

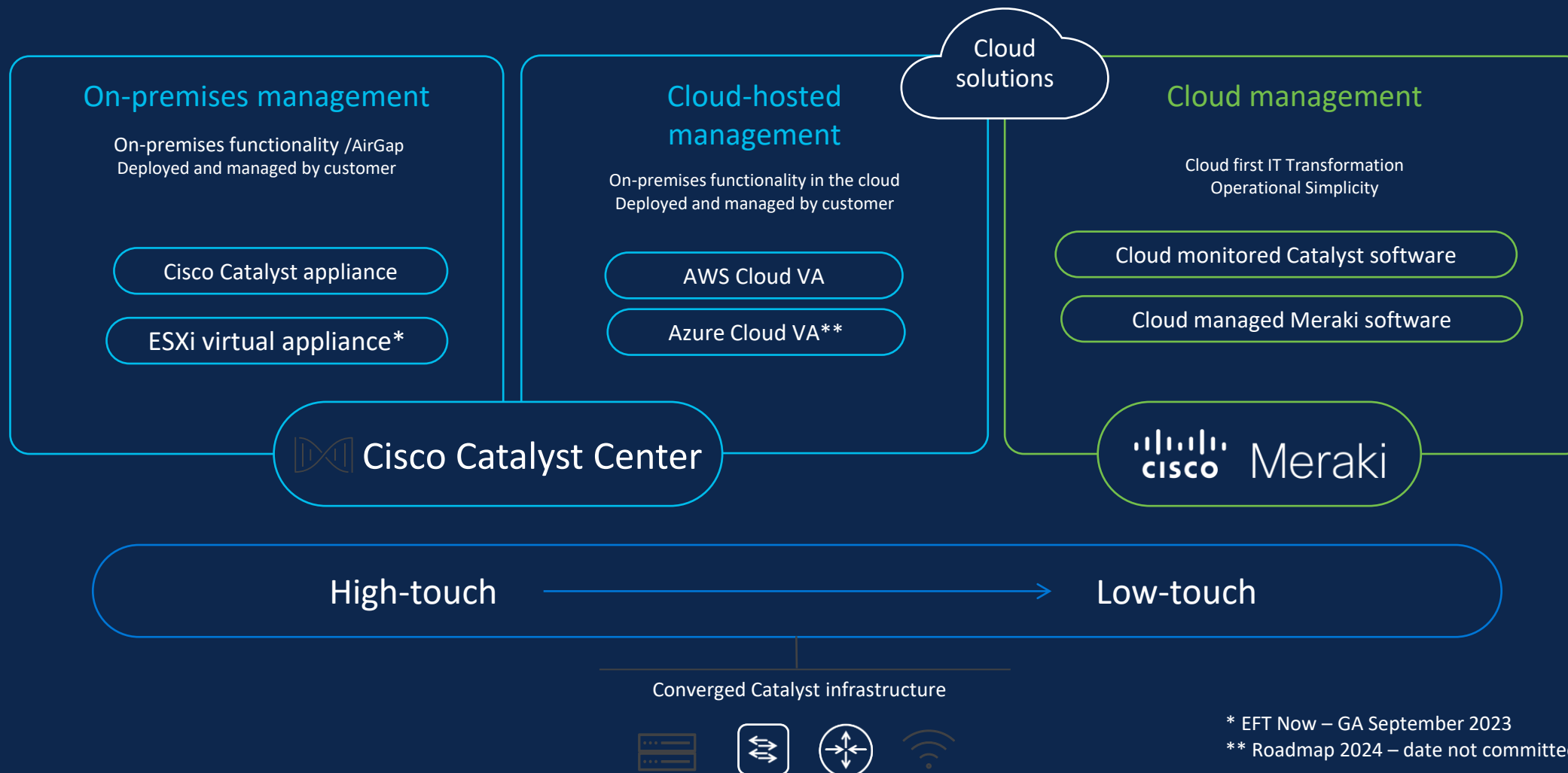
# Cisco Catalyst CVU

Catalyst Switching

*SE René Andersen/ Ib Hansen*



# Your IT Operation Model, Your Way



\* EFT Now – GA September 2023

\*\* Roadmap 2024 – date not committed

# Catalyst Meraki 9300

Simply powerful



Orderable with Meraki day 0 experience

## 9x Access SKUs

Orderability: Oct, 2023  
FCS: Nov 15, 2023

## 4x Fiber SKUs

Orderability/FCS: Q3 FY24

... and more

# Catalyst Meraki 9300 Series Overview

Orderable With Meraki Day-0 Experience

## Gigabit

Up to 1 GbE



### C9300 24/48 T

- 24/48x 1G copper
- Data only
- 40G/10G/1G fiber modular uplink options

### C9300 24/48 P

- 24/48x 1G copper
- 30 W PoE+
- 40G/10G/1G fiber modular uplink options



### C9300 24/48 U

- 24/48x 1G copper
- 60 W UPoE
- 40G/10G/1G fiber/10G mGig copper modular uplink options

## Multigig

Up to 10 GbE (mGig)



### C9300 24 UX

- 24x 10G mGig
- 60 W UPoE
- 40G/10G/1G fiber modular uplink option

### C9300 48 UXM

- 36x 2.5G mGig and 12x 10G mGig
- 60 W UPoE
- 40G/10G/1G fiber uplink option



### C9300 48 UN

- 48x 5G mGig
- 60 W UPoE
- 40G/10G/1G fiber/10G mGig copper modular uplink option

## Fiber aggregation

10/1 GbE SFP+ fiber



### C9300 24S/48S

- 24/48 port 1G SFP
- 40G/10G/1G fiber modular uplink options

### C9300X 12Y

- 10G/1G (SFP28)
- 100G hardware-based IPsec

### C9300X 24Y

- 10G/1G (SFP28)
- 100G hardware-based IPsec

Gigabit and multi-gig SKUs target ship date: FY24 Q2

Fiber SKUs migration public preview is available; -M SKUs are coming in 2H CY24.

## Catalyst 9300 modular uplinks



4x 10G/1G SFP



8x 1/10G SFP/SFP+



2x 100G/40G SFP/SFP+



2x 40G QSFP

## SFP/direct attach cables

SFP-1GB-SX  
SFP-1GB-LX10

SFP-10GB-LR  
SFP-10GB-ER  
SFP-10GB-SR  
SFP-10GB-LRM

QSFP-40G-LR  
QSFP-40G-SR4  
QSFP-40G-CSR4  
QSFP-40G-SR-BD

CBL-TA-1M  
CBL-TA-3M

All relevant Meraki optics are supported on C9300-M models.

## StackWise® and StackPower cables



50 cm-1 m-3 m



30 cm-150 cm

## Platinum-rated power supplies



315 W AC



715 W AC/DC



1100 W AC

## Modular fan



# Cisco's Comprehensive Networking Portfolio

Intuitive & Efficient

Powerful & Customizable

Branch & Distributed Enterprise

Headquarters

Air gapped & regulated



Meraki  
Dashboard



Cloud  
Monitoring



Catalyst  
Center



Meraki



Catalyst

# Cloud Monitoring Included with DNA License

Offer Additional Value for Cisco DNA Subscriptions

Also Included with Catalyst Software Subscriptions (DNX)

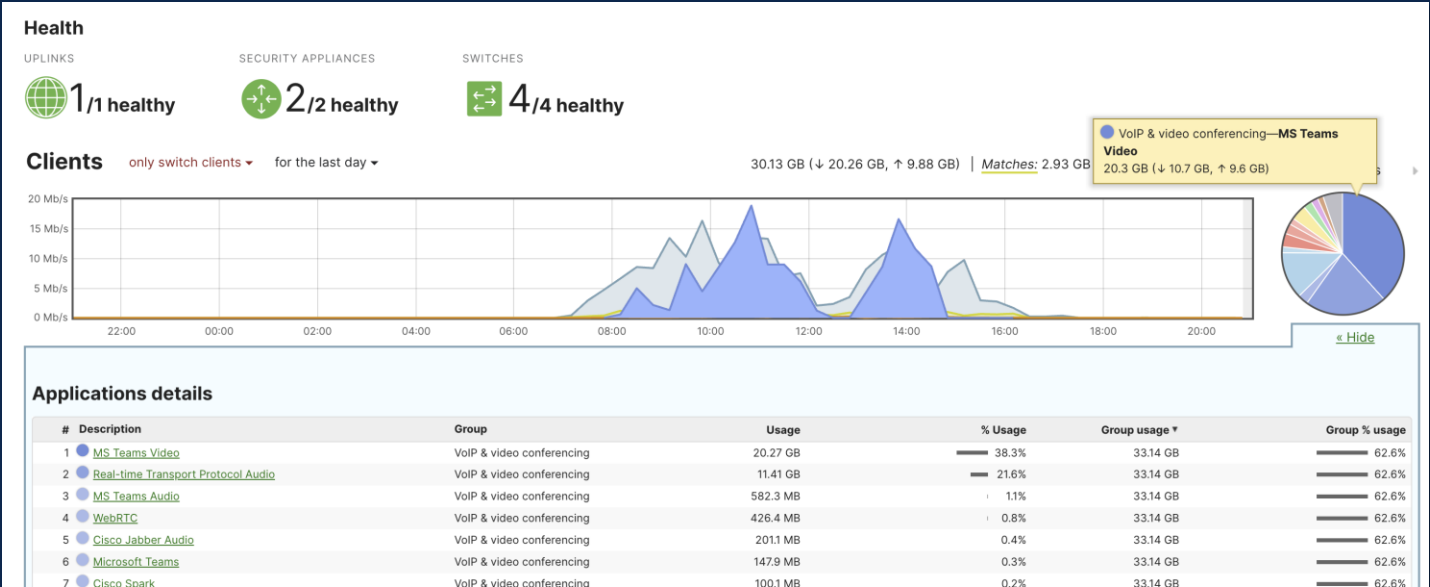
## Cisco DNA Advantage



Full monitoring suite for Catalyst Switches, Wireless LAN Controllers and Access Points + **Client Traffic Analytics** provided by IOS-XE NBAR and NetFlow

## Cisco DNA Essentials

Full monitoring suite for Catalyst Switches, Wireless LAN Controllers and Access Points

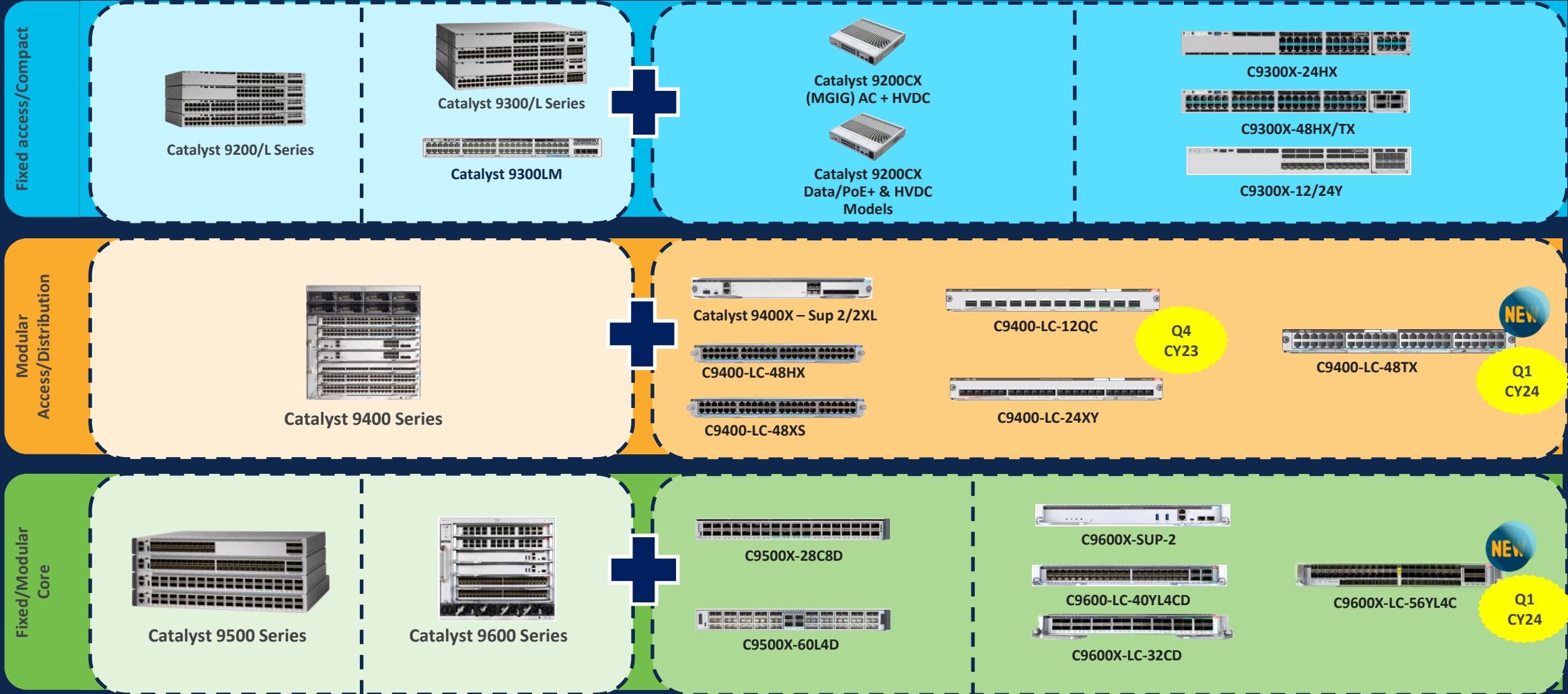


# Cisco Catalyst 9000 Switching Portfolio

One Family from Access to Core

Catalyst 9000 Series

Catalyst 9000X Models



# C9600X-56YL4C : High Density Line Card



Catalyst® 9600X SUP-2



Catalyst® 9606R

Combo line card with dense 10G/25G/50G and 100G ports

NEW



56 x 10G/25G/50G + 4x40G/100G

**C9600X-LC-56YL4C**



**First line card with 3 rows of ports**  
Supported with SUP-2

- 3.2Tbps with SUP-2



**Flexible deployment options**

- Uplink and downlink
- 10G through 100G on the same slot
- Breakout and QSA support\*\*

