

AI-Ready Data Centers

Transform data centers to power AI workloads anywhere

James Jiang, Cisco Principal System Engineer

The pace of
AI innovation is staggering

AI challenges you to deploy
new technology **faster than
ever before.**

1990s
Machine Learning

2022
ChatGPT

2024
Agents/Assistants

2025
Deep Seek
Humanoid Robot



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We need to reimagine the data center for the AI era

While managing cost pressures, intensifying threats, and business demands



Everything you need for an AI-ready data center



Comprehensive infrastructure

Power AI with networking, compute, and storage in fully-integrated, scalable, and modular systems for all workloads

Seamless operations and observability

Remove silos with unified management, observability, and assurance for traditional and AI workloads, across all environments

Security from ground to cloud

Protect hyper-distributed workloads by infusing security everywhere

Data center networking and connectivity that deliver world-class performance

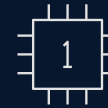
Cover all networking and connectivity needs with one provider, while maintaining flexibility

Gain breakthrough switching performance with Silicon One

Improve space utilization, energy, and cost efficiency



Data Center Networking
(traditional and AI)



Cisco Silicon One



SD-WAN



Agile Services
Networking

Cisco Validated Designs



Validated
Design

Full stack systems to accelerate time to value

Use fully integrated, modular, and scalable stacks for AI workloads

Realize fast, reliable deployments based on validated AI infrastructure

Gain unmatched performance wherever AI lives

AI PODs

 **NVIDIA** NVAIE | NIMS

 **OPENSIFT**

 **Nexus Dashboard and Intersight**

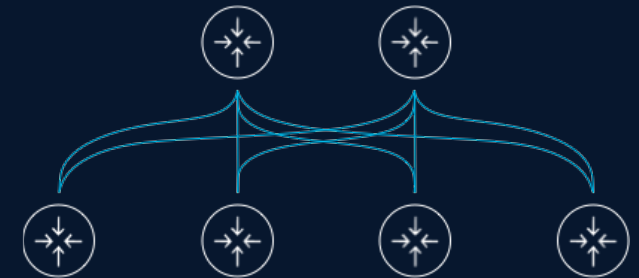
 **UCS**

 **Nexus**

 **NetApp**  **PURESTORAGE**



Cisco Nexus Hyperfabric AI



Cisco UCS
c885A M8



NVIDIA GPU



NVIDIA DPU/NIC
BlueField-3



VAST Storage

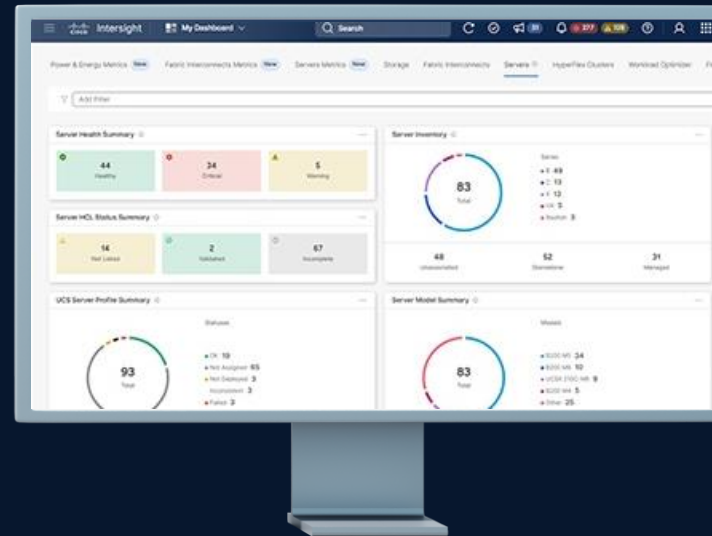
Seamless operations across environments

Leverage existing tools, skills, and operational models for traditional and AI workloads

Manage all compute resources centrally with Intersight

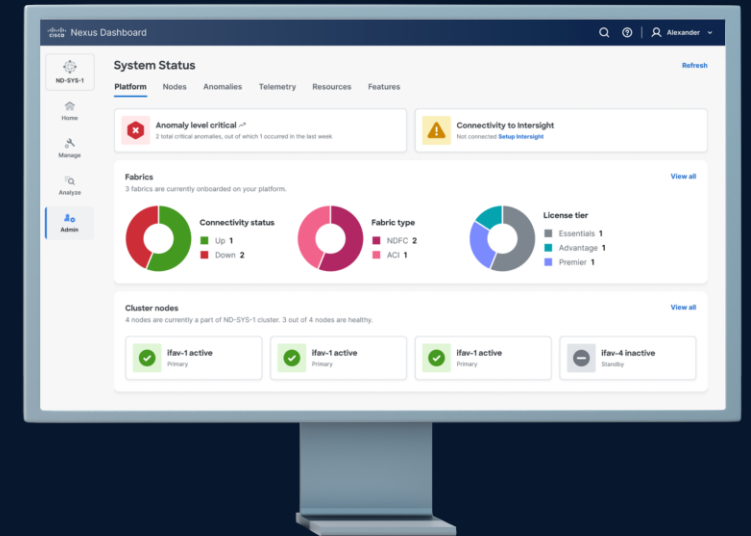
Operate your data center networks from one place with Nexus Dashboard

Intersight



Data Center and Edge Compute

Nexus Dashboard



Data Center Networking

Visibility and insights everywhere to drive digital resilience



On prem →



Public cloud →



← Your networks



← Internet

Changing the fundamentals of data center security

Visibility

Zone firewalling

Segmentation

Exploit protection

Cisco Security Cloud Control



Secure Firewall



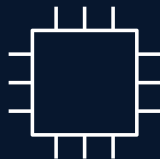
Secure Workload



Isovalent



Hypershield



Switch / Server DPUs

Security infused into the network with distributed enforcement points everywhere





Infrastructure
to power AI



Services to accelerate
the value of AI



Security for AI,
AI for security



Data to drive insights
and context



Software to
unlock productivity

Only Cisco brings
together **networking,**
compute, security, and
observability to power
AI-ready data centers

