

# UN/BOX the Future

A photograph of a Cisco UCS X-Series Modular System. The system is a large, modular server rack with a blue and silver color scheme. The front panel is open, revealing a dense array of server blades. The blades are arranged in a grid, with each blade having a small display and various ports. The system is set against a dark blue background with a faint, glowing wireframe structure of a building or server rack in the background.

Cisco UCS X-Series Modular System

# It's a hybrid cloud world



By 2023

...the number of applications running in the data center and edge locations increases by 300%

61%

...of organizations cite manual processes and siloed teams as top bottlenecks in app delivery pipelines

75%

...of Global 2000 IT organizations will adopt automated operations practices to transform their IT workforce to support unprecedented scale by 2023

App Experience



Operations



Agility



# A Lot Has Changed... and Continues to Change



# Cisco Compute Strategy

Innovation to address technology transitions

## First 5 years

Virtualization strategy  
Winning the architectural battle,  
focus on simplify management,  
reduce TCO, consolidation and CI

## Second 5 years

Dominance of cloud and data  
Helping customers scale operations  
and address agility requirements,  
big data, HCI, Flash and cloud as  
a platform

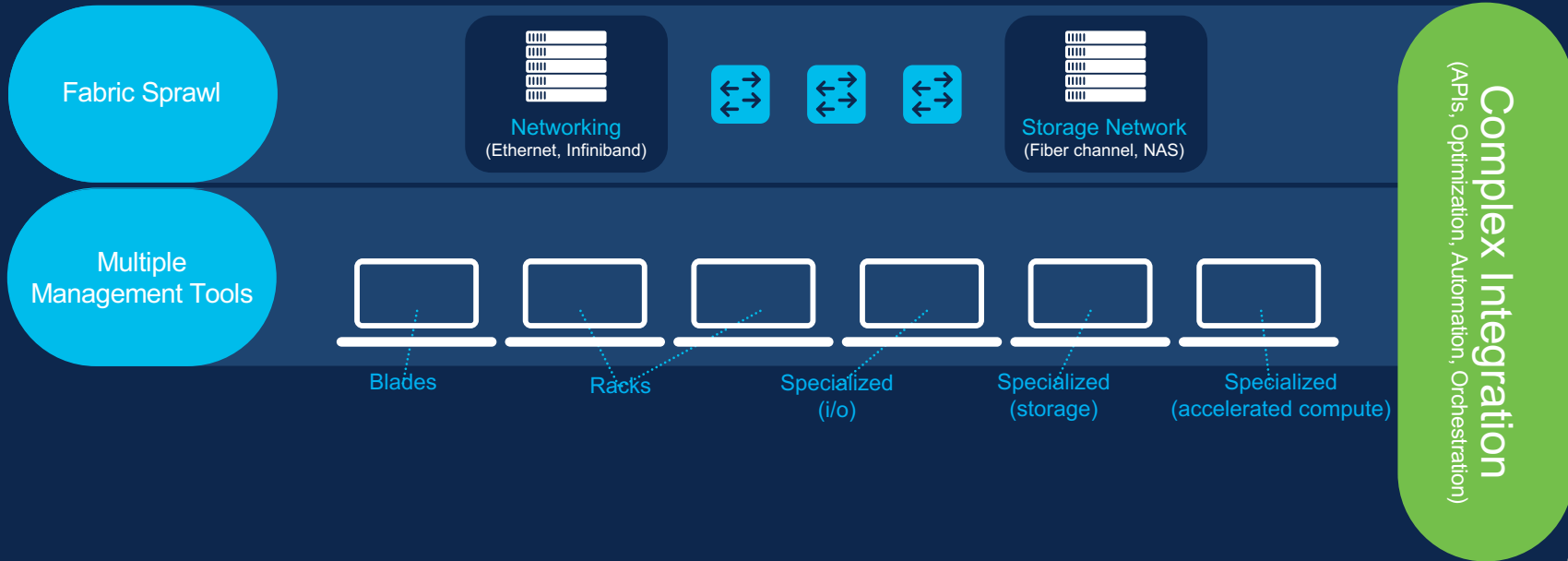
## Next Decade

Hybrid everything: Hybrid Cloud,  
Hybrid Apps, Hybrid Ops,  
Heterogenous Compute – CPU,  
Storage, GPU, and Hybrid  
Development models

