Cisco Nexus 9000 Series NX-OS Release Notes, Release 9.3(11)

Introduction

This document describes the features, issues, and exceptions of Cisco NX-OS Release 9.3(11) software for use on Cisco Nexus 9000 Series switches.

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.

Date	Description
April 25, 2024	Added CSCwh50989 and CSCwe53655 to Open Issues.
June 26, 2023	Added N9K-9372TX-E and N9K-C9372PX-E to Table 15.
January 30, 2023	Cisco NX-OS Release 9.3(11) became available.

New and Enhanced Software Features

There are no new or enhanced software and hardware features introduced in Cisco NX-OS Release 9.3(11).

Open Issues

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

Bug ID	Description
CSCwb86366	Headline: ACLQoS crashes and system reboots when defaulting Break Out ports that is a member of PO. Symptoms: Cisco NX-OS crashes due to aclqos hap reset. This issue is also seen after interface flap on a Cisco Nexus switch even when there is no change in configuration. Workarounds: Upgrade to Cisco NX-OS Release 10.3(x).
CSCwd38369	Headline: Unable to configure arp sup acl entry as dynamic label allocation fails post ASCII reload. Symptoms: The syslog shows the following error: Couldn't configure arp sup acl entry because dynamic label allocation failed. Due to this suppress-arp feature will not work. Please disable features not needed using 'show system internal access-list tcam label' and re-enable feature nv overlay. The following symptoms are noted: • ARP resolve issue in VXLAN setup as ARP suppression does not work. • Missing VXLAN ACL for sup-redirection - VXLAN-DROP_DECAP_UUC. Workarounds: If the NAT feature is not in use in VXLAN VTEP running config, then disable it.

Bug ID	Description
CSCwd68210	Headline: Cisco Nexus 9000 and Cisco Nexus 3000 Switch 100Gig Interface does not come up after upgrade of Cisco Nexus 9000. Symptoms: Interface does not come up after the upgrade of Cisco Nexus 9500 from Cisco NX-OS Release 9.3(4) to 9.3(8). The SFP used is QSFP-100G-CWDM4-S. Link between Cisco Nexus 9000 is N9K-X9736C-FX and leaf is N3K-C36180YC-R. Workarounds: None.
CSCwd82487	Headline: On Cisco Nexus 9000 VXLAN, MAC Mobility Seq does not get incremented for MAC only BGP update. Symptoms: The following symptoms are seen: • After moving host from one leaf to the other, mac mobility sequence does not get incremented for MAC only BGP update. • For Mac-ip, MAC Mobility Sequence gets incremented. Workarounds: Run the clear mac address-table dynamic address <address> command.
CSCwd92065	Headline: The start time and end time exported in the NetFlow are showing incorrect values. Symptoms: Wrong timestamp is found in the NetFlow exported data, where the time is ahead of the actual time or the system uptime. Workarounds: None.
CSCwe00551	Headline: Multicast first packet failed to create (S,G) entry on LHR. Symptoms: The following symptoms are seen: • Receiver comes online before sender sends packet • (*,G) entry is created on RP, LHR, and Intermediate routers • Sender first Multicast packet gets punted to CPU on FHR • (S,G) entry is created on RP • First packet does not reach the LHR and receiver • Second multicast packet reaches the LHR and then the (S,G) entry is created on LHR • No change noticed in spite of configuring ip routing multicast software-replicate on FHR Workarounds: None.
CSCwe01333	Headline: Object number in the Track list turns to 0 after upgrade from Cisco NX-OS Release 9.2(3) to 10.2(4). Symptoms: Upgrade the N9K-C93180YC-FX device from Cisco NX-OS Release 9.2(3) to 10.2(4) (disruptive upgrade). Post upgrade, the object value changes from original to 0 not. Workarounds: Re-deploy the missing part of the configuration.
CSCwe01850	Headline: After customer upgrades the Cisco Nexus 9000 switch from Cisco NX-OS Release 9.3(9) to 10.2(4), ARP does not learn, and STP-state remains inconsistent. Symptoms: After Cisco Nexus 9000 switches are upgraded from 9.3(9) to 10.2(4), ARP goes into an Incomplete state and STP state is inconsistent for most VLANs. Workarounds: Re-configure the port-channel.
CSCwe07768	Headline: Cisco Nexus 9300-GX platform puts BFD in default Queue. Symptoms: When output discards are seen on a GX platform that are all a part of Queue 0, BFD flaps intermittently and goes down after the TAHUSD Buffer threshold messages kick off. Workarounds: Manually configure a QoS policy to set BFD packets to QoS group 7 (priority queue).

Bug ID	Description
CSCwe08697	Headline: 40G Links flap during ISSU from 9.3(10) to 9.3(11) on N9K-X9464PX. Symptoms: Failure of In-Service Software Upgrade (ISSU) when upgrading from Cisco NX-OS Release 9.3(10) to Cisco NX-OS Release 9.3(11) with FEX connection on N9K-X9564PX LC 40G interface. Workarounds: None.
CSCwe53655	Headline: Revert reserved MAC blocking behavior for VRRP macs on SVIs Symptoms: User is not able to configure VRRP VMAC on SVI interfaces. Workarounds: None.
CSCwh50989	Headline: Custom COPP causing transit traffic to be punted to the CPU on Nexus 9300-GX2 Symptoms: When custom-COPP policy contains ACL rules which match on Layer 4 destination or source port, transit traffic also hits the COPP and the packets are copied to CPU. This causes duplication of traffic as CPU also routes the copied packets to the destination. Workarounds: Custom COPP policy using src/dst match mitigates punt for transit traffic.

Resolved Issues

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

Bug ID	Description
CSCvw58434	Headline: NAT core is seen when running NAT sanity. Symptoms: NAT process crash and system reload is observed when user configures or unconfigures the NAT inside or outside on Layer 3 interface. Workarounds: None.
CSCvw30328	Headline: The copy r s command gets aborted. Symptoms: If VRF is not up, the interface configuration entered on SVI interfaces belonging to a VRF may not be applied. When attempting to save the configuration, the log shows configuration copy aborted or configuration copy failed. Workarounds: Bring up the VRF before adding configuration.
CSCvx84922	Headline: Interim ACL rule programmed during non-atomic update does not function as expected. Symptoms: During the brief time interval required for the device to update an ACL, an issue with non-atomic updates of Access Control Lists (ACLs) on Cisco Nexus 9000 Series switches may result in traffic being permitted instead of being denied. Workarounds: None. This issue only affects the brief time interval required for the non-atomic update of the ACL and the expected ACL behavior is enforced after that.
CSCvy75335	Headline: The vmtracker process crash and box potentially reloads with vmtracker configs. Symptoms: When the vmtracker configurations are added on a Cisco Nexus 9000 switch, the vmtracker process may crash and potentially reload the entire switch. Workarounds: Remove the vmtracker configurations if they are not in use. Otherwise, upgrade to a release with the code fix.

Bug ID	Description
CSCvz43168	Headline: N9K-C9336-FX2 - 10.1(2) and 9.3(8) - Fan speeds drop to as low as 20%. Symptoms: When N9K-C9336-FX2 runs on 9.3(8) or 10.1(2) code, temperature alarms occur and the difference in speed is observed in the output of the show environment fan detail command. Workarounds: Perform any one of the following workarounds: • Downgrade to older releases such as 10.1(1) or 9.3(7a) • Run a script connecting every hour to the affected switch executing the following command: no hardware fan-zone 1 raise-speed 80hardware fan-zone 1 raise-speed 80
CSCvz67451	Headline: Bootflash lifetime usage threshold syslog shows incorrect usage value in the show command. Symptoms: The following syslog appears when the switch reaches a lifetime usage value of 95% on the bootflash. PLATFORM-2-BOOTFLASH_LIFETIME_MAJOR: Bootflash lifetime usage crossed 95%. Collect the output of the show hardware internal bootflash log command and consult the product support team. When the recommended command is checked the output has inaccurate usage percentages. These percentages make it difficult to determine whether the syslog is correct and whether the switch has an issue. Workarounds: None.
CSCvz89475	Headline: Cisco Nexus 9300-FX2/FX3 sends untranslated packets using twice NAT when one HW entry is already installed. Symptoms: With twice NAT configuration with pool and overload, packets with untranslated destination address (pool address as destination) are seen in the out-to-in direction. Workarounds: Configure ip nat translation creation-delay 0 in this situation and minimize the time window for which untranslated packets are received. However, the problem may persist.
CSCvz01927	Headline: ARP process crash. Symptoms: ARP process crash is seen when the show ip arp vrf XXX commands are executed frequently. Workarounds: To reduce the crash risk, do not run the show ip arp vrf XXX commands too often while ARP entries add/deletes are in progress in the scaled environment.
CSCwa05191	Headline: Interface track configured under sub-interface does not work after reload. Symptoms: Interface track is configured under sub-interface. When switch comes back from reload, interface track does not work. For example, an interface track is configured under sub-interface where HSRP is also configured, and the tracked interface is up. However, HSRP still recognizes that the tracked interface is down. Workarounds: Do not use sub-interface. With parent interface (no sub-interface) or SVI, this configuration should work correctly.
CSCwa77878	Headline: Default MTU is seen in running-config when non-default value is configured under network-qos class-map. Symptoms: When configuring non-default values (dpp, pause, and so on) under class-map in network-qos policy-map, default MTU, for example, mtu 1500, is shown in show running-config and cannot be deleted by the no mtu 1500 command. Default value should not be shown in show running-config. Workarounds: None. Note that though the default value is seen in running-config, there is no impact on the switch functionality.

