

Empowering Data Centers

Cisco's Path to Modernization and Operational Excellence

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Solutions Engineer – Cloud and AI Infrastructure



Agenda

Hardware innovation

Cisco silicon, platforms, optics, Nvidia partnership

Unified Operational Model

Nexus Dashboard

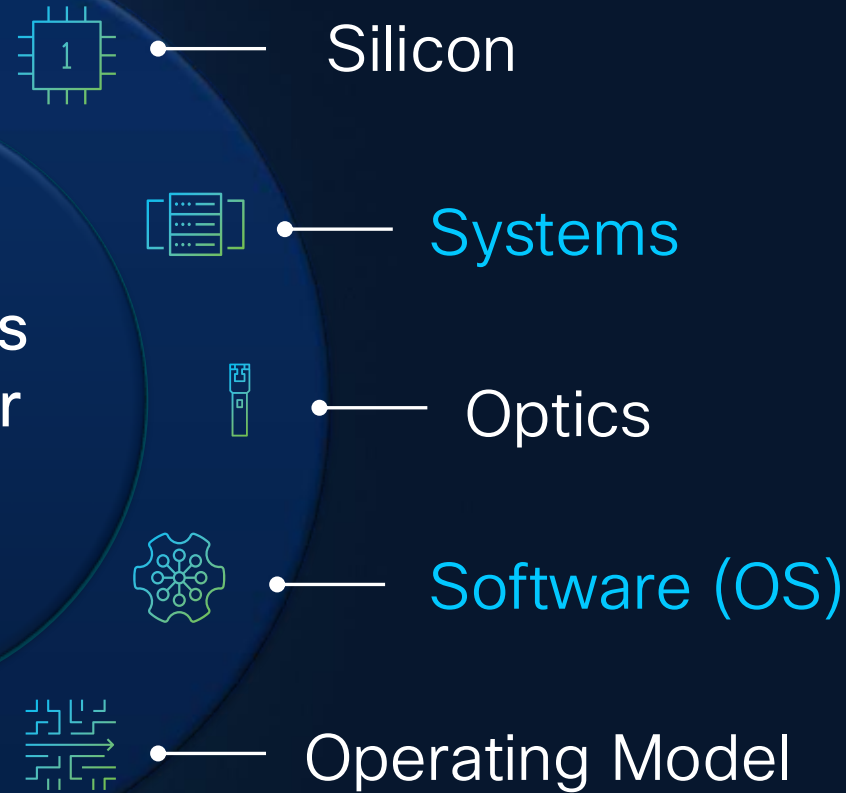
Software innovation


NXOS feature roadmap summary


ACI feature roadmap summary


Innovations and Feature Velocity


Cisco Nexus
Data Center
Switching




 Cloud Scale/Silicon One ASICs - 100G/400G/800G/1.6T
P4 Programmability

 N9800/N9500/N9300 (including Smart Switches)
N9100 Nvidia Spectrum X

 Single Lambda/Breakout/Coherent Optics
Linear Pluggable Optics

 NXOS/ACI/SONiC
Integrated Fabrics
Intelligent Packet Flow, DCQCN, Live Protect

 Unified Operational Experience
Nexus One - Nexus Dashboard - Hyperfabric - Nexus as Code

Cisco Nexus One Flexibility & Simplicity

FULLY INTEGRATED STACK

Nexus Dashboard

On premises

Nexus Hyperfabric

Cloud management

SILICON

Cisco Silicon One
NVIDIA Spectrum-X Ethernet

SYSTEMS

Cisco N9000
Systems

OPTICS

Cisco Optics

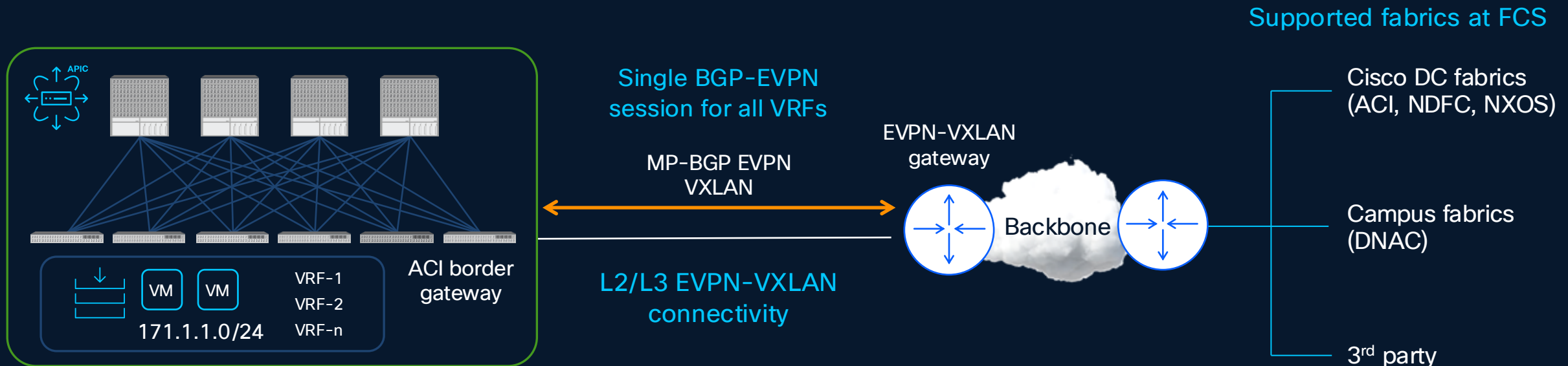
SOFTWARE

Cisco NX-OS
Cisco ACI, SONiC

SECURITY AND OBSERVABILITY

L2/L3 EVPN-VXLAN gateway connectivity

Nexus One



6.2(1)F

Any-to-any connectivity between ACI and VXLAN EVPN fabrics with policy extension

Also shipping with 6.1(5)M

6.2(2)F

Aggregated BUM storm-control on ACI BGW's

6.2(3)F

Migrate from "Multi-site with NDO" to "Multi-site with ACI BGWs"

Shipping

Committed

Planning

Multi-vendor supported

Inter-fabric VM mobility extension

Migrate workloads bi-directionally

Standards-based EVPN extension

Switching Update

DC Modernization Customer Journey

NXOS and ACI

Shipping

100G Spine



Nexus 9336 100G Switch



Nexus 9324 100G Smart Switch



1/10/25G Leaf with 100G uplinks



Nexus 9348 25G Switch



Nexus 9396 SFP/Base-T Switches



Nexus 9300 1G Switch

Shipping

400G Spine



Nexus 9300 400G Switches
(64p OR 48p 2RU options)



Nexus 9300 400G Switches
(32p OR 16p 1RU options)



25/50G/100G Leaf with 400G uplinks



Nexus 93600 28p 100G Switch



Nexus 93400 48p 50G Switch



Nexus 9348 25G Smart Switch

Future

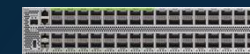
800G Spine



Nexus 9364E 800G Switch
Silicon One P200



100G Leaf with 800G uplinks



Nexus 9300 high density 100G
Switch (Cloud Scale CS100)

Alternative Leaf Option: Use any 400G Switch with
2x400G breakout on the the spine side

