

Cisco Nexus 9000 Series NX-OS Release Notes

Release 10.5(3)F

Note: The documentation set for this product strives to use bias-free language. For the purposes of this documentation set, bias-free is defined as language that does not imply discrimination based on age, disability, gender, racial identity, ethnic identity, sexual orientation, socioeconomic status, and intersectionality. Exceptions may be present in the documentation due to language that is hardcoded in the user interfaces of the product software, language used based on RFP documentation, or language that is used by a referenced third-party product.

Introduction

This document describes the features, issues, and limitations of Cisco NX-OS software Release 10.5(3)F for use on the Cisco Nexus 9000 Series switches.

Date	Description
April 23, 2025	Release 10.5(3)F became available.

Software Features

New Software Features

Product Impact	Feature	Description
Feature Set	Enhancement to retrieve Type-6 primary key detail	Beginning with Cisco NX-OS Release 10.5(3)F, added show command (show encryption mkey info [all enc-type hash-prefix last-updated length]) to display the stored details (protection-type, time stamp, first-16-characters of primary key hash, length of primary key) of the Type-6 primary key. For more information, see Cisco Nexus 9000 Series NX-OS Security Configuration Guide, Release 10.5(x).
	Support for Match Criteria: Interface	Beginning with Cisco NX-OS Release 10.5(3)F, you can select a combination of external-subnet and next-hop IP address to create groups and enforce SGACL policy. You can also use next-hop IP address with encapsulation type option for next-hop to specify the next-hop address used in the VPN address family. For more information, see Cisco Nexus 9000 Series NX-OS VXLAN Configuration Guide, Release 10.5(x)
	BFD vPC sub-second convergence in failure scenarios	Supported on CloudScale Platforms The BFD vPC watch feature improves vPC (Virtual Port Channel) convergence, reducing recovery time during network failures or topology changes. It allows paired vPC switches to converge multicast traffic within 250ms in scenarios when a single link fails in the network or a single switch goes offline due to power failure. Enable this feature using the bfd vpc-watch command on port-channel interfaces for enhanced vPC monitoring. For more information see, Cisco Nexus 9000 Series NX-OS Interfaces Configuration Guide, Release 10.5(x)

Product Impact	Feature	Description
	VXLAN GPO: ISSU	Beginning with Cisco NX-OS Release 10.5(3)F, support for ISSU is added for all the SGACL features along with service redirection for multi-node and multisite fabrics.
		For more information, see Cisco Nexus 9000 Series NX-OS ePBR Configuration Guide, Release 10.5(x) and
		For more information, see Cisco Nexus 9000 Series NX-OS VXLAN Configuration Guide, Release 10.5(x)
	VXLAN DSVNI Optimization	Beginning with Cisco NX-OS Release 10.5(3)F, support for DSVNI is enhanced with the associate-vrf vrf-name command. This command maps an L2 VLAN to a VRF directly, removing the need for SVI configuration on the BGW. For more details, refer to the Cisco Nexus 9000 Series NX-OS VXLAN Configuration Guide, Release 10.5(x).
	Switching mode value added to SNMP MIB	Beginning with Cisco NX-OS Release 10.5(3)F, switching mode value is now available with SNMP CISCO-SYSTEM-EXT-MIB. You can use the SNMP get command to view the switching mode. In releases before Cisco NX-OS Release 10.5(3)F, the switching mode property in the DME database is set to Default when the no switching-mode store-forward command is configured on the switch. Starting with Cisco NX-OS Release 10.5(3)F, the switching mode property in the DME database is set to Cut-through when the no switching-mode store-forward command is configured on the switch.
	Caching RADIUS Credentials	The RADIUS Credential Caching feature stores authenticated user credentials locally thus eliminating repeated authentication requests to the RADIUS server for the same credentials.
	Support SGACL with SR-MPLS handoff	Beginning with Cisco NX-OS Release 10.5(3)F, you can enforce SGACL on an EVPN-VXLAN fabric for traffic flows to and from external endpoints reachable through an SR-MPLS based Layer-3 VPN.
		For more information, see Cisco Nexus 9000 Series NX-OS VXLAN Configuration Guide, Release 10.5(x)
	Multi-session BFD support	Beginning with Cisco NX-OS Release 10.5(3)F, Cisco Nexus switches support Bidirectional Forwarding Detection (BFD) Multi-Sessions. This feature allows multiple BFD sessions over a single network link, enhancing network reliability through quick fault detection and detailed monitoring of multiple paths, optimizing resource use and scalability.
		For more information see, Cisco Nexus 9000 Series NX-OS Interfaces Configuration Guide, Release 10.5(x)

Product Impact	Feature	Description
	Service Chaining with service threshold	Beginning with Cisco NX-OS Release 10.5(3)F, you can configure threshold value in percentage for the number of active endpoints in a service group. Once the percentage of active endpoints reaches or goes below the threshold, the service group is considered as down, and traffic is dropped, bypassed, or forwarded based on the fil action configured. For more information, see Cisco Nexus 9000 Series NX-OS ePBR Configuration Guide, Release 10.5(x)
	ECN Detection in UDP Traffic for Traffic Analytics	Traffic Analytics now detects ECN bits in UDP traffic, crucial for managing congestion in real-time applications like VoIP and video streaming, ensuring consistent quality and improved network performance.
	Reduced footprint for Nexus 9300v and 9500v image	Beginning with Cisco NX-OS Release 10.5(3)F, the footprint of Nexus 9300v and 9500v Lite NX-OS image is reduced from 6G to 4.5G. For more information, see Cisco Nexus 9000v (9300v/9500v) Guide, Release 10.5(x).
	Breakout support on Cisco Nexus C9364C-H1 Switch	The Cisco Nexus C9364C-H1 switch now supports breakout mode on Front Ports 1-64. Breakout configurations (2x50G, 4x25G, 4x10G) are available only on the first port of each quad set, such as Front Port 1, Front Port 5, and Front Port 9. For more information, see Cisco Nexus 9000 Series NX-OS Interfaces Configuration Guide, Release 10.5(x).
	Bundled NX-OS image with EPLD	Starting from NX-OS Release 10.5(3)F, we no longer provide a separate EPLD image. Instead, we have bundled the EPLD image with the NX-OS software images. This allows you to upgrade both NX-OS and EPLD images at the same time and decreases the installation time. We also provide you the option to skip the EPLD image and install only the NX-OS image. For more information, see Cisco Nexus 9000 Series NX-OS Software Upgrade and Downgrade Guide, Release 10.5(x).
	Display Firmware Minor and Major version	Starting from Cisco NX-OS Release 10.5(3)F, the output of the show interface <i>interface</i> transceiver details command displays the major and minor versions of the firmware for the 400G Digital Coherent Optics. For more information, see Cisco Nexus 9000 Series NX-OS Interfaces Configuration Guide, Release 10.5(x).
	Disable squelch through CLI	Beginning with Cisco NX-OS Release 10.5(3)F, you can automatically manage signal integrity of optical transceivers by enabling squelching in the signal to prevent undesirable noise using the transceiver auto-squelch command. For more information, see Cisco Nexus 9000 Series NX-OS Interfaces Configuration Guide, Release 10.5(x).

Product Impact	Feature	Description
	System QoS	Supported only on Cisco Silicon One (N9800) platforms.
		Beginning with Cisco NX-OS Release 10.5(3)F, QoS classification policies are supported under system QoS on all ports (Layer 2 and Layer 3). This feature allows classification of incoming traffic based on Class of Service (CoS) or Differentiated Services Code Point (DSCP), enabling mapping to different queues. Additionally, it provides the capability to remark DSCP values, enhancing traffic management and prioritization.
		For more information, see Cisco Nexus 9000 Series NX-OS Quality of Service Configuration Guide, Release 10.5(x).
	Packet Tracer	Beginning with Cisco NX-OS Release 10.5(3)F, packet tracer diagnostic tool support is provided, which is used for debugging the feature with following capabilities:
		 Trace packet at different stages of the Rx and Tx Network Processing Unit (NPU) paths Captures filters and mask buffers of specific packets
	CoPP Consistency Checker	Beginning with Cisco NX-OS Release 10.5(3)F, CoPP consistency checker show command "show consistency-checker control-plane acl extended module module_no [brief detail]" is added with more qualifiers to perform the CoPP check more effectively for all control-plane ACLs.
		For more information, see Cisco Nexus 9000 Series NX-OS Troubleshooting Guide, Release 10.5(x).
	DSVNI with L2 multipathing	Beginning with Cisco NX-OS Release 10.5(3)F, Added DSVNI support for MAC multipathing on Cisco Nexus 9300-FX/FX2/FX3/GX/GX2/H2R/H1 Series switches and 9500 Series switches with 9700-EX/FX/GX/FX3 line cards.
		For more information, see Cisco Nexus 9000 Series NX-OS VXLAN Configuration Guide, Release 10.5(x).
	Optimized Layer 2 overlay Multicast	Beginning with Cisco NX-OS Release 10.5(3)F, the Multicast Layer 2 EVPN Route Type 6 support the following functionalities:
		 IPv4 IGMP EVPN Type 6 SMET Routes using L2RIB instead of NGMVPN IPv6 MLD Snooping EVPN Type 6 SMET Routes

Enhanced Software Features

The enhanced features that are listed below are existing features that are introduced in earlier releases, but enhanced to support new platforms in Cisco NX-OS Release 10.5(1)F.

Product Impact	Feature	Description
Feature Set	256-Way/512-Way ECMP	For Cisco NX-OS Release 10.5(3)F 256-Way and 512-Way ECMP scale Enhancements, See Cisco Nexus 9000 Series NX-OS Verified Scalability Guide, Release 10.5(3)F.
	Cisco XF3 Licensing for N9364E-SG2-Q Switch	Smart Licensing using Policy is now supported on N9364E-SG2-Q switch.
		For more information, see Cisco Nexus 9000 and 3000 Series NX-OS Smart Licensing Using Policy User Guide.