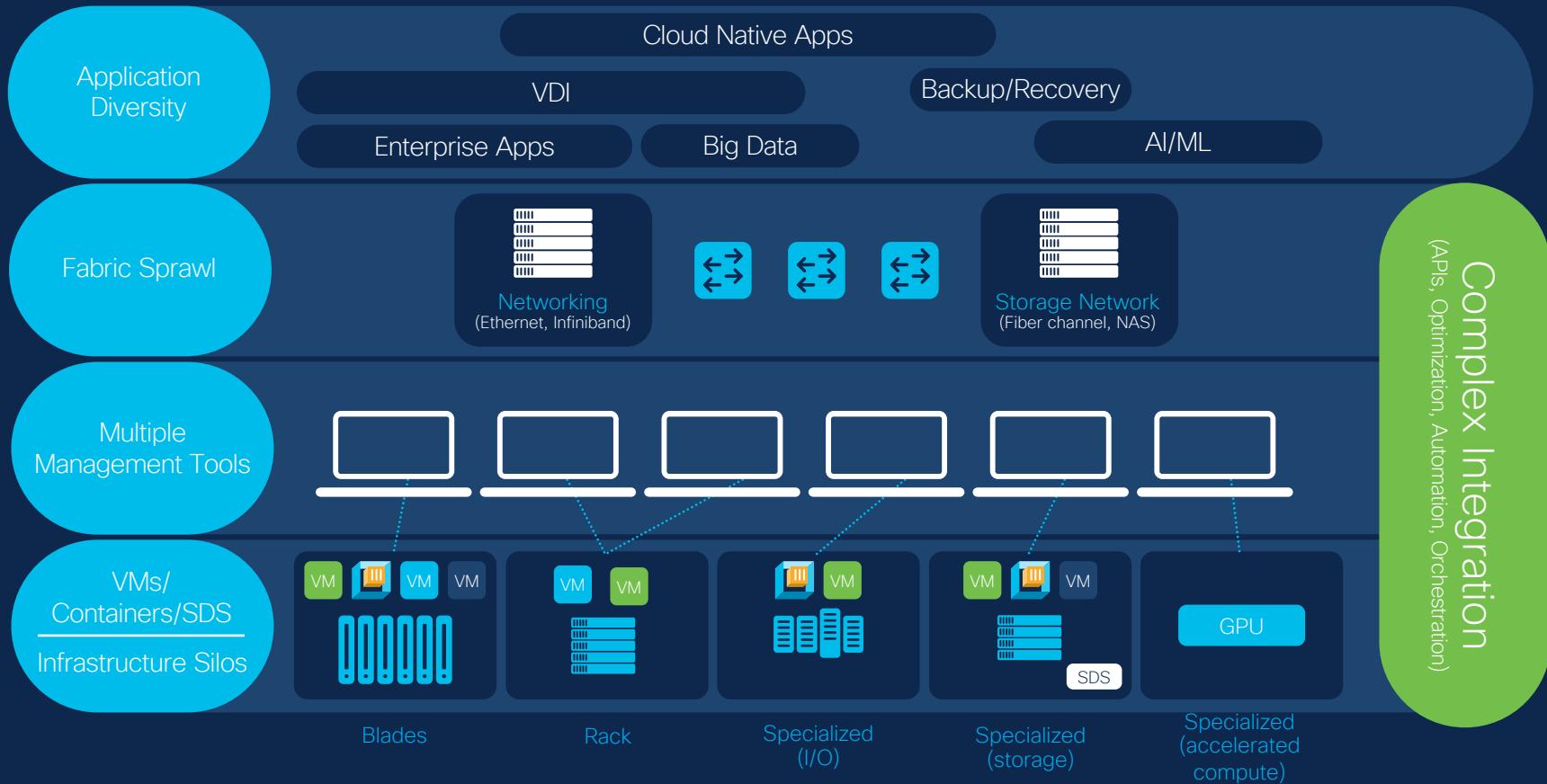
2009

2025+

# ...Spawning Unique and Complex Architectures for Modern Workloads

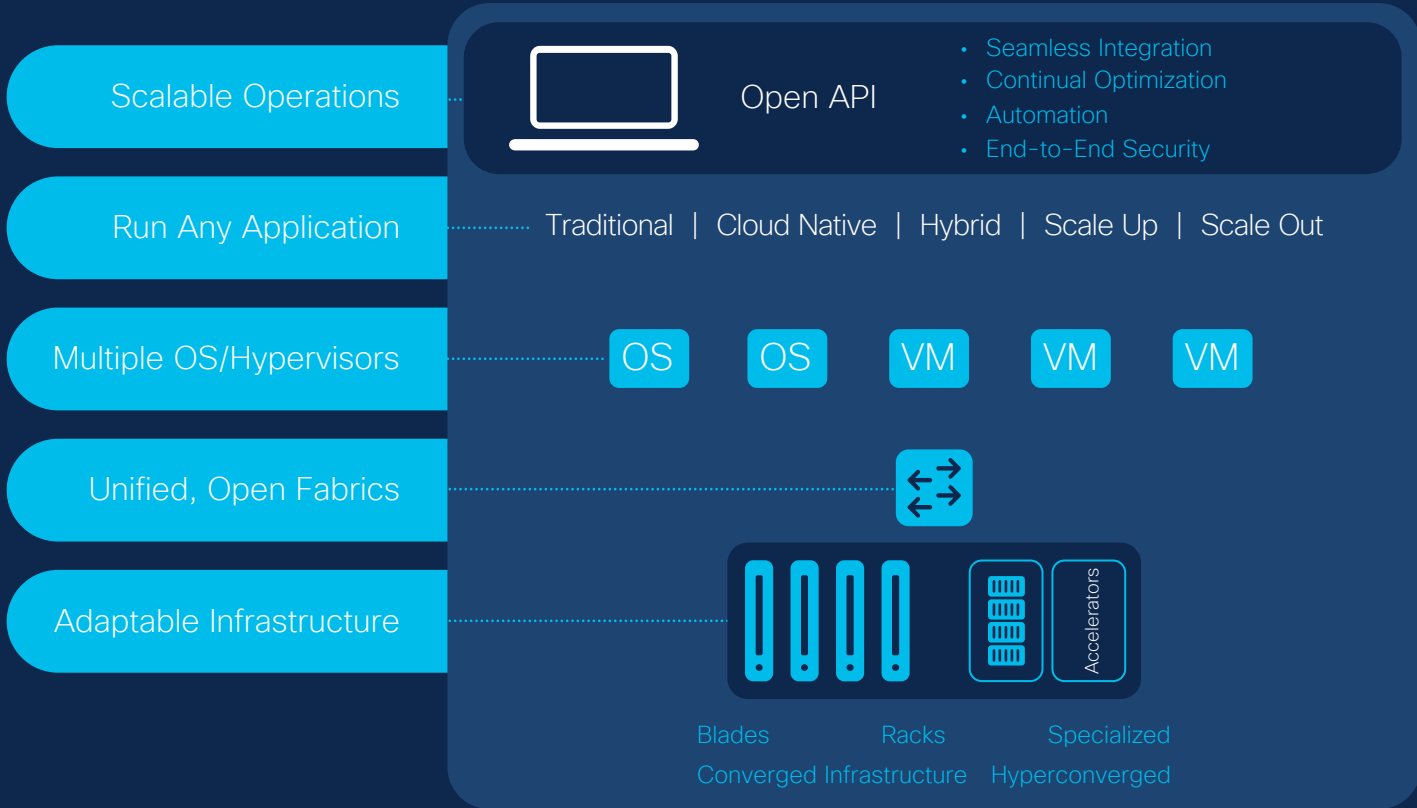


# ...Spawning Unique and Complex Architectures for Modern Workloads



# Modern Hybrid Cloud Infrastructure

Simplify to scale, automate, and operate



# Meet the UN/BOX

UCS X-Series powered by Cisco Intersight



Cloud  
Operated



Unparalleled  
Flexibility



Future-ready

# UCS X-Series Powered by Intersight

Scalable Operations

Private Cloud



Public Cloud

