

From Edge to Core: Securing AI-Ready Campus Smart Switches

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Agenda

1. Latest Campus Trends
2. Operational Simplicity for Secure Campus
3. Scalable Devices Ready for AI
4. Security Fused into the Network
5. Secure Campus VXLAN Architecture updates

Another Massive Technology Disruption

Internet

Mobility

Cloud

AI

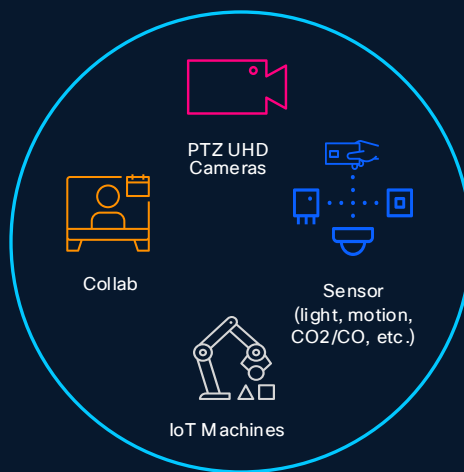
Latest Trends & Technologies in Enterprise Networks

AI Applications & New Traffic Patterns



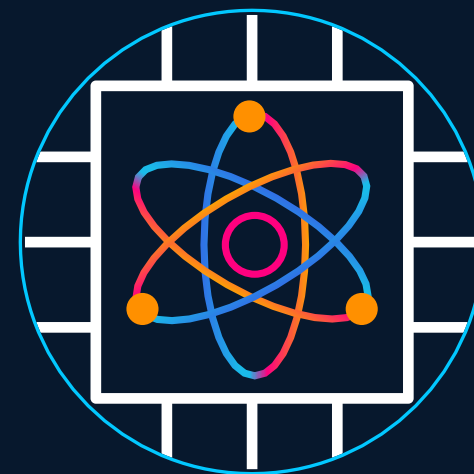
Load balancing microservices
Extreme low latency
Elephant flows and congestion

New Endpoints & Wi-Fi 7



Exponential ARP table increase
5 Gbps per port net capacity
60W+ PoE draw per port

Quantum Computing & New Threats



PQ Secure boot drive
PQ Secure OS
PQ Secure data plane

Is Your Campus Network AI ready?

