



## Overview of the Router

The Cisco NCS 540 system is a high fault-resilient platform, which provides next generation data-center switching environment with high bandwidth and low latency.

Cisco NCS 540 system provides:

- High performance (300 Gbps full-duplex switching)
- Flexible network interface (10GbE, 25GbE, 40GbE, 50GbE, and 100GbE interfaces as well as ILKN interfaces)
- Traffic manager and in-band management
- Flexible and microcode-programmable packet processor
- Label Switched Router (LSR) and possible Light Label switched Edge Router (LER) features and functionality with limited hardware scale and software functionality.
- [Command Modes, on page 1](#)

## Command Modes

The router runs on virtualized Cisco IOS XR software. Therefore, the CLI commands must be executed on virtual machines, namely the XR LXC and the System Admin LXC.

The command modes are applicable for the Cisco NCS 5500 Series Routers. This table lists the command modes for the LXCs.

Command Mode	Description
XR EXEC mode (XR LXC execution mode)	Run commands on the XR LXC to display the operational state of the router. Example: RP/0/RP0/CPU0:router#

Command Mode	Description
XR Config mode (XR LXC configuration mode)	Perform security, routing, and other XR feature configurations on the XR LXC.  Example:  <pre>RP/0/RP0/CPU0:router#<b>configure</b> RP/0/RP0/CPU0:router (config) #</pre>
System Admin EXEC mode (System Admin LXC execution mode)	Run commands on the System Admin LXC to display and monitor the operational state of the router hardware. The chassis or individual hardware modules can be reloaded from this mode.  Example:  <pre>RP/0/RP0/CPU0:router#<b>admin</b> sysadmin-vm:0_RP0#</pre>
System Admin Config mode (System Admin LXC configuration mode)	Run configuration commands on the System Admin LXC to manage and operate the hardware modules of the entire chassis.  Example:  <pre>RP/0/RP0/CPU0:router#<b>admin</b> sysadmin-vm:0_RP0#<b>config</b> sysadmin-vm:0_RP0 (config) #</pre>