

Cisco Nexus 9000 Series NX-OS Release Notes

Release 10.6(2s)

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

Introduction

This document provides information about the features, networking mode capabilities of the N9300 Smart Switch, and relevant documentation for Cisco NX-OS Release 10.6(2s) on the Cisco N9300 Series.

Date	Description
December 12, 2025	Release 10.6(2s) became available.

Cisco N9300 Series Smart Switches

The Cisco N9300 Series Smart Switches are integrated network devices designed for scalable, secure, and efficient data center operations. They combine advanced networking and security features with hardware acceleration and software flexibility, embedding stateful security powered by Cisco Hypershield directly into the network fabric.

Cisco N9300 Series Smart Switches utilize Cisco® Silicon One® E100 ASIC for high-performance switching and DPUs for enhanced security and services. The family includes 100G and 25G switches with 800G DPU acceleration. Models such as the Cisco Nexus N9348Y2C6D-SE1U and N9324C-SE1U offer exceptional flexibility and performance, making them ideal Top of Rack (ToR) solutions for VXLAN-EVPN, BGP fabrics, and Multisite deployments. These switches can be deployed as leaf switches, border leaf, or border gateways, enabling customers to build adaptable and high-performing data center architectures.

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

For product specifications, see Cisco N9300 Series Smart Switch Data Sheet.

Cisco N9324C-SE1U switch

Starting with Cisco NX-OS Release 10.6(1s), the N9300 Series Smart Switches introduces the Cisco N9324C-SE1U switch, a 1-RU solution designed to deliver high-performance networking capabilities. Its features include:

- 24 x 100G ports
- Cisco Silicon One E100 ASIC offering high-speed connectivity and scalability
- 4 DPU offering software-defined stateful services

For hardware details, see Cisco N9324C-SE1U NX-OS-Mode Switch Hardware Installation Guide.

For configuration guide (network only mode), see <u>Cisco N9300 Series Smart Switches NX-OS</u> Feature Configuration Guide, Release 10.6(1s).

Cisco N9348Y2C6D-SE1U switch

Starting with Cisco NX-OS Release 10.6(1s), the N9300 Series Smart Switches introduces the Cisco N9348Y2C6D-SE1U switch, a 1-RU solution designed to deliver high-performance. It features include:

- 48-port 25G + 2-port 100G + 6-port 400G switch
- Cisco Silicon One E100 ASIC offering high-speed connectivity and scalability
- 2 DPUs offering software-defined stateful services

For hardware details, see Cisco N9324C-SE1U NX-OS-Mode Switch Hardware Installation Guide.

For configuration guide (network only mode), see <u>Cisco N9300 Series Smart Switches NX-OS Feature Configuration Guide</u>, Release 10.6(1s).

Beginning with Cisco NX-OS Release 10.6(2s), the N9300 Series Smart Switches (N9324C-SE1U and N9348Y2C6D-SE1U) supports the following use cases

- Cloud Edge: Smart Switch provides stateful L3/L4 segmentation and visibility between private and public clouds
- Zone segmentation: Smart Switches provide external L4 stateful segmentation and visibility.
- Top of Rack (ToR) solutions for VXLAN-EVPN: Consistent L4 segmentation policy extending across VXLAN EVPN fabric as Leaf.

Software Features

Guides listed in the below table contains contents specific only to Cisco NX-OS Release 10.6(2s).

Feature Type	Description
Network only mode feature	For network only mode feature set, see <u>Cisco Nexus 9000 Series NX-OS</u> <u>Release Notes, Release 10.6(1s)F.</u>
Layer 4-Layer 7 Service acceleration	You can power up the DPUs on the Cisco N9324C-SE1U by enabling service acceleration. Service acceleration feature requires that you are on Premier license tier.
	For more information, see
	Getting Started with Cisco N9300 Series Smart Switches Guide
	Troubleshooting Cisco N9300 Smart Switches with Hypershield
	 Cisco N9300 Series Smart Switches NX-OS Feature Configuration Guide, Release 10.6(2s)
	For information on supported scale see Cisco Nexus 9000 Series NX-OS Verified Scalability Guide, Release 10.6(2s)

Release Image

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

In Cisco NX-OS Release 10.6(2s), the following 64-bit image is supported:

• The 64-bit Cisco NX-OS image filename with "nxos64-s1-dpu" as the prefix (for example, nxos64-s1-dpu.10.6.2s.F.bin) is supported and it is mandatory on Cisco N9300 Series Smart Switches.

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

Open Issues

There are no resolved issues in this release.

Resolved Issues

There are no resolved issues in this release.

Device Hardware

The following table list the Cisco Nexus 9300 Series hardware that Cisco NX-OS Release 10.6(2s) supports. For additional information about the supported hardware, see the Hardware Installation Guide for your Cisco Nexus 9000 Series device.

Table 1. Cisco N9300 Series Smart Switches

Product ID	Description
N9348Y2C6D-SE1U	1-RU switch with 48 x 25G, 6 x 400G, 2 x 100G ports, Cisco Silicon One E100 ASIC and 2 DPUs
N9324C-SE1U	1-RU switch with 24 x 100G ports, Cisco Silicon One E100 ASIC and 4 DPUs

Optics

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

Upgrade and Downgrade

To perform a software upgrade or downgrade, follow the instructions in the Cisco Nexus 9000 Series NX-OS Software Upgrade and Downgrade Guide, Release 10.6(x).

Note: Only Disruptive Upgrade is supported. See Disruptive Upgrade.

Note: Upgrading the Cisco N9324C-SE1U switch from NX-OS Release 10.5(3s) to NX-OS Release 10.6(1s) is not recommended if the service-acceleration feature is in use. This feature is not supported in NX-OS Release 10.6(1s).

To perform an upgrade from release 10.5(3s) to 10.6(2s), follow these instructions:

1. Back up the current configuration: copy running-config bootflash:config1

- 2. Start the upgrade: install-all to 10.6(2s) with the no reload option: install all nxos <image> no-reload
- Note: This implicitly copies running-config to startup-config, so a write erase is required.
 - 3. Erase previous startup configuration: write erase
 - 4. Reload the system: reload
 - 5. Prepare the configuration: Update the **config1** file with any changes needed for compatibility with 10.6(2s).
 - 6. Apply the updated configuration: copy bootflash:config1 running-config
 - 7. Save the configuration: copy running-config startup-config

To perform a software upgrade from 10.6(1s) or 10.6(2)F to 10.6(2s), follow these instructions:

- 1. Start the upgrade: install all nxos <image-name>
- 2. Update the service acceleration configuration in 10.6(2s). For configuration details, see the specific service acceleration configuration guide.
- 3. Save the configuration: copy running-config startup-config

Related Content

Document Title	Description
Cisco Nexus 9000 Series Switches	Cisco Nexus 9000 Series Switches documentation
Cisco NX-OS Software Strategy and Lifecycle Guide	Cisco NX-OS Software Release and Image-naming Convention
Cisco N9300 Series Smart Switch Data Sheet	Data sheet for Cisco N9300 Series Smart Switch
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 Note: When you downgrade from Cisco NX-OS Release 10.6(1s) 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 10.6(x)
Cisco N9324C-SE1U NX-OS-Mode Switch Hardware Installation Guide	Cisco Nexus 9324C-SE1U NX-OS-Mode Switch Hardware Installation Guide
Cisco Nexus N9348Y2C6D-SE1U NX-OS-Mode Switch Hardware Installation Guide	Cisco Nexus N9348Y2C6D-SE1U NX-OS-Mode Switch Hardware Installation Guide

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