



Show Commands

This chapter describes the Cisco Nexus 1000V 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. |

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

Supported User Roles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

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. |

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 access-list summary

To display configured access control lists (ACLs), use the **show access-list summary** command.

show access-list 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. |

Examples This example shows how to display configured ACLs:

```
n1000v# show access-lists summary

IP access list acl1
    Total ACEs Configured:1

n1000v#n1000v#
```

| Related Commands | Command | Description |
|------------------|-----------------------------|----------------------------------------------------------|
| | ip access-list | Creates the IP ACL and enters IP ACL configuration mode. |
| | show ip access-lists | Displays the IP ACL 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 | |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>size</i> | (Optional) Size of the log to display in bytes. The range is from 0 to 250000. |
| start-time <i>year month day HH:MM:SS</i> | (Optional) Specifies a start time as follows. <ul style="list-style-type: none"> • 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. |

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_Or_Quarantine_Uplink ; capability uplink (SUCCESS)
Wed Jul 22 07:57:50 2009:update:171.71.55.185@pts/2:admin:configure terminal ; flow record 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 gracefully
Wed Jul 22 08:50:36 2009:update:171.71.55.185@pts/2:admin:configure terminal ; no flow record 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 banner motd

To display the configured banner message, use the **show banner motd** command.

show banner motd

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. |

Examples This example shows how to display the configured banner message:

```
n1000v(config)# show banner motd
April 16, 2008 Welcome to the Switch
```

| Related Commands | Command | Description |
|------------------|--------------------|-------------------------------------------|
| | banner motd | Configures the banner message of the day. |
| | switchname | Changes the switch prompt. |

show boot

To display the system and kickstart boot variables for verification, use the **show boot** command.

show boot [**auto-copy** [**list**] | **sup-1** | **sup-2** | **variables**]

| Syntax Description | |
|--------------------|----------------------------------------------------------------|
| auto-copy | (Optional) Determines whether auto-copy is enabled. |
| list | (Optional) Displays the list of files to be auto-copied. |
| sup-1 | (Optional) Displays the sup-1 supervisor module configuration. |
| sup-2 | (Optional) Displays the sup-2 supervisor module configuration. |
| variables | (Optional) Displays a list of boot variables. |

Defaults None

Command Modes Global configuration (config)

Supported User Roles network-admin

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display the system and kickstart boot variables for verification:

```
n1000v# config t
n1000v(config)# show boot

sup-1
kickstart variable =
bootflash:/nexus-1000v-kickstart-mzg.4.0.4
.SV1.2.bin
system variable =
bootflash:/nexus-1000v-mzg.4.0.4.SV1.2.bin
sup-2
kickstart variable =
bootflash:/nexus-1000v-kickstart-mzg.4.0.4
.SV1.2.bin
system variable =
bootflash:/nexus-1000v-mzg.4.0.4.SV1.2.bin
No module boot variable set
n1000v(config)#
```

| Related Commands | Command | Description |
|------------------|----------------------------------|------------------------------------------------------|
| | boot system bootflash: | Adds the new system boot variable. |
| | boot kickstart bootflash: | Adds the new kickstart boot variable. |
| | reload | Reloads the Virtual Supervisor Module (VSM). |
| | show version | Displays the software version is present on the VSM. |

show bridge-domain

To display bridge domain information, use the **show bridge-domain** command.

```
show bridge-domain [bd-name| brief | summary]
```

| Syntax Description | |
|--------------------|------------------------------------------------------------------------------------------------|
| <i>bd-name</i> | (Optional) The name of the bridge domain. |
| brief | (Optional) Specifies to display only a brief summary of the information for the bridge domain. |
| summary | (Optional) Specifies to display summary information for all bridge domains. |

| Defaults | None |
|----------|------|
|----------|------|

| Command Modes | Any command mode |
|---------------|------------------|
|---------------|------------------|

| Supported User Roles | network-admin network-operator |
|----------------------|-----------------------------------|
|----------------------|-----------------------------------|

| Command History | Release | Modification |
|-----------------|----------------|---------------------------------------------------------------------------------------|
| | 4.2(1)SV2(2.1) | This command was modified to list the global configurations and segment mode changes. |
| | 4.2(1)SV1(5.1) | This command was introduced. |

| Usage Guidelines | The ports are inactive if a segment ID is not configured for a bridge domain. |
|------------------|-------------------------------------------------------------------------------|
|------------------|-------------------------------------------------------------------------------|

| Examples | This example shows how to display all bridge domains. |
|----------|-------------------------------------------------------|
|----------|-------------------------------------------------------|

```
n1000v(config)# show bridge-domain
```

```
Global Configuration:
Mode: Unicast-only
MAC Distribution: Enable
```

```
Bridge-domain tenant-red (0 ports in all)
Segment ID: 5000 (Manual/Active)
Mode: Unicast-only (override)
MAC Distribution: Enable (override)
Group IP: 224.24.109.28
State: UP           Mac learning: Enabled
Veth5, Veth7, Veth9
n1000v(config)#
```

This example shows how to display brief summary information for a bridge domain:

```
n1000v(config)# show bridge-domain brief
Bridge-domain                               Status           Ports
-----
tenant-red                                  active          Veth5, Veth7, Veth9
```

This example shows how to display summary information for all bridge domains:

```
n1000v(config)# show bridge-domain summary
Number of existing bridge-domains: 1
n1000v(config)#
```

Related Commands

| Command | Description |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| show bridge-domain | Displays all bridge domains with the mode. |
| show bridge-domain vteps | Displays the bridge domain-to-VTEP mappings that are maintained by the VSM and are pushed to all VEMs. |
| show bridge-domain mappings | Displays VLAN-VXLAN mappings configured in VSM on the Ethernet uplink port-profile of a service module/VXLAN gateway or the vEthernet access port-profile for VXLAN trunk feature. |
| show bridge-domain mac | Displays all the MAC addresses that are learned by the VSMs on VXLANs that are configured with the MAC distribution feature. |

show bridge-domain mac

Displays all the MACs learnt by VSM on VXLANs configured with MAC distribution.

show bridge-domain mac

show bridge-domain <bd-name> mac

| Syntax Description | | |
|--------------------|----------------------------|--------------------------------------------------------------------------------------------|
| | <i>bd-name</i> | (Optional) The name of the bridge domain. |
| | mac | (Optional) Displays all the MACs learnt by VSM on VXLANs configured with MAC distribution. |
| | <bd-name> mac | (Optional) Displays all the MACs learnt by VSM on VXLANs configured with MAC distribution. |

Defaults None

Command Modes Any command mode

Supported User Roles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(2.1) | This command was introduced. |

Usage Guidelines To list all the MAC addresses that are learned by the VSMs on VXLANs that are configured with the MAC distribution feature.

Examples This example shows how to display mac information for all bridge domains:

```
n1000v(config)# show bridge-domain mac

Bridge-domain: Vxlan-32200
MAC Table Count: 3
MAC Table Version: 3
MAC Address      Module      Port      VTEP-IP Address
-----
0050.569f.2c58   6           Veth65    10.105.232.88
```

show bridge-domain mac

```
0050.569f.4ebf 6 Veth67 10.105.232.88
0050.569f.7957 6 Veth68 10.105.232.88
```

This example shows how to display <bd-name> mac information for bridge domain:

```
n1000v(config)# show bridge-domain Vxlan-32200 mac
```

```
Bridge-domain: Vxlan-32200
MAC Table Count: 3
MAC Table Version: 3
MAC Address      Module    Port      VTEP-IP Address
-----
0050.569f.2c58  6        Veth65    10.105.232.88
0050.569f.4ebf  6        Veth67    10.105.232.88
0050.569f.7957  6        Veth68    10.105.232.88
```

Related Commands

| Command | Description |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| show bridge-domain | Displays all bridge domains with the mode. |
| show bridge-domain vteps | Displays the bridge domain-to-VTEP mappings that are maintained by the VSM and are pushed to all VEMs. |
| show bridge-domain mappings | Displays VLAN-VXLAN mappings configured in VSM on the Ethernet uplink port-profile of a service module/VXLAN gateway or the vEthernet access port-profile for VXLAN trunk feature. |

show bridge-domain mappings

Displays VLAN-VXLAN mappings configured in VSM on the Ethernet uplink port-profile of a service module/VXLAN gateway or the vEthernet access port-profile for VXLAN trunk feature.

show bridge-domain mappings [active | inactive | module | service]

| Syntax Description | | |
|--------------------|------------|-----------------------------------------------------------------------------------------------------------------------------|
| active | (Optional) | Displays the active mappings. A mapping is considered active if the VLAN and bridge-domain are created in VSM. |
| inactive | (Optional) | Displays the inactive mappings. A mapping is considered inactive if either the VLAN or bridge-domain is not created in VSM. |
| module | (Optional) | Displays interfaces on a specified module. |
| service | (Optional) | Service command. |

Defaults None

Command Modes Any command mode

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(2.1) | This command was introduced. |

Usage Guidelines Use this command to view all VLAN-VXLAN mappings created in the VSM.

Examples This example shows how to display VLAN-VXLAN mappings for VXLAN Gateway:

```
vsm# show bridge-domain mappings
```

```
-----  
Interface Module Serv Inst Vlan BD-Name  
-----
```

```
port-channel7 9 753 753 bd-753  
port-channel8 10 753 753 bd-753
```

This example shows how to display VLAN-VXLAN mappings for the VXLAN trunk feature:

```
switch(config-bd)# show bridge-domain mappings
```

```
-----  
Interface Service Instance ID Module ID Vlan ID Segment ID  
-----
```

```
Vethernet2 10 3 600 5000  
Vethernet2 10 3 601 500
```

**Note**

The value in the Interface column varies based on the VXLAN gateway or the VXLAN trunk feature. Vethernet<number> in the Interface column indicates mapping for the VXLAN trunk feature; port-channel<number> in the Interface column indicates mapping configured on the VXLAN gateway.

Related Commands

| Command | Description |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| show bridge-domain | Displays all bridge domains with the mode. |
| show bridge-domain vteps | Displays the bridge domain-to-VTEP mappings that are maintained by the VSM and are pushed to all VEMs. |
| show bridge-domain mac | Displays all the MAC addresses that are learned by the VSMS on VXLANs that are configured with the MAC distribution feature. |

show bridge-domain vteps

Displays bridge-domain to VTEPs mapping maintained by VSM and pushed to all VEMs.

show bridge-domain vteps

show bridge-domain <bd-name> vteps

| Syntax Description | |
|------------------------------|----------------------------------------------------------------------------------------------|
| <i>bd-name</i> | (Optional) The name of the bridge domain. |
| vteps | (Optional) Displays bridge-domain to VTEPs mapping maintained by VSM and pushed to all VEMs. |
| <bd-name> vteps | (Optional) Displays bridge-domain to VTEPs mapping maintained by VSM and pushed to all VEMs. |

Defaults None

Command Modes Any command mode

Supported User Roles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(2.1) | This command was introduced. |

Usage Guidelines Mappings that are maintained by the VSM bridge-domain to VTEP and are pushed to all VEMs.

Examples This example shows how to display vteps information for all bridge domains:

```
n1000v(config)# show bridge-domain vteps
```

```
D: Designated VTEP      I:Forwarding Publish Incapable VTEP
```

```
Note: (*) Denotes active gateway module
```

```
Bridge-domain: Vxlan-32000
```

```
VTEP Table Version: 3
```

```
Port      Module  VTEP-IP Address  VTEP-Flags
```

```
-----
```

| | | | |
|--------|---|----------------|-----|
| Veth48 | 7 | 10.105.232.89 | (D) |
| Veth55 | 7 | 10.105.232.106 | |
| Veth53 | 7 | 30.30.30.89 | |

show bridge-domain vteps

```
Veth231      18      104.232.105.10  (DI*)
```

This example shows how to display <bd-name> vteps information for specific bridge domains:

```
n1000v(config)# show bridge-domain Vxlan-32000 vteps
```

```
D: Designated VTEP      I:Forwarding Publish Incapable VTEP
```

Note: (*) Denotes active gateway module

```
Bridge-domain: Vxlan-32000
```

```
VTEP Table Version: 3
```

```
Port          Module    VTEP-IP Address  VTEP-Flags
```

```
-----
```

| | | | |
|---------|----|----------------|-------|
| Veth48 | 7 | 10.105.232.89 | (D) |
| Veth55 | 7 | 10.105.232.106 | |
| Veth53 | 7 | 30.30.30.89 | |
| Veth231 | 18 | 104.232.105.10 | (DI*) |

Related Commands

| Command | Description |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| show bridge-domain | Displays all bridge domains with the mode. |
| show bridge-domain mappings | Displays VLAN-VXLAN mappings configured in VSM on the Ethernet uplink port-profile of a service module/VXLAN gateway or the vEthernet access port-profile for VXLAN trunk feature. |
| show bridge-domain mac | Displays all the MAC addresses that are learned by the VSMs on VXLANs that are configured with the MAC distribution feature. |

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 <i>name</i> | | Display a specific CDP entry matching a name. |
| global | | Display CDP parameters for all interfaces. |
| interface <i>interface</i> | | Display CDP parameters for a specified interface. |
| traffic interface <i>interface</i> | | Display CDP traffic statistics. |

Defaults None

Command Modes Any

Supported User Roles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

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 <i>if</i> | (Optional) Show CDP neighbors for a specified interface. |
| detail | Show the detailed configuration of all CDP neighbors. |

Defaults None

Command Modes Any

Supported User Roles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

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
```

■ show cdp neighbors

```

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 class-map

To display the class map configuration for all class maps or for a specified class map, use the **show class-map** command.

```
show class-map [[type qos] [cmmap-name]]
```

| Syntax Description | type | (Optional) Specifies the type of the class map. |
|--------------------|-------------------|-------------------------------------------------|
| | qos | (Optional) Specifies the type QoS. |
| | <i>cmmap-name</i> | (Optional) Name of an existing class map. |

| Defaults | None |
|----------|------|
|----------|------|

| Command Modes | Any |
|---------------|-----|
|---------------|-----|

| SupportedUserRoles | network-admin network-operator |
|--------------------|-----------------------------------|
|--------------------|-----------------------------------|

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display the class map configuration for all class maps with the type qos:

```
n1000v# show class-map type qos
```

```
Type qos class-maps
=====

class-map type qos match-all class1

class-map type qos match-all class2

n1000v#
```

| Related Commands | Command | Description |
|------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| | class-map | Puts you in Class Map QoS configuration mode for the specified class map, and configures and saves the map name in the running configuration. |
| | match access-group name | Configures and saves the access group to match for this class in the running configuration. |
| | show ip access-lists | Displays all IPv4 access control lists (ACLs) or a specific IPv4 ACL. |

show cli variables

To display user-defined CLI persistent variables, use the **show cli variables** command.

To remove user-defined CLI persistent variables, use the **cli no var name** command in configuration mode.

show cli variables

cli no var name *name*

| | | |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| Syntax Description | <i>name</i> | Name of an existing variable. |
| Defaults | None | |
| Command Modes | Any | |
| Supported User Roles | network-admin network-operator | |
| Command History | Release | Modification |
| | 4.0(4)SV1(1) | This command was introduced. |
| Examples | <p>This example shows how to display user-defined CLI persistent variables:</p> <pre>n1000v# show cli variables VSH Variable List ----- TIMESTAMP="2008-07-02-13.45.15" testinterface="ethernet 3/1"</pre> <p>This example shows how to remove the user-defined CLI persistent variable, <i>mgmtport</i>.</p> <pre>n1000v# cli no var name mgmtport n1000v#</pre> | |
| Related Commands | Command | Description |
| | cli var name | Defines a command-line interface (CLI) variable for a terminal session. |
| | run-script | Runs a command script that is saved in a file. |

show cores

To view recent core images, use the **show cores** command.

show cores

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 System core image files are generated when a service fails.

Examples This example shows how to display recent core images:

```
n1000v# show cores
Module-num      Instance-num    Process-name    PID    Core-create-time
-----
n1000v#
```

| Related Commands | Command | Description |
|------------------|----------------|----------------------------------------------|
| | show processes | Displays information regarding process logs. |

show cts

To display the global Cisco TrustSec configuration on Cisco Nexus 1000V, use the **show cts** command.

show cts

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(1.1) | This command was introduced. |

Usage Guidelines To use this command, you enable the Cisco TrustSec feature.

This command requires an Advanced License. See the *Cisco Nexus 1000V License Configuration Guide, Release 4.2(1)SV2(1.1)* for more information on the licensing requirements for Cisco Nexus 1000V.

Examples This example shows how to display CTS configuration:

```
n1000v# show cts
CTS Global Configuration
=====
CTS support           : enabled
CTS device identity   : not configured
SGT                   : 0
CTS caching support   : disabled

Number of CTS interfaces in
  DOT1X mode : 0
  Manual mode : 0
n1000v#
```

| Related Commands | Command | Description |
|------------------|---------------------|----------------------------------------------------|
| | feature cts | Enables Cisco TrustSec on Cisco Nexus 1000V. |
| | show cts sxp | Displays the SXP configuration for Cisco TrustSec. |

show cts device tracking

To display the Cisco TrustSec device tracking configuration, use the **show cts device tracking** command.

show cts device tracking

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

| Release | Modification |
|----------------|------------------------------|
| 4.2(1)SV2(1.1) | This command was introduced. |

Usage Guidelines

This command requires an Advanced License. See the *Cisco Nexus 1000V License Configuration Guide, Release 4.2(1)SV2(1.1)* for more information on the licensing requirements for Cisco Nexus 1000V.

Examples

This example shows how to display CTS device tracking configuration:

```
n1000v# show cts device tracking
enabled
n1000v#
```

Related Commands

| Command | Description |
|----------------------------|----------------------------------------------------|
| show cts | Displays Cisco TrustSec configuration. |
| cts device tracking | Enables the device tracking on Cisco TrustSec SXP. |

show cts interface delete-hold timer

To display the interface delete hold timer period for Cisco TrustSec, use the **show cts interface delete-hold timer** command.

show cts delete-hold timer

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(1.1) | This command was introduced. |

Usage Guidelines This command requires an Advanced License. See the *Cisco Nexus 1000V License Configuration Guide, Release 4.2(1)SV2(1.1)* for more information on the licensing requirements for Cisco Nexus 1000V.

Examples This example shows how to display CTS configuration:

```
n1000v# configure terminal
n1000v# cts interface delete-hold timer 120
n1000v# show cts interface delete-hold timer
120
```

| Related Commands | Command | Description |
|------------------|----------------------------------------|------------------------------------------------------------------------------|
| | show cts | Displays Cisco TrustSec configuration. |
| | cts interface delete-hold timer | Configures the delete hold timer period for an interface for Cisco TrustSec. |

show cts ipsgt entries

To display the SXP SGT entries for Cisco TrustSec, use the **show cts ipsgt entries** command.

show cts ipsgt entries

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(1.1) | This command was introduced. |

Usage Guidelines This command requires an Advanced License. See the *Cisco Nexus 1000V License Configuration Guide, Release 4.2(1)SV2(1.1)* for more information on the licensing requirements for Cisco Nexus 1000V.

Examples This example shows how to display SGT related configuration:

```
n1000v# show cts ipsgt entries
Interface SGT IP ADDRESS VRF Learnt
-----
- 100 1.1.1.1 default Cli Configured
- 200 2.2.2.3 management Cli Configured
switch(config)#

n1000V(config)# show cts ipsgt entries vrf default
Interface SGT IP ADDRESS Pushed Learnt
-----
Vethernet2 6766 10.78.1.76 Yes Device Tracking

n1000V(config)# show cts ipsgt entries vrf management
Interface SGT IP ADDRESS Pushed Learnt
-----
Vethernet2 6766 10.78.1.76 Yes Device Tracking
- 545 99.10.10.10 Yes Cli Configured

n1000V(config)# show cts ipsgt entries
Interface SGT IP ADDRESS VRF Learnt
-----
Vethernet2 6766 10.78.1.76 - Device Tracking
```

■ show cts ipsgt entries

```
- 545 99.10.10.10 management Cli Configured
```

Related Commands

| Command | Description |
|-------------------------------|------------------------------------------------------------------------------------------|
| show cts | Displays Cisco TrustSec configuration. |
| show cts sxp | Displays the SXP configuration for Cisco TrustSec. |
| cts role-based sgt-map | Configures the Cisco TrustSec security group tag (SGT) mapping to the host IP addresses. |

show cts role-based sgt-map

To display the mapping of the IP address to SGT for Cisco TrustSec, use the **show cts role-based sgt-map** command.

show cts role-based sgt-map

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(1.1) | This command was introduced. |

Usage Guidelines This command requires an Advanced License. See the *Cisco Nexus 1000V License Configuration Guide, Release 4.2(1)SV2(1.1)* for more information on the licensing requirements for Cisco Nexus 1000V.

Examples This example shows how to display IP-SGT mapping:

```
n1000v# show cts role-based sgt-map
IP ADDRESS SGT VRF/VLAN SGT CONFIGURATION
1.1.1.1 100 vrf:1 CLI Configured
2.2.2.3 200 vrf:2 CLI Configured
n1000v(config)#
```

| Related Commands | Command | Description |
|------------------|-------------------------------|------------------------------------------------------------------------------------------|
| | show cts | Displays Cisco TrustSec configuration. |
| | show cts sxp | Displays the SXP configuration for Cisco TrustSec. |
| | cts role-based sgt-map | Configures the Cisco TrustSec security group tag (SGT) mapping to the host IP addresses. |

show cts sxp

To display the Cisco TrustSec Security Group Tag (SGT) Exchange Protocol (SXP) configuration, use the **show cts sxp** command.

```
show cts sxp
```

| | |
|---------------------------|--------------------------------------------|
| Syntax Description | This command has no arguments or keywords. |
|---------------------------|--------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|---------------------------|-----------------------------------|
| SupportedUserRoles | network-admin network-operator |
|---------------------------|-----------------------------------|

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(1.1) | This command was introduced. |

| | |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Usage Guidelines | This command requires an Advanced License. See the <i>Cisco Nexus 1000V License Configuration Guide, Release 4.2(1)SV2(1.1)</i> for more information on the licensing requirements for Cisco Nexus 1000V. |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| | |
|-----------------|----------------------------------------------------------|
| Examples | This example shows how to display CTS SXP configuration: |
|-----------------|----------------------------------------------------------|

```
n1000v# show cts sxp
CTS SXP Configuration:
SXP enabled
SXP retry timeout:60
SXP reconcile timeout:120
Minimum SXP Version: 1
Maximum SXP Version:1
n1000v(config)#
```

| Related Commands | Command | Description |
|------------------|-----------------------|--------------------------------------------------------------------------------|
| | show cts | Displays Cisco TrustSec configuration. |
| | cts sxp enable | Enables the Security Group Tag (SGT) Exchange Protocol (SXP) peer on a device. |

show cts sxp connection

To display the Cisco TrustSec Security Group Tag (SGT) Exchange Protocol (SXP) connections information, use the **show cts sxp connection** command.

show cts sxp connection

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any

Supported User Roles

network-admin
network-operator

Command History

| Release | Modification |
|----------------|------------------------------|
| 4.2(1)SV2(1.1) | This command was introduced. |

Usage Guidelines

This command requires an Advanced License. See the *Cisco Nexus 1000V License Configuration Guide, Release 4.2(1)SV2(1.1)* for more information on the licensing requirements for Cisco Nexus 1000V.

Examples

This example shows how to display CTS SXP connection information:

```
n1000v# show cts sxp
PEER_IP_ADDR      VRF          PEER_SXP_MODE  SELF_SXP_MODE  CONNECTION STATE
172.23.233.94     management   listener       speaker        initializing

n1000v(config)#
```

Related Commands

| Command | Description |
|--------------------------------|---------------------------------------------------------------------------------------------------|
| show cts | Displays Cisco TrustSec configuration. |
| show cts sxp | Displays the SXP configuration for Cisco TrustSec. |
| cts sxp connection peer | Configures a Security Group Tag (SGT) Exchange Protocol (SXP) peer connection for Cisco TrustSec. |

show ecp

To display the ECP information on the Cisco Nexus 1000V, use the **show ecp** command.

```
show ecp
```

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(2.2) | This command was introduced. |

Usage Guidelines None

Examples The following example shows the configured information for ECP.

```
n1000v# show ecp
ECP Max ReTries : 3
ECP Retransmission Timer Exp : 14(163840 micro seconds)
```

| Related Commands | Command | Description |
|------------------|---------------------|---------------------------------------------------------------------|
| | show evb | Displays the EVB segmentation information on the Cisco Nexus 1000V. |
| | show evb vsi | Displays the VDP VSI information from the Cisco Nexus 1000V VEM. |

show ecp module

To display the state information and statistics for ECP, use the **show ecp module** command.

```
show ecp module <module id>
```

Syntax Description

| | |
|-------------|-------------------------------------------------------------------------------|
| <module id> | The module ID for which you want to display state information and statistics. |
|-------------|-------------------------------------------------------------------------------|

Defaults

None

Command Modes

Any

Supported User Roles

network-admin

Command History

| Release | Modification |
|----------------|------------------------------|
| 4.2(1)SV2(2.2) | This command was introduced. |

Usage Guidelines

None

Examples

This example shows how to display the ecp module information:

```
n1000v# show ecp mod 4
ECP Max Retries : 3
ECP Retransmission Timer Exp : 14(163840 micro seconds)
TX Sequence No : 127
Retry Count : 0
TX Count : 0
TX Count Errors : 0
In TX Queue : 0
RX Count : 0
RX Sequence : 42634
```

Related Commands

| Command | Description |
|---------------------|---------------------------------------------------------------------|
| show evb | Displays the EVB segmentation information on the Cisco Nexus 1000V. |
| show evb vsi | Displays the VDP VSI information from the Cisco Nexus 1000V VEM. |
| show ecp | Displays the ECP information. |

show evb

To display the EVB segmentation information on the Cisco Nexus 1000V, use the **show evb** command.

show evb

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(2.2) | This command was introduced. |

Usage Guidelines None

Examples This example shows the evb segmentation information:

```
n1000v# show evb
Edge Virtual Bridging
Role : VDP Station
VDP Mac Address : 0180.0000.0000
VDP Resource Wait Delay : 22(66 secs)
VDP Reinit Keep Alive : 21(20 secs)
```

| Related Commands | Command | Description |
|------------------|------------------------|--------------------------------------------------------------|
| | show run evb | Displays the running configuration for the EVB segmentation. |
| | show evb module | Displays evb information for a module. |

show evb module

To display evb information for a module, use the **show evb module** command.

```
show evb module <module id>
```

Syntax Description

| | |
|--------------------------|------------------------------------------------------------------|
| <i><module id></i> | The module ID for which you want to display the evb information. |
|--------------------------|------------------------------------------------------------------|

Defaults

None

Command Modes

Any

Supported User Roles

network-admin

Command History

| Release | Modification |
|----------------|------------------------------|
| 4.2(1)SV2(2.2) | This command was introduced. |

Usage Guidelines

You must have the EVB feature enabled before executing this command.

Examples

This example shows how to display evb module information.

```
n1000V# show evb mod 4
Edge Virtual Bridging
Role : VDP Station
VDP Mac Address : 2020.1111.2222
VDP Resource Wait Delay : 20(17 secs)
VDP Reinit Keep Alive : 20(10 secs)
```

Related Commands

| Command | Description |
|---------------------|---------------------------------------------------------------------|
| show evb | Displays the EVB segmentation information on the Cisco Nexus 1000V. |
| show evb vsi | Displays the VDP VSI information from the Cisco Nexus 1000V VEM. |
| show ecp | Displays the ECP information. |

show evb vsi

To display the VDP VSI information from the Cisco Nexus 1000V VEMs, use the **show evb vsi** command.

show evb vsi *interface veth*

| | |
|---------------------------|---------------------------------------------------|
| Syntax Description | <i>interface veth</i> Name of an interface veth . |
|---------------------------|---------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|---------------------------|---------------|
| SupportedUserRoles | network-admin |
|---------------------------|---------------|

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 4.2(1)SV2(2.2) | This command was introduced. |

| | |
|-------------------------|-------|
| Usage Guidelines | None. |
|-------------------------|-------|

| | |
|-----------------|----------------------------------------------------------------------------------------|
| Examples | This example shows how to display the VDP VSI information from Cisco Nexus 1000V VEMs. |
|-----------------|----------------------------------------------------------------------------------------|

```
switch # show evb vsi interface vethernet 15
LTL : 50 [module: 4]
Segment : 33333
MAC : 0050.5693.7D25
IP : 222.222.221.100
VSI State : 3
State Machine State : 8
Rwd Expiry Count : 20999
Last CMD Time : 1
Last RSP Time : 0
switch # show ecp
ECP Max ReTries : 3
ECP Retransmission Timer Exp : 14(163840 micro seconds)
switch # show ecp mod 4
ECP Max ReTries : 3
ECP Retransmission Timer Exp : 14(163840 micro seconds)
TX Sequence No : 34778
Retry Count : 0
TX Count : 0
TX Count Errors : 21
In TX Queue : 0
RX Count : 0
RX Sequence : 11040
```

| Related Commands | Command | Description |
|-------------------------|------------------------|---------------------------------------------------------------------|
| | show evb | Displays the EVB segmentation information on the Cisco Nexus 1000V. |
| | show evb vsi | Displays the VDP VSI information from the Cisco Nexus 1000V VEM. |
| | show ecp | Displays the ECP information. |
| | show evb module | Displays the EVB information for a module. |

show fabric forwarding

To display the fabric forwarding details on the Cisco Nexus 1000V, use the **show fabric forwarding** command.

show fabric forwarding

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(2.2) | This command was introduced. |

Usage Guidelines None

Examples This example shows the fabric forwarding feature enabled.

```
n1000v# show fabric forwarding
Gateway mac-address: 2020.1111.2222
```

| Related Commands | Command | Description |
|------------------|----------------------------------------------|------------------------------------------------------------------------------------------------|
| | show running-config fabric forwarding | Displays the running configuration for the fabric forwarding feature on the Cisco Nexus 1000V. |

show feature

To display features available, such as LACP or NetFlow, and whether they are enabled, use the **show feature** command.

show feature

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin

| Command History | Release | Modification |
|-----------------|----------------|--------------------------------------------------------------------|
| | 4.2(1)SV2(2.1) | This command was modified to list the VXLAN gateway feature state. |
| | 4.2(1)SV1(4) | This command was introduced. |

Usage Guidelines Specifies all the features enabled on VSM.

Examples This example shows how to display available features and whether they are enabled:

```
n1000v# show feature
Feature Name      Instance  State
-----
cts               1        enabled
dhcp-snooping    1        enabled
http-server      1        enabled
lacp              1        disabled
netflow          1        enabled
network-segmentation 1        disabled
port-profile-roles 1        enabled
private-vlan     1        enabled
segmentation     1        enabled
sshServer        1        enabled
tacacs           1        disabled
telnetServer     1        enabled
vtracker         1        disabled
vxlan-gateway    1        enabled
n1000v(config)#
```

Related Commands

| Command | Description |
|-----------------------------|-----------------------------------------|
| feature lacp | Enables LACP support for port channels. |
| feature dhcp | Enables DHCP snooping support. |
| feature netflow | Enables NetFlow support. |
| feature evb | Enables the EVB feature. |
| feature private-vlan | Enables private VLAN support. |

show file

To display a full filename by entering a partial filename and pressing the Tab key, use the **show file** command.

```
show file {bootflash: | volatile: | debug:} partial_filename [cksum | md5sum]
```

| Syntax Description | |
|-------------------------|-------------------------------------------------------------------------------------------------------------|
| bootflash | Specifies a directory or filename. |
| volatile: | Specifies a directory or filename on volatile flash. |
| debug: | Specifies a directory or filename on expansion flash. |
| <i>partial_filename</i> | Portion of the filename to be displayed. Pressing Tab lists any existing files that match the partial name. |
| cksum | Displays CRC checksum for a file. |
| md5sum | Displays MD5 checksum for a file. |

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

When you type a partial filename and then press Tab, the CLI completes the filename if the characters that you typed are unique to a single file.

If not, the CLI lists a selection of filenames that match the characters that you typed.

You can then retype enough characters to make the filename unique; and CLI completes the filename for you.

