Show Commands

This chapter describes the Cisco Nexus 1000V show commands.

Note This chapter is a work in progress and does not yet include all show commands.

show aaa accounting

To display the AAA accounting configuration, use the **show aaa accounting** command.

show aaa accounting

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Examples

This example shows how to display the accounting configuration:

```
n1000v# show aaa accounting
         default: local
n1000v#
```

Related Commands

Command	Description
aaa accounting login	Configures the console or default login accounting method.
show running-config aaa [all]	Displays the AAA configuration as it currently exists in the running configuration.

show aaa authentication

To display the configuration for AAA authentication, use the **show aaa authentication** command.

show aaa authentication [**login error-enable** | **login mschap**]

Syntax Description

login error-enable	(Optional) Displays the authentication login error message enable configuration.
login mschap	(Optional) Displays the authentication login MS-CHAP enable configuration.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Examples

This example shows how to display the configured authentication parameters:

```
n1000v# show aaa authentication
         default: local
         console: local
```

This example shows how to display the authentication-login error-enable configuration:

```
n1000v# show aaa authentication login error-enable
disabled
```

This example shows how to display the authentication-login MSCHAP configuration:

```
n1000v# show aaa authentication login mschap
disabled
```

Related Commands

Command	Description
aaa authentication login	Configures the console or default login authentication method.
show running-config aaa [all]	Displays the AAA configuration as it currently exists in the running configuration.

show aaa groups

To display the configured AAA server groups, use the **show aaa groups** command.

show aaa groups

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Examples

This example shows how to display AAA group information:

```
n1000v# show aaa groups
radius
TacServer
```

Related Commands

Command	Description
aaa group	Configures an AAA server group.
show running-config aaa [all]	Displays the AAA configuration as it currently exists in the running configuration.

show accounting log

To display the accounting log contents, use the **show accounting log** command.

show accounting log [*size*] [**start-time** *year month day HH*:*MM*:*SS*]

Syntax Description

size	(Optional) Size of the log to display in bytes. The range is from 0 to 250000.
start-time *year month day HH*:*MM*:*SS*	(Optional) Specifies a start time as follows. • The year is shown in the *yyyy* format, such as 2009. • The month is shown in the three-letter English abbreviation, such as Feb. • The day of the month is shown as a number from 1 to 31. • Hours, minutes, and seconds are shown in the standard 24-hour format, such as 16:00:00.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Examples

This example shows how to display the entire accounting log:

```
n1000v# show accounting log
Wed Jul 22 02:09:44 2009:update:vsh.3286:root:configure terminal ; port-profile Unused_O
r_Quarantine_Uplink ; capability uplink (SUCCESS)
Wed Jul 22 07:57:50 2009:update:171.71.55.185@pts/2:admin:configure terminal ; flow reco
rd newflowrecord (SUCCESS)
Wed Jul 22 08:48:57 2009:start:swordfish-build1.cisco.com@pts:admin:
Wed Jul 22 08:49:03 2009:stop:swordfish-build1.cisco.com@pts:admin:shell terminated grac
efully
Wed Jul 22 08:50:36 2009:update:171.71.55.185@pts/2:admin:configure terminal ; no flow r
ecord newflowrecord (SUCCESS)
Thu Jul 23 07:21:50 2009:update:vsh.29016:root:configure terminal ; port-profile Unused_
Or_Quarantine_Veth ; state enabled (SUCCESS)
Thu Jul 23 10:25:19 2009:start:171.71.55.185@pts/5:admin:
Thu Jul 23 11:07:37 2009:update:171.71.55.185@pts/5:admin:enabled aaa user default role
enabled/disabled
doc-n1000v(config)#
```

This example shows how to display 400 bytes of the accounting log:

```
n1000v# show accounting log 400

Sat Feb 16 21:15:24 2008:update:/dev/pts/1_172.28.254.254:admin:show accounting log
start-time 2008 Feb 16 18:31:21
Sat Feb 16 21:15:25 2008:update:/dev/pts/1_172.28.254.254:admin:show system uptime
Sat Feb 16 21:15:26 2008:update:/dev/pts/1_172.28.254.254:admin:show clock
```

This example shows how to display the accounting log starting at 16:00:00 on February 16, 2008:

```
n1000v(config)# show accounting log start-time 2008 Feb 16 16:00:00

Sat Feb 16 16:00:18 2008:update:/dev/pts/1_172.28.254.254:admin:show logging log file
start-time 2008 Feb 16 15:59:16
Sat Feb 16 16:00:26 2008:update:/dev/pts/1_172.28.254.254:admin:show accounting log
start-time 2008 Feb 16 12:05:16
Sat Feb 16 16:00:27 2008:update:/dev/pts/1_172.28.254.254:admin:show system uptime
Sat Feb 16 16:00:28 2008:update:/dev/pts/1_172.28.254.254:admin:show clock
Sat Feb 16 16:01:18 2008:update:/dev/pts/1_172.28.254.254:admin:show logging log file
start-time 2008 Feb 16 16:00:16
Sat Feb 16 16:01:26 2008:update:/dev/pts/1_172.28.254.254:admin:show accounting log
start-time 2008 Feb 16 12:05:16
Sat Feb 16 16:01:27 2008:update:/dev/pts/1_172.28.254.254:admin:show system uptime
Sat Feb 16 16:01:29 2008:update:/dev/pts/1_172.28.254.254:admin:show clock
Sat Feb 16 16:02:18 2008:update:/dev/pts/1_172.28.254.254:admin:show logging log file
start-time 2008 Feb 16 16:01:16
Sat Feb 16 16:02:26 2008:update:/dev/pts/1_172.28.254.254:admin:show accounting log
start-time 2008 Feb 16 12:05:16
Sat Feb 16 16:02:28 2008:update:/dev/pts/1_172.28.254.254:admin:show system uptime
```

Related Commands

Command	Description
clear accounting log	Clears the accounting log.

show cdp

To display your Cisco Discovery Protocol (CDP) configuration, use the **show cdp** command.

show cdp {**all** | **entry** {**all** | **name** *s0*} | **global** | **interface** *if0* | **traffic interface** *if2*}

Syntax Description

all	Display all interfaces in CDP database.
entry	Display CDP entries in database.
name *name*	Display a specific CDP entry matching a name.
global	Display CDP parameters for all interfaces.
interface *interface*	Display CDP parameters for a specified interface.
traffic interface *interface*	Display CDP traffic statistics.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Examples

This example shows how to display the global CDP configuration:

```
n1000v(config)# show cdp global
Global CDP information:
    CDP enabled globally
    Sending CDP packets every 5 seconds
    Sending a holdtime value of 10 seconds
    Sending CDPv2 advertisements is disabled
    Sending DeviceID TLV in Mac Address Format
```

This example shows how to display the CDP configuration for a specified interface:

```
n1000v(config)# show cdp interface ethernet 2/3
Ethernet2/3 is up
    CDP enabled on interface
    Sending CDP packets every 60 seconds
    Holdtime is 180 seconds
```

