

Campus Switching Innovations for Future Proofed Workspaces

Cisco 9000 Series Campus Switches

Minhaj Uddin
Leader Technical Marketing

CISCO Live !

Cisco Webex App

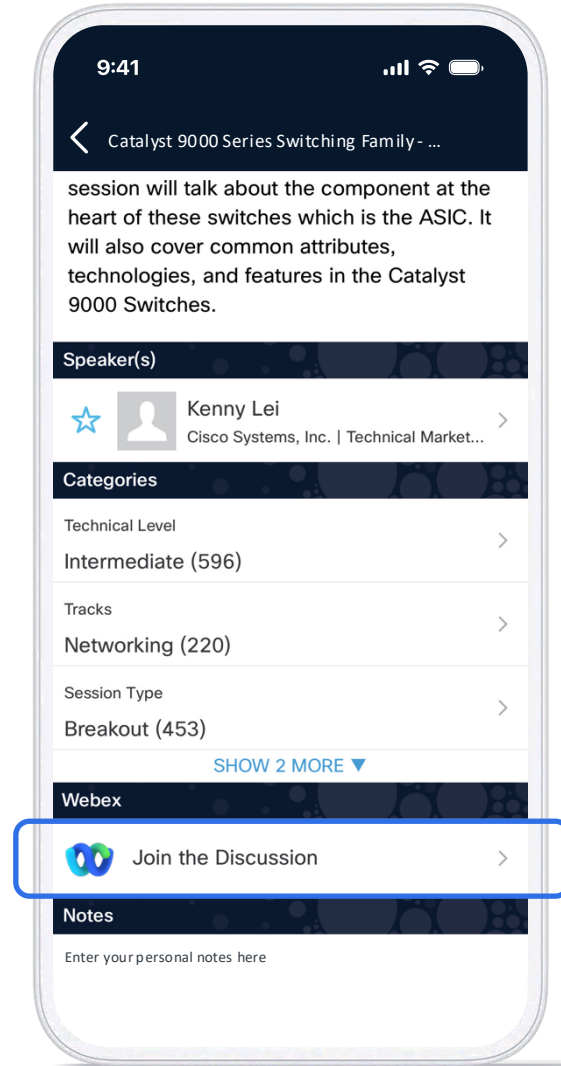
Questions?

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

How

- 1 Find this session in the Cisco Live Mobile App
- 2 Click “Join the Discussion”
- 3 Install the Webex App or go directly to the Webex space
- 4 Enter messages/questions in the Webex space

Webex spaces will be moderated by the speaker until 14 November 2025.

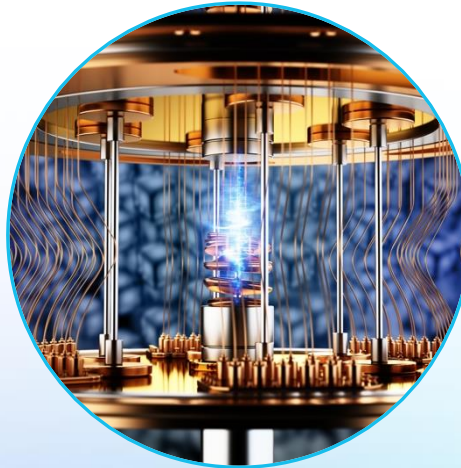


<https://ciscolive.ciscoevents.com/ciscolivebot/#BRKENS-2609>

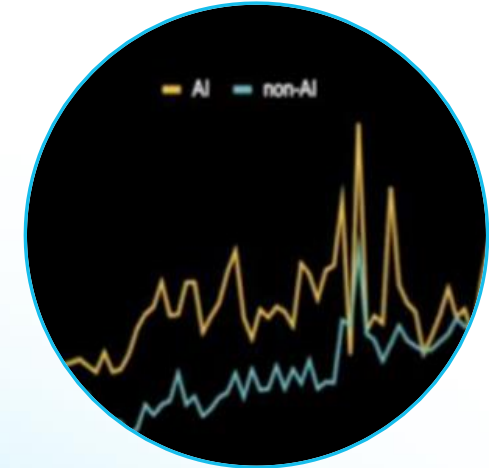
New Endpoints & Wi-Fi 7



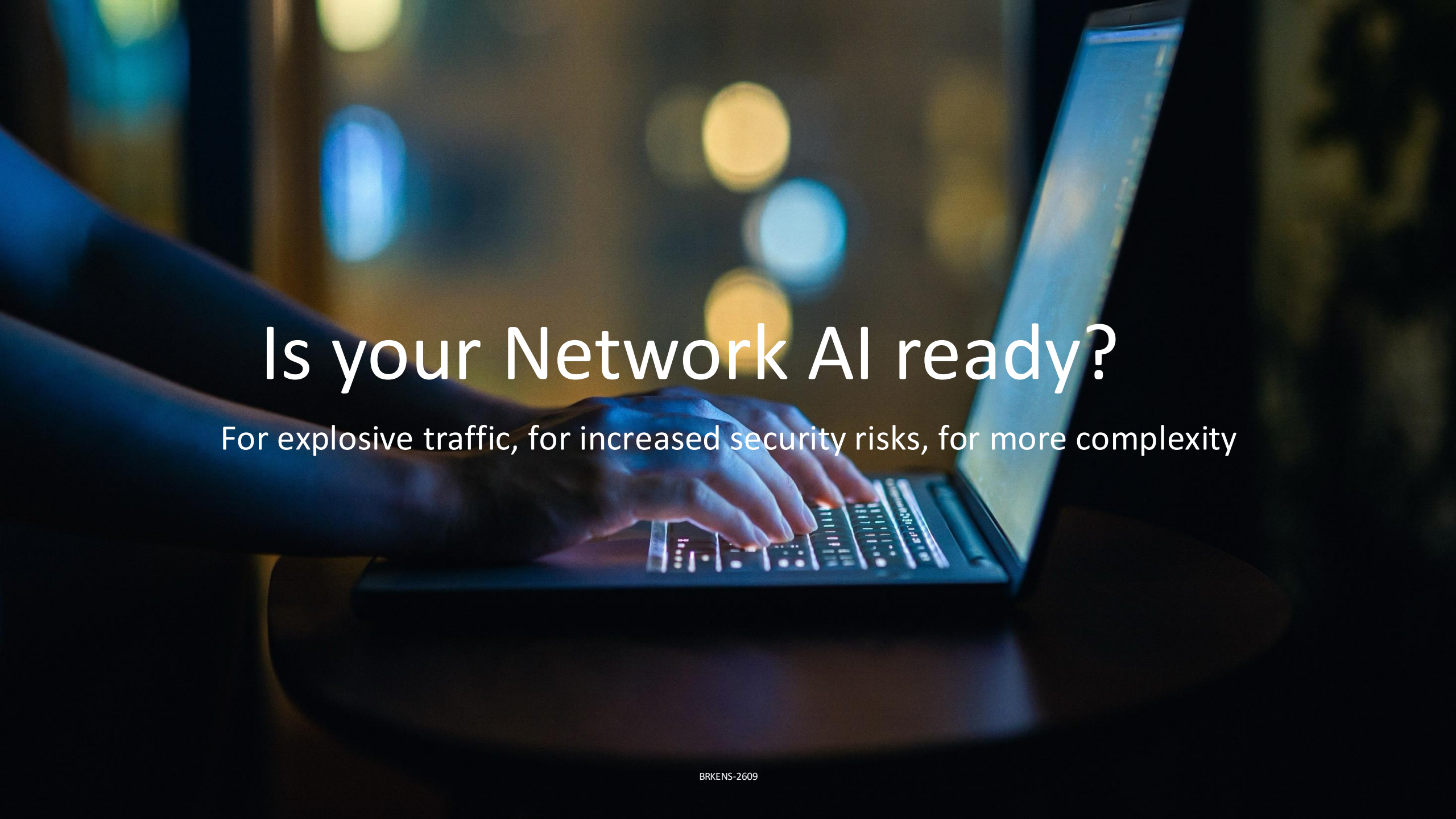
Quantum Computing & New Threats



AI Applications & New Traffic Patterns



Latest trends & technologies in Enterprise Networks



Is your Network AI ready?

For explosive traffic, for increased security risks, for more complexity

Considerations for a future-proofed campus network

Wi-Fi 7 and Smart Spaces

10Gbps port throughput

UPoE+ Power requirements

Increased uplink and stack bandwidth

Scaling MAC address density

Universal Zero Trust

Seamless zero trust network access

Least-privilege MFA & identity services

Fabric architecture and scaled policy

Rich telemetry and distributed enforcement

Campus Edge AI

Move AI and ML workloads closer to client and data

Minimize latency

Defend against data export.

Network-wide visibility and control

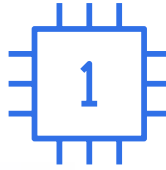
Future-proofed Scale

Modern apps and clients are driving massive client growth

6Ghz Wireless, 4K/8K video, IoT, Sensors and autonomous robots

Higher scale requirements for L2, L3, ACL, FNF, across Access and Core

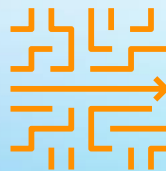
Architecture for the AI-Ready Secure Campus



Scalable devices
ready for AI



Security
fused into the network



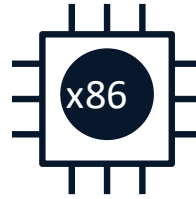
Operational simplicity
powered by AI

What does it mean to build hardware for the AI era?



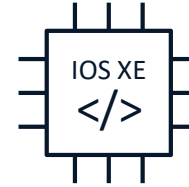
Silicon

- Massive packet bandwidth
- High forwarding performance
- Large forwarding info base
- P4 programmable for future protocols



System

- Integrated application hosting
- AI-driven visibility
- Programmable open ecosystem
- Power Efficient



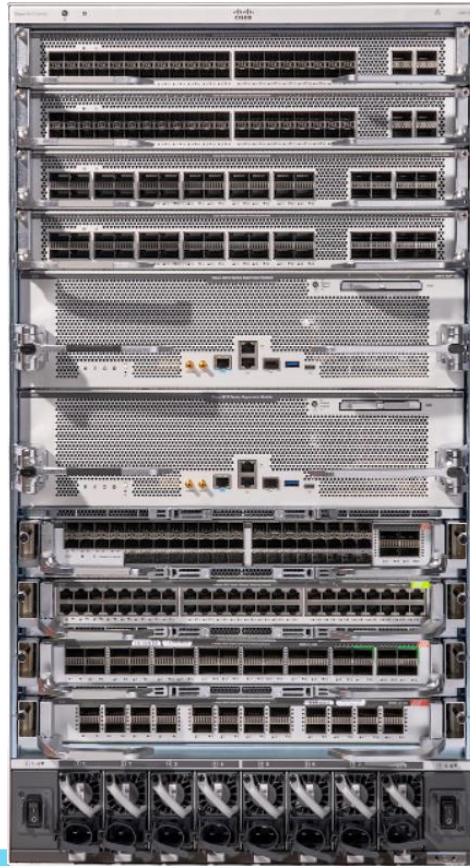
OS

- Pervasive programmability
- Deep observability
- Highly scalable
- Near-zero downtime architecture

Sustainability

Smart Power, PoE Assurance and Energy dashboard

Cisco C9610



Cisco C9350



Cisco C9000 Smart Switches

AI-Ready Hardware

C9350, C9610, Silicon One, IOS XE

Security fused into the network

PQC Compliant, Hypershield Ready, Cisco Live Protect

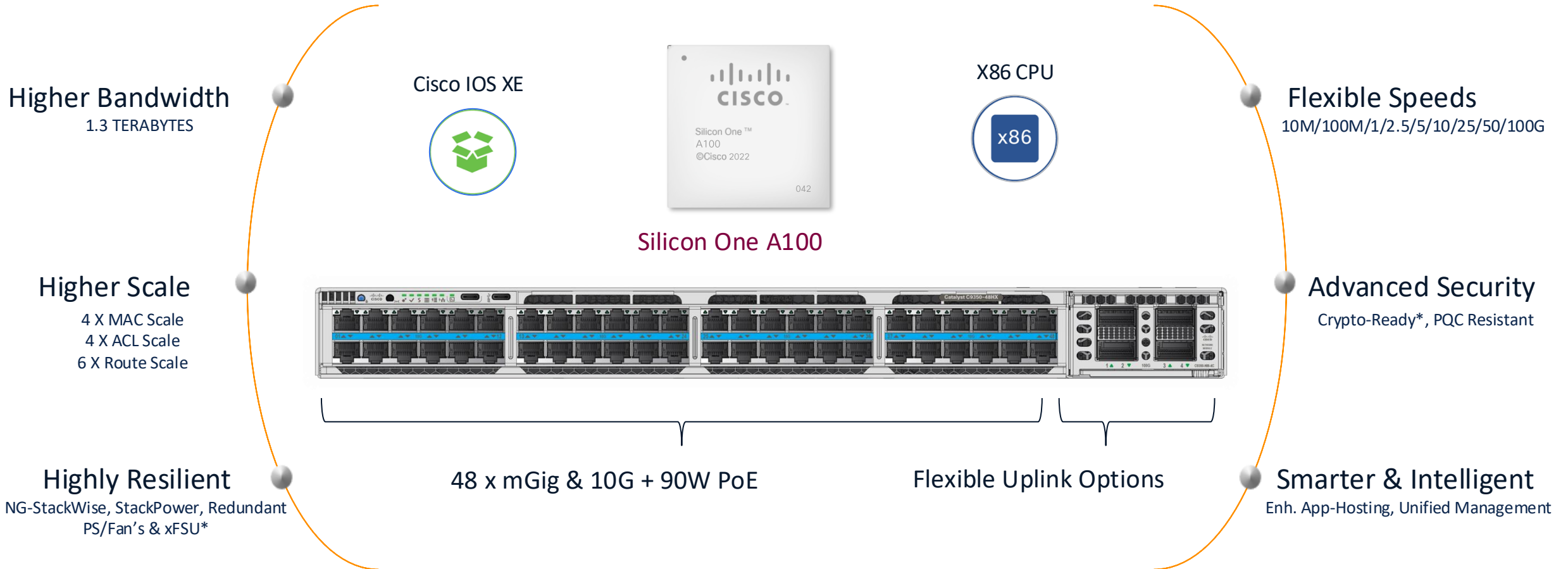
Operational Simplicity with Platform Flexibility

One hardware, your choice of management platform

Architecture for the AI-Ready Secure Networks

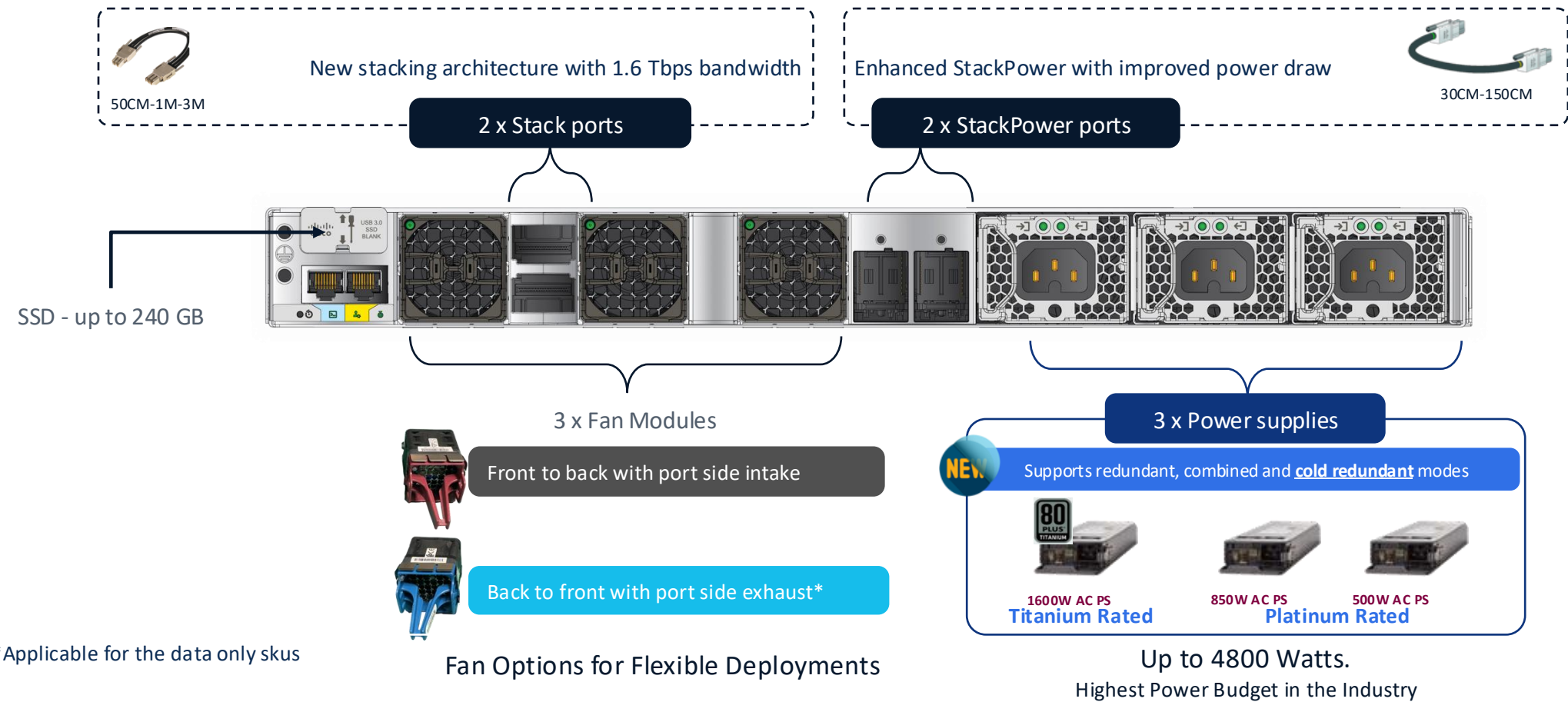
Introducing C9350 Series

New Hardware launch



Introducing C9350

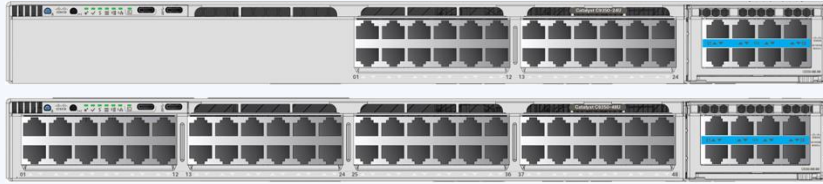
Re-designed for flexibility



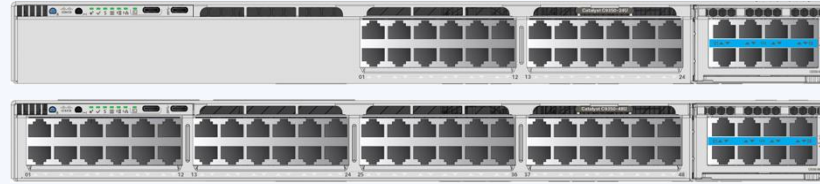
Cold redundant mode 'hibernates' redundant power supply when power requirement is low <5W consumption

Cisco 9350 Series

Gigabit SKUs



C9350-24P/48P
24/48x 1G/100M/10M copper
30W PoE+



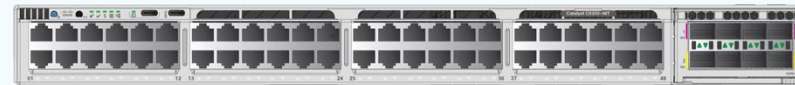
C9350-24U/48U
24/48x 1G/100M/10M copper
60W UPoE



C9350-24T/48T
24/48x 1G/100M/10M copper
Data only



C9350-48HX
48x 10G mGig
90W UPOE+



C9350-48TX
24/48x 10G mGig
Data only

MultiGigabit SKUs

Modular Uplink 50G at access



C9350-NM-4C
4x40/100G



C9350-NM-2C
2x40/100G

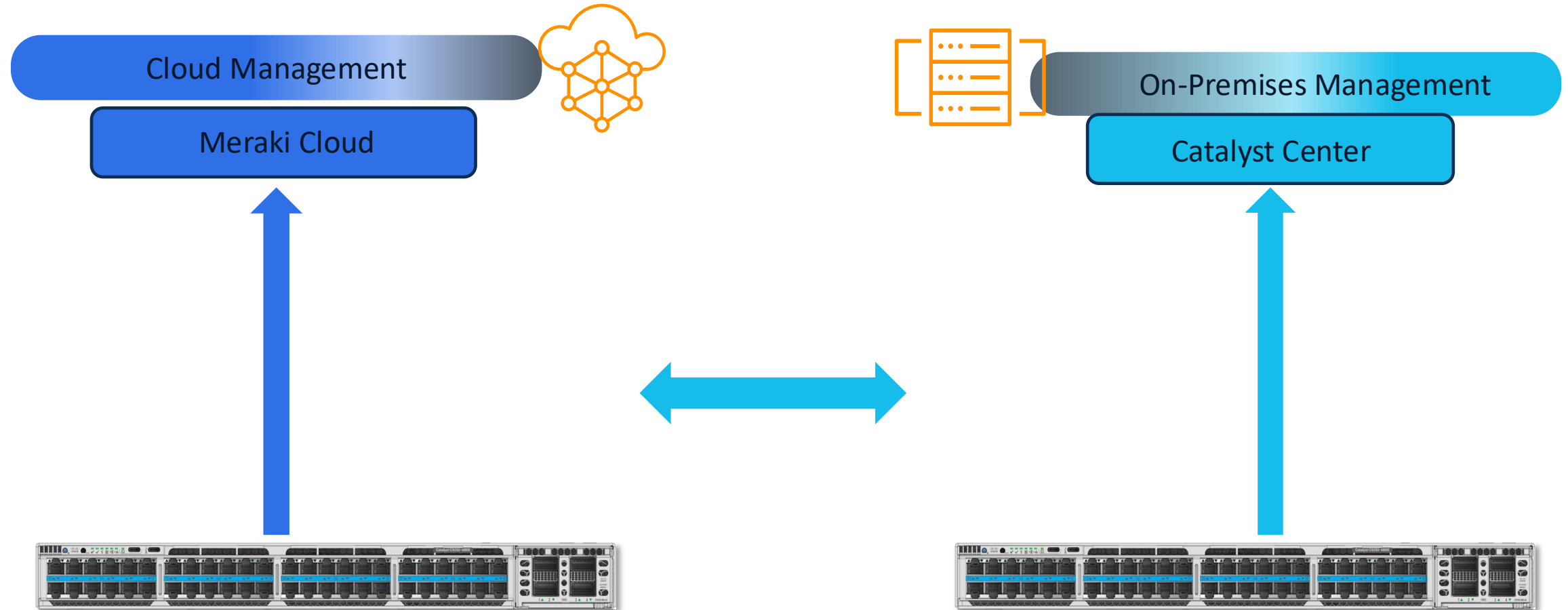


C9350-NM-8Y
8x10/25G or 4x50G

Note: Uplinks/PSU's/Stack Cables are not backward compatible with C9300(X) series

Unified Experience: The New out-of-box Experience

Effortless Onboarding: Catalyst or Meraki mode, **hands-free!**



One box, your choice, hands free
No CLI conversion or –M SKUs needed!