Examples

This example shows how to display a full filename by entering a partial filename and pressing the Tab key:

```
n1000v# show file bootflash:nexus-1000v <Tab>
bootflash:nexus-1000v-dplug-mzg.4.0.4.SV1.0.42.bin
bootflash:nexus-1000v-mzg.4.0.4.SV1.0.42.bin
bootflash:nexus-1000v-kickstart-mzg.4.0.4.SV1.0.42.bin
```

| Related Commands | Command | Description |
|------------------|--------------|-----------------------------------------------------------------------------------------|
| | dir | Displays the contents of a directory or file. |
| | copy | Copies a file from the specified source location to the specified destination location. |
| | mkdir | Creates a directory at the current directory level. |
| | rmdir | Removes a directory. |

show flow exporter

To display information about the flow exporter, use the **show flow exporter** command.

show flow exporter [*name*]

| | |
|---------------------------|-----------------------------------------------------------|
| Syntax Description | <i>name</i> (Optional) Name of an existing flow exporter. |
|---------------------------|-----------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|--------------------------------------------------------|
| Command Modes | CLI flow exporter configuration (config-flow-exporter) |
|----------------------|--------------------------------------------------------|

| | |
|---------------------------|-----------------------------------|
| SupportedUserRoles | network-admin network-operator |
|---------------------------|-----------------------------------|

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

| | |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Examples | This example shows how to display information about the flow exporter: n1000v(config-flow-exporter)# show flow exporter |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------|

| Related Commands | Command | Description |
|------------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------|
| | flow exporter | Creates a flow exporter, saves it in the running configuration, and then places you in CLI flow exporter configuration mode. |
| | show flow interface | Displays flow interface information. |
| | show flow monitor | Displays the monitor configuration. |
| | show flow record | Displays the record configuration. |

show flow interface

To display the NetFlow configuration for the specified interface, use the **show flow interface** command.

```
show flow interface { ethernet interface_number | vethernet slot_number }
```

| Syntax Description | | |
|-------------------------|--|----------------------------------------------------------------|
| ethernet | | Indicates Ethernet IEEE 802.3z. |
| <i>interface_number</i> | | Number that identifies this interface. The range is 1–1048575. |
| vethernet | | Indicates virtual Ethernet interface. |
| <i>slot_number</i> | | Number identifying the slot. The range is 1–66. |

Defaults None

Command Modes Any

Supported User Roles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display NetFlow configuration information for vEthernet slot 2:

```
n1000v(config-if)# show flow interface veth 2
Interface veth 2:
Monitor: MonitorTest
Direction: Output
```

| Related Commands | Command | Description |
|------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| | flow monitor | Creates a flow monitor, by name, saves it in the running configuration, and then places you in the CLI flow monitor configuration mode. |
| | flow exporter | Creates a flow exporter, saves it in the running configuration, and puts you in CLI flow exporter configuration mode. |
| | show flow exporter | Displays information about the flow exporter. |
| | show flow monitor | Displays the monitor configuration. |
| | show flow record | Displays the record configuration. |

show flow monitor

To display information about existing flow monitors, use the **show flow monitor** command.

show flow monitor [*name*]

| | |
|---------------------------|----------------------------------------------------------|
| Syntax Description | <i>name</i> (Optional) Name of an existing flow monitor. |
|---------------------------|----------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|---------------------------|-----------------------------------|
| SupportedUserRoles | network-admin network-operator |
|---------------------------|-----------------------------------|

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display information about the flow monitor called MonitorTest:

```
n1000v(config-flow-monitor)# show flow monitor MonitorTest
Flow Monitor monitortest:
Use count: 0
Inactive timeout: 600
Active timeout: 1800
Cache Size: 15000
n1000v(config-flow-monitor)#
```

| Related Commands | Command | Description |
|-------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| | flow monitor | Creates a flow monitor, by name, saves it in the running configuration, and then places you in the CLI flow monitor configuration mode. |
| | flow exporter | Creates a flow exporter, saves it in the running configuration, and then places you in CLI flow exporter configuration mode. |
| | show flow exporter | Displays information about the flow exporter. |
| | show flow record | Displays the record configuration. |

show flow record

To display information about NetFlow flow records, use the **show flow record** command.

```
show flow record [recordname | netflow-original | netflow {ipv4 {original-input |
original-output | netflow protocol-port}}]
```

| Syntax Description | |
|------------------------------|------------------------------------------------------------------------|
| <i>recordname</i> | (Optional) Name of an existing NetFlow flow record. |
| netflow-original | (Optional) Specifies traditional IPv4 input NetFlow with an AS origin. |
| netflow | (Optional) Specifies traditional NetFlow collection schemes. |
| ipv4 | Specifies IPv4 collection schemes. |
| original-input | Indicates the input NetFlow. |
| original-output | Indicates the output NetFlow. |
| netflow protocol-port | Specifies the protocol and ports aggregation scheme. |

Defaults None

Command Modes CLI flow exporter configuration (config-flow-exporter)

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|----------------------------------------------------------------------------------------------------------|
| | 4.2(1)SV1(4) | This command was modified to change the protocol-port attribute to netflow protocol-port . |
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display information about the NetFlow flow record called RecordTest:

```
n1000v# config t
n1000v(config)# flow record RecordTest
n1000v(config-flow-record)# show flow record RecordTest
Flow record RecordTest:
  Description: Ipv4flow
  No. of users: 0
  Template ID: 0
  Fields:
    match ipv4 destination address
    match interface input
    match interface output
    match flow direction
    collect counter packets
n1000v(config-flow-record)#
```


| Related Commands | Command | Description |
|------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| | flow monitor | Creates a flow monitor, by name, saves it in the running configuration, and then puts you in the CLI flow monitor configuration mode. |
| | flow exporter | Creates a flow exporter, saves it in the running configuration, and then puts you in CLI flow exporter configuration mode. |
| | show flow exporter | Displays information about the flow exporter. |

show interface brief

To display a short version of the interface configuration, use the **show interface brief** command.

show interface brief

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. |

Examples This example shows how to display a short version of the interface configuration:

```
n1000v# show int brief
-----
Port VRF Status IP Address Speed MTU
-----
mgmt0 -- up 172.23.232.141 1000 1500
-----
Ethernet VLAN Type Mode Status Reason Speed Port
Interface Ch #
-----
Eth3/2 1 eth trunk up none 1000(D) --
Eth3/3 1 eth access up none 1000(D) --
n1000v#
```

| Related Commands | Command | Description |
|------------------|------------------------------------|-------------------------------------------------------|
| | interface | Adds, removes or configures interfaces. |
| | show interface ethernet | Displays information about Ethernet interfaces. |
| | show interface port-channel | Displays descriptive information about port channels. |
| | show interface switchport | Displays information about switchport interfaces. |

| Command | Description |
|---------------------------------|--------------------------------------------------------------|
| show interface trunk | Displays information about all the trunk interfaces. |
| show interface vethernet | Displays statistical information about vEthernet interfaces. |

show interface capabilities

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

show interface capabilities

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any configuration mode

SupportedUserRoles network-admin

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display information about the capabilities of the interfaces:

```
n1000v# show interface capabilities
mgmt0
  Model:                --
  Type:                 --
  Speed:                10,100,1000,auto
  Duplex:               half/full/auto
  Trunk encap. type:    802.1Q
  Channel:              no
  Broadcast suppression: none
  Flowcontrol:          rx-(none),tx-(none)
  Rate mode:            none
  QOS scheduling:       rx-(none),tx-(none)
  CoS rewrite:          yes
  ToS rewrite:          yes
  SPAN:                 yes
  UDLD:                 yes
  Link Debounce:        no
  Link Debounce Time:   no
  MDIX:                 no
  Port Group Members:   none

port-channell
  Model:                unavailable
  Type:                 unknown
  Speed:                10,100,1000,10000,auto
  Duplex:               half/full/auto
  Trunk encap. type:    802.1Q
  Channel:              yes
```

```

Broadcast suppression: percentage(0-100)
Flowcontrol: rx-(off/on/desired),tx-(off/on/desired)
Rate mode: none
QOS scheduling: rx-(none),tx-(none)
CoS rewrite: yes
ToS rewrite: yes
SPAN: yes
UDLD: no
Link Debounce: no
Link Debounce Time: no
MDIX: no
Port Group Members: none

port-channel2
Model: unavailable
Type: unknown
Speed: 10,100,1000,10000,auto
Duplex: half/full/auto
Trunk encap. type: 802.1Q
Channel: yes
Broadcast suppression: percentage(0-100)
Flowcontrol: rx-(off/on/desired),tx-(off/on/desired)
Rate mode: none
QOS scheduling: rx-(none),tx-(none)
CoS rewrite: yes
ToS rewrite: yes
SPAN: yes
UDLD: no
Link Debounce: no
Link Debounce Time: no
MDIX: no
Port Group Members: none

port-channel12
Model: unavailable
Type: unknown
Speed: 10,100,1000,10000,auto
Duplex: half/full/auto
Trunk encap. type: 802.1Q
Channel: yes
Broadcast suppression: percentage(0-100)
Flowcontrol: rx-(off/on/desired),tx-(off/on/desired)
Rate mode: none
QOS scheduling: rx-(none),tx-(none)
CoS rewrite: yes
ToS rewrite: yes
SPAN: yes
UDLD: no
Link Debounce: no
Link Debounce Time: no
MDIX: no
Port Group Members: none

control0
Model: --
Type: --
Speed: 10,100,1000,auto
Duplex: half/full/auto
Trunk encap. type: 802.1Q
Channel: no
Broadcast suppression: none
Flowcontrol: rx-(none),tx-(none)
Rate mode: none
QOS scheduling: rx-(none),tx-(none)

```

show interface capabilities

```

CoS rewrite:          yes
ToS rewrite:          yes
SPAN:                 yes
UDLD:                 yes
Link Debounce:        no
Link Debounce Time:   no
MDIX:                 no
Port Group Members:   none

```

```
n1000v#
```

Related Commands

| Command | Description |
|---------------------------------------|-----------------------------------------------------------------------------------------|
| show interface ethernet status | Displays the status for a specified Ethernet interface. |
| show interface switchport | Displays interface configuration information, including the mode. |
| show interface trunk | Displays information, including access and trunk interface, for all Layer 2 interfaces. |
| show interface counters | Displays the counters for a specified Ethernet interface. |
| show interface brief | Displays a short version of the interface configuration. |

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 |
|---------------|-----|
|---------------|-----|

| Supported User Roles | 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 ethernet

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

show interface ethernet *slot/port* [**brief** | **capabilities** | **debounce** | **description** | **flowcontrol** | **mac-address** | **switchport** | **trunk**]

| Syntax Description | | |
|---------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>slot/port</i> | | Slot number of the interface that you want to display. The slot number range is from 1 to 66, and the port number range is from 1 to 256. |
| brief | | (Optional) Specifies to display only a brief summary of the information for the specified interface. |
| capabilities | | (Optional) Specifies to display capability information for the specified interface. |
| debounce | | (Optional) Specifies to display interface debounce time information. |
| description | | (Optional) Specifies to display the description of the specified interface. |
| flowcontrol | | (Optional) Specifies to display information about the flow-control status and statistics on received and transmitted flow-control pause packets for the specified interface. |
| mac-address | | (Optional) Specifies to display MAC address information for the specified interface. |
| switchport | | (Optional) Specifies to display information for the specified interface including access and trunk modes. |
| trunk | | (Optional) Specifies to display trunk mode information for the specified interface. |

Defaults None

Command Modes Any

Supported User Roles network-admin

| Command History | Release | Modification |
|-----------------|--------------|-----------------------------------------------------------------------------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |
| | 4.0(4)SV1(2) | Displays 5-minute input and output packet/bit rate statistics for the specified Ethernet interface. |

Examples

This example shows how to display statistical information for Ethernet interface 3/2:

```
n1000v# show interface ethernet 3/2
Ethernet3/2 is up
  Hardware: Ethernet, address: 0050.5652.a9ba (bia 0050.5652.a9ba)
  MTU 1500 bytes, BW 1000000 Kbit, DLY 10 usec,
    reliability 0/255, txload 0/255, rxload 0/255
```



```

Encapsulation ARPA
Port mode is trunk
full-duplex, 1000 Mb/s
Beacon is turned off
Auto-Negotiation is turned off
Input flow-control is off, output flow-control is off
Auto-mdix is turned on
Switchport monitor is off
  5 minute input rate 570 bytes/second, 6 packets/second
  5 minute output rate 220 bytes/second, 0 packets/second
Rx
7570522 Input Packets 1120178 Unicast Packets
5340163 Multicast Packets 1110181 Broadcast Packets
647893616 Bytes
Tx
1177170 Output Packets 1168661 Unicast Packets
7269 Multicast Packets 1240 Broadcast Packets 0 Flood Packets
252026472 Bytes
4276048 Input Packet Drops 0 Output Packet Drops
1 interface resets

```

Related Commands

| Command | Description |
|------------------------|----------------------------------|
| clear interface | Clears the interface statistics. |

show interface ethernet counters

To display the counters for an Ethernet interface, use the **show interface ethernet counters** command.

```
show interface ethernet slot/port counters [brief | detailed | errors | snmp | storm-control | trunk]
```

| Syntax Description | | |
|----------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------|
| <i>slot/port</i> | | Slot number of the interface that you want to display. The slot number range is from 1 to 66, and the port number range is from 1 to 256. |
| brief | | (Optional) Specifies to display only a brief summary of the counter information for the specified interface. |
| detailed | | (Optional) Specifies to display the nonzero counters for the specified interface. |
| errors | | (Optional) Specifies to display the interface error counters for the specified interface. |
| snmp | | (Optional) Specifies to display the SNMP MIB values for the specified interface. |
| storm-control | | (Optional) Specifies to display the storm-control counters for the specified interface. |
| trunk | | (Optional) Specifies to display the trunk counters for the specified interface. |

Defaults None

Command Modes Any

SupportedUserRoles network-admin

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples

This example shows how to display counters for Ethernet interface 3/2:

```
n1000v# show interface ethernet 3/2 counters
```

```
-----
Port                InOctets          InUcastPkts       InMcastPkts       InBcastPkts
-----
Eth3/2              684023652         1182824           5637863           1171780
-----
Port                OutOctets          OutUcastPkts      OutMcastPkts      OutBcastPkts
-----
n1000v#             265927107         1233866           7269              1240
```

Related Commands

| Command | Description |
|------------------------|----------------------------------|
| clear interface | Clears the interface statistics. |

show interface ethernet status

To display the status for an Ethernet interface, use the **show interface ethernet status** command.

show interface ethernet *slot/port* status [err-disable]

| | | |
|---------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Syntax Description | <i>slot/port</i> | Slot number of the interface that you want to display. The slot number range is from 1 to 66, and the port number range is from 1 to 256. |
| | err-disabled | (Optional) Specifies to display the err-disabled state for the specified interface. |

Defaults None

Command Modes Any

Supported User Roles network-admin

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display the err-disabled status for Ethernet interface 3/2:

```
n1000v# show interface ethernet 3/2 status err-disabled
```

```
-----
Port      Name           Status  Reason
-----
Eth3/2    --             up      none
-----
```

| Related Commands | Command | Description |
|-------------------------|------------------------|----------------------------------|
| | clear interface | Clears the interface statistics. |

show interface ethernet transceiver

To display the transceiver information for an Ethernet interface, use the **show interface ethernet transceiver** command.

show interface ethernet *slot/port* transceiver [calibrations | details]

| Syntax Description | | |
|--------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| | <i>slot/port</i> | Slot number of the interface that you want to display. The slot number range is from 1 to 66, and the port number range is from 1 to 256. |
| | calibrations | (Optional) Specifies to display the calibration information for the specified interface. |
| | details | (Optional) Specifies to display detailed information for the specified interface. |

Defaults None

Command Modes Any

Supported User Roles network-admin

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display transceiver information for Ethernet interface 3/2:

```
n1000v# show interface ethernet 3/2 transceiver calibrations
Ethernet3/2
    sfp is not applicable
```

| Related Commands | Command | Description |
|------------------|------------------------|----------------------------------|
| | clear interface | Clears the interface statistics. |

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 | |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>channel-number</i> | 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 | |
|-----------------------|----------------------------------------------------------------------------------|
| <i>channel-number</i> | 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
```

show interface port-channel counters

```
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.          txHCTotalPkts = 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
```

```
21.          txHCPkts65to127Octets = 0
22.          txHCPkts128to255Octets = 0
23.          txHCPkts256to511Octets = 0
24.          txHCpkts512to1023Octets = 0
25.          txHCpkts1024to1518Octets = 0
26.          txHCpkts1519to1548Octets = 0
27.          ShortFrames = 0
28.          Collisions = 0
29.          SingleCol = 0
30.          MultiCol = 0
31.          LateCol = 0
32.          ExcessiveCol = 0
33.          LostCarrier = 0
34.          NoCarrier = 0
35.          Runts = 0
36.          Giants = 0
37.          InErrors = 0
38.          OutErrors = 0
39.          InputDiscards = 0
40.          BadEtypeDrops = 0
41.          IfDownDrops = 0
42.          InUnknownProtos = 0
43.          txCRC = 0
44.          rxCRC = 0
45.          Symbol = 0
46.          txDropped = 0
47.          TrunkFramesTx = 0
48.          TrunkFramesRx = 0
49.          WrongEncap = 0
50.          Babbles = 0
51.          Watchdogs = 0
52.          ECC = 0
53.          Overruns = 0
54.          Underruns = 0
55.          Dribbles = 0
56.          Deferred = 0
57.          Jabbers = 0
58.          NoBuffer = 0
59.          Ignored = 0
60.          bpduOutLost = 0
61.          cos0OutLost = 0
62.          cos1OutLost = 0
63.          cos2OutLost = 0
64.          cos3OutLost = 0
65.          cos4OutLost = 0
66.          cos5OutLost = 0
67.          cos6OutLost = 0
68.          cos7OutLost = 0
69.          RxPause = 0
70.          TxPause = 0
71.          Resets = 0
72.          SQETest = 0
73.          InLayer3Routed = 0
74.          InLayer3RoutedOctets = 0
75.          OutLayer3Routed = 0
76.          OutLayer3RoutedOctets = 0
77.          OutLayer3Unicast = 0
78.          OutLayer3UnicastOctets = 0
79.          OutLayer3Multicast = 0
80.          OutLayer3MulticastOctets = 0
81.          InLayer3Unicast = 0
82.          InLayer3UnicastOctets = 0
83.          InLayer3Multicast = 0
84.          InLayer3MulticastOctets = 0
```

show interface port-channel counters

```

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 | Clears the statistics for all interfaces that belong to a specific channel group. |
| interface port-channel | |

show interface status

To display the interface line status, use the **show interface status** command.

show interface status [**down** | **err-disabled** | **inactive** | **module** *module-number* | **up**]

| Syntax | Description |
|----------------------|---------------------------------------------------------------------|
| down | (Optional) Specifies interfaces that are in the down state. |
| err-disabled | (Optional) Specifies interfaces that are in the errdisabled state. |
| inactive | (Optional) Specifies interfaces that are in the inactive state. |
| module | (Optional) Limits the display to interfaces on a particular module. |
| <i>module-number</i> | Number that identifies an existing module. The range is 1–66. |
| up | (Optional) Specifies interfaces that are in the up state. |

Defaults None

Command Modes Any

Supported User Roles network-admin

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display line status for interfaces in the up state:

```
n1000v# show interface status up
```

```
-----
Port          Name           Status  Vlan    Duplex  Speed  Type
-----
mgmt0         --             up      routed  full    1000   --
ctrl0         --             up      routed  full    1000   --
n1000v#
```

| Related Commands | Command | Description |
|------------------|-----------------------------|----------------------------------------------------------|
| | show interface brief | Displays a short version of the interface configuration. |
| | show interface | Displays interface status and information. |

| Command | Description |
|------------------------------------|----------------------------------------------------|
| show interface capabilities | Displays information about interface capabilities. |
| interface | Adds, removes, or configures interfaces. |

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 <i>slot number</i> | (Optional) Specify the slot number for the display of an ethernet switchport interface. | |
| port- channel <i>channel-number</i> | (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
```

show interface switchport

```

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

Defaults None

Command Modes Any

Supported User Roles 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
-----
```

■ show interface 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 interface vethernet

To display statistical information about vEthernet interfaces, use the **show interface vethernet** command.

```
show interface vethernet interface-number [brief | description | mac-address | switchport | trunk]
```

| Syntax Description | |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <i>interface-number</i> | (Optional) Number of the interface that you want to display. The range is from 1 to 1048575. |
| brief | (Optional) Specifies to display only a brief summary of information for the specified interface. |
| description | (Optional) Specifies to display the description of the specified interface. |
| mac-address | (Optional) Specifies to display MAC address information for the specified interface. |
| switchport | (Optional) Specifies to display switchport information for the specified interface, including access and trunk modes. |
| trunk | (Optional) Specifies to display trunk mode information for the specified interface. |

Defaults None

Command Modes Any

Supported User Roles network-admin

| Command History | Release | Modification |
|-----------------|--------------|------------------------------------------------------------------------------------------------------|
| | 4.0(4)SV1(2) | This command was introduced. |
| | 4.0(4)SV1(2) | Displays 5-minute input and output packet/bit rate statistics for the specified vEthernet interface. |

Examples This example shows how to display statistical information for vEthernet interface 1:

```
n1000v# show interface vethernet 1
Vethernet1 is up
  Port description is gentoo, Network Adapter 1
  Hardware is Virtual, address is 0050.5687.3bac
  Owner is VM "gentoo", adapter is Network Adapter 1
  Active on module 4
  VMware DVS port 1
  Port-Profile is vm
  Port mode is access
  5 minute input rate 1 bytes/second, 0 packets/second
  5 minute output rate 94 bytes/second, 1 packets/second
```

■ show interface vethernet

```
Rx
655 Input Packets 594 Unicast Packets
0 Multicast Packets 61 Broadcast Packets
114988 Bytes
Tx
98875 Output Packets 1759 Unicast Packets
80410 Multicast Packets 16706 Broadcast Packets 0 Flood Packets
6368452 Bytes
0 Input Packet Drops 0 Output Packet Drops
```

Related Commands

| Command | Description |
|------------------------|----------------------------------|
| clear interface | Clears the interface statistics. |

show interface vethernet counters

To display the counters for a vEthernet interface, use the **show interface vethernet counters** command.

show interface vethernet *interface-number* **counters** [**brief** | **detailed** | **errors** | **trunk**]

| Syntax Description | |
|-------------------------|----------------------------------------------------------------------------------------------------------|
| <i>interface-number</i> | Number of the interface that you want to display. The range is from 1 to 1048575. |
| brief | (Optional) Specifies to display only a brief summary of counter information for the specified interface. |
| detailed | (Optional) Specifies to display the nonzero counters for the specified interface. |
| errors | (Optional) Specifies to display the interface error counters for the specified interface. |
| trunk | (Optional) Specifies to display the trunk counters for the specified interface. |

Defaults None

Command Modes Any

Supported User Roles network-admin

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display counters for vEthernet interface 1:

```
n1000v# show interface vethernet 1 counters
```

```
-----
Port                InOctets      InUcastPkts   InMcastPkts   InBcastPkts
-----
Veth1                2434320       5024           12              32363
-----
Port                OutOctets      OutUcastPkts   OutMcastPkts   OutBcastPkts
-----
Veth1                4357946       4910           127             64494
-----
```

| Related Commands | Command | Description |
|------------------|------------------------|----------------------------------|
| | clear interface | Clears the interface statistics. |

show interface vethernet status

To display the status for a vEthernet interface, use the **show interface vethernet status** command.

show interface vethernet *interface-number* **status** [**err-disabled**]

| Syntax Description | |
|-------------------------|-------------------------------------------------------------------------------------|
| <i>interface-number</i> | Number of the interface that you want to display. The range is from 1 to 1048575. |
| err-disabled | (Optional) Specifies to display the err-disabled state for the specified interface. |

Defaults None

Command Modes Any

Supported User Roles network-admin

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display the err-disabled status for vEthernet interface 1:

```
n1000v# show interface vethernet 1 status err-disabled
```

```
-----
Port      Name                Status  Reason
-----
Veth1     VM1-48, Network Ad up  none
n1000v#
```

| Related Commands | Command | Description |
|------------------|------------------------|----------------------------------|
| | clear interface | Clears the interface statistics. |

show interface virtual

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

```
show interface virtual [vm vm_name] | vmk | vswif] [module module_number]
```

| Syntax Description | |
|----------------------|-----------------------------------------------------------------------|
| vm | (Optional) Specifies interfaces owned by a virtual machine. |
| <i>vm_name</i> | (Optional) Name that identifies an existing virtual machine. |
| vmk | (Optional) Specifies interfaces owned by the Virtual Machine Kernel. |
| vswif | (Optional) Specifies interfaces owned by the Virtual Service Console. |
| module | (Optional) Specifies interfaces on a particular module. |
| <i>module_number</i> | Number that identifies an existing module. |

Defaults None

Command Modes Any

SupportedUserRoles network-admin

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display information for virtual interfaces:

```
n1000v# show interface virtual
-----
Port          Adapter          Owner          Mod Host
-----
Veth1          VM1-k161          2
Veth2          VM1-k165          5
Veth3          VM2-k161          2
Veth1          Net Adapter 1    austen-gentool 33 austen-strider.austen.
Veth2          Net Adapter 2    austen-gentool 33 austen-strider.austen.
n1000v#
```

| Related Commands | Command | Description |
|------------------|--------------------------------------------|-----------------------------------------------------------------|
| | show interface virtual port-mapping | Displays the virtual port mapping for all vEthernet interfaces. |
| | show interface ethernet | Displays information about Ethernet interfaces. |

| Command | Description |
|------------------------------------|--------------------------------------------------------------|
| show interface port-channel | Displays descriptive information about port channels. |
| show interface trunk | Displays information about all the trunk interfaces. |
| show interface vethernet | Displays statistical information about vEthernet interfaces. |

show interface virtual port-mapping

To display the virtual port mapping for all vEthernet interfaces, use the **show interface virtual port-mapping** command.

```
show interface virtual port-mapping [vm [vm_name] | vmk | vswif] [module module_number]
```

| Syntax Description | Parameter | Description |
|--------------------|----------------------|-----------------------------------------------------------------------|
| | vm | (Optional) Specifies interfaces owned by a virtual machine. |
| | <i>vm_name</i> | (Optional) Name that identifies an existing virtual machine. |
| | vmk | (Optional) Specifies interfaces owned by the Virtual Machine Kernel. |
| | vswif | (Optional) Specifies interfaces owned by the Virtual Service Console. |
| | module | (Optional) Specifies interfaces on a particular module. |
| | <i>module_number</i> | Number that identifies an existing module. |

Defaults None

Command Modes Any

Supported User Roles network-admin

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display the virtual port mapping for all vEthernet interfaces:

```
n1000v# show interface virtual port-mapping
```

```
-----
Port          Hypervisor Port   Status   Reason
-----
Veth1         DVPort100         up       none
Veth2         DVPort160         up       none
n1000v#
```

| Related Commands | Command | Description |
|------------------|------------------------------------|-------------------------------------------------------|
| | show interface virtual | Displays information about virtual interfaces. |
| | show interface ethernet | Displays information about Ethernet interfaces. |
| | show interface port-channel | Displays descriptive information about port channels. |

| Command | Description |
|---------------------------------|--------------------------------------------------------------|
| show interface trunk | Displays information about all the trunk interfaces. |
| show interface vethernet | Displays statistical information about vEthernet interfaces. |

show ip access-list

To display all IPv4 access control lists (ACLs) or a specific IPv4 AC, use the **show ip access-list** command.

```
show ip access-list [name]
```

| Syntax Description | <i>name</i> (Optional) Name of an existing IPv4 access control list. | | | | | | | | |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------------|-----------------------|----------------------------------------------------------|-----------------------------|----------------------------------------------------------------------------------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Defaults | None | | | | | | | | |
| Command Modes | Any | | | | | | | | |
| Supported User Roles | network-admin network-operator | | | | | | | | |
| Command History | <table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>4.0(4)SV1(1)</td> <td>This command was introduced.</td> </tr> </tbody> </table> | Release | Modification | 4.0(4)SV1(1) | This command was introduced. | | | | |
| Release | Modification | | | | | | | | |
| 4.0(4)SV1(1) | This command was introduced. | | | | | | | | |
| Examples | <p>This example shows how to display the IPv4 access control list called protoacl:</p> <pre>n1000v(config)# show ip access-lists protoacl IP access list protoacl statistics per-entry 10 permit icmp 7.120.1.10/32 7.120.1.20/32 20 permit tcp 7.120.1.10/32 7.120.1.20/32 dscp af11 30 permit udp 7.120.1.10/32 7.120.1.20/32 precedence critical 50 permit ip 7.120.1.20/32 7.120.1.10/32 60 permit ip 7.120.1.20/32 7.120.1.10/32 dscp af11 70 permit ip 7.120.1.20/32 7.120.1.10/32 precedence critical n1000v#</pre> | | | | | | | | |
| Related Commands | <table border="1"> <thead> <tr> <th>Command</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>ip access-list</td> <td>Creates the IP ACL and enters IP ACL configuration mode.</td> </tr> <tr> <td>statistics per-entry</td> <td>Specifies that the device maintains global statistics for packets that match the rules in the ACL.</td> </tr> <tr> <td>show ip access-list summary</td> <td>Displays the IP ACL configuration. If the ACL remains applied to an interface, the command lists the interfaces.</td> </tr> </tbody> </table> | Command | Description | ip access-list | Creates the IP ACL and enters IP ACL configuration mode. | statistics per-entry | Specifies that the device maintains global statistics for packets that match the rules in the ACL. | show ip access-list summary | Displays the IP ACL configuration. If the ACL remains applied to an interface, the command lists the interfaces. |
| Command | Description | | | | | | | | |
| ip access-list | Creates the IP ACL and enters IP ACL configuration mode. | | | | | | | | |
| statistics per-entry | Specifies that the device maintains global statistics for packets that match the rules in the ACL. | | | | | | | | |
| show ip access-list summary | Displays the IP ACL configuration. If the ACL remains applied to an interface, the command lists the interfaces. | | | | | | | | |

show logging ip access-list cache module

To display the ACL logging configuration for a VEM module, use the **show logging ip access-list cache module** command.

show logging ip access-list cache module *vem*

| Syntax | Description |
|------------|-------------------------------|
| <i>vem</i> | The module number of the VEM. |

Defaults None

Command Modes Any command mode

Supported User Roles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV1(5.1) | This command was introduced. |

Usage Guidelines

Examples This example shows how to display the ACL logging configuration for VEM:

```
n1000v(config)# show logging ip access-list cache module 3
Number of deny flows:      25
Number of permit flows:   30
Total Number of active flows: 55
```

| Related Commands | Command | Description |
|------------------|-------------------------------------|----------------------------------|
| | logging ip access-list cache | Enables ACL logging on all VEMs. |

show logging ip access-list status

To display the status of the ACL logging configuration for a VSM , use the **show logging ip access-list status** command.

show logging ip access-list status

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any command mode

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV1(5.1) | This command was introduced. |

Usage Guidelines

Examples This example shows how to display the status of ACL logging configuration for a VSM:

```
switch(config)# show logging ip access-list status

Max deny flows      = 3000
Max permit flows   = 3000
Alert interval     = 300
Match log level    = 6
VSM IP = 192.168.1.1
Syslog IP = 10.1.1.1
Syslog IP = 0.0.0.0
Syslog IP = 0.0.0.0
ACL Logging enabled on module(s) :
  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19
 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35
 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51
 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66
ACL Logging disabled on module(s) :
3
```

■ show logging ip access-list status

Related Commands

| Command | Description |
|------------------------------|----------------------------------|
| logging ip access-list cache | Enables ACL logging on all VEMs. |

show ip access-list summary

To display the IP ACL configuration, use the **show ip access-list** command.

show ip access-list [*name*] **summary**

| Syntax Description | <i>name</i> (Optional) Name of an existing IPv4 access control list. | | | | | | | | |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------------|-----------------------|----------------------------------------------------------|-----------------------------|----------------------------------------------------------------------------------------------------|----------------------------|-----------------------------------------------------------------------|
| Defaults | None | | | | | | | | |
| Command Modes | Any | | | | | | | | |
| Supported User Roles | network-admin network-operator | | | | | | | | |
| Command History | <table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>4.0(4)SV1(1)</td> <td>This command was introduced.</td> </tr> </tbody> </table> | Release | Modification | 4.0(4)SV1(1) | This command was introduced. | | | | |
| Release | Modification | | | | | | | | |
| 4.0(4)SV1(1) | This command was introduced. | | | | | | | | |
| Usage Guidelines | If the ACL remains applied to an interface, this command lists the interfaces. | | | | | | | | |
| Examples | <p>This example shows how to display the IPv4 access control list called ACL1:</p> <pre>n1000v# show ip access-lists summary IPV4 ACL1 Total ACEs Configured: 1 Configured on interfaces: Vethernet1 - ingress (Port ACL) Active on interfaces: Vethernet1 - ingress (Port ACL) n1000v#</pre> | | | | | | | | |
| Related Commands | <table border="1"> <thead> <tr> <th>Command</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>ip access-list</td> <td>Creates the IP ACL and enters IP ACL configuration mode.</td> </tr> <tr> <td>statistics per-entry</td> <td>Specifies that the device maintains global statistics for packets that match the rules in the ACL.</td> </tr> <tr> <td>show ip access-list</td> <td>Displays all IPv4 access control lists (ACLs) or a specific IPv4 ACL.</td> </tr> </tbody> </table> | Command | Description | ip access-list | Creates the IP ACL and enters IP ACL configuration mode. | statistics per-entry | Specifies that the device maintains global statistics for packets that match the rules in the ACL. | show ip access-list | Displays all IPv4 access control lists (ACLs) or a specific IPv4 ACL. |
| Command | Description | | | | | | | | |
| ip access-list | Creates the IP ACL and enters IP ACL configuration mode. | | | | | | | | |
| statistics per-entry | Specifies that the device maintains global statistics for packets that match the rules in the ACL. | | | | | | | | |
| show ip access-list | Displays all IPv4 access control lists (ACLs) or a specific IPv4 ACL. | | | | | | | | |

show ip arp client

To display the ARP client table, use the **show ip arp client** command.

show ip arp client

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. |

Examples This example shows how to display the ARP client table:

```
n1000v# show ip arp client
Number of ARP Clients: 1

Protocol uuid: 442,      Client type: L2
  Flags: 8,      Recv fn: dhcp_snoop_verify_mac2ip_binding
n1000v#
```

| Related Commands. | Command | Description |
|-------------------|------------------------------------------|----------------------------------------------------------------------------------|
| | ip arp inspection vlan | Configures the specified VLAN or list of VLANs for Dynamic ARP Inspection (DAI). |
| | show ip arp inspection vlan | Displays the DAI status for the specified list of VLANs. |
| | show ip arp inspection statistics | Displays the DAI statistics. |
| | show ip arp inspection interface | Displays the trust state and the ARP packet rate for a specified interface. |
| | show ip arp statistics | Displays ARP statistics. |

show ip arp inspection

To verify the dynamic ARP inspection configuration, use the **show ip arp inspection** command.

show ip arp inspection

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(2) | This command was introduced. |

Examples This example shows how to display the dynamic ARP inspection configuration:

```
n1000v# show ip arp inspection
Source Mac Validation : Disabled
Destination Mac Validation : Disabled
IP Address Validation : Disabled
Filter Mode(for static bindings): IP
Vlan : 1
-----
Configuration : Disabled
Operation State : Inactive

1000v#
```

| Related Commands | Command | Description |
|------------------|------------------------------------------|---------------------------------------------------------------------|
| | ip arp inspection vlan | Enables Dynamic ARP Inspection (DAI) for a specified list of VLANs. |
| | show ip arp inspection statistics | Displays the DAI statistics. |

show ip arp inspection interface

To display the trust state for the specified interface, use the **show ip arp inspection interface** command.

