
TECHNICAL DECISION MAKER PRESENTATION

Cisco Catalyst 8300 Series Edge Platforms

Prepared as a convenient PDF reference for network planning, platform evaluation, and procurement discussions.

Source presentation: Cisco. Layer23-Switch added this cover and closing resource page. Cisco and related marks belong to Cisco Systems, Inc. This material may include historical roadmap content; verify current specifications, lifecycle status, licensing, and availability before purchase or deployment.



The bridge to possible

Cisco Catalyst 8300 Series Edge Platforms

Technical Decision Maker

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Cisco Catalyst 8000 Edge platforms
Family Overview

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Introducing Catalyst 8300 Series
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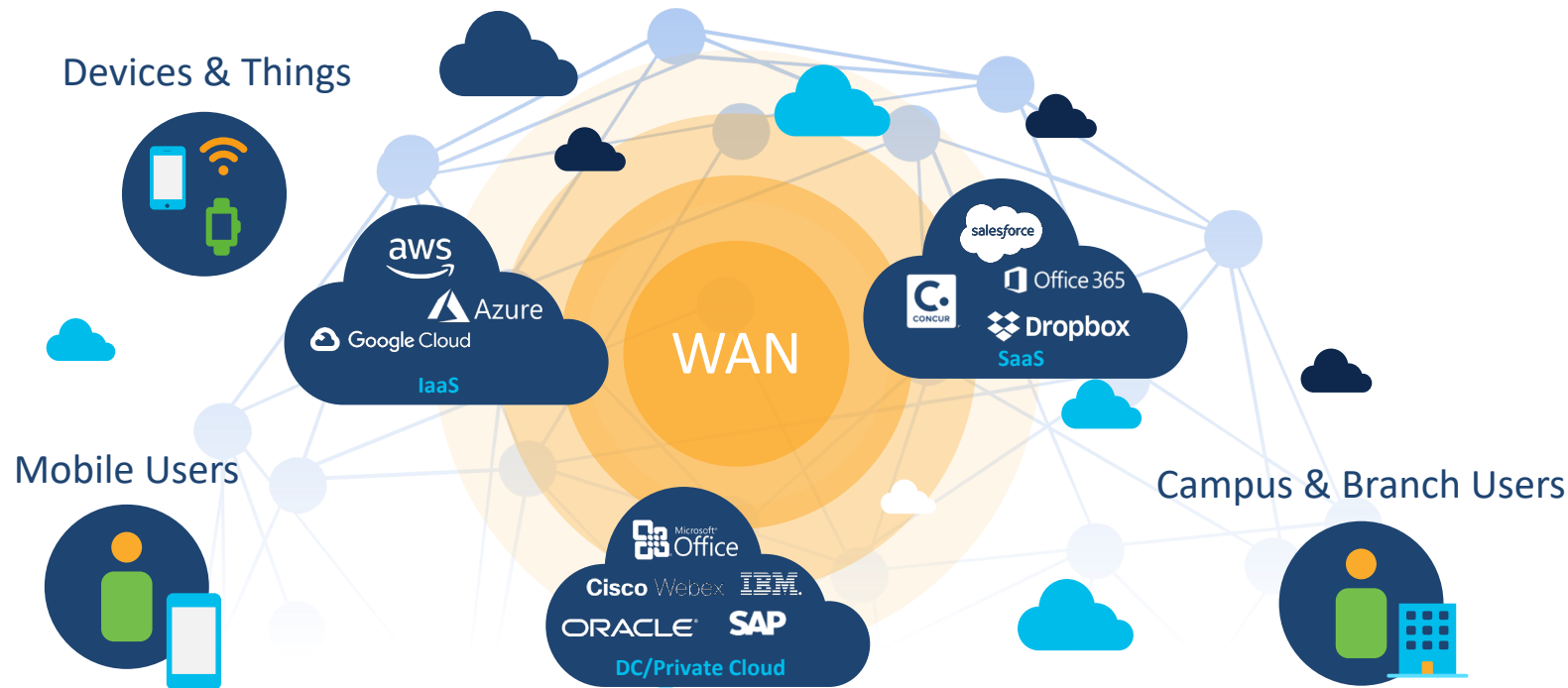
Solutions and Use-cases

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Summary

Cisco Catalyst 8000 Edge Platforms Family Overview

It's a Multicloud World



Journey to Cloud

Fueled by Technology Transformation

Multicloud



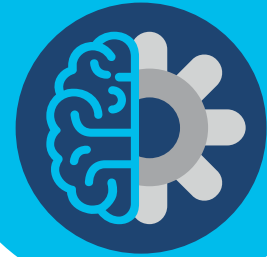
“Cloud migration will continue to accelerate the adoption of SD-WAN”
- Markets & Markets Research

5G, Edge Compute



“By 2022, 5G Infra in Branch expected to grow to \$1.9 billion”
- IDC Report

AI/ML Insights



“By 2022, 72% of network strategists project using AI-enabled predictive insights or prescriptive remediation”
- Cisco VNI report

Facilitating more service acceleration at the edge in a multicloud world

Powered by secure cloud scale SD-WAN

Cisco's flexible architecture for Intent-based Networking

Any Deployment



On-premise | Cloud | Multi-tenant

Automation | Network Insights | Machine Learning | AI

Open | Programmable | Scalable

Any Service



Multicloud
Optimization



Multi-Layer
Security



Analytics



Voice



Multi-Domain
IBN Policy

Any Transport



Satellite



Internet



MPLS



5G/LTE

Any Location



Branch



Colocation

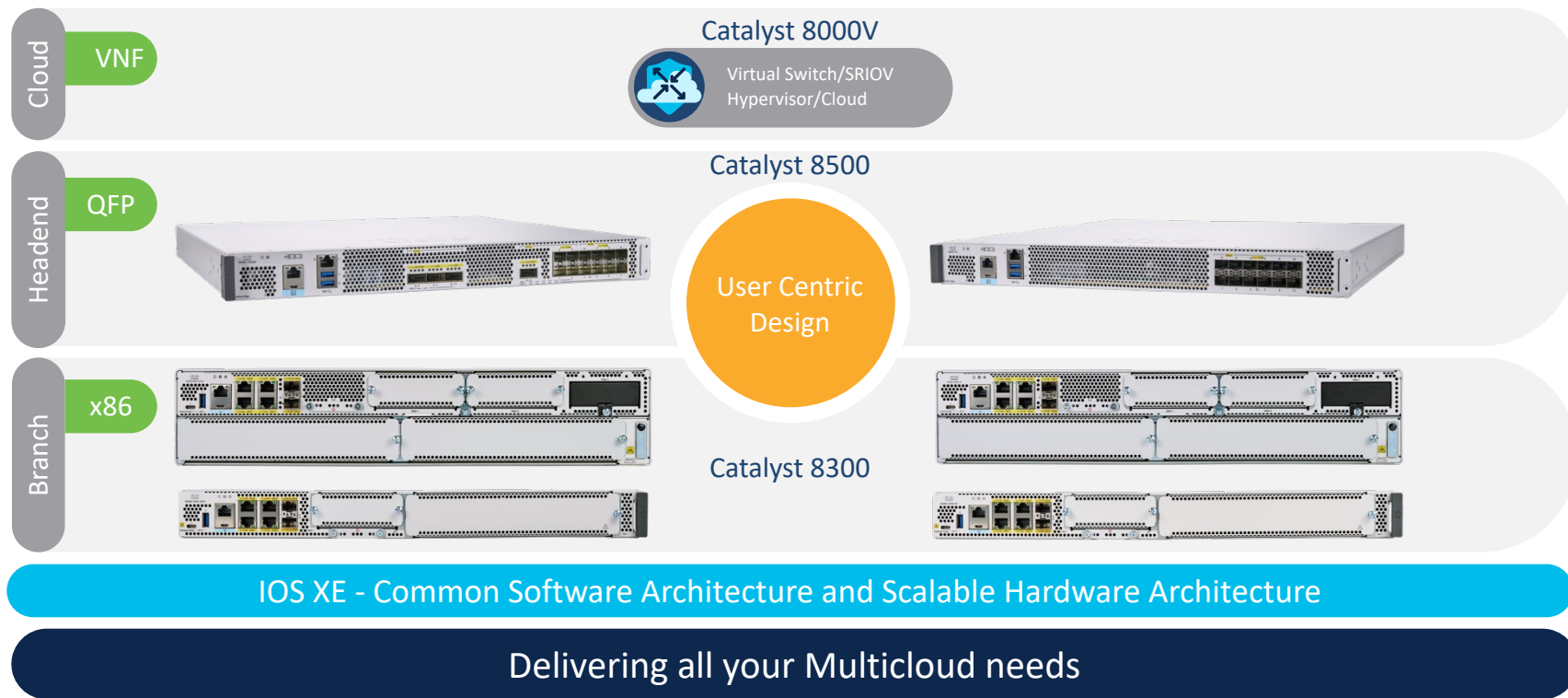


Cloud

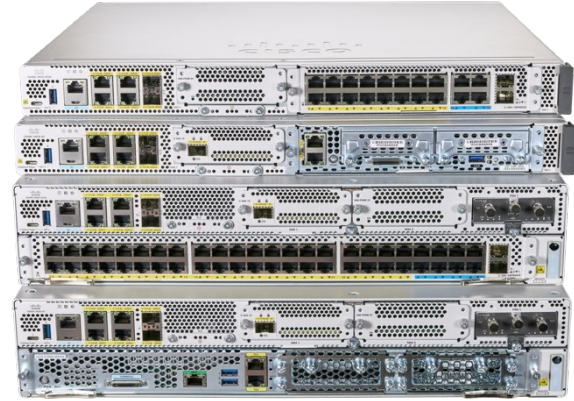


Remote Work

Cisco Catalyst 8000 Edge Platforms Family



Introducing Cisco Catalyst 8300 Series Edge Platforms



Cisco Catalyst 8300 Series Edge Platforms is a high-performance platform built for SD-WAN services like comprehensive Security, compute and application optimization with Multi-Domain integration

Cisco Catalyst 8300 Series Edge Platforms

Foundation for the Secure Cloud Scale SD-WAN branch



Integrated Rich Services

Voice Survivability, Forward Error Correction & Packet Duplication, TCP Optimization

Edge Intelligence

Compute
Container based Apps



Scale

Up to 5x IPsec and IP CEF Performance
Core Availability for 3-4x Services Performance

Multi-Layer Security

SSL Acceleration
Application Firewall
IPS/IDS, URL Filtering
AMP, Threat Grid
Umbrella SIG

System

Cisco Catalyst 8300
Series
Edge Platforms



Connectivity

Higher
WAN Port
density

Default 8G
DRAM

10GE w/
MACsec

Pluggable
NVMe
Storage

5G WAN

Manageability

vManage

Multi-tenant

Open APIs

Analytics

Cisco Catalyst 8300 Series Edge Platforms

Greater flexibility for branch transformation

C8300-2N2S-4T2X



C8300-2N2S-6T



Resilient
Architecture

Leads the Industry
in Service Richness

Future Proofing
and Investment
Protection

User-centric
Design

C8300-1N1S-4T2X

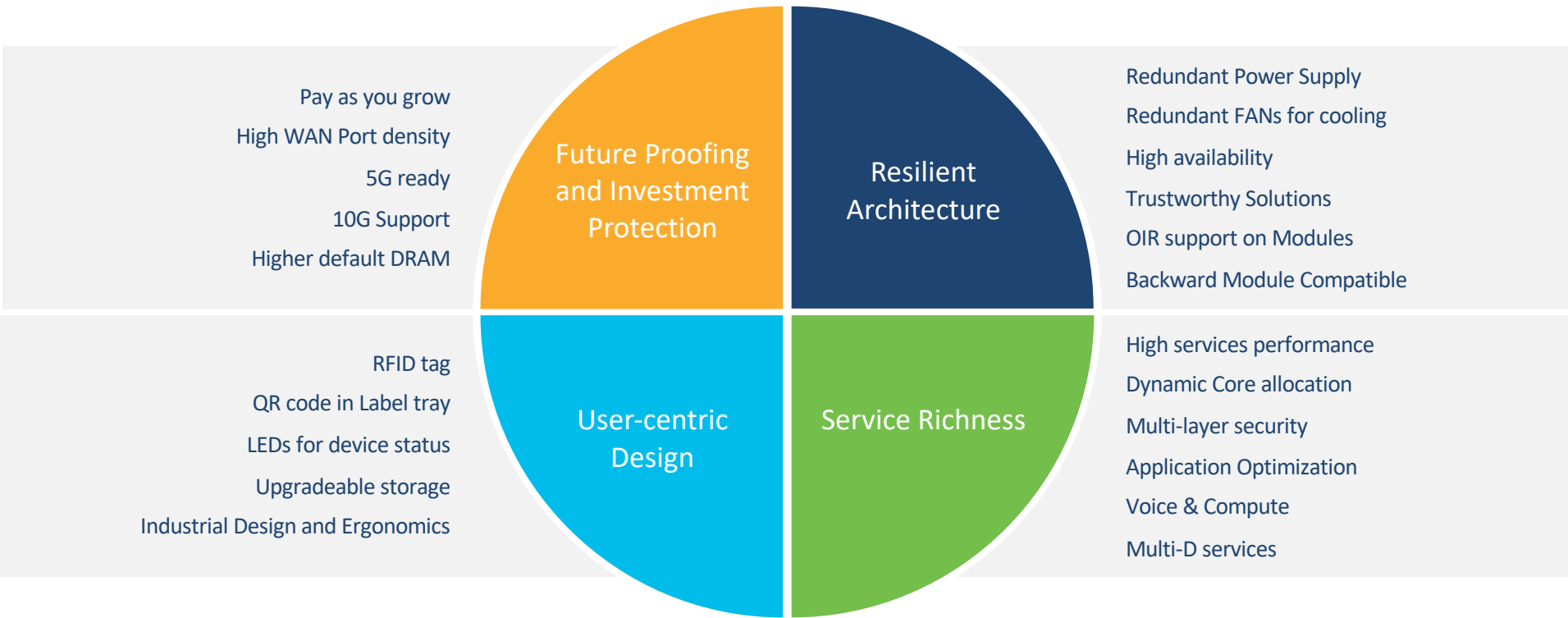


C8300-1N1S-6T



Next Gen WAN Access Edge

Cisco Catalyst 8300 Scalable Architecture



Cisco Catalyst 8300 Series Edge Platforms

The leading SD-WAN high performance branch router with rich services



Performance and Rich Services

C8300-1N1S-6T
(1G WAN Ports)



(1 RU, Up to 15 Gbps CEF
Up to 2 Gbps IPsec)

C8300-2N2S-6T
(1G WAN Ports)



(2 RU, Up to 15 Gbps CEF
Up to 2 Gbps IPsec)

C8300-1N1S-4T2X
(10G WAN Ports)



(1 RU, Up to 19 Gbps CEF
Up to 5 Gbps IPsec)

