



Release Notes for Cisco NCS 5000 Series Routers, IOS XR Release 7.4.2

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Network Convergence System 5000 Series Routers

The Network Convergence System 5000 Series offers a high-density, small-form-factor MPLS aggregation router for metro aggregation. It is designed to economically scale large enterprise, over-the-top (OTT), and service provider Data Center networking architectures.

The Cisco NCS 5000 Series is an extension to Cisco's routing platform portfolio enabling Service Providers and MPLS enabled data center architectures to offer elastic networks with improved business agility and simplified operations to deliver high-bandwidth mobile, video, and cloud services.

It can also operate as an extension shelf of Cisco ASR 9000 Series Aggregation Services Routers using Network Virtualization (nV) technology, consolidating multiple layers in the network and dramatically reducing operational costs.

The Cisco NCS 5000 series routers are small form factor dense aggregation systems. Powered by industry leading routing operation system, IOS-XR, the system also offers rich functions such as third party application hosting, machine-to-machine interface, telemetry and flexible package delivery.



Note Cisco IOS XR Release 7.4.2 is an Extended Maintenance Release of [Cisco IOS XR Release 7.4.1](#) for Cisco NCS 5000 Series routers. For more details on the Cisco IOS XR release model and associated support, see [Guidelines for Cisco IOS XR Software](#).

The Cisco NCS 5000 series router is not supported in the standalone mode in IOS XR Release.7.4.2. It is only supported as a satellite to the ASR 9000 Router. For information on satellite features, see Release Notes for Cisco ASR 9000 Series Routers, IOS XR Release.7.4.2.

Release Packages

This table lists the Cisco IOS XR Software feature set matrix (packages) with associated filenames.

Table 1: Release 7.4.2 Packages for Cisco NCS 5000 Series Router

Composite Package		
Feature Set	Filename	Description
Cisco IOS XR IP Unicast Routing Core Bundle	ncs5k-mini-x.iso	Contains base image contents that includes: <ul style="list-style-type: none">• Host operating system• System Admin boot image• IOS XR boot image• Alarm co-relation
Individually-Installable Optional Packages		
Feature Set	Filename	Description

Cisco IOS XR Manageability Package	ncs5k-mgbl-3.0.0.0-r742.x86_64.rpm	XML, Parser, HTTP Server, Telemetry, and gRPC.
Cisco IOS XR MPLS Package	ncs5k-mpls-3.1.0.0-r742.x86_64.rpm	Label Distribution Protocol (LDP), MPLS forwarding , MPLS operations , Administration and maintenance (OAM), Layer3-vpn , layer-2 vpn.
Cisco IOS XR MPLS RSVP TE package	ncs5k-mpls-te-rsvp-1.1.0.0-r742.x86_64.rpm	Supports MPLS RSVP-TE (Resource Reservation Protocol with Traffic Engineering extensions)
Cisco IOS XR Security Package	ncs5k-k9sec-3.2.0.0-r742.x86_64.rpm	Support for Encryption, Decryption, and Secure Shell (SSH),
Cisco IOS XR Multicast Package	ncs5k-mcast-2.2.0.0-r742.x86_64.rpm	Multicast routing protocols (PIM, IGMP, Auto-rp, BSR) and infrastructure (Multicast routing information Base) , Multicast forwarding (mfwf)
Cisco IOS XR ISIS package	ncs5k-isis-2.2.0.0-r742.x86_64.rpm	Supports ISIS
Cisco IOS XR OSPF package	ncs5k-ospf-2.0.0.0-r742.x86_64.rpm	Supports OSPF

Caveats

Caveats describe unexpected behavior in Cisco IOS XR Software releases. Severity-1 caveats are the most critical caveats; severity-2 caveats are less critical.

Caveats

These caveats are applicable for Cisco IOS XR Software:

Bug ID	Headline
CSCwa35067	ROUTING-OSPF-3-EXTERNALERR_RC : External error, xtc_api_connect - log seen post RPFO

Upgrading Cisco IOS XR Software

Cisco IOS XR Software is installed and activated from modular packages, allowing specific features or software patches to be installed, upgraded, or downgraded without affecting unrelated processes. Software packages can be upgraded or downgraded on all supported card types, or on a single card (node).

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Cisco Systems, Inc.
San Jose, CA 95134-1706
USA

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CiscoSystems(USA)Pte.Ltd.
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