



## Show Commands

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This chapter describes the Cisco Nexus 1000V show commands.

# show aaa accounting

To display the authentication, authorization, and accounting (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
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the accounting configuration:

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

Related Commands	Command	Description
	<b>aaa group</b>	Configures an AAA server group.
	<b>show aaa authentication</b>	Displays the configuration for AAA authentication.
	<b>show aaa authorization</b>	Displays the configured AAA server groups.
	<b>show aaa groups</b>	Displays AAA server group accounting.
	<b>show running-config aaa</b>	Displays the AAA configuration as it currently exists in the running configuration.
	<b>show aaa user default-role</b>	Displays the user default role assigned by the AAA administrator.
	<b>test aaa</b>	Tests for AAA on a RADIUS server or server group.

# show aaa authentication

To display the configuration for authentication, authorization, and accounting (AAA) authentication, use the **show aaa authentication** command.

```
show aaa authentication [login {ascii-authentication | chap | error-enable | mschap |
mschapv2}]
```

Syntax Description	
<b>login</b>	(Optional) Displays the authentication login error message configuration.
<b>ascii-authentication</b>	Displays the ASCII authentication configuration.
<b>chap</b>	Displays the authentication login Challenge Handshake Authentication Protocol (CHAP) enable configuration.
<b>error-enable</b>	Displays the login error message enable configuration.
<b>mschap</b>	Displays the login MS-CHAP enable configuration.
<b>mschapv2</b>	Displays the login MS-CHAPv2 enable configuration

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the configured authentication parameters:

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

Related Commands	Command	Description
	<b>aaa authentication login mschap</b>	Enables MSCHAP authentication at login.
	<b>aaa group</b>	Configures an AAA server group.
	<b>show aaa accounting</b>	Displays the AAA accounting configuration.
	<b>show aaa authorization</b>	Displays the configured AAA server groups.
	<b>show aaa groups</b>	Displays AAA server group accounting.

<b>Command</b>	<b>Description</b>
<b>show aaa user default-role</b>	Displays the user default role assigned by the AAA administrator.
<b>show running-config aaa</b>	Displays the AAA configuration as it currently exists in the running configuration.
<b>test aaa</b>	Tests for AAA on a RADIUS server or server group.

# show aaa authorization

To display the configured authentication, authorization, and accounting (AAA) server groups, use the **show aaa authorization** command.

```
show aaa authorization [all]
```

Syntax Description	all	(Optional) Displays all (including default configurations) of the authorization information.
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Defaults	None
----------	------

Command Modes	Any
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Supported User Roles	network-admin network-operator
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Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

## Examples

This example shows how to display the configured authorization parameters:

```
n1000v# show aaa authorization
      pki-ssh-cert: local
      pki-ssh-pubkey: local
AAA command authorization:
```

This example shows how to display the authorization for all configurations using the optional **all** keyword:

```
n1000v# show aaa authorization all
      pki-ssh-cert: local
      pki-ssh-pubkey: local
AAA command authorization:
      default authorization for config-commands: local
      default authorization for commands: local
```

Related Commands	Command	Description
	<b>aaa group</b>	Configures an AAA server group.
	<b>show aaa accounting</b>	Displays the AAA accounting configuration.
	<b>show aaa authentication</b>	Displays the configuration for AAA authentication.
	<b>show aaa groups</b>	Displays AAA server group accounting.

<b>Command</b>	<b>Description</b>
<b>show running-config aaa</b>	Displays the AAA configuration as it currently exists in the running configuration.
<b>show aaa user default-role</b>	Displays the user default role assigned by the AAA administrator.
<b>test aaa</b>	Tests for AAA on a RADIUS server or server group.

# show aaa groups

To display the configured authentication, authorization, and accounting (AAA) 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
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the AAA configured groups:

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

Related Commands	Command	Description
	<b>aaa group</b>	Configures an AAA server group.
	<b>show aaa accounting</b>	Displays the AAA accounting configuration.
	<b>show aaa authentication</b>	Displays the configuration for AAA authentication.
	<b>show aaa authorization</b>	Displays the configured AAA server groups.
	<b>show running-config aaa</b>	Displays the AAA configuration as it currently exists in the running configuration.
	<b>show aaa user default-role</b>	Displays the user default role assigned by the AAA administrator.
	<b>test aaa</b>	Tests for AAA on a RADIUS server or server group.

# show aaa user default-role

To display the user default role assigned by the authentication, authorization, and accounting (AAA) administrator, use the **show aaa user default-role** command.

**show aaa user default-role**

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the status of user AAA default role:

```
n1000v# show aaa user default-role
enabled
```

Related Commands	Command	Description
	<b>aaa group</b>	Configures an AAA server group.
	<b>show aaa accounting</b>	Displays the AAA accounting configuration.
	<b>show aaa authentication</b>	Displays the configuration for AAA authentication.
	<b>show aaa authorization</b>	Displays the configured AAA server groups.
	<b>show aaa groups</b>	Displays AAA server group accounting.
	<b>show running-config aaa</b>	Displays the AAA configuration as it currently exists in the running configuration.
	<b>test aaa</b>	Tests for AAA on a RADIUS server or server group.



# show access-lists

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

```
show access-lists [capture session session_id | dynamic | expanded | summary | list_name
[capture session session_id | dynamic | expanded | summary]]
```

Syntax Description		
<b>capture</b>	(Optional) Captures a session by its ID. When used as an option it requires the keyword <b>session</b> with <i>session_id</i> as an argument. The range is from 1 to 48.	
<b>session</b>	Captures a session by the <i>session_id</i> .	
<i>session_id</i>	Session ID. The range is from 1 to 48.	
<b>dynamic</b>	(Optional) Displays dynamic access lists.	
<b>expanded</b>	(Optional) Displays information about expand access list groups.	
<b>summary</b>	(Optional) Displays summary information about access lists.	
<i>list_name</i>	(Optional) ACL name. The name is a maximum of 64 alphanumeric, case-sensitive characters.	

**Defaults** The default <cr> displays all access lists.

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display access lists:

```
n1000v# show access-lists
```

```
IPV4 ACL abhi-acl
 10 permit ip 122.243.200.20/32 66.139.138.221/32 dscp af12
 20 deny icmp 4.68.213.83/32 59.90.89.77/32 dscp cs1
 30 permit icmp 72.165.25.69/32 85.135.171.135/32 echo dscp cs1
 40 deny igmp 56.51.111.28/32 127.177.14.122/32 7 dscp 11
 50 permit tcp 91.125.160.40/32 lt 40765 14.208.192.244/32 gt 2594 dscp 1
 60 permit udp 15.104.89.102/32 eq 20343 54.182.95.236/32 lt 43125 dscp 6
 70 permit ip 46.167.60.215/32 78.70.151.1/32 dscp 7
 80 permit icmp 90.119.71.215/32 93.255.186.116/32 dscp 9
 90 permit icmp 38.164.211.185/32 56.74.11.71/32 timestamp-request dscp af11
100 deny igmp 58.63.101.184/32 0.179.173.154/32 0 dscp 3
110 permit tcp 92.217.203.237/32 gt 21295 65.214.100.184/32 eq 13033 dscp 4
```

```

120 permit udp 12.229.14.211/32 lt 57734 88.115.243.129/32 gt 50221 dscp 5
130 deny ip 111.63.192.108/32 104.76.118.97/32 dscp af13
140 permit 13 125.190.31.44/32 111.228.220.8/32 dscp default
150 permit icmp 22.137.175.193/32 94.115.68.250/32 1 dscp af12
160 deny igmp 65.33.193.187/32 24.63.252.123/32 13 dscp 5
...

```

This example shows how to display expanded information about access lists:

```

n1000v# show access-lists expanded

IPV4 ACL abhi-acl
 10 deny tcp any 209.165.200.234/0 eq ftp
 20 deny tcp any 209.165.200.234/0 eq 666
 30 deny udp any 209.165.200.234/0 eq tftp
 40 deny tcp any 209.165.200.234/0 eq telnet
 50 deny udp any 209.165.200.234/0 eq 1000
 60 deny udp any 209.165.200.234/0 eq 1016
 70 deny udp any 209.165.200.234/0 eq 1032
 80 deny udp any 209.165.200.234/0 eq 1048
 90 deny udp any 209.165.200.234/0 eq 1064
100 deny udp any 209.165.200.234/0 eq 1080
110 deny udp any 209.165.200.234/0 eq 1096
120 permit ip any any
...

```

This example shows how to display an access list by its name:

```

n1000v# show access-lists abhi-acl

IPV4 ACL abhi-acl
 10 deny tcp any 209.165.200.234/0 eq ftp
 20 deny tcp any 209.165.200.234/0 eq 666
 30 deny udp any 209.165.200.234/0 eq tftp
 40 deny tcp any 209.165.200.234/0 eq telnet
 50 deny udp any 209.165.200.234/0 eq 1000
 60 deny udp any 209.165.200.234/0 eq 1016
 70 deny udp any 209.165.200.234/0 eq 1032
 80 deny udp any 209.165.200.234/0 eq 1048
 90 deny udp any 209.165.200.234/0 eq 1064
100 deny udp any 209.165.200.234/0 eq 1080
110 deny udp any 209.165.200.234/0 eq 1096
120 permit ip any any

```

This example shows how to display summary information about a named access list by using a list name as an argument and the optional **summary** keyword:

```

n1000v# show access-lists abhi-aclsummary

IPV4 ACL abhi-acl
  Total ACEs Configured:12
  Configured on interfaces:
  Active on interfaces:

```

## Related Commands

Command	Description
<b>clear access-list counter</b>	Clear the counters for IP and MAC ACLs.
<b>ip access-list</b>	Creates an IP access list.
<b>resequence</b>	Resequences a list with sequence numbers.

# show accounting log

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

```
show accounting log [log_size | all | last-index | start-seqnum start_eqnum [end-seqnum
end_seqnum] | start-time year month day hh:mm:ss [end-time year month day hh:mm:ss]
```

Syntax Description		
<i>log_size</i>	(Optional)	Log size (in bytes). The range is from 0 to 250000
<b>all</b>	(Optional)	Displays the accounting log including show commands.
<b>last-index</b>	(Optional)	Displays the accounting log last index information.
<b>start-seqnum</b> <i>start_seqnum</i>	(Optional)	Displays accounting log messages starting from a given sequence number. Start sequence number. The range is from 1 to 2000000000.
<b>end-seqnum</b> <i>end_seqnum</i>	(Optional)	Displays messages ending with a given sequence number. End sequence number. The range is from 1 to 2000000000.
<b>start-time</b> <i>year</i> <i>month</i> <i>day</i> <i>hh:mm:ss</i>	(Optional)	Displays messages from a given start time. Year in YYYY format. Month as Jan, Feb, Mar,..., or Dec. The maximum is three characters. Enter day of month in DD format. Hour, minutes, seconds as HH:MM:SS with the colons. The time is a maximum of eight characters.
<b>end-time</b>	(Optional)	Displays messages from a given end time.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the accounting log:

```
n1000v# show accounting log
```

```
Sun Jan 6 18:02:11 2013:type=start:id= msp.1304:user=admin:cmd=
Sun Jan 6 18:02:11 2013:type=update:id= msp.1304:user=admin:cmd=configure terminal ;
interface Vethernet133 (SUCCESS)
```

## show accounting log

```
Sun Jan 6 18:02:11 2013:type=update:id= msp.1304:user=admin:cmd=configure terminal ;
interface Vethernet133 ; ip port access-group abhi-acl in (SUCCESS)
Sun Jan 6 18:02:11 2013:type=update:id= msp.1304:user=admin:cmd=configure terminal ;
interface Vethernet133 ; ip port access-group abhi-acl out (SUCCESS)
Sun Jan 6 18:02:11 2013:type=update:id= msp.1304:user=admin:cmd=configure terminal ;
interface Vethernet133 ; switchport mode access (SUCCESS)
Sun Jan 6 18:02:11 2013:type=update:id= msp.1304:user=admin:cmd=configure terminal ;
interface Vethernet133 ; switchport access vlan 262 (SUCCESS)
Sun Jan 6 18:02:11 2013:type=update:id= msp.1304:user=admin:cmd=configure terminal ;
interface Vethernet133 ; no shutdown (SUCCESS)
...
```

This example shows how to show the accounting log by entering a size (0 to 250000 in bytes) argument:

```
n1000v# show accounting log 32500
```

```
Thu Jan 3 17:07:33 2013:type=stop:id= msp.1296:user=admin:cmd=
Thu Jan 3 17:07:33 2013:type=start:id= msp.1296:user=admin:cmd=
Thu Jan 3 17:07:33 2013:type=update:id= msp.1296:user=admin:cmd=configure terminal ;
interface Ethernet5/2 (SUCCESS)
Thu Jan 3 17:07:34 2013:type=update:id= msp.1296:user=admin:cmd=configure terminal ;
interface Ethernet5/2 ; shutdown (SUCCESS)
Thu Jan 3 17:07:34 2013:type=update:id= msp.1296:user=admin:cmd=configure terminal ;
interface Ethernet5/2 ; no channel-group auto mode on mac-pinning (SUCCESS)
Thu Jan 3 17:07:34 2013:type=update:id= msp.1296:user=admin:cmd=configure terminal ;
interface Ethernet5/2 ; no channel-group auto mode on mac-pinning (SUCCESS)
...
```

This example shows how to display accounting log messages with the required year month, day, hour, minutes and seconds:

```
n1000v# show accounting log start-time 2013 Jan 15 02:22:30 end-time 2013 Jan 15 07:43:48
```

```
Tue Jan 15 07:43:46 2013:type=update:id= msp.1303:user=admin:cmd=configure terminal ;
interface Vethernet158 ; ip flow monitor monitor2 input (SUCCESS)
Tue Jan 15 07:43:46 2013:type=update:id= msp.1303:user=admin:cmd=configure terminal ;
interface Vethernet158 ; ip flow monitor monitor2 output (SUCCESS)
Tue Jan 15 07:43:46 2013:type=update:id= msp.1303:user=admin:cmd=configure terminal ;
interface Vethernet158 ; switchport mode access (SUCCESS)
Tue Jan 15 07:43:46 2013:type=update:id= msp.1303:user=admin:cmd=configure terminal ;
interface Vethernet158 ; switchport access vlan 263 (SUCCESS)
Tue Jan 15 07:43:46 2013:type=update:id= msp.1303:user=admin:cmd=configure terminal ;
interface Vethernet158 ; no shutdown (SUCCESS)
Tue Jan 15 07:43:46 2013:type=stop:id= msp.1303:user=admin:cmd=
Tue Jan 15 07:43:46 2013:type=start:id=ppm.23757:user=admin:cmd=
Tue Jan 15 07:43:47 2013:type=stop:id=ppm.23757:user=admin:cmd=
Tue Jan 15 07:43:48 2013:type=start:id= msp.1303:user=admin:cmd=
Tue Jan 15 07:43:48 2013:type=update:id= msp.1303:user=admin:cmd=configure terminal ;
interface Vethernet159 (SUCCESS)
Tue Jan 15 07:43:48 2013:type=update:id= msp.1303:user=admin:cmd=configure terminal ;
interface Vethernet159 ; ip port access-group abhi-acl in (SUCCESS)
Tue Jan 15 07:43:48 2013:type=update:id= msp.1303:user=admin:cmd=configure terminal ;
interface Vethernet159 ; ip port access-group abhi-acl out (SUCCESS)
```

### Related Commands

Command	Description
<code>clear accounting log</code>	Clears the accounting log.

# show banner motd

To display the current message of the day (MOTD) 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
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the current MOTD banner message:

```
n1000v# show banner motd
Nexus 1000V Switch
```

Related Commands	Command	Description
	<b>banner motd</b>	Configures the banner message of the day.
	<b>send</b>	Sends a message to an open session.
	<b>switchname</b>	Changes the switch prompt.

# show boot

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

```
show boot [auto-copy | current | module [module_key_word] | sup-1 | sup-2 | variables]
```

Syntax Description		
<b>auto-copy</b>	(Optional)	Checks to see if autocopy is turned on.
<b>current</b>	(Optional)	Displays the current boot variables.
<b>module</b>	(Optional)	Displays the configuration of all modules.
<i>module_key_word</i>	(Optional)	Module keyword.
<b>sup-1</b>	(Optional)	Displays the first supervisor configuration.
<b>sup-2</b>	(Optional)	Displays the second supervisor configuration.
<b>variables</b>	(Optional)	Displays the list of boot variables.

**Defaults** None

**Command Modes** Any)

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

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

```
n1000v# show boot
Current Boot Variables:

sup-1
kickstart variable = bootflash:/n1000vh-dk9-kickstart.5.2.1.SM1.5.0.202.gbin
system variable = bootflash:/n1000vh-dk9.5.2.1.SM1.5.0.202.gbin
sup-2
kickstart variable = bootflash:/n1000vh-dk9-kickstart.5.2.1.SM1.5.0.202.gbin
system variable = bootflash:/n1000vh-dk9.5.2.1.SM1.5.0.202.gbin
No module boot variable set

Boot Variables on next reload:

sup-1
kickstart variable = bootflash:/n1000vh-dk9-kickstart.5.2.1.SM1.5.0.202.gbin
system variable = bootflash:/n1000vh-dk9.5.2.1.SM1.5.0.202.gbin
sup-2
kickstart variable = bootflash:/n1000vh-dk9-kickstart.5.2.1.SM1.5.0.202.gbin
system variable = bootflash:/n1000vh-dk9.5.2.1.SM1.5.0.202.gbin
```

```
No module boot variable set
```

This example shows how to display the first supervisor configuration:

```
n1000v# show boot sup-1
Current Boot Variables:
```

```
sup-1
kickstart variable = bootflash:/n1000vh-dk9-kickstart.5.2.1.SM1.5.0.202.gbin
system variable = bootflash:/n1000vh-dk9.5.2.1.SM1.5.0.202.gbin
```

```
Boot Variables on next reload:
```

```
sup-1
kickstart variable = bootflash:/n1000vh-dk9-kickstart.5.2.1.SM1.5.0.202.gbin
system variable = bootflash:/n1000vh-dk9.5.2.1.SM1.5.0.202.gbin
```

This example shows how to display the list of boot variables:

```
n1000v# show boot variables
List of boot variables are:
  ssi
  system
  asm-sfn
  kickstart
```

### Related Commands

<b>boot auto-copy</b>	Enables automatic copying of boot image files to the standby supervisor module.
<b>boot kickstart bootflash:</b>	Adds the new kickstart boot variable.
<b>boot system bootflash:</b>	Adds the new system boot variable.
<b>reload</b>	Reloads the VSM.
<b>show version</b>	Displays what software version is present on the VSM.

# show bridge-domain

To display detailed information about bridge-domains, use the **show bridge-domain** summary command.

## show 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
	5.2(1)SK1(2.1)	This command was introduced.

**Examples** This example displays detailed information about bridge-domains:

```
n1000v# show bridge-domain
Global Configuration:
Mode: Unicast-only
MAC Distribution: Disable
.
.
.
Bridge-domain z999 (0 ports in all)
Segment ID: 7998 (Manual/Active)
Mode: Multicast (override)
MAC Distribution: Disable
Group IP: 229.1.1.1
State: UP                Mac learning: Enabled
```

**Related Commands** This command has no related commands.



# show bridge-domain brief

To display brief information about the configured bridge-domains, use the **show bridge-domain brief** command.

## show bridge-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
	5.2(1)SK1(2.1)	This command was introduced.

**Examples** This example displays brief information about the configured bridge-domains:

```
n1000v# show bridge-domain brief
Bridge-domain          Segment  Status  Ports
-----
a                       0        inactive
segment1              4096     active  Veth10, Veth11, Veth12,
                                   Veth13, Veth14, Veth15,
                                   Veth16, Veth17, Veth18,
                                   Veth19, Veth20, Veth21,
                                   Veth22, Veth23, Veth24,
                                   Veth25, Veth26, Veth27,
                                   Veth28, Veth29, Veth70,
                                   Veth71, Veth72, Veth73,
                                   Veth74, Veth75, Veth76,
                                   Veth77, Veth78, Veth79
.
.
.
z999                   7998     active
```

Related Commands	Command	Description
	show bridge-domain	Displays bridge-domain configurations.

# show bridge-domain summary

To display number of bridge-domains that exist, use the **show bridge-domain summary** command.

**show bridge-domain summary**

---

**Syntax Description** This command has no arguments or keywords.

---

**Defaults** None

---

**Command Modes** Any

---

**SupportedUserRoles** network-admin  
network-operator

---

Command History	Release	Modification
	5.2(1)SK1(2.1)	This command was introduced.

---



---

**Examples** This example displays the number of bridge-domains that exist:

```
n1000v# show bridge-domain summary
Number of existing bridge-domains: 3508
```

---

Related Commands	Command	Description
	<b>show bridge-domain</b>	Displays bridge-domain configurations.

---

# show bridge-domain vteps

To display information about all of the VTEPs that are configured on different modules for VXLAN 1.5, use the **show bridge-domain vteps** command.

## show bridge-domain vteps

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(2.1)	This command was introduced.

**Examples** This example displays information about all of the VTEPs that are configured on different modules:

```
n1000v# show bridge-domain vteps
D: Designated VTEP      I:Forwarding Publish Incapable VTEP
```

Note: (\*) Denotes active gateway module

```
Bridge-domain: segment1
VTEP Table Version: 2
Port          Module  VTEP-IP Address  VTEP-Flags
-----
Veth9         3       11.1.1.2         (D)
Veth5         4       11.1.1.3         (D)
Veth8         4       11.1.1.4
Veth6         4       12.1.1.6
Veth7         4       12.1.1.5
```

```
Bridge-domain: segment3
VTEP Table Version: 1
Port          Module  VTEP-IP Address  VTEP-Flags
-----
Veth9         3       11.1.1.2         (D)
```

Related Commands	Command	Description
	<b>show bridge-domain</b>	Displays bridge-domain configurations.
	<b>show module vteps</b>	Displays information about all VTEPs configured on different modules.

# show cdp all

To display all of the interfaces in the Cisco Discovery Protocol database, use the **show cdp all** command.

**show cdp all**

---

**Syntax Description** This command has no arguments or keywords.

---

**Defaults** None

---

**Command Modes** Any

---

**SupportedUserRoles** network-admin  
network-operator

---

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

---



---

**Examples** This example shows how to display all of the interfaces in the Cisco Discovery Protocol database:

```
n1000v# show cdp all
mgmt0 is up
  CDP enabled on interface
  Refresh time is 60 seconds
  Hold time is 180 seconds
control0 is up
  CDP enabled on interface
  Refresh time is 60 seconds
  Hold time is 180 seconds
Vethernet1 is up
  CDP enabled on interface
  Refresh time is 60 seconds
  Hold time is 180 seconds
Vethernet2 is up
  CDP enabled on interface
  Refresh time is 60 seconds
  Hold time is 180 seconds
Ethernet3/1 is up
  CDP enabled on interface
  Refresh time is 60 seconds
  Hold time is 180 seconds
...
```

---

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>cdp advertise</b>	Assigns the Cisco Discovery Protocol version to advertise.
<b>cdp enable</b>	In interface mode, enables the Cisco Discovery Protocol on an interface. In EXEC mode, enables the Cisco Discovery Protocol for your device.
<b>clear cdp</b>	Clears the Cisco Discovery Protocol information on an interface.
<b>show cdp entry</b>	Displays Cisco Discovery Protocol entries by name.
<b>show cdp global</b>	Displays Cisco Discovery Protocol global parameters.
<b>show cdp interface</b>	Displays the Cisco Discovery Protocol parameters for an interface
<b>show cdp neighbors</b>	Displays Cisco Discovery Protocol neighbors.
<b>show cdp traffic</b>	Displays Cisco Discovery Protocol traffic.

# show cdp entry

To display a specific Cisco Discovery Protocol entry that matches a name, use the **show cdp entry name** command.

```
show cdp entry {all | name cdp_name}
```

Syntax Description		
<b>all</b>		Displays all of the entries in the Cisco Discovery Protocol database.
<b>name</b>		Specifies a Cisco Discovery Protocol entry that matches a name.
<i>cdp_name</i>		Name of an entry in the Cisco Discovery Protocol database. The name is case-sensitive, alphanumeric, and has a maximum of 256 characters.

Defaults	
	None

Command Modes	
	Any

Supported User Roles	
	network-admin network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

## Examples

This example shows how to display all of the entries in the Cisco Discovery Protocol database:

```
n1000v# show cdp entry all
-----
Device ID:THROTTLE(0802674791369441099)
System Name: THROTTLE

Interface address(es):
  IPv4 Address: 10.105.225.181
Platform: Nexus1000V, Capabilities:
Interface: mgmt0, Port ID (outgoing port): mgmt0
Holdtime: 140 sec

Version:
Cisco Nexus Operating System (NX-OS) Software, Version 5.2(1)SM1(5.1)

Advertisement Version: 2

MTU: 1500
Mgmt address(es):
  IPv4 Address: 10.105.225.181
-----
Device ID:THROTTLE(0802674791369441099)
System Name: THROTTLE
```

```

Interface address(es):
  IPv4 Address: 10.105.225.181
Platform: Nexus1000V, Capabilities:
Interface: control0, Port ID (outgoing port): control0
Holdtime: 140 sec

Version:
Cisco Nexus Operating System (NX-OS) Software, Version 5.2(1)SM1(5.1)

Advertisement Version: 2
...

```

This example shows how to display an entry in the Cisco Discovery Protocol database that matches a name:

```

n1000v# show cdp entry name N5K-1-RowP-Rack7
-----
Device ID:THROTTLE(0802674791369441099)
System Name:THROTTLE
Interface address(es):
  IPv4 Address: 10.105.225.181
Platform: Nexus1000V, Capabilities: Switch IGMP Filtering
Interface: mgmt0, Port ID (outgoing port): mgmt0
Holdtime: 139 sec

Version:
Cisco Nexus Operating System (NX-OS) Software, Version 5.2(1)SM1(5.1)

Advertisement Version: 2
Mgmt address(es):
  IPv4 Address: 10.105.225.181

```

### Related Commands

Command	Description
<b>cdp advertise</b>	Assigns the Cisco Discovery Protocol version to advertise.
<b>cdp enable</b>	In interface mode, enables Cisco Discovery Protocol on an interface. In EXEC mode, enables Cisco Discovery Protocol for your device.
<b>clear cdp</b>	Clears the Cisco Discovery Protocol information on an interface.
<b>show cdp all</b>	Displays all interfaces in Cisco Discovery Protocol database.
<b>show cdp global</b>	Displays Cisco Discovery Protocol global parameters.
<b>show cdp interface</b>	Displays Cisco Discovery Protocol parameters for an interface.
<b>show cdp neighbors</b>	Displays Cisco Discovery Protocol neighbors.
<b>show cdp traffic</b>	Displays Cisco Discovery Protocol traffic.

# show cdp global

To display the Cisco Discovery Protocol global parameters, use the **show cdp global** command.

**show cdp global**

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the Cisco Discovery Protocol global parameters:

```
n1000v# show cdp global
Global CDP information:
  CDP enabled globally
  Refresh time is 60 seconds
  Hold time is 180 seconds
  CDPv2 advertisements is enabled
  DeviceID TLV in System-Name(Default) Format
```

Related Commands	Command	Description
	<b>cdp advertise</b>	Assigns the Cisco Discovery Protocol version to advertise.
	<b>cdp enable</b>	In interface mode, enables the Cisco Discovery Protocol on an interface. In EXEC mode, enables the Cisco Discovery Protocol for your device.
	<b>cdp enable</b>	In interface mode, enables Cisco Discovery Protocol on an interface. In EXEC mode, enables Cisco Discovery Protocol for your device.
	<b>clear cdp</b>	Clears the Cisco Discovery Protocol information on an interface.
	<b>show cdp all</b>	Displays all interfaces in Cisco Discovery Protocol database.
	<b>show cdp entry</b>	Displays Cisco Discovery Protocol entries by name.
	<b>show cdp interface</b>	Displays Cisco Discovery Protocol parameters for an interface
	<b>show cdp neighbors</b>	Displays Cisco Discovery Protocol neighbors.
	<b>show cdp traffic</b>	Displays Cisco Discovery Protocol traffic.



# show cdp interface

To display the Cisco Discovery Protocol interface, use the **show cdp interface** command.

```
show cdp interface { control if_num | ethernet slot/chassis_num / port/slot_num | mgmt
  mgmt_if_num }
```

Syntax Description		
<b>control</b>		Specifies the control interface.
<i>if_num</i>		Control interface number. The only valid value is 0.
<b>ethernet</b>		Specifies an Ethernet IEEE 802.3z interface.
<i>slot/chassis_num</i>		Slot/chassis number. The range is from 1 to 66.
<i>/</i>		Slash separator.
<i>port/slot_num</i>		Port/slot number. The range is from 1 to 128.
<b>mgmt</b>		Specifies a management interface.
<i>mgmt_if_num</i>		Management interface number. The only valid value is 0.

**Defaults** None

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the control interface in the Cisco Discovery Protocol database:

```
n1000v# show cdp interface control 0
control0 is up
  CDP enabled on interface
  Refresh time is 60 seconds
  Hold time is 180 seconds
```

This example shows how to display the Ethernet IEEE 802.3z interfaces in the Cisco Discovery Protocol database:

```
n1000v# show cdp interface ethernet 3/2
Ethernet3/2 is up
  CDP enabled on interface
  Refresh time is 60 seconds
  Hold time is 180 seconds
```

This example shows how to display the management interface in the Cisco Discovery Protocol database:

```
n1000v# show cdp interface mgmt 0
mgmt0 is up
  CDP enabled on interface
  Refresh time is 60 seconds
  Hold time is 180 seconds
```

#### Related Commands

Command	Description
<b>cdp advertise</b>	Assigns the Cisco Discovery Protocol version to advertise.
<b>cdp enable</b>	In interface mode, enables the Cisco Discovery Protocol on an interface. In EXEC mode, enables the Cisco Discovery Protocol for your device.
<b>clear cdp</b>	Clears the Cisco Discovery Protocol information on an interface.
<b>interface control</b>	Configures the control interface and enter interface configuration mode.
<b>interface ethernet</b>	Configures an Ethernet interface.
<b>interface mgmt</b>	Configures the management interface and enter interface configuration mode.
<b>show cdp all</b>	Displays all interfaces in Cisco Discovery Protocol database.
<b>show cdp entry name</b>	Displays Cisco Discovery Protocol entries by name.
<b>show cdp global</b>	Displays Cisco Discovery Protocol global parameters.
<b>show cdp neighbors</b>	Displays Cisco Discovery Protocol neighbors.
<b>show cdp traffic</b>	Displays Cisco Discovery Protocol traffic.

# show cdp neighbors

To display the Cisco Discovery Protocol neighbors interface, use the **show cdp neighbors** command.

```
show cdp neighbors [detail | interface { control if_num | ethernet slot/chassis_num /
port/slot_num | mgmt mgmt_if_num}]
```

Syntax Description	
<b>detail</b>	(Optional) Displays details of Cisco Discovery Protocol neighbors.
<b>interface</b>	(Optional) Displays Cisco Discovery Protocol neighbors on an interface.
<b>control</b>	Specifies the control interface.
<i>if_num</i>	Control interface number. The only valid value is 0.
<b>ethernet</b>	Specifies an Ethernet IEEE 802.3z interface.
<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.
<i>/</i>	Slash separator.
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
<b>mgmt</b>	(Optional) Specifies a management interface.
<i>mgmt_if_num</i>	Management interface number. The only valid value is 0.

**Defaults** None

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the Cisco Discovery Protocol neighbors interface:

```
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
```

## ■ show cdp neighbors

```

swordfish-6k-2          Eth2/6          141      R S I      WS-C6503-E      Gig1/18

```

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

```

n1000v(config)# show cdp neighbors interface ethernet 2/3

```

```

Capability Codes: R - Router, T - Trans-Bridge, B - Source-Route-Bridge
                  S - Switch, H - Host, I - IGMP, r - Repeater,
                  V - VoIP-Phone, D - Remotely-Managed-Device,
                  s - Supports-STP-Dispute

```

```

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

```

## ■ Related Commands

Command	Description
<b>cdp advertise</b>	Assigns the Cisco Discovery Protocol version to advertise.
<b>cdp enable</b>	In interface mode, enables the Cisco Discovery Protocol on an interface. In EXEC mode, enables the Cisco Discovery Protocol for your device.
<b>clear cdp</b>	Clears the Cisco Discovery Protocol information on an interface.
<b>interface ethernet</b>	Configures an Ethernet interface.
<b>show cdp all</b>	Displays all interfaces in Cisco Discovery Protocol database.
<b>show cdp entry name</b>	Displays Cisco Discovery Protocol entries by name.
<b>show cdp global</b>	Displays Cisco Discovery Protocol global parameters.
<b>show cdp interface</b>	Displays Cisco Discovery Protocol parameters for an interface
<b>show cdp traffic</b>	Displays Cisco Discovery Protocol traffic.

# show cdp traffic interface control

To display the Cisco Discovery Protocol traffic statistics for a named interface, use the **show cdp traffic interface control** command.

```
show cdp traffic interface control if_num
```

<b>Syntax Description</b>	<i>if_num</i>	Control interface number. The only valid value is 0.
---------------------------	---------------	--

<b>Defaults</b>	None
-----------------	------

<b>Command Modes</b>	Any
----------------------	-----

<b>SupportedUserRoles</b>	network-admin network-operator
---------------------------	-----------------------------------

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display Cisco Discovery Protocol traffic interface control statistics:

```
n1000v# show cdp traffic interface control 0
```

```
-----
Traffic statistics for control0
Input Statistics:
  Total Packets: 0
  Valid CDP Packets: 0
    CDP v1 Packets: 0
    CDP v2 Packets: 0
  Invalid CDP Packets: 0
    Unsupported Version: 0
    Checksum Errors: 0
    Malformed Packets: 0

Output Statistics:
  Total Packets: 10
    CDP v1 Packets: 0
    CDP v2 Packets: 10
  Send Errors: 0
```

Related Commands	Command	Description
	<b>cdp advertise</b>	Assigns the Cisco Discovery Protocol version to advertise.
	<b>cdp enable</b>	In interface mode, enables the Cisco Discovery Protocol on an interface. In EXEC mode, enables the Cisco Discovery Protocol for your device.

<b>Command</b>	<b>Description</b>
<b>clear cdp</b>	Clears the Cisco Discovery Protocol information on an interface.
<b>interface control</b>	Configures the control interface and enter interface configuration mode.
<b>show cdp all</b>	Displays all interfaces in Cisco Discovery Protocol database.
<b>show cdp entry name</b>	Displays Cisco Discovery Protocol entries by name.
<b>show cdp global</b>	Displays Cisco Discovery Protocol global parameters.
<b>show cdp interface</b>	Displays Cisco Discovery Protocol parameters for an interface.
<b>show cdp neighbors</b>	Displays Cisco Discovery Protocol neighbors.

# show cdp traffic interface ethernet

To display the Cisco Discovery Protocol IEEE 802.3z interface information for a named slot/chassis number, use the **show cdp traffic interface ethernet** command.

```
show cdp traffic interface ethernet slot/chassis_num / port/slot_num
```

Syntax Description	slot/chassis_num	Slot/chassis number. The range is from 1 to 66.
	/	Slash separator.
	port/slot_num	Port/slot number. The range is from 1 to 128.

**Defaults** None

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the IEEE 802.3z interface statistics by a named slot/chassis number:

```
n1000v# show cdp traffic interface ethernet 3/2
-----
Traffic statistics for Ethernet3/2
Input Statistics:
  Total Packets: 14
  Valid CDP Packets: 14
    CDP v1 Packets: 0
    CDP v2 Packets: 14
  Invalid CDP Packets: 0
    Unsupported Version: 0
    Checksum Errors: 0
    Malformed Packets: 0

Output Statistics:
  Total Packets: 16
    CDP v1 Packets: 0
    CDP v2 Packets: 16
  Send Errors: 0
```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>cdp advertise</b>	Assigns the Cisco Discovery Protocol version to advertise.
<b>cdp enable</b>	In interface mode, enables the Cisco Discovery Protocol on an interface. In EXEC mode, enables the Cisco Discovery Protocol for your device.
<b>clear cdp</b>	Clears the Cisco Discovery Protocol information on an interface.
<b>show cdp all</b>	Displays all interfaces in Cisco Discovery Protocol database.
<b>show cdp entry name</b>	Displays Cisco Discovery Protocol entries by name.
<b>show cdp global</b>	Displays Cisco Discovery Protocol global parameters.
<b>show cdp interface</b>	Displays Cisco Discovery Protocol parameters for an interface.
<b>show cdp neighbors</b>	Displays Cisco Discovery Protocol neighbors.



# show cdp traffic interface mgmt

To display the Cisco Discovery Protocol traffic interface statistics by management number, use the **show cdp traffic interface mgmt** command.

```
show cdp traffic interface mgmt mgmt_if_num
```

<b>Syntax Description</b>	<i>mgmt_if_num</i>	Management interface number. The only valid value is 0.
---------------------------	--------------------	---

<b>Defaults</b>	None
-----------------	------

<b>Command Modes</b>	Any
----------------------	-----

<b>SupportedUserRoles</b>	network-admin network-operator
---------------------------	-----------------------------------

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display Cisco Discovery Protocol traffic interface management statistics:

```
n1000v# show cdp traffic interface mgmt 0
```

```
-----
Traffic statistics for mgmt0
Input Statistics:
  Total Packets: 0
  Valid CDP Packets: 0
    CDP v1 Packets: 0
    CDP v2 Packets: 0
  Invalid CDP Packets: 0
    Unsupported Version: 0
    Checksum Errors: 0
    Malformed Packets: 0
```

```
Output Statistics:
  Total Packets: 34
    CDP v1 Packets: 0
    CDP v2 Packets: 34
  Send Errors: 0
```

Related Commands	Command	Description
	<b>cdp advertise</b>	Assigns the Cisco Discovery Protocol version to advertise.
	<b>cdp enable</b>	In interface mode, enables the Cisco Discovery Protocol on an interface. In EXEC mode, enables the Cisco Discovery Protocol for your device.

<b>Command</b>	<b>Description</b>
<b>clear cdp</b>	Clears the Cisco Discovery Protocol information on an interface.
<b>interface mgmt</b>	Configures the management interface and enter interface configuration mode.
<b>show cdp all</b>	Displays all interfaces in Cisco Discovery Protocol database.
<b>show cdp entry name</b>	Displays Cisco Discovery Protocol entries by name.
<b>show cdp global</b>	Displays Cisco Discovery Protocol global parameters.
<b>show cdp interface</b>	Displays Cisco Discovery Protocol parameters for an interface.
<b>show cdp neighbors</b>	Displays Cisco Discovery Protocol neighbors.

# show cli alias

To display the command-line interface (CLI) alias configuration, use the **show cli alias** command.

```
show cli alias [name alias_name]
```

Syntax Description	
<b>name</b>	(Optional) Displays a specific alias.
<b>alias_name</b>	The name of the specific alias. The alias name is not case-sensitive.

**Defaults** Displays all CLI aliases.

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the CLI alias configuration:

```
n1000v# show cli alias
n1000v#
```

Related Commands	Command	Description
	<b>clear cli history</b>	Clears the history of commands that you have entered into the CLI.
	<b>cli var name</b>	Defines a CLI variable for a terminal session.
	<b>run-script</b>	Runs a saved shell script.

# show cli dynamic

To display the current range of dynamic command-line interface (CLI) parameters, use the **show cli** command.

```
show cli dynamic {integers [param_integer] | strings [param_string]}
```

Syntax Description	integers	Specifies the current range of dynamic integer parameters.
	<i>param_integer</i>	(Optional) Parameter name. The integer value name ranges from 1 to 66.
Syntax Description	strings	Specifies the current range of dynamic string parameters.
	<i>param_string</i>	(Optional) Parameter name. The string values are case-sensitive and alphanumeric.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display current range of dynamic CLI integers:

```
n1000v# show cli dynamic integers
<module>                                1 to 66 <i1>                                1 to 66
```

This example shows how to display current range of dynamic CLI strings:

```
n1000v# show cli dynamic strings
Token: <res-mgr-template-known-name-all>
  vdc-default
  global-default

Token: <res-mgr-res-known-name>
  vrf
  u4route-mem
  u6route-mem
  vlan
  monitor-session
  port-channel

Token: <res-mgr-res-known-name-all>
  vrf
  u4route-mem
  u6route-mem
  vlan
```

```

monitor-session
port-channel

Token: <trap_arg>
rmon
config
snmp
upgrade
sysmgr
aaa
rf
entity
feature-control
license
link
vtp

Token: <license-feature>
N1KV_MSFT_LAN_SERVIC
NEXUS_VSG_SERVICES_P
NEXUS_ASA1000V_SERVI
...

```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>clear cli history</b>	Clears the history of commands that you have entered into the CLI.
<b>cli var name</b>	Defines a CLI variable for a terminal session.
<b>run-script</b>	Runs a saved shell script.

# show cli history

To display a history of command-line interface (CLI) commands, use the **show cli history** command.

```
show cli history [num_lines [unformatted] | config-mode [num_lines [unformatted] |
unformatted [num_lines]] | exec-mode [num_lines [unformatted] | unformatted [num_lines]]
| this-mode-only [num_lines [unformatted] | unformatted [num_lines]] | unformatted
[num_lines]]
```

## Syntax Description

<b>num_lines</b>	(Optional) Number of lines to display. The range is from 0 to 2147483647.
<b>unformatted</b>	(Optional) Displays just the commands.
<b>config-mode</b>	(Optional) Displays the history of configuration commands only.
<b>exec-mode</b>	(Optional) Displays the history of EXEC commands only.
<b>this-mode-only</b>	(Optional) Displays the history from current mode only.

## Defaults

Displays the CLI command history.

## Command Modes

Any

## Supported User Roles

network-admin  
network-operator

## Command History

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

## Examples

This example shows how to display the history of CLI commands:

```
n1000v# show cli history
0 01:12:51 show cli dynamic integers
1 01:13:47 show cli dynamic string
2 01:17:14 show cli dynamic integers module
3 01:17:25 show cli dynamic integers 1
4 01:22:12 show cli history
```

## Related Commands

Command	Description
<b>clear cli history</b>	Clears the history of commands that you have entered into the CLI.
<b>cli var name</b>	Defines a CLI variable for a terminal session.
<b>run-script</b>	Runs a saved shell script.

# show cli interface table

To display the command-line interface (CLI) interface table, use the **show cli interface table** command.

## show cli interface table

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the CLI interface table:

```
n1000v# show cli interface table
```

```
name port-channel mask 2097152 match length 2 format 9 lib ethpcmcli
name ethernet mask 8589934592 match length 1 format 14 lib pmcli_common
name mgmt mask 128 match length 4 format 1 lib pmcli_common
name control mask 68719476736 match length 7 format 1 lib pmcli_common
name vethernet mask 4294967296 match length 2 format 1 lib vimcli
```

Related Commands	Command	Description
	<b>clear cli history</b>	Clears the history of commands that you have entered into the CLI.
	<b>cli var name</b>	Defines a CLI variable for a terminal session.
	<b>run-script</b>	Runs a saved shell script.

# show cli list

To display user-defined command-line interface (CLI) command syntax, use the **show cli list** command.

```
show cli list [max_combo [component_match [detail [recurse] | recurse [detail]]]
```

Syntax Description	
<i>max_combo</i>	(Optional) Maximum number of combinations to show per command. The default is 100.
<i>component_match</i>	(Optional) Component to match.
<b>detail</b>	(Optional) Specifies the formatting of arguments as {17 <1-10>} instead of <int:1-10>.
<b>recurse</b>	(Optional) Specifies going into submodes.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the CLI command syntax:

```
n1000v# show cli list
MODE exec
no debug fm error
no debug fm flow
no debug aclmgr all
no debug aclmgr ha
no debug aclmgr fsm
no debug aclmgr errors
no debug aclmgr events
no debug aclmgr trace
no debug aclmgr ppf mts
no debug aclmgr ppf session
no debug aclmgr ppf session-state
no debug aclmgr ppf pss
no debug aclmgr ppf errors
no debug aclmgr ppf remote-link
no debug core error
no debug core flow
no debug aaa aaa-requests
no debug aaa all
no debug aaa conf-events
```



```
no debug aaa errors
no debug aaa events
no debug aaa mts
...
```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>clear cli history</b>	Clears the history of commands that you have entered into the CLI.
<b>cli var name</b>	Defines a CLI variable for a terminal session.
<b>run-script</b>	Runs a saved shell script.

# show cli syntax

To display the command-line interface (CLI) syntax of all commands, use the **show cli syntax** command.

## show cli syntax

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the syntax of all commands:

```
n1000v# show cli syntax
(0) [no] debug fm {error | flow}
(1) [no] debug aclmgr all
(2) [no] debug aclmgr {ha | fsm | errors | events | trace}
(3) [no] debug aclmgr ppf {mts | session | session-state | pss | errors | remote-link}
(4) [no] debug core {error | flow}
(5) [no] debug aaa aaa-requests
(6) [no] debug aaa all
(7) [no] debug aaa conf-events
(8) [no] debug aaa errors
(9) [no] debug aaa events
(10) [no] debug aaa mts
(11) [no] debug license all
(12) [no] debug license errors
(13) [no] debug license events
(14) [no] debug license mts
(15) [no] debug klm rwsem {error | flow [sap <i0>]}
(16) [no] debug klm internal redundancy {error | flow}
(17) [no] debug klm internal kadb {error | flow}
(18) [no] debug system internal confcheck all
(19) [no] debug system internal confcheck error
(20) [no] debug system internal confcheck mts {pkt {both | rx [{node <i0> | opcode <i1> |
sap <i2>}] | tx} | pkthdr {both | rx [numpkt <
i3>] | tx}}
...
```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>clear cli history</b>	Clears the history of commands that you have entered into the CLI.
<b>cli var name</b>	Defines a CLI variable for a terminal session.
<b>run-script</b>	Runs a saved shell script.
<b>show cli syntax</b>	Displays CLI commands.

# show cli syntax long

To display the command-line interface (CLI) syntax using more than one line per command (tree form), use the **show cli syntax long** command.

```
show cli syntax long [recurse [roles] | roles] [role_mask | network-admin | network-operator]
```

Syntax Description	
<b>recurse</b>	(Optional) Displays children of the current mode.
<b>roles</b>	(Optional) Displays commands for a specific role.
<i>role-mask</i>	(Optional) Displays commands that match the roles mask. The range is from 0x0 to 0xffffffff.
<b>network-admin</b>	(Optional) Displays commands for the network administrator role.
<b>network-operator</b>	(Optional) Displays commands for the network operator role.

Defaults	
	None

Command Modes	
	Any

SupportedUserRoles	
	network-admin network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the CLI syntax by using more than one line per command (tree form):

```
n1000v# show cli syntax long
MODE exec
*** (0) [no] debug fm {error
| flow}
*** (1) [no] debug aclmgr all
*** (2) [no] debug aclmgr {ha
| fsm
| errors
| events
| trace}
*** (3) [no] debug aclmgr ppf {mts
| session
| session-state
| pss
| errors
| remote-link}
*** (4) [no] debug core {error
```

```
... | flow}
```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>clear cli history</b>	Clears the history of commands that you have entered into the CLI.
<b>cli var name</b>	Defines a CLI variable for a terminal session.
<b>run-script</b>	Runs a saved shell script.

# show cli syntax recurse

To display the command-line interface (CLI) syntax and the children of all commands, use the **show cli syntax recurse** command.

```
show cli syntax recurse [long [roles] | roles] [role_mask | network-admin | network-operator]
```

Syntax Description	long	(Optional) Displays more than 1 line per command (tree form).
	roles	(Optional) Displays commands for a specific role.
	role-mask	(Optional) Commands that match the roles mask. The range is from 0x0 to 0xffffffff.
	network-admin	(Optional) Displays commands for the network administrator role.
	network-operator	(Optional) Displays commands for the network operator role.

Defaults	None
----------	------

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

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

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the CLI syntax and the children of all commands:

```
n1000v# show cli syntax recurse
MODE exec
(0) [no] debug fm {error | flow}
(1) [no] debug aclmgr all
(2) [no] debug aclmgr {ha | fsm | errors | events | trace}
(3) [no] debug aclmgr ppf {mts | session | session-state | pss | errors | remote-link}
(4) [no] debug core {error | flow}
(5) [no] debug aaa aaa-requests
(6) [no] debug aaa all
(7) [no] debug aaa conf-events
(8) [no] debug aaa errors
(9) [no] debug aaa events
(10) [no] debug aaa mts
...
```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>clear cli history</b>	Clears the history of commands that you have entered into the CLI.
<b>cli var name</b>	Defines a CLI variable for a terminal session.
<b>run-script</b>	Runs a saved shell script.

# show cli syntax roles

To display the command-line interface (CLI) syntax of all commands for a specific role in mode, use the **show cli syntax roles** command.

```
show cli syntax roles [role_mask | network-admin | network-operator]
```

Syntax Description	
<i>role-mask</i>	(Optional) Commands that match the roles mask. The range is from 0x0 to 0xffffffff.
<b>network-admin</b>	(Optional) Displays commands for the network administrator role.
<b>network-opera tor</b>	(Optional) Displays commands for the network operator role.

**Defaults** Displays the CLI syntax of all command roles.

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the CLI syntax of all commands in EXEC mode:

```
n1000v# show cli syntax roles network-admin
MODE exec
(0) [no] debug license all
(1) [no] debug license errors
(2) [no] debug license events
(3) [no] debug license mts
(4) [no] debug module all
(5) [no] debug module error [module1 <module>]
(6) [no] debug module event
(7) [no] debug module ha
(8) [no] debug module no-heartbeat
(9) [no] debug module no-powerdown
(10) [no] debug module trace [module1 <module>]
(11) [no] debug exceptionlog {demux | deque | error | flow | info}
...
```

Related Commands	Command	Description
	<b>clear cli history</b>	Clears the history of commands that you have entered into the CLI.



<b>Command</b>	<b>Description</b>
<b>cli var name</b>	Defines a CLI variable for a terminal session.
<b>run-script</b>	Runs a saved shell script.

# show cli variables

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

**show cli variables**

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display user-defined CLI persistent variables:

```
n1000v# show cli variables
VSH Variable List (* = session vars)
-----
SWITCHNAME="nexus1000V"
TIMESTAMP="2013-02-16-02.20.43"
```

Related Commands	Command	Description
	<b>clear cli history</b>	Clears the history of commands that you have entered into the CLI.
	<b>cli var name</b>	Defines a CLI variable for a terminal session.
	<b>run-script</b>	Runs a saved shell script.

# show clock

To display the clock, use the **show clock** command.

**show clock [detail]**

Syntax Description	detail
	(Optional) Displays the current date and time configuration.

**Defaults** Displays the machine time and date.

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the clock:

```
n1000v# show clock
13:59:11.321 PST Fri Jan 04 2013
```

Related Commands	Command	Description
	<b>clock set</b>	Manually sets the clock.
	<b>clock summer-time</b>	Configures summer-time (daylight saving time).
	<b>clock timezone</b>	Configurec the time zone offset from the UTC.

# show copyright

To display the copyright, use the **show copyright** command.

**show copyright**

---

**Syntax Description** This command has no arguments or keywords.

---

**Defaults** None

---

**Command Modes** Any

---

**SupportedUserRoles** network-admin  
network-operator

---

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

---



---

**Examples** This example shows how to display the copyright:

```
n1000v# show copyright
Cisco Nexus Operating System (NX-OS) Software
TAC support: http://www.cisco.com/tac
Copyright (c) 2002-2013, 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
```

---

Related Commands	Command	Description
	show version	Displays the software version.

---

# show cores

To display all of the device core dumps, for the current virtual device context (VDC), 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
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display all of the device core dumps for the current VDC:

```
n1000v# show cores
Module Instance Process-name PID Date(Year-Month-Day Time)
-----
```

Related Commands	Command	Description
	<b>attach module</b>	Accesses the standby VSM console from the active VSM.
	<b>clear cores</b>	Clears the core files.
	<b>show processes</b>	Displays information about the process logs.