C8300-2N2S-4T2X
(10G WAN Ports)



(2 RU, Up to 20 Gbps CEF
Up to 5 Gbps IPsec)

IMIX traffic
CEF: Autonomous mode
IPsec: Autonomous/Controller mode

Flexible SoC Architecture with Multiple Cores

Cisco Catalyst 8300 Series Edge Platforms

Introducing 10G in Access with higher port density

10G WAN Ports 'X'
& 5G IPsec

C8300-2N2S-4T2X



C8300-1N1S-4T2X



4 RJ45
2 SFP+

1G WAN Ports 'T'
& 2G IPsec

C8300-2N2S-6T



C8300-1N1S-6T



4 RJ45
2 SFP

M.2 USB/ NVMe
Storage

UADP-based switch
modules/10G WAN module

User Centric Design
(RFID, QR label, FRUs)

Higher-efficiency AC
and DC power supplies



C8300-2N2S Front View

2 NIM and 2 SM

Status and physical security

Status LED
FAN LED
Power LED

External Storage

NVMe M.2 (16/32/600G)

Inventory

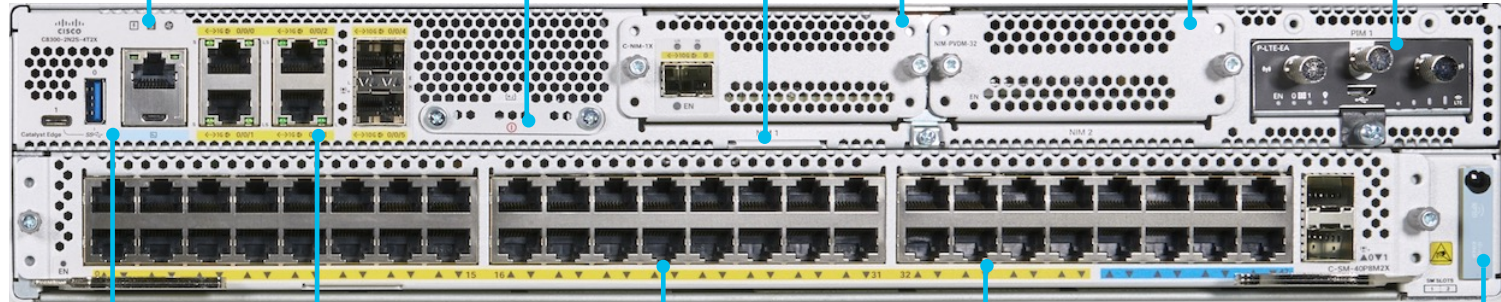
QR label tray

Network Modules

NIM slot

LTE WAN (PIM slot)

CAT 4/6/18 PIM



Management /USB Storage

RJ45 Console
Micro-USB
USB Type A, USB Type C

Data Interfaces (FPGE)

4 RJ45 GE WAN
2 SFP+ WAN

Network Modules

SM-X slot

Inventory

RFID

C8300-2N2S-6T has in-built 2 SFP
C8300-2N2S-4T2X has in-built 2 SFP+

C8300-2N2S Rear View

2 NIM and 2 SM

Power supply Slot 1

PSU Internal FAN
AC/DC PSU

Power supply Slot 0

PSU Internal FAN
AC/DC PSU



FAN

FANs

FAN Tray

C8300-1N1S Front View

1 NIM and 1 SM

Status and physical security

Status LED

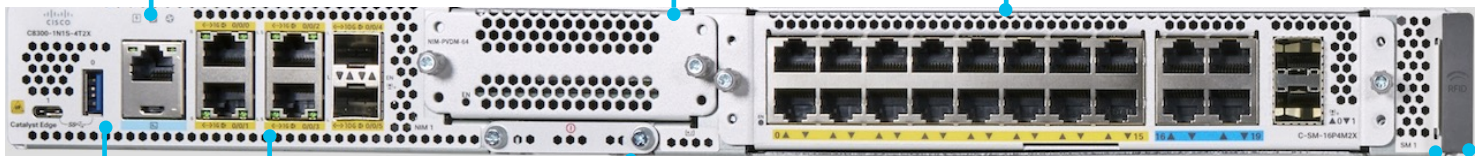
FAN LED

Power LED

Network Modules

NIM slot

SM-X slot



Management /USB Storage

RJ45 Console

Micro-USB

USB Type A, USB Type C

Data Interfaces (FPGE)

4 RJ45 GE WAN

2 SFP+ WAN

Storage

NVMe M.2 (16/32/600G)

Inventory

RFID

QR Label tray

C8300-1N1S-4T2X has in-built 2 SFP+
C8300-1N1S-6T has in-built 2 SFP

C8300-1N1S Rear View

1 NIM and 1 SM

Power supply Slot 1

PSU Internal FAN
AC/DC PSU

Power supply Slot 0

PSU Internal FAN
AC/DC PSU



FAN

FANs
FAN Tray

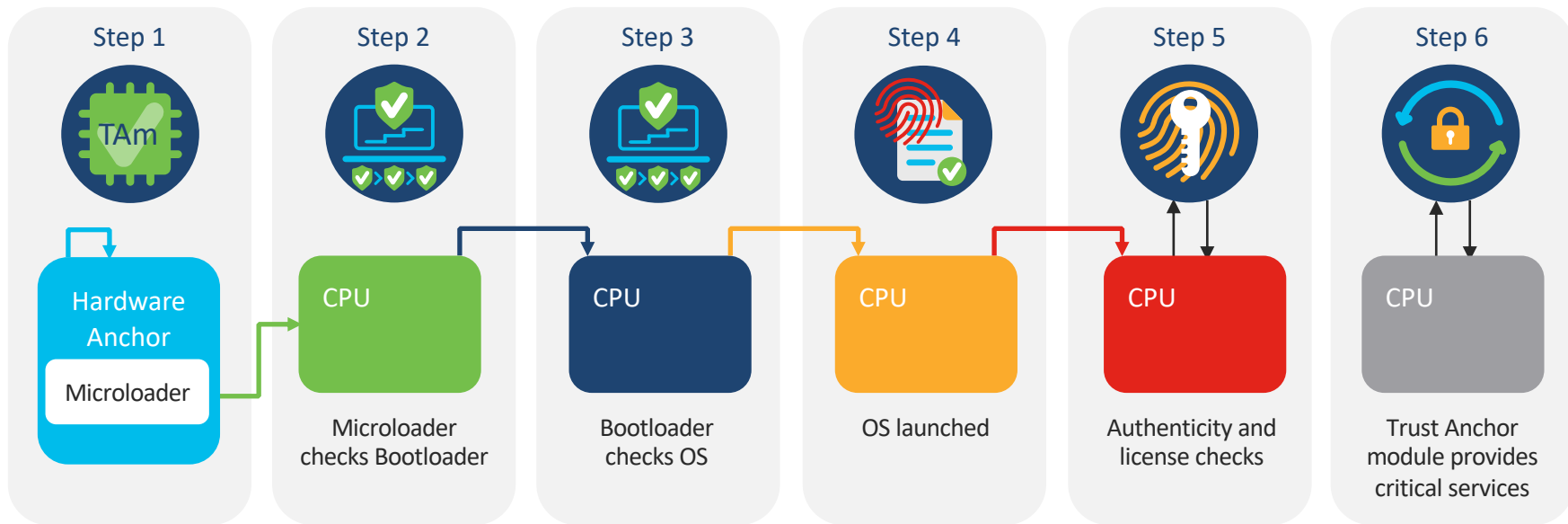
LTE WAN (PIM slot)

CAT4/6/18 PIM



C8300 Built-in TPM Chip

Trustworthy Solutions



First instructions run on CPU stored in tamper-resistant hardware

Confidentiality

Integrity

Authenticity



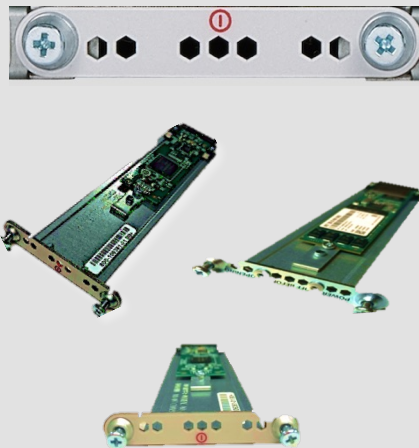
C8300 Storage Options

External M.2 storage

Storage Options

8 GB default bootflash

16G default M2. USB
32 GB M.2 USB options
600 GB M.2 NVMe SSD options



Use Case

SD-WAN storage

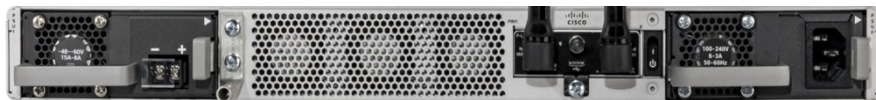
App Hosting

Logging local

Guest Shell/Python



C8300 Power Supply



Dual AC, DC, POE PSUs

HVDC PSU support

PoE, PoE+ & UPOE Capable

PoE Boost with 500W and 1000W

Device Model	Power Supply	AC 250W	DC 400W	DC 400W HV	Dual AC PSU	Dual DC PSU	AC + POE 500W	AC + DC Mix mode
C8300-1N1S-6T	Internal	✓	✓	✓	✓	✓	✓	✓
C8300-1N1S-4T2X	Internal	✓	✓	✓	✓	✓	✓	✓

Device Model	Power Supply	AC 650W	DC 650W	DC 650W NEBS	Dual AC PSU	Dual DC PSU	PoE Adaptor	AC + DC Mix mode
C8300-2N2S-6T	Internal	✓	✓	✓	✓	✓	✓	✓
C8300-2N2S-4T2X	Internal	✓	✓	✓	✓	✓	✓	✓

PoE Supported Modules

NIM-ES2-8-P
C-SM-40G8M2X
C-SM-16G4M2X



N + 1 Redundancy with Inline Power



C8300 Field Replaceable FAN Module

Replaceable fan tray, 4 Internal Fans assembly module for Chassis cooling + PSU fan



Field Replaceable Fan Tray

Reverse Airflow (NEBS)

Front-to-Back Airflow

Fixed Fan tray, 3 Internal Fans assembly module for Chassis cooling + PSU Fan



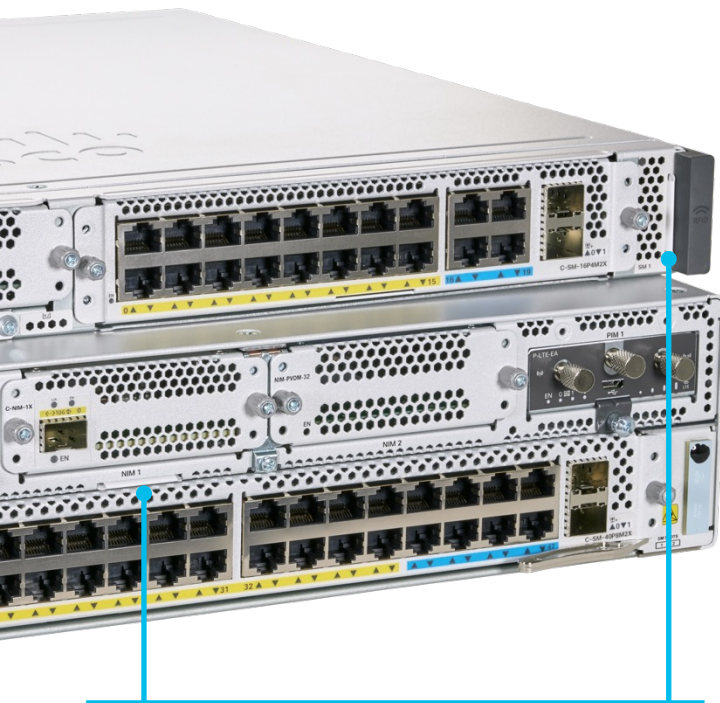
Internal Fan tray

Front-to-Back Airflow

FAN Module Build N+1 Redundancy for Cooling



Label Tray



QR Label Tray

Label Tray is a **Plastic strip** that can be pulled out

Label Tray contains:

Product ID

PID version ID

CLEI

TAN

Serial Number



Label tray contains a **QR code** with above information encoded in it:

Device Family, Base PID

Device MAC

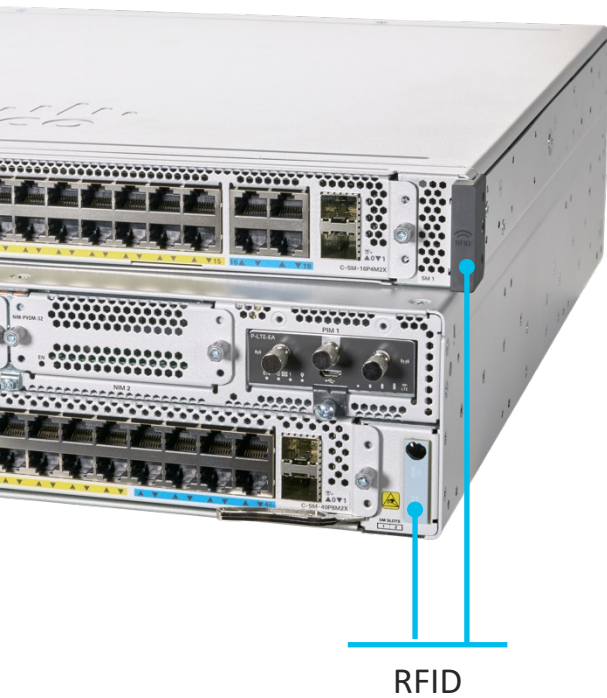
Vendor

Serial Number

HW Version



Radio Frequency Identification (RFID)



Front Facing **Passive UHF RFID**



Ultra High Frequency (**UHF**) Specs

860 to 960 MHz

1 to 4 meter Distance

Supply Chain Applications



UHF Benefits:

Good read range

Low cost

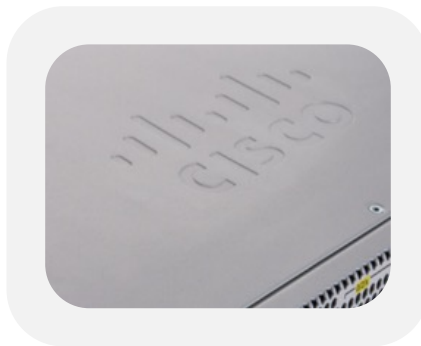
Industry adopted standard



Industrial Design and Ergonomics



Circle Pattern
Hex Packing



Satin Aluminum Based
Textured Finish



Rounded Frame
4 mm

Connectivity Richness

C8300 Connectivity Richness

Next-gen modules and backward compatibility



Slot type

Pluggable Interface
Module (PIM)

Network Interface
Module (NIM)

Services Module (SM)

