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The bridge to possible

Nexus 9000 Series

400G and Beyond

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Product Manager, Cloud Networking
PSODCN-2357

CISCO *Live!*

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Cisco Webex App

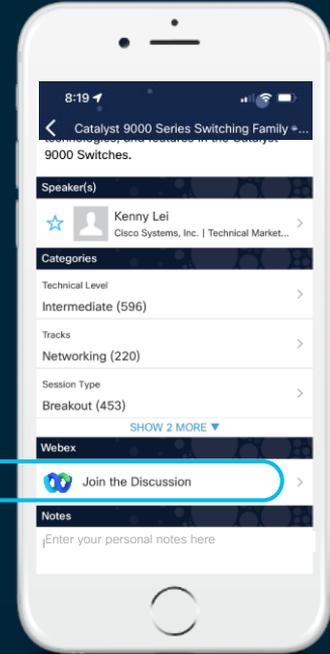
Questions?

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 June 17, 2022.



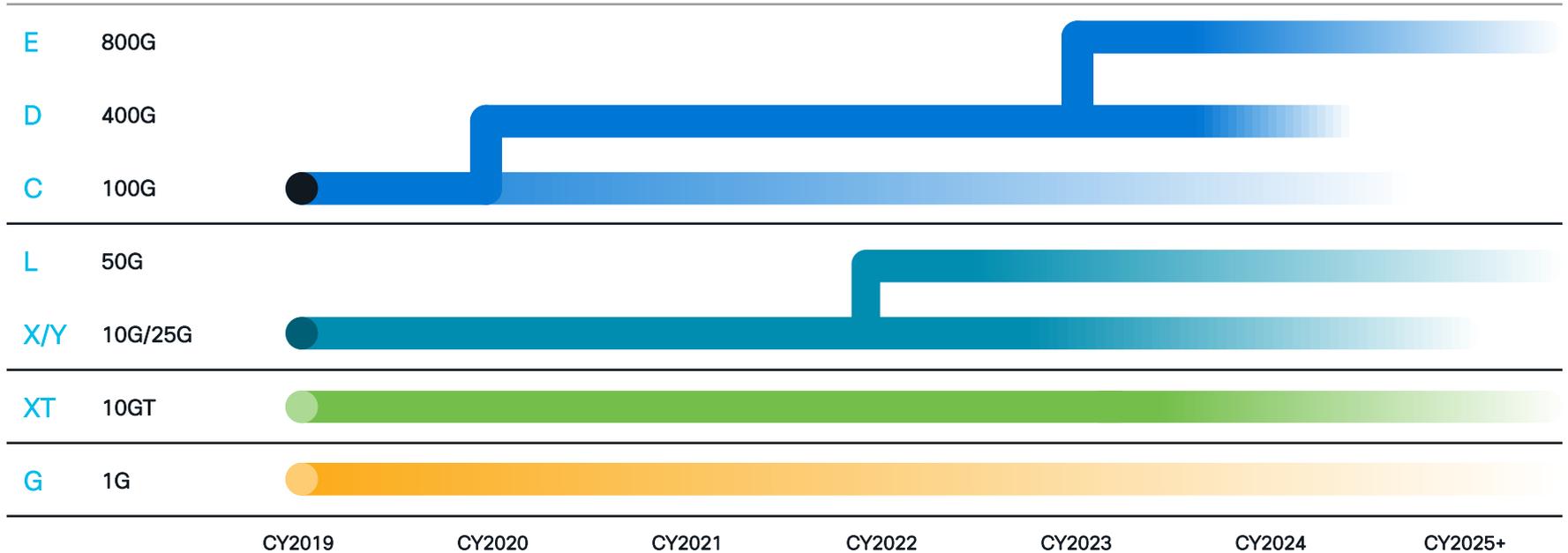
<https://cislive.ciscoevents.com/cislivebot/#PSODCN-2357>