```
show ip arp inspection interface vethernet interface-number
```

| | |
|---------------------------|----------------------------------------------------------------------------------------|
| Syntax Description | vethernet <i>number</i> Specifies that the output is for a vEthernet interface. |
|---------------------------|----------------------------------------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|---------------------------|-----------------------------------|
| SupportedUserRoles | network-admin network-operator |
|---------------------------|-----------------------------------|

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 4.0(4)SV1(2) | This command was introduced. |

| | |
|-----------------|----------------------------------------------------------------------------|
| Examples | This example shows how to display the trust state for a trusted interface: |
|-----------------|----------------------------------------------------------------------------|

```
n1000v# show ip arp inspection interface vethernet 6

Interface           Trust State
-----
vEthernet 6         Trusted
n1000v#
```

| Related Commands | Command | Description |
|------------------------------------------|-------------------------------|---------------------------------------------------------------------|
| | ip arp inspection vlan | Enables Dynamic ARP Inspection (DAI) for a specified list of VLANs. |
| show ip arp inspection statistics | Displays the DAI statistics. | |

show ip arp inspection statistics

Use the **show ip arp inspection statistics** command to display the Dynamic ARP Inspection (DAI) statistics. You can specify a VLAN or range of VLANs.

```
show ip arp inspection statistics [vlan vlan-list]
```

| | |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Syntax Description | vlan <i>vlan-list</i> (Optional) Specifies the list of VLANs for which to display DAI statistics. Valid VLAN IDs are from 1 to 4096. |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|-----------------------------|-----------------------------------|
| Supported User Roles | network-admin network-operator |
|-----------------------------|-----------------------------------|

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 4.0(4)SV1(2) | This command was introduced. |

Examples This example shows how to display the DAI statistics for VLAN 1:

```
n1000v# show ip arp inspection statistics vlan 1

Vlan : 1
-----
ARP Req Forwarded = 0
ARP Res Forwarded = 0
ARP Req Dropped   = 0
ARP Res Dropped   = 0
DHCP Drops        = 0
DHCP Permits      = 0
SMAC Fails-ARP Req = 0
SMAC Fails-ARP Res = 0
DMAC Fails-ARP Res = 0
IP Fails-ARP Req   = 0
IP Fails-ARP Res   = 0
n1000v#
```

| Related Commands | Command | Description |
|-------------------------|------------------------------------------------|-----------------------------------------------------------------------------|
| | clear ip arp inspection statistics vlan | Clears the DAI statistics for a specified VLAN. |
| | show ip arp inspection interface | Displays the trust state and the ARP packet rate for a specified interface. |

show ip arp inspection vlan

To display the Dynamic ARP Inspection (DAI) status for the specified list of VLANs, use the **show ip arp inspection vlan** command.

show ip arp inspection vlan *list*

| | | |
|---------------------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Syntax Description | <i>list</i> | Number identifying an existing VLAN, or range of VLANs, from 1–3967 and 4048–4093. You can specify groups of VLANs or individual VLANs; for example, 1–5, 10 or 2–5, 7–19. |
|---------------------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|-----------------------------|-----------------------------------|
| Supported User Roles | network-admin network-operator |
|-----------------------------|-----------------------------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display the DAI status for VLAN 13:

```
n1000v# show ip arp inspection vlan 13

Source Mac Validation : Disabled
Destination Mac Validation : Disabled
IP Address Validation : Disabled
Filter Mode(for static bindings): IP
Vlan : 100
-----
Configuration : Disabled
Operation State : Inactive
```

| | | |
|-------------------------|------------------------------------------|---------------------------------------------------------|
| Related Commands | Command | Description |
| | ip arp inspection vlan | Configures the specified VLAN or list of VLANs for DAI. |
| | show ip arp client | Displays the ARP client table. |
| | show ip arp inspection statistics | Displays the DAI statistics. |

| Command | Description |
|-----------------------------------------|-----------------------------------------------------------------------------|
| show ip arp inspection interface | Displays the trust state and the ARP packet rate for a specified interface. |
| show ip arp statistics | Displays ARP statistics. |

show ip arp statistics

To display the ARP statistics, use the **show ip arp statistics** command.

```
show ip arp statistics [interface-all] [vrf {name | all | default | management}]
```

| Syntax Description | |
|----------------------|-----------------------------------------------------------------------------------------|
| interface-all | (Optional) Specifies ARP statistics for all interfaces. |
| vrf | (Optional) Specifies information about a specific Virtual Routing and Forwarding (VRF). |
| <i>name</i> | Name of an existing VRF. |
| all | Displays ARP statistics for all VRFs. |
| default | Specifies the default VRF currently in the system configuration. |
| management | Specifies the existing VRF currently used for management connections. |

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display ARP statistics for all VRFs:

```
n1000v# show ip arp statistics vrf all

ARP packet statistics for all contexts
Sent:
Total 101994, Requests 3920, Replies 98074, Requests on L2 0, Replies on L2 0,
Gratuitous 2, Dropped 0
Received:
Total 8070240, Requests 98074, Replies 4034, Requests on L2 0, Replies on L2 0
Proxy arp 0, Local-Proxy arp 0, Dropped 7968132
Received packet drops details:
  Appeared on a wrong interface      : 0
  Incorrect length                   : 0
  Invalid protocol packet             : 228
  Invalid context                     : 0
  Context not yet created             : 0
  Invalid layer 2 address length      : 0
  Invalid layer 3 address length      : 0
  Invalid source IP address          : 221153
  Source IP address is our own       : 0
```

```

No mem to create per intf structure : 0
Source address mismatch with subnet : 0
Directed broadcast source          : 0
Invalid destination IP address      : 0
Non-local destination IP address    : 7746751
Invalid source MAC address          : 0
Source MAC address is our own       : 0
Received before arp initialization  : 0
Received packet on unknown iod     : 0
L2 packet on proxy-arp-enabled interface : 0
L2 packet on untrusted L2 port      : 0

```

ARP adjacency statistics

Adds 13, Deletes 11, Timeouts 11

Related Commands

| Command | Description |
|------------------------------------------|----------------------------------------------------------------------------------|
| ip arp inspection vlan | Configures the specified VLAN or list of VLANs for Dynamic ARP Inspection (DAI). |
| show ip arp client | Displays the ARP client table. |
| show ip arp inspection statistics | Displays the DAI statistics. |
| show ip arp inspection interface | Displays the trust state and the ARP packet rate for a specified interface. |
| show ip arp inspection vlan | Displays the DAI status for the specified list of VLANs. |

show ip dhcp snooping

To display general status information for DHCP snooping, use the **show ip dhcp snooping** command.

show ip dhcp snooping

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(2) | This command was introduced. |

Examples This example shows how to display general status information about DHCP snooping:

```
n1000v# show ip dhcp snooping
DHCP snooping service is enabled
Switch DHCP snooping is enabled
DHCP snooping is configured on the following VLANs:
1,13
DHCP snooping is operational on the following VLANs:
1
Insertion of Option 82 is disabled
Verification of MAC address is enabled
DHCP snooping trust is configured on the following interfaces:
Interface           Trusted
-----
vEthernet 3        Yes

n1000v#
```

| Related Commands | Command | Description |
|------------------|--------------------------------------|---------------------------------------------------------------------------|
| | ip dhcp snooping | Globally enables DHCP snooping on the device. |
| | show ip dhcp snooping binding | Displays IP-MAC address bindings, including the static IP source entries. |

| Command | Description |
|-----------------------------------------|---------------------------------------|
| show ip dhcp snooping statistics | Displays DHCP snooping statistics. |
| show running-config dhcp | Displays DHCP snooping configuration. |

show ip dhcp snooping binding

To display IP-to-MAC address bindings for all interfaces or a specific interface, use the **show ip dhcp snooping binding** command.

```
show ip dhcp snooping binding [IP-address] [MAC-address] [interface vethernet
interface-number] [vlan vlan-id]
```

```
show ip dhcp snooping binding [dynamic]
```

```
show ip dhcp snooping binding [static]
```

| Syntax Description | | |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--|
| <i>IP-address</i> | (Optional) IPv4 address that the bindings shown must include. Valid entries are in dotted-decimal format. | |
| <i>MAC-address</i> | (Optional) MAC address that the bindings shown must include. Valid entries are in dotted-hexadecimal format. | |
| interface vethernet <i>interface-number</i> | (Optional) Specifies the vEthernet interface that the bindings shown must be associated with. | |
| vlan <i>vlan-id</i> | (Optional) Specifies a VLAN ID that the bindings shown must be associated with. Valid VLAN IDs are from 1 to 4096. | |
| dynamic | (Optional) Limits the output to all dynamic IP-MAC address bindings. | |
| static | (Optional) Limits the output to all static IP-MAC address bindings. | |

| Defaults | |
|----------|------|
| | None |

| Command Modes | |
|---------------|-----|
| | Any |

| Supported User Roles | |
|----------------------|-----------------------------------|
| | network-admin network-operator |

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(2) | This command was introduced. |

| Usage Guidelines | |
|------------------|------------------------------------------------------------------------------------------------------------------------|
| | The command output includes static IP source entries. Static entries appear with the term “static” in the Type column. |

Examples

This example shows how to show all bindings:

```
n1000v# show ip dhcp snooping binding
MacAddress      IPAddress      LeaseSec  Type      VLAN  Interface
-----
0f:00:60:b3:23:33  10.3.2.2      infinite  static    13    vEthernet 6
0f:00:60:b3:23:35  10.2.2.2      infinite  static    100   vEthernet 10
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. |

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

Supported User Roles 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

To ensure that IGMP snooping is enabled on the VLAN, use the **show ip igmp snooping** command.

show ip igmp snooping

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. |

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

```
n1000v# show ip igmp snooping
Global IGMP Snooping Information:
  IGMP Snooping enabled
  IGMPv1/v2 Report Suppression enabled
  IGMPv3 Report Suppression disabled

IGMP Snooping information for vlan 1
  IGMP snooping enabled
  IGMP querier none
  Switch-querier disabled
  IGMPv3 Explicit tracking enabled
  IGMPv2 Fast leave disabled
  IGMPv1/v2 Report suppression enabled
  IGMPv3 Report suppression disabled
  Router port detection using PIM Hellos, IGMP Queries
  Number of router-ports: 0
  Number of groups: 0
IGMP Snooping information for vlan 2
  IGMP snooping enabled
  IGMP querier none
  Switch-querier disabled
  IGMPv3 Explicit tracking enabled
  IGMPv2 Fast leave disabled
  IGMPv1/v2 Report suppression enabled
  IGMPv3 Report suppression disabled
  Router port detection using PIM Hellos, IGMP Queries
  Number of router-ports: 0
  Number of groups: 0
IGMP Snooping information for vlan 100
  IGMP snooping enabled
```

```
IGMP querier none
Switch-querier disabled
IGMPv3 Explicit tracking enabled
IGMPv2 Fast leave disabled
IGMPv1/v2 Report suppression enabled
IGMPv3 Report suppression disabled
Router port detection using PIM Hellos, IGMP Queries
Number of router-ports: 0
Number of groups: 0
IGMP Snooping information for vlan 101
IGMP snooping enabled
IGMP querier none
Switch-querier disabled
IGMPv3 Explicit tracking enabled
IGMPv2 Fast leave disabled
IGMPv2 Fast leave disabled
IGMPv1/v2 Report suppression enabled
IGMPv3 Report suppression disabled
Router port detection using PIM Hellos, IGMP Queries
Number of router-ports: 0
Number of groups: 0
IGMP Snooping information for vlan 102
IGMP snooping enabled
IGMP querier none
Switch-querier disabled
IGMPv3 Explicit tracking enabled
IGMPv2 Fast leave disabled
IGMPv1/v2 Report suppression enabled
IGMPv3 Report suppression disabled
Router port detection using PIM Hellos, IGMP Queries
Number of router-ports: 0
Number of groups: 0
IGMP Snooping information for vlan 103
IGMP snooping enabled
IGMP querier none
Switch-querier disabled
IGMPv3 Explicit tracking enabled
IGMPv2 Fast leave disabled
IGMPv2 Fast leave disabled
IGMPv1/v2 Report suppression enabled
IGMPv3 Report suppression disabled
Router port detection using PIM Hellos, IGMP Queries
Number of router-ports: 0
Number of groups: 0
IGMP Snooping information for vlan 104
IGMP snooping enabled
IGMP querier none
Switch-querier disabled
IGMPv3 Explicit tracking enabled
IGMPv2 Fast leave disabled
IGMPv1/v2 Report suppression enabled
IGMPv3 Report suppression disabled
Router port detection using PIM Hellos, IGMP Queries
Number of router-ports: 0
Number of groups: 0
IGMP Snooping information for vlan 105
IGMP snooping enabled
IGMP querier none
Switch-querier disabled
IGMPv3 Explicit tracking enabled
IGMPv2 Fast leave disabled
IGMPv2 Fast leave disabled
IGMPv1/v2 Report suppression enabled
IGMPv3 Report suppression disabled
```

show ip igmp snooping

```

Router port detection using PIM Hellos, IGMP Queries
Number of router-ports: 0
Number of groups: 0
IGMP Snooping information for vlan 106
IGMP snooping enabled
IGMP querier none
Switch-querier disabled
IGMPv3 Explicit tracking enabled
IGMPv2 Fast leave disabled
IGMPv1/v2 Report suppression enabled
IGMPv3 Report suppression disabled
Router port detection using PIM Hellos, IGMP Queries
Number of router-ports: 0
Number of groups: 0
IGMP Snooping information for vlan 107
IGMP snooping enabled
IGMP querier none
Switch-querier disabled
IGMPv3 Explicit tracking enabled
IGMPv2 Fast leave disabled
IGMPv2 Fast leave disabled
IGMPv1/v2 Report suppression enabled
IGMPv3 Report suppression disabled
Router port detection using PIM Hellos, IGMP Queries
Number of router-ports: 0
Number of groups: 0
IGMP Snooping information for vlan 108
IGMP snooping enabled
IGMP querier none
Switch-querier disabled
IGMPv3 Explicit tracking enabled
IGMPv2 Fast leave disabled
IGMPv1/v2 Report suppression enabled
IGMPv3 Report suppression disabled
Router port detection using PIM Hellos, IGMP Queries
Number of router-ports: 0
Number of groups: 0
IGMP Snooping information for vlan 109
IGMP snooping enabled
IGMP querier none
Switch-querier disabled
IGMPv3 Explicit tracking enabled
IGMPv2 Fast leave disabled
IGMPv2 Fast leave disabled
IGMPv1/v2 Report suppression enabled
IGMPv3 Report suppression disabled
Router port detection using PIM Hellos, IGMP Queries
Number of router-ports: 0
Number of groups: 0
IGMP Snooping information for vlan 115
IGMP snooping enabled
IGMP querier none
Switch-querier disabled
IGMPv3 Explicit tracking enabled
IGMPv2 Fast leave disabled
IGMPv1/v2 Report suppression enabled
IGMPv3 Report suppression disabled
Router port detection using PIM Hellos, IGMP Queries
Number of router-ports: 0
Number of groups: 0
IGMP Snooping information for vlan 260
IGMP snooping enabled
IGMP querier none
Switch-querier disabled

```



```

IGMPv3 Explicit tracking enabled
IGMPv2 Fast leave disabled
IGMPv1/v2 Report suppression enabled
IGMPv3 Report suppression disabled
Router port detection using PIM Hellos, IGMP Queries
Number of router-ports: 0
Number of groups: 0
IGMP Snooping information for vlan 261
IGMP snooping enabled
IGMP querier none
Switch-querier disabled
IGMPv3 Explicit tracking enabled
IGMPv2 Fast leave disabled
IGMPv1/v2 Report suppression enabled
IGMPv3 Report suppression disabled
Router port detection using PIM Hellos, IGMP Queries
Number of router-ports: 0
Number of groups: 0

n1000v#

```

Related Commands

| Command | Description |
|-------------------------------------|------------------------------------------------------------------------------------------------------|
| show cores | Displays a list of cores. |
| 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 groups | Verifies if the Cisco Nexus 1000V is configured correctly and is ready to forward multicast traffic. |

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 |
|----------------|----------------------|
| <i>vlan-id</i> | Specifies a VLAN ID. |

| Defaults | None |
|----------|------|
|----------|------|

| Command Modes | Any |
|---------------|-----|
|---------------|-----|

| Supported User Roles | 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 <i>vlan-id</i> Specifies a VLAN and its ID. |
| Defaults | None | |
| Command Modes | Any | |
| Supported User Roles | 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 <i>vlan-id</i> Specifies a VLAN and its ID. |
| Defaults | None | |
| Command Modes | Any | |
| Supported User Roles | 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 ip verify source

To display the IP-to-MAC address bindings, use the **show ip verify source** command.

```
show ip verify source [ interface { vethernet interface-number } ]
```

| Syntax Description | interface | (Optional) Specifies that the output is limited to IP-to-MAC address bindings for an interface. |
|--------------------|---------------------------------------------|-------------------------------------------------------------------------------------------------|
| | vethernet <i>interface-number</i> | Specifies the vEthernet interface. Range is from 1 to 1048575. |

| Defaults | None |
|----------|------|
|----------|------|

| Command Modes | Any |
|---------------|-----|
|---------------|-----|

| Supported User Roles | network-admin network-operator |
|----------------------|-----------------------------------|
|----------------------|-----------------------------------|

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(2) | This command was introduced. |

Examples This example shows how to display the IP-to-MAC address bindings:

```
n1000v# show ip verify source
Filter Mode(for static bindings): IP
IP source guard is enabled on the following interfaces:
-----
IP source guard operational entries:
-----
Interface Filter-mode IP-address Mac-address Vlan
-----
(config)#
switch(config)# show ip verify source interface vethernet 1
Filter Mode(for static bindings): IP-MAC
IP source guard is disabled on this interface.
```

| Related Commands | Command | Description |
|------------------|---------------------------|------------------------------------------------------------------------|
| | ip source binding | Creates a static IP source entry for the specified Ethernet interface. |
| | ip verify source | Enables IP Source Guard on an interface. |
| | dhcp-snooping-vlan | |

show ip source binding filter-mode

To display the source binding filter mode, use the **show ip source binding filter-mode** command.

show ip source binding filter-mode

| | | |
|---------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Syntax Description | <i>filter-mode</i> | Filter mode to be used on the switch. The available filter modes are <i>ip</i> and <i>ip-mac</i> . Use the <i>ip</i> filter mode to filter the traffic based on the source IP address. Use the <i>ip-mac</i> filter mode to filter the traffic based on the IP-MAC Address pair. |
|---------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|---------------------------|-----------------------------------|
| SupportedUserRoles | network-admin network-operator |
|---------------------------|-----------------------------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 4.0(4)SV2(1.1) | This command was introduced. |

Examples This example shows how to display the IP-to-MAC address bindings:

```
n1000v# show ip source binding filter-mode
DHCP Snoop Filter Mode(for static bindings) = IP-MAC
cinquedia(config)#
```

| | | |
|-------------------------|--------------------------------------------------------------------|------------------------------------------------------------------------|
| Related Commands | Command | Description |
| | ip source binding filter-mode [<i>ip</i> <i>ip-mac</i>] | Creates a static IP source entry for the specified Ethernet interface. |
| | ip verify source dhcp-snooping-vlan | Enables IP Source Guard on an interface. |

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 | <i>channel-number</i> (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 <i>channel-number</i> , 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
```

| LACPDU Port | Marker Sent | Marker Recv | Response Sent | Response Recv | LACPDU Sent | LACPDU 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 | <i>slot/port</i> | 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
```

```
PDU sent: 556
```

```
PDU 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, 8000, 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 | <i>channel-number</i> 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 |
|----------------------|-----|

| | |
|-----------------------------|---------------|
| Supported User Roles | network-admin |
|-----------------------------|---------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 4.0(4)SV1(1) | This command was introduced. |

| | |
|-------------------------|-------------------------------------------------------------------------------------|
| Usage Guidelines | If you do not specify the <i>channel-number</i> , 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-channell1 neighbors
Partner's information
Port      Partner          Partner          Partner
System ID 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
Port      Partner          Partner          Partner
System ID 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 offload status

To display the LACP offload status for verification, use the **show lacp offload status** command.

show lacp offload status

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.2(1)SV1(4) | This command was introduced. |

Usage Guidelines

Examples This example shows how to display the LACP offload status for verification:

```
n1000v(config)# show lacp offload status
  Current Status      : Enabled
  Running Config Status : Enabled
  Saved Config Status  : Enabled
n1000v(config)#
```

| Related Commands | Command | Description |
|------------------|---------------------|-------------------------------------------------------|
| | lacp offload | Offloads management of LACP from the VSM to the VEMs. |

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 | |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------|
| interface port-channel | (Optional) Specifies an existing LACP port channel. |
| <i>channel-number</i> | 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 |
|---------------|-----|
|---------------|-----|

| Supported User Roles | network-admin |
|----------------------|---------------|
|----------------------|---------------|

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

| Usage Guidelines | If you do not specify the <i>channel-number</i> , 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
```

■ show lacp port-channel

| 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.

Examples This example shows how to display the LACP system identifier on the switch:

```
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 license

To display the content of all the license files that are installed on the virtual supervisor module (VSM), use the **show license** command.

```
show license
```

Syntax Description None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display the content of all the license files that are installed on the VSM:

```
n1000v# show license
license_file.lic:
SERVER this_host ANY
VENDOR cisco
INCREMENT NEXUS1000V_LAN_SERVICES_PKG cisco 1.0 permanent 16 \
  HOSTID=VDH=8449368321243879080 \
  NOTICE="<LicFileID>kathleen.lic</LicFileID><LicLineID>0</LicLineID> \
  <PAK>dummyPak</PAK>" SIGN=34FCB2B24AE8

n1000v#
```

| Related Commands | Command | Description |
|------------------|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| | show license brief | Displays a list of license files that are installed on the VSM. |
| | show license usage [<i>package-name</i>] | Displays the license packages that are supported on the VSM. Optionally, you can display a specific license package. |

show license brief

To display a list of license files that are installed on the virtual supervisor module (VSM), use the **show license brief** command.

show license brief

Syntax Description None

Command Modes Any

SupportedUserRoles network-admin
network-operator

Command History

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

Examples

This example shows how to display the content of all the license files that are installed on the VSM:

```
n1000v# show license brief
license_file.lic
n1000v#
```

Related Commands

| Command | Description |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| show license | Displays the content of all the license files that are installed on the VSM. |
| show license usage [<i>package-name</i>] | Displays the license packages that are supported on the VSM. Optionally, you can display a specific license package. |

show license file

To verify the license installation by displaying the license configured for the Virtual Supervisor Module (VSM), use the **show license file** command.

show license file *filename*

| Syntax Description | <i>filename</i> | Name of the existing license file (.lic). |
|--------------------|-----------------|-------------------------------------------|
|--------------------|-----------------|-------------------------------------------|

| Defaults | None |
|----------|------|
|----------|------|

| Command Modes | Any |
|---------------|-----|
|---------------|-----|

| SupportedUserRoles | network-admin network-operator |
|--------------------|-----------------------------------|
|--------------------|-----------------------------------|

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

| Usage Guidelines | To find the name of the existing file, enter the following command at the prompt: |
|------------------|-----------------------------------------------------------------------------------|
|------------------|-----------------------------------------------------------------------------------|

```
n1000v# show license file ?
```

| Examples | This example shows how to display the license file, <i>sample.lic</i> , configured for the VSM: |
|----------|-------------------------------------------------------------------------------------------------|
|----------|-------------------------------------------------------------------------------------------------|

```
n1000v# show license file sample.lic
sample.lic:
SERVER this_host ANY
VENDOR cisco
INCREMENT NEXUS1000V_LAN_SERVICES_PKG cisco 1.0 permanent 16 \
    HOSTID=VDH=8449368321243879080 \
    NOTICE="<LicFileID>sample.lic</LicFileID><LicLineID>0</LicLineID> \
    <PAK>dummyPak</PAK>" SIGN=34FCB2B24AE8

n1000v#
```

| Related Commands | Command | Description |
|------------------|-----------------------------|------------------------------------------------------------------------------|
| | show license | Displays the content of all the license files that are installed on the VSM. |
| | show license brief | Displays a list of license files that are installed on the VSM. |
| | show license host-id | Displays the serial number (host ID) for your VSM |
| | show license usage | Displays the license packages that are supported on the VSM. |

show license host-id

To obtain the serial number, also called the *host ID*, for your Virtual Supervisor Module (VSM), use the **show license host-id** command.

show license host-id

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

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

Usage Guidelines The host ID includes everything that appears after the equal sign (=).
The host ID is required to obtain a license key file and register your VSM license.

Examples This example shows how to obtain the host ID for your VSM:

```
n1000v# show license host-id
License hostid: VDH=8449368321243879080
n1000v#
```

| Related Commands | Command | Description |
|------------------|---------------------------|------------------------------------------------------------------------------|
| | show license | Displays the content of all the license files that are installed on the VSM. |
| | show license brief | Displays a list of license files that are installed on the VSM. |
| | show license file | Displays the license configured for the VSM |
| | show license usage | Displays the license packages that are supported on the VSM. |

show license usage

To display the various license packages that are supported on the virtual supervisor module (VSM), use the **show license usage** command.

```
show license usage [package-name]
```

| | |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Syntax Description | <i>package-name</i> (Optional) Name of a license file. In the Cisco Nexus 1000V, the VSM supports only one package (NEXUS1000V_LAN_SERVICES_PKG). |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|-----------------------------|-----------------------------------|
| Supported User Roles | network-admin network-operator |
|-----------------------------|-----------------------------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display a brief summary of the various license packages that are supported on the VSM:

```
n1000v# show license usage
Feature                               Ins Lic  Status Expiry Date Comments
                                Count
-----
NEXUS1000V_LAN_SERVICES_PKG          No   16   In use Never        -
n1000v# -----
```

This example shows how to display the license usage information for a specific license package:

Example:
n1000v# show license usage NEXUS1000V_LAN_SERVICES_PKG

```
-----
Feature Usage Info
-----
      Installed Licenses :    10
      Eval Licenses :      0
      Max Overdraft Licenses :  16
      Installed Licenses in Use :  4
      Overdraft Licenses in Use :  0
      Eval Licenses in Use :      0
      Licenses Available :    22
-----
Application
-----
VEM 3 - Socket 1
VEM 3 - Socket 2
VEM 4 - Socket 1
VEM 4 - Socket 2
```

n1000v#

Related Commands

| Command | Description |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| show license | Displays the content of all the license files that are installed on the VSM. |
| show license brief | Displays a list of license files that are installed on the VSM. |
| show license <i>package-name</i> | Displays the content of a specific license file that is installed on the VSM. In the Cisco Nexus 1000V, the VSM supports only one package (NEXUS1000V_LAN_SERVICES_PKG). |

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, <i>jan, feb, mar</i> . |
| | dd | Specify the day of month, for example <i>01</i> . |
| | hh:mm:ss | Specify the hour, minutes, seconds, for example, <i>04:00:00</i> . |

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

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. |

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. |

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. |

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 mac access-lists

To display the MAC access control list (ACL) configuration, use the **show mac access lists** command.

show mac access-lists *name*

| | |
|---------------------------|----------------------------------------------------|
| Syntax Description | <i>name</i> Enter the name of the MAC access list. |
|---------------------------|----------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|------------------------------------|
| Command Modes | ACL configuration (config-mac-acl) |
|----------------------|------------------------------------|

| | |
|---------------------------|-----------------------------------|
| SupportedUserRoles | network-admin network-operator |
|---------------------------|-----------------------------------|

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

| | |
|-----------------|--------------------------------------------------------------------------------------------------------|
| Examples | This example shows how to display the MAC ACL configuration for the MAC access list called acl-mac-01: |
|-----------------|--------------------------------------------------------------------------------------------------------|

```
n1000v# config t
n1000v(config)# mac access-list acl-mac-01
n1000v(config-mac-acl)# show mac access-lists acl-mac-01
n1000v(config-mac-acl)#
```

| Related Commands | Command | Description |
|-------------------------|------------------------------|--------------------------------------------------------|
| | mac access-list | Creates the MAC ACL and enters ACL configuration mode. |
| | show mac address-list | Displays the MAC address table. |

show mac address-table

To display the MAC address table, use the **show mac address-table** command.

