

Why Cisco Nexus 9000 with Nexus Dashboard for AI Networking



“In an era where AI workloads and real-time data processing define the competitive edge, high-performance data center switching is no longer a luxury—it’s a necessity.

Powered by Cisco Nexus 9000 Series switching, we are able to move massive volumes of data with unparalleled speed and low latency that is foundational to unlocking the full potential of Groq’s innovative fast inferencing solutions, ensuring organizations stay ahead in a data-driven world.”

Cameron Ferdinands
Head of Network Operations, Groq

Product overview

AI has evolved from natural language-focused Large Language Models (LLMs) to agentic AI, and now to physical AI that operates in the real world. As AI becomes essential to enterprises, neoclouds, and hyperscalers, organizations need high-performance networking to support its explosive traffic demands.

Cisco is fueling the AI revolution with a unified data center network powered by Cisco Nexus 9000 series switches and Nexus Dashboard.

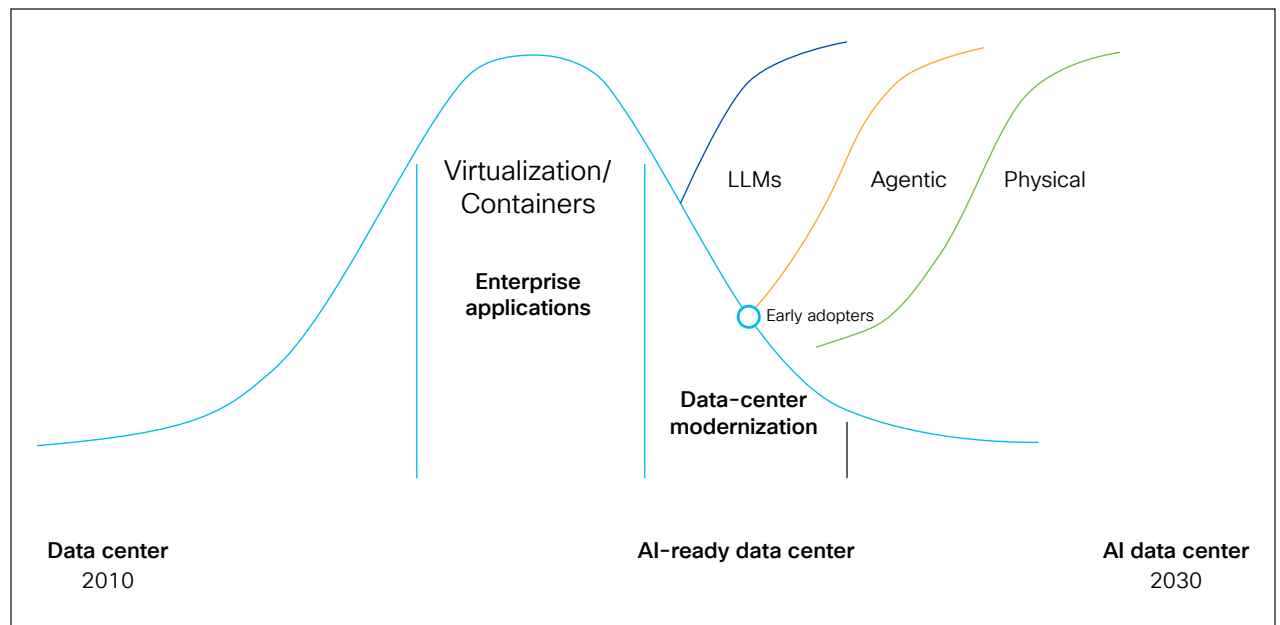


Figure 1. Big shifts redefining the data center

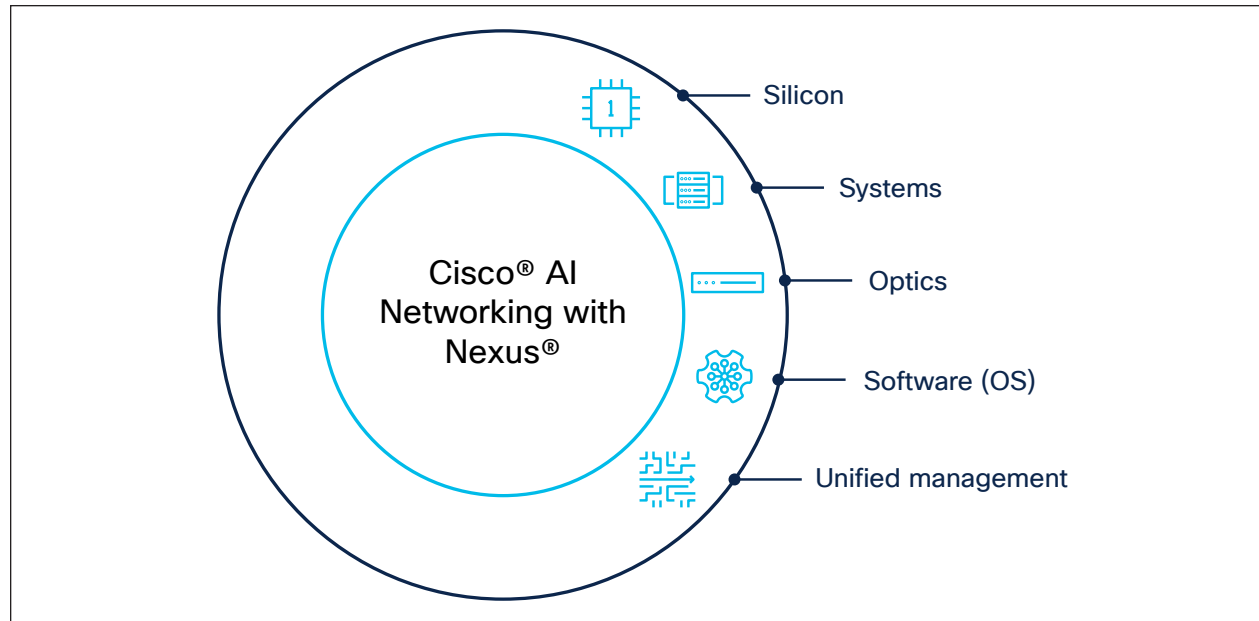


Figure 2. Foundations of Cisco AI Networking with Nexus 9000 and Nexus Dashboard

Benefits

- **Fully integrated solution** combining custom silicon, high-performance systems, advanced software, and a unified operating model for building AI data centers.
