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The bridge to possible

Any app, any scale, with new UCS computing solutions

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PSODCN-2353



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Cisco Webex App

Questions?

Use Cisco Webex App to chat with the speaker after the session

How

- 1 Find this session in the Cisco Live Mobile App
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- 4 Enter messages/questions in the Webex space

Webex spaces will be moderated by the speaker until June 17, 2022.



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Agenda

- Challenges
- Cisco Intersight
- Cisco UCS Portfolio
- Cisco UCS X-Series & 5th Gen Fabric
- Conclusion

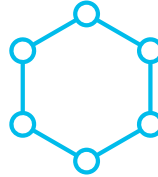
Persistent challenges for IT

Fragmented technologies
impede time to value



Valuable IT energy wasted
on platform integration

Application diversity drives
infrastructure diversity



Specialized systems increase
operational complexity

Hybrid cloud spawns islands
of infra and operations



Reduced visibility, increased
cost and risk

It's a hybrid cloud world



Cisco Intersight



Operational consistency across deployments



Secure



Cloud-Managed



Enterprise-Ready

Observability

Optimization

Automation

Cloud Native



Cisco Intersight



UCS X-Series

HyperFlex Edge

HyperFlex

Converged
Infrastructure

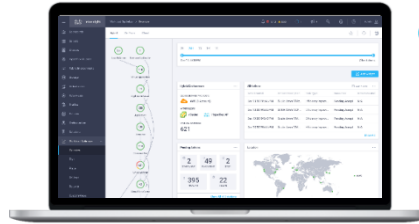
UCS C-Series



UCS portfolio

UCS Server Portfolio

Performance optimized for bare metal, virtualized, and cloud applications



Cisco Intersight



Blade Servers



New

B200
M5/M6



B480 M5

Modular Servers



New

X210c M6

Rack Servers



New

C220 M5/M6
C225 M6



New

C240 M5/M6
C245 M6



C240SD M5



C4200 SFF / C125 M5



C480 M5

Storage Servers



S3260 M5

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10

Cisco UCS X-Series

Radically simplified hybrid cloud infrastructure



Simplify with
cloud-operated infrastructure



Simplify with a system designed
for modern applications



Simplify with a system engineered
for the future



UCS X-Series

Simplify with an Adaptable System

Open, modular design: Cisco UCS X9508 Chassis

New nodes

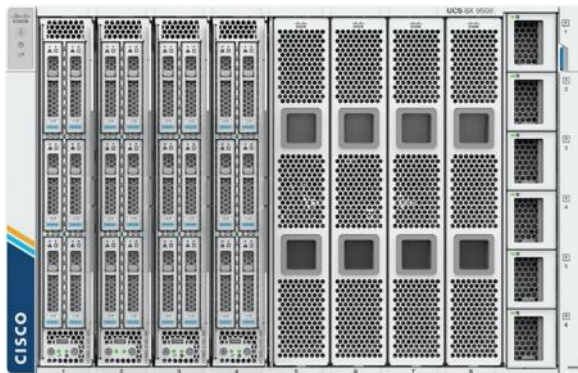
- Compute nodes
- Accelerator nodes

Unified Fabric

- 100Gb or 25Gb

UCS X-Fabric Technology

- PCIe Gen4



Power and cooling margins

- Ready for high-watt CPUs and GPUs
- Ready for liquid cooling

Architecture which enables:

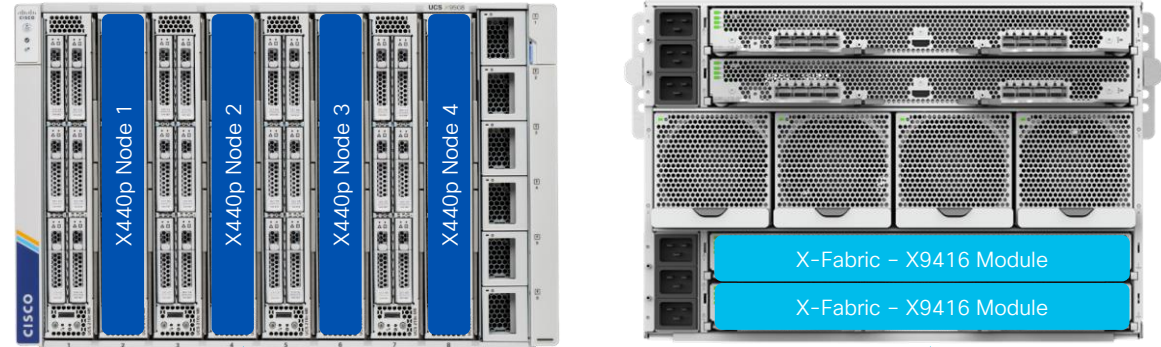
- Modularity for seamless integration of next innovations
- Balanced compute and drive ratios
- Optimal failure domains
- High performance