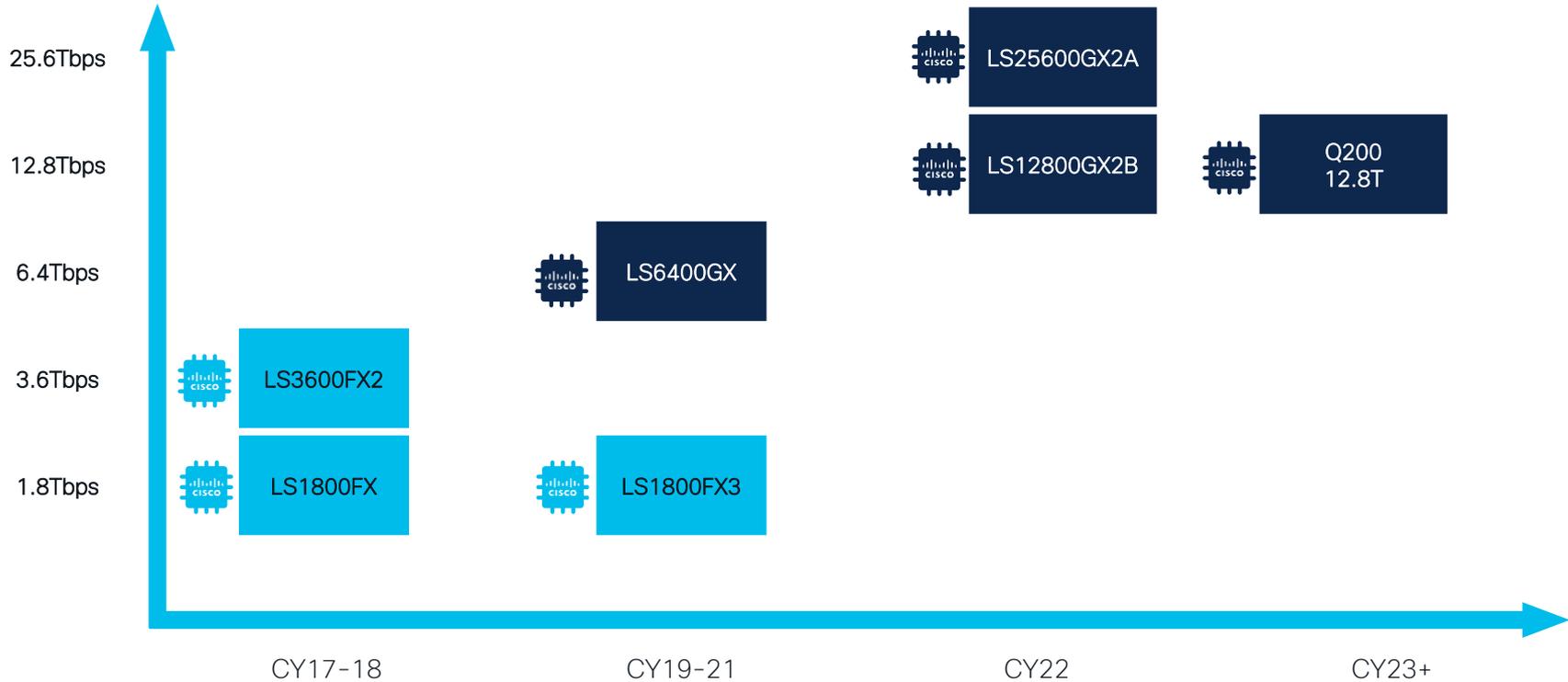
Agenda

- Introduction
- Cisco Nexus 9800 Series
- Cisco Nexus 9400 Series
- Cisco Nexus 9300 Series
- Cisco Nexus 9500 Series
- Conclusion