Module type

LTE

LAN, WAN, LTE, VOICE, DSL,
UCS-E, ASYNC

LAN, WAN, VOICE,
UCS-E, ADAPTOR

70+ varieties
of
Modules and
Interfaces

Backward Module Compatibility

ISR 4400 Modules*		New Modules				
UCS-E M3 SM Modules	Compute		SD-WAN	Perf.	MACsec	
	Ethernet WAN	L3/L2 10G,2.5G,1G WAN/LAN Modules				
4P/8P/8P PoE NIM Modules	Ethernet LAN	L2 1G/2.5mG/10G Switch Modules				
CAT4/6 NIM Modules	LTE/5G	5G/CAT18 LTE PIM				
FXS/FXO/BRI/T1E1 SM-NIM Modules	Voice	Voice DSP Modules for IP Services				
Serial/Async/DSL	Legacy WAN			Voice		

*ISR 4K Modules Not Supported: UCS-E M1/M2, Ethernet SM, Ethernet WAN, SM-NIM Carrier

Catalyst 8300 Supported Modules

* IOS XE is supported, SD-WAN support is in the roadmap
 Blue color: new modules
 Green color: Target 2nd half FY23



LAN

NIM-ES2-4
 NIM-ES2-8
 NIM-ES2-8-P
 C-SM-40P8M2X
 C-SM-16P4M2X

Async

NIM-16A
 NIM-24A
 SM-X-64A

WAN

C-NIM-4X
 C-NIM-8T
 C-NIM-8M
 C-NIM-1X
 C-NIM-2T
 C-NIM-1M

NIM-1T
 NIM-2T
 NIM-4T

SM-X-1T3/E3*
 NIM-2BRI-S/T*
 NIM-4BRI-S/T*

WAN + Voice:

NIM-1MFT-T1/E1
 NIM-2MFT-T1/E1
 NIM-4MFT-T1/E1
 NIM-8MFT-T1/E1
 NIM-1CE1T1-PRI
 NIM-2CE1T1-PRI
 NIM-8CE1T1-PRI

LTE

NIM-LTEA-EA
 NIM-LTEA-LA
 P-LTEA-EA
 P-LTEA-LA
 P-LTEAP18-GL
 CG418-E

5G WAN

P-5GS6-GL (PIM version)
 CG522-E (HW version)

Voice

SM-X-PVDM-3000
 SM-X-PVDM-2000
 SM-X-PVDM-1000
 SM-X-PVDM-500
 SM-X-24FXS/4FXO
 SM-X-16FXS/2FXO
 SM-X-8FXS/12FXO
 SM-X-72FXS

NIM-2FXSP
 NIM-4FXSP
 NIM-2FXS/4FXOP
 NIM-2FXO
 NIM-4FXO
 NIM-4E/M
 NIM-2BRI-NT/TE*
 NIM-4BRI-NT/TE*
 NIM-PVDM-32
 NIM-PVDM-64
 NIM-PVDM-128
 NIM-PVDM-256

DSL

NIM-VAB-A
 NIM-VA-B
 NIM-VAB-M
 NIM-4SHDSL-EA

ADAPTOR

C-SM-NIM-ADPT

Storage

SSD-M2NVME-600G
 M2USB-16G
 M2USB-32G

UCS-E

UCS-E1100D-M6
 UCS-E160S-M3/K9
 UCS-E1120D-M3/k9
 UCS-E180D-M3/K9

Higher 10Gbps/2.5Gbps mGig LAN in Branch

C-NIM-8M*

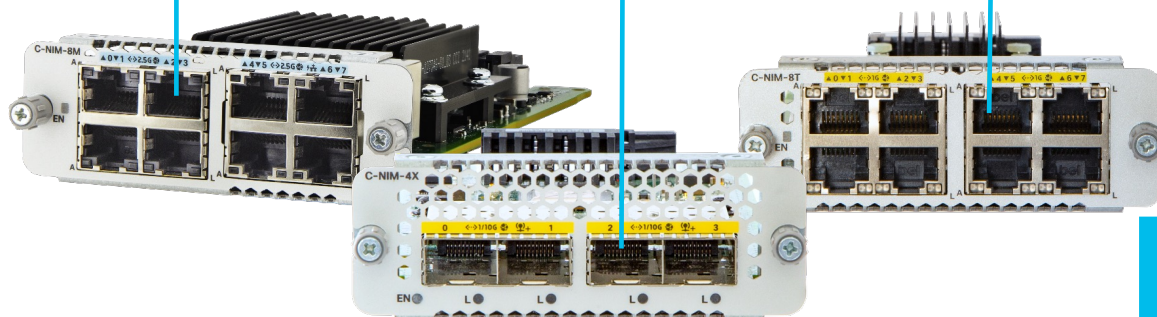
- 8x 2.5Gbps mGig, RJ45
- 4x UPoE support

C-NIM-4X**

- 4x 1/10Gbps, SFP+

C-NIM-8T

- 8x 1Gbps, RJ45



*C-NIM-8M- Targeted 2nd Half of CY23

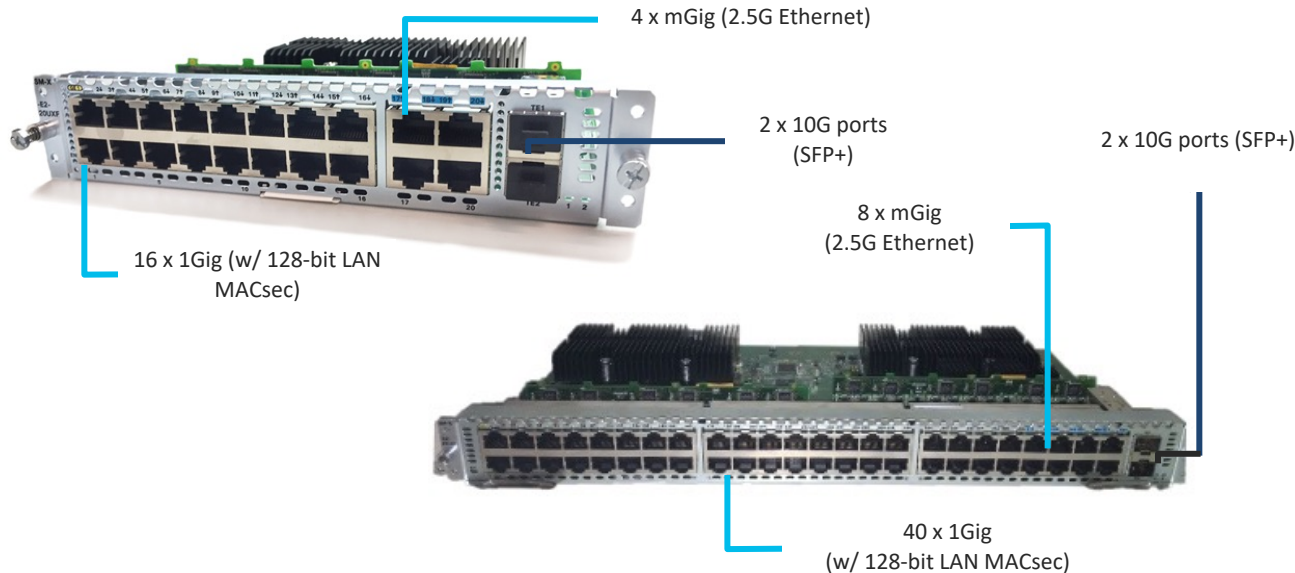
**C-NIM-4X- Only on C8300

10G/2.5G/1G WAN/LAN Modules

- 1 Flexible L2 and L3 capability
- 2 Comprehensive WAN MACsec 256-bit
- 3 L2 and L3 support on all modules
- 4 90W PoE enabled WAN port on C-NIM-8M
- 5 SD-WAN support from Day-1

Layer 2 feature parity with NIM-ES2 modules
Layer 3 feature parity with onboard WAN ports

C8300 SM Based Layer 2 Switch Module



L2 Switch Module

- 1 Layer 2 Features compatible with Cat switch
- 2 LAN MACsec for switch to host communication
- 3 2.5 mGig to connect to future Access Point/ 5G
- 4 Support for SD-WAN features
- 5 UPoE Capable



Port Speed and Diversity
(1G, 2.5G mGig, 10G Fiber)



LAN MACsec
(128-bit/ 256-bit***)

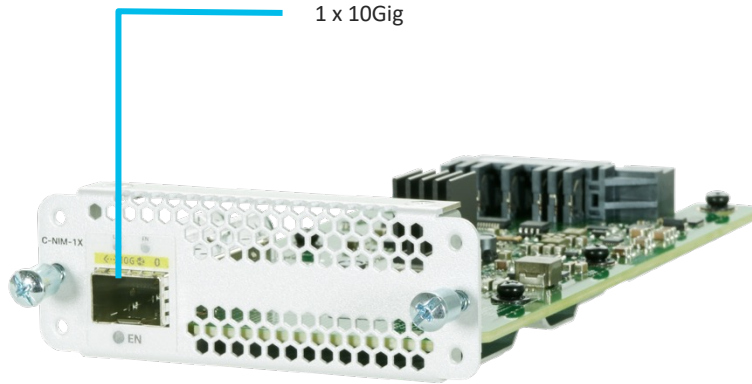


Power Over Ethernet
(PoE/ PoE+/ UPOE)



Cisco UADP ASIC
(UADP 2.0)

C8300 NIM Based Layer 3 10G WAN Module



L3 10G WAN Module

- 1 Layer 3 Features compatible w/ Router FPGE
- 2 WAN MACsec for Secure WAN and Metro Ethernet links
- 3 SD-WAN support



Port Speed and Diversity
(10G Fiber)



WAN MACsec
(256-bit)

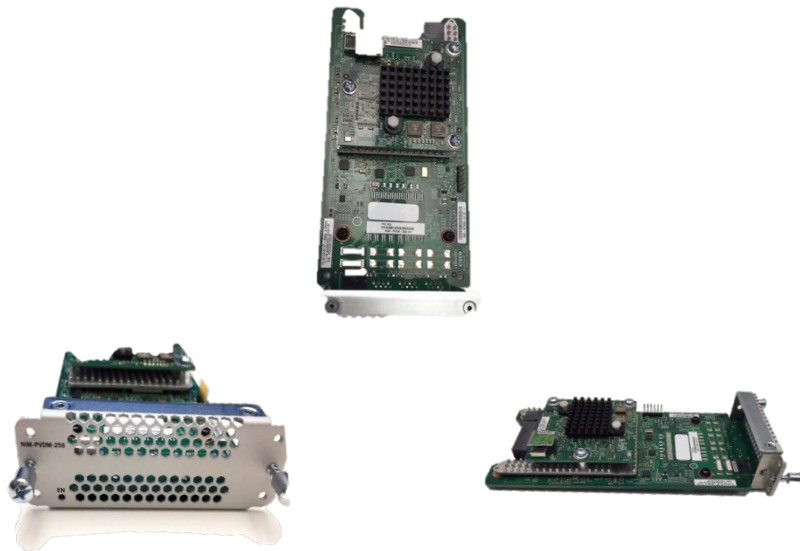


Higher Performance



SD Managed

C8300 NIM Based DSP Voice Modules



Low-medium complexity deployments

4 different NIMs to support 32,64,128,256 voice channels

IP based voice services like transcoding and conferencing

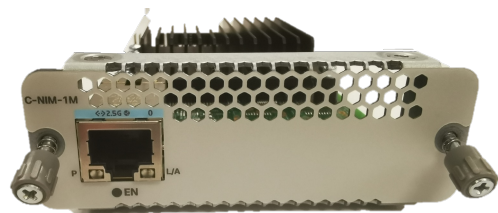
Can be paired with service modules for DSP farm capability

Supports wide range of codecs for different complexities

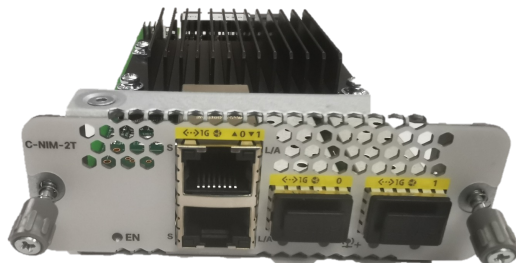
Compatible with ISR4461 and Next Generation Platforms

Optimized for rich-media voice applications

C8300 NIM Based Layer 3 1Gig and MGig WAN Module



C-NIM-1M
1 x 2.5G Copper



C-NIM-2T
2 x 1G Copper or SFP

L3 1G/2.5G WAN Module

- 1 Layer 3 Features compatible w/ Router FPGE
- 2 WAN MACsec for Secure WAN and Metro Ethernet links on C-NIM-2T
- 3 SD-WAN support
- 4 90W PoE enabled WAN port on C-NIM-1M



Port Speed and Diversity
(1G/2.5G Copper or 1G Fiber)



WAN MACsec
(128/256-bit)

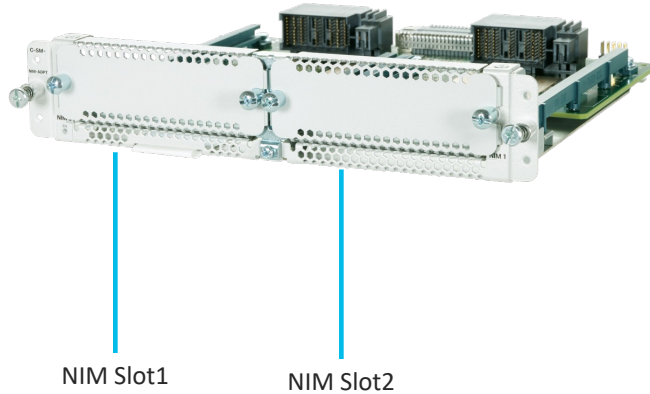


Higher Performance



SD Managed

C8300 SM Based Carrier Card



Next-Gen SM-NIM Carrier card

- 1 Enables 2 NIM modules per Card
- 2 Support Online removal and Insertion
- 3 Dual 10G backplane connectivity to CPU
- 4 SD-WAN support from Day-1

UCS-E1100D-M6



UCS-E1100D-M6

Key Specs

Intel D-1749-NT
3.0 Ghz, 10 cores



4 NVMe/SATA SSD
disk (Upto 4*4TB)

4 DRAM
(Up to 4*32GB)



4*10G interface

1 USB-C



Retail

- File & print services
- Point of Sale, Billing – Retailix (NCR), Micros
- Database Server – Oracle, MySQL

Finance

- Security Apps: Firewalls
- Credit card authorization apps
- Home grown or customized Banking applications - Teller applications

Health Care - Clinics

- Digital Image Storage
- Patient Data Storage
- Video Surveillance Manager



C8300-2N2S-6T



C8300-2N2S-4T2X

Next-Gen Higher performance UCS-E Blade Servers

- 1 2 times increased CPU than M3 servers
- 2 NVMe SSD disks and DDR4 DRAM (3200 Mhz)
- 3 2x 10G backplane and 2x 10G front panel interfaces
- 4 Intersight capable hardware and AppQoE ready
- 5 Intel VROC RAID (RAID-0, RAID-1 & RAID-5) with NVMe
- 6 Certified with ESXi 7.0 and RHEL 8.3
- 7 SD-WAN support from Day-1

5G Sub-6 GHz module

CAT 20 LTE

Dual Micro SIM

3300↓/400↑ Mbps

Supported on all
ISR1K, C8200, C8300
platforms with a PIM
slot.

