

Release Notes for Cisco Nexus 9000 Series Switches

Release 10.6(1)F

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Cisco Nexus 9000 Series switches, Release 10.6(1)F

This document describes the features, issues, and limitations of Cisco NX-OS software Release 10.6(1)F for use on the Cisco Nexus 9000 Series switches.

New software features

This section provides a brief description of the new software features introduced in this release.

Table 1. New software features for Cisco Nexus 9000 Series switches, Release 10.6(1)F

Product impact	Feature	Description
Feature Set	Support for Single PSU Mode	Beginning with Cisco NX-OS Release 10.6(1)F, you can configure Single PSU Mode on Cisco Nexus 9336C-FX2, Cisco Nexus 9348GC-FXP, Cisco Nexus 9332D-GX2B to allow a switch to operate with only one active power supply unit. For more information, see Cisco Nexus 9000 Series NX-OS High Availability and Redundancy Guide, Release 10.6(x).
	Support for SG-RouterID Hash	Beginning with Cisco NX-OS Release 10.6(1)F, the SG-RouterID Hash feature uses Router-IDs to enable consistent hashing for multicast flows in ECMP spine-leaf topologies, improving multicast traffic distribution. For more information, see Cisco Nexus 9000 Series NX-OS Multicast Routing Configuration Guide, Release 10.6(x).
	Enhanced Fault and Notification Payload Structure	Beginning with Cisco NX-OS Release 10.6(1)F, fault and notification payloads are enhanced with new categories and improved structure, enabling more precise troubleshooting and traffic flow optimization. For more information, see Cisco Nexus 9000 Series NX-OS IP Fabric for Media Solution Guide, Release 10.6(x).
	IPv6 Support for UDP Jitter Operations	Beginning with Cisco NX-OS Release 10.6(1)F, IPv6 is now supported for UDP jitter IP SLA operations, allowing configuration of IPv6 addresses for both source and destination, and enabling IPv6-based responders. For more information, see Cisco Nexus 9000 Series NX-OS IP SLAs Configuration Guide, Release 10.6(x).
	Passwordless Authentication for gRPC via UDS	Beginning with Cisco NX-OS Release 10.6(1)F, passwordless authentication is supported for gRPC using Unix Domain Sockets (UDS), allowing trusted agent connections without AAA credentials. For more information, see Cisco Nexus 9000 Series NX-OS Programmability Guide, Release 10.6(x).

Product impact	Feature	Description
	Host Identity Based Authorization (HIBA)	Beginning with Cisco NX-OS Release 10.6(1)F, host authorization information can be embedded in host certificates, enabling SSH access control and user grants to be centrally managed by a Certificate Authority (CA), reducing reliance on external AAA servers. For more information, see Cisco Nexus 9000 Series NX-OS Security Configuration Guide, Release 10.6(x).
	SR-MPLS Support on Cisco Nexus 9336C-SE1 Platform	Beginning with Cisco NX-OS Release 10.6(1)F, Segment Routing Layer 3 VPN and Layer 3 EVPN features with SR-MPLS underlay are supported on Cisco Nexus 9336C-SE1 platform switch. For more information, see Cisco Nexus 9000 Series NX-OS Label Switching Configuration Guide, Release 10.6(x).
	TPMON Platform and Optics Support	Beginning with Cisco NX-OS Release 10.6(1)F, TPMON is supported only on specific Cisco Nexus platforms and select optics/transceiver types. For more information, see Cisco Nexus 9000 Series NX-OS Interfaces Configuration Guide, Release 10.6(x).
	EVPN ESI Multi-Homing	Beginning with Cisco NX-OS Release 10.6(1)F, added ESI multi-homing feature which is a standardized solution that uses BGP-EVPN based communication between ESI peers. This feature provides redundancy similar to vPC and vPC fabric peering. Supports 2-way, 3-way, and 4-way multi-homing on PIP or VIP modes.
		For more information, see Cisco Nexus 9000 Series NX-OS VXLAN Configuration Guide, Release 10.6(x), Cisco Nexus 9000 Series NX-OS Verified Scalability Guide, Release 10.6(1)F and Cisco Nexus 3000 and 9000 Series NX-API REST SDK User Guide and API Reference, Release 10.6(x)
	1R2C Egress Policer Support on Subinterface	Beginning with Cisco NX-OS Release 10.6(1)F, Egress QoS policies are supported on subinterfaces of Layer 3 physical interfaces, port channels and breakout ports of Cisco Nexus 9300-FX/FX2/FX3/GX/GX2/H2R/H1 Series switches, and 9500 Series switches with 9700-FX/FX3/GX line cards. For more information, see Cisco Nexus 9000 Series NX-OS Quality of Service Configuration Guide, Release 10.6(x).
	RACL on SVI support on Cisco Nexus 9336C-SE1 - switch	Beginning with Cisco NX-OS Release 10.6(1)F, Cisco Nexus 9336C-SE1 switch support RACLs on both SVI interfaces and regular routed interfaces. For more information, see Cisco Nexus 9000 Series NX-OS Security Configuration Guide, Release 10.6(x).