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

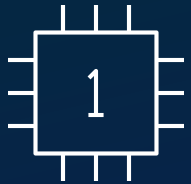


Architecture for Secure Campus

Operational Simplicity
Powered by AI



Scalable Devices
Ready for AI



Security
Fused into the network



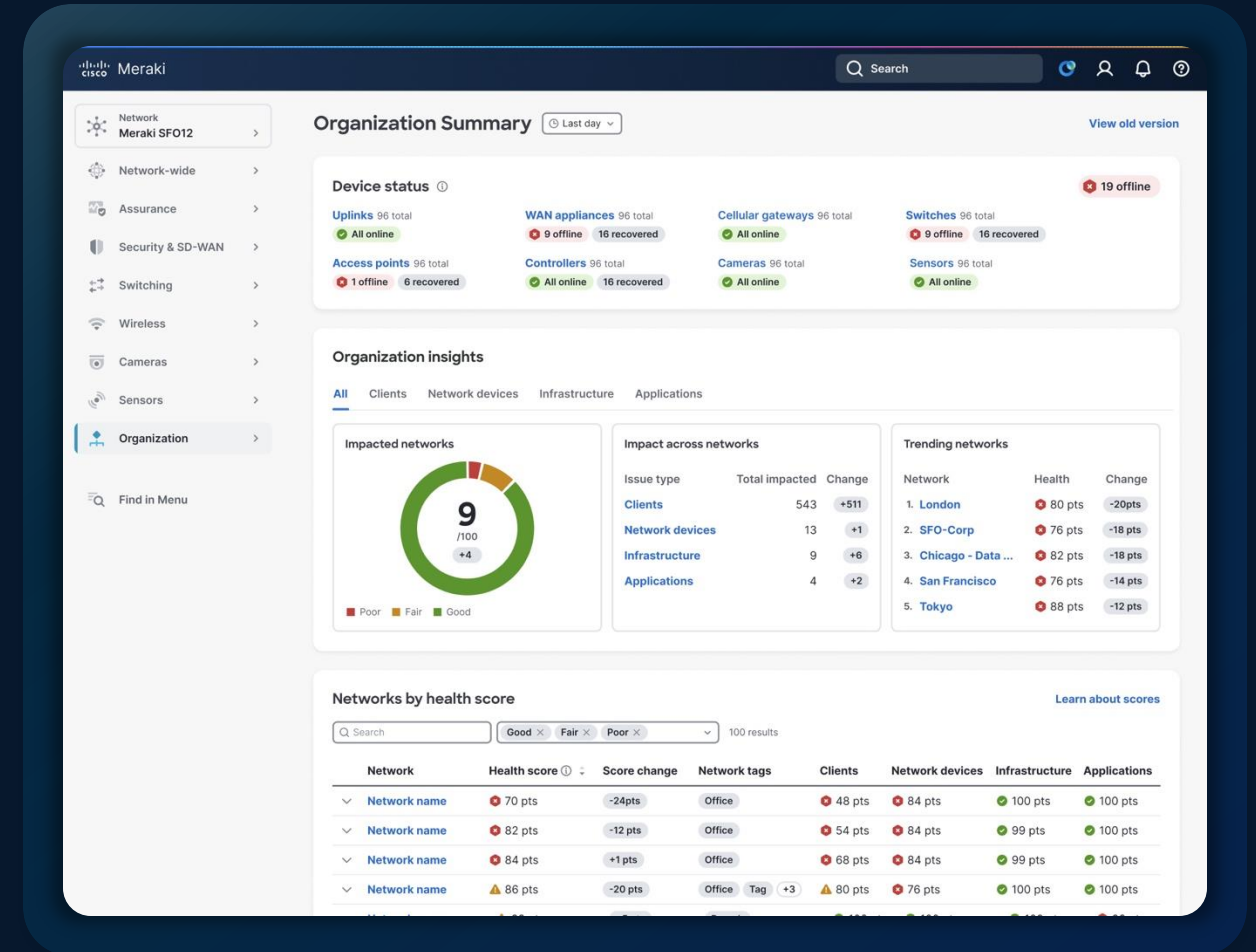
Available

Unified Management – Catalyst and Meraki, Any Environment

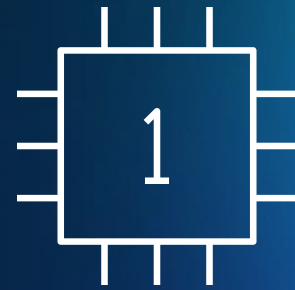
Seamless control across cloud,
on-prem, or hybrid

New enterprise campus capabilities

AI-powered automation and assurance



Scalable Devices Ready for AI



INTRODUCING

The Cisco C9000 Series Smart Switches

Powerful, Secure, Easy to Manage

Cisco Silicon One -
industry's
most powerful,
programmable ASIC

High-performance,
programmable
x86 CPU

Cisco IOS XE w/
secure boot &
Trustworthy Solution

Universal PoE+
& PoE Analytics

Switch power
optimization &
FMP-ready

On-device
ThousandEyes
App hosting

Cisco C9350 Smart Switch



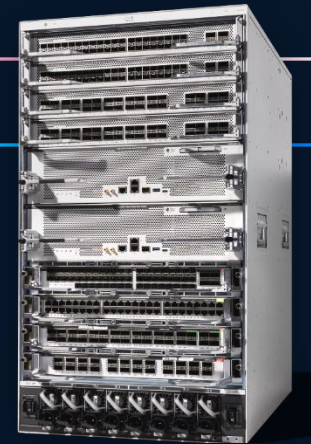
1.6 Tbps
Stacking
bandwidth

4x100G
Uplink
Modules

<5 μ s
Latency

4x
Higher MAC &
ARP density

Cisco C9610 Smart Switch



25.6 Tbps
System
bandwidth

256x100G
Modular
Line-Cards

<5 μ s
Latency

10 slot
To power
the core

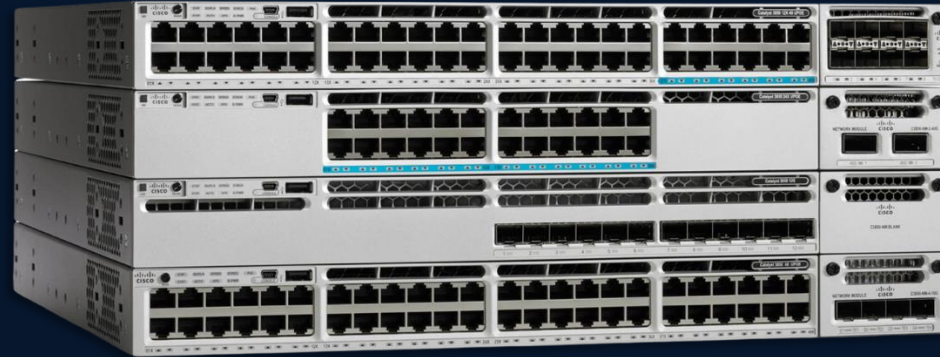
High-performance,
low latency

Cisco Silicon One +
co-processor for
security and AI

Post-quantum
secure

Intelligent energy
efficiency

Introducing Smart Switches for the AI-Powered Campus



Cisco C9350 Smart Switches

AVAILABLE JUNE 2025

Cisco C9350 Models

mGig Downlinks (18.6" D)



Cisco C9350-48HX
48x 10G-mGig & 90W UPoE+



Cisco C9350-48TX
48x 10G-mGig Data-Only

1G Downlinks (15.1" D)



Cisco C9350-48U
48x 1G & 60W UPoE



Cisco C9350-24U
24x 1G & 60W UPoE



Cisco C9350-48P
48x 1G & 30W PoE+



Cisco C9350-24P
24x 1G & 30W PoE+



Cisco C9350-48T
48x 1G Data-Only



Cisco C9350-24T
24x 1G Data-Only

Network Modules



C9350-NM-4C
4x 100G/40G QSFP28



C9350-NM-2C
2x 100G/40G QSFP28



C9350-NM-8Y
8x 25G/10G/1G SFP28
(50G on top 4 ports)