Cisco N9364E 51.2T Systems



High-performance 51.2T spine switches for scale across data center networks

Powered by Cisco Silicon One P200

Just Announced
2H CY2026



64p 800G OSFP ports
3RU

<p>Cisco N9364E-SP2R-O</p>	<p>Unrivalled performance and scale</p> <p>High performance MACsec and IPsec across L2/L3 networks</p> <p>Unified packet buffer and High Bandwidth Memory (HBM)</p>	<p>End-to-End security and Future ready programmability</p> <p>P4-based programmability enables flexible feature enhancements</p> <p>Support for both NXOS and ACI in DC Spine role</p>
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Cisco Nexus 9300 Spine Switches

High bandwidth fabrics enabling scalable, non-blocking spine architectures

NXOS and ACI

100G Switches



N9K-C9364C-H1
64p 100G



N9K-C93600CD-GX
28p 100G + 8p 400G



N9336C-SE1
36p 100G



N9324C-SE1U (Smart switch)
24x 100G



N9K-C9336C-FX2
36p 100G

400G Switches



N9K-C9364D-GX2A
64p 400G



N9K-C9348D-GX2A
48p 400G



N9K-C9332D-GX2B
32p 400G



N9K-C9332D-H2R
32p 400G

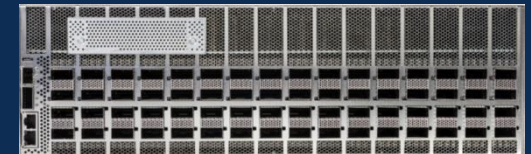


N9K-C9316D-GX
16p 400G

800G Switches



N9364E-SP2R-O
64p 800G 2H CY26



N9364E-SP2R-Q
64p 800G 1H CY27

Cisco Nexus 9300 ToR/Leaf Switches

NXOS and ACI

Feature Rich High-Density and Compact leafs enabling efficient aggregation

10/25G/50G w/ 100G/400G uplink



N9K-C93360YC-FX2/N9396Y12C-SE1
96x 25G + 12x 100G



N9K-C93216TC-FX2/N9396T12C-SE1
96x 10GT + 12x 100G



N9K-C93400LD-H1
48x 50G + 4x 400G



N9348Y2C6D-SE1U
48x 25G + 2x 100G + 6x 400G



N9K-C93180YC-FX3
48x 25G + 6 100G



N9K-C93108TC-FX3
48x 10GT + 6x 100G



9348GC-FX3
48x 1GT + 4x25G + 2x 100G

100G w/ 100G/400G uplink



N9K-C9348C8D-H2R
48x 100G + 8x 400G Future



N9K-C93600CD-GX
28x 100G + 8x 400G



N9336C-SE1
36x 100G



N9324C-SE1U
24x 100G



N9K-C9336C-FX2
36x 100G

400G down/uplink



N9K-C9332D-GX2B
32x 400G



N9K-C9316D-GX
16x 400G

NOW ORDERABLE

Cisco Nexus Hyperfabric

High-performance Ethernet

Cloud-managed operations

Unified stack including NVAIE

AI-native operational model

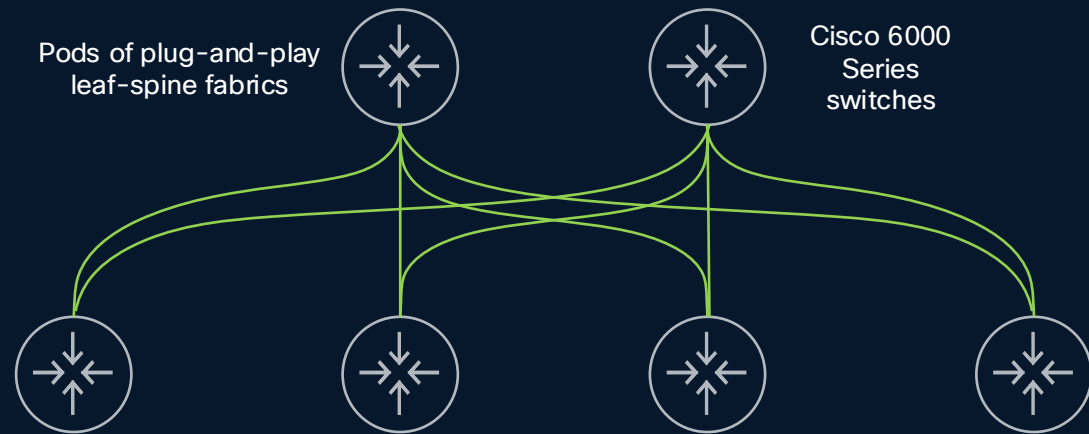
Democratize AI infrastructure

Visibility into full stack AI

Cisco Nexus Hyperfabric



On-prem AI infrastructure



Cisco UCS C885A M8

NVIDIA GPU

NVIDIA DPU / NIC BlueField-3



VAST Storage UCS C225

Nexus Hyperfabric Switches

Nexus 6100 Series



HF6100-64ED (800G Spine / AI)
Silicon One G200 · 64x 800G OSFP



HF6100-32D (400G Spine)
Silicon One Q200 · 32x 400G QDD



HF6100-60L4D (Leaf)
Silicon One Q200 · 60x SFP56 + 4x 400G QDD

H2CY26

Nexus 9300 Series



N9164E-NS4 (800G AI/ML fabric Spine/Leaf)
Nvidia Spectrum 4 64x 800G OSFP



N9336C-SE1 (100G Spine/Leaf)
Silicon One E100 · 36x 100G QSFP28



N9K-93180YC-FX3 (SFP28 Leaf)
Cloud Scale FX3 · 48x 25G SFP28 + 6x 100G QSFP28



N9K-93108TC-FX3 (Copper Leaf)
Cloud Scale FX3 · 48x 10G BaseT + 6x 100G QSFP28

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

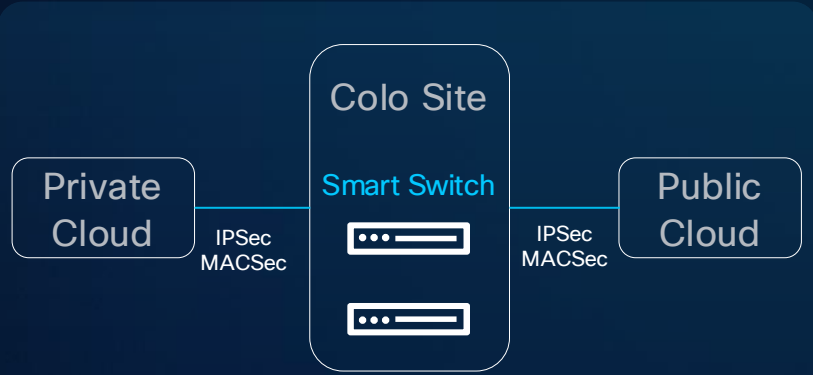


Zone-based
segmentation



Cloud Edge

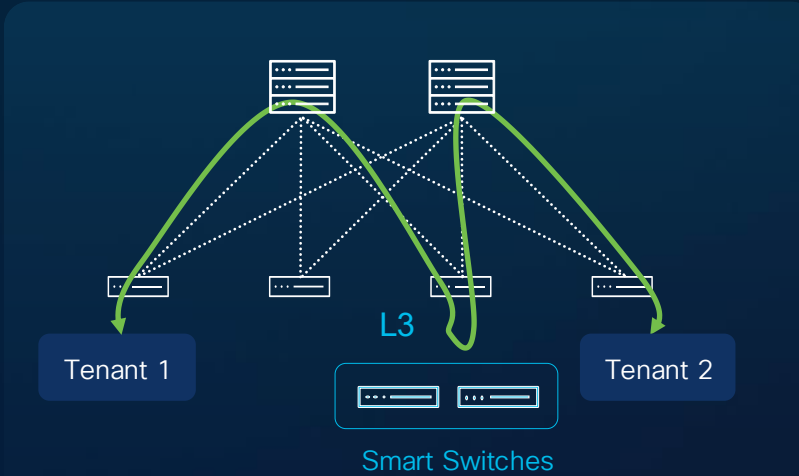
Upcoming Use Cases



Cloud Edge

Smart Switch provides stateful L3/L4 East-West segmentation and visibility between private and public clouds