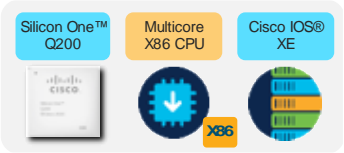


**High-speed secure transport**

- IPSEC\*, MACsec, WAN-MACsec
- IEEE 1588 and PTP v2 \*\*
- Hitless MUX (HMUX)

# Introducing Catalyst 9500X-60L4D

Dense 1 RU SFP56 Switch – 60 x 10/25/50G + 4 x 40/100/200\*/400G



**~3 x Switch Performance**

Upto 4.6 Tbps switching capacity  
Upto 8 Bpps forwarding rate

**10x Route Scale and ultra-deep Buffers**

Up to 2 million route scale  
8 GB of ultra-deep buffers

**50G SFP in Campus**

Dual rate optics for future proofing  
High Port Density

**IOS-XE 17.10.1**

**Unmatched Flexibility with Customizable Templates**

**50G & 400G leadership**

**Secure with LAN & WAN MACsec or IPsec\***

**Application Hosting (2 x 10G AppGig ports)**



**Reversible Airflow**

Front to Back  
Back to Front

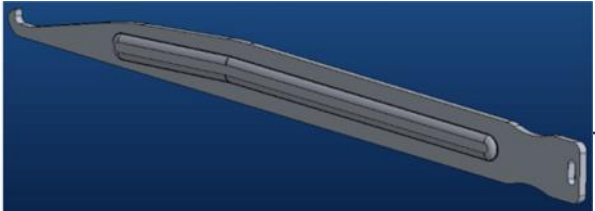
**Highest Fixed Resiliency**

Redundant fans (5+1)  
Redundant power supplies (AC & DC options)  
StackWise® Virtual (17.11.1)

**Hardware Encryption**

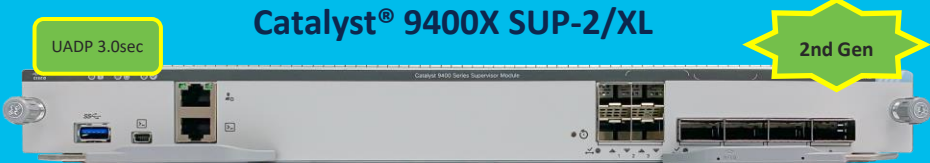
LAN MACsec  
WAN MACsec  
IPsec\*

**Industry first**



# Cisco Catalyst 9400 Series

SUP2/2XL



Catalyst® 9400X SUP-2/XL

2nd Gen

Unmatched flexibility

100G leadership in access

3-4X Bandwidth Boost

C9400-LC-24XY



C9400-LC-12QC



C9400-LC-48XS



C9400-LC-24S



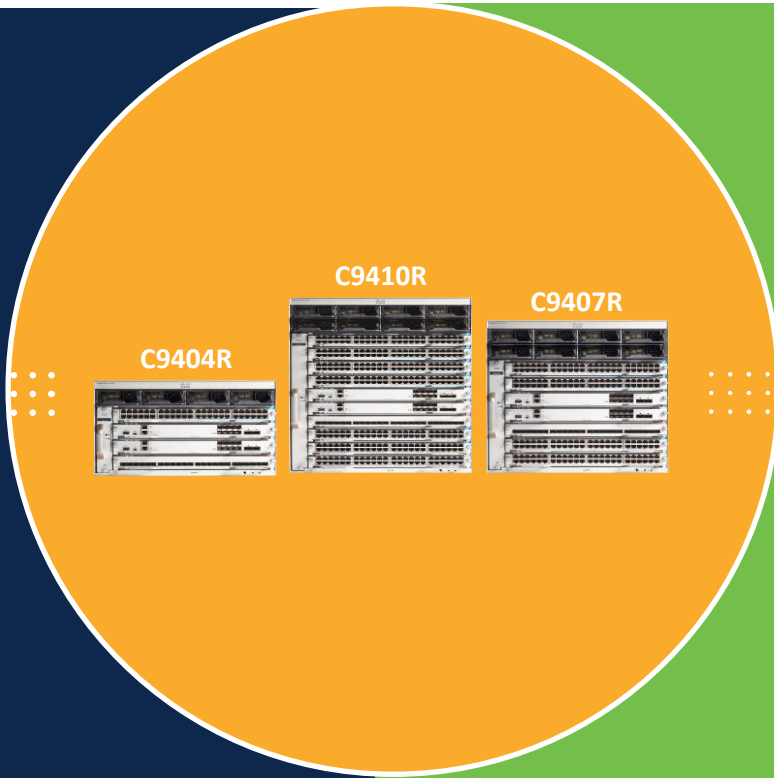
C9400-LC-48HX



C9400-LC-48HN



C9400-LC-48UX



480G per slot BW  
Higher bandwidth per slot

High Speed Transport Security  
100G IPsec | Line-rate MACsec

Smart & Sustainable  
Fast/Perpetual PoE | Titanium PS

Customizable Templates  
Layer 2 | Layer 3 | Security

Higher Speeds  
1/2.5/5/10/25/40G/100G

Larger Buffers  
Up to 36MB packet buffer/ASIC

RJ45, mGig, PoE/UPoE, UPoE+, SFP, SPF+,  
SFP28, QSFP28,

\*1G not supported on the SUP2/2XL Uplink ports

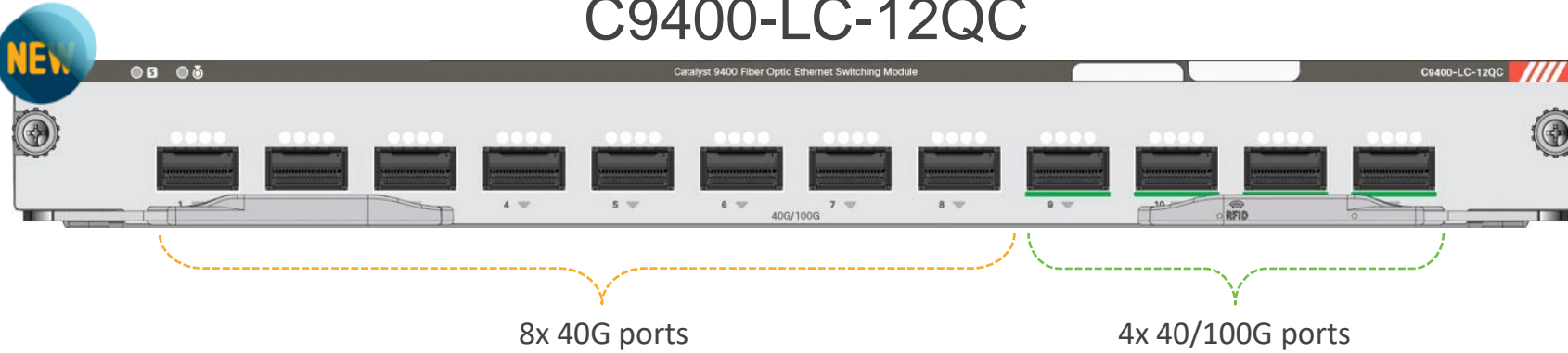
Enhanced Capabilities

# Introducing 25G & 40G/100G Line Cards on C9400X



IOS XE 17.12.1

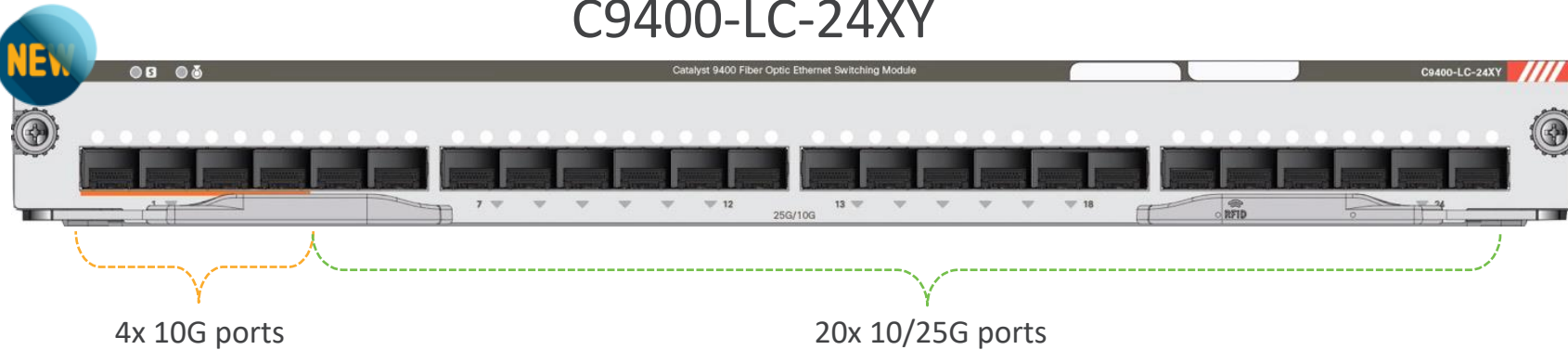
## C9400-LC-12QC



Enabling Collapsed  
Access & Distribution  
Transition with SUP2

Higher speed downlinks  
for High-end Access  
expanded designs

## C9400-LC-24XY



Supported with SUP-2  
& SUP-2XL Only

# Cisco Catalyst 9300 Series

Expanded Catalyst 9300 Series with Catalyst 9300X and Catalyst 9300/L/LM models

Catalyst 9300X Flexible Uplink Switches		Catalyst 9300 Flexible Uplink Switches	Catalyst 9300L/LM Fixed Uplink Switches
<b>mGig</b>	100G HW IPsec StackWise® 1T 100G Uplinks Highest mGig/UPOE+ density Resilient, Secure Campus	Cisco StackPower StackWise® 480 mGig + UPOE Resilient, Secure Campus	Front Panel SSD* StackWise® 320 Depth<=13.2(C9300LM) Business Critical Branch Dedicated 9300LM PS
<b>Fiber</b>	1/10/25G Fiber Modular Uplinks QSFP 4x 100/40G * 2x 100/40G QSFP 8x 10G-Mgig 8x 25/10/1G	1G Fiber Modular Uplinks 4x mGig 4x 1G SFP 2x 1/10/25G 8x 1/10G SFP/SFP+ 2x 40G QSFP	Fixed Fiber Uplinks

  
Smart/Sustainable buildings

  
Collapsed access

  
WiFi 6/6E deployments

  
UPOE+/UPOE

  
IT/OT devices

  
Server Connectivity

  
Fiber To The Desktop (FTTD)

# NEW Catalyst 9300X Multigigabit Models



C9300X-48HX

48x 100M/1G/2.5G/5G/10G ports with UPOE+



C9300X-48TX

48x 100M/1G/2.5G/5G/10G ports Data Only



36x 100M/1G/2.5G/5G with UPOE+

12x 100M/1G/2.5G/5G/10G with UPOE+



C9300X-24HX

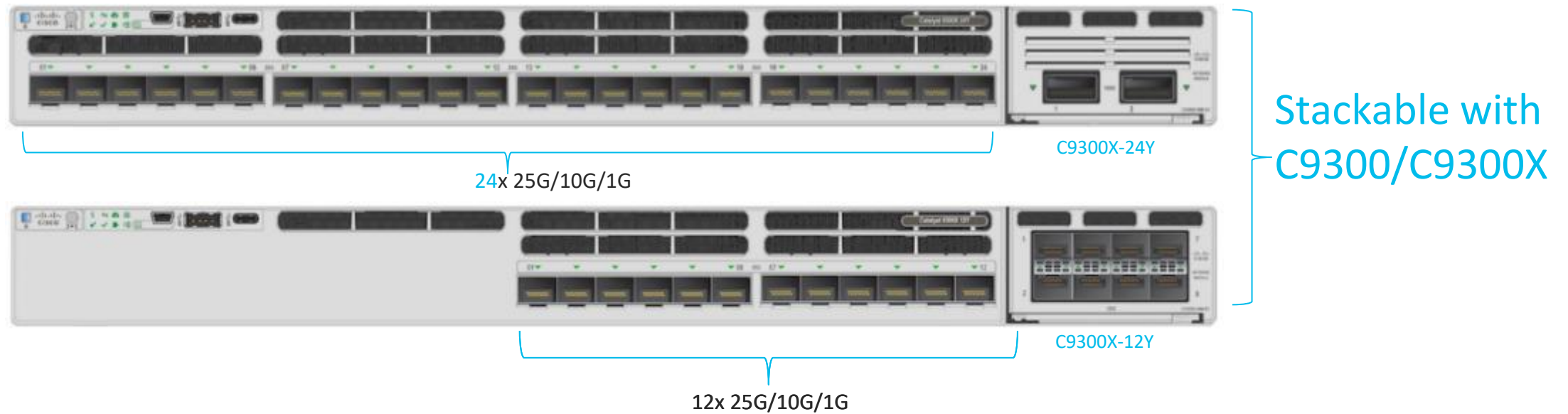
24x 100M/1G/2.5G/5G/10G ports with UPOE+