Product impact	Feature	Description
	MACsec support on Cisco Nexus 9336C-SE1 switch	Beginning with Cisco NX-OS Release 10.6(1)F, added MACsec support on Cisco Nexus 9336C-SE1 switch. For more information, see Cisco Nexus 9000
		Series NX-OS Security Configuration Guide, Release 10.6(x).
	TRMv4 support on Cisco Nexus 9336C-SE1 switch	Beginning with Cisco NX-OS Release 10.6(1)F, added TRMv4 support on 10.6(1)F Cisco Nexus 9336C-SE1 switch for • Standalone, vPC, vPC fabric peering inner and border leaf • Multi-site Anycast BGW. For more information, see Cisco Nexus 9000 Series NX-OS VXLAN Configuration Guide, Release 10.6(x).
	VXLAN support on Cisco Nexus 9336C-SE1 switch	Beginning with Cisco NX-OS Release 10.6(1)F, added VXLAN support on Cisco Nexus 9336C-SE1 switch. For more information, see Cisco Nexus 9000 Series NX-OS VXLAN Configuration Guide, Release 10.6(x).
	VXLAN Anycast BGW (L2VNI) and RFC5549	Beginning with Cisco NX-OS Release 10.6(1)F, added L2VNI and RFC5549 underlay support for VXLAN Anycast BGW on Cisco Nexus 9364E-SG2-Q and Cisco Nexus 9364E-SG2-O switches. For more information, see Cisco Nexus 9000 Series NX-OS VXLAN Configuration Guide, Release 10.6(x).
	Base Transport Header (BTH) matching QoS policy	Beginning with Cisco NX-OS Release 10.6(1)F, added RoCEv2 header filter options to provide precise traffic filtering for the RoCEv2 protocol, enhancing Layer 3 QoS for Dynamic Load Balancing (DLB) on Cisco Nexus 9364E-SG2 Series switch. For more information, see Cisco Nexus 9000 Series NX-OS Quality of Service Configuration Guide, Release 10.6(x).
	SMET route interoperability support	Beginning with Cisco NX-OS Release 10.6(1)F, added a new format RFC 6625 encoding option to the advertise evpn multicast command for EVPN route Type 6, 7 and 8 to address interoperability issues between Cisco NX-OS and other vendors devices due to different encoding methods for multicast routes. For more information, see Cisco Nexus 9000 Series NX-OS VXLAN Configuration Guide, Release 10.6(x).