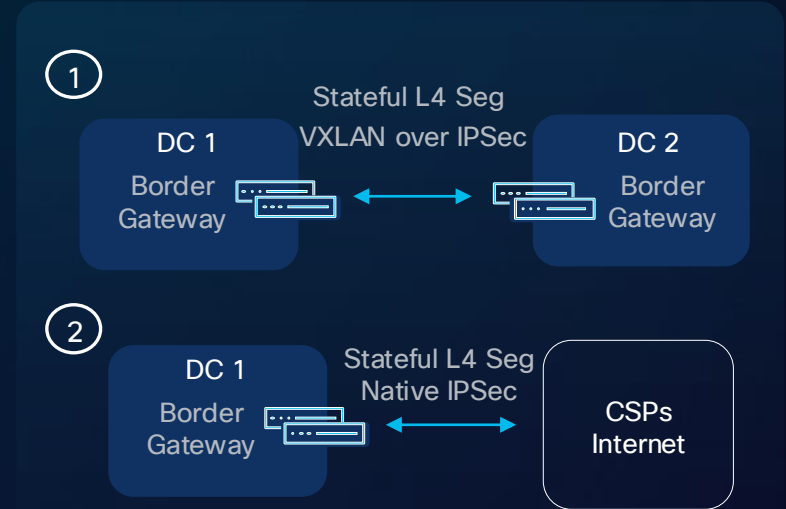
Positioned for ACI & Nexus fabrics



Zone Segmentation

Smart Switches provide external East-West L4 stateful segmentation and visibility

Positioned for ACI fabrics



Secure Peering for DCI

Encrypt VXLAN multi-site DCI traffic using IPsec or native IPsec for Internet/CSPs

Positioned for Nexus fabrics

Scale for AI



Cisco NVIDIA
Partnership

Cisco and NVIDIA: Accelerating AI adoption in the Enterprise



Extend NVIDIA's Spectrum-X architecture to include Cisco Silicon and **Cisco Optics**

1

Cisco Silicon is currently the only non-NVIDIA silicon that will be approved by Nvidia for compliance with Enterprise and Cloud Partner Reference Architecture.

Shipping



Deliver the highest performance Ethernet solutions available for AI workloads with tighter integration

2

NVIDIA will collaborate with Cisco to enhance communication between NVIDIA NICs and Cisco Silicon. Support packet spraying and adaptive routing capabilities with Cisco Switches.

Shipping



Build Cisco Nexus Switches powered by Cisco Software and NVIDIA Spectrum

3

Empowering customers to standardize on Cisco networking and NVIDIA technology—delivering flexibility and choice in the data center.

Orderable. Shipping in Q2 CY2026

Reference Architectures

Cisco AI Secure Factory

AI Software
NVIDIA AI Enterprise

AI Compute
Cisco UCS

AI Storage
Third-party offer

AI Networking
NVIDIA + Cisco Silicon One

Cisco
Enterprise
Reference
Architecture
(**ERA**)

< 1024 GPUs

Cisco N9364E-SG2
Cisco Silicon One



Cisco
Enterprise
Reference
Architecture
(**ERA**)

NVIDIA
ERA
Compliant

< 1024 GPUs

Cisco N9364E-SG2
Cisco Silicon One
Spectrum-X License



Cisco
Cloud
Reference
Architecture
(**CRA**)

1K~32K GPUs

Cisco N9364E-SG2
Cisco Silicon One



Cisco
Cloud
Reference
Architecture
(**CRA**)

NVIDIA
NCP RA
Compliant

1K~32K GPUs

Cisco N9164E-NS4
NVIDIA Spectrum-X
Ethernet Silicon



Cisco Nexus 800G Switches for the AI Era

Performance and scalability to meet the needs of AI fabric

Powered by Silicon One G200 series

Shipping



N9364E-SG2-O

64p 800G OSFP
2RU



N9364E-SG2-Q

64p 800G QSFP-DD
2RU

Cisco N9364E-SG2

Designed for performance and scale

Prevent packet drops of bursty AI traffic through fully shared 256MB packet buffer

512-radix enables highly scalable and efficient network designs

Advanced load balancing for maximum efficiency

Intelligent Packet Flow offers optimized congestion management and ultimate flexibility

NVIDIA Spectrum-X integration ensures unparalleled end-to-end integration



Cisco 800G Linear Pluggable Optics (LPO) Solutions

Introducing AI Scale-out power efficiency and reliability for 800G Networks

Just Announced!!
Q3 CY2026



Cisco L800G OSFP LPO
50% less power per module

Powered by Cisco Silicon Photonics
Integrated designs reduce system power consumption 30%

Shift power consuming optics DSP functionality to Cisco Silicon One platform

High signal integrity driven by Cisco Silicon Photonics and Cisco Silicon One

High reliability with lower thermal stress

Increase port density without PDU upgrades

Cisco Nexus 800G: Efficient and Optimized



Power efficient with LPO optics support

**Powered by Silicon One
G200 series**

Just Announced !!
Q3 CY26



N9364E-SG2X-O
64p 800G OSFP
2RU



N9364E-SG2X-Q
64p 800G QSFP-DD
2RU

Cisco N9364E-SG2X

Enhanced efficiency and lowered OpEx

Supports Linear Pluggable Optics (LPO) which reduces the overall power consumption by up to 30%

Lowers total cost of ownership (TCO)

Optimizes performance and scalability

Fully shared 256MB packet buffer and 512-radix to meet the needs of today's highly-scalable AI data centers

Improved latency for reduced job completion time

Cisco N9100: NVIDIA Spectrum-X Integration



N9164E-NS4-O
64p 800G OSFP
2RU

Cisco secure AI stack that uniquely meets
NVIDIA NCP RA compliance

Orderable Now
Shipping in Q2 CY2026

Cisco N9164E-NS4 OSFP

Ultimate flexibility

Operating system flexibility between NX-OS, Cisco SONiC, or Hyperfabric

Provisioning and manageability with Nexus Dashboard integration

NVIDIA technology and partnership

Innovative Spectrum-X Ethernet silicon

Addresses large scale AI infrastructures with NCP Reference Architecture (RA)-compliant network designs

