Data sheet Cisco public



# Cisco Nexus 3232C Switch

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#### Product overview

The Cisco Nexus® 3232C Switch is a low latency, dense, high-performance, power-efficient, 100-Gbps switch designed for the data center. This compact, 1-Rack-Unit (1RU) model offers wire-rate Layer 2 and 3 switching on all ports with latency of 450ns. It is a member of the Cisco Nexus 3200 platform and runs the industry-leading Cisco® NX-OS Software operating system, providing customers with comprehensive features and functions that are widely deployed. The comprehensive programmability features help enable organizations to run today's applications while also preparing them for demanding and changing application needs such as big data, cloud, and virtualization. The Cisco Nexus 3232C supports both forward and reverse (port-side exhaust and port-side intake) airflow schemes with AC and DC power inputs.

The Cisco Nexus 3232C (Figure 1) is a Quad Small Form-Factor Pluggable (QSFP) switch with 32 QSFP28 ports. Each QSFP28 port can operate at 10, 25, 40, 50, and 100 Gbps, up to a maximum of 128 x 25-Gbps ports<sup>1</sup>.



Figure 1. Cisco Nexus 3232C Switch

#### Main benefits

The Cisco Nexus 3232C provides the following:

- Wire-rate Layer 2 and 3 switching on all ports<sup>2</sup>, with up to 6.4 Terabits per second (Tbps) and up to 3.3 billion packets per second (bpps)
- Robust programmability, with support for Cisco NX-API, Linux containers, XML and JavaScript Object Notation (JSON) APIs, the OpenStack plug-in, Python, and Puppet and Chef configuration and automation tools
- **High performance and scalability** with a four-core CPU, 8 GB of DRAM, and 16 Mb of dynamic buffer allocation, making the switch excellent for massively scalable data centers and big data applications
- Flexibility
  - The QSFP28 port can be configured to work as 4 x 25-Gbps ports, offering deployment flexibility, with up to a maximum of 128 x 25-Gbps ports.
  - Both fiber and copper cabling solutions are available for 10-, 25-, 40-, 50-, and 100-Gbps connectivity, including Active Optical Cable (AOC) and Direct-Attached Cable (DAC).

<sup>&</sup>lt;sup>1</sup> 50-Gbps break-out switch coming soon with software release

<sup>&</sup>lt;sup>2</sup> Wire rate on all ports for packets greater than 200 bytes

#### · High availability

- Virtual PortChannel (vPC) technology provides Layer 2 multipathing through the elimination of Spanning Tree Protocol. It also enables fully utilized bisectional bandwidth and simplified Layer 2 logical topologies without the need to change the existing management and deployment models.
- The 64-way equal-cost multipath (ECMP) routing enables the use of Layer 3 fat-tree designs. This
  feature allows organizations to prevent network bottlenecks, increase resiliency, and add capacity
  with little network disruption.
- Advanced reboot capabilities include hot and cold patching and fast reboot capabilities.
- The switch uses hot-swappable Power-Supply Units (PSUs) and fans.

#### Purpose-built NX-OS operating system with comprehensive, proven innovations

- Power-On Auto Provisioning (POAP) enables touchless bootup and configuration of the switch, drastically reducing provisioning time.
- Cisco Embedded Event Manager (EEM) and Python scripting enable automation and remote operations in the data center.
- Advanced buffer monitoring reports real-time buffer utilization per port and per queue, which allows organizations to monitor traffic bursts and application traffic patterns.
- Ethanalyzer is a built-in packet analyzer for monitoring and troubleshooting control-plane traffic and is based on the popular Wireshark open-source network protocol analyzer.
- Complete Layer 3 unicast and multicast routing protocol suites are supported, including Border Gateway Protocol (BGP), Open Shortest Path First (OSPF), Enhanced Interior Gateway Routing Protocol (EIGRP), Routing Information Protocol Version 2 (RIPv2), Protocol Independent Multicast Sparse Mode (PIM-SM), Source-Specific Multicast (SSM), and Multicast Source Discovery Protocol (MSDP).