# show debug

To display the debug flags, use the **show debug** command.

```
show debug [aaa | aclcomp | acllog [bypass] | aclmgr | ascii-cfg | bootvar | capability | cdp |
cert-enroll | confcheck | core | csm | dhcp | ethpm [bypass] | evmc | evms | exceptionlog | fm
| fs-daemon | im [bypass] | ip {icmp | ipc | mpacket | packet | routing} | ipconf [bypass] |
kadb | klm-rwsem | lacp [bypass] | license | logfile log_file_name | m2rib | module | msp |
mvsh | nfm [bypass] | nsmgr | ntp | platform | pltfm_config [bypass] | plugin [bypass] |
port-channel [bypass] | port-profile | radius | redundancy | res_mgr [bypass] | rpm | sal |
scheduler | security | session-mgr | snmp | spanning-tree [bypass] | system | tcap | ttyd | vdc
| vem_mgr [bypass] | vim [bypass] | vlan [bypass] | vmm | vms | vnm-pa | vns_agent [bypass]
| vsh | vshd | xml {server [session {logging {level}}}]}
```

## Syntax Description

<b>aaa</b>	(Optional) Displays the authentication, authorization, and accounting (AAA) debugging flags.
<b>aclcomp</b>	(Optional) Displays the access control list (ACL) COMP debugging flags.
<b>acllog</b>	(Optional) Displays the ACL log debugging flags.
<b>bypass</b>	(Optional) Displays the ACL log bypass flags.
<b>aclmgr</b>	(Optional) Displays the ACL manager debugging flags.
<b>ascii-cfg</b>	(Optional) Displays all of the ASCII-CFG debugging flags.
<b>bootvar</b>	(Optional) Displays the boot variable debugging flags.
<b>capability</b>	(Optional) Displays all of the capability debugging flags.
<b>cdp</b>	(Optional) Displays the Cisco Discovery Protocol debug flags.
<b>cert-enroll</b>	(Optional) Displays the Cert-enroll debugging flags.
<b>confcheck</b>	(Optional) Displays all of the configuration check debugging flags.
<b>core</b>	(Optional) Displays the core daemon debugging flags.
<b>csm</b>	(Optional) Displays the Cisco security manager (CSM) debugging flags.
<b>dhcp</b>	(Optional) Displays the debugging flags of the Dynamic Host Configuration Protocol (DHCP).
<b>ethpm</b>	(Optional) Displays the Ethernet port manager (ETHPM) debugging flags.
<b>evmc</b>	(Optional) Displays the event manager client (EVMC) debugging flags.
<b>evms</b>	(Optional) Displays the EVMS debugging flags.
<b>exceptionlog</b>	(Optional) Displays all of the exception logger debugging flags.
<b>fm</b>	(Optional) Displays the feature manager debugging flags.
<b>fs-daemon</b>	(Optional) Displays the FS daemon debugging flags.
<b>im</b>	(Optional) Displays the IM debugging flags.
<b>ip</b>	(Optional) Displays IP information.
<b>ipconf</b>	(Optional) Displays the IP configuration debugging flags.
<b>icmp</b>	Displays the ICMP debug flags.
<b>ipc</b>	Displays the InterProcessor Communication (IPC) events debug flags.
<b>mpacket</b>	Displays multicast packet debug flags.
<b>packet</b>	Displays unicast packet debug flags.

<b>routing</b>	Displays the routing table debug flags.
<b>mld</b>	Displays Multicast Listener Discovery (MLD) debug flags.
<b>nd</b>	Displays Neighbor Discovery (ND) debug flags.
<b>kadb</b>	(Optional) Displays the kernel ADB debugging flags.
<b>klm-rwsem</b>	(Optional) Displays the RWSEM driver debug elements.
<b>lACP</b>	(Optional) Displays the Link Aggregation Control Protocol (LACP) debugging flags.
<b>license</b>	(Optional) Displays the licensing debugging flags.
<b>logfile</b>	(Optional) Displays the contents of the logfile.
<i>log_file_name</i>	Log file name.
<b>m2rib</b>	(Optional) Displays information about the Multicast 2 Routing Information Base (M2RIB).
<b>module</b>	(Optional) Displays all of the module debugging flags.
<b>mSP</b>	(Optional) Displays the MSP debugging flags.
<b>mvsh</b>	(Optional) Displays the MSVSH debugging flags.
<b>nfm</b>	(Optional) Displays the network fault manager (NFM) debugging flags.
<b>nsmgr</b>	(Optional) Displays debugging flags of the name space manager (NSMGR).
<b>ntp</b>	(Optional) Displays the state of the Network Time Protocol (NTP) debug settings.
<b>platform</b>	(Optional) Displays all of the platform manager debugging flags.
<b>pltfm_config</b>	(Optional) Displays the PLTFM_CONFIG debugging flags.
<b>plugin</b>	(Optional) Displays the PLUGIN debugging flags.
<b>port-channel</b>	(Optional) Displays the port channel debugging flags.
<b>port-profile</b>	(Optional) Displays the port profile debugging flags.
<b>radius</b>	(Optional) Displays the Remote Authentication Dial-In User Service (RADIUS) debugging flags.
<b>redundancy</b>	(Optional) Displays the redundancy drivers debugging flags.
<b>res_mgr</b>	(Optional) Displays the RES_MGR debugging flags.
<b>rpm</b>	(Optional) Displays the Route Processor Module (RPM) debug flags.
<b>sal</b>	(Optional) Displays the Service Abstraction Layer (SAL) debugging flags.
<b>scheduler</b>	(Optional) Displays all of the scheduler debugging flags.
<b>security</b>	(Optional) Displays the security debugging flags.
<b>session-mgr</b>	(Optional) Displays the session manager debugging flags.
<b>snmp</b>	(Optional) Displays all of the Simple Network Management Protocol (SNMP) server debugging flags.
<b>spanning-tree</b>	(Optional) Displays the STP debugging flags.
<b>system</b>	(Optional) Displays all of the system debugging flags.
<b>tcap</b>	(Optional) Displays all of the exception logger debugging flags.
<b>ttyd</b>	(Optional) Displays all of the TTYD debugging flags.
<b>vdc</b>	(Optional) Displays the virtual device context (VDC) manager debugging flags.
<b>vem_mgr</b>	(Optional) Displays the VEM_MGR debugging flags.

<b>vim</b>	(Optional) Displays the Virtual Infrastructure Methodology (VIM) debugging flags.
<b>vlan</b>	(Optional) Displays all of the VLAN manager debugging flags.
<b>vmm</b>	(Optional) Displays the virtual machine manager (VMM) debugging flags.
<b>vms</b>	(Optional) Displays the virtual modular system (VMS) debugging flags.
<b>vnm-pa</b>	(Optional) Displays the VNM PA debugging flags.
<b>vns_agent</b>	(Optional) Displays the VNS_AGENT debugging flags
<b>vsh</b>	(Optional) Displays all of the VSH debugging flags
<b>vshd</b>	(Optional) Displays all of the virtual shared hardware device (VSHD) debugging flags.
<b>xml</b>	(Optional) Displays the XML debugging flags.
<b>server</b>	Specifies the XML agent server.
<b>session</b>	(Optional) Displays the XML agent session.
<b>logging</b>	Displays message logging facilities.
<b>level</b>	Displays the facility parameter for system log messages.

**Defaults** Displays all of the debug flags.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the debug flags:

```
n1000v# show debug
show debug

Debug level is set to Minor(1)

REDUN_MGR Daemon:
  Error debugging is on
  default for new sessions logging level: 3
```

Related Commands	Command	Description
	<b>clear debug-logfile</b>	Clears the contents of the debug logfile.
	<b>debug logfile</b>	Directs the output of the <b>debug</b> commands to a specified file.



Command	Description
<b>debug logging</b>	Enables <b>debug</b> command output logging.
<b>show debug-filter</b>	Displays the settings of the debug filter.

# show debug-filter

To display the settings of the debug filter, use the **show debug-filter** command.

```
show debug-filter {all {icmp} | rpm}
```

Syntax Description	all	Displays all debugs filters.
	rpm	Displays Route Processor Module (RPM) debug filters.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the settings of the debug filter:

```
n1000v# show debug-filter all
n1000v#
```

This example shows how to display the debug filter settings for the RPM:

```
n1000v# show debug-filter rpm
n1000v#
```

Related Commands	Command	Description
	clear debug-logfile	Clears the contents of the debug logfile.
	debug logfile	Directs the output of the <b>debug</b> commands to a specified file.
	debug logging	Enables <b>debug</b> command output logging.

# show default-interface log

To display the execution log of the last default-interface, use the **show default-interface log** command.

**show default-interface log**

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the default interface:

```
n1000v# show default-interface log
No default interface command log
```

Related Commands	Command	Description
	<b>default shutdown</b>	Remove a configured administrative state from an interface.

# show dynamic-port-profile

To display information about the dynamic ports, use the **show dynamic-port-profile** command.

```
show dynamic-port-profile [inherit inherited_port_profile | name dynamic_port_profile | nsm
network segment net_seg_name]
```

Syntax Description		
<b>inherit</b>	(Optional) Specifies the inherited port profile.	
<i>inherited_port_profile</i>	Inherited port profile name. The name is a maximum of 80 case-sensitive, alphanumeric characters.	
<b>name</b>	(Optional) Specifies a dynamic port profile.	
<i>dynamic_port_profile</i>	Dynamic port profile name. The name is a maximum of 80 case-sensitive, alphanumeric characters.	
<b>network segment</b>	(Optional) Specifies a network segment.	
<i>net_seg_name</i>	Network segment name. The name is a maximum of 64 characters.	

**Defaults** Displays information about the dynamic port profiles.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the dynamic ports:

```
n1000v# show dynamic-port-profile
dynamic-port-profile:
dynpp_330779e2-4641-46cc-a757-5a31b1b3999f_272e538f-7f4e-45b6-a363-9fda6b1389f7
  inherit port-profile: cluster-traffic
  network-segment: NS_VLAN_261
dynamic-port-profile:
dynpp_e06910e1-dc31-4212-8f21-4f657bed269d_ae3f98c7-a021-4124-9ab2-7a68f9955467
  inherit port-profile: veth-policy
  network-segment: sec-20
dynamic-port-profile:
dynpp_e06910e1-dc31-4212-8f21-4f657bed269d_f3c01725-6685-4d5a-b08f-7494f744ea08
  inherit port-profile: veth-policy
  network-segment: NS_VLAN_262
```

Related Commands	Command	Description
	<b>capability iscsi-multipath</b>	Configures a port profile to be used with the ISCSI multipath protocol.
	<b>inherit port-profile</b>	Adds an inherited configuration to a new port profile as a default configuration.

# show encryption service stat

To display the encryption service status, use the **show encryption service stat** command.

**show encryption service stat**

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the encryption service status:

```
n1000v# show encryption service stat
Encryption service not enabled
Master Encryption Key: not configured.
Type-6 encryption is not being used
```

# show event manager environment

To display information about event manager environment variables, use the **show event manager environment** command.

```
show event manager environment {enviro_name | all}
```

## Syntax Description

<i>enviro_name</i>	Environment variable name. The name is a maximum of 29 characters.
<b>all</b>	Displays information about all the configured environment variables.

## Defaults

None

## Command Modes

Any

## Supported User Roles

network-admin

## Command History

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

## Examples

This example shows how to display information about event manager environment variables:

```
n1000v# show event manager environment all
n1000v#
```

## Related Commands

Command	Description
<b>event-log</b>	Enables and disables event logging for the VNS agent and saves or configures logging.
<b>event manager</b>	Creates or modifies an event manager policy, configures an environment variable, or registers/activates a script policy.

# show event manager event-types

To display information about registered event manager (EM) event types, use the **show event manager event-types** command.

**show event manager event-types** [*event\_name* [**module** *slot\_id*] | **all** | **module** *slot\_id*]

Syntax Description	
<i>event_name</i>	(Optional) Displays information about the specified event type.
<b>module</b>	(Optional) Displays information about event types on other modules.
<i>slot_id</i>	Slot ID. The range is from 1 to 66.
<b>all</b>	(Optional) Displays information about all the configured environment variables.

**Defaults** Displays information about registered EM event types.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about registered EM event types:

```
n1000v# show event manager event-types
Name : oir
Description : OIR event
Event Parameters : devicetype, eventtype, devicenum
Publisher : Platform Manager
Default Action : None

Name : fanabsent
Description : Fan Absent Event
Event Parameters : devicenum, time
Publisher : Platform Manager
Default Action : None

Name : fanbad
Description : Fan Bad Event
Event Parameters : devicenum, time
Publisher : Platform Manager
Default Action : None

Name : memory
Description : Memory Alerts
Event Parameters : memstate
```



```

Publisher : Platform Manager
Default Action : None

Name : temperature
Description : Temperature Sensor Event
Event Parameters : modnum, sensornum, major_minor
Publisher : Platform Manager
Default Action : Shutdown on major temperature threshold

Name : poweroverbudget
Description : Power Over Budget Event
Event Parameters :
Publisher : Platform Manager
Default Action : Syslog
...

```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>event-log</b>	Enables and disables event logging for the VNS agent and saves or configures logging.
<b>event manager</b>	Creates or modifies an EM policy, configures an environment variable, or registers/activates a script policy.

# show event manager history events

To display information about the history of event manager (EM) events, use the **show event manager history events** command.

```
show event manager history events [detail [maximum max_limit | severity specified_severity] |
maximum max_limit | severity specified_severity]
```

Syntax Description	
<b>detail</b>	(Optional) Displays information about the event parameters as well.
<b>maximum</b>	(Optional) Specifies an upper limit on the number of events to be shown.
<i>max_limit</i>	Maximum number of events to be shown. The range is from 1 to 500.
<b>severity</b>	(Optional) Displays those events where the severity is >= to the specified severity.
<i>specified_severity</i>	Severity level: <ul style="list-style-type: none"> <li>• catastrophic</li> <li>• minor</li> <li>• moderate</li> <li>• severe</li> </ul>

**Defaults** Displays information about the history of EM events.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the history of EM events:

```
n1000v# show event manager history events
n1000v#
```

Related Commands	Command	Description
	<b>event-log</b>	Enables and disables event logging for the VNS agent and saves or configures logging.
	<b>event manager</b>	Creates or modifies an event manager policy, configures an environment variable, or registers/activates a script policy.

# show event manager policy-state

To display information about the state of an event manager (EM) policy, use the **show event manager policy-state** command.

```
show event manager policy-state policy_name [module slot_id]
```

## Syntax Description

<i>policy_name</i>	Policy name. The name is a maximum of 29 alphanumeric, non case-sensitive characters.
<b>module</b>	(Optional) Specifies information about event types on other modules.
<i>slot_id</i>	Slot ID. The range is from 1 to 66.

## Defaults

Displays information about the state of an EM policy.

## Command Modes

Any

## Supported User Roles

network-admin

## Command History

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

## Examples

This example shows how to display information about the state of an EM policy:

```
n1000v# show event manager policy-state __pfm_power_over_budget
Policy __pfm_power_over_budget
```

## Related Commands

Command	Description
<b>event manager</b>	EM commands.
<b>event-log</b>	EM logging commands.

# show event manager script system

To display information about an event manager (EM) system scripts, use the **show event manager script system** command.

```
show event manager script system {all | sys_script_name}
```

Syntax	Description
<b>all</b>	Displays information about all the available system scripts.
<i>sys_script_name</i>	System script policy name. The name is a maximum of 29 alphanumeric, non case-sensitive characters.

Defaults	None
----------	------

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

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

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

Examples	This example shows how to display information about all EM script policies:
----------	---

```
n1000v# show event manager script system all
n1000v#
```

Related Commands	Command	Description
	<b>event manager</b>	EM commands.
	<b>event-log</b>	EM logging commands.

# show event manager system-policy

To display information about the event manager (EM) system policies, use the **show event manager system-policy** command.

**show event manager system-policy** [*policy\_name* | **all**]

Syntax Description		
	<i>policy_name</i>	(Optional) Policy name. The name is a maximum of 29 alphanumeric, non case-sensitive characters.
	<b>all</b>	(Optional) Displays all policies including advanced and ones that can not be overridden.

**Defaults** Displays information about the EM system policies.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about all of the EM system policies:

```
n1000v# show event manager system-policy all
Name : __lcm_module_failure
  Description : Power-cycle 2 times then power-down
  Overridable : Yes

      Name : __pfm_fanabsent_any_singlefan
  Description : Shutdown if any fanabsent for 5 minute(s)
  Overridable : Yes

      Name : __pfm_fanbad_any_singlefan
  Description : Syslog when fan goes bad
  Overridable : Yes
...
```

Related Commands	Command	Description
	<b>event manager</b>	Creates or modifies an event manager policy, configures an environment variable, or registers/activates a script policy.
	<b>event-log</b>	Enables and disables event logging for the VNS agent and saves or configures logging.

# show feature

To display the feature status, 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
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the feature status:

```
n1000v# show feature
Feature Name          Instance  State
-----
Flexlink              1        disabled
bfd                   1        disabled
bfd_app               1        disabled
btcm                  1        disabled
dhcp                  1        enabled
drap                   1        disabled
fcoe-npv              1        disabled
http-server           1        enabled
ippool                1        disabled
lacp                   1        enabled
ldap                  1        disabled
netflow               1        enabled
network-segmentation 1        enabled
oim                   1        disabled
otv                   1        disabled
poe                   1        disabled
privilege             1        disabled
ptp                   1        disabled
scpServer             1        disabled
segmentation          1        disabled
sftpServer            1        disabled
sshServer             1        enabled
tacacs                1        disabled
telnetServer          1        enabled
vem                   1        disabled
```

Related Commands	Command	Description
	<b>feature dhcp</b>	Enables the DHCP feature globally.
	<b>feature http-server</b>	Enables the HTTP server.
	<b>feature lacp</b>	Enables the LACP feature that bundles a number of physical ports together to form a single logical channel.
	<b>feature ssh</b>	Enables the SSH server.
	<b>feature tacacs+</b>	Enables the TACACS+ server.
	<b>feature telnet</b>	Enables the Telnet server.

# show feature-set services

To display the feature set services and status, use the **show feature-set services** command.

**show feature-set services** *name*

Syntax Description	<i>name</i>	The name of the feature set. The name is case-sensitive.
--------------------	-------------	--

Defaults	None
----------	------

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

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

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the feature set services and status:

```
n1000v# show feature-set services http-server
0 services in feature set http-server
```

Related Commands	Command	Description
	<b>feature dhcp</b>	Enables the DHCP feature globally.
<b>feature http-server</b>	Enables the HTTP server.	
<b>feature lACP</b>	Enables the LACP feature that bundles a number of physical ports together to form a single logical channel.	
<b>feature ssh</b>	Enables the SSH server.	
<b>feature tacacs+</b>	Enables the TACACS+ server.	
<b>feature telnet</b>	Enables the Telnet server.	



# 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: | debug: | log: | modflash: | volatile:} part_filename} [cksum | md5sum]
```

Syntax Description	
<b>bootflash:</b>	Specifies a bootflash filename.
<b>debug:</b>	Specifies a debug filename on expansion flash.
<b>log:</b>	Specifies a log filename.
<b>modflash:</b>	Specifies a modflash filename.
<b>volatile:</b>	Specifies a filename on volatile flash.
<i>part_filename</i>	Portion of the filename to be displayed. Pressing the Tab Key lists any existing files that match the partial name.
<b>cksum</b>	(Optional) Displays the Cycle Redundancy Check (CRC) checksum for a file.
<b>md5sum</b>	(Optional) Displays the Message-Digest Algorithm (MD5) checksum for a file.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Usage Guidelines** When you type a partial filename and then press the Tab Key, the command-line interface (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:n1000v-dk9 <Tab>
bootflash:n1000vh-dk9-kickstart.5.2.1.SM1.5.1.bin
bootflash:n1000vh-dk9.5.2.1.SM1.5.1.binn
```

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

# show flow cache size

To display information about NetFlow cache properties, use the **show flow cache size** command.

**show flow cache size**

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the NetFlow cache properties:

```
n1000v# show flow cache size
Module  Cache Size  Free Flows  Monitors  NetFlow Memory Used
-----  -
3       65536       65536      0         9539584
4       65536       65536      0         9539584
6       65536       65536      0         9539584
```

# show flow exporter

To display information about the NetFlow Exporter configuration and statistics, use the **show flow exporter** command.

```
show flow exporter [exporter_name]
```

Syntax Description	
<i>exporter_name</i>	(Optional) Exporter name. The name is a maximum of 63 case-sensitive, alphanumeric characters.

**Defaults** Displays information about the NetFlow Exporter configuration and statistics.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the NetFlow Exporter configuration and statistics:

```
n1000v# show flow exporter
Flow exporter exporter2:
  Destination UDP Port 9996
  Source IP Address 10.105.225.180/27
  Export from Line Card
  DSCP 63
  Export Version 9
  Exporter Statistics
    Number of Flow Records Exported 0
    Number of Templates Exported 0
    Number of Export Packets Sent 0
    Number of Export Bytes Sent 0
    Number of Destination Unreachable Events 0
    Number of No Buffer Events 0
    Number of Packets Dropped (No Route to Host) 0
    Number of Packets Dropped (other) 0
    Number of Packets Dropped (LC to RP Error) 0
    Number of Packets Dropped (Output Drops) 0
    Time statistics were last cleared: Never
...
```

This example shows how to display the NetFlow Exporter configuration and statistics for flow exporter e123456789012345678901234567890123456789:

```
n1000v# show flow exporter e123456789012345678901234567890123456789
Flow exporter e123456789012345678901234567890123456789:
  Destination UDP Port 6
```

```

Source IP Address 10.105.225.180/27
Export from Line Card
DSCP 63
Export Version 9
Exporter Statistics
  Number of Flow Records Exported 0
  Number of Templates Exported 0
  Number of Export Packets Sent 0
  Number of Export Bytes Sent 0
  Number of Destination Unreachable Events 0
  Number of No Buffer Events 0
  Number of Packets Dropped (No Route to Host) 0
  Number of Packets Dropped (other) 0
  Number of Packets Dropped (LC to RP Error) 0
  Number of Packets Dropped (Output Drops) 0
  Time statistics were last cleared: Never

```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>Destination</b>	Adds a destination IP address to a NetFlow flow exporter.
<b>transport udp</b>	Adds a destination UDP port from the NetFlow exporter to the collector.

# show flow Internal

To display information about the internal NetFlow details, use the **show flow internal** command.

**show flow internal**

## Defaults

Displays information about the internal NetFlow configuration details.

## Command Modes

Any

## Supported User Roles

network-admin

## Command History

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

## Examples

This example shows how to display the internal netflow configuration and statistics:

```
switch(config)# show flow internal
<CR>
>          Redirect it to a file
>>         Redirect it to a file in append mode
event-history Show various event logs of NFM
global        Display nfm global info
info          Show internal data structure information
interface     Interface information
lif           Logical interface
mem-stats     Show memory allocation statistics of NFM
pdl           PDL database
template     Show all the template fields
|            Pipe command output to filter
```

## Related Commands

Command	Description
<b>clear flow exporter</b>	Clears the statistics for a Flexible NetFlow flow exporter.
<b>collect counter</b>	Configures the number of bytes or packets in a flow as a nonkey field and collects the number of bytes or packets seen for a Flexible NetFlow record.
<b>collect timestamp sys-uptime</b>	Collects the TIMESTAMP SYS-UPTIME for a NetFlow flow record.
<b>collect transport tcp flags</b>	Collects TCP flags for a NetFlow flow record.
<b>description</b>	Adds a description to a flow record, flow monitor, IP address or VRF instance to a NetFlow flow exporter.
<b>dscp</b>	Adds a DSCP to a NetFlow flow exporter.
<b>feature netflow</b>	Enables the NetFlow.

<b>Command</b>	<b>Description</b>
<b>flow exporter</b>	Creates or modifies a Flexible NetFlow flow exporter defining where and how Flow Records are exported to the NetFlow collector server.
<b>flow monitor</b>	Creates a Flexible NetFlow flow monitor, modifies an existing Flexible NetFlow flow monitor, and enters Flexible NetFlow flow monitor configuration mode.
<b>flow record</b>	Creates a Flexible NetFlow flow record, modifies an existing Flexible NetFlow flow record, and enters Flexible NetFlow flow record configuration mode.
<b>ip flow monitor</b>	Enables a Flexible NetFlow flow monitor for traffic that the router is receiving or forwarding.
<b>match ip</b>	Defines IP matching criteria for a NetFlow flow record.
<b>match ipv4</b>	Defines IPv4 matching criteria for a NetFlow flow record.
<b>match transport</b>	Defines transport matching criteria for a NetFlow flow record.
<b>option exporter-stats timeout</b>	Specifies a timeout period for resending NetFlow flow exporter data.
<b>option interface-table timeout</b>	The timeout period for resending the NetFlow flow exporter interface table.
<b>record</b>	Configures a NetFlow flow record.
<b>source</b>	Adds an interface to a flow exporter designating it as the source for NetFlow flow records.
<b>template data timeout</b>	Designates a timeout period for resending NetFlow template data.
<b>transport udp</b>	Adds a destination UDP port from the NetFlow exporter to the collector.
<b>version 9</b>	Designate NetFlow export version 9 in the NetFlow exporter.

# show flow internal interface

To display information about the internal NetFlow interface details, use the **show flow internal interface** command.

## show flow internal interface

### Defaults

Displays information about the NetFlow internal interface configuration and statistics.

### Command Modes

Any

### SupportedUserRoles

network-admin

### Command History

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

### Examples

This example shows how to display the NetFlow internal interface configuration and statistics:

```
switch(config)# sh flow internal interface
Note: Interface lveth3/1:
Note:   ifindex type: 0x1b
Note:   count: 2
Note:   Monitor: m1
Note:   Direction: Input
Note:   Handle: 65537
Note:   State: NFM_INTF_ENABLED
Note:   Monitor: m1
Note:   Direction: Output
Note:   Handle: 65537
Note:   State: NFM_INTF_ENABLED
Note: Interface lveth3/4:
Note:   ifindex type: 0x1b
Note:   count: 2
Note:   Monitor: m2
Note:   Direction: Input
Note:   Handle: 64
Note:   State: NFM_INTF_ENABLED
Note:   Monitor: m2
Note:   Direction: Output
Note:   Handle: 64
Note:   State: NFM_INTF_ENABLED
```

### Related Commands

Command	Description
<b>clear flow exporter</b>	Clears the statistics for a Flexible NetFlow flow exporter.
<b>collect counter</b>	Configures the number of bytes or packets in a flow as a nonkey field and collects the number of bytes or packets seen for a Flexible NetFlow record.



<b>Command</b>	<b>Description</b>
<b>collect timestamp sys-uptime</b>	Collects the TIMESTAMP SYS-UPTIME for a NetFlow flow record.
<b>collect transport tcp flags</b>	Collects TCP flags for a NetFlow flow record.
<b>description</b>	Adds a description to a flow record, flow monitor, IP address or VRF instance to a NetFlow flow exporter.
<b>dscp</b>	Adds a DSCP to a NetFlow flow exporter.
<b>feature netflow</b>	Enables the NetFlow.
<b>flow exporter</b>	Creates or modifies a Flexible NetFlow flow exporter defining where and how Flow Records are exported to the NetFlow collector server.
<b>flow monitor</b>	Creates a Flexible NetFlow flow monitor, modifies an existing Flexible NetFlow flow monitor, and enters Flexible NetFlow flow monitor configuration mode.
<b>flow record</b>	Creates a Flexible NetFlow flow record, modifies an existing Flexible NetFlow flow record, and enters Flexible NetFlow flow record configuration mode.
<b>ip flow monitor</b>	Enables a Flexible NetFlow flow monitor for traffic that the router is receiving or forwarding.
<b>match ip</b>	Defines IP matching criteria for a NetFlow flow record.
<b>match ipv4</b>	Defines IPv4 matching criteria for a NetFlow flow record.
<b>match transport</b>	Defines transport matching criteria for a NetFlow flow record.
<b>option exporter-stats timeout</b>	Specifies a timeout period for resending NetFlow flow exporter data.
<b>option interface-table timeout</b>	The timeout period for resending the NetFlow flow exporter interface table.
<b>record</b>	Configures a NetFlow flow record.
<b>source</b>	Adds an interface to a flow exporter designating it as the source for NetFlow flow records.
<b>template data timeout</b>	Designates a timeout period for resending NetFlow template data.
<b>transport udp</b>	Adds a destination UDP port from the NetFlow exporter to the collector.
<b>version 9</b>	Designate NetFlow export version 9 in the NetFlow exporter.

# show flow interface

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

**show flow interface** [**ethernet** *slot/chassis\_num / port/slot\_num* | **vethernet** *vethernet\_num*]

Syntax Description		
<b>ethernet</b>	(Optional) Specifies an Ethernet IEEE 802.3z interface.	
<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.	
<i>/</i>	Slash separator.	
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.	
<b>vethernet</b>	(Optional) Specifies a virtual Ethernet interface.	
<i>vethernet_num</i>	Virtual Ethernet interface number. The range is from 1 to 1048575.	

**Defaults** Displays information about the NetFlow interfaces.

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display NetFlow interface information:

```
n1000v# show flow interface
Interface Vethernet19:
  Monitor: monitor2
  Direction: Input
Interface Vethernet20:
  Monitor: monitor2
  Direction: Input
Interface Vethernet21:
  Monitor: monitor2
  Direction: Input
```

Related Commands	Command	Description
	<b>show flow internal interface</b>	Displays information about the internal NetFlow interface details, use the <b>show flow exporter</b> command.

# show running-config netflow

To display information about the netflow configuration and statistics, use the **show running-config netflow** command.

## show running-config netflow

**Defaults** Displays information about the running configuration details.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the NetFlow Exporter configuration and statistics:

```
switch(config)# show running-config netflow

!Time: Sun Sep 28 22:49:22 2014

version 5.2(1)SK3(2.1)
feature netflow

flow exporter e1
 destination 10.197.128.44 use-vrf management
 transport udp 9002
 source lc-exp 10.197.128.26/27
 version 9
flow record r1
 match ipv4 source address
 match ipv4 destination address
 match ip protocol
 match transport source-port
 match transport destination-port
 collect counter bytes long
 collect counter packets long
flow monitor m1
 record r1
 exporter e1

interface Vethernet1
 ip flow monitor m1 input
 ip flow monitor m1 output

...
```

Related Commands	Command	Description
	<b>clear flow exporter</b>	Clears the statistics for a Flexible NetFlow flow exporter.
	<b>collect counter</b>	Configures the number of bytes or packets in a flow as a nonkey field and collects the number of bytes or packets seen for a Flexible NetFlow record.
	<b>collect timestamp sys-uptime</b>	Collects the TIMESTAMP SYS-UPTIME for a NetFlow flow record.
	<b>collect transport tcp flags</b>	Collects TCP flags for a NetFlow flow record.
	<b>description</b>	Adds a description to a flow record, flow monitor, IP address or VRF instance to a NetFlow flow exporter.
	<b>dscp</b>	Adds a DSCP to a NetFlow flow exporter.
	<b>feature netflow</b>	Enables the NetFlow.
	<b>flow exporter</b>	Creates or modifies a Flexible NetFlow flow exporter defining where and how Flow Records are exported to the NetFlow collector server.
	<b>flow monitor</b>	Creates a Flexible NetFlow flow monitor, modifies an existing Flexible NetFlow flow monitor, and enters Flexible NetFlow flow monitor configuration mode.
	<b>flow record</b>	Creates a Flexible NetFlow flow record, modifies an existing Flexible NetFlow flow record, and enters Flexible NetFlow flow record configuration mode.
	<b>ip flow monitor</b>	Enables a Flexible NetFlow flow monitor for traffic that the router is receiving or forwarding.
	<b>match ip</b>	Defines IP matching criteria for a NetFlow flow record.
	<b>match ipv4</b>	Defines IPv4 matching criteria for a NetFlow flow record.
	<b>match transport</b>	Defines transport matching criteria for a NetFlow flow record.
	<b>option exporter-stats timeout</b>	Specifies a timeout period for resending NetFlow flow exporter data.
	<b>option interface-table timeout</b>	The timeout period for resending the NetFlow flow exporter interface table.
	<b>record</b>	Configures a NetFlow flow record.
	<b>source</b>	Adds an interface to a flow exporter designating it as the source for NetFlow flow records.
	<b>template data timeout</b>	Designates a timeout period for resending NetFlow template data.
	<b>transport udp</b>	Adds a destination UDP port from the NetFlow exporter to the collector.
	<b>version 9</b>	Designate NetFlow export version 9 in the NetFlow exporter.

# show flow monitor

To display information about NetFlow monitor configuration, use the **show flow monitor** command.

```
show flow monitor [monitor_name [cache {module module_num} | statistics [cache {module
module_num} | statistics {module module_num}]]]
```

Syntax Description		
<i>monitor_name</i>	(Optional) Monitor name. The name is a maximum of 63 alphanumeric characters.	
<b>cache</b>	(Optional) Displays the cache properties.	
<b>module</b>	Specifies a module.	
<i>module_num</i>	Module number. The range is from 3 to 66.	
<b>statistics</b>	(Optional) Displays monitor statistics.	

**Defaults** Displays information about NetFlow monitor configuration.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the NetFlow monitor configuration:

```
n1000v# show flow monitor
Flow Monitor m123456789012345678901234567890123456789:
  Use count: 0
  Flow Record: r123456789012345678901234567890123456789
  Flow Exporter: e123456789012345678901234567890123456789
Flow Monitor monitor2:
  Use count: 0
  Flow Record: record1
  Flow Exporter: exporter2
Flow Monitor test:
  Use count: 0
Flow Monitor monitor1:
  Use count: 0
  Flow Record: record1
  Flow Exporter: exporter1
  Flow Exporter: exporter2
Flow Monitor m2:
  Use count: 0
  Flow Record: r1
  Flow Exporter: ex1
  Flow Exporter: ex2
```

Related Commands	Command	Description
	<b>IP flow monitor</b>	To enable a Flexible NetFlow flow monitor for traffic that the router is receiving or forwarding, use the ip flow monitor command. To disable a Flexible NetFlow flow monitor, use the no form of this command.
	<b>Description</b>	To add a description for the interface and save it in the running configuration, use the description command. To remove the interface description, use the no form of this comma

# show flow record

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

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

Syntax Description		
<i>record_name</i>	(Optional) Flow record name. The name is a maximum of 63 alphanumeric characters.	
<b>netflow</b>	(Optional) Displays NetFlow records.	
<b>ipv4</b>	Displays the IPv4 collection schemes.	
<b>original-input</b>	Displays the input NetFlow.	
<b>original-output</b>	Displays the output NetFlow.	
<b>protocol-port</b>	Displays the protocol and ports aggregation scheme.	
<b>netflow-original</b>	(Optional) Displays the original NetFlow records.	

**Defaults** Displays information about NetFlow records.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display NetFlow record information:

```
n1000v# show flow record
Flow record r123456789012345678901234567890123456789:
  No. of users: 1
  Template ID: 257
  Fields:
    match ipv4 source address
    match ipv4 destination address
    match ip protocol
    match ip tos
    match transport source-port
    match transport destination-port
    match interface input
    match interface output
    match flow direction
    collect transport tcp flags
    collect counter bytes
    collect counter packets
    collect timestamp sys-uptime first
```

```

    collect timestamp sys-uptime last
Flow record record1:
  No. of users: 2
  Template ID: 258
  Fields:
    match ipv4 source address
    match ipv4 destination address
    match ip protocol
    match ip tos
...

```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>clear flow exporter</b>	Clears the statistics for a Flexible NetFlow flow exporter.
<b>collect counter</b>	Configures the number of bytes or packets in a flow as a nonkey field and collect the number of bytes or packets seen for a Flexible NetFlow record.
<b>collect timestamp sys-uptime</b>	Collects the TIMESTAMP SYS-UPTIME for a NetFlow flow record.
<b>collect transport tcp flags</b>	Collects TCP flags for a NetFlow flow record.
<b>match ip</b>	Defines the IP matching criteria for a NetFlow flow record.
<b>match ipv4</b>	Defines the IPv4 matching criteria for a NetFlow flow record.
<b>match transport</b>	Defines the transport matching criteria for a NetFlow flow record.



# show flow timeout

To display information about NetFlow timeout values, use the **show flow timeout** command.

## show flow timeout

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display NetFlow flow cache timeout values:

```
n1000v# show flow timeout
Flow timeout values
  Active timeout:          1800 seconds
  Inactive timeout:       45 seconds
  Fast timeout:           Disabled
  Session aging timeout:  Disabled
  Aggressive aging timeout: Disabled
```

Related Commands	Command	Description
	<b>flow timeout active</b>	Displays the flow active timeout values
	<b>flow timeout inactive</b>	Displays the flow inactive timeout values

# show hostname

To display information about the host name, use the **show hostname** command.

**show hostname**

---

**Syntax Description** This command has no arguments or keywords.

---

**Defaults** None

---

**Command Modes** Any

---

**SupportedUserRoles** network-admin

---

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

---



---

**Examples** This example shows how to display the hostname:

```
n1000v# show hostname
n1000v
```

---

Related Commands	Command	Description
	hostname	Configures the system host name.

---

# show hosts

To display information about host devices, use the **show hosts** command.

## show hosts

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about host devices:

```
n1000v# show hosts
DNS lookup enabled
Name/address lookup uses domain service
Name servers are 255.255.255.255
```

```
Host                Address
```

# show http-server

To display information about the HTTP server state, use the **show http-server** command.

**show http-server**

---

**Syntax Description** This command has no arguments or keywords.

---

**Defaults** None

---

**Command Modes** Any

---

**SupportedUserRoles** network-admin

---

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

---



---

**Examples** This example shows how to display information about the HTTP server state:

```
n1000v# show http-server
http-server enabled
```

---

Related Commands	Command	Description
	<b>feature http-server</b>	Enables the HTTP server.

---

# show incompatibility system

To display information about incompatible configurations, use the **show incompatibility system** command.

```
show incompatibility system { bootflash: | volatile: } <Tab>
```

## Syntax Description

<b>bootflash:</b>	Specifies a bootflash filename.
<b>volatile:</b>	Specifies a filename on volatile flash.

## Defaults

None

## Command Modes

Any

## Supported User Roles

network-admin

## Command History

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

## Usage Guidelines

When you type a partial filename and then press the Tab Key, the command-line interface (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 information about incompatible configurations:

```
n1000v# show incompatibility system bootflash: <Tab>
bootflash:///          bootflash://module-2/    bootflash://sup-2/
bootflash://sup-local/  bootflash://sup-standby/
bootflash://module-1/   bootflash://sup-1/        bootflash://sup-active/
bootflash://sup-remote/
```

## Related Commands

Command	Description
<b>dir</b>	Displays the contents of a directory or file.

# show install all

To display information about the software installation impact between two images, use the **show install all** command.

```
show install all { failed-standby | failure-reason | impact { iso bootflash: | kickstart { bootflash:
| ftp: | modflash: | scp: | sftp: | tftp: | volatile: } { system } { bootflash: | ftp: | modflash: | scp:
| sftp: | tftp: | volatile: } } | status }
```

Syntax	Description
<b>failed-standby</b>	Displays log from failed standby.
<b>failure-reason</b>	Displays failure reason for the last install all.
<b>impact</b>	Displays impact of the <b>install all</b> command.
<b>iso</b>	Displays the boot variable name.
<b>bootflash:</b>	Displays the bootflash image Uniform Resource Identifier (URI).
<b>kickstart</b>	Displays the boot-variable name.
<b>ftp:</b>	Displays the File Transfer Protocol (FTP) image URI.
<b>modflash:</b>	Displays the modflash image URI.
<b>scp:</b>	Displays the Secure Copy (SCP) image URI.
<b>sftp:</b>	Displays the Secure File Transfer Protocol (SFTP) image URI.
<b>tftp:</b>	Displays the Trivial File Transfer Protocol (TFTP) image URI.
<b>volatile:</b>	Displays the volatile image URI.
<b>system</b>	Displays the system boot variable name.
<b>status</b>	Displays status of the current or last <b>install all</b> .

**Defaults** None

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the status of the current or last install all:

```
n1000v# show install all status
No installation has taken place since the last reboot.
```

Related Commands	Command	Description
	install	Upgrades software.

# show interface

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

## show interface

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Usage Guidelines** The options for this command are in the following sections.

**Examples** This example shows how to display the interface configuration:

```
n1000v# show interface
mgmt0 is up
  Hardware: Ethernet, address: 0015.5de1.85a4 (bia 0015.5de1.85a4)
  Internet Address is 10.105.225.180/27
  MTU 1500 bytes, BW 1000000 Kbit, DLY 10 usec
  reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA
  auto-duplex, auto-speed
  Auto-Negotiation is turned on
  1 minute input rate 13528 bits/sec, 8 packets/sec
  1 minute output rate 176 bits/sec, 0 packets/sec
  Rx
    1210626 input packets 40911 unicast packets 90963 multicast packets
    1078752 broadcast packets 331363572 bytes
  Tx
    31274 output packets 22558 unicast packets 4358 multicast packets
    4358 broadcast packets 4586888 bytes

Ethernet3/2 is up
  Hardware: Ethernet, address: 0025.b5aa.ab5f (bia 0025.b5aa.ab5f)
  Port-Profile is DATA-Macpin
  MTU 1500 bytes
  Encapsulation ARPA
  Port mode is trunk
  full-duplex, 10 Gb/s
```



```

5 minute input rate 15200 bits/second, 10 packets/second
5 minute output rate 24 bits/second, 0 packets/second
Rx
 2813862 Input Packets 0 Unicast Packets
 632362 Multicast Packets 2181514 Broadcast Packets
471008300 Bytes
Tx
 4221 Output Packets 0 Unicast Packets
 4221 Multicast Packets 0 Broadcast Packets 0 Flood Packets
1055250 Bytes
 0 Input Packet Drops 0 Output Packet Drops
.
.
.
port-channel1 is up
  Hardware: Port-Channel, address: 0025.b5aa.ab4f (bia 0025.b5aa.ab4f)
  MTU 1500 bytes, BW 30000000 Kbit, DLY 10 usec
  reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA
  Port mode is trunk
  full-duplex, 10 Gb/s
  Input flow-control is off, output flow-control is off
  Switchport monitor is off
  Members in this channel: Eth3/1, Eth3/2, Eth3/3
  Last clearing of "show interface" counters never
  300 seconds input rate 45656 bits/sec, 30 packets/sec
  300 seconds output rate 72 bits/sec, 0 packets/sec
Rx
  0 unicast packets 1890152 multicast packets 6550952 broadcast packets
 8440897 input packets 1413635922 bytes
 0 input packet drops
Tx
  0 unicast packets 12658 multicast packets 0 broadcast packets
12658 output packets 3164500 bytes
 0 flood packets
 0 output packet drops
1 interface resets
.
.
.
Vethernet1 is up
  Port description is 1000V
  Hardware: Virtual, address: 0025.b5aa.ab2f (bia 0025.b5aa.ab2f)
  Active on module 3
  DVS port D962C7C4-DF69-4254-A07C-E67F33CF887B
  Port-Profile is
dynpp_4a4baaec-30e6-4686-b130-24f31acbdcb2_2c97d33c-44b5-4e93-9b2e-d96ad521bad4
  Port mode is access
  5 minute input rate 167704 bits/second, 32 packets/second
  5 minute output rate 179960 bits/second, 46 packets/second
Rx
 17964785 Input Packets 17953842 Unicast Packets
 1752 Multicast Packets 11289 Broadcast Packets
53132004473 Bytes
Tx
 42851796 Output Packets 42057541 Unicast Packets
160900 Multicast Packets 633355 Broadcast Packets 794256 Flood Packets
41115843155 Bytes
 0 Input Packet Drops 0 Output Packet Drops
.
.
.
control0 is up
  Hardware: Ethernet, address: 0015.5dad.ab25 (bia 0015.5dad.ab25)

```

```

MTU 1500 bytes, BW 1000000 Kbit, DLY 10 usec
reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA
auto-duplex, auto-speed
Auto-Negotiation is turned on
1 minute input rate 0 bits/sec, 0 packets/sec
1 minute output rate 0 bits/sec, 0 packets/sec
Rx
  0 input packets 0 unicast packets 0 multicast packets
  0 broadcast packets 0 bytes
Tx
  5178 output packets 0 unicast packets 5178 multicast packets
  0 broadcast packets 1325365 bytes

```

**Related Commands**

Command	Description
<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
<b>errdisable recovery interval</b>	Enables the recovery timer.
<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
<b>shutdown</b>	Disables an interface.
<b>speed</b>	Sets the speed for an interface.
<b>subgroup</b>	Configures an interface port channel subgroup assignment.
<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>switchport access vlan</b>	Sets the access mode of an interface.
<b>switchport mode</b>	Sets the port mode of an interface.
<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.

# show interface brief

To display brief information about an interface, 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

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

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

```
n1000v# show interface brief
```

```
-----
Port      VRF      Status IP Address      Speed  MTU
-----
mgmt0    --      up    10.105.225.180  --     1500
-----
```

```
-----
Ethernet  VLAN  Type Mode  Status Reason      Speed  Port
Interface                               Ch #
-----
Eth3/1    1     eth trunk up    none      10G    1
Eth3/2    1     eth trunk up    none      10G    1
Eth3/3    1     eth trunk up    none      10G    1
Eth3/5    260   eth trunk up    none      10G
Eth4/1    1     eth trunk up    none      10G    3
Eth4/2    1     eth trunk up    none      10G    3
Eth4/3    1     eth trunk up    none      10G    3
Eth4/5    260   eth trunk up    none      10G
-----
```

```
-----
Port-channel VLAN  Type Mode  Status Reason      Speed  Protocol
Interface
-----
Po1          1     eth trunk up    none      a-10G(D) none
Po3          1     eth trunk up    none      a-10G(D) none
-----
```

```
-----
Vethernet  VLAN  Type Mode  Status Reason      MTU Module
-----
```

## show interface brief

```

Veth1      260    virt access up    none          auto
Veth2      260    virt access up    none          auto

-----
Port      VRF          Status IP Address          Speed  MTU
-----
control0  --          up      --                  --     1500

```

## Related Commands

Command	Description
<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
<b>errdisable recovery interval</b>	Enables the recovery timer.
<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
<b>shutdown</b>	Disables an interface.
<b>speed</b>	Sets the speed for an interface.
<b>subgroup</b>	Configures an interface port channel subgroup assignment.
<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>switchport access vlan</b>	Sets the access mode of an interface.
<b>switchport mode</b>	Sets the port mode of an interface.
<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.

# show interface capabilities

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

## show interface capabilities

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the interface capabilities:

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

port-channel1
  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
  CoS rewrite:    yes
```

■ show interface capabilities

```

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

```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
<b>errdisable recovery interval</b>	Enables the recovery timer.
<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
<b>shutdown</b>	Disables an interface.
<b>speed</b>	Sets the speed for an interface.
<b>subgroup</b>	Configures an interface port channel subgroup assignment.
<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>switchport access vlan</b>	Sets the access mode of an interface.
<b>switchport mode</b>	Sets the port mode of an interface.
<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.

# show interface control

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

```
show interface control control_num [brief | counters [detailed [all] | errors [snmp]] | description
| status]
```

Syntax Description	
<i>control_num</i>	Control interface number. The only valid value is 0.
<b>brief</b>	(Optional) Displays brief interface information.
<b>counters</b>	(Optional) Displays interface counters.
<b>detailed</b>	(Optional) Displays only non-zero counters.
<b>all</b>	(Optional) Displays every interface counter.
<b>errors</b>	(Optional) Displays interface error counters.
<b>snmp</b>	(Optional) Displays the Simple Network Management Protocol (SNMP) Management Information Base (MIB) values.
<b>description</b>	(Optional) Displays interface description.
<b>status</b>	(Optional) Displays interface line status.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the control interface:

```
n1000v# show interface control 0
control0 is up
  Hardware: Ethernet, address: 001d.d8b7.1ca2 (bia 001d.d8b7.1ca2)
  MTU 1500 bytes, BW 1000000 Kbit, DLY 10 usec
  reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA
  auto-duplex, auto-speed
  Auto-Negotiation is turned on
  1 minute input rate 0 bits/sec, 0 packets/sec
  1 minute output rate 0 bits/sec, 0 packets/sec
  Rx
    0 input packets 0 unicast packets 0 multicast packets
    0 broadcast packets 0 bytes
  Tx
    69 output packets 0 unicast packets 69 multicast packets
```

```
0 broadcast packets 17661 bytes
```

Related Commands	Command	Description
	<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
	<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
	<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
	<b>errdisable recovery interval</b>	Enables the recovery timer.
	<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
	<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
	<b>shutdown</b>	Disables an interface.
	<b>speed</b>	Sets the speed for an interface.
	<b>subgroup</b>	Configures an interface port channel subgroup assignment.
	<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
	<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
	<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
	<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
	<b>switchport access vlan</b>	Sets the access mode of an interface.
	<b>switchport mode</b>	Sets the port mode of an interface.
	<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
	<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.



# show interface counter

To display information about the interface counters, use the **show interface counter** command.

```
show interface counter [detailed [all [snmp] | snmp] | errors [module module_num] | module
module_num | snmp [module module_num]]
```

Syntax Description		
<b>detailed</b>	(Optional)	Displays only non-zero counters.
<b>all</b>	(Optional)	Displays every interface counter.
<b>snmp</b>	(Optional)	Displays the Simple Network Management Protocol (SNMP) Management Information Base (MIB) values.
<b>errors</b>	(Optional)	Displays interface error counters.
<b>module</b>		Specifies a module.
<i>module_num</i>		Module number. The range is from 1 to 66.

**Defaults** Displays information about the interface counters.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display detailed information about interface counters:

```
n1000v# show interface counters detailed
mgmt0
  Input Packets:                64623
  Input Bytes:                  13465065
  Output Packets:                126442
  Output Bytes:                  80902866

Ethernet3/1
  0.                            InPackets = 484561
  1.                            InOctets = 45999918
  2.                            InUcastPkts = 70211
  3.                            InMcastPkts = 322151
  4.                            InBcastPkts = 92203
  5.                            OutPackets = 320
  6.                            OutOctets = 82560
  7.                            OutUcastPkts = 0
  8.                            OutMcastPkts = 320
  9.                            OutBcastPkts = 0
  10.                           OutFloodPkts = 0
```

```

11.                               InDrops = 24894
12.                               OutDrops = 0

Ethernet3/2
 0.                               InPackets = 483869
 1.                               InOctets = 45349933
 2.                               InUcastPkts = 70399
 3.                               InMcastPkts = 321391
 4.                               InBcastPkts = 92160
 5.                               OutPackets = 320
 6.                               OutOctets = 82560
 7.                               OutUcastPkts = 0
 8.                               OutMcastPkts = 320
 9.                               OutBcastPkts = 0
10.                               OutFloodPkts = 0
...

```

**Related Commands**

Command	Description
<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
<b>errdisable recovery interval</b>	Enables the recovery timer.
<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
<b>shutdown</b>	Disables an interface.
<b>speed</b>	Sets the speed for an interface.
<b>subgroup</b>	Configures an interface port channel subgroup assignment.
<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>switchport access vlan</b>	Sets the access mode of an interface.
<b>switchport mode</b>	Sets the port mode of an interface.
<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.

# show interface description

To display interface descriptions, use the **show interface description** command.

## show interface description

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display interface descriptions:

```
n1000v# show interface description
```

```
-----
Interface          Description
-----
mgmt0              --
-----
```

```
-----
Interface          Description
-----
Veth1              --
Veth2              --
Veth3              --
Veth4              --
Veth5              --
Veth6              --
Veth7              --
Veth8              --
Veth9              --
Veth10             --
Veth11             --
Veth12             --
Veth13             --
Veth14             --
Veth15             --
Veth16             --
Veth17             --
Veth18             --
Veth19             --
Veth20             --
-----
```

```

-----
Interface          Description
-----
...

```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
<b>errdisable recovery interval</b>	Enables the recovery timer.
<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
<b>shutdown</b>	Disables an interface.
<b>speed</b>	Sets the speed for an interface.
<b>subgroup</b>	Configures an interface port channel subgroup assignment.
<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>switchport access vlan</b>	Sets the access mode of an interface.
<b>switchport mode</b>	Sets the port mode of an interface.
<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.

# show interface ethernet

To display information about the Ethernet IEEE 802.3z interface, use the **show interface ethernet** command.