Product Impact	Feature	Description
	Cisco XF3 license for N9364E-SG2-O Switch	Smart Licensing using Policy is now supported on N9364E-SG2-O switch.
		For more information, see Cisco Nexus 9000 and 3000 Series NX-OS Smart Licensing Using Policy User Guide.

Hardware Features

New Hardware Features

Cisco Nexus 9364E-SG2-Q Switch

The Cisco Nexus 9364E-SG2 switch (N9364E-SG2-Q) is a 2-rack unit (RU), fixed-port, high-density switch designed to support high-density 800G fabrics for next generation leaf and spine designs. This switch contains Cisco Silicon One G200 which focuses specifically on enhanced Ethernet-based artificial intelligence/machine learning Al/ML and web-scale spine deployments. It is a 5 nm, 51.2 TeraBits per second (Tbps), 512 X 112 Gbps serializer-deserializer (SerDes) switch. This switch uses QSFP-DD optics.

This switch has these user-replaceable components:

- Fan modules (four) with one airflow choice: Port-side intake fan module (FAN-PI-V4).
- Power supply modules (two-one for operations and one for redundancy [1+1]). The power supply module can be AC type ONLY. The option is: 3kW AC, PSU3KW-HVPI.

For details on Cisco Nexus 9364E-SG2-Q switch, see the

Cisco Nexus 9364E-SG2-Q Switch Hardware Installation Guide

Cisco Nexus 9364E-SG2-O Switch

The Cisco Nexus 9364E-SG2 switch (N9364E-SG2-O) is a 2-rack unit (RU), fixed-port, high-density switch designed to support high-density 800G fabrics for next generation leaf and spine designs. This switch contains Cisco Silicon One G200 which focuses specifically on enhanced Ethernet-based artificial intelligence/machine learning Al/ML and web-scale spine deployments. It is a 5 nm, 51.2 TeraBits per second (Tbps), 512 X 112 Gbps serializer-deserializer (SerDes) switch. This switch uses OSFP optics.

This switch has these user-replaceable components:

- Fan modules (four) with one airflow choice: Port-side intake fan module (FAN-PI-V4).
- Power supply modules (two–one for operations and one for redundancy [1+1]). The power supply module can be AC type ONLY. The option is: 3kW AC, PSU3KW-HVPI.

For details on Cisco Nexus 9364E-SG2-O switch, see

Cisco Nexus 9364E-SG2-O Switch Hardware Installation Guide

For Supported Features on Cisco Nexus 9364E-SG2-Q switch and Cisco Nexus 9364E-SG2-O switch, see

Readme First

Cisco Nexus 9300 Series Smart Switches

The N9300 Series Switches introduces the Cisco N9324C-SE1U switch is a 1-RU solution designed to deliver high-performance networking capabilities. Its features include:

- 24-port 100G ports
- Cisco Silicon One E100 ASIC offering high-speed connectivity and scalability
- 4 AMD DPUs offer software-defined stateful services

The integration of Cisco NX-OS and Hypershield software into a single software image simplifies deployment and enhances operational flexibility.

The Cisco N9300 Series Smart Switches offer converged switching and routing services.

Release Image

Note: Starting from 10.5(3)F, Cisco NX-OS no longer provides a separate EPLD image. Instead, the EPLD image is bundled with all NX-OS images and so the image sizes are correspondingly larger.

In Cisco NX-OS Release 10.5(3)F, the following four 64-bit images are supported:

- The 64-bit Cisco NX-OS image filename with "nxos64-cs" as the prefix (for example, nxos64-cs.10.5.3.F.bin) is supported on all Cisco Nexus 9000 series switches except Cisco Nexus 9500 series -R and -R2 modular switches, Cisco Nexus 9800 switches, and N9364E-SG2 switches.
- The 64-bit Cisco NX-OS image filename with "nxos64-s1" as the prefix (for example, nxos64-s1.10.5.3.F.bin) is supported and mandatory on all Cisco Nexus 9800 and N9364E-SG2 switches.
- The 64-bit Cisco NX-OS image filename with "nxos64-s1-dpu" as the prefix (for example, nxos64-s1-dpu.10.5.3.F.bin) is supported and mandatory on N9324C Smart Switches
- The 64-bit Cisco NX-OS image filename with "nxos64-msll" as the prefix (for example, nxos64-msll.10.5.3.F.bin) is supported on Cisco Nexus 9500 Series -R and -R2 modular switches.

Note: The 32-bit image is no longer supported.

Open Issues

Click the bug ID to access the Bug Search Tool and see additional information about the bug.

Bug ID	Headline
CSCwj48097	The throughput displayed by `show policy-map interface ethernet x/y` outputs as " n/a bps" in N9K.

Resolved Issues

Click the bug ID to access the Bug Search Tool and see additional information about the bug.

Bug ID	Headline
CSCwm45424	MTM Crash after touching scale of 270K mac in L2 heavy mode
CSCwo49393	When LACP role is same on both vPC peers, LACP role election not triggered when KA/PL is brought up
CSCwn26370	SPAN PG buffer size get reset to 1000 after SPAN session flap
CSCwn78958	Silent Failure Issuing Factory-Reset of FM-G Module
CSCwm11580	N9K: link transmit reset-skip not working for GX/GX2A/GX2B/H2R switches
CSCwo02994	Print the src mac address in ipv6 DAD syslog messages
CSCwo48652	cfs ipv4 distribute command is no longer present in running-config after downgrade to 9.3.x.
CSCwn50809	ALL BFD neighbors down after upgrading from 10.4.2 to 10.4.4(M)

Bug ID	Headline Headline
CSCwo32195	SFTP copy command does not use specified SSH port
CSCwo25976	Sflow sampling incorrectly outgoing multicast traffic on L3 interface
CSCwo13810	STP is blocked on the VLAN mapping port after shut/no shut the port
CSCwm40487	Dispute detected with Peer-switch enabled on non-root
CSCwm61956	n9k: Incorrect static route after NH move between VPC peers in VPC fabric peering
CSCwm98382	Traffic not forwarded in LACP port-channel with 2 active FEX HIF interfaces
CSCwo61250	Delay in sending SA message from originating RP to MSDP peer
CSCwo36973	ip igmp snooping querier x.x.x.x is not seen on upgrading N9K switch
CSCwj69012	DHCP Discover packets are being dropped with custom COPP policy on a purely L2 Nexus 9k
CSCwk24875	svi is taking longer to come up on GIR/vpc domain no shut on primary
CSCwn89255	Nexus removing IPv4 address from CDP details after IPv6 is configured
CSCwn55171	Policy based routing not applied after configure replace
CSCwk49982	NLB Source traffic failed to forward and gets flooded within nlb vlan
CSCwk78346	N9K: DOM for passive QSA showing N/A for Rx Power
CSCwo16083	Error while removing class from policy map
CSCwn14266	MPLS Labeled destination traffic dropped on N9k EOR with RX line card
CSCwn62246	Docker file filling up /var/volatile/log causing logging stops
CSCwo00475	Unable to enable "feature netflow"
CSCwk77092	Tracking multiple objects fails in certain sequence
CSCwn90781	N9K: link incorrectly flaps when negotiated to DCBXP CIN TLV - DCX-No ACK in 100 PDUs
CSCwk75059	N9300 offload link bring up initial state to link scan thread
CSCwh39932	N9300 fails to establish OSPF adjacency in non-vpc vlan with orphan port connected L3 device
CSCwk76333	When shutting 48 ports simultaneously, N9K rarely sees traffic interrupt (delayed phy port down)
CSCwm48014	Nexus 9500 mgmt0 interface reverts to 100m after upgrade
CSCwn51357	vPC LACP Lag-ID mis matched issues when reconfiguration vPC domain.
CSCwk77003	N9K delay forwarding of IGMP proxy v3 report when "ip igmp snooping v3-report-suppression" enabled
CSCwn89433	Upgrade fails from 9.3.14 to 10.3.6 when cli alias name command present

Bug ID	Headline
CSCwn64379	N9K-X9716D-GX - Sensor/MTM/Port-Client crash when faulty QSFP-DD is present.
CSCwn43902	root command polling data after customer enabling Suzieq poller
CSCwm47657	Nexus responds with timeout instead of "Bad context specified" when SNMP query uses context
<u>CSCwn45253</u>	N9K experiences an unexpected reload with tahusd hap reset
CSCwk36818	N9K - Memory leak in TAHUSD_MTRACK_TYPE_STATS_DMA_HDLR
CSCwn31806	N9K-GX2/HX Links fail to come up
CSCwo13431	N9K/CR: config replace failing if snmp-user admin without auth is present in the config
CSCwk49611	Delayed linkup seen with 40g or 100g on specific retimer ports
CSCwn98717	snmpwalk/snmpbulkwalk does not print outputs for some port-channels under certain conditions
CSCwn29296	N9500-R hardware application counters may get corrupted
CSCwn21950	Not able to delete a numeric user from the commandline.
CSCwn47474	EBGP peering between vPC Border Leaf VTEP and an external Layer3 fails during failover scenario
CSCwm37332	PTP out of sync on a breakout interface
CSCwm06182	QDD-2X100-SR4-S - Breakout interfaces lanes shutdown when sibling interfaces are shutdown.
CSCwo08055	NXA-PAC-1100W-PE PSU Reported as "fail/shutdown" but Still Operational in fex mode
CSCwn97983	N9K: config-replace with OSPF failing, "auto-cost reference-bandwidth gbps" command is not accepted
CSCwm89617	On FX3-based N9K switches, SFP-10G-T-X not coming back up after link down
CSCwk82500	Nexus SNMP Transceiver Polling causes SNMPD process crash
CSCwm48004	N9K: IPv6 ra trigger doesn't work as documented
CSCwn58536	Auto-negotiation is not supported on C93180YC-FX3 with 100G DAC cable on port with macsec enabled
CSCwn36599	N9K-GX2 - CSUSD HAP Reset with no core or stack-trace
CSCwm89006	N9K: Modification failed for NBM flow policy name with the character '/'
CSCwn90502	ERROR: Failed to write VSH commands.
CSCwe93685	Increase the hop limit 64 to NTP packets
CSCwn22843	N9K/TRM/new L3VNI mode - The secondary vPC does not forward multicast traffic in a failover scenario
CSCwm78875	SNMP trap not generated on MGMT port using IPv6 address