## Configuration

The Cisco Nexus 3232C has the following configuration:

- 32 fixed 100 Gigabit Ethernet QSFP28 ports
- Locator LED
- Environment LED
- Status LED
- Dual redundant power supplies
- Redundant (3+1) fans
- Lane-selected LED
- One 10/100/1000-Mbps management port
- One RS-232 serial console port
- Two USB ports

### Transceiver and cabling options

The Cisco Nexus 3232C has 32 QSFP28 ports. QSFP28 technology allows a smooth transition from 40 to 100 Gigabit Ethernet infrastructure in data centers. Each of the Cisco Nexus 3232C Switch's QSFP28 ports can operate in either native 100 Gigabit Ethernet mode or 4 x 25 Gigabit Ethernet mode. This switch supports both fiber and copper cabling solutions for these two modes.

For low-cost cabling, copper-based 40-Gbps Twinax cables can be used, and for longer cable reaches, short-reach optical transceivers are excellent. Connectivity can be established from the QSFP28 ports to 10 Gigabit Ethernet switches or hosts using a splitter cable that has an Enhanced QSFP (QSFP+) transceiver on one end and four SFP+ transceivers on the other end. Similar capability can be achieved on the fiber solution by using QSFP+ SR4 transceivers on both ends and procuring third-party fiber splitter MPO-to-LC cables. Table 1 lists the transceiver types supported.

Table 1. Cisco Nexus 3232C QSFP28 transceiver support matrix

Part Number	Description
QSFP-100G-AOC (1m-30m)	QSFP 100-Gbps to QSFP 100-Gbps AOC: 1, 2, 3, 5, 7, 10, 15, 20, 25, and 30m
QSFP-100G-CU (1m-5m)	QSFP 100-Gbps to QSFP 100-Gbps copper DAC: 1, 2, 3, and 5m
QSFP-4SFP25G-CU (1m-5m)	QSFP 100-Gbps to 4 x SFP 25-Gbps passive copper breakout cable: 1, 2, 3, and 5m
QSFP-100G-SR4-S	100GBASE SR4 transceiver module with MPO-12 connector, multimode fiber up to 100m
QSFP-100G-LR4-S	100GBASE LR4 transceiver module for Single-Mode Fiber (SMF) with LC connector, 10km
QSFP-100G-CWDM4-S	100GBASE CWDM4 transceiver module for Single-Mode Fiber (SMF) with LC connector, 2km
QSFP-100G-PSM4-S	100GBASE PSM4 transceiver module with MPO-12 connector, single-mode fiber up to 500m

The Cisco Nexus 3232C supports 100, 40 and 10 Gigabit Ethernet optics. Please refer to latest compatibility matrix for information about all supported optics:

- 100 Gigabit Ethernet compatibility matrix:
   <a href="https://www.cisco.com/c/en/us/td/docs/interfaces">https://www.cisco.com/c/en/us/td/docs/interfaces</a> modules/transceiver modules/compatibility/matrix/
   100GE Tx Matrix.html
- 40 Gigabit Ethernet compatibility matrix: <a href="https://www.cisco.com/c/en/us/td/docs/interfaces">https://www.cisco.com/c/en/us/td/docs/interfaces</a> modules/transceiver modules/compatibility/matrix/ <a href="https://www.cisco.com/c/en/us/td/docs/interfaces">40GE Tx Matrix.html</a>
- 10 Gigabit Ethernet compatibility matrix:
   <a href="https://www.cisco.com/c/en/us/td/docs/interfaces">https://www.cisco.com/c/en/us/td/docs/interfaces</a> modules/transceiver modules/compatibility/matrix/
   10GE Tx Matrix.html

For more information about the transceiver types, see <a href="https://www.cisco.com/en/US/products/hw/modules/ps5455/prod">https://www.cisco.com/en/US/products/hw/modules/ps5455/prod module series home.html</a>.