This example shows how to display the CDP traffic statistics for a specified interface:

```
n1000v(config)# show cdp traffic interface ethernet 2/3
----------------------------------------
Traffic statistics for Ethernet2/3
Input Statistics:
    Total Packets: 98
    Valid CDP Packets: 49
        CDP v1 Packets: 49
        CDP v2 Packets: 0
    Invalid CDP Packets: 49
        Unsupported Version: 49
        Checksum Errors: 0
        Malformed Packets: 0

Output Statistics:
    Total Packets: 47
        CDP v1 Packets: 47
        CDP v2 Packets: 0
    Send Errors: 0
```

This example shows how to display CDP parameters for all interfaces:

```
n1000v# show cdp all
Ethernet2/2 is up
    CDP enabled on interface
    Sending CDP packets every 60 seconds
    Holdtime is 180 seconds
Ethernet2/3 is up
    CDP enabled on interface
    Sending CDP packets every 60 seconds
    Holdtime is 180 seconds
Ethernet2/4 is up
    CDP enabled on interface
    Sending CDP packets every 60 seconds
    Holdtime is 180 seconds
Ethernet2/5 is up
    CDP enabled on interface
    Sending CDP packets every 60 seconds
    Holdtime is 180 seconds
Ethernet2/6 is up
    CDP enabled on interface
    Sending CDP packets every 60 seconds
    Holdtime is 180 seconds
mgmt0 is up
    CDP enabled on interface
    Sending CDP packets every 60 seconds
    Holdtime is 180 seconds
```

Related Commands

Command	Description
show cdp neighbors	Displays the configuration and capabilities of upstream devices.
cdp enable	In interface mode, enables CDP on an interface. In EXEC mode, enables CDP for your device.
cdp advertise	Assigns the CDP version to advertise.

show cdp neighbors

To display the configuration and capabilities of upstream devices, use the **show cdp neighbors** command.

show cdp neighbors [**interface** *if*] **detail**

Syntax Description

interface *if*	(Optional) Show CDP neighbors for a specified interface.
detail	Show the detailed configuration of all CDP neighbors.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Examples

This example shows how to display the configuration and capabilities of upstream devices:

```
n1000v(config)# show cdp neighbors
Capability Codes: R - Router, T - Trans-Bridge, B - Source-Route-Bridge
                  S - Switch, H - Host, I - IGMP, r - Repeater,
                  V - VoIP-Phone, D - Remotely-Managed-Device,
                  s - Supports-STP-Dispute

Device ID              Local Intrfce   Hldtme  Capability  Platform      Port ID

swordfish-6k-2         Eth2/2          169     R S I    WS-C6503-E    Gig1/14
swordfish-6k-2         Eth2/3          139     R S I    WS-C6503-E    Gig1/15
swordfish-6k-2         Eth2/4          135     R S I    WS-C6503-E    Gig1/16
swordfish-6k-2         Eth2/5          177     R S I    WS-C6503-E    Gig1/17
swordfish-6k-2         Eth2/6          141     R S I    WS-C6503-E    Gig1/18
```

This example shows how to display configuration and capabilities of upstream devices for a specific interface:

```
n1000v(config)# show cdp neighbors interface ethernet 2/3
Capability Codes: R - Router, T - Trans-Bridge, B - Source-Route-Bridge
                  S - Switch, H - Host, I - IGMP, r - Repeater,
                  V - VoIP-Phone, D - Remotely-Managed-Device,
```

```
                  s - Supports-STP-Dispute

Device ID             Local Intrfce   Hldtme  Capability  Platform      Port ID
swordfish-6k-2        Eth2/3          173     R S I    WS-C6503-E    Gig1/15
```

Related Commands

Command	Description
show cdp	Displays the CDP configuration and capabilities for your device.
cdp enable	In interface mode, enables CDP on an interface. In EXEC mode, enables CDP for your device.
cdp advertise	Assigns the CDP version to advertise.

show interface counters trunk

To display the counters for Layer 2 switch port trunk interfaces, use the **show interface counters trunk** command.

show interface {**ethernet** *slot/port*} **counters trunk**

Syntax Description

ethernet *slot/port*	Specifies the module number and port number for the trunk interface that you want to display.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

The device supports only IEEE 802.1Q encapsulation. This command also displays the counters for trunk port channels.

Examples

This example shows how to display the counters for a trunk interface. This display shows the frames transmitted and received through the trunk interface, as well as the number of frames with the wrong trunk encapsulation:

```
n1000v# show interface ethernet 2/9 counters trunk

--------------------------------------------------------------------------
Port            TrunkFramesTx   TrunkFramesRx      WrongEncap
--------------------------------------------------------------------------
Ethernet2/9                 0               0               0
n1000v#
```

Related Commands

Command	Description
clear counters interface	Clears the counters for the specified interfaces.

show interface port-channel

To display descriptive information about port channels, use the **show interface port-channel** command.

show interface port-channel *channel-number* [**brief** | **description** | **flowcontrol** | **status** | **switchport** | **trunk**]

Syntax Description

channel-number	Number of the port-channel group. Valid values are from 1 to 4096.
brief	(Optional) Specifies the summary information for specified port channels.
description	(Optional) Specifies the description of specified port channels.
flowcontrol	(Optional) Specifies information about the flow-control status control for specified port channels and the statistics on received and transmitted flow-control pause packets.
status	(Optional) Specifies information about the status for specified port channels.
switchport	(Optional) Specifies information for specified Layer 2 port channels including access and trunk modes.
trunk	(Optional) Specifies information for specified Layer 2 port channels on the trunk mode.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

To display more statistics for the specified port channels, use the **show interface port-channel counters** command.

Examples

This example shows how to display information for a specific port channel. This command displays statistical information gathered on the port channel at 1-minute intervals:

```
n1000v(config)# show interface port-channel 50
port-channel50 is down (No operational members)
  Hardware is Port-Channel, address is 0000.0000.0000 (bia 0000.0000.0000)
  MTU 1500 bytes, BW 100000 Kbit, DLY 10 usec,
```

```
   reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA
  Port mode is access
  auto-duplex, auto-speed
  Beacon is turned off
  Input flow-control is off, output flow-control is off
  Switchport monitor is off
  Members in this channel: Eth2/10
  Last clearing of "show interface" counters 2d71.2uh
  5 minute input rate 0 bytes/sec, 0 packets/sec
  5 minute output rate 0 bytes/sec, 0 packets/sec
  Rx
    0 input packets 0 unicast packets 0 multicast packets
    0 broadcast packets 0 jumbo packets 0 storm suppression packets
    0 bytes
  Tx
    0 output packets 0 multicast packets
    0 broadcast packets 0 jumbo packets
    0 bytes
    0 input error 0 short frame 0 watchdog
    0 no buffer 0 runt 0 CRC 0 ecc
    0 overrun  0 underrun 0 ignored 0 bad etype drop
    0 bad proto drop 0 if down drop 0 input with dribble
    0 input discard
    0 output error 0 collision 0 deferred
    0 late collision 0 lost carrier 0 no carrier
    0 babble
    0 Rx pause 0 Tx pause 0 reset
```

This example shows how to display a brief description for a specific port channel, including the mode for the port channel, the status, speed, and protocol:

```
n1000v# show interface port-channel 5 brief

--------------------------------------------------------------------------------
Port-channel VLAN  Type Mode   Status  Reason                   Speed  Protocol
Interface
--------------------------------------------------------------------------------
                   eth  access down    No operational members      auto(D)  lacp
```