- **High-speed and low latency switches:** **Cisco Nexus® 9000 Series Switches** powered by **Cisco® Silicon One®** and Cloud Scale ASICs.
- **Maximized performance for AI networks:** **Cisco Intelligent Packet Flow** incorporates live telemetry, congestion-aware load balancing, and fault detection to ensure efficient and reliable traffic steering across the fabric, thereby helping customers unlock consistent performance and reduce Job Completion Time (JCT).
- **Flexible connectivity options:** With support for 400G and 800G in both QSFP-DD and OSFP form factors, **Cisco Optics** ensure broad compatibility.
- **Unified management:** **Cisco Nexus Dashboard** provides built-in templates for AI fabric provisioning and delivers end-to-end RoCEv2 visibility and congestion analytics. Ongoing enhancements will bring job-level insights, topology-aware visualization, and NIC observability, advancing operational intelligence across AI fabrics.
- **Ultra Ethernet ready:** Cisco is one of the key steering members for Ultra Ethernet Consortium (UEC), and Cisco Nexus 9000 switches are Ultra Ethernet ready to support the mandatory network-side requirements.
- **Vendor-agnostic:** Cisco offers vendor-agnostic support with validated designs across leading AI ecosystem partners, including NVIDIA, AMD, Intel®, VAST, WEKA, and others.
- **Sustainable scaling:** High radix and smaller footprint fabrics enabled by Cisco AI networking for data centers support massive scale, minimizing energy consumption and optimizing resource utilization.

