Cisco NCS 1002 Product Overview

The Cisco Network Convergence System (NCS) 1002 is a 2 RU system that delivers fully programmable, high-bandwidth capacity (up to 250 Gbps) wavelengths over distances exceeding 3000 km using existing fiber. Powered by the industry-leading Cisco IOS XR operating system, Cisco NCS 1002 offers robust functions such as third party application hosting, machine-to-machine interface, telemetry and flexible package delivery.

NCS 1002 delivers the following benefits:

- Supports up to 2 Tbps capacity

- Transports 100, 200, or 250Gbps per wavelength on the same platform through software provisioning

- Transports 10 GE, 40 GE, and 100 GE on the same platform through software provisioning

- Supports grid-less tuning for flex-grid dense wavelength-division multiplexing (DWDM)

- Supports different modulation formats (PM-QPSK or PM-16QAM)

- Supports 7% or 20% Soft Decision (SD) FEC for maximum optical performance

- Allows for automated installation, configuration and monitoring

- Supports machine-to-machine (M2M) APIs based on YANG models for ease of configuration

- Supports a telemetry agent for a pub-sub model of device monitoring

- Command Modes, on page 1

Command Modes

The Cisco NCS 1002 system runs on the Cisco IOS XR operating system. This table lists command modes.

Command Mode	Description
XR execution mode	Displays and monitors the operational state in XR mode. Example: `RP/0/RP0/CPU0:ios#`

Command Mode	Description

XR configuration mode	Performs feature configurations.
	
	Example:
	
	`RP/0/RP0/CPU0:ios# configure`
	`RP/0/RP0/CPU0:ios(config)#`

System Admin execution mode	Displays and monitors the operational state in System Admin mode. Example: `sysadmin-vm:0_RP0#`