#### Cisco NX-OS software benefits

NX-OS is a data center-class operating system built with modularity, resiliency, and serviceability at its foundation. NX-OS helps ensure continuous availability and sets the standard for mission-critical data center environments. The self-healing and highly modular design of NX-OS makes zero-impact operations a reality and enables exceptional operation flexibility.

Focused on the requirements of the data center, NX-OS provides a robust and comprehensive feature set that meets the networking requirements of present and future data centers. With an XML interface and a Command-Line Interface (CLI) like that of Cisco IOS° Software, NX-OS provides state-of-the-art implementations of relevant networking standards as well as a variety of true data center-class Cisco innovations.

Table 2 summarizes that benefits that NX-OS offers. Table 3 lists NX-OS packages available for the Cisco Nexus 3232C.

Table 2. Benefits of Cisco NX-OS Software

Feature	Benefit
Common software throughout the data center: NX-OS runs on all Cisco data center switch platforms (Cisco Nexus 9000, 7000, 6000, 5000, 4000, and 3000 Series Switches; Cisco Nexus 1000V Switches; and Cisco Nexus 2000 Series Fabric Extenders).	<ul> <li>Simple data center operating environment</li> <li>End-to-end Cisco Nexus and NX-OS fabric</li> <li>No retraining necessary for data center engineering and operations teams</li> </ul>
Software compatibility: NX-OS interoperates with Cisco products running any variant of Cisco IOS Software and also with any networking OS that conforms to the networking standards listed as supported in this data sheet.	<ul> <li>Transparent operation with existing network infrastructure</li> <li>Open standards</li> <li>No compatibility concerns</li> </ul>
Modular software design: NX-OS is designed to support distributed multithreaded processing. NX-OS modular processes are instantiated on demand, each in a separate protected memory space. Thus, processes are started and system resources allocated only when a feature is enabled. A real-time preemptive scheduler that helps ensure timely processing of critical functions governs the modular processes.	<ul> <li>Robust software</li> <li>Fault tolerance</li> <li>Increased scalability</li> <li>Increased network availability</li> </ul>
Troubleshooting and diagnostics: NX-OS is built with unique serviceability functions to enable network operators to take early action based on network trends and events, enhancing network planning and improving Network Operations Center (NOC) and vendor response times. Cisco Smart Call Home and Cisco Online Health Management System (OHMS) are some of the features that enhance the serviceability of NX-OS.	<ul> <li>Quick problem isolation and resolution</li> <li>Continuous system monitoring and proactive notifications</li> <li>Improved productivity of operations teams</li> </ul>
Ease of management: NX-OS provides a programmatic XML interface based on the NETCONF industry standard. The NX-OS XML interface provides a consistent API for devices. NX-OS also provides support for Simple Network Management Protocol (SNMP) Versions 1, 2, and 3 MIBs. In addition NX-API and Linux Bash are now supported.	<ul> <li>Rapid development and creation of tools for enhanced management</li> <li>Comprehensive SNMP MIB support for efficient remote monitoring</li> </ul>

Feature	Benefit
Role-Based Access Control (RBAC): With RBAC, NX-OS enables administrators to limit access to switch operations by assigning roles to users. Administrators can customize access and restrict it to the users who require it.	<ul> <li>Tight access control mechanism based on user roles</li> <li>Improved network device security</li> <li>Reduction in network problems arising from human errors</li> </ul>

**Table 3.** Cisco NX-OS Software packages available for Cisco Nexus 3232C\*

Packaging	Chassis Based	Part Number	Supported Features
Cisco Nexus 3232c Enhanced Layer 3 license	Chassis	N3K-LAN1K9	Layer 3 including full OSPF, EIGRP, BGP, and VXLAN**

<sup>\*</sup> Nexus 3232C uses Nexus 9000 Licensing scheme. Please refer to <a href="https://www.cisco.com/c/en/us/td/docs/switches/datacenter/sw/nx-os/licensing/guide/b Cisco NX-OS Licensing Guide/b Cisco NX-OS Licensing Guide chapter 01.html#con 24753</a>

## **Product specifications**

Table 4 lists the specifications for the Cisco Nexus 3232C.