448 mGig Ports with  
8-Member Stack

NEW  
C9300X-48HXN

Highest Multigigabit Ports in the Industry with Standalone and StackWise-1T

# Catalyst 9300X High-Speed Fiber



3850 10G Fiber Replacement



Collapsed Access

FTTD



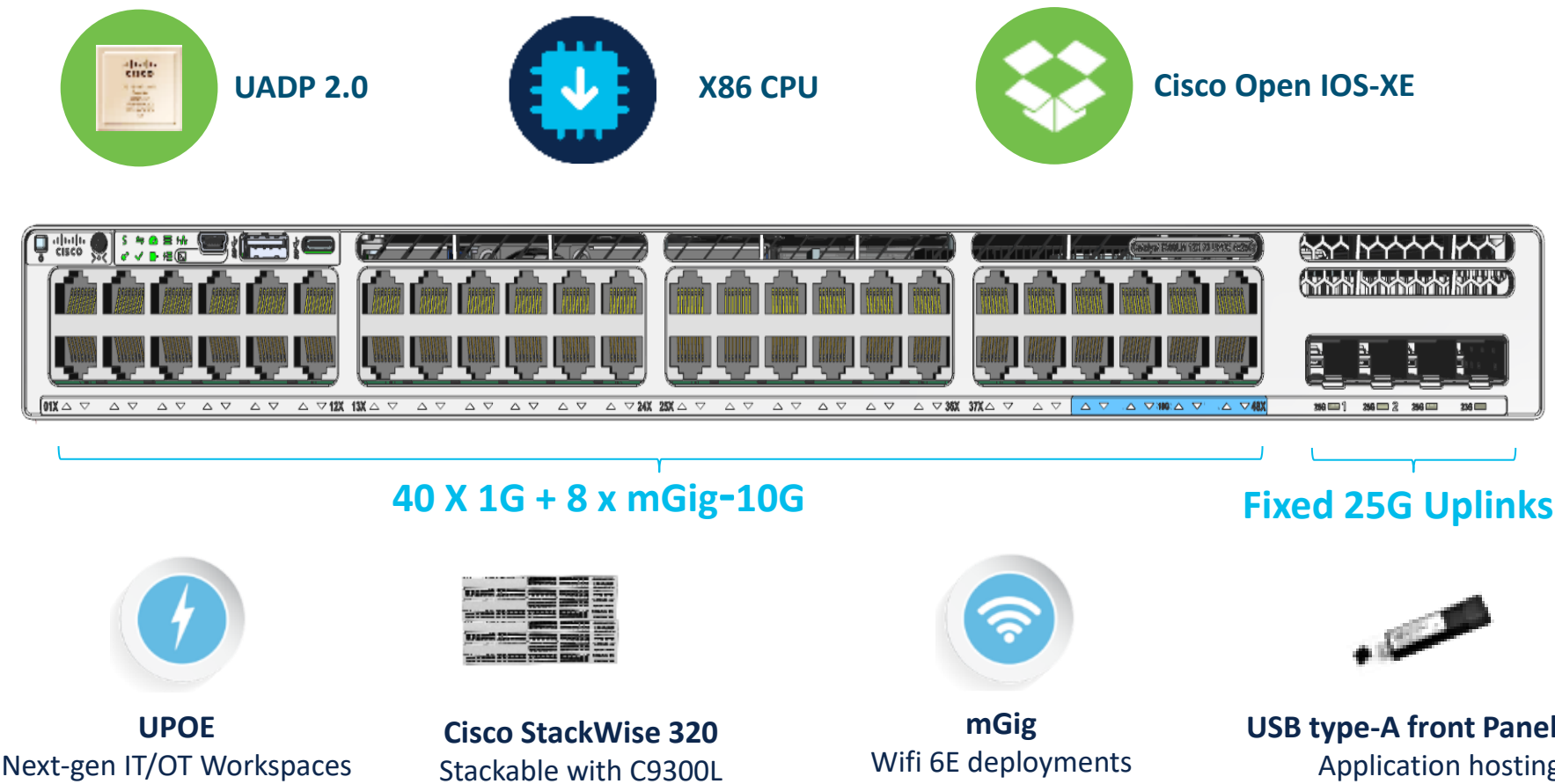
Servers



Bringing Stackable High-Speed fiber to the Access

# Introducing 9300LM(mini) Series Switches in C9300L Family

## Fixed Uplink replacement for Catalyst 3650-mini



### IBN Innovations

- HA, Hot Patching, UPOE
- MACsec 256, ETA
- On-box App hosting
- SD-Access, BGP EVPN, AVC, FNF

\*Roadmap

Catalyst 9000 Innovations in Shallow depth Form Factor

# Catalyst 9300LM- Shallow Depth



48,8cm

Catalyst C9300L



30—34,8cm

Catalyst C9300LM



29,5 cm

Catalyst C3650-mini

## Dimension(H X W x D)

SKU	AC PSU	DC PSU
Data Models	17.50" x 1.73" x <b>12.39"</b>	17.50" x 1.73" x <b>11.86"</b>
UPOE/mGig Models	17.50" x 1.73" x <b>13.17"</b>	17.50" x 1.73" x <b>13.03"</b>

Migration Platform for C3650-mini

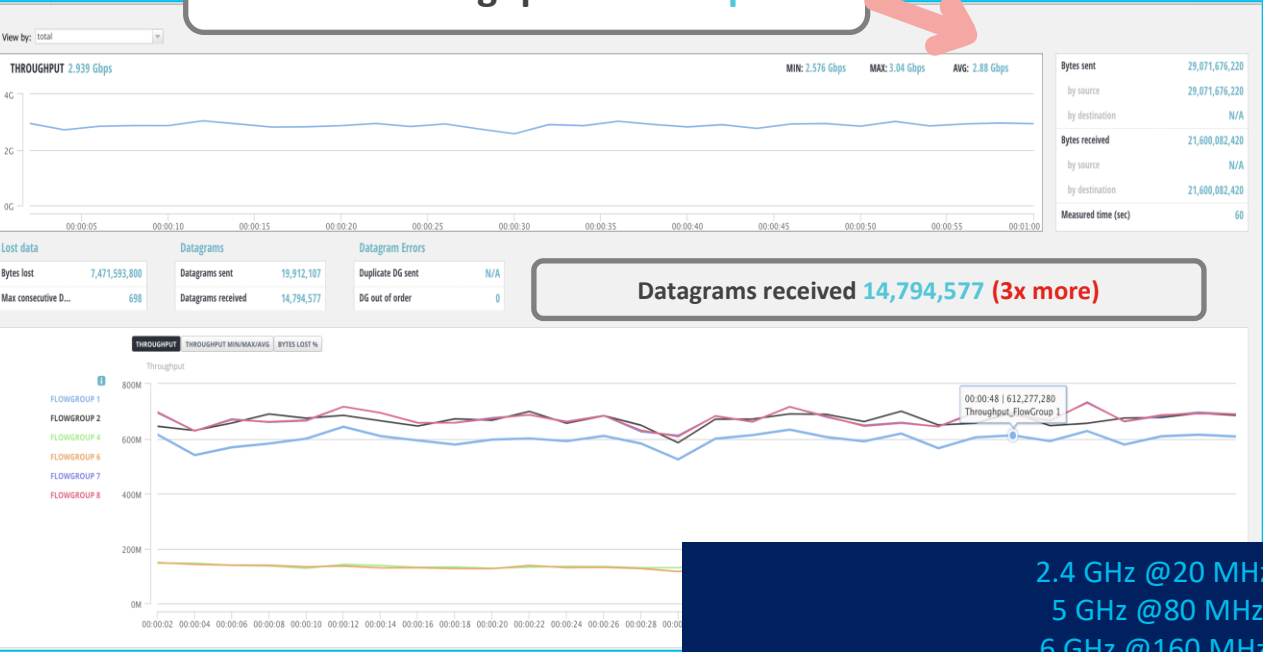
# Why mGig Switch **for** Wi-Fi6/6E Access Points?

# Conclusion – Yes, you will need an mGig Switch

5 Gig (mGig) AP Uplink vs. 1 Gig AP Uplink

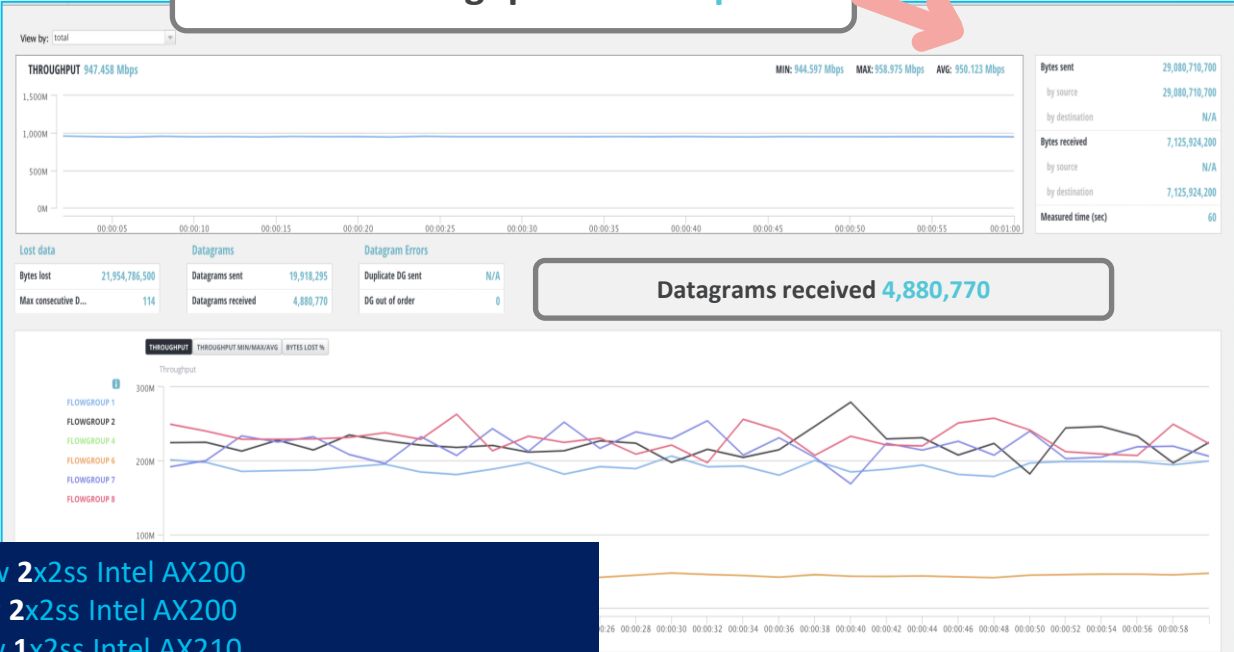
Wi-Fi 6E Performance with mGig (5 Gig) Switch

UDP Throughput 2.88 Gbps





Wi-Fi 6E Performance with Gigabit Switch

UDP Throughput 950 Mbps




2.4 GHz @20 MHz w 2x2ss Intel AX200  
5 GHz @80 MHz w 2x2ss Intel AX200  
6 GHz @160 MHz w 1x2ss Intel AX210

# Catalyst 9300X – 3<sup>rd</sup> Party Certified



October 2023  
DR230908G



Cisco Catalyst 9300X  
Feature and Performance Validation  
Assessment

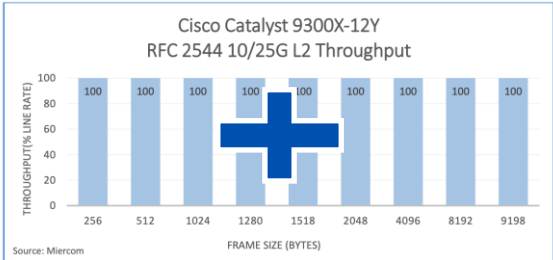
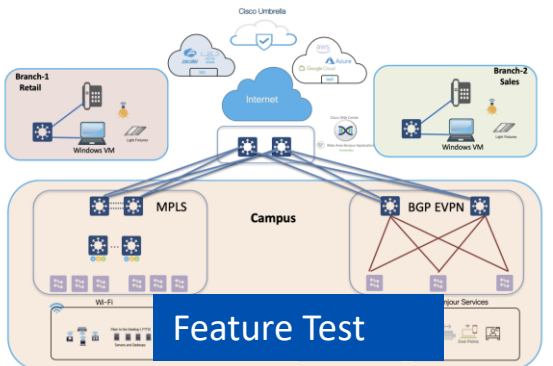
Miercom.com/Cisco

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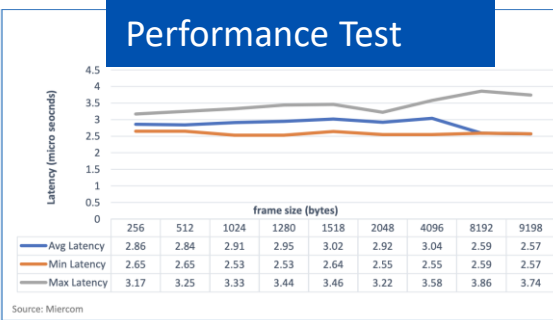
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## 3.0 How We Did It

The testbed setup for testing the Catalyst 9300X features and performance was very comprehensive given its unique capabilities across all sections of network infrastructure. As shown below, the theme of the testbed was to build a large campus simulating a central location with different buildings and extending to branch locations using different layer 3 overlay technologies. Each site was centered around one or more Catalyst 9300X switches. Using a realistic network environment, we tested the capabilities of the Cisco Catalyst 9300X and its ability to support different features as outlined in Section 2.0 and maintain performance across these features.