```
show interface ethernet slot/chassis_num / port/slot_num [brief | capabilities | counters [brief |
detailed [all [snmp]] | errors [snmp] | snmp] | description | mac-address | status
[err-disabled] | switchport | trunk]
```

Syntax	Description
<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.
/	Slash separator.
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
<b>brief</b>	(Optional) Displays brief interface information.
<b>capabilities</b>	(Optional) Displays interface capabilities information.
<b>counters</b>	(Optional) Displays interface counters.
<b>detailed</b>	(Optional) Displays only nonzero counters.
<b>all</b>	(Optional) Displays all interface counters.
<b>snmp</b>	(Optional) Displays the Simple Network Management Protocol (SNMP) Management Information Base (MIB) values.
<b>errors</b>	(Optional) Displays the interface error counters.
<b>description</b>	(Optional) Displays the interface description.
<b>mac-address</b>	(Optional) Displays the interface MAC address.
<b>status</b>	(Optional) Displays the interface line status.
<b>err-disabled</b>	(Optional) Displays the interface error disabled state.
<b>switchport</b>	(Optional) Displays interface switchport information.
<b>trunk</b>	(Optional) Displays interface trunk information.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the Ethernet IEEE 802.3z interface:

```
n1000v# show interface ethernet 6/1
```

```

Ethernet6/1 is up
  Hardware: Ethernet, address: 001b.21b1.a6bc (bia 001b.21b1.a6bc)
  Port-Profile is DATA-Macpin
  MTU 1500 bytes
  Encapsulation ARPA
  Port mode is trunk
  full-duplex, 10 Gb/s
  5 minute input rate 20680 bits/second, 22 packets/second
  5 minute output rate 3024 bits/second, 3 packets/second
  Rx
    39381 Input Packets 6039 Unicast Packets
    24442 Multicast Packets 8900 Broadcast Packets
    5120342 Bytes
  Tx
    4626 Output Packets 220 Unicast Packets
    3768 Multicast Packets 639 Broadcast Packets 4386 Flood Packets
    488408 Bytes
    894 Input Packet Drops 0 Output Packet Drops

```

**Related Commands**

Command	Description
<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
<b>errdisable recovery interval</b>	Enables the recovery timer.
<b>shutdown</b>	Disables an interface.
<b>speed</b>	Sets the speed for an interface.
<b>subgroup</b>	Configures an interface port channel subgroup assignment.
<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>switchport access vlan</b>	Sets the access mode of an interface.
<b>switchport mode</b>	Sets the port mode of an interface.
<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.

# show interface mac-address

To display information about the interface MAC addresses, use the **show interface mac-address** command.

## show interface mac-address

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the interface MAC addresses:

```
n1000v# show interface mac-address
```

```
-----
Interface                Mac-Address      Burn-in Mac-Address
-----
mgmt0                    0015.5dad.ab26  0015.5dad.ab26
Vethernet1               0000.0000.0000  0000.0000.0000
Vethernet2               0000.0000.0000  0000.0000.0000
Vethernet3               0000.0000.0000  0000.0000.0000
Vethernet4               0000.0000.0000  0000.0000.0000
Vethernet5               0000.0000.0000  0000.0000.0000
Vethernet6               0000.0000.0000  0000.0000.0000
Vethernet7               0000.0000.0000  0000.0000.0000
Vethernet8               0000.0000.0000  0000.0000.0000
Vethernet9               0000.0000.0000  0000.0000.0000
Vethernet10              0000.0000.0000  0000.0000.0000
Vethernet11              0000.0000.0000  0000.0000.0000
Vethernet12              0000.0000.0000  0000.0000.0000
Vethernet13              0000.0000.0000  0000.0000.0000
Vethernet14              0000.0000.0000  0000.0000.0000
Vethernet15              0000.0000.0000  0000.0000.0000
Vethernet16              0000.0000.0000  0000.0000.0000
Vethernet17              0000.0000.0000  0000.0000.0000
Vethernet18              0000.0000.0000  0000.0000.0000
Vethernet19              0000.0000.0000  0000.0000.0000
Vethernet20              0000.0000.0000  0000.0000.0000
control0                 0015.5dad.ab25  0015.5dad.ab25
```

Related Commands	Command	Description
	<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
	<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
	<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
	<b>errdisable recovery interval</b>	Enables the recovery timer.
	<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
	<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
	<b>shutdown</b>	Disables an interface.
	<b>speed</b>	Sets the speed for an interface.
	<b>subgroup</b>	Configures an interface port channel subgroup assignment.
	<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
	<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
	<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
	<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
	<b>switchport access vlan</b>	Sets the access mode of an interface.
	<b>switchport mode</b>	Sets the port mode of an interface.
	<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
	<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.



# show interface mgmt

To display information about the management interface, use the **show interface mgmt** command.

```
show interface mgmt mgmt_if_num [brief | capabilities | counters [detailed [all] | errors [snmp] | snmp] | description | status]
```

Syntax Description		
	<i>mgmt_if_num</i>	Management interface number. The only valid value is 0.
	<b>brief</b>	(Optional) Displays brief interface information.
	<b>capabilities</b>	(Optional) Displays interface capabilities information.
	<b>counters</b>	(Optional) Displays the interface counters.
	<b>detailed</b>	(Optional) Displays only non-zero counters.
	<b>all</b>	(Optional) Displays all interface counters.
	<b>errors</b>	(Optional) Displays the interface error counters.
	<b>snmp</b>	(Optional) Displays the Simple Network Management Protocol (SNMP) Management Information Base (MIB) values.
	<b>description</b>	(Optional) Displays the interface description.
	<b>status</b>	(Optional) Displays the interface line status.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the management interface:

```
n1000v# show interface mgmt 0
mgmt0 is up
  Hardware: Ethernet, address: 0015.5de1.85a4 (bia 0015.5de1.85a4)
  Internet Address is 10.105.225.180/27
  MTU 1500 bytes, BW 1000000 Kbit, DLY 10 usec
  reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA
  auto-duplex, auto-speed
  Auto-Negotiation is turned on
  1 minute input rate 14168 bits/sec, 9 packets/sec
  1 minute output rate 560 bits/sec, 0 packets/sec
  Rx
    1212841 input packets 41020 unicast packets 91025 multicast packets
```

```

1080796 broadcast packets 331770692 bytes
Tx
31383 output packets 22659 unicast packets 4362 multicast packets
4362 broadcast packets 4617918 bytes

```

Related Commands	Command	Description
	<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
	<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
	<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
	<b>errdisable recovery interval</b>	Enables the recovery timer.
	<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
	<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
	<b>shutdown</b>	Disables an interface.
	<b>speed</b>	Sets the speed for an interface.
	<b>subgroup</b>	Configures an interface port channel subgroup assignment.
	<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
	<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
	<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
	<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
	<b>switchport access vlan</b>	Sets the access mode of an interface.
	<b>switchport mode</b>	Sets the port mode of an interface.
	<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
	<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.

# show interface port-channel

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

```
show interface port-channel port_chan_num [brief | capabilities | counters [brief | detailed [all
  [snmp] | snmp] | errors [snmp] | trunk] | description | fcoe | mac-address | status [err-vlans]
  | switchport | trunk]
```

Syntax Description	
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
<b>brief</b>	(Optional) Displays brief interface information.
<b>capabilities</b>	(Optional) Displays interface capabilities information.
<b>counters</b>	(Optional) Displays the interface counters.
<b>detailed</b>	(Optional) Displays only non-zero counters.
<b>all</b>	(Optional) Displays all interface counters.
<b>snmp</b>	(Optional) Displays the Simple Network Management Protocol (SNMP) Management Information Base (MIB) values.
<b>errors</b>	(Optional) Displays the interface error counters.
<b>trunk</b>	(Optional) Displays interface trunk information.
<b>description</b>	(Optional) Displays the interface description.
<b>fcoe</b>	(Optional) Displays Fiber Channel over Ethernet (FCoE) information.
<b>mac-address</b>	(Optional) Displays the interface MAC address.
<b>status</b>	(Optional) Displays the interface line status.
<b>err-vlans</b>	(Optional) Displays VLANs with errors.
<b>switchport</b>	(Optional) Displays interface switchport information.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display port channel 1 interface information:

```
n1000v# show interface port-channel 1
port-channel1 is up
  Hardware: Port-Channel, address: 0025.b5aa.ab4f (bia 0025.b5aa.ab4f)
  MTU 1500 bytes, BW 30000000 Kbit, DLY 10 usec
```

## show interface port-channel

```

reliability 255/255, txload 1/255, rxload 1/255
Encapsulation ARPA
Port mode is trunk
full-duplex, 10 Gb/s
Input flow-control is off, output flow-control is off
Switchport monitor is off
Members in this channel: Eth3/1, Eth3/2, Eth3/3
Last clearing of "show interface" counters never
300 seconds input rate 59448 bits/sec, 54 packets/sec
300 seconds output rate 72 bits/sec, 0 packets/sec
Rx
  0 unicast packets  633095 multicast packets  1446439 broadcast packets
  2079474 input packets  395962426 bytes
  0 input packet drops
Tx
  0 unicast packets  3549 multicast packets  0 broadcast packets
  3549 output packets  887250 bytes
  0 flood packets
  0 output packet drops
1 interface resets

```

### Related Commands

Command	Description
<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
<b>errdisable recovery interval</b>	Enables the recovery timer.
<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
<b>shutdown</b>	Disables an interface.
<b>speed</b>	Sets the speed for an interface.
<b>subgroup</b>	Configures an interface port channel subgroup assignment.
<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
<b>sys veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>sys veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
<b>sys veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>switchport access vlan</b>	Sets the access mode of an interface.
<b>switchport mode</b>	Sets the port mode of an interface.
<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.

# show interface snmp-ifindex

To display information about the Simple Network Management Protocol (SNMP) interface index (IFindex), use the **show interface** command.

## show interface snmp-ifindex

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the SNMP IFindex list:

```
n1000v# show interface snmp-ifindex
```

```
-----
Port                IFMIB Ifindex (hex)
-----
mgmt0                83886080   (0x5000000 )
Veth1                469762048  (0x1c000000)
Veth2                469762064  (0x1c000010)
Veth3                469762080  (0x1c000020)
Veth4                469762096  (0x1c000030)
Veth5                469762112  (0x1c000040)
Veth6                469762128  (0x1c000050)
Veth7                469762144  (0x1c000060)
Veth8                469762160  (0x1c000070)
Veth9                469762176  (0x1c000080)
Veth10              469762192  (0x1c000090)
Veth11              469762208  (0x1c0000a0)
Veth12              469762224  (0x1c0000b0)
Veth13              469762240  (0x1c0000c0)
Veth14              469762256  (0x1c0000d0)
Veth15              469762272  (0x1c0000e0)
Veth16              469762288  (0x1c0000f0)
Veth17              469762304  (0x1c000100)
Veth18              469762320  (0x1c000110)
Veth19              469762336  (0x1c000120)
Veth20              469762352  (0x1c000130)
contro10            117440512  (0x7000000 )
-----
```

Related Commands	Command	Description
	<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
	<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
	<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
	<b>errdisable recovery interval</b>	Enables the recovery timer.
	<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
	<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
	<b>shutdown</b>	Disables an interface.
	<b>speed</b>	Sets the speed for an interface.
	<b>subgroup</b>	Configures an interface port channel subgroup assignment.
	<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
	<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
	<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
	<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
	<b>switchport access vlan</b>	Sets the access mode of an interface.
	<b>switchport mode</b>	Sets the port mode of an interface.
	<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
	<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.

# show interface status

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

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

Syntax Description	down	(Optional) Displays the interface down state.
	<b>err-disabled</b>	(Optional) Displays the interface error disabled state.
	<b>err-vlans</b>	(Optional) Displays VLANs. with errors.
	<b>inactive</b>	(Optional) Displays the interface inactive state.
	<b>module</b>	(Optional) Displays interfaces on the module.
	<b>up</b>	(Optional) Displays the interface up state

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the interface up state:

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

```
-----
Port          Name                Status   Vlan    Duplex  Speed  Type
-----
mgmt0         --                  connected routed   auto    auto   --
control0     --                  connected routed   auto    auto   --
-----
```

This example shows how to display the interface down state:

```
n1000v# show interface status down
```

```
-----
Port          Name                Status   Vlan    Duplex  Speed  Type
-----
Veth1         --                  nonPcpt  1       auto    auto   --
Veth2         --                  nonPcpt  1       auto    auto   --
Veth3         --                  nonPcpt  1       auto    auto   --
Veth4         --                  nonPcpt  1       auto    auto   --
Veth5         --                  nonPcpt  1       auto    auto   --
Veth6         --                  nonPcpt  1       auto    auto   --
-----
```

## show interface status

```

Veth7      --          nonPcpt  1          auto    auto    --
Veth8      --          nonPcpt  1          auto    auto    --
Veth9      --          nonPcpt  1          auto    auto    --
Veth10     --          nonPcpt  1          auto    auto    --
Veth11     --          nonPcpt  1          auto    auto    --
Veth12     --          nonPcpt  1          auto    auto    --
Veth13     --          nonPcpt  1          auto    auto    --
Veth14     --          nonPcpt  1          auto    auto    --
Veth15     --          nonPcpt  1          auto    auto    --
Veth16     --          nonPcpt  1          auto    auto    --
Veth17     --          nonPcpt  1          auto    auto    --
Veth18     --          nonPcpt  1          auto    auto    --
Veth19     --          nonPcpt  1          auto    auto    --
Veth20     --          nonPcpt  1          auto    auto    --

```

## Related Commands

Command	Description
<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
<b>errdisable recovery interval</b>	Enables the recovery timer.
<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
<b>shutdown</b>	Disables an interface.
<b>speed</b>	Sets the speed for an interface.
<b>subgroup</b>	Configures an interface port channel subgroup assignment.
<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>switchport access vlan</b>	Sets the access mode of an interface.
<b>switchport mode</b>	Sets the port mode of an interface.
<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.



# show interface switchport

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

## show interface switchport

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the interface switchport information:

```
n1000v# show interface switchport
Name: Vethernet1
  Switchport: Enabled
  Switchport Monitor: Not enabled
  Operational Mode: access
  Access Mode VLAN: 1 (default)
  Trunking Native Mode VLAN: 1 (default)
  Trunking VLANs Allowed: 1 to 4094
  Voice VLAN: none
  Extended Trust State : not trusted [COS = 0]

Name: Vethernet2
  Switchport: Enabled
  Switchport Monitor: Not enabled
  Operational Mode: access
  Access Mode VLAN: 1 (default)
  Trunking Native Mode VLAN: 1 (default)
  Trunking VLANs Allowed: 1 to 4094
  Voice VLAN: none
  Extended Trust State : not trusted [COS = 0]
...
```

Related Commands	Command	Description
	<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
	<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.

<b>Command</b>	<b>Description</b>
<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
<b>errdisable recovery interval</b>	Enables the recovery timer.
<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
<b>shutdown</b>	Disables an interface.
<b>speed</b>	Sets the speed for an interface.
<b>subgroup</b>	Configures an interface port channel subgroup assignment.
<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>switchport access vlan</b>	Sets the access mode of an interface.
<b>switchport mode</b>	Sets the port mode of an interface.
<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.

# show interface trunk

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

```
show interface trunk [fex fex_id | module module_num | vlan vlan_id]
```

Syntax Description	Parameter	Description
	<b>fex</b>	(Optional) Specifies a command redirect to a Fabric Extender (FEX).
	<i>fex_id</i>	FEX ID. The range is from 100 to 199.
	<b>module</b>	Specifies a module.
	<i>module_num</i>	Module number. The range is from 1 to 66.
	<b>vlan</b>	(Optional) Specifies trunk information per native VLAN.
	<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.

**Defaults** Displays interface trunk information.

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display interface trunk information:

```
n1000v# show interface trunk
```

```
-----
Port          Native Status      Port
              Vlan                Channel
-----
```

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

```
-----
Port          Vlans Err-disabled on Trunk
-----
```

```
-----
Port          STP Forwarding
-----
```

## Related Commands

Command	Description
<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
<b>errdisable recovery interval</b>	Enables the recovery timer.
<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
<b>shutdown</b>	Disables an interface.
<b>speed</b>	Sets the speed for an interface.
<b>subgroup</b>	Configures an interface port channel subgroup assignment.
<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>switchport access vlan</b>	Sets the access mode of an interface.
<b>switchport mode</b>	Sets the port mode of an interface.
<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.

# show interface vem-internet

To display virtual Ethernet Module (VEM) related interface information, use the **show interface vem-internet** command.

```
show interface vem-ethernet {attach connectee device | info} [module module_num]
```

Syntax Description		
<b>attach connectee device</b>		Displays interface attach connectee device names.
<b>info</b>		Displays VEM-related interface information.
<b>module</b>		(Optional) Specifies a module.
<i>module_num</i>		Module number. The range is from 3 to 66.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display VEM-related interface information:

```
n1000v# show interface vem-ethernet info
show interface vem-ethernet info
```

```
-----
Port          If-index      Ltl    Module  Hostname
-----
Eth3/2        0x25008040    18     3       NODE-135
Eth3/3        0x25008080    19     3       NODE-135
Eth4/7        0x2500c180    23     4       NODE-137
Eth5/1        0x25010000    17     5       NODE-UCS-154
Eth5/2        0x25010040    18     5       NODE-UCS-154
Eth6/1        0x25014000    17     6       NODE-UCS-157
Eth6/2        0x25014040    18     6       NODE-UCS-157
Eth7/1        0x25018000    17     7       NODE-UCS-158
Eth7/2        0x25018040    18     7       NODE-UCS-158
```

Related Commands	Command	Description
	<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
	<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
	<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
	<b>errdisable recovery interval</b>	Enables the recovery timer.
	<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
	<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
	<b>shutdown</b>	Disables an interface.
	<b>speed</b>	Sets the speed for an interface.
	<b>subgroup</b>	Configures an interface port channel subgroup assignment.
	<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
	<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
	<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
	<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
	<b>switchport access vlan</b>	Sets the access mode of an interface.
	<b>switchport mode</b>	Sets the port mode of an interface.
	<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
	<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.

# show interface vethernet

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

```
show interface vethernet vethernet_num [brief | counters [brief | detailed [all [snmp] | snmp] | errors [snmp] | snmp] | description | mac-address | status [err-disabled] | switchport | trunk]
```

Syntax Description	
<i>vethernet_num</i>	Virtual Ethernet interface number. The range is from 1 to 1048575.
<b>brief</b>	(Optional) Displays brief interface information.
<b>counters</b>	(Optional) Displays the interface counters.
<b>detailed</b>	(Optional) Displays only non-zero counters.
<b>all</b>	(Optional) Displays all interface counters.
<b>snmp</b>	(Optional) Displays the Simple Network Management Protocol (SNMP) Management Information Base (MIB) values.
<b>errors</b>	(Optional) Displays the interface error counters.
<b>description</b>	(Optional) Displays the interface description.
<b>mac-address</b>	(Optional) Displays the interface MAC address.
<b>status</b>	(Optional) Displays the interface line status.
<b>err-disabled</b>	(Optional) Displays the interface error disabled state.
<b>switchport</b>	(Optional) Displays interface switchport information.
<b>trunk</b>	(Optional) Displays interface trunk information.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display a virtual Ethernet interface configuration:

```
n1000v# show interface vethernet 1
Vethernet1 is down (nonParticipating)
  Hardware: Virtual, address: 0000.0000.0000 (bia 0000.0000.0000)
  Inactive
  Port mode is access
  5 minute input rate 0 bits/second, 0 packets/second
  5 minute output rate 0 bits/second, 0 packets/second
Rx
```

■ show interface vethernet

```

0 Input Packets 0 Unicast Packets
0 Multicast Packets 0 Broadcast Packets
0 Bytes
Tx
0 Output Packets 0 Unicast Packets
0 Multicast Packets 0 Broadcast Packets 0 Flood Packets
0 Bytes
0 Input Packet Drops 0 Output Packet Drops

```

**Related Commands**

Command	Description
<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
<b>errdisable recovery interval</b>	Enables the recovery timer.
<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
<b>shutdown</b>	Disables an interface.
<b>speed</b>	Sets the speed for an interface.
<b>subgroup</b>	Configures an interface port channel subgroup assignment.
<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>switchport access vlan</b>	Sets the access mode of an interface.
<b>switchport mode</b>	Sets the port mode of an interface.
<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.



# show interface virtual

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

## show interface virtual

**Syntax Description** This command has no arguments or keywords

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Usage Guidelines** Options for this command are presented in the sections that follow.

**Examples** This example shows how to display information about all of the virtual interfaces:

```
n1000v# show interface virtual
```

```
-----
Port          If-index      Ltl    Module  Hostname
-----
Eth3/2        0x25008040    18     3       NODE-135
Eth3/3        0x25008080    19     3       NODE-135
Eth4/7        0x2500c180    23     4       NODE-137
Eth5/1        0x25010000    17     5       NODE-UCS-154
Eth5/2        0x25010040    18     5       NODE-UCS-154
Eth6/1        0x25014000    17     6       NODE-UCS-157
Eth6/2        0x25014040    18     6       NODE-UCS-157
Eth7/1        0x25018000    17     7       NODE-UCS-158
Eth7/2        0x25018040    18     7       NODE-UCS-158
JARVIS# show interface virtual
```

```
-----
Port          Adapter      Owner      Mod Host
-----
Veth19        Net Adapter  VM1        7   NODE-UCS-158
Veth20        Net Adapter  VM1        7   NODE-UCS-158
Veth21        Net Adapter  VM1        7   NODE-UCS-158
Veth34        1000V       VM1        4   NODE-137
```

Related Commands	Command	Description
	<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
	<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
	<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
	<b>errdisable recovery interval</b>	Enables the recovery timer.
	<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
	<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
	<b>shutdown</b>	Disables an interface.
	<b>speed</b>	Sets the speed for an interface.
	<b>subgroup</b>	Configures an interface port channel subgroup assignment.
	<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
	<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
	<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
	<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
	<b>switchport access vlan</b>	Sets the access mode of an interface.
	<b>switchport mode</b>	Sets the port mode of an interface.
	<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
	<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.

# show interface virtual attach

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

```
show interface virtual attach { binding [detail | module module_num [detail] | vm vm_name
                               [detail]] | connectee { device | id | name } [module module_num] | status [module module_num
                               | vm vm_name] | sync }
```

Syntax Description		
<b>binding</b>		Displays attach port bindings.
<b>detail</b>		(Optional) Displays additional details.
<b>module</b>		(Optional) Specifies the interfaces on a module.
<i>module_num</i>		Module number. The range is from 3 to 66.
<b>vm</b>		(Optional) Specifies a virtual machine (VM) interfaces.
<i>vm_name</i>		VM name. The name is a maximum of 80 characters.
<b>connectee</b>		Displays interface attach connectee information.
<b>device</b>		Displays attached device names.
<b>id</b>		Displays attached connectee identifiers.
<b>name</b>		Displays attached connectee names.
<b>status</b>		(Optional) Displays the interface attach status.
<b>sync</b>		Displays interface attach sync information.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

## Examples

This example shows how to display the virtual interface attach status information:

```
n1000v# show interface virtual attach status
```

```
-----
Port          Status    Port-Profile
-----
Veth1         detached
Veth2         detached
Veth3         detached
Veth4         detached
Veth5         detached
```

```

Veth6      detached
Veth7      detached
Veth8      detached
Veth9      detached
Veth10     detached
Veth11     detached
Veth12     detached
Veth13     detached
Veth14     detached
Veth15     detached
Veth16     detached
Veth17     detached
Veth18     detached
Veth19     detached
Veth20     detached

```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
<b>errdisable recovery interval</b>	Enables the recovery timer.
<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
<b>shutdown</b>	Disables an interface.
<b>speed</b>	Sets the speed for an interface.
<b>subgroup</b>	Configures an interface port channel subgroup assignment.
<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
<b>sys veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>sys veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
<b>sys veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>switchport access vlan</b>	Sets the access mode of an interface.
<b>switchport mode</b>	Sets the port mode of an interface.
<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.

# show interface virtual description

To display virtual interface descriptions, use the **show interface virtual description** command.

## show interface virtual description

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display a virtual interface descriptions:

```
n1000v# show interface virtual description
```

```
-----
Interface  Description
-----
```

```
Veth1      --
Veth2      --
Veth3      --
Veth4      --
Veth5      --
Veth6      --
Veth7      --
Veth8      --
Veth9      --
Veth10     --
Veth11     --
Veth12     --
Veth13     --
Veth14     --
Veth15     --
Veth16     --
Veth17     --
Veth18     --
Veth19     --
Veth20     --
```

## Related Commands

Command	Description
<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
<b>errdisable recovery interval</b>	Enables the recovery timer.
<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
<b>shutdown</b>	Disables an interface.
<b>speed</b>	Sets the speed for an interface.
<b>subgroup</b>	Configures an interface port channel subgroup assignment.
<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>switchport access vlan</b>	Sets the access mode of an interface.
<b>switchport mode</b>	Sets the port mode of an interface.
<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.

# show interface virtual module

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

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

Syntax Description	
<i>module_num</i>	Module number. The range is from 3 to 66.
<b>vm</b>	(Optional) Specifies a virtual machine (VM) interface.
<i>vm_name</i>	VM name. The name is a maximum of 80 characters.
<b>vmk</b>	(Optional) Displays the interfaces owned by the VM kernel.
<b>vswif</b>	(Optional) Displays the interfaces owned by the virtual service (vService) console.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display virtual interface information for a specific module:

```
n1000v# show interface virtual module 5
```

```
-----
```

Port	Adapter	Owner	Mod	Host
Veth2	Net Adapter	BLUEVM-01	5	NODE-139
Veth4	Net Adapter	GREENVM-01	5	NODE-139
Veth5	Net Adapter	BLUEVM-01	5	NODE-139
Veth6	Net Adapter	GREENVM-01	5	NODE-139
Veth8	Net Adapter	GREENVM-01	5	NODE-139
Veth9	Net Adapter	BLUEVM-01	5	NODE-139
Veth10	Net Adapter	GREENVM-01	5	NODE-139
Veth12	Net Adapter	GREENVM-01	5	NODE-139
Veth13	Net Adapter	BLUEVM-01	5	NODE-139
Veth14	Net Adapter	GREENVM-01	5	NODE-139
Veth16	Net Adapter	GREENVM-01	5	NODE-139
Veth17	Net Adapter	BLUEVM-01	5	NODE-139
Veth19	Net Adapter	GREENVM-01	5	NODE-139
Veth20	Net Adapter	GREENVM-02	5	NODE-139
Veth21	Net Adapter	BLUEVM-01	5	NODE-139
Veth23	Net Adapter	GREENVM-02	5	NODE-139

```
-----
```

```

Veth24      Net Adapter  BLUEVM-01      5  NODE-139
Veth25      Net Adapter  GREENVM-02     5  NODE-139
Veth27      Net Adapter  GREENVM-02     5  NODE-139
Veth28      Net Adapter  BLUEVM-01      5  NODE-139
Veth29      Net Adapter  GREENVM-02     5  NODE-139
...

```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
<b>errdisable recovery interval</b>	Enables the recovery timer.
<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
<b>shutdown</b>	Disables an interface.
<b>speed</b>	Sets the speed for an interface.
<b>subgroup</b>	Configures an interface port channel subgroup assignment.
<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>switchport access vlan</b>	Sets the access mode of an interface.
<b>switchport mode</b>	Sets the port mode of an interface.
<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.



# show interface virtual pinning

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

```
show interface virtual pinning [module module_num]
```

Syntax Description	module	(Optional) Specifies an interface on a module.
	<i>module_num</i>	Module number. The range is from 3 to 66.

**Defaults** Displays all virtual interface pinning information.

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display virtual interface pinning information:

```
n1000v# show interface virtual pinning
```

```
-----
Veth      Pinned      Associated PO List of
          Sub Group id interface      Eth interface(s)
-----
Veth19    1            Po5            Eth7/2
Veth20    0            Po5            Eth7/1
Veth21    1            Po5            Eth7/2
Veth34    -
```

Related Commands	Command	Description
	<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
	<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
	<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
	<b>errdisable recovery interval</b>	Enables the recovery timer.
	<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
	<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
	<b>shutdown</b>	Disables an interface.

Command	Description
<b>speed</b>	Sets the speed for an interface.
<b>subgroup</b>	Configures an interface port channel subgroup assignment.
<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
<b>sys veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>sys veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
<b>sys veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>switchport access vlan</b>	Sets the access mode of an interface.
<b>switchport mode</b>	Sets the port mode of an interface.
<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.

# show interface virtual port-mapping

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

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

## Syntax Description

<b>module</b>	(Optional) Specifies an interface on a module.
<i>module_num</i>	Module number. The range is from 3 to 66.
<b>vm</b>	(Optional) Specifies a virtual machine (VM) interface.
<i>vm_name</i>	VM name. The name is a maximum of 80 characters.
<b>vmk</b>	(Optional) Displays the interfaces owned by the VM kernel.
<b>vswif</b>	(Optional) Displays the interfaces owned by the virtual service (vService) console (VSC).

## Defaults

Displays the virtual port mapping for all virtual interfaces.

## Command Modes

Any

## Supported User Roles

network-admin

## Command History

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

## Examples

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

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

```
-----
Port          Binding-Type  Status  Reason
Hypervisor-Port
-----
Veth1         static        up       none
05d2442e-4331-492c-a14e-430719805a2c--343f289a-3244-4830-8ca2-24efe1bdee4a
Veth2         static        up       none
98bcf40e-2a47-4b39-a968-f2f21d1aaf7d--4210be98-0739-4fd2-ac60-b7b697763efa
Veth3         static        up       none
05d2442e-4331-492c-a14e-430719805a2c--dc1f4f47-238a-4bbc-86e2-3a1a130325ba
Veth4         static        up       none
0a4f801d-920a-48c6-b691-8d79a10c774b--6b49eea0-06f8-4fad-a11b-4001da33be70
Veth5         static        up       none
98bcf40e-2a47-4b39-a968-f2f21d1aaf7d--96b40d64-2ae7-439e-bbf3-d7a6aea4622b
Veth6         static        up       none
0a4f801d-920a-48c6-b691-8d79a10c774b--16f6e52b-b56b-4cbb-9831-45519303cdd9
```

...

Related Commands	Command	Description
	<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
	<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
	<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
	<b>errdisable recovery interval</b>	Enables the recovery timer.
	<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
	<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
	<b>shutdown</b>	Disables an interface.
	<b>speed</b>	Sets the speed for an interface.
	<b>subgroup</b>	Configures an interface port channel subgroup assignment.
	<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
	<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
	<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
	<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
	<b>switchport access vlan</b>	Sets the access mode of an interface.
	<b>switchport mode</b>	Sets the port mode of an interface.
	<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
	<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.

# show interface virtual vem-info

To display virtual Ethernet module (VEM) information that relates to virtual interfaces, use the **show interface virtual vem-info** command.

```
show interface virtual vem-info [module module_num [vm vm_name] | vm vm_name]
```

## Syntax Description

<b>module</b>	(Optional) Specifies an interface on a module.
<i>module_num</i>	Module number. The range is from 3 to 66.
<b>vm</b>	(Optional) Specifies a virtual machine (VM) interfaces.
<i>vm_name</i>	VM name. The name is a maximum of 80 characters.

## Defaults

Displays all VEM information that relates to virtual interfaces.

## Command Modes

Any

## Supported User Roles

network-admin

## Command History

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

## Examples

This example shows how to display VEM information that relate to virtual interfaces:

```
n1000v# show interface virtual vem-info
```

```
-----
Port          If-index      Ltl    Module  Hostname
-----
Veth1         0x1c000000    57     6       NODE-141
Veth2         0x1c000010    121    5       NODE-139
Veth3         0x1c000020    58     6       NODE-141
Veth4         0x1c000030    81     5       NODE-139
Veth5         0x1c000040    122    5       NODE-139
Veth6         0x1c000050    82     5       NODE-139
Veth7         0x1c000060    59     6       NODE-141
Veth8         0x1c000070    83     5       NODE-139
Veth9         0x1c000080    123    5       NODE-139
Veth10        0x1c000090    84     5       NODE-139
Veth11        0x1c0000a0    60     6       NODE-141
Veth12        0x1c0000b0    85     5       NODE-139
...
```

## Related Commands

Command	Description
<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
<b>errdisable recovery interval</b>	Enables the recovery timer.
<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
<b>shutdown</b>	Disables an interface.
<b>speed</b>	Sets the speed for an interface.
<b>subgroup</b>	Configures an interface port channel subgroup assignment.
<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>switchport access vlan</b>	Sets the access mode of an interface.
<b>switchport mode</b>	Sets the port mode of an interface.
<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.

# show interface virtual vm

To display information about virtual interfaces owned by a virtual machine (VM), use the **show interface virtual vm** command.

```
show interface virtual vm [vm_name]
```

<b>Syntax Description</b>	<i>vm_name</i> (Optional) VM name. The name is a maximum of 80 characters.				
<b>Defaults</b>	Displays all virtual interfaces owned by all VMs.				
<b>Command Modes</b>	Any				
<b>Supported User Roles</b>	network-admin				
<b>Command History</b>	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>5.2(1)SK1(1.1)</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	5.2(1)SK1(1.1)	This command was introduced.
Release	Modification				
5.2(1)SK1(1.1)	This command was introduced.				

**Examples** This example shows how to display information about all virtual interfaces owned by all VMs:

```
n1000v# show interface virtual vm
```

```
-----
Port          Adapter      Owner          Mod Host
-----
Veth1         Net Adapter  REDVM-01       6  NODE-141
Veth2         Net Adapter  BLUEVM-01      5  NODE-139
Veth3         Net Adapter  REDVM-01       6  NODE-141
Veth4         Net Adapter  GREENVM-01     5  NODE-139
Veth5         Net Adapter  BLUEVM-01      5  NODE-139
Veth6         Net Adapter  GREENVM-01     5  NODE-139
Veth7         Net Adapter  REDVM-01       6  NODE-141
Veth8         Net Adapter  GREENVM-01     5  NODE-139
Veth9         Net Adapter  BLUEVM-01      5  NODE-139
Veth10        Net Adapter  GREENVM-01     5  NODE-139
Veth11        Net Adapter  REDVM-01       6  NODE-141
Veth12        Net Adapter  GREENVM-01     5  NODE-139
Veth13        Net Adapter  BLUEVM-01      5  NODE-139
Veth14        Net Adapter  GREENVM-01     5  NODE-139
Veth15        Net Adapter  REDVM-01       6  NODE-141
Veth16        Net Adapter  GREENVM-01     5  NODE-139
Veth17        Net Adapter  BLUEVM-01      5  NODE-139
Veth18        Net Adapter  REDVM-01       6  NODE-141
Veth19        Net Adapter  GREENVM-01     5  NODE-139
...
```

Related Commands	Command	Description
	<b>duplex</b>	Sets the duplex mode for an interface as full, half, or autonegotiate.
	<b>errdisable detect cause</b>	Detects the reason that an interface is error-disabled.
	<b>errdisable recovery cause</b>	Enables the automatic recovery from the error-disabled (errdisable) state for an application.
	<b>errdisable recovery interval</b>	Enables the recovery timer.
	<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
	<b>interface vethernet</b>	Creates a virtual Ethernet interface and enter interface configuration mode.
	<b>shutdown</b>	Disables an interface.
	<b>speed</b>	Sets the speed for an interface.
	<b>subgroup</b>	Configures an interface port channel subgroup assignment.
	<b>subgroup-id</b>	Configures subgroup IDs for Ethernet member ports of a vPC-HM.
	<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
	<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts that are no longer used by a vNIC or hypervisor port.
	<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
	<b>switchport access vlan</b>	Sets the access mode of an interface.
	<b>switchport mode</b>	Sets the port mode of an interface.
	<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
	<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.



# show inventory

To display information about the network inventory, use the **show inventory** command.

```
show inventory [chassis | module [module_num]]
```

Syntax Description	
<b>chassis</b>	(Optional) Displays inventory chassis information.
<b>module</b>	(Optional) Displays inventory module information.
<i>module_num</i>	(Optional) Module number. The range is from 1 to 66.

**Defaults** Displays all network inventory information.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the network inventory:

```
n1000v# show inventory
NAME: "Chassis", DESCR: "Nexus 1000V Chassis"
PID: Nexus1000V           , VID: V00 , SN: 3911703911355839484

NAME: "Slot 1", DESCR: "Virtual Supervisor Module"
PID: Nexus1000V           , VID: TBD  SN: T1DD8B71C00

...
```

This example shows how to display information about the system chassis:

```
n1000v# show inventory chassis
NAME: "Chassis", DESCR: "Nexus 1000V Chassis"
PID: Nexus1000V           , VID: V00 , SN: 9593408361359731774
```

This example shows how to display information about the system inventory for a specific module:

```
n1000v# show inventory module 1
NAME: "Slot 1", DESCR: "Virtual Supervisor Module"
PID: Nexus1000V           , VID: TBD  SN: T1DD8B71C00
```

## Related Commands

Command	Description
<b>show inventory brief</b>	Displays an abridged view of the network inventory.

# show ip access-lists

To display the IP access control lists (ACLs), use the **show ip access-lists** command.

```
show ip access-lists [list_name [capture {session session_id [dynamic | expanded | summary]}]
| capture {session session_id [dynamic | expanded | summary]} | dynamic | expanded |
summary]
```

Syntax Description	
<i>list_name</i>	(Optional) Access list name. The name is a maximum of 64 characters.
<b>capture</b>	(Optional) Capture a session by its ID.
<b>session</b>	Specifies a session.
<i>session_id</i>	Session ID. The range is from 1 to 48.
<b>dynamic</b>	(Optional) Displays dynamic ACLs.
<b>expanded</b>	(Optional) Displays information about expand ACL groups.
<b>summary</b>	(Optional) Displays summary information about ACLs.

**Defaults** Displays all IP ACLs.

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display all IP ACLs:

```
n1000v# show ip access-lists
```

```
IPV4 ACL abhi-acl
 10 permit ip 122.243.200.20/32 66.139.138.221/32 dscp af12
 20 deny icmp 4.68.213.83/32 59.90.89.77/32 dscp cs1
 30 permit icmp 72.165.25.69/32 85.135.171.135/32 echo dscp cs1
 40 deny igmp 56.51.111.28/32 127.177.14.122/32 7 dscp 11
 50 permit tcp 91.125.160.40/32 lt 40765 14.208.192.244/32 gt 2594 dscp 1
 60 permit udp 15.104.89.102/32 eq 20343 54.182.95.236/32 lt 43125 dscp 6
 70 permit ip 46.167.60.215/32 78.70.151.1/32 dscp 7
 80 permit icmp 90.119.71.215/32 93.255.186.116/32 dscp 9
 90 permit icmp 38.164.211.185/32 56.74.11.71/32 timestamp-request dscp af11
...
```

This example shows how to display an IP ACL by name:

```
n1000v# show ip access-lists abhi-acl
```

```

IPV4 ACL abhi-acl
 10 permit ip 122.243.200.20/32 66.139.138.221/32 dscp af12
 20 deny icmp 4.68.213.83/32 59.90.89.77/32 dscp cs1
 30 permit icmp 72.165.25.69/32 85.135.171.135/32 echo dscp cs1
 40 deny igmp 56.51.111.28/32 127.177.14.122/32 7 dscp 11
 50 permit tcp 91.125.160.40/32 lt 40765 14.208.192.244/32 gt 2594 dscp 1
 60 permit udp 15.104.89.102/32 eq 20343 54.182.95.236/32 lt 43125 dscp 6
 70 permit ip 46.167.60.215/32 78.70.151.1/32 dscp 7
 80 permit icmp 90.119.71.215/32 93.255.186.116/32 dscp 9
 90 permit icmp 38.164.211.185/32 56.74.11.71/32 timestamp-request dscp af11
100 deny igmp 58.63.101.184/32 0.179.173.154/32 0 dscp 3
110 permit tcp 92.217.203.237/32 gt 21295 65.214.100.184/32 eq 13033 dscp 4
120 permit udp 12.229.14.211/32 lt 57734 88.115.243.129/32 gt 50221 dscp 5
130 deny ip 111.63.192.108/32 104.76.118.97/32 dscp af13
140 permit 13 125.190.31.44/32 111.228.220.8/32 dscp default

```

This example shows how to display a summary of IP ACLs:

```
n1000v# show ip access-lists summary
```

```

IPV4 ACL abhi-acl
  Total ACEs Configured:110
  Configured on interfaces:
  Active on interfaces:
IPV4 ACL abhi-acl-2807
  Total ACEs Configured:109
  Configured on interfaces:
  Active on interfaces:
...

```

#### Related Commands

Command	Description
<b>clear access-list counter</b>	Clear the counters for IP and MAC ACLs.
<b>deny</b>	Creates an IPv4 ACL rule that denies traffic matching its conditions.
<b>ip access-list</b>	Creates an ACL.
<b>ip port access-group</b>	Creates an access group.
<b>permit</b>	Creates an IPv4 ACL rule that permits traffic matching its conditions.
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip interface</b>	Displays IP related interface information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays an IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays an IP routing table.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip show ip igmp snooping

To display the Internet Group Management Protocol (IGMP) snooping status and configuration information, 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  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display IGMP snooping statistics:

```
n1000v# show ip igmp snooping

Global IGMP Snooping Information:
  IGMP Snooping enabled
  Optimised Multicast Flood (OMF) enabled
  IGMPv1/v2 Report Suppression disabled
  IGMPv3 Report Suppression disabled
  Link Local Groups Suppression enabled
  VPC Multicast optimization disabled

IGMP Snooping information for vlan 1
  IGMP snooping enabled
  Optimised Multicast Flood (OMF) enabled
  IGMP querier none
  Switch-querier disabled
  IGMPv3 Explicit tracking enabled
  IGMPv2 Fast leave disabled
  IGMPv1/v2 Report suppression disabled
  IGMPv3 Report suppression disabled
  Link Local Groups suppression enabled
  Router port detection using PIM Hellos, IGMP Queries
  Number of router-ports: 0
  Number of groups: 0
  VLAN vPC function disabled
  Active ports:
```

...

Related Commands	Command	Description
	<b>clear ip igmp interface statistics</b>	Clears the IGMP statistics for an interface.
	<b>clear ip igmp snooping statistics vlan</b>	Clears the IGMP snooping statistics for VLANs.
	<b>ip igmp snooping</b>	Enables IGMP snooping.
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays the IP routing table.
	<b>show ip static-route</b>	Displays the IP configured static routes.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.

# show ip igmp snooping event-history

To display various event logs of Internet Group Management Protocol (IGMP) snooping, use the **show ip igmp snooping event-history** command.

```
show ip igmp snooping event-history { rib | vpc | igmp-snoop-internal | mfdm | mfdm-sum |
statistics | vlan | vlan-sum }
```

Syntax Description	rib	Displays the Routing Information Base (RIB) event history.
	<b>vpc</b>	Displays the virtual port channel operations event history.
	<b>igmp-snoop-internal</b>	Displays the internal IGMP event history buffers.
	<b>mfdm</b>	Displays the event-history buffer of the type Multicast Forwarding Information Base (MFIB) distribution sum.
	<b>mfdm-sum</b>	Displays the MFIB distribution
	<b>statistics</b>	Displays the state and size of the event history buffers.
	<b>vlan</b>	Displays the VLAN event history buffer.
	<b>vlan-events</b>	Displays the history buffer of the VLAN events.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display IGMP the RIB event history:

```
n1000v# show ip igmp snooping event-history rib

RIB Events for IGMP Snoop process
2013 Feb  8 11:23:11.898387 igmp [2626]: [2736]: M2RIB: Processing ack: reclaiming buffer
0x0x8282d6c, xid 0x5, count 1
2013 Feb  8 11:23:11.898384 igmp [2626]: [2736]: M2RIB: Received ack for proto-recv-op, xid
0x5
2013 Feb  8 11:23:11.896409 igmp [2626]: [2736]: M2RIB: Processing ack: reclaiming buffer
0x0x8270134, xid 0x4, count 1
2013 Feb  8 11:23:11.896406 igmp [2626]: [2736]: M2RIB: Received ack for proto-recv-op, xid
0x4
2013 Feb  8 11:23:11.891937 igmp [2626]: [2648]: M2RIB: Sent OMF-op, buffer 0x0x8282d6c,
xid 0x5, count 1
```

## show ip igmp snooping event-history

```

2013 Feb  8 11:23:11.891910 igmp [2626]: [2648]: M2RIB: Sent proto-recv-op, buffer
0x0x8270134, xid 0x4, count 1,size:0x8282d4c-0x827014c
2013 Feb  8 11:23:11.891870 igmp [2626]: [2648]: M2RIB: Moving RIB txlist member marker to
version 2
2013 Feb  8 11:23:11.891857 igmp [2626]: [2648]: M2RIB: Syncing router-ports, snoop-state,
OMF-state for vlan 173
2013 Feb  8 11:23:11.891850 igmp [2626]: [2648]: M2RIB: Adding vlan OMF-op enable for vlan
173 to buffer
2013 Feb  8 11:23:11.891847 igmp [2626]: [2648]: M2RIB: Adding vlan proto-recv enable for
vlan 173 to buffer, lkup-mode:ip
2013 Feb  8 11:23:11.891833 igmp [2626]: [2648]: M2RIB: Vlan 173 OMF state changed,
triggering update
2013 Feb  8 11:23:11.891830 igmp [2626]: [2648]: M2RIB: Vlan 173 state changed, triggering
update
2013 Feb  8 11:23:11.891827 igmp [2626]: [2648]: M2RIB: Processing vlan-update for vlan 173
from txlist
2013 Feb  8 11:23:11.891821 igmp [2626]: [2648]: M2RIB: Obtained OMF-buffer 0x0x8282d6c
...

```

This example shows how to display the internal IGMP event-history buffers:

```

n1000v# show ip igmp snooping event-history igmp-snoop-internal

igmp-snoop-internal Events for IGMP Snoop process
2013 Feb  8 11:23:11.891232 igmp [2626]: [2736]: Created igmp snooping vdb for <vlan 173>
on vlan-create notification (state ACTIVE)
2013 Feb  8 11:23:11.889610 igmp [2626]: [2736]: Sent IGMP snooping status notification
message
2013 Feb  8 11:23:11.889597 igmp [2626]: [2736]: IGMP snooping is globally enabled
2013 Feb  8 11:23:11.889589 igmp [2626]: [2736]: Sending IGMP snooping status to registry
2013 Feb  8 11:23:11.889472 igmp [2626]: [2736]: Received vlan create notification for
<vlan 173>, (type 1)
2013 Feb  8 11:23:11.889464 igmp [2626]: [2736]: Parsed vlan mgr message, num_records 1
2013 Feb  8 11:13:47.556270 igmp [2626]: [2736]: Sending request to CLI-server for
if:sup-eth3 config
2013 Feb  8 11:13:47.555602 igmp [2626]: [2736]: Sending request to CLI-server for
if:sup-eth2 config
2013 Feb  8 11:13:47.554804 igmp [2626]: [2736]: Sending request to CLI-server for
if:sup-eth1 config
2013 Feb  8 11:13:47.553993 igmp [2626]: [2736]: Sending request to CLI-server for
if:control0 config
2013 Feb  8 11:13:47.552798 igmp [2626]: [2736]: Sending request to CLI-server for if:mgmt0
config
2013 Feb  8 11:13:47.552274 igmp [2626]: [2736]: Ignoring vlan create notification for
reserved vlan <vlan 4040>, (type 6)
2013 Feb  8 11:13:47.552270 igmp [2626]: [2736]: Parsed vlan mgr message, num_records 1
2013 Feb  8 11:13:47.547170 igmp [2626]: [2736]: Created igmp snooping vdb for <vlan 1> on
vlan-create notification (state ACTIVE)
2013 Feb  8 11:13:47.546057 igmp [2626]: [2736]: Sent IGMP snooping status notification
message
2013 Feb  8 11:13:47.546040 igmp [2626]: [2736]: IGMP snooping is globally enabled
2013 Feb  8 11:13:47.546002 igmp [2626]: [2736]: Sending IGMP snooping status to registry
2013 Feb  8 11:13:47.545667 igmp [2626]: [2736]: Received vlan create notification for
<vlan 1>, (type 1)
2013 Feb  8 11:13:47.545657 igmp [2626]: [2736]: Obtained 81 reserved vlans from vlan-mgr
2013 Feb  8 11:13:47.545645 igmp [2626]: [2736]: Reserved vlan 4094
2013 Feb  8 11:13:47.545644 igmp [2626]: [2736]: Reserved vlan 4047
...

```

This example shows how to display the state and size of the event-history buffers:

```

n1000v# show ip igmp snooping event-history statistics
Buffer name      State      Size
vlan             Enabled   large

```



vlan-events	Enabled	large
igmp-snoop-internal	Enabled	large
mfdm	Enabled	large
mfdm-sum	Enabled	large
VPC	Enabled	large
RIB	Enabled	large

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>clear ip igmp interface statistics</b>	Clears the IGMP statistics for an interface.
<b>clear ip igmp snooping statistics vlan</b>	Clears the IGMP snooping statistics for VLANs.
<b>ip igmp snooping</b>	Enables IGMP snooping.
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing table.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip igmp snooping explicit-tracking

To display the explicit-tracking database for the Internet Group Management Protocol (IGMP), use the **show ip igmp snooping explicit-tracking** command.

```
show ip igmp snooping explicit-tracking [vlan vlan_id]
```

Syntax Description	Parameter	Description
	<b>vlan</b>	(Optional) Specifies the VLAN explicit tracking database.
	<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.

**Defaults** Displays the entire IGMP explicit-tracking database.

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display IGMP snooping information for the explicit tracking database:

```
n1000v# show ip igmp snooping explicit-tracking
IGMPv3 Snooping Explicit-tracking information
Vlan Source/Group
      Intf          Reporter      Uptime      Last-Join Expires
```

This example shows how to display IGMP snooping information for VLAN 59 when the explicit tracking database is enabled:

```
n1000v# (config-vlan-config)# vlan configuration 59
n1000v# (config-vlan-config)# ip igmp snooping explicit-tracking
n1000v# (config-vlan-config)# show ip igmp snooping vlan 59
IGMP Snooping information for vlan 59
  IGMP snooping disabled
  Optimised Multicast Flood (OMF) disabled
  IGMP querier none
  Switch-querier disabled
  IGMPv3 Explicit tracking enabled (initializing, time-left: 00:04:17)
  IGMPv2 Fast leave disabled
  IGMPv1/v2 Report suppression disabled
  IGMPv3 Report suppression disabled
  Link Local Groups suppression enabled
  Router port detection using PIM Hellos, IGMP Queries
```

```

Number of router-ports: 0
Number of groups: 0
VLAN vPC function disabled
Active ports:
  Po1

```

This example shows how to display IGMP snooping information for VLAN 59 when the explicit tracking database is disabled:

```

n1000v# vlan configuration 59
n1000v#(config-vlan-config)# no ip igmp snooping explicit-tracking
n1000v#(config-vlan-config)# show ip igmp snooping vlan 59
IGMP Snooping information for vlan 59
  IGMP snooping disabled
  Optimised Multicast Flood (OMF) disabled
  IGMP querier none
  Switch-querier disabled
  IGMPv3 Explicit tracking disabled
  IGMPv2 Fast leave disabled
  IGMPv1/v2 Report suppression disabled
  IGMPv3 Report suppression disabled
  Link Local Groups suppression enabled
  Router port detection using PIM Hellos, IGMP Queries
  Number of router-ports: 0
  Number of groups: 0
  VLAN vPC function disabled
  Active ports:
    Po1

```

#### Related Commands

Command	Description
<b>clear ip igmp interface statistics</b>	Clears the IGMP statistics for an interface.
<b>clear ip igmp snooping statistics vlan</b>	Clears the IGMP snooping statistics for VLANs.
<b>ip igmp snooping</b>	Enables IGMP snooping.
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing table.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip igmp snooping groups

To display the Internet Group Management Protocol (IGMP) snooping information for a group address, use the **show ip igmp snooping groups** command.