Cisco N9K 102.4T Liquid Cooled System



Unleashing 102.4T to
Accelerate AI at Massive
Scale

Powered by Cisco Silicon One
G300

Just Announced!!
2H CY2026



64p 1.6T OSFP ports
20U

<p>N9364F-SG3-L</p>	<p>Delivering lossless, low-latency switching for AI/ML fabric</p> <p>Scale-Out networking for AI/ML fabrics</p> <p>100% liquid cooled with direct to chip liquid cooling</p>	<p>Compact 20U switch with ORv3 rack support</p> <p>Choice of network operating systems (NX-OS & SONiC)</p>
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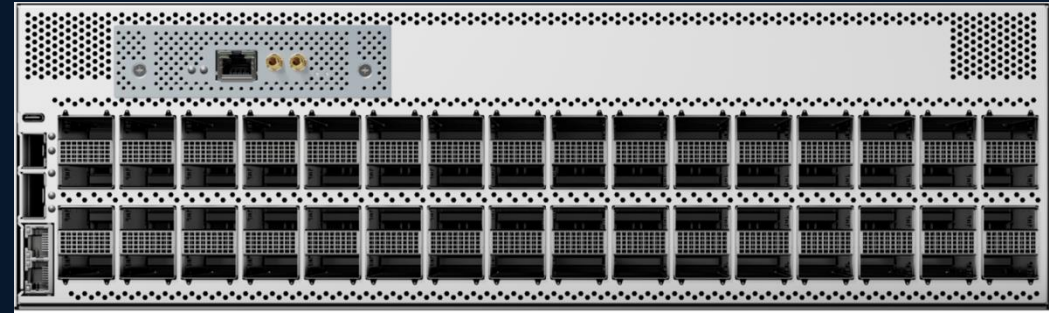
Cisco N9K 102.4T Air Cooled System



Unleashing 102.4T to
Accelerate AI at Massive
Scale

Powered by Cisco Silicon One
G300

Just Announced!!
2H CY2026



64p 1.6T OSFP ports
3RU

N9364F-SG3-A

Delivering lossless, low-latency switching for AI/ML fabric

Scale-Out networking for AI/ML fabrics

100% air cooled switch deployed in conventional environments

Supports standard EIA 19" rack and ORv3 and MGX with adapter

Choice of network operating systems (NX-OS and SONiC)

Cisco N9100: Expand AI Fabric with NVIDIA 102.4T Spectrum-X

The next major leap in AI data center capacity
with NCP RA-compliant Cisco Secure AI Factory

Future



N9164F-NS6

64p 1.6T OSFP
20U

Cisco N9164F-NS6
OSFP

Ultimate performance

Extraordinary network scale for AI to meet the demands of next generation secure AI factory

100% liquid cooled system with direct to chip liquid cooling

NVIDIA technology and partnership

NVIDIA Spectrum-X Ethernet technology enables scale-out AI fabric

Addresses large scale AI infrastructures with NCP Reference Architecture (RA)-compliant network designs



Reliable connectivity for AI data centers

Cisco OSFP 1.6T Pluggable Optics

High-performance and reliability

Cisco Silicon Photonics technology

Advanced DSP-based diagnostics and monitoring



Just Announced!!

2H CY2026

High bandwidth AI scale-out

1.6T switch-to-NIC connectivity and high-density fabrics for massive AI cluster builds (2x800G, 4x400G, and 8x200G links)

Diversified supply chain

Seamless AI cluster scaling with diversified supply chain and interoperability across Cisco and 3rd party DSPs

Efficiency and flexibility

Fully retimed and linear optics for power-efficiency and deployment flexibility in liquid cooled and air-cooled platforms

Cisco Nexus 9000 Series - Modular Switch Portfolio

Compact



Nexus 9408

Optimized for
100G/200G/400G

High density 100G/400G



Nexus 9500

Optimized for 1G through 400G
4-slot, 8-slot, 16-slot chassis

800G Ready
High Port Density



Nexus 9800

Very high density 400G & 100G ports
800G ready
4-slot and 8-slot chassis

Nexus Dashboard

Unified Domains, Architectures and User Experiences



Provision

Once, deploy anywhere



Secure

One source of truth



Manage

One logical network

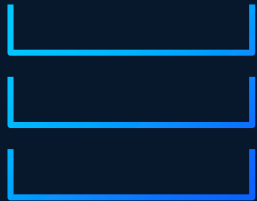


Analyze

Identify, troubleshoot, and fix faster

Nexus Dashboard Physical or virtual cluster

MDS



SAN

Nexus



Classic Ethernet

VXLAN

ACI

IP Media Fabrics

AI Fabrics

Hypershield

Extensible to other networks



Campus



WAN/Transport

Catalyst 8000

CSR 1000v

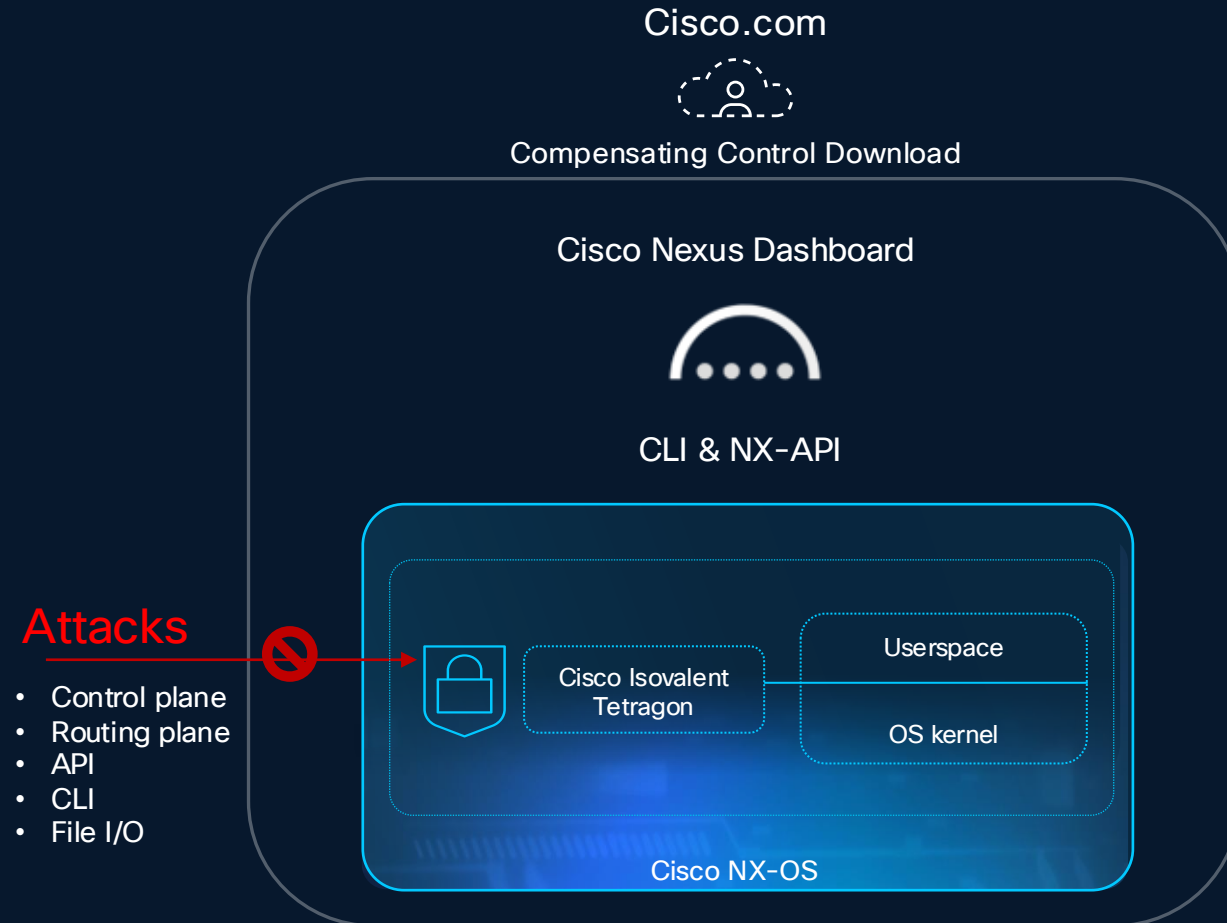
Virtual, Kubernetes & 3rd party Networks

Consistent and open operating experience across architectures

Vulnerability Mitigation with No Downtime

Available
Now

Live Protect for Nexus OS switches



Attacks

- Control plane
- Routing plane
- API
- CLI
- File I/O



Innovation

- Enterprise-grade Tetragon agent built into NXOS 10.6(1)F
- eBPF-powered security observability and enforcement
- First to market (no equivalent from Arista, Juniper, Aruba, etc.)