SD-WAN support

PID	Modem	Region
P-5GS6-GL	Telit FN980	Global Single PID

* Support for LTE band dedicated for use by emergency services

SIM usage indicator

5G / LTE antennas

- Antennas 1 and 3



GPS antenna

- Active GPS antenna

5G / LTE antennas

- Antennas 2 and 0

CAT18 PIM module

CAT18 LTE

Dual Micro SIM

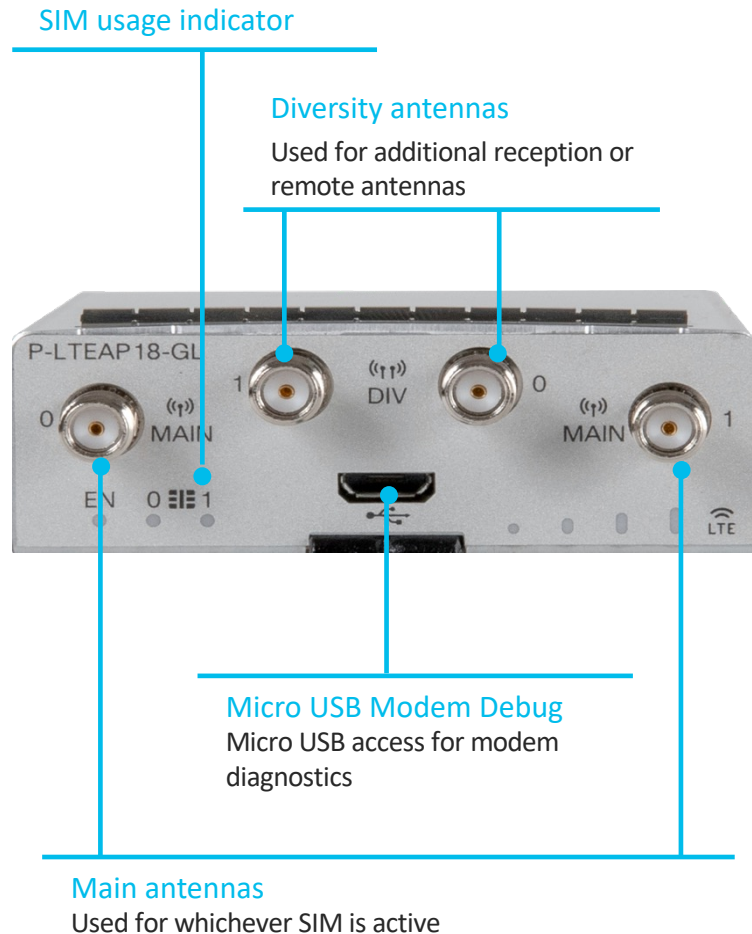
1200/200 Mbps

Supported on
ISR1120 and
ISR1160 & C8300

SD-WAN support

PID	Modem	Region	LTE Bands
PLTEAP 18-GL	Telit Wireless	Global	1, 2, 3, 4, 5, 7, 8, 12, 13, 14*, 17, 18, 19, 20, 25, 26, 28, 29, 30, 32, 38, 39, 40, 41, 42, 43, 46, 48, 66, 71

*Support for LTE band dedicated for use by emergency services



Cisco Catalyst Cellular Gateway

Flexibility & Simplicity for Cat18 LTE & 5G Wireless WAN

Giga-Bit Class Cellular

4G/CAT18 (October 2020)
5G sub-6 coming (EFT started)
Dual SIM
2.5Gbps mGig port

SD-WAN Ready

Automation, Assurance
API Support

Secure by Design

Trustworthy Systems
Failure Recovery

Operational Resiliency

Out-of-band management
IP Passthrough using Single PDN



High-speed Failover or Primary
Cellular WAN

Precision Placement for Better
Coverage

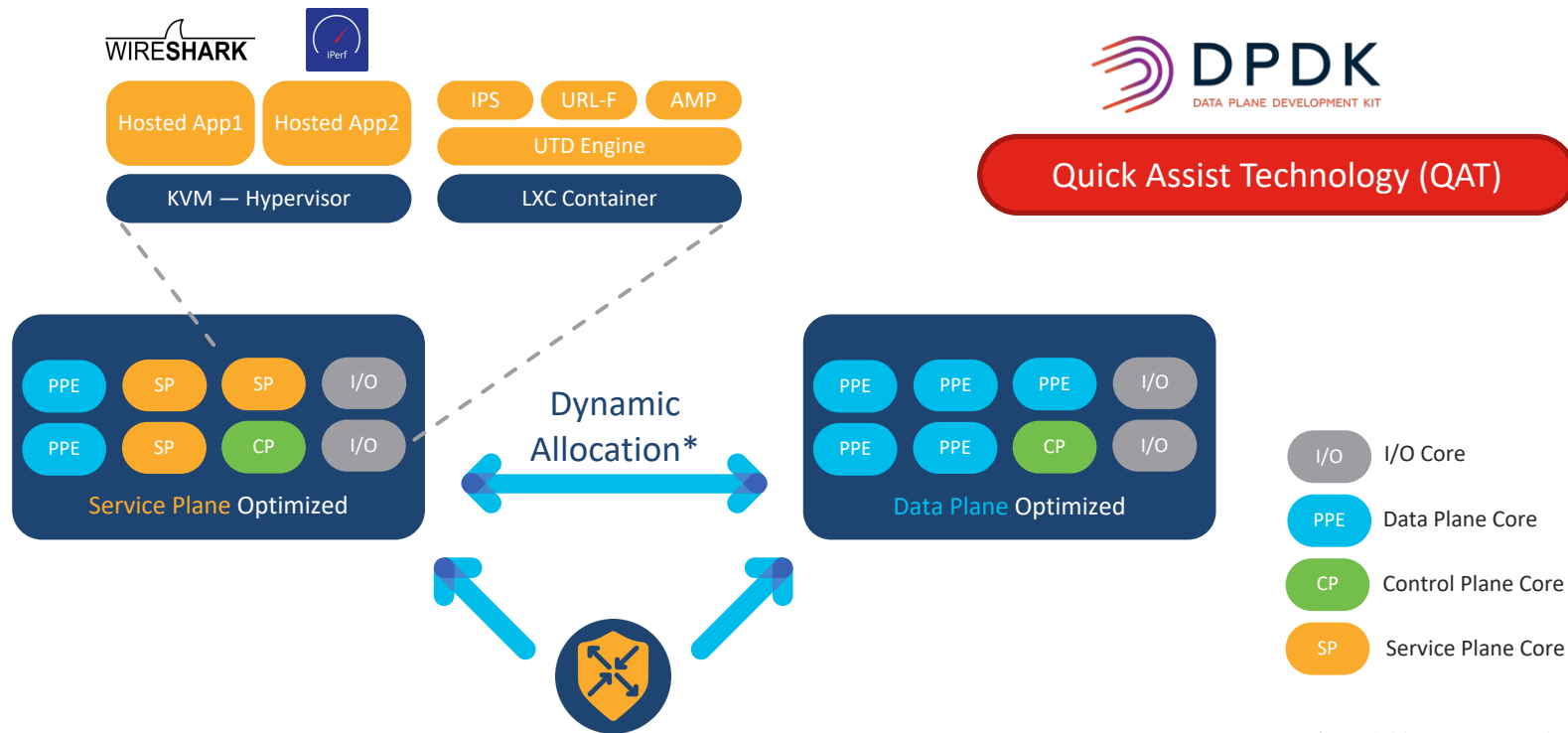
PoE Powered or External
Power Source

Platform Architecture



X86 Multi-core CPU

Catalyst 8000 Edge Platforms Family — SoC



* Available in XE 17.4 release

Dynamic Core allocation — meet throughput and services demand

Catalyst 8300 Series Edge Platforms

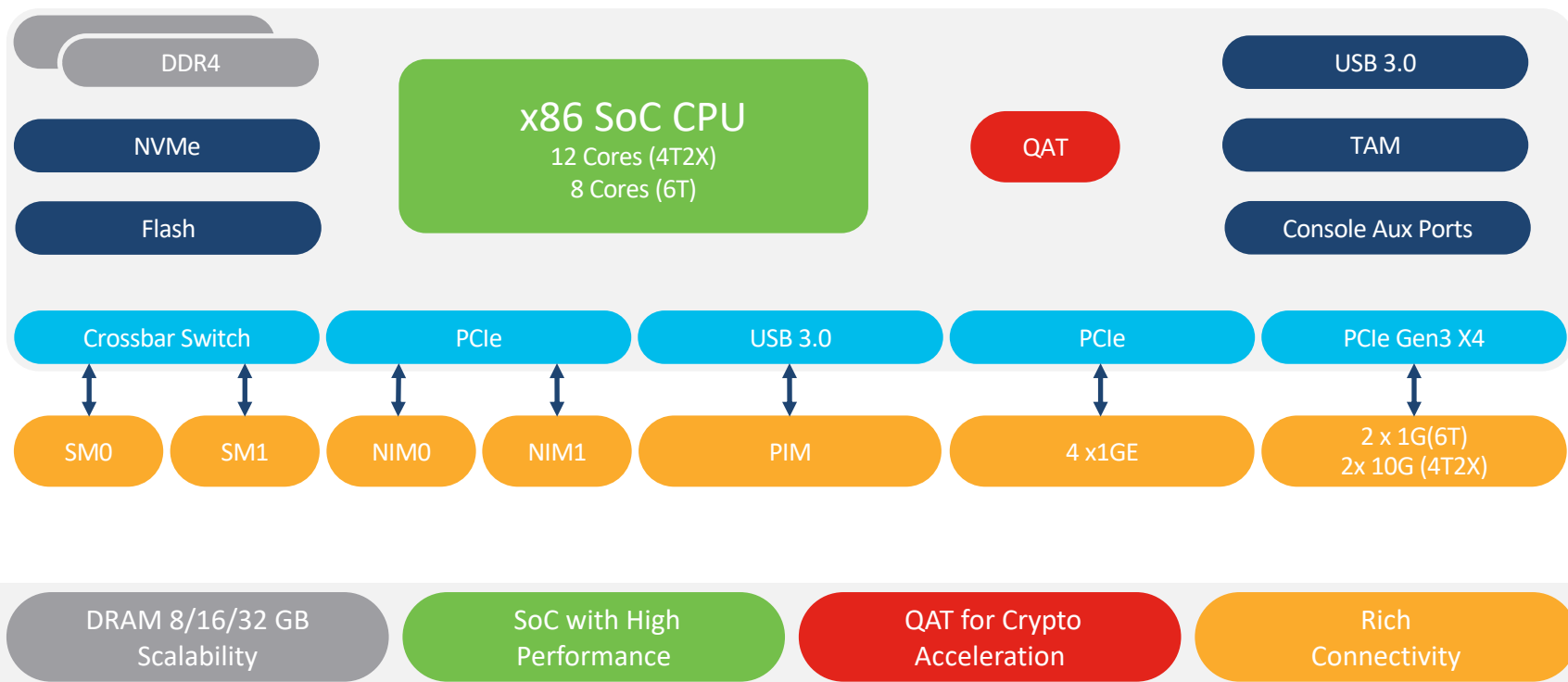
Default optimized Core allocation XE 17.3

