



Release Notes for Cisco NCS 540 Series Routers, Cisco IOS XR Release 25.4.2

Contents

Cisco NCS 540 Series Routers, Release 25.4.2	3
New software features.....	3
New hardware	3
Changes in behavior	3
Open issues.....	3
Known issues.....	3
Compatibility.....	3
Supported software packages	4
Related resources.....	8
Legal information	9

Cisco NCS 540 Series Routers, Release 25.4.2

Cisco IOS XR Release 25.4.2 is a maintenance release of [Cisco IOS XR Release 25.4.1](#) for Cisco NCS 540 Series routers.

For more details on the Cisco IOS XR release model and associated support, see [Software Lifecycle Support Statement - IOS XR](#).

New software features

There are no new software features introduced in this release.

New hardware

There is no new hardware introduced in this release.

Changes in behavior

There are no changes in behavior in this release.

Open issues

There are no open issues in this release.

Known issues

During a software upgrade to IOS XR Release 25.4.2, the system may not complete the Auto-FPD upgrade as expected. After the upgrade, the FPD status shows 'RLOAD REQ', indicating that you must perform an additional reload to activate the updated FPD.

Compatibility

Compatibility Matrix for EPNM and Crosswork with Cisco IOS XR Software

The compatibility matrix lists the version of EPNM and Crosswork that are supported with Cisco IOS XR Release in this release.

Table 1. Compatibility Matrix for Cisco NCS 540 Series Routers, Release 25.4.2

Cisco IOS XR	Crosswork	EPNM
Release 25.4.2	Crosswork Optimization Engine 6.0	Evolved Programmable Network Manager 8.1.1

System requirements

Use the **show hw-module fpd** command in EXEC and Admin mode to view the hardware components with their current FPD version and status. The status of the hardware must be CURRENT; Running and Programmed version must be the same. You can also use the `show fpd package` command in Admin mode to check the fpd versions.

Software Version

To verify the software version running on the router, use **show version** command in the EXEC mode.

```
Router# show version
```

Tue Mar 31 10:00:08.989 IST
 Cisco IOS XR Software, Version 25.4.2
 Copyright (c) 2013-2026 by Cisco Systems, Inc.

Build Information:

```
Built By      : swtools
Built On     : Tue Mar 24 17:48:23 PDT 2026
Built Host   : iox-lnx-121
Workspace    : /auto/srcarchive12/prod/25.4.2/ncs540/ws
Version     : 25.4.2
Location    : /opt/cisco/XR/packages/
Label       : 25.4.2-iso
```

cisco NCS-540 () processor
 System uptime is 1 day 14 hours 13 minutes

Supported software packages

The following tables list the supported base images and optional packages and their corresponding file names.

Visit the [Cisco Software Download page](#) to download the Cisco IOS XR software images.

Table 2. Release 25.4.2 software for N540-24Z8Q2C-SYS, N540-ACC-SYS, and N540X-ACC-SYS

Package	Filename	Description
Base image		
IOS XR Base Image	ncs540-mini-x-25.4.2.iso	IOS XR mandatory base image.
USB Boot Package	ncs540-usb_boot-25.4.2.zip	Package required to perform USB Boot. Includes the same packages as the base image.
Optional packages not included in the base image		
IOS XR Manageability	ncs540-mgbl-1.0.0.0-r2542.x86_64.rpm	Supports Extensible Markup Language (XML) Parser, Telemetry, Netconf, gRPC and HTTP server
IOS XR MPLS	ncs540-mpls-1.0.0.0-r2542.x86_64.rpm ncs540-mpls-te-rsvp-1.0.0.0-r2542.x86_64.rpm	Supports MPLS and MPLS Traffic Engineering (MPLS-TE)
IOS XR Security	ncs540-k9sec-1.0.0.0-r2542.x86_64.rpm	Supports MACsec and 802.1X
IOS XR ISIS	ncs540-isis-1.0.0.0-r2542.x86_64.rpm	Supports ISIS
IOS XR OSPF	ncs540-ospf-1.0.0.0-r2542.x86_64.rpm	Supports OSPF

Package	Filename	Description
IOS XR Lawful Intercept	ncs540-li-1.0.0.0-r2542.x86_64.rpm	Supports Lawful Intercept (LI)
IOS XR Multicast	ncs540-mcast-1.0.0.0-r2542.x86_64.rpm	Supports Multicast
IOS XR EIGRP	ncs540-eigrp-1.0.0.0-r2542.x86_64.rpm	Supports EIGRP
IOS XR LI-CTRL	ncs540-lictrl-1.0.0.0-r2542.x86_64.rpm	Supports LI-CTRL

Table 3. Release 25.4.2 Software for N540-24Q8L2DD-SYS, N540-24Q2C2DD-SYS, N540X-16Z4G8Q2C-A/D, N540-28Z4C-SYS-A/D, N540X-12Z16G-SYS-A/D, N540-12Z20G-SYS-A/D, N540-FH-CSR-SYS, N540X-16Z8Q2C-D, and N540-FH-AGG-SYS