Single Unified Product

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ware without a mgmtbr: port 1(oobnd0) entered disabled state
valid license isoobnd0: entered allmulticast mode
not permitted aoobnd0: entered promiscuous mode
nd may result inmgmtbr: port 1(oobnd0) entered blocking state

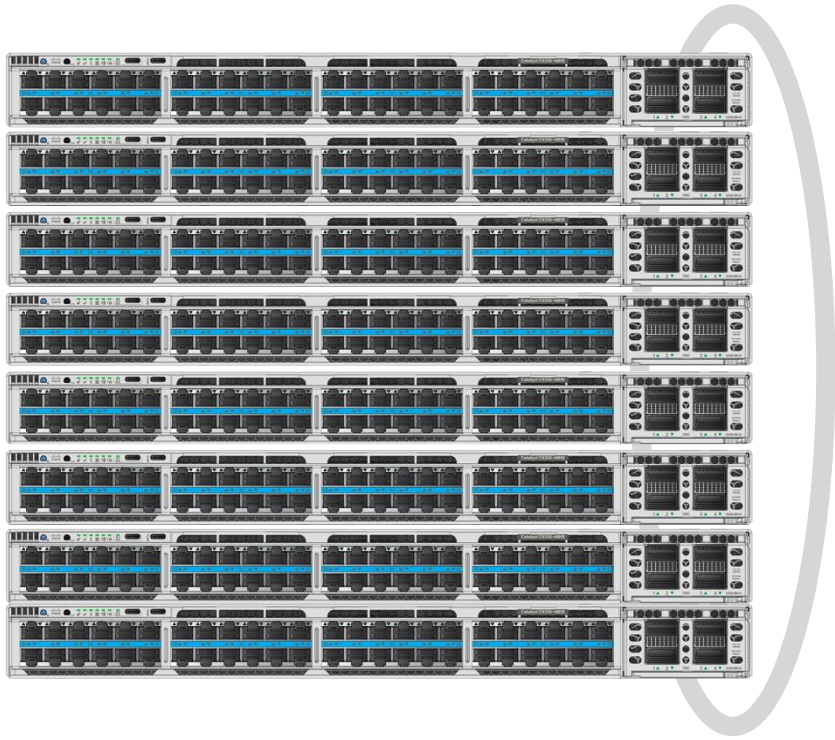
fees charged tmgmtbr: port 1(oobnd0) entered forwarding state
o your account. Cisco reserves the right to terminate access to,
or restrict the function_

 Secure Shell Xterm Zmodem ☐ ZOC2505_r07r12-ts0104.log

Cisco C9350 Series Switches

New stacking architecture for the new generation of campus access

Redesigned stacking architecture from the ground-up for the new generation of access switches.



NEW

1.6T Guaranteed Stacking bandwidth

NEW

User friendly Stacking design

NEW

Isolated bandwidth loss in event of failure

NEW

Enhanced Stackpower
More power draw per cable

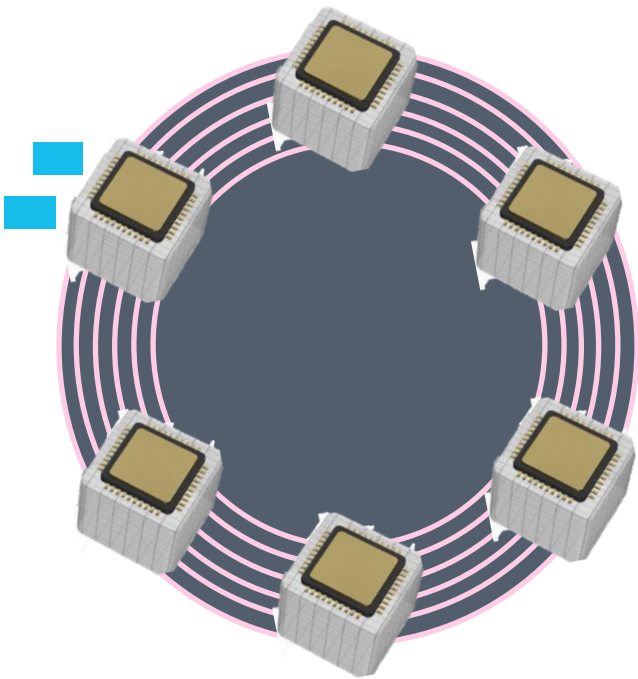
Standards-based Ethernet Stacking Architecture

New Architecture for StackWise

Example – 6-member stack

Current StackWise architecture

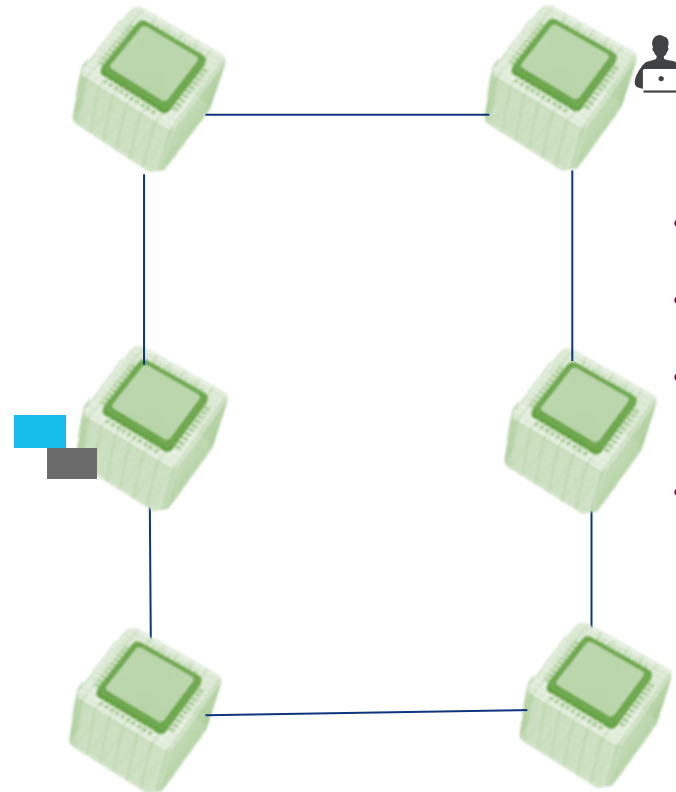
Ring-based stacking



- Spatial Re-Use Algorithm
- Best Effort Bandwidth
- Non-Flexible Cabling Configuration

Next Generation StackWise architecture

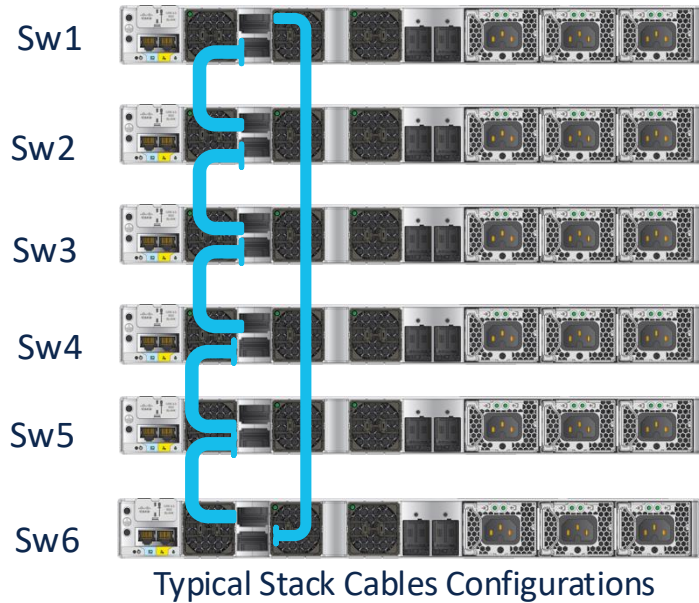
Standard SPF/VXLAN based stacking



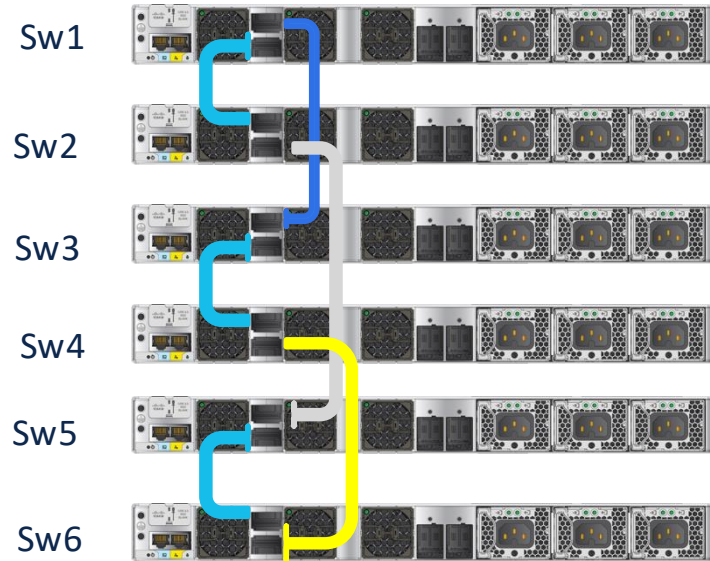
- Flexible Cabling Design
- Guaranteed Bandwidth
- Based on Proven L3 SPF Algorithm & VXLAN
- ECMP & Low Latency

Ensures minimal latency, high throughput, and consistent Packet forwarding

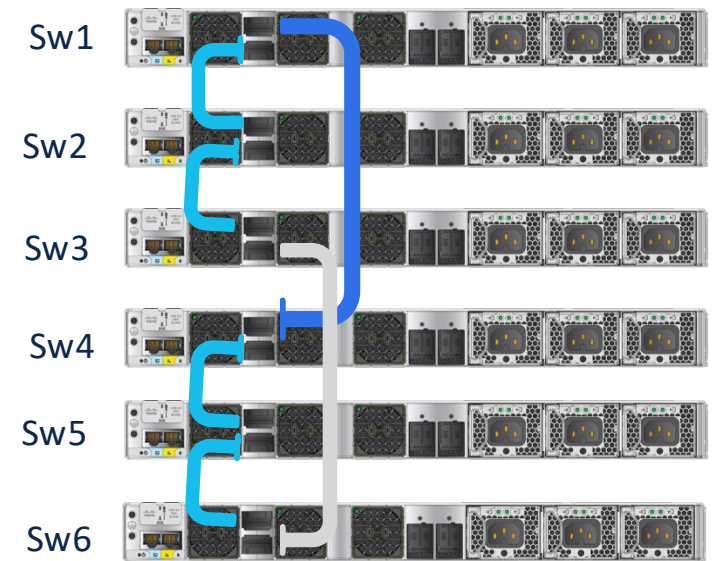
Cisco C9350 StackWise Configurations options



Sw1 Port1- Sw2 Port0
Sw2 Port1- Sw3 Port0
Sw3 Port1- Sw4 Port0
Sw4 Port1- Sw5 Port0
Sw5 Port1- Sw6 Port0
Sw6 Port1- Sw1 Port0



Sw1 Port0- Sw3 Port0
Sw1 Port1- Sw2 Port0
Sw2 Port1- Sw5 Port0
Sw3 Port1- Sw4 Port0
Sw4 Port1- Sw6 Port1
Sw5 Port1- Sw6 Port0



Sw1 Port0- Sw4 Port0
Sw1 Port1- Sw2 Port0
Sw2 Port1- Sw3 Port0
Sw3 Port1- Sw6 Port1
Sw4 Port1- Sw5 Port0
Sw5 Port1- Sw6 Port0

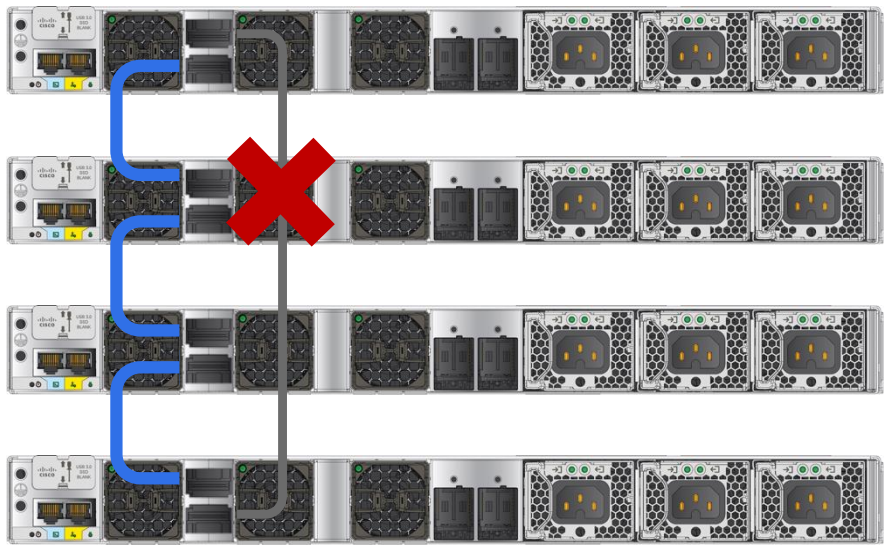
As stack grows, it provides **greater flexibility in connecting cables** in **different configurations** with shorter stack cables. No restrictions on how or where you connect to form a full ring.

Considering 6 x C9350 Switches in Stack

Enhanced stacking architecture

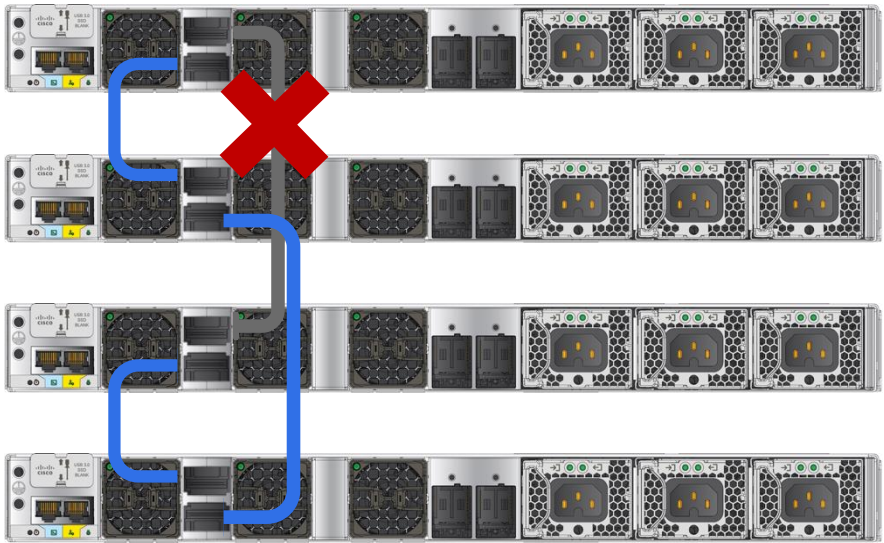
Failure handling

Current StackWise architecture



Packets are fragmented and load-balanced between stack ports, a single failure will effectively halve the bandwidth for the full stack.

Next Generation StackWise architecture



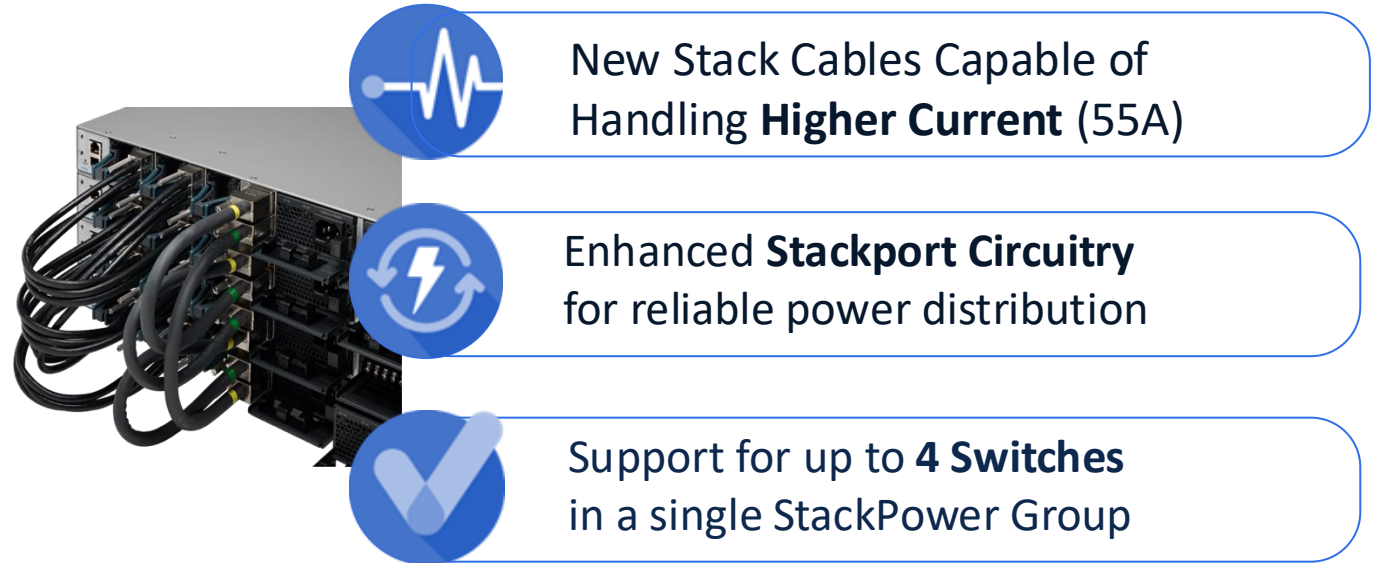
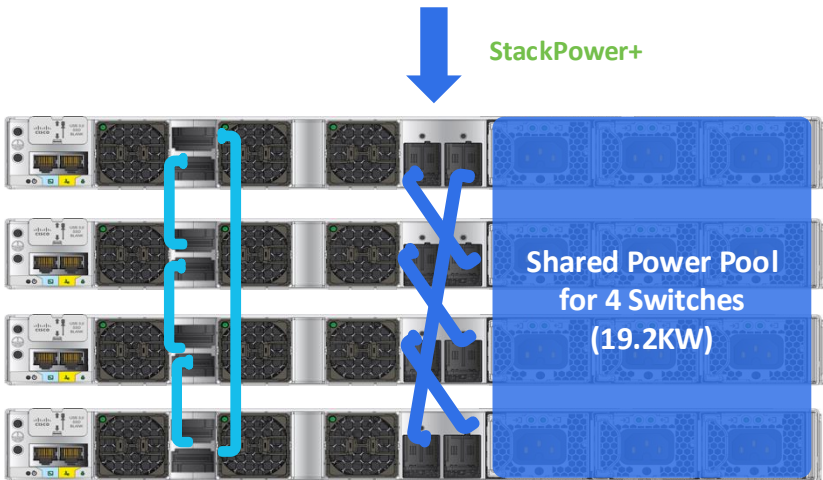
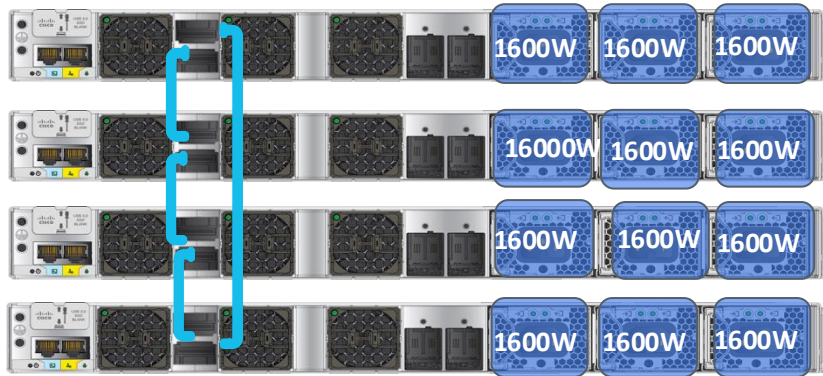
Switch 1 to 3 bandwidth is halved. Other switches operate at full bandwidth.

```
Switch#sh switch stack-bandwidth
```

