



Cisco NCS 1010 software setup fundamentals

Use this information to understand the key terms, concepts, types of releases relevant to setting up and upgrading Cisco IOS XR Optical Site Manager System Setup and Software Installation Guide.

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Types of software releases for Cisco NCS 1010

The Cisco IOS XR software model for NCS 1010 offers three primary types of software releases. Software images are available for download at the [Cisco Software Download](#) page. You can use these descriptions to identify release types, locate command outputs in documentation, and find supporting resources during NCS 1010 setup or troubleshooting.

Table 1: Types of software releases

Release Type	Description	Example	Where to Find
Feature Release (FR)	Contains new features and supports new hardware; features are added and installation notes are provided in release notes.	X.X.1 format (e.g., 24.1.1, 24.2.1)	Release notes, Cisco download site
Maintenance Release	Delivers groups of critical bug fixes to feature releases.	Referenced in release notes	Release notes, Cisco download site
Software Maintenance Unit (SMU)	Provides specific fixes until the release's End of Maintenance (EoM); fixes are merged into the next shipping release. SMUs are customized and posted as "Cisco IOS XR Software Maintenance Upgrade."	Customized for a specific release	Cisco download site, under <i>Cisco IOS XR Software Maintenance Upgrade</i> .

For detailed information about numbering, release types, and timelines, see: [Software Lifecycle Support Statement - IOS XR](#)

Downloadable software files for Cisco NCS 1010

This table describes the files available for download from the [Cisco Software Download](#) page for Cisco NCS1010.

Table 2: IOS XR Software Installation Files in Cisco Software Download Page

Package File	Example	Description
ncs1010-x64-<rel. no.>.iso	ncs1010-x64-24.3.1.iso	This file includes the required core packages. These packages comprise the operating system, Admin, Base, Forwarding, SNMP Agent, FPD, Alarm Correlation, Netconf-yang, Telemetry, Extensible Markup Language (XML) parser, and HTTP server packages.
Individually Installable Packages		
xrtelnet-<rel. no.>x86_64.rpm xr-telnet-ncs1010-<rel. no.>x86_64.rpm	xr-telnet-24.3.1.v1.0.0-1.x86_64.rpm xr-telnet-ncs1010-24.3.1.v1.0.0-1.x86_64.rpm	Install these packages to support Telnet.
xrcdp-rpms.<rel. no.>.rpm xr-cdp-ncs1010-<rel. no.>x86_64.rpm	xr-cdp-24.3.1.v1.0.0-1.x86_64.rpm xr-cdp-ncs1010-24.3.1.v1.0.0-1.x86_64	Install these packages to support CDP.

Command modes for Cisco NCS 1010

The NCS 1010 operates using virtualized Cisco IOS XR software. CLI commands are executed on the IOS XR virtual machine.

The command modes apply to the Cisco NCS 1010 Series. The table lists available command modes for IOS XR.

Command Mode	Description
IOS XR EXEC mode (IOS XR execution mode)	Use commands on IOS XR to display the operational state of NCS 1010. Example: RP/0/RP0/CPU0:ios#

Command Mode	Description
IOS XR Config mode (IOS XR configuration mode)	Configure security, routing, and other XR features on IOS XR. Example: RP/0/RP0/CPU0:ios#configure RP/0/RP0/CPU0:ios(config)