This example shows how to display the description for a specific port channel:

```
n1000v# show interface port-channel 5 description

--------------------------------------------------------------------------------
Interface               Description
--------------------------------------------------------------------------------
port-channel5           test
```

This example shows how to display the flow-control information for a specific port channel:

```
n1000v# show interface port-channel 50 flowcontrol

--------------------------------------------------------------------------------
Port       Send FlowControl  Receive FlowControl  RxPause TxPause
           admin    oper     admin    oper
--------------------------------------------------------------------------------
Po50       off      off      off      off         0       0
```

This example shows how to display the status of a specific port channel:

```
n1000v# show interface port-channel 5 status

--------------------------------------------------------------------------------
Port           Name               Status    Vlan      Duplex  Speed   Type
```

```
--------------------------------------------------------------------------------
                test               down     1          auto     auto     --
```

This example shows how to display information for a specific Layer 2 port channel:

```
n1000v# show interface port-channel 50 switchport
Name: port-channel50
  Switchport: Enabled
  Switchport Monitor: Not enabled
  Operational Mode: trunk
  Access Mode VLAN: 1 (default)
  Trunking Native Mode VLAN: 1 (default)
  Trunking VLANs Enabled: 1-3967,4048-4093
  Administrative private-vlan primary host-association: none
  Administrative private-vlan secondary host-association: none
  Administrative private-vlan primary mapping: none
  Administrative private-vlan secondary mapping: none
  Administrative private-vlan trunk native VLAN: none
  Administrative private-vlan trunk encapsulation: dot1q
  Administrative private-vlan trunk normal VLANs: none
  Administrative private-vlan trunk private VLANs: none
  Operational private-vlan: none
```

This command displays information for Layer 2 port channels in both the access and trunk modes.

When you use this command for a routed port channel, the device returns the following message:

```
Name: port-channel20
  Switchport: Disabled
```

This example shows how to display information for a specific Layer 2 port channel that is in trunk mode:

```
n1000v# show interface port-channel 5 trunk

n1000v# show interface port-channel 50 trunk
port-channel50 is down (No operational members)
    Hardware is Ethernet, address is 0000.0000.0000
    MTU 1500 bytes, BW 100000 Kbit, DLY 10 usec
    Port mode is access
    Speed is auto-speed
    Duplex mode is auto
    Beacon is turned off
    Receive flow-control is off, Send flow-control is off
    Rate mode is dedicated
  Members in this channel: Eth2/10
    Native Vlan: 1
    Allowed Vlans: 1-3967,4048-4093
```

This command displays information for only Layer 2 port channels in the trunk modes; you cannot display information about Layer 2 port channels in the access mode with this command.

Related Commands

Command	Description
show interface port-channel counters	Displays the statistics for channel groups.
show port-channel summary	Displays summary information for all channel groups.

show interface port-channel counters

To display information about port-channel statistics, use the **show interface port-channel counters** command.

show interface port-channel *channel-number* **counters** [**brief** | **detailed** [**all** | **snmp**] | **errors** [**snmp**] | **trunk**]

Syntax Description

channel-number	Number of the port-channel group. Valid values are from 1 to 4096.
brief	(Optional) Specifies the rate MB/s and total frames for specified port channels.
detailed	(Optional) Specifies the nonzero counters for specified port channels.
all	(Optional) Specifies the counters for specified port channels.
snmp	(Optional) Specifies the SNMP MIB values for specified port channels.
errors	(Optional) Specifies the interface error counters for specified port channels.
trunk	(Optional) Specifies the interface trunk counters for specified port channels.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

This command displays statistics for all port channels including LACP-enabled port channels and those port channels that are not associated with an aggregation protocol.

Examples

This example shows how to display the counters for a specific port channel. This display shows the transmitted and received unicast and multicast packets:

```
n1000v# show interface port-channel 2 counters

Port            InOctets    InUcastPkts    InMcastPkts    InBcastPkts
Po2                 6007              1             31              1

Port           OutOctets   OutUcastPkts   OutMcastPkts   OutBcastPkts
```

```
Po2                 4428            1            25            1
n1000v#
```

This example shows how to display the brief counters for a specific port channel. This display shows the transmitted and received rate and total frames:

```
n1000v# show interface port-channel 20 counters brief

--------------------------------------------------------------------------------
Interface              Input (rate is 1 min avg)  Output (rate is 1 min avg)
                       -------------------------  --------------------------
                       Rate     Total             Rate     Total
                       MB/s     Frames            MB/s     Frames
--------------------------------------------------------------------------------
port-channel20         0        0                 0        0
```

This example shows how to display all the detailed counters for a specific port channel:

```
n1000v# show interface port-channel 20 counters detailed all
port-channel20
  64 bit counters:
   0.                      rxHCTotalPkts = 0
   1.                      txHCTotalPks = 0
   2.                    rxHCUnicastPkts = 0
   3.                    txHCUnicastPkts = 0
   4.                  rxHCMulticastPkts = 0
   5.                  txHCMulticastPkts = 0
   6.                  rxHCBroadcastPkts = 0
   7.                  txHCBroadcastPkts = 0
   8.                         rxHCOctets = 0
   9.                         txHCOctets = 0
  10.                 rxTxHCPkts64Octets = 0
  11.           rxTxHCpkts65to127Octets = 0
  12.          rxTxHCpkts128to255Octets = 0
  13.          rxTxHCpkts256to511Octets = 0
  14.         rxTxHCpkts512to1023Octets = 0
  15.        rxTxHCpkts1024to1518Octets = 0
  16.        rxTxHCpkts1519to1548Octets = 0
  17.                    rxHCTrunkFrames = 0
  18.                    txHCTrunkFrames = 0
  19.                     rxHCDropEvents = 0

  All Port Counters:
   0.                           InPackets = 0
   1.                            InOctets = 0
   2.                         InUcastPkts = 0
   3.                         InMcastPkts = 0
   4.                         InBcastPkts = 0
   5.                         InJumboPkts = 0
   6.                   StormSuppressPkts = 0
   7.                          OutPackets = 0
   8.                           OutOctets = 0
   9.                       OutUcastPkts = 0
  10.                       OutMcastPkts = 0
  11.                       OutBcastPkts = 0
  12.                       OutJumboPkts = 0
  13.                   rxHCPkts64Octets = 0
  14.              rxHCPkts65to127Octets = 0
  15.             rxHCPkts128to255Octets = 0
  16.             rxHCPkts256to511Octets = 0
  17.            rxHCpkts512to1023Octets = 0
  18.           rxHCpkts1024to1518Octets = 0
  19.           rxHCpkts1519to1548Octets = 0
  20.                   txHCPkts64Octets = 0
```

```
            txHCPkts65to127Octets = 0
           txHCPkts128to255Octets = 0
           txHCPkts256to511Octets = 0
          txHCpkts512to1023Octets = 0
         txHCpkts1024to1518Octets = 0
         txHCpkts1519to1548Octets = 0
                     ShortFrames = 0
                      Collisions = 0
                       SingleCol = 0
                        MultiCol = 0
                         LateCol = 0
                    ExcessiveCol = 0
                     LostCarrier = 0
                       NoCarrier = 0
                           Runts = 0
                          Giants = 0
                        InErrors = 0
                       OutErrors = 0
                    InputDiscards = 0
                    BadEtypeDrops = 0
                      IfDownDrops = 0
                  InUnknownProtos = 0
                           txCRC = 0
                           rxCRC = 0
                          Symbol = 0
                       txDropped = 0
                    TrunkFramesTx = 0
                    TrunkFramesRx = 0
                       WrongEncap = 0
                          Babbles = 0
                       Watchdogs = 0
                             ECC = 0
                        Overruns = 0
                       Underruns = 0
                        Dribbles = 0
                        Deferred = 0
                         Jabbers = 0
                        NoBuffer = 0
                         Ignored = 0
                    bpduOutLost = 0
                    cos0OutLost = 0
                    cos1OutLost = 0
                    cos2OutLost = 0
                    cos3OutLost = 0
                    cos4OutLost = 0
                    cos5OutLost = 0
                    cos6OutLost = 0
                    cos7OutLost = 0
                       RxPause = 0
                       TxPause = 0
                        Resets = 0
                       SQETest = 0
                 InLayer3Routed = 0
              InLayer3RoutedOctets = 0
                 OutLayer3Routed = 0
              OutLayer3RoutedOctets = 0
                   OutLayer3Unicast = 0
              OutLayer3UnicastOctets = 0
                  OutLayer3Multicast = 0
           OutLayer3MulticastOctets = 0
                    InLayer3Unicast = 0
              InLayer3UnicastOctets = 0
                  InLayer3Multicast = 0
           InLayer3MulticastOctets = 0
```

```
  85.              InLayer3AverageOctets = 0
  86.             InLayer3AveragePackets = 0
  87.             OutLayer3AverageOctets = 0
  88.            OutLayer3AveragePackets = 0
```