Switch#	Role	Stack Bandwidth	Current State
*1	Active	800G	Ready
2	Standby	1600G	Ready
3	Member	800G	Ready
4	Member	1600G	Ready

A link failure only affects bandwidth for directly connected switches, all other switches operate at full bandwidth

Cisco C9350 Series - Enhanced StackPower+



New Stack Cables Capable of Handling **Higher Current** (55A)

Enhanced **Stackport Circuitry** for reliable power distribution

Support for up to **4 Switches** in a single StackPower Group

Zero-Footprint RPS

Built-in power redundancy, without extra hardware

Power Pooling

Shared power across switches for efficient use

1+N Redundancy

Inline PSU backup for higher reliability and uptime

Priority Power Allocation

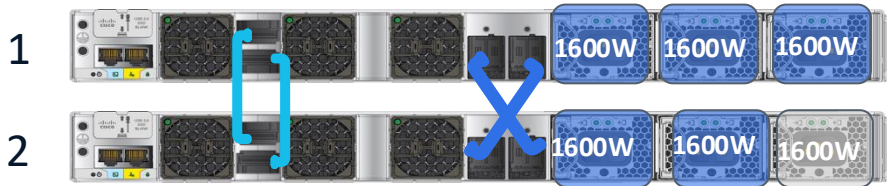
with unused PSUs on standby

StackPower+ delivers over 30% more power via StackPower ports

Cisco C9350 Series Smart Switches

Enhanced Power Designs with StackPower+

Scenario 1: No redundant power supply on second switch

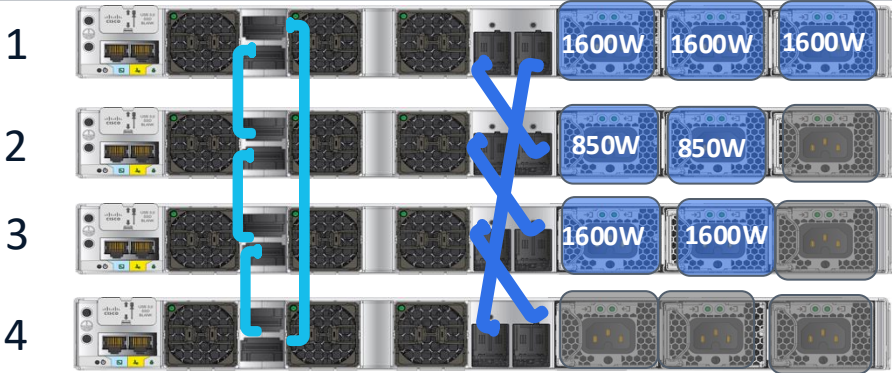


	Input Power	PoE Required	System Power
C9350-48HX	3 x1600W 4800W	90W x 48 4320W	480W
C9350-48U	3 x1600W 4800W	60W x48 2880W	280W

Outcome

N+1 redundancy across entire stack without fully loading power supplies.

Scenario 2: One switch with no power supply



	Input Power	PoE Required	System Power
C9350-48HX	3 x1600W 4800W	90W x 32 2880W	480W
C9350-48P	2 x 850W 1700W	30W x24 720W	280W
C9350-48U	2 x 1600W 3200W	60W x 48 2880W	280W
C9350-24U	0	24 x 60W 1440W	260W

Outcome

Powering switch and providing PoE without local PSU

Reliable, Uninterrupted Power with StackPower+

C9350 Smart Switch Reload Enhanced

Improving **Boot times** with Kernal-exec Reload

▶▶ C9350# reload

- Performs a kexec-based reload by loading the IOS XE kernel directly, bypassing ROMMON
- Use for normal reloads when no firmware/ROMMON reinitialization is required — **saves ~44+ sec**

▶▶ C9350# reload firmware

- Forces a full ROMMON based reload with complete hardware and firmware bring-up
- Use when ROMMON, FPGA, MCU, or PHY components need full reinitialization

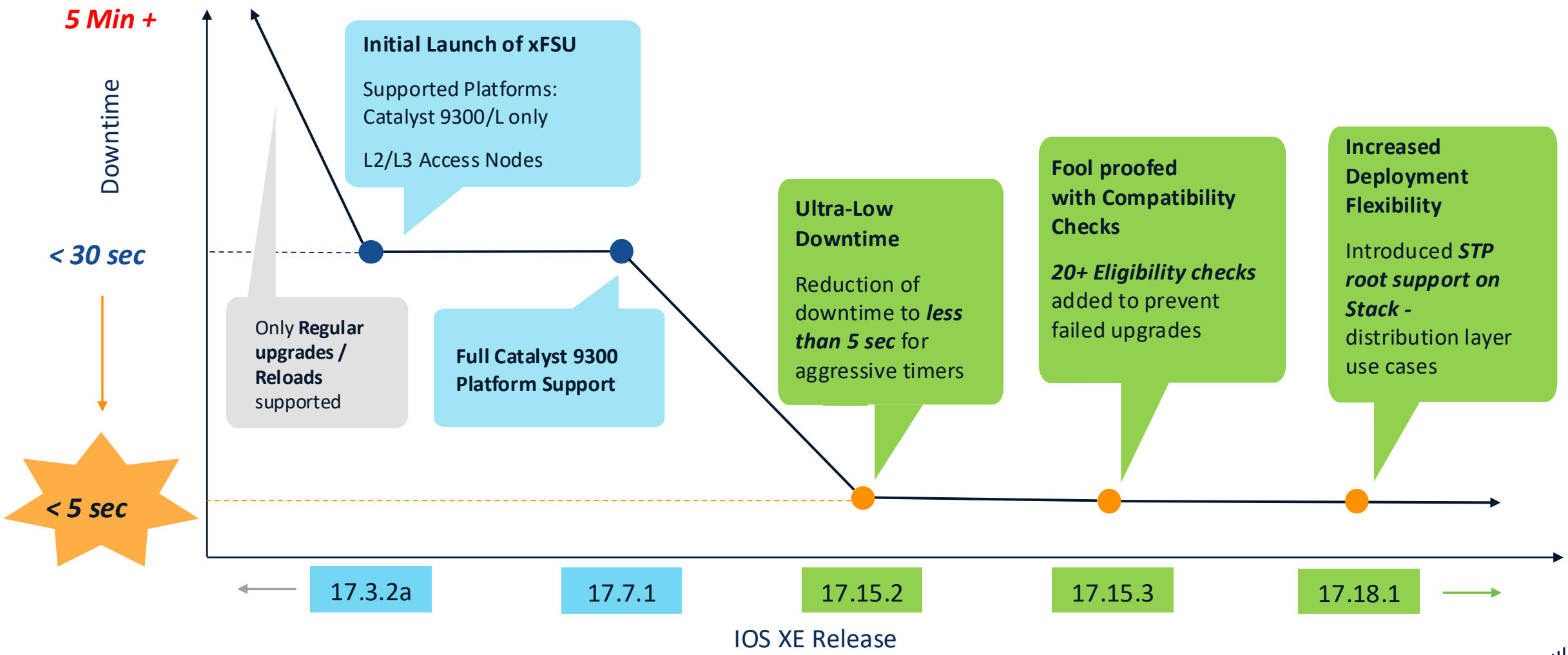
Tested Boot Time*		*Boot Time – Timer starts from “reload” to timer ends at “Press RETURN”		
Reload	Reload Firmware	Reload	Reload Firmware	Reload
C9350 — 24/48/ U/P/T		C9350 — 24/48/ HX/TX		Catalyst 9300X
71 sec	121 sec	78 sec	157 sec	197 sec



Default **reload** : Catalyst 9300 → ROMMON boot | Cisco C9350 → Kexec based boot
Use **reload firmware** on Cisco C9350 for ROMMON boot

xFSU Evolution on Catalyst 9300 Series

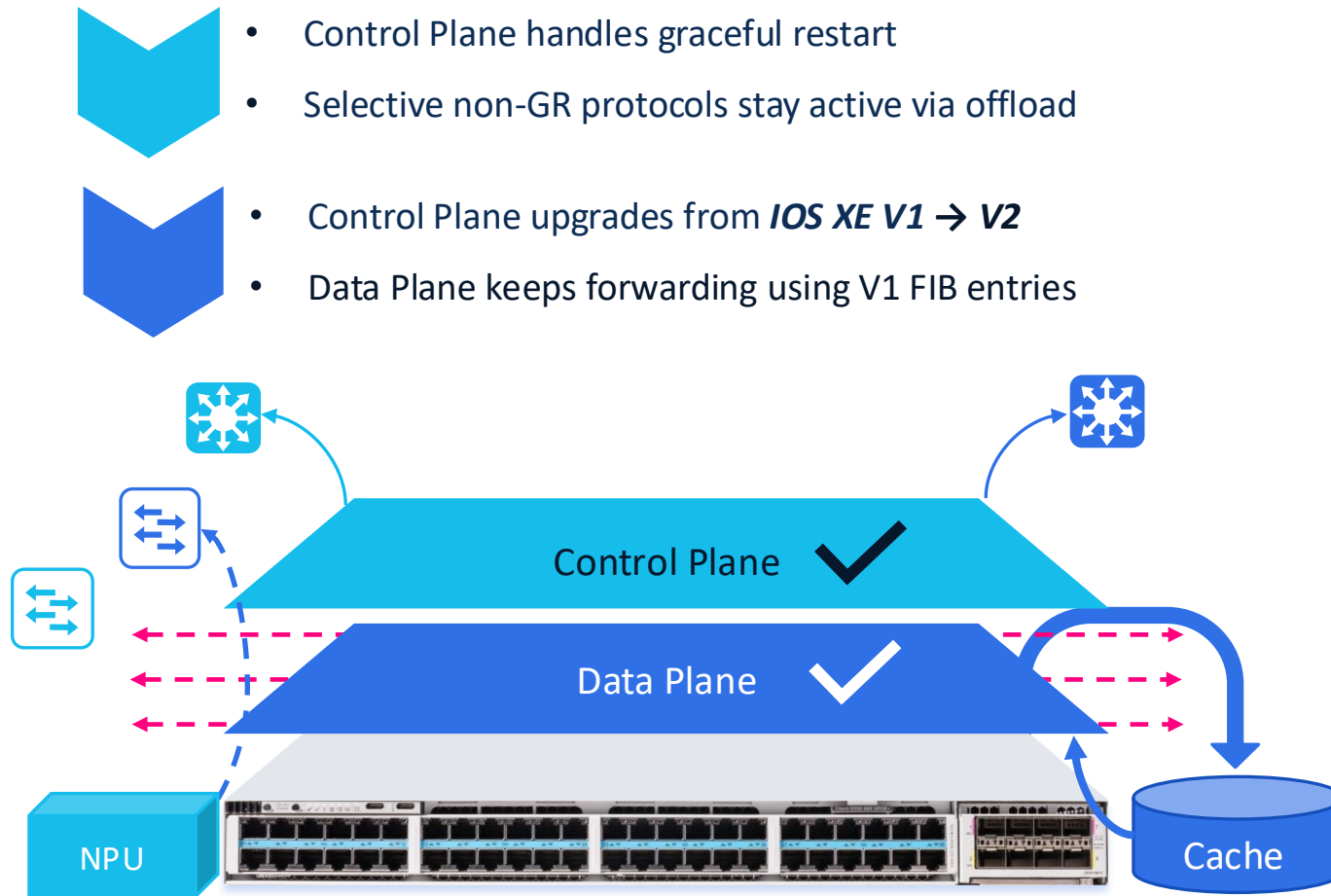
From **Downtime Reduction** to more **Flexibility**



The Next Gen **xFSU** on C9350 Smart Switches

Achieving **Sub-seconds downtime** for upgrades and reloads

Upcoming Support
Standalone IOS XE 26.1.1
Stack CY26Q3



- Control Plane upgraded to **IOS XE V2**
- All ASIC TCAM/Register entries are **cached** in the memory
- Data Plane goes for an upgrade **V1** → **V2**
- Selective** update on registers based on the enabled features
- Data Plane upgraded to **IOS XE V2**



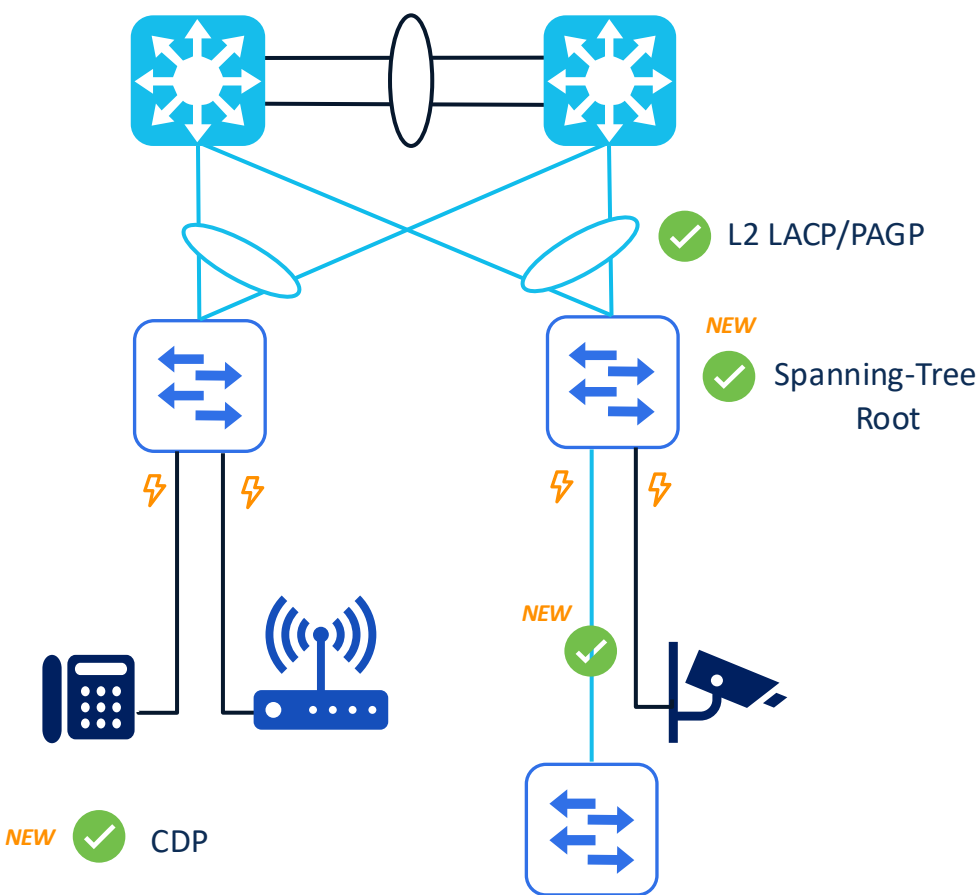
**Total
Traffic Downtime
< 1 sec**

Flexible xFSU Implementation (Standalone)

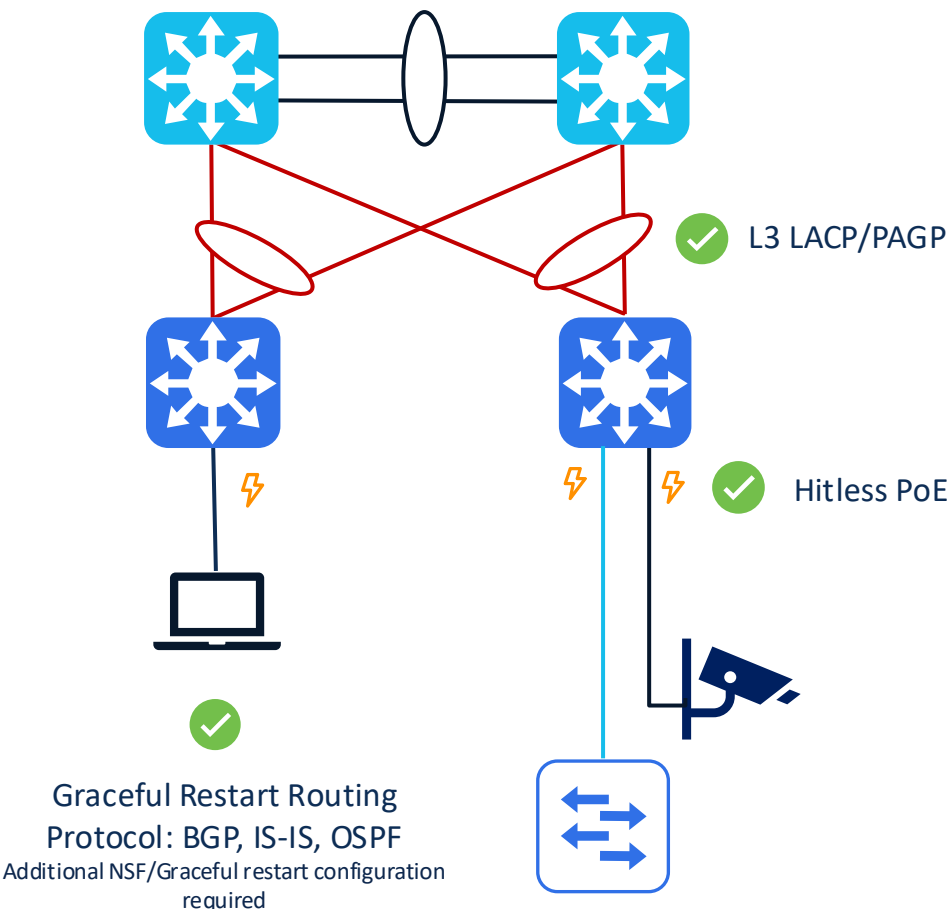
No Topology Modification Needed

Upcoming Support
Standalone IOS XE 26.1.1
Stack CY26Q3

L2 Access/Distribution Node

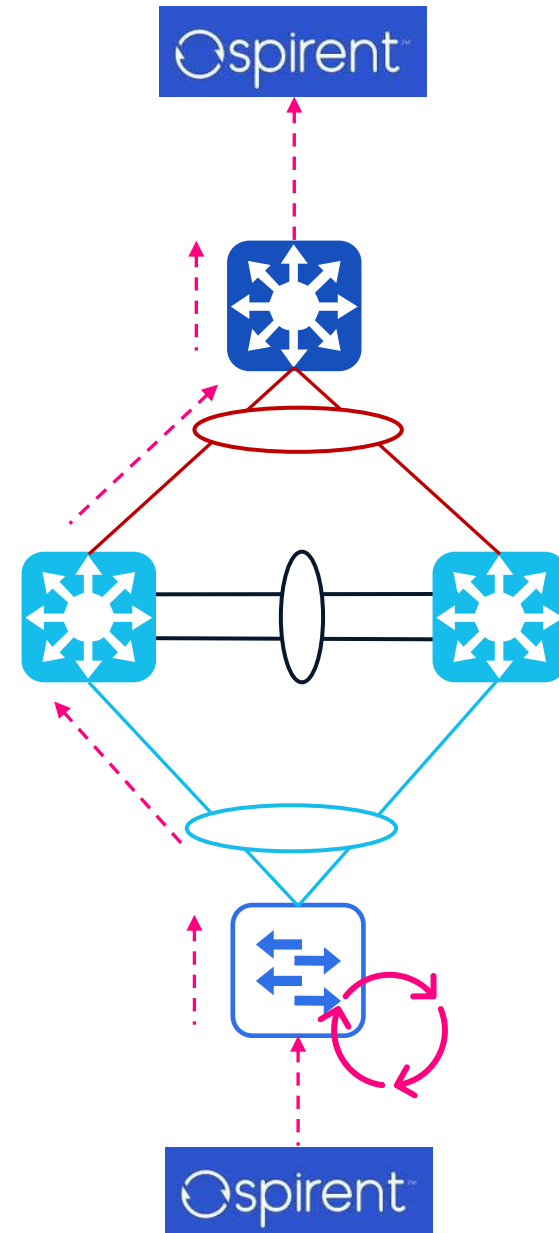


L3 Routed Access Node



xFSU Demo

Topology



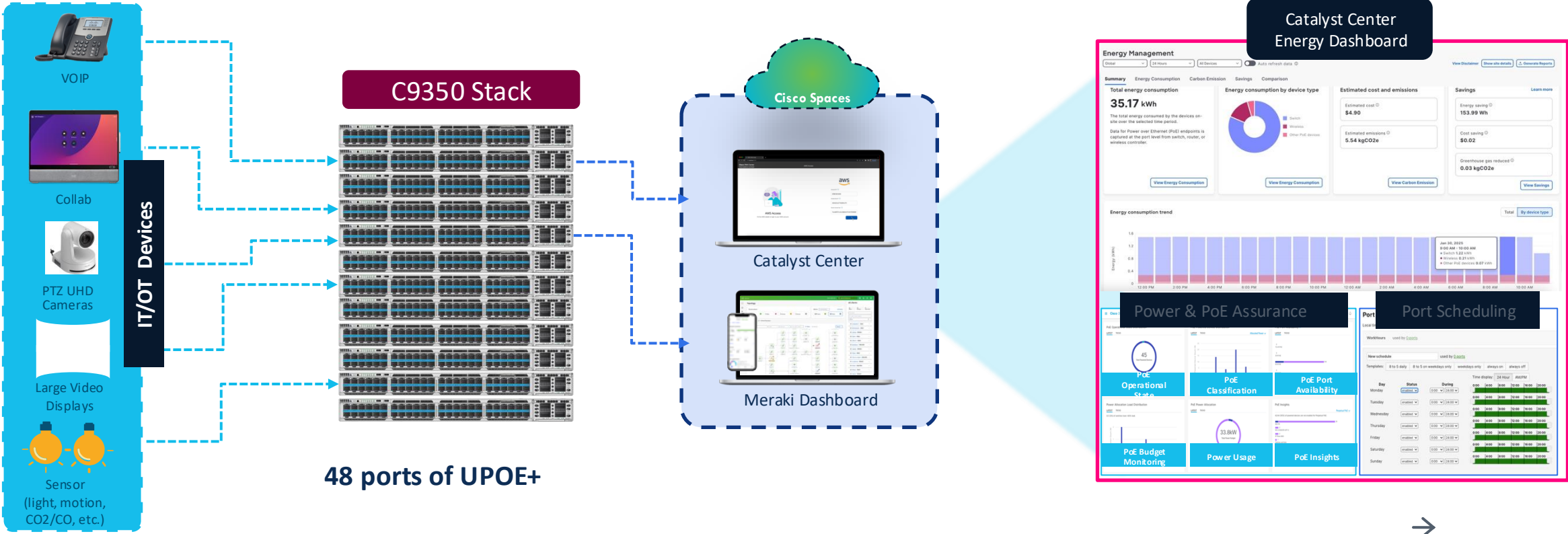
The screenshot displays the 'Launch TestCenter IQ' application. The main window is titled 'xFSU_test:Results 1'. The left sidebar shows 'Port Traffic and Counters > Basic Traffic Results'. The main area contains a table with traffic statistics for two ports. The table has columns: Port Name, Total Tx Count (Frames), Total Rx Count (Frames), Total Tx Count (bits), and Total Rx Count (bits). The first row is for '1/0/1 Port //1/1' with values 1,903,620, 410, 15,228,945,024, and 250,232. The second row is for '1/0/48 Port //1/2' with values 1, 1,898,554, 512, and 15,187,939,184. A summary row at the bottom shows totals: 1,903,621, 1,898,964, 15,228,945,536, and 15,188,189,416. The right sidebar shows 'Streams > Dropped Stream Results' with a 'Result Count: 0/0'.

