VLAN Subinterface Commands

This module provides command line interface (CLI) commands for configuring 802.1Q VLANs on the Cisco NCS 5000 Series Router.

For detailed information about VLAN Subinterfaces concepts, configuration tasks, and examples, refer to the *Interface and Hardware Component Configuration Guide for Cisco NCS 5000 Series Routers*

interface (VLAN)

To create a VLAN subinterface, use the **interface** command in XR Config mode. To delete a subinterface, use the **no** form of this command.

interface *type interface-path-id.subinterface* [**l2transport**]
no interface *type interface-path-id.subinterface* [**l2transport**]

Syntax Description

type	Type of Ethernet interface on which you want to create a VLAN. Enter **GigabitEthernet**, **TenGigE**, or **Bundle-Ether**.
*interface-path-id**.subinterface*	Physical interface or virtual interface followed by the subinterface path ID. Naming notation is *interface-path-id.subinterface*. The period in front of the subinterface value is required as part of the notation. For more information about the syntax for the router, use the question mark (?) online help function.
l2transport	Enables Layer 2 transport port mode on the specified VLAN interface and enters Layer 2 transport configuration mode. The l2transport keyword creates the Vlan interface in L2 mode so that it can be used for L2VPNs and local switching.

Command Default

No default behavior or values

Command Modes

r-interface-vlan-common

Command History

Release	Modification
Release 6.0	This command was introduced.

Usage Guidelines

For the *interface-path-id* argument, use the following guidelines:

- If specifying a physical interface, the naming notation is *rack*/*slot*/*module*/*port*. The slash between values is required as part of the notation. An explanation of each component of the naming notation is as follows:

    - *rack*: Chassis number of the rack.

    - *slot*: Physical slot number of the line card.

    - *module*: Module number. A physical layer interface module (PLIM) is always 0.

    - *port*: Physical port number of the interface.

- If specifying an Ethernet bundle interface, the range is from 1 through 65535.

For the *subinterface* argument, the range is from 0 through 4095.

To configure a large number of subinterfaces, we recommend entering all configuration data before you commit the **interface** command.

To change an interface from Layer 2 to Layer 3 mode and back, you must delete the interface first and then re-configure it in the appropriate mode.

> **Note** A subinterface does not pass traffic without an assigned VLAN ID.

Task ID

Task ID	Operations
vlan	read, write

Examples

This example shows how to configure a VLAN subinterface on a 10-Gigabit Ethernet interface:

```
RP/0/RP0/CPU0:router(config)# interface TenGigE 0/0/0/10.1
RP/0/RP0/CPU0:router(config-subif)# ipv4 address  30.0.1.2 255.255.255.0
RP/0/RP0/CPU0:router(config-subif)# encapsulation dot1q 3201
```

This example shows how to create a VLAN subinterface with Layer 2 transport port mode enabled, and enter Layer 2 transport configuration mode under that VLAN:

```
RP/0/RP0/CPU0:router(config)# interface TenGigE0/0/0/10.101 l2transport
RP/0/RP0/CPU0:router(config-if-l2)#encapsulation dot1q 101
```

interface (VLAN)