Power Supplies



1600W AC
Titanium Rated, Port Intake



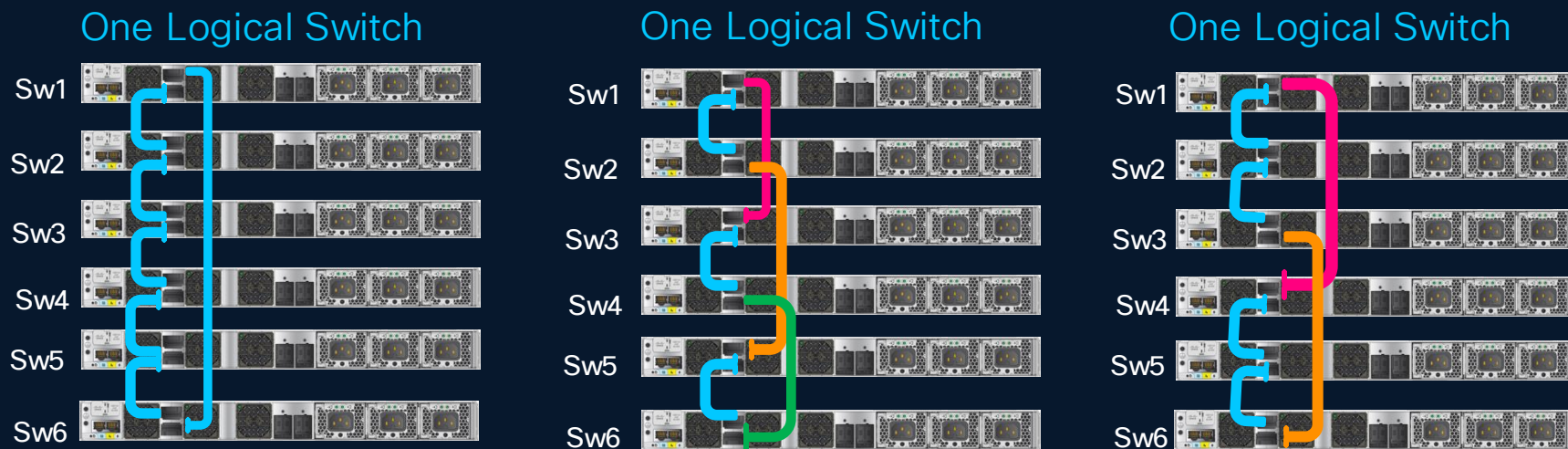
850W AC
Titanium Rated, Port Intake



500W AC
Titanium Rated, Port Intake

New Stacking Architecture

Built for the New Generation of Campus Switching



Typical Stack Cables Configurations

New Stack Cables Configurations Options

8/12* Member Stacking
With 1.6T stacking capacity

User friendly stacking design
Eliminate mandatory long stack cable requirement

Standard Ethernet Stacking
based on SPF (Shortest Path First) / VxLAN

Point-to-point architecture
for low latency and optimized path selection

Sub-Second Stateful Switchover with
SSO & NSF

Isolated bandwidth loss
in event of failure

Unparalleled density,
speed, and security

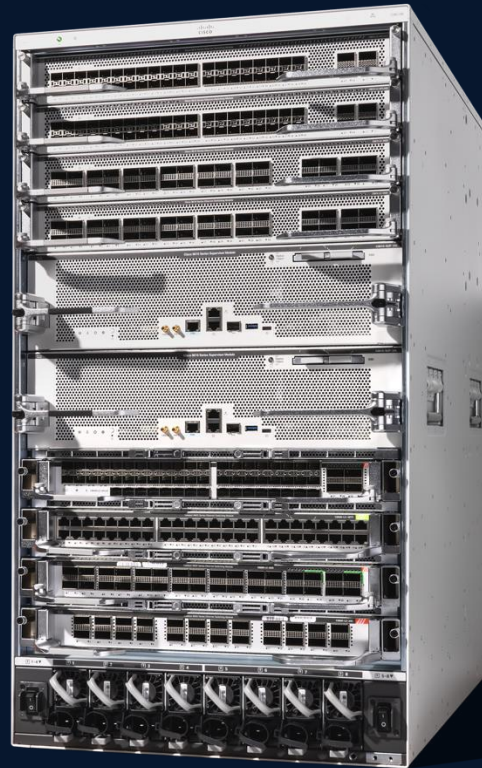
Backward compatible
chassis with front to
back airflow

Powered by Cisco
Silicon One

High density
chassis with state-
of-the-art hardware

Entirely modular and
upgradable system

Introducing Smart Switches for the AI-Powered Campus



AVAILABLE JUNE 2025

Cisco C9610 Modular Core Smart Switches

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 <ul style="list-style-type: none">Up to 8 Redundant power suppliesUp to 4 Redundant fan traysRedundant Supervisors	Sub-second failover <ul style="list-style-type: none">Between Supervisors in same chassis ($\leq 5\text{ms}$)Between chassis with Next Generation StackWise Virtual ($\leq 150\text{ms}$)	Resilient L3 topologies <ul style="list-style-type: none">NSF support for OSPF, EIGRP, ISIS, BGP	Minimize upgrade time <ul style="list-style-type: none">SMUISSUGIR	Infrastructure resilience <ul style="list-style-type: none">Multi-chassis EtherChannel (MEC)Dynamic add/change Modules & Links

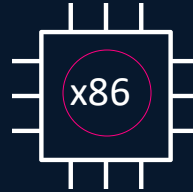
Introducing the Next Generation of Campus Switching

Silicon One ASICs, AI-Ready Infrastructure, Updated IOS-XE



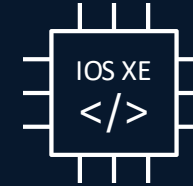
Silicon One ASICs Adaptability

- Programmable at all layers
- Permits multiple use cases in a converged solution
- Virtual slicing for parallel processing



X86 Processor AI Readiness

- Control-Plane scale for agentic-AI and AI agents at scale.
- Enhances software-assisted services (AVC/XDR)
- Advanced App-Hosting with AI-Hosting (Edge Compute)



Updated IOS XE Security

- Supports post-quantum cryptography
- Trustworthy Linux kernel that securely hosts applications
- Leverage advanced Linux features for Cisco Live Protect

Sustainable

Smart Power | PoE Assurance | Energy Dashboard

Security Fused Into the Network



Security Fused Into the Network

Securing access to apps
anywhere



Securing network
connectivity



Securing network
access



Securing the device



New Threats Attack Networks Directly



Attacks on Infrastructure

Exploits like Salt Typhoon that target unpatched software on key infrastructure



Attacks on Encryption

“Harvest now, decrypt later” attacks where encrypted data is extracted and stored, anticipating quantum computing.