Port Name	Total Tx Count (Fra...)	Total Rx Count (Fra...)	Total Tx Count (bits)	Total Rx Count (bits)
1/0/1 Port //1/1	1,903,620	410	15,228,945,024	250,232
1/0/48 Port //1/2	1	1,898,554	512	15,187,939,184
Σ	1,903,621	1,898,964	15,228,945,536	15,188,189,416

KE 19350-24T#

Scaled up for Smart Buildings

Density & Resiliency



Connect

Classify

Secure

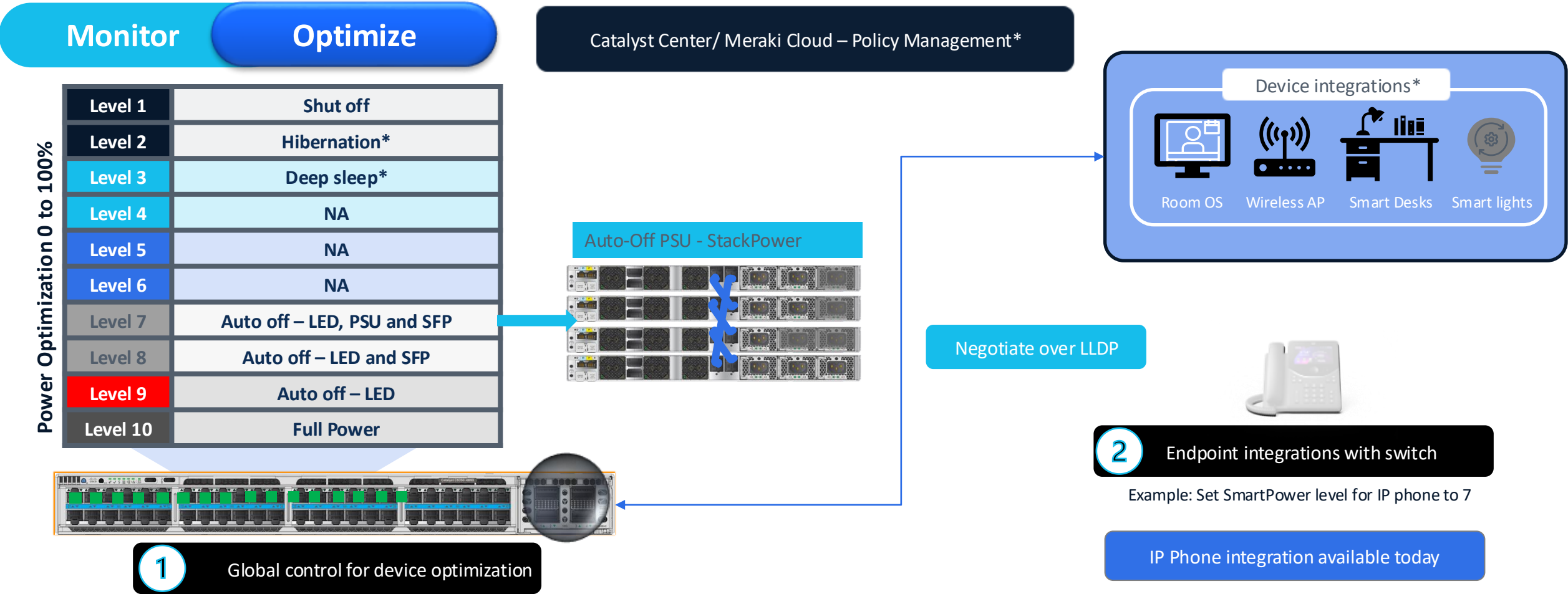
Resiliency

- Extended connectivity with SD-Access Extended node solutions
- CoAP to access lights and other sensors for lighting control
- Device classification and profiling with ISE
- Emerging standards support for access control (ex: Manufacturers Usage Description [MUD])
- Secure Virtual networks and segmentation of IoT from IT with SD-Access
- Scalable group-based policies
- PoE HA – Perpetual PoE, Fast PoE, 2-event classification
- Container-hosted Cloud-tethered apps on open Cisco IOS XE Software

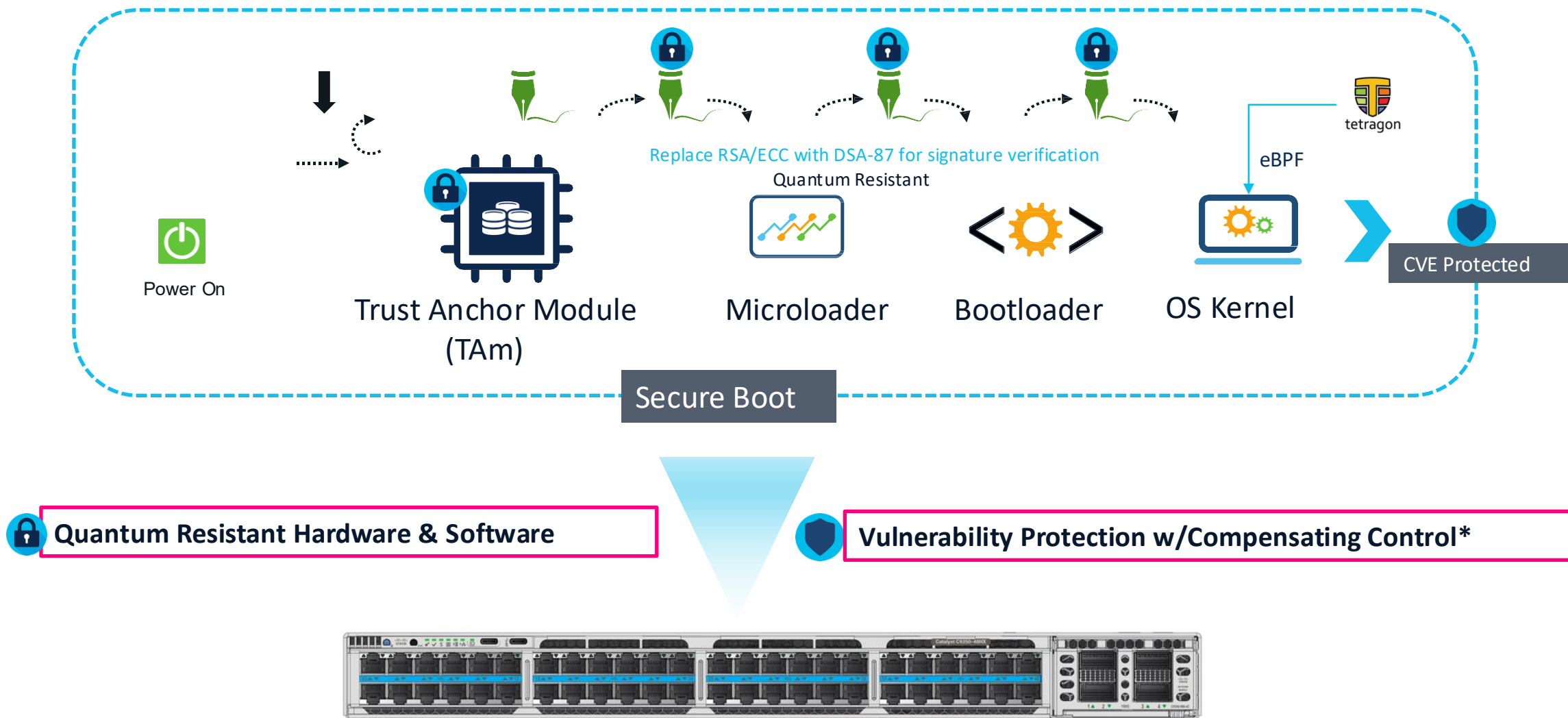
End-to-end solution managed by central IT team that lowers TCO

Cisco 9350 – Energy Management

With SmartPower

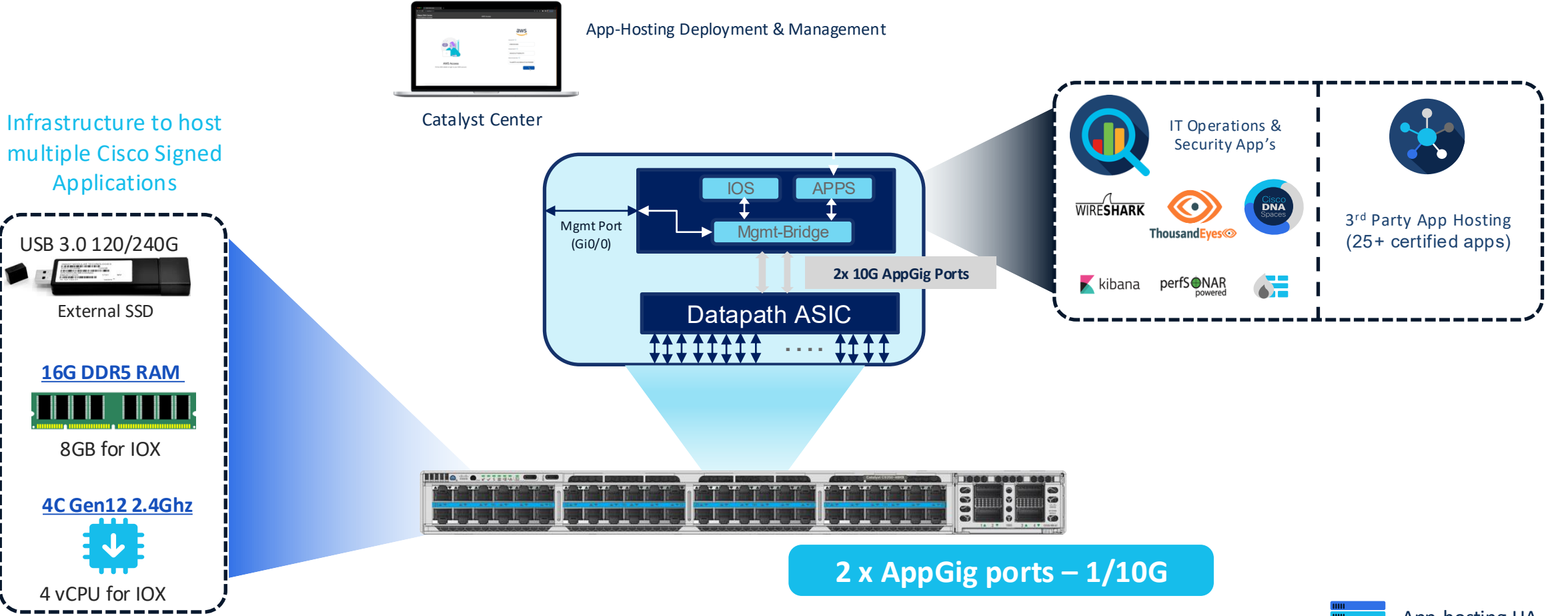


Securing the Switch – Hardware to Software



C9350 Enhanced Application-Hosting

Unlocking emerging use cases



App-hosting HA with Stacking (1+1)

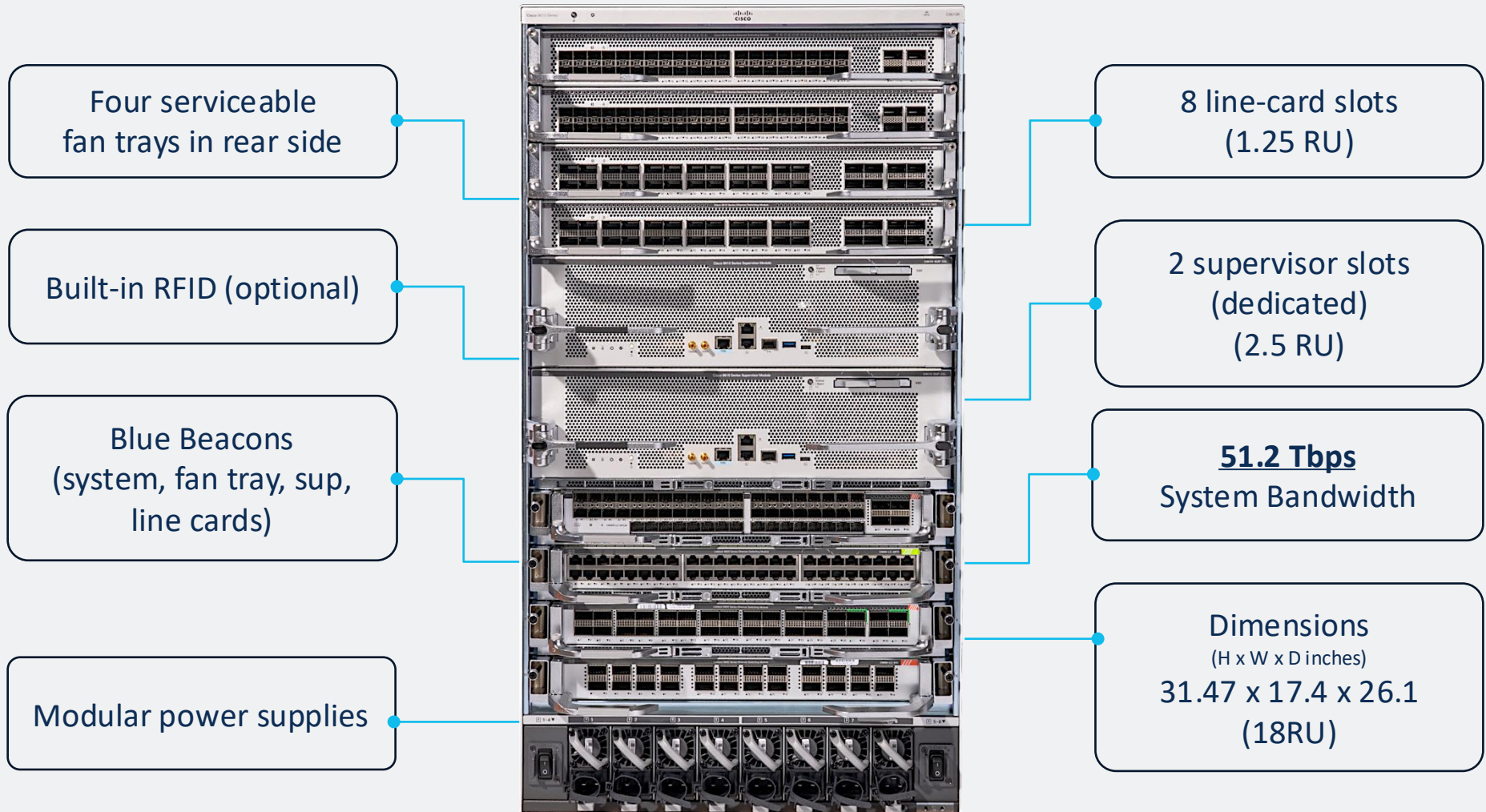
2x App Memory

≥13% faster¹ DDR5

≥35% faster² Gen12

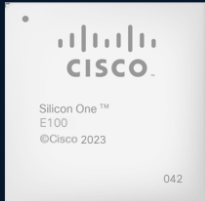
Expanding capabilities for the next generation

Cisco C9610R Chassis



Cisco C9610R Series Supervisors

Supervisor 3 and Supervisor 3 XL



Powered by Silicon One E100



C9610-SUP3 - E100



1M IPv4 Prefixes



768K Exact Match



256K Policies

25.6 Tbps (full duplex)

3.2 Tbps per slot

8 core X86 CPU
@ 2.5 GHz

Built-in RFID

SATA SSD
(Field Replacable)

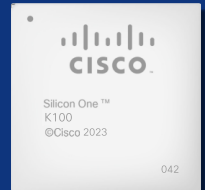
4x K100/E100
+ 1x Fabric ASIC

8x Line Card slots
+ **2x Supervisor** slots

32GB DDR4
DRAM

Copper and Fiber
Mgmt ports

1 x USB 3.0 storage
1x USB C console



Powered by Silicon One K100



C9610-SUP3XL - K100



2M IPv4 Prefixes



1.2M Exact Match

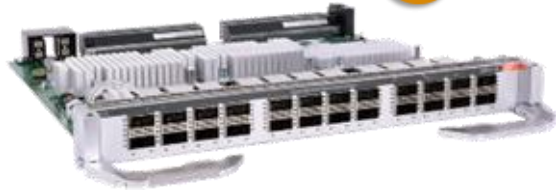


512K Policies

Cisco C9610R Support C9606R Line Cards

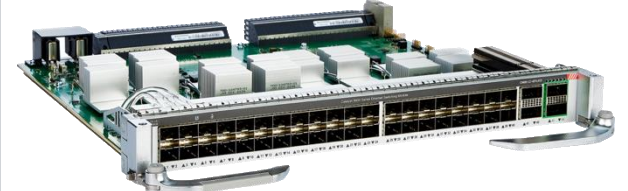
C9600-LC-24C - 100G/40G(fiber)

- 24 ports
- QSFP28/QSFP+
- 100G and 40G



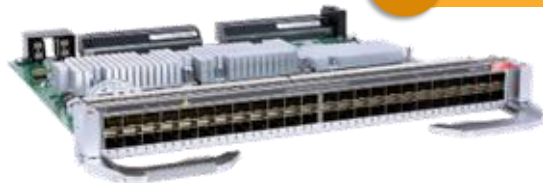
C9600-LC-40Y14CD – 400G/200G*/100G/50G/40G/ 25G/10G (fiber)

- 40+2+2 ports
- SFP56/QSFP56+/QSFPDD
- 400G,200G**,100G,50G,40G,25G, 10G and 1G*



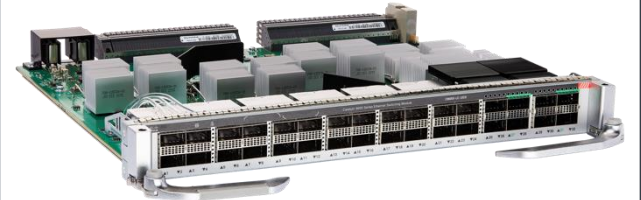
C9600-LC-48YL – 50G/ 25G/10G/1G (fiber)

- 48 ports
- SFP56/SFP28/SFP+
- 50G,25G,10G,and 1G*



C9600X-LC-32CD – 400G/200G*/100G/40G(fiber)