Intersight  
Cloud Orchestrator

Intersight  
Workload Optimizer

Intersight Service for  
HashiCorp Terraform

Intersight  
Workload Engine

Intersight  
Virtualization Service

Intersight  
Kubernetes Service

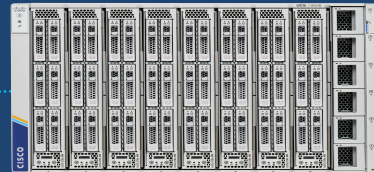
Intersight Infrastructure Service

Common Services

Unified, Open Fabrics

UCS X-Fabric  
Technology

Adaptable Infrastructure



UCS X-Series

Benefits  
of  
Blades

Expandability  
of Racks

Constructs  
for  
Specialized

# Hybrid cloud infrastructure for the next decade



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 Cloud Operations Platform



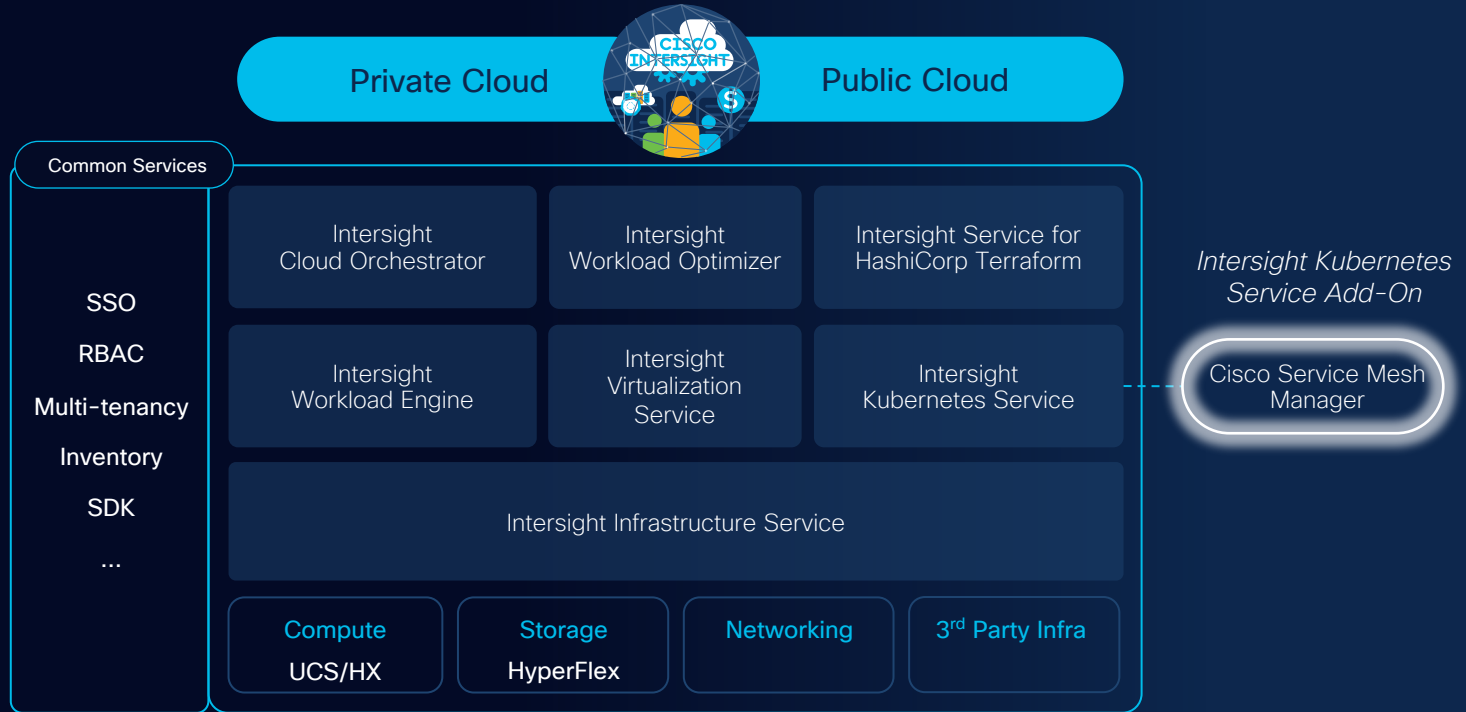
Automation



Observability



Cloud native



# UCS X-Series

Performance, capacity  
and bandwidth for all  
your apps

**600+**  
Cores

**~100 TB**  
Memory



**1 PB**  
Storage

**35 M**  
IOPS

# Simplify with an Adaptable System

Open, modular design

## New nodes

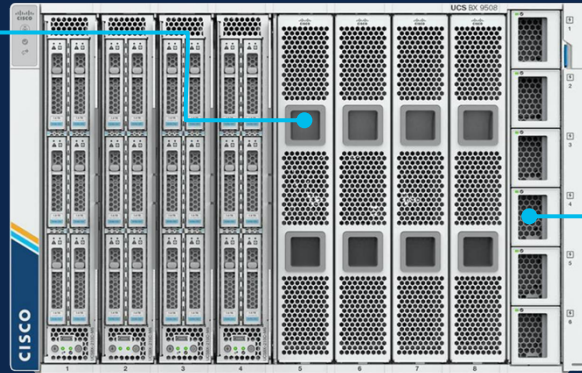
- Compute Nodes
- Storage nodes\*
- Accelerator nodes\*
- External Persistent Memory nodes\*