This example shows how to display the error counters for a specific port channel:

```
n1000v# show interface port-channel 5 counters errors

--------------------------------------------------------------------------------
Port       Align-Err     FCS-Err    Xmit-Err     Rcv-Err   UnderSize OutDiscards
--------------------------------------------------------------------------------
Po5                0           0           0           0           0           0
--------------------------------------------------------------------------------
Port      Single-Col   Multi-Col    Late-Col   Exces-Col   Carri-Sen       Runts
--------------------------------------------------------------------------------
Po5                0           0           0           0           0           0

--------------------------------------------------------------------------------
Port          Giants SQETest-Err Deferred-Tx IntMacTx-Er IntMacRx-Er  Symbol-Err
--------------------------------------------------------------------------------
                   0          --           0           0           0           0
```

This example shows how to display information about the trunk interfaces for a specific port channel:

```
n1000v# show interface port-channel 5 counters trunk

--------------------------------------------------------------------------------
Port             TrunkFramesTx   TrunkFramesRx      WrongEncap
--------------------------------------------------------------------------------
port-channel5               0               0               0
```

Related Commands

Command	Description
clear counters interface port-channel *channel-number*	Clears the statistics for all interfaces that belong to a specific channel group.

show interface switchport

To display information about switchport interfaces, use the **show interface switchport** command.

show interface [**ethernet** *slot number*| **port-channel** *channel number*] **switchport**

Syntax Description

ethernet *slot number*	(Optional) Specify the slot number for the display of an ethernet switchport interface.
port- channel *channel-number*	(Optional) Specify the channel number for the display of a port channel switchport interface.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

If you do not specify an interface, this command displays information about all Layer 2 interfaces, including access, trunk, and port channel interfaces and all private VLAN ports.

Examples

This example shows how to display information for all Layer 2 interfaces:

```
n1000v# show interface switchport
Name: Ethernet2/5
  Switchport: Enabled
  Switchport Monitor: Not enabled
  Operational Mode: access
  Access Mode VLAN: 1 (default)
  Trunking Native Mode VLAN: 1 (default)
  Trunking VLANs Enabled: 1-3967,4048-4093
  Administrative private-vlan primary host-association: none
  Administrative private-vlan secondary host-association: none
  Administrative private-vlan primary mapping: none
  Administrative private-vlan secondary mapping: none
  Administrative private-vlan trunk native VLAN: none
  Administrative private-vlan trunk encapsulation: dot1q
  Administrative private-vlan trunk normal VLANs: none
  Administrative private-vlan trunk private VLANs: none
  Operational private-vlan: none

Name: Ethernet2/9
  Switchport: Enabled
```

```
  Switchport Monitor: Not enabled
  Operational Mode: trunk
  Access Mode VLAN: 1 (default)
  Trunking Native Mode VLAN: 1 (default)
  Trunking VLANs Enabled: 1-3967,4048-4093
  Administrative private-vlan primary host-association: none
  Administrative private-vlan secondary host-association: none
  Administrative private-vlan primary mapping: none
  Administrative private-vlan secondary mapping: none
  Administrative private-vlan trunk native VLAN: none
  Administrative private-vlan trunk encapsulation: dot1q
  Administrative private-vlan trunk normal VLANs: none
  Administrative private-vlan trunk private VLANs: none
  Operational private-vlan: none

Name: port-channel5
  Switchport: Enabled
  Switchport Monitor: Not enabled
  Operational Mode: access
  Access Mode VLAN: 1 (default)
  Trunking Native Mode VLAN: 1 (default)
  Trunking VLANs Enabled: 1-3967,4048-4093
  Administrative private-vlan primary host-association: none
  Administrative private-vlan secondary host-association: none
  Administrative private-vlan primary mapping: none
  Administrative private-vlan secondary mapping: none
  Administrative private-vlan trunk native VLAN: none
  Administrative private-vlan trunk encapsulation: dot1q
  Administrative private-vlan trunk normal VLANs: none
  Administrative private-vlan trunk private VLANs: none
  Operational private-vlan: none

n1000v#
```

Related Commands

Command	Description
switchport mode	Sets the specified interfaces as either Layer 2 access or trunk interfaces.
show interface counters	Displays statistics for a specified Layer 2 interface.

show interface trunk

To display information about all the trunk interfaces, use the **show interface trunk** command.

show interface [**ethernet** *type/slot* | **port-channel** *channel-number*] **trunk** [**module** *number* | **vlan** *vlan-id*]

Syntax Description

ethernet *type/slot* | **port-channel** *channel-number*	(Optional) Type and number of the interface you want to display.
module *number*	(Optional) Specifies the module number.
vlan *vlan-id*	(Optional) Specifies the VLAN number.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

If you do not specify an interface, a module number or a VLAN number, the system displays information for all trunk interfaces.

This command displays information about all Layer 2 trunk interfaces and trunk port-channel interfaces.

Use the **show interface counters** command to display statistics for the specified Layer 2 interface.

Examples

This example shows how to display information for all Layer 2 trunk interfaces:

```
n1000v(config)# show interface trunk

--------------------------------------------------------------------------------
Port       Native  Status        Port
           Vlan                  Channel
--------------------------------------------------------------------------------
Eth2/9     1       trunking      --
Eth2/10    1       trnk-bndl     Po50
Po50       1       not-trunking  --

--------------------------------------------------------------------------------
Port       Vlans Allowed on Trunk
--------------------------------------------------------------------------------
```

```
Eth2/9      1-3967,4048-4093
Eth2/10     1-3967,4048-4093
Po50        1-3967,4048-4093

--------------------------------------------------------------------------------
Port        STP Forwarding
--------------------------------------------------------------------------------
Eth2/9      none
Eth2/10     none
Po50        none

n1000v#
```

Related Commands

Command	Description
switchport mode trunk	Sets the specified interfaces as Layer 2 trunk interfaces.

show ip dhcp snooping statistics

To display statistics related to the Dynamic Host Configuration Protocol (DHCP), use the **show ip dhcp snooping statistics** command.

show ip dhcp snooping statistics

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Before you can configure DHCP, you must enable the feature using the **feature dhcp** command.