FUTURE

Live Protect

Mitigate new threats in near-real time—without upgrading image or rebooting device

Cisco Catalyst Center

Search, Star, Cloud, Help, Notifications (3), User, Admin

Network Device Security

Overview Device vulnerabilities

73 All vulnerabilities

12 Live Protect available for deployment

37 Live Protect deployed

Search

CVSS score

Device family

Live Protect status

Filters 73 results

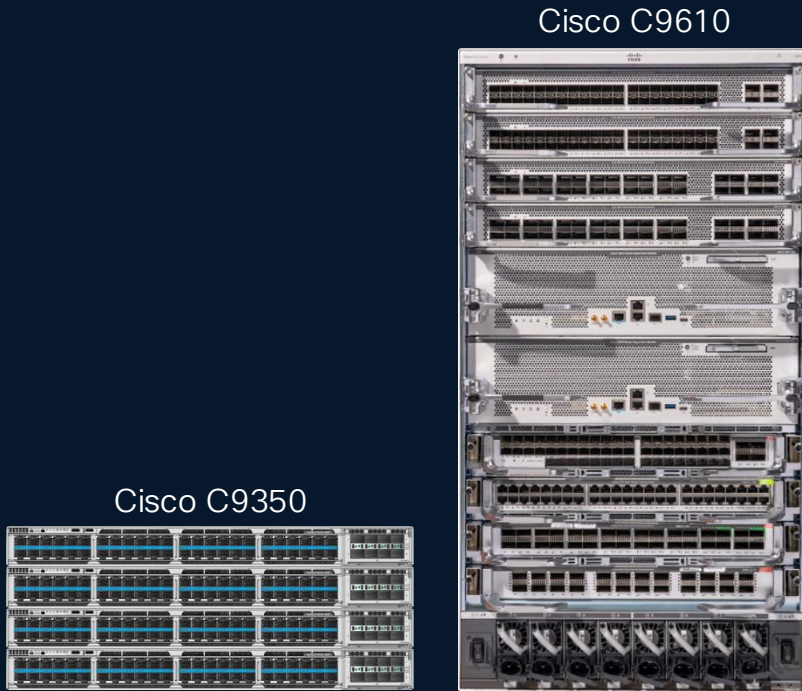
Apr 22 2025 09:41 Rescan

Vulnerability	Details	CVSS	Affected devices	Live Protect	Hits
CVE-2023-20198 New	Web UI Unauthorized Access Vulnerability	10.0	1	Available	—
CVE-2024-20169	Command Injection Vulnerability	9.8	1	Available	—
CVE-2023-20154	SNMP Remote Code Execution	9.8	2	Available	—
CVE-2023-20049 New	Authentication Bypass Management Interface	9.6	1	Protection	6
CVE-2024-20467	Privilege Escalation via CLI	9.1	1	Observation	5
CVE-2024-20480	SSH Key Management Vulnerability	9.1	2	Available	—
CVE-2023-20177 New	IPv6 RA Guard Bypass	8.6	1	Protection	1
CVE-2024-20508	Privilege Escalation through Configuration API	8.6	2	Protection	3
CVE-2023-20200	CLI Privilege Escalation	8.6	2	Available	—
CVE-2024-20437	Buffer Overflow in HTTP Server	8.4	1	Observation	8

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Live Protect Demo

What Makes Cisco C9000 Quantum Resistant?