Catalyst 9300X models are line rate starting 200 bytes. For Layer 2, Cisco Catalyst 9300-12Y provided 100 percent line rate for frame sizes 256-bytes to 9198-bytes.



# Cisco ASAc Hosted on Catalyst 9300/L(LM)/X

Seamless Firewall Service Insertion in the Network

FCS Nov 2023

IOS-XE 17.12.2

ASA 9.20.2

## Technical Specifications



ASAv Feature parity



Reuse ASAv license



200-350MB (IMIX) throughput



10 logical interfaces



Routed Mode Firewall



App Hosting HA (Cold)



REST API  
Programmable  
Scripts



CDO  
Security Policy  
Management



Cisco Catalyst Center  
App Lifecycle  
Management

**Centralized  
Management**



App Resources  
Memory (RAM) : 2 GB  
Disk (SSD) : 40 MB  
CPU : 1 Core

**Local Management**



ASDM



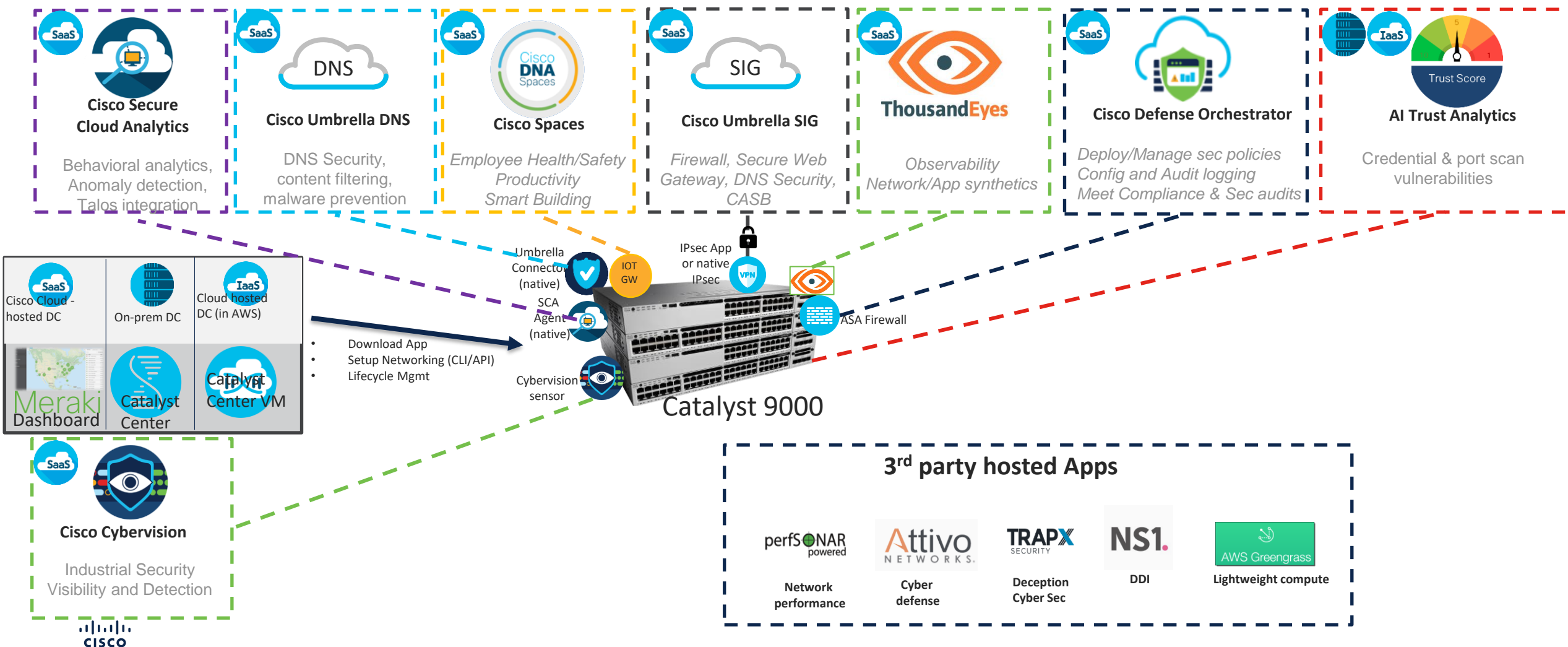
CLI



SSD Required

# Catalyst 9000 with Catalyst Advantage

## Enables Cisco Catalyst Full Stack Value



# Secure Deployment with IPsec on Catalyst 9K



Layer 3 hardware encryption

IKEv2

Standards based High Speed Secure Transport

Static virtual tunnel interface

VRF aware

OSPF/BGP

Policy Based Routing

Multicast Routing

IPv4/IPv6

L3 Segmentation over IPsec

L2 Extension over IPsec

NAT Traversal

GRE over IPsec



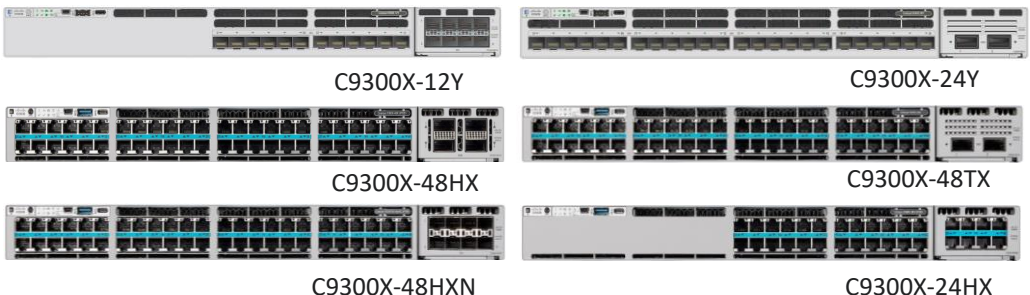
900+ Customers



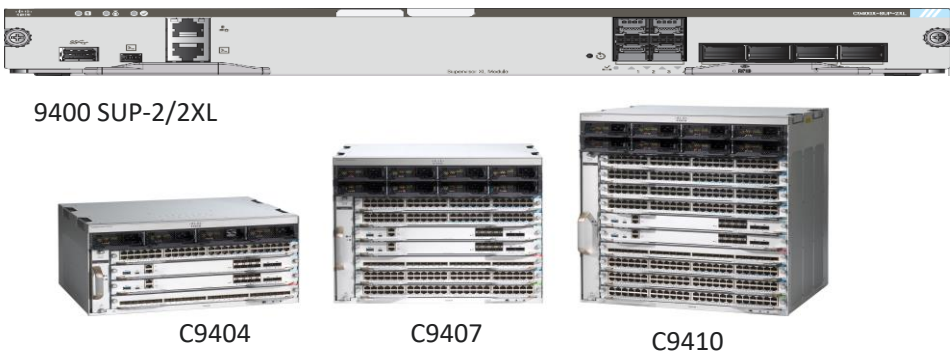
10+ Region/Verticals



## Catalyst 9300X – up to 100G IPsec throughput



## Catalyst 9400X - up to 100G IPsec throughput



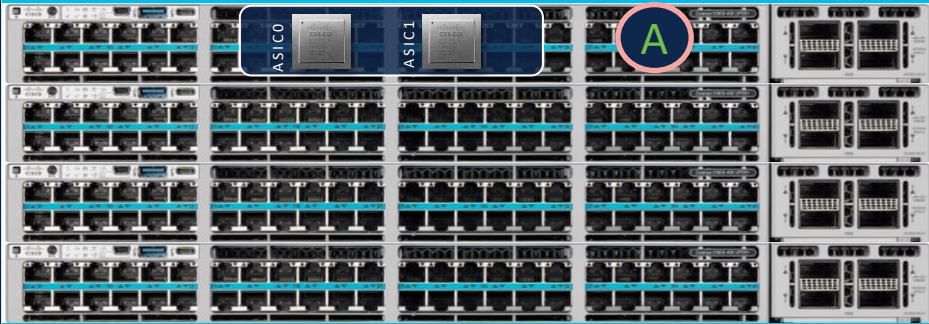
## Catalyst 9500X - up to 400G IPsec throughput



9500X (LA) - SVTI, IPv4, OSPF/BGP, vrf-aware support

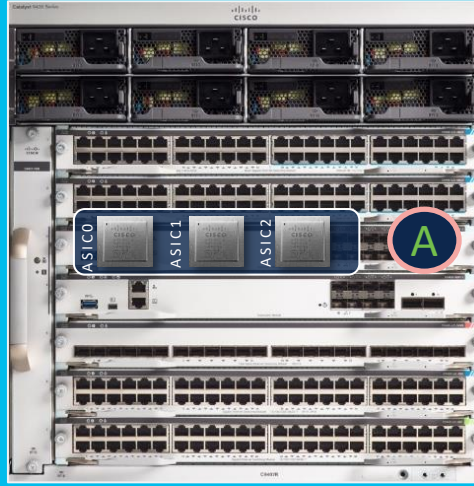
# IPsec Performance and Scale enhancements

9300X - 100G



IPsec processed on ASIC0 of Active switch  
100G aggregated IPsec throughput

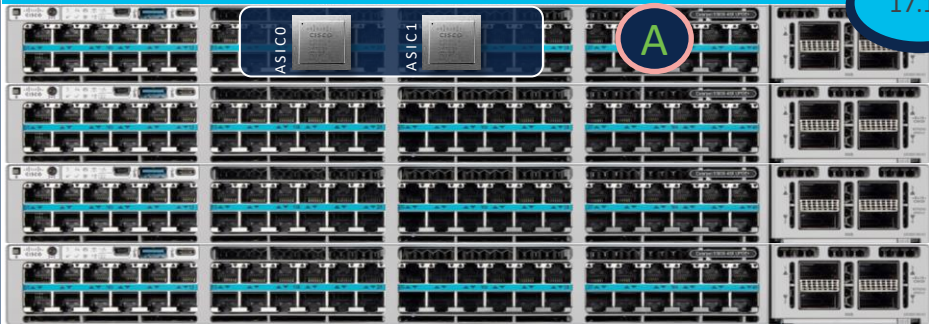
9400X(SUP-2/2XL) - 100G



IPsec processed on ASIC0 of Active SUP  
100G IPsec throughput

NEW

9300X - 200G

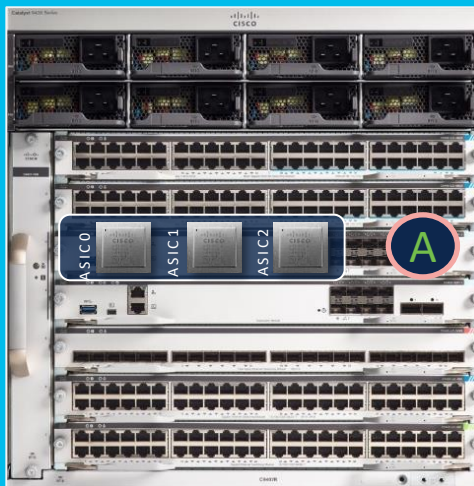


IPsec distributed across ASIC0 & ASIC1  
200G aggregated IPsec throughput

17.14

NEW

9400X(SUP-2/2XL) - 300G



IPsec distributed across ASIC0, ASIC1 & ASIC2  
of Active SUP  
300G IPsec throughput

17.14

IPv4 Tunnel scale:480, IPv6 tunnel scale:240

Maximum of 100G per tunnel

# Automate your IPsec Deployments



Catalyst Center

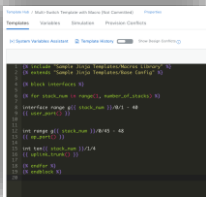


Ansible



Terraform

Site-to-Site



Template Editor / API's

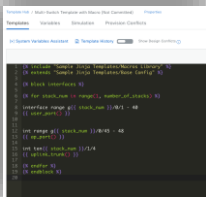


[Git Hub Repo for Site-to-Site](#)



[TF Code](#)

Site-to-AWS



Template Editor / API's



[Git Hub Repo for Site-to-Site](#)



[TF Code](#)

Site-to-GCP



Template Editor / API's



[Git Hub Repo for Site-to-Site](#)