```
show ip igmp snooping groups [multicast_ip] [source_ip] [detail] [summary] [vlan vlan_id]
```

Syntax Description	
<i>multicast_ip</i>	(Optional) Multicast IP address of single group in the format A.B.C.D.
<i>source_ip</i>	(Optional) Source IP address in the format A.B.C.D.
<b>detail</b>	(Optional) Displays detailed information for the group.
<b>summary</b>	(Optional) Displays snooping group summary.
<b>vlan</b>	(Optional) Specifies a VLAN.
<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.

**Defaults** Displays IGMP snooping information for all group addresses.

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display IGMP snooping information for a group address:

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

Vlan Group Address      Ver Type Port list
```

This example shows how to display IGMP snooping information for a multicast address with a source address:

```
n1000v# show ip igmp snooping groups 224.1.1.1 209.165.202.130
Type: S - Static, D - Dynamic, R - Router port

Vlan Group Address      Ver Type Port list
```

This example shows how to display IGMP snooping information for a source address with a multicast address:

```
n1000v# show ip igmp snooping groups 209.165.202.130 224.0.1.0
Type: S - Static, D - Dynamic, R - Router port
```

```
Vlan Group Address Ver Type Port list
```

This example shows how to display the VLAN explicit tracking database:

```
n1000v# show ip igmp snooping groups vlan 2
Type: S - Static, D - Dynamic, R - Router port
```

```
Vlan Group Address Ver Type Port list
```

### Related Commands

Command	Description
<b>clear ip igmp interface statistics</b>	Clears the IGMP statistics for an interface.
<b>clear ip igmp snooping statistics vlan</b>	Clears the IGMP snooping statistics for VLANs.
<b>ip igmp snooping</b>	Enables IGMP snooping.
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing table.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip igmp snooping lookup-mode

To display information about the IP Internet Group Management Protocol (IGMP) lookup mode, use the **show ip igmp snooping lookup-mode** command.

```
show ip igmp snooping lookup-mode [vlan vlan_id]
```

Syntax Description	Parameter	Description
	<b>vlan</b>	(Optional) Specifies a VLAN.
	<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.

**Defaults** Displays all of the information about the IP IGMP lookup mode.

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the IP IGMP lookup mode:

```
n1000v# show ip igmp snooping lookup-mode
Global lookup-mode:
  configured : IP
  operational: IP
VLAN lookup-mode
  1 IP
  10 IP
  20 IP
  30 IP
  40 IP
  50 IP
  60 IP
  77 IP
  80 IP
  200 IP
  201 IP
  202 IP
  ...
```

<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>clear ip igmp interface statistics</b>	Clears the IGMP statistics for an interface.
	<b>clear ip igmp snooping statistics vlan</b>	Clears the IGMP snooping statistics for VLANs.
	<b>ip igmp snooping</b>	Enables IGMP snooping.
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays the IP routing table.
	<b>show ip static-route</b>	Displays the IP configured static routes.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.

# show ip igmp snooping mac-oif

To display information about the IP Internet Group Management Protocol (IGMP) snooping, static MAC outgoing interface (OIF), use the **show ip igmp snooping mac-oif** command.

**show ip igmp snooping mac-oif** [**detail** | **vlan** *vlan\_id* [**detail**]]

Syntax Description	detail	(Optional) Displays detailed information for the group.
	<b>vlan</b>	(Optional) Specifies a VLAN.
	<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.

**Defaults** Displays summary information about the IP IGMP snooping, static MAC OIF.

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the IP IGMP snooping, static MAC OIF:

```
n1000v# show ip igmp snooping mac-oif
Total Mac OIF: 0
VLAN Count MAC-ADDR          OIFs
   1         0
  173        0
```

This example shows how to display detailed information about the IP IGMP snooping, static MAC OIF for a specific VLAN:

```
n1000v# show ip igmp snooping mac-oif vlan 173 detail
VLAN Count MAC-ADDR          OIFs
   173        0
```

Related Commands	Command	Description
	<b>clear ip igmp interface statistics</b>	Clears the IGMP statistics for an interface.
	<b>clear ip igmp snooping statistics vlan</b>	Clears the IGMP snooping statistics for VLANs.



<b>Command</b>	<b>Description</b>
<b>ip igmp snooping</b>	Enables IGMP snooping.
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing table.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip igmp snooping mrouter

To display information about the detected IP Internet Group Management Protocol (IGMP) multicast routers, use the **show ip igmp snooping mrouter** command.

```
show ip igmp snooping mrouter [vlan vlan_id]
```

Syntax	Description
<b>vlan</b>	(Optional) Specifies a VLAN.
<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.

**Defaults** Displays all information about the detected IP IGMP multicast routers.

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the detected IGMP multicast routers:

```
n1000v# show ip igmp snooping mrouter
Type: S - Static, D - Dynamic, V - vPC Peer Link
      I - Internal, C - Co-learned, U - User Configured
Vlan Router-port  Type      Uptime    Expires
```

This example shows how to display the IGMP multicast routers detected for a specific VLAN:

```
n1000v# show ip igmp snooping mrouter vlan 173
Type: S - Static, D - Dynamic, V - vPC Peer Link
      I - Internal, C - Co-learned, U - User Configured
Vlan Router-port  Type      Uptime    Expires
```

Related Commands	Command	Description
	<b>clear ip igmp interface statistics</b>	Clears the IGMP statistics for an interface.
	<b>clear ip igmp snooping statistics vlan</b>	Clears the IGMP snooping statistics for VLANs.
	<b>ip igmp snooping</b>	Enables IGMP snooping.
	<b>show ip access-lists</b>	Displays the IP ACLs.

<b>Command</b>	<b>Description</b>
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing table.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip igmp snooping querier

To display information about the IP Internet Group Management Protocol (IGMP) snooping querier, use the **show ip igmp snooping querier** command.

```
show ip igmp snooping querier [detail | vlan vlan_id]
```

Syntax Description	Parameter	Description
	<b>detail</b>	(Optional) Displays detailed information for the group.
	<b>vlan</b>	(Optional) Specifies a VLAN.
	<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.

**Defaults** Displays all information about the IP IGMP snooping querier.

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display IGMP snooping querier information:

```
n1000v# show ip igmp snooping querier
Vlan IP Address      Version Expires      Port
```

This example shows how to display IGMP snooping querier information:

```
n1000v# show ip igmp snooping querier detail
Vlan IP Address      Version Expires      Port
```

Related Commands	Command	Description
	<b>clear ip igmp interface statistics</b>	Clears the IGMP statistics for an interface.
	<b>clear ip igmp snooping statistics vlan</b>	Clears the IGMP snooping statistics for VLANs.
	<b>ip igmp snooping</b>	Enables IGMP snooping.
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.

<b>Command</b>	<b>Description</b>
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing table.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip igmp snooping statistics

To display Internet Group Management Protocol (IGMP) snooping packet/error counter statistics, use the **show ip igmp snooping statistics** command.

```
show ip igmp snooping statistics [global | vlan vlan_id]
```

Syntax Description	global	(Optional) Displays global statistics.
	vlan	(Optional) Specifies a VLAN.
	<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.

**Defaults** Displays all of the IGMP snooping packet/error counter statistics.

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

## Examples

This example shows how to display IGMP packet/error counter statistics:

```
n1000v# show ip igmp snooping statistics
Global IGMP snooping statistics: (only non-zero values displayed)
  Native mct reports drop: 0
  IGMP pkt rcvd without if_create: 0
  MVR mapped in access : 0
  MVR groups_cleared from access: 0
VLAN 1 IGMP snooping statistics, last reset: never (only non-zero values displayed)
  vPC Peer Link CFS packet statistics:
VLAN 173 IGMP snooping statistics, last reset: never (only non-zero values displayed)
  vPC Peer Link CFS packet statistics:
```

This example shows how to display IGMP packet/error counter statistics for a specific VLAN:

```
n1000v# show ip igmp snooping statistics vlan 173
Global IGMP snooping statistics: (only non-zero values displayed)
  Native mct reports drop: 0
  IGMP pkt rcvd without if_create: 0
  MVR mapped in access : 0
  MVR groups_cleared from access: 0
VLAN 173 IGMP snooping statistics, last reset: never (only non-zero values displayed)
  vPC Peer Link CFS packet statistics:
```

<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>clear ip igmp interface statistics</b>	Clears the IGMP statistics for an interface.
	<b>clear ip igmp snooping statistics vlan</b>	Clears the IGMP snooping statistics for VLANs.
	<b>ip igmp snooping</b>	Enables IGMP snooping.
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays the IP routing table.
	<b>show ip static-route</b>	Displays the IP configured static routes.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.

# show ip igmp snooping vlan

To display VLAN Internet Group Management Protocol (IGMP) snooping membership information, use the **show ip igmp snooping vlan** command.

```
show ip igmp snooping vlan vlan_id
```

<b>Syntax Description</b>	<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.
<b>Defaults</b>	None	
<b>Command Modes</b>	Any	
<b>Supported User Roles</b>	network-admin network-operator	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	5.2(1)SK1(1.1)	This command was introduced.

## Examples

This example shows how to display IGMP VLAN snooping information:

```
n1000v# show ip igmp snooping vlan 59
IGMP Snooping information for vlan 59
  IGMP snooping disabled
  Optimised Multicast Flood (OMF) disabled
  IGMP querier none
  Switch-querier disabled
  IGMPv3 Explicit tracking enabled (initializing, time-left: 00:04:14)
  IGMPv2 Fast leave disabled
  IGMPv1/v2 Report suppression disabled
  IGMPv3 Report suppression disabled
  Link Local Groups suppression enabled
  Router port detection using PIM Hellos, IGMP Queries
  Number of router-ports: 0
  Number of groups: 0
  VLAN vPC function disabled
  Active ports:
    Po1
```



<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>clear ip igmp interface statistics</b>	Clears the IGMP statistics for an interface.
	<b>clear ip igmp snooping statistics vlan</b>	Clears the IGMP snooping statistics for VLANs.
	<b>ip igmp snooping</b>	Enables IGMP snooping.
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays the IP routing table.
	<b>show ip static-route</b>	Displays the IP configured static routes.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.

# show ip interface

To display information about the IP interface status, use the **show ip interface** command.

**show ip interface**

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the IP interface status:

```
n1000v# show ip interface
IP Interface Status for VRF "default"
```

Related Commands	Command	Description
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays the IP routing table.
	<b>show ip static-route</b>	Displays the IP configured static routes.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.

# show ip interface A.B.C.D

To display information about a specific IP-related interface, use the **show ip interface** command.

```
show ip interface ipv4_address [operational] [vrf {vrf_name | all | default | management}] | vrf
{vrf_name | all | default | management}}
```

Syntax Description		
<i>ipv4_address</i>		IPv4 address in the format A.B.C.D.
<b>operational</b>		(Optional) Displays administratively enabled interfaces.
<b>vrf</b>		(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>		VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>		Displays adjacency entries for all VRFs.
<b>default</b>		Displays a known VRF name.
<b>management</b>		Displays the management interface.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about all IP interface per VRF instance:

```
n1000v# show ip interface vrf all
IP Interface Status for VRF "default"

IP Interface Status for VRF "management"
mgmt0, Interface status: protocol-up/link-up/admin-up, iod: 2,
  IP address: 10.105.225.180, IP subnet: 10.105.225.160/27
  IP broadcast address: 255.255.255.255
  IP multicast groups locally joined: none
  IP MTU: 1500 bytes (using link MTU)
  IP primary address route-preference: 0, tag: 0
  IP multicast routing: disabled
  IP icmp redirects: enabled
  IP directed-broadcast: disabled
  IP icmp unreachable (except port): disabled
  IP icmp port-unreachable: enabled
  IP unicast reverse path forwarding: none
  IP load sharing: none
```

## show ip interface A.B.C.D

```

IP interface statistics last reset: never
IP interface software stats: (sent/received/forwarded/originated/consumed)
  Unicast packets   : 22713/28081/13328/20697/11312
  Unicast bytes     : 3356973/2798523/1917483/2072962/633472
  Multicast packets : 0/14820/0/0/0
  Multicast bytes   : 0/849808/0/0/0
  Broadcast packets : 0/28628/0/0/0
  Broadcast bytes   : 0/3537430/0/0/0
  Labeled packets   : 0/0/0/0/0
  Labeled bytes     : 0/0/0/0/0
WCCP Redirect outbound: disabled
WCCP Redirect inbound: disabled
WCCP Redirect exclude: disabled

```

### Related Commands

Command	Description
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing table.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip interface brief

To display a brief summary of the status and configuration of the IP interfaces, use the **show ip interface brief** command.

```
show ip interface brief [include-secondary [vrf {vrf_name | all | default | management}] |
operational [vrf {vrf_name | all | default | management}] | vrf {vrf_name | all | default |
management}]
```

Syntax Description	
<b>include-secondary</b>	(Optional) Displays a summary of all IP addresses.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>	Displays adjacency entries for all VRFs.
<b>default</b>	Displays a known VRF name.
<b>management</b>	Displays the management interface.
<b>operational</b>	(Optional) Displays administratively enabled interfaces.

**Defaults** Displays a brief summary of the status and configuration of the IP interfaces.

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display a brief summary of the status and configuration of IP interfaces:

```
n1000v# show ip interface brief operational vrf all
IP Interface Status for VRF "default" (1)
Interface                IP Address                Interface Status

IP Interface Status for VRF "management" (2)
Interface                IP Address                Interface Status
mgmt0                   10.105.225.180           protocol-up/link-up/admin-up
```

<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays the IP routing table.
	<b>show ip static-route</b>	Displays the IP configured static routes.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.

# show ip interface control

To display IP-related information for a control interface, use the **show ip interface control** command.

```
show ip interface control control_int_num [operational [vrf {vrf_name | all | default | management}] | vrf {vrf_name | all | default | management}]
```

## Syntax Description

<i>control_int_num</i>	Control interface number. The only valid value is 0.
<b>operational</b>	(Optional) Displays administratively enabled interfaces.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>	Displays adjacency entries for all VRFs.
<b>default</b>	Displays a known VRF name.
<b>management</b>	Displays the management interface.

## Defaults

None

## Command Modes

Any

## Supported User Roles

network-admin  
network-operator

## Command History

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

## Examples

This example shows how to display IP-related information for a control interface:

```
n1000v# show ip interface control 0
```

```
IP is disabled on control0
```

## Related Commands

Command	Description
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.

<b>Command</b>	<b>Description</b>
<b>show ip route</b>	Displays the IP routing table.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.



# show ip interface mgmt

To display IP-related information for management interfaces, use the **show ip interface mgmt** command.

```
show ip interface mgmt mgmt_if_num [operational [vrf {vrf_name | all | default | management}]
| vrf {vrf_name | all | default | management}]
```

## Syntax Description

<i>mgmt_if_num</i>	Management interface number. The only valid value is 0.
<b>operational</b>	(Optional) Displays administratively enabled interfaces.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>	Displays adjacency entries for all VRFs.
<b>default</b>	Displays a known VRF name.
<b>management</b>	Displays the management interface.

## Defaults

None

## Command Modes

Any

## Supported User Roles

network-admin  
network-operator

## Command History

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

## Examples

This example shows how to display IP-related information for a management interface:

```
n1000v# show ip interface mgmt 0
IP Interface Status for VRF "management"(2)
mgmt0, Interface status: protocol-up/link-up/admin-up, iod: 2,
  IP address: 10.105.225.180, IP subnet: 10.105.225.160/27
  IP broadcast address: 255.255.255.255
  IP multicast groups locally joined: none
  IP MTU: 1500 bytes (using link MTU)
  IP primary address route-preference: 0, tag: 0
  IP multicast routing: disabled
  IP icmp redirects: enabled
  IP directed-broadcast: disabled
  IP icmp unreachable (except port): disabled
  IP icmp port-unreachable: enabled
  IP unicast reverse path forwarding: none
  IP load sharing: none
  IP interface statistics last reset: never
  IP interface software stats: (sent/received/forwarded/originated/consumed)
```

## show ip interface mgmt

```

Unicast packets   : 22744/28107/13328/20728/11312
Unicast bytes     : 3361843/2800071/1917483/2077832/633472
Multicast packets : 0/14828/0/0/0
Multicast bytes   : 0/850208/0/0/0
Broadcast packets : 0/28646/0/0/0
Broadcast bytes   : 0/3538834/0/0/0
Labeled packets   : 0/0/0/0/0
Labeled bytes     : 0/0/0/0/0
WCCP Redirect outbound: disabled
WCCP Redirect inbound: disabled
WCCP Redirect exclude: disabled

```

### Related Commands

Command	Description
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing table.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip interface operational

To display information about administratively enabled IP interfaces, use the **show ip interface operational** command.

**show ip interface operational** [**vrf** {*vrf\_name* | **all** | **default** | **management**}]

Syntax Description		
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.	
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.	
<b>all</b>	Displays adjacency entries for all VRFs.	
<b>default</b>	Displays a known VRF name.	
<b>management</b>	Displays the management interface.	

**Defaults** Displays information about all administratively enabled IP interfaces.

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about administratively enabled IP interfaces per-VRF instance:

```
n1000v# show ip interface operational vrf all
IP Interface Status for VRF "default"

IP Interface Status for VRF "management"
mgmt0, Interface status: protocol-up/link-up/admin-up, iod: 2,
  IP address: 10.105.225.180, IP subnet: 10.105.225.160/27
  IP broadcast address: 255.255.255.255
  IP multicast groups locally joined: none
  IP MTU: 1500 bytes (using link MTU)
  IP primary address route-preference: 0, tag: 0
  IP multicast routing: disabled
  IP icmp redirects: enabled
  IP directed-broadcast: disabled
  IP icmp unreachable (except port): disabled
  IP icmp port-unreachable: enabled
  IP unicast reverse path forwarding: none
  IP load sharing: none
  IP interface statistics last reset: never
  IP interface software stats: (sent/received/forwarded/originated/consumed)
```

## show ip interface operational

```

Unicast packets   : 22756/28118/13328/20740/11312
Unicast bytes     : 3364307/2800761/1917483/2080296/633472
Multicast packets : 0/14828/0/0/0
Multicast bytes   : 0/850208/0/0/0
Broadcast packets : 0/28646/0/0/0
Broadcast bytes   : 0/3538834/0/0/0
Labeled packets   : 0/0/0/0/0
Labeled bytes     : 0/0/0/0/0
WCCP Redirect outbound: disabled
WCCP Redirect inbound: disabled
WCCP Redirect exclude: disabled

```

### Related Commands

Command	Description
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing table.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip interface vrf

To display IP-related interface information as virtual routing and forwarding (VRF) instance, use the **show ip interface *ip\_address*** command.

```
show ip interface vrf { vrf_name | all | default | management }
```

Syntax Description		
	<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
	<b>all</b>	Displays adjacency entries for all VRFs.
	<b>default</b>	Displays a known VRF name.
	<b>management</b>	Displays the management interface.

**Defaults** None

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display IP-related interface information as per-VRF instance:

```
n1000v# show ip interface vrf all
IP Interface Status for VRF "default"

IP Interface Status for VRF "management"
mgmt0, Interface status: protocol-up/link-up/admin-up, iod: 2,
  IP address: 10.105.225.180, IP subnet: 10.105.225.160/27
  IP broadcast address: 255.255.255.255
  IP multicast groups locally joined: none
  IP MTU: 1500 bytes (using link MTU)
  IP primary address route-preference: 0, tag: 0
  IP multicast routing: disabled
  IP icmp redirects: enabled
  IP directed-broadcast: disabled
  IP icmp unreachable (except port): disabled
  IP icmp port-unreachable: enabled
  IP unicast reverse path forwarding: none
  IP load sharing: none
  IP interface statistics last reset: never
  IP interface software stats: (sent/received/forwarded/originated/consumed)
    Unicast packets      : 22775/28145/13328/20759/11312
    Unicast bytes        : 3367793/2802627/1917483/2083782/633472
```

## show ip interface vrf

```

Multicast packets : 0/14828/0/0/0
Multicast bytes   : 0/850208/0/0/0
Broadcast packets : 0/28646/0/0/0
Broadcast bytes   : 0/3538834/0/0/0
Labeled packets   : 0/0/0/0/0
Labeled bytes     : 0/0/0/0/0
WCCP Redirect outbound: disabled
WCCP Redirect inbound: disabled
WCCP Redirect exclude: disabled

```

### Related Commands

Command	Description
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing table.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip logging

To display IP logging information, use the **show ip logging** command.

## show ip logging

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display IP logging information:

```
n1000v# show ip logging
n1000v#
```

Related Commands	Command	Description
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays the IP routing table.
	<b>show ip static-route</b>	Displays the IP configured static routes.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.

# show ip process

To display IP global information, use the **show ip process** command.

```
show ip process [vrf {vrf_name | all | default | management}]
```

Syntax Description		
<b>vrf</b>	(Optional)	Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>		VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>		Displays adjacency entries for all VRFs.
<b>default</b>		Displays a known VRF name.
<b>management</b>		Displays the management interface.

**Defaults** Displays IP global information.

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display IP process information for VRF:

```
n1000v# show ip process vrf all
VRF default
  VRF id is 1
  Base table id is 1
  Auto discard is disabled
  Auto discard is not added
  Auto Null broadcast is configured
  Auto Punt broadcast is configured
  Static discard is not configured
  Number of static default route configured is 0
  Number of ip unreachable configured is 0
  Iodlist:
  Local address list:

VRF management
  VRF id is 2
  Base table id is 2
  Auto discard is disabled
  Auto discard is not added
  Auto Null broadcast is not configured
  Auto Punt broadcast is not configured
```



```
Static discard is not configured
Number of static default route configured is 1
Number of ip unreachable configured is 0
Iodlist: 2
Local address list: 10.105.225.180
```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip route</b>	Displays the IP routing table.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip route

To display IP routing information, use the **show ip route** command.

**show ip route**

**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
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the IP routing table:

```
n1000v# show ip route
```

Related Commands	Command	Description
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip static-route</b>	Displays the IP configured static routes.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.

# show ip route A.B.C.D

To display a single IP route by a longest match lookup, use the **show ip route A.B.C.D** command.

```
show ip route ip_route [am | broadcast | detail | direct | interface { control | ethernet |
management | port-channel} | local | mstatic | netflow | next-hop | sal | static | summary |
updated | vrf]
```

Syntax Description	
<b>am</b>	(Optional) Displays routes that the adjacency manager owns.
<b>broadcast</b>	(Optional) Displays connected routes that broadcast owns.
<b>detail</b>	(Optional) Displays IP routes in full detail.
<b>direct</b>	(Optional) Displays connected routes that direct owns.
<b>interface</b>	(Optional) Specifies only the routes with this output interface. Further branches are: <ul style="list-style-type: none"> <li>• <b>control</b> Specifies the control interface.</li> <li>• <b>ethernet</b> Specifies an Ethernet IEEE 802.3z interface.</li> <li>• <b>port-channel</b> Specifies a port channel interface.</li> <li>• <b>vethernet</b> Specifies a virtual Ethernet interface.</li> </ul>
<b>local</b>	(Optional) Displays connected routes that local owns.
<b>mstatic</b>	(Optional) Displays routes that mstatic owns.
<b>netflow</b>	(Optional) Displays routes that NetFlow owns.
<b>next-hop</b>	(Optional) Displays routes with this next hop only.
<b>sal</b>	(Optional) Displays connected routes that the Service Abstraction Layer (SAL) owns.
<b>static</b>	(Optional) Displays routes that static owns.
<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.

**Defaults** Displays a single IP route, longest match lookup.

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Usage Guidelines**

Following any one of the above commands with a space, then a question mark (?) will bring-up menus of additional arguments or keywords. If the menu contains a carriage return <cr>, with or without additional options, the command may be terminated at that level or, if they exist, one of the options may be chosen.

**Examples**

This example shows how to check for command argument and keyword branches under *ip\_address am* and then to enter the command:

```
n1000v# show ip route 10.105.225.180 ?
<CR>
>          Redirect it to a file
>>         Redirect it to a file in append mode
all        Display routes for protocol for backup next-hops too
detail     Display routes in full detail
interface  Display routes with this output interface only
next-hop   Display routes with this next-hop only
summary    Display route counts
updated    Display routes filtered by last updated time
vrf        Display per-VRF information
|          Pipe command output to filter
```

This example shows how to display the IP routes that the adjacency manager owns:

```
n1000v# show ip route 10.105.225.180 am
IP Route Table for VRF "default"
'' denotes best ucast next-hop
''' denotes best mcast next-hop
'[x/y]' denotes [preference/metric]

Route not found
```

**Related Commands**

Command	Description
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing information.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip route A.B.C.D/LEN

To display a single exact match IP route, use the **show ip route A.B.C.D/LEN** command.

```
show ip route ip_route/len [am | broadcast | detail | direct | interface {control | ethernet |
management | port-channel} | local | mstatic | netflow | next-hop | sal | static | summary |
updated | vrf]
```

## Syntax Description

<b>am</b>	(Optional) Displays routes that the adjacency manager owns.
<b>broadcast</b>	(Optional) Displays connected routes that broadcast owns.
<b>detail</b>	(Optional) Displays IP routes in full detail.
<b>direct</b>	(Optional) Displays connected routes that direct owns.
<b>interface</b>	(Optional) Specifies the routes with this output interface.  Further branches are: <ul style="list-style-type: none"> <li>• <b>control</b> Specifies the control interface.</li> <li>• <b>ethernet</b> Specifies an Ethernet IEEE 802.3z interface.</li> <li>• <b>port-channel</b> Specifies a port channel interface.</li> <li>• <b>vethernet</b> Specifies a virtual Ethernet interface.</li> </ul>
<b>local</b>	(Optional) Displays connected routes that local owns.
<b>mstatic</b>	(Optional) Displays routes that mstatic owns.
<b>netflow</b>	(Optional) Displays routes that NetFlow owns.
<b>next-hop</b>	(Optional) Displays routes with this next hop only.
<b>sal</b>	(Optional) Displays connected routes that the Service Abstraction Layer (SAL) owns.
<b>static</b>	(Optional) Displays routes that static owns.
<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.

## Defaults

Displays a single exact match IP route.

## Command Modes

Any

## Supported User Roles

network-admin  
network-operator

## Command History

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

**Usage Guidelines**

Following any one of the above commands with a space, then a question mark (?) will bring-up menus of additional arguments or keywords. If the menu contains a carriage return <cr>, with or without additional options, the command may be terminated at that level or, if they exist, one of the options may be chosen.

**Examples**

This example shows how to check for command argument and keyword branches under *ip\_address/len updated*:

```
n1000v# show ip route 209.165.200.224/8 updated ?
<CR>
>          Redirect it to a file
>>         Redirect it to a file in append mode
am         Display routes owned by adjacency manager
broadcast  Display connected routes owned by broadcast
detail     Display routes in full detail
direct     Display connected routes owned by direct
interface  Display routes with this output interface only
local      Display connected routes owned by local
mstatic    Display routes owned by mstatic
netflow    Display routes owned by netflow
next-hop   Display routes with this next-hop only
sal        Display connected routes owned by sal
since      Display those routes updated since this time
static     Display routes owned by static
summary    Display route counts
until      Display those routes updated until this time
vrf        Display per-VRF information
|          Pipe command output to filter
```

**Related Commands**

Command	Description
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing information.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip route am

To display IP routes that the adjacency manager owns, use the **show ip route am** command.

```
show ip route am [all | detail | interface { control | ethernet | management | port-channel } |
next-hop | summary | updated | vrf]
```

Syntax Description	
<b>all</b>	(Optional) Displays routes for backup next hops.
<b>detail</b>	(Optional) Displays IP routes in full detail.
<b>direct</b>	(Optional) Displays connected routes that direct owns.
<b>interface</b>	(Optional) Specifies the routes with this output interface. Further branches are: <ul style="list-style-type: none"> <li>• <b>control</b> Specifies the control interface.</li> <li>• <b>ethernet</b> Specifies an Ethernet IEEE 802.3z interface.</li> <li>• <b>port-channel</b> Specifies a port channel interface.</li> <li>• <b>vethernet</b> Specifies a virtual Ethernet interface.</li> </ul>
<b>next-hop</b>	(Optional) Displays routes with this next hop only.
<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.

**Defaults** Display all of the IP routes that the adjacency manager owns.

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Usage Guidelines** Following any one of the above commands with a space, then a question mark (?) will bring-up menus of additional arguments or keywords. If the menu contains a carriage return <cr>, with or without additional options, the command may be terminated at that level or, if they exist, one of the options may be chosen.

**Examples** This example shows how to check for command argument and keyword branches under the **am updated**:

keywords:

```
n1000v# show ip route am updated ?
<CR>
>          Redirect it to a file
>>        Redirect it to a file in append mode
detail     Display routes in full detail
interface  Display routes with this output interface only
next-hop   Display routes with this next-hop only
since      Display those routes updated since this time
summary    Display route counts
until      Display those routes updated until this time
vrf        Display per-VRF information
|          Pipe command output to filter
```

#### Related Commands

Command	Description
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing information.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.



# show ip route broadcast

To display IP routes that broadcast owns, use the **show ip route broadcast** command.

```
show ip route broadcast [all | detail | interface { control | ethernet | management | port-channel}
| next-hop | summary | updated | vrf]
```

Syntax Description	
<b>all</b>	(Optional) Displays routes for backup next hops.
<b>detail</b>	(Optional) Displays IP routes in full detail.
<b>direct</b>	(Optional) Displays connected routes that direct owns.
<b>interface</b>	(Optional) Specifies the routes with this output interface. Further branches are: <ul style="list-style-type: none"> <li>• <b>control</b> Specifies the control interface.</li> <li>• <b>ethernet</b> Specifies an Ethernet IEEE 802.3z interface.</li> <li>• <b>port-channel</b> Specifies a port channel interface.</li> <li>• <b>vethernet</b> Specifies a virtual Ethernet interface.</li> </ul>
<b>next-hop</b>	(Optional) Displays routes with this next hop only.
<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.

**Defaults** Displays all IP routes that broadcast owns.

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Usage Guidelines** Following any one of the above commands with a space, then a question mark (?) will bring-up menus of additional arguments or keywords. If the menu contains a carriage return <cr>, with or without additional options, the command may be terminated at that level or, if they exist, one of the options may be chosen.

**Examples** This example shows how to check for command branches under the **broadcast summary** keywords:

```

n1000v# show ip route broadcast summary ?
<CR>
  >      Redirect it to a file
  >>     Redirect it to a file in append mode
  vrf    Display per-VRF information
  |      Pipe command output to filter

```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing information.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip route detail

To display detailed information about IP routes, use the **show ip route detail** command.

```
show ip route detail [vrf {vrf_name | all | default | management}]
```

Syntax Description		
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.	
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.	
<b>all</b>	Displays adjacency entries for all VRFs.	
<b>default</b>	Displays a known VRF name.	
<b>management</b>	Displays the management interface.	

**Defaults** Displays detailed information about IP routes.

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display detailed information about IP routes:

```
n1000v# show ip route detail
IP Route Table for VRF "default"
'*' denotes best ucast next-hop
'**' denotes best mcast next-hop
'[x/y]' denotes [preference/metric]

0.0.0.0/32, ubest/mbest: 1/0
    *via Null0, [220/0], 00:01:41, broadcast, discard
127.0.0.0/8, ubest/mbest: 1/0
    *via Null0, [220/0], 00:01:41, broadcast, discard
255.255.255.255/32, ubest/mbest: 1/0
    *via sup-eth1, [0/0], 00:01:16, broadcast
```

Related Commands	Command	Description
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.

<b>Command</b>	<b>Description</b>
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing information.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip route direct

To display IP connected routes that direct owns, use the **show ip route direct** command.

```
show ip route direct [all | detail | interface {control | ethernet | management | port-channel} |
next-hop | summary | updated | vrf]
```

Syntax Description	
<b>all</b>	(Optional) Displays routes for backup next hops.
<b>detail</b>	(Optional) Displays IP routes in full detail.
<b>interface</b>	(Optional) Specifies the routes with this output interface. Further branches are: <ul style="list-style-type: none"> <li>• <b>control</b> Specifies the control interface.</li> <li>• <b>ethernet</b> Specifies an Ethernet IEEE 802.3z interface.</li> <li>• <b>port-channel</b> Specifies a port channel interface.</li> <li>• <b>vethernet</b> Specifies a virtual Ethernet interface.</li> </ul>
<b>next-hop</b>	(Optional) Displays routes with this next hop only.
<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.

**Defaults** Displays all IP connected routes that direct owns.

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Usage Guidelines** Following any one of the above commands with a space, then a question mark (?) will bring-up menus of additional arguments or keywords. If the menu contains a carriage return <cr>, with or without additional options, the command may be terminated at that level or, if they exist, one of the options may be chosen.

**Examples** This example shows how to check for command branches under the **direct updated** keywords:

```
n1000v# show ip route direct updated ?
<CR>
```

## show ip route direct

```

>          Redirect it to a file
>>         Redirect it to a file in append mode
detail     Display routes in full detail
interface  Display routes with this output interface only
next-hop   Display routes with this next-hop only
since      Display those routes updated since this time
summary    Display route counts
until      Display those routes updated until this time
vrf        Display per-VRF information
|          Pipe command output to filter

```

### Related Commands

Command	Description
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing information.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip route ip

To display IP route information, use the **show ip route ip** command.

```
show ip route ip [ip_route | am | broadcast | detail | direct | local | mstatic | netflow | next-hop |
rpf | sal | static | summary | unicast | updated | vrf]
```

Syntax Description		
<i>ip_route</i>	(Optional) Specifies an IP route in one of the following formats:	<ul style="list-style-type: none"> <li>• Single route longest match lookup A.B.C.D or WORD</li> <li>• Single exact match route A.B.C.D/LEN</li> </ul>
<b>am</b>	(Optional) Displays the adjacency manager routes.	
<b>broadcast</b>	(Optional) Displays the connected broadcast routes.	
<b>detail</b>	(Optional) Displays routes in full detail.	
<b>direct</b>	(Optional) Displays the connected direct routes.	
<b>local</b>	(Optional) Displays the connected local routes.	
<b>mstatic</b>	(Optional) Displays the mstatic routes.	
<b>netflow</b>	(Optional) Displays routes that are owned by NetFlow.	
<b>next-hop</b>	(Optional) Displays routes with this next hop only.	
<b>rpf</b>	(Optional) Displays reverse path forwarding (RPF) information for a multicast source.	
<b>sal</b>	(Optional) Displays the connected controller Service Abstraction Layer (SAL) routes.	
<b>static</b>	(Optional) Displays the static routes.	
<b>summary</b>	(Optional) Displays route counts.	
<b>unicast</b>	(Optional) Displays unicast information.	
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.	
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.	

**Defaults** Displays IP route information.

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Usage Guidelines**

Following any one of the above commands with a space, then a question mark (?) will bring-up menus of additional arguments or keywords. If the menu contains a carriage return <cr>, with or without additional options, the command may be terminated at that level or, if they exist, one of the options may be chosen.

**Examples**

This example shows how to check for command branches under the **ip rpf** keywords:

```
n1000v# show ip route ip route rpf ?
<CR>
>          Redirect it to a file
>>         Redirect it to a file in append mode
A.B.C.D     Display single route longest match lookup
A.B.C.D/LEN Display single exact match route
WORD        Display single route longest match lookup
am          Display routes owned by adjacency manager
broadcast   Display connected routes owned by broadcast
detail      Display routes in full detail
direct      Display connected routes owned by direct
interface   Display routes with this output interface only
local       Display connected routes owned by local
mstatic     Display routes owned by mstatic
netflow     Display routes owned by netflow
next-hop    Display routes with this next-hop only
sal         Display connected routes owned by sal
static      Display routes owned by static
summary     Display route counts
updated     Display routes filtered by last updated time
vrf         Display per-VRF information
|          Pipe command output to filter
```

This example shows how to display IP route RPF details per-VRF:

```
n1000v# show ip route ip rpf detail vrf all
IP Route Table for VRF "default", RPF for multicast source
'*' denotes best ucast next-hop
***' denotes best mcast next-hop
'[x/y]' denotes [preference/metric]
0.0.0.0/32, ubest/mbest: 1/0
    *via Null0, [220/0], 3d00h, broadcast, discard
127.0.0.0/8, ubest/mbest: 1/0
    *via Null0, [220/0], 3d00h, broadcast, discard
255.255.255.255/32, ubest/mbest: 1/0
    *via sup-eth1, [0/0], 3d00h, broadcast

IP Route Table for VRF "management", RPF for multicast source
'*' denotes best ucast next-hop
***' denotes best mcast next-hop
'[x/y]' denotes [preference/metric]
0.0.0.0/32, ubest/mbest: 1/0
    *via Null0, [220/0], 3d00h, broadcast, discard
127.0.0.0/8, ubest/mbest: 1/0
    *via Null0, [220/0], 3d00h, broadcast, discard
255.255.255.255/32, ubest/mbest: 1/0
    *via sup-eth1, [0/0], 3d00h, broadcast
0.0.0.0/0, ubest/mbest: 1/0
    *via 10.105.225.161, mgmt0, [1/0], 3d00h, static
        recursive next hop: 10.105.225.161/32
10.105.225.160/27, ubest/mbest: 1/0, attached
    *via 10.105.225.180, mgmt0, [0/0], 3d00h, direct
10.105.225.160/32, ubest/mbest: 1/0, attached
    *via 10.105.225.160, Null0, [0/0], 3d00h, broadcast
```



```

10.105.225.161/32, ubest/mbest: 1/0, attached
    *via 10.105.225.161, mgmt0, [250/0], 3d00h, am
10.105.225.180/32, ubest/mbest: 1/0, attached
    *via 10.105.225.180, mgmt0, [0/0], 3d00h, local
10.105.225.191/32, ubest/mbest: 1/0, attached
    *via 10.105.225.191, mgmt0, [0/0], 3d00h, broadcast

```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing information.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip route ipv4

To display IPv4 route information, use the **show ip route ipv4** command.

**show ip route ipv4** [*ipv4\_route* | **am** | **broadcast** | **detail** | **direct** | **local** | **mstatic** | **netflow** | **next-hop** | **rpf** | **sal** | **static** | **summary** | **unicast** | **updated** | **vrf**]

Syntax Description	
<i>ipv4_route</i>	(Optional) Specifies an IP route in one of the following formats: <ul style="list-style-type: none"> <li>• Single route longest match lookup A.B.C.D or WORD</li> <li>• Single exact match route A.B.C.D/LEN</li> </ul>
<b>am</b>	(Optional) Displays the adjacency manager routes.
<b>broadcast</b>	(Optional) Displays the connected broadcast routes.
<b>detail</b>	(Optional) Displays routes in full detail.
<b>direct</b>	(Optional) Displays the connected direct routes.
<b>local</b>	(Optional) Displays connected local routes.
<b>mstatic</b>	(Optional) Displays the mstatic routes.
<b>netflow</b>	(Optional) Displays routes that are owned by NetFlow.
<b>next-hop</b>	(Optional) Displays routes with this next hop only.
<b>rpf</b>	(Optional) Displays reverse path forwarding (RPF) information for a multicast source.
<b>sal</b>	(Optional) Displays the connected controller Service Abstraction Layer (SAL) routes.
<b>static</b>	(Optional) Displays the static routes.
<b>summary</b>	(Optional) Displays route counts.
<b>unicast</b>	(Optional) Displays unicast information.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.

**Defaults** Displays IPv4 route information.

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Usage Guidelines**

Following any one of the above commands with a space, then a question mark (?) will bring-up menus of additional arguments or keywords. If the menu contains a carriage return <cr>, with or without additional options, the command may be terminated at that level or, if they exist, one of the options may be chosen.

**Examples**

This example shows how to check for command branches under the **ipv4 rpf** keywords:

```
n1000v# show ip route ipv4 rpf ?
<CR>
>                               Redirect it to a file
>>                              Redirect it to a file in append mode
A.B.C.D                          Display single route longest match lookup
A.B.C.D/LEN                       Display single exact match route
WORD                              Display single route longest match lookup
am                               Display routes owned by adjacency manager
broadcast                         Display connected routes owned by broadcast
detail                            Display routes in full detail
direct                            Display connected routes owned by direct
interface                         Display routes with this output interface only
local                             Display connected routes owned by local
mstatic                           Display routes owned by mstatic
netflow                           Display routes owned by netflow
next-hop                           Display routes with this next-hop only
sal                               Display connected routes owned by sal
static                             Display routes owned by static
summary                           Display route counts
updated                           Display routes filtered by last updated time
vrf                               Display per-VRF information
|                                 Pipe command output to filter
```

This example shows how to display IPv4 RPF per VRF information:

```
n1000v# show ip route ipv4 rpf vrf all
IP Route Table for VRF "default", RPF for multicast source
'*' denotes best ucast next-hop
***' denotes best mcast next-hop
'[x/y]' denotes [preference/metric]

IP Route Table for VRF "management", RPF for multicast source
'*' denotes best ucast next-hop
***' denotes best mcast next-hop
'[x/y]' denotes [preference/metric]

0.0.0.0/0, ubest/mbest: 1/0
    *via 10.105.225.161, mgmt0, [1/0], 3d00h, static
10.105.225.160/27, ubest/mbest: 1/0, attached
    *via 10.105.225.180, mgmt0, [0/0], 3d00h, direct
10.105.225.180/32, ubest/mbest: 1/0, attached
    *via 10.105.225.180, mgmt0, [0/0], 3d00h, local
```

**Related Commands**

Command	Description
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.

<b>Command</b>	<b>Description</b>
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing information.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip route local

To display connected IP routes owned by local, use the **show ip route local** command.

```
show ip route local [all | detail | interface { control if_num | ethernet slot/chassis_num /
port/slot_num [. port_num] | port-channel port_chan_num [. sub_if_num] | vethernet
vethernet_num } | next-hop next_ip_address [detail | summary | updated [detail | since date
[detail | summary | until date [detail | summary]]]] | summary | updated [detail | since date
[detail | summary | until date [detail | summary]]]] [vrf { vrf_name | all | default |
management}]
```

## Syntax Description

<b>all</b>	(Optional) As an individual option, it displays routes for protocol for backup next-hops.
<b>detail</b>	(Optional) Displays routes in full detail.
<b>interface</b>	(Optional) Specifies the routes with this output interface.
<b>control</b>	Specifies the control interface.
<i>if_num</i>	Control interface number. The only valid value is 0.
<b>ethernet</b>	Specifies an Ethernet IEEE 802.3z interface.
<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.
/	Slash separator.
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
.	(Optional) Specifies the subinterface separator (dot .)
<i>port_num</i>	Port number. The range is from 1 to 64.
<b>port-channel</b>	Specifies a port channel interface.
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.
<b>vethernet</b>	Specifies a virtual Ethernet interface.
<i>vethernet_num</i>	Virtual Ethernet number. The range is from 1 to 1048575.
<b>next-hop</b>	(Optional) Specifies routes with this next hop only.
<i>next_ip_address</i>	Next hop IP address in the format A.B.C.D.
<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>since</b>	(Optional) Specifies routes updated since this time.
<i>date</i>	Date/time [[CC]YY-][MM-DD-]HH:MM[:SS] e.g., 13-02-01-12:13:13.
<b>until</b>	(Optional) Specifies routes updated until this time.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>	When used as a choice under VRF, it displays adjacency entries for all VRFs.
<b>default</b>	Displays a known VRF name.
<b>management</b>	Displays the management interface.

## show ip route local

**Defaults** Displays connected IP routes owned by local.

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display all of the connected routes owned by local per VRF instance:

```
n1000v# show ip route local vrf all
IP Route Table for VRF "default"
 '*' denotes best ucast next-hop
 *** denotes best mcast next-hop
 '[x/y]' denotes [preference/metric]

IP Route Table for VRF "management"
 '*' denotes best ucast next-hop
 *** denotes best mcast next-hop
 '[x/y]' denotes [preference/metric]

10.105.225.180/32, ubest/mbest: 1/0, attached
    *via 10.105.225.180, mgmt0, [0/0], 12:50:25, local
```

Related Commands	Command	Description
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays the IP routing information.
	<b>show ip static-route</b>	Displays the IP configured static routes.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.

# show ip route mstatic

To display connected IP routes owned by mstatic, use the **show ip route mstatic** command.

```
show ip route mstatic [all | detail | interface { control if_num | ethernet slot/chassis_num /
port/slot_num [. port_num] | port-channel port_chan_num [. sub_if_num] | vethernet
vethernet_num } | next-hop next_ip_address [detail | summary | updated [detail | since date
[detail | summary | until date [detail | summary]]]] | summary | updated [detail | since date
[detail | summary | until date [detail | summary]]]] [vrf { vrf_name | all | default |
management}]
```

Syntax	Description
<b>all</b>	(Optional) as an individual option. Displays routes for protocol for backup next hops.
<b>detail</b>	(Optional) Displays routes in full detail.
<b>interface</b>	(Optional) Specifies the routes with this output interface.
<b>control</b>	Specifies the control interface.
<i>if_num</i>	Control interface number. The only valid value is 0.
<b>ethernet</b>	Specifies an Ethernet IEEE 802.3z interface.
<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.
/	Slash separator.
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
.	(Optional) Specifies the subinterface separator (dot .)
<i>port_num</i>	Port number. The range is from 1 to 64.
<b>port-channel</b>	Specifies a port channel interface.
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.
<b>vethernet</b>	Specifies a virtual Ethernet interface.
<i>vethernet_num</i>	Virtual Ethernet number. The range is from 1 to 1048575.
<b>next-hop</b>	(Optional) Specifies routes with this next hop only.
<i>next_ip_address</i>	Next hop IP address in the format A.B.C.D.
<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>since</b>	(Optional) Specifies routes updated since this time.
<i>date</i>	Date/time [[CC]YY-][MM-DD-]HH:MM[:SS] e.g., 13-02-01-12:13:13.
<b>until</b>	(Optional) Specifies routes updated until this time.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>	When used as a choice under VRF, it displays adjacency entries for all VRFs.
<b>default</b>	Displays a known VRF name.
<b>management</b>	Displays the management interface.

## show ip route mstatic

**Defaults** Displays connected IP routes owned by mstatic.

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display all of the connected routes owned by mstatic per VRF instance:

```
n1000v# show ip route mstatic
IP Route Table for VRF "default"
 '*' denotes best ucast next-hop
 *** denotes best mcast next-hop
 '[x/y]' denotes [preference/metric]
```

```
IP Route Table for VRF "management"
 '*' denotes best ucast next-hop
 *** denotes best mcast next-hop
 '[x/y]' denotes [preference/metric]
```

Related Commands	Command	Description
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays the IP routing information.
	<b>show ip static-route</b>	Displays the IP configured static routes.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.



# show ip route netflow

To display connected IP routes owned by NetFlow, use the **show ip route netflow** command.

```
show ip route netflow [all | detail | interface { control if_num | ethernet slot/chassis_num /
port/slot_num [. port_num] | port-channel port_chan_num [. sub_if_num] | vethernet
vethernet_num } | next-hop next_ip_address [detail | summary | updated [detail | since date
[detail | summary | until date [detail | summary]]]] | summary | updated [detail | since date
[detail | summary | until date [detail | summary]]]] [vrf { vrf_name | all | default |
management}]
```

Syntax	Description
<b>all</b>	(Optional) As an individual option, it displays routes for protocol for backup next-hops.
<b>detail</b>	(Optional) Displays routes in full detail.
<b>interface</b>	(Optional) Specifies the routes with this output interface.
<b>control</b>	Specifies the control interface.
<i>if_num</i>	Control interface number. The only valid value is 0.
<b>ethernet</b>	Specifies an Ethernet IEEE 802.3z interface.
<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.
<i>/</i>	Slash separator.
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
<i>.</i>	(Optional) Specifies the subinterface separator (dot .)
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.
<b>port-channel</b>	Specifies a port channel interface.
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
<b>vethernet</b>	Specifies a virtual Ethernet interface.
<i>vethernet_num</i>	Virtual Ethernet number. The range is from 1 to 1048575.
<b>next-hop</b>	(Optional) Specifies routes with this next hop only.
<i>next_ip_address</i>	Next hop IP address in the format A.B.C.D.
<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>since</b>	(Optional) Specifies routes updated since this time.
<i>date</i>	Date/time [[CC]YY-][MM-DD-]HH:MM[:SS] e.g., 13-02-01-12:13:13.
<b>until</b>	(Optional) Specifies routes updated until this time.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>	When used as a choice under VRF, it displays adjacency entries for all VRFs.
<b>default</b>	Displays a known VRF name.
<b>management</b>	Displays the management interface.

**Defaults** Displays connected IP routes owned by NetFlow.

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display IP routes owned by NetFlow for a virtual Ethernet interface:

```
n1000v# show ip route netflow interface vethernet 1
IP Route Table for VRF "default"
'*' denotes best ucast next-hop
***' denotes best mcast next-hop
'[x/y]' denotes [preference/metric]
```

Command	Description
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing information.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip route next-hop

To display IP route next hop information, use the **show ip route next-hop** command.

```
show ip route next-hop next_ip_addres [am | broadcast | direct | interface | local | mstatic |
netflow | sal | static | updated [detail | since date [detail | summary | until date [detail |
summary]]] [all] [detail] [interface {control if_num | ethernet slot/chassis_num /
port/slot_num [. port_num] | port-channel port_chan_num [. sub_if_num] | vethernet
vethernet_num}] [summary] [updated [detail | since date [detail | summary | until date
[detail | summary]]] [vrf {vrf_name | all | default | management}]
```

## Syntax Description

<i>next_ip_address</i>	A.B.C.D the next hop address.
<b>am</b>	(Optional) Displays the adjacency manager routes.
<b>broadcast</b>	(Optional) Displays the connected broadcast routes.
<b>direct</b>	(Optional) Displays the connected direct routes.
<b>local</b>	(Optional) Displays connected local routes.
<b>mstatic</b>	(Optional) Displays the mstatic routes.
<b>netflow</b>	(Optional) Displays routes that are owned by NetFlow.
<b>detail</b>	(Optional) Displays routes in full detail.
<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>since</b>	(Optional) Specifies routes updated since this time.
<i>date</i>	Date/time [[CC]YY-][MM-DD-]HH:MM[:SS] e.g., 13-02-01-12:13:13.
<b>until</b>	(Optional) Specifies routes updated until this time.
<b>sal</b>	(Optional) Displays the connected controller Service Abstraction Layer (SAL) routes.
<b>static</b>	(Optional) Displays the static routes.
<b>all</b>	(Optional) as an individual option. Displays routes for protocol for backup next hops.
<b>interface</b>	(Optional) Specifies the routes with this output interface.
<b>control</b>	Specifies the control interface.
<i>if_num</i>	Control interface number. The only valid value is 0.
<b>ethernet</b>	Specifies an Ethernet IEEE 802.3z interface.
<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.
/	Slash separator.
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
.	(Optional) Specifies the subinterface separator (dot .)
<i>port_num</i>	Port number. The range is from 1 to 64.
<b>port-channel</b>	Specifies a port channel interface.
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.

<b>vethernet</b>	Specifies a virtual Ethernet interface.
<i>vethernet_num</i>	Virtual Ethernet number. The range is from 1 to 1048575.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>	When used as a choice under VRF, it displays adjacency entries for all VRFs.
<b>default</b>	Displays a known VRF name.
<b>management</b>	Displays the management interface.