Customer workflow

- Policy file (shields) delivered as a signed RPM available on cisco.com
- Download and apply SMU to the switch (Enforce or Monitor mode)
- Collect metrics, events, logs, and traces
- Export Tetragon events to Splunk or other SIEMs
- SMU automatically removed with PSIRT-bundle upgrade



Ease of use

- Available with essentials or higher license
- Integrated Nexus Dashboard workflow
- API and CI/CD support for automation
- PSIRT upgrades during standard maintenance windows

Cisco Nexus Dashboard

Live Protect for Nexus OS switches

Welcome, admin

Refresh

Overview Topology Dashboards

dual-14 at a glance

Anomaly level Warning ⓘ

19 total warning anomalies, out of which 19 occurred in the last week

19 Total

Warning 19

Advisory level Warning ⓘ

21 total warning advisories, out of which 21 occurred in the last week

21 active

Security advisories ⓘ

4 Active advisories

18 Impacted devices

Network infrastructure

2 Fabrics ⓘ

0 Inter-fabric ⓘ

19 Switches ⓘ

2 Active Endpoints ⓘ ⓘ

Recent activity View all

Login successful. roles: super-admin by admin 0 minutes ago

Modify Userpreference: local-admin by admin 5 minutes ago

Login successful. roles: super-admin by admin 16 minutes ago

- Updated Security advisories card
- Enable and Disable Live Protect feature
- Deploy compensating control
- Topology view of security advisories and one click deploy

Device Security

Security advisories Topology

Advisories Devices

Filter by attributes

Advisory Id	Title	Advisory level	Status	CVSS	Nodes
<input type="checkbox"/> cisco-sa-nxos-cmdinj-Lq6jsZhH	CSCwh77786:	Warning	Active	4.4	f2-bgw1 View all (8 tota)
<input type="checkbox"/> cisco-sa-nxos-cmdinj-Lq6jsZhH	CSCwh77786: cisco-sa-nxos-cmdinj-Lq6jsZhH	Warning	Active	4.4	f1-bgw1 View all (10 tot)
<input type="checkbox"/> cisco-sa-nxos-psbe-ce-YvbTn5du	CSCwh77780:	Warning	Active	5.3	f2-bgw1 View all (8 tota)
<input type="checkbox"/> cisco-sa-nxos-psbe-ce-YvbTn5du	CSCwh77780:	Warning	Active	5.3	f1-bgw1 View all (10 tot)



Security Overview ⓘ

Advisories 2 Active

Select an advisory to highlight its devices

- CSCwh77780: Warning
- CSCwh77786: Warning

Devices 10 total Deploy Live Protect

Filter by attributes

Name	Compensating control
<input type="checkbox"/> f1-bgw1	Available
<input type="checkbox"/> f1-bgw2	Available
<input type="checkbox"/> f1-leaf1	Available
<input type="checkbox"/> f1-leaf2	Partially protected

Cisco Nexus Dashboard

SMU support added for Nexus Dashboard



- Nexus Dashboard 4.2 introduces native support for installing Software Maintenance Updates (SMUs) to apply targeted fixes for the Nexus Dashboard software, eliminating the need to engage TAC for routine patching.
- This empowers customers to apply critical fixes faster, reduce operational delays, and maintain software compliance with greater independence.
- By streamlining SMU deployment within Nexus Dashboard, teams can respond more quickly to issues while keeping control and visibility centralized in a single operational platform.

Benefits

Nexus Dashboard Release Highlights

Nexus Dashboard 4.2

Invest in AI/AI OPS

- AI/ML Fabrics Enhancements & DLB
- GPU Server Topology
- Nvidia Partnership
- SLURM Integration
- AI Job visibility

Nexus One

- Inter-op between ACI & NX-OS with policy extension
- ACI to ACI Extension via BGW
- Telemetry support for Catalyst platforms

Secure Data Center

- Hypershield Integration
- Smart Switch Integration
- Security Certifications
- Live Protect for NX-OS
- Multi-tenancy
- ESG & GPO enhancements

Platform and Scale

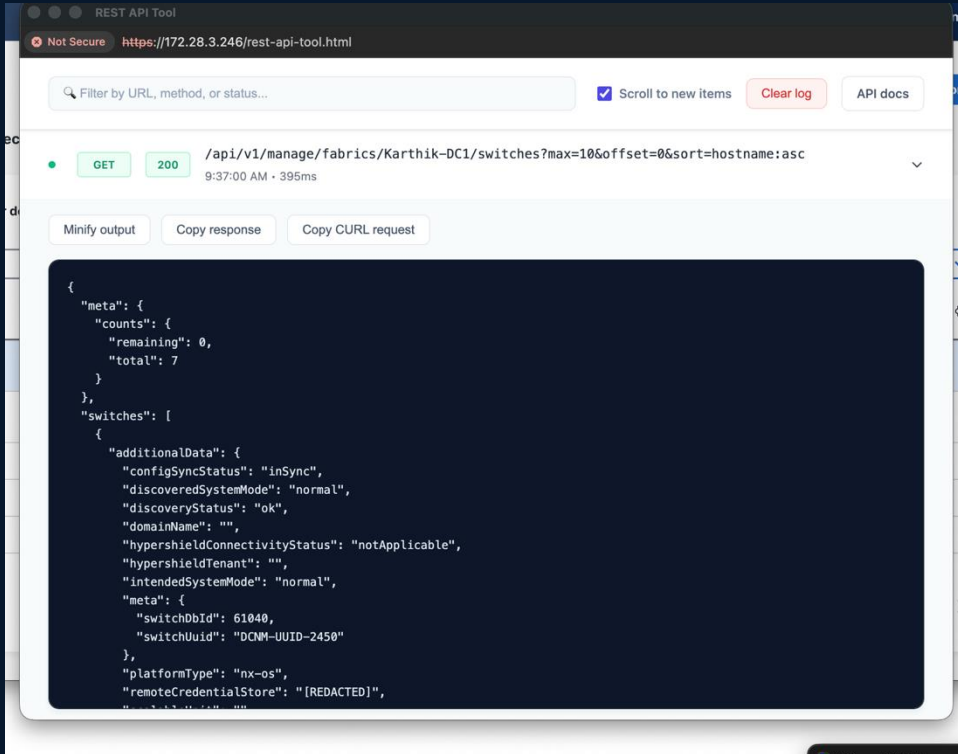
- Simplify ND Cluster options (1/3/6 sizes)
- Multi-Cluster scale increase
- Cluster switch scale increase
- Expand Hypervisor & public cloud support for vND (Nutanix, Azure, GCP)
- Native Splunk

Cisco Nexus Dashboard

API Inspector and Open APIs

POPULAR FEATURE RETURNED

Enhanced Developer Experience



- **Detailed Request Analysis**

Access comprehensive details of API requests and payloads with clean, developer-friendly formatting

- **Advanced Search**

Quickly locate specific API calls with robust search and filtering options

- **Integrated Documentation**

Launch relevant API documentation directly from the inspector interface for seamless reference

- **Open APIs**

ND 4.2 introduces comprehensive model-driven Open APIs, enabling programmatic access to network services and automation workflows.