- 30+2 ports
- QSFP28/QSFPDD
- Supports 400G,200G*,100G, and 40G



C9600-LC-48TX - mGig (copper)

- 48 ports
- Copper 10G (NBASE-T/10BASE-T)
- 10G and 1G*



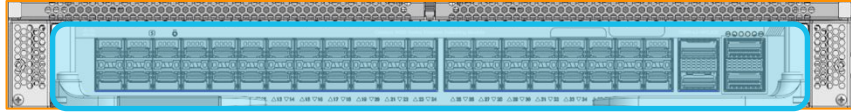
C9600X-LC-56Y14C - 100G/50G/40G/25G/10G (fiber)

- 56 50G+4 100G ports
- SFP56/QSFP28
- 100G, 50G, 40G, 25G, 10G and 1G*



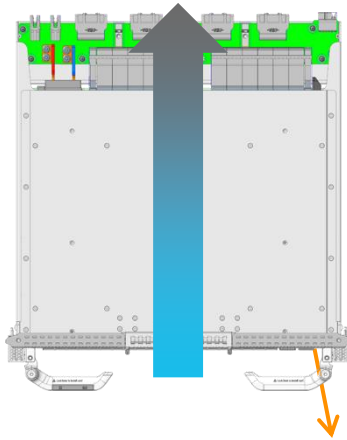
C9610-LC-ADPT

Adapter for C9606 linecards



C9606 line-cards were 1RU form factor

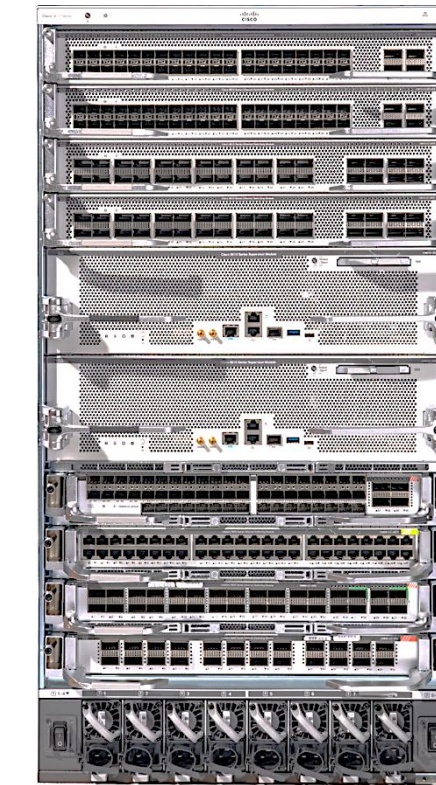
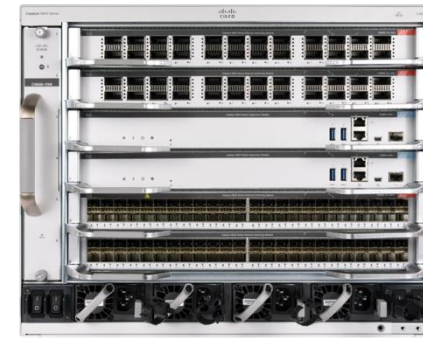
1.25RU Adapter house the C9606 line-cards



C9606 line-cards were designed for left-to-right air flow

Adapter internally redirects airflow from front-to-back

Backward Compatibility with C9606 LCs



- C9606 and C9610 have the same chassis width.
- No changes in rack width required

Cisco C9610R Chassis

Port Density (Without breakout)



Reference

Port speed	Density with C9606 Sup 2	Density with C9610 Sup3/3XL
400G	8	16
200G	8**	16**
100G	128	256
50G	224	448
40G	128	256
10/25G fiber	224	448
10G Copper	192	384
1G	8 (192 with Sup1)	384*

2X

Enterprise-Class High Availability

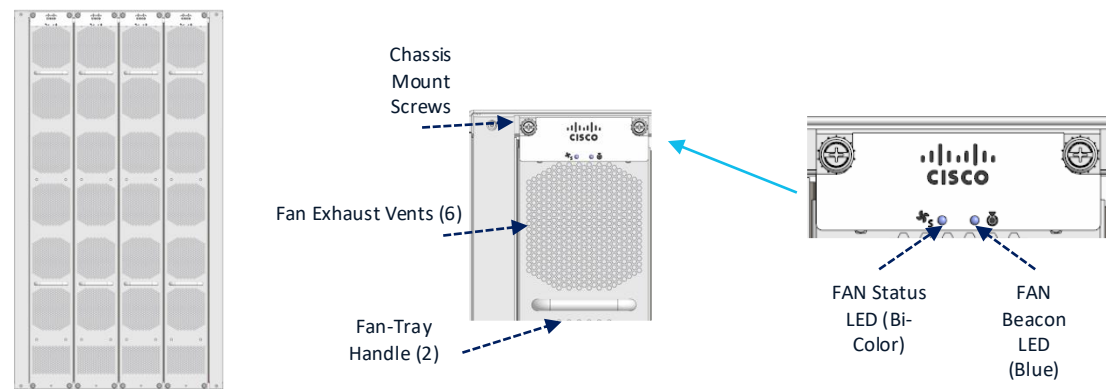
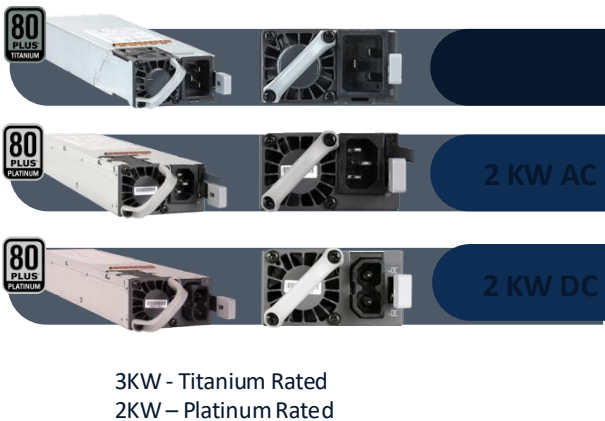
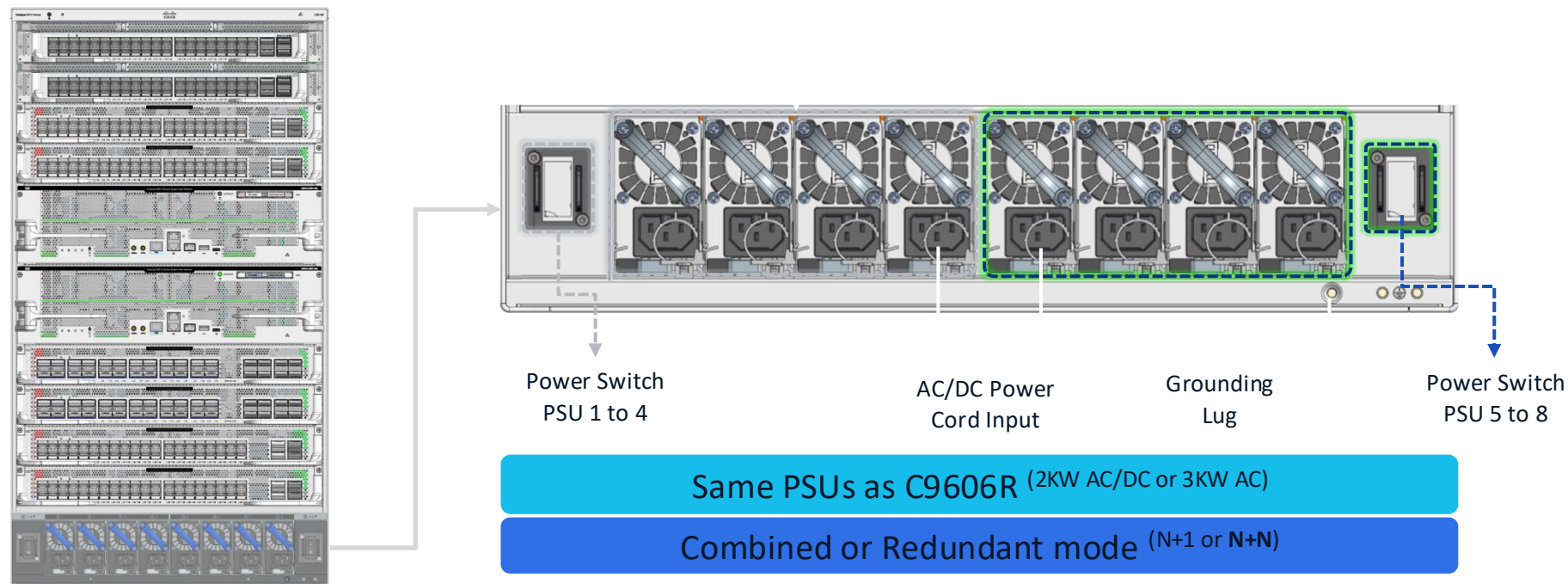
Protect business continuity



Physical redundancy	Stateful Switchover (SSO)	Non-Stop Forwarding (NSF)	In-Service Software Upgrade (ISSU)	Next Generation StackWise Virtual
Redundant hardware - Up to 8 Redundant power supplies - Up to 4 Redundant fan trays - Redundant supervisors	Sub-second failover - Between Supervisors in same chassis ($\leq 5\text{ms}$) - Between chassis with Next Generation StackWise Virtual ($\leq 150\text{ms}$)	Resilient L3 topologies NSF support for OSPF, EIGRP, ISIS, BGP	Minimize upgrade time - SMU - ISSU - GIR	Infrastructure resilience - Multi-chassis EtherChannel (MEC) - Dynamic add/change Modules & Links



C9610R Power Supplies and FanTrays



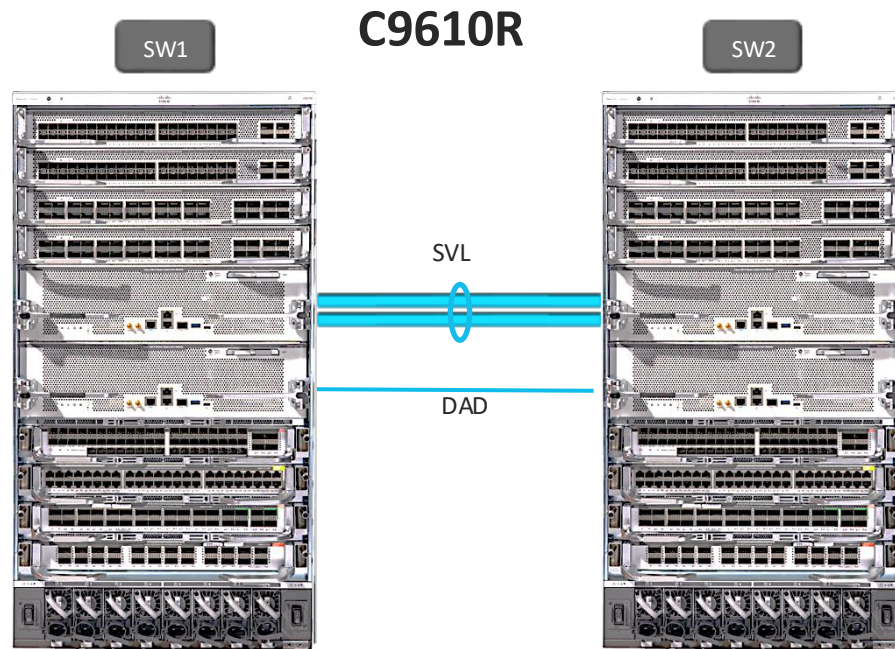
Front to back Airflow

N+ 1 Redundancy



Next Generation StackWise Virtual

Back panel (C9350) and front-panel (C9610) stacking use the same implementation.

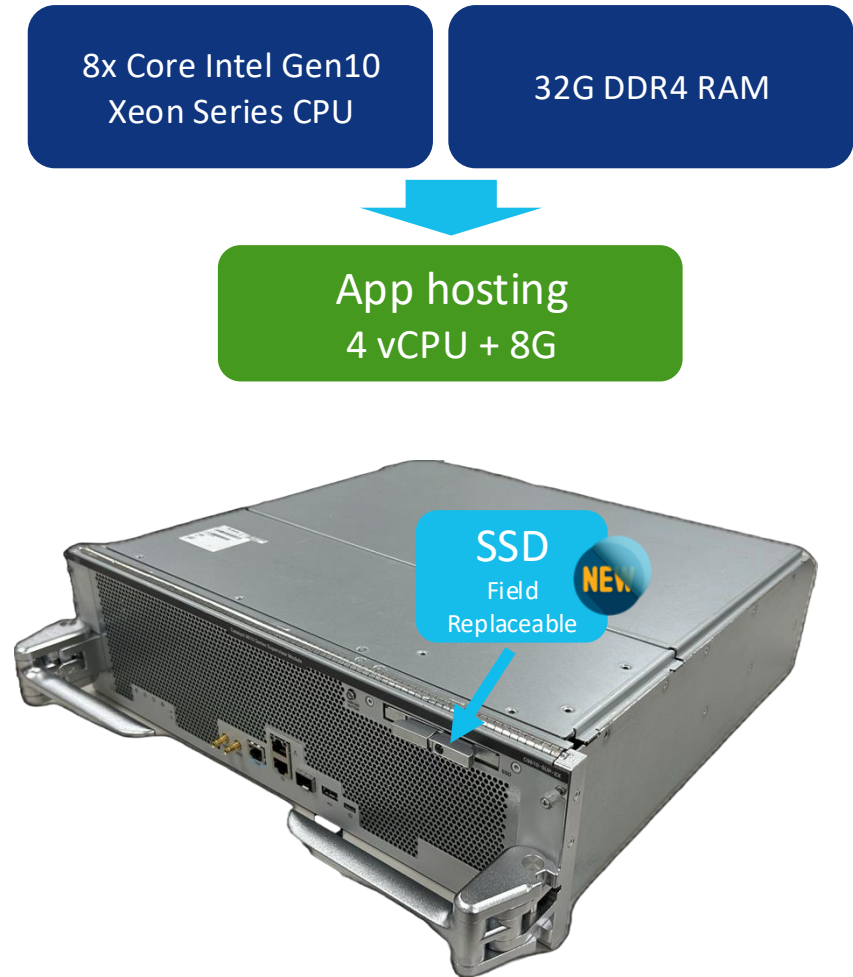
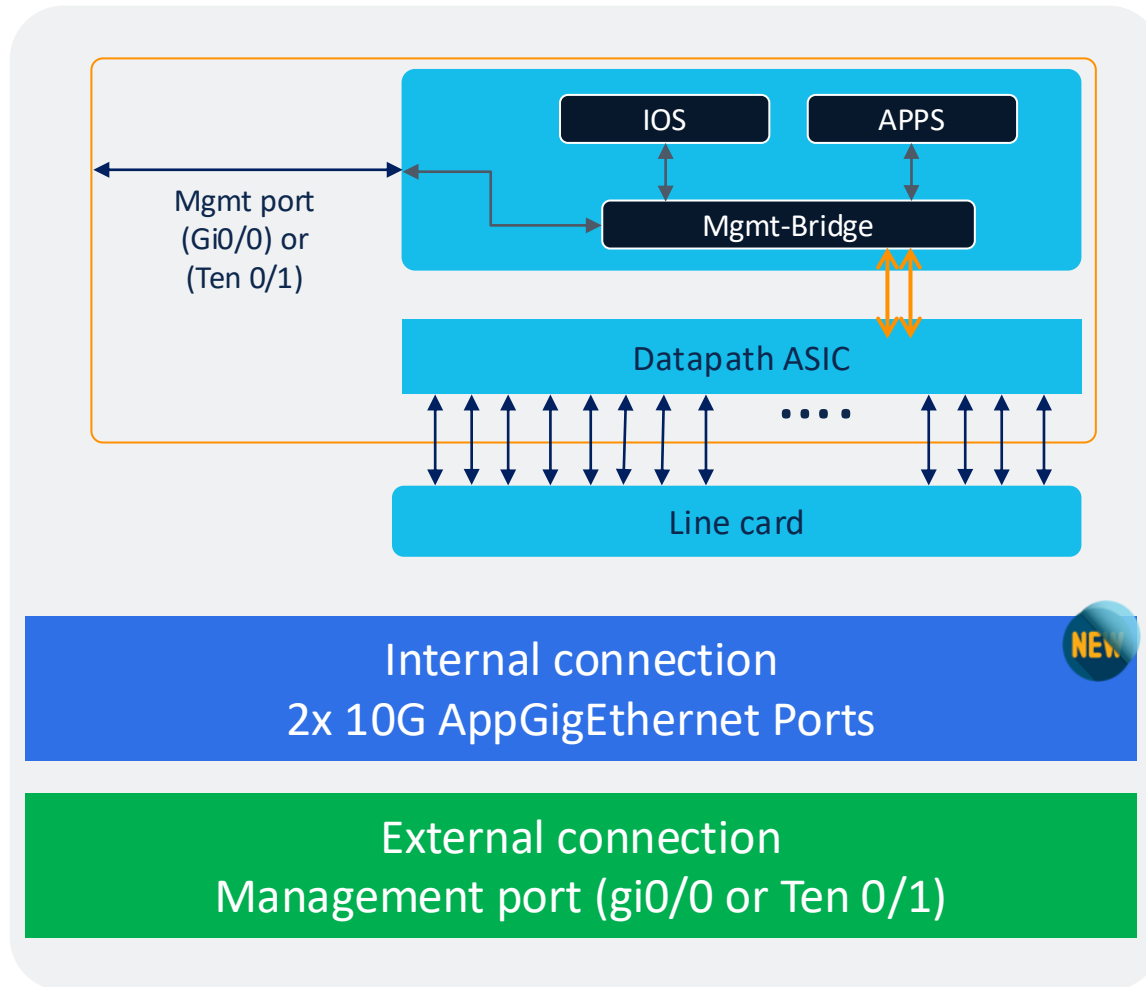


Standard Ethernet Based (VXLAN)

- Use shortest-path-first (SFP – ISIS)
- Dynamically adding and removing
 - SVL members
 - DAD links

- Simplify Operations by Eliminating STP, FHRP and Multiple Touch-Points
- Double Bandwidth & Reduce Latency with Active-Active Multi-chassis EtherChannel (MEC)
- Minimizes Convergence with Sub-second Stateful and Graceful Recovery (SSO/NSF)

Enhanced app-hosting infrastructure on Cisco 9610-Sup 3/XL



Cisco 9610 – Supervisor engine 3

Switch Database Management (SDM) template

Default template (Core)
Maximizes system resources
for Layer 3 unicast and multicast
routes

User-customizable template
Allows customizable
ACL TCAM resources



Cisco®
C9610 Series

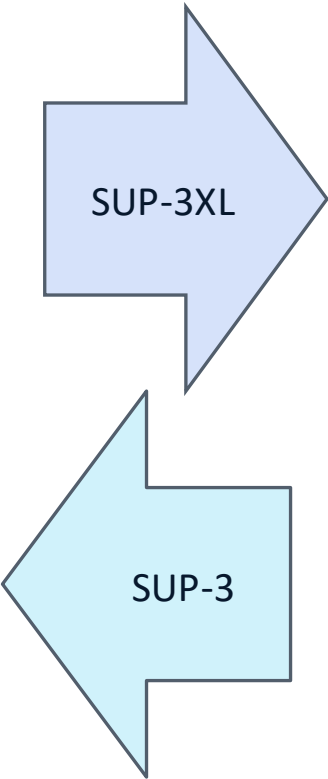
Custom template*
Provide flexibility for
customizing TCAM space for
specific requirements

C9610 Default SDM Template



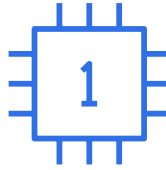
This is the Core template.	
Feature-Name	Reserved-Scale
Unicast MAC addresses	131072
FIB Host Route	131072
OGACL	2048
SGACL Hosts	24576
SGACL Cells	24576
Max MPLS Label	65536
L3 Multicast entries	32768
L2 Multicast entries	16384
Number of VLANs	4094 (**)
Overflow Unicast MAC addresses	512 (**)
Overflow L2 Multicast entries	512 (**)
Overflow L3 Multicast entries	512 (**)
Ipv4/Ipv6 shared unicast routes	131072 (**)
Overflow shared unicast routes	1000000 (**)
STP Instances	4094 (**)
Tunnels	1024 (**)
VRF	3839 (**)
Max MPLS VPN Routes Per-Vrf label mode	1000000 (**)
Max MPLS VPN Routes Per-Prefix label mode	65536 (**)
Max L3 adjacency	131072 (**)
Max L3 Interface	12288 (**)
Max MPLS TE TUNNEL	4096 (**)
Security ACL IN	21504
Security ACL OUT	21504
QOS ACL IN	5120
QOS ACL OUT	5120
PBRNAT ACL IN	8192
PBRNAT ACL OUT	8192
MIRROR ACL IN	1024
MIRROR ACL OUT	1024
FNF ACL IN	2048
FNF ACL OUT	2048
FNF FLOW IN	32768
FNF FLOW OUT	32768
(**) - SDM library is referred to only obtain scale	
Resource scale information	
EM	1280000
HCAM	131072
OTHER	0