**Defaults** None

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display all IP route next hop information per VRF instance:

```
n1000v# show ip route next-hop 0.0.0.0 vrf all
IP Route Table for VRF "default"
'*' denotes best ucast next-hop
***' denotes best mcast next-hop
'[x/y]' denotes [preference/metric]

IP Route Table for VRF "management"
'*' denotes best ucast next-hop
***' denotes best mcast next-hop
'[x/y]' denotes [preference/metric]

0.0.0.0/0, ubest/mbest: 1/0
  *via 10.105.225.161, mgmt0, [1/0], 13:01:17, static
10.105.225.160/27, ubest/mbest: 1/0, attached
  *via 10.105.225.180, mgmt0, [0/0], 13:01:18, direct
10.105.225.160/32, ubest/mbest: 1/0, attached
  *via 10.105.225.160, Null0, [0/0], 13:01:18, broadcast
10.105.225.161/32, ubest/mbest: 1/0, attached
  *via 10.105.225.161, mgmt0, [250/0], 13:01:04, am
10.105.225.180/32, ubest/mbest: 1/0, attached
  *via 10.105.225.180, mgmt0, [0/0], 13:01:18, local
10.105.225.191/32, ubest/mbest: 1/0, attached
  *via 10.105.225.191, mgmt0, [0/0], 13:01:18, broadcast
```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing information.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip route static

To display IP connected routes owned by static, use the **show ip route static** command.

```
show ip route static [all | detail | interface {control if_num | ethernet slot/chassis_num / port/slot_num [. port_num] | port-channel port_chan_num [. sub_if_num] | vethernet vethernet_num} | next-hop next_ip_address [detail | summary | updated [detail | since date [detail | summary | until date [detail | summary]]]] | summary | updated [detail | since date [detail | summary | until date [detail | summary]]]] [vrf {vrf_name | all | default | management}]
```

## Syntax Description

<b>all</b>	(Optional) as an individual option. Displays routes for protocol for backup next hops.
<b>detail</b>	(Optional) Displays routes in full detail.
<b>interface</b>	(Optional) Specifies the routes with this output interface.
<b>control</b>	Specifies the control interface.
<i>if_num</i>	Control interface number. The only valid value is 0.
<b>ethernet</b>	Specifies an Ethernet IEEE 802.3z interface.
<i>slot/chassis_num /</i>	Slot/chassis number. The range is from 1 to 66.
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
.	(Optional) Specifies the subinterface separator (dot .)
<i>port_num</i>	Port number. The range is from 1 to 64.
<b>port-channel</b>	Specifies a port channel interface.
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.
<b>vethernet</b>	Specifies a virtual Ethernet interface.
<i>vethernet_num</i>	Virtual Ethernet number. The range is from 1 to 1048575.
<b>next-hop</b>	(Optional) Specifies routes with this next hop only.
<i>next_ip_address</i>	Next hop IP address in the format A.B.C.D.
<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>since</b>	(Optional) Specifies routes updated since this time.
<i>date</i>	Date/time [[CC]YY-][MM-DD-]HH:MM[:SS] e.g., 13-02-01-12:13:13.
<b>until</b>	(Optional) Specifies routes updated until this time.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>	When used as a choice under VRF, it displays adjacency entries for all VRFs.
<b>default</b>	Displays a known VRF name.
<b>management</b>	Displays the management interface.

**Defaults** Displays IP connected routes owned by static.

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display all IP connected static routes per VRF instance:

```
n1000v# show ip route static vrf all
IP Route Table for VRF "default"
 '*' denotes best ucast next-hop
 '**' denotes best mcast next-hop
 '[x/y]' denotes [preference/metric]

IP Route Table for VRF "management"
 '*' denotes best ucast next-hop
 '**' denotes best mcast next-hop
 '[x/y]' denotes [preference/metric]

0.0.0.0/0, ubest/mbest: 1/0
   *via 10.105.225.161, mgmt0, [1/0], 13:03:29, static
```

Related Commands	Command	Description
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays the IP routing information.
	<b>show ip static-route</b>	Displays the IP configured static routes.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.

# show ip route summary

To display IP connected route counts, use the **show ip route summary** command.

```
show ip route summary [vrf {vrf_name | all | default | management}]
```

Syntax Description		
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.	
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.	
<b>all</b>	Displays adjacency entries for all VRFs.	
<b>default</b>	Displays a known VRF name.	
<b>management</b>	Displays the management interface.	

**Defaults** Displays IP connected route counts.

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display summaries of IP connected routes:

```
n1000v# show ip route summary
IP Route Table for VRF "default"
Total number of routes: 3
Total number of paths: 3

Best paths per protocol:      Backup paths per protocol:
  broadcast      : 3          None

Number of routes per mask-length:
  /8 : 1          /32: 2
```

Related Commands	Command	Description
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
	<b>show ip interface</b>	Displays IP-related interface information.



<b>Command</b>	<b>Description</b>
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing information.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip route unicast

To display IP unicast route information, use the **show ip route unicast** command.

```
show ip route unicast [route | am | broadcast | detail | direct | local | mstatic | netflow | next-hop
| sal | static | summary | updated | vrf]
```

## Syntax Description

<i>route</i>	(Optional) Specifies an IP route in one of the following formats: <ul style="list-style-type: none"> <li>• Single route longest match lookup A.B.C.D or WORD</li> <li>• Single exact match route A.B.C.D/LEN</li> </ul>
<b>am</b>	(Optional) Displays the adjacency manager (AM) routes.
<b>broadcast</b>	(Optional) Displays the connected broadcast routes.
<b>direct</b>	(Optional) Displays the connected direct routes.
<b>detail</b>	(Optional) Displays routes in full detail.
<b>local</b>	(Optional) Displays connected local routes.
<b>mstatic</b>	(Optional) Displays the mstatic routes.
<b>netflow</b>	(Optional) Displays the NetFlow routes.
<b>next-hop</b>	(Optional) Displays routes with this next hop only.
<b>sal</b>	(Optional) Displays the connected controller Service Abstraction Layer (SAL) routes.
<b>static</b>	(Optional) Displays the static routes.
<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.

## Defaults

Displays unicast IP route information/

## Command Modes

Any

## Supported User Roles

network-admin  
network-operator

## Command History

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

**Usage Guidelines**

Following any one of the above commands with a space, then a question mark (?) will bring-up menus of additional arguments or keywords. If the menu contains a carriage return <cr>, with or without additional options, the command may be terminated at that level or, if they exist, one of the options may be chosen.

**Examples**

This example shows how to check for command branches under the **ip route unicast** keywords:

```
n1000v# show ip route unicast ?
<CR>
>          Redirect it to a file
>>        Redirect it to a file in append mode
A.B.C.D    Display single route longest match lookup
A.B.C.D/LEN Display single exact match route
WORD      Display single route longest match lookup
am        Display routes owned by adjacency manager
broadcast  Display connected routes owned by broadcast
detail    Display routes in full detail
direct    Display connected routes owned by direct
interface  Display routes with this output interface only
local     Display connected routes owned by local
mstatic   Display routes owned by mstatic
netflow   Display routes owned by netflow
next-hop  Display routes with this next-hop only
rpf       Display RPF information for multicast source
sal       Display connected routes owned by sal
static    Display routes owned by static
summary   Display route counts
updated   Display routes filtered by last updated time
vrf       Display per-VRF information
|         Pipe command output to filter
```

This example shows how to display information about IP unicast routes per-VRF unstance:

```
n1000v# show ip route unicast vrf all
IP Route Table for VRF "default"
*' denotes best ucast next-hop
*** denotes best mcast next-hop
'[x/y]' denotes [preference/metric]

IP Route Table for VRF "management"
*' denotes best ucast next-hop
*** denotes best mcast next-hop
'[x/y]' denotes [preference/metric]

0.0.0.0/0, ubest/mbest: 1/0
    *via 209.165.200.226, mgmt0, [1/0], 21:20:01, static
209.165.200.225/27, ubest/mbest: 1/0, attached
    *via 209.165.200.227, mgmt0, [0/0], 21:20:01, direct
209.165.200.227/32, ubest/mbest: 1/0, attached
    *via 209.165.200.227, mgmt0, [0/0], 21:20:01, local
```

This example shows how to display all unicast IP adjacency manager routes per-VRF instance:

```
n1000v# show ip route unicast updated am vrf all
IP Route Table for VRF "management"
*' denotes best ucast next-hop
*** denotes best mcast next-hop
'[x/y]' denotes [preference/metric]

209.165.200.229/32, ubest/mbest: 1/0, attached
    *via 209.165.200.229, mgmt0, [250/0], 01:05:26, am
209.165.200.230/32, ubest/mbest: 1/0, attached
```

## show ip route unicast

```

    *via 209.165.200.230, mgmt0, [250/0], 00:29:00, am
209.165.200.231/32, ubest/mbest: 1/0, attached
    *via 209.165.200.231, mgmt0, [250/0], 01:05:27, am
209.165.200.232/32, ubest/mbest: 1/0, attached
    *via 209.165.200.232, mgmt0, [250/0], 01:05:22, am

```

### Related Commands

Command	Description
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing information.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip route unicast interface control

To display IP unicast routes on the control interface, use the **show ip route unicast interface control** command.

```
show ip route unicast interface control if_num [am | broadcast | direct | local | mstatic | netflow
| next-hop next_ip_address [detail | summary | updated [detail | since date [detail | summary
| until date [detail | summary]]]] | sal | static | updated [detail | since date [detail | summary
| until date [detail | summary]]]] [all] [detail] [summary] [vrf {vrf_name | all | default |
management}]
```

## Syntax Description

<i>if_num</i>	Control interface number. The only valid value is 0.
<b>am</b>	(Optional) Displays adjacency manager (AM) routes.
<b>broadcast</b>	(Optional) Displays the connected broadcast routes.
<b>direct</b>	(Optional) Displays the connected direct routes.
<b>local</b>	(Optional) Displays connected local routes.
<b>mstatic</b>	(Optional) Displays the mstatic routes.
<b>netflow</b>	(Optional) Displays routes that are owned by NetFlow.
<b>next-hop</b>	(Optional) Specifies routes with this next hop only.
<i>next_ip_address</i>	Next hop IP address in the format A.B.C.D.
<b>detail</b>	(Optional) Displays routes in full detail.
<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>since</b>	(Optional) Specifies routes updated since this time.
<i>date</i>	Date/time [[CC]YY-][MM-DD-]HH:MM[:SS] e.g., 13-02-01-12:13:13.
<b>until</b>	(Optional) Specifies routes updated until this time.
<b>sal</b>	(Optional) Displays the connected controller Service Abstraction Layer (SAL) routes.
<b>static</b>	(Optional) Displays the static routes.
<b>all</b>	(Optional) When used as an independent option, it displays routes for protocol for backup next hops.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>	When used as a choice under VRF, it displays adjacency entries for all VRFs.
<b>default</b>	Displays a known VRF name.
<b>management</b>	Displays the management interface.

## Defaults

None

## Command Modes

Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display IP unicast routes on the control interface:

```
n1000v# show ip route unicast interface control 0
IP Route Table for VRF "default"
 '*' denotes best ucast next-hop
 '**' denotes best mcast next-hop
 '[x/y]' denotes [preference/metric]
```

Related Commands	Command	Description
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays the IP routing information.
	<b>show ip static-route</b>	Displays the IP configured static routes.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.

# show ip route unicast interface ethernet

To display IP unicast routes on an Ethernet interface, use the **show ip route unicast interface ethernet** command.

```
show ip route unicast interface ethernet slot/chassis_num / port/slot_num [. port_num] [am |
broadcast | direct | local | mstatic | netflow | next-hop next_ip_address [detail | summary |
updated [detail | since date [detail | summary | until date [detail | summary]]]] | sal | static
| updated [detail | since date [detail | summary | until date [detail | summary]]] [all] [detail]
[summary] [vrf {vrf_name | all | default | management}]
```

## Syntax Description

<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.
/	Slash separator.
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
.	(Optional) Specifies the subinterface separator (dot .)
<i>port_num</i>	Port number. The range is from 1 to 64.
<b>am</b>	(Optional) Displays the adjacency manager routes.
<b>broadcast</b>	(Optional) Displays the connected broadcast routes.
<b>direct</b>	(Optional) Displays the connected direct routes.
<b>local</b>	(Optional) Displays connected local routes.
<b>mstatic</b>	(Optional) Displays the mstatic routes.
<b>netflow</b>	(Optional) Displays routes that are owned by NetFlow.
<b>next-hop</b>	(Optional) Specifies routes with this next hop only.
<i>next_ip_address</i>	Next hop IP address in the format A.B.C.D.
<b>detail</b>	(Optional) Displays routes in full detail.
<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>since</b>	(Optional) Specifies routes updated since this time.
<i>date</i>	Date/time [[CC]YY-][MM-DD-]HH:MM[:SS] e.g., 13-02-01-12:13:13.
<b>until</b>	(Optional) Specifies routes updated until this time.
<b>sal</b>	(Optional) Displays the connected controller Service Abstraction Layer (SAL) routes.
<b>static</b>	(Optional) Displays the static routes.
<b>all</b>	(Optional) When used as an independent option, it displays routes for protocol for backup next hops.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>	When used as a choice under VRF, it displays adjacency entries for all VRFs.
<b>default</b>	Displays a known VRF name.
<b>management</b>	Displays the management interface.

## show ip route unicast interface ethernet

**Defaults** None

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display unicast IP routes on an Ethernet interface:

```
n1000v# show ip route unicast interface ethernet 3/2
IP Route Table for VRF "default"
'*' denotes best ucast next-hop
***' denotes best mcast next-hop
'[x/y]' denotes [preference/metric]
```

Related Commands	Command	Description
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays the IP routing information.
	<b>show ip static-route</b>	Displays the IP configured static routes.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.



# show ip route unicast interface port-channel

To display IP unicast routes on a port channel interface, use the **show ip route unicast interface port-channel** command.

```
show ip route unicast interface port-channel port_chan_num [. sub_if_num] [am | broadcast |
direct | local | mstatic | netflow | next-hop next_ip_address [detail | summary | updated
[detail | since date [detail | summary | until date [detail | summary]]]] | sal | static | [updated
[detail | since date [detail | summary | until date [detail | summary]]]] [all] [detail]
[summary] [vrf {vrf_name | all | default | management}]
```

## Syntax Description

<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
.	(Optional) Specifies the subinterface separator (dot .)
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.
<b>am</b>	(Optional) Displays the adjacency manager routes.
<b>broadcast</b>	(Optional) Displays the connected broadcast routes.
<b>direct</b>	(Optional) Displays the connected direct routes.
<b>local</b>	(Optional) Displays connected local routes.
<b>mstatic</b>	(Optional) Displays the mstatic routes.
<b>netflow</b>	(Optional) Displays routes that are owned by NetFlow.
<b>next-hop</b>	(Optional) Specifies routes with this next hop only.
<i>next_ip_address</i>	Next hop IP address in the format A.B.C.D.
<b>detail</b>	(Optional) Displays routes in full detail.
<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>since</b>	(Optional) Specifies routes updated since this time.
<i>date</i>	Date/time [[CC]YY-][MM-DD-]HH:MM[:SS] e.g., 13-02-01-12:13:13.
<b>until</b>	(Optional) Specifies routes updated until this time.
<b>sal</b>	(Optional) Displays the connected controller Service Abstraction Layer (SAL) routes.
<b>static</b>	(Optional) Displays the static routes.
<b>all</b>	(Optional) When used as an independent option, it displays routes for protocol for backup next hops.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>	When used as a choice under VRF, it displays adjacency entries for all VRFs.
<b>default</b>	Displays a known VRF name.
<b>management</b>	Displays the management interface.

## Defaults

None

## show ip route unicast interface port-channel

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display details of IP unicast routes on a port channel interface:

```
n1000v# show ip route unicast interface port-channel 4 detail
IP Route Table for VRF "default"
'*' denotes best ucast next-hop
'***' denotes best mcast next-hop
'[x/y]' denotes [preference/metric]

0.0.0.0/32, ubest/mbest: 1/0
    *via Null0, [220/0], 00:41:49, broadcast, discard
127.0.0.0/8, ubest/mbest: 1/0
    *via Null0, [220/0], 00:41:49, broadcast, discard
255.255.255.255/32, ubest/mbest: 1/0
    *via sup-eth1, [0/0], 00:41:23, broadcast
```

Related Commands	Command	Description
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays the IP routing information.
	<b>show ip static-route</b>	Displays the IP configured static routes.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.

# show ip route unicast interface vethernet

To display IP unicast routes on a virtual Ethernet interface, use the **show ip route unicast interface vethernet** command.

```
show ip route unicast interface vethernet vethernet_num [am | broadcast | direct | local | mstatic
| netflow | next-hop next_ip_address [detail | summary | updated [detail | since date [detail |
summary | until date [detail | summary]]]] | sal | static | [updated [detail | since date [detail
| summary | until date [detail | summary]]]] [all] [detail] [summary] [vrf {vrf_name | all |
default | management}]
```

## Syntax Description

<i>vethernet_num</i>	Virtual Ethernet number. The range is from 1 to 1048575.
<b>am</b>	(Optional) Displays adjacency manager (AM) routes.
<b>broadcast</b>	(Optional) Displays the connected broadcast routes.
<b>direct</b>	(Optional) Displays the connected direct routes.
<b>local</b>	(Optional) Displays connected local routes.
<b>mstatic</b>	(Optional) Displays the mstatic routes.
<b>netflow</b>	(Optional) Displays routes that are owned by NetFlow.
<b>next-hop</b>	(Optional) Specifies routes with this next hop only.
<i>next_ip_address</i>	Next hop IP address in the format A.B.C.D.
<b>detail</b>	(Optional) Displays routes in full detail.
<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>since</b>	(Optional) Specifies routes updated since this time.
<i>date</i>	Date/time [[CC]YY-][MM-DD-]HH:MM[:SS] e.g., 13-02-01-12:13:13.
<b>until</b>	(Optional) Specifies routes updated until this time.
<b>sal</b>	(Optional) Displays the connected controller Service Abstraction Layer (SAL) routes.
<b>static</b>	(Optional) Displays the static routes.
<b>all</b>	(Optional) When used as an independent option, it displays routes for protocol for backup next hops.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>	When used as a choice under VRF, it displays adjacency entries for all VRFs.
<b>default</b>	Displays a known VRF name.
<b>management</b>	Displays the management interface.

## Defaults

None

## Command Modes

Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display details about IP unicast routes on a virtual Ethernet interface:

```
n1000v# show ip route unicast interface vethernet 1 detail
IP Route Table for VRF "default"
'*' denotes best ucast next-hop
***' denotes best mcast next-hop
'[x/y]' denotes [preference/metric]

0.0.0.0/32, ubest/mbest: 1/0
    *via Null0, [220/0], 13:10:45, broadcast, discard
127.0.0.0/8, ubest/mbest: 1/0
    *via Null0, [220/0], 13:10:45, broadcast, discard
255.255.255.255/32, ubest/mbest: 1/0
    *via sup-eth1, [0/0], 13:10:19, broadcast
```

Related Commands	Command	Description
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays the IP routing information.
	<b>show ip static-route</b>	Displays the IP configured static routes.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.

# show ip route unicast rpf

To display IP route reverse path forwarding (RPF) information for a unicast source, use the **show ip route unicast rpf** command.

```
show ip route unicast rpf [route | am | broadcast | detail | direct | interface { control if_num |
ethernet slot/chassis_num / port/slot_num [. port_num] | port-channel port_chan_num [.
sub_if_num] | vethernet vethernet_num } | local | mstatic | netflow | next-hop
next_ip_address [detail | summary | updated [detail | since date [detail | summary | until
date [detail | summary]]]] | sal | static | updated [detail | since date [detail | summary | until
date [detail | summary]]]] [all] [detail] [interface { control if_num | ethernet
slot/chassis_num / port/slot_num [. port_num] | port-channel port_chan_num [. sub_if_num] |
vethernet vethernet_num } ] [next-hop next_ip_address [detail | summary | updated [detail |
since date [detail | summary | until date [detail | summary]]]]] [summary] [updated [detail
| since date [detail | summary | until date [detail | summary]]]]] [vrf { vrf_name | all | default
| management }]
```

## Syntax Description

<i>route</i>	(Optional) Specifies an IP route in one of the following formats: <ul style="list-style-type: none"> <li>• Single route longest match lookup A.B.C.D or WORD</li> <li>• Single exact match route A.B.C.D/LEN</li> </ul>
<b>am</b>	(Optional) Displays the adjacency manager routes.
<b>broadcast</b>	(Optional) Displays the connected broadcast routes.
<b>direct</b>	(Optional) Displays the connected direct routes.
<b>detail</b>	(Optional) Displays routes in full detail.
<b>interface</b>	(Optional) Specifies the routes with this output interface.
<b>control</b>	Specifies the control interface.
<i>if_num</i>	Control interface number. The only valid value is 0.
<b>ethernet</b>	Specifies an Ethernet IEEE 802.3z interface.
<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.
/	Slash separator.
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
.	(Optional) Specifies the subinterface separator (dot .)
<i>port_num</i>	Port number. The range is from 1 to 64.
<b>port-channel</b>	Specifies a port channel interface.
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.
<b>vethernet</b>	Specifies a virtual Ethernet interface.
<i>vethernet_num</i>	Virtual Ethernet number. The range is from 1 to 1048575.
<b>local</b>	(Optional) Displays connected local routes.
<b>mstatic</b>	(Optional) Displays the mstatic routes.
<b>netflow</b>	(Optional) Displays routes that are owned by NetFlow.
<b>next-hop</b>	(Optional) Specifies routes with this next hop only.
<i>next_ip_address</i>	Next hop IP address in the format A.B.C.D.

<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>since</b>	(Optional) Specifies routes updated since this time.
<i>date</i>	Date/time [[CC]YY-][MM-DD-]HH:MM[:SS] e.g., 13-02-01-12:13:13.
<b>until</b>	(Optional) Specifies routes updated until this time.
<b>sal</b>	(Optional) Displays the connected controller Service Abstraction Layer (SAL) routes.
<b>static</b>	(Optional) Displays the static routes.
<b>all</b>	(Optional) As an individual option, it displays routes for protocol for backup next hops.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>	When used as a choice under VRF, it displays adjacency entries for all VRFs.
<b>default</b>	Displays a known VRF name.
<b>management</b>	Displays the management interface.

**Defaults** Displays IP route RPF unicast information.

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display detailed information about RPF IP routes for a unicast source:

```
n1000v# show ip route unicast rpf detail
IP Route Table for VRF "default", RPF for multicast source
'*' denotes best ucast next-hop
***' denotes best mcast next-hop
'[x/y]' denotes [preference/metric]

0.0.0.0/32, ubest/mbest: 1/0
    *via Null0, [220/0], 13:11:52, broadcast, discard
127.0.0.0/8, ubest/mbest: 1/0
    *via Null0, [220/0], 13:11:52, broadcast, discard
255.255.255.255/32, ubest/mbest: 1/0
    *via sup-eth1, [0/0], 13:11:26, broadcast
```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing information.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip route updated

To display IP routes filtered by last updated time, use the **show ip route updated** command.

**show ip route updated** [**am** | **broadcast** | **detail** | **direct** | **local** | **mstatic** | **netflow** | **next-hop** | **sal** | **since** | **static** | **summary** | **until** | **vrf**]

## Syntax Description

<b>am</b>	(Optional) Displays the adjacency manager routes.
<b>broadcast</b>	(Optional) Displays the connected broadcast routes.
<b>detail</b>	(Optional) Displays routes in full detail.
<b>direct</b>	(Optional) Displays the connected direct routes.
<b>local</b>	(Optional) Displays connected local routes.
<b>mstatic</b>	(Optional) Displays the mstatic routes.
<b>netflow</b>	(Optional) Displays routes that are owned by NetFlow.
<b>next-hop</b>	(Optional) Displays routes with this next hop only.
<b>sal</b>	(Optional) Displays the connected controller Service Abstraction Layer (SAL) routes.
<b>since</b>	(Optional) Displays routes updated since this time.
<b>static</b>	(Optional) Displays the static routes.
<b>summary</b>	(Optional) Displays route counts.
<b>until</b>	(Optional) Specifies routes updated until this time.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.

## Defaults

Displays IP routes filtered by last updated time.

## Command Modes

Any

## Supported User Roles

network-admin  
network-operator

## Command History

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

## Usage Guidelines

Following any one of the above commands with a space, then a question mark (?) will bring-up menus of additional arguments or keywords. If the menu contains a carriage return <cr>, with or without additional options, the command may be terminated at that level or, if they exist, one of the options may be chosen.



**Examples**

This example shows how to check for command branches under the **ip route updated** keywords:

```
nexus1000v# show ip route updated ?
<CR>
>          Redirect it to a file
>>         Redirect it to a file in append mode
am         Display routes owned by adjacency manager
broadcast  Display connected routes owned by broadcast
detail     Display routes in full detail
direct     Display connected routes owned by direct
interface  Display routes with this output interface only
local      Display connected routes owned by local
mstatic    Display routes owned by mstatic
netflow    Display routes owned by netflow
next-hop   Display routes with this next-hop only
sal        Display connected routes owned by sal
since      Display those routes updated since this time
static     Display routes owned by static
summary    Display route counts
until      Display those routes updated until this time
vrf        Display per-VRF information
|          Pipe command output to filter
```

This example shows how to display updated IP per-VRF routes that are owned by the adjacency manager:

```
n1000v# show ip route updated am vrf all
IP Route Table for VRF "management"
'*' denotes best ucast next-hop
 '**' denotes best mcast next-hop
 '[x/y]' denotes [preference/metric]

209.165.200.229/32, ubest/mbest: 1/0, attached
   *via 209.165.200.229, mgmt0, [250/0], 01:05:26, am
209.165.200.230/32, ubest/mbest: 1/0, attached
   *via 209.165.200.230, mgmt0, [250/0], 00:29:00, am
209.165.200.231/32, ubest/mbest: 1/0, attached
   *via 209.165.200.231, mgmt0, [250/0], 01:05:27, am
209.165.200.232/32, ubest/mbest: 1/0, attached
   *via 209.165.200.232, mgmt0, [250/0], 01:05:22, am
```

**Related Commands**

Command	Description
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays the IP routing information.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.
<b>show ip verify</b>	Displays IPSG information.

# show ip route updated interface control

To display IP routes on the control interface that are filtered by last updated time, use the **show ip route updated interface control** command.

```
show ip route updated interface control if_num [am | broadcast | direct | local | mstatic | netflow
| next-hop next_ip_address [detail | summary | updated [detail | since date [detail | summary
| until date [detail | summary]]]] | sal | static | updated [detail | since date [detail | summary
| until date [detail | summary]]]] [all] [detail] [summary] [vrf {vrf_name | all | default |
management}]
```

## Syntax Description

<i>if_num</i>	Control interface number. The only valid value is 0.
<b>am</b>	(Optional) Displays the adjacency manager routes.
<b>broadcast</b>	(Optional) Displays the connected broadcast routes.
<b>direct</b>	(Optional) Displays the connected direct routes.
<b>local</b>	(Optional) Displays connected local routes.
<b>mstatic</b>	(Optional) Displays the mstatic routes.
<b>netflow</b>	(Optional) Displays routes that are owned by NetFlow.
<b>next-hop</b>	(Optional) Specifies routes with this next hop only.
<i>next_ip_address</i>	Next hop IP address in the format A.B.C.D.
<b>detail</b>	(Optional) Displays routes in full detail.
<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>since</b>	(Optional) Specifies routes updated since this time.
<i>date</i>	Date/time [[CC]YY-][MM-DD-]HH:MM[:SS] e.g., 13-02-01-12:13:13.
<b>until</b>	(Optional) Specifies routes updated until this time.
<b>sal</b>	(Optional) Displays the connected controller Service Abstraction Layer (SAL) routes.
<b>static</b>	(Optional) Displays the static routes.
<b>all</b>	(Optional) When used as an independent option, it displays routes for protocol for backup next hops.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>	When used as a choice under VRF, it displays adjacency entries for all VRFs.
<b>default</b>	Displays a known VRF name.
<b>management</b>	Displays the management interface.

## Defaults

None

## Command Modes

Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display detailed information about IP routes on a control interface that are filtered by last updated time:

```
n1000v# show ip route updated interface control 0 detail
IP Route Table for VRF "default"
'*' denotes best ucast next-hop
 '**' denotes best mcast next-hop
 '[x/y]' denotes [preference/metric]

0.0.0.0/32, ubest/mbest: 1/0
    *via Null0, [220/0], 13:14:54, broadcast, discard
127.0.0.0/8, ubest/mbest: 1/0
    *via Null0, [220/0], 13:14:54, broadcast, discard
255.255.255.255/32, ubest/mbest: 1/0
    *via sup-eth1, [0/0], 13:14:28, broadcast
```

Related Commands	Command	Description
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays the IP routing information.
	<b>show ip static-route</b>	Displays the IP configured static routes.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.

# show ip route updated interface ethernet

To display IP routes on an Ethernet interface that are filtered by last updated time, use the **show ip route updated interface ethernet** command.

```
show ip route updated interface ethernet slot/chassis_num / port/slot_num [. port_num] [am |
broadcast | direct | local | mstatic | netflow | next-hop next_ip_address [detail | summary |
updated [detail | since date [detail | summary | until date [detail | summary]]]] | sal | static
| updated [detail | since date [detail | summary | until date [detail | summary]]] [all] [detail]
[summary] [vrf {vrf_name | all | default | management}]
```

## Syntax Description

<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.
<i>/</i>	Slash separator.
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
<i>.</i>	(Optional) Specifies the subinterface separator (dot .)
<i>port_num</i>	Port number. The range is from 1 to 64.
<b>am</b>	(Optional) Displays the adjacency manager routes.
<b>broadcast</b>	(Optional) Displays the connected broadcast routes.
<b>direct</b>	(Optional) Displays the connected direct routes.
<b>local</b>	(Optional) Displays connected local routes.
<b>mstatic</b>	(Optional) Displays the mstatic routes.
<b>netflow</b>	(Optional) Displays routes that are owned by NetFlow.
<b>next-hop</b>	(Optional) Specifies routes with this next hop only.
<i>next_ip_address</i>	Next hop IP address in the format A.B.C.D.
<b>detail</b>	(Optional) Displays routes in full detail.
<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>since</b>	(Optional) Specifies routes updated since this time.
<i>date</i>	Date/time [[CC]YY-][MM-DD-]HH:MM[:SS] e.g., 13-02-01-12:13:13.
<b>until</b>	(Optional) Specifies routes updated until this time.
<b>sal</b>	(Optional) Displays the connected controller Service Abstraction Layer (SAL) routes.
<b>static</b>	(Optional) Displays the static routes.
<b>all</b>	(Optional) When used as an independent option, it displays routes for protocol for backup next hops.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>	When used as a choice under VRF, it displays adjacency entries for all VRFs.
<b>default</b>	Displays a known VRF name.
<b>management</b>	Displays the management interface.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display detailed information about IP routes on an Ethernet interface that are filtered by last updated time:

```
n1000v# show ip route updated interface ethernet 3/2 detail
IP Route Table for VRF "default"
'*' denotes best ucast next-hop
*** denotes best mcast next-hop
'[x/y]' denotes [preference/metric]

0.0.0.0/32, ubest/mbest: 1/0
    *via Null0, [220/0], 13:16:15, broadcast, discard
127.0.0.0/8, ubest/mbest: 1/0
    *via Null0, [220/0], 13:16:15, broadcast, discard
255.255.255.255/32, ubest/mbest: 1/0
    *via sup-eth1, [0/0], 13:15:49, broadcast
```

Related Commands	Command	Description
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays the IP routing information.
	<b>show ip static-route</b>	Displays the IP configured static routes.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.

# show ip route updated interface port-channel

To display IP routes on a port channel interface that are filtered by last updated time, use the **show ip route updated interface port-channel** command.

```
show ip route updated interface port-channel port_chan_num [. sub_if_num] [am | broadcast |
direct | local | mstatic | netflow | next-hop next_ip_address [detail | summary | updated
[detail | since date [detail | summary | until date [detail | summary]]]] | sal | static | [updated
[detail | since date [detail | summary | until date [detail | summary]]]] [all] [detail]
[summary] [vrf {vrf_name | all | default | management}]
```

## Syntax Description

<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
.	(Optional) Specifies the subinterface separator (dot .)
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.
<b>am</b>	(Optional) Displays the adjacency manager routes.
<b>broadcast</b>	(Optional) Displays the connected broadcast routes.
<b>direct</b>	(Optional) Displays the connected direct routes.
<b>local</b>	(Optional) Displays connected local routes.
<b>mstatic</b>	(Optional) Displays the mstatic routes.
<b>netflow</b>	(Optional) Displays routes that are owned by NetFlow.
<b>next-hop</b>	(Optional) Specifies routes with this next hop only.
<i>next_ip_address</i>	Next hop IP address in the format A.B.C.D.
<b>detail</b>	(Optional) Displays routes in full detail.
<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>since</b>	(Optional) Specifies routes updated since this time.
<i>date</i>	Date/time [[CC]YY-][MM-DD-]HH:MM[:SS] e.g., 13-02-01-12:13:13.
<b>until</b>	(Optional) Specifies routes updated until this time.
<b>sal</b>	(Optional) Displays the connected controller Service Abstraction Layer (SAL) routes.
<b>static</b>	(Optional) Displays the static routes.
<b>all</b>	(Optional) When used as an independent option, it displays routes for protocol for backup next hops.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>	When used as a choice under VRF, it displays adjacency entries for all VRFs.
<b>default</b>	Displays a known VRF name.
<b>management</b>	Displays the management interface.

## Defaults

None

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display detailed information about IP routes on the port channel 1 interface that are filtered by last updated time:

```
n1000v# show ip route updated interface port-channel 1 detail
IP Route Table for VRF "default"
'*' denotes best ucast next-hop
 '**' denotes best mcast next-hop
 '[x/y]' denotes [preference/metric]

0.0.0.0/32, ubest/mbest: 1/0
    *via Null0, [220/0], 13:23:47, broadcast, discard
127.0.0.0/8, ubest/mbest: 1/0
    *via Null0, [220/0], 13:23:47, broadcast, discard
255.255.255.255/32, ubest/mbest: 1/0
    *via sup-eth1, [0/0], 13:23:21, broadcast
```

Related Commands	Command	Description
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays the IP routing information.
	<b>show ip static-route</b>	Displays the IP configured static routes.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.

# show ip route updated interface vethernet

To display IP routes on a virtual Ethernet interface that are filtered by last updated time, use the **show ip route updated interface vethernet** command.

```
show ip route updated interface vethernet vethernet_num [am | broadcast | direct | local |
mstatic | netflow | next-hop next_ip_address [detail | summary | updated [detail | since date
[detail | summary | until date [detail | summary]]] | sal | static | [updated [detail | since date
[detail | summary | until date [detail | summary]]] | [all] [detail] [summary] [vrf {vrf_name
| all | default | management}]
```

## Syntax Description

<i>vethernet_num</i>	Virtual Ethernet number. The range is from 1 to 1048575.
<b>am</b>	(Optional) Displays adjacency manager (AM) routes.
<b>broadcast</b>	(Optional) Displays the connected broadcast routes.
<b>direct</b>	(Optional) Displays the connected direct routes.
<b>local</b>	(Optional) Displays connected local routes.
<b>mstatic</b>	(Optional) Displays the mstatic routes.
<b>netflow</b>	(Optional) Displays routes that are owned by NetFlow.
<b>next-hop</b>	(Optional) Specifies routes with this next hop only.
<i>next_ip_address</i>	Next hop IP address in the format A.B.C.D.
<b>detail</b>	(Optional) Displays routes in full detail.
<b>summary</b>	(Optional) Displays route counts.
<b>updated</b>	(Optional) Displays routes filtered by the last updated time.
<b>since</b>	(Optional) Specifies routes updated since this time.
<i>date</i>	Date/time [[CC]YY-][MM-DD-]HH:MM[:SS] e.g., 13-02-01-12:13:13.
<b>until</b>	(Optional) Specifies routes updated until this time.
<b>sal</b>	(Optional) Displays the connected controller Service Abstraction Layer (SAL) routes.
<b>static</b>	(Optional) Displays the static routes.
<b>all</b>	(Optional) When used as an independent option, it displays routes for protocol for backup next hops.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>	When used as a choice under VRF, it displays adjacency entries for all VRFs.
<b>default</b>	Displays a known VRF name.
<b>management</b>	Displays the management interface.

## Defaults

None

## Command Modes

Any



**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display detailed information about IP routes on a virtual Ethernet interface that are filtered by the last updated time:

```
n1000v# show ip route updated interface vethernet 1 detail
show ip route updated interface vethernet 1 detail
IP Route Table for VRF "default"
'*' denotes best ucast next-hop
'***' denotes best mcast next-hop
'[x/y]' denotes [preference/metric]

0.0.0.0/32, ubest/mbest: 1/0
    *via Null0, [220/0], 13:24:49, broadcast, discard
127.0.0.0/8, ubest/mbest: 1/0
    *via Null0, [220/0], 13:24:49, broadcast, discard
255.255.255.255/32, ubest/mbest: 1/0
    *via sup-eth1, [0/0], 13:24:23, broadcast
```

Related Commands	Command	Description
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays the IP routing information.
	<b>show ip static-route</b>	Displays the IP configured static routes.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.

# show ip static-route

To display IP configured static routes, use the **show ip static-route** command.

```
show ip static-route [vrf {vrf_name | all | default | management}]
```

Syntax Description		
	<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
	<b>all</b>	Displays adjacency entries for all VRFs.
	<b>default</b>	Displays a known VRF name.
	<b>management</b>	Displays the management interface.

**Defaults** Displays IP configured static routes.

**Command Modes** Any

**SupportedUserRoles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display IP configured static routes:

```
n1000v# show ip static-route
```

Related Commands	Command	Description
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays the IP routing table.
	<b>show ip traffic</b>	Displays the IP traffic statistics.
	<b>show ip verify</b>	Displays IPSG information.

# show ip traffic

To display IP traffic statistics, use the **show ip traffic** command.

## show ip traffic

Syntax Description	detail	(Optional) Displays detailed IP traffic statistics.
--------------------	--------	---

Defaults	Displays IP traffic statistics.
----------	---------------------------------

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

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

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display IP traffic statistics:

```
n1000v# show ip traffic

IP Software Processed Traffic Statistics
-----
Transmission and reception:
  Packets received: 1268, sent: 28832, consumed: 522,
  Forwarded, unicast: 0, multicast: 0, Label: 0
Opts:
  end: 0, nop: 0, basic security: 0, loose source route: 0
  timestamp: 0, record route: 0
  strict source route: 0, alert: 0,
  other: 0
Errors:
  Bad checksum: 0, packet too small: 0, bad version: 0,
  Bad header length: 0, bad packet length: 0, bad destination: 0,
  Bad ttl: 0, could not forward: 516, no buffer dropped: 0,
  Bad encapsulation: 4, no route: 4, non-existent protocol: 0
  Bad options: 0
  Stateful Restart Recovery: 0
  MBUF pull up fail: 0
  Ingress Drop (ifmgr init): 0,
  Ingress Drop (invalid filter): 0
  Ingress Drop (Invalid L2 msg): 0
  Stateful Restart Recovery: 0, MBUF pull up fail: 0
  Bad context id: 0, rpf drops: 0
  Ingress Drop (ifmgr init): 0,
  Ingress Drop (invalid filter): 0
  Ingress Drop (Invalid L2 msg): 0
```

```

ACL Filter Drops :
  Ingress - 0
  Egress - 0
  Directed Broadcast - 0
Fragmentation/reassembly:
  Fragments received: 0, fragments sent: 0, fragments created: 0,
  Fragments dropped: 0, packets with DF: 0, packets reassembled: 0,
  Fragments timed out: 0

ICMP Software Processed Traffic Statistics
-----
Transmission:
  Redirect: 0, unreachable: 0, echo request: 0, echo reply: 0,
  Mask request: 0, mask reply: 0, info request: 0, info reply: 0,
  Parameter problem: 0, source quench: 0, timestamp: 0,
  Timestamp response: 0, time exceeded: 0,
  Irdp solicitation: 0, irdp advertisement: 0
  Output Drops - badlen: 0, encap fail: 0, xmit fail: 0
  ICMP originate Req: 24, Redirects Originate Req: 0
  Originate deny - Resource fail: 0, short ip: 0, icmp: 0, others: 24
Reception:
  Redirect: 0, unreachable: 0, echo request: 0, echo reply: 0,
  Mask request: 0, mask reply: 0, info request: 0, info reply: 0,
  Parameter problem: 0, source quench: 0, timestamp: 0,
  Timestamp response: 0, time exceeded: 0,
  Irdp solicitation: 0, irdp advertisement: 0,
  Format error: 0, checksum error: 0
  Lisp processed: 0, No clients: 0: Consumed: 0
  Replies: 0, Reply drops - bad addr: 0, inactive addr: 0

Statistics last reset: never

RFC 4293: IP Software Processed Traffic Statistics
-----
Reception
  Pkts rcv: 1351, Bytes rcv: 121317,
  inhdrerrors: 0, innoerrors: 0, inaddrerrors: 0,
  inunknownprotos: 0, intruncatedpkts: 0, inforwdgrams: 524,
  reasmreqds: 0, reasmoks: 0, reasmfails: 0,
  indiscards: 0, indelivers: 609,
  inmcastpkts: 218, inmcastbytes: 11218,
  inbcastpkts: 540,
Transmission
  outrequets: 29617, outnoroutes: 4, outforwdgrams: 0,
  outdiscards: 0, outfragreqds: 0, outfragoks: 0,
  outfragfails: 0, outfragcreates: 0, outtransmits: 29609,
  bytes sent: 29253974, outmcastpkts: 0, outmcastbytes: 0,
  outbcastpkts: 0, outbcastbytes: 0

```

**Related Commands**

Command	Description
<b>deny</b>	Creates an IPv4 ACL rule that denies traffic matching its conditions.
<b>permit</b>	Creates an IPv4 ACL rule that permits traffic matching its conditions.
<b>show ip access-lists</b>	Displays the IP ACLs.
<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
<b>show ip interface</b>	Displays IP-related interface information.
<b>show ip internal</b>	Displays internal IP information.

<b>Command</b>	<b>Description</b>
<b>show ip logging</b>	Displays the IP policy logging table.
<b>show ip process</b>	Displays IP global information.
<b>show ip route</b>	Displays an IP routing table.
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip verify</b>	Displays IPSG information.

# show ip verify source

To verify IP Source Guard (IPSG) information, use the **show ip verify source** command.

```
show ip verify source [interface { vethernet vethernet_num}]
```

Syntax Description	Parameter	Description
	<b>interface</b>	(Optional) Specifies interface information.
	<b>vethernet</b>	Specifies a virtual Ethernet interface.
	<i>vethernet_num</i>	Virtual Ethernet number. The range is from 1 to 1048575.

**Defaults** Displays IPSG information.

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to verify IPSG information:

```
n1000v# show ip verify source
IP source guard is enabled on the following interfaces:
-----
```

```
IP source guard operational entries:
-----
```

```
Interface          Filter-mode          IP-address          Mac-address          Vlan
-----          -
```

Related Commands	Command	Description
	<b>show ip access-lists</b>	Displays the IP ACLs.
	<b>show ip igmp snooping</b>	Displays the IP IGMP snooping information.
	<b>show ip interface</b>	Displays IP-related interface information.
	<b>show ip internal</b>	Displays internal IP information.
	<b>show ip logging</b>	Displays the IP policy logging table.
	<b>show ip process</b>	Displays IP global information.
	<b>show ip route</b>	Displays an IP routing table.

<b>Command</b>	<b>Description</b>
<b>show ip static-route</b>	Displays the IP configured static routes.
<b>show ip traffic</b>	Displays the IP traffic statistics.

# show l2 mroute

To display information about the Layer 2 multicast route database, use the **show l2 mroute** command.

```
show l2 mroute [flood [hex | resolved [hex]] | group {ipv4_group_add | mac_group_add} [hex | resolved [hex]] | hex | omf [hex | resolved [hex]] | resolved [hex] | source {ipv4_source_add | mac_source_add} [group {ipv4_group_add | mac_group_add} [hex | resolved [hex]]] | summary | vdc-omf [resolved] | vlan vlan_id [flood [hex | resolved [hex]] | group {ipv4_group_add | mac_group_add} [hex | resolved [hex]] | hex | omf [hex | resolved [hex]] | resolved [hex] | source {ipv4_source_add | mac_source_add} [group {ipv4_group_add | mac_group_add}]] [hex | resolved [hex]]]
```

Syntax	Description
<b>flood</b>	(Optional) Displays the VLAN flood route.
<b>hex</b>	(Optional) Displays the switch IDs in hex.
<b>resolved</b>	(Optional) Displays the resolve switch ID next hops into the underlying interfaces.
<b>group</b>	(Optional) Specifies the group address.
<i>ipv4_group_add</i>	IPv4 group address in the format A.B.C.D.
<i>mac_group_add</i>	MAC group address.
<b>omf</b>	(Optional) Displays the catch-all entries consisting of multicast route ports.
<b>source</b>	(Optional) Specifies a source IP address.
<i>ipv4_source_add</i>	IPv4 source address in the format A.B.C.D.
<i>mac_source_add</i>	MAC source address.
<b>summary</b>	(Optional) Displays the multicast route database summary.
<b>vdc-omf</b>	(Optional) Displays the virtual device context (VDC) optimized multicast flooding (OMF) route.
<b>vlan</b>	(Optional) Specifies a VLAN.
<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5, 7-19.

**Defaults** Displays information about the Layer 2 multicast route database.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.



**Examples**

This example shows how to display information about the Layer 2 multicast route:

```
n1000v# show l2 mroute
```

```
Found total 0 route(s)
```

# show lacp counters

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

```
show lacp counters [interface {port-channel port_chan_num [. sub_if_num]}]
```

Syntax Description	Parameter	Description
	<b>interface</b>	(Optional) Specifies an interface.
	<b>port-channel</b>	Specifies the LACP port channel interface.
	<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
	.	(Optional) Specifies the subinterface separator (dot .)
	<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.

**Defaults** Displays information about the LACP counters.

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the LACP counters:

```
n1000v# show lacp counters
          LACPDU          Marker      Marker Response  LACPDU
Port      Sent   Recv   Sent   Recv   Sent   Recv   Pkts Err
-----
port-channel1
Ethernet4/4      2604  2605    0     0     0     0     0
Ethernet4/3      2604  2604    0     0     0     0     0
Ethernet4/6      2597  2596    0     0     0     0     0
Ethernet4/5      2597  2596    0     0     0     0     0

port-channel2
Ethernet4/2      2597  2596    0     0     0     0     0
Ethernet4/1      2597  2596    0     0     0     0     0

port-channel4
Ethernet3/2      2598  2598    0     0     0     0     0
Ethernet3/1      2598  2598    0     0     0     0     0

port-channel6
Ethernet3/5      2606  2607    0     0     0     0     0
Ethernet3/6      2598  2598    0     0     0     0     0
Ethernet3/4      2598  2598    0     0     0     0     0
```

```
Ethernet3/3          2598  2598    0    0    0    0    0
```

This example shows how to display information about the LACP counters for port channel 1:

```
n1000v# show lacp counters interface port-channel 1
LACPDUs      Marker      Marker Response  LACPDUs
Port         Sent       Recv      Sent   Recv    Sent   Recv    Pkts Err
-----
port-channel1
Ethernet4/4   2606     2607      0      0      0      0      0
Ethernet4/3   2606     2606      0      0      0      0      0
Ethernet4/6   2599     2599      0      0      0      0      0
Ethernet4/5   2599     2599      0      0      0      0      0
```

#### Related Commands

Command	Description
<code>clear lacp counter</code>	Clears statistics for all LACP group interfaces.

# show lacp interface

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

```
show lacp interface [ethernet slot/chassis_num / port/slot_num [. port_num]]
```

Syntax Description		
<b>ethernet</b>	(Optional) Specifies an Ethernet IEEE 802.3z interface.	
<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.	
<i>/</i>	Slash separator.	
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.	
<i>.</i>	(Optional) Specifies the subinterface separator (dot .)	
<i>port_num</i>	Port number. The range is from 1 to 64.	

**Defaults** Displays information about the LACP interface.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about an LACP Ethernet interface:

```
n1000v# show lacp interface ethernet 3/2
Interface Ethernet3/2 is up
  Channel group is 4 port channel is Po4
  PDUs sent: 2608
  PDUs rcvd: 2607
  Markers sent: 0
  Markers rcvd: 0
  Marker response sent: 0
  Marker response rcvd: 0
  Unknown packets rcvd: 0
  Illegal packets rcvd: 0
Lag Id: [[(00:05:73:d8:ef:01, 32768, 60, 0x8000, 0x105), (00:05:73:d8:ef:01, 32768, 60,
0x8000, 0x105)]]
Operational as aggregated link since
Local Port: Eth3/2   MAC Address= 2-0-c-0-0-3c
  System Identifier=0x8000,2-0-c-0-0-3c
  Port Identifier=0x8000,0x302
Operational key=3
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=(Ac-1:To-0:Ag-1:Sy-1:Co-1:Di-1:De-0:Ex-0)
Actor Oper State=(Ac-1:To-0:Ag-1:Sy-1:Co-1:Di-1:De-0:Ex-0)
Neighbor: 1/5
  MAC Address= 0-5-73-d8-ef-1
  System Identifier=0x8000,0-5-73-d8-ef-1
  Port Identifier=0x8000,0x105
  Operational key=60
  LACP_Activity=active
  LACP_Timeout=Long Timeout (30s)
  Synchronization=IN_SYNC
  Collecting=true
  Distributing=true
Partner Admin State=(Ac-1:To-0:Ag-1:Sy-1:Co-1:Di-1:De-0:Ex-0)
Partner Oper State=(Ac-1:To-0:Ag-1:Sy-1:Co-1:Di-1:De-0:Ex-0)

```

**Related Commands**

Command	Description
<b>clear lacp counter</b>	Clears statistics for all LACP group interfaces.

# show lacp internal

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

```
show lacp internal { event-history { errors | global | ifindex interface_index | interface ethernet
slot/chassis_num / port/slot_num [. port_num] | lock | msgs } | info [all | global | ifindex
interface_index [detail] | interface ethernet slot/chassis_num / port/slot_num [. port_num] |
log | pc-db interface port-channel port_chan_num [. sub_if_num] | pss] | mem-stats [detail]
```

Syntax	Description
<b>event-history</b>	Displays the LACP event history logs.
<b>errors</b>	Displays the LACP error logs.
<b>global</b>	Displays global event transitions.
<b>ifindex</b>	Specifies the LACP interface index logs.
<i>interface_index</i>	Interface index. The range is from 0 to 2147483647.
<b>interface</b>	Displays a LACP interface.
<b>ethernet</b>	Specifies an Ethernet IEEE 802.3z interface.
<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.
<i>/</i>	Slash separator.
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
<i>.</i>	(Optional) Specifies the subinterface separator (dot .)
<i>port_num</i>	Port number. The range is from 1 to 64.
<b>lock</b>	Displays the LACP lock logs.
<b>msgs</b>	Displays the LACP message logs.
<b>info</b>	Displays internal LACP information.
<b>all</b>	(Optional) Displays all the internal information.
<b>detail</b>	(Optional) Displays detailed LACP information
<b>log</b>	Displays the LACP information log.
<b>pc-db</b>	Displays the LACP port channel database.D
<b>interface</b>	Displays a LACP interface.
<b>port-channel</b>	Specifies a LACP port channel interface.
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.
<b>pss</b>	Displays the LACP global persistent storage service (PSS) information.
<b>mem-stats</b>	Displays LACP memory allocation statistics.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

### Command History

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

### Examples

This example shows how to display information about the internal LACP event history error messages:

```
n1000v# # show lacp internal event-history errors
```

- 1) Event:E\_DEBUG, length:85, at 630000 usecs after Thu Apr 18 08:33:54 2013  
[102] lacp\_vem\_lc\_offline\_notify\_handler(886): Failed to get IF OBJ for IFDX 25014040
- 2) Event:E\_DEBUG, length:85, at 630000 usecs after Thu Apr 18 08:33:54 2013  
[102] lacp\_vem\_lc\_offline\_notify\_handler(886): Failed to get IF OBJ for IFDX 25014000
- 3) Event:E\_DEBUG, length:85, at 790000 usecs after Thu Apr 18 08:21:49 2013  
[102] lacp\_vem\_lc\_offline\_notify\_handler(886): Failed to get IF OBJ for IFDX 25014040
- 4) Event:E\_DEBUG, length:85, at 600000 usecs after Thu Apr 18 08:17:58 2013  
[102] lacp\_vem\_lc\_offline\_notify\_handler(886): Failed to get IF OBJ for IFDX 25014040
- 5) Event:E\_DEBUG, length:85, at 600000 usecs after Thu Apr 18 08:17:58 2013  
[102] lacp\_vem\_lc\_offline\_notify\_handler(886): Failed to get IF OBJ for IFDX 25014000  
...

### Related Commands

Command	Description
<b>clear lacp counter</b>	Clears statistics for all LACP group interfaces.

