

New and Changed Information

This chapter provides release-specific information for each new and changed feature in the *Cisco Nexus* 5000 Series NX-OS Layer 2 Interfaces Command Reference. The latest version of this document is available at the following Cisco website:

http://www.cisco.com/en/US/products/ps9670/prod_command_reference_list.html

To check for additional information about this Cisco NX-OS Release, see the *Cisco Nexus 5000 Series Switch Release Notes* available at the following Cisco website:

http://www.cisco.com/en/US/products/ps9670/prod_release_notes_list.html

New and Changed Information for Cisco NX-OS Releases

This section includes the following topics:

- New and Changed Information for Cisco NX-OS Release 5.2(1)N(1), page xix
- New and Changed Information for Cisco NX-OS Release 5.1(3)N1(1a), page xx
- New and Changed Information for Cisco NX-OS Release 5.1(3)N1(1), page xx
- New and Changed Information for Cisco NX-OS Release 5.0(3)N2(1), page xxiv
- New and Changed Information for Cisco NX-OS Release 5.0(3)N1(1), page xxv
- New and Changed Information for Cisco NX-OS Release 5.0(2)N2(1), page xxvi
- New and Changed Information for Cisco NX-OS Release 5.0(2)N1(1), page xxvii
- New and Changed Information for Cisco NX-OS Release 4.2(1)N2(1), page xxvii
- New and Changed Information for Cisco NX-OS Release 4.2(1)N1(1), page xxviii
- New and Changed Information for Cisco NX-OS Release 4.0(1a)N2(1), page xxviii
- New and Changed Information for Cisco NX-OS Release 4.0(1a)N1(1), page xxix
- New and Changed Information for Cisco NX-OS Release 4.0(0)N1(1a), page xxix

New and Changed Information for Cisco NX-OS Release 5.2(1)N(1)

Table 1 summarizes the new and changed features for Cisco NX-OS Release 5.2(1)N1(1) and tells you where they are documented.

Feature	Description	Where Documented
Dynamic system reserved	This feature was introduced.	system vlan reserve, page 258
VLAN range		show system vlan reserved, page 399

Table 1 New and Changed Information for Release 5.0(3)N2(1)

New and Changed Information for Cisco NX-OS Release 5.1(3)N1(1a)

Table 2 summarizes the new and changed features for Cisco NX-OS Release 5.2(1)N1(1a) and tells you where they are documented.

 Table 2
 New and Changed Information for Release 5.0(3)N2(1)

Feature	Description	Where Documented
VLAN configuration	This feature was introduced.	vlan configuration, page 433

New and Changed Information for Cisco NX-OS Release 5.1(3)N1(1)

Table 3 summarizes the new and changed features for Cisco NX-OS Release 5.1(3)N1(1) and tells you where they are documented.

Feature	Description	Where Documented
Adapter Fabric Extender (Adapter-FEX)	This feature was introduced.	bind (virtual Ethernet interface)
	The following Adapter-FEX commands were	feature-set virtualization
	introduced:	interface vethernet
	• feature-set virtualization	shutdown
	• interface vethernet	switchport mode
	• bind	vethernet auto-create
	vethernet auto-create	show interface vethernet
	• show interface vethernet counters	show running-config interface
	• show interface vethernet	6 -
	• show running-config interface vethernet	
	The following Adapter-FEX-related commands were updated:	
	• shutdown	
	• switchport mode	
	• show running-config interface	
Encapsulated Remote Switched	This feature was introduced.	description (SPAN, ERSPAN)
Port Analyzer (ERSPAN)	The following commands were introduced:	destination (ERSPAN)
	• destination (ERSPAN)	erspan-id
	• erspan-id	monitor erspan origin ip-address
	• monitor erspan origin ip-address	monitor session
	• shut (ERSPAN)	shut (ERSPAN)
	• vrf (ERSPAN)	source (SPAN, ERSPAN)
	The following commands were updated:	vrf (ERSPAN)
	• description (SPAN, ERSPAN)	show monitor session
	monitor session	
	• source (SPAN, ERSPAN)	
	• show monitor session	
Clock protocol	This feature was introduced to synchronize the clock protocol.	clock protocol
	The following command was added:	
	clock protocol	

Table 3	New and Changed Information for Release 5.1(3)N1(1)
---------	-----------------------------------------------------