Bug ID	Description
CSCwa90917	Headline: Cisco Nexus 9000 PKI Authentication Failure. Symptoms: Unable to log in to Cisco Nexus 9000 using certificate-based login. Workarounds: None
CSCwa92834	Headline: Enhancement to tweak the PLL value through non hidden command. Symptoms: Link flaps between Cisco Nexus 93180 and Cat 9200 switch due to jitter tolerance in the signal. Workarounds: Contact TAC for assistance.
CSCwb11701	Headline: Cisco Nexus 9000 - One or more VRFs are stuck in Delete Holddown due to BGP RNH route cleanup issue. Symptoms: One or more VRFs are stuck in Delete Holddown because RNHs are not deleted. Also, one or more routes in BGP event-history are stuck trying to resolve RNH approximately every 100 ms. This issue is seen when VRF is configured under BGP but does not have associated VRF context defined. Workarounds: Delete all stale or missing VRFs under BGP using the no vrf NAME command where NAME should be replaced by every missing VRF.
CSCwb12531	Headline: Cisco Nexus 9000 - Memory leak in LLDP (FU_MEM_fu_gwrap_t) after removing or reapplying VRF context. Symptoms: LLDP Memory is incrementing when VRF is removed or recovered. Workarounds: None.

CSCwb28215	Headline: Cisco Nexus 9000 - Continuous MTM flow control condition hit syslogs seen on Cloudscale platforms.
	Symptoms: The following syslog prints frequently though no significant MAC moves occur on the device:
	`2022 Jul 20 03:41:25.275 Nexus-SWITCH %TAHUSD-SLOT1-4-TAHUSD_L2_LEARN_DISABLE_MTM_FLOW_CTRL: Unit-1: MTM flow control condition hit [pending_msgs:10]`
	Workarounds: This issue is cosmetic as the logs are printing for existing MAC entries, not just new learns or updates. However, change MTM logging level as follows:
	`Nexus9000# configure terminal`
	`Enter configuration commands, one per line. End with CNTL/Z.`
	`Nexus9000(config)# attach module 1`
	`module-1# configure terminal`
	`Enter configuration commands, one per line. End with CNTL/Z.`
	`module-1(config)# logging level mtm 3`

CSCwb66035	Headline: For fabric interface, is-dci is set to TRUE. Symptoms: The issue can occur if the remote BGW's multisite IP address is seen over the fabric link by consulting the RIB when fabric link is initializing (bringing itself up). BUM traffic is dropped and this can impact ARP, multicast, and broadcast packets. Hosts on Site A cannot perform ARP resolution to Site B. Workarounds: Make sure the multisite IP addresses of remote BGWs are not reachable through the fabric link when the fabric link is bringing itself up. The is-DCI consults the routing table for the peer IP of the remote multisite BGWs to verify whether the link is DCI link or not.

Bug ID	Description
CSCwb83283	Headline: Memory leak due to port profile. Symptoms: Memory leaks are observed post SNMP CLI operations. Workarounds: Use REST GET or SNMPWALK/GET (avoid show commands).
CSCwb92400	Headline: Changes in the way the show hardware internal buffer info pkt-stats is collected in show techs. Symptoms: The existing show tech-support command outputs collect buffer stats only for module 1 and instance 0. These outputs do not present all information if the show tech command output is collected on switch with LC module which has more than one instance. For example, 9364GX switch has 4 instances ------ > show tech output will collect stats only for one of those instances. There is no output present for instance 1, 2, and 3. However, output is collected only for instance " 0" . Workarounds: None.
CSCwb93820	Headline: Cisco Nexus 9000/TRM - Invalid host entry in hardware after mcast source is moved between sites. Symptoms: Traffic destined to IP address of multicast sources can be forwarded by CPU or drop after multicast sources are moved between EVPN sites. This issue is seen on transit sites that do not have directly connected sources or receivers. This is due to invalid HW entry in host route table that has destination IP redirect to CPU set. This can be verified by CLI. Workarounds: Move host again between sites or stop multicast traffic and wait until S,G entry expires.
CSCwb99044	Headline: Need to remove mandate of L2VNI with dci-advertise-pip. Symptoms: NVE peering goes down across multisite. Workarounds: Create dummy L2VNI for NVE peering to work.
CSCwc08583	Headline: The vPC peer is alive for counter does not increase. Symptoms: vPC peer is alive for counter does not increase when IPv6 is configured for keep-alive. This counter moves for msec but shows 0 for seconds. Workarounds: Use IPv4 instead.
CSCwc21224	Headline: ACLQoS crash due to hap reset @ tlv_aligned_array_get_next_tlv. Symptoms: Switch crashes due to an ACLQoS process crash, as seen in the outputs of the show version or show module internal exceptionlog command. Workarounds: None.
CSCwc24060	Headline: Cisco Nexus 9000 - Inner tag removed when traffic crosses vPC peer-link. Symptoms: Dot1q tunneled traffic has its inner tag removed or stripped when crossing the peer-link of the vPC pair. Workarounds: Disable and enable the system dot1q-tunnel transit vlan <vlan-id> (for the provider VLANs) command to solve the forwarding issue.
CSCwc25401	Headline: Set DHParam for Cisco NX-OS Release 9.3(9) to 2048. Symptoms: Enhancement to adjust the current Cisco NX-OS Release 9.3(x) code with a SMU to set the DHParam from the default of 1024 to a new value of 2048 to fix scanning issue. Workarounds: Upgrade to Cisco NX-OS Release 10.2(3) or 10.3(1) to remove the ciphers in question: DHE-RSA-AES128-GCM-SHA256, DHE-RSA-AES128-SHA256, and DHE-RSA-AES256-GCM-SHA384.

Bug ID	Description
CSCwc26955	Headline: LACP egress is set to incorrect traffic class. Symptoms: LACP Tx direction may drop LACP PDU randomly due to incorrect TC values set. Such control plane flow is always expected as TC0. However, in the current release, it is TC7. Workarounds: Shut down or remove the monitor session.
CSCwc30146	Headline: IPv6 packet does not include Layer 3 header when calculating MTU. Symptoms: IPv6 packet does not include Layer 3 header when calculating MTU, which causes few packets that crossed MTU to get transferred with default MTU setting (1500) on Cisco Nexus 9000. Workarounds: None.
CSCwc34293	Headline: N9K-C9336C-FX2 Multicast Tx SPAN does not work. Symptoms: N9K-C9336C-FX2 Multicast Tx SPAN does not work. Configure multicast Tx span source, but no output is seen on span dst. Workarounds: None.
CSCwc35610	Headline: PSU actual input and output power are 0 after upgrade to Cisco NX-OS Release 9.3(9). Symptoms: The output of the show environment power command shows the actual power input and output as 0, though the box is working fine, and no Power failure alert is seen in the log. Workarounds: None.
CSCwc36651	Headline: EEM - event fib route does not work. Symptoms: Unable to generate or trigger syslog with the EEM event fib route feature. Workarounds: None.
CSCwc36942	Headline: UC_RPF_FAIILUR/uRPF is kept on even when recreating SVI with no uRPF. Symptoms: Asymmetric traffic are dropped with the ELAM final drop of UC_RPF_FAIILUR. Workarounds: Perform any one of the following workarounds: • Reload ascii command to load the configuration on reboot instead of binary. • Remove the uRPF configuration on SVI before deleting the SVI itself.
CSCwc37654	Headline: Cisco Nexus 9300 NAT breaks short-lived passive data FTP sessions with non-zero NAT creation-delay. Symptoms: Short-lived passive FTP data session fails. Data session does not work. Workarounds: None.
CSCwc38530	Headline: BGP with MD5 authentication does not form between switches that use non-default vrf with long name. Symptoms: When trying to form BGP with MD5 authentication between 2 directly connected switches in VRF with 32-character name, BGP does not come up. Workarounds: Perform the following workaround: 1. Shorten VRF name from at least one side (even by 1 character). 2. Remove MD5 authentication.
CSCwc40726	Headline: Cisco Nexus ACLQoS event-history error output is missing in ACLQoS TS and TS detail. Symptoms: Module level ACLQoS tech-support output is missing in the tech-support detail. Workarounds: Collect missing output separately. Module level aclqos tech-support can be collected through slot <slot no> quoted in the show tech-support aclqos command output.