# show lacp neighbor

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

```
show lacp neighbor [interface {port-channel port_chan_num [. sub_if_num]]}
```

## Syntax Description

<b>interface</b>	(Optional) Displays an interface.
<b>port-channel</b>	Specifies the LACP port channel interface.
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
.	(Optional) Specifies the subinterface separator (dot .)
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.

## Defaults

Displays information about the LACP interface neighbor.

## Command Modes

Any

## Supported User Roles

network-admin

## Command History

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

## Examples

This example shows how to display information about the LACP port channel 1 neighbor:

```
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
Partner's information
Port      Partner          Partner          Partner
Eth4/4    System ID        Port Number      Age              Flags
          32768,0-5-73-d6-c9-1  0x210b           78890            SA
          LACP Partner      Partner
          Port Priority    Oper Key         Port State
          32768             0x3b             0x3d

Partner's information
Port      Partner          Partner          Partner
Eth4/3    System ID        Port Number      Age              Flags
          32768,0-5-73-d6-c9-1  0x2108           78890            SA
          LACP Partner      Partner
          Port Priority    Oper Key         Port State
          32768             0x3b             0x3d

Partner's information
```



```

Port          Partner          Partner          Age          Partner
Eth4/6       System ID       Port Number      78994       Flags
              32768,0-5-73-d6-c9-1  0x210a          SA
              LACP Partner     Partner          Partner
              Port Priority    Oper Key         Port State
              32768           0x3b            0x3d
...

```

**Related Commands**

Command	Description
<b>clear lacp counter</b>	Clears statistics for all LACP group interfaces.

# show lacp offload status

To display information about the Link Aggregation Control Protocol (LACP) offload status, 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
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the LACP offload status:

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

Related Commands	Command	Description
	<b>clear lacp counter</b>	Clears statistics for all LACP group interfaces.

# show lacp port-channel

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

```
show lacp port-channel [interface {port-channel port_chan_num [. sub_if_num]}]
```

Syntax Description	interface	(Optional) Specifies an interface.
	port_chan_num	Port channel number. The range is from 1 to 4096.
	.	(Optional) Specifies the subinterface separator (dot .)
	sub_if_num	Subinterface number. The range is from 1 to 4093.

**Defaults** Displays information about the LACP port channel interfaces.

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

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

```
n1000v# # show lacp port-channel
port-channel1
  System Mac=2-0-c-0-0-3c
  Local System Identifier=0x8000,2-0-c-0-0-3c
  Admin key=0x0
  Operational key=0x0
  Partner System Identifier=0x8000,0-5-73-d6-c9-1
  Operational key=0x3b
  Member Port List=3-6
port-channel2
  System Mac=2-0-c-0-0-3c
  Local System Identifier=0x8000,2-0-c-0-0-3c
  Admin key=0x1
  Operational key=0x1
  Partner System Identifier=0x8000,0-5-73-d6-c9-1
  Operational key=0x3c
  Member Port List=1-2
port-channel4
  System Mac=2-0-c-0-0-3c
  Local System Identifier=0x8000,2-0-c-0-0-3c
  Admin key=0x3
  Operational key=0x3
  Partner System Identifier=0x8000,0-5-73-d8-ef-1
```

## ■ show lacp port-channel

```
Operational key=0x3c
Member Port List=1-2
port-channel6
System Mac=2-0-c-0-0-3c
Local System Identifier=0x8000,2-0-c-0-0-3c
Admin key=0x5
Operational key=0x5
Partner System Identifier=0x8000,0-5-73-d8-ef-1
Operational key=0x3b
```

---

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>clear lacp counter</b>	Clears statistics for all LACP group interfaces.

---

# show lacp system-identifier

To display the Link Aggregation Control Protocol (LACP) system identifier, 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
	5.2(1)SK1(1.1)	This command was introduced.

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

```
n1000v# show lacp system-identifier
32768,2-0-c-0-0-3c
```

Related Commands	Command	Description
	<b>clear lacp counter</b>	Clears statistics for all LACP group interfaces.

# show license

To display information about the license, use the **show license** command.

**show license** [**brief** | **default** | **file** *license\_file* | **host-id** | **usage**]

Syntax Description		
<b>brief</b>	(Optional)	Displays a brief list of license files.
<b>default</b>	(Optional)	Displays services using the default license.
<b>file</b>	(Optional)	Displays contents of a license file.
<i>license_file</i>		License file name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>host-id</b>	(Optional)	Displays the license host ID..
<b>usage</b>	(Optional)	Displays the license usage table.

**Defaults** Displays information about the license.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the services using the default license:

```
n1000v# show license default
Feature                                     Default License Count
-----
NEXUS_VSG_SERVICES_PKG                     16
N1KV_MSFT_LAN_SERVICES_PKG                 512
NEXUS_ASA1000V_SERVICES_PKG                16
-----
```

This example shows how to display the license host ID:

```
n1000v# show license host-id
License hostid: VDH=1300095395136032199
```

This example shows how to display the license usage table:

```
n1000v# show license usage
Feature                                     Ins Lic Status Expiry Date Comments
-----
NEXUS_VSG_SERVICES_PKG                     No  16  Unused Never      -
```

```

N1KV_MSFT_LAN_SERVICES_PKG    No   512   Unused Never      -
NEXUS_ASA1000V_SERVICES_PKG  No   16    Unused 09 Apr 2013 -
-----

```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>clear license</b>	Uninstalls a license file from a VSM, or uninstalls an evaluation license before installing a permanent license.
<b>install license bootflash:</b>	Installs license files on a VSM.
<b>svs license transfer src-vem</b>	Transfers licenses from a source VEM to another VEM, or to the VSM pool of available licenses.
<b>svs license volatile</b>	Enables volatile licenses so that, whenever a VEM is taken out of service, its licenses are returned to the VSM pool of available licenses.

# show line

To display the parameters of a terminal line, use the **show line** command.

**show line** [**com1** | **console** [**connected**]] [**user-input-string**]

Syntax Description	
<b>com1</b>	(Optional) Displays auxiliary line configurations.
<b>console</b>	(Optional) Displays console line configurations.
<b>connected</b>	(Optional) Displays whether the line is currently connected.
<b>user-input-string</b>	(Optional) Displays the user-input initialization string.

**Defaults** Displays the parameters of a terminal line.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the parameters of a terminal line:

```
n1000v# show line
line Console:
  Speed:          9600 baud
  Databits:       8 bits per byte
  Stopbits:       1 bit(s)
  Parity:         none
  Modem In:       Disable
  Modem Init-String -
                  default : ATE0Q1&D2&C1S0=1\015

line Aux:
  Speed:          9600 baud
  Databits:       8 bits per byte
  Stopbits:       1 bit(s)
  Parity:         none
  Modem In:       Disable
  Modem Init-String -
                  default : ATE0Q1&D2&C1S0=1\015
  Hardware Flowcontrol: ON
```

This example shows how to display the parameters of auxiliary lines:

```
n1000v# show line com1
line Aux:
```



```
Speed:          9600 baud
Databits:       8 bits per byte
Stopbits:       1 bit(s)
Parity:         none
Modem In:       Disable
Modem Init-String -
                 default : ATE0Q1&D2&C1S0=1\015
Hardware Flowcontrol: ON
```

**Related Commands**

Command	Description
<b>clear line</b>	Ends a session on a specified terminal.
<b>line console</b>	Enters console configuration mode.

# show logging

To display information about the system logs, use the **show logging** command.

```
show logging [console | info | internal info | ip { access-list { cache module_num | internal
(errors | event-history { errors | msgs } | info global | mem-stats [detail] | msgs } | status } } |
last num_lines | logfile [duration hh:mm:ss | last-index | start-seqn start_seq | start-time year
month day hh:mm:ss] | module | monitor | pending | pending-diff | server | session { status } |
status | timestamp]
```

## Syntax Description

<b>console</b>	(Optional) Displays the console logging configuration.
<b>info</b>	(Optional) Displays the logging configuration.
<b>internal info</b>	(Optional) Displays the internal logging information.
<b>ip</b>	(Optional) Displays the IP configuration.
<b>access-list</b>	Displays the access control list (ACL) logging flows on a module.
<b>cache</b>	Specifies the logging cache.
<b>module</b>	Specifies the module (line card) logging configuration.
<i>module_num</i>	Module number. The range is from 3 to 66.
<b>internal</b>	Displays the internal ACL log information.
<b>errors</b>	Displays the ACL error logs.
<b>event-history</b>	Displays various ACL event logs.
<b>msgs</b>	Displays various ACL message logs.
<b>info global</b>	Displays the ACL log global information.
<b>mem-stats</b>	Displays the ACL memory allocation statistics.
<b>detail</b>	(Optional) Displays the F_Port Server detailed memory statistics.
<b>status</b>	Displays the logging status; optional when used as an independent command.
<b>last</b>	(Optional) Specifies the last lines of a logfile.
<i>num_lines</i>	Lines to display. The range is from 1 to 999.
<b>logfile</b>	(Optional) Displays the contents of the logfile.
<b>duration</b>	(Optional) Specifies the messages from the logfile of the last given duration.
<i>hh:mm:ss</i>	Duration time in hours and minutes. The times entered must be in 24-hour format.
<b>last-index</b>	(Optional) Displays the sequence number of the last message in logfile.
<b>start-seqn</b>	(Optional) Specifies logfile messages from a given start sequence number.
<i>start_seq</i>	Start sequence number. The range is from 0 to 2147483647.
<b>start-time</b>	(Optional) Specifies logfile messages from a given start time.
<i>year</i>	Year in YYYY format.
<i>month</i>	Month as Jan, Feb, Mar,.. The month is a maximum of three characters.
<i>day</i>	Day in DD format.
<b>monitor</b>	(Optional) Displays the monitor logging configuration.
<b>pending</b>	(Optional) Displays the server address pending configuration.

<b>pending-diff</b>	(Optional) Displays the server address differences between the pending and configuration databases.
<b>server</b>	(Optional) Displays the server logging configuration.
<b>session</b>	(Optional) Displays the logging session status.
<b>timestamp</b>	(Optional) Displays the logging timestamp configuration.

**Defaults**

Displays the system logs.

**Command Modes**

Any

**SupportedUserRoles**

network-admin

**Command History**

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

**Examples**

This example shows how to display information about system logs:

```
n1000v# show logging
Logging console:          enabled (Severity: critical)
Logging monitor:         enabled (Severity: notifications)
Logging linecard:        enabled (Severity: notifications)
Logging fex:             enabled (Severity: notifications)
Logging timestamp:       Seconds
Logging server:          disabled
Logging logfile:         enabled
                        Name - messages: Severity - notifications Size - 4194304
```

Facility	Default Severity	Current Session Severity
aaa	3	3
aclcomp	2	2
aclog	2	2
aclmgr	3	3
auth	0	0
authpriv	3	3
bootvar	5	5
capability	2	2
capability	2	2
cdp	2	2
cert_enroll	2	2
clis	7	7
confcheck	2	2
cron	3	3
daemon	3	3
eth_port_channel	5	5
ethpm	5	5
evmc	5	5
...		

Related Commands	Command	Description
	<b>clear logging logfile</b>	Clears logging file messages.
	<b>clear logging session</b>	Clears the current logging session.
	<b>logging console</b>	Enables console session logging messages.
	<b>logging event</b>	Logs interface events.
	<b>logging ip access-list cache</b>	Enables ACL logging on all VEMs.
	<b>logging level</b>	Enables message logging.
	<b>logging logfile</b>	Configures the log file used to store system messages.
	<b>logging module</b>	Starts module messages logging.
	<b>logging monitor</b>	Enables the logging of messages to the monitor (terminal line).
	<b>logging server</b>	Designates and configures a remote server for logging system messages.
	<b>logging timestamp</b>	Sets the unit of measure for the timestamp.

# show logging level

To display information about the system logging level, use the **show logging** command.

```
show logging level [aaa | aclog | aclmgr | adjmgr | auth | authpriv | bootvar | capability | cdp |
cert_enroll | clis | core | cron | daemon | ethpm | evmc | evms | feature-mgr | fs-daemon | ftp
| im | ip igmp | ipconf | kernel | l3vm | lacp | licmgr | local0 | local1 | local2 | local3 | local4 |
local5 | local6 | local7 | lpr | m2rib | mail | module | mvsh | netstack | news | nfm | ntp |
platform | plugin | port-channel | port-profilez | radius | redun_mgr | res_mgr | rpm | sal |
scheduler | security | smm | snmpd | spanning-tree | syslog | sysmgr | u6rib | urib | user |
uucp | vem_mgr | vim | vlan_mgr | vmm | vns_agent | vshd]
```

## Syntax Description

<b>aaa</b>	(Optional) Displays the accounting, authorization, and authentication (AAA) logging configuration.
<b>aclog</b>	(Optional) Displays the access control list (ACL) logging configuration.
<b>aclmgr</b>	(Optional) Displays the level for ACL manager syslog messages.
<b>adjmgr</b>	(Optional) Displays the adjacency manager logging configuration.
<b>auth</b>	(Optional) Displays the Authorization System (AS) logging configuration.
<b>authpriv</b>	(Optional) Displays the authorization (private) logging configuration.
<b>bootvar</b>	(Optional) Displays the boot variable logging configuration.
<b>capability</b>	(Optional) Displays the capability logging configuration.
<b>cdp</b>	(Optional) Displays the Cisco Discovery Protocol logging configuration.
<b>cert_enroll</b>	(Optional) Displays the Certificate enrollment logging configuration.
<b>clis</b>	(Optional) Displays the command-line interface (CLI) logging configuration.
<b>core</b>	(Optional) Displays the core daemon logging configuration.
<b>cron</b>	(Optional) Displays the Cron/at facility logging configuration.
<b>daemon</b>	(Optional) Displays the system daemons logging configuration.
<b>ethpm</b>	(Optional) Displays the Ethernet port manager (ETHPM) logging configuration.
<b>evmc</b>	(Optional) Displays the level for EVMC manager syslog messages
<b>evms</b>	(Optional) Displays the level for EVMS manager syslog messages
<b>feature-mgr</b>	(Optional) Displays the feature manager (FM) logging configuration.
<b>fs-daemon</b>	(Optional) Displays the fs-daemon logging configuration.
<b>ftp</b>	(Optional) Displays the File Transfer System (FTP) logging configuration.
<b>im</b>	(Optional) Displays the IM logging configuration.
<b>ip igmp</b>	(Optional) Displays IP Internet Group Management Protocol (IGMP) information.
<b>ipconf</b>	(Optional) Displays the IP configuration logging configuration.
<b>kernel</b>	(Optional) Displays the kernel logging configuration.
<b>l3vm</b>	(Optional) Displays the Layer 3 VM logging configuration.
<b>lacp</b>	(Optional) Displays the Link Aggregation Control Protocol (LACP) logging configuration.
<b>licmgr</b>	(Optional) Displays the licensing logging configuration.
<b>local</b>	(Optional) Displays the local use daemons logging configuration.

<b>lpr</b>	(Optional) Displays the line printer remote (LPR) logging configuration.
<b>m2rib</b>	(Optional) Displays the Multicast 2 Routing Information Base (M2RIB) logging configuration.
<b>mail</b>	(Optional) Displays the mail system logging configuration.
<b>module</b>	(Optional) Displays the module (linecard) manager logging configuration.
<b>mvsh</b>	(Optional) Displays the level for MVSH syslog messages
<b>netstack</b>	(Optional) Displays the Netstack logging configuration.
<b>news</b>	(Optional) Displays the USENET news logging configuration.
<b>nfm</b>	(Optional) Displays the network fault manager (NFM) logging configuration.
<b>ntp</b>	(Optional) Displays the Network Time Protocol (NTP) logging settings.
<b>platform</b>	(Optional) Displays the platform logging configuration.
<b>plugin</b>	(Optional) Displays the plugin logging configuration.
<b>port-channel</b>	(Optional) Displays the port channel logging configuration.
<b>port-profile</b>	(Optional) Displays the syslog level for the port profile.
<b>radius</b>	(Optional) Displays Remote Authentication Dial-In User Service (RADIUS) logging configuration.
<b>redun_mgr</b>	(Optional) Displays redundancy manager logging configuration.
<b>res_mgr</b>	(Optional) Displays res_mgr logging configuration.
<b>rpm</b>	(Optional) Displays the Route Processor Module (RPM) logging configuration.
<b>sal</b>	(Optional) Displays the Service Abstraction Layer (SAL) logging configuration.
<b>scheduler</b>	(Optional) Displays the scheduler logging configuration.
<b>security</b>	(Optional) Displays the security logging configuration.
<b>smm</b>	(Optional) Displays the shared memory manager (SMM) logging configuration.
<b>snmpd</b>	(Optional) Displays the Simple Network Management Protocol (SNMP) logging configuration.
<b>spanning-tree</b>	(Optional) Displays the spanning tree logging configuration.
<b>syslog</b>	(Optional) Displays the internal syslog message logging configuration.
<b>sysmgr</b>	(Optional) Displays the system manager logging configuration.
<b>u6rib</b>	(Optional) Displays the Unicast 6 Routing Information Base (U6RIB) logging configuration.
<b>urib</b>	(Optional) Displays the URIB logging configuration.
<b>user</b>	(Optional) Displays the user process logging configuration.
<b>uucp</b>	(Optional) Displays the Unix-to-Unix copy system logging configuration.
<b>vem_mgr</b>	(Optional) Displays the virtual Ethernet Module (VEM) manager logging configuration.
<b>vim</b>	(Optional) Displays the Virtual Infrastructure Methodology (VIM) logging configuration.
<b>vlan_mgr</b>	(Optional) Displays the VLAN manager logging configuration.
<b>vmm</b>	(Optional) Displays the virtual machine manager (VMM) logging configuration.
<b>vns_agent</b>	(Optional) Displays the VNS agent logging configuration.
<b>vshd</b>	(Optional) Displays the virtual shared hardware device (VSHD) logging configuration.

**Defaults** Displays information about the system logging level.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the Cron/at logs:

```
n1000v# show logging level cron
Facility          Default Severity      Current Session Severity
-----          -
cron              3                      3
0 (emergencies)   1 (alerts)            2 (critical)
3 (errors)        4 (warnings)          5 (notifications)
6 (information)   7 (debugging)
```

Related Commands	Command	Description
	<b>clear logging logfile</b>	Clears logging file messages.
	<b>clear logging session</b>	Clears the current logging session.
	<b>logging console</b>	Enables console session logging messages.
	<b>logging event</b>	Logs interface events.
	<b>logging ip access-list cache</b>	Enables ACL logging on all VEMs.
	<b>logging level</b>	Enables message logging.
	<b>logging logfile</b>	Configures the log file used to store system messages.
	<b>logging module</b>	Starts module messages logging.
	<b>logging monitor</b>	Enables the logging of messages to the monitor (terminal line).
	<b>logging server</b>	Designates and configures a remote server for logging system messages.
	<b>logging timestamp</b>	Sets the unit of measure for the timestamp.

# show mac access-lists

To display information about the MAC access control lists (ACLs), use the **show mac access-lists** command.

```
show mac access-lists [acl_list name] [capture session session_id [dynamic | expanded | summary]] | dynamic | expanded | summary] | capture session session_id [dynamic | expanded | summary] | dynamic [capture session session_id [dynamic | expanded | summary]] | expanded | summary]
```

Syntax Description	
<i>acl_list name</i>	(Optional) ACL name. The name is a maximum of 64 characters.
<b>capture session</b>	(Optional) Specifies a session.
<i>session_id</i>	Session ID. The range is from 1 to 48.
<b>dynamic</b>	(Optional) Displays dynamic ACLs.
<b>expanded</b>	(Optional) Displays information about expand ACL groups.
<b>summary</b>	(Optional) Displays summary information about ACLs.

**Defaults** Displays information about the MAC ACLs.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about MAC ACLs:

```
n1000v# show mac access-lists
MAC ACL test-mac
 30 permit 0002.3000.0000 0000.00ff.ffff any
 40 permit 0002.3100.0000 0000.00ff.ffff any
 50 permit 0002.3200.0000 0000.00ff.ffff any
 60 permit 0002.3300.0000 0000.00ff.ffff any
 70 permit 0002.3400.0000 0000.00ff.ffff any
 80 permit 0002.3500.0000 0000.00ff.ffff any
 90 permit 0002.3600.0000 0000.00ff.ffff any
100 permit 0002.3700.0000 0000.00ff.ffff any
110 permit 0002.3800.0000 0000.00ff.ffff any
120 permit 0002.3900.0000 0000.00ff.ffff any
130 permit 0002.3a00.0000 0000.00ff.ffff any
140 permit 0002.3b00.0000 0000.00ff.ffff any
150 permit 0002.3c00.0000 0000.00ff.ffff any
170 permit 0002.3e00.0000 0000.00ff.ffff any
180 permit 0015.5df4.8506 0000.0000.0000 any
```



```

200 permit 0015.5df4.8704 0000.0000.0000 any
210 permit 0015.5df4.8312 0000.0000.0000 any
220 permit 0015.5df4.8706 0000.0000.0000 any
230 permit 0015.5df4.8700 0000.0000.0000 any
250 deny 0015.5df4.8304 0000.0000.0000 any
260 permit any any
MAC ACL test-mac-in
30 permit 0002.3000.0000 0000.00ff.ffff any
40 permit 0002.3100.0000 0000.00ff.ffff any
50 permit 0002.3200.0000 0000.00ff.ffff any
60 permit 0002.3300.0000 0000.00ff.ffff any
70 permit 0002.3400.0000 0000.00ff.ffff any
80 permit 0002.3500.0000 0000.00ff.ffff any
90 permit 0002.3600.0000 0000.00ff.ffff any
...

```

This example shows how to display summary information about a specific MAC ACL:

```

n1000v# show mac access-lists test-mac-in summary
MAC ACL test-mac-in
  Total ACEs Configured:20
  Configured on interfaces:
  Active on interfaces:

```

This example shows how to display summary information about MAC ACLs:

```

n1000v# show mac access-lists summary
MAC ACL test-mac
  Total ACEs Configured:21
  Configured on interfaces:
  Active on interfaces:
MAC ACL test-mac-in
  Total ACEs Configured:20
  Configured on interfaces:
  Active on interfaces:

```

## Related Commands

Command	Description
<b>deny</b>	Creates a MAC ACL rule that denies traffic matching its conditions.
<b>permit</b>	Creates a MAC ACL rule that permits traffic matching its conditions.
<b>show mac address-table</b>	Displays information about the MAC address table.
<b>show mac-lists</b>	Displays information about MAC lists.

# show mac address-table

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

## show mac address-table

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	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              Mod
-----+-----+-----+-----+-----+-----+-----
1         0002.3d12.e600   static  0        N1KV Internal Port  3
1         0002.3d22.e600   static  0        N1KV Internal Port  3
1         0002.3d32.e602   static  0        N1KV Internal Port  3
1         0002.3d42.e600   static  0        N1KV Internal Port  3
1         0002.3d42.e602   static  0        N1KV Internal Port  3
1         0002.3d62.e602   static  0        N1KV Internal Port  3
1         0002.3d82.e602   static  0        N1KV Internal Port  3
262      0015.5de1.9629   dynamic 1        Po2                3
262      0015.5de1.9d07   dynamic 123      Po2                3
262      0015.5de1.9e03   dynamic 3        Po2                3
262      001d.d8b7.1c01   dynamic 0        Po2                3
263      0015.5de1.9626   dynamic 1        Po1                3
1         0002.3d12.e600   static  0        N1KV Internal Port  4
1         0002.3d22.e600   static  0        N1KV Internal Port  4
1         0002.3d32.e603   static  0        N1KV Internal Port  4
1         0002.3d42.e600   static  0        N1KV Internal Port  4
1         0002.3d42.e603   static  0        N1KV Internal Port  4
1         0002.3d62.e603   static  0        N1KV Internal Port  4
1         0002.3d82.e603   static  0        N1KV Internal Port  4
262      0015.5de1.9629   dynamic 1        Po7                4
262      0015.5de1.9d07   dynamic 123      Po7                4
262      0015.5de1.9e03   dynamic 3        Po7                4
262      001d.d8b7.1c01   dynamic 0        Po7                4
263      0015.5de1.9626   dynamic 1        Po8                4
1         0002.3d12.e600   static  0        N1KV Internal Port  5
1         0002.3d22.e600   static  0        N1KV Internal Port  5
1         0002.3d32.e604   static  0        N1KV Internal Port  5
```

```

1          0002.3d42.e600    static 0          N1KV Internal Port      5
1          0002.3d42.e604    static 0          N1KV Internal Port      5
1          0002.3d62.e604    static 0          N1KV Internal Port      5
1          0002.3d82.e604    static 0          N1KV Internal Port      5
262       0015.5de1.9629    dynamic 1         Po10                    5
262       0015.5de1.9d07    dynamic 123       Po10                    5
262       0015.5de1.9e03    dynamic 3         Po10                    5
262       001d.d8b7.1c01    dynamic 0         Po10                    5
263       0015.5de1.9626    dynamic 1         Po9                      5
1          0002.3d12.e600    static 0          N1KV Internal Port      6
1          0002.3d22.e600    static 0          N1KV Internal Port      6
1          0002.3d32.e605    static 0          N1KV Internal Port      6
1          0002.3d42.e600    static 0          N1KV Internal Port      6
1          0002.3d42.e605    static 0          N1KV Internal Port      6
1          0002.3d62.e605    static 0          N1KV Internal Port      6
1          0002.3d82.e605    static 0          N1KV Internal Port      6
262       0015.5de1.9629    dynamic 2         Po13                    6
262       0015.5de1.9d07    dynamic 123       Po13                    6
262       0015.5de1.9e03    dynamic 4         Po13                    6
262       001d.d8b7.1c01    dynamic 1         Po13                    6
263       0015.5de1.9626    dynamic 2         Po12                    6
Total MAC Addresses: 48

```

**Related Commands**

Command	Description
<b>deny</b>	Creates a MAC ACL rule that denies traffic matching its conditions.
<b>permit</b>	Creates a MAC ACL rule that permits traffic matching its conditions.
<b>show mac access-lists</b>	Displays information about the MAC ACLs.
<b>show mac-lists</b>	Displays information about MAC lists.

# show mac address-table address

To display information about a specific MAC address table, use the **show mac address-table address** command.

```
show mac address-table address mac_address [bridge-domain bridge_dom_name | interface
{ ethernet slot/chassis_num / port/slot_num [. port_num] | port-channel port_chan_num [. sub_if_num] | vethernet vethernet_num [bridge-domain bridge_dom_name | vlan vlan_id]} |
vlan vlan_id]
```

## Syntax Description

<i>mac_address</i>	MAC address in one of the following formats: <ul style="list-style-type: none"> <li>• E.E.E</li> <li>• EE-EE-EE-EE-EE-EE</li> <li>• EE:EE:EE:EE:EE:EE</li> <li>• EEEE.EEEE.EEEE</li> </ul>
<b>bridge-domain</b>	(Optional) Specifies the bridge domain.
<i>bridge_dom_name</i>	Bridge domain name. The name is a maximum of 128 characters.
<b>interface</b>	(Optional) Displays an interface.
<b>ethernet</b>	Specifies an Ethernet IEEE 802.3z interface.
<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.
/	Slash separator.
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
.	(Optional) Specifies the subinterface separator (dot .)
<i>port_num</i>	Port number. The range is from 1 to 64.
<b>port-channel</b>	Specifies a port channel interface.
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.
<b>vethernet</b>	Specifies a virtual Ethernet interface.
<i>vethernet_num</i>	Virtual Ethernet number. The range is from 1 to 1048575.
<b>vlan</b>	(Optional) Specifies a VLAN.
<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.

## Defaults

Displays information about a specific MAC address table.

## Command Modes

Any

## Supported User Roles

network-admin

**Command History**

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

**Examples**

This example shows how to display a specific MAC address table:

```
n1000v# show mac address-table address f0f7.55aa.bd11
VLAN      MAC Address      Type    Age      Port      Mod
-----+-----+-----+-----+-----+-----
2012      f0f7.55aa.bd11  dynamic 10       Po6       5
2012      f0f7.55aa.bd11  dynamic 10       Po8       6
Total MAC Addresses: 2
```

**Related Commands**

Command	Description
<b>deny</b>	Creates a MAC ACL rule that denies traffic matching its conditions.
<b>permit</b>	Creates a MAC ACL rule that permits traffic matching its conditions.
<b>show mac access-lists</b>	Displays information about the MAC ACLs.
<b>show mac address-table</b>	Displays information about the MAC address table.
<b>show mac-lists</b>	Displays information about MAC lists.

# show mac address-table aging-time

To display information about the configured or default MAC address table aging time, use the **show mac address-table aging-time** command.

```
show mac address-table aging-time [bridge-domain bridge_dom_name | vlan vlan_id]
```

Syntax	Description
<b>bridge-domain</b>	(Optional) Specifies the bridge domain.
<i>bridge_dom_name</i>	Bridge domain name. The name is a maximum of 128 characters.
<b>vlan</b>	(Optional) Specifies a VLAN.
<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.

**Defaults** Displays information about the configured or default MAC address table aging time.

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the MAC address table aging time:

```
n1000v# show mac address-table aging-time
Vlan  Aging Time
-----
100    300
200    300
173    300
101    300
1       300
```

Related Commands	Command	Description
	<b>deny</b>	Creates a MAC ACL rule that denies traffic matching its conditions.
	<b>permit</b>	Creates a MAC ACL rule that permits traffic matching its conditions.
	<b>show mac access-lists</b>	Displays information about the MAC ACLs.
	<b>show mac address-table</b>	Displays information about the MAC address table.
	<b>show mac-lists</b>	Displays information about MAC lists.

# show mac address-table bridge-domain

To display information about the MAC address table for a specific bridge domain (BD), use the **show mac address-table bridge-domain** command.

**show mac address-table bridge-domain** *bridge\_dom\_name*

<b>Syntax Description</b>	<i>bridge_dom_name</i> BD name. The name is a maximum of 128 characters.
---------------------------	--

<b>Defaults</b>	Displays information about the MAC address table for a specific BD.
-----------------	---

<b>Command Modes</b>	Any
----------------------	-----

<b>SupportedUserRoles</b>	network-admin
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<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	5.2(1)SK1(1.1)	This command was introduced.

<b>Examples</b>	This example shows how to display the MAC address table for a specific BD name: n1000v# <b>show mac address-table bridge-domain</b>
-----------------	--

<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>deny</b>	Creates a MAC access control list (ACL) rule that denies traffic matching its conditions.
	<b>permit</b>	Creates a MAC ACL rule that permits traffic matching its conditions.
	<b>show mac access-lists</b>	Displays information about the MAC ACLs.
	<b>show mac address-table</b>	Displays information about the MAC address table.
	<b>show mac-lists</b>	Displays information about MAC lists.

# show mac address-table count

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

## show mac address-table count

```
[address mac_address [bridge-domain bridge_dom_name | interface {ethernet slot/chassis_num / port/slot_num [. port_num] | port-channel port_chan_num [. sub_if_num] | vethernet vethernet_num [bridge-domain bridge_dom_name | vlan vlan_id]} | vlan vlan_id] |
```

```
bridge-domain bridge_dom_name |
```

```
dynamic [address mac_address [bridge-domain bridge_dom_name | interface {ethernet slot/chassis_num / port/slot_num [. port_num] | port-channel port_chan_num [. sub_if_num] | vethernet vethernet_num [bridge-domain bridge_dom_name | vlan vlan_id]} | vlan vlan_id] |
```

```
interface {ethernet slot/chassis_num / port/slot_num [. port_num] | port-channel port_chan_num [. sub_if_num] | vethernet vethernet_num [bridge-domain bridge_dom_name | vlan vlan_id]} |
```

```
secure [address mac_address [bridge-domain bridge_dom_name | interface {ethernet slot/chassis_num / port/slot_num [. port_num] | port-channel port_chan_num [. sub_if_num] | vethernet vethernet_num [bridge-domain bridge_dom_name | vlan vlan_id]} | vlan vlan_id] |
```

```
static [address mac_address [bridge-domain bridge_dom_name | interface {ethernet slot/chassis_num / port/slot_num [. port_num] | port-channel port_chan_num [. sub_if_num] | vethernet vethernet_num [bridge-domain bridge_dom_name | vlan vlan_id]} | vlan vlan_id] |
```

```
vlan vlan_id]
```

### Syntax Description

<b>address</b>	(Optional) Specifies a MAC address.
<i>mac_address</i>	MAC address in one of the following formats: <ul style="list-style-type: none"> <li>E.E.E</li> <li>EE-EE-EE-EE-EE-EE</li> <li>EE:EE:EE:EE:EE:EE</li> <li>EEEE.EEEE.EEEE</li> </ul>
<b>bridge-domain</b>	(Optional) Specifies the bridge domain.
<i>bridge_dom_name</i>	Bridge domain name. The name is a maximum of 128 characters.
<b>interface</b>	(Optional) Specifies an interface.
<b>ethernet</b>	Specifies an Ethernet IEEE 802.3z interface.
<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.
<i>/</i>	Slash separator.
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
<i>.</i>	(Optional) Specifies the subinterface separator (dot .)
<i>port_num</i>	Port number. The range is from 1 to 64.
<b>port-channel</b>	Specifies a port channel interface.
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.



<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.
<b>vethernet</b>	Specifies a virtual Ethernet interface.
<i>vethernet_num</i>	Virtual Ethernet number. The range is from 1 to 1048575.
<b>vlan</b>	(Optional) Specifies a VLAN.
<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.
<b>dynamic</b>	(Optional) Displays dynamic entries.
<b>secure</b>	(Optional) Displays secure entries.
<b>static</b>	(Optional) Displays static entries.

**Defaults**

Displays the count of MAC address table entries.

**Command Modes**

Any

**Supported User Roles**

network-admin

**Command History**

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

**Examples**

This example shows how to display the count of MAC address table entries:

```
n1000v# show mac address-table count
Total MAC Addresses: 10
```

**Related Commands**

Command	Description
<b>deny</b>	Creates a MAC ACL rule that denies traffic matching its conditions.
<b>permit</b>	Creates a MAC ACL rule that permits traffic matching its conditions.
<b>show mac access-lists</b>	Displays information about the MAC ACLs.
<b>show mac address-table</b>	Displays information about the MAC address table.
<b>show mac-lists</b>	Displays information about MAC lists.

# show mac address-table dynamic

To display information about dynamic MAC address table entries, use the **show mac address-table dynamic** command.

```
show mac address-table dynamic [address mac_address [bridge-domain bridge_dom_name |
interface {ethernet slot/chassis_num / port/slot_num [. port_num] | port-channel
port_chan_num [. sub_if_num] | vethernet vethernet_num [bridge-domain bridge_dom_name
| vlan vlan_id]} | vlan vlan_id]]
```

Syntax	Description
<b>address</b>	(Optional) Specifies a MAC address.
<i>mac_address</i>	MAC address in one of the following formats: <ul style="list-style-type: none"> <li>E.E.E</li> <li>EE-EE-EE-EE-EE-EE</li> <li>EE:EE:EE:EE:EE:EE</li> <li>EEEE.EEEE.EEEE</li> </ul>
<b>bridge-domain</b>	(Optional) Specifies the bridge domain.
<i>bridge_dom_name</i>	Bridge domain name. The name is a maximum of 128 characters.
<b>interface</b>	(Optional) Displays an interface.
<b>ethernet</b>	Specifies an Ethernet IEEE 802.3z interface.
<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.
<i>/</i>	Slash separator.
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
<i>.</i>	(Optional) Specifies the subinterface separator (dot .)
<i>port_num</i>	Port number. The range is from 1 to 64.
<b>port-channel</b>	Specifies a port channel interface.
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
<i>sub_if_num</i>	(Optional) Subinterface number. The range is from 1 to 4093.
<b>vethernet</b>	Specifies a virtual Ethernet interface.
<i>vethernet_num</i>	Virtual Ethernet number. The range is from 1 to 1048575.
<b>vlan</b>	(Optional) Specifies a VLAN.
<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.

**Defaults** Displays information about dynamic MAC address table entries.

**Command Modes** Any

**Supported User Roles** network-admin

**Command History**

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

**Examples**

This example shows how to display the dynamic MAC address table for a specific port-channel interface:

```
n1000v# show mac address-table dynamic interface port-channel 6
VLAN      MAC Address      Type    Age      Port      Mod
-----+-----+-----+-----+-----+-----
261       0010.1857.0cde   dynamic 30       Po6       5
261       0010.1857.0cdf   dynamic 5        Po6       5
262       001d.d8b7.1df9   dynamic 7        Po6       5
263       001d.d8b7.1df8   dynamic 6        Po6       5
2012      0000.c9b0.1c90   dynamic 82       Po6       5
2012      0000.c9b0.1c91   dynamic 0        Po6       5
2012      001b.21c2.497c   dynamic 12       Po6       5
2012      f0f7.55aa.bd11   dynamic 2        Po6       5
2012      f0f7.55aa.bd13   dynamic 1        Po6       5
Total MAC Addresses: 9
```

**Related Commands**

Command	Description
<b>deny</b>	Creates a MAC ACL rule that denies traffic matching its conditions.
<b>permit</b>	Creates a MAC ACL rule that permits traffic matching its conditions.
<b>show mac access-lists</b>	Displays information about the MAC ACLs.
<b>show mac address-table</b>	Displays information about the MAC address table.
<b>show mac-lists</b>	Displays information about MAC lists.

# show mac address-table interface

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

```
show mac address-table interface { ethernet slot/chassis_num / port/slot_num [. port_num] |
port-channel port_chan_num [. sub_if_num] | vethernet vethernet_num } [bridge-domain
bridge_dom_name | vlan vlan_id]
```

Syntax	Description
<b>ethernet</b>	Specifies an Ethernet IEEE 802.3z interface.
<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.
<i>/</i>	Slash separator.
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
<i>.</i>	(Optional) Specifies the subinterface separator (dot .)
<i>port_num</i>	Port number. The range is from 1 to 64.
<b>port-channel</b>	Specifies a port channel interface.
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.
<b>vethernet</b>	Specifies a virtual Ethernet interface.
<i>vethernet_num</i>	Virtual Ethernet number. The range is from 1 to 1048575.
<b>bridge-domain</b>	(Optional) Specifies the bridge domain.
<i>bridge_dom_name</i>	Bridge domain name. The name is a maximum of 128 characters.
<b>vlan</b>	(Optional) Specifies a VLAN.
<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.

**Defaults** None

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the MAC address table interface entries for a specific port channel interface:

```
n1000v# show mac address-table interface port-channel 8
```

AC Address	Type	Age	Port	Mod
261	0010.1857.0cde	dynamic	1	Po8
261	0010.1857.0cdf	dynamic	23	Po8
262	001d.d8b7.1df9	dynamic	12	Po8
263	001d.d8b7.1df8	dynamic	18	Po8
2012	0000.c9b0.1c90	dynamic	4	Po8
2012	0000.c9b0.1c91	dynamic	0	Po8
2012	0014.1b45.6800	dynamic	249	Po8
2012	001b.21c2.497c	dynamic	99	Po8
2012	f0f7.55aa.bd11	dynamic	11	Po8
2012	f0f7.55aa.bd13	dynamic	1	Po8

Total MAC Addresses: 10

**Related Commands**

Command	Description
<b>deny</b>	Creates a MAC ACL rule that denies traffic matching its conditions.
<b>permit</b>	Creates a MAC ACL rule that permits traffic matching its conditions.
<b>show mac access-lists</b>	Displays information about the MAC ACLs.
<b>show mac address-table</b>	Displays information about the MAC address table.
<b>show mac-lists</b>	Displays information about MAC lists.

# show mac address-table module

To display information about the virtual Ethernet Module (VEM) MAC address table, use the **show mac address-table module** command.

**show mac address-table module** *module\_num*

[**address** *mac\_address* [**bridge-domain** *bridge\_dom\_name* | **interface** {**ethernet** *slot/chassis\_num* / *port/slot\_num* [. *port\_num*] | **port-channel** *port\_chan\_num* [. *sub\_if\_num*] | **vethernet** *vethernet\_num* [**bridge-domain** *bridge\_dom\_name* | **vlan** *vlan\_id*]}] | **vlan** *vlan\_id*] |

**bridge-domain** *bridge\_dom\_name* |

**count** [**address** *mac\_address* [**bridge-domain** *bridge\_dom\_name* | **interface** {**ethernet** *slot/chassis\_num* / *port/slot\_num* [. *port\_num*] | **port-channel** *port\_chan\_num* [. *sub\_if\_num*] | **vethernet** *vethernet\_num* [**bridge-domain** *bridge\_dom\_name* | **vlan** *vlan\_id*]}] | **vlan** *vlan\_id*] | **bridge-domain** *bridge\_dom\_name* | **dynamic** [**address** *mac\_address* [**bridge-domain** *bridge\_dom\_name* | **interface** {**ethernet** *slot/chassis\_num* / *port/slot\_num* [. *port\_num*] | **port-channel** *port\_chan\_num* [. *sub\_if\_num*] | **vethernet** *vethernet\_num* [**bridge-domain** *bridge\_dom\_name* | **vlan** *vlan\_id*]}] | **vlan** *vlan\_id*]] | **interface** {**ethernet** *slot/chassis\_num* / *port/slot\_num* [. *port\_num*] | **port-channel** *port\_chan\_num* [. *sub\_if\_num*] | **vethernet** *vethernet\_num* [**bridge-domain** *bridge\_dom\_name* | **vlan** *vlan\_id*]}] | **secure** [**address** *mac\_address* [**bridge-domain** *bridge\_dom\_name* | **interface** {**ethernet** *slot/chassis\_num* / *port/slot\_num* [. *port\_num*] | **port-channel** *port\_chan\_num* [. *sub\_if\_num*] | **vethernet** *vethernet\_num* [**bridge-domain** *bridge\_dom\_name* | **vlan** *vlan\_id*]}] | **vlan** *vlan\_id*]] | **static** [**address** *mac\_address* [**bridge-domain** *bridge\_dom\_name* | **interface** {**ethernet** *slot/chassis\_num* / *port/slot\_num* [. *port\_num*] | **port-channel** *port\_chan\_num* [. *sub\_if\_num*] | **vethernet** *vethernet\_num* [**bridge-domain** *bridge\_dom\_name* | **vlan** *vlan\_id*]}] | **vlan** *vlan\_id*]] |

**dynamic** [**address** *mac\_address* [**bridge-domain** *bridge\_dom\_name* | **interface** {**ethernet** *slot/chassis\_num* / *port/slot\_num* [. *port\_num*] | **port-channel** *port\_chan\_num* [. *sub\_if\_num*] | **vethernet** *vethernet\_num* [**bridge-domain** *bridge\_dom\_name* | **vlan** *vlan\_id*]}] | **vlan** *vlan\_id*]] |

**interface** {**ethernet** *slot/chassis\_num* / *port/slot\_num* [. *port\_num*] | **port-channel** *port\_chan\_num* [. *sub\_if\_num*] | **vethernet** *vethernet\_num* [**bridge-domain** *bridge\_dom\_name* | **vlan** *vlan\_id*]} |

**secure** [**address** *mac\_address* [**bridge-domain** *bridge\_dom\_name* | **interface** {**ethernet** *slot/chassis\_num* / *port/slot\_num* [. *port\_num*] | **port-channel** *port\_chan\_num* [. *sub\_if\_num*] | **vethernet** *vethernet\_num* [**bridge-domain** *bridge\_dom\_name* | **vlan** *vlan\_id*]}] | **vlan** *vlan\_id*]] |

**static** [**address** *mac\_address* [**bridge-domain** *bridge\_dom\_name* | **interface** {**ethernet** *slot/chassis\_num* / *port/slot\_num* [. *port\_num*] | **port-channel** *port\_chan\_num* [. *sub\_if\_num*] | **vethernet** *vethernet\_num* [**bridge-domain** *bridge\_dom\_name* | **vlan** *vlan\_id*]}] | **vlan** *vlan\_id*]] |

**vlan** *vlan\_id*]

Syntax	Description
<i>module_num</i>	Module number. The range is from 1 to 66.
<b>address</b>	(Optional) Specifies a MAC address.
<i>mac_address</i>	MAC address in one of the following formats: <ul style="list-style-type: none"> <li>E.E.E</li> <li>EE-EE-EE-EE-EE-EE</li> <li>EE:EE:EE:EE:EE:EE</li> <li>EEEE.EEEE.EEEE</li> </ul>
<b>bridge-domain</b>	(Optional) Specifies the bridge domain.
<i>bridge_dom_name</i>	Bridge domain name. The name is a maximum of 128 characters.
<b>interface</b>	(Optional) Displays an interface.
<b>ethernet</b>	Specifies an Ethernet IEEE 802.3z interface.
<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.
/	Slash separator.
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
.	(Optional) Specifies the subinterface separator (dot .)
<i>port_num</i>	Port number. The range is from 1 to 64.
<b>port-channel</b>	Specifies a port channel interface.
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.
<b>vethernet</b>	Specifies a virtual Ethernet interface.
<i>vethernet_num</i>	Virtual Ethernet number. The range is from 1 to 1048575.
<b>vlan</b>	(Optional) Specifies a VLAN.
<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.
<b>dynamic</b>	(Optional) Displays dynamic entries.
<b>secure</b>	(Optional) Displays secure entries.
<b>static</b>	(Optional) Displays static entries.

**Defaults** Display information about the VEM MAC address table.

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples**

This example shows how to display the MAC address table, VEM module specific information:

```
n1000v# show mac address-table module 6
VLAN      MAC Address      Type   Age      Port      Mod
-----+-----+-----+-----+-----+-----
1          0002.3d10.0800   static 0        N1KV Internal Port 6
1          0002.3d20.0800   static 0        N1KV Internal Port 6
1          0002.3d30.0805   static 0        N1KV Internal Port 6
1          0002.3d40.0800   static 0        N1KV Internal Port 6
1          0002.3d40.0805   static 0        N1KV Internal Port 6
1          0002.3d60.0805   static 0        N1KV Internal Port 6
1          0002.3d80.0805   static 0        N1KV Internal Port 6
261       0010.1857.0cde   dynamic 1        Po8        6
261       0010.1857.0cdf   dynamic 2        Po8        6
262       001d.d8b7.1df9   dynamic 3        Po8        6
263       001d.d8b7.1df8   dynamic 24       Po8        6
264       001d.d8b7.1dfa   dynamic 10       Po7        6
2012     0000.c9b0.1c90   dynamic 64        Po8        6
2012     0000.c9b0.1c91   dynamic 0        Po8        6
2012     0014.1b45.6800   dynamic 108       Po8        6
2012     001b.21c2.497c   dynamic 112       Po8        6
2012     f0f7.55aa.bd11   dynamic 2        Po8        6
2012     f0f7.55aa.bd13   dynamic 2        Po8        6
Total MAC Addresses: 18
```

**Related Commands**

Command	Description
<b>deny</b>	Creates a MAC ACL rule that denies traffic matching its conditions.
<b>permit</b>	Creates a MAC ACL rule that permits traffic matching its conditions.
<b>show mac access-lists</b>	Displays information about the MAC ACLs.
<b>show mac address-table</b>	Displays information about the MAC address table.
<b>show mac-lists</b>	Displays information about MAC lists.



# show mac address-table secure

To display information about the secure MAC address table entries, use the **show ma address-table secure** command.

```
show mac address-table secure [address mac_address [bridge-domain bridge_dom_name |  
interface {ethernet slot/chassis_num / port/slot_num [. port_num] | port-channel  
port_chan_num [. sub_if_num] | vethernet vethernet_num [bridge-domain bridge_dom_name  
| vlan vlan_id}] | vlan vlan_id]]
```

## Syntax Description

<b>address</b>	(Optional) Specifies a MAC address.
<i>mac_address</i>	MAC address in one of the following formats: <ul style="list-style-type: none"> <li>E.E.E</li> <li>EE-EE-EE-EE-EE-EE</li> <li>EE:EE:EE:EE:EE:EE</li> <li>EEEE.EEEE.EEEE</li> </ul>
<b>bridge-domain</b>	(Optional) Specifies the bridge domain.
<i>bridge_dom_name</i>	Bridge domain name. The name is a maximum of 128 characters.
<b>interface</b>	(Optional) Specifies an interface.
<b>ethernet</b>	Specifies an Ethernet IEEE 802.3z interface.
<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.
/	Slash separator.
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
.	(Optional) Specifies the subinterface separator (dot .)
<i>port_num</i>	Port number. The range is from 1 to 64.
<b>port-channel</b>	Specifies a port channel interface.
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.
<b>vethernet</b>	Specifies a virtual Ethernet interface.
<i>vethernet_num</i>	Virtual Ethernet number. The range is from 1 to 1048575.
<b>vlan</b>	(Optional) Specifies a VLAN.
<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.

## Defaults

Displays information about secure MAC address table entries.

## Command Modes

Any

## Supported User Roles

network-admin

**Command History**

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

**Examples**

This example shows how to display secure MAC address table entries:

```
n1000v# show mac address-table secure
Total MAC Addresses: 0
```

**Related Commands**

Command	Description
<b>deny</b>	Creates a MAC ACL rule that denies traffic matching its conditions.
<b>permit</b>	Creates a MAC ACL rule that permits traffic matching its conditions.
<b>show mac access-lists</b>	Displays information about the MAC ACLs.
<b>show mac address-table</b>	Displays information about the MAC address table.
<b>show mac-lists</b>	Displays information about MAC lists.

# show mac address-table static

To display information about static MAC address table entries, use the **show mac address-table static** command.

```
show mac address-table static [address mac_address [bridge-domain bridge_dom_name |  
interface {ethernet slot/chassis_num / port/slot_num [. port_num] | port-channel  
port_chan_num [. sub_if_num] | vethernet vethernet_num [bridge-domain bridge_dom_name  
| vlan vlan_id]} | vlan vlan_id]]
```

## Syntax Description

<b>address</b>	(Optional) Specifies a MAC address.
<i>mac_address</i>	MAC address in one of the following formats: <ul style="list-style-type: none"> <li>E.E.E</li> <li>EE-EE-EE-EE-EE-EE</li> <li>EE:EE:EE:EE:EE:EE</li> <li>EEEE.EEEE.EEEE</li> </ul>
<b>bridge-domain</b>	(Optional) Specifies the bridge domain.
<i>bridge_dom_name</i>	Bridge domain name. The name is a maximum of 128 characters.
<b>interface</b>	(Optional) Displays an interface.
<b>ethernet</b>	Specifies an Ethernet IEEE 802.3z interface.
<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.
/	Slash separator.
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
.	(Optional) Specifies the subinterface separator (dot .)
<i>port_num</i>	Port number. The range is from 1 to 64.
<b>port-channel</b>	(Optional) Specifies a port channel interface.
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.
<b>vethernet</b>	(Optional) Specifies a virtual Ethernet interface.
<i>vethernet_num</i>	Virtual Ethernet number. The range is from 1 to 1048575.
<b>vlan</b>	(Optional) Specifies a VLAN.
<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.

## Defaults

Displays information about static MAC address table entries.

## Command Modes

Any

## Supported User Roles

network-admin

**Command History**

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

**Examples**

This example shows how to display static MAC address table for a specific MAC address:

```
n1000v# show mac address-table static address 0002.3d60.0804
VLAN      MAC Address      Type   Age      Port                               Mod
-----+-----+-----+-----+-----+-----+-----
1         0002.3d60.0804  static 0        N1KV Internal Port                5
Total MAC Addresses: 1
```

**Related Commands**

Command	Description
<b>deny</b>	Creates a MAC ACL rule that denies traffic matching its conditions.
<b>permit</b>	Creates a MAC ACL rule that permits traffic matching its conditions.
<b>show mac access-lists</b>	Displays information about the MAC ACLs.
<b>show mac address-table</b>	Displays information about the MAC address table.
<b>show mac-lists</b>	Displays information about MAC lists.

# show mac address-table vlan

To display information about the MAC address table VLAN entries, use the **show mac address-table vlan** command.