Feature	Description	Where Documented
Virtual Ethernet interfaces	This feature was introduced.	bind (virtual Ethernet interface)
		capability (virtual Ethernet interface)
		cdp enable
		default shutdown (virtual Ethernet interface)
		description (interface)
		high-performance host-netio (virtual Ethernet interface)
		install feature-set virtualization
		interface vethernet
		pinning id (virtual Ethernet interface)
		shutdown
		switchport access vlan
		switchport block
		switchport mode
		switchport mode private-vlan host
		switchport private-vlan host-association
		switchport private-vlan mapping
		switchport trunk allowed vlan
		switchport trunk native vlan
		vethernet auto-create
		vmware (virtual Ethernet interface
		vsi (virtual Ethernet interface)
		svs veth auto-delete
		svs veth auto-setup
		show interface vethernet
		show interface vethernet counters
		show interface virtual
Cisco Virtual Machine Fabric	This feature was introduced.	feature vmfex
Extender (VM-FEX)		feature-set virtualization
		install feature-set virtualization
		interface vethernet

Table 3 New and Changed Information for Release 5.1(3)N1(1) (continued)

Feature	Description	Where Documented
Multicast VLAN Registration	This feature was introduced.	mvr group
(MVR)		mvr type
		mvr vlan
		show mvr
		show mvr groups
		show mvr interface
		show mvr members
		show mvr receiver-ports
		show mvr source-ports
Ethernet Port Security	This feature was introduced.	clear port-security dynamic
		feature port-security
		switchport port-security
		switchport port-security aging
		switchport port-security mac-address
		switchport port-security maximum
		switchport port-security violation
		show port-security
		show running-config port-security
		show startup-config port-security
FCoE over Adapter-FEX	This feature was introduced to connect a VMware vCenter Server to a Cisco Nexus 5000 Series switch.	connect
		dvs-name
		extension-key
		install certificate
		protocol vmware-vim
		remote hostname
		remote ip address
		remote port
		remote vrf
		svs connection
		svs veth auto-delete
		svs veth auto-setup
		vmware dvs
		show svs connections

Table 3 New and Changed Information for Release 5.1(3)N1(1) (continued)

Feature	Description	Where Documented
Management SVI	This feature was introduced.	management
		show interface mgmt
Spanning Tree Protocol (STP) pseudo parameters	 This feature was introduced to configure spanning tree pseudo parameters for Layer 2 gateway switches. The following commands were introduced: mst (STP) 	mst (STP) spanning-tree pseudo-information vlan (STP)
	 mst (STT) spanning-tree pseudo-information vlan (STP) 	show running-config spanning-tree
	The following command was updated:show running-config spanning-tree	
Spanning Tree Protocol (STP) enhancements	 The following commands were introduced: spanning-tree bridge assurance spanning-tree domain spanning-tree mst pre-standard spanning-tree vlan cost spanning-tree vlan port-priority 	spanning-tree bridge assurance spanning-tree domain spanning-tree mst pre-standard spanning-tree vlan cost spanning-tree vlan port-priority
Interface speed enhancement	 Interface speed of 100 Mbps and the auto keyword was introduced. The following command was updated: speed (interface) 	speed (interface)
Interface VLAN enhancement	You can set the carrier delay on a serial interface.	carrier-delay
Interface duplex mode	This feature was introduced.	duplex
Interface statistics collection interval	This feature was introduced.	load-interval
Link Aggregation Control Protocol (LACP) graceful convergence	The following command was added:lacp graceful-convergence	lacp graceful-convergence

Table 3	New and Changed Information for Release 5.1(3)N1(1) (continued)
---------	-----------------------------------------------------------------

New and Changed Information for Cisco NX-OS Release 5.0(3)N2(1)

Table 4 summarizes the new and changed features for Cisco NX-OS Release 5.0(3)N2(1) and tells you where they are documented.

Feature	Description	Where Documented
Flex Links	This feature was introduced.	feature flexlink
	Flex Links, which are two Layer 2 interfaces, where one interface is configured to act as a backup to the other.	switchport backup interface show interface switchport backup show running-config backup show running-config flexlink show startup-config backup
		show startup-config flexlink show tech-support
Configurable Hash Polynomial	This feature was introduced on a Cisco Nexus 5548 switch and Cisco Nexus 5596 switch.	port-channel load-balance ethernet
Switchport enhancements	Support was added to configure the switch to override the priority of frames arriving on the Cisco IP phone port from connected devices.	switchport priority extend
Voice VLAN	This feature was introduced.	switchport voice vlan

Table 4 New and Changed Information for Release 5.0(3)N2(1)

New and Changed Information for Cisco NX-OS Release 5.0(3)N1(1)

Table 5 summarizes the new and changed features for Cisco NX-OS Release 5.0(3)N1(1) and tells you where they are documented.