Examples

This example shows how to display statistics related to DHCP:

```
n1000v# show ip dhcp snooping statistics
Packets processed 0
Packets received through cfsoe 0
Packets forwarded 0
Total packets dropped 0
Packets dropped from untrusted ports 0
Packets dropped due to MAC address check failure 0
Packets dropped due to Option 82 insertion failure 0
Packets dropped due to o/p intf unknown 0
Packets dropped which were unknown 0
Packets dropped due to dhcp relay not enabled 0
Packets dropped due to no binding entry 0
Packets dropped due to interface error/no interface 0
Packets dropped due to max hops exceeded 0
n1000v#
```

Related Commands

Command	Description
ip dhcp snooping	Globally enables DHCP snooping on the device.
show ip dhcp snooping	Displays general information about DHCP snooping.

Command	Description
show ip dhcp snooping binding	Displays IP-MAC address bindings, including the static IP source entries.
feature dhcp	Enables the DHCP snooping feature on the device.

show ip igmp snooping explicit-tracking vlan

To display IGMPv3 snooping explicit tracking information for a VLAN, use the **show ip igmp snooping explicit-tracking vlan** command.

show ip igmp snooping explicit-tracking vlan *vlan-id*

Syntax Description

vlan-id	Specifies a VLAN ID.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Examples

Related Commands

Command	Description
show ip igmp snooping	Ensures that IGMP snooping is enabled on the VLAN.
show ip igmp snooping groups	Verifies if the Cisco Nexus 1000V is configured correctly and is ready to forward multicast traffic.
show ip igmp snooping mrouter	Displays multicast router ports on the VLAN.
show ip igmp snooping querier	Displays IGMP snooping queriers enabled on the VLAN

show ip igmp snooping groups

To verify if the Cisco Nexus 1000V is configured correctly and is ready to forward multicast traffic, use the **show ip igmp snooping groups** command.

show ip igmp snooping groups

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

When troubleshooting multicast IGMP issues, execute this command and look for the letter R under the port heading. The R indicates that the Virtual Supervisor Module (VSM) has learned the uplink router port from the IGMP query that was sent by the upstream switch, which means that the Cisco Nexus 1000V is ready to forward multicast traffic.

Examples

This example shows how to ensure that IGMP snooping is enabled on the VLAN:

```
n1000v# show ip igmp snooping groups
Type: S - Static, D - Dynamic, R - Router port

Vlan  Group Address      Ver  Type  Port list
59    */*                v3   R     Po1
n1000v#n1000v#
```

Related Commands

Command	Description
show cdp neighbor	Displays the configuration and capabilities of upstream devices.
module vem execute	Remotely executes commands on the Virtual Ethernet Module (VEM) from the Cisco Nexus 1000V.
show ip igmp snooping	Ensures that IGMP snooping is enabled on the VLAN.

show ip igmp snooping mrouter

To display VLAN multicast router ports , use the **show ip igmp snooping mrouter** command.

show ip igmp snooping mrouter [**vlan** *vlan-id*]

Syntax Description

vlan *vlan-id*	Specifies a VLAN and its ID.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Examples

Related Commands

Command	Description
show ip igmp snooping	Ensures that IGMP snooping is enabled on the VLAN.
show ip igmp snooping groups	Verifies if the Cisco Nexus 1000V is configured correctly and is ready to forward multicast traffic.
show ip igmp snooping explicit-tracking vlan	Display IGMP snooping information for a VLAN.
show ip igmp snooping querier	Displays IGMP snooping queriers enabled on the VLAN

show ip igmp snooping querier

To display IGMP snooping querier information, use the **show ip igmp snooping querier** command.

show ip igmp snooping querier [**vlan** *vlan-id*]

Syntax Description

vlan *vlan-id*	Specifies a VLAN and its ID.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Examples

Related Commands

Command	Description
show ip igmp snooping	Ensures that IGMP snooping is enabled on the VLAN.
show ip igmp snooping groups	Verifies if the Cisco Nexus 1000V is configured correctly and is ready to forward multicast traffic.
show ip igmp snooping explicit-tracking vlan	Display IGMP snooping information for a VLAN.
show ip igmp snooping mrouter	Displays multicast router ports on the VLAN.

show lacp counters

To display information about Link Aggregation Control Protocol (LACP) statistics, use the **show lacp counters** command.

show lacp counters [**interface port-channel** *channel-number*]

Syntax Description

channel-number	(Optional) Number of the LACP channel group. Valid values are from 1 to 4096.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

If you do not specify the *channel-number*, all channel groups are displayed.

Examples

This example shows how to display the LACP statistics for a specific channel group:

```
n1000v# show lacp counters interface port-channel 1

LACPDUs          Marker      Marker Response    LACPDUs
Port               Sent   Recv     Sent   Recv      Sent   Recv      Pkts Err
--------------------------------------------------------------------------------
port-channel1
Ethernet1/1         554    536       0      0         0      0         0
Ethernet1/2         527    514       0      0         0      0         0
Ethernet1/3         535    520       0      0         0      0         0
Ethernet1/4         515    502       0      0         0      0         0
Ethernet1/5         518    505       0      0         0      0         0
Ethernet1/6         540    529       0      0         0      0         0
Ethernet1/7         541    530       0      0         0      0         0
Ethernet1/8         547    532       0      0         0      0         0
Ethernet1/9         544    532       0      0         0      0         0
Ethernet1/10        513    501       0      0         0      0         0
Ethernet1/11        497    485       0      0         0      0         0
Ethernet1/12        493    486       0      0         0      0         0
Ethernet1/13        492    485       0      0         0      0         0
Ethernet1/14        482    481       0      0         0      0         0
Ethernet1/15        481    476       0      0         0      0         0
Ethernet1/16        482    477       0      0         0      0         0
```

Related Commands

Command	Description
clear lacp counters	Clears the statistics for all LACP interfaces or those interfaces that belong to a specific LACP channel group.

show lacp interface

To display information about specific Link Aggregation Control Protocol (LACP) interfaces, use the **show lacp interface** command.

show lacp interface ethernet *slot/port*

Syntax Description

slot/port	Slot number and port number for the interface you want to display.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

The LACP_Activity field displays whether the link is configured in the active or passive port-channel mode.

The Port Identifier field displays the port priority as part of the information. The part of the information in this field is the port number. The following example shows how to identify the port priority and the port number:

```
Port Identifier=0x8000,0x101
```

The port priority value is `0x8000`, and the port number value is `0x101` in this example.