# Catalyst 9200CX Family

## Migration Platform for C2960CX and C3560CX

### AC Models

#### C9200CX-8UXG-2X

- 4x mGig/10G + 4 x 1G (802.3bt Type 3 Class 6 60W all ports)
- 2x 1/10G SFP+
- Internal AC or hVDC power supply options
- 240W PoE power budget

mGig/UPOE

#### C9200CX-8P-2X2G



#### C9200CX-12P-2X2G



- 8 or 12 x 1G PoE+
- 2 x 1G copper and 2 x SFP+ uplinks
- Internal AC power supply
- 240W PoE power budget

1G/PoE+

#### C9200CX-12T-2X2G



- 12 x 1G data
- 3 x 1G copper and 2 x SFP+ uplinks

- Powered by 802.3bt Class 6 60W UL
- OR External 80W PS (LVDC support)

Data-Only

**EoS for C2960CX/C3560CX is April 2024**

\*Excluding mGig and Passthrough Models\*

### hVDC Models

#### C9200CX-8UXG-2XH



- 4x mGig/10G + 4 x 1G (802.3bt Type 3 Class 6 60W all ports)
- 2x 1/10G SFP+
- Internal hVDC power supply
- 240W PoE power budget

mGig/UPOE

#### C9200CX-8P-2X2GH



#### C9200CX-12P-2X2GH



- 8 or 12 x 1G PoE+
- 2 x 1G copper and 2 x SFP+ uplinks
- Internal hVDC power supply
- 240W PoE power budget

1G/PoE+

### hVDC Benefits:

- Avoids double conversion from DC → AC, then AC → DC:
- Considerably lower power losses compared to 120VAC over long distance lines
- Sustainable Building Designs for smart buildings

**MORE  
THAN**

**C9200**



C9200CX

C9200

Programmability

Full Flexible NetFlow

Cold patching

Trustworthy solutions

SD-Access (16 VNs)

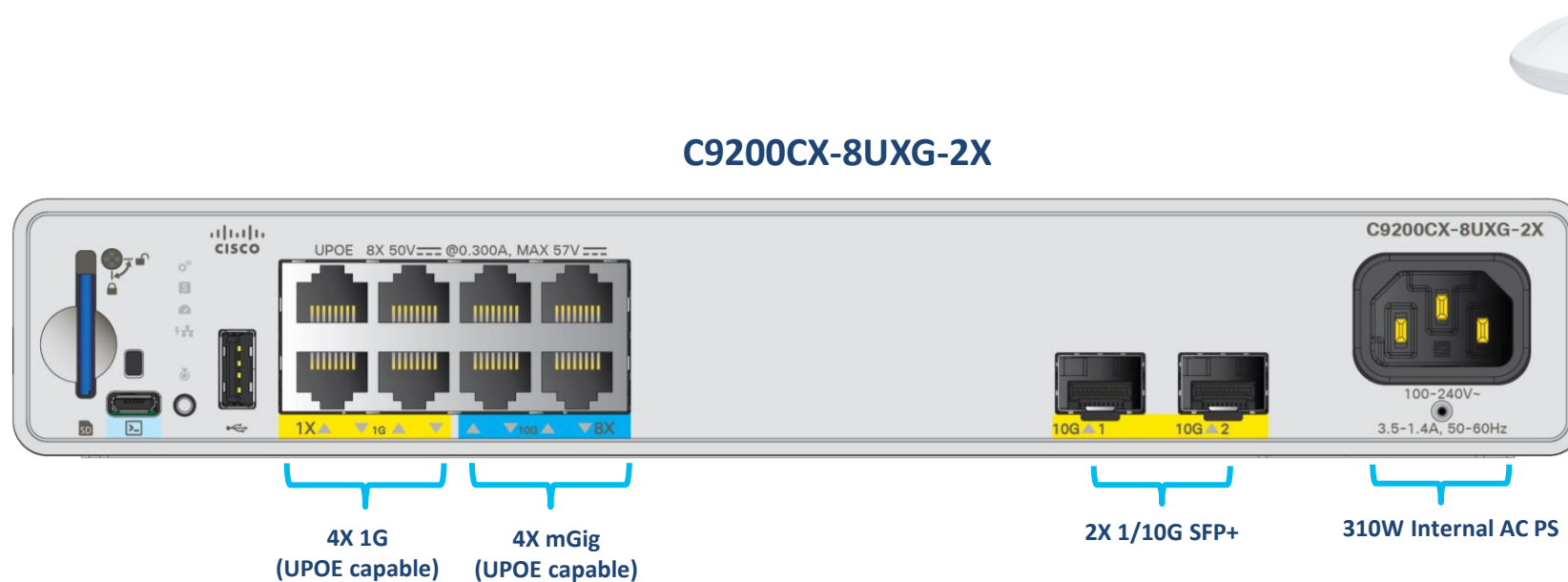
802.3bt 60W UPOE\*\*

MACsec-256



# Introducing Catalyst 9200CX mGig

Ready for Wi-Fi 6/6E & Smart Building Deployments



## Wi-Fi 6/6E with Catalyst 9100 Series APs

AP	PoE power consumption	Link speed	Link Layer Discovery Protocol (LLDP)
C9136I	802.3bt (UPOE)	5G	47.3W
C9162I	802.3bt (UPOE)	2.5G	25.5W
C9164I	802.3bt (UPOE)	2.5G	30W
C9166	802.3bt (UPOE)	5G	30.5W

All Downlink Ports UPOE Capable

Varying Speeds—for IP phones to Wi-Fi 6/6E APs

Large Power Bank for PDs

802.3bt Type 3 Class 6 60W

10MB/100MB/1G/2.5G/5G/10G  
mGig Speeds

240W PoE Power Budget

Cisco

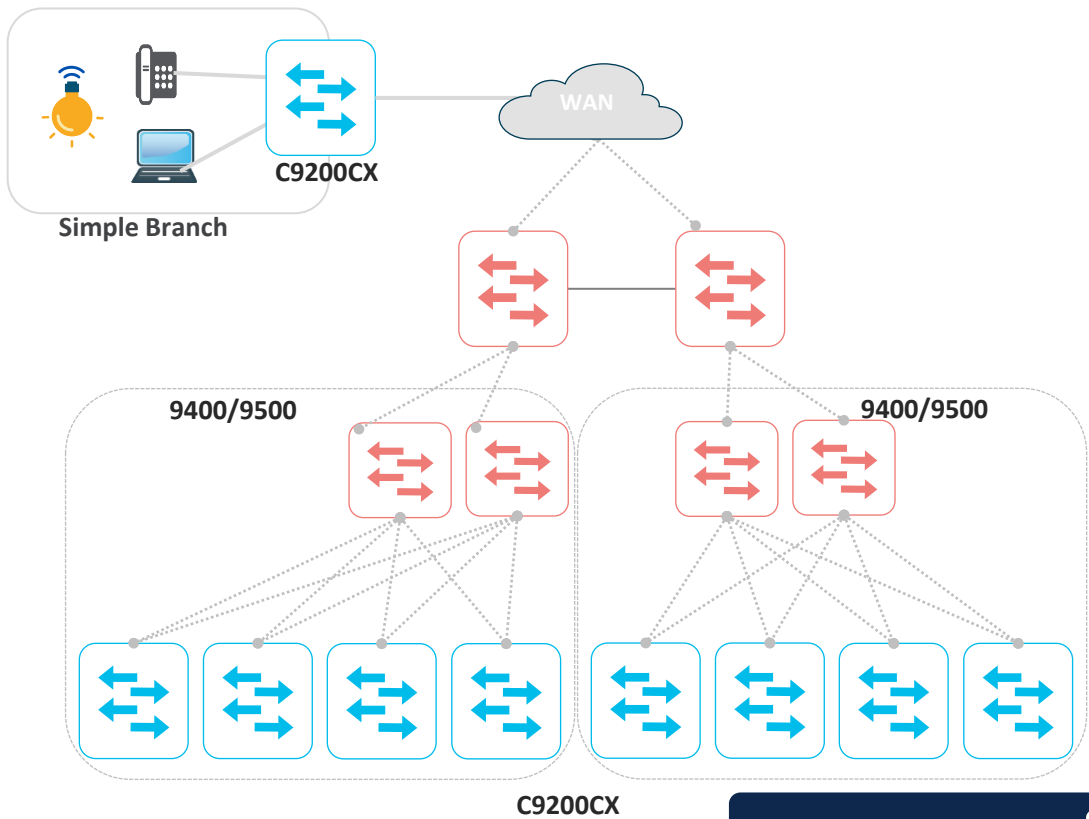
Global Sales Enablement Team  
Virtual Teams

# New Feature Support on Catalyst 9200CX

## BGP

Available w/ IOS 17.13.1

NEW

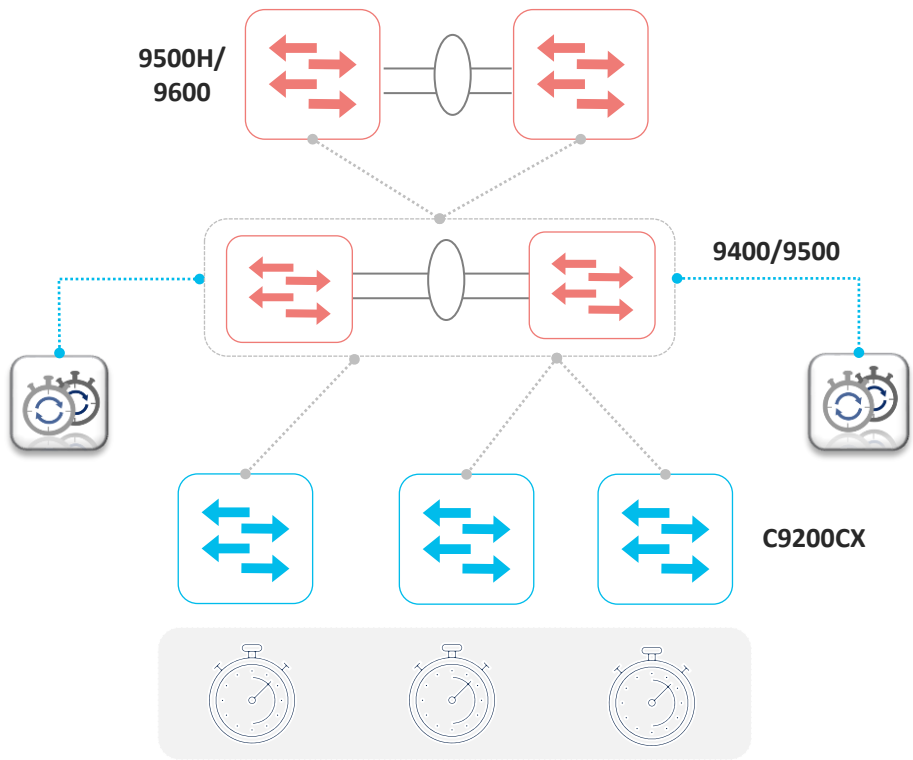


Scale	
BGP Neighbors	16
BGP Routes	4k
v6 BGP Routes	2k

## PTP

Available w/ IOS 17.14.1

NEW



Profiles
Default Profile (1588.v2)
AES67

\*BGP-EVPN not supported

# Upcoming Sustainability Features @17.14.1



## Energy Consumption Visibility

- New Energy **Consumption** metering and **enriched Yang MDT** for System and PoE Ports telemetry with instant draw in (Watts) and hourly metering in (Kwh)

### Cisco-IOS-XE-Platform-Oper.YANG

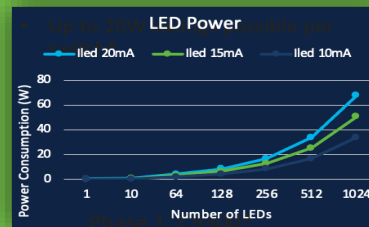
- PoE power metering per each port up to 24 hours
- System power metering with data saved up to 24 hours of total energy consumption **locally on switch**

Phase 1: C9200\*, C9300\*, C9400\*



## Smart LEDs

- Ability to turn off LED's and **conserve energy**
- CLI commands to enable/disable the LEDs
- Default turned off state possible in the future releases