Product impact	Feature	Description
	Support RPKI community when connected via eBGP	Beginning with Cisco NX-OS Release 10.6(1)F, network administrators can utilize BGP Prefix Origin Validation State Extended Community to signal and accept origin-as validation state to and from external BGP peers. For more information, see Cisco Nexus 9000 Series NX-OS Security Configuration Guide, Release 10.6(x) and Cisco Nexus 3000 and 9000 Series NX-API REST SDK User Guide and API Reference, Release 10.6(x)
	PIM Graceful-SPT Feature to Be Default	Beginning with Cisco NX-OS Release 10.6(1)F, the ip pim spt-switch-graceful command is enabled by default. This feature minimizes packet loss by allowing a graceful switchover from the shared tree to the shortest path tree (SPT) where the shared tree is used until the shortest path tree (SPT) is fully established and verified by receiving the first data packet. For more information, see Cisco Nexus 9000 Series NX-OS Multicast Routing Configuration Guide, Release 10.6(x).
	gNOI Containerz for TPA lifecycle orchestration	Beginning with Cisco NX-OS Release 10.6(1)F, support is added for gNOI Containerz for TPA lifecycle orchestration, put RPC, and Set Package
	gNOI File Put RPC	to upgrade NX-OS or to install RPMS. For more information, see Cisco Nexus 9000
	gNOI SetPackage to upgrade NX-OS	Series NX-OS Programmability Guide, Release 10.6(x)
	TACACS+ TLS 1.3 support with IEFT draft	Beginning with Cisco NX-OS Release 10.6(1)F, users can use TLS 1.3 to configure TACACS+ server for a client. For more information, see Cisco Nexus 9000 Series NX-OS Security Configuration Guide, Release 10.6(x).
	Multicast route statistics (Cisco Nexus 9336C-SE1 switch)	Beginning with Cisco NX-OS Release 10.6(1)F, multicast flex statistics for IPv4 is supported on Cisco Nexus 9336C-SE1. For more information, see Cisco Nexus 9000 Series NX-OS Multicast Routing Configuration Guide, Release 10.6(x).
	Support PBR feature on Cisco Nexus 9336C-SE1 switch	Beginning with Cisco NX-OS Release 10.6(1)F, the following features of policy-based routing are supported on Cisco Nexus 9336C-SE1 switch: • Base redirection • 32 way ECMP • NULL routes • IPv4 and IPv6 PBR policies For more information, see Cisco Nexus 9000 Series NX-OS Unicast Routing Configuration Guide, Release 10.6(x)

Product impact	Feature	Description
	L2VLAN segmentation with SVI	Beginning with Cisco NX-OS Release 10.6(1)F, mac based micro-segmentation is supported with L2 VLANs with SVI and without SVI. For more information, see Cisco Nexus 9000 Series NX-OS VXLAN Configuration Guide, Release 10.5(x) and Cisco Nexus 3000 and 9000 Series NX-API REST SDK User Guide and API Reference, Release 10.6(x)
	Match Criteria: Port+VLAN (1 Bridge Domain, 2 security groups use case)	Beginning with Cisco NX-OS Release 10.6(1)F, users can select combination of VLAN and an interface to create a security group. For more information, see For more information, see Cisco Nexus 9000 Series NX-OS VXLAN Configuration Guide, Release 10.6(x)
	Deprecate redundant SSH configuration and DSA CLIs	Beginning with Cisco NX-OS Release 10.6(1)F, some of the DSA algorithm and all the DSA-related SSH CLI commands are deprecated. For more information, see Cisco Nexus 9000 Series NX-OS Security Configuration Guide, Release 10.6(x).
	Smart License HTTP Connect Message - User Agent String	From NX-OS Release 10.6(1)F, for packet captures, the HTTP User-Agent string is enabled in HTTP Connect messages for Smart Licensing transport. The User-Agent string is set to cisconxos, allowing proxies to identify Nexus devices and facilitate connectivity. In earlier releases, nexus switches had to be identified manually. For more information, see Cisco Nexus 9000 and 3000 Series NX-OS Smart Licensing Using Policy
		User Guide.
	Egress TA support on FX and FX2 TORs	Starting from Cisco NX-OS Release 10.6(1)F, Egress Traffic Analytics feature is supported on 9300-FX and FX2 TOR switches.
	SPAN and ERSPAN for Layer 2 ports on Nexus 9800 switches	Starting from Cisco NX-OS Release 10.6(1)F, SPAN and ERSPAN are supported on Layer 2 ports on Nexus 9800 switches. For more information, see Cisco Nexus 9000 Series NX-OS System Management Configuration Guide, Release 10.6(x).
	Securing NX-OS with Cisco Live Protect	Starting from Cisco NX-OS Release 10.6(1)F, the Cisco Live Protect feature is introduced to protect the Nexus switches in monitoring mode. This feature is implemented using the NXSecure configuration. This feature is only supported on Cisco Nexus 9300-FX, -FX2, -FX3, -GX, -GX2, -H1, and -H2R switches. For more information, see Cisco Nexus 9000 Series NX-OS Security Configuration Guide, Release 10.6(x).