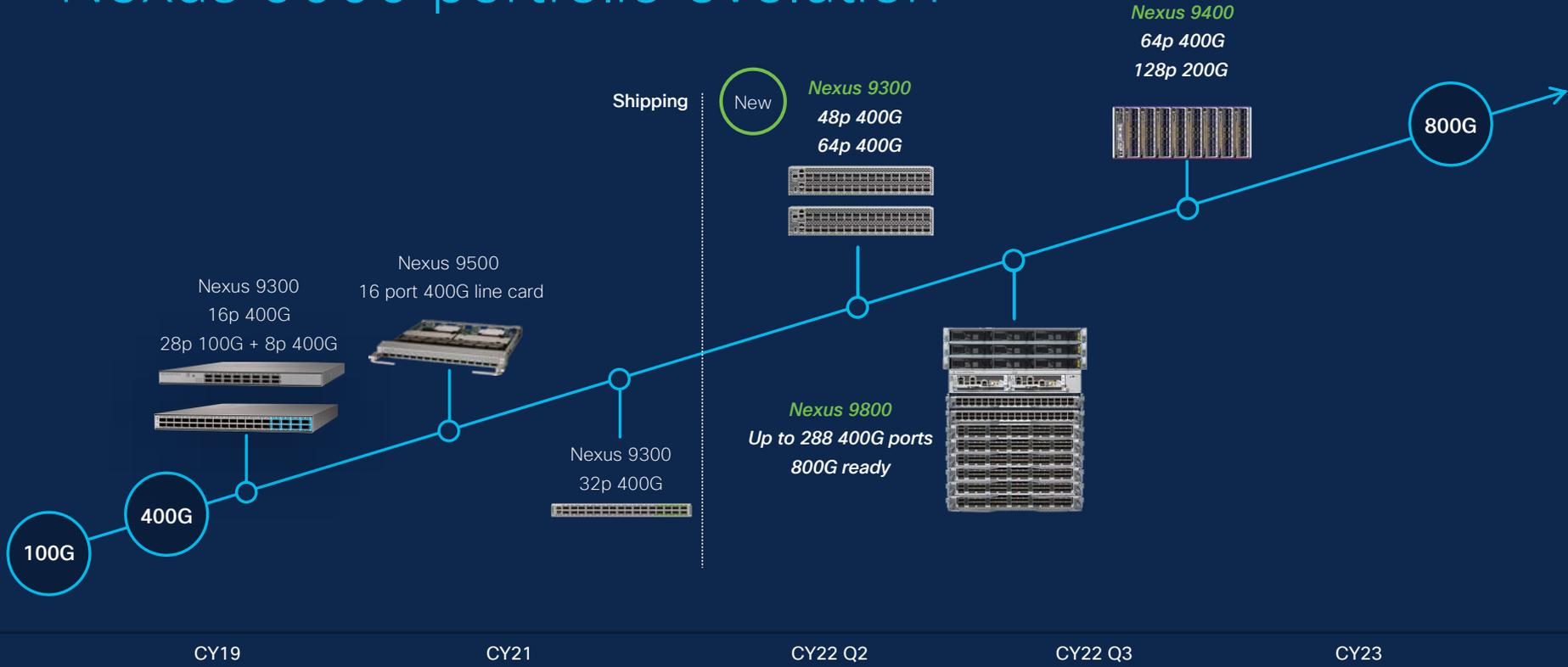
Cloud & Data Center Speed Transitions



Cisco Cloud Networking ASICs



Nexus 9000 portfolio evolution



Cloud service providers



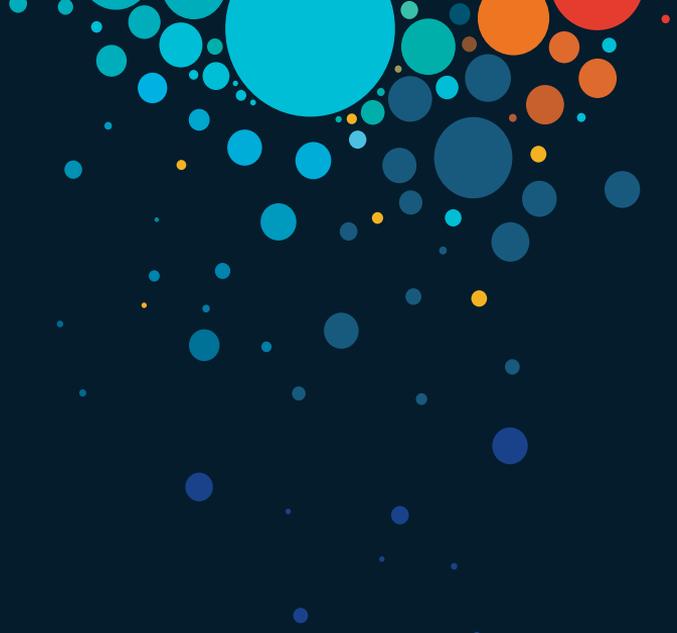
Telco service providers



Enterprise



Media networks



Cisco Nexus 9800 Series

Introducing Cisco Nexus 9800 Series

Performance, Flexibility, and Efficiency

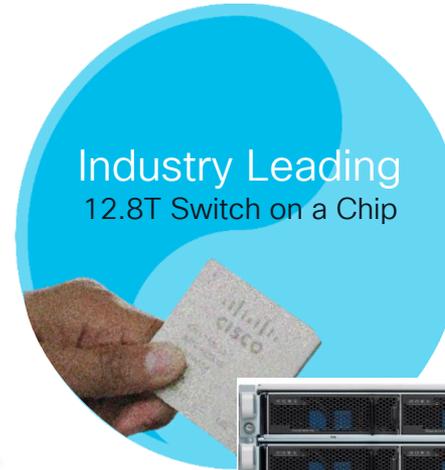
High Performance | High Port Density | Scalable | Low Power