Phase 1: C9300\*



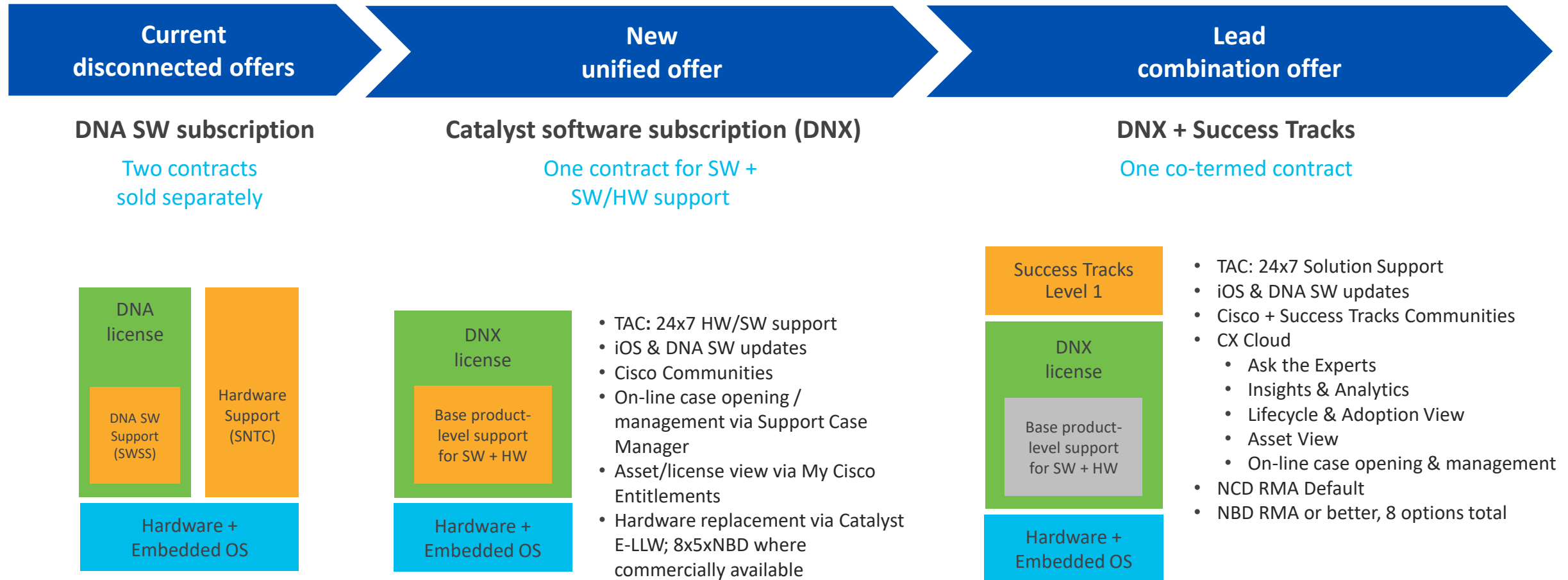
## Unused Fiber Port Shutdown

- **Auto-sense physical SFP** module presence and turn-off PHY to save power on unplugged SFP ports to conserve energy
- Periodically check for SFP presence and **auto Turn-on ports** on SFP plug-in

Phase 1: C9300\*

# Catalyst Software Subscription for Switching

Transition from base product-level support to Success Tracks



# Extend the Catalyst 9000 opportunity

## Cisco Catalyst™ 9000 switches



Enterprise switching



Industrial switching



Same UADP ASIC



Same Cisco IOS® XE



Same Cisco DNA Center management

# Part of a broad market-leading industrial switching portfolio



## DIN rail

Catalyst® IE3100, IE3200, IE3300, and IE3400



## IP67

Catalyst IE3400 Heavy Duty Series



## Embedded

ESS3300, Catalyst ESS9300



Rack-mount Gigabit Ethernet copper/fiber  
IE4010, IE5000



Stackable rack-mount all fiber or all copper  
Catalyst IE9300

# The new Catalyst IE9300 Rugged Series portfolio

All-fiber and all-copper, high performance, ruggedized industrial rackmount switches



## Shipping



### IE-9310-26S2C

26x 1GE SFP ports  
2x 1GE combo ports



### IE-9320-26S2C

26x 1GE SFP ports  
2x 1GE combo ports  
Stackable

## 5 New Models



### IE-9320-24T4X

24x 1GE ports  
4x 10G SFP ports  
Stackable



### IE-9320-24P4S

24x 1GE with PoE/PoE+  
Up to 385W PoE budget  
4x 1GE SFP ports  
Stackable



### IE-9320-24P4X

24x 1GE with PoE/PoE+  
4x 10G SFP ports  
Up to 720W PoE budget  
Stackable



### IE-9320-22S2C4X

22x 1GE SFP, 4x 10G SFP  
2x 1GE combo ports  
Timing input  
Conformal coating  
Stackable



### IE-9320-16P8U4X

8x mGig with 90W 4-pair PoE  
16x 1GE with PoE/PoE+ ports  
Up to 720W PoE budget  
4x 10G SFP ports  
Stackable



### PWR-RGD-AC-DC-400

720W of PoE power with 2 PSUs

The most comprehensive industrial rackmount portfolio in the market

Catalyst IE9300 Rugged Series

# Manage with tools familiar to IT

Leverage your existing knowledge and investments

Cisco Catalyst™ IE9300



## Reduce downtime

Proactive issue detection and guided remediation to always maintain a high-performing network



## Increase efficiency

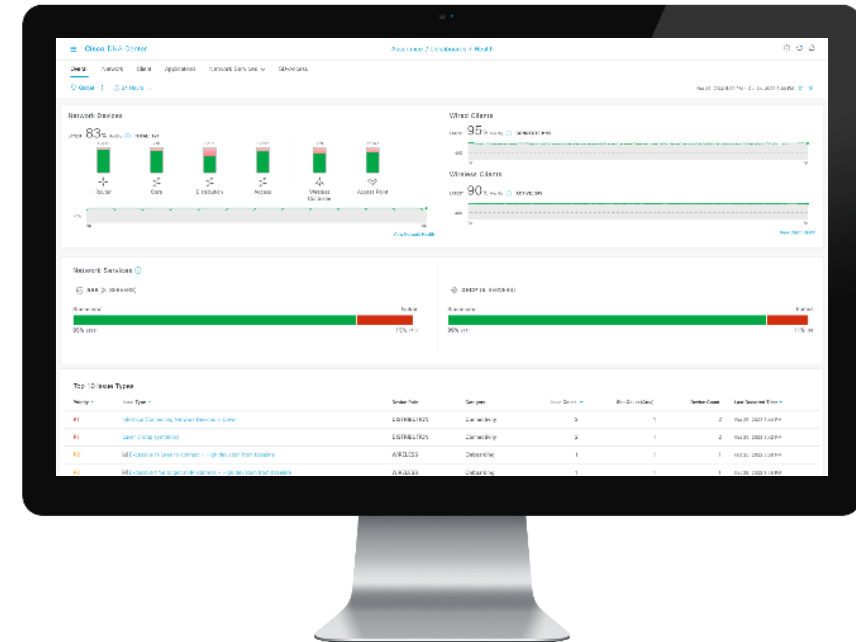
Automation and workflows simplify, empower, and streamline network management



## Stay compliant

Track updates, ensure that software images comply, and remain aware of security advisories

Cisco DNA Center



Streamline and secure operations networks with a modern, intelligent, and proven network controller

# Segment your network with visibility and analytics

with Cyber Vision, Cisco DNA Center, and Cisco Identity Services Engine (ISE)



## Visualize IEC 62443 zones and conduits

Leverage Cyber Vision visibility to create zones, and share details with Cisco® ISE



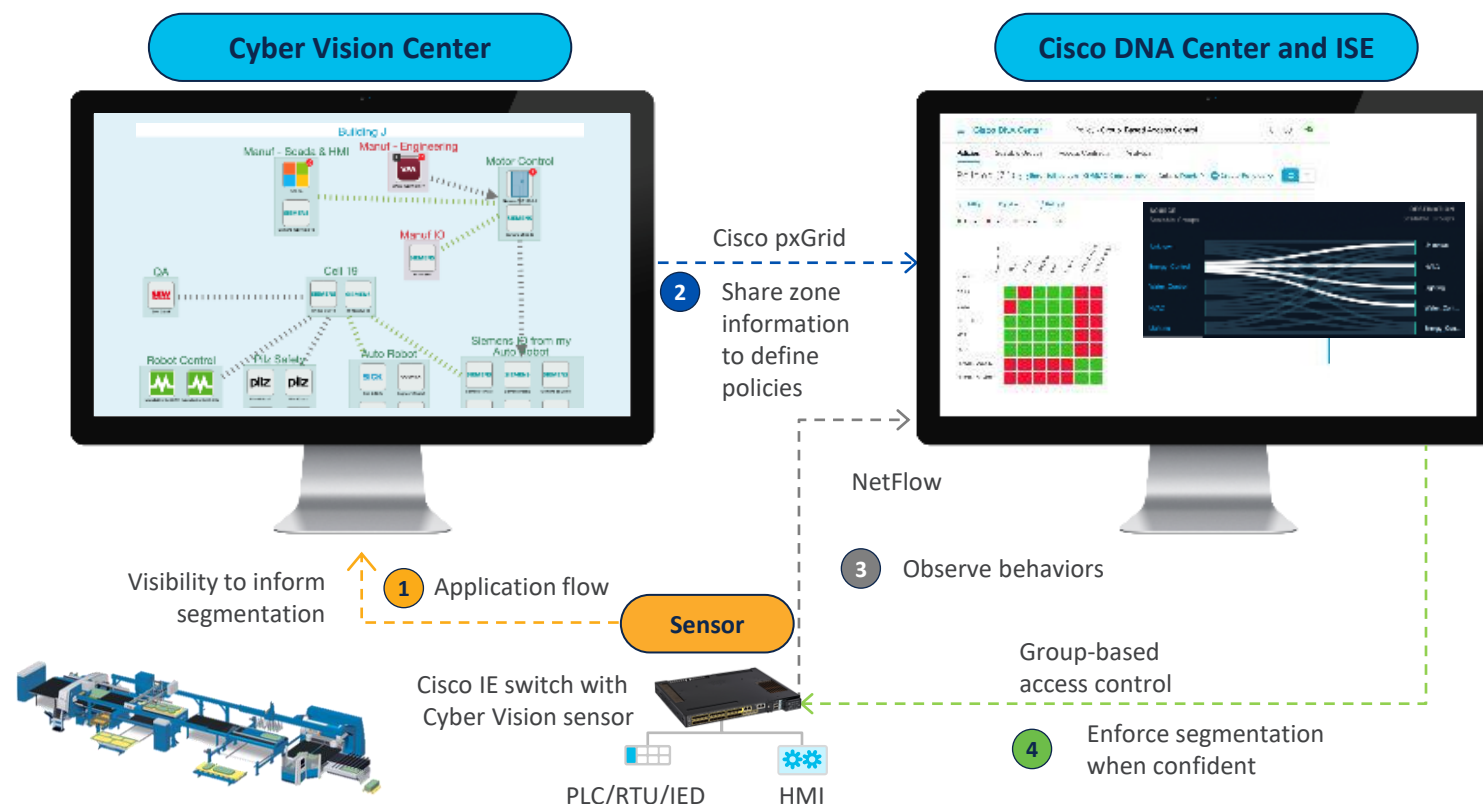
## Enable dynamic network segmentation

Cyber Vision grouping results in dynamic group-based policy assignment to endpoints through ISE



## Monitor before enforcement

Visualize network behaviors in Cisco DNA Center and enable enforcement when confident



Build a uniform, consistent switching fabric between your enterprise and operations network with SD-Access

# Cisco IE-9320-22S2C4X Front Panel

## 24x SFP Gigabit Ethernet Ports (Downlinks)

- 22x 100/1000M SFP ports
- 2x GE Combo (100/1000 SFP, 10/100/1000 RJ45) ports

FPGA

## Mode & System LEDs

- System, Alarm
- Port Status LEDs

## Substation Hardened

- Substation Compliant
- IEC61850-3 and IEEE1613

## All Ports IEEE 1588 v2/PTP

- Power Profile C37.238, Default Profile

## 4x SFP Ten-Gigabit Ethernet Ports (Uplinks)

- 1/10G SFP

## Timing

- GPS

## Alarm Contacts

- FOUR Alarm Inputs
- ONE Alarm Output

## Console

- RS232
- Micro USB

## Conformal Coating

## Conductive Cooling

- No fans or moving parts
- Increased Operating Temp

## Timing

- IRIG-B

## Storage

- SD Flash
- USB 2.0

## Field Replaceable Power Supplies

- High Voltage PS: 85–265 VAC , 88–300 VDC
- Low Voltage PS: 18–75 VDC

## Stacking Ports

- IE9300 Models' similarities
- IE9300 Models' Differences

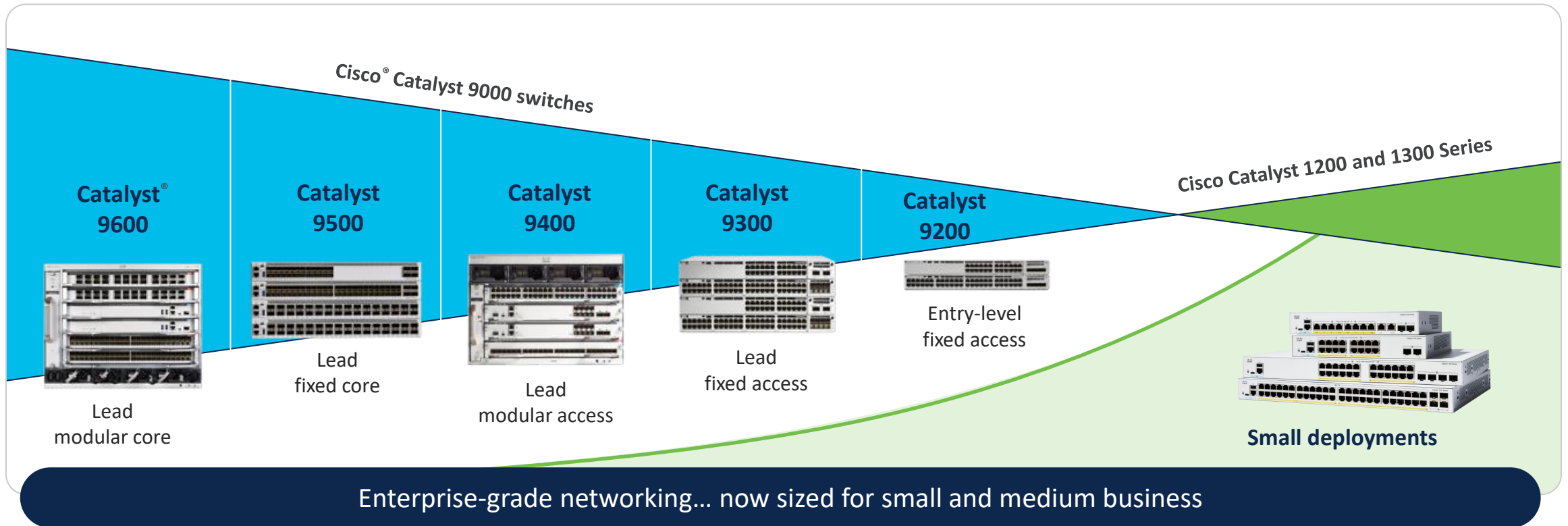
# IE9300 Key Supported Features per License