Benefits

Cisco Nexus Dashboard

Intent reconcile from switch to Nexus dashboard

The screenshot displays the Cisco Nexus Dashboard interface for a switch configuration. The main area shows a 'Deploy Configuration - Core' window with a progress bar indicating 'Config Preview' and 'Deploy Progress'. Below the progress bar, there is a search filter and a 'Resync All' button. A table lists configuration details for switch 'N9k-244-gx', including IP address, role, serial number, fabric status (Out-Of-Sync), pending config (9 Lines), diff (+2 -8 ^3), status description (Out-of-Sync), and progress. A 'Reconcile All' button is visible next to the table. The configuration lines are shown in a list view, with some lines highlighted in red and others in green. A 'Reconcile Block' tooltip is visible over one of the lines.

Run On-demand incremental sync-up of selected Out-of-Band configurations

Achieve operational efficiency

Local switch configuration, host port configuration, ACLs and global CLI (underlay only)

Benefits

Single source of truth

Cisco Nexus Dashboard Fabric Designer

Design your entire network fabric before buying any hardware

Pre-build Configurations and Cable Plan based on Cisco Best practices

Supports Data Center VXLAN, Routed, and AI/ML fabric types

Fabric designer settings
Description here

Switches

Spines * Spine model
2 N9364E-SG2-Q
Max spine count 16

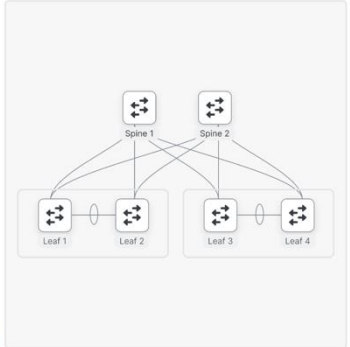
Leafs * Leaf model
4 N9K-C93180YC-FX3
Max leaf count 256

Management gateway *
192.168.1.1/24

Management IP pool *
10-20

Intra fabric link speed
400G

Other attributes



emo-Fabric


Refresh View in topology Actions

Overview **Designer** Advisories History

Bill of materials **Assembly** Cabling Configurations

Filter

Spine1



PID: N9364E-SG2-Q
• 64-port 800G
• 2x400, and 8x100 breakout
Datasheet

Required parts

Power supply (2)

Item	Product ID (PID)	Status	Serial number	Quantity
650W AC Power supply	FDO22-3842GGS	Needed		2

Fan tray (6)

Item	Product ID (PID)	Status	Serial number	Quantity
Catalyst 9500X front...	C9500-FAN-1RU	Needed		6

Optics for assigned ports (2)

Item	Product ID (PID)	Status	Serial number	Quantity
Ethernet1_1	QSFP-100G-AOC3M	Needed		1
Ethernet1_2	QSFP-100G-AOC1M	Needed		1



Complete Configurations



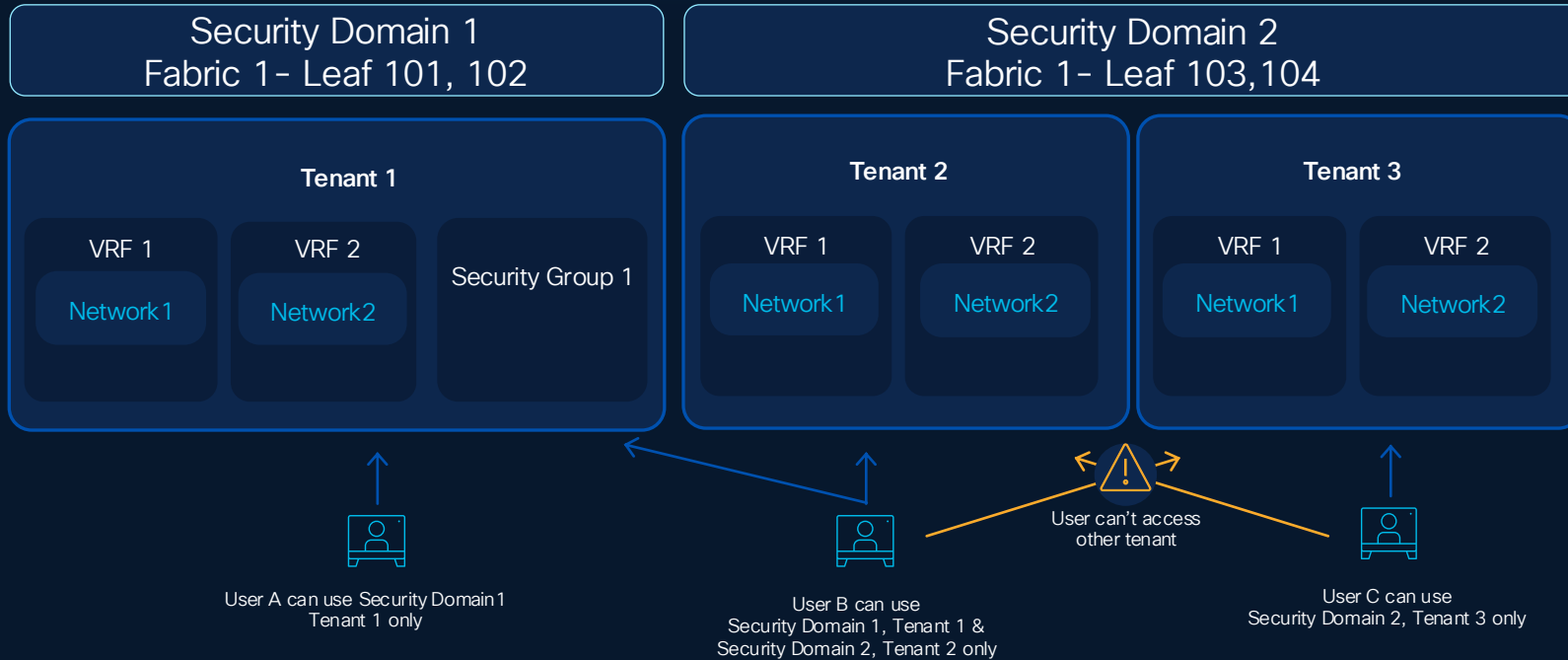
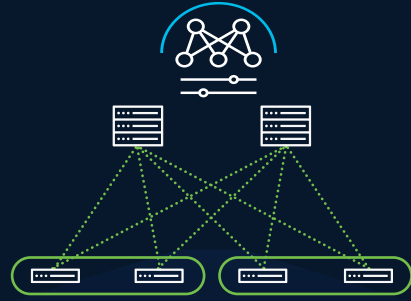
Detailed cable Plan and Assembly List

Benefits

Design fabrics with foresight helping with faster approvals and smoother production

Cisco Nexus Dashboard

Administrative Multi-Tenancy



Tenants: Group of logical network resources

Security domains: Isolation of physical resources

Phase 1 (ND 4.2)

- Tenancy applies to VXLAN/External fabrics for provisioning and monitoring
- Tenancy applies to ACI - NXOS interop
- Tenancy applies to Orchestrator functions
- Tenancy will not apply to ACI fabrics monitored by ND in Phase 1

Benefits

Administrative separation in addition to traditional VRF isolation

Cisco Nexus Dashboard

Enhancements to fabric software upgrades



Prepare

- Seamlessly create and manage custom upgrade groups
- Directly upload software images to upgrade groups
- Run custom pre-upgrade checks to validate switch stability before upgrades