14.4 Tbps per Slot | 36 400G Ports per Slot

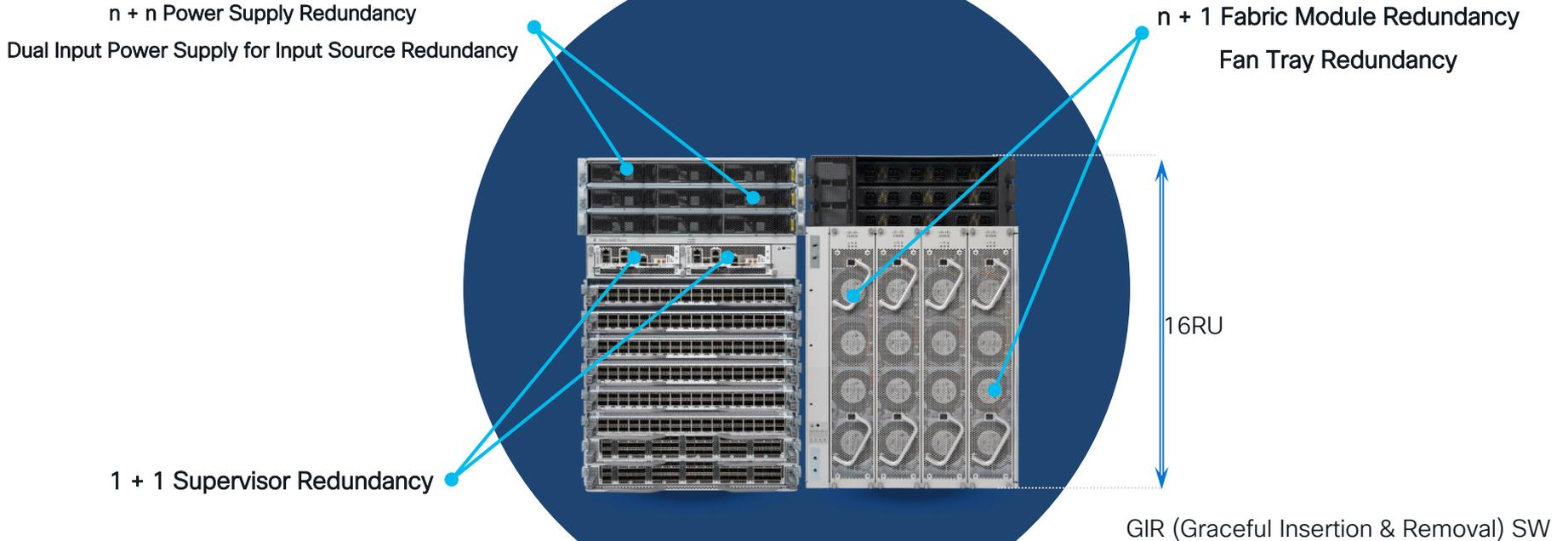
8-slot and 4-slot Modular Switches

Cisco ACI Spine & NXOS Capable

Line Rate MACsec



Cisco Nexus 9800 – Redundancy Capabilities



Cisco Nexus 9800 Series

36-port 400G MACsec Line Card

36 QSFP56-DD Ports | 14.4Tbps

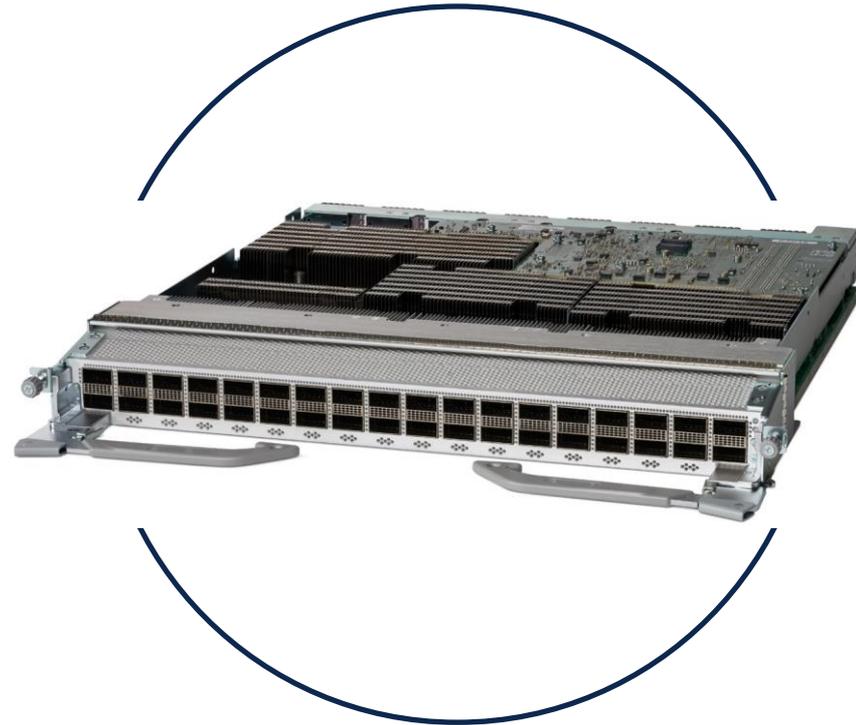
Line-rate MACsec on all ports

