date and compliant?

© 2026 Cisco and/or its affiliates. All rights reserved.

Rehost

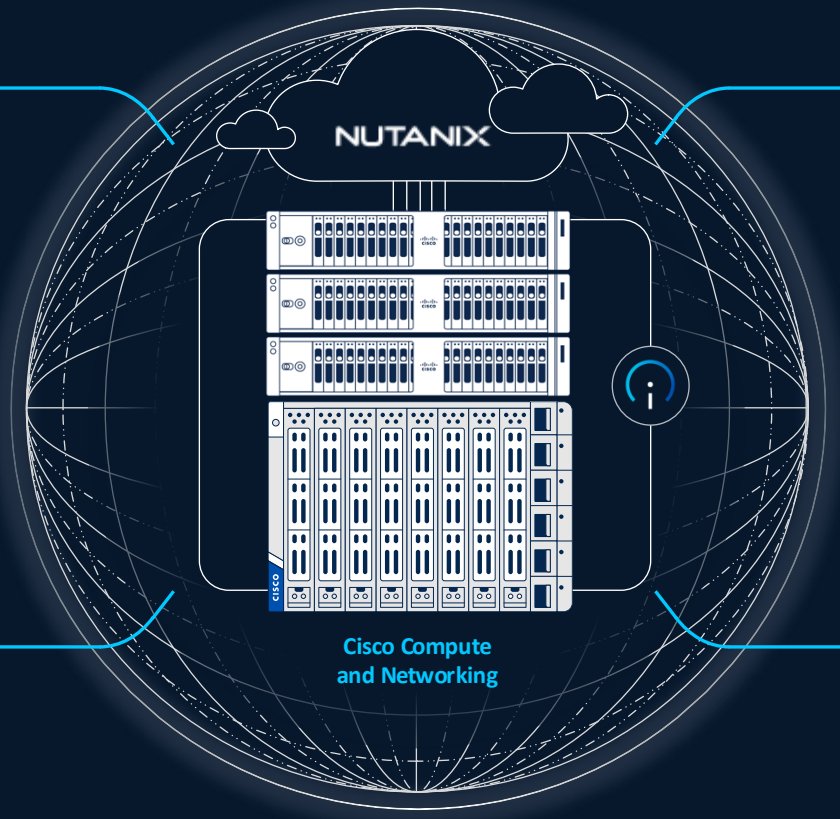
Rehost VM workloads on a validated Cisco + Nutanix platform

Platform Choice

Move beyond legacy virtualization while keeping a familiar VM operating model.

Validated Stack

Cisco compute and networking with Nutanix Cloud Platform, engineered to run together.



Simpler Path

Easier buying, deployment, and scaling across VM, edge, and AI-ready workloads.

Joint Accountability

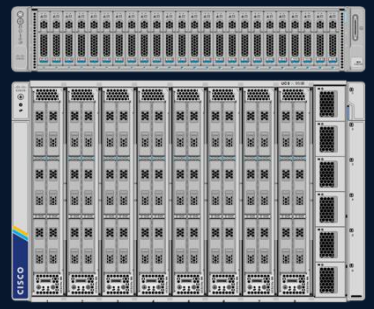
Integrated support model across Cisco and Nutanix reduces handoff risk.

Rehost path takeaway: change the platform, not the application estate.

© 2026 Cisco and/or its affiliates. All rights reserved.

Rehost on Nutanix without stranding UCS investments

1



Repurpose existing UCS
Convert qualified UCS servers into Nutanix-ready nodes

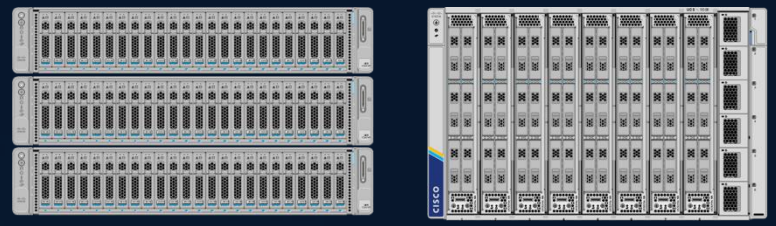
Supported hardware *

Cisco UCS rackmount M6/M7/M8,
X-Series M6/M7/M8 modular servers,
and B-Series M5/M6

Easily provision & manage
with Cisco Intersight

2

Cisco Compute Hyperconverged with Nutanix Cluster



Preserve deployment flexibility
Use Cisco Compute Hyperconverged nodes for HCI, or redeploy them as x86 servers if needs change.

Possible scenarios

Not ready to deploy,
Strategy shift or testing & validation

Same operating model
Deploy and automate like factory-prepped appliances

Investment protection
Reuse UCS assets and
reduce stranded hardware risk.

Future flexibility
Move between HCI and x86 deployment models as priorities shift.