```
show mac address-table vlan vlan_id
```

Syntax Description	<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.
--------------------	----------------	---

Defaults	None
----------	------

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

Supported User Roles	network-admin
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Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

## Examples

This example shows how to display MAC address table VLAN entries:

```
n1000v# show mac address-table vlan 1
VLAN      MAC Address      Type   Age      Port                               Mod
-----+-----+-----+-----+-----+-----+-----
1         0002.3d10.0800   static 0        N1KV Internal Port               3
1         0002.3d20.0800   static 0        N1KV Internal Port               3
1         0002.3d30.0802   static 0        N1KV Internal Port               3
1         0002.3d40.0800   static 0        N1KV Internal Port               3
1         0002.3d40.0802   static 0        N1KV Internal Port               3
1         0002.3d60.0802   static 0        N1KV Internal Port               3
1         0002.3d80.0802   static 0        N1KV Internal Port               3
1         0002.3d10.0800   static 0        N1KV Internal Port               4
1         0002.3d20.0800   static 0        N1KV Internal Port               4
1         0002.3d30.0803   static 0        N1KV Internal Port               4
1         0002.3d40.0800   static 0        N1KV Internal Port               4
1         0002.3d40.0803   static 0        N1KV Internal Port               4
1         0002.3d60.0803   static 0        N1KV Internal Port               4
1         0002.3d80.0803   static 0        N1KV Internal Port               4
1         0002.3d10.0800   static 0        N1KV Internal Port               5
1         0002.3d20.0800   static 0        N1KV Internal Port               5
1         0002.3d30.0804   static 0        N1KV Internal Port               5
1         0002.3d40.0800   static 0        N1KV Internal Port               5
1         0002.3d40.0804   static 0        N1KV Internal Port               5
1         0002.3d60.0804   static 0        N1KV Internal Port               5
1         0002.3d80.0804   static 0        N1KV Internal Port               5
1         0002.3d10.0800   static 0        N1KV Internal Port               6
1         0002.3d20.0800   static 0        N1KV Internal Port               6
1         0002.3d30.0805   static 0        N1KV Internal Port               6
```

**show mac address-table vlan**

```

1          0002.3d40.0800    static 0          N1KV Internal Port      6
1          0002.3d40.0805    static 0          N1KV Internal Port      6
1          0002.3d60.0805    static 0          N1KV Internal Port      6
1          0002.3d80.0805    static 0          N1KV Internal Port      6
Total MAC Addresses: 28

```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>deny</b>	Creates a MAC ACL rule that denies traffic matching its conditions.
<b>permit</b>	Creates a MAC ACL rule that permits traffic matching its conditions.
<b>show mac access-lists</b>	Displays information about the MAC ACLs.
<b>show mac address-table</b>	Displays information about the MAC address table.
<b>show mac-lists</b>	Displays information about MAC lists.

# show mac-list

To display information about MAC lists, use the **show mac-list** command.

```
show mac-list [mac_list_name [mac_address [mac_mask]] | seq seq_num]
```

Syntax Description	
<i>mac_list_name</i>	(Optional) MAC list name. The name is a maximum of 63 characters.
<i>mac_address</i>	(Optional) MAC address in one of the following formats: <ul style="list-style-type: none"> <li>• E.E.E</li> <li>• EE-EE-EE-EE-EE-EE</li> <li>• EE:EE:EE:EE:EE:EE</li> <li>• EEEE.EEEE.EEEE</li> </ul>
<i>mac_mask</i>	(Optional) the MAC mask in one of the following formats: <ul style="list-style-type: none"> <li>• E.E.E</li> <li>• EE-EE-EE-EE-EE-EE</li> <li>• EE:EE:EE:EE:EE:EE</li> <li>• EEEE.EEEE.EEEE</li> </ul>
<b>seq</b>	(Optional) Specifies the sequence number.
<i>seq_num</i>	Sequence number. The range is from 1 to 4294967294.

**Defaults** Displays information about MAC lists.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about MAC lists:

```
n1000v# show mac-list
```

Related Commands	Command	Description
	<b>show mac address-table</b>	Displays information about the MAC address table.
	<b>show mac access-lists</b>	Displays information about the MAC access control lists (ACLs).

■ show mac-list



# show module

To display information for all chassis I/O and supervisor modules, use the **show module** command.

**show module** [*module\_num* [**bandwidth-fairness** | **recovery-steps**]]

Syntax Description	
<i>module_num</i>	(Optional) Module number. The range is from 1 to 66.
<b>bandwidth-fairness</b>	(Optional) Displays the bandwidth fairness status.
<b>recovery-steps</b>	(Optional) Displays the recovery steps to bring up a module.

**Defaults** Displays information for all chassis I/O and supervisor modules.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display module information for all I/O modules and supervisor modules in the chassis:

```
n1000v# show module
Mod  Ports  Module-Type                Model                Status
----  -
1    0      Virtual Supervisor Module  Nexus1000V          active *
2    0      Virtual Supervisor Module  Nexus1000V          ha-standby
5    288    Virtual Ethernet Module    NA                   ok
6    288    Virtual Ethernet Module    NA                   ok

Mod  Sw                Hw
---  -
1    5.2(1)SM1(5.0.342)  0.0
2    5.2(1)SM1(5.0.342)  0.0
5    5.2(1)SM1(5.1)      Windows Server 2012 - Datacenter (6.2.9200, 6.30)
6    5.2(1)SM1(5.1)      Windows Server 2012 - Datacenter (6.2.9200, 6.30)

Mod  MAC-Address(es)                Serial-Num
---  -
1    00-19-07-6c-5a-a8 to 00-19-07-6c-62-a8  NA
2    00-19-07-6c-5a-a8 to 00-19-07-6c-62-a8  NA
5    02-00-0c-00-05-00 to 02-00-0c-00-05-80  NA
6    02-00-0c-00-06-00 to 02-00-0c-00-06-80  NA

Mod  Server-IP                Server-UUID                Server-Name
---  -
1    10.105.225.180           NA                          NA
```

■ show module

```

2    10.105.225.180    NA                                NA
3    10.105.225.157    20D6995A-82DC-E111-0000-0AA11223349E  NODE-UCS-157
4    10.105.225.158    20D6995A-82DC-E111-0000-0AA11223346E  NODE-UCS-158

```

\* this terminal session

**Related Commands**

Command	Description
<b>module vem</b>	Allows the user to enter remote commands on the VEM, from the Cisco Nexus 1000V.
<b>vem</b>	Configures a VEM.

# show module vteps

To display VTEP configuration information for all chassis I/O and supervisor modules, use the **show module vteps** command.

## show module vteps

**Syntax Description** This command has no arguments or keywords.

**Defaults** Displays information for all chassis I/O and supervisor modules.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(2.1)	This command was introduced.

**Examples** This example shows how to display VTEP configuration information for all I/O modules and supervisor modules in the chassis:

```
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 10.1.1.2 (D)
4 Veth2 10.1.1.1 (D)
5 Veth13 10.1.1.5 (DI*)
* this terminal session
```

Related Commands	Command	Description
	<b>show bridge-domain vteps</b>	Displays information about all of the VTEPs that are configured on different modules for VXLAN 1.5.

# show network-state tracking

To display information about the network state, use the **show network-state tracking** command.

```
show network-state tracking [configuration | interface {port-channel port_chan_num [.
sub_if_num}] | module module_num]
```

Syntax	Description
<b>configuration</b>	(Optional) Displays the network configuration.
<b>interface</b>	(Optional) Displays the network interface information.
<b>port-channel</b>	Specifies a port channel interface.
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
.	(Optional) Specifies the subinterface separator (dot .)
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.
<b>module</b>	(Optional) Specifies a module.
<i>module_num</i>	Module number. The range is from 3 to 66.

**Defaults** Displays information about the network state.

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the network state:

```
n1000v# show network-state tracking module 3
ERROR: network-state tracking is disabled
```

Related Commands	Command	Description
	<b>show nsm network segment</b>	Displays information about the network segments.
	<b>track network-state enable</b>	Enables NST for all VEMs configured with a vPC-HM port profile.
	<b>track network-state interval</b>	Specifies an interval of time, from 1 to 10 seconds, between which NST broadcasts are sent to pinpoint link failure on a port channel configured for a vPC-HM.

Command	Description
<b>track network-state threshold miss-count</b>	Configures the maximum number of NST broadcasts that can be missed consecutively before a split network is declared.
<b>track network-state split action</b>	Configures the action to take if a split network is detected by NST.

# show nsm ip pool template filter description

To display a specific ip pool template or subnet based on its description.

**show nsm ip pool template filter description sub-10-1**

<b>Syntax Description</b>	<b>filter</b>	Indicates that we want to filter by some attribute.
	<i>ip_pool</i>	IP pool template name. The name is a maximum of 256 case-sensitive, alphanumeric characters.
	<b>Description</b>	Indicates that we want to filter by description or human-readable name that was given for this ip pool template.

**Defaults** Displays the ip pool template or subnet information.

**Command Modes** Any

**SupportedUserRoles** network-admin

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	5.2(1)SK3(1.1)	This command was introduced.

**Examples** This example shows how to display information about the pool of the NSM IP addresses:

```
switch# show nsm ip pool template filter description sub-10-1
Name: d259d433-3e5c-491b-afda-787ddc260dea
Description: sub-10-1
IP-address-range: 10.10.1.2-10.10.1.254
Network: 10.10.1.0
Subnet mask: 255.255.255.0
```

<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>show nsm network segment</b>	Displays information about all network segments.
	<b>show nsm ip pool template</b>	Displays configured ip pool template or subnets.

# show nsm network segment filter description

To display a specific network segment pool based on its description.

**show nsm network segment filter description net-10-1**

Syntax Description	filter	Indicates that we want to filter by some attribute
	network segment	Displays the network segment in its own independent object on its own.

**Defaults** Displays the information configured for the network segment.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK3(1.1)	This command was introduced.

**Examples** This example shows how to display information about the pool of the NSM IP addresses:

```
switch# show nsm network segment filter description net-10-1
Name: 3a43c169-bbf9-404d-abf0-3580b9a7113e
Description: net-10-1
UUID: 3a43c169-bbf9-404d-abf0-3580b9a7113e
Network segment pool: 39e45a8d-8ecd-4bb0-9666-6ddcec2cfefc
Mode: switchport mode access
Vlan: 1090
System Network Segment: FALSE
ip pool template: d259d433-3e5c-491b-afda-787ddc260dea
ip pool template UUID: d259d433-3e5c-491b-afda-787ddc260dea
Publish-name: 3a43c169-bbf9-404d-abf0-3580b9a7113e
```

Related Commands	Command	Description
	<b>show nsm network segment</b>	Displays information about all network segments.
	<b>show nsm ip pool template</b>	Displays configured ip pool template or subnets.

# show nsm network segment pool filter description

To display a specific network segment pool based on its description.

```
show nsm network segment pool filter description vm-pool1
```

<b>Syntax Description</b>	<b>network segment</b>	Displays the network segment in its own independent object on its own.
---------------------------	------------------------	--

<b>Defaults</b>	Displays the information configured for this network segment pool.
-----------------	--

<b>Command Modes</b>	Any
----------------------	-----

<b>SupportedUserRoles</b>	network-admin
---------------------------	---------------

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	5.2(1)SK3(1.1)	This command was introduced.

**Examples** This example shows how to display information about the pool of the NSM IP addresses:

```
switch# show nsm network segment pool filter description vm-pool1
Name: 39e45a8d-8ecd-4bb0-9666-6ddcec2cfefc
Description: vm-pool1
UUID: 39e45a8d-8ecd-4bb0-9666-6ddcec2cfefc
Logical network Name: 39e45a8d-8ecd-4bb0-9666-6ddcec2cfefc_log_net
Intra Port Communication: Disabled
Publish-name: 39e45a8d-8ecd-4bb0-9666-6ddcec2cfefc
```

Command	Description
<b>show nsm network segment</b>	Displays information about all network segments.
<b>show nsm ip pool template</b>	Displays configured ip pool template or subnets.



# show nsm ip pool template

To display information about the pool of network segmentation manager (NSM) IP addresses, use the `show nsm ip pool template` command.

```
show nsm ip pool template [name ip_pool | usage {network segment [name ip_pool]}]
```

Syntax Description	name	(Optional) Specifies a NSM IP pool template.
	<i>ip_pool</i>	IP pool template name. The name is a maximum of 64 case-sensitive, alphanumeric characters.
	usage	(Optional) Displays the networks using an NSM IP pool template.
	network segment	Displays the network segment using an NSM IP pool template.

**Defaults** Displays information about the pool of NSM IP addresses.

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the pool of the NSM IP addresses:

```
n1000v# show nsm ip pool template
Name: default-Abhi-Pool
  Description:
  IP-address-range: 192.168.5.10-192.168.5.254
  Network: 192.168.5.0
  Subnet mask: 255.255.255.0
  Default router: 192.168.5.1
  Netbios: Enabled
  DHCP: Disabled
  Reserved-ip-list:
    192.168.5.30
    192.168.5.31
    192.168.5.39
    192.168.5.40
  Netbios-name-server-list:
    192.168.5.7
    192.168.5.8
    192.168.5.9
    192.168.5.6
  DNS-server-list:
```

```

    192.168.5.2
    192.168.5.3
    192.168.5.4
    192.168.5.5
    DNS-suffix-list:

Name: test
Description:
IP-address-range: 10.1.1.20-10.1.1.50
Network: 10.1.1.0
Subnet mask: 255.255.255.0
Default router: 10.1.1.1
Netbios: Disabled
DHCP: Disabled
Reserved-ip-list:
    10.1.1.25
    10.1.1.26
    10.1.1.27
Netbios-name-server-list:
    10.1.1.45
    10.1.1.46
    10.1.1.47
DNS-server-list:
    10.1.1.35
    10.1.1.36
DNS-suffix-list:

```

This example shows how to display information about a NSM IP pool named pool10:

```

n1000v# show nsm ip pool template name pool10
Name: pool10
Description: pool
IP-address-range: 172.16.0.7-172.16.0.9
Network: 172.16.10.10
Subnet mask: 255.255.255.0
Default router:
Netbios: Disabled
DHCP: Disabled
Reserved-ip-list:
Netbios-name-server-list:
DNS-server-list:
DNS-suffix-list:

```

This example shows how to display information about network segments:

```

n1000v# show nsm ip pool template usage network segment
Ip-pool: default-Abhi-Pool
LLVLAN-1621
LLVLAN-1622
LLVLAN-1623
LLVLAN-1624
.
.
.
community-2012
dhcp-261
novlan
sec-10
sec-20
sec-30-isolated
sec-40
sec-50
sec-60
sec-80

```

```
sec-promisc
Ip-pool: test
```

This example shows how to display information about a network segment using the NSM IP pool template name default-Abhi-pool:

```
n1000v# show nsm ip pool template usage network segment name default-Abhi-Pool
Ip-pool: default-Abhi-Pool
NS_VLAN_1
NS_VLAN_200
NS_VLAN_201
NS_VLAN_202
NS_VLAN_203
NS_VLAN_204
NS_VLAN_205
.
.
.
community-2012
novlan
sec-10
sec-20
sec-30-isolated
sec-40
sec-50
sec-60
sec-80
sec-promisc
```

#### Related Commands

Command	Description
<b>ip route</b>	Creates an IP route.
<b>nsm ip pool template</b>	Configures an NSM IP pool.
<b>nsm logical network</b>	Configures an NSM logical network.
<b>nsm network segment</b>	Configures a network segment.
<b>nsm network segment pool</b>	Configures an NSM network segment pool.
<b>nsm network uplink</b>	Configures an NSM network uplink.
<b>show nsm logical network</b>	Displays an NSM logical network.
<b>show nsm network segment</b>	Displays information about an NSM network segment.
<b>show nsm network uplink</b>	Displays NSM uplink information.

# show nsm logical network

To display a complete list of the network segmentation manager (NSM) logical networks, use the **show nsm logical network** command.

```
show nsm logical network [name logical_net]
```

## Syntax Description

<b>name</b>	(Optional) Specifies an NSM logical network.
<i>logical_net</i>	Logical network name. The name is a maximum of 64 case-sensitive, alphanumeric characters.

## Defaults

Displays a complete list of the NSM logical networks.

## Command Modes

Any

## Supported User Roles

network-admin

## Command History

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

## Examples

This example shows how to display a complete list of NSM logical networks:

```
n1000v# show nsm logical network
```

```
Name: Cisco-New
Description:
```

```
Name: IntranetSFO
Description: Network for external Internet connectivity
```

```
Name: Nexus1000V-Even
Description:
```

```
Name: Nexus1000V-Odd
Description:
```

```
Name: OTHER-N1k-2
Description:
```

```
Name: OTHERS-N1K
Description:
```

```
Name: System-Fabric
Description:
```

This example shows how to display an NSM logical network named IntranetSFO:

```
n1000v# show nsm logical network name IntranetSFO
```

Name: IntranetSFO

Description: Network for external Internet connectivity

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>nsm logical network</b>	Configures an NSM logical network.
<b>nsm network segment</b>	Configures a network segment.
<b>nsm network segment pool</b>	Configures an NSM network segment pool.
<b>nsm network uplink</b>	Configures an NSM network uplink.
<b>show nsm ip pool template</b>	Displays information about the pool of NSM IP addresses.
<b>show nsm network segment</b>	Displays information about an NSM network segment.
<b>show nsm network uplink</b>	Displays NSM uplink information.

# show nsm network segment

To display information about the network segmentation manager (NSM) network segments, use the **show nsm network segment** command.

```
show nsm network segment [brief | filter [network | vlan vlan_id] | name net_seg_pool | pool
[name net_seg_pool] | virtual usage [name net_seg_pool]]
```

Syntax Description		
<b>brief</b>	(Optional) Displays brief information about the NSM network segment pool.	
<b>filter</b>	(Optional) Displays filtered information.	
<b>vlan</b>	(Optional) Specifies the VLAN of the virtual machine (VM) network segment pool.	
<i>vlan_id</i>	The VLAN number of the VM network segment. The range is from 0 to 2147483647.	
<b>name</b>	(Optional) Specifies the NSM network segment pool name.	
<i>net_seg_pool</i>	Network segment pool name. The name is a maximum of 64 case-sensitive, alphanumeric characters.	
<b>pool</b>	(Optional) Specifies the NSM network segment pool.	
<b>virtual usage</b>	(Optional) Displays virtual port profile usage by interface.	

**Defaults** Displays information about an NSM network segment.

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Usage Guidelines** NSM automatically creates and deletes a VLAN as per segment configuration. The example below shows VLAN ID 342 which was auto created because segment `vlan_342` is set to access vlan 342.

**Examples** This example shows how to display information about NSM network segments:

```
n1000v# # show nsm network segment
```

```
Name: NS_VLAN_1
VM Network Name: NS_VLAN_1
VM Network GUID: 67d1daca-8c47-463a-8952-e0327ec6b284
Description:
```

```

GUID: 102cde9c-2824-4589-9585-cc6d0efc7bac
Network segment pool: System-Definition
Vlan: 1
System Network Segment: TRUE
ip pool template: default-Abhi-Pool
ip pool template GUID: dca93874-e919-4bab-bb36-ddb1a0c74324
Publish-name: NS_VLAN_1

Name: NS_VLAN_200
VM Network Name: NS_VLAN_200
VM Network GUID: 85a5ae8a-5432-4752-b9c7-c7544b7c5e14
Description:
GUID: e8caa13b-5f76-4b2f-bfbe-945c39d7b143
Network segment pool: ND_VLAN_200
Vlan: 200
System Network Segment: FALSE
ip pool template: default-Abhi-Pool
ip pool template GUID: b4b3ffb1-ff83-4ff6-b513-a8a31907de1c
Publish-name: NS_VLAN_200

Name: NS_VLAN_201
VM Network Name: NS_VLAN_201
VM Network GUID: 3618421d-1e4e-42f9-b877-b72a943ae173
Description:
GUID: 1011fb3f-3ce7-4338-99c1-52422673f1e9
Network segment pool: ND_VLAN_201
Vlan: 201
System Network Segment: FALSE
...

```

This example shows how to display information about a NSM network segment named NS\_VLAN\_202:

```

n1000v# show nsm network segment name NS_VLAN_202
Name: NS_VLAN_202
VM Network Name: NS_VLAN_202
VM Network GUID: 567ee28a-6cfb-46ad-b464-568a133e7592
Description:
GUID: 09f638c6-c1f4-4b94-a9b9-a44e1dd92202
Nsm Network Segment Pool: ND_VLAN_202
Vlan: 202
System Network-Segment: FALSE
nsm ip pool template:
IP-Pool_template GUID:
Publish-name: NS_VLAN_202

```

This example shows how to display brief information about NSM network segments:

```
n1000v# show nsm network segment brief
```

```

-----
Network segment      Mode      VLAN      Pub      Sys
-----
DATA-Macpin         access    pĂłç$İ|.t  0        0
NS_VLAN_1           access    1          1        1
NS_VLAN_200        access    200        1        0
NS_VLAN_201        access    201        1        0
NS_VLAN_202        access    202        1        0
NS_VLAN_203        access    203        1        0
NS_VLAN_204        access    204        1        0
NS_VLAN_205        access    205        1        0
NS_VLAN_206        access    206        1        0

```

...

This example shows how to display information about the NSM network segment pool configuration:

```
n1000v# show nsm network segment pool

Name: Cisco-Campus-New
  GUID: ac0e898e-6a2d-400c-8f62-7a4bc7c08506
  Logical network Name: Cisco-New
  Intra Port Communication: Disabled
  Publish-name: Cisco-Campus-New

Name: ND_VLAN_200
  GUID: d6792668-52c7-4ac0-b5b2-b349a7b714b2
  Logical network Name: Nexus1000V-Even
  Intra Port Communication: Disabled
  Publish-name: ND_VLAN_200

Name: ND_VLAN_201
  GUID: b84e4b66-fe4b-4f43-8af8-f317720b42a4
  Logical network Name: Nexus1000V-Odd
  Intra Port Communication: Disabled
  Publish-name: ND_VLAN_201

...
```

This example shows how to display information about the NSM network segment pool configuration for a network named Cisco-Campus-New:

```
n1000v# show nsm network segment pool name Cisco-Campus-New

Name: Cisco-Campus-New
  GUID: ac0e898e-6a2d-400c-8f62-7a4bc7c08506
  Logical network Name: Cisco-New
  Intra Port Communication: Disabled
  Publish-name: Cisco-Campus-New
```

The following example shows how to display information about network segment pool information for VLAN 312:

```
n1000v# show nsm network segment filter vlan 312

Name: VLAN-312
  VM Network Name: VLAN-312
  VM Network GUID: 67639a71-d88c-400e-8c54-e0bab1e4ffd3
  Description:
  GUID: ecd1bd51-633f-4983-8660-c19b69cde734
  Network segment pool: Cisco-Campus-New
  Vlan: 312
  System Network Segment: FALSE
  ip pool template: default-Abhi-Pool
  ip pool template GUID: 9e9f13cb-4ad8-4afa-811a-04fe5c578690
  Publish-name: VLAN-312

n1000v#
```

This example shows how to display NSM network segment virtual port profile usage by interface.

```
n1000v# show nsm network segment virtual usage
-----
```

Network segment	Port Profile	Port	Owner
NS_VLAN_261	dynpp_39dd6ff0-7102-469e-bfe2-8de7eaaf0882_ c6cd32a9-08ab-46cb-a1fa-7ae9f4641625	Veth3	SUSE-003
		Veth6	SUSE-002
		Veth9	SUSE-004
		Veth12	SUSE-001

```
-----
```



```

dynpp_18e87473-bdb5-4e84-8fa5-204642fcaa32_
    c6cd32a9-08ab-46cb-a1fa-7ae9f4641625
        Veth1      Win2012-001
        Veth2      Win2012-002
NS_VLAN_263      dynpp_39dd6ff0-7102-469e-bfe2-8de7eaaf0882_
    694182a4-d4ed-4a24-9e98-de733ea16a10
        Veth4      SUSE-003
        Veth7      SUSE-002
        Veth10     SUSE-004
        Veth13     SUSE-001
sec-20           dynpp_39dd6ff0-7102-469e-bfe2-8de7eaaf0882_
    6af9ccd8-c129-4bfd-b445-af82db0bbfe1
        Veth5      SUSE-003
        Veth8      SUSE-002
        Veth11     SUSE-004
        Veth14     SUSE-001

```

**Related Commands**

Command	Description
<b>feature network-segmentation-manager</b>	Enables the NSM feature.
<b>id</b>	Associates an network segmentation policy with the tenant ID.
<b>nsm logical network</b>	Configures an NSM logical network.
<b>nsm network segment</b>	Configures an NSM network segment.
<b>nsm network segment pool</b>	Configures an NSM network segment pool.
<b>nsm network uplink</b>	Configures an NSM network uplink.
<b>show network-state</b>	Displays the network state.
<b>show nsm logical network</b>	Displays a complete list of NSM logical networks.
<b>show nsm network uplink</b>	Displays NSM uplink information.
<b>type</b>	Defines the network segmentation policy type.

# show nsm network uplink

To display information about the network segmentation manager (NSM) uplink network configuration, use the **show nsm network uplink** command.

```
show nsm network uplink [brief | filter {network segment pool net_seg_pool} | name uplink_net]
```

Syntax	Description
<b>brief</b>	(Optional) Displays brief information about the network uplink.
<b>filter</b>	(Optional) Displays the network uplink through a filter.
<b>network segment pool</b>	(Optional) Specifies a network segment pool.
<i>net_seg_pool</i>	Network segment pool name. The name is a maximum of 64 case-sensitive, alphanumeric characters.
<b>name</b>	(Optional) Specifies an uplink network.
<i>uplink_net</i>	Uplink network name. The name is a maximum of 80 case-sensitive characters.

**Defaults** Displays information about the NSM uplink network configuration.

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the NSM uplink network configuration:

```
n1000v# show nsm network uplink
nsm network uplink: DATA-Lacp
  Publish-name: DATA-Lacp
  import port-profile: Lacp-Policy
  nsm network segment pool:
    ND_VLAN_203
    ND_VLAN_205
    ND_VLAN_207
    ND_VLAN_209
    ND_VLAN_211
  .
  .
  .
Cisco-Campus-New
  port-profile config:
    switchport mode trunk
    switchport trunk allowed vlan 203,205,207,209,211,213,215,217,219,221
    switchport trunk allowed vlan add 223,225,227,229,231,233,235,237,239
```

```

switchport trunk allowed vlan add 241,243,245,247,249,251,253,255,257
switchport trunk allowed vlan add 261-263,265,267,269,271,273,275,277
switchport trunk allowed vlan add 281,283,285,287,289,291,293,295,297
switchport trunk allowed vlan add 299,302,304,306,308,310,312,314,316
switchport trunk allowed vlan add 318,320,322,324,326,328,330,332,334
switchport trunk allowed vlan add 336,338,340,342,344,346,348,350,352
switchport trunk allowed vlan add 354,356,358,360,362,364,366,368,370
switchport trunk allowed vlan add 372,374,376,378,380,382,384,386,388
switchport trunk allowed vlan add 390,392,394,396,398,400-402,2012
nsm network uplink: DATA-Macpin
Publish-name: DATA-Macpin
import port-profile: Macpin-Policy
nsm network segment pool:
ND_VLAN_203
ND_VLAN_205
ND_VLAN_207
ND_VLAN_209
...

```

This example shows how to display information about the a specific NSM network segment pool:

```

n1000v# show nsm network uplink filter network segment pool ND_VLAN_203
uplink network: DATA-Lacp
Publish-name: DATA-Lacp
import port-profile: Lacp-Policy
network segment pool:
ND_VLAN_203
ND_VLAN_205
ND_VLAN_207
ND_VLAN_209
ND_VLAN_211
ND_VLAN_213
ND_VLAN_215
ND_VLAN_217
ND_VLAN_219
ND_VLAN_221
ND_VLAN_223
ND_VLAN_225
ND_VLAN_227
ND_VLAN_229
...

```

The following example shows how to display brief information about the NSM network uplink:

```

n1000v# show nsm network uplink brief
-----
network uplink                Pub      Sys
-----
DATA-Lacp                      1        1
DATA-Lacp-System               1        1
DATA-Macpin                    1        0
DATA-Macpin-System             1        1
UPLINK-MGMT-LACP               1        1
Uplink-MGMT                   1        1
Uplink-MGMT-Host-180          1        1
Uplink_Even_Lacp              1        0
Uplink_Even_Macpin            1        0
-----
Total          Total Pub      Total Sys
-----
13             13           8
n1000v#

```

The following example shows how to display the list of NSM network uplinks that are filtered based on the Ethernet policy port profile:

```
n1000v# show nsm network uplink filter import UplinkNoPortChannel
uplink network: NexusUplink
  Publish-name: NexusUplink
  import port-profile: UplinkNoPortChannel
  network segment pool:
    IntranetSJ
  System Uplink-Network: TRUE
  Switchport mode override:auto
  Native network segment: VMNetworkB
  port-profile config:
n1000v#
```

The following example shows how to display the list of the network uplinks that are filtered based on the NSM network segment pools used:

```
n1000v# show nsm network uplink filter network segment pool IntranetSJ
  Publish-name: NexusUplink
  import port-profile: UplinkNoPortChannel
  network segment pool:
    IntranetSJ
  System Uplink-Network: TRUE
  Switchport mode override:auto
  Native network segment: VMNetworkB
  port-profile config:
n1000v#
```

#### Related Commands

Command	Description
<b>nsm network segment</b>	Configures an NSM network segment.
<b>nsm logical network</b>	Configures an NSM logical network.
<b>nsm network segment pool</b>	Configures an NSM network segment pool.
<b>nsm network uplink</b>	Configures an NSM network uplink.
<b>show nsm network segment</b>	Displays information about an NSM network segments.
<b>show nsm logical network</b>	Displays a complete list of NSM logical networks.

# show ntp

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

```
show ntp { authentication-keys | authentication-status | internal { event-history { config | fsm |
  msgs | rts | tstamp } | mem-stats [detail] | module-info } | logging-status | peer-status | peers
  | pending peers | pending-diff | rts-update | session status | source | statistics { io | local |
  memory | peer { ipaddr ipv4_addr | name peer_name } | status | trusted-keys }
```

## Syntax Description

<b>authentication-keys</b>	Displays the authentication keys.
<b>authentication-status</b>	Displays the NTP authentication status.
<b>internal</b>	Displays NTP internal information.
<b>event-history</b>	Displays the event history.
<b>config</b>	Displays the configuration history.
<b>fsm</b>	Displays the finite state machine (FSM) state transition.
<b>msgs</b>	Displays the message and transaction service (MTS) history.
<b>rts</b>	Displays the request-to-send (RTS) history.
<b>tstamp</b>	Displays the timestamp update history.
<b>mem-stats</b>	Displays the NTP memory allocation statistics.
<b>detail</b>	(Optional) Displays detailed NTP memory allocation statistics.
<b>module-info</b>	Displays all line card related information.
<b>logging-status</b>	Displays the NTP logging status.
<b>peer-status</b>	Displays the all of the server/peers status.
<b>peers</b>	Displays all of the peers.
<b>pending peers</b>	Displays the NTP temporary peer database.
<b>pending-diff</b>	Displays the server address differences between the pending and configuration databases.
<b>rts-update</b>	Displays the state of the request-to-send (RTS) update.
<b>session status</b>	Displays the session status.
<b>source</b>	Displays the configured IP source address.
<b>statistics</b>	Displays NTP statistics.
<b>io</b>	Displays the input-output statistics.
<b>local</b>	Displays the counters maintained by the local NTP.
<b>memory</b>	Displays the statistics counters related to memory code.
<b>peer</b>	Displays the per-peer statistics counter.
<b>ipaddr</b>	Specifies the peer's IP address.
<i>ipv4_addr</i>	Peer's IPv4 address.
<b>name</b>	Specifies a peer's name.
<i>peer_name</i>	Peer name.
<b>status</b>	Displays the NTP distribution status.
<b>trusted-keys</b>	Displays trusted keys.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

### Examples

This example shows how to display messages about the NTP internal event history:

```
n1000v# show ntp internal event-history msgs
```

- 1) Event:E\_MTS\_RX, length:60, at 850000 usecs after Tue Apr 2 16:38:30 2013  
 [REQ] Opc:MTS\_OPC\_NTP\_SHOW\_REQ(2702), Id:0X000C6945, Ret:SUCCESS  
 Src:0x00000101/17080, Dst:0x00000101/72, Flags:None  
 HA\_SEQNO:0X00000000, RRtoken:0x000C6945, Sync:UNKNOWN, Payloadsize:200  
 Payload:  
 0x0000: 00 00 00 01 00 00 00 58 00 00 00 00 61 64 6d 69
  - 2) Event:E\_MTS\_TX, length:60, at 250000 usecs after Tue Apr 2 16:38:15 2013  
 [NOT] Opc:MTS\_OPC\_NTP\_TIME\_UPD(2707), Id:0X000C67EB, Ret:SUCCESS  
 Src:0x00000101/72, Dst:0x00000101/0, Flags:None  
 HA\_SEQNO:0X00000000, RRtoken:0x00000000, Sync:UNKNOWN, Payloadsize:16  
 Payload:  
 0x0000: 77 09 5b 51 90 d0 03 00 e9 47 00 00 80 b2 e6 0e
  - 3) Event:E\_MTS\_RX, length:60, at 460000 usecs after Tue Apr 2 16:38:07 2013  
 [REQ] Opc:MTS\_OPC\_NTP\_SHOW\_REQ(2702), Id:0X000C678B, Ret:SUCCESS  
 Src:0x00000101/17078, Dst:0x00000101/72, Flags:None  
 HA\_SEQNO:0X00000000, RRtoken:0x000C678B, Sync:UNKNOWN, Payloadsize:200  
 Payload:  
 0x0000: 00 00 00 01 00 00 00 58 00 00 00 00 61 64 6d 69
  - 4) Event:E\_MTS\_TX, length:60, at 250000 usecs after Tue Apr 2 16:36:45 2013  
 [NOT] Opc:MTS\_OPC\_NTP\_TIME\_UPD(2707), Id:0X000C601D, Ret:SUCCESS  
 Src:0x00000101/72, Dst:0x00000101/0, Flags:None  
 HA\_SEQNO:0X00000000, RRtoken:0x00000000, Sync:UNKNOWN, Payloadsize:16  
 Payload:  
 0x0000: 1d 09 5b 51 90 d0 03 00 8f 47 00 00 80 b2 e6 0e
- ...

### Related Commands

Command	Description
<b>clear ntp statistics</b>	Clears the NTP statistics.
<b>ntp enable</b>	Enables the NTP.
<b>ntp peer</b>	Configures an NTP peer.
<b>ntp server</b>	Configures an NTP server.
<b>ntp source</b>	Configures an NTP source.

# show password strength-check

To display the status of the password strength check utility, 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

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the status of the password strength check:

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

Related Commands	Command	Description
	<b>password strength-check</b>	Enables password strength checking.

# show port-channel capacity

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

**show port-channel capacity**

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display port channel capacity information:

```
n1000v# show port-channel capacity
Port-channel resources
    1600 total    13 used    1587 free    0% used
```

Related Commands	Command	Description
	<b>feature lacp</b>	Enables the LACP feature that bundles a number of physical ports together to form a single logical channel.
	<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
	<b>port-channel load-balance ethernet</b>	Sets an algorithm for balancing load on interfaces in channel groups.
	<b>show port-channel</b>	Displays port channel information.



# show port-channel cdp-map

To display the port channel Cisco Discovery Protocol map, use the **show port-channel cdp-map** command.

## show port-channel cdp-map

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the port channel Cisco Discovery Protocol map:

```
n1000v# show port-channel cdp-map
-----
Sub-grp id          Device-id
-----
0                   N5K-2-RowP-Rack6 (SSI144506V9)
1                   N5K-1-RowP-Rack7 (SSI144506TY)
```

Related Commands	Command	Description
	<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
	<b>port-channel load-balance ethernet</b>	Sets an algorithm for balancing load on the interfaces in channel groups.
	<b>show port-channel</b>	Displays port channel information.

# show port-channel compatibility-parameters

To display information about port channel compatibility parameters, 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
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about port channel compatibility parameters:

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

Members must have the same port mode configured.

```
* port mode
```

Members must have the same port mode configured, either E,F or AUTO. If they are configured in AUTO port mode, they have to negotiate E or F 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.

```
* shut lan
```

Members have to have the same shut lan 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.

## \* load interval

Member must have same load interval configured.

## \* 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.

## \* Storm Control

Members must have same storm-control configured.

## \* Flow Control

Members must have same flowctrl configured.

## \* Capabilities

Members must have common capabilities.

## \* Capabilities speed

Members must have common speed capabilities.

## \* Capabilities duplex

Members must have common speed duplex capabilities.

## \* rate mode

Members must have the same rate mode configured.

...

---

**Related Commands**

Command	Description
<b>feature lacp</b>	Enables the LACP feature that bundles a number of physical ports together to form a single logical channel.
<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
<b>port-channel load-balance ethernet</b>	Sets an algorithm for load balancing on interfaces in channel groups.
<b>show port-channel</b>	Displays port channel information.

# show port-channel database

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

```
show port-channel database [interface {port-channel port_chan_num}]
```

Syntax Description	Parameter	Description
	<b>interface</b>	(Optional) Specifies a port channel.
	<b>port-channel</b>	Specifies a port channel interface.
	<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.

**Defaults** Displays the port channel databases.

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the port channel database:

```
n1000v# show port-channel database
port-channell
  Last membership update is successful
  4 ports in total, 4 ports up
  First operational port is Ethernet3/8
  Age of the port-channel is 0d:02h:15m:38s
  Time since last bundle is 0d:02h:15m:38s
  Last bundled member is Ethernet3/8
  Ports:  Ethernet3/5      [on] [up]
          Ethernet3/6      [on] [up]
          Ethernet3/7      [on] [up]
          Ethernet3/8      [on] [up] *
  ...
```

Related Commands	Command	Description
	<b>feature lacp</b>	Enables the LACP feature that bundles a number of physical ports together to form a single logical channel.
	<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
	<b>port-channel load-balance ethernet</b>	Sets an algorithm for load balancing on interfaces in channel groups.
	<b>show port-channel</b>	Displays port channel information.

# show port-channel load-balance

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

## show port-channel load-balance

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display port channel load balance information:

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

port channel Load-Balancing Configuration:
System: source-mac

port channel Load-Balancing Addresses Used Per-Protocol:
Non-IP: source-mac
IP: source-mac
```

Related Commands	Command	Description
	<b>feature lacp</b>	Enables the LACP feature that bundles a number of physical ports together to form a single logical channel.
	<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
	<b>port-channel load-balance ethernet</b>	Sets an algorithm for load balancing on interfaces in channel groups.
	<b>show port-channel</b>	Displays port channel information.

# show port-channel summary

To display port channel summary information, 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
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display port channel summary information:

```
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)
        M - Not in use. Min-links not met

-----
Group Port-      Type   Protocol  Member Ports
Channel
-----
1     Po1 (SU)    Eth    NONE     Eth3/5 (P)  Eth3/6 (P)
2     Po2 (SU)    Eth    NONE     Eth3/3 (P)  Eth3/4 (P)
3     Po3 (SU)    Eth    NONE     Eth3/1 (P)  Eth3/2 (P)
4     Po4 (SD)    Eth    NONE     --
5     Po5 (SD)    Eth    NONE     --
6     Po6 (SU)    Eth    NONE     Eth4/1 (P)  Eth4/2 (P)
7     Po7 (SU)    Eth    NONE     Eth4/3 (P)  Eth4/4 (P)
...

```

Related Commands	Command	Description
	<b>feature lacp</b>	Enables the LACP feature that bundles a number of physical ports together to form a single logical channel.
	<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.

<b>Command</b>	<b>Description</b>
<b>port-channel load-balance ethernet</b>	Sets an algorithm for load balancing on interfaces in channel groups.
<b>show port-channel</b>	Displays port channel information.

# show port-channel traffic

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

```
show port-channel traffic [interface {port-channel port_chan_num [. sub_if_num]]}
```

Syntax Description	Parameter	Description
	<b>interface</b>	(Optional) Displays port channel interface information.
	<b>port-channel</b>	Specifies a port channel interface.
	<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
	.	(Optional) Specifies the subinterface separator (dot .)
	<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.

**Command Default** None

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

## Examples

This example shows how to display port channel traffic statistics:

```
n1000v# show port-channel traffic
show port-channel traffic
ChanId      Port  Rx-Ucst Tx-Ucst  Rx-Mcst Tx-Mcst  Rx-Bcst Tx-Bcst
-----
1   Eth3/8  24.64%  0.0%   24.90%  18.45%  25.03%  0.0%
1   Eth3/7  24.64%  0.0%   24.85%  18.45%  25.01%  0.0%
1   Eth3/6  24.96%  0.0%   25.29%  18.45%  25.02%  0.0%
1   Eth3/5  25.75% 100.00%  24.94%  44.62%  24.92% 100.00%
-----
2   Eth3/4  47.29%  25.00%  49.92%  31.61%  50.11%  17.59%
2   Eth3/3  52.70%  75.00%  50.07%  68.38%  49.88%  82.40%
-----
3   Eth4/6   0.0%   0.0%   4.59%  24.96%   0.0%   0.0%
3   Eth4/5  57.96%  0.0%  60.82%  25.03%  69.91%  0.0%
3   Eth4/4   0.0%   0.0%   4.76%  24.96%   0.09%  0.0%
3   Eth4/3  42.03%  0.0%  29.82%  25.03%  29.99%  0.0%
...

```

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

```
n1000v# show port-channel traffic interface port-channel 2
ChanId      Port  Rx-Ucst Tx-Ucst  Rx-Mcst Tx-Mcst  Rx-Bcst Tx-Bcst
-----

```



```

2    Eth3/4  47.33%  25.00%  49.92%  31.46%  50.10%  17.59%
2    Eth3/3  52.66%  75.00%  50.07%  68.53%  49.89%  82.40%

```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>feature lacp</b>	Enables the LACP feature that bundles a number of physical ports together to form a single logical channel.
<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
<b>port-channel load-balance ethernet</b>	Sets an algorithm for load balancing on interfaces in channel groups.
<b>show port-channel</b>	Displays port channel information.

# show port-channel usage

To display information about the port channel number usage, 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
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about port channel usage:

```
n1000v# show port-channel usage
Total 0 port-channel numbers used
=====
Used   :
Unused:  1 - 4096
        (some numbers may be in use by SAN port channels)
```

Related Commands	Command	Description
	<b>feature lACP</b>	Enables the LACP feature that bundles a number of physical ports together to form a single logical channel.
	<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
	<b>port-channel load-balance ethernet</b>	Sets an algorithm for load balancing on interfaces in channel groups.
	<b>show port-channel</b>	Displays port channel information.

# show port-profile

To display information about the port profile, use the **show port-profile** command.

```
show port-profile [brief | expand-interface port_profile_name | fip | name port_profile_name | |
usage [port_profile_name] | virtual {usage [port_profile_name]}
```

Syntax Description		
<b>brief</b>	(Optional)	Displays brief information about port profiles
<b>expand-interface</b>	(Optional)	Displays the active profile configuration applied in an interface.
<i>port_profile_name</i>		Port profile name.
<b>fip</b>	(Optional)	Displays the enabled Fiber Channel over Ethernet (FCoE) Initialization Protocol (FIP).
<b>name</b>	(Optional)	Displays the port profile by name.
<b>usage</b>	(Optional)	Displays the list of interfaces inherited by a port profile.
<b>virtual</b>	(Optional)	Displays virtual port profile information.

**Defaults** Displays all port profiles.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about port profiles:

```
n1000v# show port-profile
port-profile ACL_POLICY
  type: Vethernet
  description:
  status: enabled
  max-ports: 32
  min-ports: 1
  inherit:
  config attributes:
    ip port access-group acl-test in
    no shutdown
  evaluated config attributes:
    ip port access-group acl-test in
    no shutdown
  assigned interfaces:
  port-group: ACL_POLICY
  system vlans: none
  capability l3control: no
```

```

capability iscsi-multipath: no
capability vxlan: no
capability l3-vn-service: no
port-profile role: none
port-binding: static

port-profile ACL_POLICY1
type: Vethernet
description:
status: disabled
max-ports: 32
min-ports: 1
inherit:
config attributes:
evaluated config attributes:
assigned interfaces:
port-group:
system vlans: none
capability l3control: no
capability iscsi-multipath: no
capability vxlan: no
capability l3-vn-service: no
port-profile role: none
port-binding: static
.
.
.
port-profile uplink_network_default_policy
type: Ethernet
description: NSM created profile. Do not delete.
status: enabled
max-ports: 512
min-ports: 1
inherit:
config attributes:
  no shutdown
evaluated config attributes:
  no shutdown
assigned interfaces:
port-group:
system vlans: none
capability l3control: no
capability iscsi-multipath: no
capability vxlan: no
capability l3-vn-service: no
port-profile role: none
port-binding: static
...

```

This example shows how to display brief information about the port profiles:

```
n1000v# show port-profile brief
```

Port Profile	Profile Type	Profile State	Conf Items	Eval Items	Assigned Intfs	Child Profs
ACL_POLICY	Vethernet	1	2	2	0	0
ACL_POLICY1	Vethernet	0	0	0	0	0
AllAccess	Ethernet	1	2	2	0	1
AllAccess1	Vethernet	1	1	1	0	0
AllowWebServerAccess	Vethernet	1	1	1	0	0
NSM_template_segmentation	Vethernet	1	1	1	0	0
NSM_template_vlan	Vethernet	1	1	1	0	0
NexusUplink	Ethernet	1	3	4	0	0

PortChannelProfile	Ethernet	1	2	2	0	0
UNN	Ethernet	1	3	3	0	0
bbb	Vethernet	0	0	0	0	0
channel	Ethernet	1	1	2	0	0
hsrp-1	Vethernet	1	3	3	0	0
ms-nlb	Vethernet	1	3	3	0	0
msft	Vethernet	1	1	1	0	0
name	Ethernet	1	3	3	0	0
name1	Vethernet	1	0	0	0	0
trunk	Ethernet	1	2	2	0	0
uplink-port-channel	Ethernet	1	2	3	0	0
uplink_network_default_policy	Ethernet	1	1	1	0	5
vrrp-1	Vethernet	1	3	3	0	0

Profile Type	Assigned Intfs	Total Prfls	Sys Prfls	Parent Prfls	Child Prfls	UsedBy Prfls
Vethernet	0	12	0	12	0	0
Ethernet	0	9	1	7	6	0

This example shows how to display the enabled port profile FIP:

```
n1000v# show port-profile fip
Total number of Actions for ppm: 11
  Action ID: 1 -> crash
  Action ID: 2 -> switchover
  Action ID: 3 -> reload
  Action ID: 4 -> pssdump runtime db
  Action ID: 5 -> pssdump runtime cfg
  Action ID: 6 -> Sleep for 10 seconds
  Action ID: 7 -> Sleep for 20 seconds
  Action ID: 8 -> Sleep for 30 seconds
  Action ID: 9 -> Sleep for 90 seconds
  Action ID: 10 -> Sleep for 3 minutes
  Action ID: 11 -> Sleep for 10 minutes
Total number of Fault injection points for ppm: 1
  FIP ID: 1
    Description: __dummy_entry_"ppm"
    Enabled: no
    Action ID: 0
    Repeat Count: 0
```

This example shows how to display a specific port profile by its name:

```
n1000v# show port-profile name LACP-Policy
port-profile LACP-Policy
  type: Ethernet
  description:
  status: enabled
  max-ports: 512
  min-ports: 1
  inherit:
  config attributes:
    channel-group auto mode active
    no shutdown
  evaluated config attributes:
    channel-group auto mode active
    no shutdown
  assigned interfaces:
  port-group:
  system vlans: none
  port-binding: static
```

This example shows how to display a list of interfaces inherited by a port profile:

```

n1000v# show port-profile usage

port-profile Lacp-Policy

port-profile Macpin-Policy

port-profile NSM_template_segmentation

port-profile NSM_template_vlan

port-profile NexusNoRestriction

port-profile NexusUplink

port-profile PortChannelProfile

port-profile Uplink-10G-Lacp

port-profile Uplink-10G-Macpin

port-profile Uplink-MGMT

port-profile Uplink-Odd-Long-Macpin
port-channel1
port-channel2
port-channel3
port-channel4
Ethernet4/3
Ethernet4/5
...

```

This example shows how to display virtual port profile information:

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

```

-----
Port Profile          Port          Adapter      Owner
-----
Uplink-Odd-Long-Macpin Po1
                    Po2
                    Po3
                    Po4
                    Eth4/3      vmnic2      NODE-137
                    Eth4/5      vmnic4      NODE-137
                    Eth5/4      vmnic3      NODE-139
                    Eth5/5      vmnic4      NODE-139
dynpp_3d5413ff-4755-41bd-9 Veth1        WIN-VM-07
                    Veth2        WIN-VM-07
                    Veth3        WIN-VM-08
                    Veth4        WIN-VM-08
                    Veth5        WIN-VM-01
                    Veth6        WIN-VM-01
                    Veth7        WIN-VM-06
                    Veth8        WIN-VM-06
                    Veth9        WIN-VM-03
                    Veth10       WIN-VM-03
                    Veth11       WIN-VM-04
                    Veth12       WIN-VM-04
                    Veth13       WIN-VM-05
                    Veth14       WIN-VM-05
                    Veth15       WIN-VM-02
                    Veth16       WIN-VM-02
...

```

Related Commands	Command	Description
	<b>default shutdown</b>	Removes a configured administrative state from a port profile and returns its member interfaces to the default state (shutdown).
	<b>default switchport</b>	Removes a particular switchport characteristic from a port profile.
	<b>inherit port-profile</b>	Adds an inherited configuration to a new port profile as a default configuration.
	<b>interface port-channel</b>	Creates a port channel interface and enters interface configuration mode.
	<b>ip port access-group</b>	Creates an access group.
	<b>max-ports</b>	Configures the maximum number of ports for a port profile.
	<b>nsm network uplink</b>	Configures a network uplink.
	<b>pinning id</b>	Pins virtual Ethernet traffic to a specific subgroup.
	<b>pinning-sgid</b>	Pins control or packet VLAN traffic to a specific subgroup.
	<b>port-binding</b>	Configures port binding for a port profile.
	<b>port-profile</b>	Creates a port profile and enters port profile configuration mode.
	<b>port-profile default port-binding</b>	Configures a default port binding that is automatically applied to all new virtual Ethernet port profiles.
	<b>shutdown</b>	Disables all ports in a port profile.
	<b>user</b>	Assigns a user to a port profile role.

# show privilege

To display information about your privilege level, use the **show privilege** command.

**show privilege**

---

**Syntax Description** This command has no arguments or keywords.

---

**Defaults** None

---

**Command Modes** Any

---

**SupportedUserRoles** network-admin

---

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

---



---

**Examples** This example shows how to display information about your privilege level:

```
n1000v# show privilege
User name: admin
Current privilege level: -1
Feature privilege: Disabled
```



# show processes

To display information about processes, use the **show processes** command.

```
show processes [cpu [history | sort] | log [details | pid pid_num | vdc-all] | memory [shared
[detail | dynamic]] | vdc vdc_number [cpu | log [details | pid pid_num] | memory]]
```

Syntax Description	
<b>cpu</b>	(Optional) Displays the process CPU information.
<b>history</b>	(Optional) Displays the processes CPU utility history.
<b>sort</b>	(Optional) Displays the CPU utility sorted CPU information.
<b>log</b>	(Optional) Displays information about process logs.
<b>details</b>	(Optional) Displays details of all logs.
<b>pid</b>	(Optional) Displays detailed log information about a specific process.
<i>pid_num</i>	Process ID number. The range is from 1 to 2147483647.
<b>vdc-all</b>	(Optional) Displays information about process logs in all virtual device contexts (VDCs).
<b>memory</b>	(Optional) Displays process memory information.
<b>shared</b>	(Optional) Displays shared memory information.
<b>detail</b>	(Optional) Displays shared memory in bytes instead of default kbytes.
<b>dynamic</b>	(Optional) Displays the details of dynamic shared memory segments
<b>vdc</b>	(Optional) Displays the processes in a VDC.
<i>vdc_number</i>	VDC number.

