FC-NPV and FCoE-NPV Supported Hardware

Licensing Requirements

For a complete explanation of Cisco NX-OS licensing recommendations and how to obtain and apply licenses, see the *Cisco NX-OS Licensing Guide* and the *Cisco NX-OS Licensing Options Guide*.

Supported Platforms

Starting with Cisco NX-OS release 7.0(3)I7(1), use the Nexus Switch Platform Support Matrix to know from which Cisco NX-OS releases various Cisco Nexus 9000 and 3000 switches support a selected feature.

FC-NPV and FCoE-NPV Supported Hardware

The following table list the Cisco Nexus 9000 Series hardware that the FC-NPV and FCoE-NPV features are supported.

To enable FC/FCoE NPV mode on Cisco Nexus 9000 series switches, you must configure **feature-set fcoe-npv**.

Note   For more information about enabling SAN Switching mode on Cisco Nexus 9000 series switches, see the *Cisco Nexus 9000 Series NX-OS SAN Switching Configuration Guide, Release 9.3(x)*

Table 1: Cisco Nexus 9000 FC-NPV and FCoE-NPV Supported Hardware

Switches / Line cards	Model (PID)	FC NP Port	FCoE NP Port	FC Edge Port	FCoE Edge Port	FEX Support
Cisco Nexus 9200 Series Switches	N9K-C9236C	No	Yes	No	Yes	No
	N9K-C9272Q	No	Yes	No	Yes	No
	N9K-C92160YC-X	No	Yes	No	Yes	No
Cisco Nexus 9300 Series Switches	N9K-C9332PQ	No	Yes	No	Yes	Yes
	N9K-C9372PX-E	No	Yes	No	Yes	Yes
	N9K-C9396PX	No	Yes	No	Yes	Yes
	N9K-C93180YC-EX	No	Yes	No	Yes	Yes
	N9K-C93180LC-EX	No	Yes	No	Yes	Yes
	N9K-C93180YC-FX	Yes	Yes	Yes	Yes	Yes
	N9K-C93360YC-FX2	Yes	Yes	Yes	Yes	No
Cisco Nexus 9504 and 9508 Switches	N9K-X9432PQ	No	Yes	No	Yes	Yes [1]
	N9K-X9564PX	No	Yes	No	Yes	Yes [2]
	N9K-X9732C-EX	No	Yes	No	Yes	No
	N9K-X9736C-FX	No	Yes	No	Yes	No

[1] Only ST FEX supported.
[2] Only ST FEX supported.

Note The N9k-9272Q switch has 72 ports. Ports 1 to 36 only operate in 40-Gb mode. Ports 37 to 71 support breakout to 4 x 10-Gb connectivity. Port 72 does not support breakout.

Note The N9K-C93180LC-EX supports FCoE NPV on FEX with only one FEX model: the N2K-C2348UPQ. FC ports with FEX is not supported.

Beginning with Cisco NX-OS Release 9.3(5), FC-NPV and FCoE-NPV is supported on Cisco Nexus 93360YC-FX2 switches.

Beginning with Cisco NX-OS Release 9.3(5), ISSU with with FCoE (Fiber Channel over Ethernet)/FC (Fiber Channel) NPV (N-port Virtualization) is supported on some Cisco Nexus 9000 switches. An ISSU allows you to upgrade the device software while the switch continues to forward traffic. Beginning with Cisco NX-OS

Release 9.3(5), you can perform an in-service software upgrade (ISSU), also known as a nondisruptive upgrade, for some Cisco Nexus 9000 switches. The default upgrade process is disruptive. Using the nondisruptive option helps ensure a nondisruptive upgrade. (See *Cisco Nexus 9000 Series NX-OS Software Upgrade and Downgrade Guide, Release 9.x* for a complete list of supported platforms).

Note   Software Maintenance Upgrade (SMU) is not supported for FC and FCOE.

Table 2: ISSU Support Matrix

Switches / Line cards	Model (PID)	With FC/FCOE NPV	With ST FEX	With AA FEX
Cisco Nexus 9200 Series Switches	N9K-C9236C	No	N/A	N/A
	N9K-C9272Q	Yes	N/A	N/A
	N9K-C92160YC-X	Yes	N/A	N/A
Cisco Nexus 9300 Series Switches	N9K-C9332PQ	Yes	Yes	No
	N9K-C9372PX	Yes	Yes	No
	N9K-C9372PX-E	Yes	Yes	No
	N9K-C9396PX	Yes	Yes	No
	N9K-C93180YC-EX	Yes	No	No
	N9K-C93180LC-EX	Yes	No	No
	N9K-C93180YC-FX	Yes	No	No
	N9K-C93360YC-FX2	No	N/A	N/A
Cisco Nexus 9504 and 9508 Switches	N9K-X9432PQ	Yes	Yes	No
	N9K-X9464PX	Yes	Yes	No
	N9K-X9536PQ	Yes	Yes	No
	N9K-X9564PX	Yes	Yes	No
	N9K-X9636PQ	Yes	Yes	No
	N9K-X9732C-EX	No	N/A	N/A
	N9K-X9736C-FX	No	N/A	N/A

On the following models, the 40G GEM (Gigabit Ethernet Expansion Module) ports cannot be used to connect FCoE hosts (F ports). They can be used as FCoE uplink ports (VNP Ports):

  • Cisco Nexus 9332PQ switch

  • Cisco Nexus 9372PX switch

- Cisco Nexus 9372PX-E switch

- Cisco Nexus 9396PX switch

- N9K-X9464PX line cards

- N9K-X9564PX line cards

FC-NPV is supported on N9k-C93180YC-FX and N9k-C93360YC-FX2 switches and only the following SFPs are supported:

- DS-SFP-FC8G-SW

- DS-SFP-FC16G-SW

- DS-SFP-FC32G-SW

Note From Release 9.3(5), FC-NPV is supported on N9k-C93360YC-FX2 switch.

FCoE-NPV supports the following FEX:

- N2K-B22HP-P

- N2K-B22IBM-P

- N2K-C2232PP

- N2K-C2348UPQ

Beginning with Cisco NX-OS Release 9.3(5), 25G adapter QL41212H is supported on the following devices. However, when a vFC port is shut for more than 60 seconds, the FIP VLAN request retries may not be sent from the host due to a driver issue. For more information about the issue see: CSCvt83152.

- N9K-C93180YC-FX

- N9K-C93180YC-EX

- N9K-C93360YC-FX2