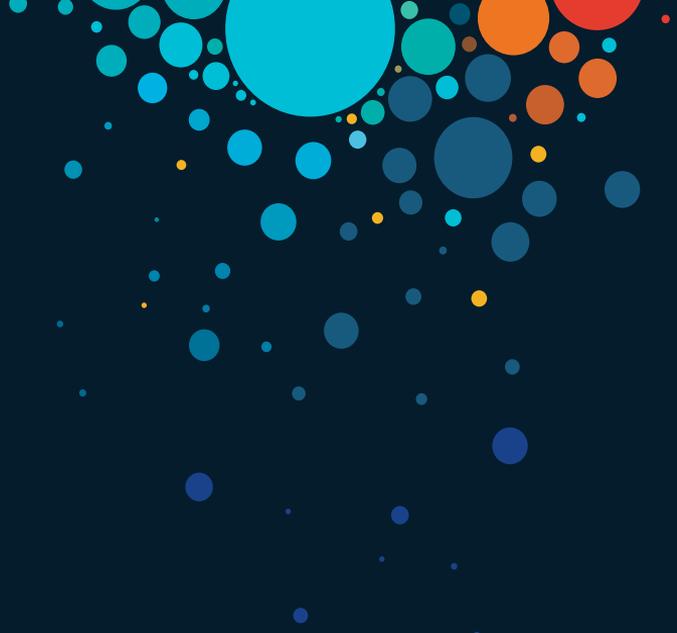
ZR and ZR+ support

3x 108MB on-die + 8GB HBM packet buffer

4x 100G, 4x 25G, and 4x 10G breakout

7+1 fabric module redundancy





Cisco Nexus 9400 Series

Introducing Nexus 9408 – Centralized Modular

NEW

Cisco Cloud Scale 25.6 Tbps (GX2A) ASIC

Speed & Density

Up to 64 400G ports or 128 200G ports
Breakout support for 10G, 25G, 50G, 100G, & 200G