Table 4.Specifications

Description	Specification	
Physical	<ul> <li>1RU fixed form-factor switch</li> <li>32 QSFP28 ports; each supports native 100 Gigabit Ethernet and 4 x 25 Gigabit Ethernet modes</li> <li>2 redundant power supplies</li> <li>4 redundant (3+1) fans</li> <li>Management, console, and USB flash-memory ports</li> </ul>	
Performance	<ul> <li>6.4-Tbps switching capacity</li> <li>Forwarding rate of up to 3.3 bpps</li> <li>Line-rate traffic throughput (both Layer 2 and 3) on all ports</li> <li>Configurable Maximum Transmission Unit (MTU) of up to 9216 bytes (jumbo frames)</li> </ul>	
Hardware tables and scalability	Number of MAC addresses	40,000
Sociality	Number of VLANS	4096
	Number of spanning-tree instances	• RSTP: 512 • MSTP: 64
	Number of ACL entries	• 6000 ingress • 1000 egress
	Routing table*	<ul> <li>Maximum number of Longest-Prefix-Match (LPM) routes: 128,000</li> <li>Maximum number of IP host entries:72,000</li> <li>Maximum number of MAC address entries: 136,000</li> <li>Maximum number of Layer 3 multicast entries: 64,000</li> </ul>
	Number of EtherChannels	256 (with vPC)

<sup>\*\*</sup> VXLAN will be supported in future release

Description	Specification	
	Latency	~450ns**
	Number of ports per EtherChannel	32
	Buffer size	16 MB shared
	System memory	8 GB
	Boot-flash memory	64 GB
Power	Frequency	50 to 60 Hz
	Power-supply types	AC (forward and reverse airflow)
	Typical operating power	205 watts (W)
	Maximum power	402W
	AC PSUs  Input voltage Frequency Efficiency  Power-supply efficiency  Typical heat dissipation  Maximum heat dissipation	<ul> <li>100 to 240 VAC</li> <li>50 to 60 Hz</li> <li>89 to 91% at 220V</li> <li>89 to 91% at 220V</li> <li>700 BTU/hr</li> <li>1371 BTU/hr</li> </ul>
Cooling	through ports)	xhaust (air enters through fan tray and power supplies and exits stake (air enters through ports and exits through fan tray and power
Sound	Measured sound power (maximum)  • Fan speed: 40% duty cycle  • Fan speed: 70% duty cycle  • Fan speed: 100% duty cycle	<ul><li>66.1 dBA</li><li>70.6 dBA</li><li>76.9 dBA</li></ul>

Description	Specification	
Environment	Dimensions (height x width x depth)	1.72 x 17.3 x 22.4 in. (4.4 x 43.9 x 56.8 cm)
	Weight	22.2 lb (10.06 kg)
	Temperature: Operating	32 to 104°F (0 to 40°C)
	Temperature: Storage	-40 to 158°F (-40 to 70°C)
	Relative humidity: Operating	<ul> <li>10 to 85% noncondensing</li> <li>Up to 5 days at maximum (85%) humidity</li> <li>Recommend ASHRAE data center environment</li> </ul>
	Relative humidity: Storage	5 to 95% noncondensing
	Altitude: Operating	Up to 13,123 ft.
	Altitude: Non-Operating	Up to 16,000 ft.

<sup>\*</sup> Denotes ASIC capabilities; please refer to Cisco Nexus 3000 Series Verified Scalability Guide documentation for exact scalability numbers validated for specific software releases:

https://www.cisco.com/en/US/products/ps11541/products installation and configuration guides list.html.