```
show mac address-table [module number] [count] [static | dynamic] [address mac-addr]
[interface name] [vlan id]
```

Syntax Description

| | |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| module <i>number</i> | (Optional) Specifies a module number for display. |
| count | (Optional) Specifies the count of MAC address entries for display. |
| static | (Optional) Specifies static entries in the MAC address table for display. |
| dynamic | (Optional) Specifies dynamic entries in the MAC address table for display. |
| address <i>mac-addr</i> | (Optional) Specifies a MAC address to display in one of the following formats: <ul style="list-style-type: none"> A.B.C AA-BB-CC-DD-EE-FF AA:BB:CC:DD:EE:FF AAAA.BBBB.CCCC |
| interface <i>name</i> | (Optional) Specifies an interface name (ethernet <i>slot/port</i> , port channel (<i>number</i>), or vEth <i>number</i>), associated with this MAC address table for display. |
| ethernet <i>slot/port</i> | Specifies an Ethernet interface slot number (1–66) and port number (1–256), separated by a slash (/) for display. |
| port-channel <i>number</i> | Specifies a port channel interface number (1 - 4096) for display. |
| vethernet <i>number</i> | Specifies a Virtual Ethernet interface number (1–1048575) for display. |
| vlan <i>id</i> | (Optional) Specifies a VLAN ID (1 - 4094) for display. |

Defaults

None

Command Modes

Any

Supported User Roles

network-admin
network-operator

Command History

| Release | Modification |
|--------------|----------------------------------------------------|
| 4.2(1)SV1(4) | Added the count option, removed the secure option. |
| 4.0(4)SV1(1) | This command was introduced. |

Examples

This example shows how to display the MAC address table:

```
n1000v# show mac address-table
VLAN      MAC Address      Type   Age    Port                               Module
-----+-----+-----+-----+-----+-----
1         0002.3d11.5502   static 0      N1KV Internal Port                3
1         0002.3d21.5500   static 0      N1KV Internal Port                3
1         0002.3d21.5502   static 0      N1KV Internal Port                3
1         0002.3d31.5502   static 0      N1KV Internal Port                3
1         0002.3d41.5502   static 0      N1KV Internal Port                3
1         0002.3d61.5500   static 0      N1KV Internal Port                3
1         0002.3d61.5502   static 0      N1KV Internal Port                3
1         0002.3d81.5502   static 0      N1KV Internal Port                3
3         12ab.47dd.ff89   static 0      Eth3/3                             3
342       0002.3d41.5502   static 0      N1KV Internal Port                3
342       0050.568d.5a3f   dynamic 0      Eth3/3                             3
343       0002.3d21.5502   static 0      N1KV Internal Port                3
343       0050.568d.2aa0   dynamic 9      Eth3/3                             3
Total MAC Addresses: 13
n1000v#
```

This example shows how to display a specific MAC address:

```
n1000v# sho mac address-table address 0050.568d.5a3f
VLAN      MAC Address      Type   Age    Port                               Module
-----+-----+-----+-----+-----+-----
342       0050.568d.5a3f   dynamic 0      Eth3/3                             3
Total MAC Addresses: 1
n1000v#
```

This example shows how to display a count of MAC addresses in the Layer 2 MAC address table:

```
n1000v# show mac address-table count
Total MAC Addresses: 42
n1000v#
```

Related Commands

| Command | Description |
|------------------------------------------|-------------------------------------------------------------------------------------------------------|
| mac address-table static | Adds a static MAC address in the Layer 2 MAC address table and saves it in the running configuration. |
| show mac address-table aging-time | Displays the aging time in the MAC address table. |
| show mac access-lists | Displays the MAC ACL configuration. |

show mac address-table aging-time

To display the aging time in the MAC address table for a single VLAN or for all VLANs, use the **show mac address-table aging-time** command.

show mac address-table aging-time [*vlan id*]

| Syntax Description | vlan | (Optional) Specifies that the output is required for a single VLAN associated with this MAC address table. |
|--------------------|-----------|------------------------------------------------------------------------------------------------------------|
| | <i>id</i> | Identifies the VLAN ID, between 1 and 4094. |

Defaults None

Command Modes Any

Supported User Roles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|---------------|------------------------------|
| | 4.0(4) SV1(1) | This command was introduced. |

Examples This example shows how to display the aging time for a specific VLAN ID in the MAC address table:

```
n1000v# show mac address-table aging-time vlan 1
Vlan Aging Time
-----
1      300
n1000v#
```

This example shows how to display the aging time for every VLAN in the MAC address table:

```
n1000v# show mac address-table aging-time
Vlan Aging Time
----
1      300
2      300
100    300
101    300
102    300
103    300
104    300
105    300
106    300
109    300
115    300
260    300
261    300
n1000v#
```

| Related Commands | Command | Description |
|------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| | mac address-table aging-time | Specifies and saves in the running configuration the amount of time that will elapse before an entry in the Layer 2 MAC address table is discarded. |
| | show mac address-table | Displays the MAC address table. |
| | show mac access-lists | Displays the MAC ACL configuration. |

show mac address static

To display the static MAC address entries in the MAC address table, use the **show mac address static** command.

show mac address static [*interface_type if_id*]

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.2(1)SV1(4) | This command was introduced. |

Examples This example shows how to display all static MAC addresses in the MAC address table:

```
n1000v# show mac address static
VLAN      MAC Address      Type   Age   Port                               Module
-----+-----+-----+-----+-----+-----+-----
1         0002.3d11.5502   static 0     N1KV Internal Port                3
1         0002.3d21.5500   static 0     N1KV Internal Port                3
1         0002.3d21.5502   static 0     N1KV Internal Port                3
1         0002.3d31.5502   static 0     N1KV Internal Port                3
1         0002.3d41.5502   static 0     N1KV Internal Port                3
1         0002.3d61.5500   static 0     N1KV Internal Port                3
1         0002.3d61.5502   static 0     N1KV Internal Port                3
1         0002.3d81.5502   static 0     N1KV Internal Port                3
3         12ab.47dd.ff89   static 0     Eth3/3                             3
342       0002.3d41.5502   static 0     N1KV Internal Port                3
343       0002.3d21.5502   static 0     N1KV Internal Port                3
Total MAC Addresses: 11
```

This example shows how to display a static MAC address entries for a specific interface in the MAC address table:

```
n1000v# show mac address static interface Ethernet 3/3
VLAN      MAC Address      Type   Age   Port                               Module
-----+-----+-----+-----+-----+-----+-----
3         12ab.47dd.ff89   static 0     Eth3/3                             3
Total MAC Addresses: 1
n1000v(config)#
```

| Related Commands | Command | Description |
|------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| | mac address-table static | Adds a static MAC address in the Layer 2 MAC address table and saves it in the running configuration. |
| | mac address-table aging-time | Specifies and saves in the running configuration the amount of time that will elapse before an entry in the Layer 2 MAC address table is discarded. |
| | show mac address-table | Displays the MAC address table. |
| | show mac access-lists | Displays the MAC ACL configuration. |

show module

To display module status, software version, MAC address, server information, and so forth, use the **show module** command.

show 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 The Hw field in the output equates to the VIB version, which can be cross-referenced to the ESX/ESXi release in the *Cisco Nexus 1000V Compatibility Information, Release 4.2(1)SV2(1.1)* document.

Examples This example shows how to display module information:

```
n1000v# show module
Mod  Ports  Module-Type                Model                Status
---  ---
1    0      Virtual Supervisor Module  Nexus1000V          active *

Mod  Sw                Hw
---  ---
1    4.0(4)SV1(2)     0.0

Mod  MAC-Address(es)                Serial-Num
---  ---
1    00-19-07-6c-5a-a8 to 00-19-07-6c-62-a8  NA

Mod  Server-IP          Server-UUID                Server-Name
---  ---
1    172.23.232.152    NA                          NA

* this terminal session
n1000v#
```

| Related Commands | Command | Description |
|------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------|
| | show module uptime | Displays the length of time a module has been up and running. |
| | show module vem license-info | Displays license information about the VEM connected to your VSM. |
| | show module vem mapping | Displays information about the VEM a VSM maps to, including VEM module number, status, UUID, and license status. |
| | show module vem counters | Displays VEM counters to verify whether the VSM is receiving any packets from VEM. |
| | show module vem missing | Displays VEM modules that are added to VC but are missing from the VSM. |
| | module vem | Allows remote entry of commands on the VEM from the Cisco Nexus 1000V. |
| | show module vteps | Displays vteps information about all the modules. |
| | show module service-module | Displays HA-role, Cluster-id, HA mode and HA-status for service modules attached to the VSM. |

show module service-module

Displays HA-role, Cluster-id, HA mode and HA-status for service modules attached to the VSM.

show module service-module

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(2.1) | This command was introduced. |

Usage Guidelines Use this command to view the HA-role, Cluster-id, HA mode and HA status of all the service modules attached to the VSM.

Examples This example shows how to display the cluster ID mapping and the details about active, standby, and standalone service modules:

```
n1000v# show module service-module
Mod Cluster-id Role           HA Mode    Status
-----
6      1      Primary    HA         Active
7      1      Secondary  HA         Standby
```

| Related Commands | Command | Description |
|------------------|-----------------------------------|----------------------------------------------------------------------------------------------|
| | show module | Displays the VXLAN gateway service modules. |
| | show module service-module | Displays HA-role, Cluster-id, HA mode and HA-status for service modules attached to the VSM. |

show module uptime

To display the length of time a module has been up and running, use the **show module uptime** command.

show module uptime

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.2(1)SV1(4) | This command was introduced. |

Usage Guidelines

Examples This example shows how to display the length of time a module has been up and running:

```
n1000v# show module uptime
----- Module 1 -----
Module Start Tme:   Mon Feb  7 13:34:33 2011
Up Time:           36 day(s), 0 hour(s), 13 minute(s), 19 second(s)
n1000v#
```

| Related Commands | Command | Description |
|------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------|
| | show module | Displays module status, software version, MAC address, server information, and so forth. |
| | show module vem mapping | Displays information about the VEM a VSM maps to, including VEM module number, status, UUID, and license status. |
| | show module vem counters | Displays VEM counters to verify whether the VSM is receiving any packets from VEM. |
| | show module vem license-info | Displays license information about the VEM connected to your VSM. |

| Command | Description |
|--------------------------------|-------------------------------------------------------------------------|
| show module vem missing | Displays VEM modules that are added to VC but are missing from the VSM. |
| module vem | Allows remote entry of commands on the VEM from the Cisco Nexus 1000V. |

show module vem license-info

To display license information about VEM modules connected to your VSM, use the **show module vem license-info** command.

show module vem [*module-number*] **license-info**

| | |
|---------------------------|-------------------------------------------------------------------------------------------|
| Syntax Description | <i>module-number</i> (Optional) Number identifying an existing module. The range is 1–66. |
|---------------------------|-------------------------------------------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|---------------------------|-----------------------------------|
| SupportedUserRoles | network-admin network-operator |
|---------------------------|-----------------------------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 4.2(1)SV1(4) | This command was introduced. |

| | |
|-------------------------|------|
| Usage Guidelines | None |
|-------------------------|------|

Examples This example shows how to display the license info for VEM modules:

```
n1000v# show module vem license-info
Licenses are Sticky
Mod   Socket Count  License Usage Count  License Version  License Status
---   -
3     2             -                    -                unlicensed
n1000v#
```

| | | |
|-------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------|
| Related Commands | Command | Description |
| | show module | Displays module status, software version, MAC address, server information, and so forth. |
| | show module vem mapping | Displays information about the VEM a VSM maps to, including VEM module number, status, UUID, and license status. |
| | show module vem counters | Displays VEM counters to verify whether the VSM is receiving any packets from VEM. |

| Command | Description |
|--------------------------------|-------------------------------------------------------------------------|
| show module vem missing | Displays VEM modules that are added to VC but are missing from the VSM. |
| module vem | Allows remote entry of commands on the VEM from the Cisco Nexus 1000V. |

show module vem counters

To display VEM counters to verify whether the VSM is receiving any packets from VEM, use the **show module vem counters** command.

```
show module vem [module-number] counters
```

| Syntax Description | <i>module</i> (Optional) Number identifying an existing module. The range is 1–66. | | | | |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------------|--------------|------------------------------|
| Defaults | None | | | | |
| Command Modes | Any | | | | |
| Supported User Roles | network-admin network-operator | | | | |
| Command History | <table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>4.2(1)SV1(4)</td> <td>This command was introduced.</td> </tr> </tbody> </table> | Release | Modification | 4.2(1)SV1(4) | This command was introduced. |
| Release | Modification | | | | |
| 4.2(1)SV1(4) | This command was introduced. | | | | |

Usage Guidelines

The following is a description of the fields in the **show module vem counters** command output:

Mod: Module number.

InNR: Number of node ID requests sent by this module and received by the VSM.

OutMI: Number of module insert messages sent by the VSM to this module.

OutHBeats: Number of heartbeats sent to this module.

InHBeats: Number of heartbeats received from this module.

InsCnt: Number of times this module inserted successfully.

RemCnt: Number of times this module has been removed.

Examples

This example shows how display the VEM counters to verify whether the VSM is receiving any packets from VEM:

```
n1000v# show module vem counters
-----
Mod  InNR  OutMI  InMI  OutHBeats  InHBeats  InsCnt  RemCnt
-----
   3    1     1     1    3113363    3113360     1       0
   4    1     1     1    3113363    3113363     1       0
n1000v#
```

| Related Commands | Command | Description |
|-------------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------|
| | show module | Displays module status, software version, MAC address, server information, and so forth. |
| | show module vem license-info | Displays license information about the VEM connected to your VSM. |
| | show module vem mapping | Displays information about the VEM a VSM maps to, including VEM module number, status, UUID, and license status. |
| | show module vem missing | Displays VEM modules that are added to VC but are missing from the VSM. |
| | show module vem counters | Displays VEM counters to verify whether the VSM is receiving any packets from VEM. |
| | module vem | Allows remote entry of commands on the VEM from the Cisco Nexus 1000V. |

show module vem mapping

To display information about the VEM a VSM maps to, including VEM module number, status, UUID, and license status, use the **show module vem mapping** command.

show module vem [*module-number*] **mapping**

| | |
|---------------------------|-------------------------------------------------------------------------------------------|
| Syntax Description | <i>module-number</i> (Optional) Number identifying an existing module. The range is 1–66. |
|---------------------------|-------------------------------------------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|---------------------------|-----------------------------------|
| SupportedUserRoles | network-admin network-operator |
|---------------------------|-----------------------------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display information about the VEM a VSM maps to, including VEM module number, status, UUID, and license status:

```
n1000v# show module vem mapping
Mod      Status      UUID                                             License Status
-----
3         absent      c43cfa32-08b4-4a12-b899-90f54fb05db0         licensed
n1000v#
```

| | | |
|-------------------------|-------------------------------------|------------------------------------------------------------------------------------|
| Related Commands | Command | Description |
| | show module | Displays module information. |
| | module vem | Allows remote entry of commands on the VEM from the Cisco Nexus 1000V. |
| | show module vem counters | Displays VEM counters to verify whether the VSM is receiving any packets from VEM. |
| | show module vem license-info | Displays license information about the VEM connected to your VSM. |
| | show module vem missing | Displays VEM modules that are added to VC but are missing from the VSM. |

show module vem missing

To display VEM modules that are added to VC but missing from VSM, use the **show module vem missing** command.

show module vem missing

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.2(1)SV1(4) | This command was introduced. |

Usage Guidelines

Examples This example shows how to display VEM modules that are added to VC but are missing from the VSM:

```
n1000v# show module vem missing
No missing module found.
n1000v#
```

| Related Commands | Command | Description |
|------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------|
| | show module | Displays module status, software version, MAC address, server information, and so forth. |
| | module vem | Allows remote entry of commands on the VEM from the Cisco Nexus 1000V. |
| | show module vem license-info | Displays license information about the VEM connected to your VSM. |
| | show module vem mapping | Displays information about the VEM a VSM maps to, including VEM module number, status, UUID, and license status. |

| Command | Description |
|---------------------------------|------------------------------------------------------------------------------------|
| show module vem counters | Displays VEM counters to verify whether the VSM is receiving any packets from VEM. |
| show module vem missing | Displays VEM modules that are added to VC but are missing from the VSM. |

show module vteps

To display the IP addresses available on each module that can be used for VXLAN Tunnel Endpoints.

show module vteps

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(2.1) | This command was introduced. |

Usage Guidelines The IP addresses of VTEPS available on each module.

Examples This example shows how to display VEM modules that are added to VC but are missing from the VSM:

```
n1000v# show module vteps
D: Designated VTEP I:Forwarding Publish Incapable VTEP
```

Note: (*) Denotes active gateway module

```
Module Port VTEP-IP Address VTEP-Flags
-----
```

```
3 Veth6 10.105.232.87 (D)
5 Veth3 10.105.232.91 (D)
7 Veth55 10.105.232.106
18 Veth231 10.105.232.104 (DI*)
```

| Related Commands | Command | Description |
|------------------|-----------------------------------|----------------------------------------------------------------------------------------------|
| | show module | Displays module status, software version, MAC address, server information, and so forth. |
| | show module service-module | Displays HA-role, Cluster-id, HA mode and HA-status for service modules attached to the VSM. |

show monitor

To display the status of the Switched Port Analyzer (SPAN) sessions, use the **show monitor** command.

show monitor

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. |

Examples This example shows how to display the status of the SPAN sessions:

```
n1000v# show monitor
Session State Reason Description
-----
17 down Session admin shut folio
```

| Related Commands | Command | Description |
|------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------|
| | monitor session | Starts the specified SPAN monitor session from either global configuration mode or monitor-configuration mode. |
| | show monitor session | Displays the ERSPAN session configuration as it exists in the running configuration. |

show monitor session

To display the Switched Port Analyzer (SPAN) session configuration, use the **show monitor session** command.

show monitor session {*session_number* | **all** | **range** {*session_range*}} [**brief**]

| Syntax Description | | |
|--------------------|-----------------------|----------------------------------------------------------------|
| | <i>session_number</i> | Number identifying the SPAN session number. The range is 1–64. |
| | all | Specifies all sessions. |
| | range | Indicates a session range. |
| | <i>session_range</i> | Range of SPAN sessions from 1–64. |
| | brief | (Optional) Specifies a shortened version. |

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display the SPAN session configuration for session 1:

```
n1000v(config)# show monitor session 1
session 1
-----
type : erspan-source
state : up
source intf :
    rx : Eth3/3
    tx : Eth3/3
    both : Eth3/3
source VLANs :
    rx :
    tx :
    both :
filter VLANs : filter not specified
destination IP : 10.54.54.1
ERSPAN ID : 999
ERSPAN TTL : 64
ERSPAN IP Prec. : 0
ERSPAN DSCP : 0
ERSPAN MTU : 1000
```

| Related Commands | Command | Description |
|------------------|------------------------|----------------------------------------------------------------------------------------------------------------|
| | show monitor | Displays the status of the SPAN sessions. |
| | monitor session | Starts the specified SPAN monitor session from either global configuration mode or monitor-configuration mode. |

show network-segment manager switch

To display the Cisco Nexus 1000V configured with Network Segmentation Manager (NSM), use the **show network-segment manager switch** command.

show network-segment manager switch

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV1(5.1) | This command was introduced. |

Usage Guidelines

Examples This example shows how to display the Cisco Nexus 1000V information:

```
n1000v# configure terminal
n1000v(config)# feature network-segmentation-manager
n1000v# show network-segment manager switch
switch: default_switch
state: enabled
dvs-uuid: d4 e7 12 50 89 db 3b c4-8d 4d 4c 36 ca 1c d1 f0
dvs-name: nexus1000v
mgmt-srv-uuid: 087F202C-8937-4F1E-8676-6F714C1AB96C
reg status: registered
last alert: 30 seconds ago
connection status: connected
```

| Related Commandss | Command | Description |
|--------------------------|------------------------------------------------------|---------------------------------------------------------|
| | feature network-segmentation -manager | Enables the Network Segmentation Manager (NSM) feature. |
| | network-segment policy | Creates a network segmentation policy. |
| | show run network-segment policy | Displays the network segmentation policy configuration. |

show network-segment network

To display the networks associated with a network segmentation policy, use the **show network-segment network** command.

```
show network-segment network [network_name | id]
```

| Syntax Description | |
|---------------------|--------------------------------------------------------------------|
| <i>network_name</i> | (Optional) The name of the network. |
| <i>id</i> | (Optional) The ID associated with the network segmentation policy. |

| Defaults | None |
|----------|------|
|----------|------|

| Command Modes | Any |
|---------------|-----|
|---------------|-----|

| Supported User Roles | network-admin network-operator |
|----------------------|-----------------------------------|
|----------------------|-----------------------------------|

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV1(5.1) | This command was introduced. |

Usage Guidelines

Examples This example shows how to display the networks associated with a network segmentation policy:

```
n100v(config)# show network-segment network

network dvs.VCDVSint-org-cn2-e46e9686-2327-49df-ad5c-a3f89c00cfb8
tenant id: 2b4calb2-ba8e-456c-b772-a4730af16e2e
network-segment policy: default_segmentation_template
segment id: 4107
multicast ip: 225.0.0.1

network dvs.VCDVSint-org-nexus-6141babd-bdc8-4e86-8f16-1ac786fb377f
tenant id: 91e87e80-e18b-460f-a761-b978c0d28aea
network-segment policy: seg-template-nexus-org
segment id: 4108
multicast ip: 225.0.0.2

n100v(config)#
```

| Related Commands | Command | Description |
|------------------|------------------------------------------------------|---------------------------------------------------------|
| | feature network-segmentation -manager | Enables the Network Segmentation Manager (NSM) feature. |
| | network-segment policy | Creates a network segmentation policy. |
| | show run network-segment policy | Displays the network segmentation policy configuration. |

network-segment policy migrate

To migrate the networks from the default network segmentation policy to the non default destination network segmentation policy, use the **network-segment policy migrate** command.

network-segment policy migrate *id isolation_id type nw_type dest-policy policy*

no network-segment policy *name*

| Syntax Description | |
|---------------------|--------------------------------------------------------------------|
| <i>isolation_id</i> | Tenant ID of the networks to be migrated. |
| <i>nw_type</i> | Type of networks (VLAN or Segmentation) to be migrated. |
| <i>policy</i> | Name of the destination network segmentation policy to migrate to. |

Defaults None

Command Modes Global configuration (config)

SupportedUserRoles network-admin

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV1(5.1) | This command was introduced. |

Usage Guidelines None

Examples This example shows how to migrate networks:

```
n1000v# configure terminal
n1000v(config)# network-segment policy migrate id da5c49a8-dd1b-4326-9da0-3c5e6a2c1b87
type vlan dest-policy org_vlan
n1000v(config)#
```

| Related Commands | Command | Description |
|------------------|-------------------------------|----------------------------------------|
| | show run | Displays the NSM policy configuration. |
| | network-segment policy | |

| Command | Description |
|------------------------------------------------------|---------------------------------------------------------|
| network-segment policy | Creates a network segmentation policy. |
| feature network-segmentation -manager | Enables the Network Segmentation Manager (NSM) feature. |

show network-segment policy usage

To display the network segmentation policy usage by networks, use the **show network-segment policy usage** command.

```
show network-segment policy usage [policy_name]
```

| | |
|---------------------------|----------------------------------------------------------------------------|
| Syntax Description | <i>policy_name</i> (Optional) The name of the network segmentation policy. |
|---------------------------|----------------------------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|---------------------------|-----------------------------------|
| SupportedUserRoles | network-admin network-operator |
|---------------------------|-----------------------------------|

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV1(5.1) | This command was introduced. |

| | |
|-------------------------|------|
| Usage Guidelines | None |
|-------------------------|------|

| | |
|-----------------|----------------------------------------------------------------------------------|
| Examples | This example shows how to display network segmentation policy usage by networks: |
|-----------------|----------------------------------------------------------------------------------|

```
n1000v# show network-segment policy usage

network-segment policy default_segmentation_template
dvs.VCDVStint-org-cn2-e46e9686-2327-49df-ad5c-a3f89c00cfb8

network-segment policy default_vlan_template

network-segment policy seg-template-nexus-org
dvs.VCDVStint-org-nexus-6141babd-bdc8-4e86-8f16-1ac786fb377f

network-segment policy vlan-template-nexus-org
```

| | |
|-------------------------|--|
| Related Commands | |
|-------------------------|--|

■ show network-segment policy usage

| Command | Description |
|------------------------------------------------------|---------------------------------------------------------|
| feature network-segmentation -manager | Enables the Network Segmentation Manager (NSM) feature. |
| network-segment policy | Creates a network segmentation policy. |
| show run network-segment policy | Displays the network segmentation policy configuration. |

show network-state tracking

To display the Network State Tracking status for a module or interface, use the **show network-state tracking** command.

```
show network-state tracking {module modID | interface channelID}
```

| Syntax Description | module <i>modID</i> Show state related to module number. | | | | |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------------|--------------|------------------------------|
| | interface <i>channelID</i> Show state related to interface port channel. | | | | |
| Defaults | None | | | | |
| Command Modes | Any | | | | |
| SupportedUserRoles | network-admin | | | | |
| Command History | <table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>4.2(1)SV1(4)</td> <td>This command was introduced.</td> </tr> </tbody> </table> | Release | Modification | 4.2(1)SV1(4) | This command was introduced. |
| Release | Modification | | | | |
| 4.2(1)SV1(4) | This command was introduced. | | | | |

Examples

This example shows how to display Network State Tracking status for a module:

```
n1000v# show network-state tracking module 3
Port-   Network  Tracking  SG  SG      Tracking  SG
Channel Mode    Vlan      ID  State   Interface Members
-----
Po2     split    263      10  Active  Eth66/3   Eth66/3, Eth66/4
                                     Eth66/5, Eth66/6, Eth66/7
Po2     split    263      11  Active  Eth66/8   Eth66/8, Eth66/9, Eth66/11
```

This example shows how to display Network State Tracking status for an interface and port channel:

```
n1000v# show network-state tracking interface port-channel 2
Port-   Network  Tracking  SG  SG      Tracking  SG
Channel Mode    Vlan      ID  State   Interface Members
-----
Po2     split    263      10  Active  Eth66/3   Eth66/3, Eth66/4, Eth66/5, Eth66/6
                                     Eth66/7
Po2     split    263      11  Active  Eth66/8   Eth66/8, Eth66/9, Eth66/11
```

| Related Commands | Command | Description |
|------------------|-------------------------------------------|------------------------------------------------------------------------------------|
| | track network-state enable | Enables Network State Tracking for all VEMs configured with a vPC-HM port-profile. |
| | show network-state tracking config | Displays the Network State Tracking configuration for verification. |

show network-state tracking config

To display the Network State Tracking configuration, use the **show network-state tracking config** command.

show network-state tracking config

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.2(1)SV1(4) | This command was introduced. |

Examples This example shows how to display the Network State Tracking configuration:

```
n1000v# show network-state tracking config
Tracking mode       : disabled
Tracking Interval  : 5 sec
Miss count threshold : 5 pkts
Split-network action : unknown
n1000v#
```

| Related Commands | Command | Description |
|------------------|------------------------------------|------------------------------------------------------------------------------------|
| | tracking enable | Enables Network State Tracking for all VEMs configured with a vPC-HM port-profile. |
| | show network-state tracking | Displays the Network State Tracking status for a module or interface. |

show ntp peer-status

To display the status for all Network Time Protocol (NTP) servers and peers, use the **show ntp peer-status** command.

show ntp peer-status

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

Supported User Roles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Usage Guidelines A domain name is resolved only when you have a DNS server configured.

Examples This example shows how to display the configured server and peers:

```
n1000v# show ntp peer-status
Total peers : 2
* - selected for sync, + - peer mode(active),
- - peer mode(passive), = - polled in client mode
  remote          local      st poll reach  delay    vrf
-----
=192.0.2.10      0.0.0.0      16 16    0  0.00000 default
+72.229.253.127 0.0.0.0      16 16    0  0.00000 default
n1000v#
```

| Related Commands | Command | Description |
|------------------|----------------------------|-------------------------------------|
| | show ntp peers | Displays all NTP peers. |
| | show ntp statistics | Displays NTP statistics. |
| | ntp server | Forms an association with a server. |
| | ntp peer | Forms an association with a peer. |

show ntp peers

To display all Network Time Protocol (NTP) peers, use the **show ntp peers** command.

show ntp peers

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 A domain name is resolved only when you have a DNS server configured.

Examples This example shows how to display the configured server and peers:

```
n1000v# show ntp peers
-----
Peer IP Address          Serv/Peer
-----
192.0.2.10              Server (configured)
72.229.253.127         Peer (configured)
n1000v#
```

| Related Commands | Command | Description |
|------------------|-----------------------------|----------------------------------------------------|
| | show ntp peer-status | Displays the status for all NTP servers and peers. |
| | show ntp statistics | Displays NTP statistics. |
| | ntp server | Forms an association with a server. |
| | ntp peer | Forms an association with a peer. |

show ntp statistics

To display Network Time Protocol (NTP) statistics, use the **show ntp statistics** command.

```
show ntp statistics {io | local | memory | peer {ip-address | dns-name}}
```

| Syntax Description | io | Specifies the input-output statistics. |
|--------------------|-------------------|---------------------------------------------------------------|
| | local | Specifies the counters maintained by the local NTP. |
| | memory | Specifies the statistics counters related to the memory code. |
| | peer | Specifies the per-peer statistics counter of a peer. |
| | <i>ip-address</i> | IP address of this peer. |
| | <i>dns-name</i> | DNS name of this peer. |

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 A domain name is resolved only when you have a DNS server configured.

Examples This example shows how to display the configured server and peers:

```
n1000v# show ntp statistics local
system uptime:          6742265
time since reset:      6742265
old version packets:   0
old version packets:   0
unknown version number: 0
bad packet format:     0
packets processed:     0
bad authentication:    0
packets rejected:      0
n1000v#
```


| Related Commands | Command | Description |
|------------------|------------|-------------------------------------|
| | ntp server | Forms an association with a server. |
| | ntp peer | Forms an association with a peer. |

show password strength-check

To display whether password strength is being checked, use the **show password strength-check** command.

show password strength-check

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. |

Examples This example shows how to display whether password strength is being checked:

```
n1000v# show password strength-check
Password strength check enabled
n1000v#
```

| Related Commands | Command | Description |
|------------------|--------------------------------|--------------------------------------------------------------------------|
| | password strength-check | Enables password-strength checking. |
| | username | Creates a user account. |
| | role name | Names a user role and puts you in role configuration mode for that role. |

show platform fwm info vtep

To display all the vteps information of the bridge-domains.

show platform fwm info vtep

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(2.1) | This command was introduced. |

Usage Guidelines To specifies the vteps informations of all bridge-domains.

Examples This example shows how to display the vteps information of the bridge-domain:

```
n1000v(config)# show platform fwm info vtep
Bridge-domain: vxlan6000, swbd: 4096, version: 5
-----
VTEP[0]: ip_addr: [192.168.10.9], flags: 1
VTEP[0]: ip_addr: [192.168.10.6], flags: 1
VTEP[0]: ip_addr: [192.168.10.14], flags: 3
VTEP[0]: ip_addr: [192.168.10.13], flags: 1

Bridge-domain: vxlan6001, swbd: 4097, version: 3
-----
VTEP[0]: ip_addr: [192.168.10.9], flags: 1
VTEP[0]: ip_addr: [192.168.10.14], flags: 3

Bridge-domain: vxlan6002, swbd: 4098, version: 3
-----
VTEP[0]: ip_addr: [192.168.10.9], flags: 1
VTEP[0]: ip_addr: [192.168.10.14], flags: 3
```

■ show platform fwm info vtep

| Related Commands | Command | Description |
|------------------|------------------------------------|--------------------------------------|
| | show platform fwm info vlan all | To display all the configured vlans. |

show policy-map

To display the policy map configuration for all policy maps or for a specified policy map, use the **show policy-map** command.

```
show policy-map [{type qos [policy_map_name]} | {type queuing [pmap-name-que]}]
```

| Syntax Description | type | (Optional) Specifies the type of the policy map. |
|--------------------|------------------------|--------------------------------------------------|
| | qos | (Optional) Specifies type QoS. |
| | <i>policy_map_name</i> | (Optional) Name of an existing policy map. |
| | queuing | type queuing. |
| | <i>pmap-name-que</i> | (Optional) policy map name (type queuing) |

Defaults None

Command Modes Any

Supported User Roles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|--------------------------------|
| | 4.2(1)SV1(4) | type queuing was added. |
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display the policy map configuration for all policy maps:

```
n1000v# show policy-map
```

```
Type qos policy-maps
=====

policy-map type qos class1
  class class-default
policy-map type qos policy1
  class class1
    set dscp 26
  class class2
    set dscp 14
  class class-default
    set dscp 20
    police cir 256000 bps bc 300 ms pir 256000 bps be 300 ms conform transmit

exceed set dscp dscp table cir-markdown-map violate drop
```

show policy-map

```

policy-map type qos policy2
policy-map type qos policy3
  class class-default
    police cir 256000 bps bc 300 ms pir 256000 bps be 300 ms conform transmit
  exceed set dscp dscp table cir-markdown-map violate drop
n1000v#

```

Related Commands

| Command | Description |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| show policy-map | Displays the policy map configuration for all policy maps or for a specified policy map. |
| class | Creates a reference to class-map-name and enters policy-map class QoS configuration mode for the specified class map. |
| set dscp | Defines the DSCP value that should be used in all IP headers for the specified class and saves it in the running configuration. |

show policy-map interface

To display the status of the global statistics and the configured policy maps on all interfaces, use the **show policy-map interface** command.