Product impact	Feature	Description
	Support for Breakout interfaces with DLB/FLB	Beginning from Cisco NX-OS Release 10.6(1)F, the users can add specific breakout ports in the interface list for the DLB interface on Cisco Nexus 9364E-SG2-Q and Cisco Nexus 9364E-SG2-O switches. For more information, see Cisco Nexus 9000 Series Unicast Routing Configuration Guide, Release 10.6(x).
	Al/ML License Enhancements (Adaptive routing)	Starting from Cisco NX-OS Release 10.6(1)F, as part of the AI/ML License Enhancements, the adaptive routing feature is supported on Cisco Nexus 9300-FX, -FX2, -FX3, -GX, -GX2, -H1, and -H2R switches, as well as on Cloudscale platforms (GX2A and GX2B) and the G200 SiliconOne platform. Adaptive routing feature utilizes NVIDIA® NIC's spectrum-x capabilities and requires you to enable a new command and have the relevant licenses.
	SPAN to CPU and ERSPAN Tx mirroring support on SG2 switches	Starting with NX-OS Release 10.6(1)F, SPAN to CPU is supported for both Tx and Rx mirroring and ERSPAN Tx mirroring is supported on Nexus 9364E-SG2 switch. For more information, see Cisco Nexus 9000 Series NX-OS System Management Configuration Guide, Release 10.6(x).
	Nexus Data Broker (NDB) packet truncation	Packet truncation is a software feature that allows a Cisco Nexus 9000 CloudScale switch to shorten packets to a user-defined size as they exit an interface. You can control the Cyclic Redundancy Check (CRC) value of runcated packets, streamline monitoring by truncating packets at the egress port, and save resources. Nexus Data Broker (NDB) packet truncation is supported on Cisco Nexus 9300-FX/FX2/FX3/GX/GX2/H2R/H1 Series switches. For more information, see Cisco Nexus 9000 Series NX-OS System Management Configuration Guide, Release 10.6(x)
	Versatile diagnostics monitoring	Cisco NX-OS Release 10.6.1(F) supports VDM features on VDM capable optic modules depending on the firmware version on optic modules. You can use versatile diagnostics monitoring (VDM) to monitor pluggable optical modules on the Cisco Nexus 9364E-SG2-Q switch. For more information, see Cisco Nexus 9000 Series NX-OS Interfaces Configuration Guide, Release 10.6(x)
	Support for Cisco SFP-10G-OLT20-X module	Beginning with Cisco NX-OS Release 10.6.1(F), Cisco Nexus 9000 Series switches support the SFP-10G-OLT20-X module.

New hardware features

This section provides a brief description of the new hardware features introduced in Cisco NX-OS Release 10.6(1)F.

Cisco Nexus 9336C-SE1

The Cisco Nexus 9336C-SE1 switch is a 1-RU fixed-port, Top-of-Rack (TOR) switch that supports both Layer 2 (L2) and Layer 3 (L3) configurations. It supports 36 fixed QSFP28 ports and uses the Silicon One™ E100 ASIC.

For Supported Features on Cisco Nexus 9336C-SE1 switch, see

• Cisco Nexus 9336C-SE1 READ ME FIRST

Unsupported Hardware

From Cisco NX-OS Release 10.6(1)F, the following hardware are not supported.

- N9K-C92348GC-X
- N9K- C9332C
- N9K-C9364C
- N9K-X9736C-EX
- N9K-X9732C-EX

Resolved issues

This table lists the resolved issues in this specific software release.