#### Software features

Please refer to the latest release notes for a list of software features supported by the Cisco Nexus 3200 platform: <a href="https://www.cisco.com/c/en/us/support/switches/nexus-3000-series-switches/products-release-notes-list.html">https://www.cisco.com/c/en/us/support/switches/nexus-3000-series-switches/products-release-notes-list.html</a>.

#### Standards

Table 5 lists management standards supported by the Cisco Nexus 3200 platform.

Table 5. Management and standards support

Description	Specification	
MIB support	Generic MIBs  SNMPv2-SMI CISCO-SMI SNMPv2-TM SNMPv2-TC IANA-ADDRESS-FAMILY-NUMBERS-MIB IANAifType-MIB IANAiprouteprotocol-MIB HCNUM-TC CISCO-TC SNMPv2-MIB SNMP-COMMUNITY-MIB	Monitoring MIBs  NOTIFICATION-LOG-MIB  CISCO-SYSLOG-EXT-MIB  CISCO-PROCESS-MIB  RMON-MIB  CISCO-RMON-CONFIG-MIB  CISCO-HC-ALARM-MIB  Security MIBs  CISCO-AAA-SERVER-MIB  CISCO-AAA-SERVER-EXT-MIB  CISCO-COMMON-ROLES-MIB

<sup>\*\*</sup> Latency for Switch only.

Description	Specification	
	SNMP-FRAMEWORK-MIB SNMP-NOTIFICATION-MIB SNMP-TARGET-MIB SNMP-USER-BASED-SM-MIB SNMP-VIEW-BASED-ACM-MIB CISCO-SNMP-VACM-EXT-MIB CISCO-CLASS-BASED-QOS-MIB Ethernet MIBs CISCO-VLAN-MEMBERSHIP-MIB LLDP-MIB IP-MULTICAST-MIB Configuration MIBs ENTITY-MIB IF-MIB CISCO-ENTITY-EXT-MIB CISCO-ENTITY-FRU-CONTROL-MIB CISCO-ENTITY-FRU-CONTROL-MIB CISCO-SYSTEM-MIB CISCO-SYSTEM-MIB CISCO-SYSTEM-MIB CISCO-IF-IF-MIB CISCO-IF-EXTENSION-MIB CISCO-IF-EXTENSION-MIB CISCO-INTP-MIB CISCO-IMAGE-MIB CISCO-IMAGE-MIB	CISCO-COMMON-MGMT-MIB CISCO-SECURE-SHELL-MIB Miscellaneous MIBs  CISCO-LICENSE-MGR-MIB CISCO-FEATURE-CONTROL-MIB CISCO-CDP-MIB CISCO-RF-MIB Layer 3 and Routing MIBs  UDP-MIB TCP-MIB SPF-MIB SPF-MIB CISCO-HSRP-MIB CISCO-HSRP-MIB
Standards	<ul> <li>IEEE 802.1D: Spanning Tree Protocol</li> <li>IEEE 802.1p: CoS Prioritization</li> <li>IEEE 802.1Q: VLAN Tagging</li> <li>IEEE 802.1s: Multiple VLAN Instances of Span IEEE 802.1w: Rapid Reconfiguration of Span IEEE 802.3z: Gigabit Ethernet</li> <li>IEEE 802.3ad: Link Aggregation Control Problems</li> <li>IEEE 802.3ae: 10 Gigabit Ethernet</li> <li>IEEE 802.1ab: LLDP</li> <li>IEEE 1588-2008: Precision Time Protocol (</li> </ul>	onning Tree Protocol  Otocol (LACP)