UCS X210c M6 Compute Node



- Two-socket modular server
 - 3rd Gen Intel® Xeon® Scalable CPUs
- Up to 8 TB of capacity using 256 GB DIMMs or up to 12 TB of memory with Intel Optane™ Persistent Memory (PMem)
- Up to six SAS/SATA/NVMe drives or
- Up to two NVMe drives & two NVIDIA T4 GPUs
- Up to 200 Gbps Unified Fabric

UCS X-Fabric Technology and PCIe Nodes with GPU



PCIe node supports Nvidia GPUs:

- 2 x A16
- 2 x A40
- 4 x T4
- 2 x A100

UCS X-Fabric Technology

- ✓ Based on native PCIe Gen. 4
- ✓ Provides GPU acceleration to applications
- ✓ No backplane or cables = Easily upgrades

5th Gen Unified Fabric

Future-ready performance and bandwidth

- Industry-first: 100G to a single port, delivering 200G per modular server
- Better application performance for network intensive workloads

Simplify and save by consolidating multiple traffic types

- Reduces adapters and cables
- Lowers server and networking TCO
- One VIC replaces multiple NICs, HBAs, and management adapters



Cisco UCS 6536
Fabric Interconnect



Cisco UCS 9108 100G
Intelligent Fabric Module

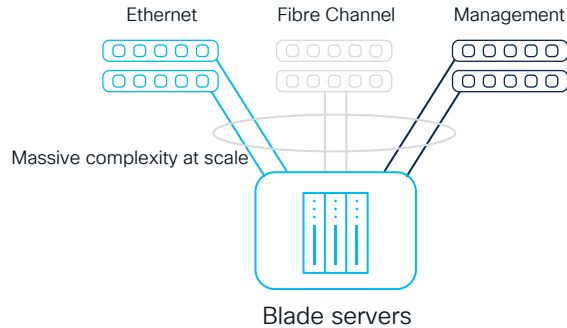


Cisco UCS 15000
Series Virtual Interface
Card

Industry-leading simplicity