PQC compliant hardware

PQC Compliant
Secure Boot

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

PQC signed
IOS XE*

Quantum secure operating system protects against forging & unauthenticated OS

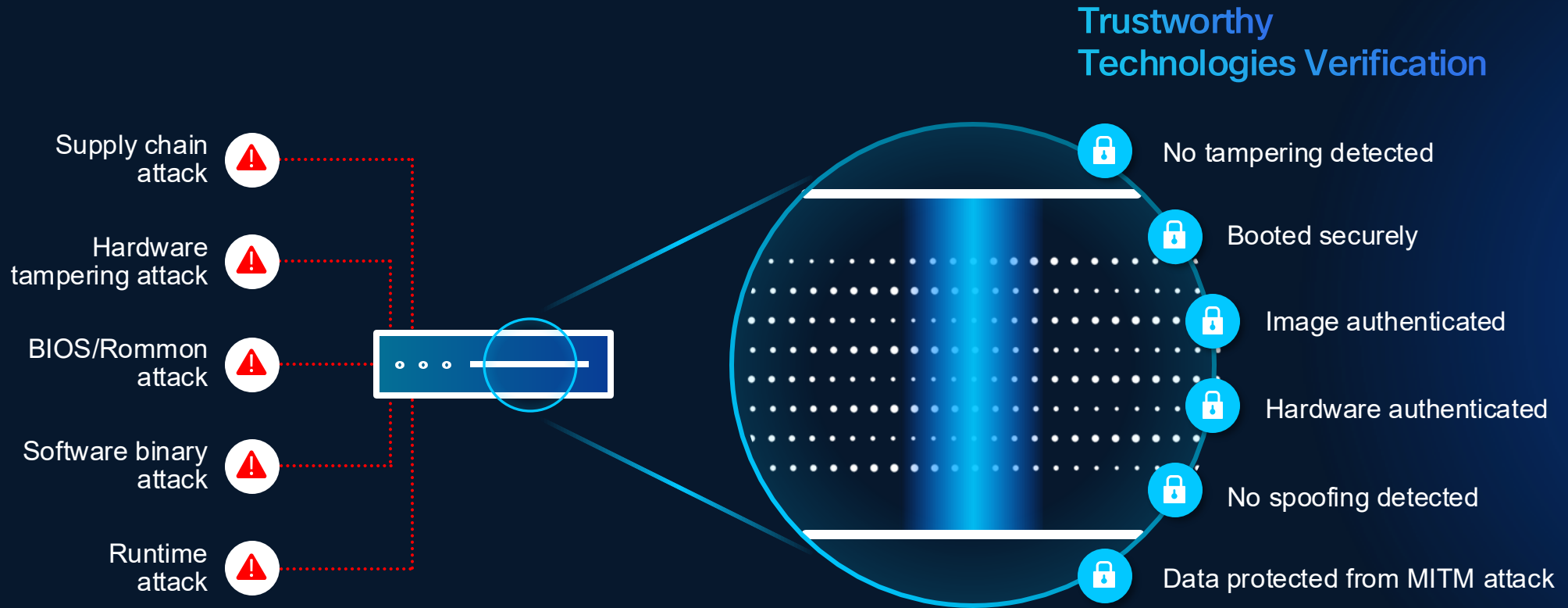
Data plane
security*

Protects against 'harvest now decrypt later' attack on quantum vulnerable protocols like MACsec & IPsec

*Planned at later date

Securing the Device

Secure from Hardware to Software, from Boot Time to Runtime

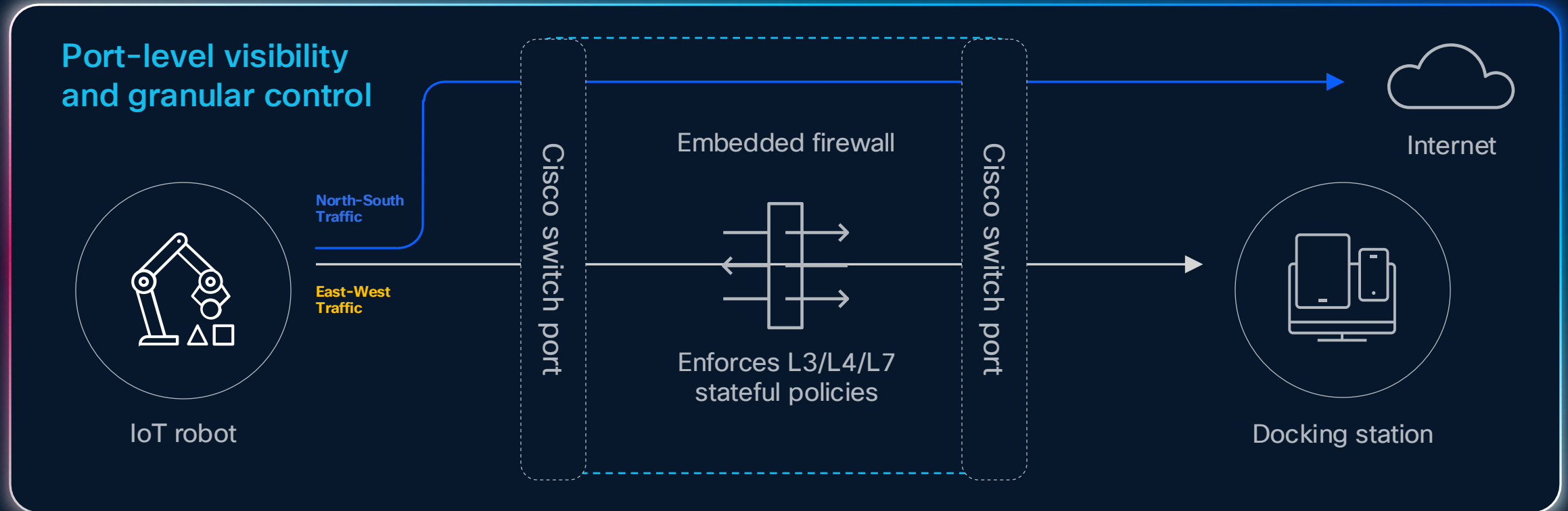


Securing the Network

FUTURE

Hypershield Enables Distributed Firewall Enforcement in the Campus

Cisco C9350 Smart Switches are Hypershield **Ready**



- Ideal for unmanaged or high-risk assets needing deep inspection: L4 now, L7 in future
- Enforces granular L3/L4 stateful policies per VRF/VLAN, SGT in future
- Distributed firewalling on C9350 CPU
- Simplified & consolidated security
- Real-time threat prevention
- Port-level stateful inspection & control