Note: This software release may contain bug fixes first introduced in other releases. To see additional information, click the bug ID to access the <u>Cisco Bug Search Tool</u>.

Table 2. Resolved issues for Cisco Nexus 9000 Series switches, Release 10.6(1)F

Bug ID	Bug Description
CSCwq26517	N9K DNS: source-interface not working for ip name-server command in 10.5(3)
CSCwp08416	N9K Configured with the `vlan dot1q tag native` global command may drop traffic on the port with SrcId 0
CSCwp14674	TCP: MD5 Hash not found for (11.11.xx.xx, 179)->(1.1.x.x, 46958) R - kernel
CSCwp25644	N9k PIDs brings down interfaces for laser cuts less than debounce timer
CSCwo80263	Inconsistent switch memory usage between CLI and DME
CSCwp27254	Nexus 9000: VPC Fabric Port Status Stuck UP or DOWN After Virtual Peer-Link Reconfiguration
CSCwp03035	iBGP Routes Cannot Be Redistributed into OSPF
CSCwp61385	NXOS 10.3.6 missing OID 1.3.6.1.4.1.9.9.691.1.1.2.1 CefexConfigEntry in snmpwalk
CSCwp17526	N9K PVLAN primary does not work if port-VLAN mapping is configured on the same port

Bug ID	Bug Description
CSCwp90936	N9K/N3K unexpected reload due to sysmgr shutdown
CSCwp83852	User role modifications not applied in N9K
CSCwp15766	Unable to configure the MTU 1500 when creating port-channel sub interface via RESTCONF:PATCH
CSCwo88419	nginx_dme process crashes repeatedly
CSCwo41002	N9500-R: Disable mac learning on additional higher range internal ports
CSCwp01976	In OSPFv3, the path selection for E1 type route is not working properly for some prefixes.
CSCwq00225	'ipv6 link-local' configuration missing after reload
CSCwo69699	Duplicates Seen During vPC Border Leaf Recovery in TRM Fabric
CSCwo79875	N9400 can not display LEM online syslog
CSCwp95741	Route in peer missing after configuring address-family ipv4 unicast under neighbor
CSCwo84711	N9K: vsh.bin crash and error EOL function pfm_cli_show_inventory from library libpfm.so
CSCwp04483	Nexus 9408: LEM is slot 6 showing 0 origin timestamp in PTP sync message on boot
CSCwo80063	System core file storage usage is unexpectedly high
CSCwo69188	SNMP syslogs stating ACL not found despite being present
CSCwp00709	High CPU due to vsh.bin with rapid logging of sev 0,1,2 syslogs
CSCwo94050	N9K-C93108TC-FX3P - PoE Interfaces Require Manual Shut/No Shut to Power Up After Cable Insertion
CSCwp87790	Nexus N9K-C9364D-GX2A interface stays down after replacing the transceiver QDD-400G with a QSFP-100G
CSCwp19152	NTP MTS build up leading to copy run start and show cli failure
CSCwo90314	When the aaa group1 cannot access the TACACS Server but the source-interface remains up, the permissions obtained by the role are abnormal
CSCwp22707	N9K-C93360YC-FX2 - PSU fans running at 100% after upgrade
CSCwq14936	Issue with RIP Summary Route Propagation on Nexus 9000
CSCwo90376	[Telemetry] Large number of AAAA DNS queries are sent by the nexus switch to the DNS server to resolve telegraf hostname, even though IPv6 is not configured
CSCwq11709	SCP File Download Fails in Verbose Mode from NXOS Server
CSCwp58949	"ip igmp static-oif route-map " entries count towards ICAM PBR sequence
CSCwp08468	flexcoh_SDK.log fills up /var/sysmgr/tmp_logs folder on the LC which would impact ND-ISSU
CSCwq10716	Light levels on FEX report different values after NX-OS upgrade