Bug ID	Headline
CSCwh74943	Fast mechanism to detect EDMA lockup condition to force panic
CSCwn01856	LACP/ETHPM REINIT Flap Brings Down All Interfaces of a 400G Breakout
CSCwn80826	Packets received on orphan port not on module 1 not sent to peer-link
CSCwo56566	"Port is not compatible" when removing PVLAN config and adding the interfaces to the port-channel
CSCwn11753	Memory leak in SNMP due to libutils.so
CSCwn33500	BGP sends out updates 20+ sec after BGP session is up in peer scale setup
CSCwo35552	Nexus 3000/9000: VPC Interfaces Suspended due to "Invalid Argument to Function Call"
CSCwm49356	IGMP flooding through TAP interfaces
CSCwn10211	Disclosure of local user password in AAA server logs
CSCwk77692	Continuous Alarms and Warnings on Ports Eth1/49 and Eth1/51 on N9K-C9348GC-FXP
CSCwk76266	IGMP proxy reports not generated for L2TRM
CSCwo61854	CR error "Operation failed because of conversion of user config file failed." due to BGP network string
CSCwo02525	"switchport mac-learn disable" doesn't work in EX platform
CSCwk88760	static igmp/mld snooping not work when flexlink UP/Standby state changed
CSCwn97241	LLDP flag "UPOE Supported" set to "Yes" on non-poe port
CSCwo42643	Nexus 93180YC-FX3: NAT fails to translate flows after reaching 2K tcam entries
CSCwo08994	ERROR: Cannot apply config on a port that is already a member of a port channel.
CSCwm84389	New L3VNID config automatically gets added to the running and startup post upgrade to 10.2 code
CSCwo60580	Interfaces "not connec" after ISSU upgrade
CSCwo02923	NDI Incorrectly Recognizes Unset RD Value: "unknown:unknown:0:0" as Valid (For Nexus)
CSCwm86694	Wt ECMP: Null NH when RNH points to another RNH
CSCwo58794	BFD reset on the N9K-GX's Macsec enabled 400G interfaces with more than 10G bidirectional traffic
CSCwn82929	Nexus 3550T floods logs with IGMP related messages
CSCwn27011	NxOS IPv6 Static Route remains valid when interface to reach next-hop is down
CSCwo09087	NAT stats are not cleared on doing clear copp statistics in QP TOR with nat traffic
CSCwn60569	network-operator execute commands for admin after removing VSA on Radius-server
CSCwn85089	Traffic destined for IP ending in 136.204 do not reach the 9K SW FEX, not in ELAM

Bug ID	Headline			
CSCwn87179	NBM interfaces attributes missing in telemetry data streamed from N9K in 10.3(6)			
CSCwk80096	Remove urpf enabled SVI and recreate without urpf - urpf fail traffic dropped			
CSCwo01259	Multiple BGP neighbour flaps due to unrelated SVI interface shut/no shut.			
CSCwo52387	Link with SFP-10G-T-X module shows not connected when configured with 100Mbps			
CSCwj77571	400G DR4 Finisar and Finisar+ on Nexus 9000 shows incorrect `show int transceiver` detail outputs			
CSCwm80791	Retimer show commands hog CSUSD main thread, client apps could get killed.			
CSCwo28609	Nexus stops responding to SNMP requests for OID " 1.3.6.1.2.1.17.2.5"			
CSCwk78898	tahusd - EDMA stuck seen on N9K-C9364C-GX			
CSCwm04351	N9K: 'show system internal access-list globals' contains unexpected output			
CSCwn80317	ospf configuration mismatch in 10.3(5)			
CSCwn41310	N9K - "ip pim rp-candidate" command shows as "ip pim bsr rp-candidate" in running-config			
CSCwi53829	N9K - Micron 5300 & 5100 Read-Only Bootflash			
CSCwo26113	SDWrap: CLI error/timeout when component process is not running			
CSCwo06777	system vrf-member-change retain-I3-config fails to place an interface in a non-existent VRF.			
CSCwn39482	Need remove the 44B trailer from IPv6 BFD control packets			
CSCwn96490	BRIDGE_ASSURANCE_UNBLOCK msg not shown when bridge assurance block restored			
CSCwm84389	New L3VNID config automatically gets added to the running and startup post upgrade to 10.2 code			
CSCwj54742	MGMT connectivity issues for N9K-C9408 PIDs			
CSCwn14266	MPLS Labeled destination traffic dropped on N9k EOR with RX line card			
CSCwn11753	Memory leak in SNMP due to libutils.so			
CSCwk49611	Delayed linkup seen with 40g or 100g on specific retimer ports			
CSCwm98382	Traffic not forwarded in LACP port-channel with 2 active FEX HIF interfaces			

General/Known Issues

Click the bug ID to access the Bug Search Tool and see additional information about the bug.

Bug ID	Description
CSCwi95977	DME CC failure for mutiisite virtual rmac
CSCwi95768	Loopback Ping is not working after enabling MPLS LDP at Interface

Bug ID	Description
CSCwh88451	URIB crashed on urib_chlist_segv_handler after restarting bgp and urib together
CSCwi57646	ESG_SGACL: Source of MAC detail is not seen in json output of MAC table
CSCwi87175	slight drop in L2 multicast performance in N9K-C9364C-H1 switch
CSCwi24238	With NDFC/auto-config, VPC peer-link stays down on disable 'feature tunnel-encryption'
CSCvt37624	'The BGP instance is not in expected state' after quick bgp unconfig / reconfig with 700K ipv4 pfx
CSCwi22304	TTL is not decremented for decap L3 VPN traffic on N9800
CSCwh44244	DME inconsistency in sys/mplsta-[eth1/7/1] object after some CLI sequence

Device Hardware

The following tables list the Cisco Nexus 9000 Series hardware that Cisco NX-OS Release 10.5(3)F supports. For additional information about the supported hardware, see the Hardware Installation Guide for your Cisco Nexus 9000 Series device.

Table 1. Cisco N9300 Series Smart Switches

Product ID	Description
N9324C-SE1U	1-RU switch with 24-port 100G ports, Cisco Silicon One E100 ASIC and 4 AMD DPUs.

Table 2. Cisco Nexus 9800 Switches

Product ID	Description
N9K-C9808	16-RU modular switch with slots for up to 8 Line Cards in addition to 2 supervisors, 8 fabric modules, 4 fan trays, and 3 power trays.
N9K-C9804	10-RU modular switch with slots for up to 4 Line Cards in addition to 2 supervisors, 8 fabric modules, 4 fan trays, and 2 power trays.

Table 3. Cisco Nexus 9800 Series Line Cards

Product ID	Description
N9K-X9836DM-A	Cisco Nexus 9800 36-port 400G QSFP-DD Line Card with MACsec.
N9K-X98900CD-A	Cisco Nexus 9800 14-port 400G QSFP-DD + 34-port 100G QSFP28 Line Card.

Table 4. Cisco Nexus 9800 Series Fabric Modules

Product ID	Description	
N9K-C9808-FM-A	Cisco Nexus 9800 Fabric Module for 8-slot Chassis	
N9K-C9804-FM-A	Cisco Nexus 9800 Fabric Module for 4-slot Chassis	

 Table 5.
 Cisco Nexus 9800 Supervisor Module

Product ID	Description
N9K-C9800-SUP-A	Cisco Nexus 9800 Platform Supervisor Module

Table 6.Cisco Nexus 9800 Fans and Fan Trays

Product ID	Description
N9K-C9808-FAN-A	Cisco Nexus 9800 8-slot chassis fan tray (1st Generation)
N9K-C9804-FAN-A	Cisco Nexus 9800 4-slot chassis fan tray (1st Generation)

Table 7. Cisco Nexus 9800 Power Supplies

Product ID	Description
N9K-HV 6.3KW 20A-A	Cisco Nexus 9800 6,300W 20A AC and HV Power Supply

Table 8. Cisco Nexus 9500 Switches

Product ID	Description
N9K-C9504	7-RU modular switch with slots for up to 4 Line Cards in addition to two supervisors, 2 system controllers, 3-6 fabric modules, 3 fan trays, and up to 4 power supplies.
N9K-C9508	13-RU modular switch with slots for up to 8 Line Cards in addition to two supervisors, 2 system controllers, 3-6 fabric modules, 3 fan trays, and up to 8 power supplies.
N9K-C9516	21-RU modular switch with slots for up to 16 Line Cards in addition to two supervisors, 2 system controllers, 3-6 fabric modules, 3 fan trays, and up to 10 power supplies.