Bug ID	Description
CSCwc41076	Headline: Cisco Nexus 9000 - Packet loss during initializing FEX HIF after FEX comes online. Symptoms: In AA FEX topology, when shut/no shut of the NIF (vPC leg) is done on the Primary SW (HSRP) and the FEX comes online again, ARP reply to the host connected to the FEX from the SW is dropped on the SW until HIF on the FEX comes up on the SW. Workarounds: None.
CSCwc42251	Headline: LLDP crashes when configuring it on the device. Symptoms: When trying to configure LLDP, it crashes. Though the LLDP feature is enabled, it does not run. Disabling and re-enabling the feature lldp in the configuration does not help either. Workarounds: None.
CSCwc43397	Headline: Memory leak in the NGINX process. Symptoms: Nexus switch memory usage might be constantly increasing due to the NGINX process. Workarounds: None.
CSCwc44309	Headline: Cisco Nexus 9300 single NAT without AU breaks passive data FTP session flow after a successful initial start. Symptoms: Passive FTP session data transfer fails to complete. Workarounds: None.
CSCwc48255	Headline: VSH process crash. Symptoms: This is a VSH shell crash that does not have an impact on the system and production environment. When this VSH shell crash happens, a user issuing a CLI is disconnected from the device and a core file is generated. [show cores] Workarounds: None. The VSH crash has no impact on the switch. The switch recovers on its own.
CSCwc48758	Headline: CoPP fails to apply, and no syslog is generated when PPF session fails. Symptoms: Under some rare circumstances, CoPP may fail to apply on system boot (PPF timeout). Workarounds: Use the show copp status command to validate that the CoPP is applied.

Bug ID	Description

CSCwc52440	Headline: LACP port-priority configuration does not take effect on platforms which do not support DME.
	Symptoms: LACP port-priority will not take any affect:
	`switch(config-if)# lacp port-priority 500`
	`switch(config-if)# show lacp interface ethernet 1/1`
	`Interface Ethernet1/1 is up`
	`  Channel group is 1 port channel is Po1`
	`  PDUs sent: 28`
	`  PDUs rcvd: 7`
	`  Markers sent: 0`
	`  Markers rcvd: 0`
	`  Marker response sent: 0`
	`  Marker response rcvd: 0`
	`  Unknown packets rcvd: 0`
	`  Illegal packets rcvd: 0`
	`Lag Id: [ [(8000, a4-4c-11-2c-dd-c1, 8000, 8000, 101), (8000, f4-cf-e2-8c-88-bc, 8000, 8000, 101)] ]`
	`Operational as aggregated link since Tue Aug 10 05:29:23 2021`
	`Local Port: Eth1/1  MAC Address= f4-cf-e2-8c-88-bc`
	`  System Identifier=0x8000,  Port Identifier=0x8000,0x101 < ??????  it should be 0x1f4,0x101 as 500 is 0x1f4 in hex`
	Workarounds: None

CSCwc52574	Headline: Cisco Nexus 9000 - SRC VTEP Peer IP 0.0.0.0 seen in the show nve peers command output. Symptoms: SRC VTEP peer IP 0.0.0.0 is listed in the output of the show nve peers command. Workarounds: Flap NVE Interface to clear and recreate peer entries. Then, reload the affected switch.
CSCwc53865	Headline: Cisco Nexus 9000 - show npv flogi-table command output is split across two lines. Symptoms: The output of the show npv flogi-table command splits the output in two lines. The command output for these types of platform-independent commands must be consistent as it was in the original output format and not split into two lines. Workarounds: None.
CSCwc55730	Headline: PIM-Process Crash Symptoms: %SYSMGR-3-HEARTBEAT_FAILURE: Service "pim" sent SIGABRT for not setting heartbeat for last 7 periods. Last heartbeat 210.94 secs ago. Workarounds: None; PIM restarts after the crash.
CSCwc56079	Headline: High PTP correction on -R line cards is seen during 2 PTP GMs failover. Symptoms: On the Cisco Nexus 9000 fabric, high PTP correction is seen on the -R series-based line cards on Cisco Nexus 9500 (more than ~600 ns) during PTP GM failover with different GM ID. Workarounds: None.

Bug ID	Description
CSCwc59099	Headline: Cisco Nexus 9000 Syslog - %SYSMGR-2-TMP_DIR_FULL: System temporary directory usage is unexpectedly high at 98%. Symptoms: Cisco Nexus 9000 switch running NX-OS Release 9.3(9) may print logs indicating one of the line cards has high memory usage in a tmp directory. The syslog states that the temporary directory is full (usage is unexpectedly high at 98%) as seen in the output of the show logging log command. Workarounds: PSS debugs for mts-mgr process is turned on by default in Cisco NX-OS Release 9.3(9). Hence, the file is filled whenever there is any PSS activity on the mts-mgr process such as show running-config, update config, and copy running-startup. If the system is being subjected to such activity, then the file gets updated. Follow the below procedure, whenever the system is rebooted, to prevent this file from getting filled: 1. Get the uuid of the mts_mgr process from the CLI. 2. Convert the UUID in the above command in HEX to decimal format. 3. Turn off PSS debugs by running the command on CLI. 4. Clear all the logs in the files. 5. Monitor the system for changes to the file.
CSCwc59914	Headline: Unable to apply PACL when TCAM template is enabled. Symptoms: On a Cisco Nexus 93180YC-EX that has a TCAM template configured, the “ERROR: TCAM region is not configured. Please configure TCAM region and retry the command.” error is seen when a PACL is applied to an interface. However, the TCAM hardware/software outputs indicate that the ing-ifacl (PACL) region is configured and has space available. Workarounds: Remove the TCAM template configuration and configure TCAM region using the hardware access-list tcam region ing-ifacl 256 command.
CSCwc60753	Headline: VRRP stuck in INIT. Symptoms: VRRP may be stuck in INIT state indefinitely after reloading. Workarounds: Shut/no shut the affected interface.
CSCwc65941	Headline: Increasing input overruns on the management interface on Cisco Nexus 9000. Symptoms: Observed increasing in input overruns on the management interface (mgmt0) on Cisco Nexus 9000, when receiving LLDP packets from the Cisco Catalyst (WS-C2960X-48T) switch. Workarounds: Disable the LLDP configurations on the Catalyst switch for the mgmt0 attached port.
CSCwc66335	Headline: Cisco Nexus 9000 - SRCTEP Peer Entry Missing in HW. Symptoms: BUM traffic received on VTEP is dropped with the INFRA_ENCAP_SRC_TEP_MISS reason. This is due to the Source VTEP entry for peer missing in the hardware. The peer entry will be present in NVE and IPFIB though. Workarounds: None.
CSCwc67943	Headline: Cisco Nexus 9000 TRM - SA-AD not triggered from the Turn-around router. Symptoms: Cisco Nexus 9000 TRM - SA-AD is not triggered from the Turn-around router. Workarounds: None.