Enhanced Telemetry

FT, FTE, SSX, INT-XD at 400G speeds

Secure Fabric Connectivity

MACsec & CloudSec at 400G speeds

Supervisor

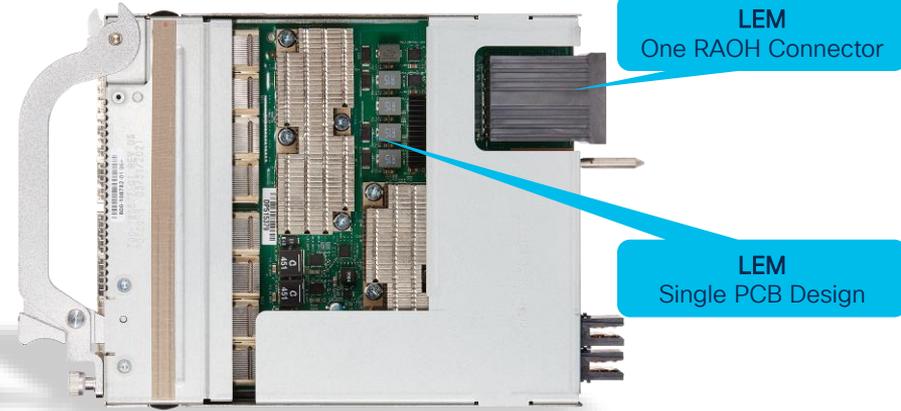
x86 6-core | 32GB DDR4 | 128GB SSD

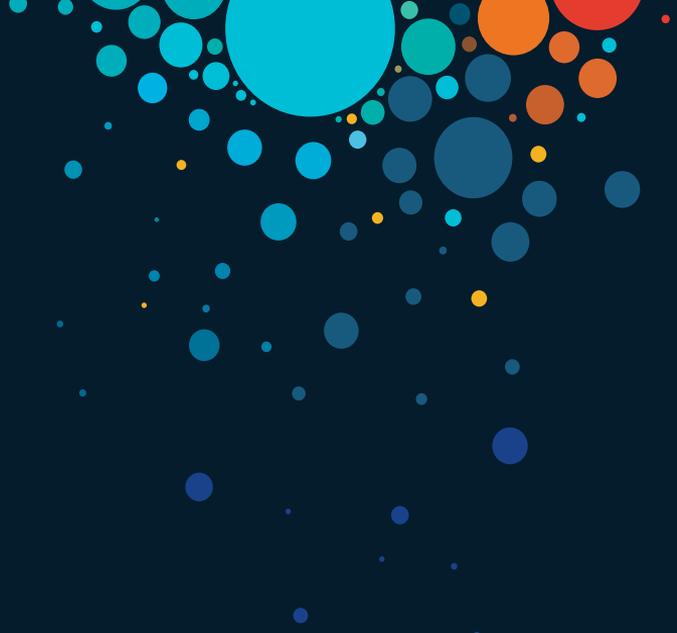


Specifications	
Depth	24"
Switch Card	1 (25.6 Tbps – Field Replaceable)
Supervisor	1 (Field Replaceable)
Expansion Slots	8
Port Cards	8p QSFP-DD 400G or 16p QSFP56 200G (Field Replaceable)

Cisco Nexus 9408 Design Advantages

Chassis	600mm deep 64-port 400G centralized modular switch
Switch Card	One row of connectors Enhanced performance, reliability, and durability
Line Extension Module (LEM)	Single PCB design for both 400G and 200G interface cards (LEM) with one connector per LEM Less complexity and better reliability