Package	Filename	Description
Base Image		
IOS XR Base Image	ncs540l-x64-25.4.2.iso	<p>IOS XR base image with mandatory packages.</p> <p>The base ISO image also includes the following optional packages:</p> <ul style="list-style-type: none"> xr-bgp xr-cdp xr-eigrp xr-ipsla xr-is-is xr-k9sec xr-lictrl xr-lldp xr-mcast xr-mpls-oam xr-netflow xr-ospf xr-perf-meas xr-perfmgmt xr-rip xr-telnet xr-track <p>These optional packages are also included in NCS540l-iosxr-25.4.2.tar.</p>
USB Boot Package	ncs540l-usb_boot-25.4.2.zip	<p>Package required to perform USB Boot.</p> <p>Includes the same packages as the base image.</p>
Optional packages not included in the base image		

Package	Filename	Description
IOS XR Telnet (xr-telnet)	NCS540I-iosxr-25.4.2.tar	Supports Telnet
IOS XR EIGRP (xr-eigrp)	NCS540I-iosxr-25.4.2.tar	Supports EIGRP
IOS XR CDP (xr-cdp)	NCS540I-iosxr-25.4.2.tar	Supports CDP
IOS XR k9sec (xr-k9sec)	NCS540I-k9sec-rpms.25.4.2.tar	Supports 802.1X
IOS XR RIP (xr-rip)	NCS540I-iosxr-25.4.2.tar	Supports RIP

Table 4. Release 25.4.2 Software for N540X-4Z14G2Q-A/D, N540X-8Z16G-SYS-A/D, N540-6Z14S-SYS-D, N540-6Z18G-SYS-A/D, N540X-6Z18G-SYS-A/D, and N540X-6Z6G-SYS

Package	Filename	Description
Base image		

Package	Filename	Description
IOS XR Base Image	ncs540l-aarch64-25.4.2.iso	<p>IOS XR base image with mandatory packages.</p> <p>The ISO image also includes the following optional packages:</p> <ul style="list-style-type: none"> xr-bgp xr-cdp xr-eigrp xr-ipsla xr-is-is xr-k9sec xr-lictrl xr-lldp xr-mcast xr-mpls-oam xr-ncs540l-mcast xr-ncs540l-netflow xr-netflow xr-ospf xr-perf-meas xr-perfmgmt xr-rip xr-telnet xr-track <p>These optional packages are also included in NCS540l aarch64 iosxr optional rpms-25.4.2.tar.</p>
USB Boot Package	ncs540l-aarch64-usb_boot-25.4.2.zip	<p>Package required to perform USB Boot.</p> <p>Includes the same packages as the base image.</p>
Optional packages not included in the base image		
Package	Filename	Description
IOS XR Telnet (xr-telnet)	NCS540l-aarch64-iosxr-optional-rpms-25.4.2.tar	Supports Telnet
IOS XR EIGRP (xr-eigrp)	NCS540l-aarch64-iosxr-optional-rpms-25.4.2.tar	Supports EIGRP
IOS XR CDP (xr-cdp)	NCS540l-aarch64-iosxr-optional-rpms-25.4.2.tar	Supports CDP

Package	Filename	Description
IOS XR k9sec (xr-k9sec)	NCS540I-aarch64-k9sec-rpms.25.4.2.tar	Supports 802.1X
IOS XR RIP (xr-rip)	NCS540I-aarch64-iosxr-optional-rpms-25.4.2.tar	Supports RIP

Related resources

Table 5. Related resources

Document	Description
Cisco feature finder	An interactive tool that assists in locating features introduced across Cisco IOS XR releases and platforms.
Cisco IOS XR error messages	Search by release number, error strings, or compare release numbers to view a detailed repository of error messages and descriptions.
Cisco IOS XR MIBs	Select the MIB of your choice from a drop-down to explore an extensive repository of MIB information.
Cisco NCS 540 documentation	CCO Documentation for Cisco NCS 540 Series Routers
Feature deprecation and removal details	Outlines the features currently supported by each operating system.
Feature deprecation phasing out insecure capabilities	Provides a list of insecure features and protocols that are scheduled for systematic deprecation and eventual removal from specified Cisco products.
Feature removal and suggested alternatives	Details the reasons why certain features or protocols are deemed insecure and offers secure alternatives when available.
Smart licensing	Information about Smart Licensing Using Policy solutions and their deployment on IOS XR Routers.
Transceiver Module Group (TMG) compatibility matrix	Search by product family, product ID, data rate, reach, cable type, or form factor to determine the transceivers that Cisco hardware device supports.
YANG data models	A user-friendly reference designed to easily explore and understand the various data models supported in Cisco IOS XR platforms and releases.
Yang data models in Github	Repository containing the folders with yang data models introduced and enhanced in every IOS XR release.

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