Bug ID	Bug Description
CSCwq27803	Bandwidth remaining percent values are not honored on R series Line card
CSCwp95485	SYN-TIMEOUT and FINRST-TIMEOUT timers activate when ASCII reload happens, even with no tcp-nat tcam carved
CSCwo74023	N9K object-group editing causes aclqos hap-reset, ASIC errors and Module restart
CSCwp03577	N9K-C93108TC-FX3 - The 1G link comes up on the peer device after the FX3 reload and not in a system ready state
CSCwo66912	Upgrade from 9.3(x) to 10.4(5) fails due to SRG processing failed
CSCwq07354	n9k is stuck during booting up
CSCwq16808	FTP custom port not working, default port "21" is used instead
CSCwp29610	N9k VXLAN prefixes are installed in FIB without NVE Flag
CSCwo92631	N9K: Macsec-psk no-show removes key-octet-string on upgrade
CSCwo45133	N9K improvement to save power debug regiester2 in obfl
CSCwq23068	kernel panic at mts_sys_get_HA_state
CSCwp21192	Upgrading Nexus 93108TC-FX3P in Fex Mode from 9.3(11) to 10.4(4)M may cause specific FEX to not boot
CSCwo60636	Nexus 9408 - On occasion ASIC MAC fault interrupts are missed, resulting in down links staying connected.
CSCwp15191	DME "operErrDisQual" state "link-flap-err" not restored to "up" after interface error disabled state recovery
CSCwo52934	N9K-C9316D-GX management interface will not come up with 1Gb SFP
CSCwq31398	SNMP-Server Community string not displaying 32 character community
CSCwo66097	Nexus 9000 - syslogd crash after changing remote logging host configuration
CSCwp10800	STP scalability affected by debugs
CSCwp19413	N9k Telemetry stops streaming under certain conditions
CSCwp02936	N9k triggers a kernel panic due to memory leak in ipqosmgr
CSCwo72997	N9K Mroute is getting deleted/expired every 4-5 minutes.
CSCwo94451	Unknown Unicast Frames with Ethertype 0x0000 Flooded and Looped by vPC VTEPs in eVPN Fabric
CSCwn65152	sFlow generates duplicate sFlow samples for TCP traffic
CSCwm41191	Interface not coming up when auto negotiation is enabled with QSFP-100G-PCC
CSCwq28687	Observing telemetry crash post ISSU

Bug ID	Bug Description
CSCwp99731	N9K: %DAEMON-3-SYSTEM_MSG: "can't read from 679/stat - pidof[697]" appears frequently
CSCwp08740	Kernel panic with mts_q exhaustion for telemetry process
CSCwo90276	N9k does not populate remote IP address field within AAA bound packet
CSCwo53143	VTP does not forward on vPC port-channels after link flap
CSCwo82289	Programmability hardening: NVE crash when configuring/unconfiguring ND suppression at high VNI scale
CSCwp01080	Config replace failing with NetFlow config with message ".ERROR: MTS send/receive failed"
CSCwo94447	Type 6 primary key fails to get programmed post multi-hop upgrade + AAA config changes to 10.4.x
CSCwo79875	Device cannot display LEM online syslog
CSCwo08423	VXLANv4 EVPN regression job, Type1ConsistencyCheck failed due to s1hal core
CSCwm08921	L2PT process crashed during FEX removal via NDFC
CSCwp31181	NIA RPM fails due to multiple PIDs and pgrep only killing last PID
CSCwo69786	Fibre interface not coming up after upgrade to NXOS 10.3.6 (QSFP-H40G-AOC5M)
CSCwp15351	Crash in mrib ephemeral routedb
CSCwq14416	dACL is not being programmed correctly in TCAM
CSCwo63323	MTM process crash when large number of MAC addresses in the network
CSCwo19914	Device does not send 802.1D TCN BPDU in link to legacy STP

Open issues

This table lists the open issues in this specific software release.

Note: This software release may contain open bugs first identified in other releases. To see additional information, click the bug ID to access the Cisco Bug Search Tool.