```
show policy-map interface [brief] [ethernet slot/port | port-channel port_channel_number |
vethernet interface_number] [[input | output] [type qos]]
```

| Syntax Description | | |
|----------------------------|------------|---------------------------------------------------------------------------------------------------------------|
| brief | (Optional) | Specifies the shortened output. |
| ethernet | (Optional) | Specifies an Ethernet interface. |
| <i>slot/port</i> | | Valid slot and port of the interface, separated by a slash (/). The slot range 1–66; the port range is 1–256. |
| port-channel | (Optional) | Specifies a port channel interface. |
| <i>port_channel_number</i> | | Identifier for a valid port channel. The range is 1–4096. |
| vethernet | (Optional) | Specifies a Virtual Ethernet interface. |
| <i>interface_number</i> | | Identifier for a valid Virtual Ethernet interface. The range is 1–1048575. |
| input | (Optional) | Specifies the input policy |
| output | (Optional) | Specifies the output policy. |
| type | (Optional) | Specifies the type of the class-map. |
| qos | (Optional) | Specifies type QoS. |

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display statistics for policy maps that are configured on interfaces:

```
n1000v(config)# show policy-map interface
```

```
Global statistics status : enabled
```

```
Vethernet3
  Service-policy (qos) input: new-policy
```

show policy-map interface

```

policy statistics status: enabled

Class-map (qos): class-default (match-any)
  59610700 packets
  set prec 5

Vethernet5

Service-policy (qos) output: new-policer
  policy statistics status: enabled

Class-map (qos): new-class (match-all)
  344661013 packets
  Match: precedence 5
  police cir 900 mbps bc 200 ms
    conformed 505953339796 bytes, 899924196 bps action: transmit
    violated 12285218014 bytes, 22283000 bps action: dropn1000v#

```

Related Commands

| Command | Description |
|-----------------------------|----------------------------------------------------------------------------------------------|
| policy-map | Defines a policy map that represents a set of policies to be applied to a set of class maps. |
| qos statistics | Enables QoS statistics on all interfaces. |
| clear qos statistics | Clears the specified QoS statistics. |

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
```

■ 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 | <i>channel-number</i> 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 |
|----------------------|-----|

| | |
|-----------------------------|---------------|
| Supported User Roles | 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. |
| <i>channel-number</i> | 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 |

| Supported User Roles | |
|----------------------|---------------|
| | network-admin |

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

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 | <i>channel-number</i> 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 | |
|-----------------------|-----------------------------------------------------------------------------------------------------------------|
| <i>channel-number</i> | 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 |

| Supported User Roles | |
|----------------------|---------------|
| | 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. |

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-profile

To display configurations for port profiles, use the **show port-profile** command.

```
show port-profile [name prof_name]
```

| Syntax Description | name | (Optional) Specifies to display information about a specific port profile. |
|--------------------|------------------|----------------------------------------------------------------------------|
| | <i>prof_name</i> | Name of the port profile to display. |

| Defaults | None |
|----------|------|
|----------|------|

| Command Modes | Any |
|---------------|-----|
|---------------|-----|

| Supported User Roles | network-admin network-operator |
|----------------------|-----------------------------------|
|----------------------|-----------------------------------|

| Command History | Release | Modification |
|-----------------|--------------|---------------------------------------------------------------------------------------------------------------------|
| | 4.2(1)SV1(4) | Port profile role information is added to this command. |
| | 4.0(4)SV1(2) | Port profile type, pinning and channel-group configuration are added. The capability uplink information is removed. |
| | 4.0(4)SV1(1) | This command was introduced. |

Examples

The following example shows how to display the configuration of port profile UplinkProfile1:

```
n1000v# show port-profile name UplinkProfile1
port-profile system
  type: Vethernet
  description:
  status: disabled
  max-ports: 32
  inherit:
  config attributes:
    switchport mode trunk
    switchport trunk allowed vlan 114-115
    no shutdown
  evaluated config attributes:
    switchport mode trunk
    switchport trunk allowed vlan 114-115
    no shutdown
  assigned interfaces:
  port-group:
  system vlans: none
  capability l3control: no
  port-profile role: none
n1000v#
```

Related Commands

| Command | Description |
|---------------------|-------------------------|
| port-profile | Creates a port profile. |

show port-profile expand-interface

To verify that the interface level configuration did not overwrite the port profile configuration, use the **show port-profile expand-interface** command.

```
show port-profile expand-interface [name port-profile-name]
```

| Syntax Description | name | (Optional) Limits the display to a particular port profile name. |
|--------------------|----------------------|------------------------------------------------------------------|
| | <i>module-number</i> | Name that identifies an existing port profile. |

| Defaults | None |
|----------|------|
|----------|------|

| Command Modes | Any |
|---------------|-----|
|---------------|-----|

| SupportedUserRoles | network-admin |
|--------------------|---------------|
|--------------------|---------------|

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to verify that the interface level configuration did not overwrite the port profile configuration:

```
n1000v# show port-profile expand-interface
port-profile 1
port-profile 2
port-profile AccessProf
port-profile AllAccess
port-profile PortProfile1
port-profile SystemProfile
n1000v#
```

| Related Commands | Command | Description |
|------------------|-----------------------------|--------------------------------------------------------------------------------------|
| | show port-profile | Displays configurations for port profiles. |
| | port-profile | Creates a port profile and enters port-profile configuration mode. |
| | inherit port-profile | Adds the inherited configuration to the new port profile as a default configuration. |

show port-profile-role

To display the port profile role configuration, use the **show port-profile-role** command.

```
show port-profile-role [name port-profile-role-name]
```

| Syntax Description | name | (Optional) Specify that you want to display a specific role. |
|--------------------|-------------------------------|--------------------------------------------------------------|
| | <i>port-profile-role-name</i> | Specify the name of the role to display |

| Defaults | None |
|----------|------|
|----------|------|

| Command Modes | Any |
|---------------|-----|
|---------------|-----|

| SupportedUserRoles | network-admin |
|--------------------|---------------|
|--------------------|---------------|

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.2(1)SV1(4) | This command was introduced. |

Usage Guidelines

Examples

This example shows how to display the adminUser port profile role:

```
n1000v# show port-profile-role name adminUser
```

```
Name: adminUser
Description: adminOnly
Users:
  hdbaar (user)
Assigned port-profiles:
  allaccess2
```

| Related Commands | Command | Description |
|------------------|-------------------------------------|----------------------------------------------------------------------------|
| | show port-profile | Displays the port profile configuration, including roles assigned to them. |
| | show port-profile-role users | Displays available users and groups. |
| | port-profile-role | Creates a port profile role. |
| | user | Assigns a user to a port profile role. |
| | group | Assigns a group to a port profile role. |
| | assign port-profile-role | Assigns a port profile role to a specific port profile. |

■ show port-profile-role

| Command | Description |
|----------------------------------|------------------------------------------------------------|
| feature port-profile-role | Enables support for the restriction of port profile roles. |
| port-profile | Creates a port profile. |

show port-profile-role users

To display available users and groups, use the **show port-profile-role users** command.

show port-profile-role users

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.2(1)SV1(4) | This command was introduced. |

Usage Guidelines

Examples This example shows how to display available users and groups:

```
n1000v# show port-profile-role users
Groups:
  Administrators
  TestGroupB
Users:
  dbaar
  fgreen
  suchen
  mariofr
n1000v#
```

| Related Commands | Command | Description |
|------------------|---------------------------------|---------------------------------------------------------|
| | port-profile-role | Creates a port profile role. |
| | user | Assigns a user to a port profile role. |
| | group | Assigns a group to a port profile role. |
| | assign port-profile-role | Assigns a port profile role to a specific port profile. |

| Command | Description |
|--------------------------------------|------------------------------------------------------------|
| feature port-profile-role | Enables support for the restriction of port profile roles. |
| port-profile | Creates a port profile. |

show port-profile sync-status

To display interfaces that are out of sync with port profiles, use the **show port-profile sync-status** command.

```
show port-profile sync-status [interface if-name]
```

| Syntax Description | interface | (Optional) Specify that you want to display a specific interface. |
|--------------------|----------------|-------------------------------------------------------------------|
| | <i>if-name</i> | Specify the name of the interface to display |

| Defaults | None |
|----------|------|
|----------|------|

| Command Modes | Any |
|---------------|-----|
|---------------|-----|

| Supported User Roles | network-admin network-operator |
|----------------------|-----------------------------------|
|----------------------|-----------------------------------|

| Command History | Release | Modification |
|-----------------|---------------|------------------------------|
| | 4.2(1) SV1(4) | This command was introduced. |

| Usage Guidelines | None |
|------------------|------|
|------------------|------|

Examples This example shows how to display interfaces that are out of sync with port profiles:

```
n1000v# show port-profile sync-status
```

```
Ethernet3/2
port-profile: uplink
interface status: quarantine
sync status: out of sync
cached commands:
errors:
  command cache overrun
recovery steps:
  bring interface online
```

```
Ethernet3/3
port-profile: uplink
interface status: quarantine
sync status: out of sync
cached commands:
errors:
  command cache overrun
recovery steps:
  bring interface online
```

■ show port-profile sync-status

| Related Commands | Command | Description |
|------------------|--------------------------|--------------------------------------------|
| | port-profile | Creates a port profile. |
| | show port-profile | Displays configurations for port profiles. |

show port-profile virtual usage

To display port profile usage by interface, use the **show port-profile virtual usage** command.

show port-profile virtual usage [*name name*]

| Syntax Description | name | (Optional) Specify that you want to display a specific port profile. |
|--------------------|-------------|----------------------------------------------------------------------|
| | <i>name</i> | Specify the name of the port profile to display |

Defaults None

Command Modes Any

SupportedUserRoles network-admin

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.2(1)SV1(4) | This command was introduced. |

Usage Guidelines

Examples

This example shows how to display port profile usage by interface:

```
n1000v# show port-profile virtual usage
```

```
-----
Port Profile          Port          Adapter      Owner
-----
n1kv-uplink0         Po1
                    Eth3/2        vmnic1       localhost.
                    Eth3/3        vmnic2       localhost.
vlan1767              Veth7         Net Adapter 1 all-tool-7
                    Veth8         Net Adapter 1 all-tool-8
aipc1765              Veth4         Net Adapter 1 bl-h-s
inband1766            Veth6         Net Adapter 3 bl-h-s
mgmt1764              Veth5         Net Adapter 2 bl-h-s
vpc-mac-uplink       Po7
                    Eth5/2        vmnic1       localhost.
                    Eth5/3        vmnic2       localhost.
ch-vpc-mac-uplink    Po2
                    Po3
                    Eth4/2        vmnic1       VDANIKLNCOS
                    Eth4/3        vmnic2       VDANIKLNCOS
ch-aipc1765           Veth1         Net Adapter 1 bl-h-p
ch-mgmt1764           Veth2         Net Adapter 2 bl-h-p
ch-inband1766         Veth3         Net Adapter 3 bl-h-p
n1000v#
```

| Related Commands | Command | Description |
|------------------|-----------------------------|--------------------------------------------------------------------------------------|
| | port-profile | Creates a port profile. |
| | show port-profile | Displays configurations for port profiles. |
| | inherit port-profile | Adds the inherited configuration to the new port profile as a default configuration. |
| | port-profile-role | Creates a port profile role. |

show port-security

To display the secured MAC addresses in the system, use the **show port-security** command.

show port-security

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. |

Examples This example shows how to display the secured MAC addresses in the system:

```
n1000V# show port-security
Total Secured Mac Addresses in System (excluding one mac per port)      : 0
Max Addresses limit in System (excluding one mac per port) : 8192

-----
Secure Port  MaxSecureAddr  CurrentAddr  SecurityViolation  Security Action
              (Count)         (Count)         (Count)
-----
Vethernet1          1             0             0             Shutdown
=====
```

| Related Commands | Command | Description |
|------------------|------------------------------------|---------------------------------------------------------------------------------------------|
| | port-security stop learning | Sets the Drop on Source Miss (DSM) bit on the port. |
| | module vem execute | Remotely executes commands on the Virtual Ethernet Module (VEM) from the Cisco Nexus 1000V. |
| | show cdp neighbors | Displays the configuration and capabilities of upstream devices. |

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-channell 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 | <i>interface-id</i> Interface ID. |
| Defaults | None | |
| Command Modes | Any | |
| Supported User Roles | network-admin network-operator | |
| Command History | Release | Modification |
| | 4.0(4)SV1(1) | This command was introduced. |
| Usage Guidelines | None | |
| Examples | <p>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:</p> <pre>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#</pre> | |
| 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 processes

To display the state and the start count of all processes, use the **show processes** command.

```
show processes [cpu | log | memory]
```

| Syntax Description | Parameter | Description |
|--------------------|---------------|----------------------------------------------------------|
| | cpu | (Optional) Specifies processes related to the CPU. |
| | log | (Optional) Specifies information regarding process logs. |
| | memory | (Optional) Specifies processes related to memory. |

Defaults None

Command Modes Any

Supported User Roles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Usage Guidelines After issuing the **show processes cpu history** CLI command on the VSM, it is observed that the CLI output to indicate the amount of time elapsed is graphed from the right to the left direction. Therefore, the output should be read from the right to the left direction.

Examples This example shows how to display the state and the start count of all processes:

```
n1000v# show processes
```

```

PID      State  PC          Start_cnt  TTY  Type  Process
-----  -----  -----  -----  ---  ---  -----
   1      S     77f8a468    1          -    O    init
   2      S           0          1          -    O    ksoftirqd/0
   3      S           0          1          -    O    desched/0
   4      S           0          1          -    O    events/0
   5      S           0          1          -    O    khelper
  10      S           0          1          -    O    kthread
  18      S           0          1          -    O    kblockd/0
  35      S           0          1          -    O    khubd
 121      S           0          1          -    O    pdflush
 122      S           0          1          -    O    pdflush
 124      S           0          1          -    O    aio/0
 123      S           0          1          -    O    kswapd0
 709      S           0          1          -    O    kseriod

```

| | | | | | | |
|------|---|----------|---|---|----|-----------------|
| 756 | S | 0 | 1 | - | O | kide/0 |
| 766 | S | 0 | 1 | - | O | ata/0 |
| 770 | S | 0 | 1 | - | O | scsi_eh_0 |
| 1096 | S | 0 | 1 | - | O | kjournald |
| 1101 | S | 0 | 1 | - | O | kjournald |
| 1620 | S | 0 | 1 | - | O | kjournald |
| 1627 | S | 0 | 1 | - | O | kjournald |
| 1952 | S | 77f6c18e | 1 | - | O | portmap |
| 1965 | S | 0 | 1 | - | O | nfsd |
| 1966 | S | 0 | 1 | - | O | nfsd |
| 1967 | S | 0 | 1 | - | O | nfsd |
| 1968 | S | 0 | 1 | - | O | nfsd |
| 1969 | S | 0 | 1 | - | O | nfsd |
| 1970 | S | 0 | 1 | - | O | nfsd |
| 1971 | S | 0 | 1 | - | O | nfsd |
| 1972 | S | 0 | 1 | - | O | nfsd |
| 1973 | S | 0 | 1 | - | O | lockd |
| 1974 | S | 0 | 1 | - | O | rpciod |
| 1979 | S | 77f6e468 | 1 | - | O | rpc.mountd |
| 1989 | S | 77f6e468 | 1 | - | O | rpc.statd |
| 2016 | S | 77e0e468 | 1 | - | VG | sysmgr |
| 2298 | S | 0 | 1 | - | O | mping-thread |
| 2299 | S | 0 | 1 | - | O | mping-thread |
| 2315 | S | 0 | 1 | - | O | stun_kthread |
| 2316 | S | 0 | 1 | - | O | stun_arp_mts_kt |
| 2339 | S | 0 | 1 | - | O | redun_kthread |
| 2340 | S | 0 | 1 | - | O | redun_timer_kth |
| 2866 | S | 0 | 1 | - | O | sf_rdn_kthread |
| 2866 | S | 0 | 1 | - | O | sf_rdn_kthread |
| 2867 | S | 77f37468 | 1 | - | VU | xinetd |
| 2868 | S | 77f6e468 | 1 | - | VU | tftpd |
| 2869 | S | 7788c1b6 | 1 | - | VL | syslogd |
| 2870 | S | 77ecf468 | 1 | - | VU | sdwrapd |
| 2872 | S | 77d94468 | 1 | - | VU | platform |
| 2877 | S | 0 | 1 | - | O | ls-notify-mts-t |
| 2889 | S | 77eb2be4 | 1 | - | VU | pfm_dummy |
| 2896 | S | 77f836be | 1 | - | O | klogd |
| 2903 | S | 77d9e468 | 1 | - | VL | vshd |
| 2904 | S | 77e41468 | 1 | - | VU | stun |
| 2905 | S | 77a74f43 | 1 | - | VL | smm |
| 2906 | S | 77e5a468 | 1 | - | VL | session-mgr |
| 2907 | S | 77c4e468 | 1 | - | VL | psshelper |
| 2908 | S | 77f75468 | 1 | - | VU | lmgrd |
| 2909 | S | 77e36be4 | 1 | - | VG | licmgr |
| 2910 | S | 77e4e468 | 1 | - | VG | fs-daemon |
| 2911 | S | 77ec5468 | 1 | - | VL | feature-mgr |
| 2912 | S | 77e7a468 | 1 | - | VU | confcheck |
| 2913 | S | 77eb3468 | 1 | - | VU | capability |
| 2915 | S | 77c4e468 | 1 | - | VU | psshelper_gsvc |
| 2922 | S | 77f75468 | 1 | - | O | cisco |
| 2937 | S | 77895f43 | 1 | - | VL | clis |
| 2937 | S | 77895f43 | 1 | - | VL | clis |
| 2952 | S | 77cba468 | 1 | - | VL | xmlma |
| 2953 | S | 77e8b468 | 1 | - | VL | vmm |
| 2955 | S | 77e80468 | 1 | - | VU | ttyd |
| 2957 | S | 77ecb6be | 1 | - | VL | sysinfo |
| 2958 | S | 77b57468 | 1 | - | VL | sksd |
| 2959 | S | 77ea7468 | 1 | - | VG | res_mgr |
| 2960 | S | 77e53468 | 1 | - | VG | plugin |
| 2961 | S | 77ccf468 | 1 | - | VL | mvsh |
| 2962 | S | 77e05468 | 1 | - | VU | module |
| 2963 | S | 77cce468 | 1 | - | VL | evms |
| 2964 | S | 77ccf468 | 1 | - | VL | evmc |
| 2965 | S | 77ecc468 | 1 | - | VU | core-dmon |

show processes

```

2966      S 7765b40d          1    -    VL  ascii-cfg
2967      S 77cebbe4          1    -    VL  securityd
2968      S 77cb5468          1    -    VU  cert_enroll
2969      S 77b17be4          1    -    VL  aaa
2973      S 77e19468          1    -    VU  ExceptionLog
2975      S 77dfb468          1    -    VU  bootvar
2976      S 77df9468          1    -    VG  ifmgr
2977      S 77ead468          1    -    VU  tcap
2978      S 77a6bf43          1    -    VL  l3vm
2978      S 77a6bf43          1    -    VL  l3vm
2979      S 77a62f43          1    -    VL  u6rib
2980      S 77a62f43          1    -    VL  urib
2981      S 77f30be4          1    -    VU  core-client
2983      S 77b95468          1    -    VL  aclmgr
3008      S 77d51468          1    -    VU  aclcomp
3011      S 7774440d          1    -    VL  tacacs
3012      S 77a72f43          1    -    VL  adjmgr
3016      S 77a74f43          1    -    VL  arp
3021      S 778a1896          1    -    VL  icmpv6
3022      S 7791ef43          1    -    VL  netstack
3050      S 7770240d          1    -    VL  radius
3051      S 77f59be4          1    -    VL  ip_dummy
3052      S 77f59be4          1    -    VL  ipv6_dummy
3053      S 7783c40d          1    -    VU  ntp
3054      S 77f59be4          1    -    VL  pktmgr_dummy
3055      S 778ae40d          1    -    VL  snmpd
3056      S 77f59be4          1    -    VL  tcpudp_dummy
3063      S 7782d40d          1    -    VL  cdp
3064      S 77b1540d          1    -    VL  dcos-xinetd
3154      S 77b4040d          1    -    O   ntpd
3195      S 77e0d468          1    -    VL  vsim
3196      S 778ee40d          1    -    VL  ufdm
3196      S 778ee40d          1    -    VL  ufdm
3197      S 77d42468          1    -    VU  sf_nf_srv
3198      S 778e240d          1    -    VL  sal
3199      S 77a14f43          1    -    VL  rpm
3200      S 778cd40d          1    -    VG  pltfm_config
3201      S 77efc468          1    -    VU  pixmc
3202      S 77e0f468          1    -    VG  pixm
3203      S 77c43468          1    -    VU  pdl_srv_tst
3204      S 7789e40d          1    -    VL  nfm
3205      S 77ddc468          1    -    VU  msp
3206      S 77dbc468          1    -    VL  monitor
3207      S 7789c40d          1    -    VL  mfdm
3208      S 7787340d          1    -    VL  l2fm
3209      S 77dc0468          1    -    VL  ipqosmgr
3210      S 77e81468          1    -    VU  ethanalyzer
3211      S 777b740d          1    -    VL  dhcp_snoop
3212      S 77b3940d          1    -    VL  dcos-thttpd
3213      S 77c26468          1    -    VU  copp
3214      S 77b2b468          1    -    VL  eth_port_channel
3215      S 77d15468          1    -    VL  vlan_mgr
3219      S 758bc40d          1    -    VU  vms
3220      S 77b8a468          1    -    VL  eth-port-sec
3221      S 77abb468          1    -    VL  stp
3221      S 77abb468          1    -    VL  stp
3226      S 77de5468          1    -    VL  lacp
3228      S 777ba40d          1    -    VL  ethpm
3232      S 77a0127b          1    -    VL  igmp
3235      S 77dba468          1    -    VL  private-vlan
3241      S 77d70468          1    -    VU  vim
3246      S 77d4b468          1    -    VU  portprofile
3285      S 77f836be          1    1    O   getty
3286      S 77f806be          1    S0   O   getty

```

```

3290      S 77f1deee          1 - 0 gettylogin1
3308      S 77f836be          1 S1 0 getty
3360      S 77ae140d         1 - 0 dcos_sshd
3361      S 77aaa468         1 8 0 vsh
4213      Z 0                1 - 0 vmw_maintenance
25188     Z 0                1 - 0 vmw_maintenance
31228     Z 0                1 - 0 vmw_maintenance
427       Z 0                1 - 0 vmw_maintenance
1035      Z 0                1 - 0 vmw_maintenance
2439      Z 0                1 - 0 vmw_maintenance
7167      Z 0                1 - 0 vmw_maintenance
8246      Z 0                1 - 0 vmw_maintenance
8856      Z 0                1 - 0 vmw_maintenance
10539     Z 0                1 - 0 vmw_maintenance
10539     Z 0                1 - 0 vmw_maintenance
16083     Z 0                1 - 0 vmw_maintenance
19353     S 77ae140d         1 - 0 dcos_sshd
19354     S 7752340d         1 - 0 xmlsa
13167     S 77ae140d         1 - 0 dcos_sshd
13169     S 77aaa468         1 17 0 vsh
14253     S 7798140d         1 - 0 in.dcos-telnetd
14254     S 77aaa468         1 18 0 vsh
14757     S 7798140d         1 - 0 in.dcos-telnetd
14758     S 77a82eee          1 19 0 vsh
14933     S 77f426be          1 19 0 more
14934     S 77aa9be4         1 19 0 vsh
14935     R 77f716be          1 - 0 ps
-         NR -                0 - VL eigrp
-         NR -                0 - VL isis
-         NR -                0 - VL ospf
-         NR -                0 - VL ospfv3
-         NR -                0 - VL rip
-         NR -                0 - VL eigrp
-         NR -                0 - VL isis
-         NR -                0 - VL ospf
-         NR -                0 - VL ospfv3
-         NR -                0 - VL rip
-         NR -                0 - VL rip
-         NR -                0 - VL eigrp
-         NR -                0 - VL isis
-         NR -                0 - VL ospf
-         NR -                0 - VL ospfv3
-         NR -                0 - VL rip
-         NR -                0 - VL amt
-         NR -                0 - VL bgp
-         NR -                0 - VL eou
-         NR -                0 - VL glbp
-         NR -                0 - VL hsrp_engine
-         NR -                0 - VU installer
-         NR -                0 - VL interface-vlan
-         NR -                0 - VU lisp
-         NR -                0 - VL msdp
-         NR -                0 - VL pim
-         NR -                0 - VL pim6
-         NR -                0 - VL scheduler
-         NR -                0 - VL isis
-         NR -                0 - VL ospf
-         NR -                0 - VL ospfv3
-         NR -                0 - VL rip

```

■ show processes

```

-   NR   -   0   -   VL   amt
-   NR   -   0   -   VL   bgp
-   NR   -   0   -   VL   eou
-   NR   -   0   -   VL   glbp
-   NR   -   0   -   VL   hsrp_engine
-   NR   -   0   -   VU   installer
-   NR   -   0   -   VL   interface-vlan
-   NR   -   0   -   VU   lisp
-   NR   -   0   -   VL   msdp
-   NR   -   0   -   VL   pim
-   NR   -   0   -   VL   pim6
-   NR   -   0   -   VL   scheduler
-   NR   -   0   -   VU   vbuilder

```

State: R(runnable), S(sleeping), Z(defunct)

Type: U(unknown), O(non sysmgr)

NR(not running), ER(terminated etc)

n1000v#

Related Commands

| Command | Description |
|--------------------------------------|------------------------------------------------------------------------------|
| show system redundancy status | Displays the HA status of the system. |
| show module | Displays information about all available VSMS and VEMs in the system. |
| module vem | Allows you to enter commands on the VEM remotely from the Cisco Nexus 1000V. |

show radius-server

To display the RADIUS server configuration, use the **show radius-server** command.

```
show radius-server [host]
```

| | |
|---------------------------|----------------------------------------------------------------------|
| Syntax Description | <i>host</i> (Optional) DNS name or IP address for the RADIUS server. |
|---------------------------|----------------------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|-----------------------------|-----------------------------------|
| Supported User Roles | network-admin network-operator |
|-----------------------------|-----------------------------------|

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display the RADIUS server configuration:

```
n1000v# show radius-server ads
ads:
    available for authentication on port:1812
    available for accounting on port:1813
    idle time:0
    test user:test
    test password:*****
n1000v(config)#
```

| Related Commands | Command | Description |
|-------------------------|--------------------------------------------|-------------------------------------------------------------------|
| | radius-server host | Defines the IP address or hostname for the RADIUS server. |
| | radius-server directed-request | Enables directed requests. |
| | show radius-server groups | Displays information about the RADIUS server group configuration. |
| | show radius-server sorted | Displays RADIUS servers sorted by name. |
| | show radius-server statistics | Displays RADIUS statistics. |
| | show radius-server directed-request | Displays the directed request configuration. |

show radius-server directed-request

To display the directed request configuration, use the **show radius-server directed-request** command.

show radius-server directed-request

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. |

Examples This example shows how to display the directed request configuration:

```
n1000v(config)# show radius-server directed-request
disabled
n1000v(config)#
```

| Related Commands | Command | Description |
|------------------|---------------------------------------|-------------------------------------------------------------------|
| | radius-server directed-request | Enables directed requests. |
| | show radius-server groups | Displays information about the RADIUS server group configuration. |
| | show radius-server sorted | Displays RADIUS servers sorted by name. |
| | show radius-server statistics | Displays RADIUS statistics. |

show radius-server groups

To display information about the RADIUS server group configuration, use the **show radius-server groups** command.

```
show radius-server groups [group-name]
```

| Syntax Description | <i>group-name</i> (Optional) Name of the RADIUS server group. | | | | | | | | | | | | | | |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------------|--------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------|-----------------------------------------------------------|---------------------------------------|----------------------------|----------------------------------|-----------------------------------------|--------------------------------------|-----------------------------|--------------------------------------------|----------------------------------------------|
| Defaults | None | | | | | | | | | | | | | | |
| Command Modes | Any | | | | | | | | | | | | | | |
| Supported User Roles | network-admin network-operator | | | | | | | | | | | | | | |
| Command History | <table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>4.0(4)SV1(1)</td> <td>This command was introduced.</td> </tr> </tbody> </table> | Release | Modification | 4.0(4)SV1(1) | This command was introduced. | | | | | | | | | | |
| Release | Modification | | | | | | | | | | | | | | |
| 4.0(4)SV1(1) | This command was introduced. | | | | | | | | | | | | | | |
| Examples | <p>This example shows how to display information about the RADIUS server group configuration:</p> <pre>n1000v# show radius-server groups n1000v#</pre> | | | | | | | | | | | | | | |
| Related Commands | <table border="1"> <thead> <tr> <th>Command</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>aaa group server radius</td> <td>Creates a RADIUS server group and enters the RADIUS server group configuration submode for that group.</td> </tr> <tr> <td>radius-server host</td> <td>Defines the IP address or hostname for the RADIUS server.</td> </tr> <tr> <td>radius-server directed-request</td> <td>Enables directed requests.</td> </tr> <tr> <td>show radius-server sorted</td> <td>Displays RADIUS servers sorted by name.</td> </tr> <tr> <td>show radius-server statistics</td> <td>Displays RADIUS statistics.</td> </tr> <tr> <td>show radius-server directed-request</td> <td>Displays the directed request configuration.</td> </tr> </tbody> </table> | Command | Description | aaa group server radius | Creates a RADIUS server group and enters the RADIUS server group configuration submode for that group. | radius-server host | Defines the IP address or hostname for the RADIUS server. | radius-server directed-request | Enables directed requests. | show radius-server sorted | Displays RADIUS servers sorted by name. | show radius-server statistics | Displays RADIUS statistics. | show radius-server directed-request | Displays the directed request configuration. |
| Command | Description | | | | | | | | | | | | | | |
| aaa group server radius | Creates a RADIUS server group and enters the RADIUS server group configuration submode for that group. | | | | | | | | | | | | | | |
| radius-server host | Defines the IP address or hostname for the RADIUS server. | | | | | | | | | | | | | | |
| radius-server directed-request | Enables directed requests. | | | | | | | | | | | | | | |
| show radius-server sorted | Displays RADIUS servers sorted by name. | | | | | | | | | | | | | | |
| show radius-server statistics | Displays RADIUS statistics. | | | | | | | | | | | | | | |
| show radius-server directed-request | Displays the directed request configuration. | | | | | | | | | | | | | | |

show radius-server sorted

To display the RADIUS server configuration in a sorted format, use the **show radius-server sorted** command.

show radius-server sorted

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

Supported User Roles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display the RADIUS server configuration in a sorted format:

```
n1000v(config)# show radius-server sorted
```

| Related Commands | Command | Description |
|------------------|--------------------------------------------|-------------------------------------------------------------------|
| | radius-server host | Defines the IP address or hostname for the RADIUS server. |
| | radius-server directed-request | Enables directed requests. |
| | show radius-server groups | Displays information about the RADIUS server group configuration. |
| | show radius-server statistics | Displays RADIUS statistics. |
| | show radius-server directed-request | Displays the directed request configuration. |

show radius-server statistics

To displays the RADIUS statistics, use the **show radius-server statistics** command.

```
show radius-server statistics {hostname | ipv4-address}
```

| Syntax Description | hostname | DNS name for the RADIUS server host. |
|--------------------|--------------|---------------------------------------|
| | ipv4-address | IP address of the RADIUS server host. |

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display the RADIUS statistics:

```
n1000v# show radius-server statistics 10.10.1.1
Server is not monitored

Authentication Statistics
  failed transactions: 0
  sucessfull transactions: 0
  requests sent: 0
  requests timed out: 0
  responses with no matching requests: 0
  responses not processed: 0
  responses containing errors: 0

Accounting Statistics
  failed transactions: 0
  sucessfull transactions: 0
  requests sent: 0
  requests timed out: 0
  responses with no matching requests: 0
  responses not processed: 0
  responses containing errors: 0
```

| Related Commands | Command | Description |
|-------------------------|--------------------------------------------|-------------------------------------------------------------------|
| | radius-server host | Defines the IP address or hostname for the RADIUS server. |
| | radius-server directed-request | Enables directed requests. |
| | show radius-server groups | Displays information about the RADIUS server group configuration. |
| | show radius-server sorted | Displays RADIUS servers sorted by name. |
| | show radius-server statistics | Displays RADIUS statistics. |
| | show radius-server directed-request | Displays the directed request configuration. |

show running-config bridge-domain

To display the running configuration information for bridge domain, use the **show running-config bridge-domain** command.

show running-config bridge-domain

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(2.1) | This command was introduced. |

Usage Guidelines To use this command, you can display the running bridge domain.

Examples This example shows how to display running config bridge domain information:

```
n1000V(config)# # show running-config bridge-domain

!Command: show running-config bridge-domain
!Time: Tue Jun 18 05:00:03 2013

version 4.2(1)SV2(2.1)
feature segmentation
feature vxlan-gateway
segment mode unicast-only

bridge-domain tenant-red1
segment id 5000
group 224.24.109.28
segment mode unicast-only
no segment distribution mac
bridge-domain tenant-red2
segment id 5001
segment mode unicast-only
no segment distribution mac
bridge-domain tenant-red3
segment id 5002
segment mode unicast-only
segment distribution mac
```

show running-config bridge-domain

```

interface Vethernet62
switchport access bridge-domain tenant-red1

interface Vethernet65
switchport access bridge-domain tenant-red2

interface Vethernet67
switchport access bridge-domain tenant-red3

interface port-channel1
service instance 2
encapsulation dot1q 320 bridge-domain tenant-red1
encapsulation dot1q 321 bridge-domain tenant-red2
encapsulation dot1q 322 bridge-domain tenant-red3

```

Related Commands

| Command | Description |
|---------------------------|--------------------------------------------|
| show bridge-domain | Displays all bridge domains with the mode. |

show running-configuration cts

To display the running configuration information for Cisco TrustSec, use the **show cts running-configuration** command.

show cts running-configuration

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any

SupportedUserRoles

network-admin
network-operator

Command History

| Release | Modification |
|----------------|------------------------------|
| 4.2(1)SV2(1.1) | This command was introduced. |

Usage Guidelines

To use this command, you enable the Cisco TrustSec feature.

This command requires an Advanced License. See the *Cisco Nexus 1000V License Configuration Guide, Release 4.2(1)SV2(1.1)* for more information on the licensing requirements for Cisco Nexus 1000V.