Bug ID	Description

CSCwc70139	Headline: L2ACLredirect failures do not result in kernel panic.
	Symptoms: L2ACLredirect failures do not result in kernel panic especially for -R chassis and line cards.
	Workarounds: Apply the following EEM for force reload:
	`event manager applet gold_l2acl override __L2ACLRedirect`
	`action 1 syslog priority emergencies msg L2ACL_test_failed_reloading`
	`action 2 reload force`

CSCwc70147	Headline: Reload force does not work with T+ EEM. Symptoms: Default EEM action reload does not work. The force keyword gets added twice in the running config and cannot be removed. Workarounds: None.
CSCwc71075	Headline: When authentication is used, OSPFv3 neighborship is brought down while issuing no feature nv overlay. Symptoms: Enable feature nv overlay on the Nexus switch and then disable it using no feature nv overlay. All existing OSPFv3 neighborships go to DOWN state. Workarounds: Remove OSPFv3 authentication under interface.
CSCwc73361	Headline: MPLS Labels are not advertised to neighbor switches after reboot on Cisco Nexus 9336C. Symptoms: Network topology is configured with Segment Routing. MPLS network for L3VPNS on 4 X Cisco Nexus 9336C switches (NX-OS mode). OSPF is used as IGP and advertises the MPLS labels. Labels are learnt after they are configured. After any one of the Cisco Nexus devices is rebooted, the labels from the switch are no longer advertised by the switch that was rebooted to any other neighboring Cisco Nexus devices. The same behavior repeats for any switch that is rebooted. OSPF database opaque external type 7 prefix is not generated or advertised by the rebooted switch to other neighbor switches. Workarounds: When a command is entered under the segment routing configuration section, for example, global block range or a prefix, something triggers the labels to be advertised through OSPF. The type 7 prefix is visible in the OSPF database and subsequently installed in the MPLS forwarding table of the remaining three switches. Remove p2p config from the loopback interface.
CSCwc78473	Headline: Cisco Nexus 9500 delays sending BPDUs every 60 seconds. Symptoms: A Cisco Nexus 9500 switch might delay sending out spanning-tree BPDUs every 60 seconds. Workarounds: None.
CSCwc79911	Headline: vPC is in down state with reason shown as Inactive after adding VLAN VNI and peer-ip from another VXLAN. Symptoms: VLAN is removed from the active VLANs list on vPC peer-link port-channel after VLAN vn-segment configuration changes. Workarounds: Delete or re-configure the missing VLAN on both vPC peers using the no vlan <vlan_id>vlan <vlan_id>vn-segment <segment-id> command.

Bug ID	Description

CSCwc80086	Headline: Cisco Nexus 9000 sysmgr crashes due to incorrect core pattern in the Cisco NX-OS Release 7.0(3)I7(x) result in LC/FM reload.
	
	Symptoms: Following are the symptoms:
	1. Cisco Nexus 9000 EOR with BCM linecard or N9K-C9508-FM crashes due to sysmgr.
	
	`show cores`
	`VDC  Module  Instance  Process-name  PID  Date(Year-Month-Day Time)`
	`---  ------  --------  ---------------  --------  -------------------------`
	`1  2  1  sysmgr  XXXX  2022-08-09 16:58:27`
	`1  24  1  sysmgr  XXXX  2022-08-19 06:30:11`
	`1  24  1  sysmgr  XXXX  2022-08-20 04:58:48`
	
	2. System uptime is nearly two years.
	3. OBFL can fail after the crash and RMA may be needed.
	4. These logs can be seen in previous reboots of the line card.
	
	Workarounds: None. NX-OS upgrade is required to avoid another line card or module reboot for the same reason.

CSCwc81130	Headline: Log reports that the N9K-C92348GC's PSU went down and up in 1-3 sec. Symptoms: Syslog reports that the N9K-C92348GC's PSU went down and up in 1-3 sec. Workarounds: None. This is a cosmetic error and PSU keeps providing power to the switch.
CSCwc81429	Headline: PHY ports stay linked up when peer is powered off. Symptoms: On N9K-X9788TC2-FX and N9K-C93108TC2-FX platforms, when the peer reloads, the link does not go on few occasions. Workarounds: None.
CSCwc84291	Headline: KIM Process MTS Buffers are stuck. Symptoms: KIM Process has messages stuck in the MTS queue. Kernel error messages may be seen in the syslog for net device. Workarounds: Reload the switch.
CSCwc87548	Headline: Underrun errors transmitted when upgrading from 40 to 100 Gbps on a EOR Cisco Nexus 9000. Symptoms: When the SFP is replaced to support 100G (QSFP-100G-SR4) or by changing the speed of the port (QSFP-40/100-SRBD), transmitting of underrun packets begins. However, though the output errors counter does not increase locally, the CRC starts increasing on the neighbor device. These ports are configured on a layer 2 Port channel (no vPC). While working at 40G no CRC are seen. Workarounds: Downgrade to 40 Gbps.

Bug ID	Description
CSCwc87567	Headline: Cisco Nexus 9000 - VXLAN Multisite vPC with dci-advertise-pip tenant VRF CPU generated traffic still uses VIP. Symptoms: On Cisco Nexus 9000, when VXLAN Multisite vPC is configured with dci-advertise-pip, the CPU generated traffic within the tenant VRF still uses the shared NVE source loopback VIP. Packets are punted to CPU and seen in ethanalyzer on remote Bordergateway. ELAM reports UC_TENANT_MYTEP_BRIDGE_MISS and ROUTING_DISABLED. This is because the VIP is not listed as an NVE peer on the remote Bordergateway, only the PIPs are advertised with dci-advertise-pip. Workarounds: None, if both vPC and dci-advertise-pip are required to be configured.
CSCwc88680	Headline: Optimize Libutil_is_dme_enabled to accommodate timing of critical paths. Symptoms: There could be STP topology change in few conditions. Workarounds: None.
CSCwc88702	Headline: Cisco Nexus 9000 syslog shows - Failed to open file: No such file or directory - securityd -post upgrade to Cisco NX-OS Release 9.3(9). Symptoms: Cisco Nexus 9000 generates the following syslog message periodically after upgrade to Cisco NX-OS Release 9.3(9): %USER-3-SYSTEM_MSG: Failed to open file: No such file or directory - security. Log appears after upgrade. However, no other changes seen. Workarounds: None; log is cosmetic.
CSCwc90986	Headline: Unable to configure the ip tacacs source-interface command when feature password encryption aes is configured. Symptoms: When feature password encryption aes is configured on the device, the ip tacacs source-interface command cannot be configured. The command is accepted but not reflected in the configuration. Workarounds: Remove feature password encryption aes. Remove feature tacacs. Configure feature tacacs+ and ip tacacs source-interface.
CSCwc93774	Headline: Cisco Nexus 9000 - NetFlow configured under VLAN configuration range takes longer than expected. Symptoms: When configuring NetFlow under VLAN configuration for large range (for example, 1-999), the command takes 15 minutes to complete. Workarounds: None.
CSCwc97662	Headline: 40G RWX programming is incorrect, can lead to MAC under-run. Symptoms: Output errors seen in TX interface where the traffic profile is 100g -> 40g. Additionally, TAHUSD_MAC_INTR_TX_UNDERRUN_MAC is seen in the output of the show hardware internal tah event-history front-port X lane 1 command. Workarounds: None.
CSCwc98298	Headline: Cisco Nexus 9300 NAT does not translate TCP flow packets randomly. Symptoms: Packets of random TCP flow may be sent untranslated in the in-out direction. Workarounds: None.
CSCwc98903	Headline: Mac-address is not synchronized between vPC nodes. Symptoms: Mac address does not synchronize between the vPC peers when the NVE interface and/or the uplinks flap. Workarounds: Remove feature NVE overlay from the running config.

Bug ID	Description
CSCwc99674	Headline: DME inconsistency when custom COPP policy Symptoms: The show consistency-checker dme running-config enhanced command fails. Workarounds: None.

CSCwc98328	Headline: %PORT-5-IF_DOWN_LINK_FAILURE - Link failure Link reset failure.
	Symptoms: The following syslog messages are seen in Cisco Nexus C93360YC-FX2 running Cisco NX-OS Release 10.2(3):
	`2022 Sep 12 11:34:30 N9KSW1 %PORT-5-IF_TRUNK_DOWN: %$VSAN 2%$ Interface fc1/96, vsan 2 is down (Gracefully shutdown)`
	`2022 Sep 12 11:34:30 N9KSW1 %PORT-5-IF_DOWN_LINK_FAILURE: %$VSAN 2%$ Interface fc1/96 is down (Link failure Link reset)`
	Workarounds: None.

CSCwd03152	Headline: VLAN Mapping issue and STP inconsistency with single leg vPC. Symptoms: A Cisco Nexus 9000 switch runs on Cisco NX-OS Release 9.3(9), and vPC connects to downstream access switch with single link. The switch runs VXLAN and vPC port channels that have PV mapping configuration. STP state of the configured vPC port channel will be in forwarding state, even though the port is in shut state. The translated VLAN is in downstream access. The VLAN will be in a broken state due to wrong BPDUs being received. Workarounds: Enable both links from vPC primary and secondary towards the access switch.
CSCwd06720	Headline: Removing one object-group causes statistics for the whole ACL to be disabled. Symptoms: Removing one port object-group causes the statistics for the whole ACL to be disabled. Both IPv4 address object-group and port object-group are configured under the same rule. If one of the port object-groups is not configured or removed from config, statistics for the other entry will be disabled. Workarounds: Remove entry from ACL for which the port object-group has been removed or not configured.
CSCwd11687	Headline: Cisco Nexus 9000/XXX -R ARP reply packets are dropped in Cisco Nexus 9000 received if it is received from peer-link. Symptoms: ARP resolution issue is seen on devices connected to Cisco Nexus 9000 devices with -R linecards. Unicast ARP reply packets are not forwarded from Cisco Nexus 9000 device SVI to the host across the peer-link and instead redirected to CPU of vPC peer and dropped. Workarounds: Shut and no shut VPC peer-link.
CSCwd13471	Headline: SNMP trap does not send to specific server. Symptoms: With below SNMP config, after reloading, SNMP trap is only sent to X.X.X.2 and X.X.X.3, not sent to X.X.X.1. Workarounds: Remove existing configuration and reconfigure hosts after reloading of device or SNMP process restart.
CSCwd15262	Headline: Netconf crash during an RPC call. Symptoms: The service Netconf in a Cisco Nexus device can fail after performing an RPC. This crash can leave the Netconf process unstable. Workarounds: None.