Table 5 New and Changed Information for Release 5.0(3)N1(1)

Feature	Description	Where Documented
SPAN enhancements	Rate limited Switched Port Analyzer (SPAN) is supported on Cisco Nexus 5010 Series and Cisco Nexus 5020 Series switches.	switchport monitor rate-limit
	Added the switchport monitor rate-limit command.	
LLDP	The Link Layer Discovery Protocol (LLDP) is enabled by default on a Cisco NX-OS switch.	feature lldp

Feature	Description	Where Documented
Layer 3 interfaces	This feature was introduced.	bandwidth (interface)
Layer 3 interfaces	 This feature was introduced. The following Layer 3 interface commands were introduced: encapsulation dot1q interface ethernet (Layer 3) interface loopback interface vlan no switchport The following commands were updated to include support for Layer 3 interfaces and subinterfaces: bandwidth (interface) delay (interface) interface port-channel shutdown 	bandwidth (interface) delay (interface) description (interface) encapsulation dot1Q interface ethernet (Layer 3) interface loopback interface port-channel interface vlan no switchport shutdown Show Commands
	• show interface brief	
	show interface ethernetshow interface port-channel	
Unified ports	Support was added to configure unified ports on a Cisco Nexus 5548UP switch or Cisco Nexus 5596UP switch.	port

Table 5 New and Changed Information for Release 5.0(3)N1(1) (continued)

New and Changed Information for Cisco NX-OS Release 5.0(2)N2(1)

Table 6 summarizes the new and changed features for Cisco NX-OS Release 5.0(2)N2(1) and tells you where they are documented.

Feature	Description	Where Documented
Support for VTP client and server device mode, VTP file and password, and VTP on an interface	You can configure the VTP device mode as client, server, or off. You can also configure the VTP database file or set the password for the VTP administrative domain. You can enable VTP on an interface.	clear vtp counters vtp (interface) vtp file vtp mode vtp password vtp version
Force addition of an interface	You can force the addition of the interface into the	Show Commands channel-group (Ethernet)
into a channel group	specified channel group.	Show Commands

Table 6 New and Changed Information for Release 5.0(2)N2(1)

New and Changed Information for Cisco NX-OS Release 5.0(2)N1(1)

Table 7 summarizes the new and changed features for Cisco NX-OS Release 5.0(2)N1(1) and tells you where they are documented.

Feature	Description	Where Documented
Support for Fabric Extender preprovisioning	You can preprovision a module in a chassis slot of a Cisco Nexus 2000 Series Fabric Extender.	provision
		slot
		show provision
		show running-config exclude-provision
		show startup-config exclude-provision
Link Aggregation Control	The following command was added:	lacp suspend-individual
Protocol (LACP) port suspension	• lacp suspend-individual	
SNMP notification for VTP domain	You can enable SNMP notifications for a VTP domain.	snmp-server enable traps vtp

New and Changed Information for Cisco NX-OS Release 4.2(1)N2(1)

Table 8 summarizes the new and changed features for Cisco NX-OS Release 4.2(1)N2(1) and tells you where they are documented.

Feature	Description	Where Documented
Hardware Hashing	This feature was introduced.	hardware multicast hw-hash
Link Aggregation Control	The following command was added:	lacp rate fast
Protocol (LACP) enhancement	lacp rate fast	

Table 8 New and Changed Information for Release 4.2(1)N2(1)

New and Changed Information for Cisco NX-OS Release 4.2(1)N1(1)

Table 9 summarizes the new and changed features for Cisco NX-OS Release 4.2(1)N1(1) and tells you where they are documented.

Table 9 New and Changed Information for Release 4.2(1)N1(1)

Feature	Description	Where Documented
Layer 2 interface	Support for error-disable (err-disabled) detection was introduced.	errdisable detect cause
		errdisable recovery cause
		errdisable recovery interval
		Show Commands
Ethernet Switched Port	The following commands were updated:	monitor session
Analyzer (SPAN)	• monitor session	
MAC Address Table	The following commands were updated:	clear mac address-table dynamic
	• clear mac address-table dynamic	mac address-table aging-time
	• mac address-table aging-time	mac address-table notification
	mac address-table notification	mac address-table static
	• mac address-table static	Show Commands
VLAN Trunking Protocol (VTP)	This feature was introduced.	clear vtp counters
		feature vtp
		vtp domain
		vtp mode
		vtp version
		Show Commands

New and Changed Information for Cisco NX-OS Release 4.0(1a)N2(1)

Table 10 summarizes the new and changed features for Cisco NX-OS Release 4.0(1a)N2(1) and tells you where they are documented.