## Future I/O

- New SmartNIC Features, 100Gb+

## UCS X-Fabric Technology

- PCIe Gen4/5/6
- CXL



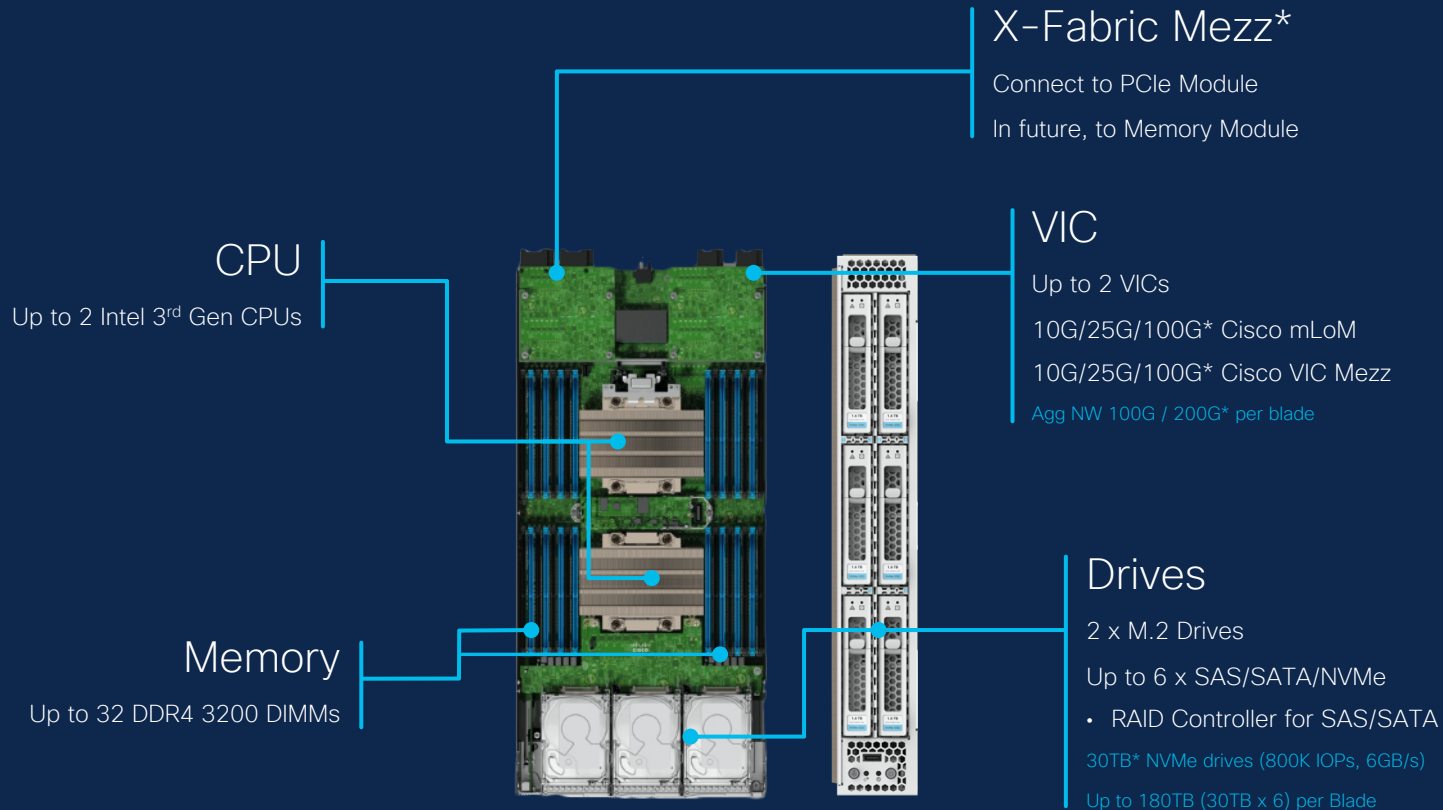
## Power and Cooling Margins

- Ready for high-watt CPUs and GPUs
- Liquid cooling enabled

## Architecture which enables:

- Modularity for seamless integration of Next Innovations
- Efficiency of power and cooling
- Balanced Compute and Drive Ratios
- Optimal Failure Domains
- High Performance

# UCS X210c M6 Compute Node



\*Post FCS