Bug ID	Description

CSCwd21451	Headline: SNMP walk on any OID not return with expected results.
	Symptoms: SNMP walk on any OID not return with expected results, for example, ipAdEntAddr. IP-MIB or OID returns only 2 IPs even though multiple IPs are configured:
	`server-host% snmpwalk -v 2c -c '***' pnq16-co-agg-r2 IP-MIB::ipAdEntAddr`
	`IP-MIB::ipAdEntAddr.10.130.96.4 = IpAddress: 10.130.96.4`
	`IP-MIB::ipAdEntAddr.10.130.96.65 = IpAddress: 10.130.96.65`
	Workarounds: None.

CSCwd26540	Headline: Enable syslog for CRC Error on internal ports of TOR. Symptoms: Below syslog is only true for switches with Fabric. Currently the following message is printed only for EOR. `2021 May 24 06:49:34 RTBE-14P6Z4Y16-7-13-BDR1 %STATSCLIENT-SLOT1-2-STATSCL_CRIT: Module 1 received CRC errors on internal interface ii1/1/3 in last ~5min interval FCSErr=3 TotalFCSErr=50518` Workarounds: None.
CSCwd27172	Headline: Unexpected reload after POAP process crashes. Symptoms: Device reloads leaving a POAP core file: `2022 Oct 11 13:00:32 switch %$ VDC-1 %$ %SYSMGR-2-SERVICE_CRASHED: Service "poap" (PID 847) hasn't caught signal 11 (core will be saved)` Workarounds: Reduce the bootfile-url length to be less than 128 characters.
CSCwd29257	Headline: IPv6 OSPF ECMP route does not show both routes as best. Symptoms: IPv6 OSPF ECMP route does not show both route with "*" as best, only one shows with "*" as best, so route from one neighbor is showing up with "*" and route from another neighbor is not. Workarounds: Clear the IPv6 route as follows: #clear ipv6 route 2001:fb1::/48
CSCwd33062	Headline: PIM source-register loopback is not honored for data encapsulated register packets. Symptoms: PIM register packets generated by the DR with data encapsulated that are forwarded towards the RP do not honor the configured source-register configuration, and instead use the local interface/DR where the traffic was originally received as the outer header. The issue is not seen for null register packets that do not contain encapsulated data. On RP, the incorrect packet is seen under the show ip pim internal event-history data-register-receive command. Workarounds: Remove the associated interface and register-source from the configuration and reapply it. Data-encap register then honors the register-source. However, this workaround does not survive the reload.
CSCwd41354	Headline: The grpcnxsdk works thread is not released properly. Symptoms: There exists an ongoing gnmi 5-second sample subscription for “System/ptp-items/ephoper-items/pastcorrections-items/PtpEphCorrection-list”. The gNMI SET cannot happen when this path is being queried. The repetitive queries of this path at every 5 seconds triggers a bug, which prevents the query from completing. Then a following gNMI SET is blocked due to this unfinished query. The client script times out and sends more SET requests, which only piles up and uses up the max 16-session limit. Workarounds: Kill the grpcnxsdk process. It recovers automatically and further queries can be made.

Bug ID	Description
CSCwd42595	Headline: Output of the show spanning-tree root command no longer shows " This bridge is root" for non-vPC VLANs. Symptoms: When upgrading to Cisco NX-OS Release 9.3(10), the output of the show spanning-tree root command does not indicate if the bridge is root for non-vPC VLANs. Additionally, on both vPC peers, the Bridge ID uses the local system-mac in place of the vPC system-mac. The cost and port is seen as 0 in the output of the show spanning-tree vlan command. Workarounds: None
CSCwd45954	Headline: IOFPGA is not displayed during EPLD upgrade. Symptoms: After EPLD upgrade from Cisco NX-OS Release 7.0(3)I7(3) to 9.3(9), few 9788TC modules show expected behavior, whereas 5-6 9788TC is not upgraded correctly. Additionally, the output of the show install all impact command shows both MI and IO FPGA in Cisco NX-OS Release 7.0(3)I7(3). However, in Cisco NX-OS Release 9.3(9), only MI FPGA is seen. Workarounds: None.
CSCwd46673	Headline: [NX-OS] Cisco Nexus 9000 Back Pressure Correction to prevent PSU Fan Reverse Direction. Symptoms: Power supply exhaust fan is observed to be spinning in wrong direction in a Cisco Nexus 9000 product. Workarounds: Increase the PSU fan speed to prevent back-pressure.
CSCwd46964	Headline: Issue with configuring BFD RX interval, the BFD session seems to always use 50 ms as TX interval. Symptoms: When configuring the BFD RX Interval, the BFD echo packets still transmit at 50 ms which is the minimum TX Interval. The inference is that the required RX interval which is configured using the bfd echo-rx-interval 250 command under the interface is not taken into account. Workarounds: Use the bfd interval 250 min_rx 250 multiplier 3 command to specify the BFD TX interval.
CSCwd47148	Headline: Smart licensing - Callhome HTTP proxy is not working when defined using IPv6 address. Symptoms: Communication with CSSM portal is not working when using IPv6 HTTP proxy. Workarounds: Instead of referencing the HTTP proxy using IPv6, use HOSTNAME and define the static IPv6 host configuration.
CSCwd49931	Headline: Cisco Nexus 3000/Cisco Nexus 9000 BCM - ACL TCAM Mismatch is seen in hardware. Symptoms: Mismatch on multiple entries in ACL TCAM is seen on Cisco Nexus platforms such as 3172PX. Workarounds: None. The mismatch does not have any impact.
CSCwd49994	Headline: Static NAT stopped working after upgrade to 9.3(8). Symptoms: After upgrading (disruptive ISSU) the Cisco Nexus switch from Cisco NX-OS Release 9.3(4) to 9.3(8), static NAT stopped working. Removing the NAT configuration and disabling the NAT feature and reconfigure it again does not help, not even reload/reload ASCII. Workarounds: SMU patch will be available for the NX-OS 9.3(8) as workaround to fix the issue.

Bug ID	Description
CSCwd53084	Headline: Cisco Nexus 9000 - SNMP does not return any value. Symptoms: SNMP get/walk to Cisco Nexus 9000 might stop working and return empty values or OID may not exist even if OID is present and populated on the system. This issue may occur after several weeks or months of operation in Cisco NX-OS Release 9.3(5) and later. Workarounds: Restart the SNMP process. However, if the issue repeats after restart, then restart again.
CSCwd54117	Headline: IPv6 ssh is not getting denied for default port 22. Symptoms: This issue is observed in Cisco NX-OS Release 9.3(7) and 10.2.4(M). There is no command to change ssh port number in Cisco Nexus CLI syntax. However, ssh port number can be changed in bash mode. Workarounds: None.
CSCwd56148	Headline: Cisco Nexus 9000 crashes with tahusd core. Symptoms: After upgrading from Cisco NX-OS Release 9.3(5) to Cisco NX-OS Release 9.3(10), the switch crashes with tahusd core with the following Syslog entries. %$ VDC-1 %$ %SYSMGR-SLOT1-2-SERVICE_CRASHED: Service "tahusd" (PID 25045) hasn't caught signal 6 (core will be saved). %$ VDC-1 %$ %SYSMGR-SLOT1-2-HAP_FAILURE_SUP_RESET: Service "tahusd" in vdc 1 has had a hap failure <<< The tahusd process crashes due to any one of the following reasons: • There is some out-of-order execution of Assembly instructions. • There is a race condition in the glibc mutex_unlock code. Workarounds: None
CSCwd63552	Headline: There is a mismatch between the Cisco Nexus 9000 Series NX-OS Verified Scalability Guide and the threshold configured on the switch. Symptoms: Per the Cisco Nexus 9000 Series NX-OS Verified Scalability Guide, Release 9.3(10), the switch supports 48000 STP instances. However, the devices trigger a log message when more than 14000 are in use. Workarounds: None.
CSCwd64423	Headline: Fill word IDLE not reported correctly in the output of the show hardware internal fc-mac all-ports command. Symptoms: This is a show command output error. The value is displayed incorrectly. Workarounds: None. However, no functional impact.
CSCwd66084	Headline: N9K-C9364C-GX - Removing SFP-10G from one port causes other ports in the same quad to flap. Symptoms: When the quad speed is 100G (when 100G optics are inserted in the port in the quad), inserting and then removing the SFP-10G causes other ports which are in same quad to flap. This issue only occurs when removing SFP-10G. This issue is not seen when removing 40G SFP. Workarounds: None
CSCwd67745	Headline: Cisco Nexus 9000 switch crash when tunnel-encryption and speed 10000 is configured on the same interface. Symptoms: When tunnel-encryption and speed 10000 is configured on the same interface, tahusd crashes, resulting in boot loop on switch startup. Workarounds: Do not manually set speed to 10000 or use QSA.