Table 9. Cisco Nexus 9500 Cloud Scale Line Cards

Product ID	Description	Maximum Quantity		
		Cisco Nexus 9504	Cisco Nexus 9508	Cisco Nexus 9516
N9K-X9716D-GX	Cisco Nexus 9500 16-port 400G QSFP-DD Line Card	4	8	N/A
N9K-X9736C-FX	Cisco Nexus 9500 36-port 40/100 Gigabit Ethernet QSFP28 Line Card	4	8	16
N9K-X9736C-FX3	Cisco Nexus 9500 36-port 40GE/100GE line card	4	8	16
N9K-X9788TC-FX	Cisco Nexus 9500 48-port 1/10-G BASE-T Ethernet and 4-port 40/100 Gigabit Ethernet QSFP28 Line Card	4	8	16

Product ID	Description	Maximum Quantity		
		Cisco Nexus 9504	Cisco Nexus 9508	Cisco Nexus 9516
N9K-X97160YC-EX	Cisco Nexus 9500 48-port 10/25-Gigabit Ethernet SFP28 and 4-port 40/100 Gigabit Ethernet QSFP28 Line Card	4	8	16
N9K-X9732C-FX	Cisco Nexus 9500 32-port 40/100 Gigabit Ethernet QSFP28 Line Card	4	8	16
N9K-X9732C-EX	Cisco Nexus 9500 32-port 40/100 Gigabit Ethernet QSFP28 Line Card	4	8	16
N9K-X9736C-EX	Cisco Nexus 9500 36-port 40/100 Gigabit Ethernet QSFP28 Line Card	4	8	16

Table 10. Cisco Nexus 9500 R-Series Line Cards

Product ID	Description	Maximum Quantity	
		Cisco Nexus 9504	Cisco Nexus 9508
N9K-X9636C-R	Cisco Nexus 9500 36-port 40/100 Gigabit Ethernet QSFP28 Line Card	4	8
N9K-X9636C-RX	Cisco Nexus 9500 36-port 40/100 Gigabit Ethernet QSFP28 Line Card	4	8
N9K-X9636Q-R	Cisco Nexus 9500 36-port 40-Gigabit Ethernet QSFP Line Card	4	8
N9K-X96136YC-R	Cisco Nexus 9500 16-port 1/10 Gigabit, 32-port 10/25 Gigabit, and 4-port 40/100 Gigabit Ethernet Line Card	4	8
N9K-X9624D-R2	Cisco Nexus 9500 24-port 400-Gigabit QDD Line Card	Not supported	8

 Table 11.
 Cisco Nexus 9500 Cloud Scale Fabric Modules

Product ID	Description	Minimum	Maximum
N9K-C9504-FM-E	Cisco Nexus 9504 100-Gigabit cloud scale fabric module	4	5
N9K-C9504-FM-G	Cisco Nexus 9500 4-slot 1.6Tbps cloud scale fabric module	4	5
N9K-C9508-FM-E	Cisco Nexus 9508 100-Gigabit cloud scale fabric module	4	5
N9K-C9508-FM-E2	Cisco Nexus 9508 100-Gigabit cloud scale fabric module	4	5
N9K-C9508-FM-G	Cisco Nexus 9500 8-slot 1.6Tbps cloud-scale fabric module	4	5
N9K-C9516-FM-E2	Cisco Nexus 9516 100-Gigabit cloud scale fabric module	4	5

Table 12. Cisco Nexus 9500 R-Series Fabric Modules

Product ID	Description	Minimum	Maximum
N9K-C9504-FM-R	Cisco Nexus 9504 100-Gigabit R-Series fabric module	4	6
N9K-C9508-FM-R	Cisco Nexus 9508 100-Gigabit R-Series fabric module	4	6
N9K-C9508-FM-R2	Cisco Nexus 9508 400-Gigabit R-Series fabric module	4	6

Table 13. Cisco Nexus 9500 Supervisor Modules

Supervisor	Description	Maximum
N9K-SUP-A	1.8-GHz supervisor module with 4 cores, 4 threads, and 16 GB of memory	2
N9K-SUP-A+	1.8-GHz supervisor module with 4 cores, 8 threads, and 16 GB of memory	2
N9K-SUP-B	2.2-GHz supervisor module with 6 cores, 12 threads, and 24 GB of memory	2
N9K-SUP-B+	1.9-GHz supervisor module with 6 cores, 12 threads, and 32 GB of memory	2

Note: N9K-SUP-A and N9K-SUP-A+ are not supported on Cisco Nexus 9504 and 9508 switches with -R and -R2 Line Cards.

Table 14. Cisco Nexus 9500 System Controller

Product ID	Description	Quantity
N9K-SC-A	Cisco Nexus 9500 Platform System Controller Module	2

Table 15. Cisco Nexus 9500 Fans and Fan Trays

Product ID	Description	Quantity
N9K-C9504-FAN	Fan tray for 4-slot modular chassis	3
N9K-C9504-FAN2	Fan tray that supports the Cisco N9K-C9504-FM-G fabric module	3
N9K-C9508-FAN	Fan tray for 8-slot modular chassis	3
N9K-C9508-FAN2	Fan tray that supports the Cisco N9K-C9508-FM-G fabric module	3
N9K-C9516-FAN	Fan tray for 16-slot modular chassis	3

Table 16. Cisco Nexus 9500 Fabric Module Blanks with Power Connector

Product ID	Description	Minimum	Maximum
N9K-C9504-FAN-PWR	Cisco Nexus 9500 4-slot chassis 400G cloud scale fan tray power connector	1	2
N9K-C9508-FAN-PWR	Cisco Nexus 9500 4-slot chassis 400G cloud scale fan tray power connector	1	2

Table 17. Cisco Nexus 9500 Power Supplies

Product ID	Description	Quantity	Cisco Nexus Switches
N9K-PAC-3000W-B	3-KW AC power supply	Up to 4 Up to 8 Up to 10	Cisco Nexus 9504 Cisco Nexus 9508 Cisco Nexus 9516
N9K-PDC-3000W-B	3-KW DC power supply	Up to 4 Up to 8 Up to 10	Cisco Nexus 9504 Cisco Nexus 9508 Cisco Nexus 9516
N9K-PUV-3000W-B	3-KW Universal AC/DC power supply	Up to 4 Up to 8 Up to 10	Cisco Nexus 9504 Cisco Nexus 9508 Cisco Nexus 9516
N9K-PUV2-3000W-B	3.15-KW Dual Input Universal AC/DC Power Supply	Up to 4 Up to 8 Up to 10	Cisco Nexus 9504 Cisco Nexus 9508 Cisco Nexus 9516

Table 18. Cisco Nexus 9400 Switches

Product ID	Description
N9K-C9408	4-RU, 8-slot centralized modular chassis switch, which is configurable with up to 128 200-Gigabit QSFP56 (256 100 Gigabit by breakout) ports or 64 400-Gigabit ports.
N9K-C9400-SUP-A	Cisco Nexus 9400 Supervisor Card
N9K-C9400-SW-GX2A	Cisco Nexus 9400 25.6Tbps Switch Card
N9K-X9400-8D	Cisco Nexus 9400 8p 400G QSFP-DD LEM
N9K-X9400-16W	Cisco Nexus 9400 16p 200G QSFP56 LEM
N9K-X9400-22L	Cisco Nexus 9400 LEM with 22 10G/25G/50G ports.

Table 19. Cisco Nexus 9200 and 9300 Switches

Cisco Nexus Switch	Description
N9364E-SG2-Q	The Cisco Nexus 9364E-SG2-Q switch is a 2-rack unit (RU), fixed-port, high-density switch designed to support high-density 800G fabrics for next generation leaf and spine designs.