Examples

This example shows how to display the LACP statistics for a specific channel group:

```
n1000v# show lacp interface ethernet 1/1

n1000v(config-if-range)# show lacp interface eth1/1
Interface Ethernet1/1 is up
  Channel group is 1 port channel is Po1
  PDUs sent: 556
  PDUs rcvd: 538
  Markers sent: 0
  Markers rcvd: 0
  Marker response sent: 0
  Marker response rcvd: 0
  Unknown packets rcvd: 0
  Illegal packets rcvd: 0
Lag Id: [ [(8000, 0-11-11-22-22-74, 0, 8000, 101), (8000, 0-11-11-22-22-75, 0, 8
000, 401)] ]
```

```
Operational as aggregated link since Wed Jun 11 20:37:59 2008

Local Port: Eth1/1   MAC Address= 0-11-11-22-22-74
  System Identifier=0x8000,0-11-11-22-22-74
  Port Identifier=0x8000,0x101
  Operational key=0
  LACP_Activity=active
  LACP_Timeout=Long Timeout (30s)
  Synchronization=IN_SYNC
  Collecting=true
  Distributing=true
  Partner information refresh timeout=Long Timeout (90s)
Actor Admin State=
Actor Oper State=
Neighbor: 4/1
  MAC Address= 0-11-11-22-22-75
  System Identifier=0x8000,0-11-11-22-22-75
  Port Identifier=0x8000,0x401
  Operational key=0
  LACP_Activity=active
  LACP_Timeout=Long Timeout (30s)
  Synchronization=IN_SYNC
  Collecting=true
  Distributing=true
Partner Admin State=
Partner Oper State=
```

Related Commands

Command	Description
show port-channel summary	Displays information about all port-channel groups.

show lacp neighbor

To display information about Link Aggregation Control Protocol (LACP) neighbors, use the **show lacp neighbor** command.

show lacp neighbor [interface port-channel *channel-number*]

Syntax Description

channel-number	Port-channel number for the LACP neighbor that you want to display. The range of values is from 1 to 4096.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

If you do not specify the *channel-number*, all channel groups are displayed.

Examples

This example shows how to display the information about the LACP neighbors for a specific port channel:

```
n1000v# show lacp neighbor interface port-channel 1
Flags:  S - Device is sending Slow LACPDUs F - Device is sending Fast LACPDUs
        A - Device is in Active mode       P - Device is in Passive mode
port-channel1 neighbors
Partner's information
          Partner               Partner                   Partner
Port      System ID             Port Number     Age       Flags
Eth1/1    32768,0-11-11-22-22-750x401           44817     SA

          LACP Partner          Partner                   Partner
          Port Priority         Oper Key                  Port State
          32768                 0x0                       0x3d

Partner's information
          Partner               Partner                   Partner
Port      System ID             Port Number     Age       Flags
Eth1/2    32768,0-11-11-22-22-750x402           44817     SA

          LACP Partner          Partner                   Partner
          Port Priority         Oper Key                  Port State
          32768                 0x0                       0x3d
```

Related Commands

Command	Description
show port-channel summary	Displays information about all port-channel groups.

show lacp port-channel

To display information about Link Aggregation Control Protocol (LACP) port channels, use the **show lacp port-channel** command.

show lacp port-channel [interface port-channel *channel-number*]

Syntax Description

channel-number	Port-channel number for the LACP channel group that you want to display. The range of values is from 1 to 4096.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

If you do not specify the *channel-number*, all channel groups are displayed.

Examples

This example shows how to display the information about LACP port channels:

```
n1000v# show lacp port-channel

port-channel1
  Local System Identifier=0x8000,0-11-11-22-22-74
  Admin key=0x0
  Operational key=0x0
  Partner System Identifier=0x8000,0-11-11-22-22-75
  Operational key=0x0
  Max delay=0
  Aggregate or individual=1
port-channel2
  Local System Identifier=0x8000,0-11-11-22-22-74
  Admin key=0x1
  Operational key=0x1
  Partner System Identifier=0x8000,0-11-11-22-22-75
  Operational key=0x1
  Max delay=0
  Aggregate or individual=1
```

Related Commands

Command	Description
show port-channel summary	Displays information about all port-channel groups.

show lacp system-identifier

To display the Link Aggregation Control Protocol (LACP) system identifier for the device, use the **show lacp system-identifier** command.

show lacp system-identifier

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

The LACP system ID is the combination of the configurable LACP system priority value and the MAC address.

Each system that runs LACP has an LACP system priority value. You can accept the default value of 32768 for this parameter, or you can configure a value between 1 and 65535. LACP uses the system priority with the MAC address to form the system ID and also uses the system priority during negotiation with other devices. A higher system priority value means a lower priority.

The system ID is different for each virtual device context (VDC).

Examples

This example shows how to display the information about the LACP port channel for a specific port channel:

```
n1000v> show lacp system-identifier
8000,AC-12-34-56-78-90
```

Related Commands

Command	Description
lacp system-priority	Sets the system priority for LACP.

show logging logfile

To display the contents of the log file, use the **show logging logfile** command.

show logging logfile [start-time *time* **| end-time** *time*]

Syntax Description

start-time	(Optional)Specify the starting time for which you want the logfile displayed.	
end-time	(Optional) Specify the ending time for which you want the logfile displayed.	
time	Specify the time as follows:	
	Time	**Description**
	yyyy	Specify the year.
	mmm	Specify the month, for example, *jan, feb, mar.*
	dd	Specify the day of month, for example *01*.
	hh:mm:ss	Specify the hour, minutes, seconds, for example, *04:00:00*.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Examples

This example shows how to display the contents of the logfile:

```
n1000v# show logging logfile start-time 2009 Aug 23 22:00:00 end-time 2009 Aug 24 24:00:00
2009 Aug 23 22:58:00 doc-n1000v %PORTPROFILE-5-SYNC_COMPLETE: Sync completed.
2009 Aug 24 23:53:15 doc-n1000v %MODULE-5-MOD_OK: Module 3 is online (serial: )
2009 Aug 24 23:53:15 doc-n1000v %PLATFORM-5-MOD_STATUS: Module 3 current-status is MOD_S
TATUS_ONLINE/OK
n1000v#
```

Related Commands

Command	Description
logging logfile	Configures the log file used to store system messages.

show logging module

To display the current configuration for logging module messages to the log file, use the **show logging module** command.

show logging module

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Examples

This example shows how to display the configuration for logging of messages to the log file:

```
n1000v# show logging module
Logging linecard:                disabled
n1000v#
```

Related Commands

Command	Description
logging module	Starts logging of module messages to the log file.

show logging server

To display the current server configuration for logging system messages, use the **show logging server** command.

show logging server

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Examples

This example shows how to display the :

```
n1000v# show logging server
Logging server:                 enabled
{172.28.254.253}
        server severity:        notifications
        server facility:        local7
        server VRF:             management
n1000v#
```

Related Commands

Command	Description
logging server	Designates a remote server for system message logging, and configures it.

show logging timestamp

To display the unit of measure used in the system messages timestamp, use the **show logging timestamp** command.

show logging timestamp

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Examples

This example shows how to display the unit of measure used in the system messages timestamp:

```
n1000v# show logging timestamp
Logging timestamp:              Seconds
n1000v#
```

Related Commands

Command	Description
logging timestamp	Sets the unit of measure for the system messages timestamp.

show port-channel compatibility-parameters

To display the parameters that must be the same among the member ports in order to join a port channel, use the **show port-channel compatibility parameters** command.

show port-channel compatibility-parameters

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

When you add an interface to a channel group, the software checks certain interface attributes to ensure that the interface is compatible with the channel group. For example, you cannot add a Layer 3 interface to a Layer 2 channel group. The software also checks a number of operational attributes for an interface before allowing that interface to participate in the port-channel aggregation.