Security Fused Into the Network

Securing access to apps
anywhere



Securing network
connectivity



Securing network
access

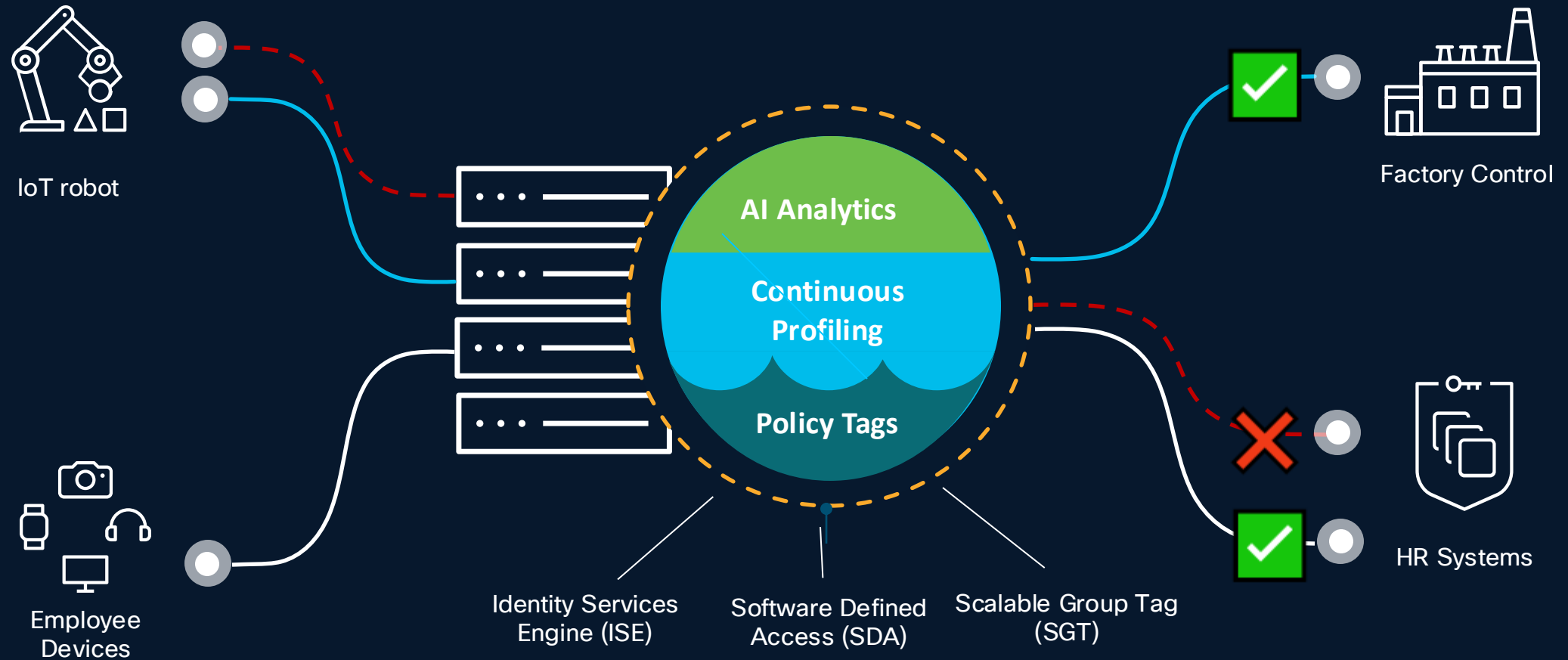


Securing the device



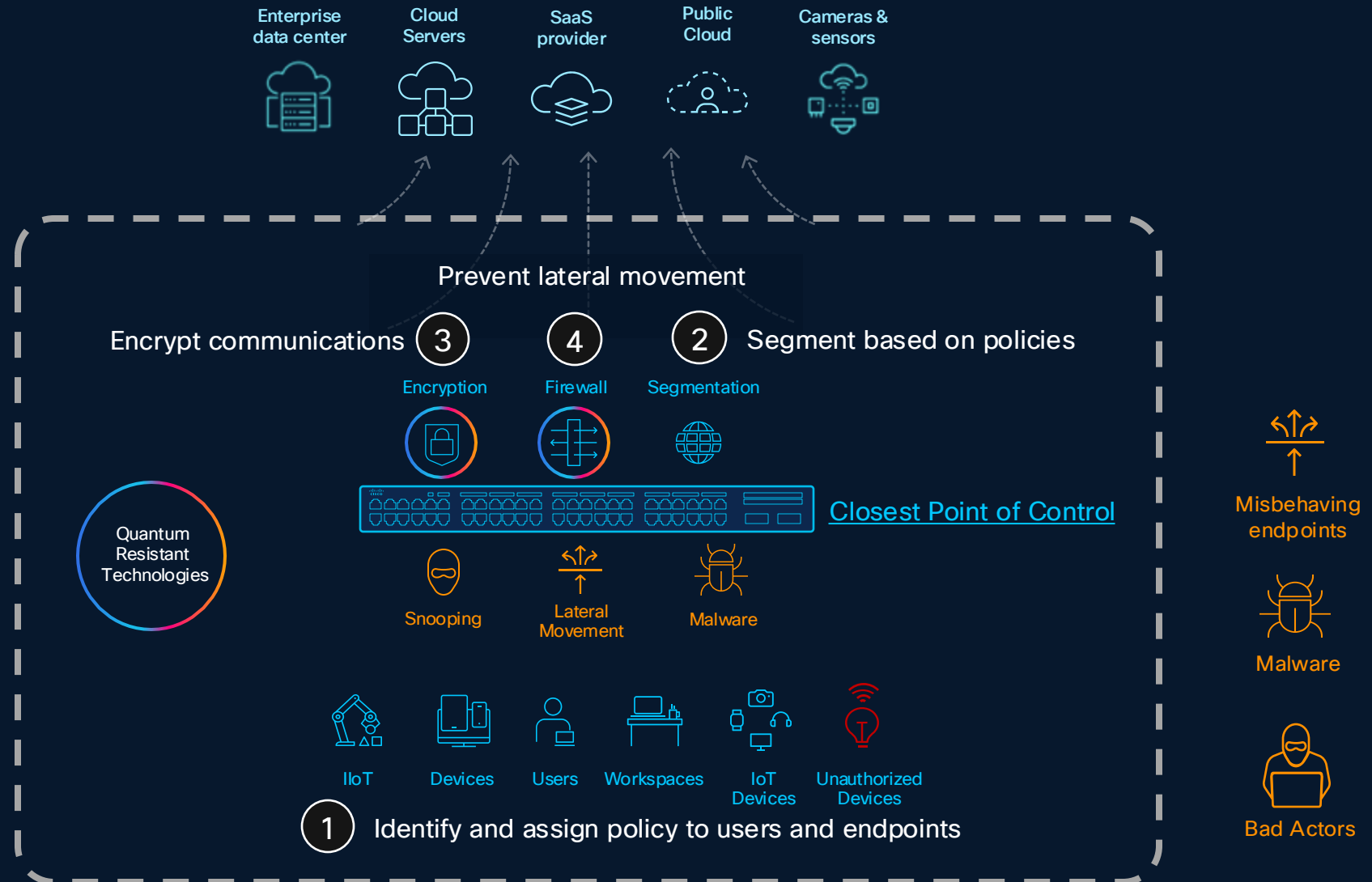
Securing Network Access

Scalable Micro-Segmentation to Protect Every Connection



Securing the Network

At the Closest Point of Control