Examples

This example shows how to display CTS running configuration information:

```
n1000V(config)# feature cts
n1000V(config)# vrf context management
n1000V(config)# ip route 0.0.0.0/0 10.78.1.1
n1000V(config)# cts role-based sgt-map 99.10.10.10 545
n1000V(config)# port-profile type vethernet kumar
n1000V(config-port-prof)# capability l3control
n1000V(config-port-prof)# vmware port-group
n1000V(config-port-prof)# switchport mode access
n1000V(config-port-prof)# switchport access vlan 353
n1000V(config-port-prof)# cts sgt 6766
n1000V(config-port-prof)# no shutdown
n1000V(config-port-prof)# system vlan 353
n1000V(config-port-prof)# state enabled
n1000V(config-port-prof)# cts device tracking
n1000V(config-port-prof)# cts interface delete-hold 60
n1000V(config-port-prof)# cts sxp enable
n1000V(config-port-prof)# cts sxp default password 7 CisocPassword
n1000V(config-port-prof)# cts sxp connection peer 10.104.244.22 password required
7vbmzx123 mode listener vrf management
```

```
n1000v(config-port-prof)# show running-config cts

!Command: show running-config cts
!Time: Mon Oct 1 15:51:49 2012

version 4.2(1)SV2(1.1)
feature cts

cts device tracking
cts interface delete-hold 60
cts sxp enable
cts sxp connection peer 172.23.233.94 password none mode listener vrf management
n1000v(config)#
```

show running-config diff

| Command | Description |
|-------------------------------------------|----------------------------------------------------------------|
| copy running-config startup-config | Copies the running configuration to the startup configuration. |

To verify the difference between the running and startup configurations, use the **show running-config diff** command.

```
show running-config diff
```

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 When you switch over from one VSM to another, any unsaved running configuration that was available in an active VSM is still unsaved in the new active VSM. You can verify this unsaved running configuration with this command. Then, save that configuration in the startup, if needed.

Examples This example shows how to verify the difference between the running and startup configurations:

```
n1000v# show running-config diff
*** Startup-config
--- Running-config
*****
*** 1,38 ****
version 4.0(4)SV1(1)
role feature-group name new
role name testrole
username admin password 5 $1$S7HvKc5G$aguYqHl0dPtBJAhEPwsy1 role network-admin
telnet server enable
ip domain-lookup
```

Related Commands

| Command | Description |
|-------------------------------------------|-----------------------------------------------------------------------|
| system switchover | Initiates, on the active VSM, a manual switchover to the standby VSM. |
| copy running-config startup-config | Copies the running configuration to the startup configuration. |

show running-config evb

To display the running configuration for the EVB segmentation on the Cisco Nexus 1000V, use the **show run evb** command.

show running-config evb

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(2.2) | This command was introduced. |

Usage Guidelines None

Examples This example shows how to display the running configuration for the EVB segmentation.

```
n1000v#: show running-config evb
evb resource-wait-delay 24
evb reinit-keep-alive 25
ecp retransmission-timer-exponent 15
ecp max-retries 6
```

| Related Commands | Command | Description |
|------------------|---------------------|---------------------------------------------------------------------|
| | show evb | Displays the EVB segmentation information on the Cisco Nexus 1000V. |
| | show evb vsi | Displays the VDP VSI information from the Cisco Nexus 1000V VEM. |

show running-config fabric forwarding

To display the running configuration for enabling the fabric forwarding feature, use the **show running-config fabric forwarding** command.

show running-config fabric forwarding

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(2.2) | This command was introduced. |

Usage Guidelines You must have enabled the fabric forwarding feature before executing this command.

Examples This example shows how to display fabric forwarding feature on the Cisco Nexus 1000V:

```
n1000V# show running-config fabric forwarding
version 4.2(1)SV2(2.2)
feature fabric forwarding
fabric forwarding anycast-gateway-mac 1111.2222.4444
```

| Related Commands | Command | Description |
|------------------|---------------------|---------------------------------------------------------------------|
| | show evb | Displays the EVB segmentation information on the Cisco Nexus 1000V. |
| | show evb vsi | Displays the VDP VSI information from the Cisco Nexus 1000V VEM. |
| | show ecp | Displays the ECP information. |

show running-config interface ethernet

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

show running-config interface ethernet *slot/port*

| | |
|---------------------------|----------------------------------------------------------------------------------|
| Syntax Description | <i>slot/port</i> Slot number and port number for an existing Ethernet interface. |
|---------------------------|----------------------------------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|-----------------------------|---------------|
| Supported User Roles | network-admin |
|-----------------------------|---------------|

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display the running configuration for a Ethernet interface 2/1:

```
n1000v# show running-config interface ethernet 2/1
version 4.0(4)SV1(3)

interface Ethernet3/2
  inherit port-profile uplink_all
```

| Related Commands | Command | Description |
|------------------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| | show running-config interface port-channel | Displays information about the running configuration of the port channel. |
| show running-config interface vethernet | Displays information about the running configuration of the vEthernet interface. | |

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 | <i>channel-number</i> Number of the port-channel group. The range of values is from 1 to 4096. |
|---------------------------|------------------------------------------------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|-----------------------------|---------------|
| Supported User Roles | network-admin |
|-----------------------------|---------------|

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

| | |
|-----------------|-------------------------------------------------------------------------------------------|
| 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 interface vethernet

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

show running-config interface vethernet *interface-number*

| | |
|---------------------------|---------------------------------------------------------------------------------|
| Syntax Description | <i>interface-number</i> Number that identifies an existing vEthernet interface. |
|---------------------------|---------------------------------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|-----------------------------|---------------|
| Supported User Roles | network-admin |
|-----------------------------|---------------|

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display the running configuration for a vEthernet interface 2/1:

```
n1000v# show running-config interface vethernet 1
version 4.0(4)SV1(2)

interface Vethernet1
  description isp_pvlan1
  pinning id 3
  switchport mode private-vlan host
  no shutdown

n1000v#
```

| Related Commands | Command | Description |
|-----------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| | show running-config interface port-channel | Displays information about the running configuration of the port channel. |
| show running-config interface ethernet | Displays information about the running configuration of the Ethernet interface. | |

show running-config network-segment policy

To display the network segmentation policy configuration, use the **show running-config network-segment policy** command.

```
show running-config network-segment policy [policy_name]
```

| | | |
|---------------|--------------------|---------------------------------------------------------|
| Syntax | <i>policy_name</i> | (Optional) The name of the network segmentation policy. |
|---------------|--------------------|---------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|-----------------------------|-----------------------------------|
| Supported User Roles | network-admin network-operator |
|-----------------------------|-----------------------------------|

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV1(5.1) | This command was introduced. |

Usage Guidelines

Examples This example shows how display the network segmentation policy configuration:

```
n1000v# show running-config network-segment policy abc-policy-vxlan

!Command: show running-config network-segment policy abc-policy-vxlan
!Time: Fri Aug 26 18:34:50 2011

version 4.2(1)SV1(5.1)
feature network-segmentation-manager

network-segment policy abc-policy-vxlan
description network segmentation policy for ABC for VXLAN networks
id f5dcf127-cdb0-4bdd-8df5-9515d6dc8170
type segmentation
import port-profile port-profile ABC_profile_segmentation
```

| Related Commands | Command | Description |
|------------------|------------------------------------------------------|---------------------------------------------------------|
| | feature network-segmentation -manager | Enables the Network Segmentation Manager (NSM) feature. |
| | network-segment policy | Creates a network segmentation policy. |

show running-config port-profile

To display the port profile configuration, use the **show running-config port-profile** command.

```
show running-config port-profile [prof_name]
```

| | |
|---------------------------|------------------------------------------------|
| Syntax Description | <i>prof_name</i> (Optional) Port Profile Name. |
|---------------------------|------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|---------------------------|---------------|
| SupportedUserRoles | network-admin |
|---------------------------|---------------|

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 4.2(1)SV1(4) | This command was introduced. |

| | |
|-------------------------|------|
| Usage Guidelines | None |
|-------------------------|------|

| | |
|-----------------|-------------------------------------------------------------------|
| Examples | This example shows how to display the port profile configuration: |
|-----------------|-------------------------------------------------------------------|

```
n1000v(config)# show running-config port-profile
!Command: show running-config port-profile
!Time: Fri Oct 15 13:28:40 2010

version 4.2(1)SV1(4)
port-profile default max-ports 32
port-profile type ethernet allaccess2
  assign port-profile-role adminUser
port-profile type vethernet feature-veth-240
  capability feature-veth
  vmware port-group
  switchport mode access
  switchport access vlan 240
  no shutdown
  description Port-group created for Nexus1000V internal usage. Do not use/modify
manually.
  state enabled
n1000v(config)#
```

| Related Commands | Command | Description |
|-------------------------|---------------------|-------------------------|
| | port-profile | Creates a port profile. |

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 | <i>vlan-id</i> | VLAN ID number or range of VLANs. Valid VLAN IDs are 1-4094 or ranges are 1-5, 10 or 2-5, 7-19. |
|---------------------------|----------------|-------------------------------------------------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|-----------------------------|-----------------------------------|
| Supported User Roles | network-admin network-operator |
|-----------------------------|-----------------------------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 4.0(4)SV1(1) | This command was introduced. |

| | |
|-------------------------|------|
| Usage Guidelines | None |
|-------------------------|------|

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 service-module interface brief

Displays all the interfaces of the service modules attached to the VSM.

show service-module interface brief

| | |
|---------------------------|---------------------------------------------------------------|
| Syntax Description | brief Specifies all interfaces of the service modules. |
|---------------------------|---------------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|-----------------------------|-----------------------------------|
| Supported User Roles | network-admin network-operator |
|-----------------------------|-----------------------------------|

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 4.2(1)SV2(2.1) | This command was introduced. |

| | |
|-------------------------|-------------------------------------------------------------------------|
| Usage Guidelines | Specifies all Ethernet and Vethernet interfaces of the service modules. |
|-------------------------|-------------------------------------------------------------------------|

Examples This example shows how to display all the interfaces of the service modules attached to the VSM:

```
n1000v(config)# show service-module interface brief
```

```
-----
Ethernet      VLAN   Type Mode   Status Reason                               Speed   Port
Interface                                           Ch #
-----
Eth37/1       1      eth trunk up      none                               auto    5
Eth37/3       1      eth trunk up      none                               auto    5
Eth38/1       1      eth trunk up      none                               auto    6
Eth38/3       1      eth trunk up      none                               auto    6
Po4           1      eth trunk down    No operational members            auto(D) lacp
Po5           1      eth trunk up      none                               auto(D) lacp
Po6           1      eth trunk up      none                               auto(D) lacp
Po7           1      eth trunk down    No operational members            auto(D) lacp
-----
Vethernet     VLAN   Type Mode   Status Reason                               Speed
-----
Veth81        1546  virt access down  nonParticipating                  auto
Veth129       1546  virt access down  nonParticipating                  auto
Veth222       1546  virt access up    none                               auto
Veth223       1546  virt access up    none                               auto
n1000v(config)#
```

| Related Commands | Command | Description |
|------------------|---------------------------------------------------------|-------------------------------------------------------------------------------|
| | show service-module interface module <mod> | Displays all the interfaces of a specific service module attached to the VSM. |
| | show service-module mgmt-int | Displays the management interface of the service modules attached to the VSM. |
| | show service-module mgmt-int module <mod> | Displays the management interface of a specific module attached to the VSM. |

show service-module interface module <mod> brief

Displays all the interfaces of a specific service module attached to the VSM.

show service-module interface module <mod> brief

Syntax Description

| | |
|---------------------------|----------------------------------------------------|
| module <mod> | Specifies service module attached to the VSM. |
| brief | Specifies all the interfaces of a specific module. |

Defaults

None

Command Modes

Any

Supported User Roles

network-admin
network-operator

Command History

| Release | Modification |
|----------------|------------------------------|
| 4.2(1)SV2(2.1) | This command was introduced. |

Usage Guidelines

Specifies all Ethernet and Vethernet interfaces of the specific service modules.

Examples

This example shows how to display all the interfaces of a specific service module attached to the VSM:

```
n1000v(config)# show service-module interface module 37 brief
```

```
-----
Ethernet      VLAN   Type Mode   Status Reason          Speed   Port
Interface
-----
Eth37/1       1      eth trunk up     none           auto    5
Eth37/3       1      eth trunk up     none           auto    5
Po5           1      eth trunk up     none           auto(D) lacp
-----
Vethernet     VLAN   Type Mode   Status Reason          Speed
-----
Veth223       1546  virt access up     none           auto
n1000v(config)#
```


| Related Commands | Command | Description |
|------------------|--------------------------------------------------------|-------------------------------------------------------------------------------|
| | show service-module interface brief | Displays all the interfaces of the service modules attached to the VSM. |
| | show service-module mgmt-int | Displays the management interface of the service modules attached to the VSM. |
| | show service-module mgmt-int module <mod> | Displays the management interface of a specific module attached to the VSM. |

show service-module mgmt-int

Displays the management interface of the service modules attached to the VSM.

show service-module mgmt-int

| | |
|---------------------------|-------------------------------------------------|
| Syntax Description | mgmt-int Specifies management interface. |
|---------------------------|-------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|---------------------------|-----------------------------------|
| SupportedUserRoles | network-admin network-operator |
|---------------------------|-----------------------------------|

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 4.2(1)SV2(2.1) | This command was introduced. |

| | |
|-------------------------|-----------------------------------------------------------|
| Usage Guidelines | User installs the management IP address with the gateway. |
|-------------------------|-----------------------------------------------------------|

Examples This example shows how to display the management interface of the service modules attached to the VSM:

```
n1000v(config)# show service-module mgmt-int
```

```
-----
Mod      Interface-Name  IP-address                Speed  MTU
-----
37       Mgmt0           10.105.234.173           0      0
38       Mgmt0           10.105.234.172           0      0
n1000v(config)#
```

| Related Commands | Command | Description |
|-------------------------|--------------------------------------------|-------------------------------------------------------------------------|
| | show service-module interface brief | Displays all the interfaces of the service modules attached to the VSM. |

| Command | Description |
|---------------------------------------------------------------|-------------------------------------------------------------------------------|
| show service-module interface module <mod> brief | Displays all the interfaces of a specific service module attached to the VSM. |
| show service-module mgmt-int module <mod> | Displays the management interface of a specific module attached to the VSM. |

■ `show service-module mgmt-int module <mod>`

show service-module mgmt-int module <mod>

Displays the management interface of a specific module attached to the VSM.

`show service-module mgmt-int module <mod>`

| | | |
|---------------------------|---------------------------|----------------------------------|
| Syntax Description | mgmt-int | Specifies management interface. |
| | module <mod> | Specifies service module number. |

Defaults None

Command Modes Any

Supported User Roles network-admin
network-operator

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 4.2(1)SV2(2.1) | This command was introduced. |

Usage Guidelines User installs the management IP address with the gateway.

Examples This example shows how to display the management interface of a specific module attached to the VSM:

```
n1000v(config)# show service-module mgmt-int module 37
```

```
-----
Mod      Interface-Name  IP-address                Speed  MTU
-----
37       Mgmt0           10.105.234.173           0      0
n1000v(config)#
```

| Related Commands | Command | Description |
|-------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------|
| | show service-module interface brief | Displays all the interfaces of the service modules attached to the VSM. |
| | show service-module interface module <mod> brief | Displays all the interfaces of a specific service module attached to the VSM. |
| | show service-module mgmt-int | Displays the management interface of the service modules attached to the VSM. |

show snmp

To display information about one or more destination profiles, use the **show snmp** command.

show snmp [**community** | **context** | **engineID** | **group** | **host** | **sessions** | **trap** | **user**]

| Syntax Description | |
|--------------------|----------------------------------------------------|
| community | (Optional) Specifies SNMP community strings. |
| context | (Optional) Specifies SNMP context mapping entries. |
| engineID | (Optional) Specifies the SNMP engineID. |
| group | (Optional) Specifies the SNMP group. |
| host | (Optional) Specifies SNMP hosts. |
| sessions | (Optional) Specifies SNMP sessions. |
| trap | (Optional) Specifies SNMP traps. |
| user | (Optional) Specifies SNMPv3 users. |

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display information about the SNMP engineID:

```
n1000v# show snmp engineID
Local SNMP engineID: [Hex] 800000090302000C000000
                    [Dec] 128:000:000:009:003:002:000:012:000:000:000
n1000v#
```

| Related Commands | Command | Description |
|------------------|-----------------------------|--------------------------------------------------------|
| | snmp-server contact | Configures sysContact, which is the SNMP contact name. |
| | snmp-server location | Configures sysLocation, which is the SNMP location. |

show ssh key

To display the Secure Shell (SSH) server keys, use the **show ssh key** command.

```
show ssh key [dsa | rsa]
```

| Syntax Description | dsa | (Optional) Specifies the display of DSA SSH keys. |
|--------------------|-----|---------------------------------------------------|
| | rsa | (Optional) Specifies the display of RSA SSH keys. |

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display SSH server keys:

```
n1000v# show ssh key
n1000v#
```

| Related Commands | Command | Description |
|------------------|-----------------|---------------------------------------------|
| | ssh key | Generates the SSH server key. |
| | show ssh server | Displays whether the SSH server is enabled. |

show ssh server

To display the Secure Shell (SSH) server configuration, use the **show ssh server** command.

show ssh 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. |

Examples This example shows how to display the SSH server configuration:

```
n1000v# show ssh server
ssh is enabled
version 2 enabled
n1000v#
```

| Related Commands | Command | Description |
|------------------|------------------------|--------------------------------------------------------|
| | ssh | Creates an SSH IP session to a remote device using IP. |
| | ssh key | Generates the SSH server key. |
| | show ssh server | Displays whether the SSH server is enabled. |
| | show ssh key | Displays the SSH server keys. |

show startup-config aaa

To display the Authentication, Authorization and Accounting protocol (AAA) configuration in the startup configuration, use the **show startup-config aaa** command.

show startup-config aaa

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. |

Examples This example shows how to display the AAA configuration in the startup configuration:

```
n1000v# show startup-config aaa
version 4.0(4)SV1(2)

n1000v#
```

| Related Commands | Command | Description |
|------------------|---------------------------------------|---------------------------------------------------------------------------|
| | show startup-config aclmanager | Displays startup configuration for the access control list (ACL) manager. |
| | show startup-config am | Displays information about the Arthur–Merlin protocol (AM). |
| | show startup-config arp | Displays information about ARP. |
| | show startup-config dhcp | Displays information about DHCP. |
| | show startup-config icmpv6 | Displays information about ICMPv6. |
| | show startup-config igmp | Displays information about IGMP. |
| | show startup-config interface | Displays the interface configuration. |

| Command | Description |
|------------------------------------------|--------------------------------------------------------------------------|
| show startup-config ip | Displays information about IP. |
| show startup-config ipqos | Displays the startup configuration for IP QoS Manager. |
| show startup-config ipv6 | Displays information about IPv6. |
| show startup-config l3vm | Displays information about l3vm. |
| show startup-config license | Displays information about licensing. |
| show startup-config log | Displays the execution log of the last-used ASCII startup configuration. |
| show startup-config monitor | Displays configured Ethernet SPAN sessions. |
| show startup-config netflow | Displays the NetFlow configuration. |
| show startup-config port-profile | Displays the port-profile configuration. |
| show startup-config port-security | Displays the port-security configuration. |
| show startup-config radius | Displays the RADIUS configuration. |
| show startup-config tacacs+ | Displays the TACACS configuration. |

show startup-config network-segment policy

To display the start up configuration of a network segmentation policy, use the **show startup-config network-segment policy** command.

```
show startup-config network-segment policy [policy_name]
```

| Syntax Description | <i>policy_name</i> (Optional) The name of the network segmentation policy. | | | | |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------------|----------------|------------------------------|
| Defaults | None | | | | |
| Command Modes | Any command mode | | | | |
| Supported User Roles | network-admin network-operator | | | | |
| Command History | <table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>4.2(1)SV1(5.1)</td> <td>This command was introduced.</td> </tr> </tbody> </table> | Release | Modification | 4.2(1)SV1(5.1) | This command was introduced. |
| Release | Modification | | | | |
| 4.2(1)SV1(5.1) | This command was introduced. | | | | |
| Usage Guidelines | None | | | | |
| Examples | <p>This example shows how to display the start up configuration of a network segmentation policy:</p> <pre>n1000v(config)# show startup-config network-segment policy !Command: show startup-config network-segment policy !Time: Fri Dec 9 02:50:42 2011 !Startup config saved at: Thu Dec 8 05:02:19 2011 version 4.2(1)SV1(5.1) feature network-segmentation-manager network-segment policy default_vlan_template description Default template used for VLAN backed pools type vlan import port-profile NSM_template_vlan network-segment policy default_segmentation_template description Default template used for isolation backed pools type segmentation import port-profile NSM_template_segmentation</pre> | | | | |
| Related Commands | | | | | |

■ show startup-config network-segment policy

| Command | Description |
|------------------------------------------------------|---------------------------------------------------------|
| feature network-segmentation -manager | Enables the Network Segmentation Manager (NSM) feature. |
| network-segment policy | Creates a network segmentation policy. |

show startup-config radius

To display the RADIUS configuration in the startup configuration, use the **show startup-config radius** command.

show startup-config radius

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. |

Examples This example shows how to display the RADIUS configuration in the startup configuration:

```
n1000v# show startup-config radius
version 4.0(4)SV1(2)

n1000v#
```

| Related Commands | Command | Description |
|------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| | show startup-config aaa | Displays the Authentication, Authorization and Accounting protocol (AAA) configuration in the startup configuration. |
| | show startup-config aclmanager | Displays startup configuration for the access control list (ACL) manager. |
| | show startup-config am | Displays information about Arthur-Merlin protocol (AM). |
| | show startup-config arp | Displays information about ARP. |
| | show startup-config dhcp | Displays information about DHCP. |
| | show startup-config icmpv6 | Displays information about ICMPv6. |
| | show startup-config igmp | Displays information about IGMP. |

| Command | Description |
|------------------------------------------|--------------------------------------------------------------------------|
| show startup-config interface | Displays the interface configuration. |
| show startup-config ip | Displays information about IP. |
| show startup-config ipqos | Displays the startup configuration for the IP QoS Manager. |
| show startup-config ipv6 | Displays information about IPv6. |
| show startup-config l3vm | Displays information about l3vm. |
| show startup-config license | Displays information about licensing. |
| show startup-config log | Displays the execution log of the last-used ASCII startup configuration. |
| show startup-config monitor | Displays configured Ethernet SPAN sessions. |
| show startup-config netflow | Displays the NetFlow configuration. |
| show startup-config port-profile | Displays the port-profile configuration. |
| show startup-config port-security | Displays the port-security configuration. |
| show startup-config radius | Displays the RADIUS configuration. |
| show startup-config tacacs+ | Displays the TACACS configuration. |

show startup-config security

To display the user account configuration in the startup configuration, use the **show startup-config security** command.

show startup-config security

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. |

Examples This example shows how to display the user account configuration in the startup configuration:

```
n1000v# show startup-config security
version 4.0(4)SV1(2)
username admin password 5 $1$3/cH7rWm$W3QUjfQ0yfySds5p3/PtX. role network-admin

username kathleen password 5 $1$7vewiaFA$iLCfmalyKeSBySqrAgvNZ/ role network-op
erator
username kathleen role network-admin
telnet server enable

n1000v#
```

| Related Commands | Command | Description |
|------------------|---------------------------------------|-----------------------------------------------------------------------------------------|
| | show startup-config aaa | Displays the Authentication, Authorization and Accounting protocol (AAA) configuration. |
| | show startup-config aclmanager | Displays the startup configuration for Access Control List (ACL) manager. |
| | show startup-config am | Displays information about the Arthur–Merlin protocol (AM). |
| | show startup-config arp | Displays information about ARP. |
| | show startup-config dhcp | Displays information about DHCP. |

| Command | Description |
|------------------------------------------|----------------------------------------------------------------------|
| show startup-config icmpv6 | Displays information about ICMPv6. |
| show startup-config igmp | Displays information about IGMP. |
| show startup-config interface | Displays the interface configuration. |
| show startup-config ip | Displays information about IP. |
| show startup-config ipqos | Displays the startup configuration for the IP QoS Manager. |
| show startup-config ipv6 | Displays information about IPv6. |
| show startup-config l3vm | Displays information about L3vm. |
| show startup-config license | Displays information about licensing. |
| show startup-config log | Displays the execution log of last used ASCII startup configuration. |
| show startup-config monitor | Displays configured Ethernet SPAN sessions. |
| show startup-config netflow | Displays the NetFlow configuration. |
| show startup-config port-profile | Displays the port profile configuration. |
| show startup-config port-security | Displays the port-security configuration. |
| show startup-config radius | Displays the RADIUS configuration. |
| show startup-config tacacs+ | Displays the TACACS configuration. |

show svs connections

To display the current connections to the Cisco Nexus 1000V for verification, use the **show svs connections** command.

```
show svs connections [conn_name]
```

| | |
|---------------------------|-------------------------------------------------------------|
| Syntax Description | <i>conn_name</i> (Optional) Name of an existing connection. |
|---------------------------|-------------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|---------------------------|-----------------------------------|
| SupportedUserRoles | network-admin network-operator |
|---------------------------|-----------------------------------|

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display information about the SVS connection:

```
n1000v# show svs connections

connection vc:
  hostname: 172.23.232.139
  remote port: 80
  protocol: vmware-vim https
  certificate: default
  datacenter name: Documentation-DC
  DVS uuid: 9b dd 36 50 2e 27 27 8b-07 ed 81 89 ef 43 31 17
  config status: Enabled
  operational status: Disconnected
  sync status: -
  version: -
n1000v#
```

| Related Commands | Command | Description |
|-------------------------|---------------------------|----------------------------------------------------------------------------------------------------------------------------|
| | svs connection | Places you into connection configuration mode for adding this connection between Cisco Nexus 1000V and the vCenter Server. |
| | show svs domain | Displays the domain configuration. |
| | show svs neighbors | Displays information about SVS neighbors. |

show svcs domain

To display the VSM domain configuration, use the **show svcs domain** command.

show svcs domain

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. |
| | 4.0(4)SV1(2) | The output of this command was modified to include the Layer 2 and Layer 3 transport mode configuration. |

Examples This example shows how to display the VSM domain configuration:

```
n1000v# config t
n1000v(config)# svcs-domain
n1000v(config-svcs-domain)# show svcs domain
SVS domain config:
  Domain id: 100
  Control vlan: 100
  Packet vlan: 101
  Management vlan: 0
  L2/L3 Control mode: L3
  L2/L3 Control interface: mgmt0
  Status: Config push to VC successful.
n1000v(config-svcs-domain)#
```

| Related Commands | Command | Description |
|------------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | svcs-domain | Creates and configures a domain for the Cisco Nexus 1000V that identifies the VSM and VEMs and the control and packet VLANs for communication and management. |

show svcs neighbors

To display all SVS neighbors, use the **show svcs neighbors** command.

show svcs neighbors

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. |

Examples This example shows how to display all SVS neighbors:

```
n1000v# show svcs neighbors
```

```
Active Domain ID: 113
```

```
AIPC Interface MAC: 0050-56b6-2bd3
```

```
Inband Interface MAC: 0050-56b6-4f2d
```

| Src MAC | Type | Domain-id | Node-id | Last learnt (Sec. ago) |
|----------------|------|-----------|---------|------------------------|
| 0002-3d40-7102 | VEM | 113 | 0302 | 71441.12 |
| 0002-3d40-7103 | VEM | 113 | 0402 | 390.77 |

```
n1000v#
```

| Related Commands | Command | Description |
|------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | show svcs domain | Displays the Virtual Supervisor Module (VSM) domain configuration. |
| | svcs-domain | Creates and configures a domain for the Cisco Nexus 1000V that identifies the VSM and Virtual Ethernet Modules (VEMs) and the control and packet VLANs for communication and management. |

show svcs upgrade status

To monitor the upgrade of the Virtual Supervisor Module (VSM), use the **show svcs upgrade status** command.

show svcs upgrade status

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.2(1)SV1(4) | This command was introduced. |

Examples This example shows how to monitor the upgrade of the VSM to a new software version:

```
n1000v# show svcs upgrade status
Upgrade State: Start
Upgrade mgmt0 ipv4 addr: 1.1.1.1
Upgrade mgmt0 ipv6 addr:
Upgrade control0 ipv4 addr:
n1000v#
```

| Related Commands | Command | Description |
|------------------|------------------------------|------------------------------------------------------------------------------------------|
| | svcs upgrade start | Begins the upgrade of the VSM. |
| | svcs upgrade complete | Completes a VSM software upgrade, and notifies hosts to switch to the upgraded datapath. |

show switch edition

To display the current edition of the Nexus 1000V switch with the list of advanced features, use the **show switch edition** command.

show switch edition

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(1.1) | This command was introduced. |

Examples This example shows how to monitor the upgrade of the VSM to a new software version:

```
n1000v# show switch edition
Switch Edition - Essential
```

```
Advanced Features
Feature Name           Feature State
-----
cts                    disabled
dhcp snooping         disabled
```

```
Licenses Available: 512
Licenses in Use: 0
License Expiry: Never
```

```
VSM# show switch edition
Switch Edition - Advanced
```

```
Advanced Features
Feature Name           Feature State
-----
cts                    disabled
dhcp snooping         enabled
```

```
Licenses Available: 28
Licenses in Use: 4
License Expiry: 11 Dec 2012
```

```
n1000v#
```

Related Commands

| Command | Description |
|-----------------------------|------------------------------------------------------------------------------------------|
| svs upgrade start | Begins the upgrade of the VSM. |
| svs upgrade complete | Completes a VSM software upgrade, and notifies hosts to switch to the upgraded datapath. |

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. |
|--------------------|-------------------|---------------------------------------------------------------|
| | <i>error-code</i> | Displays description about a specific error code. |

| Defaults | None |
|----------|------|
|----------|------|

| Command Modes | Any |
|---------------|-----|
|---------------|-----|

| Supported User Roles | 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. |

show system internal active-active accounting logs

To display the accounting logs that are stored on a local VSM during the latest split-brain resolution, use the **show system internal active-active accounting logs** command.

show system internal active-active accounting logs

| | | |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Syntax Description | <i>logs</i> | Displays logs during previous Active-Active VSM scenario. |
| Defaults | None | |
| Command Modes | Any | |
| SupportedUserRoles | network-admin network-operator | |
| Command History | Release | Modification |
| | 4.2.1SV2(1.1) | This command was introduced. |
| Usage Guidelines | None | |
| Examples | <p>This example shows how to display the accounting logs that are stored on a local VSM during the latest split-brain resolution:</p> <pre>n1000v# show system internal active-active accounting logs n1000v#</pre> | |
| Related Commands | Command | Description |
| | show system redundancy status | Displays the system redundancy status. |
| | show system internal active-active remote accounting logs | Displays the accounting logs that are stored on a remote VSM during the last split-brain resolution. |
| | show system resources | Displays the system resources. |

show system internal active-active redundancy traces

To display the redundancy traces that are stored on a local VSM during the latest split-brain resolution, use the **show system internal active-active redundancy traces** command.

show system internal active-active *redundancy* traces

| | | |
|---------------------------|-------------------|-------------------------------------------------------------------------------------------------------|
| Syntax Description | <i>redundancy</i> | Displays the redundancy traces that are stored on a local VSM during the last split-brain resolution. |
|---------------------------|-------------------|-------------------------------------------------------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|---------------------------|-----------------------------------|
| SupportedUserRoles | network-admin network-operator |
|---------------------------|-----------------------------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 4.2.1SV2(1.1) | This command was introduced. |

Usage Guidelines

Examples This example shows how to display the accounting logs that are stored on a local VSM during the latest split-brain resolution:

```
n1000v# show system internal active-active redundancy traces
n1000v#
```

| | | |
|-------------------------|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Related Commands | Command | Description |
| | show system redundancy status | Displays the system redundancy status. |
| | show system internal active-active remote redundancy traces | Displays the remote redundancy traces that are stored on a remote VSM during the last split-brain resolution. |
| | show system resources | Displays the system resources. |

show system internal active-active remote accounting logs

To display the accounting logs that are stored on a remote VSM during the latest split-brain resolution, use the **show system internal active-active remote accounting logs** command.

show system internal active-active remote accounting logs *logs*

| | | |
|---------------------------|-------------|-------------------------------------------------------------------------------------------------------------|
| Syntax Description | <i>logs</i> | Displays the remote accounting logs that are stored on a remote VSM during the last split-brain resolution. |
|---------------------------|-------------|-------------------------------------------------------------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|---------------------------|-----------------------------------|
| SupportedUserRoles | network-admin network-operator |
|---------------------------|-----------------------------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 4.2.1SV2(1.1) | This command was introduced. |

| | |
|-------------------------|------|
| Usage Guidelines | None |
|-------------------------|------|

Examples This example shows how to display the accounting logs that are stored on a remote VSM:

```
n1000v# show system internal active-active remote accounting logs
n1000v#
```

| | | |
|-------------------------|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Related Commands | Command | Description |
| | show system redundancy status | Displays the system redundancy status. |
| | show system internal active-active accounting logs | Displays the accounting logs that are stored on a local VSM during the last split-brain resolution. |
| | show system resources | Displays the system resources. |

show system internal active-active remote redundancy traces

To display the remote redundancy traces that are stored on a remote VSM during the latest split-brain resolution, use the **show system internal active-active remote redundancy traces** command.

show system internal active-active *remote redundancy traces*

| Syntax | Description |
|-------------------|---------------------------------------------------------------------------------------------------------------|
| <i>remote</i> | Displays information for the remote VSM. |
| <i>redundancy</i> | Displays the remote redundancy traces that are stored on a remote VSM during the last split-brain resolution. |

Defaults None

Command Modes Any

Supported User Roles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|---------------|------------------------------|
| | 4.2.1SV2(1.1) | This command was introduced. |

Usage Guidelines None

Examples This example shows how to display the remote redundancy traces that are stored on a remote VSM:

```
n1000v# show system internal active-active remote redundancy traces
n1000v#
```

| Related Commands | Command | Description |
|------------------|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| | show system redundancy status | Displays the system redundancy status. |
| | show system internal active-active redundancy traces | Displays the redundancy traces that are stored on a local VSM during the last split-brain resolution. |
| | show system resources | Displays the system resources. |

show system redundancy status

To display the current redundancy status for the Virtual Supervisor Module (VSM), use the **show system redundancy status** command. When a VSM role collision is detected, a warning is highlighted in the CLI output. If no collisions are detected, the warning is not displayed in the output.

show system redundancy status

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

Supported User Roles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display the current redundancy status for the VSM:

```
n1000v# show system redundancy status
-----
administrative: secondary
operational: secondary
Redundancy mode
-----
administrative: HA
operational: HA
This supervisor (sup-2)
-----
Redundancy state: Active
Supervisor state: Active
Internal state: Active with HA standby
Other supervisor (sup-1)
-----
Redundancy state: Standby
Supervisor state: HA standby
Internal state: HA standby

WARNING! Conflicting sup-2(s) detected in same domain
-----
MAC Latest Collision Time
00:50:56:97:02:3b 2012-Sep-11 18:59:17
00:50:56:97:02:3c 2012-Sep-11 18:59:17
00:50:56:97:02:2f 2012-Sep-11 18:57:42
00:50:56:97:02:35 2012-Sep-11 18:57:46
```

```
00:50:56:97:02:29 2012-Sep-11 18:57:36
```

```
00:50:56:97:02:30 2012-Sep-11 18:57:42
```

```
00:50:56:97:02:36 2012-Sep-11 18:57:46
```

```
00:50:56:97:02:2a 2012-Sep-11 18:57:36
```

```
NOTE: Please run the same command on sup-1 to check for conflicting(if any) sup-1(s) in  
the same  
domain.
```

```
n1000v#
```

show system redundancy status**Related Commands**

| Command | Description |
|-------------------------------|------------------------------------|
| system redundancy role | Designates the HA role of the VSM. |
| show system resources | Displays the system resources. |

show system resources

To display system-related CPU and memory statistics, use the **show system resources** command.

show system resources

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. |

Examples This example shows how to display system-related CPU and memory statistics:

```
n1000v# show system resources
Load average:  1 minute: 0.00   5 minutes: 0.00   15 minutes: 0.00
Processes   : 261 total, 1 running
CPU states  : 0.0% user,   0.0% kernel, 100.0% idle
Memory usage: 2075012K total,   946780K used, 1128232K free
              66764K buffers,  475404K cache

n1000v#
```

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

show system vem feature level

To display the current software release supported, use the **show system vem feature level** command.

show system vem feature level

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(2) | This command was introduced. |

Examples This example shows how to display the current VEM feature level:

```
n1000v# show system vem feature level
current feature level: 4.0(4)SV1(2)
n1000v#
```

| Related Commands | Command | Description |
|------------------|----------------------------------------|-------------------------------------------------|
| | system update vem feature level | Changes the software version supported on VEMs. |

show table-map

To display QoS table maps, use the **show table-map** command.

```
show table-map [table-map-name | default-table-map-name]
```

| | |
|---------------------------|-------------------------------------------------------------------------------------|
| Syntax Description | <i>table-map-name</i> (Optional) Specify a particular table map to display. |
| | <i>default-table-map-name</i> (Optional) Specify the system-defined table map name. |

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|-----------------------------|-----------------------------------|
| Supported User Roles | network-admin network-operator |
|-----------------------------|-----------------------------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 4.0(4)SV1(4) | This command was introduced. |

Usage Guidelines

Examples This example shows how to display the pir-markdown-map:

```
n1000v# show table-map pir-markdown-map
```

```
Table-map pir-markdown-map
  default copy
  from 10,12 to 14
  from 18,20 to 22
  from 26,28 to 30
  from 34,36 to 38
```

```
n1000v#
```

| | | |
|-------------------------|------------------|--------------------------------------|
| Related Commands | Command | Description |
| | table-map | Creates or modifies a QoS table map. |

show tacacs-server

To display the TACACS+ server configuration, use the **show tacacs-server** command.

show tacacs-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 The global shared key is saved in encrypted form in the running configuration. To display the key, use the **show running-config** command.