Description	Specification
RFC	BGP
	RFC 1997: BGP Communities Attribute
	RFC 2385: Protection of BGP Sessions with the TCP MD5 Signature Option
	RFC 2439: BGP Route Flap Damping
	RFC 2519: A Framework for Inter-Domain Route Aggregation
	RFC 2545: Use of BGPv4 Multiprotocol Extensions
	RFC 2858: Multiprotocol Extensions for BGPv4
	RFC 3065: Autonomous System Confederations for BGP
	RFC 3392: Capabilities Advertisement with BGPv4
	• RFC 4271: BGPv4
	RFC 4273: BGPv4 MIB: Definitions of Managed Objects for BGPv4
	RFC 4456: BGP Route Reflection
	RFC 4486: Subcodes for BGP Cease Notification Message
	RFC 4724: Graceful Restart Mechanism for BGP
	RFC 4893: BGP Support for Four-Octet AS Number Space
	• RFC 5549: BGP Ipv4 NLRIs with an IPv6 next hop
	OSPF
	RFC 2328: OSPF Version 2
	8431RFC 3101: OSPF Not-So-Stubby-Area (NSSA) Option
	RFC 3137: OSPF Stub Router Advertisement
	RFC 3509: Alternative Implementations of OSPF Area Border Routers
	RFC 3623: Graceful OSPF Restart
	RFC 4750: OSPF Version 2 MIB
	RIP
	RFC 1724: RIPv2 MIB Extension
	RFC 2082: RIPv2 MD5 Authentication
	RFC 2453: RIP Version 2
	IP Services
	RFC 768: User Datagram Protocol (UDP)      DEC 769: Trivial File Transfer Protocol (TETP)
	RFC 783: Trivial File Transfer Protocol (TFTP)      RFC 791: IP
	• RFC 791. IF
	• RFC 793: TCP
	• RFC 793. TOP  • RFC 826: ARP
	• RFC 626. ARP
	• RFC 959: FTP
	RFC 1027: Proxy ARP      PEC 1205: Network Time Protocol (NTD) Version 3
	RFC 1305: Network Time Protocol (NTP) Version 3     DFC 1510: Closeless Interdemoir Pouting (CIDD)
	RFC 1519: Classless Interdomain Routing (CIDR)     DEC 1543: Root Project
	RFC 1542: BootP Relay      DFC 1561: Demais Name System (DNS) Client
	RFC 1591: Domain Name System (DNS) Client  DEC 1013: ID::(A Posters)
	RFC 1812: IPv4 Routers  PFC 2424: PHOP Halant
	RFC 2131: DHCP Helper  PFC 2230: VPPP
	• RFC 2338: VRRP

Description	Specification
	IP Multicast
	• RFC 2236: Internet Group Management Protocol, version 2
	• RFC 3376: Internet Group Management Protocol, Version 3
	• RFC 3446: Anycast Rendezvous Point Mechanism Using PIM and MSDP
	RFC 3569: An Overview of SSM
	• RFC 3618: Multicast Source Discovery Protocol (MSDP)
	• RFC 4601: Protocol Independent Multicast - Sparse Mode (PIM-SM): Protocol Specification (Revised)
	RFC 4607: Source-Specific Multicast for IP
	RFC 4610: Anycast-RP using PIM
	RFC 5132: IP Multicast MIB

# Regulatory standards compliance

Table 6 summarizes regulatory standards compliance for the Cisco Nexus 3200 platform.

 Table 6.
 Regulatory standards compliance: Safety and EMC

Specification	Description
Regulatory Compliance	Products should comply with CE Markings according to directives 2004/108/EC and 2006/95/EC.
Safety	<ul> <li>UL 60950-1</li> <li>CAN/CSA-C22.2 No. 60950-1EN 60950-1</li> <li>IEC 60950-1AS/NZS 60950-1GB4943</li> </ul>
EMC: Emissions	<ul> <li>47CFR Part 15 (CFR 47) Class A</li> <li>AS/NZS CISPR22 Class A</li> <li>CISPR22 Class A</li> <li>EN55022 Class A</li> <li>ICES003 Class A</li> <li>VCCI Class A</li> <li>EN61000-3-2</li> <li>EN61000-3-3</li> <li>KN22 Class A</li> <li>CNS13438 Class A</li> </ul>
EMC: Immunity	<ul> <li>EN50082-1</li> <li>EN61000-6-1</li> <li>EN55024</li> <li>CISPR24</li> <li>EN300386</li> <li>KN 61000-4 series</li> </ul>

# Ordering information

Table 7 provides ordering information for the Cisco Nexus 3232C.