Run

- Visualize the steps of your upgrade as they happen in real-time
- Quickly address issues and cancel upgrades if needed



Synthesize

- Correlate data between pre-upgrade and post-upgrade checks
Validate the state of your switches after upgrade

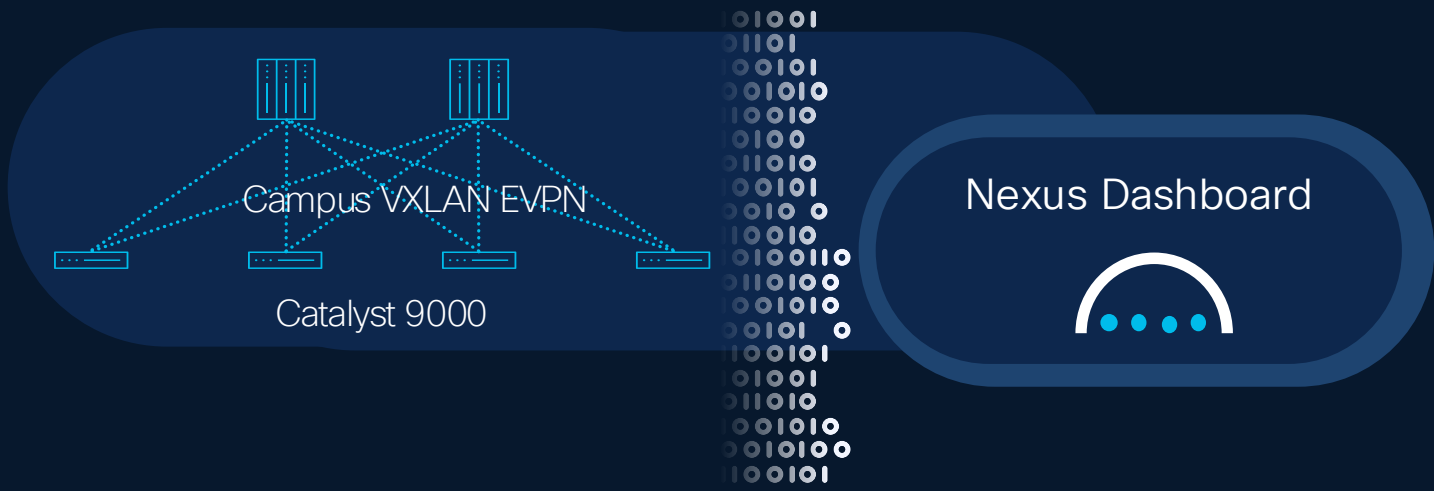
Platforms added to existing SWIM portfolio – Catalyst 8000 (pre and post checks are roadmap for Catalyst platforms)

Benefits

Consistency and reliability in an automated switch upgrade process

Cisco Nexus Dashboard

Telemetry Support on Catalyst - Phase 1



Collect telemetry from Catalyst switches for Managed Campus VXLAN Fabrics (Spine/Leaf role)

Support for TA Compatibility mode

Basic Anomaly, Interfaces, Endpoints, Trending, Environmental, CPU/Memory stats

IOS-XE 17.12.x and above

L2 ToR Support (future)

- C9300L-24P-4G
- C9300L-48P-4G
- C9200CX-12P-2X2G-E

Benefits

Comprehensive telemetry across both Nexus and Catalyst platforms

Nexus Dashboard Release Highlights

Nexus Dashboard 4.3

AI-driven Insights & Visibility

- Cisco AI Assistant (Docs)
- AI Job monitoring for server NIC stats
- Cisco Cloud Control integration
- MCP Server
- Traffic Analytics for S1 platforms
- Anomaly Suppression

Secure DC Workload

- CyberArk Integration for SAN
- Live Protect Enhancements
- Campus to DC Micro-segmentation
- Kerberos 4.2 Proxy

Unified Experience & Automation

- Intent Reconciler
- Policy Simplification
- TRM Visualization for VXLAN fabrics
- Nexus One Telemetry Enhancements (CA/TA)
- EPG to ESG Migration

Platform & Integrations

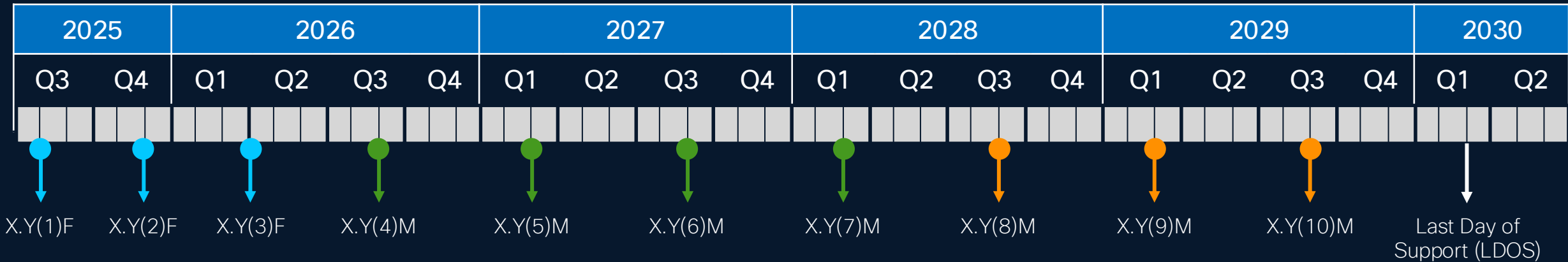
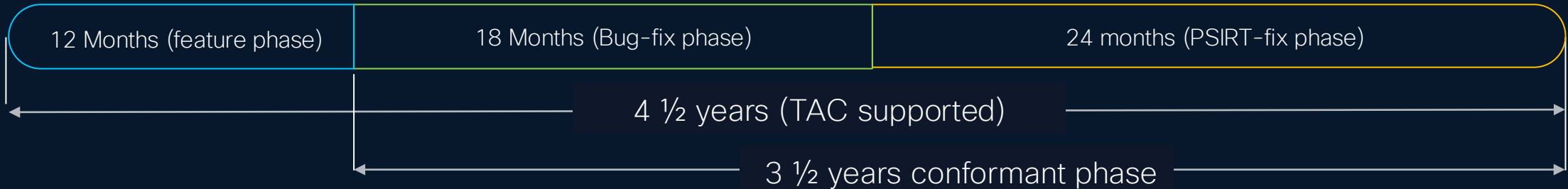
- Connected TAC
- SONiC Support for Nexus
- OpenStack Reconciler & Network type support
- ESX 9.0.2

Software Updates

Nexus (NX-OS and ACI) software release cycle

Key objectives

Predictable software release cadence | Reach maintenance mode quickly



4.5 years of total release lifecycle

Three feature releases in a train

No short-lived and long-lived releases

- 3 – feature releases
- 4 – bug-fix + PSIRT-fix releases
- 3 – PSIRT-fix releases

NX-OS Roadmap Summary

NX-OS 10.5(3)F

L2/L3 Leaf, L3VNI BGW on N9364E-SG2

Programmability – Multi-threaded NETCONF

N9Kv footprint reduction

Security – Mechanism to identify when/if AES master key is updated

AI: Path Based (WCMP) load balancing

AI: Policy based load balancing

AI: Intelligent Packet Flow

VXLAN GPO – Match Criteria: Interface

NX-OS 10.6(1)F

VXLAN GPO – Match Criteria: Port + VLAN

128-way ECMP w/ VXLAN

Security: TLS1.3 + TACACS

ESI Multihoming

Multicast Traffic Pinning

NDB: Packet Truncation Optimization

IPFM: Critical Events Enhancements

AI: SmartNIC integration with Spectrum-X

NX-OS 10.6(2)F

AI: ECMP Static Pinning

AI: Packet classification using reserve bit

AI: Telemetry drop flow notification, sampled netflow

Resilient Hashing (VXLAN overlay)