Default Optimized Core Allocations*

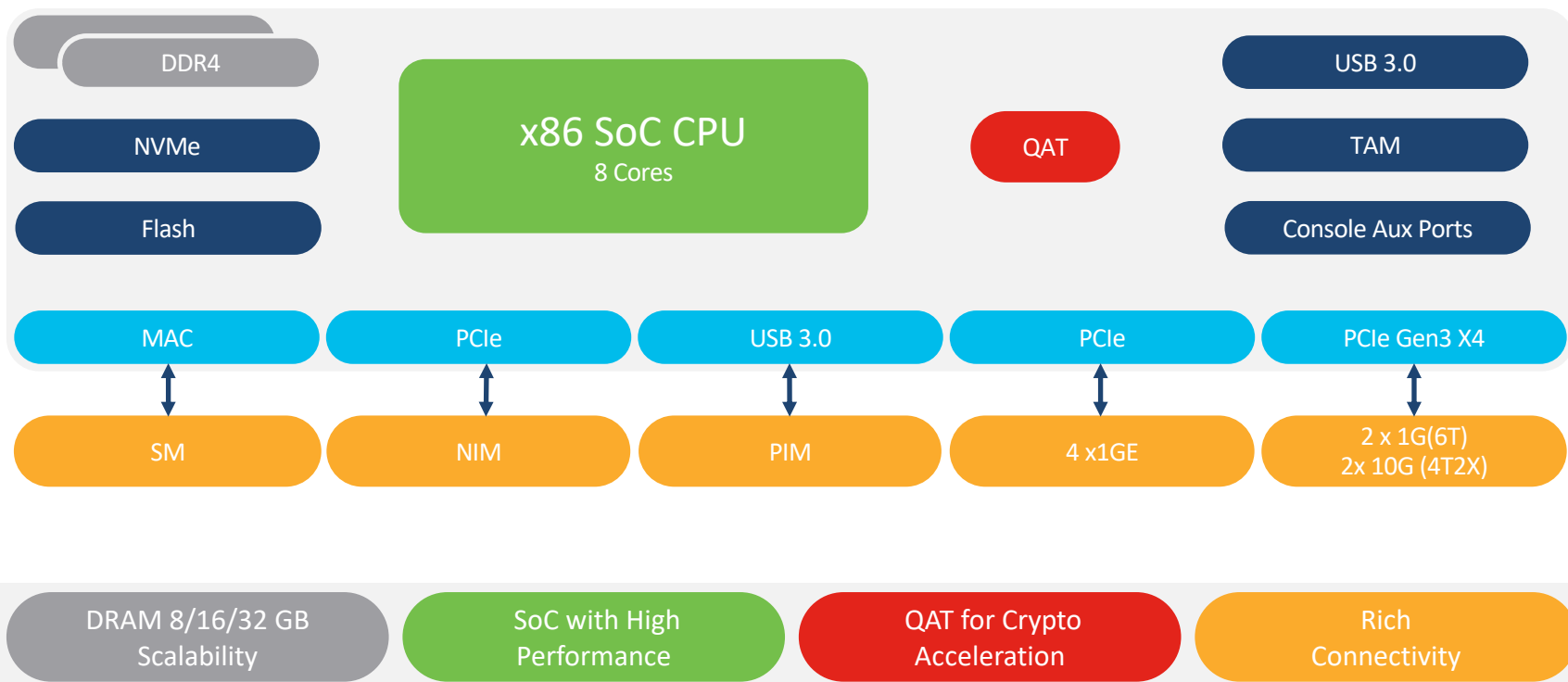


* Dynamic Core allocation available in XE 17.4 release

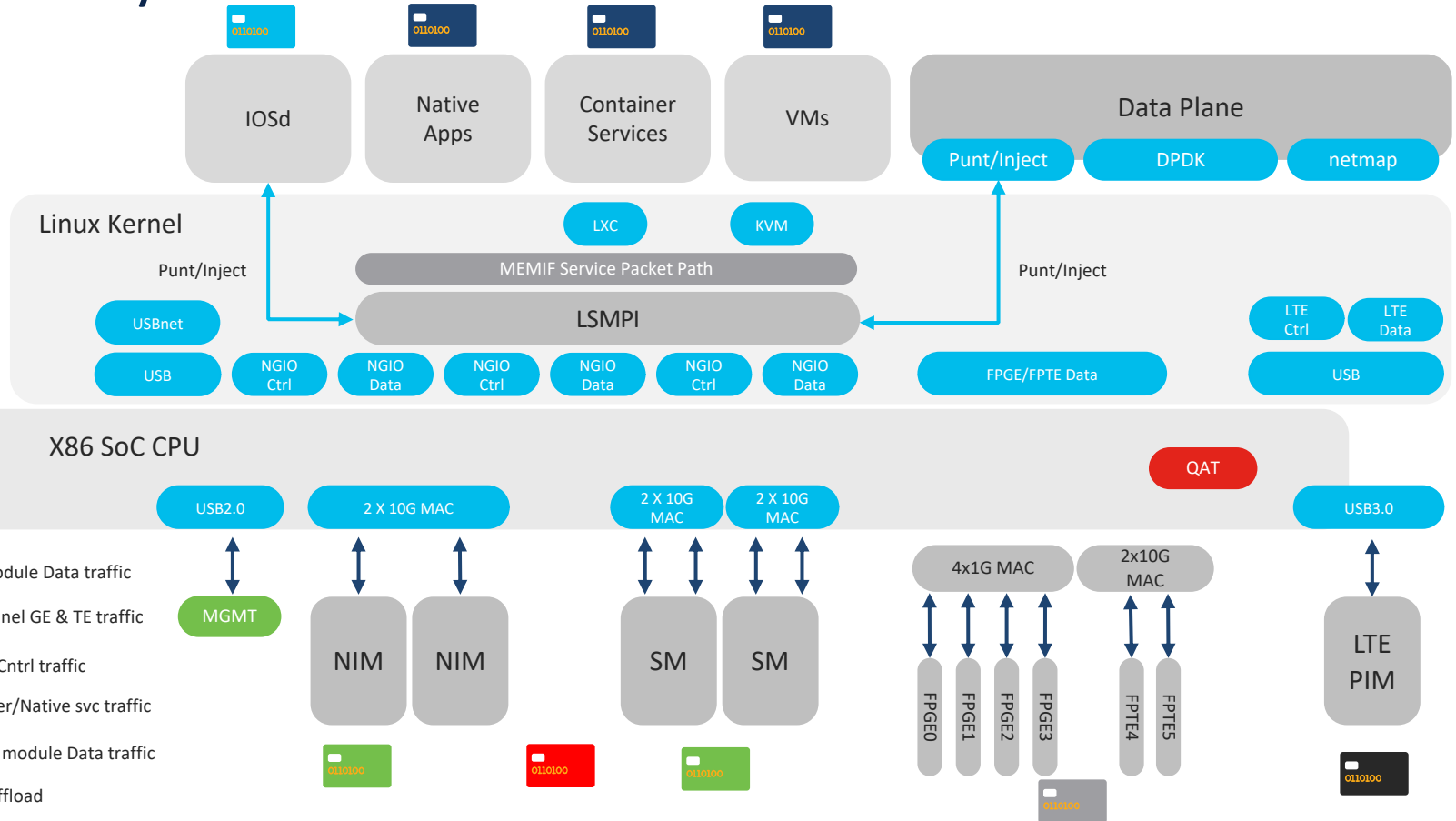
C8300-2N2S Block Diagram



C8300-1N1S Block Diagram



Catalyst 8300 and Life of a Packet

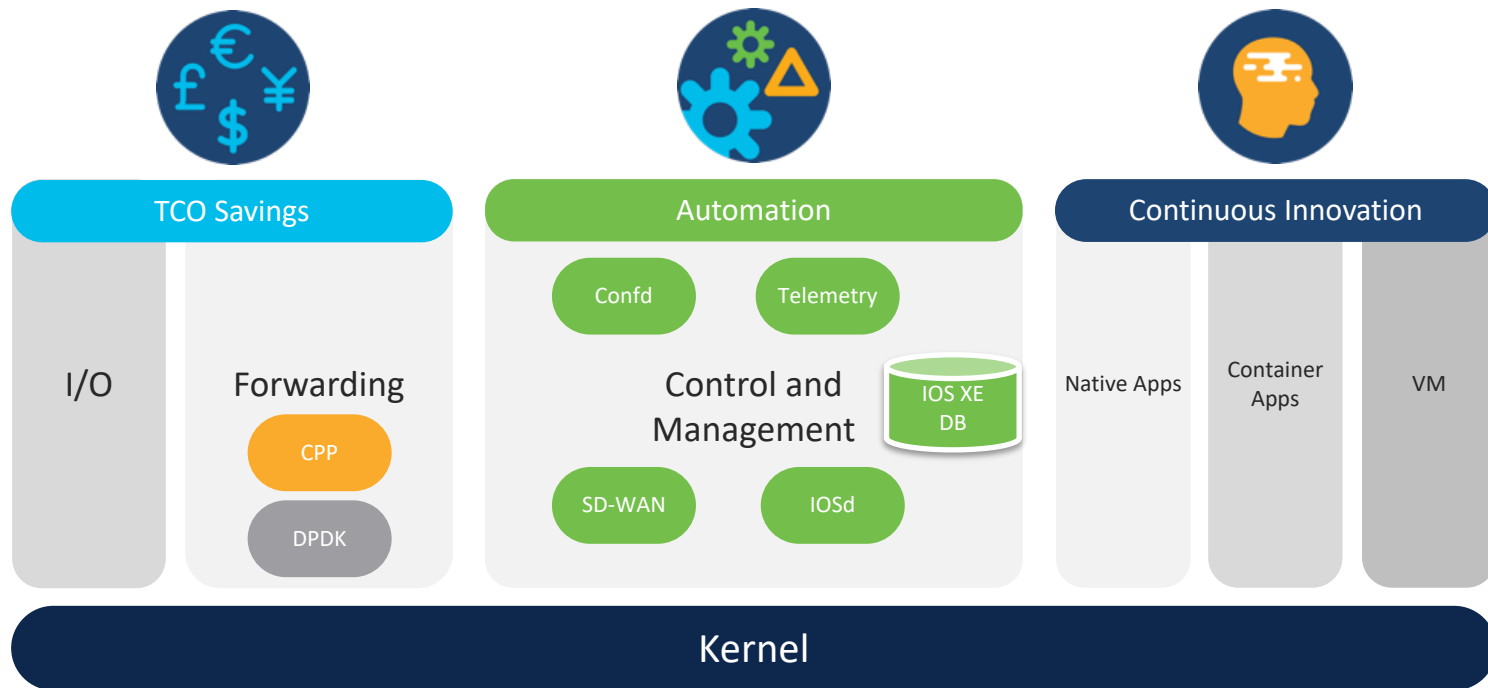


IOS XE Software Architecture



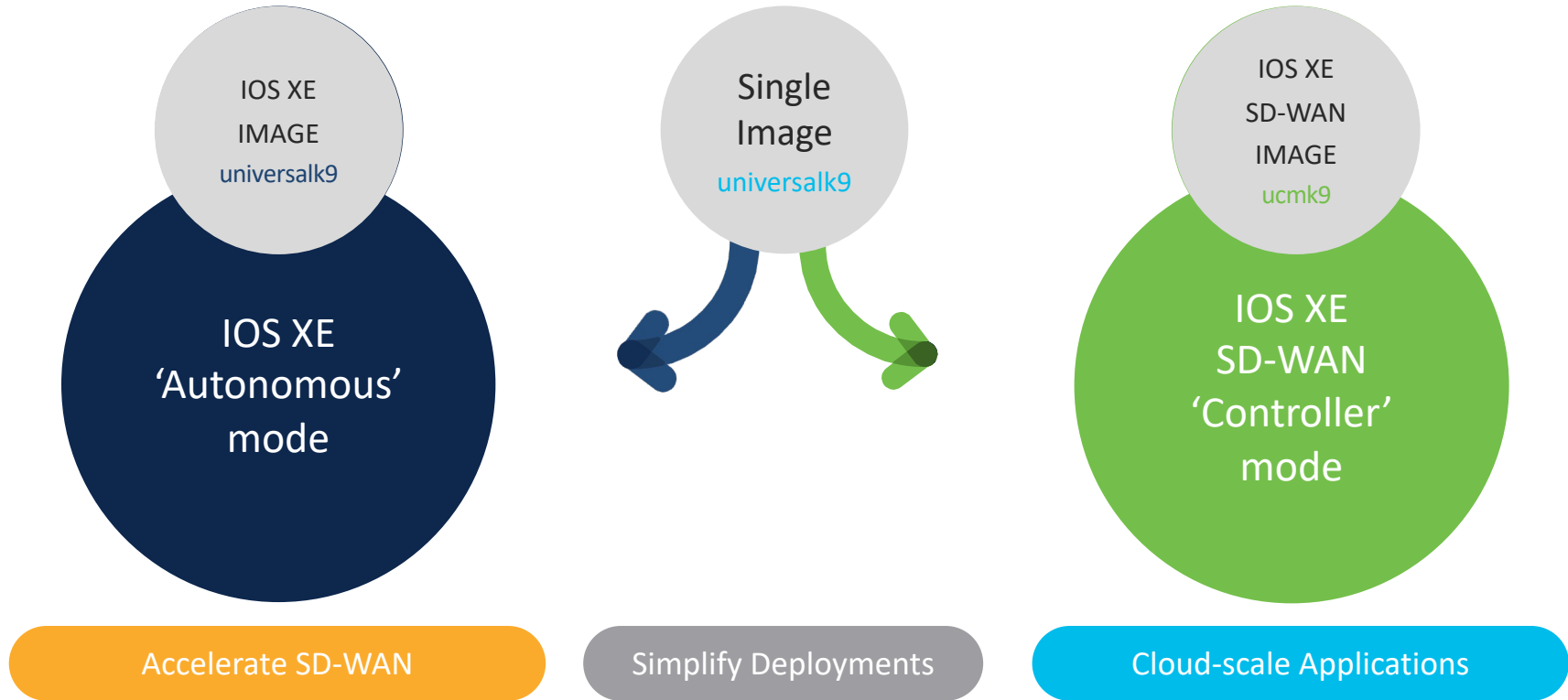
Open and Extensible IOS
XE

Open IOS XE — A Modern Operating System

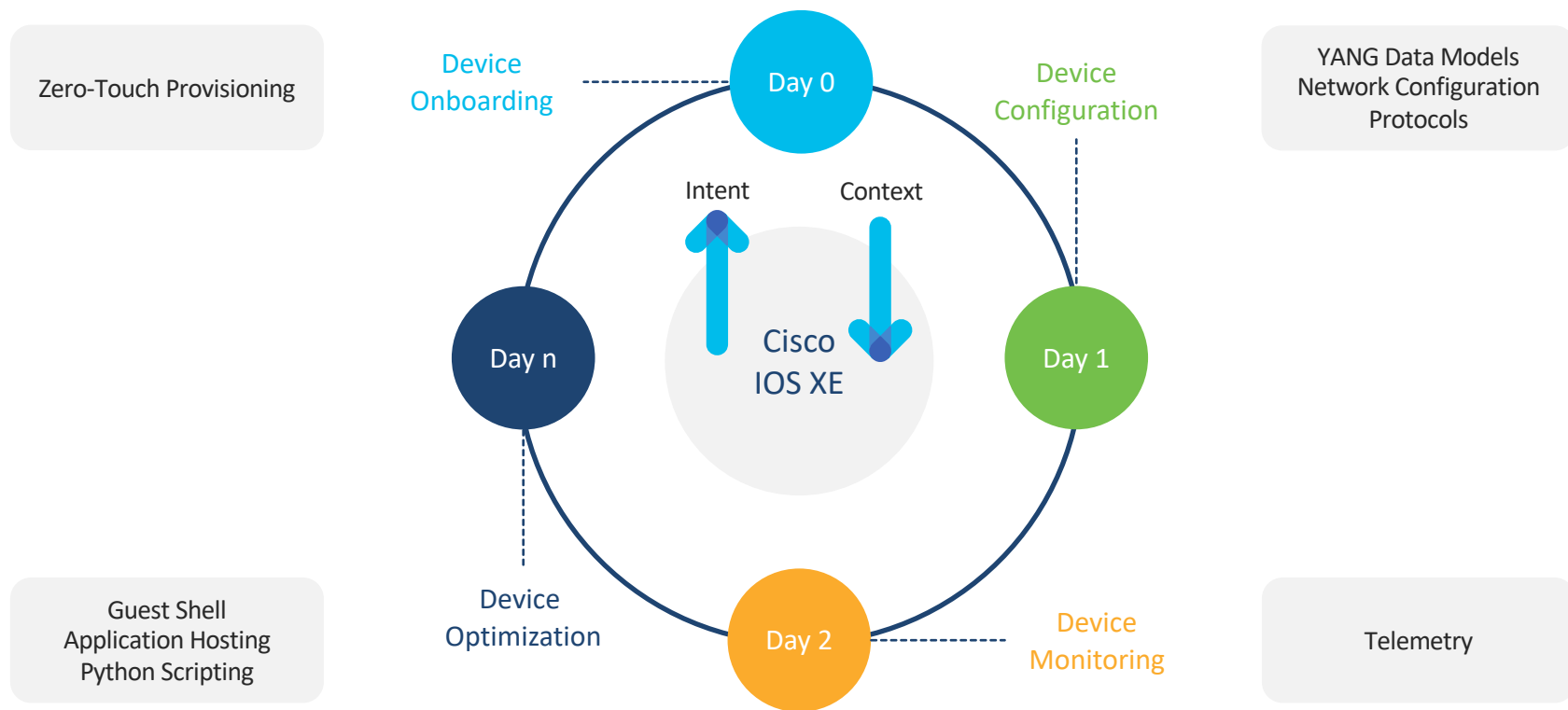


Open, API, Model Driven & Secure Operating Systems

Easy Operations with Single Image



Programmability Device Lifecycle Phases



Cisco C8300 Series Edge Platforms

Features & Technology

- * 5G support in Roadmap
- ** SD-WAN support in Roadmap
- *** SD-WAN support only T1/E1/PRI
- **** SD-WAN support only SIP SRST