Cisco Nexus 9300 Series

Cisco Nexus High Density 400G Fixed Switches

ACI Leaf, ACI Spine, & NXOS

25.6T, 19.2T, and 12.8T 400G Switches

120MB Smart Buffer

Security

CloudSec and MACsec

Telemetry

FT, FTE, SSX, INT-XD

N9K-C9364D-GX2A



N9K-C9348D-GX2A



N9K-C9332D-GX2B



Nexus 9300 High Density 400G Switches



32p 400G
8p MACsec/CloudSec

Nexus 9332D-GX2B



48p 400G
48p MACsec/CloudSec

Nexus 9348D-GX2A



64p 400G
16p MACsec/CloudSec

Nexus 9364D-GX2A

Nexus 9316D-GX
16p 400G



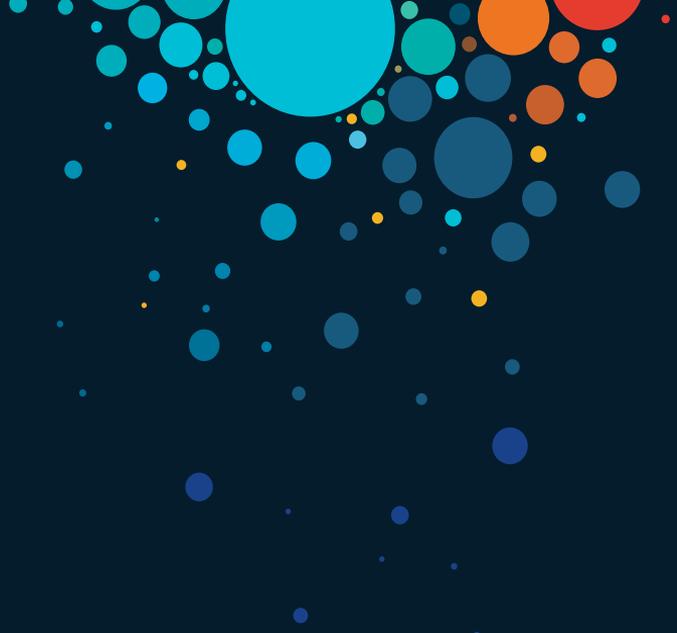
Nexus 93600CD-GX
28p 100G + 8p 400G



Cisco Nexus 9300 Cloud Scale 100/400G Switches

ACI Leaf	ACI Spine	ACI Spine or Leaf	
<p>36p 100G Nexus 9336C-FX2</p> 	<p>64p 100G Nexus 9364C</p>  <p>32p 100G Nexus 9332C</p> 	<p>32p 400G Nexus 9332D-GX2B</p>  <p>28p 40/100G & 8p 400G Nexus 93600CD-GX</p>  <p>64p 40/100G Nexus 9364C-GX</p> 	<p>64p 40/100G Nexus 9364D-GX2B</p>  <p>16p 400G Nexus 9316D-GX</p> 

NXOS



Cisco Nexus 9500 Series

400G on Nexus 9500 Series Chassis

Speed & Density

16 ports of line rate 400G with FM-G
Breakout support for 10G, 25G, 50G, 100G, & 200G