* See documentation for additional details

Rehost

Cisco UCS Converged Infrastructure Portfolio

Offering choice and flexibility

20,000+
Customers

200+
Validated Architectures

12+
Years of Innovation



FlexPod

NetApp



FlashStack

PURESTORAGE®



Cisco and Hitachi adaptive solutions

HITACHI

Use cases

Virtual infrastructures

Hybrid cloud

Enterprise applications

AI/ML

Containers

SAP HANA

Desktop virtualization

Data protection

© 2025 Cisco and/or its affiliates. All rights reserved.

cisco

Cisco Server Virtualization and Kubernetes with Red Hat

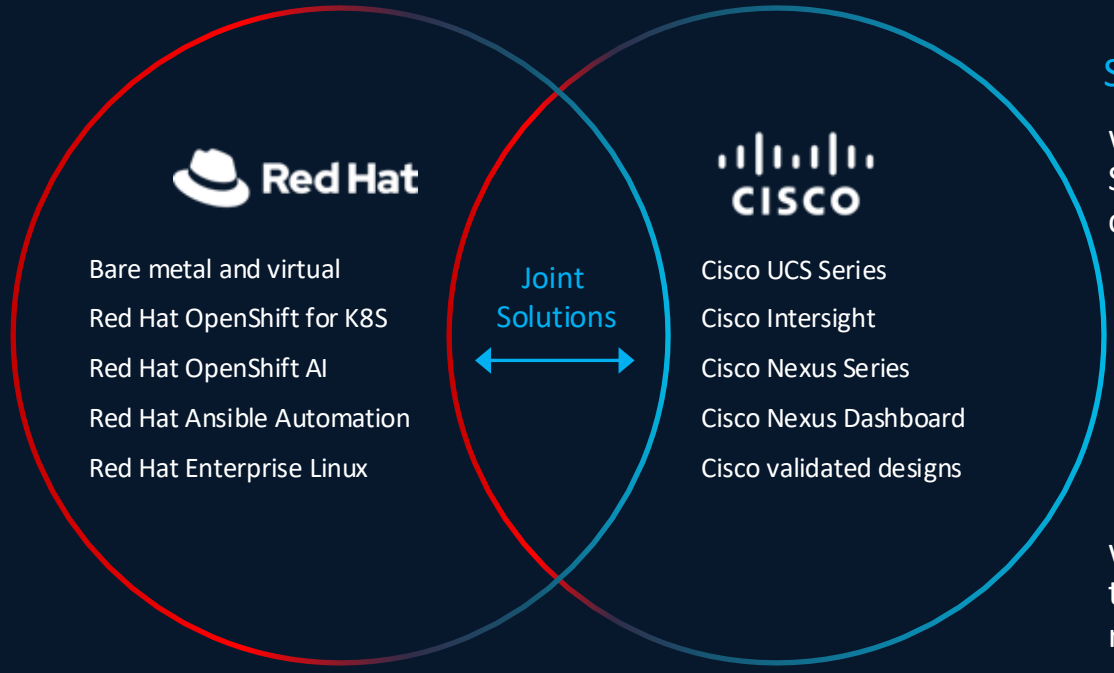
on-premise and public cloud

Open Cloud Infrastructure

platform built on open-source innovation

Accelerated Time to value

with turnkey experience and integrated automation



Simplified Operations and Support

with Cloud managed infrastructure and Cisco Solution Support across Red Hat on converged infrastructure stacks

Reduced Risk

with Cisco Validated Designs, delivering tested architectures for standardized, repeatable deployments.

Operate across hybrid multicloud	More choice and flexibility	20+ Cisco Validated Designs	Consistent app dev experience	Increased sustainability

© 2025 Cisco and/or its affiliates. All rights reserved.

Nutanix: NKP & NAI on Cisco AI PODs

A scalable architecture, built to support AI workloads simply & efficiently

Security

Security-first infrastructure maintains data sovereignty, rapid integration of new LLMs, enabling safe enterprise AI

Network

High-performance integrated AI networking supporting small to large-scale inferencing

Assurance

Pre-validated AI infrastructure with flexible deployment options accelerates adoption while increasing developer productivity running everything on a consistent, repeatable platform



Comprehensive Turn-Key AI Platform

- NVIDIA — Applications & Agents
- NUTANIX — Enterprise AI
- NUTANIX — Kubernetes Platform
- Compute — CISCO — Network
- NUTANIX — Unified Storage