Adv Security

Umbrella	Trustworthy
AMP	Framework
Threatgrid	ZBFW
Trustsec	Crypto VPN
uRPF	Snort IPS/IDS
SSHv2	CoPP



Collaboration

CUBE**	DSP Farm
Digital voice***	SRST****
Analog Voice	



Routing & Multicast

SD-WAN routing (OMP)
IPv4/v6 routing protocols,
Multicast routing
PIM-SM/MLD
Policy-based routing (PBR)
First-Hop redundancy



Wireless WAN

4G/LTE
5G*
Cellular Gateway
GPS



Integrated Switching

NIM/SM-X Modules
Higher port-density
Higher port speed
Integrated Layer 2 security



Application Services

PfR	NBARv2
SD-Access	AppQoE
QoS	vAnalytics
HQoS	

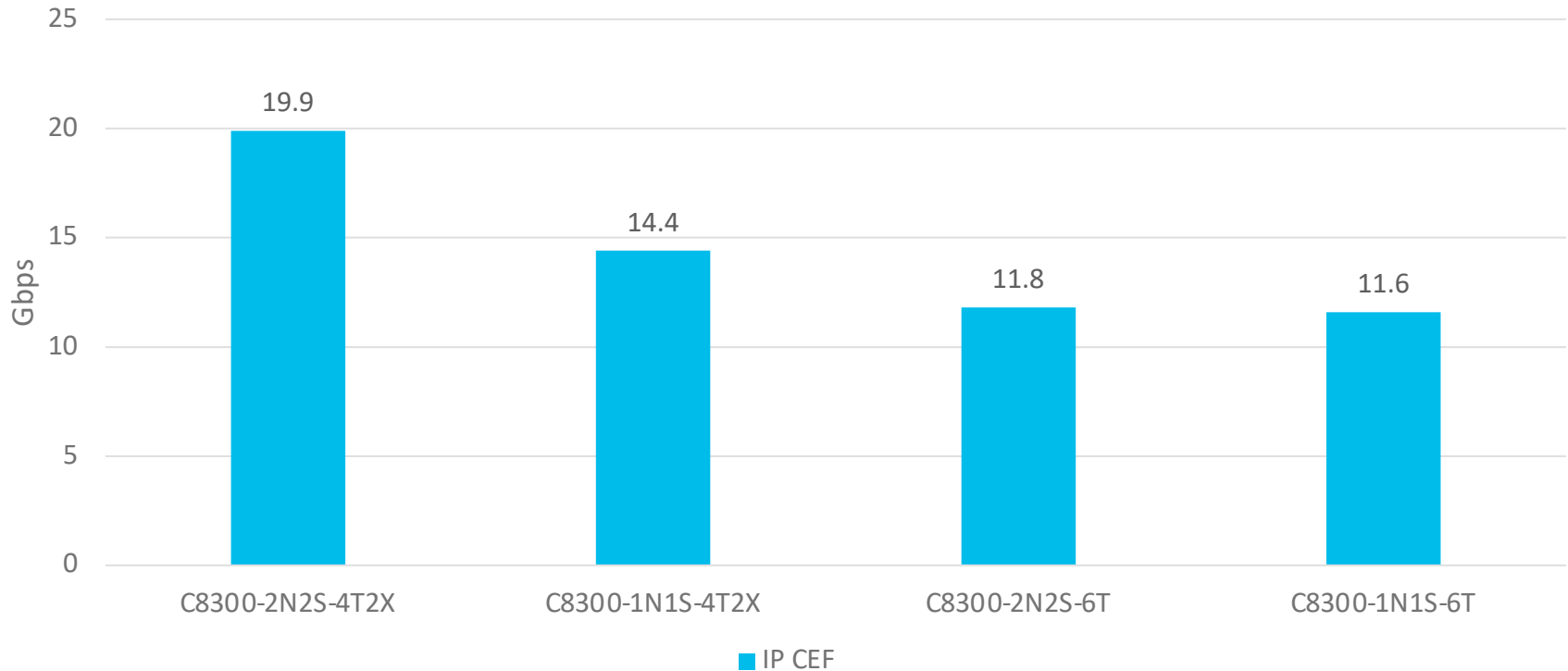
vWAAS not supported as service container. Install UCS-E module to run vWAAS

Service richness on C8300, Feature parity with ISR4400

49

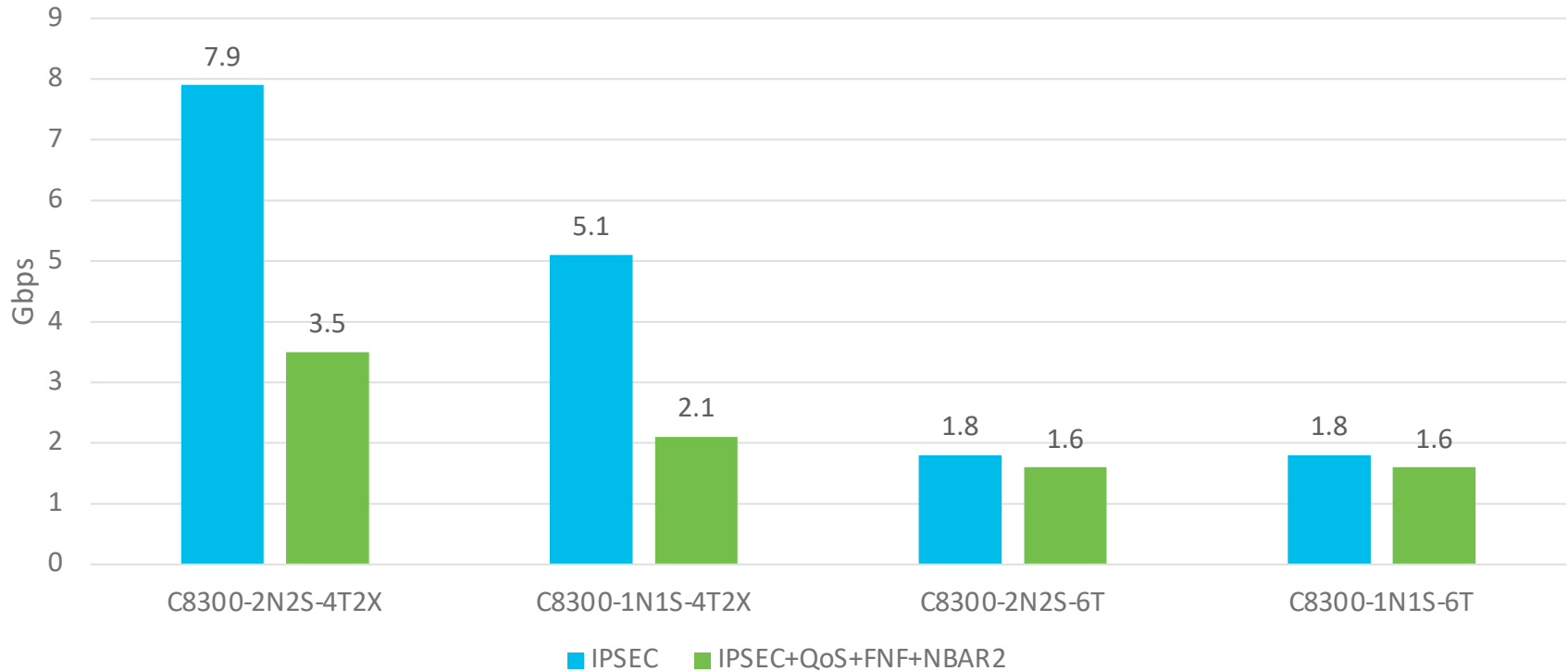
Performance

Catalyst 8300 Baseline Throughput



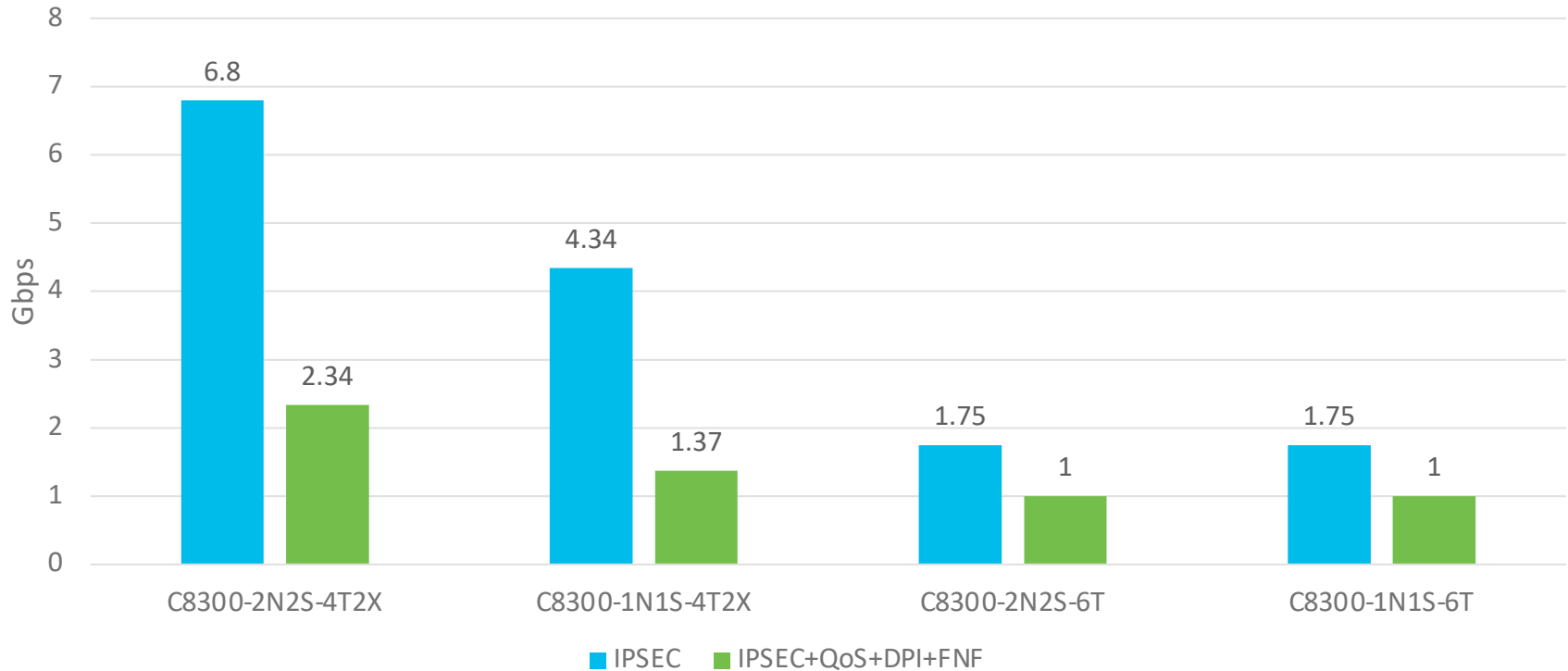
Throughput numbers are based on IMIX packets

Catalyst 8300 IOS XE IPsec Profile Throughput



Throughput numbers are based on IMIX packets

Catalyst 8300 SD-WAN Profile Throughput



Throughput numbers are based on IMIX packets

Catalyst 8300 Series Platforms Scale XE 17.3

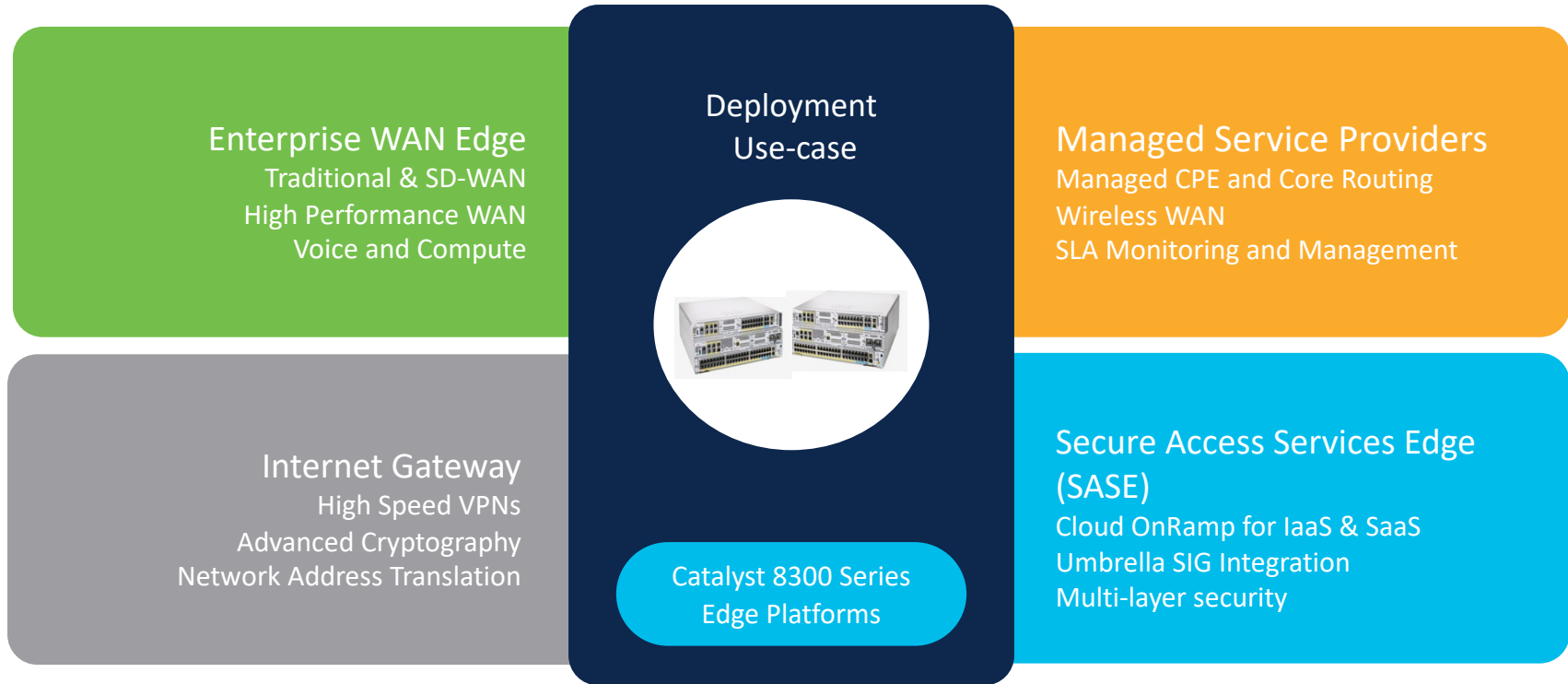
Features	8G Default DRAM All Platforms	16G DRAM All Platforms	32G DRAM All Platforms
Number of IPv4 routes (BGP)	1.6M	4M	4M
Number of IPv6 routes (BGP)	1.5M	4M	4M
Number of IPv4 VRF Routes (MPLS VPN) - per prefix label	700K	2M	2M
Number of IPv4 VRF Routes (MPLS VPN) - per vrf label	700K	2M	2M
Number of IPv6 VRF Routes (MPLS VPN) - per prefix label	700K	2M	2M
Number of IPv6 VRF Routes (MPLS VPN) - per vrf label	700K	2M	2M
Max NAT44 static entries	10K	32K	32K
Max NAT44 static networks	2K	10K	10K
Max number of Firewall sessions	512K	512K	512K
Max number of NAT+FW sessions	340K	340K	340K
IPv4 ACLs per System	4K	4K	4K
IPv6 ACLs per System	4K	4K	4K