density switch designed to support high-density 800G fabrics for next generation leaf and spine designs. The Cisco Nexus 92348GC-X switch (N9K-C92348GC-X) is a 1-RU switch that supports 696 Gbps of bandwidth and over 250 mpps. The 16BASE-T downlink ports on the 92348GC-X can be configured to work as 100 Mbps, 1-Gbps ports. The 4 ports of 5FP28 can be configured as 1/10/25-Gbps and the two-ports of QSFP28 can be configured as 40- and 100-Gbps ports. The Clsco Nexus 92348GC-X is ideal for Big Data customers that require a Gigabit Ethernet ToR switch with local switching. 1-RU fixed-port, 12/L3 switch with 48 50G SFP56 ports and 4 400G QSFP-DD uplink ports. 1 RU fixed-port switch Forty-eight 100M/16/10GBASE-T ports (ports 1-48), Six 40/100-Gigabit ports QSFP28 (ports 49-54), Two management ports (one 10/100/1000BASE-T port and one SFP port), One console port (RS-232), and one USB port. 1-RU fixed-port switch with 400-Gigabit QSFP-DD ports (32), 10-Gigabit SFP+ ports (2), Management ports (one 10/100/1000BASE-T port and one SFP port), console port (RS-232), and USB port. 1 RU fixed-port switch 48 10/100/1000M copper RJ-45 downlink ports, 4 10- /Z5G SFP28 uplink ports, and 2 40-/100G QSFP28 uplink ports, 4 10- /Z5G SFP28 uplink ports, and 2 40-/100G QSFP28 uplink ports that support PoE/P64-P6E+A 40-/25G SFP28 uplink ports, and 2 40-/100G QSFP28 uplink ports. 1-RU fixed-port switch 40 10M/100M/16 copper RJ-45 downlink ports that support PoE/P64-P0E++A 40-/25G SFP28 uplink ports, and 2 40-/100G QSFP28 uplink ports. 1-RU fixed-port switch with 24 100M/110/25-Gigabit Ethernet SP28 ports (ports 1-24), 6 10/25/40/50/100-Gigabit QSFP28 ports (ports 49-54), One management port (one 10/100/1000BASE-T port), and One console port (RS- 232) 1-RU fixed-port switch with 64 100-Gigabit SFP28 ports (ports 1-28), 8 10/40/100/400-Gigabit QSFP28 ports (ports 29-36) 1-RU fixed-port switch with 64 100-Gigabit QSFP28 ports (ports 1-28), 8 10/40/100/40/-Gigabit GSFP29 ports (ports 29-36) 2-RU fixed-port switch with 64 40-/100-Gi	Cisco Nexus Switch	Description
Spine designs. The Cisco Nexus 92348GC-X switch (N9K-C92348GC-X) is a 1-RU switch that supports 696 Gbps of bandwidth and over 250 mpps. The 1GBASE-T downlink ports on the 92348GC-X can be configured to work as 100 Mbps, 1-Gbps ports. The 4 ports of SFP28 can be configured as 1/10/25-Gbps and the two-ports of QSFP28 can be configured as 40- and 100-Gbps ports. The Cisco Nexus 92348GC-X is ideal for Big Data customers that require a Gigabit Ethernet ToR switch with local switching. N9K-C93400LD-H1 1-RU fixed-port, L2/L3 switch with 48 50G SFP56 ports and 4 400G QSFP-DD uplink ports. 1 RU fixed-port switch Forty-eight 100M/1G/10GBASE-T ports (ports 1-48), Six 40/100-Gigabit ports QSFP28 (ports 49-54), Two management ports (one 10/100/100/100BASE-T port and one SFP port), One console port (RS-232), and one USB port. N9K-C9332D-H2R 1-RU fixed-port switch with 400-Gigabit QSFP-DD ports (32), 10-Gigabit SFP-ports (2), Management ports (one 10/100/1000BASE-T port and one SFP port), One console port (RS-232), and USB port. N9K-C9348GC-FX3 1 RU fixed-port switch 48 10/100/1000M copper RJ-45 downlink ports, 4 10-25G SFP28 uplink ports. N9K-C9348GC-FX3PH 1-RU fixed-port switch 40 10M/100M/1G copper RJ-45 downlink ports that support PoE/PoE+PoE+PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+PoE++ and 8 10M/100M-Copper RJ-45 downlink ports that support PoE/PoE+PoE++ and 8 10M/100M-Copper RJ-45 downlink ports that support PoE/PoE+PoE++ and	N9364E-SG2-O	
supports 696 Gbps of bandwidth and over 250 mpps. The 1 GBASE-T downlink ports on the 92348GC-X can be configured to work as 100 Mbps, 1-1-Gbps ports. The 4 ports of SFP28 can be configured as 1/10/25-Gbps and the two-ports of QSFP28 can be configured as 40- and 100-Gbps ports. The Cisco Nexus 92348GC-X is ideal for Big Data customers that require a Gigabit Ethernet ToR switch with local switching. NSK-C93400LD-H1 1-RU fixed-port, L2/L3 switch with 48 50G SFP56 ports and 4 400G QSFP-DD uplink ports. 1 RU fixed-port switch Forty-eight 100M/1G/10GBASE-T ports (ports 1-48), Six 40/100-Gigabit ports QSFP28 (ports 49-54), Two management ports (one 10/100/1000BASE-T port and one SFP port), One console port (RS-232), and one USB port. NSK-C9332D-H2R 1-RU fixed-port switch with 400-Gigabit QSFP-DD ports (32), 10-Gigabit SFP+ports (2), Management ports (one 10/100/1000BASE-T port and one SFP port), console port (RS-232), and USB port. NSK-C9348GC-FX3 1 RU fixed-port switch 48 10/100/1000M copper RJ-45 downlink ports, 4 10-/25G SFP28 uplink ports, and 2 40-/100G QSFP28 uplink ports. 1-RU fixed-port switch 40 10M/100M/1G copper RJ-45 downlink ports that support PoE/PoE+/PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+ by PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE++ by PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE++ by PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE++ by PoE++		
100 Mbps, 1-Gbps ports. The 4 ports of SFP28 can be configured as 1/10/25-Gbps and the two-ports of QSFP28 can be configured as 40- and 100-Gbps ports. The Cisco Nexus 92348GC-X is ideal for Big Data customers that require a Gigabit Ethernet ToR switch with local switching. N9K-C93400LD-H1 1-RU fixed-port, L2/L3 switch with 48 50G SFP56 ports and 4 400G QSFP-DD uplink ports. 1-RU fixed-port, L2/L3 switch Forty-eight 100M/16/10GBASE-T ports (ports 1-48), Six 40/100-Gigabit ports QSFP28 (ports 49-54), Two management ports (one 10/100/1000BASE-T port and one SFP port), One console port (RS-232), and one USB port. 1-RU fixed-port switch with 400-Gigabit QSFP-DD ports (32), 10-Gigabit SFP+ ports (2), Management ports (one 10/100/1000BASE-T port and one SFP port), console port (RS-232), and USB port. 1-RU fixed-port switch 48 10/100/1000M copper RJ-45 downlink ports, 4 10-/25G SFP28 uplink ports, and 2 40-/100G QSFP28 uplink ports. 1-RU fixed-port switch 48 10/100/100M/1G copper RJ-45 downlink ports that support PoE/PoE+/PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE+ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE+ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE+ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE+ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE+ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE+ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE+ and 8 10M/100M/10/CE-Gigabit Ethernet SFP28 ports (ports 49-54), One management port (one 10/100/1000BASE-T port), and One console port (RS-232) 1-RU fixed	N9K-C92348GC-X	
QSFP28 can be configured as 40- and 100-Gbps ports. The Cisco Nexus 92348GC-X is ideal for Big Data customers that require a Gigabit Ethernet ToR switch with local switching. N9K-C93400LD-H1 1-RU fixed-port, L2/L3 switch with 48 50G SFP56 ports and 4 400G QSFP-DD uplink ports. 1 RU fixed-port switch Forty-eight 100M/16/10GBASE-T ports (ports 1-48), Six 40/100-Gigabit ports QSFP28 (ports 49-54), Two management ports (one 10/100/1000BASE-T port and one SFP port), One console port (RS-232), and one USB port. N9K-C9332D-H2R 1-RU fixed-port switch with 400-Gigabit QSFP-DD ports (32), 10-Gigabit SFP+ ports (2), Management ports (one 10/100/1000BASE-T port and one SFP port), console port (RS-232), and USB port. N9K-C9348GC-FX3 1 RU fixed-port switch 48 10/100/1000M copper RJ-45 downlink ports, 4 10-/25G SFP28 uplink ports, and 2 40-/100G QSFP28 uplink ports. N9K-C9348GC-FX3PH 1-RU fixed-port switch 40 10M/100M/16 copper RJ-45 downlink ports that support P6F/P6F-P6F+ and 8 10M/100M copper RJ-45 downlink ports that support P6F/P6F-P6F+796F+, 4 10-/25G SFP28 uplink ports, and 2 40-/100G QSFP28 uplink ports. N9K-C93180YC-FX3H 1-RU fixed-port switch with 24 100M/1/10/25-Gigabit Ethernet SFP28 ports (ports 1-24), 6 10/25/40/50/100-Gigabit QSFP28 ports (ports 49-54), One management port (one 10/100/1000BASE-T port), and One console port (RS-232) N9K-C9316D-GX 1-RU switch with 16x400/100/40-Gbps ports. 1-RU fixed-port switch with 64 100-Gigabit QSFP28 ports (ports 1-28), 8 10/40/100/400-Gigabit QSFP28 ports (ports 29-36) 2-RU Top-of-Rack switch with 64 40-/100-Gigabit QSFP28 ports and 2 1-/10-Gigabit SFP+ ports. 2-RU Top-of-Rack switch with 64 40-/100-Gigabit QSFP28 ports and 2 1-/10-Gigabit SFP+ ports. 2-RU Top-of-Rack switch with 64 40-/100-Gigabit QSFP28 ports and 2 1-/10-Gigabit SFP+ ports. 2-RU Top-of-Rack switch with 64 40-/100-Gigabit QSFP28 ports and 2 1-/10-Gigabit SFP+ ports. 2-RU Top-of-Rack switch with 64 40-/100-Gigabit QSFP28 ports and 2 1-/10-Gigabit SFP+ ports. 2-RU Top-of-Rack switch with		
Gigabit Ethernet ToR switch with local switching. 1-RU fixed-port, L2/L3 switch with 48 50G SFP56 ports and 4 400G QSFP-DD uplink ports. 1 RU fixed-port switch Forty-eight 100M/16/10GBASE-T ports (ports 1-48), Six 40/100-Gigabit ports QSFP28 (ports 49-54), Two management ports (one 10/100/1000BASE-T port and one SFP port), One console port (RS-232), and one USB port. 1-RU fixed-port switch with 400-Gigabit QSFP-DD ports (32), 10-Gigabit SFP+ ports (2), Management ports (one 10/100/1000BASE-T port and one SFP port), console port (RS-232), and USB port. N9K-C9348GC-FX3 1 RU fixed-port switch 48 10/100/1000M copper RJ-45 downlink ports, 4 10-/25G SFP28 uplink ports, and 2 40-/100G QSFP28 uplink ports. N9K-C9348GC-FX3PH 1-RU fixed-port switch 40 10M/100M/1G copper RJ-45 downlink ports that support PoE/PoE+PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+PoE++, 4 10-/25G SFP28 uplink ports, and 2 40-/100G QSFP28 uplink ports. N9K-C93180YC-FX3H 1-RU fixed-port switch with 24 100M/1/10/25-Gigabit Ethernet SFP28 ports (ports 1-24), 6 10/25/40/50/100-Gigabit QSFP28 ports (ports 49-54), One management port (one 10/100/1000BASE-T port), and One console port (RS-232) N9K-C9316D-GX 1-RU switch with 16x400/100/40-Gbps ports. 2-RU fixed-port switch with 64 100-Gigabit QSFP28 ports (ports 1-28), 8 10/40/100/400-Gigabit QSFP2B ports (ports 29-36) N9K-C93600CD-GX 1-RU fixed-port switch with 64 100-Gigabit QSFP28 ports (ports 1-28), 8 10/40/100/400-Gigabit QSFP2B ports (ports 29-36) 2-RU Top-of-Rack switch with 64 40-/100-Gigabit QSFP2B ports and 2 1-/10-Gigabit SFP+ ports. - Ports 1 to 64 support 40/100-Gigabit speeds. - Ports 49-64 support MACsec encryption. - Ports 651-64and66 support 1/10 Gigabit speeds.		
uplink ports. 1 RU fixed-port switch Forty-eight 100M/1G/10GBASE-T ports (ports 1-48), Six 40/100-Gigabit ports QSFP28 (ports 49-54), Two management ports (one 10/100/1000BASE-T port and one SFP port), One console port (RS-232), and one USB port. 1-RU fixed-port switch with 400-Gigabit QSFP-DD ports (32), 10-Gigabit SFP+ ports (2), Management ports (one 10/100/1000BASE-T port and one SFP port), console port (RS-232), and USB port. 1 RU fixed-port switch 48 10/100/1000M copper RJ-45 downlink ports, 4 10-/25G SFP28 uplink ports, and 2 40-/100G QSFP28 uplink ports, 4 10-/25G SFP28 uplink ports, and 2 40-/100G QSFP28 uplink ports that support PoE/PoE+/PoE+/PoE+, and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE+/PoE+, and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE+, and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE+, and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE+, and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE+, and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE+, and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE+, and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE+, and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE+, and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE+, and 8 10M/100M-10/25-Gigabit Ethernet SFP28 ports (ports 1-24), 6 10/25/40/50/100-Gigabit QSFP28 ports (ports 49-54), One management port (one 10/100/100BASE-T port), and One console port (RS-232) N9K-C9316D-GX 1-RU switch with 16x400/100/40-Gigabit SFP28 ports. 1-RU fixed-port switch with 64 100-Gigabit QSFP28 ports (ports 1-28), 8 10/40/100/400-Gigabit QSFP2B ports (ports 1-28), 8 10/40/100/400-Gigabit QSFP2D ports (ports 29-36) N9K-C9364C 2-RU Top-of-Rack switch with 64 40-/100-Gigabit QSFP28 ports and 2 1-/10-Gigabit SFP+ ports. • Ports 1 to 64 support 40/100-Gigabit speeds. • Ports 49-64 support MACsec encryption. • Ports 651-64and66 suppor		
40/100-Gigabit ports QSFP28 (ports 49-54), Two management ports (one 10/100/1000BASE-T port and one SFP port), One console port (RS-232), and one USB port. 1-RU fixed-port switch with 400-Gigabit QSFP-DD ports (32), 10-Gigabit SFP+ ports (2), Management ports (one 10/100/1000BASE-T port and one SFP port), console port (RS-232), and USB port. 1 RU fixed-port switch 48 10/100/1000M copper RJ-45 downlink ports, 4 10-/25G SFP28 uplink ports, and 2 40-/100G QSFP28 uplink ports. NSK-C9348GC-FX3PH 1-RU fixed-port switch 40 10M/100M/1G copper RJ-45 downlink ports that support PoE/PoE+/PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE++, 4 10-/25G SFP28 uplink ports, and 2 40-/100G QSFP28 uplink ports. NSK-C93180YC-FX3H 1-RU fixed-port switch with 24 100M/1/10/25-Gigabit Ethernet SFP28 ports (ports 1-24), 6 10/25/40/50/100-Gigabit QSFP28 ports (ports 49-54), One management port (one 10/100/100/BASE-T port), and One console port (RS-232) NSK-C9316D-GX 1-RU switch with 16x400/100/40-Gbps ports. 1-RU fixed-port switch with 64 100-Gigabit SFP28 ports (ports 1-28), 8 10/40/100/400-Gigabit QSFP28 ports (ports 1-28), 8 10/40/100/400-Gigabit QSFP2B ports (ports 1-28), 8 10/40/100/400-Gigabit QSFP2B ports and 2 1-/10-Gigabit SFP+ ports. 2-RU Top-of-Rack switch with 64 40-/100-Gigabit QSFP2B ports and 2 1-/10-Gigabit SFP+ ports. 2-RU Top-of-Rack switch with 64 40-/100-Gigabit QSFP2B ports and 2 1-/10-Gigabit SFP+ ports. 2-RU Top-of-Rack switch with 64 40-/100-Gigabit SFP2B ports and 2 1-/10-Gigabit SFP+ ports. 2-RU Top-of-Rack switch with 64 40-/100-Gigabit speeds. 2-RU Top-of-Rack switch with 64 40-/100-Gigabit speeds. 2-RU Top-of-Rack switch with 64 40-/100-Gigabit speeds. 2-RU Forts 49-64 support 40/100-Gigabit speeds.	N9K-C93400LD-H1	
ports (2), Management ports (one 10/100/1000BASE-T port and one SFP port), console port (RS-232), and USB port. NSK-C9348GC-FX3 1 RU fixed-port switch 48 10/100/1000M copper RJ-45 downlink ports, 4 10-/25G SFP28 uplink ports, and 2 40-/100G QSFP28 uplink ports. NSK-C9348GC-FX3PH 1-RU fixed-port switch 40 10M/100M/1G copper RJ-45 downlink ports that support PoE/PoE+/PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE++, 4 10-/25G SFP28 uplink ports, and 2 40-/100G QSFP28 uplink ports. NSK-C93180YC-FX3H 1-RU fixed-port switch with 24 100M/1/10/25-Gigabit Ethernet SFP28 ports (ports 1-24), 6 10/25/40/50/100-Gigabit QSFP28 ports (ports 49-54), One management port (one 10/100/1000BASE-T port), and One console port (RS-232) NSK-C9316D-GX 1-RU switch with 16x400/100/40-Gbps ports. 1-RU fixed-port switch with 64 100-Gigabit SFP28 ports (ports 1-28), 8 10/40/100/400-Gigabit QSFP28 ports (ports 1-28), 8 10/40/100/400-Gigabit QSFP28 ports and 2 1-/10-Gigabit SFP4 ports. 1-RU fixed-port switch with 64 40-/100-Gigabit QSFP28 ports and 2 1-/10-Gigabit SFP4 ports. 2-RU Top-of-Rack switch with 64 40-/100-Gigabit QSFP28 ports and 2 1-/10-Gigabit SFP4 ports. 2-RU Top-of-Rack switch with 64 40-/100-Gigabit QSFP28 ports and 2 1-/10-Gigabit SFP4 ports. 2-RU Forts 1 to 64 support 40/100-Gigabit speeds. 2-Ports 49-64 support MACsec encryption. 2-Ports 651-64and66 support 1/10 Gigabit speeds.	N9K-C93108TC-FX3	40/100-Gigabit ports QSFP28 (ports 49-54), Two management ports (one 10/100/1000BASE-T port and one SFP port), One console port (RS-232), and
/25G SFP28 uplink ports, and 2 40-/100G QSFP28 uplink ports. 1-RU fixed-port switch 40 10M/100M/1G copper RJ-45 downlink ports that support PoE/PoE+/PoE++, 4 10-/25G SFP28 uplink ports, and 2 40-/100G QSFP28 uplink ports. 1-RU fixed-port switch with 24 100M/1/10/25-Gigabit Ethernet SFP28 ports (ports 1-24), 6 10/25/40/50/100-Gigabit QSFP28 ports (ports 49-54), One management port (one 10/100/1000BASE-T port), and One console port (RS-232) N9K-C9316D-GX 1-RU switch with 16x400/100/40-Gbps ports. 2-RU fixed-port switch with 64 100-Gigabit SFP28 ports (ports 1-28), 8 10/40/100/400-Gigabit QSFP28 ports (ports 1-28), 8 10/40/100/400-Gigabit QSFP2B ports and 2 1-/10-Gigabit SFP4 ports. 2-RU Top-of-Rack switch with 64 40-/100-Gigabit QSFP28 ports and 2 1-/10-Gigabit SFP4 ports. 2-RU Top-of-Rack switch with 64 40-/100-Gigabit QSFP28 ports and 2 1-/10-Gigabit SFP4 ports. 3-Ports 1 to 64 support 40/100-Gigabit speeds. 4-Ports 49-64 support MACsec encryption. 5-Ports 651-64and66 support 1/10 Gigabit speeds.	N9K-C9332D-H2R	ports (2), Management ports (one 10/100/1000BASE-T port and one SFP port),
support PoE/PoE+/PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE+/PoE++, 4 10-/25G SFP28 uplink ports, and 2 40-/100G QSFP28 uplink ports. N9K-C93180YC-FX3H 1-RU fixed-port switch with 24 100M/1/10/25-Gigabit Ethernet SFP28 ports (ports 1-24), 6 10/25/40/50/100-Gigabit QSFP28 ports (ports 49-54), One management port (one 10/100/1000BASE-T port), and One console port (RS-232) N9K-C9316D-GX 1-RU switch with 16x400/100/40-Gbps ports. N9K-C9364C-GX 2-RU fixed-port switch with 64 100-Gigabit SFP28 ports (ports 1-28), 8 10/40/100/400-Gigabit QSFP2D ports (ports 29-36) N9K-C9364C 2-RU Top-of-Rack switch with 64 40-/100-Gigabit QSFP28 ports and 2 1-/10-Gigabit SFP+ ports. Ports 1 to 64 support 40/100-Gigabit speeds. Ports 49-64 support MACsec encryption. Ports 651-64and66 support 1/10 Gigabit speeds.	N9K-C9348GC-FX3	
(ports 1–24), 6 10/25/40/50/100-Gigabit QSFP28 ports (ports 49-54), One management port (one 10/100/1000BASE-T port), and One console port (RS-232) N9K-C9316D-GX 1-RU switch with 16x400/100/40-Gbps ports. 2-RU fixed-port switch with 64 100-Gigabit SFP28 ports. N9K-C93600CD-GX 1-RU fixed-port switch with 28 10/40/100-Gigabit QSFP28 ports (ports 1–28), 8 10/40/100/400-Gigabit QSFP-DD ports (ports 29-36) N9K-C9364C 2-RU Top-of-Rack switch with 64 40-/100-Gigabit QSFP28 ports and 2 1-/10-Gigabit SFP+ ports. • Ports 1 to 64 support 40/100-Gigabit speeds. • Ports 49-64 support MACsec encryption. • Ports 651-64and66 support 1/10 Gigabit speeds.	N9K-C9348GC-FX3PH	support PoE/PoE++ and 8 10M/100M copper RJ-45 downlink ports that support PoE/PoE++, 4 10-/25G SFP28 uplink ports, and 2 40-/100G
2-RU fixed-port switch with 64 100-Gigabit SFP28 ports. 1-RU fixed-port switch with 28 10/40/100-Gigabit QSFP28 ports (ports 1-28), 8 10/40/100/400-Gigabit QSFP-DD ports (ports 29-36) 2-RU Top-of-Rack switch with 64 40-/100-Gigabit QSFP28 ports and 2 1-/10-Gigabit SFP+ ports. • Ports 1 to 64 support 40/100-Gigabit speeds. • Ports 49-64 support MACsec encryption. • Ports 651-64and66 support 1/10 Gigabit speeds.	N9K-C93180YC-FX3H	(ports 1-24), 6 10/25/40/50/100-Gigabit QSFP28 ports (ports 49-54), One management port (one 10/100/1000BASE-T port), and One console port (RS-
N9K-C93600CD-GX 1-RU fixed-port switch with 28 10/40/100-Gigabit QSFP28 ports (ports 1-28), 8 10/40/100/400-Gigabit QSFP-DD ports (ports 29-36) 2-RU Top-of-Rack switch with 64 40-/100-Gigabit QSFP28 ports and 2 1-/10-Gigabit SFP+ ports. • Ports 1 to 64 support 40/100-Gigabit speeds. • Ports 49-64 support MACsec encryption. • Ports 651-64and66 support 1/10 Gigabit speeds.	N9K-C9316D-GX	1-RU switch with 16x400/100/40-Gbps ports.
10/40/100/400-Gigabit QSFP-DD ports (ports 29-36) 2-RU Top-of-Rack switch with 64 40-/100-Gigabit QSFP28 ports and 2 1-/10-Gigabit SFP+ ports. • Ports 1 to 64 support 40/100-Gigabit speeds. • Ports 49-64 support MACsec encryption. • Ports 651-64and66 support 1/10 Gigabit speeds.	N9K-C9364C-GX	2-RU fixed-port switch with 64 100-Gigabit SFP28 ports.
Gigabit SFP+ ports. • Ports 1 to 64 support 40/100-Gigabit speeds. • Ports 49-64 support MACsec encryption. • Ports 651-64and66 support 1/10 Gigabit speeds.	N9K-C93600CD-GX	1-RU fixed-port switch with 28 10/40/100-Gigabit QSFP28 ports (ports 1-28), 8 10/40/100/400-Gigabit QSFP-DD ports (ports 29-36)
V9K-C9364C-H1 2-RU fixed-port switch with 64 100G SFP28 ports.	N9K-C9364C	Gigabit SFP+ ports. • Ports 1 to 64 support 40/100-Gigabit speeds. • Ports 49-64 support MACsec encryption.
	N9K-C9364C-H1	2-RU fixed-port switch with 64 100G SFP28 ports.