Examples This example shows how to displays the TACACS+ server configuration:

```
n1000v# show tacacs-server
Global TACACS+ shared secret:*****
timeout value:5
deadtime value:0
total number of servers:1
following TACACS+ servers are configured:
10.10.2.2:
available on port:49
```

| Related Commands | Command | Description |
|------------------|--------------------------------------------|----------------------------------------------------------------------------------------------|
| | tacacs+ enable | Enables TACACS+. |
| | tacacs-server key | Designates the global key shared between the Cisco Nexus 1000V and the TACACS+ server hosts. |
| | show tacacs-server directed-request | Displays the directed server enable configuration. |
| | show tacacs-server groups | Displays information about the TACACS+ server group configuration. |

| Command | Description |
|--------------------------------------|--------------------------------------------------|
| show tacacs-server sorted | Displays TACACS+ servers, sorted by server name. |
| show tacacs-server statistics | Displays TACACS statistics. |

show tcp client

To display information about the TCP client, use the **show tcp client** command.

```
show tcp client [pid pid] [detail]
```

| Syntax Description | pid | (Optional) Specifies information about the client process. |
|--------------------|---------------|------------------------------------------------------------|
| | <i>pid</i> | ID for the specified client process. |
| | detail | (Optional) Specifies socket details. |

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|-----------------------------|-----------------------------------|
| Supported User Roles | network-admin network-operator |
|-----------------------------|-----------------------------------|

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display information about the TCP client:

```
n1000v# show tcp client
Total number of clients: 12
Total number of cancels: 255372
client: syslogd, pid: 2962, sockets: 2
client: ntp, pid: 3148, sockets: 2
client: dcos-xinetd, pid: 3156, sockets: 2
client: snmpd, pid: 3150, sockets: 4
client: ntpd, pid: 3243, sockets: 3
client: dcos-thttpd, pid: 3305, sockets: 2
client: radiusd, pid: 3143, sockets: 2
client: vms, pid: 3318, sockets: 0
client: dcos_sshd, pid: 3491, sockets: 3
client: vsh, pid: 3494, sockets: 0
client: in.dcos-telnetd, pid: 25028, sockets: 3
client: vsh, pid: 25029, sockets: 0
```

| Related Commands | Command | Description |
|------------------|----------------------------|------------------------------------------------|
| | show tcp connection | Displays information about the TCP connection. |
| | show tcp statistics | Displays TCP protocol statistics. |

show tcp connection

To display information about the connection, use the **show tcp connection** command.

```
show tcp connection [pid pid | tcp | udp | raw] [local {srcIP | srcIP6}] [foreign {dstIP | dstIP6}]
[detail]
```

| Syntax Description | |
|--------------------|----------------------------------------------------------------------------|
| pid | (Optional) Specifies the client process connection status. |
| <i>pid</i> | ID for the client process connection status. |
| tcp | (Optional) Specifies all TCP connections. |
| udp | (Optional) Specifies all UDP connections. |
| raw | (Optional) Specifies all RAW connections. |
| local | (Optional) Specifies all TCP connections with a specified local address. |
| <i>srcIP</i> | Local IP address in the format A.B.C.D. |
| <i>srcIP6</i> | Local IP address in the format A:B:C:D. |
| foreign | (Optional) Specifies all TCP connections with a specified foreign address. |
| <i>dstIP</i> | Destination IP address in the format A.B.C.D. |
| <i>dstIP6</i> | Destination IP address in the format A:B:C:D. |
| detail | (Optional) Specifies detailed connection information. |

Defaults None

Command Modes Any

Supported User Roles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display detailed information about the connection:

```
n1000v# show tcp connection detail
Total number of tcp sockets: 8
Active connections (including servers)
Local host: * (22), Foreign host: * (0)
  Protocol: tcp6, type: stream, ttl: 64, tos: 0, Id: 6
  Options: none, state:
  Receive buffer:
    cc: 0, hiwat: 25300, lowat: 1, flags: none
  Send buffer:
    cc: 0, hiwat: 25300, lowat: 2048, flags:
```

```

Sequence number state:
  iss: 0, snduna: 0, sndnxt: 0, sndwnd: 0
  irs: 0, rcvnxt: 0, rcvwnd: 0, sndcwnd: 1012
Timing parameters:
  srtt: 0 ms, rtt: 0 ms, rttv: 12000 ms, krtd: 3000 ms
  rttmin: 1000 ms, mss: 1012, duration: 1390144100 ms
State: LISTEN
Flags: none
Context: management

Local host: * (23), Foreign host: * (0)
Protocol: tcp6, type: stream, ttl: 64, tos: 0, Id: 17
Options: none, state:
Receive buffer:
  cc: 0, hiwat: 17204, lowat: 1, flags: none
Send buffer:
  cc: 0, hiwat: 17204, lowat: 2048, flags:
Sequence number state:
  iss: 0, snduna: 0, sndnxt: 0, sndwnd: 0
  irs: 0, rcvnxt: 0, rcvwnd: 0, sndcwnd: 1012
Timing parameters:
  srtt: 0 ms, rtt: 0 ms, rttv: 12000 ms, krtd: 3000 ms
  rttmin: 1000 ms, mss: 1012, duration: 1390144100 ms
State: LISTEN
Flags: none
Context: management

Local host: * (80), Foreign host: * (0)
Protocol: tcp6, type: stream, ttl: 64, tos: 0, Id: 13
Options: none, state: none
Receive buffer:
  cc: 0, hiwat: 16384, lowat: 1, flags: none
Send buffer:
  cc: 0, hiwat: 16384, lowat: 2048, flags:
Sequence number state:
  iss: 0, snduna: 0, sndnxt: 0, sndwnd: 0
  irs: 0, rcvnxt: 0, rcvwnd: 0, sndcwnd: 1073725440
Timing parameters:
  srtt: 0 ms, rtt: 0 ms, rttv: 12000 ms, krtd: 3000 ms
  rttmin: 1000 ms, mss: 1024, duration: 1390144100 ms
State: LISTEN
Flags: none
Context: management

Local host: * (80), Foreign host: * (0)
Protocol: tcp, type: stream, ttl: 64, tos: 0, Id: 14
Options: none, state: none
Receive buffer:
  cc: 0, hiwat: 16500, lowat: 1, flags: none
Send buffer:
  cc: 0, hiwat: 16500, lowat: 2048, flags:
Sequence number state:
  iss: 0, snduna: 0, sndnxt: 0, sndwnd: 0
  irs: 0, rcvnxt: 0, rcvwnd: 0, sndcwnd: 500
Timing parameters:
  srtt: 0 ms, rtt: 0 ms, rttv: 12000 ms, krtd: 3000 ms
  rttmin: 1000 ms, mss: 500, duration: 1390144100 ms
State: LISTEN
Flags: none
Context: management

Local host: * (161), Foreign host: * (0)
Protocol: tcp, type: stream, ttl: 64, tos: 0, Id: 3
Options: none, state: none

```

```
Receive buffer:
  cc: 0, hiwat: 16384, lowat: 1, flags: none
Send buffer:
  cc: 0, hiwat: 16384, lowat: 2048, flags:
Sequence number state:
  iss: 0, snduna: 0, sndnxt: 0, sndwnd: 0
  irs: 0, rcvnxt: 0, rcvwnd: 0, sndcwnd: 512
Timing parameters:
  srtt: 0 ms, rtt: 0 ms, rttv: 12000 ms, krtd: 3000 ms
  rttmin: 1000 ms, mss: 512, duration: 1390144100 ms
State: LISTEN
Flags: none
Context: management

Local host: * (161), Foreign host: * (0)
Protocol: tcp6, type: stream, ttl: 64, tos: 0, Id: 5
Options: none, state: none
Receive buffer:
  cc: 0, hiwat: 16384, lowat: 1, flags: none
Send buffer:
  cc: 0, hiwat: 16384, lowat: 2048, flags:
Sequence number state:
  iss: 0, snduna: 0, sndnxt: 0, sndwnd: 0
  irs: 0, rcvnxt: 0, rcvwnd: 0, sndcwnd: 1073725440
Timing parameters:
  srtt: 0 ms, rtt: 0 ms, rttv: 12000 ms, krtd: 3000 ms
  rttmin: 1000 ms, mss: 1024, duration: 1390144100 ms
State: LISTEN
Flags: none
Context: management

Local host: 10.10.233.74 (22), Foreign host: 10.10.185.189 (48131)
Protocol: tcp, type: stream, ttl: 64, tos: 0, Id: 20
Options: none, state: none
Receive buffer:
  cc: 0, hiwat: 17500, lowat: 1, flags: none
Send buffer:
  cc: 0, hiwat: 17500, lowat: 2048, flags:
Sequence number state:
  iss: 3575780911, snduna: 3576001996, sndnxt: 3576001996, sndwnd: 32767
  irs: 905490047, rcvnxt: 905574926, rcvwnd: 17500, sndcwnd: 1953
Timing parameters:
  srtt: 700 ms, rtt: 0 ms, rttv: 0 ms, krtd: 1000 ms
  rttmin: 1000 ms, mss: 500, duration: 1390101600 ms
State: ESTABLISHED
Flags: none
Context: management

Local host: 10.10.233.74 (23), Foreign host: 10.10.22.107 (35030)
Protocol: tcp, type: stream, ttl: 64, tos: 0, Id: 18
Options: none, state: none
Receive buffer:
  cc: 0, hiwat: 17500, lowat: 1, flags: none
Send buffer:
  cc: 0, hiwat: 17500, lowat: 2048, flags:
Sequence number state:
  iss: 3273730667, snduna: 3273793065, sndnxt: 3273793065, sndwnd: 32767
  irs: 3760023047, rcvnxt: 3760024636, rcvwnd: 17500, sndcwnd: 25095
Timing parameters:
  srtt: 700 ms, rtt: 0 ms, rttv: 0 ms, krtd: 1000 ms
  rttmin: 1000 ms, mss: 500, duration: 467168700 ms
State: ESTABLISHED
Flags: none
Context: management
```

```

Total number of udp sockets: 11
Active connections (including servers)
Local host: * (123), Foreign host: * (0)
  Protocol: udp6, type: dgram, ttl: 64, tos: 0, Id: 11
  Options: none, state: none
  Receive buffer:
    cc: 0, hiwat: 42240, lowat: 1, flags: none
  Send buffer:
    cc: 0, hiwat: 9216, lowat: 2048, flags:
  Context: management

Local host: * (123), Foreign host: * (0)
  Protocol: udp, type: dgram, ttl: 64, tos: 0x10, Id: 10
  Options: none, state: none
  Receive buffer:
    cc: 0, hiwat: 42240, lowat: 1, flags: none
  Send buffer:
    cc: 0, hiwat: 9216, lowat: 2048, flags:
  Context: management

Local host: * (161), Foreign host: * (0)
  Protocol: udp, type: dgram, ttl: 64, tos: 0, Id: 1
  Options: none, state:
  Receive buffer:
    cc: 0, hiwat: 131072, lowat: 1, flags: none
  Send buffer:
    cc: 0, hiwat: 131072, lowat: 2048, flags:
  Context: management

Local host: * (161), Foreign host: * (0)
  Protocol: udp6, type: dgram, ttl: 64, tos: 0, Id: 2
  Options: none, state:
  Receive buffer:
    cc: 0, hiwat: 131072, lowat: 1, flags: none
  Send buffer:
    cc: 0, hiwat: 131072, lowat: 2048, flags:
  Context: management

Local host: 127.0.0.1 (123), Foreign host: * (0)
  Protocol: udp, type: dgram, ttl: 64, tos: 0x10, Id: 12
  Options: none, state: none
  Receive buffer:
    cc: 0, hiwat: 42240, lowat: 1, flags: none
  Send buffer:
    cc: 0, hiwat: 9216, lowat: 2048, flags:
  Context: management

Local host: 127.0.0.1 (130), Foreign host: * (0)
  Protocol: udp, type: dgram, ttl: 64, tos: 0, Id: 9
  Options: none, state:
  Receive buffer:
    cc: 0, hiwat: 42240, lowat: 1, flags: none
  Send buffer:
    cc: 0, hiwat: 9216, lowat: 2048, flags:
  Context: management

Local host: 127.0.0.1 (27613), Foreign host: 127.0.0.1 (123)
  Protocol: udp, type: dgram, ttl: 64, tos: 0, Id: 8
  Options: , state: none
  Receive buffer:
    cc: 0, hiwat: 42240, lowat: 1, flags:
  Send buffer:
    cc: 0, hiwat: 9216, lowat: 2048, flags:

```


Context: management

Total number of raw sockets: 0

Related Commands

| Command | Description |
|-------------------------------------|-----------------------------------------------------------------------|
| show telnet server | Displays the Telnet server configuration. |
| show running-config security | Displays the user account configuration in the running configuration. |
| show tcp client | Displays information about the TCP client. |
| show tcp statistics | Displays TCP protocol statistics. |

show tcp statistics

To display TCP protocol statistics, use the **show tcp statistics** command.

show tcp statistics [**all** | **tcp4** | **tcp6** | **tcpsum** | **udp4** | **udp6** | **udpsum** | **raw4** | **raw6** | **rawsum**]

| Syntax Description | |
|--------------------|--------------------------------------------------------------------------------------------|
| all | (Optional) Specifies all TCPv4, TCPv6, UDPv4, UDPv6, RAWv4, and RAWv6 protocol statistics. |
| tcp4 | (Optional) Specifies TCPv4 protocol statistics. |
| tcp6 | (Optional) Specifies TCPv6 protocol statistics. |
| tcpsum | (Optional) Specifies the sum of TCPv4 and TCPv6 protocols statistics. |
| udp4 | (Optional) Specifies UDPv4 protocol statistics. |
| udp6 | (Optional) Specifies UDPv6 protocol statistics. |
| udpsum | (Optional) Specifies the sum of UDPv4 and UDPv6 protocols statistics. |
| raw4 | (Optional) Specifies RAWv4 protocol statistics. |
| raw6 | (Optional) Specifies RAWv6 protocol statistics. |
| rawsum | (Optional) Specifies the sum of RAWv4 and RAWv6 protocols statistics. |

Defaults None

Command Modes Any

Supported User Roles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display TCP protocol statistics:

```
n1000v# show tcp statistics
TCP Received:
  479908 packets total
  0 checksum error, 0 bad offset, 0 too short, 0 MD5 error
  232451 packets (72213943 bytes) in sequence
  195 duplicate packets (192 bytes)
  0 partially dup packets (0 bytes)
  8652 out-of-order packets (0 bytes)
  0 packets (0 bytes) with data after window
  2 packets after close
  0 window probe packets, 0 window update packets
  44339 duplicate ack packets, 0 ack packets with unseq data
  252581 ack packets (103465405 bytes)
```

```
TCP Sent:
  533421 total, 0 urgent packets
  94694 control packets
  326430 data packets (105082025 bytes)
  90 data packets (22114 bytes) retransmitted
  105144 ack only packets
  34 window probe packets, 7029 window update packets

TCP:
44330 connections initiated, 6715 connections accepted, 50669 connections established
51045 connections closed (including 165 dropped, 376 embryonic dropped)
3067 total rxmt timeout, 0 connections dropped in rxmt timeout
463 keepalive timeout, 92 keepalive probe, 371 connections dropped in keepalive
```

Related Commands

| Command | Description |
|----------------------------|------------------------------------------------|
| show tcp connection | Displays information about the TCP connection. |
| show tcp statistics | Displays TCP protocol statistics. |

show tech-support

To collect switch information for Cisco TAC to assist you in diagnosing issues, use the **show tech-support** command.

```
show tech-support {aclmgr | dhcp | ipqos | ipv6 | netflow | svcs | vsd}
```

| Syntax Description | Parameter | Description |
|--------------------|----------------|------------------------------------------------------------------------------------------|
| | aclmgr | Gathers information regarding access control list (ACL) commands. |
| | dhcp | Gathers information related to DHCP, such as snooping statistics and VLAN configuration. |
| | ipqos | Displays IP QoS Manager information, such as event details and policy configuration. |
| | ipv6 | Displays IPv6 information, such as IPv6 static routes and traffic statistics. |
| | netflow | Displays information regarding NetFlow, such as event details and statistics. |
| | svs | Displays SVS information, such as interface and software configurations. |
| | vsd | Displays virtual service domain (VSD) events and statistical information. |

Defaults None

Command Modes Any

SupportedUserRoles network-admin

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to collect switch information for Cisco TAC regarding IPv6 issues:

```
n1000v# show tech-support ipv6
`show ipv6 interface vrf all`
`show ipv6 static-route`
IPv6 Configured Static Routes

`show ipv6 statistic`
FTM related Statistics
ftm_stats_get : 0.00 0
ftm_stats_get_init : 0.00 0
ftm_stats_get_tx : 0.00 0
ftm_stats_get_rx : 0.00 0
ftm_stats_get_flush : 0.00 0
ftm_stats_get_radix : 0.00 0
ftm_stats_csm_fp : 0.00 0
`show ipv6 client`
IPv6 Registered Client Status
```

```

Client: icmpv6, status: up, pid: 3021, extended pid: 3021
  Protocol: 58, pib-index: 4, routing context id: 255
  Control mts SAP: 1280
  Data mts SAP: 1281
  IPC messages to control mq: 0
  IPC messages to data mq: 0

Client: tcpudp, status: up, pid: 3022, extended pid: 3022
  Protocol: 17, pib-index: 3, routing context id: 255
  Control mts SAP: 1219
  Data mts SAP: 1220
  IPC messages to control mq: 1
  IPC messages to data mq: 0
  Recv fn: tcp_process_ipv6_data_msg (0x81fd22a)

Client: tcpudp, status: up, pid: 3022, extended pid: 3022
  Protocol: 6, pib-index: 2, routing context id: 255
  Control mts SAP: 1219
  Data mts SAP: 1220
  IPC messages to control mq: 1
  IPC messages to data mq: 0
  Recv fn: tcp_process_ipv6_data_msg (0x81fd22a)
`show ipv6 traffic`
IPv6 Software Processed Traffic and Error Statistics, last reset: never

RP-Traffic Statistics:
  Counter                Unicast  Multicast
  -----                -
  Packets forwarded:      0        0
  Bytes forwarded:        0        0
  Packets originated:     0        0
  Bytes originated:       0        0
  Packets consumed:       0        0
  Bytes consumed:         0        0
  Fragments originated:   0        0
  Fragments consumed:     0        0

Error Statistics:
  Bad version: 0, route lookup failed: 0, hop limit exceeded: 0
  Option header errors: 0, payload length too small: 0
  PM errors: 0, MBUF errors: 0, encapsulation errors: 0
Syntax error while parsing 'show ipv6 route'

`show ipv6 internal mem-stats all`

Mem stats for IPV6

Private Mem stats for UUID : Malloc track Library(103) Max types: 5
-----
Curr alloc: 1591 Curr alloc bytes: 76678(74k)
  IPC messages to control mq: 0

Curr alloc: 1522 Curr alloc bytes: 164596(160k)

Private Mem stats for UUID : Routing IPC Library(528) Max types: 10
-----
Curr alloc: 0 Curr alloc bytes: 0(0k)

Private Mem stats for UUID : Routing Library for managing mbufs(522) Max types:

```

```

6
-----
Curr alloc: 120 Curr alloc bytes: 485008(473k)

Private Mem stats for UUID : Patricia Trie Library(523) Max types: 3
-----

Curr alloc: 29 Curr alloc bytes: 916(0k)

  IPC messages to control mq: 0

Curr alloc: 1522 Curr alloc bytes: 164596(160k)

Private Mem stats for UUID : Routing IPC Library(528) Max types: 10
-----

Curr alloc: 0 Curr alloc bytes: 0(0k)

Private Mem stats for UUID : Routing Library for managing mbufs(522) Max types:
6
-----

Curr alloc: 120 Curr alloc bytes: 485008(473k)

Private Mem stats for UUID : Patricia Trie Library(523) Max types: 3
-----

Curr alloc: 29 Curr alloc bytes: 916(0k)

  IPC messages to control mq: 0

Curr alloc: 1522 Curr alloc bytes: 164596(160k)

Private Mem stats for UUID : Routing IPC Library(528) Max types: 10
-----

Curr alloc: 0 Curr alloc bytes: 0(0k)

Private Mem stats for UUID : Routing Library for managing mbufs(522) Max types:
6
-----

Curr alloc: 120 Curr alloc bytes: 485008(473k)

Private Mem stats for UUID : Patricia Trie Library(523) Max types: 3
-----

Curr alloc: 29 Curr alloc bytes: 916(0k)

  IPC messages to control mq: 0

Curr alloc: 1522 Curr alloc bytes: 164596(160k)

```

```
Private Mem stats for UUID : Routing IPC Library(528) Max types: 10
-----
Curr alloc: 0 Curr alloc bytes: 0(0k)

Private Mem stats for UUID : Routing Library for managing mbufs(522) Max types:
6
-----
Curr alloc: 120 Curr alloc bytes: 485008(473k)

Private Mem stats for UUID : Patricia Trie Library(523) Max types: 3
-----
Curr alloc: 29 Curr alloc bytes: 916(0k)

Curr alloc: 0 Curr alloc bytes: 0(0k)

Private Mem stats for UUID : libfsrv(404) Max types: 11
-----
Curr alloc: 65 Curr alloc bytes: 1888(1k)

Private Mem stats for UUID : FSM Utils(53) Max types: 68
-----
Curr alloc: 10 Curr alloc bytes: 376(0k)

Private Mem stats for UUID : IM LIB(319) Max types: 33
-----
Curr alloc: 0 Curr alloc bytes: 0(0k)

Private Mem stats for UUID : Packet Manager(263) Max types: 16
-----
Curr alloc: 22 Curr alloc bytes: 236504(230k)

Private Mem stats for UUID : Internet Protocol version 6 (IPv6)(269) Max types:
16
-----
Curr alloc: 6 Curr alloc bytes: 1088(1k)

Private Mem stats for UUID : Transmission Control Protocol (TCP)(271) Max types:
18
-----
Curr alloc: 70 Curr alloc bytes: 272444(266k)

Private Mem stats for UUID : Lcache(544) Max types: 3
```

```

Private Mem stats for UUID : Adjacency Manager(264) Max types: 16
-----

Curr alloc: 0 Curr alloc bytes: 0(0k)

Private Mem stats for UUID : Internet Control Message Protocol version 6 (ICMPv6
) (270) Max types: 27
-----

Curr alloc: 0 Curr alloc bytes: 0(0k)

Private Mem stats for UUID : NF DDB Utils(515) Max types: 15
-----

Curr alloc: 0 Curr alloc bytes: 0(0k)

Curr alloc: 3838 Curr alloc bytes: 15194210 (14838k)

Shared Mem stats for UUID : Non mtrack users(0) Max types: 155

Shared Mem stats for UUID : Patricia Trie Library(523) Max types: 2
-----

Curr alloc: 2 Curr alloc bytes: 64(0k)

Shared Mem stats for UUID : Slab Library(529) Max types: 3
-----

Curr alloc: 4 Curr alloc bytes: 288(0k)

Shared Mem stats for UUID : Bitlogic Library(517) Max types: 6
-----

Curr alloc: 0 Curr alloc bytes: 0(0k)

Shared Mem stats for UUID : Cisco Regex Package(525) Max types: 2
-----

Curr alloc: 0 Curr alloc bytes: 0(0k)
-----

Curr alloc: 0 Curr alloc bytes: 0(0k)

Shared Mem stats for UUID : Routing Queue Library(526) Max types: 2
-----

Curr alloc: 0 Curr alloc bytes: 0(0k)

Shared Mem stats for UUID : Internet Protocol (IP) (267) Max types: 12
-----

Curr alloc: 10 Curr alloc bytes: 65888(64k)

Shared Mem stats for UUID : SMM Library(561) Max types: 2

```



```

-----
Curr alloc: 0 Curr alloc bytes: 0(0k)

Shared Mem stats for UUID : Internet Protocol version 6 (IPv6) (269) Max types: 1
4
-----

Curr alloc: 7 Curr alloc bytes: 536(0k)

Shared Mem stats for UUID : Adjacency Manager(264) Max types: 5
-----

Curr alloc: 0 Curr alloc bytes: 0(0k)

Curr alloc: 23 Curr alloc bytes: 66776 (65k)
n1000v#

```

Related Commands

| Command | Description |
|-----------------------------|--------------------------------------------------------|
| show logging logfile | Displays the contents of the log file. |
| logging logfile | Configures the log file used to store system messages. |

show telnet server

To display the Telnet server configuration, use the **show telnet server** command.

show telnet 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. |

Examples This example shows how to display the Telnet server configuration:

```
n1000v# show telnet server
telnet service enabled
n1000v#
```

| Related Commands | Command | Description |
|------------------|----------------------------|--------------------------------------------|
| | show tcp connection | Displays information about the connection. |
| | telnet | Uses Telnet to connect to another system. |
| | telnet6 | Uses Telnet6 to connect to another system. |

show terminal

To display the terminal settings for the current session, use the **show terminal** command.

show terminal

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. |

Examples This example shows how to display the terminal settings for the current session:

```
n1000v# show terminal
TTY: /dev/pts/8 type: "vt100"
Length: 24 lines, Width: 88 columns
Session Timeout: None
n1000v#
```

| Related Commands | Command | Description |
|------------------|-------------------------------|----------------------------------------------------------------------------------------------|
| | terminal width | Configures the number of characters to display on each line for the current console session. |
| | terminal terminal-type | Sets the terminal type. |
| | terminal length | Sets the number of lines on the screen. |
| | terminal width | Sets the width of the display terminal. |
| | line console | Puts you in console configuration mode. |
| | line vty | Puts you in line configuration mode. |

show user-account

To display user account configuration, use the **show user-account** command.

```
show user-account [username]
```

| | |
|---------------------------|---------------------------------------------------------------------|
| Syntax Description | <i>username</i> (Optional) Name of a user with an existing account. |
|---------------------------|---------------------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|---------------------------|-----------------------------------|
| SupportedUserRoles | network-admin network-operator |
|---------------------------|-----------------------------------|

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display user account configuration for the user called NewUser:

```
n1000v(config)# show user-account NewUser
user:NewUser
this user account has no expiry date
roles:network-operator network-admin
n1000v(config)#
```

| Related Commands | Command | Description |
|-------------------------|--------------------------|----------------------------------------------------------------------------|
| | show role | Displays the available roles that can be assigned to users. |
| | role name | Names a user role and places you in role configuration mode for that role. |
| | username password | Creates a user account. |
| | show users | Displays the current users logged in the system. |

show users

To display information about the user session, use the **show users** command.

show users

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. |

Examples This example shows how to display information about the user session:

```
n1000v# show users
NAME      LINE      TIME          IDLE          PID COMMENT
admin     pts/17    Dec 16 06:37  .            30406 (172.28.254.254) session=ss

h
admin     pts/18    Jan  3 19:01  .            3847 (sjc-vpn5-786.cisco.com) *
n1000v#
```

| Related Commands | Command | Description |
|------------------|--------------------------|----------------------------------------------------------------------------|
| | show user-account | Displays the new user account configuration. |
| | show role | Displays the available roles that can be assigned to users. |
| | username password | Creates a user account. |
| | role name | Names a user role and places you in role configuration mode for that role. |

show version

To display the versions of system software and hardware that are currently running on the switch, use the **show version** command.

show version [module]

| Syntax Description | module (Optional) Specifies the software version of a module. | | | | |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------------|--------------|------------------------------|
| Defaults | None | | | | |
| Command Modes | Any | | | | |
| Supported User Roles | network-admin network-operator | | | | |
| Command History | <table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>4.0(4)SV1(1)</td> <td>This command was introduced.</td> </tr> </tbody> </table> | Release | Modification | 4.0(4)SV1(1) | This command was introduced. |
| Release | Modification | | | | |
| 4.0(4)SV1(1) | This command was introduced. | | | | |

Examples

This example shows how to display the versions of system software and hardware that are currently running on the switch:

```
n1000v# show version
Cisco Nexus Operating System (NX-OS) Software
TAC support: http://www.cisco.com/tac
Copyright (c) 2002-2009, Cisco Systems, Inc. All rights reserved.
The copyrights to certain works contained in this software are
owned by other third parties and used and distributed under
license. Certain components of this software are licensed under
the GNU General Public License (GPL) version 2.0 or the GNU
Lesser General Public License (LGPL) Version 2.1. A copy of each
such license is available at
http://www.opensource.org/licenses/gpl-2.0.php and
http://www.opensource.org/licenses/lgpl-2.1.php

Software
  loader:    version 1.2(2) [last: image booted through mgmt0]
  kickstart: version 4.0(4)SV1(2)
  system:    version 4.0(4)SV1(2)
  kickstart image file is:
  kickstart compile time:  9/22/2009 2:00:00
  system image file is:    bootflash:/nexus-1000v-mz.4.0.4.SV1.2.bin
  system compile time:     9/22/2009 2:00:00 [10/07/2009 10:11:01]

Software
  loader:    version 1.2(2) [last: image booted through mgmt0]
  kickstart: version 4.0(4)SV1(2)
  system:    version 4.0(4)SV1(2)
```

```

kickstart image file is:
kickstart compile time: 9/22/2009 2:00:00
system image file is:   bootflash:/nexus-1000v-mz.4.0.4.SV1.2.bin
system compile time:   9/22/2009 2:00:00 [10/07/2009 10:11:01]