Announcing 19 new switches joining Cisco's leading portfolio

DIN-rail Portfolio



IP67 Portfolio



Rackmount Portfolio



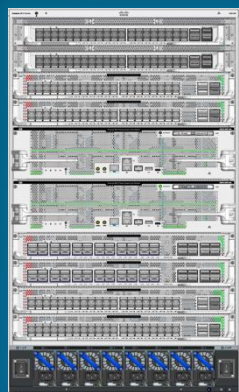
Secure the Network with Campus Fabric

SDA LISP *Cisco C9610*



Cisco C9000 Family

Cisco C9350



Dec | 17.18.2

Mar'26 | 26.1.1

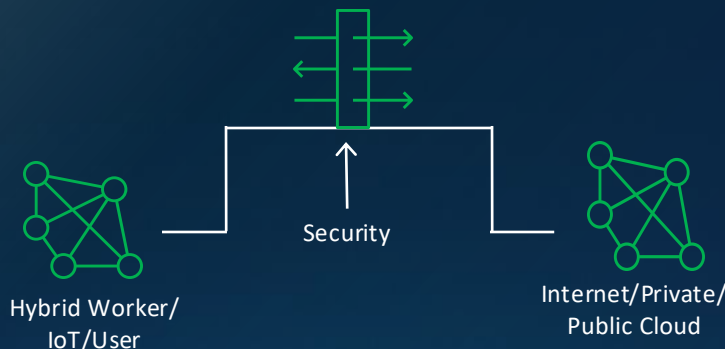
Silicon One Hardware Support for
c9350 and c9610