Cisco Nexus Switch	Description
N9K-C9332C	1-RU fixed switch with 32 40/100-Gigabit QSFP28 ports and 2 fixed 1/10-Gigabit SFP+ ports.
N9K-C9332D-GX2B	1-Rack-unit (1-RU) spine switch with 32p 400/100-Gbps QSFP-DD ports and 2p 1/10 SFP+ ports.
N9K-C9348D-GX2A	48p 40/100/400-Gigabit QSFP-DD ports and 2p 1/10G/10G SFP+ ports
N9K-C9364D-GX2A	64p 400/100-Gigabit QSFP-DD ports and 2p 1/10 SFP+ ports
N9K-C93180YC-FX3	48 1/10/25 Gigabit Ethernet SFP28 ports (ports 1-48) 6 10/25/40/50/100-Gigabit QSFP28 ports (ports 49-54)
N9K-C93180YC-FX3S	48 1/10/25 Gigabit Ethernet SFP28 ports (ports 1-48) 6 10/25/40/50/100-Gigabit QSFP28 ports (ports 49-54)
N9K-C9336C-FX2-E	1-RU switch with 36 40-/100-Gb QSFP28 ports
N9K-C9336C-FX2	1-RU switch with 36 40-/100-Gb Ethernet QSFP28 ports
N9K-C93360YC-FX2	2-RU switch with 96 10-/25-Gigabit SFP28 ports and 12 40/100-Gigabit QSFP28 ports
N9K-C93240YC-FX2	1.2-RU Top-of-Rack switch with 48 10-/25-Gigabit SFP28 fiber ports and 12 40-/100-Gigabit Ethernet QSFP28 ports.
N9K-C93216TC-FX2	2-RU switch with 96 100M/1G/10G RJ-45 ports, 12 40/100-Gigabit QSFP28 ports, 2 management ports (one RJ-45 and one SFP port), 1 console port, and 1 USB port.
N9K-C93180YC-FX	1-RU Top-of-Rack switch with 10-/25-/32-Gigabit Ethernet/FC ports and 6 40-/100-Gigabit QSFP28 ports. You can configure the 48 ports as 1/10/25-Gigabit Ethernet ports or as FCoE ports or as 8-/16-/32-Gigabit Fibre Channel ports.
N9K-C93180YC-FX-24	1 RU 24 1/10/25-Gigabit Ethernet SFP28 front panel ports and 6 fixed 40/100-Gigabit Ethernet QSFP28 spine-facing ports. The SFP28 ports support 1-, 10-, and 25-Gigabit Ethernet connections and 8-, 16-, and 32-Gigabit Fibre Channel connections.
N9K-C93108TC-FX	1-RU Top-of-Rack switch with 48 100M/1/10GBASE-T (copper) ports and 6 40-/100-Gigabit QSFP28 ports
N9K-C93108TC-FX-24	1 RU 24 1/10GBASE-T (copper) front panel ports and 6 fixed 40/100-Gigabit Ethernet QSFP28 spine-facing ports.
N9K-C93108TC-FX3P	1-RU fixed-port switch with 48 100M/1/2.5/5/10GBASE-T ports and 6 40-/100-Gigabit QSFP28 ports
N9K-C9348GC-FXP ¹	Cisco Nexus 9300 with 48p 100M/1 G, 4p 10/25 G SFP+ and 2p 100 G QSFP