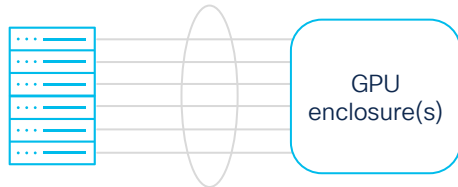
Conventional approaches

- 1 Silos of multiple ethernet and SAN fabrics and adapters



Unified fabric

- 2 Complex PCIe connectivity to external accelerators



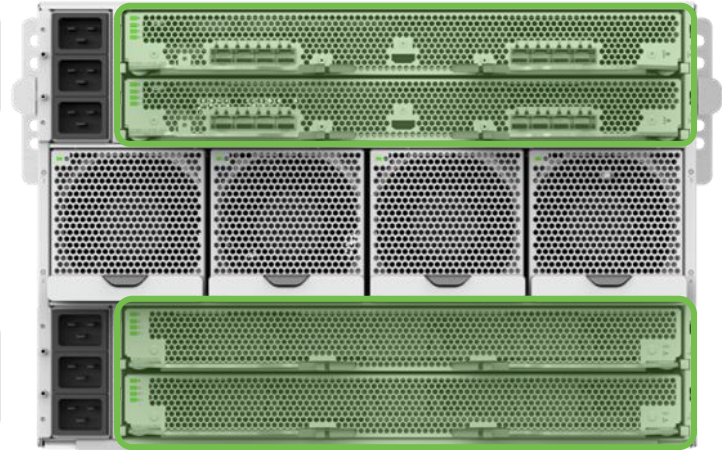
Rack servers

Cables, single point of failure

X-Fabric + PCIe nodes

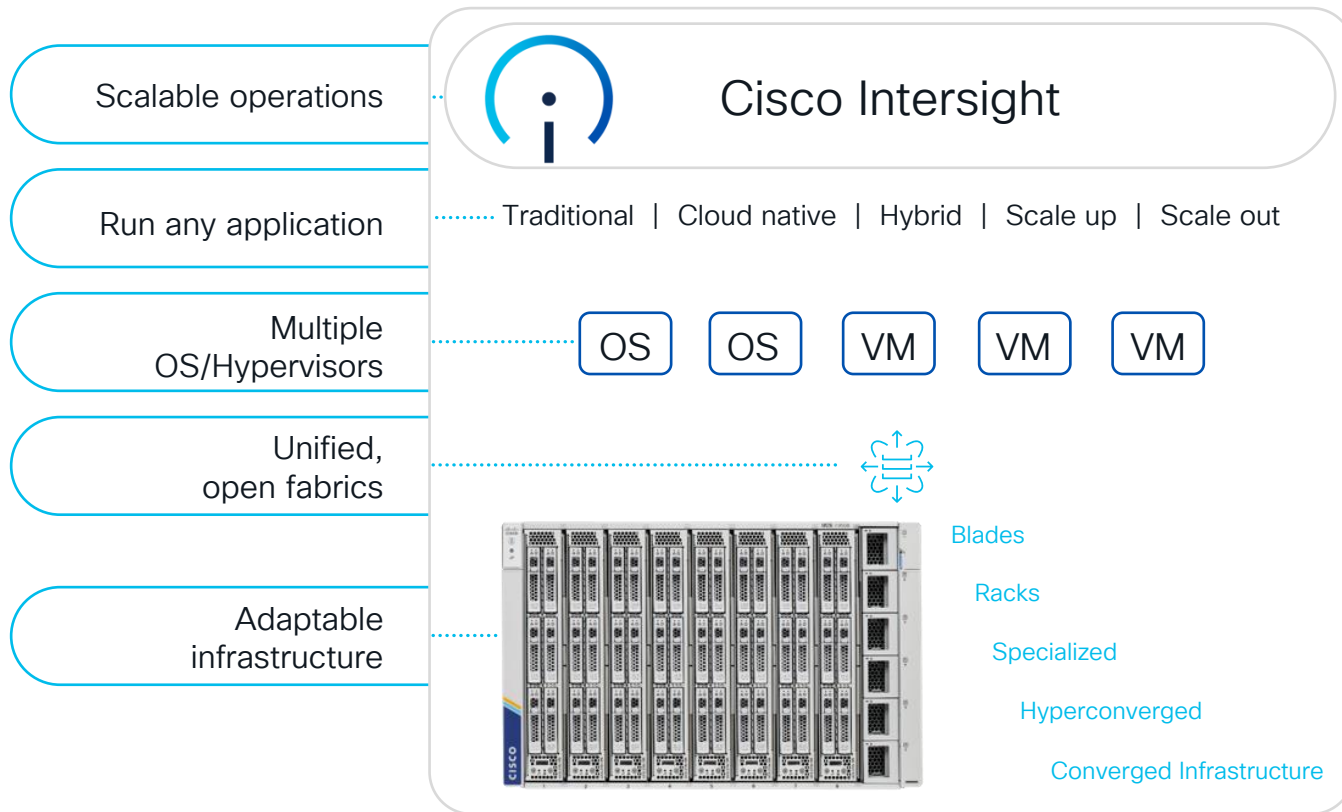
Cisco solution

UCS X-Series



Modern Hybrid Cloud Infrastructure

Simplify to scale, automate, and operate



UCS X-Series Customers



Large finance company invested in X-Series for the long-term compelling TCO numbers



Regional telco adopted X-Series modular system to **future-proof** their environment



Top 20 healthcare system embraced X-Series to flawlessly run **Epic, SQL, VDI, & other enterprise apps**



Top-tier race car manufacturer accelerated their business with a future-ready X-Series environment for their **VSI/VDI apps**



Entertainment and e-commerce giant supports customers with X-Series for **AI/ML and video streaming apps**



Leading travel provider implemented X-Series to **seamlessly integrate** with an existing storage solution and Intersight

NterOne: “Hybrid cloud infrastructure is a key enabler of our holistic business operations”