Catalyst 8300 Series Platforms Scale XE 17.3

Features	8G Default DRAM All Platforms	16G DRAM All Platforms	32G DRAM All Platforms
DMVPN / BGP Adjacencies, IKEv1, IPv4	3K	6K	6K
DMVPN / BGP Adjacencies, IKEv2, IPv4	3K	6K	6K
DMVPN / EIGRP Adjacencies, IKEv1, IPv4	3K	5K	5K
DMVPN / EIGRP Adjacencies, IKEv2, IPv4	3K	5K	5K
Number of IPsec tunnels (FlexVPN, AAA/CERT), IKEv2, IPv4	4K	5K	5K
Number of IPsec tunnels (FlexVPN, AAA/PSK), IKEv2, IPv4	4K	5K	5K
Number of IPsec Tunnels (IPsec/GRE, S2S), IKEv2, IPv4	4K	4K	4K
Number of IPsec Tunnels (IPsec/GRE, S2S), IKEv2, IPv6	4K	4K	4K
Number of IPsec Tunnels (IPsec, S2S), IKEv1, IPv4	4K	6K	6K
Number of IPsec Tunnels (IPsec, S2S), IKEv2, IPv4	4K	6K	6K
Number of IPsec Tunnels (IPsec, S2S), IKEv2, IPv6	4K	6K	6K
Number of IPsec Tunnels (IPsec/sVTI, S2S), IKEv2, IPv4	4K	4K	4K

Solution and Use Cases

Catalyst 8300 Series Edge Platforms Use Cases



Purpose built edge platforms centered around cloud, services & SD-WAN

Catalyst 8300 Series Edge Platforms

One platform, many solutions

SD-WAN & SASE

Cloud OnRamp for SaaS
Cloud OnRamp for IaaS
Umbrella SIG
Multi-layer Security
UC SD-WAN

Internet Gateway

High Throughput Performance
High Scale NAT44, NAT64
10/1G Port Offering
Firewall DDoS protection

Secure WAN

Site-to-site
Remote Access VPN
GETVPN, DMVPN, FlexVPN
Zone Based Firewall
256-bit WAN MACsec
Encryption Traffic Analysis

Managed SP CPE

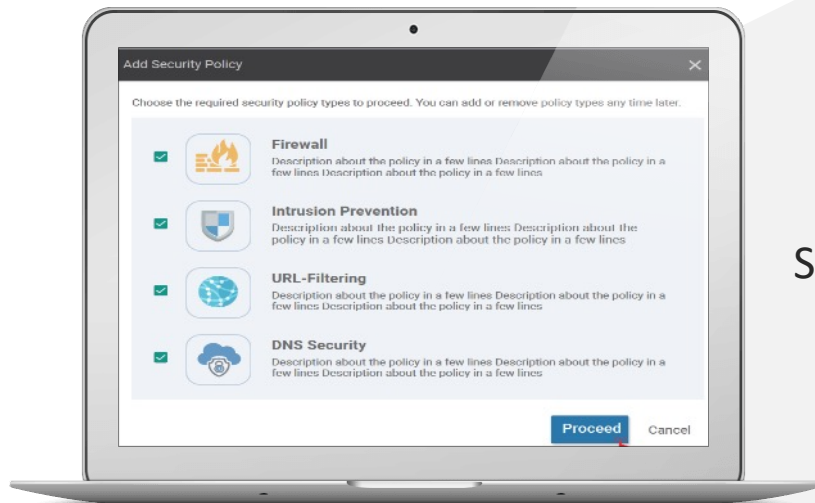
MPLS, Segment Routing
L2VPN, L3VPN
AVC, NBAR2, QoS/HQoS
MP-BGP

SD-Access

Control Plane node
Border node
Fabric edge node
SDA/SD-WAN Multi-domain

Inherits all IOS XE innovation from Day-1, ISR4K feature parity

SD-WAN Multi-layer Security



Cisco SD-WAN

Cisco
Security

Secure Internet Gateway
DNS Security/Cloud FW with Cisco Umbrella

SSL Proxy
Detect Threats in Encrypted Traffic

Enterprise Firewall
+1400 layer 7 apps classified

Intrusion Protection System
Most widely deployed IPS engine in the world

URL-filtering
Web reputation score using 82+ web categories

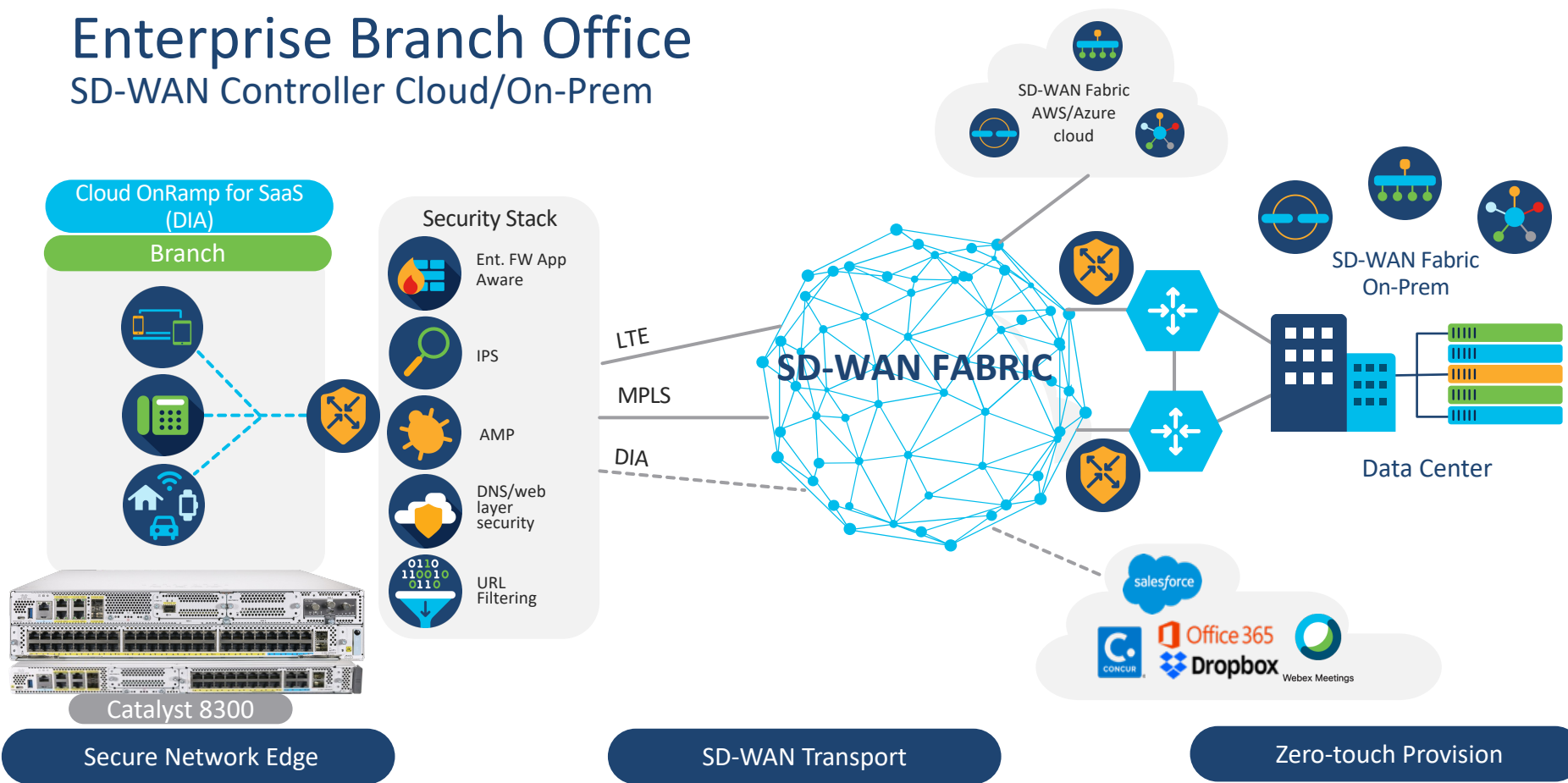
Adv. Malware Protection
With File Reputation and Sandboxing (TG)