¹ For N9K-C9348GC-FXP the PSU SPROM is not readable when the PSU is not connected. The model displays as "UNKNOWN" and status of the module displays as "shutdown."

Table 20. Cisco Nexus 9200 and 9300 Fans and Fan Trays

Product ID	Description	Quantity	Cisco Nexus Switches
NXA-SFAN-30CFM-PE	Fan module with port-side exhaust airflow (blue coloring)	3	9348GC-FX3
NXA-SFAN-30CFM-PI	Fan module with port-side intake airflow (burgundy coloring)	3	9348GC-FX3
NXA-SFAN-30CFM-PE	Fan module with port-side exhaust airflow (blue coloring)	3	9348GC-FX3PH
NXA-SFAN-30CFM-PI	Fan module with port-side intake airflow (burgundy coloring)	3	9348GC-FX3PH
NXA-SFAN-35CFM-PI	Fan module with port-side intake airflow (burgundy coloring)	6	9332D-H2R
		5	93400LD-H1
		4	93108TC-FX3
NXA-SFAN-35CFM-PE	Fan module with port-side exhaust airflow (blue coloring)	6	9332D-GX2B
		5	93400LD-H1
		4	93108TC-FX3
NXA-SFAN-35CFM-PI	Fan module with port-side intake airflow (burgundy coloring)	6	9332D-GX2B
NXA-FAN-160CFM-PE	Fan module with port-side exhaust airflow (blue coloring)	3	9364C ^[2] 93360YC-FX2
NXA-FAN-160CFM-PI	Fan module with port-side intake airflow (burgundy coloring)	3	9364C Error! Reference source not found. LilError! Reference source not found. Error! Reference source not found. 93360YC-FX2Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.
NXA-FAN-160CFM2-PE	Fan module with port-side exhaust airflow (blue coloring)	4	9364C-GX
NXA-FAN-160CFM2-PI	Fan module with port-side intake airflow (burgundy coloring)	4	9364C-GX

² For specific fan speeds see the Overview section of the Hardware Installation Guide.

Product ID	Description	Quantity	Cisco Nexus Switches
NXA-FAN-30CFM-B	Fan module with port-side intake airflow (burgundy coloring)	3	93108TC-FX Error! Reference source not found.[1] 93180YC-FX Error! Reference source not found.[1] 9348GC-FXP Error! Reference source not found.[1]
NXA-FAN-30CFM-F	Fan module with port-side exhaust airflow (blue coloring)	3	93108TC-FX Error! Reference source not found.[1] 93180YC-FX Error! Reference source not found.[1] 9348GC-FXP
NXA-FAN-35CFM-PE	Fan module with port-side exhaust airflow (blue coloring)	6	92300YC Error! Reference source not found.[1] 9332C Error! Reference source not found.[1] 93180YC-FX3S [3] 93180YC-FX3 93108TC-FX3P 93180YC-FX3H 9336C-FX2-E 9316D-GX 93600CD-GX
NXA-FAN-35CFM-PI	Fan module with port-side intake airflow (burgundy coloring)	6	92300YC [1] 9332C [1] 93180YC-FX3S [2] 93180YC-FX3 93108TC-FX3P 93180YC-FX3H 9316D-GX 93600CD-GX
	Fan module with port-side exhaust airflow (blue coloring)	O .	
NXA-FAN-65CFM-PE	Fan module with port-side exhaust airflow (blue coloring)	3	93240YC-FX2 ^[1] 9336C-FX2 ^[1]
NXA-FAN-65CFM-PI	Fan module with port-side exhaust airflow (burgundy coloring)	3	93240YC-FX2 9336C-FX2 [1]

-

³ This switch runs with +1 redundancy mode so that if one fan fails, the switch can sustain operation. But if a second fan fails, this switch is not designed to sustain operation. Hence before waiting for the major threshold temperature to be hit, the switch will power down due to entering the fan policy trigger command.