This command displays the list of compatibility checks that the system uses.

Using the **channel-group** command, you can force ports with incompatible parameters to join the port channel as long as the following parameters are the same:

- (Link) speed capability
- Speed configuration
- Duplex capability
- Duplex configuration
- Flow-control capability
- Flow-control configuration

Note See the **channel-group** command for information about forcing ports to join a port channel.

Examples

This example shows how to display the list of compatibility checks that the system makes before an interface to a channel group:

```
n1000v# show port-channel compatibility-parameters
```

```
* port mode

Members must have the same port mode configured, either E or AUTO. If they
are configured in AUTO port mode, they have to negotiate E mode when they
come up. If a member negotiates a different mode, it will be suspended.

* speed

Members must have the same speed configured. If they are configured in AUTO
speed, they have to negotiate the same speed when they come up. If a member
negotiates a different speed, it will be suspended.

* MTU

Members have to have the same MTU configured. This only applies to ethernet
port-channel.

* MEDIUM

Members have to have the same medium type configured. This only applies to
ethernet port-channel.

* Span mode

Members must have the same span mode.

* sub interfaces

Members must not have sub-interfaces.

* Duplex Mode

Members must have same Duplex Mode configured.

* Ethernet Layer

Members must have same Ethernet Layer (switchport/no-switchport) configured.

* Span Port

Members cannot be SPAN ports.

* Storm Control

Members must have same storm-control configured.

* Flow Control

Members must have same flowctrl configured.

* Capabilities

Members must have common capabilities.

* port

Members port VLAN info.

* port

Members port does not exist.

* switching port
```

```
Members must be switching port, Layer 2.

* port access VLAN

Members must have the same port access VLAN.

* port native VLAN

Members must have the same port native VLAN.

* port allowed VLAN list

Members must have the same port allowed VLAN list.
```

Related Commands

Command	Description
channel-group	Adds or removes interfaces to port-channel groups and assigns the port-channel mode to the interface.

show port-channel database

To display information about the current running of the port channels, use the **show port-channel database** command.

show port-channel database [**interface port-channel** *channel-number*]

Syntax Description

channel-number	Port-channel number for the information that you want to display. The range of values is from 1 to 4096.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

If you do not specify the *channel-number*, all channel groups are displayed. This command displays Link Aggregation Control Protocol (LACP)-enabled ports channels and port channels without an associated aggregation protocol.

Examples

This example shows how to display information on the current running of all port channels:

```
n1000v# show port-channel database
port-channel5
    Administrative channel mode is active
    Operational channel mode is active
    Last membership update is successful
    1 ports in total, 0 ports up
    Age of the port-channel is 1d:16h:18m:50s
    Time since last bundle is 1d:16h:18m:56s
    Last bundled member is
    Ports:   Ethernet2/5            [down]

port-channel20
    Administrative channel mode is active
    Operational channel mode is active
    Last membership update is successful
    1 ports in total, 0 ports up
    Age of the port-channel is 1d:16h:18m:50s
    Time since last bundle is 1d:16h:18m:56s
    Last bundled member is
    Ports:   Ethernet2/20           [down]
```

This example shows how to display information on the current running of a specific port channel:

```
n1000v# show port-channel database interface port-channel 20
port-channel20
    Administrative channel mode is active
    Operational channel mode is active
    Last membership update is successful
    1 ports in total, 0 ports up
    Age of the port-channel is 1d:16h:23m:14s
    Time since last bundle is 1d:16h:23m:20s
    Last bundled member is
    Ports:   Ethernet2/20           [down]
```

Related Commands

Command	Description
show port-channel summary	Displays a summary of information about all port channels.

show port-channel load-balance

To display information about load-balancing using port channels, use the **show port-channel load-balance** command.

show port-channel load-balance [**forwarding-path interface port-channel** *channel-number*]

Syntax Description

forwarding-path interface port-channel	(Optional) Identifies the port in the port channel that forwards the packet.
channel-number	Port-channel number for the load-balancing forwarding path that you want to display. The range of values is from 1 to 4096.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Examples

This example shows how to display information about the current port-channel load balancing for the system:

```
n1000v# show port-channel load-balance

Port Channel Load-Balancing Configuration:
System: source-dest-ip-vlan

Port Channel Load-Balancing Addresses Used Per-Protocol:
Non-IP: source-dest-mac
IP: source-dest-ip-vlan
```

Related Commands

Command	Description
port-channel load-balance ethernet	Configures load balancing using port channels.

show port-channel rbh-distribution

To display information about the Result Bundle Hash (RBH) for port channels, use the **show port-channel rbh-distribution** command.

show port-channel rbh-distribution [**interface port-channel** *channel-number*]

Syntax Description

channel-number	Port-channel number for the information the you want to display. The range of values is from 1 to 4096.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

The RBH value ranges from 0 to 7 and is shared among port members in a port channel.

Examples

This example shows how to display RBH distribution for a specific port channel:

```
n1000v# show port-channel rbh-distribution interface port-channel 4

ChanId    Member port    RBH values         Num of buckets
--------  -------------  -----------------  ----------------
 4         Eth3/13        4,5,6,7            4
 4         Eth3/14        0,1,2,3            4
```

Related Commands

Command	Description
port-channel summary	Displays summary information on port channels.

show port-channel summary

To display summary information about the port channels, use the **show port-channel summary** command.

show port-channel summary

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

If the Link Aggregation Control Protocol (LACP) is not enabled, the output shows **NONE** in the Protocol column of the display.

A channel-group interface can be in the following operational states:

- Down—The interface is down because it is administratively shut down or some other reason not related to port channels.
- Individual—The interface is part of a port channel but unable to aggregate into a port channel because of protocol exchange problems.
  - This interface continues to forward traffic as an individual link.
  - STP is aware of this interface.
- Suspended—The operational parameters of the interface are not compatible with the port channel. This interface is not forwarding traffic, although the physical MAC link state is still up.
- Switched—The interface is switched.
- Up (port channel)—The port channel is up.
- Up in port channel (members)—The port member of the port channel is up.
- Hot standby (LACP only)—The interface is eligible to join the port group if one of the interfaces currently participating in the LACP channel goes down.
  - This interface does not forward data traffic, only protocol data units (PDUs).
  - This interface does not run STP.
- Module-removed—The module has been removed.

- Routed—The interface is routed.

Examples

This example shows how to display summary information for the port channels:

```
n1000v# show port-channel summary
Flags:  D - Down        P - Up in port-channel (members)
        I - Individual  H - Hot-standby (LACP only)
        s - Suspended   r - Module-removed
        S - Switched    R - Routed
        U - Up (port-channel)
--------------------------------------------------------------------------
Group Port-       Type     Protocol  Member Ports
      Channel
--------------------------------------------------------------------------
5     Po5(SD)     Eth      LACP      Eth2/5(D)
20    Po20(RD)    Eth      LACP      Eth2/20(D)
```

Related Commands

Command	Description
show port-channel usage	Displays the port-channel numbers used and available.
show port-channel traffic	Displays transmitted and received unicast, multicast, and broadcast percentages for the port channels.

show port-channel traffic

To display traffic statistics for port channels, use the **show port-channel traffic** command.

show port-channel traffic [**interface port-channel** *channel-number*]

Syntax Description

channel-number	Port-channel number for the traffic statistics that you want to display. The range of values is from 1 to 4096.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

This command displays the percentage of transmitted and received unicast, multicast, and broadcast traffic on the port channel.