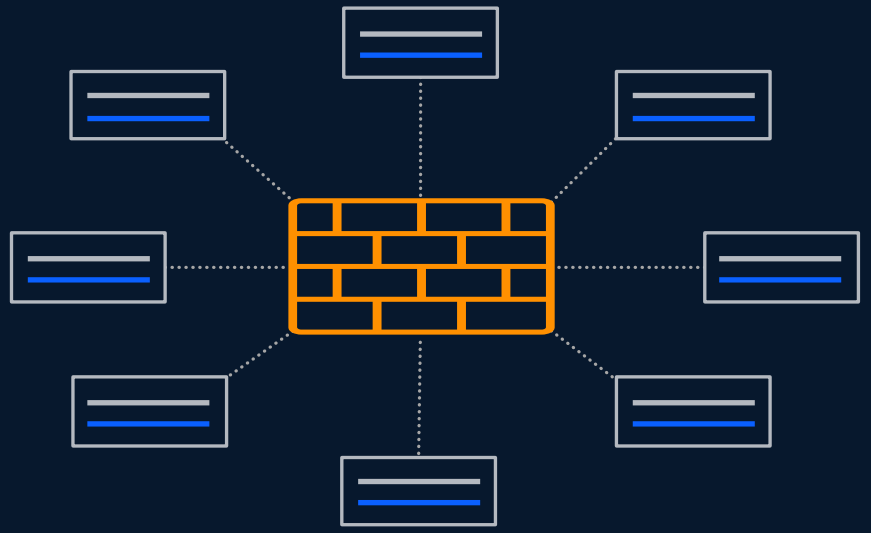
We live in a post-Mythos world

Every assumption we've had about security & infrastructure must change

© 2026 Cisco and/or its affiliates. All rights reserved.

Solving the segmentation dilemma

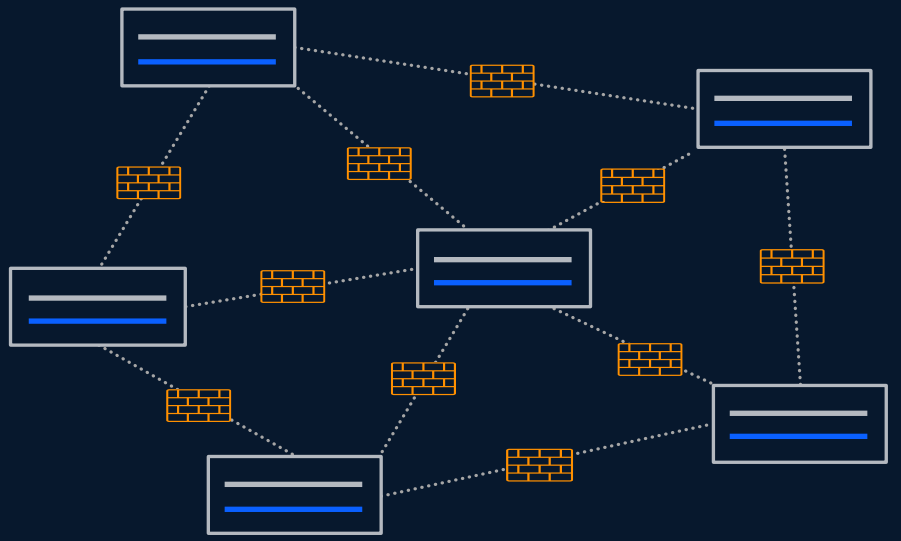
Segmentation as a choke point



Centralized enforcement

Latency. Bottlenecks. Escalating cost.

Segmentation as a distributed fabric



Distributed enforcement

Low latency. Linear scale. Reduced attack surface

© 2025 Cisco and/or its affiliates. All rights reserved.

Threat containment at massive scale built into your network



Hardware-accelerated segmentation on every port

© 2026 Cisco and/or its affiliates. All rights reserved.

Cisco Nexus 9300 Series Smart Switches



N9348Y2C6D-SE1U

48-port 25G, 6-port 400G, 2-port 100G, 800G services

Shipping



N9324C-SE1U

24-port 100G, and 800G services

Shipping

Security Use Cases

- Top of Rack segmentation & enforcement
- Zone-based segmentation
- Cloud Edge

© 2025 Cisco and/or its affiliates. All rights reserved.

Live Protect

Vulnerability shielding for Cisco products

Stop the attack… but don’t stop the network.



Apply policy to live system

Protect now;
patch in planned window

No downtime or switch reboot

Continuous re-validation

© 2026 Cisco and/or its affiliates. All rights reserved.



Cisco is foundational to the world's data center buildouts

Hyperscalers | Neoclouds | Sovereign Clouds | Service Providers | Enterprise

© 2026 Cisco and/or its affiliates. All rights reserved.

Resources

Cisco UCS Resources

Cisco Intersight Expert Series Channel

Cisco and Red Hat CVDs

Cisco AI PODs

Cisco and Nutanix Resources

Cisco AI PODs with Nutanix

VAST Data on Cisco UCS

Qumulo on Cisco UCS

Cisco N9300 Smart Switches

Cisco Cloud Control

© 2026 Cisco and/or its affiliates. All rights reserved.

Thank you


CISCO