Table 21. Cisco Nexus 9200 and 9300 Power Supplies

Product ID	Description	Quantity	Cisco Nexus Switches
NXA-PDC-715W-PI	715-W DC power supply with port-side intake airflow (blue coloring)	2	93108TC-FX3P
NXA-PDC-440W-PE	440-W DC power supply with port-side exhaust airflow (blue coloring)	2	9348GC-FX3 9348GC-FX3PH
NXA-PDC-440W-PI	440-W DC power supply with port-side intake airflow (burgundy coloring)	2	9348GC-FX3 9348GC-FX3PH
NXA-PHV-350W-PE	350-W AC power supply with port-side exhaust airflow (blue coloring)	2	9348GC-FX3 9348GC-FX3PH
NXA-PHV-350W-PI	350-W AC power supply with port-side intake airflow (burgundy coloring)	2	9348GC-FX3 9348GC-FX3PH
NXA-PAC-350W-PE2	350-W AC power supply with port-side exhaust airflow (blue coloring)	2	9348GC-FX3 9348GC-FX3PH
NXA-PAC-350W-PI2	350-W AC power supply with port-side intake airflow (burgundy coloring)	2	9348GC-FX3 9348GC-FX3PH
NXA-PAC-1900W-PE	1900-W AC power supply with port-side exhaust airflow (blue coloring)	2	9348GC-FX3 9348GC-FX3PH
NXA-PAC-1900W-PI	1900-W AC power supply with port-side intake airflow (burgundy coloring)	2	9348GC-FX3 9348GC-FX3PH
NXA-PHV-2KW-PI	2000-W HVDC power supply with port-side intake airflow (burgundy coloring)	2	9332D-H2R 93400LD-H1
NXA-PAC-1500W-PE	1500-W AC power supply with port-side exhaust airflow (blue coloring)	2	9332D-GX2B
NXA-PAC-1500W-PI	1500-W AC power supply with port-side intake airflow (burgundy coloring)	2	9332D-GX2B
NXA-PAC-500W-PE	500-W AC power supply with port-side exhaust airflow (blue coloring)	2	93180YC-FX 93108TC-FX3
NXA-PAC-500W-PI	500-W AC power supply with port-side intake airflow (burgundy coloring)	2	93180YC-FX 93108TC-FX3
NXA-PAC-650W-PE	650-W AC power supply with port-side exhaust (blue coloring)	2	92300YC 93180YC-FX3S 93180YC-FX3H
NXA-PAC-650W-PI	650-W AC power supply with port-side intake (burgundy coloring)	2	92300YC 93180YC-FX3S 93180YC-FX3 93180YC-FX3H

Product ID	Description	Quantity	Cisco Nexus Switches
NXA-PAC-750W-PE	750-W AC power supply with port-side exhaust airflow (blue coloring) 1	2	9336C-FX2 9336C-FX2-E 9332C 93240YC-FX2
NXA-PAC-750W-PI	750-W AC power supply with port-side intake airflow (burgundy coloring) 1	2	9336C-FX2 9336C-FX2-E 9332C 93240YC-FX2
NXA-PAC-1100W-PE2	1100-W AC power supply with port-side exhaust airflow (blue coloring)	2	93240YC-FX2 9332C 9316D-GX 9336C-FX2 9336C-FX2-E 93600CD-GX
NXA-PAC-1100W-PI2	1100-W AC power supply with port-side intake airflow (burgundy coloring)	2	93240YC-FX2 9332C 9316D-GX 9336C-FX2 9336C-FX2-E 93600CD-GX
NXA-PAC-1100W-PI	Cisco Nexus 9000 PoE 1100W AC PS, portside intake	2	93108TC-FX3P
NXA-PAC-1100W-PE	Cisco Nexus 9000 PoE 1100W AC PS, portside exhaust	2	93108TC-FX3P
NXA-PAC-1900W-PI	Cisco Nexus 9000 PoE 1900W AC PS, portside intake	2	93108TC-FX3P
NXA-PAC-1200W-PE	1200-W AC power supply with port-side exhaust airflow (blue coloring)	2	93360YC-FX2 9364C
NXA-PAC-1200W-PI	1200-W AC power supply with port-side intake airflow (burgundy coloring)	2	93360YC-FX2 9364C
NXA-PAC-1400W-PE	1400-W AC power supply with port-side exhaust airflow (blue coloring)	2	93400LD-H1
NXA-PAC-1400W-PI	1400-W AC power supply with port-side intake airflow (burgundy coloring)	2	93400LD-H1
N9K-PUV-1200W	1200-W Universal AC/DC power supply with bidirectional airflow (white coloring)	2	92300YC 93108TC-FX 93360YC-FX2 93180YC-FX3S 93180YC-FX 9364C 93108TC-FX3
NXA-PDC-930W-PE	930-W DC power supply with port-side exhaust airflow (blue coloring)	2	93360YC-FX2 93180YC-FX3S 93180YC-FX 9364C 93180YC-FX3H 93108TC-FX3

Product ID	Description	Quantity	Cisco Nexus Switches
NXA-PDC-930W-PI	930-W DC power supply with port-side intake airflow (burgundy coloring)	2	93360YC-FX2 93180YC-FX3S 93180YC-FX 9364C 93180YC-FX3H 93108TC-FX3
NXA-PDC-1100W-PE	1100-W DC power supply with port-side exhaust airflow (blue coloring)	2	93240YC-FX2 93600CD-GX 9316D-GX 9332C 9336C-FX2 9336C-FX2-E
NXA-PDC-1100W-PI	1100-W DC power supply with port-side intake airflow (burgundy coloring)	2	93240YC-FX2 93600CD-GX 9316D-GX 9332C 9336C-FX2 9336C-FX2-E
NXA-PHV-1100W-PE	1100-W AC power supply with port-side exhaust airflow (blue coloring)	2	93240YC-FX2 9336C-FX2
NXA-PHV-1100W-PI	1100-W AC power supply with port-side intake airflow (burgundy coloring)	2	93240YC-FX2 9336C-FX2
NXA-PAC-2KW-PE	2000-W AC power supply with port-side exhaust airflow (blue coloring)	2	9364C-GX
NXA-PAC-2KW-PI	2000-W AC power supply with port-side intake airflow (burgundy coloring)	2	9364C-GX 9332D-H2R
NXA-PDC-2KW-PE	2000-W DC power supply with port-side exhaust airflow (blue coloring	2	9364C-GX 93400LD-H1
NXA-PDC-2KW-PI	2000-W DC power supply with port-side intake airflow (burgundy coloring)	2	9364C-GX 9332D-H2R 93400LD-H1
N2200-PAC-400W	400-W AC power supply with port-side exhaust airflow (blue coloring)	2	92348GC-X
N2200-PAC-400W-B	400-W AC power supply with port-side intake airflow (burgundy coloring)	2	92348GC-X
N2200-PDC-350W-B	350-W DC power supply with port-side intake airflow	2	92348GC-X
N2200-PDC-400W	400-W DC power supply with port-side exhaust airflow (blue coloring)	2	92348GC-X

Compatibility Information

Fabric Module and Line Card compatibility details are listed below:

Table 22. Cisco Nexus 9500 Cloud Scale Line Cards

Product ID	N9K-C9504- FM-G	N9K-C9508- FM-G	N9K-C9504- FM-E	N9K-C9508- FM-E	N9K-C9508- FM-E2	N9K-C9516- FM-E2
N9K-X9716D-GX	4	4	No	No	No	No
N9K-X9736C-FX	5	5	5	5	5	5
N9K-X97160YC-EX	4	4	4	4	4	4
N9K-X9788TC-FX	4	4	4	4	4	4
N9K-X9732C-EX	4	4	4	4	4	4
N9K-X9732C-FX	4 5 (n+1 redundancy)					

Table 23. Cisco Nexus 9500 R-Series Line Cards

Product ID	N9K-C9504-FM-R	N9K-C9508-FM-R
N9K-X9636C-RX	6	6
N9K-X9636Q-R	4 6 (n+2 redundancy)	4 6 (n+2 redundancy)
N9K-X9636C-R	5 6 (n+1 redundancy)	5 6 (n+1 redundancy)
N9K-X96136YC-R	6	6

Table 24. Cisco Nexus 9500 R2-Series Line Cards

Product ID	N9K-C9508-FM-R2
N9K-X9624D-R2	6

Optics

For information about transceivers and cables supported on a switch, see the <u>Transceiver Module (TMG)</u> <u>Compatibility Matrix</u>. For the transceiver specifications and installation information, see the <u>Install and Upgrade Guides</u>.

Cisco Nexus Dashboard Insights for Data Center

Cisco NX-OS Release 10.5(3)F supports the Cisco Nexus Dashboard Insights on Cisco Nexus 9300-FX, 9300-FX2, 9300-FX3, 9300-GX, 9300-GX2, 9400, and 9800 platform switches and 9500 platform switches with -EX/FX/GX Line Cards. See the <u>Cisco Nexus Insights documentation</u>.

Upgrade and Downgrade

To perform a software upgrade or downgrade, follow the instructions in the Cisco Nexus 9000 Series NX-OS Software Upgrade and Downgrade Guide, Release 10.5(x). For information about an In Service Software Upgrade (ISSU), see the <u>Cisco NX-OS ISSU Support Matrix</u>.

Related Content

Document Title	Description
Cisco Nexus 9000 Series Switches	Cisco Nexus 9000 Series Switches documentation
Cisco NX-OS Software Strategy and Lifecycle Guide	Cisco NX-OS Software Release and Image-naming Convention
Cisco Nexus 3000 and 9000 Series NXAPI REST SDK User Guide and API Reference	Cisco Nexus 3000 and 9000 Series NX-NX-API REST SDK User Guide and API Reference
Cisco NX-OS Licensing Guide	Licensing Information
 Cisco Nexus 9000 and 3000 Series NX-OS Switch License Navigator Cisco Nexus Smart Licensing Using Policy User Guide 	Note: When you downgrade from Cisco NX-OS Release 10.5(3)F to an earlier release, the features that use the ACI+NX-OS Essentials, Advantage, and add-on licenses or the Hardware Streaming Telemetry license continue to work in honor mode in the downgraded version. In addition, the output of the show license usage command continues to include entries for these unsupported licenses.
Cisco Nexus 9000 Series NX-OS Software Upgrade and Downgrade Guide	Cisco Nexus 9000 Series Software Upgrade and Downgrade Guide, Release 10.5(x)
Cisco Nexus 9000 Series FPGA/EPLD Upgrade Release Notes	Cisco Nexus 9000 Series FPGA/EPLD Upgrade Release Notes, Release 10.5(3)F
https://cisco.github.io/cisco- mibs/supportlists/nexus9000/Nexus9000MIBSupportList.html	Cisco NX-OS Supported MIBs
Cisco Nexus 9000 Series Switch FEX Support Matrix	Supported FEX modules
Cisco Nexus 9000 Series Hardware Installation Guides	Cisco Nexus 9000 Series Hardware Installation Guides

Documentation Feedback

To provide technical feedback on this document, or to report an error or omission, please send your comments to nexus9k-docfeedback@cisco.com. We appreciate your feedback.

Legal Information

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL:

https://www.cisco.com/c/en/us/about/legal/trademarks.html. Third-party trademarks mentioned are the

property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1721R)

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

© 2025 Cisco Systems, Inc. All rights reserved.