Learn more

See how Cisco IT is transforming its AI networks with Cisco Nexus 9000 Series Switches and [Nexus Dashboard](#).

Get your AI Networks ready with the Cisco Nexus portfolio. For detailed information, visit <https://www.cisco.com/c/en/us/products/collateral/networking/cloud-networking-switches/nexus-9000-switches/nexus-9000-ai-networking-wp.html>.

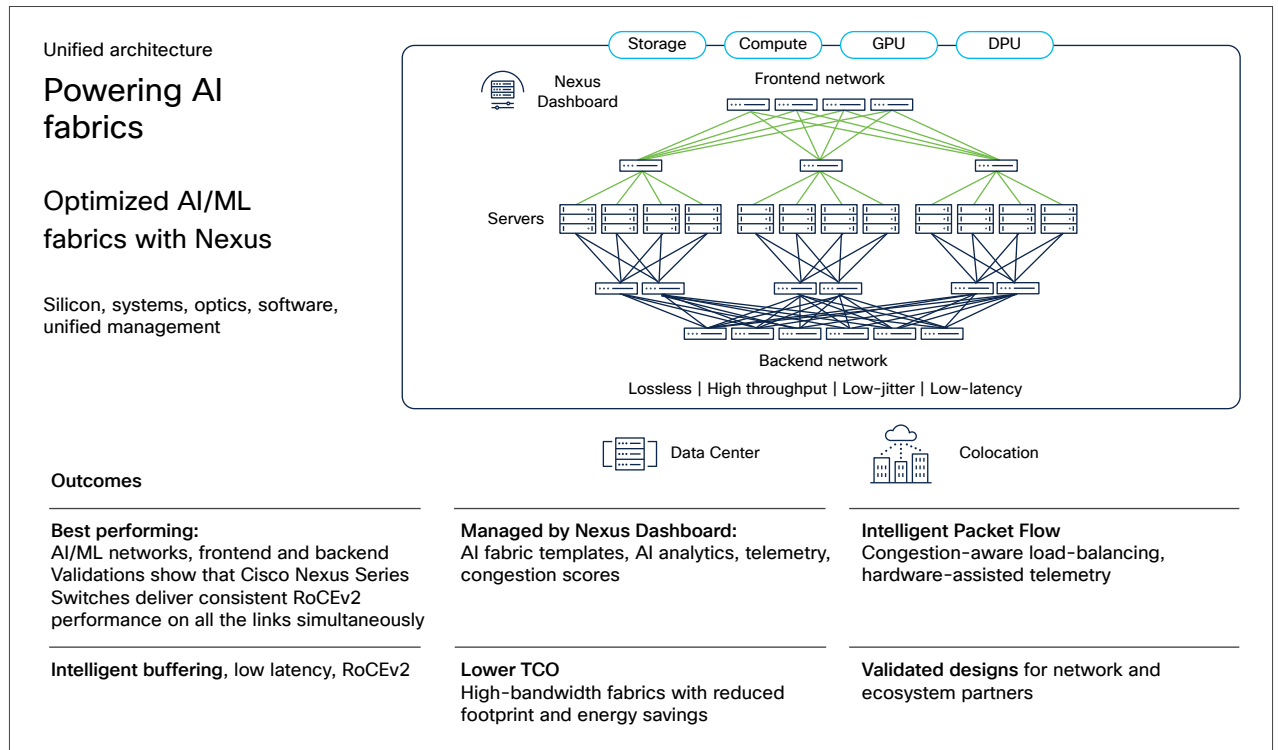


Figure 3. Cisco Nexus 9000 Switches with Nexus Dashboard for AI Networking

Cisco delivers a complete unified data center platform built to span the entire AI Networking infrastructure continuum from silicon to software. Our platform comprising Silicon One ASICs, Nexus fabric, advanced optics, strategically fused security, and unified management are architected specifically for both ever evolving workloads and meeting AI's demanding requirements. Our unified platform approach delivers breakthrough performance that transforms infrastructure complexity into competitive advantage.