# UCS X-Fabric Technology

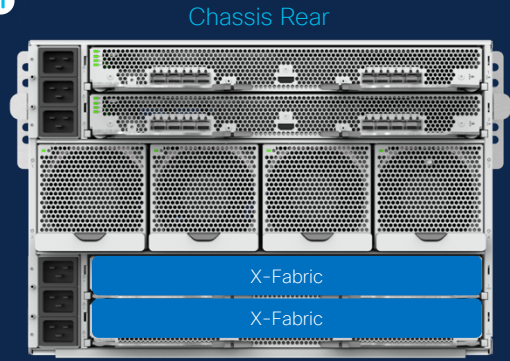
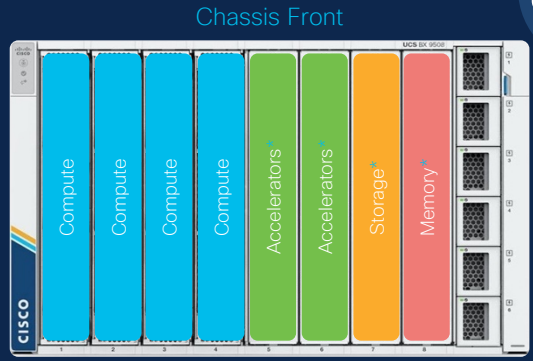
Shape infrastructure resources to applications



Run modern apps by assembling modules into systems

Simple policy-based definition of resources from Intersight

Engineered to accommodate future technologies



UCS X-Fabric Technology  
Internal Fabric interconnects nodes  
Industry standard PCIe, CXL Traffic  
No backplane or cables = Easily upgrades