Bug ID	Description
CSCwd68610	Headline: Cisco Nexus 9000 mrib hap reset. Symptoms: Cisco Nexus 9000 running Cisco NX-OS Release 9.3(10) code has an unexpected reload and generates core dumps for mrib and mcastfwd process. Workarounds: None.
CSCwd84083	Headline: KIM crashes with egress_vni >512 entries. Symptoms: KIM process crashes after configuration change. Workarounds: None.
CSCwd85014	Headline: Unexpected reload due to tahusd process crash. Symptoms: A Cisco Nexus 9000 switch may reboot unexpectedly due to tahusd process crash and a reset reason and an error log are generated. Workarounds: None.
CSCwd95021	Headline: After the current interface is shutdown, the incoming interface is not updated in the multicast mroutes table. Symptoms: Issue with multicast mroutes table not updating the incoming interface of multicast group after shutting down the current interface and still pointing to the one which is shutdown. This issue is seen in the Cisco NX-OS Release 9.3(10) code, whereas works fine in the Cisco NX-OS Release 9.3(9) code. Workarounds: None.
CSCwe05630	Headline: NXA-PAC-650W PSU is reported as shutdown but is still operational. Symptoms: Power supplies (including, but not limited to NXA-PAC-650W-PE/PI or NXA-PAC-500W-PE/PI) are reported as shutdown while continuing to operate normally per the show environment power detail command. During the issue, the OK LED is seen to be either green or flashing green, and the Fault LED is seen to be off. Workarounds: Perform the following PSU OIR steps to clear the incorrect status: 1. Disconnect power source cable from PSU. 2. Remove PSU from chassis. 3. Insert PSU to chassis. 4. Connect power source cable to PSU. These steps are in-line with the removal and installation steps documented in the Replacing a Power Supply Module section of the Replacing Components chapter of the Hardware Installation Guide for each product model.

Known Issues

Bug ID	Description
CSCwj99525	On Cisco Nexus N2K-C2348TQ HIFs fail to utilize redundant Port-Channel links, to NIF, during link failover events.

Device Hardware

The following tables list the Cisco Nexus 9000 Series hardware that Cisco NX-OS Release 9.3(11) supports. For additional information about the supported hardware, see the Hardware Installation Guide for your Cisco Nexus 9000 Series device.

Table 1. Cisco Nexus 9500 Switches

Product ID	Description
N9K-C9504	7.1-RU modular switch with slots for up to 4 line cards in addition to two supervisors, 2 system controllers, 3 to 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 to 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 to 6 fabric modules, 3 fan trays, and up to 10 power supplies.

Table 2. Cisco Nexus 9500 Cloud Scale Line Cards

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-EX	Cisco Nexus 9500 32-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-EX	Cisco Nexus 9500 36-port 40/100 Gigabit Ethernet QSFP28 line card	4	8	16
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

Table 3. 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

Product ID	Description	Maximum Quantity	
		Cisco Nexus 9504	Cisco Nexus 9508
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

Table 4. Cisco Nexus 9500 Classic Line Cards

Product ID	Description	Maximum Quantity		
		Cisco Nexus 9504	Cisco Nexus 9508	Cisco Nexus 9516
N9K-X9408C-CFP2	Line card with 8 100 Gigabit CFP2 ports	4	8	16
N9K-X9432C-S	Cisco Nexus 9500 32-port 40/100 Gigabit Ethernet QSFP28 line card	4	8	N/A
N9K-X9432PQ	Cisco Nexus 9500 32-port 40 Gigabit Ethernet QSFP+ line card	4	8	16
N9K-X9636PQ	Cisco Nexus 9500 36-port 40 Gigabit Ethernet QSFP+ line card	4	8	N/A
N9K-X9464PX	Cisco Nexus 9500 48 1/10-Gigabit SFP+ and 4-port 40-Gigabit Ethernet QSFP+ line card	4	8	16
N9K-X9464TX	Cisco Nexus 9500 48 port 1/10-Gigabit BASE-T Ethernet and 4-port 40-Gigabit Ethernet QSFP+ line card	4	8	16
N9K-X9464TX2	Cisco Nexus 9500 48 port 1/10-Gigabit BASE-T Ethernet and 4-port 40-Gigabit Ethernet QSFP+ line card	4	8	16
N9K-X9536PQ	Cisco Nexus 9500 36-port 40 Gigabit Ethernet QSFP+ line card	4	8	16
N9K-X9564PX	Cisco Nexus 9500 48 1/10-Gigabit SFP+ and 4 port 40-Gigabit Ethernet QSFP+ line card	4	8	16
N9K-X9564TX	Cisco Nexus 9500 48 port 1/10-Gigabit BASE-T Ethernet and 4 port 40-Gigabit Ethernet QSFP+ line card	4	8	16

Table 5. Cisco Nexus 9500 Cloud Scale Fabric Modules

Product ID	Description	Minimum	Maximum
N9K-C9504-FM-E	Cisco Nexus 9504 100-Gigabit cloud scale fabric	4	5

Product ID	Description	Minimum	Maximum
	module		
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-C9516-FM-E	Cisco Nexus 9516 50-Gigabit cloud scale fabric module	4	5
N9K-C9516-FM-E2	Cisco Nexus 9516 100-Gigabit cloud scale fabric module	4	5

Table 6. 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

Table 7. Cisco Nexus 9500 Fabric Modules

Product ID	Description	Minimum	Maximum
N9K-C9504-FM	Cisco Nexus 9504 40-Gigabit fabric module	3	6
N9K-C9508-FM	Cisco Nexus 9508 40-Gigabit fabric module	3	6
N9K-C9516-FM	Cisco Nexus 9516 40-Gigabit fabric module	3	6
N9K-C9504-FM-S	Cisco Nexus 9504 100-Gigabit fabric module	4	4
N9K-C9508-FM-S	Cisco Nexus 9508 100-Gigabit fabric module	4	4

Table 8. Cisco Nexus 9500 Fabric Module Blanks with Power Connector

Product ID	Description	Minimum	Maximum
N9K-C9508-FM-Z	Cisco Nexus 9508 Fabric blank with Fan Tray Power Connector module	N/A	2
N9K-C9516-FM-Z	Cisco Nexus 9516 Fabric blank with Fan Tray Power Connector module	N/A	2

Table 9. Cisco Nexus 9500 Supervisor Modules

Supervisor	Description	Quantity
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

Supervisor	Description	Quantity
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 line cards.