Cisco Live Protect: Enforce Mode

IPv6 Underlay Parity w IPv4 enhancements – MultiHop BFD, VNF Multipath

N9336C-SE1 – VxLAN EVPN multi-site w/BGW

SR-MPLS to VxLAN handoff with VXLAN GPO

NX-OS 10.6(3)F

VXLAN GPO – Intra ESG isolation

Express boot support on N9364E-SG platforms

ESI Multi-homing support for micro segmentation

Support dot1x Voice VLAN Enhancements

FIPS MACsec certification

Config Staging

IPv6 Enhancement

AI: MXL for media and broadcasting

IPFM: PFM-SD Multisite

NX-OS 10.7(1)F

Data Center and Campus Interoperability w/Policy

Security – PQC SSH/TLS

Multi-agent App hosting

N9336C-SE1 – RoCEv2 Enhancements

AI: PFC-WD on N9800
AI :Telemetry INT IFA 2.0

Soft VTEP support

MoFRR Support

Port+VLAN Match criteria (Physical vPC)

Q1CY25

Q3CY25

Q4CY25

Q1CY26

Q3CY26

ACI Roadmap Summary



Shipping



Committed



Planning

ACI 6.1(3)F

N9K-C93400LD-HXB

N9K-C9332D-H2R

N9k-9364C-H1

Remote leaf resiliency

vAPIC qualification as standby

Support for 32 ports in a single port-channel

Increase in VMM vNIC scale

ACI 6.1(4)F

Support for APIC-G5 (based on UCS-M8 server)

vAPIC support on Nutanix AHV

Support for N9K-X9736C-FX3 as 9500 spine LC

DSCP-based PFC support

ACI BGW feature enhancements

Nexus Dashboard - Day2ops telemetry enhancements

ACI 6.2(1)F

Support for co-existence of physical and virtual APIC

Support mixed ACI versions in the same fabric

APIC upgrade enhancements

ND features - ACI routing table & real-time monitoring

Scale: VSG L4L7 + ESG scale enhancements

BGP graceful restart & BGP graceful shutdown

AI feature enhancements - DLB

ACI 6.2(2)F

ACI BGW feature enhancements

AI feature enhancements - ECN buffer tuning

New optics support

vCenter 9 VMM support

ESG migration assistant

APIC UI enhancements

ACI 6.2(3)F

APIC upgrade enhancements

IPv6 for underlay phase 1 - Greenfield single pod, multi-pod, multi-site

ACI BGW feature enhancements

Nutanix VMM integration scalability limit increases

AES-256 and SHA2-256 cryptographic algorithm support

Virtual APIC support on OpenShift Virt/KVM

Nexus Dashboard - Day2ops telemetry enhancements

PBR 5-Tuple Service Node Balancing

Q1CY25

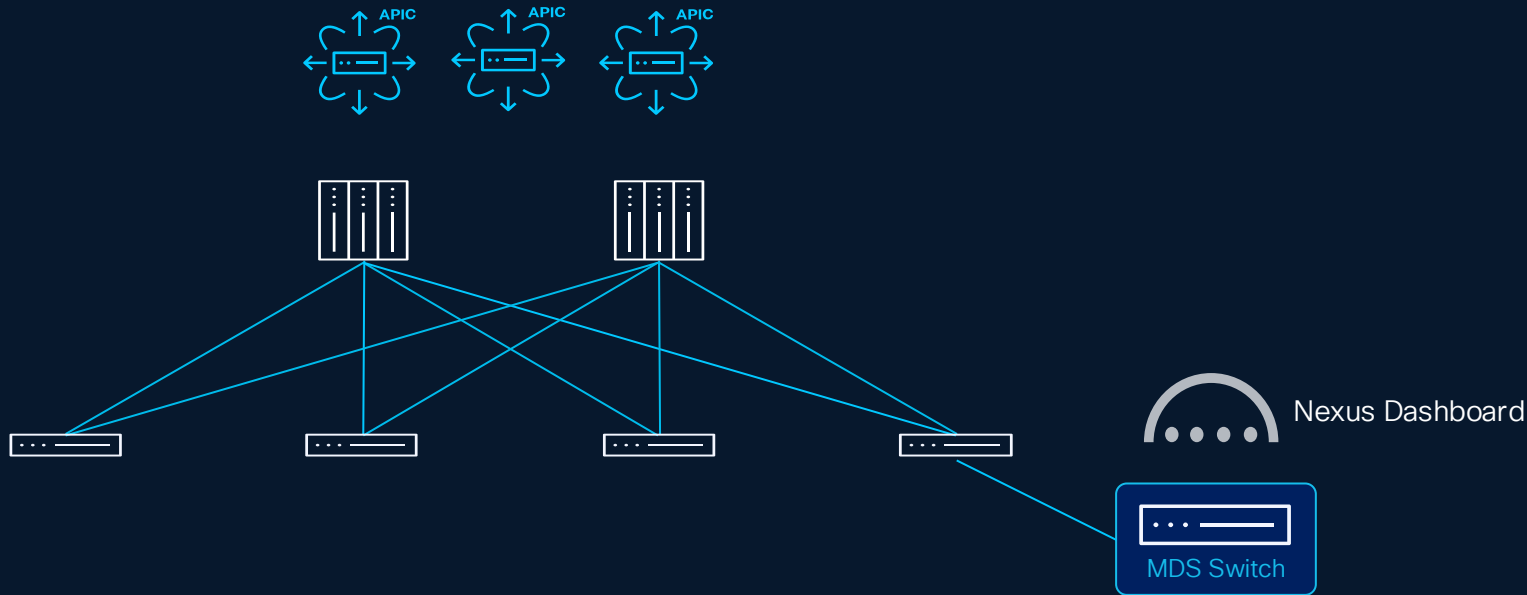
Q3CY25

Q1CY26

Q2CY26

Q3CY26

Seamless storage integration with Cisco ACI



- Supports IP-based storage protocols
- Policy-driven automation
- High-performance RDMA support
- Micro segmentation for storage isolation
- End-to-end visibility



NVMe over fabrics (NVMeoF)

RoCEv2 support

Designed for high-performance
AI, analytics



ONTAP with NFS/iSCSI

NetApp AFF & FAS systems

FlexPod solutions with Cisco
UCS + ACI



FlashArray (iSCSI, NVMe/TCP)

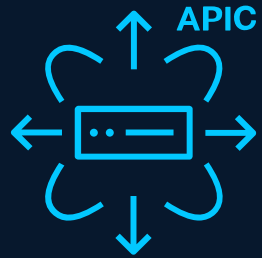
FlashBlade (NFS, S3)

Cisco validated designs available

Cisco ACI VMM integration

ACI 6.0(3)F

Shipping



- Unified management
- End-to-end network automation
- End-to-end VM visibility
- Hypervisor agnostic
- Faster time-to-value for NetOps ticketing queue

Policy-driven integrated network (physical/virtual)

Hypervisor agnostic

Faster time-to-value for NetOps ticketing queue

Reduce human error with “provision once” operating model

Thank you