Enhanced Telemetry

FT, FTE, SSX, INT-XD at 400G speeds

Secure Fabric Connectivity

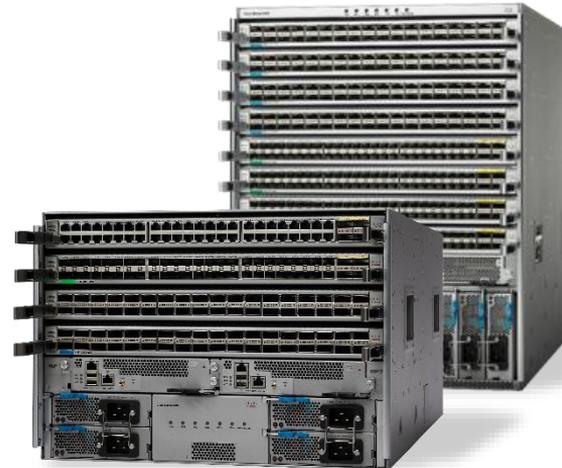
MACsec & CloudSec at 400G speeds

Compatibility

Interoperable with 100G, 25G, and 10GBaseT Line Cards



N9K-X9716D-GX 16p 400G Line Card



N9K-C9508-FM-G 1.6T Fabric Module
N9K-C9504-FM-G 1.6T Fabric Module

Cloud Networking: Platform Evolution

Nexus 9800
100G/400G/800G



Nexus 9500
40G/100G/400G



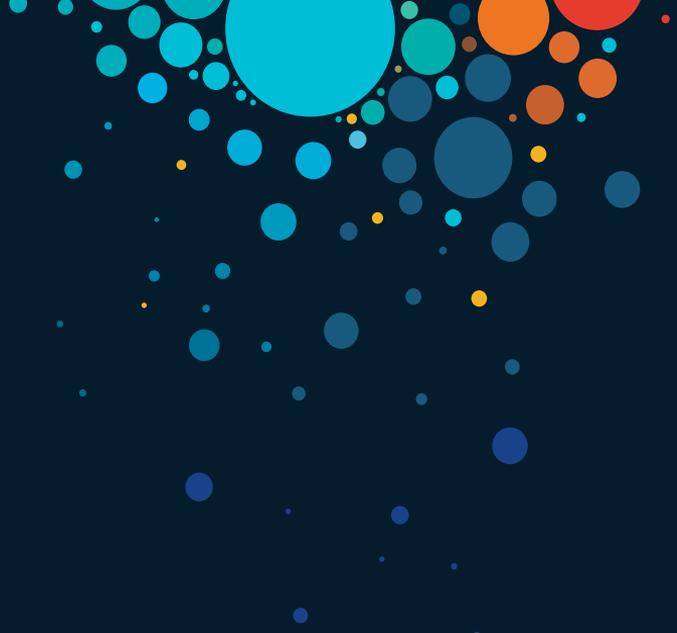
CY2014

CY2016

CY2020

CY2022

CY2023+



For more information

<http://cisco.com/go/nexus>

Technical Session Surveys

- Attendees who fill out a minimum of four session surveys and the overall event survey will get Cisco Live branded socks!
- Attendees will also earn 100 points in the Cisco Live Game for every survey completed.
- These points help you get on the leaderboard and increase your chances of winning daily and grand prizes.



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Cisco Learning Network

Resource community portal for certifications and learning



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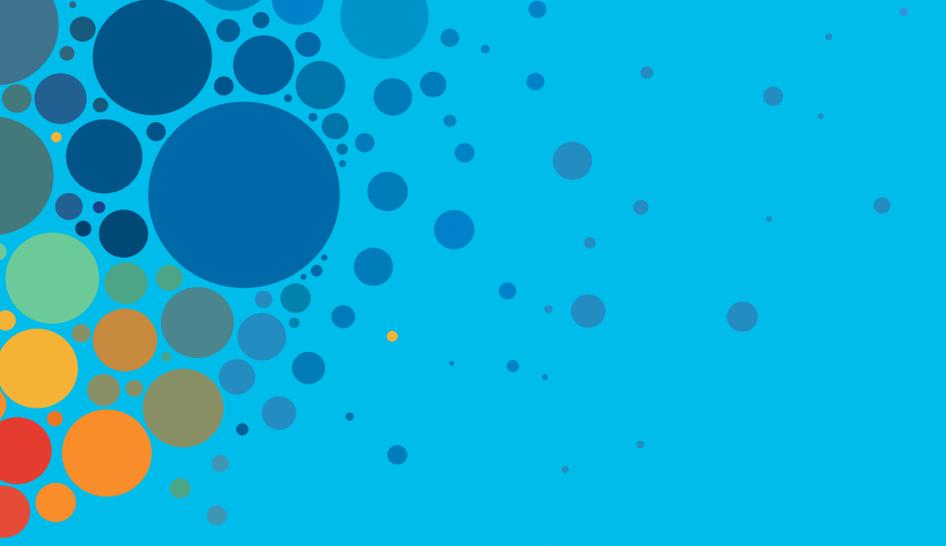
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Thank you

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