Catalyst 2.3.7.11 & 3.1.6
IOS-XE 17.18.2

**BGP EVPN Support 26.1.1 c9350*

**BGP EVPN Support 26.2.1 c9610*

Security Service Insertion



Policy-Driven Protection for
stateful inspection

GA | March'26

Fabric for Secure Networking

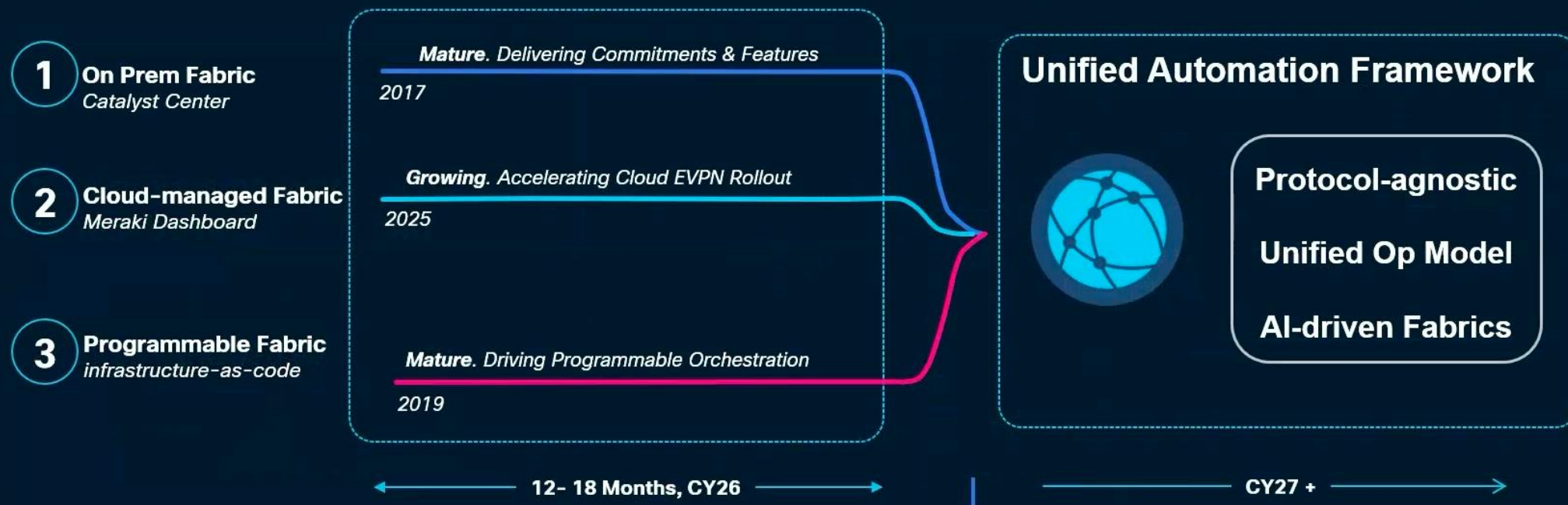


Simplify NetOps with a
secure fabric and micro/
macro-segmentation

GA | Dec '25

Three Fabric Tracks Driving Towards a Unified North Star

Prioritizing Maturity, Accelerating Innovation, Driving Convergence



Cisco delivers choice today – converging toward a Unified, Protocol-agnostic, AI-driven Fabric

Cloud-Managed Campus Fabric Overview

EVPN Fabric Orchestration from Meraki Dashboard

EFT Nov'2025
LA Dec 2025



Cloud-Managed
EVPN-VXLAN Fabric



Focused on existing
cloud-native Catalyst



Flexible deployment
and staging



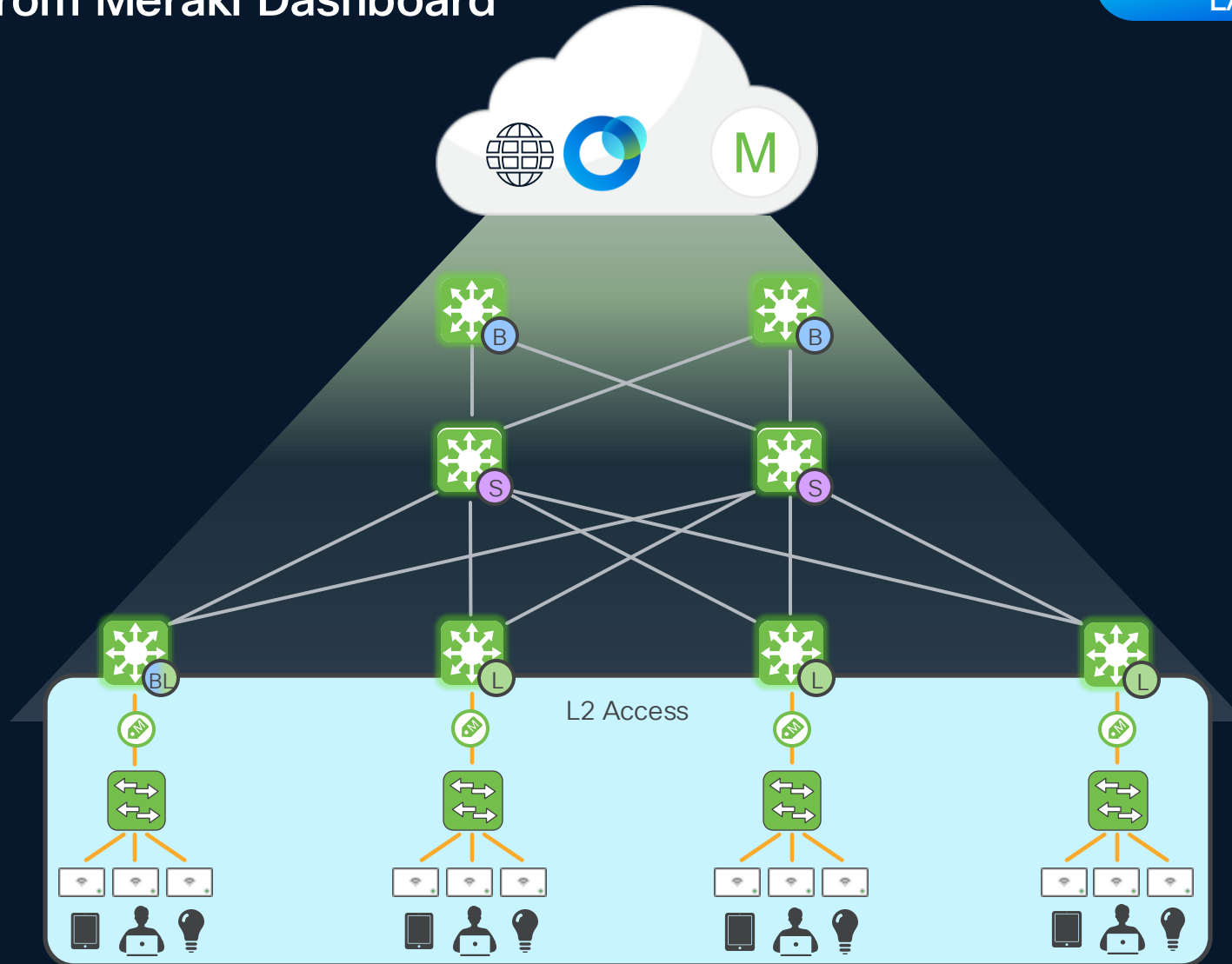
Securing the network
through Adaptive Policy



Optimized L2 extension



Day-2 fabric health view



Cloud Fabric Demo

Let's Talk Next Steps

1

**Get More Information on
Enterprise Network security
and Campus Fabric**

Work with our experts to plan your new
architecture



2

**Get the specs on the new
c9350 Smart Switches**

Work with our experts to plan your
switching refresh



3

**Get the specs on the new
c9610 Smart Switches**

Work with our experts to plan your
switching refresh



Thank you