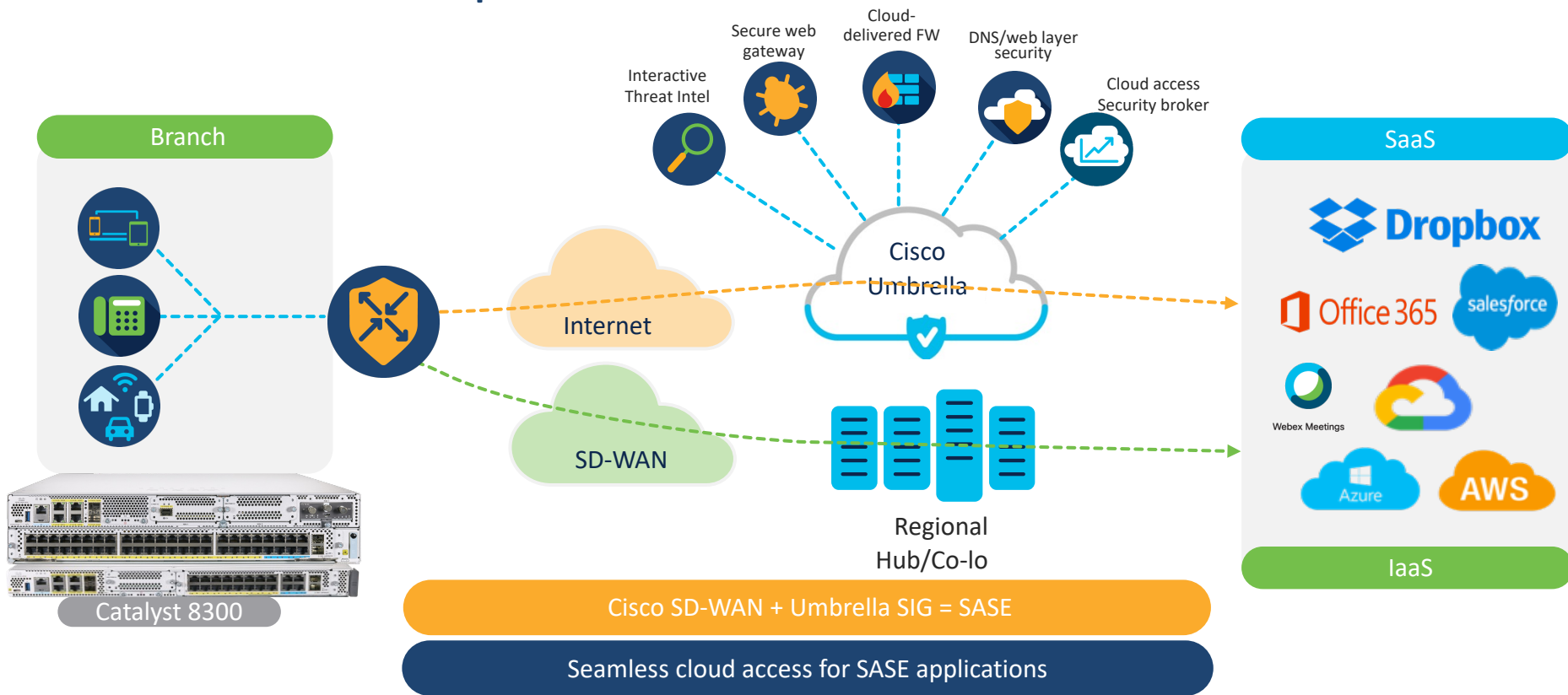
Hours instead of weeks and months

Enterprise Branch Office

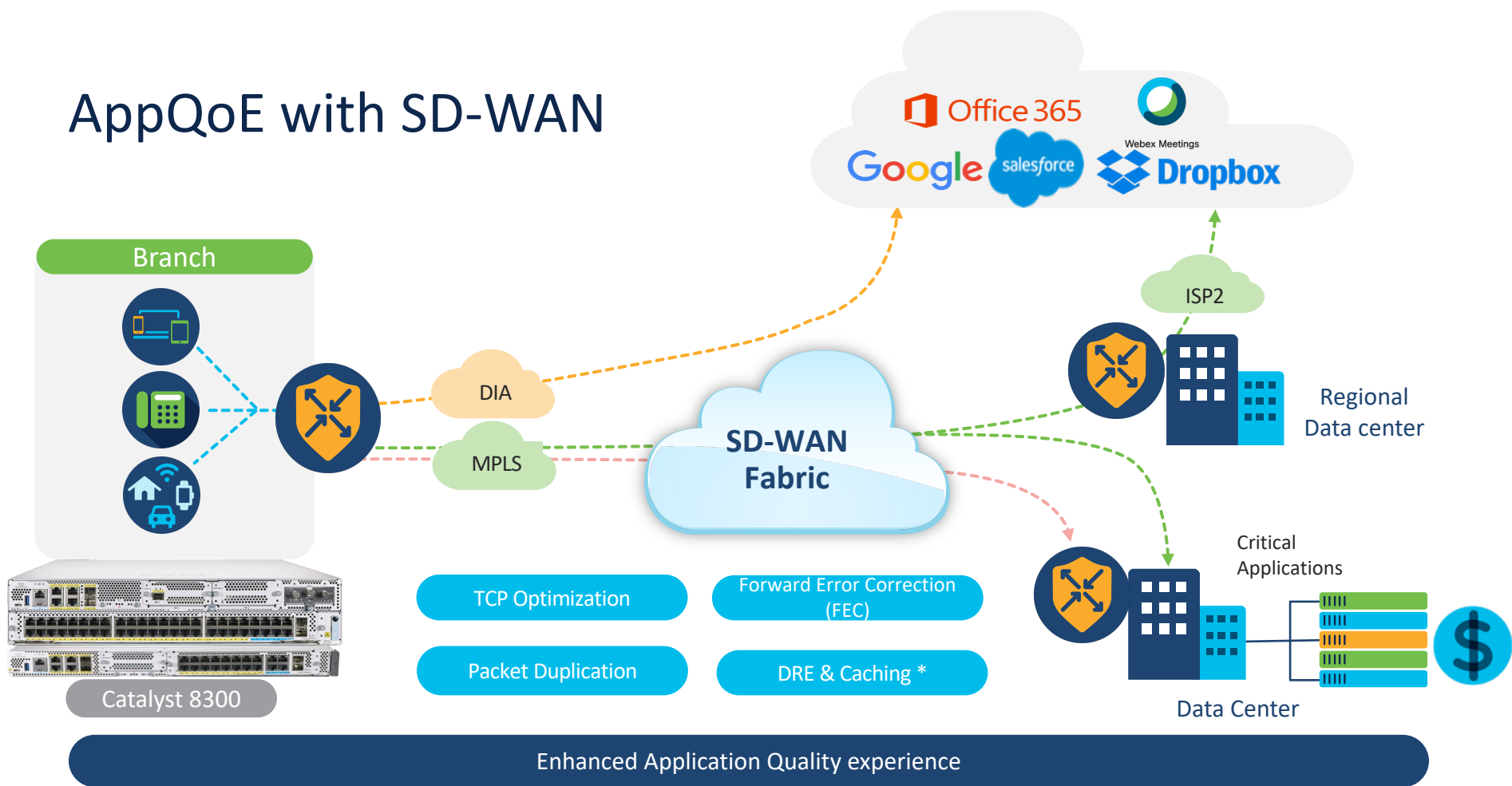
SD-WAN Controller Cloud/On-Prem



SASE Cloud Adoption with SD-WAN



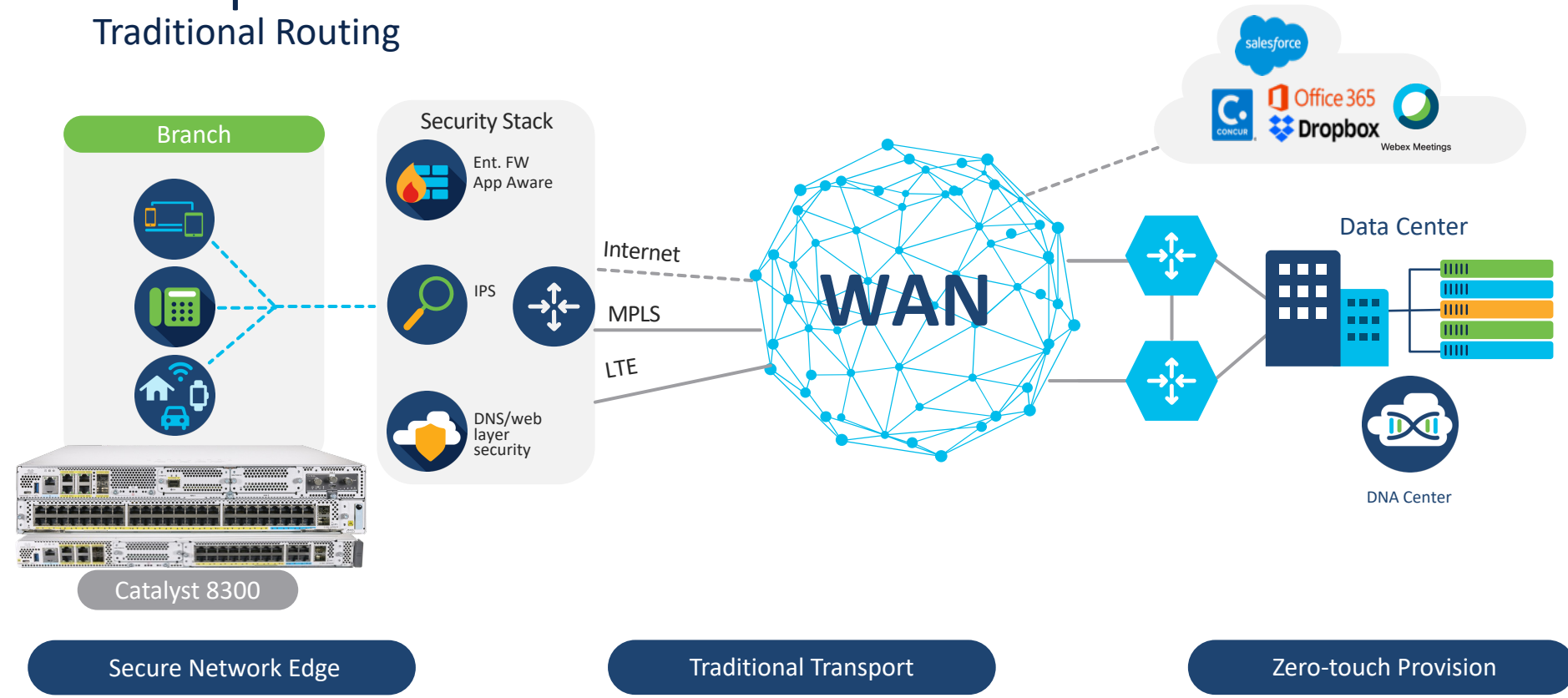
AppQoE with SD-WAN



* Roadmap

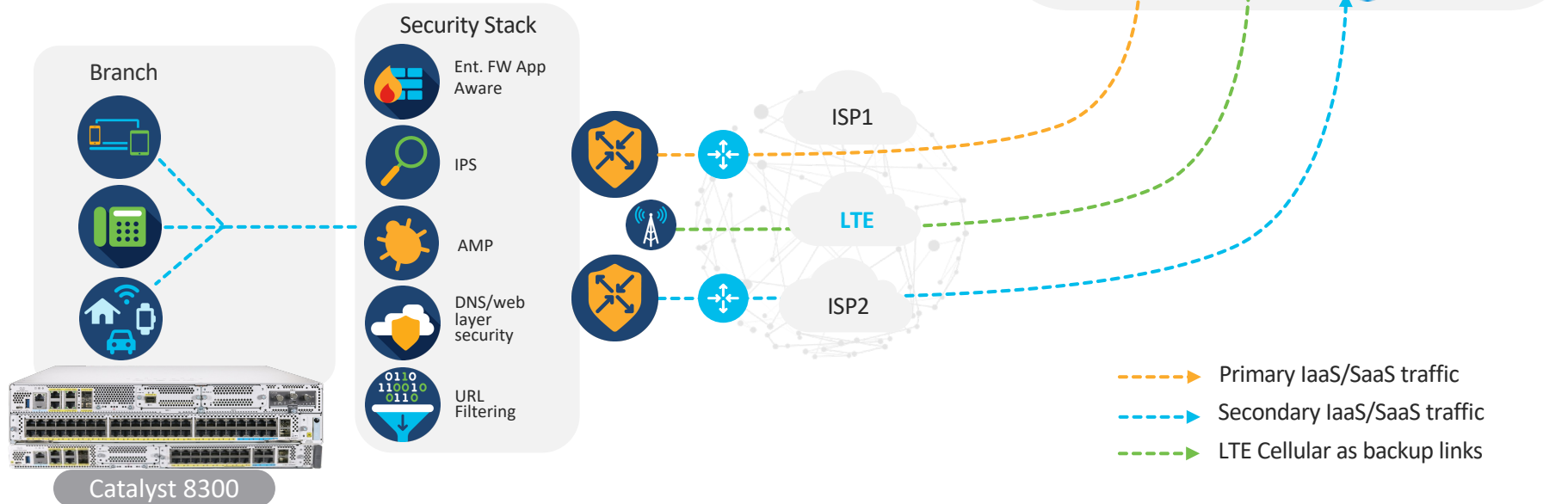
Enterprise Branch Office

Traditional Routing



Internet Gateway for DIA

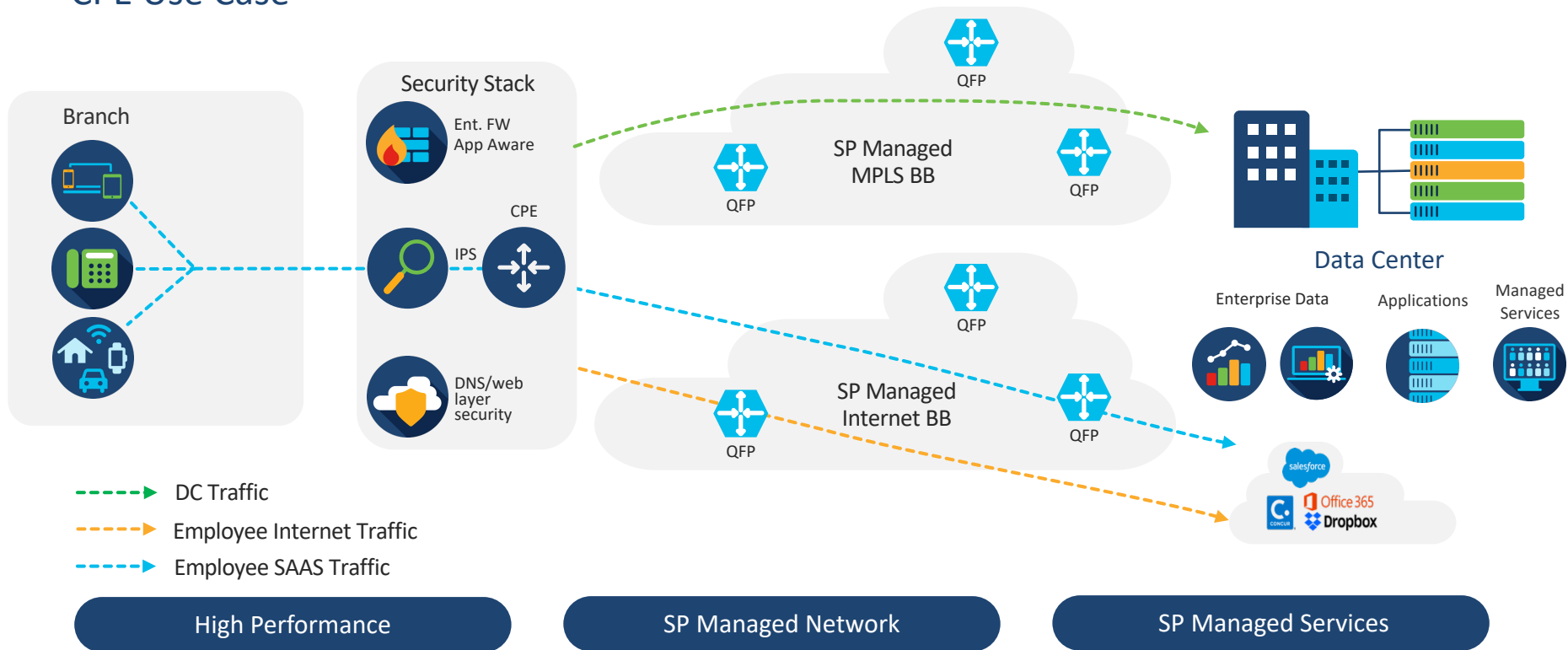
Direct Internet Access (DIA)



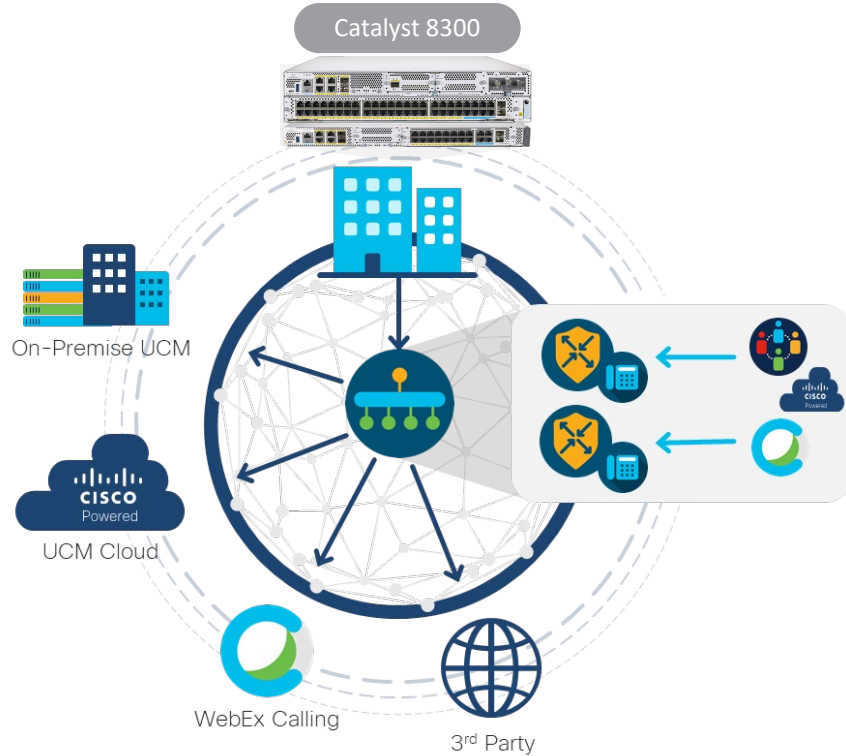
High speed internet access at the service edge

Managed Service Providers

CPE Use Case



Cisco SD-WAN Unified Communications, Voice Integration Benefits



Telephony Integration

Only vendor to natively integrate analog/digital IP directly into the CPE

Telephony survivability

Prevent internal and external phone outages using SRST enabling branch router to assume role of call control PBX.

Reduced OpEx and CapEx

Cisco SD-WAN now supports UC and SD-WAN within a single CPE

Middle-mile Optimization

Only vendor actively partnering with colocation and SDCI Partners for optimization with cloud applications (WebEx, UCM Cloud and more)

Reduced Complexity

vManage can orchestrate scalable/consistent UC configuration across the entire enterprise via templates

Closing Summary

Cisco Catalyst 8300 Series Edge Platform

Foundation for the Secure Cloud Scale SD-WAN branch



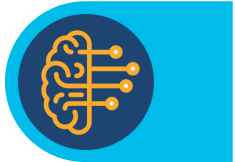
Ready for the Agile Cloud Journey

High Speed Cloud Access
Multi-Cloud Application Optimization
Compact, Powerful 1RU Platforms



Accelerated Multi-Layer Security

QAT chip for Crypto offload
SASE driven Feature Innovations
Full-stack On-premise security



5G Ready Edge Intelligence

Future proof for 5G high speed WAN
Multi-Domain Intent Based Networking



User Centric Design

Operational Ease for better Tracing
Passive UHF Radio Frequency ID
Easy Access Label Tray
Field Replaceable FAN Tray

10G, 1RU
SD-WAN Platform



Crypto Hardware
Acceleration



Up to 20Gbps
CEF Aggregate
Throughput



High WAN
port-density



High Performance
IPsec, MACsec



Highly Programmable



The bridge to possible



Turn this technical overview into a purchase-ready BOM

Send the exact model or BOM and your deployment requirements. Layer23-Switch can review compatibility, availability, and quote options.

- ✓ Exact model or Cisco PID and quantity
- ✓ Port count, media type, PoE budget, and uplink speed
- ✓ Redundancy, licensing, support, and accessory needs
- ✓ Ship-to country, target date, and lead-time constraints

REQUEST A BOM REVIEW

www.layer23-switch.com



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