CLI: *show sdm prefer*



This is the Core template.	
Feature-Name	Reserved-Scale
Unicast MAC addresses	131072
FIB Host Route	131072
OGACL	2048
SGACL Hosts	24576
SGACL Cells	24576
Max MPLS Label	131072
L3 Multicast entries	32768
L2 Multicast entries	16384
Number of VLANs	4094 (**)
Overflow Unicast MAC addresses	512 (**)
Overflow L2 Multicast entries	512 (**)
Overflow L3 Multicast entries	512 (**)
Ipv4/Ipv6 shared unicast routes	131072 (**)
Overflow shared unicast routes	2000000 (**)
STP Instances	4094 (**)
Tunnels	1024 (**)
VRF	3839 (**)
Max MPLS VPN Routes Per-Vrf label mode	1000000 (**)
Max MPLS VPN Routes Per-Prefix label mode	65536 (**)
Max L3 adjacency	131072 (**)
Max L3 Interface	12288 (**)
Max MPLS TE TUNNEL	4096 (**)
Security ACL IN	38912
Security ACL OUT	38912
QOS ACL IN	8192
QOS ACL OUT	8192
PBRNAT ACL IN	16384
PBRNAT ACL OUT	16384
MIRROR ACL IN	1024
MIRROR ACL OUT	1024
FNF ACL IN	2048
FNF ACL OUT	2048
FNF FLOW IN	65536
FNF FLOW OUT	65536
(**) - SDM library is referred to only obtain scale	
Resource scale information	
EM	1280000
HCAM	131072
OTHER	0

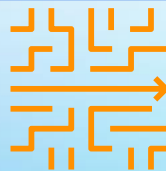
Architecture for the AI-Ready Secure Campus



Scalable devices
ready for AI

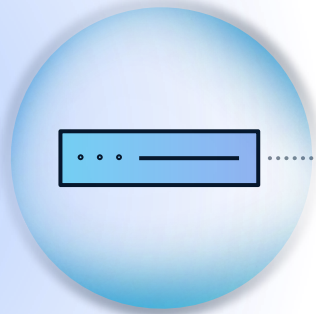


Security
fused into the network



Operational simplicity
powered by AI

Comprehensive security fused into every layer



The Switch
Secured

The Switch is the first point of network access
Make it your first point of security enforcement

The network
Secured

Users, endpoints and apps
Secured

Threats are accelerating

Exploits remain #1 infection vector:

33%

of infections start as exploits¹

Stolen credentials grant longest access:

292

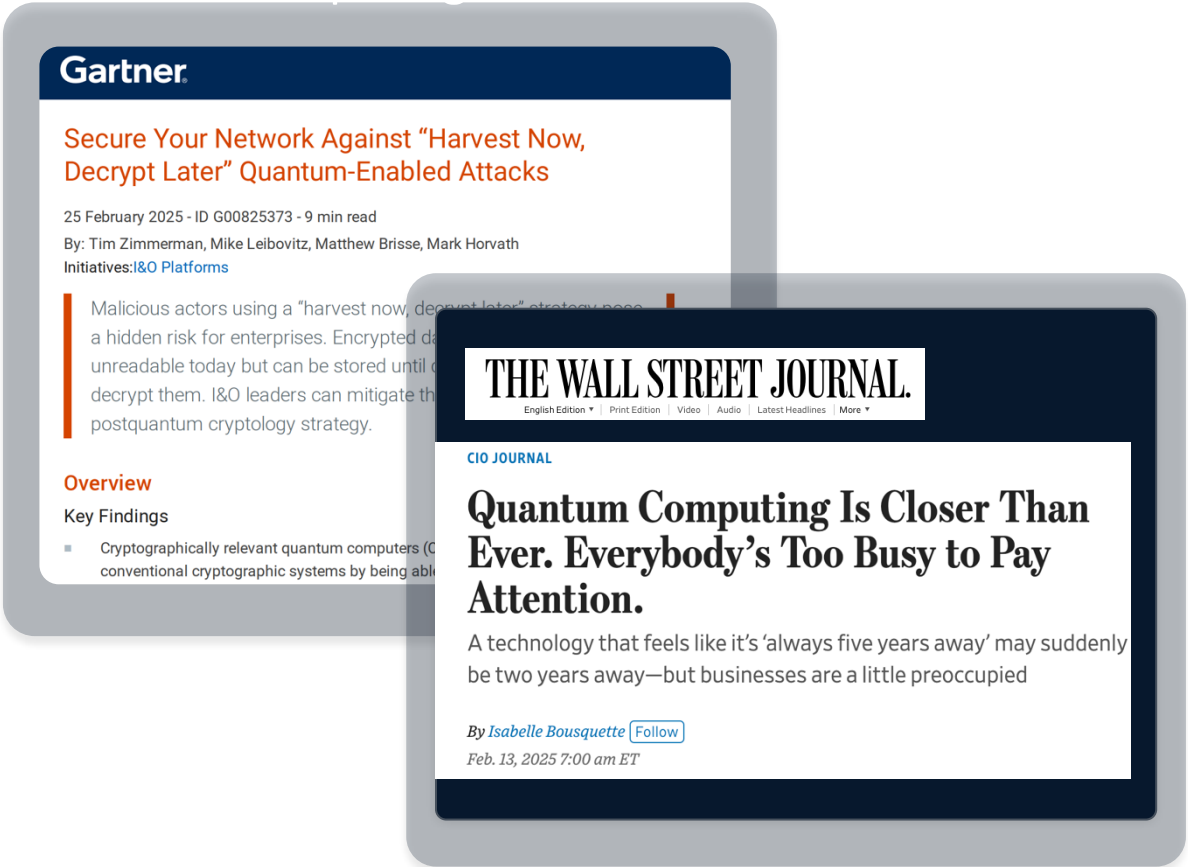
days - average breach lifecycle²

IoT devices are targets and threat

1/3

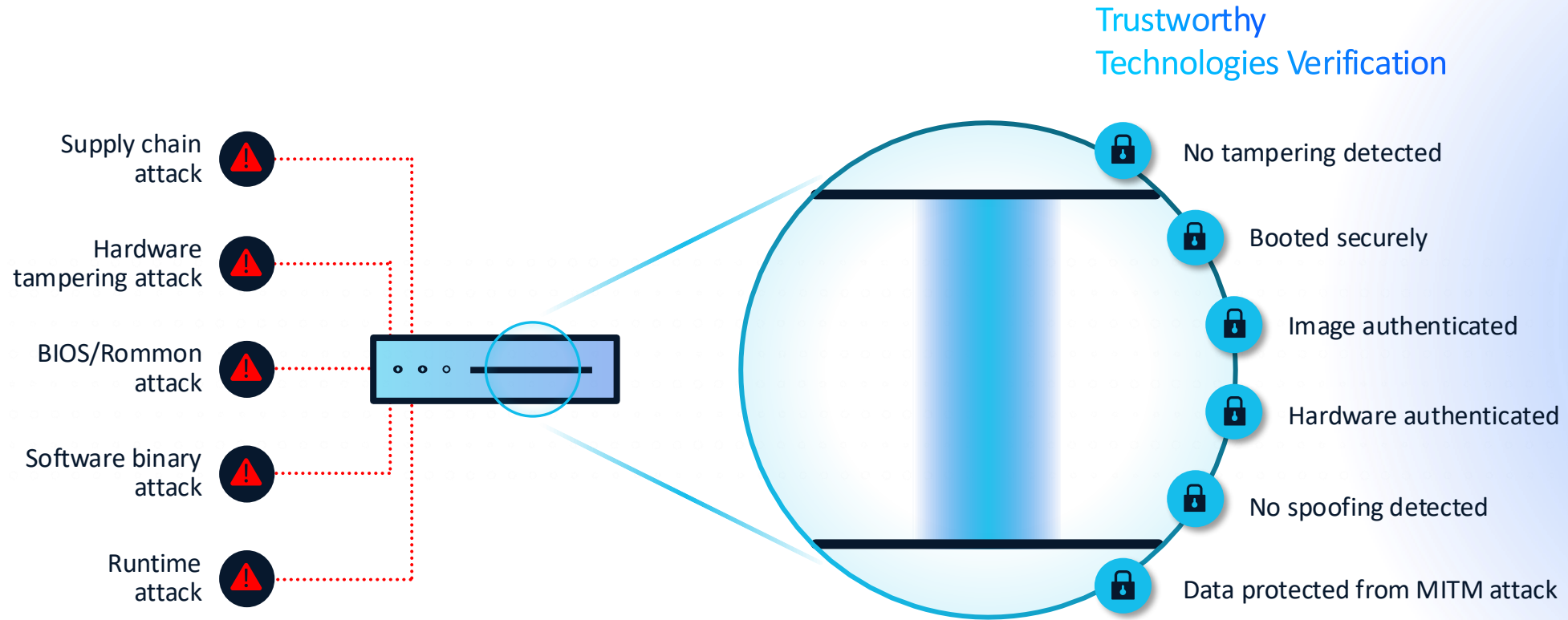
of breaches involved IoT devices

Sources:
1. M-Trends 2025: Executive Edition, Apr 2025, “By the Numbers — The Data of M-Trends”
2. IBM cost of a data breach 2024
3. Verizon DBIR, 2025



Securing the switch

Secure from hardware to software, from boot time to runtime



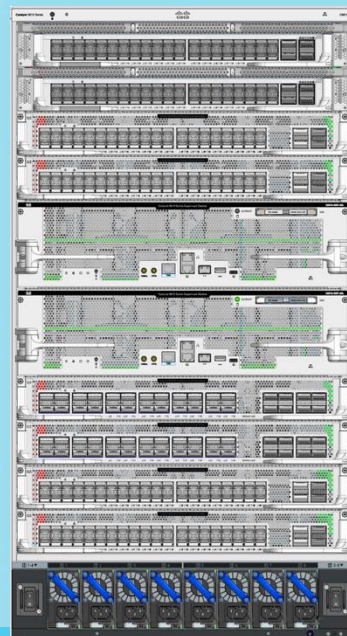


Quantum Resistant

Cisco C9350



Cisco 9610



Cisco C9000 Family

PQC compliant hardware

Data plane
Security

Protects against 'harvest now decrypt later' attack on quantum vulnerable protocols like MACSEC & IPSec

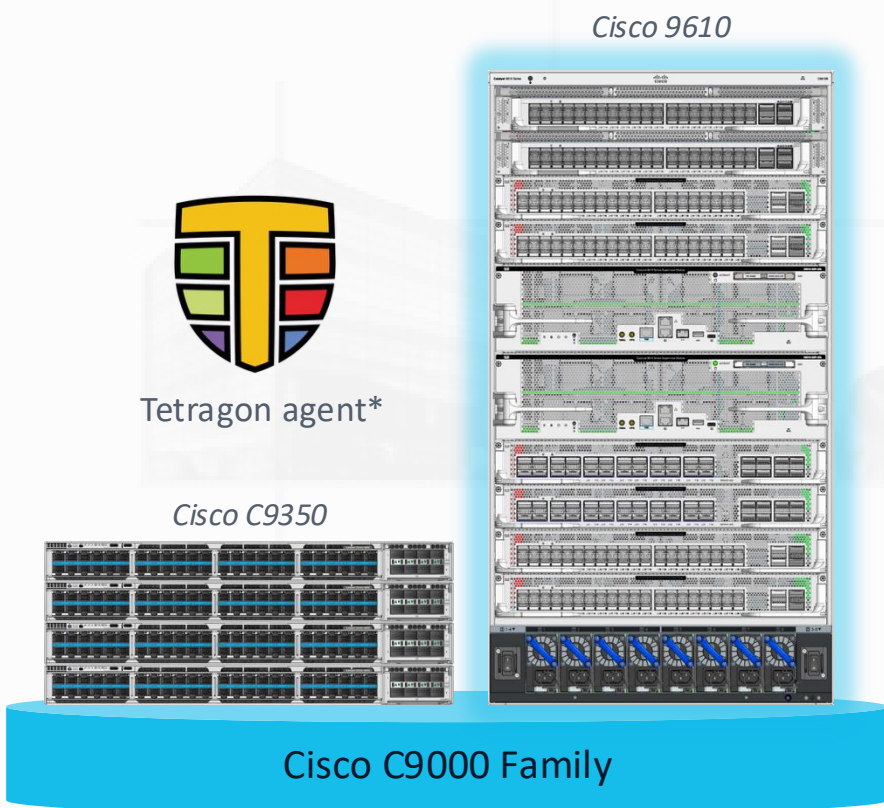
PQC signed
IOS-XE

Quantum secure operating system protects against forging & unauthenticated OS

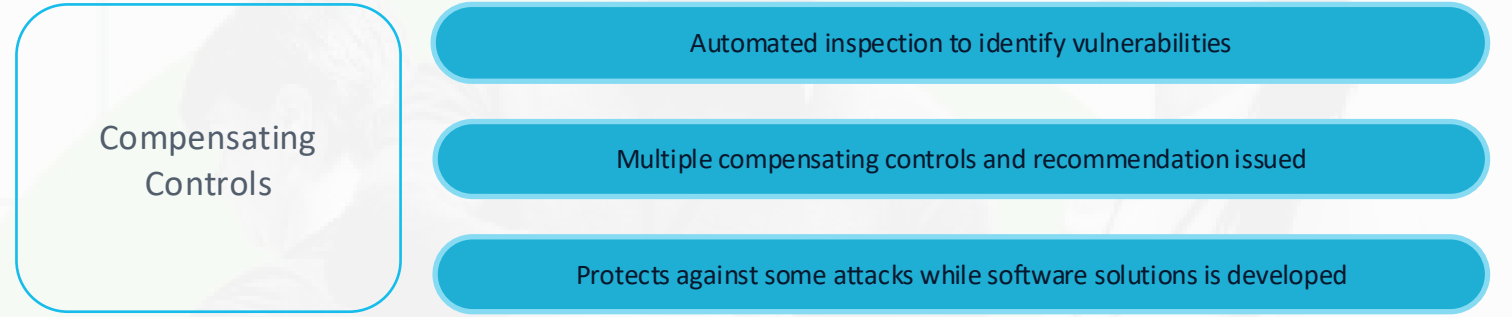
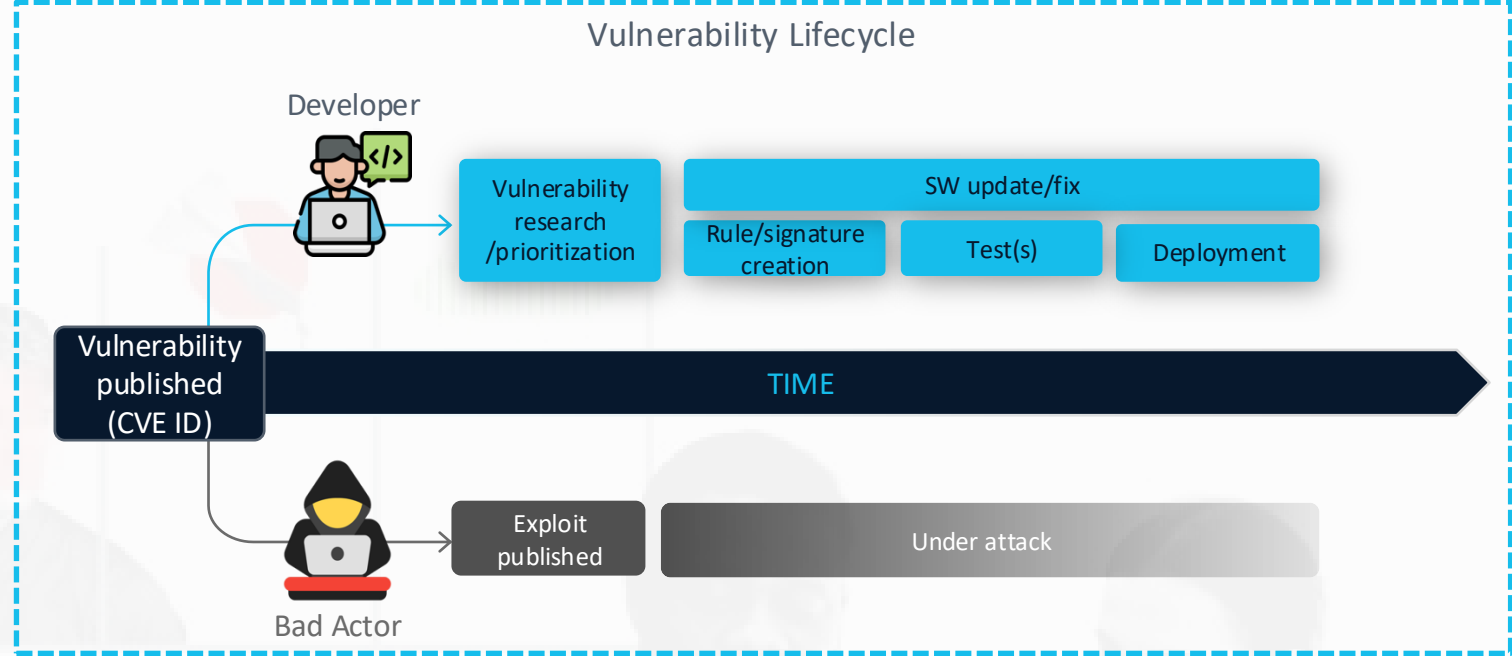
PQC Compliant Secure
Boot

PQC compliant bootloader and ROMMON verification protects against boot-level tampering

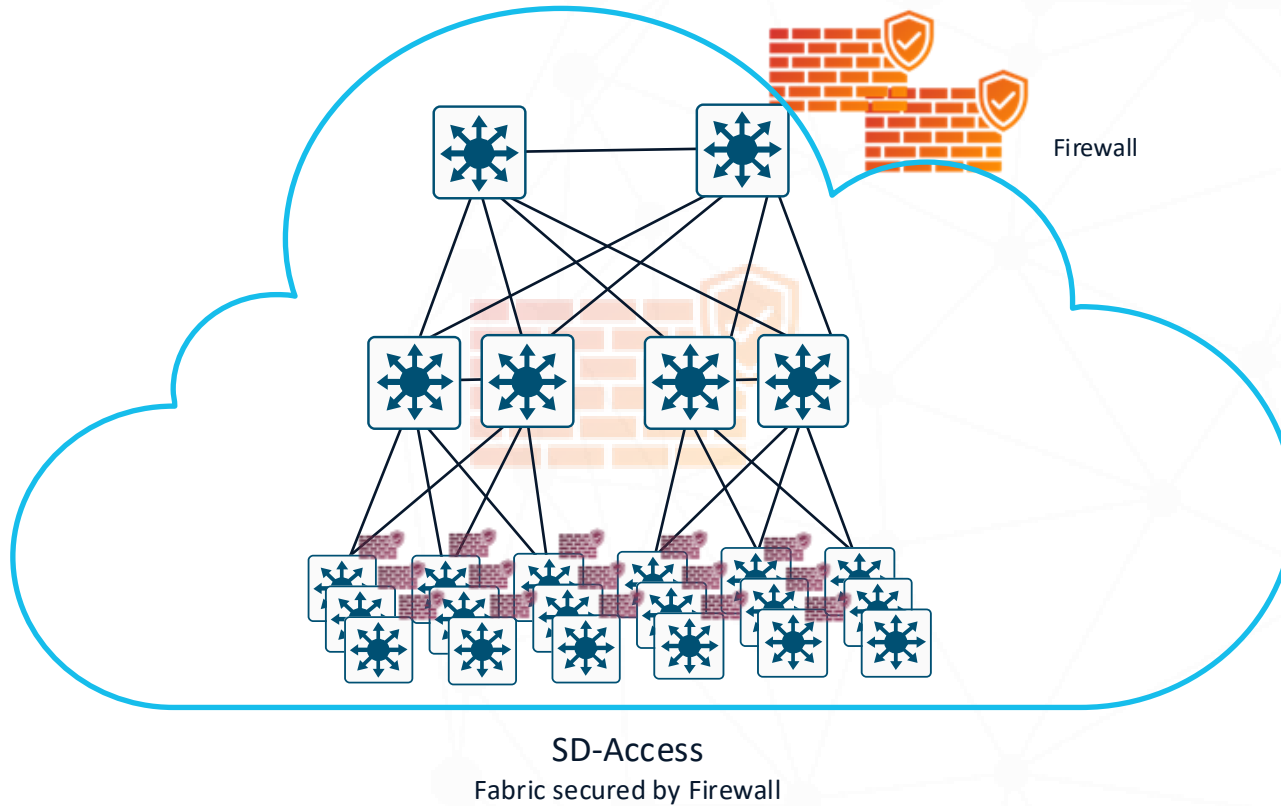
Quantum Resistant and PQC Compliant ready



Tetragon can use eBPF to monitor and enforce security policies in real time by tracing kernel level events



Compensating Controls for Vulnerabilities



Firewall services on Campus Edge

- Selective traffic steering for stateful inspection*
- Centralized Firewall Policy

Highly Scalable

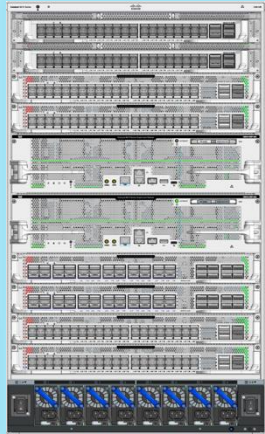
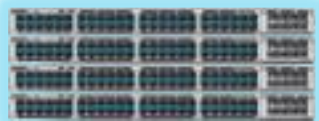
- Up to 3000 Edge devices per site – 3X Scale
- Scalable segmented clients with Cisco 9000s

Ultra Resiliency

- Integrated High Availability with ISSU and xFSU*
- Sub second convergence

SD-Access – Secure, Resilient and Scalable

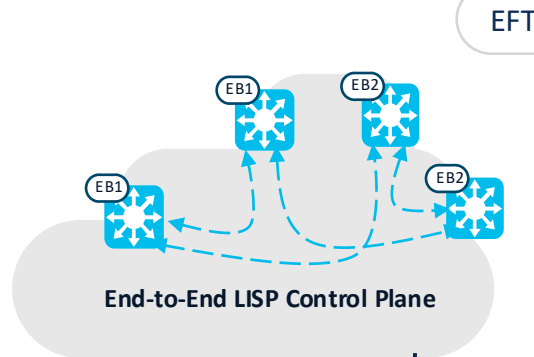
SDA LISP: Advancing Automation Capabilities



Silicon One Hardware Support

C9350 FE role with IOS-XE 17.18.2, Dec'25
Catalyst Center 2.3.7.11 & 3.1.6

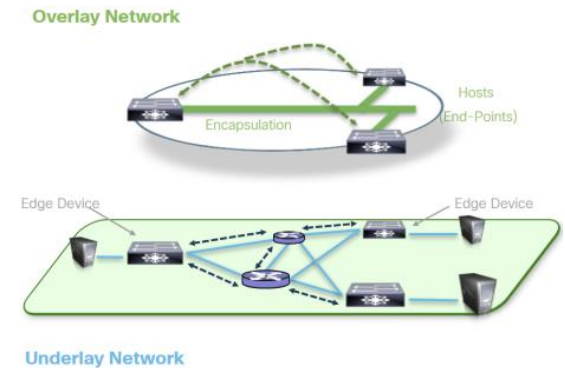
C9350 FIAB + eWLC, C9610 with IOS-XE 26.1.1
Catalyst Center 3.2.1 Mar'26



PubSub Architecture & Migration

Simplified border design with faster convergence with the new PubSub architecture.