Table 3. Open issues for Cisco Nexus 9000 Series switches, Release 10.6(1)F

Bug ID	Description
CSCwj48097	The throughput displayed by `show policy-map interface ethernet x/y` outputs as " n/a bps" in N9K.
CSCwq74807	Truncated packets are still marked as crc errored when sent out from 10G ports on N9K-C9364D-GX2A, N9K-C9332D-GX2B
CSCwq38959	On N9K-C93108TC-FX3P, after ND-ISSU, there can be complete traffic drop on 2.5G/5G interface

Known issues

This table lists the limitations for this release. Click the bug ID to access the Cisco Bug Search Tool and see additional information

Table 4. Known issues for Cisco Nexus 9000 Series switches, Release 10.6(1)F

Bug ID	Description
CSCwn08623	VXLAN-encapped OSPF hello from VPC peer doesn't hit LCND OSPF - no VLAN tag
CSCwp27259	ECN packet count is getting incremented in QOS-group 6 without any traffic
CSCwp59772	9500-FM-G EOR - NLB - Traffic forwarded on NLB vlan with lookup mode set to I3 is not flooded out of mixed mode ports and after when mrouter is configured on port-channel 102 traffic is not expected to flood for NLB_NonIPMAC
CSCwq21675	Loopback connected interfaces failed to link up after ISSU followed by no breakout
CSCwp92889	IGMP traffic took 10s to converge after PO unshut trigger
CSCwp99573	Post migrating IR → mcast, MET not created for underlay causing traffic drop
CSCwp92116	n9k/vxlan/vpc/xconnect - vpc primary shut down cause flap on xconnect session from vpc secondary
CSCwp37399	100g-4x breakout ports do not recover post remote-side reset
CSCwq16614	N9K FX3P 1G ports with MACsec enabled drop Layer 2 (L2) traffic
CSCwp51061	The next-hop address in FIB is pointing to local SVI's IP address
CSCwp35926	NXOS - OSPFv3 adj to FTD fails with IPSec ESP Auth
CSCwq07875	SPAN Session not mirroring some traffic after SPAN SRC or DST interfaces are bounced
CSCwq00509	N9348-FXP: Port connecting to SRX4600 goes Down if connects Console instead of Managment at the Z End
CSCwp93132	Power off/on all FMs causing BootupPortLoopback failure for modules
CSCwo94391	HSRP config missing after GNMI config replace
CSCwp66278	Netflow config for sub-int missing due to state machine getting stuck for long and Netflow missed notification
CSCwp67832	After changing VNI, DCI to Fabric broadcast traffic blocked
CSCwp02237	"No IP/IPv6 redirects" missing from all the SVI's DME rest config replay
CSCwo61898	ERSPAN MTU truncation T-bit is not set when source is L2 port
CSCwp80632	Seeing a traffic loss after shut LAN trigger on HSRP active node
CSCwq12232	Custom CoPP: Policer idx is incorrect for BFDC v4 PACKET entry

Compatibility

This section lists compatibility information for Cisco Nexus 9000 Series switches

Table 5. Cisco Nexus 9500 Cloud Scale Line Cards

This section lists compatibility information for Cisco Nexus 9000 Series switches

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-X9788TC-FX	4	4	4	4	4	4
N9K-X97160YC-EX	4	4	4	4	4	4
N9K-X9732C-FX	4 5 (n+1 redundancy)					
N9K-X9736C-FX3	5 (n+1 redundancy)					

Table 6. 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 7. Cisco Nexus 9500 R2-Series Line Cards

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

Scalability

This section describes the Cisco NX-OS configuration limits for Cisco Nexus 9000 Series switches. For more information, see Cisco Nexus 9000 Series NX-OS Verified Scalability Guide, Release 10.6(1)F.