If you do not specify the *channel-number*, information for all port channels is displayed.

Examples

This example shows how to display the traffic statistics for all port channels:

```
n1000v(config)# show port-channel traffic
ChanId      Port Rx-Ucst Tx-Ucst Rx-Mcst Tx-Mcst Rx-Bcst Tx-Bcst
------ --------- ------- ------- ------- ------- ------- -------
     5    Eth2/5    0.0%    0.0%    0.0%    0.0%    0.0%    0.0%
------ --------- ------- ------- ------- ------- ------- -------
    20   Eth2/20    0.0%    0.0%    0.0%    0.0%    0.0%    0.0%
```

This example shows how to display the traffic statistics for a specific port channel:

```
n1000v(config)# show port-channel traffic interface port-channel 5
ChanId      Port Rx-Ucst Tx-Ucst Rx-Mcst Tx-Mcst Rx-Bcst Tx-Bcst
------ --------- ------- ------- ------- ------- ------- -------
     5    Eth2/5    0.0%    0.0%    0.0%    0.0%    0.0%    0.0%
```

Related Commands

Command	Description
port-channel summary	Displays summary information about port channels.

show port-channel usage

To display the port-channel numbers used and available, use the **show port-channel usage** command.

show port-channel usage

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

This command displays port-channel numbers used and available in the virtual device context (VDC) that you are monitoring.

The number of port-channel numbers available across all VDCs for the entire system is from 1 to 4096.

Examples

This example shows how to display the usage for all port channels:

```
n1000v# show port-channel usage
Totally 2 port-channel numbers used
====================================
Used  :   5 , 20
Unused:   1 - 4 , 6 - 19 , 21 - 4096
n1000v#
```

Related Commands

Command	Description
port-channel summary	Displays summary information about port channels.

show port-security address

To display information about all secure MAC-addresses in the system, use the **show port-security address** command.

show port-security address *interface-id*

Syntax Description

interface vethernet	(Optional) Limits the secure MAC address information to a specific vEthernet interface.
interface ethernet	(Optional) Limits the secure MAC address information to a specific Ethernet interface.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Examples

This example shows how to use the **show port-security address** command to view information about all MAC addresses in the system:

```
n1000v# show port-security address
Total Secured Mac Addresses in System (excluding one mac per port) : 0
Max Addresses limit in System (excluding one mac per port) : 8192
------------------------------------------------------------------------
Secure Mac Address Table
------------------------------------------------------------------------
Vlan Mac Address Type Ports Remaining Age
(mins)
---- ----------- ------ ----- -------------
1 0054.AAB3.770F STATIC port-channel1 0
1 00EE.378A.ABCE STATIC Ethernet1/4 0
========================================================================
n1000v#
```

This example shows how to use the **show port-security address** command to view the MAC addresses secured by the port security feature on the Ethernet 1/4 interface:

```
n1000v# show port-security address interface ethernet 1/4
Secure Mac Address Table
------------------------------------------------------------------------
Vlan Mac Address Type Ports Remaining Age
(mins)
---- ----------- ------ ----- -------------
1 00EE.378A.ABCE STATIC Ethernet1/4 0
------------------------------------------------------------------------
n1000v#
```

This example shows how to use the **show port-security address** command to view the MAC addresses secured by the port security feature on the vethernet1 interface:

```
n1000v# show port-security address interface vethernet 1
Total Secured Mac Addresses in System (excluding one mac per port) : 0
Max Addresses limit in System (excluding one mac per port) : 8192
------------------------------------------------------------------------
Secure Mac Address Table
------------------------------------------------------------------------
Vlan Mac Address Type Ports Remaining age
(mins)
---- ----------- ------ ----- ---------------
65 0050.56B7.7DE2 DYNAMIC Vethernet1 0
========================================================================
n1000v#
```

Related Commands

Command	Description
clear port-security	Clears dynamically learned, secure MAC addresses.
switchport port-security	Enables port security on a Layer 2 interface.
show port-security	Shows information about port security.
show port-security interface	Displays information about secure interfaces.
show running-config port-security	Displays port-security configuration.

show port-security interface

To display information about the secure interfaces on the system, use the **show port-security interface** command.

show port-security interface *interface-id*

Syntax Description

interface-id	Interface ID.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Examples

This example shows how to use the **show port-security interface** command to view the status of the port security feature on the Ethernet 1/4 interface:

```
n1000v# show port-security interface ethernet 1/4
Port Security : Enabled
Port Status : Secure Down
Violation Mode : Shutdown
Aging Time : 0 mins
Aging Type : Absolute
Maximum MAC Addresses : 5
Total MAC Addresses : 1
Configured MAC Addresses : 1
Sticky MAC Addresses : 0
Security violation count : 0
n1000v#
```

Related Commands

Command	Description
clear port-security	Clears dynamically learned, secure MAC addresses.
switchport port-security	Enables port security on a Layer 2 interface.

Command	Description
show port-security	Shows information about port security.
show port-security address	Displays secure MAC addresses of the interfaces.
show running-config port-security	Displays port-security configuration.

show running-config interface port-channel

To display the running configuration for a specific port channel, use the **show running-config interface port-channel** command.

show running-config interface port-channel {*channel-number*}

Syntax Description

channel-number	Number of the port-channel group. The range of values is from 1 to 4096.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Examples

The following example shows how to display the running configuration for port channel 10:

```
n1000v(config)# show running-config interface port-channel 10
version 4.0(4)SV1(1)

interface port-channel10
  switchport
  switchport mode trunk
```

Related Commands

Command	Description
show port-channel summary	Displays a summary of port-channel information.

show running-config vlan

To display the running configuration for a specified VLAN, use the **show running-config vlan** command.

show running-config vlan *vlan-id*

Syntax Description

vlan-id	VLAN ID number or range of VLANs. Valid VLAN IDs are1-4094 or ranges are 1-5, 10 or 2-5, 7-19.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Examples

This example shows how display the running configuration for VLAN100:

```
n1000v(config)# show running-config vlan 100
version 4.2(1)SV1(4)
vlan 100
n1000v(config)#
```

Related Commands

Command	Description
show vlan	Displays VLAN information.
vlan	Creates a VLAN.

show system error-id

To display detailed information on system error codes, use the **show system error-id** command.

show system error-id {**list** | *error-code*}

Syntax Description

list	Displays brief information for all the system error messages.
error-code	Displays description about a specific error code.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

Release	Modification
4.0(4)SV1(1)	This command was introduced.

Usage Guidelines

Examples

This example shows how to display detailed information about error code 0x401e0008:

```
n1000v# show system error-id 0x401e0008
Error Facility: sysmgr
Error Description: request was aborted, standby disk may be full
n1000v#
```

Related Commands

Command	Description
show system vem feature level	Displays the current software release supported.
show system redundancy status	Displays the system redundancy status.
system vlan	Adds the system VLAN to this port profile.
show system resources	Displays the system resources.