Streamlined migration path from BGP/LISP to enhanced PubSub-based fabrics (IP/SDA Transits)



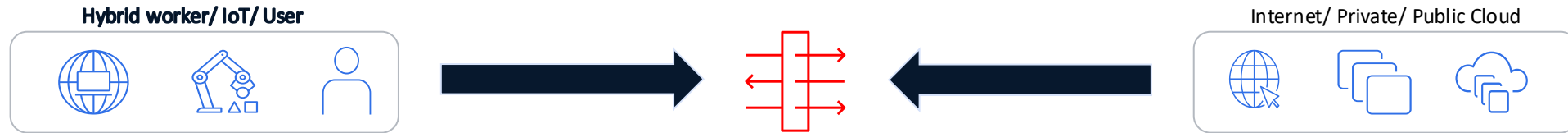
Automated IPv6 Underlay

IPv6 Only Underlay – 3.2.1
Dual Stack Underlay – 3.2.3

SSI Fabric: Stateful Security On-Demand

Intelligent Protection for Your SDA Fabric Network

Open Beta Nov' 2025



Key Concept

Allows ***select traffic*** redirection to security appliances.

This means:



Policy-Driven Protection — [Seamless Cisco or 3rd-Party Integration](#)



Efficient, Scalable Design — [Optimize Firewall Investments](#)

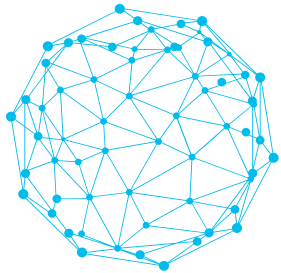


Flexible — topology-agnostic rollout [for faster time-to-value](#)

Cisco Campus Fabric Management Evolution

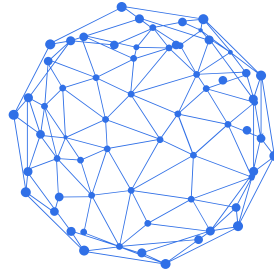
On-Prem

Cloud



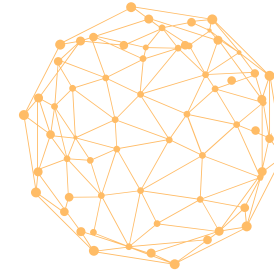
Since 2017

Intent Based Networking
Campus Optimized Fabric
Integrated Scalable Wireless
Multi-site, Multi-domain, IT/OT



Since 2019

Common Fabric – Campus | DC
“Ship-In-Night” Wireless solution
Multi-vendor compatible

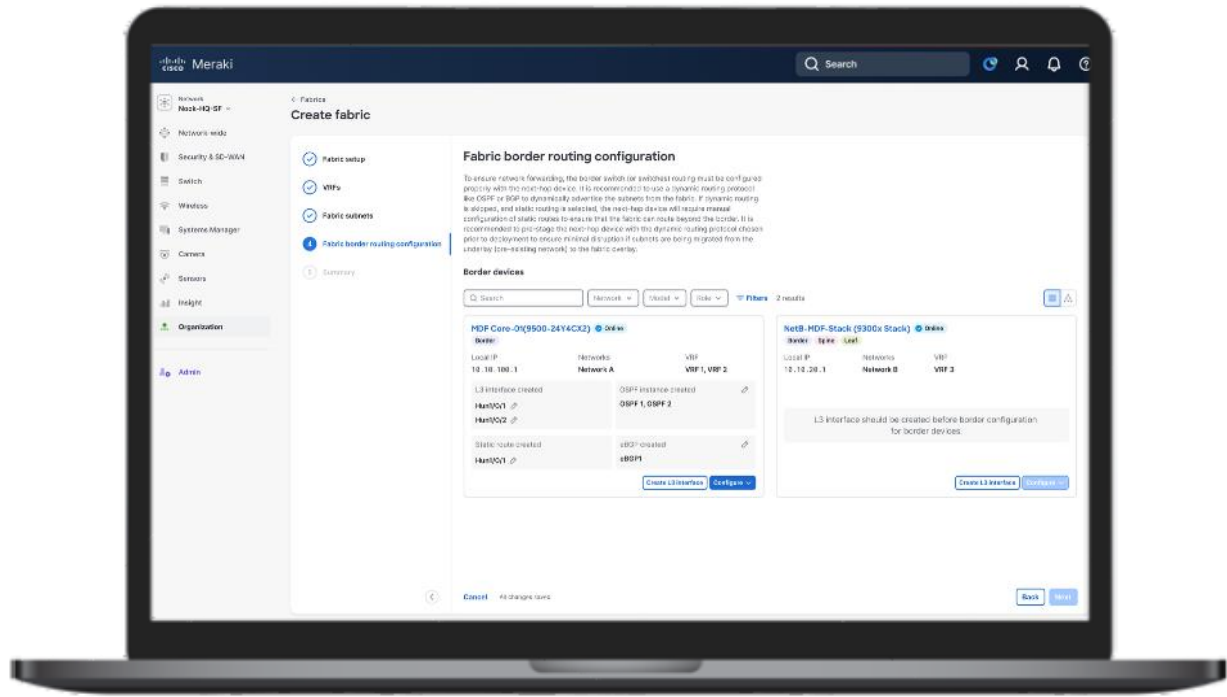


LA: Dec 2025

Intent Based Networking
Enterprise-grade Cloud Managed Fabric
Integrated Wired, Wireless | Automation & Assurance
Scalable | Secure | Flexible architecture

Introducing cloud-managed fabric

EVPN Fabric Orchestration from Meraki Dashboard



Benefit from Cloud Simplicity
Build and manage large sites from an intuitive cloud networking platform



Leverage Existing Investments
Modernize the network while utilizing existing C9K infrastructure



Migrate at Your Own Pace
Incrementally migrate devices and subnets to the cloud over time

Beta: Nov 5, 2025 | Limited Availability: December 2025 (IOS XE 17.18.2)



Simplified management as
a **single logical entity**



Focused on **brownfield migration**



Flexible deployment and staging



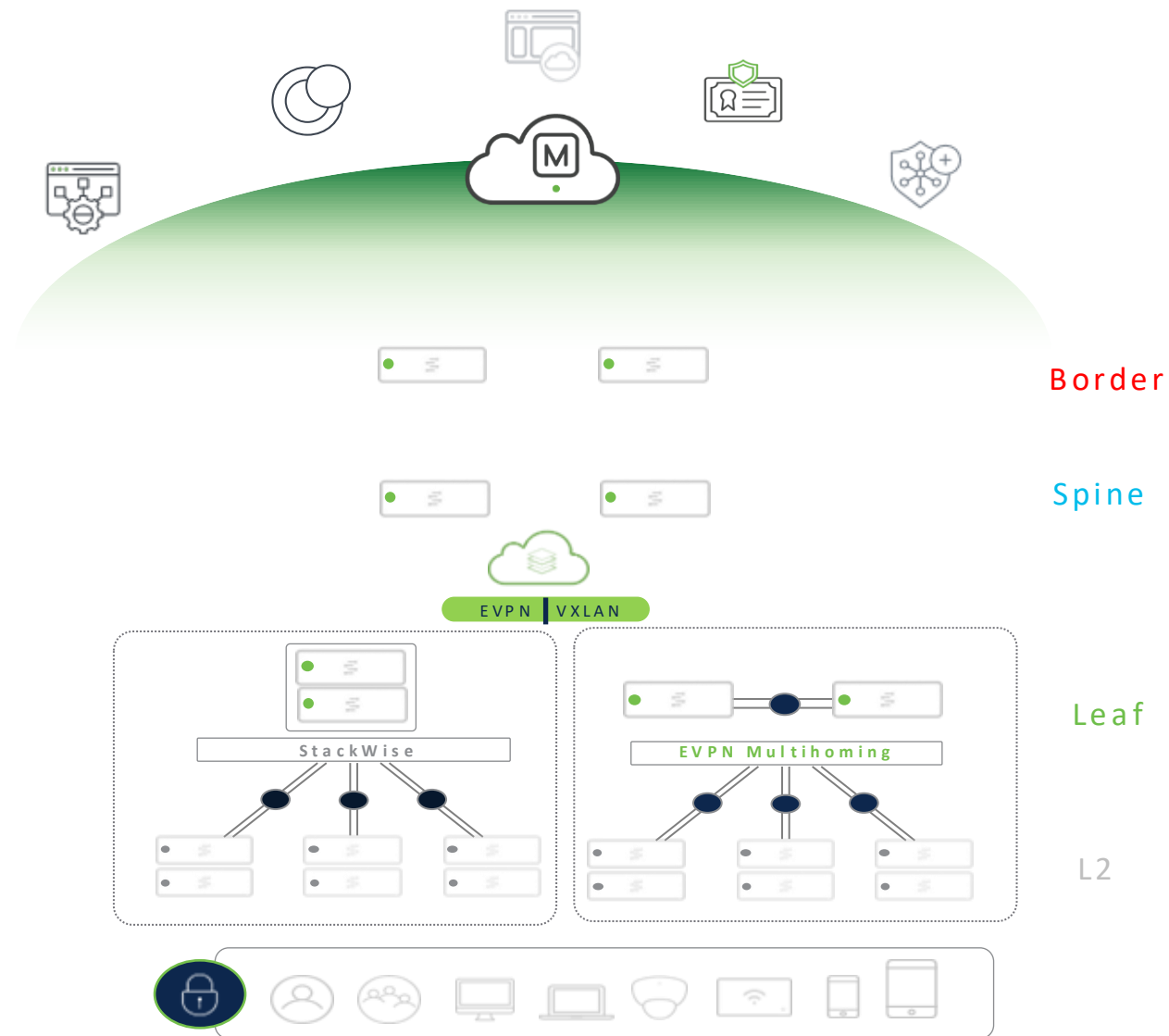
Securing the network with
Adaptive Policy



Optimized L2 extension



Day-2 Operational Assurance



Cloud-Managed Fabric Solution

BRKENS-2609



Switches



Last day



+ Add a switch

0 Offline



0 Alerting



6 Online



0 Dormant



Search

Status



Tags



Device type



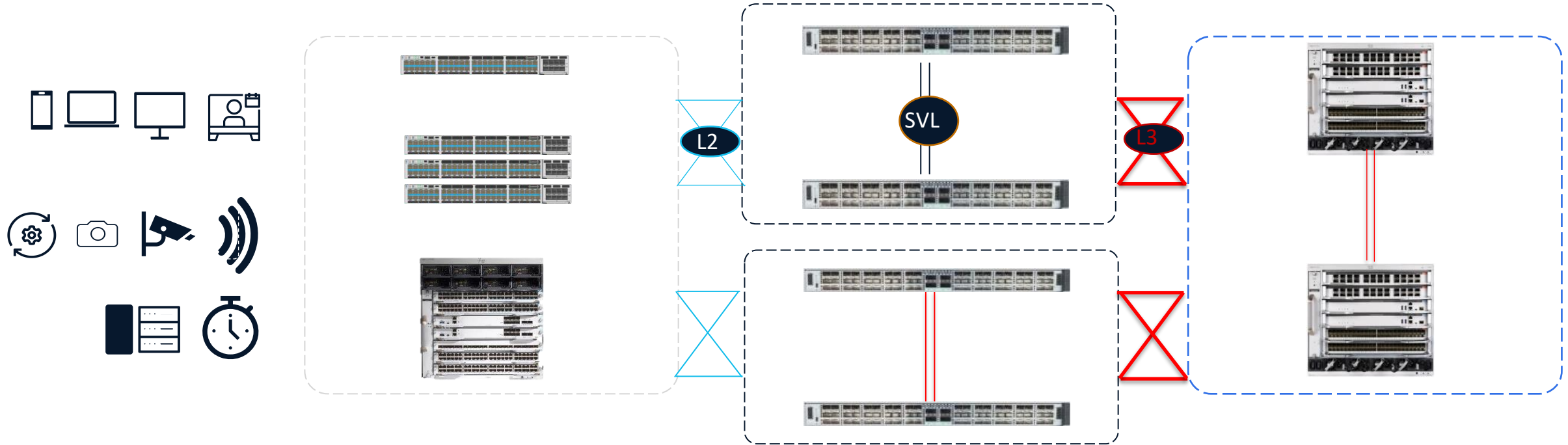
6 results

Download



☐	Status	Name	MAC address	Connectivity (UTC-8) ↕	Cloud ID	Local IP	Model	Configuration source	# active ports	
☐	✓	spbdr-2	8c:94:61:cf:8a:00		Q5VY-XQDS-H7YR	192.168.129.65	C9500-48Y4C	Cloud	5 / 52	
☐	✓	spbdr-1	5c:5a:c7:d6:ad:c0		Q5VY-2GGK-C2QN	192.168.129.64	C9500-48Y4C	Cloud	6 / 52	
☐	✓	Leaf-1	74:86:0b:77:e6:80		Q5TJ-JRZ4-N8MP	192.168.129.62	C9300-48UXM	Cloud	3 / 50	
☐	✓	Leaf-2	c4:46:06:de:e8:80		Q5KJ-9X45-8NVZ	192.168.129.61	C9300-48UXM	Cloud	3 / 50	
☐	✓	Leaf-4	9c:09:8b:61:da:00		Q5JP-HKAX-8H9Y	192.168.129.167	C9300X-48HX	Cloud	3 / 50	
☐	✓	Leaf-3	9c:09:8b:d3:11:80		Q5JM-XV3C-YFGZ	192.168.129.63	C9300X-48HXN	Cloud	3 / 50	

Cisco C9000 High Availability



Platform Resiliency

- StackWise-1.6T
- Power Stack
- PS/Fan Redundancy

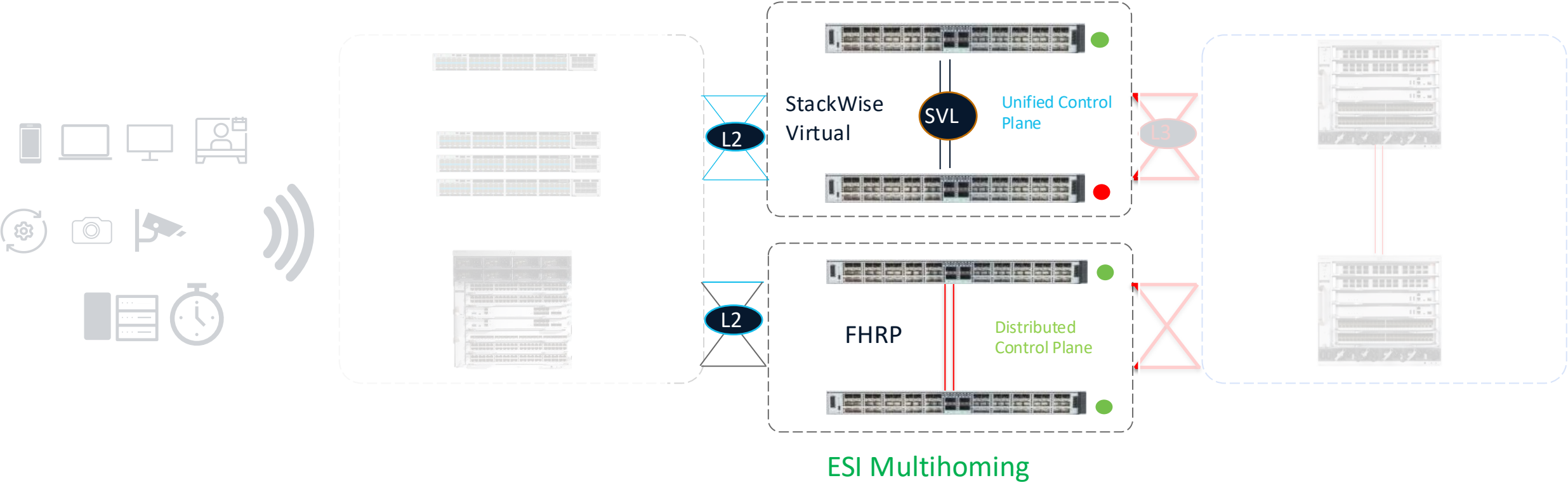
Network Resiliency

- StackWise Virtual
- Graceful Insertion & Removal (GIR)

Operational Resiliency

- ISSU
- xFSU
- SMU/Patching

Cisco C9000 High Availability – Design Redundancy

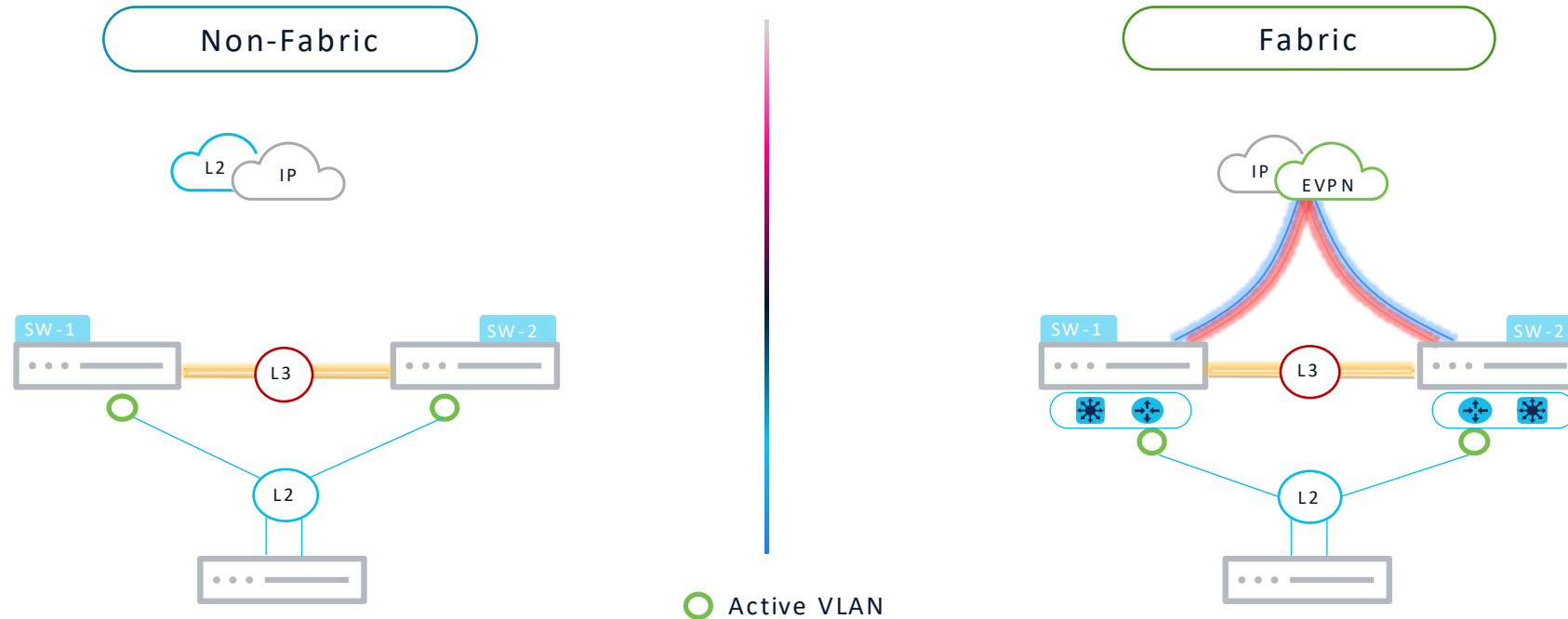


- Active
- Hot-Standby

BGP EVPN Multihoming for Fabric & Non-Fabric

IOS-XE: 17.18.2

Enable Active-Active redundancy for Firewall, WLC or Access layer



WLC HA



Firewall HA

2Xperformance,high availability and scale

for transition path from FHRP to EVPN Multihoming

Flood free Access

L2 multipath solution for traditional IP / non-fabric networks

Extensive security

with Layer 3 segmentation and Layer 2 extension with EVPN fabric

Introducing ESI Multihoming

Uncompromised Network Resiliency for Traditional | Fabric networks

17.8.2

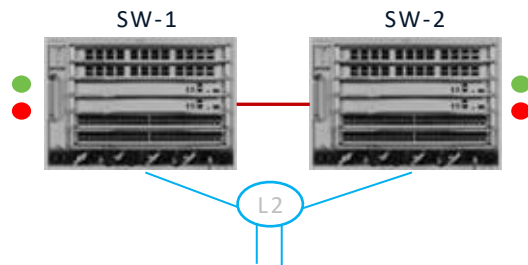
Cisco Catalyst Center



Device Mgmt | 360° | Topology | Base Automation | Network Profile | SWIM | ISSU/SMU Upgrade