NterOne Corporation is a global IT services and solutions provider with strategic focus around modernizing networks, security, cloud, data center, analytics, wireless, collaboration, IoT, software-defined systems, telco, managed services, and programmable infrastructure platforms supporting customers and partners across multiple verticals.

nterone.com

“NterOne has been relying on Cisco UCS to run its business since the beginning. The performance of the UCS X-Series is simply incredible. We are constantly standing up and tearing down VMs to support our training and labs and we've gone from hours to deploy a VM down to just minutes. The time saved means we can service our customers better. The expanded capabilities of the UCS X-Series modular form factor are a game changer. With more storage and ability to add GPUs, we will be able to simplify and consolidate more workloads on X-Series. The best thing is being able to manage all our existing UCS servers and X-Series with Cisco Intersight.”

–Matthew Taylor, Director of Engineering, NterOne

Computing for the Next Decade



Converged
Infrastructures



Technology
Partnerships



Cisco CX
Services



Validated
Designs



Cisco Plus



Cisco
Intersight



Virtual
infrastructures

Hybrid cloud

Enterprise
applications

AI/ML

Cisco Solution
Portfolio

Containers

SAP HANA

Desktop
virtualization

Data
protection

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21

World of Solutions – X-Series & Fabric Demos

- **Product innovation on display**
 - X-Series, X-Fabric, 5th Gen Fabric Interconnect, 5th Gen VIC, GPU Node
- **On Demo**
 - **Experience simplicity with X-Series**
 - Deploy X-Series live with just a few clicks – Power of Intersight
 - Define FlexPod with X-Series in Intersight
 - Pervasive visibility across X-Series FlashStack with Intersight
 - Deploy Red Hat OpenShift Container Platform with confidence (Ceph)
 - Automation with X-Series leveraging Intersight Ansible
 - **Experience innovative X-Fabric – Blurring line between rack and blade**
 - Simplicity of adding GPUs to compute nodes...in few minutes!
 - **Experience amazing performances on X-Series**
 - Performance out of the box
 - Oracle Swingbench performance
 - **Experience new 5th Gen Unified Fabric – Simplify, accelerate and reduce components**
 - 100G/200G Ethernet and NFS with a single VIC 15231
 - 100G FC aggregate and 32G E2E FC per vHBA on a single VIC 15231

Continue your education

- [BRKCLD-3010](#) - UCS X-Series: Blurring the Line Between Rack and Blade for Modern Applications
- [BRKCLD-3011](#) - Learn Why Cisco UCS Builds the Best AMD Servers in the Market
- [BRKDCN-2310](#) - Unleash the Power of Converged Infrastructure Using Cisco Intersight and UCS X-Series
- [BRKDCN-2587](#) - Best Practices for Cloud and Compute Connectivity with the 5th Gen UCS Fabric and Intersight
- [BRKCLD-2028](#) - Build Your Hybrid Cloud with Cisco
- [BRKCLD-2807](#) - Real Life Deployment of Hybrid Cloud Infrastructure using Intersight
- [BRKDCN-2794](#) - How Will the UCS X-Series Hardware Bring Your Applications Together?
- [CCP-1210](#) - Roadmap: Hyperflex, Intersight, and Unified Computing Systems Update
- [DEVNET-3026](#) - Simplify IAC for On Premises Environment using Cisco Intersight and Hashicorp Terraform Cloud
- [DEVWKS-2060](#) - Automating Cisco UCS Server Provisioning with Terraform and Intersight
- [DEVWKS-2942](#) - DevNet Workshop - Programmability with Intersight Managed Mode
- [IBODCN-2301](#) - An interactive conversations on IMM Transition - How do I get there?
- [LABDCN-1115](#) - Cisco Intersight Cloud-based Infrastructure management

Technical Session Surveys

- Attendees who fill out a minimum of four session surveys and the overall event survey will get Cisco Live branded socks!
- Attendees will also earn 100 points in the Cisco Live Game for every survey completed.
- These points help you get on the leaderboard and increase your chances of winning daily and grand prizes.



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Cisco Modeling Labs

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Cisco Learning Network

Resource community portal for certifications and learning



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Cisco Learning Partner Program

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- Book your one-on-one Meet the Engineer meeting
- Attend the interactive education with DevNet, Capture the Flag, and Walk-in Labs
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The bridge to possible

Thank you

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