L

Send comments to nexus5k-docfeedback@cisco.com

Feature	Description	Where Documented
Layer 2 interface	The following command was updated:	interface ethernet
	• inteface ethernet	

Table 10 New and Changed Information for Release 4.0(1a)N2(1)

New and Changed Information for Cisco NX-OS Release 4.0(1a)N1(1)

Table 11 summarizes the new and changed features for Cisco NX-OS Release 4.0(1a)N1(1) and tells you where they are documented.

Table 11New and Changed Information for Release 4.0(1a)N1(1)

Feature	Description	Where Documented
Layer 2 interface	The following commands were introduced:	speed (interface)
	• speed (interface)	svi enable
	The following command was deprecated::	
	• svi enable	
Unidirectional Link Detection (UDLD)	This feature was introduced.	feature udld
		udld (configuration mode)
		udld (Ethernet)
		show udld

New and Changed Information for Cisco NX-OS Release 4.0(0)N1(1a)

Table 12 summarizes the new and changed features for Cisco NX-OS Release 4.0(0)N1(1a) and tells you where they are documented.

Feature	Description	Where Documented
Layer 2 Ethernet interface	This feature was introduced.	bandwidth (interface)
		cdp
		cdp enable
		channel-group (Ethernet)
		delay (interface)
		description (interface)
		feature interface-vlan
		instance vlan
		interface ethernet
		interface mgmt
		ip igmp snooping (EXEC)
		ip igmp snooping (VLAN)
		link debounce
		shutdown
		svi enable
		Show Commands
Port Channel	This feature was introduced.	interface port-channel
		port-channel load-balance ethernet
		Show Commands
Link Aggregation Control	This feature was introduced.	clear lacp counters
Protocol (LACP)		feature lacp
		lacp port-priority
		lacp system-priority
		Show Commands
Link Layer Discovery Protocol	This feature was introduced.	feature lldp
(LLDP)		Show Commands
Private VLAN	This feature was introduced.	feature private-vlan
		private-vlan
		private-vlan association
		private-vlan synchronize
		Show Commands

Table 12 New and Changed Information for Release 4.0(0)N1(1a)

Feature	Description	Where Documented
MAC Address Table	This feature was introduced.	clear mac access-list counters
		clear mac address-table dynamic
		mac address-table aging-time
		mac address-table notification
		mac address-table static
		Show Commands
Ethernet Switched Port	This feature was introduced.	description (SPAN, ERSPAN)
Analyzer (SPAN)		destination (SPAN session)
		monitor session
		source (SPAN, ERSPAN)
		Show Commands
Spaning Tree Protocol (STP)	This feature was introduced.	clear spanning-tree counters
		clear spanning-tree detected-protocol
		revision
		spanning-tree bpdufilter
		spanning-tree bpduguard
		spanning-tree cost
		spanning-tree guard
		spanning-tree link-type
		spanning-tree loopguard default
		spanning-tree mode
		spanning-tree pathcost method
		spanning-tree port-priority
		spanning-tree port type edge
		spanning-tree port type edge bpdufilter default
		spanning-tree port type edge bpduguard default
		spanning-tree port type edge default
		spanning-tree port type network
		spanning-tree port type network default
		spanning-tree vlan
		Show Commands

Table 12 New and Changed Information for Release 4.0(0)N1(1a) (continued)

Feature	Description	Where Documented
Multiple Spanning Tree (MST)	This feature was introduced.	name (MST configuration)
		spanning-tree mst configuration
		spanning-tree mst cost
		spanning-tree mst forward-time
		spanning-tree mst hello-time
		spanning-tree mst max-age
		spanning-tree mst max-hops
		spanning-tree mst port-priority
		spanning-tree mst priority
		spanning-tree mst root
		spanning-tree mst simulate pvst
		spanning-tree mst simulate pvst global
		Show Commands
Switchport	This feature was introduced.	switchport access vlan
		switchport block
		switchport host
		switchport mode
		switchport mode private-vlan host
		switchport mode private-vlan promiscuous
		switchport mode private-vlan trunk
		switchport private-vlan association trunk
		switchport private-vlan host-association
		switchport private-vlan mapping
		switchport private-vlan trunk allowed vlan
		switchport private-vlan trunk native
		Show Commands

Table 12 New and Changed Information for Release 4.0(0)N1(1a) (continued)

Feature	Description	Where Documented
VLAN	This feature was introduced.	interface vlan
		name (VLAN configuration)
		shutdown (VLAN configuration)
		state
		vlan
		vlan dot1Q tag native
		Show Commands
Virtual routing and forwarding (VRF)	This feature was introduced.	vrf context

Table 12 New and Changed Information for Release 4.0(0)N1(1a) (continued)