```

Hardware

```

Cisco Nexus 1000V Chassis ("Virtual Supervisor Module")
Intel(R) Xeon(R) CPU          with 2075012 kB of memory.
Processor Board ID T5056B645A8

```

```

Device name: n1000v
bootflash:   2332296 kB

```

```

Kernel uptime is 79 day(s), 0 hour(s), 24 minute(s), 55 second(s)

```

plugin

```

Core Plugin, Ethernet Plugin
n1000v#

```

Related Commands

| Command | Description |
|---------------------------------|------------------------------------------------------------------------------------------------------------------|
| show version image | Displays the versions of system software and hardware that are currently running on the switch. |
| show running-config | Displays information about the configuration currently running on the system. |
| show running-config diff | Displays the difference between the startup configuration and the running configuration currently on the switch. |
| show interface | Displays details about the specified interface configuration. |

show version image

To display the software version of a given image, use the **show version** command.

```
show version image {bootflash: URI | volatile: URI}
```

| Syntax Description | Parameter | Description |
|--------------------|-------------------|--------------------------------------------|
| | bootflash: | Specifies bootflash as the directory name. |
| | <i>URI</i> | URI of the system where the image resides. |
| | volatile: | Specifies volatile as the directory name. |

| Defaults | Value |
|----------|-------|
| | None |

| Command Modes | Value |
|---------------|-------|
| | Any |

| Supported User Roles | Value |
|----------------------|-----------------------------------|
| | network-admin network-operator |

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display the versions of system software and hardware that are currently running on the switch:

```
n1000v# show version image bootflash:isan.bin
  image name: nexus-1000v-mz.4.0.4.SV1.1.bin
  bios: version unavailable
  system: version 4.0(4)SV1(1)
  compiled: 4/2/2009 23:00:00 [04/23/2009 09:55:29]
n1000v#
```

| Related Commands | Command | Description |
|------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------|
| | show version | Displays the software version of a given image. |
| | show running-config | Displays information about the configuration currently running on the system. |
| | show running-config diff | Displays the difference between the startup configuration and the running configuration currently on the switch. |
| | show interface | Displays details about the specified interface configuration. |

show virtual-service-domain brief

To display a list of the VSDs currently configured in a VSM, including VSD names and port profiles, use the **show virtual-service-domain brief** command.

show virtual-service-domain brief

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(2) | This command was introduced. |

Examples This example shows how to display a list of the VSDs currently configured in a VSM:

```
n1000v# show virtual-service-domain brief
Name          default action  in-ports  out-ports  mem-ports
vsd1          drop           1         1         4
vsd2          forward        1         1         0
vsim-cp# sho virtual-service-domain interface
-----
Name          Interface      Type      Status
-----
vsd1          Vethernet1    Member   Active
vsd1          Vethernet2    Member   Active
vsd1          Vethernet3    Member   Active
vsd1          Vethernet6    Member   Active
vsd1          Vethernet7    Inside   Active
vsd1          Vethernet8    Outside  Active
vsd2          Vethernet9    Inside   Active
vsd2          Vethernet10   Outside  Active
vsim-cp# show virtual-service-domain name vsd1
Default Action: drop
-----
Interface      Type
-----
Vethernet1    Member
Vethernet2    Member
Vethernet3    Member
Vethernet6    Member
Vethernet7    Inside
Vethernet8    Outside
```

```
n1000v#
```

| Related Commands | Command | Description |
|------------------|-------------------------------|----------------------------------------------------------------------------------------------|
| | virtual-service-domain | Creates a virtual service domain that classifies and separates traffic for network services. |

show virtual-service-domain interface

To do the interfaces currently assigned to the VSDs in a VSM, use the **show virtual-service-domain interface** command.

show virtual-service-domain interface

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(2) | This command was introduced. |

Examples This example shows how to display the interfaces currently assigned to the VSDs in a VSM:

```
n1000v# show virtual-service-domain interface
```

| Name | Interface | Type | Status |
|------|-------------|---------|--------|
| vsd1 | Vethernet1 | Member | Active |
| vsd1 | Vethernet2 | Member | Active |
| vsd1 | Vethernet3 | Member | Active |
| vsd1 | Vethernet6 | Member | Active |
| vsd1 | Vethernet7 | Inside | Active |
| vsd1 | Vethernet8 | Outside | Active |
| vsd2 | Vethernet9 | Inside | Active |
| vsd2 | Vethernet10 | Outside | Active |

| Related Commands | Command | Description |
|------------------|-------------------------------|---------------------------------------------------------------------------------------------|
| | virtual-service-domain | Creates a virtual service domain that classifies and separate traffic for network services. |

show virtual-service-domain name

To display a specific VSD currently configured in a VSM, including associated port profiles, use the **show virtual-service-domain name** command.

show virtual-service-domain name *virtual-service-domain_name*

| Syntax Description | |
|--------------------|-----------------------------------------------------|
| | <i>virtual-service-domain_name</i> Name of the VSD. |

| Defaults | |
|----------|------|
| | None |

| Command Modes | |
|---------------|-----|
| | Any |

| SupportedUserRoles | |
|--------------------|-----------------------------------|
| | network-admin network-operator |

| Command History | Release | Modification |
|-----------------|--------------|------------------------------|
| | 4.0(4)SV1(2) | This command was introduced. |

| Examples | |
|----------|-----------------------------------------------------------------|
| | This example shows how to display a specific VSD configuration: |

```
n1000v# show virtual-service-domain name vsd1
Default Action: drop
```

| Interface | Type |
|------------|---------|
| Vethernet1 | Member |
| Vethernet2 | Member |
| Vethernet3 | Member |
| Vethernet6 | Member |
| Vethernet7 | Inside |
| Vethernet8 | Outside |

```
n1000v#
```

| Related Commands | Command | Description |
|------------------|-------------------------------|---------------------------------------------------------------------------------------------|
| | virtual-service-domain | Creates a virtual service domain that classifies and separate traffic for network services. |

show vlan

To display the status and information for VLANs, use the **show vlan** command.

show vlan

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. |

Examples This example shows how to display the status and information for VLANs:

```
n1000v# show vlan
```

```

VLAN Name                Status    Ports
-----
 1    default                active    Po1, Po12, Veth1, Veth2, Veth3
                                Veth10, Veth100
 2    VLAN0002                active
100   VLAN0100                active
101   VLAN0101                active
102   VLAN0102                active
103   VLAN0103                active
104   VLAN0104                active
105   VLAN0105                active
106   VLAN0106                active
107   VLAN0107                active
108   VLAN0108                active
109   VLAN0109                active
115   VLAN0115                active
260   cp_control              active
261   cp_packet               active

VLAN Type
-----
 1    enet
 2    enet
100   enet
101   enet
102   enet

```

show vlan

```

103 enet
104 enet
105 enet
106 enet
107 enet
108 enet
109 enet
115 enet
260 enet
261 enet

```

```

Remote SPAN VLANs
-----

```

```

Primary Secondary Type Ports
-----

```

```

n1000v#

```

Related Commands

| Command | Description |
|--------------------------------------|--------------------------------------------------------------------------------------------------|
| interface | Specifies the interface that you are configuring and places you in interface configuration mode. |
| switchport trunk native vlan | Designates the native VLAN for the 802.1Q trunk in the running configuration. |
| switchport trunk allowed vlan | Sets the allowed VLANs for the trunk interface in the running configuration. |
| vlan dot1q tag native | Modifies the behavior of a 802.1Q trunked native VLAN ID interface in the running configuration. |

show vlan all-ports

To display the status of all VLANs and the ports that are configured on them, use the **show vlan all-ports** command.

show vlan all-ports

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. |

Examples This example shows how to display the status of all VLANs and the ports that are configured on them:

```
n1000v# show vlan all-ports
```

| VLAN | Name | Status | Ports |
|------|------------|--------|--------------------------------------------------------|
| 1 | default | active | Po1, Po2, Po12, Veth1, Veth2 Veth3, Veth10, Veth100 |
| 2 | VLAN0002 | active | |
| 100 | VLAN0100 | active | |
| 101 | VLAN0101 | active | |
| 102 | VLAN0102 | active | |
| 103 | VLAN0103 | active | |
| 104 | VLAN0104 | active | |
| 105 | VLAN0105 | active | |
| 106 | VLAN0106 | active | |
| 107 | VLAN0107 | active | |
| 108 | VLAN0108 | active | |
| 109 | VLAN0109 | active | |
| 115 | VLAN0115 | active | |
| 260 | cp_control | active | |
| 261 | cp_packet | active | |

```
n1000v#
```

| Related Commands | Command | Description |
|------------------|---------------------|---------------------------------|
| | show vlan id | Displays the VLAN configuration |

| Command | Description |
|-------------------------------|--------------------------------------------------|
| show vlan summary | Displays a summary of VLAN information. |
| show vlan private-vlan | Displays the Private VLAN (PVLAN) configuration. |

show vlan brief

To display only a brief summary of the status for all VLANs, use the **show vlan brief** command.

show vlan brief

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. |

Examples This example shows how to display the aging time in the MAC address table:

```
n1000v# show vlan brief
```

```

VLAN Name                Status    Ports
-----
 1    default                active    Po1, Po2, Po12, Veth1, Veth2
                                Veth3, Veth10, Veth100
 2    VLAN0002                active
100   VLAN0100                active
101   VLAN0101                active
102   VLAN0102                active
103   VLAN0103                active
104   VLAN0104                active
105   VLAN0105                active
106   VLAN0106                active
107   VLAN0107                active
108   VLAN0108                active
109   VLAN0109                active
115   VLAN0115                active
260   cp_control              active
261   cp_packet               active
n1000v#

```

| Related Commands | Command | Description |
|------------------|--------------|---------------------------------|
| | show vlan id | Displays the VLAN configuration |

| Command | Description |
|-------------------------------------|-----------------------------------------|
| <code>show vlan summary</code> | Displays a summary of VLAN information. |
| <code>show vlan private-vlan</code> | Displays the PVLAN configuration. |

show vlan id

To display the configuration for a specified VLAN, use the **show vlan id** command.

show vlan id *vlan-id*

| | | |
|---------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Syntax Description | <i>vlan-id</i> | Number identifying an existing VLAN, or range of VLANs, from 1–3967 and 4048–4093. You can specify groups of VLANs or individual VLANs; for example, 1–5, 10 or 2–5, 7–19. |
|---------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|-----------------------------|-----------------------------------|
| Supported User Roles | network-admin network-operator |
|-----------------------------|-----------------------------------|

| | | |
|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display the configuration for VLAN 462:

```
nexus1000v# show vlan id 462
```

```

VLAN Name                Status    Ports
-----
462  VLAN0462                active    Veth3, Veth5

VLAN Type
----
462  enet

Remote SPAN VLAN
-----
Disabled

Primary  Secondary  Type          Ports
-----

```

| | | |
|-------------------------|----------------|--------------------------------------------------------|
| Related Commands | Command | Description |
| | vlan | Creates a VLAN and enters the VLAN configuration mode. |

| Command | Description |
|-------------------------------|------------------------------------|
| show vlan private-vlan | Displays private VLAN information. |
| show vlan summary | Displays VLAN summary information. |

show vlan private-vlan

To display the PVLAN configuration, use the **show vlan private-vlan** command.

show vlan private-vlan [type]

| | |
|---------------------------|----------------------------------------------------------------------------------|
| Syntax Description | type (Optional) Specifies the display of only the PVLAN type information. |
|---------------------------|----------------------------------------------------------------------------------|

| | |
|-----------------|------|
| Defaults | None |
|-----------------|------|

| | |
|----------------------|-----|
| Command Modes | Any |
|----------------------|-----|

| | |
|-----------------------------|-----------------------------------|
| Supported User Roles | network-admin network-operator |
|-----------------------------|-----------------------------------|

| Command History | Release | Modification |
|------------------------|----------------|------------------------------|
| | 4.0(4)SV1(1) | This command was introduced. |

Examples This example shows how to display the PVLAN configuration:

```
1000v(config)# show vlan private-vlan
Primary  Secondary  Type          Ports
-----  -
202      303         community     Eth3/2, Veth1
n1000v(config)#
```

| Related Commands | Command | Description |
|-------------------------|--------------------------|------------------------------------------------------------|
| | show vlan id | Displays the VLAN configuration. |
| | show vlan brief | Displays only a brief summary of the status for all VLANs. |
| | show vlan summary | Displays a summary of VLAN information. |

show vlan summary

To display a summary of VLAN information, use the **show vlan summary** command.

show vlan summary

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. |

Examples This example shows how to display the aging time in the MAC address table:

```
n1000v# show vlan summary

Number of existing VLANs           : 15
Number of existing user VLANs     : 15
Number of existing extended VLANs : 0

n1000v#
```

| Related Commands | Command | Description |
|------------------|-------------------------------|------------------------------------------------------------|
| | show vlan id | Displays the VLAN configuration |
| | show vlan brief | Displays only a brief summary of the status for all VLANs. |
| | show vlan private-vlan | Displays the PVLAN configuration. |

show vmware vc extension-key

To display the extension key of the Virtual Supervisor Module (VSM), use the **show vmware vc extension-key** command.

show vmware vc extension-key

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 VSM uses the extension key when communicating with the vCenter Server. Each VSM has its own unique extension key, such as Cisco_Nexus_1000V_32943215.

You can also locate the extension key in the .xml file. The extension key registered on the vCenter Server can be found through the Managed Object Browser (MOB).

Examples This example shows how to display the extension key of the VSM:

```
n1000v# show vmware vc extension-key
Extension ID: Cisco_Nexus_1000V_1193126422
n1000v#
```

| Related Commands | Command | Description |
|------------------|---------------------------------------|------------------------------------------------------------------------------------|
| | show vmware vem upgrade status | Monitors the upgrade of a Virtual Ethernet Module (VEM) to a new software version. |
| | vmware vem upgrade notify | Notifies the vCenter Server that the software on the VSM has been upgraded. |
| | vmware vem upgrade proceed | Begins the upgrade of the virtual machine (VM). |
| | vmware vem upgrade complete | Clears the upgrade status. |

show vmware vem upgrade status

To monitor the upgrade of the Virtual Ethernet Module (VEM) to a new software version, use the **show vmware vem upgrade status** command.

show vmware vem upgrade status

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. |

Examples This example shows how to monitor the upgrade of the VEMs to a new software version:

```
n1000v# show vmware vem upgrade status
```

```
Upgrade Status: Upgrade Complete in vCenter
Upgrade Notification Sent Time: Tue Sep  8 17:37:23 2009
Upgrade Status Time(vCenter): Tue Sep  8 17:45:05 2009
Upgrade Start Time: Tue Sep  8 17:42:02 2009
Upgrade End Time(vCenter): Tue Sep  8 17:45:02 2009
Upgrade Error:
n1000v#
```

| Related Commands | Command | Description |
|------------------|------------------------------------|---------------------------------------------------------------------------------------------------------|
| | vmware vem upgrade notify | Notifies the vCenter Server that the software on the Virtual Supervisor Module (VSM) has been upgraded. |
| | vmware vem upgrade proceed | Begins the upgrade of the Virtual Machine (VM). |
| | vmware vem upgrade complete | Clears the upgrade status. |

show vtracker module-view pnic

To display the information about the physical network interface cards (pNICs) that are connected to each of the Virtual Ethernet Module (VEM) server module in the network, use the **show vtracker module-view pnic** command.

```
show vtracker module-view pnic [module number]
```

| Syntax Description | module | (Optional) Specifies the VEM module number on which the Virtual Machine (VM) resides. |
|--------------------|--------|---------------------------------------------------------------------------------------|
| | number | Module number. The range is from 3 to 66. |

Defaults None

Command Modes Any

Supported User Roles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(1.1) | This command was introduced. |

Examples This example shows how to display the module pNIC view in a Virtual Supervisor Module (VSM):

```
n1000v(config)# show vtracker module-view pnic
-----
Mod  EthIf      Adapter      Mac-Address  Driver      DriverVer      FwVer
Description
-----
3    Eth3/8     vmnic7       0050.5652.f935 igb          2.1.11.1       1.4-3
Intel Corporation 82576 Gigabit Network Connection

4    Eth4/3     vmnic2       0050.565e.df74 e1000       8.0.3.2-1vmw-NAPI N/A
Intel Corporation 82546GB Gigabit Ethernet Controller

4    Eth4/4     vmnic3       0050.565e.df75 e1000       8.0.3.2-1vmw-NAPI N/A
Intel Corporation 82546GB Gigabit Ethernet Controller
-----
```

This example shows how to display the pNIC view of module number 3:

```
n1000v(config)# show vtracker module-view pnic module 3
-----
Mod  EthIf      Adapter      Mac-Address  Driver      DriverVer      FwVer
Description
-----
```

■ show vtracker module-view pnic

```
-----  
3   Eth3/8   vmn7c7       0050.5652.f935 igb       2.1.11.1       1.4-3  
      Intel Corporation 82576 Gigabit Network Connection  
-----
```

Related Commands

| Command | Description |
|-----------------------------|-------------------------------------------|
| show interface brief | Displays the brief interface information. |

show vtracker upstream-view

To display the information about all the available virtual Ethernet interfaces for which traffic can flow through the upstream physical switch, use the **show vtracker upstream-view** command.

show vtracker upstream-view [**device-id** *name* | **device-ip** *IP address*]

| Syntax Description | device-id | (Optional) Specifies the name of the neighboring device. |
|--------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| | <i>name</i> | Device name. The name has a maximum of 80 alphanumeric characters. The name is case sensitive and special characters are allowed. |
| device-ip | | (Optional) Specifies the IP address of the device. |
| | <i>IP address</i> | Device IPv4 address. |

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(1.1) | This command was introduced. |

Usage Guidelines The Cisco Discovery Protocol (CDP) neighbor information must be accessible to generate the required upstream view output.

Examples This example shows how to display the upstream view in a Virtual Supervisor Module (VSM):

```
n1000v(config)# show vtracker upstream-view
```

```
-----
Device-Name      Device-Port  Server-Name      PC-Type      Veth-interfaces
Device-IP        Local-Port   Adapter Status    PO-Intf
-----
Upstream-SW-A    Gig2/7       203.0.113.118    MacPinn      10-11
203.0.113.66     Eth3/3       vmnic2 up         Po1
Upstream-SW-B    Gig3/10      203.0.113.117    MacPinn      9
203.0.113.54     Eth3/4       vmnic3 up         Po1
                  Gig3/8       203.0.113.99     Default      1-2
                  Eth4/3       vmnic2 up         Po2
                  Gig3/9       203.0.113.99     Default      1-2
                  Eth4/4       vmnic3 up         Po2
-----
```

show vtracker upstream-view

This example shows how to display the upstream view of the physical switch with the device ID name Upstream-SW-A:

```
n1000v(config)# show vtracker upstream-view device-id Upstream-SW-A
```

```
-----
```

| Device-Name | Device-Port | Server-Name | PC-Type | Veth-interfaces |
|---------------|-------------|---------------|---------|-----------------|
| Device-IP | Local-Port | Adapter | Status | PO-Intf |
| Upstream-SW-A | Gig2/7 | 203.0.113.118 | MacPinn | 10-11 |
| 203.0.113.66 | Eth3/3 | vmnic2 | up | Po1 |

```
-----
```

Related Commands

| Command | Description |
|---------------------------------------|--------------------------------------------------------------------------------------|
| show module | Displays the module's status, software version, MAC address, and server information. |
| show cdp neighbors | Displays your device from the upstream device. |
| show interface virtual pinning | Displays the virtual pinning information of the interface. |

show vtracker vlan-view

To display the information about all the Virtual Machines (VMs) that are connected to a specific VLAN or a range of VLANs, use the **show vtracker vlan-view** command.

show vtracker vlan-view [*vlan number/range*]

| Syntax Description | vlan | (Optional) Specifies the VLAN ID on which the VM resides. |
|--------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <i>number/range</i> | Specifies a single VLAN or a range of VLANs you need information on. The range is from 1-3967 and 4048-4093. Specify multiple IDs or range(s), separated by commas. |

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(1.1) | This command was introduced. |

Examples This example shows how to display the VLAN view in a Virtual Supervisor Module (VSM):

```
n1000v(config)# show vtracker vlan-view
```

```
* R = Regular Vlan, P = Primary Vlan, C = Community Vlan
  I = Isolated Vlan, U = Invalid
```

```
-----
```

| VLAN | Type | VethPort | VM Name | Adapter Name | Mod |
|------|------|----------|------------|---------------|-----|
| 1 | R | - | - | - | - |
| 233 | R | - | - | - | - |
| 335 | R | - | - | - | - |
| 336 | R | - | - | - | - |
| 337 | R | - | - | - | - |
| 338 | R | - | - | - | - |
| 339 | R | Veth3 | gentoo-2 | Net Adapter 3 | 3 |
| | | Veth4 | gentoo-2 | Net Adapter 4 | 3 |
| | | Veth5 | gentoo-2 | Net Adapter 2 | 3 |
| 340 | R | - | - | - | - |
| 341 | R | - | - | - | - |
| 400 | R | Veth1 | Fedora-VM2 | Net Adapter 1 | 5 |
| 401 | R | Veth1 | Fedora-VM2 | Net Adapter 1 | 5 |
| 402 | R | Veth1 | Fedora-VM2 | Net Adapter 1 | 5 |
| 403 | R | - | - | - | - |

```
-----
```

show vtracker vlan-view

```

404 P Veth6 Fedora-VM1 Net Adapter 1 4
405 C Veth2 Fedora-VM2 Net Adapter 3 5
406 I Veth7 Fedora-VM1 Net Adapter 2 4
-----

```

This example shows how to display the VLAN view within a range of 233 to 240:

```
n1000v(config)# show vtracker vlan-view vlan 233-340
```

```

* R = Regular Vlan, P = Primary Vlan, C = Community Vlan
  I = Isolated Vlan, U = Invalid

```

```

-----
VLAN   Type VethPort  VM Name                Adapter Name  Mod
-----
233    R    -         -                      -             -
335    R    -         -                      -             -
336    R    -         -                      -             -
337    R    -         -                      -             -
338    R    -         -                      -             -
339    R    Veth3     gentoo-2               Net Adapter 3  3
        Veth4     gentoo-2               Net Adapter 4  3
        Veth5     gentoo-2               Net Adapter 2  3
340    R    -         -                      -             -
-----

```

Related Commands

| Command | Description |
|-------------------------------|---------------------------------------------------------------------------------|
| show interface brief | Displays the brief interface information. |
| show vlan | Displays the VLAN interfaces connected to the switch and its respective status. |
| show interface virtual | Displays the virtual interface information. |

show vtracker vm-view info

To display the information about all the Virtual Machines (VMs) that run on each server module, use the **show vtracker vm-view info** command.

show vtracker vm-view info [**module** *number* | **vm** *name*]

| Syntax Description | module | (Optional) Specifies the module number on which the VM resides. |
|--------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------|
| | <i>number</i> | Module number. The range is from 3 to 66. |
| | vm | (Optional) Specifies the VM for which the vmview is to be displayed. |
| | <i>name</i> | VM name. The name has a maximum of 80 alphanumeric characters. The name is case sensitive and special characters are allowed. |

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(1.1) | This command was introduced. |

Usage Guidelines The VSM must be connected with the vCenter in order to generate the required VM view output. The timeout for this command is 180 seconds.

Examples This example shows how to display the VM information in a Virtual Supervisor Module (VSM):

```
n1000v(config)# show vtracker vm-view info

Module 4:
  VM Name:           Fedora-VM1
  Guest Os:          Other Linux (32-bit)
  Power State:       Powered On
  VM Uuid:           421871bd-425e-c484-d868-1f65f4f1bc50
  Virtual CPU Allocated: 1
  CPU Usage:         1 %
  Memory Allocated: 256 MB
  Memory Usage:     1 %
  VM FT State:       Unknown
  Tools Running status: Not Running
  Tools Version status: not installed
  Data Store:        NFS1_4
```

```

VM Uptime:                1 day 29 minutes 46 seconds

VM Name:                  Fedora-VM2
Guest Os:                 Other Linux (32-bit)
Power State:              Powered On
VM Uuid:                  4218ab37-d56d-63e4-3b00-77849401071e
Virtual CPU Allocated:    1
CPU Usage:                1 %
Memory Allocated:         256 MB
Memory Usage:             1 %
VM FT State:              Unknown
Tools Running status:    Not Running
Tools Version status:    not installed
Data Store:               NFS1_4
VM Uptime:                58 minutes 30 seconds

Module 5:
VM Name:                  gentoo-cluster2-1
Guest Os:                 Other (64-bit)
Power State:              Powered Off
VM Uuid:                  4235edf5-1553-650f-ade8-39565ee3cd57
Virtual CPU Allocated:    1
CPU Usage:                0 %
Memory Allocated:         512 MB
Memory Usage:             0 %
VM FT State:              Unknown
Tools Running status:    Not Running
Tools Version status:    not installed
Data Store:               datastore1 (2)
VM Uptime:                n/a

```

This example shows how to display the VM information view of Fedora-VM1:

```
n1000v(config)# show vtracker vm-view info vm Fedora-VM1
```

```

Module 4:
VM Name:                  Fedora-VM1
Guest Os:                 Other Linux (32-bit)
Power State:              Powered On
VM Uuid:                  421871bd-425e-c484-d868-1f65f4f1bc50
Virtual CPU Allocated:    1
CPU Usage:                1 %
Memory Allocated:         256 MB
Memory Usage:             1 %
VM FT State:              Unknown
Tools Running status:    Not Running
Tools Version status:    not installed
Data Store:               NFS1_4
VM Uptime:                1 day 29 minutes 46 seconds

```


show vtracker vm-view vnic

To display the information about all the virtual network interface cards (vNICs) that run on the Virtual Machines (VMs) with the adapter and pinning details, use the **show vtracker vm-view vnic** command.

show vtracker vm-view vnic [*module number* | *vm name*]

| Syntax Description | module | (Optional) Specifies the module number on which the VM resides. |
|--------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------|
| | <i>number</i> | Module number. The range is from 3 to 66. |
| Syntax Description | vm | (Optional) Specifies the VM for which the vNIC view is to be displayed. |
| | <i>name</i> | VM name. The name has a maximum of 80 alphanumeric characters. The name is case sensitive and special characters are allowed. |

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(1.1) | This command was introduced. |

Usage Guidelines The Virtual Supervisor Module must be connected with the vCenter in order to generate the required VM view output.

Examples This example shows how to display the VM vNIC in a VSM:

```
n1000v(config)# show vtracker vm-view vnic
* Network: For Access interface - Access vlan, Trunk interface - Native vlan,
  VXLAN interface - Segment Id.
-----
Mod VM-Name      VethPort      Drv Type      Mac-Addr      State Network Pinning
  HypvPort      Adapter      Mode      IP-Addr
-----
3  gentoo-2      Veth3        Vmxnet3      0050.56b5.37de up    339    Eth3/8
   1025        Adapter 3    access      n/a
3  gentoo-2      Veth4        E1000        0050.56b5.37df up    339    Eth3/8
   1026        Adapter 4    access      n/a
3  gentoo-2      Veth5        Vmxnet2      0050.56b5.37dd up    339    Eth3/8
   1024        Adapter 2    access      n/a
```

show vtracker vm-view vnic

```

4   Fedora-VM1      Veth7      E1000      0050.56bb.4fc1 up   406      Eth4/3
   4258             Adapter 2  pvlan      10.104.249.49
5   Fedora-VM2      Veth1      E1000      0050.56b5.098b up   1         Po9
   100             Adapter 1  trunk      n/a
5   Fedora-VM2      Veth2      E1000      0050.56b5.098d up   405      Po9
   3232             Adapter 3  pvlan      10.104.249.60
-----

```

This example shows how to display the VM vNIC view, on module number 4:

```

n1000v(config)# show vtracker vm-view vnic module 4
* Network: For Access interface - Access vlan, Trunk interface - Native vlan,
            VXLAN interface - Segment Id.
-----

```

```

Mod VM-Name      VethPort      Drv Type      Mac-Addr      State Network Pinning
  HypvPort      Adapter       Mode          IP-Addr
-----
4   Fedora-VM1      Veth7      E1000      0050.56bb.4fc1 up   406      Eth4/3
   4258             Adapter 2  pvlan      10.104.249.49
-----

```

Related Commands

| Command | Description |
|---------------------------------------|------------------------------------------------------------|
| show interface brief | Displays the brief interface information. |
| show interface virtual | Displays the virtual interface information. |
| show interface virtual pinning | Displays the virtual pinning information of the interface. |
| show bridge-domain brief | Displays the bridge-domain status and connected ports. |

show vtracker vmotion-view

To display the information about all the ongoing (if any) as well as previous Virtual Machine (VM) migration events, use the **show vtracker vmotion-view** command.

```
show vtracker vmotion-view { now | last number }
```

| Syntax Description | Parameter | Description |
|--------------------|---------------|-------------------------------------------------------------------------------------------------------------|
| | now | Displays the ongoing VM migrations in the switch. |
| | last | Specifies the number of VM migration events to report. The output includes previous and ongoing migrations. |
| | <i>number</i> | Number of VM migration events. The range is from 1 to 100. |

Defaults None

Command Modes Any

Supported User Roles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(1.1) | This command was introduced. |

Usage Guidelines The VSM must be connected with the vCenter in order to generate the required VMotion view output.

Examples This example shows how to display the VMotion view in a Virtual Supervisor Module (VSM):

```
n1000v(config)# show vtracker vmotion-view now
Note: Command execution is in progress...
```

```
Note: VM Migration events are shown only for VMs currently
managed by Nexus 1000v.
```

```
* '-' = Module is offline or no longer attached to Nexus1000v DVS
```

```
-----
VM-Name          Src Dst   Start-Time          Completion-Time
                  Mod Mod
-----
rk-ubt-1-0046    6   4   Mon Sep  3 10:42:27 2012 OnGoing
rk-ubt-1-0045    6   4   Mon Sep  3 10:42:27 2012 OnGoing
-----
```

This example shows how to display the VMotion view for 20 migrations:

```
n1000v(config)# show vtracker vmotion-view last 20
```

Note: Command execution is in progress...

Note: VM Migration events are shown only for VMs currently managed by Nexus 1000v.

* '-' = Module is offline or no longer attached to Nexus1000v DVS

```
-----
VM-Name          Src Dst Start-Time    Completion-Time
                  Mod Mod
-----
rk-ubt-1-0046    6   4   Mon Sep  3 10:42:27 2012 OnGoing
rk-ubt-1-0045    6   4   Mon Sep  3 10:42:27 2012 OnGoing
rk-ubt-1-0031    6   4   Mon Sep  3 10:42:27 2012 Mon Sep  3 10:44:10 2012
rk-ubt-1-0021    6   4   Mon Sep  3 10:42:27 2012 Mon Sep  3 10:43:42 2012
rk-ubt-1-0023    6   3   Thu Aug 16 14:25:26 2012 Thu Aug 16 14:27:55 2012
rk-ubt-1-0029    6   3   Thu Aug 16 14:25:26 2012 Thu Aug 16 14:27:50 2012
rk-ubt-1-0024    6   3   Thu Aug 16 14:25:26 2012 Thu Aug 16 14:26:13 2012
rk-ubt-1-0025    6   3   Thu Aug 16 14:25:26 2012 Thu Aug 16 14:26:12 2012
rk-ubt-1-0026    6   3   Thu Aug 16 14:25:26 2012 Thu Aug 16 14:26:09 2012
RHEL-Tool-VmServer - 3   Wed Aug  8 12:57:48 2012 Wed Aug  8 12:58:37 2012
-----
```

show vxlan gateway interface

Displays the transport ip-address, default-gateway, netmask configured on the VTEP of the service modules attached to the VSM. Additionally it also captures module-id and HA-state of the service modules.

show vxlan gateway interface

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 4.2(1)SV2(2.1) | This command was introduced. |

Usage Guidelines Use this command to view details of the VTEP configured on the service module attached to the VSM.

Examples This example shows how to find the module for virtual Ethernet interface binding:

```
n1000v(config)# show vxlan gateway interface
```

```
-----
Port    IP Address  Netmask    Gateway    Module
-----
Veth1   10.0.0.1    255.0.0.1  10.0.0.100  4
Veth2   20.0.0.1    255.0.0.1  20.0.0.100  5
-----
```

Related Commands None.

show xml server status

To display information about XML server settings and any active XML server sessions, use the **show xml server status** command.

show xml server status

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. |

Examples This example shows how to display information about XML server settings and any active XML server sessions:

```
n1000v# show xml server status
operational status is enabled
maximum session configured is 8
n1000v#
```

| Related Commands | Command | Description |
|------------------|-------------------------------------|-------------------------------------------------|
| | xml server max-session | Sets the number of allowed XML server sessions. |
| | xml server terminate session | Terminates the specified XML server session. |