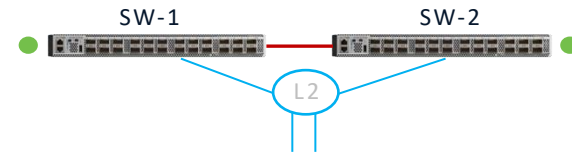
Catalyst 9600 9400

Modular - HA | Non-HA



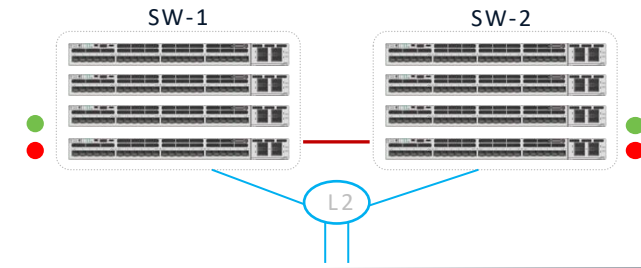
Catalyst 9500 9300

Fixed - Non-Stacking



Catalyst 9300

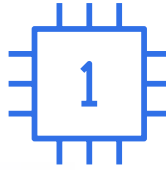
Fixed - StackWise



● Active
● Hot-Standby

- RFC 8365 based Layer 2 Multipathing solution – EVPN Multihoming
- Flexible network deployment options – Traditional (L2, IP, MPLS) | EVPN VXLAN Fabric
- Deterministic network availability during IOS-XE software upgrade for Fixed or Modular platforms
- Uncompromised network performance with Modular system software upgrade with ISSU

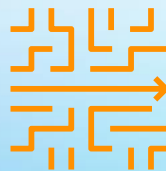
Architecture for the AI-Ready Secure Campus



Scalable devices
ready for AI



Security
fused into the network



Operational simplicity
powered by AI

Unified Platform and OS

The Foundation of Operational Simplicity

Fast, consistent out-of-box provisioning

Simple day 0 operations
Simple, streamlined onboarding
Automated port config
Secure, fast onboarding of devices

Expanding IOS XE Capabilities available in Cloud and CLI

CLOUD MANAGEMENT AVAILABLE NOW

1H'26



C9300L



C9300



C9300X



C9200L



C9500



C9200/CX



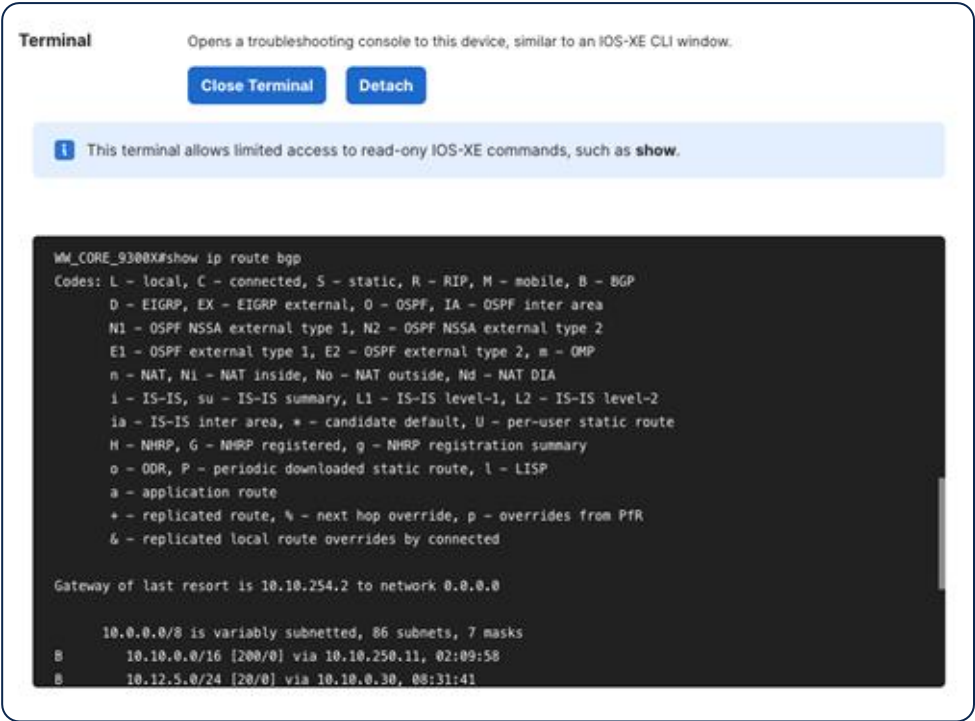
C9300LM



C9350



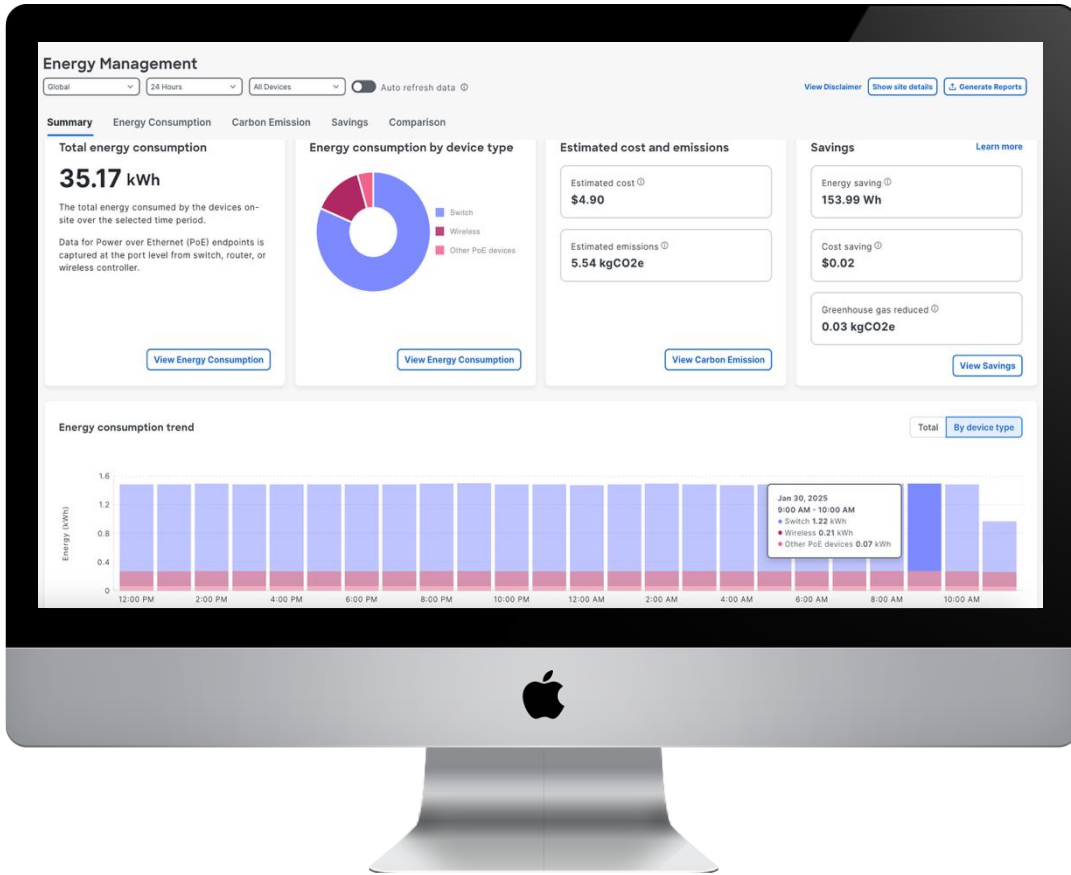
Modular



Cloud management (with device as the configuration source) unlocks the breadth of IOS XE Features

- VRF
- BGP
- In-Service Software Upgrade (ISSU)
- StackWise Virtual
- Energy Dashboard

Meraki Dashboard for Enterprise use cases



Catalyst Center Global Manager

Catalyst Center Virtual Appliance on Azure

Site-based RBAC & Rule-based Compliance

Campus Automation

Energy Dashboard

ThousandEyes Integration

Continued Investment in Catalyst Center

Simplify Troubleshooting

Wired Assurance: Delivering the best wired experience from client to cloud

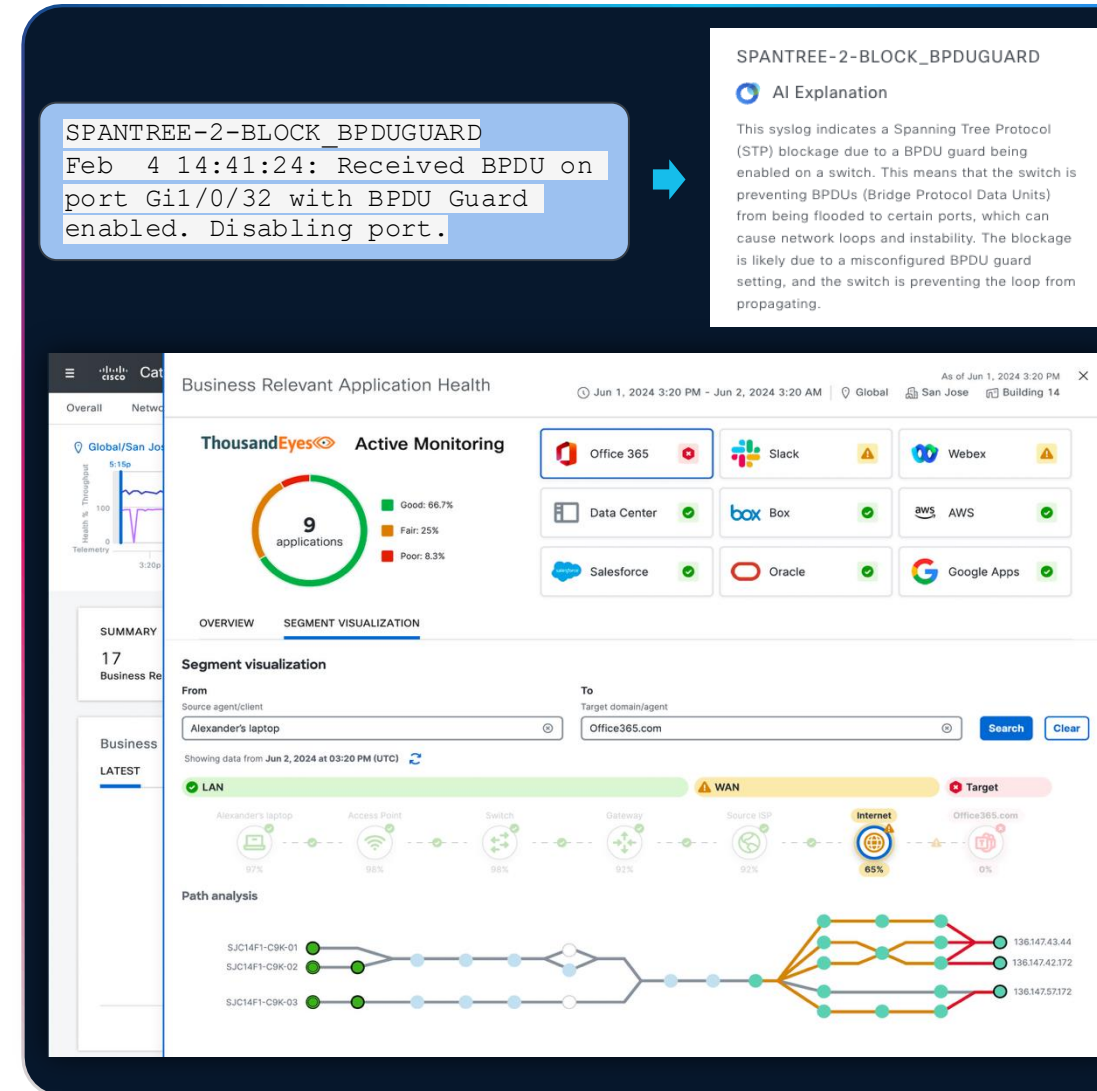
Assurance enhancements¹: Org-wide assurance view, Device Health, Digital Optical Monitoring

Intelligent Packet Capture & Analyzer¹: Automated packet capture & analysis

Thousand Eyes Integration²: Identify, isolate, and action issues across owned and unowned

AI Event Analytics²: Correlated events from Syslogs, Device Reachability, Radio Events, Client Onboarding

1. Available on Meraki Dashboard today, Packet Capture and Optical Monitoring on roadmap for Catalyst Center
2. Available on Catalyst Center today, ThousandEyes switch integration on roadmap for Meraki Dashboard





Client troubleshooting using unique partnership with Apple, Intel, Samsung



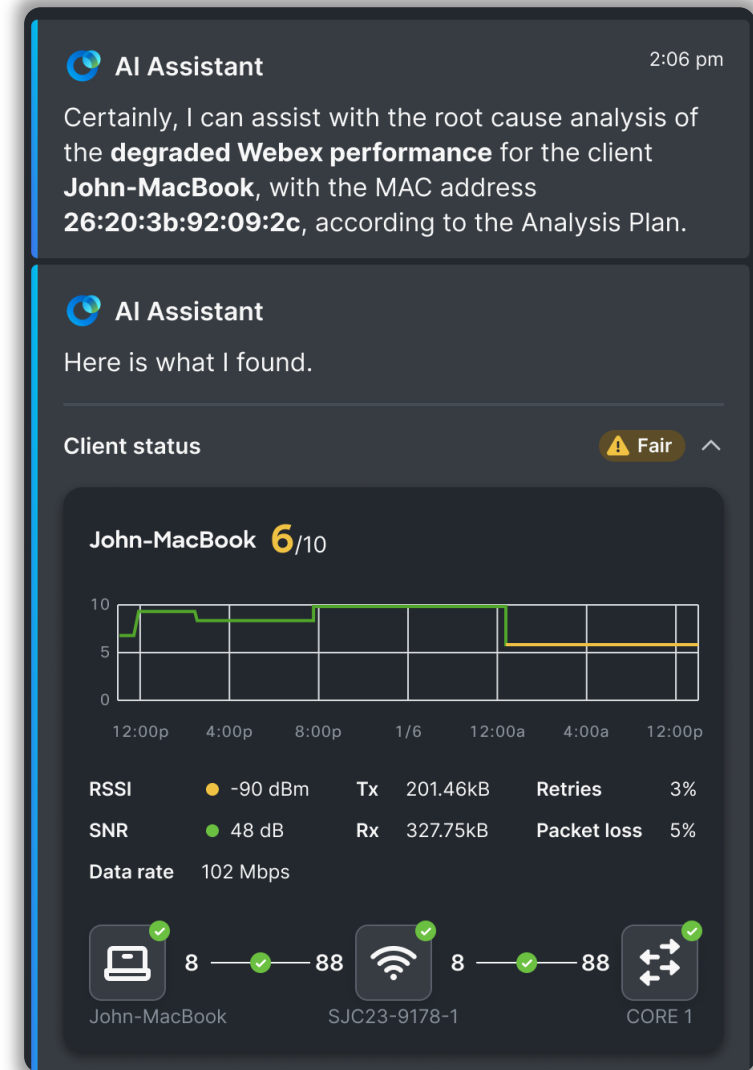
AI-driven RCA, end-to-end network correlation orchestrated through conversational interface



Conduct network change management by conversation



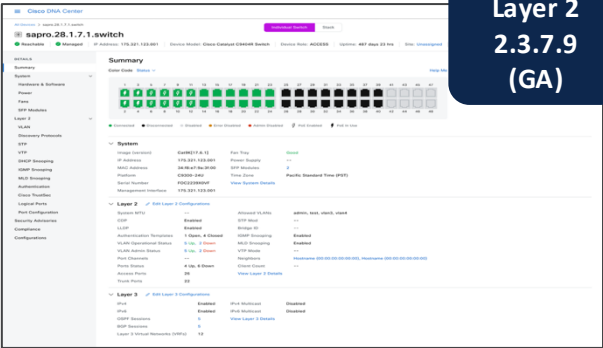
AI-generated summarization of Cisco document libraries and best practices



Operational Simplicity with AI Assistant

Catalyst Center Campus Automation

Per Device Configuration

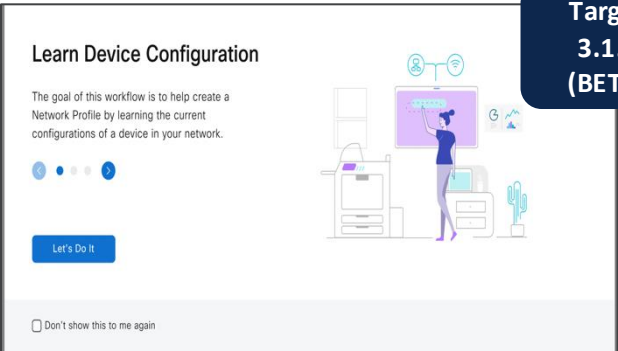


Enabling **device** by **device** feature configuration

Layer 3 & Network Settings (In Planning)

Licensing
Catalyst Essentials

Profile Creation

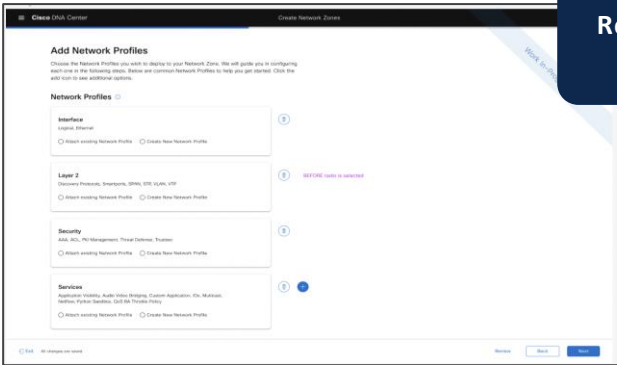


Business continuity by retaining **existing** configurations

Create Profiles based on existing networks

Licensing
Catalyst Advantage

Service Management



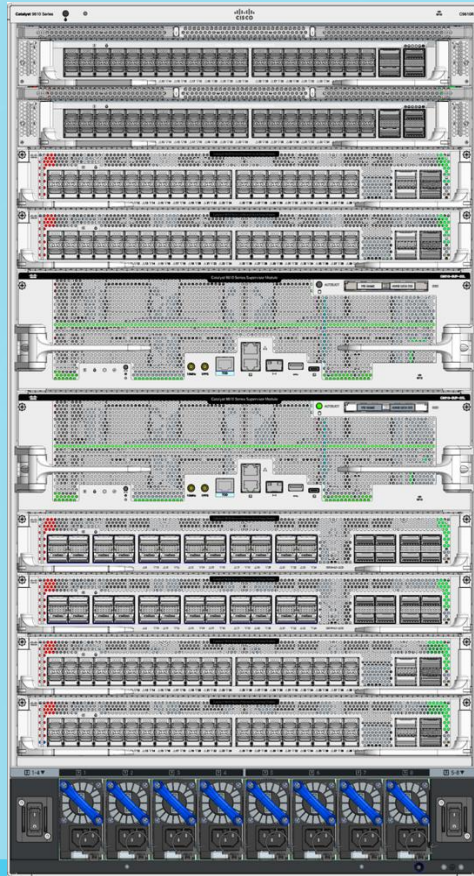
Service profile for network scalability and security

Manage service edits and provisioning at scale

Licensing
Catalyst Advantage

Summary

Cisco 9610



Cisco C9350



Cisco C9000 Smart Switches

AI- Ready Hardware

C9350, C9610, Silicon One, Cloud Native IOS-XE

Security fused into the network

PQC Compliant, Hypershield Ready, Compensating Controls

Operational Simplicity with Platform Flexibility

One hardware, your choice of management platform

Architecture for the AI-Ready Secure Networks

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