 Table 7.
 Ordering information

Part Number	Description	
Chassis		
N3K-C3232C	Nexus 3232C 32 x 100G,1RU switch	
NXA-FAN-30CFM-F	Nexus 9300 Fan, Forward airflow (Port-side Exhaust)	
NXA-FAN-30CFM-B	Nexus 9300 Reverse airflow (Port-side Intake)	
NXA-PAC-650W-PI	Nexus 9300 650W AC PS, Port-side Intake	
NXA-PAC-650W-PE	Nexus 9300 650W AC PS, Port-side Exhaust	
Software Licenses		
N3K-LAN1K9	Nexus 3164 Layer 3 LAN Enterprise License	
Spares Spares		
N3K-C3232C=	Nexus 3232C 32 x 100G, 1RU switch, Spare	
NXA-FAN-30CFM-F=	Nexus 9300 Fan, Forward airflow (Port-side Exhaust)	
NXA-FAN-30CFM-B=	Nexus 9300 Reverse airflow (Port-side Intake)	
NXA-PAC-650W-PI=	Nexus 9300 650W AC PS, Port-side Intake	
NXA-PAC-650W-PE=	Nexus 9300 650W AC PS, Port-side Exhaust	

#### Cisco environmental sustainability

Information about Cisco's environmental sustainability policies and initiatives for our products, solutions, operations, and extended operations or supply chain is provided in the "Environment Sustainability" section of Cisco's <u>Corporate Social Responsibility</u> (CSR) Report.

Reference links to information about key environmental sustainability topics (mentioned in the "Environment Sustainability" section of the CSR Report) are provided in the following table:

Sustainability topic	Reference
Information on product material content laws and regulations	<u>Materials</u>
Information on electronic waste laws and regulations, including products, batteries, and packaging	WEEE compliance

Cisco makes the packaging data available for informational purposes only. It may not reflect the most current legal developments, and Cisco does not represent, warrant, or guarantee that it is complete, accurate, or up to date. This information is subject to change without notice.

#### Services and Support

Cisco offers a wide range of services to help accelerate your success in deploying and optimizing the Cisco Nexus 3200 platform switches in your data center. The innovative Cisco Services offerings are delivered through a unique combination of people, processes, tools, and partners and are focused on helping you increase operation efficiency and improve your data center network. Cisco Advanced Services use an architecture-led approach to help you align your data center infrastructure with your business goals and achieve long-term value.

Cisco SMARTnet<sup>™</sup> Service helps you resolve mission-critical problems with direct access at any time to Cisco network experts and award-winning resources.

With this service, you can take advantage of the Cisco Smart Call Home service capability, which offers proactive diagnostics and real-time alerts on your Cisco Nexus 3200 platform switches. Spanning the entire network lifecycle, Cisco Services help increase investment protection, optimize network operations, support migration operations, and strengthen your IT expertise.

### Cisco Capital

#### Flexible payment solutions to help you achieve your objectives

Cisco Capital makes it easier to get the right technology to achieve your objectives, enable business transformation and help you stay competitive. We can help you reduce the total cost of ownership, conserve capital, and accelerate growth. In more than 100 countries, our flexible payment solutions can help you acquire hardware, software, services and complementary third-party equipment in easy, predictable payments. Learn more.

#### For more information

For more information, please visit <a href="https://www.cisco.com/go/nexus3000">https://www.cisco.com/go/nexus3000</a>.

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