Network Essentials	<b>Layer 2 Switching</b>	802.1q, 802.1w, 802.1ab, 802.1s, 802.3ad, PVRST+, PVST+, RPVST, RSPAN, SPAN, STP, Storm Control, VTP v2/v3, 802.1Q Tunneling, L2TP, QinQ, Selective QinQ, EtherChannel	<b>Quality of Service</b>	802.1p, priority queuing, MQC, class based shaping & marking, egress policing, egress queuing and shaping, auto QoS, DSCP mapping and filtering, Low Latency Queuing
	<b>Multicast</b>	IGMP v1/v2/v3, IGMP Snooping, MLD Snooping	<b>Layer 3 routing (Limited Scale)</b>	Static routing, OSPF, OSPFv3, RIP, PBR
	<b>Management</b>	WebUI, MIB, SNMP, syslog, DHCP server, NETCONF, Embedded Event Manager (EEM), PnP, Express Setup		
	<b>Security</b>	DHCPv6 Guard, IP Source Guard, IPv6 Destination Guard, IPv6 Neighbor Discovery Multicast Suppress, IPv6 Router Advertisement (RA) Guard, IPv6 Snooping, IPv6 Source/Prefix Guard, IPv6: Neighbor Discovery Duplicate Address Detection, Flexible Netflow, ACL, VACL, NEAT, HTTPS, RADIUS, TACACS+, X.509v3, Secure Shell SSH, DHCP Snooping, 802.1x, CISP, DAI, AAA, SCP, <b>L2NAT, IEEE 802.1AE MACsec-128</b>	<b>Industrial Ethernet</b>	Locate Switch, SwapDrive, GOOSE Messaging, SCADA Protocol Classification, <b>PTP Default Profile &amp; Power Profile 2011, Power Profile 2017</b> , NTP to PTP, BFD, <b>IOx (App hosting)</b>
Network Advantage	<b>Layer 3 Routing</b>	HSRP, BGP, EIGRP, IS-IS, MBGP, NSF	<b>Redundancy</b>	Resilient Ethernet Protocol (REP) ring, Fast REP, <b>HSR<sup>1,2</sup>, PRP<sup>2</sup>, MRP<sup>1</sup></b>
			<b>Automation</b>	YANG, NETCONF, RESTCONF
	<b>Virtualization</b>	VRF-Lite	<b>Security</b>	Cisco TrustSec – SGACL, SGACL Logging, EAP-TLS, <b>IEEE 802.1AE MACsec-256, L3NAT</b>
			<b>IP Multicast</b>	AutoRP, MSDP, PIMv2, IPv6 Multicast with VRF-Lite support

<sup>1</sup> Support planned / Roadmap

<sup>2</sup> Supported on IE-9320-26S2C and IE-9320-22S2C4X ONLY

# Expanding the Cisco Catalyst switching



## The Catalyst Pedigree

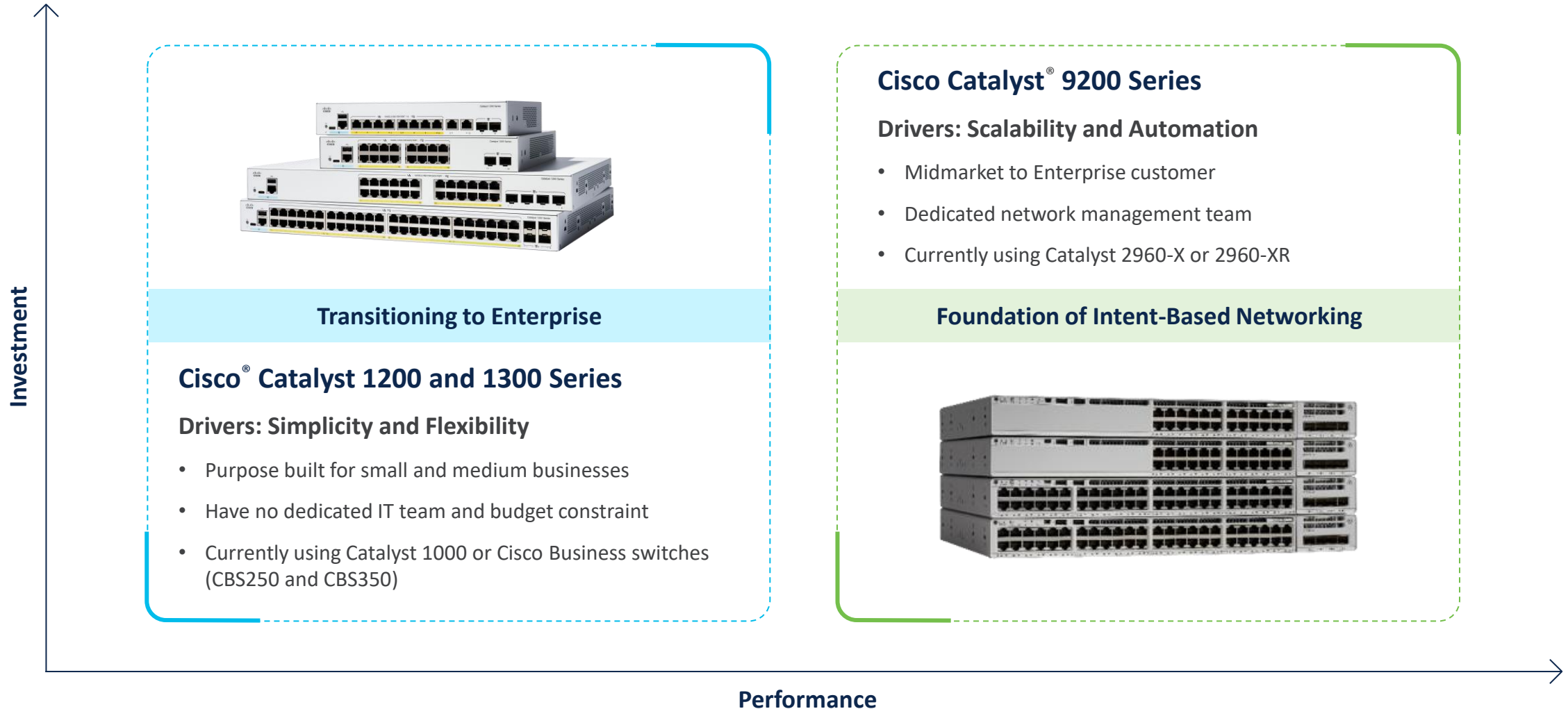
- Heritage and stability
- Trustworthy solutions
- Industry-leading support and community

## Optimized for the growing business who needs to:

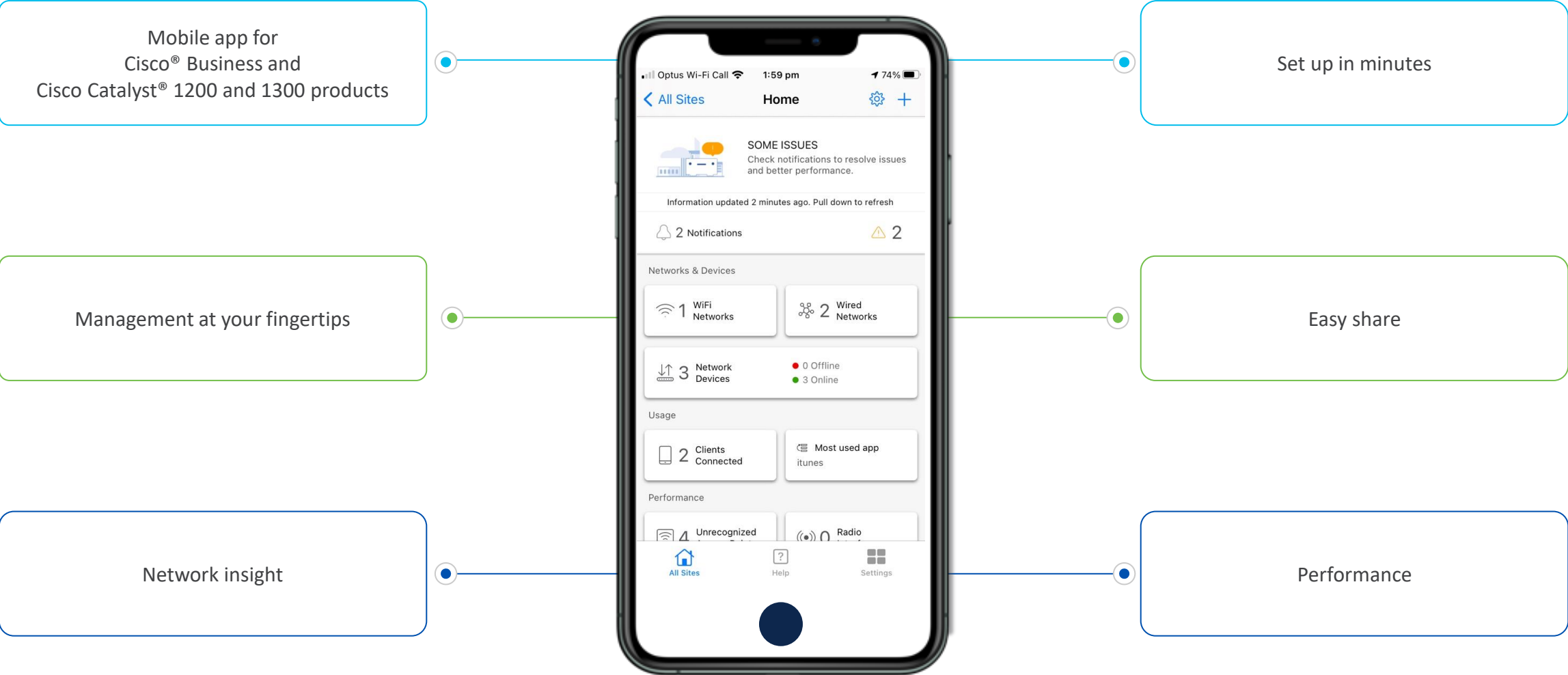
- Enable growth **Flexibility**
- Do more with less **Simplicity**
- Accelerate digitization **Security**

# Catalyst switches for the emerging enterprise

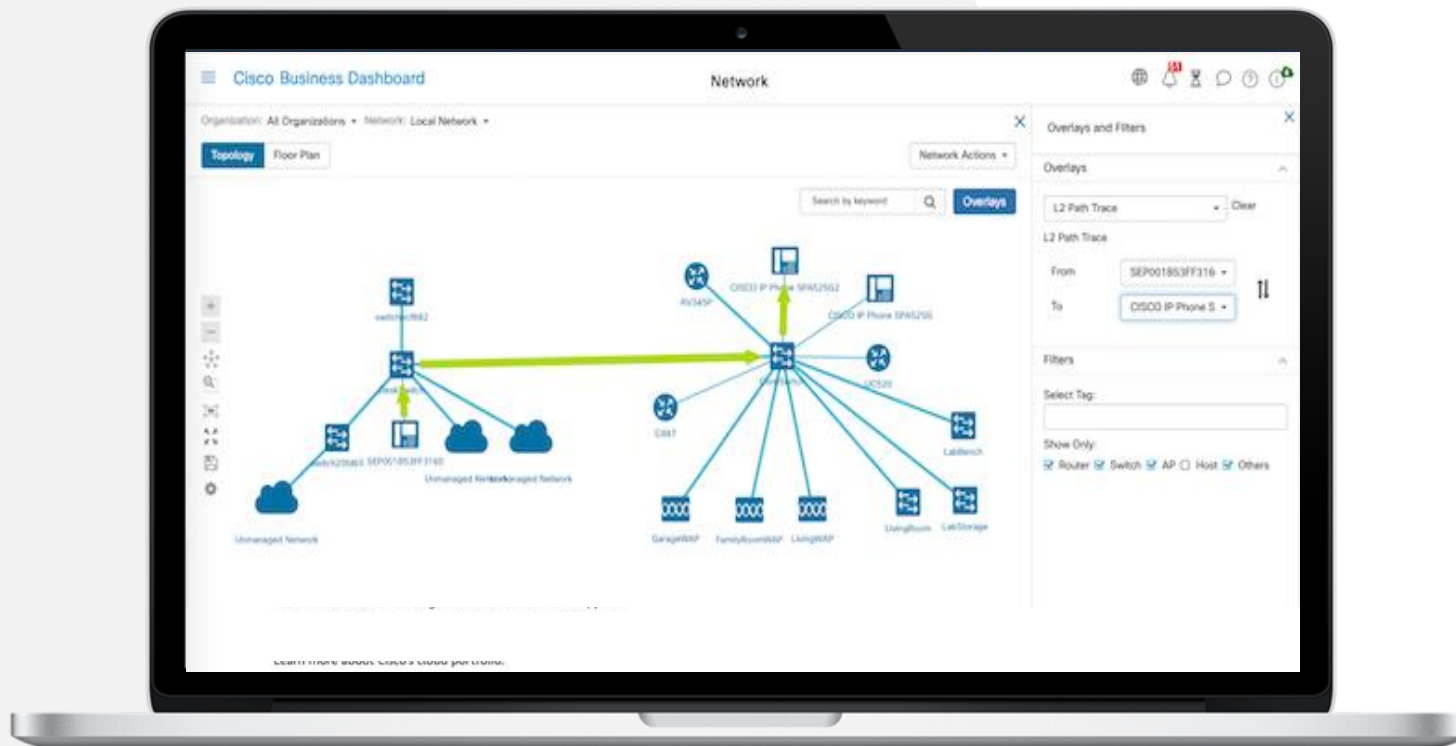
Flexibility and simplicity for networks in transition