Table 10. Cisco Nexus 9500 System Controller

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

Table 11. Cisco Nexus 9500 Fans and Fan Trays

Product ID	Description	Quantity
N9K-C9504-FAN	Fan tray for 4-slot modular chassis	3
N9K-C9508-FAN	Fan tray for 8-slot modular chassis	3
N9K-C9516-FAN	Fan tray for 16-slot modular chassis	3

Table 12. 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 13. Cisco Nexus 9200 and 9300 Fans and Fan Trays

Product ID	Description	Quantity	Cisco Nexus Switches
N9K-C9300-FAN2	Fan 2 module with port-side intake airflow (burgundy coloring)	3	93128TX
N9K-C9300-FAN2-B	Fan 2 module with port-side exhaust airflow (blue coloring)	3	93128TX

Product ID	Description	Quantity	Cisco Nexus Switches
N9K-C9300-FAN3	Fan 3 module with port-side intake airflow (burgundy coloring)	3	92304QC 9272Q[a] 93120TX
N9K-C9300-FAN3-B	Fan 3 module with port-side exhaust airflow (blue coloring)	3	92304QC 9272Q[a] 93120TX
NXA-FAN-160CFM-PE	Fan module with port-side exhaust airflow (blue coloring)	3	9364C[a] 93360YC-FX2
NXA-FAN-160CFM-PI	Fan module with port-side intake airflow (burgundy coloring)	3	9364C[a] 93360YC-FX2
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
NXA-FAN-30CFM-B	Fan module with port-side intake airflow (burgundy coloring)	3	92160YC-X 9236C[a] 93108TC-EX 93108TC-FX[a] 93180LC-EX[a] 93180YC-EX 93180YC-FX[a] 9332PQ 9348GC-FXP[a]
NXA-FAN-30CFM-F	Fan module with port-side exhaust airflow (blue coloring)	3	92160YC-X 9236C[a] 93108TC-EX 93108TC-FX[a] 93180LC-EX[a] 93180YC-EX 93180YC-FX[a] 9332PQ 9348GC-FXP
NXA-FAN-35CFM-PE	Fan module with port-side exhaust airflow (blue coloring)	4	92300YC[a] 9332C[a] 93108TC-FX3P 93180YC-FX3S[b]
		6	9316D-GX 93600CD-GX
NXA-FAN-35CFM-PI	Fan module with port-side intake airflow (burgundy coloring)	4	92300YC[a] 9332C[a] 93108TC-FX3P 93180YC-FX3S[b]
		6	9316D-GX 93600CD-GX
NXA-FAN-65CFM-PE	Fan module with port-side exhaust airflow (blue coloring)	3	93240YC-FX2[a] 9336C-FX2[a]

[a] For specific fan speeds see the Overview section of the Hardware Installation Guide.

[b] 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 14. Cisco Nexus 9200 and 9300 Power Supplies

Product ID	Description	Quantity	Cisco Nexus Switches
NXA-PAC-500W-PE	500-W AC power supply with port-side exhaust airflow (blue coloring)	2	93108TC-EX 93180LC-EX 93180YC-EX 93180YC-FX
NXA-PAC-500W-PI	500-W AC power supply with port-side intake airflow (burgundy coloring)	2	93108TC-EX 93180LC-EX 93180YC-EX 93180YC-FX
N9K-PAC-650W	650-W AC power supply with port-side intake (burgundy coloring)	2	9332PQ
N9K-PAC-650W-B	650-W AC power supply with port-side exhaust (blue coloring)	2	9332PQ
NXA-PAC-650W-PE	650-W power supply with port-side exhaust (blue coloring)	2	92160YC-X 9236C 92300YC 93180YC-FX3S 92304QC 93108TC-EX 93180YC-EX
NXA-PAC-650W-PI	650-W power supply with port-side intake (burgundy coloring)	2	92160YC-X 9236C 92300YC 93180YC-FX3S 92304QC 93108TC-EX 93180YC-EX
NXA-PAC-750W-PE	750-W AC power supply with port-side exhaust airflow (blue coloring) [1]	2	9336C-FX2 93240YC-FX2 9332C 9336C-FX2
NXA-PAC-750W-PI	750-W AC power supply with port-side exhaust airflow (burgundy coloring) [1]	2	9336C-FX2 93240YC-FX2 9332C 9336C-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 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 93600CD-GX

Product ID	Description	Quantity	Cisco Nexus Switches
NXA-PAC-1100W-PI	Cisco Nexus 9000 PoE 1100W AC PS, port-side intake	2	93108TC-FX3P
NXA-PAC-1100W-PE	Cisco Nexus 9000 PoE 1100W AC PS, port-side exhaust	2	93108TC-FX3P
NXA-PAC-1900W-PI	Cisco Nexus 9000 PoE 1900W AC PS, port-side intake	2	93108TC-FX3P
N9K-PAC-1200W	1200-W AC power supply with port-side intake airflow (burgundy coloring)	2	93120TX
N9K-PAC-1200W-B	1200-W AC power supply with port-side exhaust airflow (blue coloring)	2	93120TX
NXA-PAC-1200W-PE	1200-W AC power supply with port-side exhaust airflow (blue coloring)	2	9272Q 93360YC-FX2 9364C
NXA-PAC-1200W-PI	1200-W AC power supply with port-side intake airflow (burgundy coloring)	2	9272Q 93360YC-FX2 9364C
N9K-PUV-1200W	1200-W Universal AC/DC power supply with bidirectional airflow (white coloring)	2	92160YC-X 9236C 92300YC 92304QC 9272Q[1] 93108TC-EX 93108TC-FX 93360YC-FX2 93180YC-FX3S 93120TX 93128TX 93180LC-EX 93180YC-EX 93180YC-FX 9364C
NXA-PDC-930W-PE	930-W DC power supply with port-side exhaust airflow (blue coloring)	2	9272Q 93108TC-EX 93180YC-EX 93360YC-FX2 93180YC-FX3S 93120TX 93180YC-FX 9364C 92160YC-X
NXA-PDC-930W-PI	930-W DC power supply with port-side intake airflow (burgundy coloring)	2	9272Q 93108TC-EX 93180YC-EX 93360YC-FX2 93180YC-FX3S 93120TX 93180YC-FX 9364C 92160YC-X
NXA-PDC-1100W-PE	1100-W DC power supply with port-side exhaust airflow (blue coloring)	2	93240YC-FX2 93600CD-GX 9316D-GX

Product ID	Description	Quantity	Cisco Nexus Switches
			9332C 9336C-FX2
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
UCSC-PSU-930WDC	930-W DC power supply with port-side intake (green coloring)	2	92160YC-X 9236C 92304QC 9272Q 93108TC-EX 93120TX 93128TX 93180YC-EX 9332PQ
UCS-PSU-6332-DC	930-W DC power supply with port-side exhaust (gray coloring)	2	92160YC-X 9236C 92304QC 9272Q 93108TC-EX 93120TX 93128TX 93180YC-EX 9332PQ
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
NXA-PDC-2KW-PE	2000-W DC power supply with port-side exhaust airflow (blue coloring	2	9364C-GX
NXA-PDC-2KW-PI	2000-W DC power supply with port-side intake airflow (burgundy coloring)	2	9364C-GX
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

Table 15. Cisco Nexus 9200 and 9300 Switches

Product ID	Description
N9K-C92160YC-X	1-RU Top-of-Rack switch with 48 10-/25-Gigabit SFP+ ports and 6 40-Gigabit QSFP+ ports (4 of these ports support 100-Gigabit QSFP28 optics).
N9K-C92300YC	1.5-RU Top-of-Rack switch with 48 10-/25-Gigabit SFP28 ports and 18 fixed 40-/100-Gigabit QSFP28 ports.
N9K-C92304QC	2-RU Top-of-Rack switch with 56 40-Gigabit Ethernet QSFP+ ports (16 of these ports support 4x10 breakout cables) and 8 100-Gigabit QSFP28 ports.
N9K-C92348GC-X	The Cisco Nexus 92348GC-X switch (N9K-C92348GC-X) is a 1RU 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 2 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-C9236C	1-RU Top-of-Rack switch with 36 40-/100-Gigabit QSFP28 ports (144 10-/25-Gigabit ports when using breakout cables)
N9K-C93108TC-EX	1-RU Top-of-Rack switch with 48 10GBASE-T (copper) ports and 6 40-/100-Gigabit QSFP28 ports
N9K-C93108TC-EX-24	1-RU 24 1/10GBASE-T (copper) front panel ports and 6 40/100-Gigabit QSFP28 spine facing ports.
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-C93120TX	2-RU Top-of-Rack switch with 96 1/10GBASE-T (copper) ports and 6 40-Gigabit QSFP+ ports
N9K-C93128TX	3-RU Top-of-Rack switch with 96 1/10GBASE-T (copper) ports and an uplink module up to 8 40-Gigabit QSFP+ ports
N9K-C9316D-GX	1-RU switch with 16x400/100/40-Gbps ports.
N9K-C93180LC-EX	1-RU Top-of-Rack switch with 24 40-/50-Gigabit QSFP+ downlink ports and 6 40/100-Gigabit uplink ports. You can configure 18 downlink ports as 100-Gigabit QSFP28 ports or as 10-Gigabit SFP+ ports (using breakout cables).
N9K-C93180YC-EX	1-RU Top-of-Rack switch with 48 10-/25-Gigabit SFP28 fiber ports and 6 40-/100-Gigabit QSFP28 ports
N9K-C93180YC-EX-24	1-RU 24 1/10/25-Gigabit front panel ports and 6-port 40/100 Gigabit QSFP28 spine-facing ports
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