Supported hardware

This section lists the hardware support information for Cisco Nexus 9000 Series switches

Table 8. 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 9. 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 10. 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 11. Cisco Nexus 9800 Supervisor Module

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

Table 12. 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 13. 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 14. 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 15. 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-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
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-X9736C-FX3	Cisco Nexus 9500 36-port 100-Gigabit Ethernet QSFP28 line card	4	8	16

Table 16. Cisco Nexus 9500 R-Series Line Cards

Product ID	Description Maxim		ximum 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	

Product ID	Description	Maximum Quantity	
		Cisco Nexus 9504	Cisco Nexus 9508
N9K-X9624D-R2	Cisco Nexus 9500 24-port 400-Gigabit QDD Line Card	Not supported	8

Table 17. 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 18. 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 19. 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 20. Cisco Nexus 9500 System Controller

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

Table 21. 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 22. 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 23. 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 24. 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 25. Cisco Nexus 9200 and 9300 Switches

Cisco Nexus Switch	Description
N9K-C92348GC-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-C93400LD-H1	1-RU fixed-port, L2/L3 switch with 48 50G SFP56 ports and 4 400G QSFP-DD uplink ports.
N9K-C93108TC-FX3	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.
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/1G copper RJ-45 downlink ports that 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 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.
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-H1	2-RU fixed-port switch with 64 100G SFP28 ports.

Cisco Nexus Switch	Description
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 26. 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.[1]Error! Reference source not found.Error! Reference source not found.Error! Reference source not found.Error! Reference source not found.Error! Reference source not found. 93360YC-FX2Error! 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

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 $^{^{\}rm 2}$ For specific fan speeds see the Overview section of the Hardware Installation Guide.

Product ID	Description	Quantity	Cisco Nexus Switches
NXA-FAN-160CFM2-PI	Fan module with port-side intake airflow (burgundy coloring)	4	9364C-GX
NXA-FAN-30CFM-B	Fan module with port-side intake airflow (burgundy coloring)	3	93108TC-FX 93180YC-FX 9348GC-FXP
NXA-FAN-30CFM-F	Fan module with port-side exhaust airflow (blue coloring)	3	93108TC-FX 93180YC-FX 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) Fan module with port-side exhaust airflow (blue coloring)	6	92300YC [11] 9332C [11] 93180YC-FX3S [21] 93180YC-FX3 93108TC-FX3P 93180YC-FX3H 9316D-GX 93600CD-GX
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]

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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 27.
 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-FX3 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	exhaust airflow (blue coloring) 1 9336C-19332C		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	93180 93180 9364C 93180		93360YC-FX2 93180YC-FX3S 93180YC-FX 9364C 93180YC-FX3H 93108TC-FX3
NXA-PDC-1100W-PE	exhaust airflow (blue coloring) 936 931 933 933		93240YC-FX2 93600CD-GX 9316D-GX 9332C 9336C-FX2 9336C-FX2-E
NXA-PDC-1100W-PI	airflow (burgundy coloring) 93 93 93 93		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

Fabric Module and Line Card compatibility details are listed below:

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-X9788TC-FX	4	4	4	4	4	4
N9K-X97160YC-EX	4	4	4	4	4	4
N9K-X9732C-FX	4 5 (n+1 redundancy)					
N9K-X9736C-FX3	5 (n+1 redundancy)					

Table 28. 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 29. Cisco Nexus 9500 R2-Series Line Cards

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

Supported software packages

This section provides information about the release packages associated with Cisco Nexus 9000 Series switches

Table 30. Software packages for Cisco Nexus 9000 Series switches, Release 10.6(1)F

Software package	Description	Release
nxos64-cs. <version>.bin</version>	64-bit NX-OS core system image for most Cisco Nexus 9000 series switches	10.6(1)F
nxos64-s1. <version>.bin</version>	64-bit NX-OS core system image, mandatory for Cisco Nexus 9800 series switches	10.6(1)F

nxos64- msll. <version>.bin</version>	64-bit NX-OS core system image for Nexus 9000 -R and -R2 modular switches	10.6(1)F
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Related resources

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 Cisco Nexus 9000 and 3000 Series NX-OS Switch License Navigator Cisco Nexus Smart Licensing Using Policy User Guide	Licensing Information When you downgrade from Cisco NX-OS Release 10.5(1)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(1)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

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