# Cisco business mobile app



# Cisco business dashboard



Intuitive interface



Zero touch deployment (PnP)



Network monitoring



Configuration and management



On-premises or cloud



For Cisco® Business and Catalyst® 1200 and 1300

# Cisco Catalyst 1200 and 1300 Series switches: Comparison



Cisco® Catalyst® 1200 and 1300 Switch Family	Smart Managed Catalyst 1200	Fully Managed Catalyst 1300
Business Size	Small Business	SMB and Branch Office
Speed	1G with optional 10G uplinks	1G/multigigabit/10G with optional 10G uplinks
Number of Ports	8 to 48	8 to 48
Switch Layer	Layer 3 static	Layer 3 dynamic
Power over Ethernet	up to 375W	up to 740W
Web UI Management	✓	✓
Cisco Business Dashboard Cisco Plug and Play	Embedded probe ✓	Embedded probe ✓
Network Control (VLAN, QoS) and Security (ACL, 802.1x, DoS Prevention)	✓	✓
Advanced security	-	✓
Advanced intelligence (Smartports and Network Wide Auto Voice)	✓	✓
Layer 3 Routing	Static	RIP
Stacking	-	Up to 8 switches (10G uplink models)
Warranty	Limited lifetime with return to factory replacement	Limited lifetime with next business day advance replacement
List Price	TBD	TBD

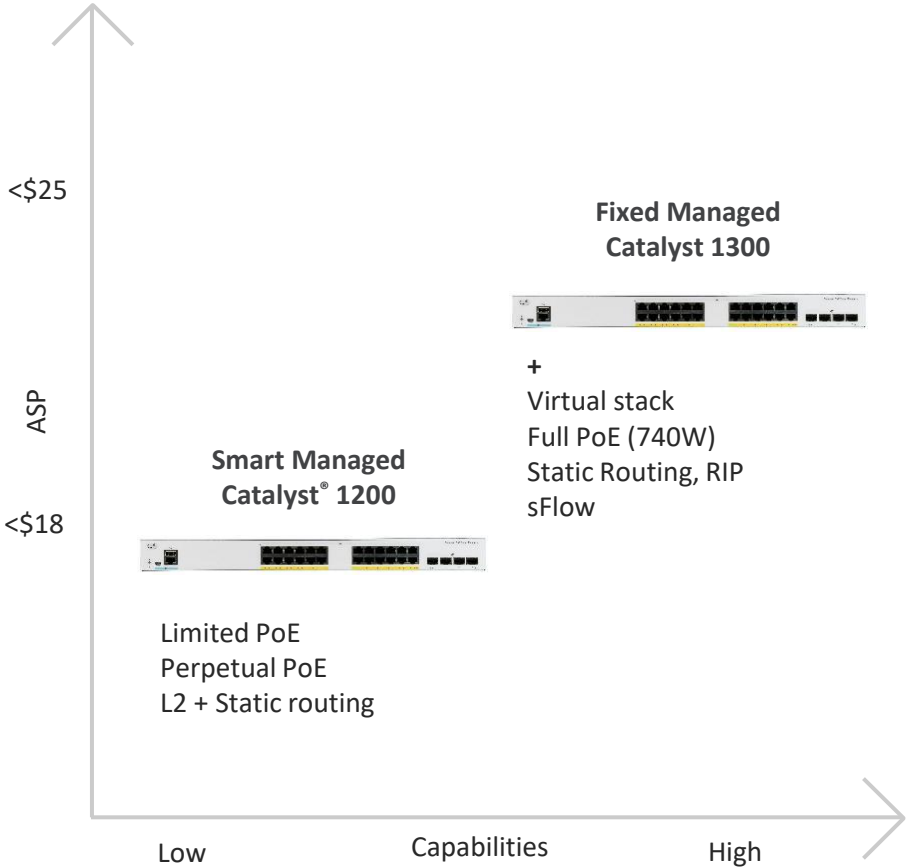
\* 60W PoE supported on select ports and models

# Switch product comparison



	Catalyst® 1200 Series	Catalyst 1300 Series
Switch management	Smart managed	Fully managed
Configuration	8 to 48 GE network ports with GE or 10G uplinks	8 to 48 GE network ports with GE or 10G uplinks
Power over Ethernet (PoE)	up to 375W	up to 740W
Stacking	No	Stackable up to 8 units (10G uplinks models)
Layer 3	Layer 3 static routing (limited scalability)	Layer 3 static routing, RIP
Scalability	8K MAC address 255 VLAN 32 IPv4 routes	16K MAC address 4K VLAN 990 IPv4 routes
Security	802.1X basic, ACL support, storm control, DoS prevention	802.1X including Dynamic VLAN (DVA), web-based authentication, MAC authentication, private VLAN, IPv6 First Hop Security, DHCP Snooping, IP Source Guard, dynamic ARP inspection, ACL support, storm control, DoS prevention
Network management	Cisco® Business Dashboard Cisco network PnP for zero touch deployment	Cisco Business Dashboard Cisco network PnP for zero touch deployment
Warranty	Limited lifetime with return to factory replacement	Enhanced limited lifetime with next business day advance replacement where available

# Catalyst 1200 and 1300 Series switches: Feature laddering



		Catalyst 1200	Catalyst 1300
Hardware	Higher PoE Budget	375W	740W
	multigigabit SKUs	✗	✓
	Dying Gasp	✗	✓
	Horizontal Stack	✗	✓
	Bluetooth dongle support	✓ (QR code)	✓ (QR code)
	Extended 50 deg C	✓	✓
	Perpetual PoE	✓	✓
Software	Routing	Static Routing	Static Routing, RIP
	sFlow	✗	✓
	Selective Q-in-Q	✗	✓
	Rest API	✓	✓
	Private VLAN	✗	✓
Management	Mobile Application	✓	✓
	Web UI	✓	✓
	(CBD) ZTP, PnP	✓	✓

# Cisco Catalyst 1300 Series switches

Key building block for any small and medium business network

## 8- and 16-Port Gigabit

### 2x 1G SFP/RJ45 uplinks (combo)



8-Port PoE (67W) and  
Full PoE (120W)

8-Port Data, SFP, PoE (67W)  
and Full PoE (120W) with ex  
power

### 2x 1G SFP uplinks



16-Port Data, PoE (120W) and Full PoE (240W)

### 4x 10G SFP uplinks (Stackable)



16-Port Data, PoE (120W)

## 24- and 48-Port Gigabit

### 4x 1G SFP uplinks



24-Port Data, SFP, PoE  
(195W) and Full PoE (375W)

48-Port Data, PoE (375W)  
and Full PoE (740W)

### 4x 10G SFP+ uplinks (Stackable)



24-Port Data, PoE (195W)  
and Full  
PoE (375W)

48-Port Data, PoE (375W)  
and Full  
PoE (740W)

## Catalyst® 1300 Series Switch Highlights

Intuitive on-device Web UI

Cisco® Business Dashboard support

No license or subscription

Rich port and PoE combinations

Perpetual PoE

True stacking on select models

Dynamic L3 switching

Built-in advanced security

2X CPU Performance, 4x memory

Limited lifetime warranty



Simple



Flexible



Secure

# Cisco's Comprehensive Networking Portfolio

Intuitive & Efficient

Powerful & Customizable

Branch & Distributed Enterprise

Headquarters

Air gapped & regulated



Meraki  
Dashboard



Cloud  
Monitoring



Catalyst  
Center



Meraki



Catalyst

EFT/LA Registration Link:

<https://salesconnect.cisco.com/EnterpriseNetworking/s/switching-efts>



Switching IOS XE 17.13.1 Early Field Trial [EFT]

Inviting customers to try and test the most sought after software features before the general availability. Customers can share their feedback about what works (and what does not) directly with our Engineering teams.  
*Note: SW feature EFT will not provide loaner HW.*

Timelines:

EFT Start Date - Sept. 5th, 2023  
EFT End Date - Oct. 17th, 2023

Contact mailer for customers: [polaris-switching-beta@cisco.com](mailto:polaris-switching-beta@cisco.com)

Switching IOS XE 17.13.1 Early Field Trial [EFT]

• Cisco Webex AirPlay, Apple TV, and Printers Remote Service Caching

Supported Platforms - Catalyst 9200,9300/L/X, 9400/X, 9500/X, 9600/X SUP1/SUP2

Modern network environments thrive on seamless service discovery, and we understand the importance of instantaneous mDNS service responses for Cisco Webex AirPlay, Apple TV, and Printers. With the introduction of dynamic caching, Catalyst 9000 series switches will dynamically cache key services received from Cisco DNA Center. This will lead to an exceptional improvement in user experiences for local Wired and Fabric Wireless users.

Register here: <https://forms.office.com/r/rrL6e9dwjH>

#	Features	
1	Cisco Webex AirPlay, Apple TV, and Printers Remote Service Caching	17.13.1 EFT
2	ASAc on Cat 9300	17.12 LA
3	1G Support on Catalyst 9500X and 9600X SUP-2	17.12 LA
4	BGP EVPN App	
5	Campus Automation	



Campus Automation  
Registration link:

<https://forms.office.com/r/ALWwPkcNJL>



BGP EVPN App  
Registration link:

<https://forms.office.com/r/Hk0bJmizH9>

# Useful Resources



Cisco Catalyst TV

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Trustworthy Systems on Catalyst 9000 Platforms(Part-II)

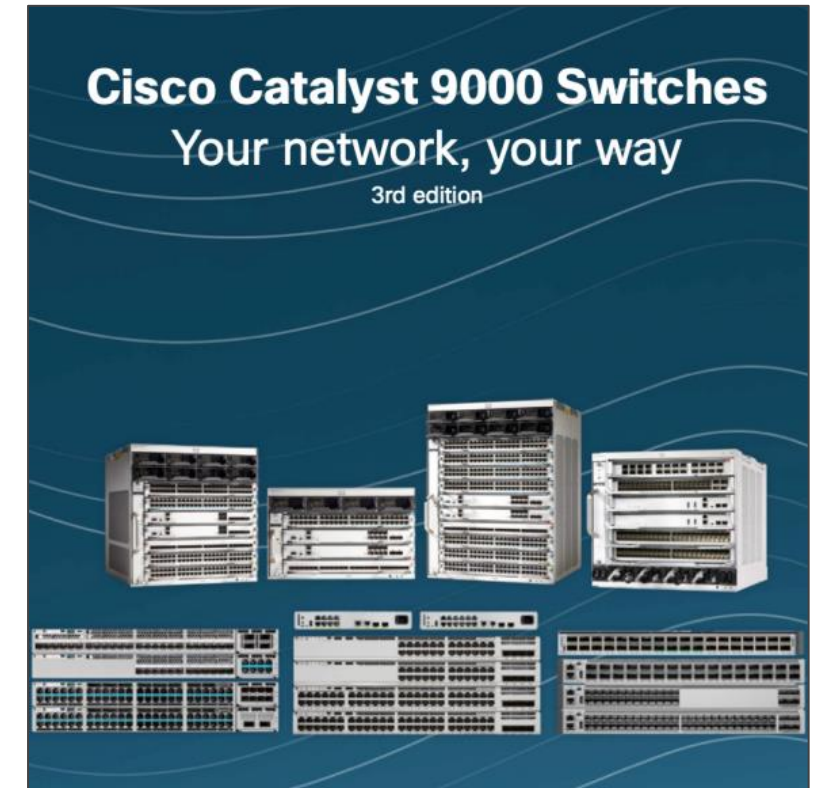
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This channel is all about Cisco Catalyst Platforms and its services and software solutions. Subscribe and Explore Playlists [Catalyst Switching](#) and [Catalyst Programmability & Automation](#) for videos and demos by the Technical Marketing Engineers on latest, relevant and exciting topics.



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[Cisco SD-Access for Industry Verticals, From Design to Migration](#)



The bridge to possible