Product ID	Description
	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-C93180YC-FX3	48 1/10/25 Gigabit Ethernet SFP28 ports (ports 1-48)
N9K-C93180YC-FX3S	6 10/25/40/50/100-Gigabit QSFP28 ports (ports 49-54)
N9K-C93216TC-FX2	48 1/10/25 Gigabit Ethernet SFP28 ports (ports 1-48)
N9K-C93240YC-FX2	6 10/25/40/50/100-Gigabit QSFP28 ports (ports 49-54)
N9K-C9332C	1-RU fixed switch with 32 40/100-Gigabit QSFP28 ports and 2 fixed 1/10-Gigabit SFP+ ports.
N9K-C9332PQ	1-RU switch with 32 40-Gigabit Ethernet QSFP+ ports (26 ports support 4x10 breakout cables and 6 ports support QSFP-to-SFP adapters)
N9K-C93360YC-FX2	2-RU switch with 96 10-/25-Gigabit SFP28 ports and 12 40/100-Gigabit QSFP28 ports
N9K-C9336C-FX2	1-RU switch with 36 40-/100-Gb Ethernet QSFP28 ports.
N9K-C9348GC-FXP	Nexus 9300 with 48p 100M/1 G, 4p 10/25 G SFP+ and 2p 100 G QSFP
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 to 64 support MACsec encryption. - Ports 65 and 66 support 1/10 Gigabit speeds.
N9K-C9364C-GX	2-RU fixed-port switch with 64 100-Gigabit SFP28 ports.
N9K-9372PX-E	1RU switch with 48 x 1/10-Gbps SFP+ and 6 x 40-Gbps fixed QSFP+ ports
N9K-9372TX-E	1RU switch with 48 x 100M/1/10GBASE-T and 6 x 40-Gbps fixed QSFP+ ports

Optics

To determine which transceivers and cables are supported by a switch, see the Transceiver Module (TMG) Compatibility Matrix. To see the transceiver specifications and installation information, see the Install and Upgrade Guides.

Cisco Network Insights

Cisco NX-OS Release 9.3(11) supports the Cisco Network Insights Advisor (NIA) and Cisco Network Insights for Resources (NIR) on Cisco Nexus 9200, 9300-EX, and 9300-FX platform switches and 9500 platform switches with -EX/FX line cards. For more information, see the Cisco Network Insights documentation.

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 9.3(x). For information about an In Service Software Upgrade (ISSU), see the Cisco NX-OS ISSU Support Matrix.

Exceptions

Cisco Nexus 9200, 9300-EX, and 9300-FX Platform Switches

The following features are not supported for the Cisco Nexus 9200, 9300-EX, and 9300-FX platform switches:

- 64-bit ALPM routing mode
- Cisco Nexus 9272PQ and Cisco Nexus 92160YC platforms do not support the PXE boot of the Cisco NX-OS image from the loader.
- ACL filters to span sub interface traffic on the parent interface
- Egress port ACLs
- Egress QoS policer (not supported for Cisco Nexus 9200 platform switches). The only policer action supported is drop. Remark action is not supported on the egress policer.
- FEX (not supported for Cisco Nexus 9200 platform switches)
- GRE v4 payload over v6 tunnels
- IP length-based matches
- IP-in-IP (not supported on the Cisco Nexus 92160 switch)
- Maximum Transmission Unit (MTU) checks for packets received with an MPLS header
- NetFlow (not supported on Cisco Nexus 9200 platform switches)
- Packet-based statistics for Traffic Storm Control (only byte-based statistics are supported)
- PVLANs (not supported on Cisco Nexus 9200 platform switches)
- PXE boot of the Cisco NX-OS image from the loader (not supported for Cisco Nexus 9272PQ and 92160YC switches)
- Q-in-VNI (not supported on Cisco Nexus 9200 platform switches)
- Q-in-Q for VXLAN (not supported on Cisco Nexus 9200 and 9300-EX platform switches)
- Q-in-VNI (not supported on Cisco Nexus 9200 platform switches)
- Resilient hashing for port channels
- Rx SPAN for multicast if the SPAN source and destination are on the same slice and no forwarding interface is on the slice
- SVI uplinks with Q-in-VNI (not supported for Cisco Nexus 9300-EX platform switches)
- Traffic Storm Control for copy-to-CPU packets
- Traffic Storm Control with unknown multicast traffic
- Tx SPAN for multicast, unknown multicast, and broadcast traffic

- VACL redirects for TAP aggregation

Cisco Nexus 9300-FX3 Platform Switches

The following features are not supported for the Cisco Nexus 9300-FX3 Platform switches:

- ACL with DSCP Wildcard Mask
- ARP Suppression with Reflective Relay
- Dynamic ACL - Named ACL support for applying blacklist/limited VLAN access for devices
- ECMP Hashing based on GRE Inner IP Header
- Enhanced ISSU
- Enhanced Policy-Based Routing (ePBR)
- ePBR Multi-Hop
- ePBR with Probes
- ePBR with User-Defined Probes
- IPv6 MIB support (IP-MIB)
- Multicast Service Reflection (Ingress, PIM-border, Egress)
- Multiple LLDP neighbors per physical interface
- Secure VXLAN EVPN Multi-Site using CloudSec
- Selective Q-in-VNI + Advertise PIP on a VTEP
- Selective Q-in-VNI + VXLAN VLAN on the same port
- Standard ISSU
- Symmetric Hashing - ECMP (Inner DA)
- Unidirectional Ethernet (UDE)
- VXLAN EVPN with downstream VNI
- VXLAN over parent interface that also carries sub-interfaces

Cisco Nexus 9300-GX Platform Switches

The following features are not supported for the Cisco Nexus 9300-GX platform switches:

- Asymmetric PFC
- Autonegotiation on all ports
- FC-FEC for Cisco Nexus 9316D-GX and 93600CD-GX switches is not supported on the second lane of the 50x2 breakout port.
- FEX
- Multicast over GRE

Cisco Nexus N9K-X9408PC-CFP2 Line Card and 9300 Platform Switches

The following features are not supported for Cisco Nexus 9500 platform switches with the N9K-X9408PC-CFP2 line card and Cisco Nexus 9300 platform switches with generic expansion modules (N9K-M4PC-CFP2):

- 802.3x
- Breakout ports
- FEX (supported on some Cisco Nexus 9300 platform switches)
- Flows other than 40G
- Multichassis EtherChannel Trunk (MCT)
- NetFlow
- Port-channel (No LACP)
- PFC/LLFC
- Precision Time Protocol (PTP)
- PVLAN (supported on Cisco Nexus 9300 platform switches)
- Shaping support on 100g port is limited
- SPAN destination/ERSPAN destination IP
- Traffic Storm Control
- vPC
- VXLAN access port

FEX Modules

The following features are not supported for FEX modules:

- Active-Active FEX and straight-through FEX are not supported on the Cisco Nexus 92348GC switch.
- For Cisco Nexus 9500 platform switches, 4x10-Gb breakout for FEX connectivity is not supported.

Cisco Nexus N9K-X96136YC-R Line Card

The following features are not supported for Cisco Nexus 9500 platform switches with the N9K-X96136YC-R line card:

- Breakout
- gPTP

  Note: One-step PTP is supported only on Cisco Nexus 9500-R series.

Cisco Nexus N9K-X9736C-FX Line Card

The following feature is not supported for Cisco Nexus 9500 platform switches with the N9K-X9736C-FX line card:

- Ports 29-36 do not support 1 Gbps speed.

Cisco Nexus 9500 Cloud Scale (EX/FX) Line Cards

The following features are not supported for Cisco Nexus 9500 platform switches with -EX/FX line cards:

- FEX
- IPv6 support for policy-based routing
- LPM dual-host mode
- SPAN port-channel destinations

Related Content

Cisco Nexus 9000 Series documentation: Cisco Nexus 9000 Series Switches

Cisco Nexus 9000 and 3000 Series NX-OS Switch License Navigator: Cisco Nexus 9000 and 3000 Series NX-OS Switch License Navigator

Cisco Nexus 9000 Series Software Upgrade and Downgrade Guide: Cisco Nexus 9000 Series NX-OS Software Upgrade and Downgrade Guide, Release 9.3(x)

Cisco Nexus 9000 Series FPGA/EPLD Upgrade Release Notes: Cisco Nexus 9000 Series FPGA/EPLD Upgrade Release Notes, Release 9.3(11)

Cisco Nexus 3000 and 9000 Series NX-API REST SDK User Guide and API Reference: Cisco Nexus NX-API Reference

Cisco NX-OS Supported MIBs:
ftp://ftp.cisco.com/pub/mibs/supportlists/nexus9000/Nexus9000MIBSupportList.html

Supported FEX modules: Cisco Nexus 9000 Series Switch FEX Support Matrix

Licensing Information: Cisco NX-OS Licensing Guide

Documentation Feedback

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

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