\* Roadmap items – subject to change

# Designed for the Diversity of Modern Apps



AI

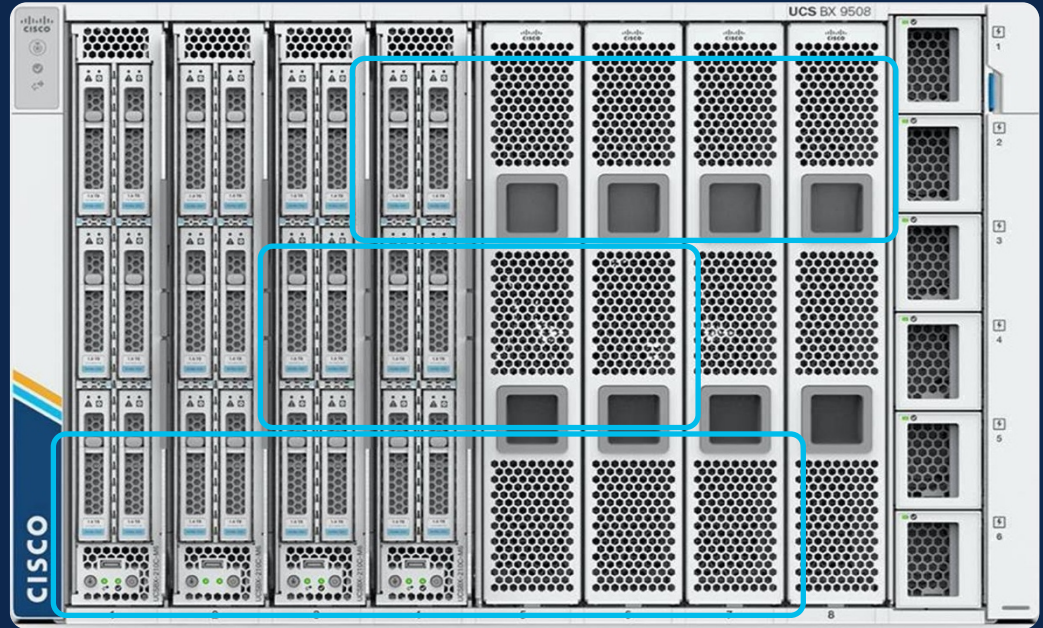
AI/ML



VDI



Big Data



# Future-Ready Design

Engineered for the next decade

....Protect investments and focus on innovation



2021



2030+

Liquid-cooling

Silicon photonics

Next gen. fabrics

Power and cooling capacity

Future accelerators

Intel/AMD roadmap

# UCS X-Series: Right Design for What's Next

## Simple

Cloud managed, without rigid hardware config rules

## Flexible

The only modular system with best of blade and rack

## Future-ready

Competitor systems aren't built for what's coming

Fewer Components

36%

30%

Larger Compute Nodes

Power and Cooling

2X

1

Control Point in the Cloud

# Cisco Plus for Hybrid Cloud

Focus on applications, not infrastructure



## Simplicity

Add capacity instantly  
Intelligent  
cost optimization



## Agility

Scale up and down  
Optimize performance



## Choice

Flexible buying  
models for compute,  
storage, network  
Avoid lock-in



Flexible  
pay-as-you-go options

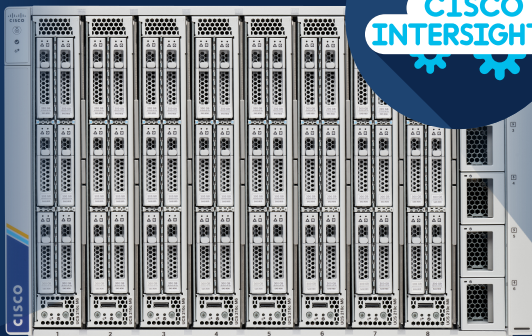


UCS X-Series

# Transforming Converged Infrastructure for Hybrid Cloud

## Adaptable Infrastructure

- ✓ Align configuration to match apps
- ✓ High-performance workloads
- ✓ HA, DR ready
- ✓ Built for the Hybrid cloud
- ✓ Streamlined vendor support



## Foundation for Hybrid-Cloud

- ✓ Intersight managed compute
- ✓ Intersight managed storage
- ✓ Automation services (Day 0 to N)
- ✓ Full-stack observability
- ✓ Intersight services:
  - Infrastructure service
  - Workload optimization
  - Kubernetes services
  - Terraform Services

UCS X-Series and Intersight combined with simplicity of CI





# Hybrid cloud infrastructure that is radically simplified



Cloud Operated



Unparalleled Flexibility



Future Ready



# Get Started Today

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Attend our next  
Webinar

[cisco.com/go/cloudwebinars](https://cisco.com/go/cloudwebinars)

2

Demo Intersight for  
yourself

[cisco.com/go/intersight](https://cisco.com/go/intersight)

1

Dive a little deeper  
into UCS X-Series

[cisco.com/go/ucsx](https://cisco.com/go/ucsx)



The bridge to possible