**Defaults** Displays all of the running processes.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the CPU utility history of a processes:

```
n1000v# show processes
```

```
PID      State  PC          Start_cnt  TTY  Process
-----  -----  -
      1      S    41520eb8      1      -    init
      2      S          0          1      -    kthreadd
      3      S          0          1      -    migration/0
```

## show processes

```

 4      S      0      1      - ksoftirqd/0
 5      S      0      1      - watchdog/0
 6      S      0      1      - events/0
 7      S      0      1      - khelper
 8      S      0      1      - kblockd/0
 9      S      0      1      - kacpid
10      S      0      1      - kacpi_notify
11      S      0      1      - kseriod
12      S      0      1      - ata/0
13      S      0      1      - ata_aux
14      S      0      1      - ksuspend_usbd
15      S      0      1      - khubd
16      S      0      1      - pdflush
17      S      0      1      - pdflush
18      S      0      1      - kswapd0
19      S      0      1      - aio/0
20      S      0      1      - nfsiod
21      S      0      1      - rpciod/0
331     S      0      1      - kjournald
336     S      0      1      - kjournald
908     S      0      1      - kjournald
915     S      0      1      - kjournald
985     S      0      1      - hv_vmbus_con/0
...

```

This example shows how to display information about the CPU process history:

```

n1000v# show processes cpu history
3132  34 1 122 2 3  1311 2  12 2 211 12 122  31 1 2
100
90
80
70
60
50
40
30
20
10
0.....5.....1.....1.....2.....2.....3.....3.....4.....4.....5.....5.....
      0      5      0      5      0      5      0      5      0      5      0      5

      CPU% per second (last 60 seconds)
      # = average CPU%

      2  43  3  5  3  55  2  3 4 3  3 5 2  33 6
413346343444545645444756541056404544639348454407304444449548
100
90
80
70
60
50      *      *      **      *      *      *
40      *      *      *      **      *      *      *      *
30      **      *      *      *      **      *      *      *      *
20      *      **      *      *      *      **      *      *      *      *      *
10      *      **      **      ****      ****      ****      *      *      *      *      *      *      *      *
0.....5.....1.....1.....2.....2.....3.....3.....4.....4.....5.....5.....
      0      5      0      5      0      5      0      5      0      5      0      5

      CPU% per minute (last 60 minutes)
      * = maximum CPU%  # = average CPU%

```

```

1
0
0
100 *
90 *
80 *
70 *
60 *
50 *
40 *
30 *
20 *
10 *
0...5...1...1...2...2...3...3...4...4...5...5...6...6...7.
  0    5    0    5    0    5    0    5    0    5    0    5    0

```

CPU% per hour (last 72 hours)  
 \* = maximum CPU% # = average CPU%

This example shows how to display detailed CPU process log information:

```

n1000v# show processes log details
=====
Service: nsmgr
Description: NSMGR Daemon
Executable: /isan/bin/nsmgr

Started at Sat Mar  2 14:23:24 2013 (106772 us)
Stopped at Sat Mar  2 14:54:46 2013 (65483 us)
Uptime: 31 minutes 22 seconds

Start type: SRV_OPTION_RESTART_STATELESS (23)
Death reason: SYSMGR_DEATH_REASON_FAILURE_SIGNAL (2)
Last heartbeat 2.21 secs ago
RLIMIT_AS: 188358438
System image name: n1000vh-dk9.5.2.1.SM1.5.0.7.bin
System image version: 5.2(1)SM1(5.0.7) S0

PID: 3630
Exit code: signal 11 (core dumped)

CWD: /var/sysmgr/work

RLIMIT_AS:      -1

Virtual Memory:

CODE      08048000 - 081A3C04
DATA      081A4000 - 081A6468
BRK       081B9000 - 085BF000
STACK    BFBAC5A0
TOTAL    94380 KB

Memory Map: 08048000 nsmg 081A4000 nsmg 4143F000 ld-2.8.s 41459000 ld-2.8.s 4145A000
ld-2.8.s 4145D000 libc-2.8.s 41596000 libc-2.8.s 41598000 libc-2.8.s 4159E000 libdl-2.8.s
415A0000 libdl-2.8.s 415A1000 libdl-2.8.s 415A4000 libuuid.so.1. 415A7000 libuuid.so.1.
415BE000 libpthread-2.8.s 415D2000 libpthread-2.8.s 415D3000 libpthread-2.8.s 415D800
0 libm-2.8.s 415FC000 libm-2.8.s 415FD000 libm-2.8.s 41600000 libtinfo.so.5. 41615000
libtinfo.so.5. 41634000 librt-2.8.s 4163B000 librt-2.8.s 4163C000 librt-2.8.s 41654000 1
ibz.so.1.2. 41666000 libz.so.1.2. B2BE5000 libsyserr-data.so.0.0. B2CEB000
libsyserr-data.so.0.0. B2D15000 mts B6D15000 libmtsdlutils.so.0.0. B6D16000
libmtsdlutils.so.0.0. B
...

```

This example shows how to display information about shared CPU dynamic memory:

```
n1000v# show processes memory shared dynamic
Component          Shared Memory Current Size  Max Size    Used
rsw_shm_urib       0X52650000    1048264    100663296   860160
rsw_shm_u6rib      0X59480000    1048264    16777216    588456
 '+' - Dynamic shared memory segment.
 '*' - Non-default sized share memory segment.
```

---

**Related Commands**

Command	Description
<b>attach module</b>	Accesses the standby VSM console from the active VSM.

---

# show radius-server

To display the Remote Authentication Dial-In User Service (RADIUS) server configuration, use the **show radius-server** command.

```
show radius-server [host | directed-request | groups [group_name] | sorted | statistics host]
```

Syntax Description	
<b>host</b>	(Optional) DNS name or IP address for the RADIUS server.
<b>directed-request</b>	(Optional) Displays the directed server enable configuration.
<b>groups</b>	(Optional) Displays RADIUS server group configuration information.
<i>group_name</i>	(Optional) RADIUS server group name. The name is a maximum of 127 characters.
<b>sorted</b>	(Optional) Displays the RADIUS servers sorted by name.
<b>statistics</b>	(Optional) Displays RADIUS statistics.

**Defaults** Displays the RADIUS server configuration.

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the RADIUS server configuration:

```
n1000v# show radius-server
retransmission count:1
timeout value:5
deadtime value:0
source interface:any available
total number of servers:0
```

This example shows how to display information about the RADIUS server group configuration:

```
n1000v# show radius-server groups
total number of groups:1

following RADIUS server groups are configured:
  group radius:
    server: all configured radius servers
    deadtime is 0
```

This example shows how to display the RADIUS server configuration in a sorted format:

```
n1000v# show radius-server sorted
timeout value:5
retransmission count:1
deadtime value:0
source interface:any available
total number of servers:0
```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>deadtime</b>	Configures the duration of time for which a nonreachable RADIUS or TACACS+ server is skipped.
<b>radius-server deadtime</b>	Configures the dead-time interval for all RADIUS servers used by a device.
<b>radius-server directed request</b>	Allows users to send authentication requests to a specific RADIUS server when logging in.
<b>radius-server host</b>	Configures the RADIUS server parameters.
<b>radius-server key</b>	Configures a RADIUS shared secret key.
<b>radius-server retransmit</b>	Configures the number of times that the device should try a request with a RADIUS server.
<b>radius-server timeout</b>	Configures the time between retransmissions to the RADIUS servers.
<b>server</b>	Configures the RADIUS server as a member of a RADIUS server group.
<b>show radius-server groups</b>	Displays information about the RADIUS server group configuration.
<b>show radius-server sorted</b>	Displays the RADIUS server configuration in a sorted format.
<b>source-interface</b>	Specifies a source interface for reaching a RADIUS or TACACS+ server group.
<b>use-vrf</b>	Configures VRF to contact this server group.

# show redundancy status

To display information about the system redundancy status, use the **show redundancy status** command.

## show redundancy status

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the redundancy status:

```
n1000v# show redundancy status
Redundancy role
-----
      administrative:  standalone
      operational:    standalone

Redundancy mode
-----
      administrative:  HA
      operational:    None

This supervisor (sup-1)
-----
      Redundancy state:  Active
      Supervisor state:  Active
      Internal state:   Active with no standby

Other supervisor (sup-2)
-----
      Redundancy state:  N/A

      Supervisor state:  N/A
      Internal state:   N/A

System start time:      Tue Feb 19 20:39:03 2013

System uptime:          4 days, 14 hours, 2 minutes, 14 seconds
Kernel uptime:         4 days, 14 hours, 3 minutes, 1 seconds
Active supervisor uptime: 4 days, 14 hours, 1 minutes, 38 seconds
```

■ show redundancy status

---

**Related Commands**

---

**Command**

---

**Description**

---

**attach module**

---

Accesses the standby VSM console from the active VSM.

---



# show resource

To display information about the resource configuration for the virtual device context (VDC), use the **show resource** command.

```
show resource [internal {event-history {errors | msgs} | info {resource [monitor-session |
port-channel | u4route-mem | vlan | vrf]}} | port-channel | u4route-mem | u6route-mem |
vlan | vrf]
```

Syntax Description		
<b>internal</b>	(Optional)	Displays the internal resource manager information.
<b>event-history</b>		Displays various resource managers event logs.
<b>errors</b>		Displays the resource manager error logs.
<b>msgs</b>		Displays the various resource manager message logs.
<b>info</b>		Displays internal data structure information.
<b>resource</b>		Displays the resource configuration for the virtual device context (VDC).
<b>port-channel</b>	(Optional)	Displays EtherChannel information.
<b>u4route-mem</b>	(Optional)	Displays IPv4 unicast route memory information.
<b>vlan</b>	(Optional)	Displays VLAN information.
<b>vrf</b>	(Optional)	Displays virtual routing and forwardings (VRFs) information.

**Defaults** Displays information about the resource configuration for the VDC.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about internal event history messages:

```
n1000v# show resource internal event-history msgs

1) Event:E_MTS_RX, length:60, at 430700 usecs after Sat Mar  2 21:36:55 2013
   [REQ] Opc:MTS_OPC_SDWRAP_DEBUG_DUMP(1530), Id:0X0001EBC3, Ret:SUCCESS
   Src:0x00000101/5993, Dst:0x00000101/387, Flags:None
   HA_SEQNO:0X00000000, RRtoken:0x0001EBC3, Sync:UNKNOWN, Payloadsize:216
   Payload:
   0x0000:  01 00 2f 74 6d 70 2f 64 62 67 64 75 6d 70 31 32

2) Event:E_MTS_RX, length:60, at 121661 usecs after Sat Mar  2 21:32:54 2013
   [REQ] Opc:MTS_OPC_VSH_CMD_TLV(7679), Id:0X0001C66C, Ret:SUCCESS
   Src:0x00000101/3351, Dst:0x00000101/387, Flags:None
```

■ **show resource**

```

HA_SEQNO:0X00000000, RRtoken:0x0001C66C, Sync:UNKNOWN, Payloadsize:264
Payload:
0x0000:  04 03 02 01 08 01 00 00 00 00 00 00 00 00 00 00

3) Event:E_MTS_RX, length:60, at 585476 usecs after Sat Mar  2 21:30:58 2013
[REQ] Opc:MTS_OPC_VSH_CMD_TLV(7679), Id:0X0001B184, Ret:SUCCESS
Src:0x00000101/3351, Dst:0x00000101/387, Flags:None
HA_SEQNO:0X00000000, RRtoken:0x0001B184, Sync:UNKNOWN, Payloadsize:272
Payload:
0x0000:  04 03 02 01 10 01 00 00 00 00 00 00 00 00 00 00
...

```

This example shows how to display information about port channel resources:

```
n1000v# show resource port-channel
```

Resource	Min	Max	Used	Unused	Avail
-----	---	---	---	-----	-----
port-channel	0	1600	16	0	1584

---

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>show resource-availability</b>	Displays information about the available resources.

---

# show rmon

To display the current remote monitoring (RMON) agent status on the router, use the **show rmon** command.

```
show rmon {alarms | events | hcalarms | info | logs}
```

Syntax Description		
	<b>alarms</b>	Displays the RMON alarm table.
	<b>events</b>	Displays the RMON event table.
	<b>hcalarms</b>	Displays the RMON high capacity (HC) alarm table.
	<b>info</b>	Displays the RMON information.
	<b>logs</b>	Displays the RMON event log table.

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display RMON events:

```
n1000v# show rmon events
Event 1 is active, owned by PMON@FATAL
  Description is FATAL(1)
  Event firing causes log and trap to community public, last fired never
Event 2 is active, owned by PMON@CRITICAL
  Description is CRITICAL(2)
  Event firing causes log and trap to community public, last fired never
Event 3 is active, owned by PMON@ERROR
  Description is ERROR(3)
  Event firing causes log and trap to community public, last fired never
Event 4 is active, owned by PMON@WARNING
  Description is WARNING(4)
  Event firing causes log and trap to community public, last fired never
Event 5 is active, owned by PMON@INFO
  Description is INFORMATION(5)
  Event firing causes log and trap to community public, last fired never
```

This example shows how to display RMON information:

```
n1000v# show rmon info
show rmon info
Maximum allowed 32 bit or 64 bit alarms : 512
Number of 32 bit alarms configured : 0
Number of 64 bit hcalarms configured : 0
```

# show role

To display information about the role configuration, use the **show role** command.

```
show role [feature [detail | name feature_name] | name | pending | pending-diff | session {status}
          | status]
```

## Syntax Description

<b>feature</b>	(Optional) Displays the role feature.
<b>detail</b>	(Optional) Displays detailed information.
<b>name</b>	(Optional) Specifies the feature name.
<i>feature_name</i>	(Optional) Feature name. The name is case-sensitive and alphanumeric.
<b>pending</b>	(Optional) Displays the uncommitted role configuration.
<b>pending-diff</b>	(Optional) Displays the uncommitted role configuration.
<b>session</b>	(Optional) Displays the role session status.
<b>status</b>	(Optional) Displays the role status.

## Defaults

Displays information about the role configuration.

## Command Modes

Any

## Supported User Roles

network-admin

## Command History

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

## Usage Guidelines

Entering a ? after **show role name** produces a list of predefined network administration and system-defined privilege roles.

## Examples

This example shows how to display detailed information about the role feature:

```
n1000v# # show role feature detail
aaa (AAA service related commands)
  show aaa *
  config t ; aaa *
  aaa *
  clear aaa *
  debug aaa *
  show accounting *
  config t ; accounting *
  accounting *
  clear accounting *
  debug accounting *
```

```

cdp                                (Cisco Discovery Protocol related commands)
  show cdp *
  config t ; cdp *
  cdp *
  clear cdp *
  debug cdp *
l3vm                                (Layer 3 virtualization related commands)
  show vrf *
  config t ; vrf *
  routing-context vrf *
ping                                (Network reachability test commands)
  show ping *
  config t ; ping *
  ping *
  clear ping *
  debug ping *
  show ping6 *
  config t ; ping6 *
  ping6 *
  clear ping6 *
  debug ping6 *
  show traceroute *
  config t ; traceroute *
  traceroute *
  clear traceroute *
  debug traceroute *
  show traceroute6 *
  config t ; traceroute6 *
  traceroute6 *
  clear traceroute6 *
  debug traceroute6 *
...

```

This example shows how to display information about the role session status:

```

n1000v# show role session status
Last Action Time Stamp      : None
Last Action                 : None
Last Action Result          : None
Last Action Failure Reason  : none

```

#### Related Commands

Command	Description
<b>description</b>	Adds a description for a role.
<b>permit interface</b>	Assigns interfaces that users assigned to this role can access.
<b>role name</b>	Creates a user role.
<b>rule</b>	Creates a rule that defines criteria for a user role.

# show routing-context

To display current the routing context, use the **show routing-context** command.

```
show routing-context
```

---

**Syntax Description** This command has no arguments or keywords.

---

**Defaults** None

---

**Command Modes** Any

---

**SupportedUserRoles** network-admin

---

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

---



---

**Examples** This example shows how to display the routing context:

```
n1000v# show routing-context
Current Route Context: default
```

# show running-config

To display the current operating configuration, use the **show running-config** command.

```
show running-config [aaa [all] | acllog [all] | aclmg [all] | adjmgr [all] | all [all] | cdp [all] |
cert-enroll [all] | diff | eem | exclude-provision | expand-port-profile | ip [all] | l3vm [all] |
license [all] | netflow | network segment [manager {switch} | policy policy_name] | ntp [all]
| radius [all] | rpm [all] | security [all] | snmp [all] | spanning-tree [all | interface
{port-channel port_chan_num [. sub_if_num}] | vdc-all [all] | vlan vlan_id | vrf {vrf_name |
default | management} [all] | vservice [node | path] [vservice_name] | vshd]
```

## Syntax Description

<b>aaa</b>	(Optional) Displays the authentication, authorization, and accounting (AAA) configuration.
<b>all</b>	(Optional) Displays the running configuration with default command-line interfaces (CLIs).
<b>acllog</b>	(Optional) Displays the running configuration for the access control list (ACL) log.
<b>aclmg</b>	(Optional) Displays the running configuration for the ACL Manager.
<b>adjmgr</b>	(Optional) Displays adjacency manager (AM) information.
<b>all</b>	(Optional) Displays the current operating configuration with defaults.
<b>cdp</b>	(Optional) Displays the Cisco Discovery Protocol configuration.
<b>cert-enroll</b>	(Optional) Displays the certificate configuration.
<b>diff</b>	(Optional) Displays the difference between the running and startup configuration.
<b>eem</b>	(Optional) Displays the embedded event manager (EEM) running configuration.
<b>exclude-provision</b>	(Optional) Hides configuration for offline provision interfaces.
<b>expand-port-profile</b>	(Optional) Displays the expanded port profile.
<b>interface</b>	(Optional) Displays the interface configuration.
<b>ip</b>	(Optional) Displays IP information.
<b>l3vm</b>	(Optional) Displays the Layer 3 virtual module (VM) information.
<b>license</b>	(Optional) Displays the licensing configuration.
<b>netflow</b>	(Optional) Displays the NetFlow configuration.
<b>network segment</b>	(Optional) Displays the network segment information.
<b>manager</b>	(Optional) Displays network segmentation manager (NSM) information.
<b>switch</b>	Displays switch information.
<b>policy</b>	(Optional) Specifies policy information.
<i>policy_name</i>	Policy name The name is a maximum of 80 characters.
<b>ntp</b>	(Optional) Displays the Network Time Protocol (NTP) information.
<b>radius</b>	(Optional) Displays the Remote Authentication Dial-In User Service (RADIUS) server configuration.
<b>rpm</b>	(Optional) Displays the route policy manager (RPM) information.
<b>security</b>	(Optional) Displays the security configuration.

<b>snmp</b>	(Optional) Displays the Simple Network Management Protocol (SNMP) configuration.
<b>spanning-tree</b>	(Optional) Displays spanning tree information.
<b>port-channel</b>	Specifies a port channel interface.
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
.	(Optional) Specifies the subinterface separator (dot .)
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.
<b>vdc-all</b>	(Optional) Displays the configurations of all virtual device contexts (VDCs).
<b>vlan</b>	(Optional) Specifies a VLAN.
<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>default</b>	Displays a known VRF name.
<b>management</b>	Displays the management interface.
<b>vservice</b>	(Optional) Displays the virtual service (vService) configuration.
<b>node</b>	(Optional) Displays vService node configuration.
<i>vservice_name</i>	(Optional) vService node/path name.
<b>path</b>	(Optional) Displays the vService path configuration.
<b>vshd</b>	(Optional) Displays the running configuration for the virtual shared hardware device (VSHD).

**Defaults** Displays the running configuration.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display all of the information about the AAA running configuration:

```
n1000v# show running-config aaa all
!Time: Mon Feb 25 06:52:42 2013

version 5.2(1)SM1(5.1)
aaa authentication login default local
aaa authorization ssh-publickey default local
```



```

aaa authorization ssh-certificate default local
aaa accounting default local
aaa user default-role
aaa authentication login default fallback error local
aaa authentication login console fallback error local
no aaa authentication login error-enable
no aaa authentication login mschap enable
no aaa authentication login mschapv2 enable
no aaa authentication login chap enable
no aaa authentication login ascii-authentication
no radius-server directed-request

```

This example shows how to display all of the information about the AM running configuration:

```

n1000v# show running-config adjmgr all
!Command: show running-config adjmgr all
!Time: Mon Feb 25 06:58:55 2013

version 5.2(1)SM1(5.1)
ip adjmgr internal event-history snmp size small
ip adjmgr internal event-history sdb size small
ip adjmgr internal event-history cli size small
ip adjmgr internal event-history ha size small
ip adjmgr internal event-history stats size small
ip adjmgr internal event-history ipc size small
ip adjmgr internal event-history errors size small
ip adjmgr internal event-history control size small
hardware ip glean throttle maximum 1000
hardware ip glean throttle timeout 300
hardware ip glean throttle syslog 10000
ip adjacency route distance 250

```

This example shows how to display information about the EM running configuration:

```

n1000v# show running-config eem
!Command: show running-config eem
!Time: Mon Feb 25 07:07:17 2013

```

```

version 5.2(1)SM1(5.1)

```

This example shows how to display all of the information about the IP running configuration:

```

n1000v# show running-config ip all

!Command: show running-config ip all
!Time: Thu May 30 14:23:52 2013

version 5.2(1)SM1(5.1)
vrf context management
  ip route 0.0.0.0/0 10.105.225.161
ip internal event-history static-rt size small
ip internal event-history vrf-errors size small
ip internal event-history cli size small
ip internal event-history ppf size small
ip internal event-history ha size small
ip internal event-history snmp size small
ip internal event-history ipc size small
ip internal event-history log size small
ip internal event-history errors size small

interface mgmt0
  ip address 10.105.225.180/27

```

This example shows how to display information about the network segment running configuration:

```
n1000v# show running-config network segment
!Time: Thu May 30 14:26:35 2013

version 5.2(1)SM1(5.1)
feature network-segmentation-manager

nsm ip pool template default-Abhi-Pool
  ip address 192.168.5.10 192.168.5.254
  network 192.168.5.0 255.255.255.0
  default-router 192.168.5.1
  netbt
  ip reserved 192.168.5.30
  ip reserved 192.168.5.31
  ip reserved 192.168.5.39
  ip reserved 192.168.5.40
  netbios-name-server 192.168.5.7
  netbios-name-server 192.168.5.8
  netbios-name-server 192.168.5.9
  netbios-name-server 192.168.5.6
  dns-server 192.168.5.2
  dns-server 192.168.5.3
  dns-server 192.168.5.4
  dns-server 192.168.5.5
nsm ip pool template test
  ip address 10.1.1.20 10.1.1.50
  network 10.1.1.0 255.255.255.0
  default-router 10.1.1.1
  ip reserved 10.1.1.25
  ip reserved 10.1.1.26
  ip reserved 10.1.1.27
  netbios-name-server 10.1.1.45
  netbios-name-server 10.1.1.46
  netbios-name-server 10.1.1.47
  dns-server 10.1.1.35
  dns-server 10.1.1.36
nsm logical network OTHERS-N1k
nsm logical network Nexus1000V-Even
nsm logical network Nexus1000V-Odd
nsm logical network OTHER-N1k-2
nsm logical network System-Fabric
nsm logical network Cisco-New
nsm logical network test
  description 123
nsm network segment pool ND_VLAN_200
  guid d6792668-52c7-4ac0-b5b2-b349a7b714b2
  member-of logical network Nexus1000V-Even
nsm network segment pool ND_VLAN_201
  guid b84e4b66-fe4b-4f43-8af8-f317720b42a4
  member-of logical network Nexus1000V-Odd
nsm network segment pool ND_VLAN_202
  guid 930dfa53-d7d3-4f97-9aa9-54178f4748db
  member-of logical network Nexus1000V-Even
...
```

This example shows how to display all of the information about the RADIUS server running configuration:

```
n1000v# show running-config radius all
!Command: show running-config radius all
!Time: Tue Feb 26 02:14:20 2013

version 5.2(1)SM1(5.1)
radius-server test username test password test idle-time 0
```

```
radius-server timeout 5
radius-server retransmit 1
radius-server deadtime 0
aaa group server radius radius
    deadtime 0
    use-vrf default
    no source-interface

no ip radius source-interface
```

This example shows how to display all of the information about the security running configuration:

```
n1000v# show running-config security all
!Time: Tue Feb 26 02:21:45 2013

version 5.2(1)SM1(5.1)
feature telnet
feature http-server
no feature scp-server
no feature sftp-server
feature ssh

username adminbackup password 5 ! role network-operator
username admin password 5 $1$BDbVzz6B$CxQD7xT9iwTJ51rq.XPhH1 role network-admin
password strength-check

banner motd #Nexus 1000V Switch
#

ssh key rsa 1024
no ssh key dsa
```

This example shows how to display all of the information about the SNMP running configuration:

```
n1000v# show running-config snmp all
!Command: show running-config snmp all
!Time: Tue Feb 26 02:32:24 2013

version 5.2(1)SM1(5.1)
snmp-server aaa-user cache-timeout 3600
snmp-server protocol enable
no snmp-server globalEnforcePriv
snmp-server tcp-session auth
snmp-server user admin auth md5 0x524afc847e9ae2f1d543c649bbc1e858 priv
0x524afc847e9ae2f1d543c649bbc1e858 localizedkey engineID 128:0:0:9:3:2:0:12:
0:0:0
rmon event 1 log trap public description FATAL(1) owner PMON@FATAL
rmon event 2 log trap public description CRITICAL(2) owner PMON@CRITICAL
rmon event 3 log trap public description ERROR(3) owner PMON@ERROR
rmon event 4 log trap public description WARNING(4) owner PMON@WARNING
rmon event 5 log trap public description INFORMATION(5) owner PMON@INFO
no snmp-server enable traps link
snmp-server enable traps entity entity_mib_change
snmp-server enable traps entity entity_module_status_change
snmp-server enable traps entity entity_power_status_change
snmp-server enable traps entity entity_module_inserted
snmp-server enable traps entity entity_module_removed
snmp-server enable traps entity entity_unrecognised_module
snmp-server enable traps entity entity_fan_status_change
snmp-server enable traps entity entity_power_out_change
snmp-server enable traps link linkDown
snmp-server enable traps link linkUp
snmp-server enable traps link extended-linkDown
snmp-server enable traps link extended-linkUp
snmp-server enable traps link cieLinkDown
```

```
snmp-server enable traps link cieLinkUp
snmp-server enable traps rf redundancy_framework
no snmp-server enable traps aaa server-state-change
...
```

This example shows how to display information about the VLAN range 1 to 5 running configuration:

```
n1000v# show running-config vlan 1,5
```

```
!Command: show running-config vlan 1, 5
!Time: Tue Feb 26 02:41:19 2013
```

```
version 5.2(1)SM1(5.1)
vlan 1
```

### Related Commands

Command	Description
<b>copy running-config startup-config</b>	Copies the running configuration to the startup configuration.
<b>default shutdown</b>	Removes a configured administrative state from a port profile and returns its member interfaces to the default state (shutdown).
<b>disable-loop-detection</b>	Disables the loop detection mechanism to support a redundant routing protocol.
<b>feature network-segmentation-manager</b>	Enables the NSM feature.
<b>id</b>	Associates a network segmentation policy with the tenant ID.
<b>pinning id</b>	Pins virtual Ethernet traffic to a specific subgroup.
<b>pinning-sgid</b>	Pins control or packet VLAN traffic to a specific subgroup.
<b>port-profile</b>	Creates a port profile and enter port profile configuration mode.
<b>service-policy</b>	Configures a service policy for an interface.
<b>setup</b>	The basic system configuration dialog for creating or modifying a configuration file.
<b>show startup-config</b>	Displays the startup configuration.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>write erase debug</b>	Erases the startup debug configuration in the persistent memory.

# show running-config exclude

To exclude configurations in the display of the current running configuration, use the **show running-config exclude** command.

```
show running-config exclude {aaa | callhome | cdp | cert-enroll | cfs | eem | license | ntp | radius
                             | security | vshd }
```

Syntax Description	aaa	Specifies the exclusion of the authentication, authorization, and accounting (AAA) configuration.
	<b>callhome</b>	Specifies the exclusion of the callhome running configuration.
	<b>cdp</b>	Specifies the exclusion of the Cisco Discovery Protocol configuration.
	<b>cert-enroll</b>	Specifies the exclusion of the certificates configuration.
	<b>cfs</b>	Specifies the exclusion of the Cisco Fabric Services (CFS) running configuration.
	<b>eem</b>	Specifies the exclusion of the embedded event manager (EEM) running configuration.
	<b>license</b>	Specifies the exclusion of the licensing configuration.
	<b>ntp</b>	Specifies the exclusion of the Network Time Protocol (NTP) information.
	<b>radius</b>	Specifies the exclusion of the Remote Authentication Dial-In User Service (RADIUS) server configuration.
	<b>security</b>	Specifies the exclusion of the security configuration.
	<b>vshd</b>	Specifies the exclusion of the running configuration for the virtual shared hardware device (VSHD).

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Usage Guidelines** The exclude command allows the user to enter a list of one to four keywords. Exceeding four keywords results in an 'Invalid command' message.

**Examples** This example shows how to exclude running configuration information:

## show running-config exclude

```
n1000v# show running-config exclude aaa cdp cfs eem

!Command: show running-config exclude aaa cdp cfs eem
!Time: Tue Feb 26 03:35:38 2013

version 5.2(1)SM1(5.1)
hostname Nexus1000V

feature telnet
feature network-segmentation-manager

username adminbackup password 5 ! role network-operator
username admin password 5 $1$BDbVzz6B$CxQD7xT9iwTJ51rq.XPhH1 role network-admin

banner motd #Nexus 1000V Switch
#

ip domain-lookup
errdisable recovery cause failed-port-state
snmp-server user admin auth md5 0x524afc847e9ae2f1d543c649bbc1e858 priv
0x524afc847e9ae2f1d543c649bbc1e858 localizedkey engineID 128:0:0:9:3:2:0:12:
0:0:0
rmon event 1 log trap public description FATAL(1) owner PMON@FATAL
rmon event 2 log trap public description CRITICAL(2) owner PMON@CRITICAL
rmon event 3 log trap public description ERROR(3) owner PMON@ERROR
rmon event 4 log trap public description WARNING(4) owner PMON@WARNING
rmon event 5 log trap public description INFORMATION(5) owner PMON@INFO

vrf context management
 ip route 0.0.0.0/0 209.165.201.1
vlan 1,100-101,173,200,400

port-channel load-balance ethernet source-mac
port-profile default max-ports 32
...
```

### Related Commands

Command	Description
<b>copy running-config startup-config</b>	Copies the running configuration to the startup configuration.
<b>default shutdown</b>	Removes a configured administrative state from a port profile and returns its member interfaces to the default state (shutdown).
<b>disable-loop-detection</b>	Disables the loop detection mechanism to support a redundant routing protocol.
<b>feature network-segmentation -manager</b>	Enables the NSM feature.
<b>id</b>	Associates a network segmentation policy with the tenant ID.
<b>pinning id</b>	Pins virtual Ethernet traffic to a specific subgroup.
<b>pinning-sgid</b>	Pins control or packet VLAN traffic to a specific subgroup.
<b>port-profile</b>	Creates a port profile and enter port profile configuration mode.
<b>service-policy</b>	Configures a service policy for an interface.
<b>setup</b>	The basic system configuration dialog for creating or modifying a configuration file.
<b>show startup-config</b>	Displays the startup configuration.

Command	Description
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>write erase debug</b>	Erases the startup debug configuration in the persistent memory.

# show running-config interface all

To display all of the running configuration interfaces, use the **show running-config interface all** command.

**show running-config interface all [expand-port-profile]**

<b>Syntax Description</b>	<b>expand-port-profile</b> (Optional) Displays expanded port profile information.				
<b>Defaults</b>	Displays the running configuration for all interfaces.				
<b>Command Modes</b>	Any				
<b>SupportedUserRoles</b>	network-admin				
<b>Command History</b>	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>5.2(1)SK1(1.1)</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	5.2(1)SK1(1.1)	This command was introduced.
Release	Modification				
5.2(1)SK1(1.1)	This command was introduced.				

## Examples

This example shows how to display information about the interface running configuration:

```
n1000v# show running-config interface all
!Time: Thu May 30 14:29:42 2013

version 5.2(1)SM1(5.1)

interface port-channell
  inherit port-profile DATA-Macpin
  no description
  no switchport dot1q ethertype
  lacp graceful-convergence
  lacp suspend-individual
  lacp fast-select-hot-standby
  vev 3
  no switchport block unicast
  no switchport block multicast
  no hardware multicast hw-hash
  spanning-tree port-priority 128
  spanning-tree cost auto
  spanning-tree link-type auto
  spanning-tree port type network
  no spanning-tree bpduguard
  no spanning-tree bpdufilter
  logging event port link-status default
  logging event port trunk-status default
  speed auto
  duplex auto
  flowcontrol receive off
  flowcontrol send off
```



```
mtu 1500
delay 1
snmp trap link-status
bandwidth 3000000
.
.
interface mgmt0
  no description
  speed auto
  duplex auto
  snmp trap link-status
  no shutdown
  cdp enable
  ip address 10.105.225.180/27

interface Vethernet1
  no description
  shutdown
  switchport
  switchport mode access
  no switchport dot1q ethertype
  no switchport priority extend
  no switchport block unicast
  no switchport block multicast
  no hardware multicast hw-hash
  no hardware vethernet mac filtering per-vlan
  no capability iscsi-multipath
  no capability vxlan
  no capability l3-vservice
  mac auto-static-learn
  no switchport uafb disable
  spanning-tree port-priority 128
  spanning-tree cost auto
  spanning-tree link-type auto
  spanning-tree port type edge
  spanning-tree bpduguard enable
  no spanning-tree bpdufilter
  storm-control broadcast level 100
  storm-control multicast level 100
  storm-control unicast level 100
.
.
.
interface Ethernet3/2
  inherit port-profile DATA-Macpin
  no description
  lacp port-priority 32768
  lacp rate normal
  cdp enable
  no switchport dot1q ethertype
  no switchport priority extend
  spanning-tree port-priority 128
  spanning-tree cost auto
  spanning-tree link-type auto
  spanning-tree port type edge
  spanning-tree bpduguard enable
  no spanning-tree bpdufilter
.
.
interface control0
  no description
  speed auto
  duplex auto
```

```
snmp trap link-status
no shutdown
```

Related Commands	Command	Description
	<b>copy running-config startup-config</b>	Copies the running configuration to the startup configuration.
	<b>default shutdown</b>	Removes a configured administrative state from a port profile and returns its member interfaces to the default state (shutdown).
	<b>disable-loop-detection</b>	Disables the loop detection mechanism to support a redundant routing protocol.
	<b>feature network-segmentation-manager</b>	Enables the NSM feature.
	<b>id</b>	Associates a network segmentation policy with the tenant ID.
	<b>pinning id</b>	Pins virtual Ethernet traffic to a specific subgroup.
	<b>pinning-sgid</b>	Pins control or packet VLAN traffic to a specific subgroup.
	<b>port-profile</b>	Creates a port profile and enters the port profile configuration mode.
	<b>service-policy</b>	Configures a service policy for an interface.
	<b>setup</b>	The basic system configuration dialog for creating or modifying a configuration file.
	<b>show startup-config</b>	Displays the startup configuration.
	<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
	<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts no longer used by a vNIC or hypervisor port.
	<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
	<b>write erase debug</b>	Erases the startup debug configuration in the persistent memory.

# show running-config interface control

To display the control interface running configuration, use the **show running-config interface control** command.

**show running-config interface control** *if\_num* [**all** [**expand-port-profile**] | **expand-port-profile**]

Syntax Description		
	<i>if_num</i>	Control interface number. The only valid value is 0.
	<b>all</b>	(Optional) Displays the global interface running configuration information.
	<b>expand-port-profile</b>	(Optional) Displays the expanded port profile information.

**Defaults** None

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the control interface running configuration:

```
n1000v# show running-config interface control 0

!Command: show running-config interface control0
!Time: Wed Mar  6 18:13:52 2013

version 5.2(1)SM1(5.1)

interface control0
  no snmp trap link-status
```

Related Commands	Command	Description
	<b>copy running-config startup-config</b>	Copies the running configuration to the startup configuration.
	<b>default shutdown</b>	Removes a configured administrative state from a port profile and returns its member interfaces to the default state (shutdown).
	<b>disable-loop-detection</b>	Disables the loop detection mechanism to support a redundant routing protocol.

Command	Description
<b>feature network-segmentation-manager</b>	Enables the NSM feature.
<b>id</b>	Associates a network segmentation policy with the tenant ID.
<b>pinning id</b>	Pins virtual Ethernet traffic to a specific subgroup.
<b>pinning-sgid</b>	Pins control or packet VLAN traffic to a specific subgroup.
<b>port-profile</b>	Creates a port profile and enter port profile configuration mode.
<b>service-policy</b>	Configures a service policy for an interface.
<b>setup</b>	The basic system configuration dialog for creating or modifying a configuration file.
<b>show startup-config</b>	Displays the startup configuration.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>write erase debug</b>	Erases the startup debug configuration in the persistent memory.

# show running-config interface ethernet

To display the Ethernet interface running configuration, use the **show running-config interface ethernet** command.

```
show running-config interface ethernet slot/chassis_num / port/slot_num [. sub_if_num | all
[expand-port-profile] | expand-port-profile]
```

Syntax Description		
<i>slot/chassis_num</i>		Slot/chassis number. The range is from 1 to 66.
/		Slash separator.
<i>port/slot_num</i>		Port/slot number. The range is from 1 to 128.
.		(Optional) Specifies the subinterface separator (dot .)
<i>sub_if_num</i>		Port number. The range is from 1 to 4093.
<b>all</b>		(Optional) Displays global interface running configuration information.
<b>expand-port-profile</b>		(Optional) Displays expanded port profile information.

**Defaults** None

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the ethernet interface running configuration:

```
n1000v# show running-config interface ethernet 9/7 all
!Command: show running-config interface Ethernet9/7 all
!Time: Wed Mar  6 18:27:14 2013
```

```
version 5.2(1)SM1(5.1)
```

```
interface Ethernet9/7
  inherit port-profile LACP
  no description
  lacp port-priority 32768
  lacp rate normal
  cdp enable
  no switchport dot1q ethertype
  no switchport priority extend
  spanning-tree port-priority 128
  spanning-tree cost auto
  spanning-tree link-type auto
```

```

spanning-tree port type edge
spanning-tree bpduguard enable
no spanning-tree bpdufilter
speed auto
mtu 1500
snmp trap link-status

```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>copy running-config startup-config</b>	Copies the running configuration to the startup configuration.
<b>default shutdown</b>	Removes a configured administrative state from a port profile and returns its member interfaces to the default state (shutdown)..
<b>disable-loop-detection</b>	Disables the loop detection mechanism to support a redundant routing protocol.
<b>feature network-segmentation-manager</b>	Enables the NSM feature.
<b>id</b>	Associates a network segmentation policy with the tenant ID.
<b>pinning id</b>	Pins virtual Ethernet traffic to a specific subgroup.
<b>pinning-sgid</b>	Pins control or packet VLAN traffic to a specific subgroup.
<b>port-profile</b>	Creates a port profile and enter port profile configuration mode.
<b>service-policy</b>	Configures a service policy for an interface.
<b>setup</b>	The basic system configuration dialog for creating or modifying a configuration file.
<b>show startup-config</b>	Displays the startup configuration.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>write erase debug</b>	Erases the startup debug configuration in the persistent memory.

# show running-config interface mgmt

To display the management interface running configuration, use the **show running-config interface mgmt** command.

```
show running-config interface mgmt mgmt_if_num [all [expand-port-profile] |
expand-port-profile]
```

Syntax Description		
	<i>mgmt_if_num</i>	Management interface number. The only valid value is 0.
	<b>all</b>	(Optional) Displays the global interface running configuration information.
	<b>expand-port-profile</b>	(Optional) Displays the expanded port profile information.

**Defaults** Displays information about the management interface running configuration.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display all the information about the management interface running configuration:

```
n1000v# show running-config interface mgmt 0 all
!Command: show running-config interface mgmt0 all
!Time: Wed Mar  6 18:31:01 2013

version 5.2(1)SM1(5.1)

version 5.2(1)SM1(5.1)

interface mgmt0
  no description
  speed auto
  duplex auto
  snmp trap link-status
  no shutdown
  cdp enable
  ip address 10.105.225.180/27
```

**Related Commands**

Command	Description
<b>copy running-config startup-config</b>	Copies the running configuration to the startup configuration.
<b>default shutdown</b>	Removes a configured administrative state from a port profile and returns its member interfaces to the default state (shutdown).
<b>disable-loop-detection</b>	Disables the loop detection mechanism to support a redundant routing protocol.
<b>feature network-segmentation-manager</b>	Enables the NSM feature.
<b>id</b>	Associates a network segmentation policy with the tenant ID.
<b>pinning id</b>	Pins virtual Ethernet traffic to a specific subgroup.
<b>pinning-sgid</b>	Pins control or packet VLAN traffic to a specific subgroup.
<b>port-profile</b>	Creates a port profile and enter port profile configuration mode.
<b>service-policy</b>	Configures a service policy for an interface.
<b>setup</b>	The basic system configuration dialog for creating or modifying a configuration file.
<b>show startup-config</b>	Displays the startup configuration.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>write erase debug</b>	Erases the startup debug configuration in the persistent memory.



# show running-config interface port-channel

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

```
show running-config interface port-channel port_chan_num [. port_num | all
[expand-port-profile] | expand-port-profile | membership [expand-port-profile]
{sub_if_num [all [expand-port-profile] | expand-port-profile | membership
[expand-port-profile]}}
```

Syntax Description		
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.	
.	(Optional) Specifies the subinterface separator (dot .)	
<i>port_num</i>	Port number. The range is from 1 to 64.	
<b>all</b>	(Optional) Displays global interface running configuration information.	
<b>expand-port-profile</b>	(Optional) Displays expanded port profile information.	
<b>membership</b>	(Optional) Displays membership information.	
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.	

**Defaults** Displays the port channel interface running configuration.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display all of the information about the port channel interface running configuration:

```
n1000v# show running-config interface port-channel 1 all
!Command: show running-config interface port-channel1 all
!Time: Wed Mar 6 18:36:44 2013
```

```
version 5.2(1)SM1(5.1)
```

```
interface port-channel1
  inherit port-profile Macpin
  no description
  no switchport dot1q ethertype
  lACP graceful-convergence
  lACP suspend-individual
  lACP fast-select-hot-standby
  vM 3
```

## show running-config interface port-channel

```

no switchport block unicast
no switchport block multicast
no hardware multicast hw-hash
spanning-tree port-priority 128
spanning-tree cost auto
spanning-tree link-type auto
spanning-tree port type network
no spanning-tree bpduguard
no spanning-tree bpdufilter
logging event port link-status default
logging event port trunk-status default
speed auto
duplex auto
flowcontrol receive off
flowcontrol send off
mtu 1500
delay 1
snmp trap link-status
bandwidth 4000000
...

```

### Related Commands!

Command	Description
<b>copy running-config startup-config</b>	Copies the running configuration to the startup configuration.
<b>default shutdown</b>	Removes a configured administrative state from a port profile and returns its member interfaces to the default state (shutdown).
<b>disable-loop-detection</b>	Disables the loop detection mechanism to support a redundant routing protocol.
<b>feature network-segmentation-manager</b>	Enables the NSM feature.
<b>id</b>	Associates a network segmentation policy with the tenant ID.
<b>pinning id</b>	Pins virtual Ethernet traffic to a specific subgroup.
<b>pinning-sgid</b>	Pins control or packet VLAN traffic to a specific subgroup.
<b>port-profile</b>	Creates a port profile and enter port profile configuration mode.
<b>service-policy</b>	Configures a service policy for an interface.
<b>setup</b>	The basic system configuration dialog for creating or modifying a configuration file.
<b>show startup-config</b>	Displays the startup configuration.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>write erase debug</b>	Erases the startup debug configuration in the persistent memory.

# show running-config port-profile

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

```
show running-config port-profile [port_profile_name]
```

<b>Syntax Description</b>	<i>port_profile_name</i>	(Optional) Port profile name. The name is a maximum of 80 case-sensitive, alphanumeric characters.
---------------------------	--------------------------	--

<b>Defaults</b>	Displays the running configuration of all port profiles.
-----------------	--

<b>Command Modes</b>	Any
----------------------	-----

<b>SupportedUserRoles</b>	network-admin
---------------------------	---------------

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

<b>Usage Guidelines</b>	Using a ? after the command, followed by a Return, will produce a list of all the running configuration port profiles.
-------------------------	--

<b>Examples</b>	This example shows how to display a list of all running port profiles:
-----------------	--

```
n1000v# show running-config port-profile ?
CDP-Policy
  DATA-Lacp
  DATA-Macpin
  DHCP-SERVER-UPLINK
  ETH1
  Eth-Profile-Mgmt
  Lacp-Policy
  Macpin-Policy
  Macpin-Policy2
  NSM_template_segmentation
  NSM_template_vlan
    Lacp
    Macpin
  U1
  Uplink-10G-Lacp
  Uplink-10G-Macpin
  Uplink-MGMT
  Uplink-Odd-Long-Macpin
  Uplink_Even_Lacp
  Uplink_Even_Macpin
  Uplink_Even_Macpin2
```

```
Uplink_Even_Macpin3
...
```

This example shows how to display information about the running configuration for all port profiles:

```
n1000v# show running-config port-profile
!Command: show running-config port-profile
!Time: Thu Feb 28 12:31:13 2013

version 5.2(1)SM1(5.1)
port-profile default max-ports 32
port-profile default port-binding static
port-profile type vethernet NSM_template_vlan
  no shutdown
  guid 68bb01b1-ce5f-420f-92d6-4fb0bb3c6e0b
  description NSM default port-profile for VLAN networks. Do not delete.
  state enabled
port-profile type vethernet NSM_template_segmentation
  no shutdown
  guid d8fc84eb-1462-4fd9-8de8-ee806fab79e4
  description NSM default port-profile for VXLAN networks. Do not delete.
  state enabled
port-profile type ethernet ETH1
  no shutdown
  guid a2674200-64ca-411e-83c9-a92e0bd508c0
  max-ports 512
  state enabled
port-profile type vethernet VETH1
  no shutdown
  guid 39e631a2-0828-45e3-a33a-28cd2ef14d02
  publish port-profile
  state enabled
port-profile type ethernet uplink_network_default_policy
  no shutdown
  guid b77be06a-5e10-4fa3-a654-7585a1f0e017
  max-ports 512
  description NSM created profile. Do not delete.
  state enabled
```

This example shows how to display information about a specific port profile's running configuration:

```
n1000v# show running-config port-profile vic-uplink

version 5.2(1)SM1(5.1)
port-profile type ethernet vic-uplink
  inherit port-profile vmdata-vpc-mac
  no shutdown
  guid 1d8703cd-40b4-4848-867d-296be908921e
  max-ports 512
  description NSM created profile. Do not delete.
  system vlan 240,251,280
  state enabled
```

**Related Commands!**

<b>Command</b>	<b>Description</b>
<b>copy running-config startup-config</b>	Copies the running configuration to the startup configuration.
<b>default shutdown</b>	Removes a configured administrative state from a port profile and returns its member interfaces to the default state (shutdown).
<b>disable-loop-detection</b>	Disables the loop detection mechanism to support a redundant routing protocol.
<b>feature network-segmentation-manager</b>	Enables the NSM feature.
<b>id</b>	Associates a network segmentation policy with the tenant ID.
<b>pinning id</b>	Pins virtual Ethernet traffic to a specific subgroup.
<b>pinning-sgid</b>	Pins control or packet VLAN traffic to a specific subgroup.
<b>port-profile</b>	Creates a port profile and enter port profile configuration mode.
<b>service-policy</b>	Configures a service policy for an interface.
<b>setup</b>	The basic system configuration dialog for creating or modifying a configuration file.
<b>show startup-config port-profile</b>	Displays the startup configuration port profiles.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>write erase debug</b>	Erases the startup debug configuration in the persistent memory.

# show snmp

To display information about the Simple Network Management Protocol (SNMP), use the **show snmp** command.

```
show snmp [community | context | engineID | group | host | sessions | source-interface | trap |
user [user_id [engineID target_id]]]
```

Syntax Description	
<b>community</b>	(Optional) Displays the SNMP community strings.
<b>context</b>	(Optional) Displays the SNMP context mapping entries.
<b>engineID</b>	(Optional) Displays the SNMP engine ID.
<b>group</b>	(Optional) Displays the SNMP group.
<b>host</b>	(Optional) Displays the SNMP hosts.
<b>sessions</b>	(Optional) Displays the SNMP sessions.
<b>source-interface</b>	(Optional) Displays the SNMP source interface through which notifications are sent.
<b>trap</b>	(Optional) Displays the SNMP traps.
<b>user</b>	(Optional) Specifies the SNMP v3 users.
<i>user_id</i>	(Optional) Name of the user. The name is a maximum of 28 characters.
<i>target_id</i>	Target SNMP v3 engine ID. The ID is a maximum of 128 characters.

**Defaults** Displays all of the information about the SNMP.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about SNMP:

```
n1000v# show snmp
Community                               Group / Access  context        acl_filter
-----
sys contact:
sys location:

0 SNMP packets input
  0 Bad SNMP versions
  0 Unknown community name
  0 Illegal operation for community name supplied
  0 Encoding errors
```

```

        0 Number of requested variables
        0 Number of altered variables
        0 Get-request PDUs
        0 Get-next PDUs
        0 Set-request PDUs
61 SNMP packets output
        0 Too big errors
        0 No such name errors
        0 Bad values errors
        0 General errors
        0 In No such name PDU
        0 In Bad vlaue PDU
        0 In Read only PDU
        0 In General errors
        0 In Get Responses
        0 Unknown Context name
61 Out Traps PDU
        0 Out Get Requests
        0 Out Get Next Requests
        0 Out Set Requests
        0 Out Get Responses
        0 Silent Drops
...

```

This example shows how to display information about the SNMP engineID:

```

n1000v# show snmp engineID
Local SNMP engineID: [Hex] 1234412336123361464013104123361361717461126131362417715
                    [Dec]
3682865:3158064:3158064:3747888:3354672:3158064:3224112:3356976:3486258:3355441:3290672

```

This example shows how to display information about the SNMP host:

```

n1000v# show snmp host
-----
Host                               Port Version Level Type  SecName
-----

```

This example shows how to display information about the SNMP source interface:

```

n1000v# show snmp source-interface
-----
Notification                        source-interface
-----
trap                                  -
inform                                -
-----

```

This example shows how to display information about the SNMP trap:

```

n1000v# show snmp trap
-----
Trap type                            Description                Enabled
-----
entity                               : entity_mib_change        Yes
entity                               : entity_module_status_change Yes
entity                               : entity_power_status_change Yes
entity                               : entity_module_inserted   Yes
entity                               : entity_module_removed    Yes
entity                               : entity_unrecognised_module Yes
entity                               : entity_fan_status_change  Yes
entity                               : entity_power_out_change   Yes
link                                  : linkDown                 Yes
link                                  : linkUp                   Yes
link                                  : extended-linkDown        Yes

```

## show snmp

link	: extended-linkUp	Yes
link	: cieLinkDown	Yes
link	: cieLinkUp	Yes
rf	: redundancy_framework	Yes
aaa	: server-state-change	No
license	: notify-license-expiry	Yes
license	: notify-no-license-for-feature	Yes
license	: notify-licensefile-missing	Yes
license	: notify-license-expiry-warning	Yes
upgrade	: UpgradeOpNotifyOnCompletion	No
upgrade	: UpgradeJobStatusNotify	No
feature-control	: FeatureOpStatusChange	No
sysmgr	: cseFailSwCoreNotifyExtended	No
rmon	: risingAlarm	Yes
rmon	: fallingAlarm	Yes
rmon	: hcRisingAlarm	Yes
rmon	: hcFallingAlarm	Yes
config	: ccmCLIRunningConfigChanged	No
snmp	: authentication	No
link	: cisco-xcvr-mon-status-chg	No
vtp	: notifs	No
vtp	: vlancreate	No
vtp	: vlandelete	No
bridge	: newroot	No
bridge	: topologychange	No

## Related Commands

Command	Description
<b>snmp-server aaa-user cache-timeout</b>	Configures how long the AAA synchronized user configuration stays in the local cache.
<b>snmp-server community</b>	Creates an SNMP community string.
<b>snmp-server contact</b>	Configures the sysContact, which is the SNMP contact name.
<b>snmp-server globalEnforcePriv</b>	Enforces SNMP message encryption for all users.
<b>snmp-server host</b>	Configures a host receiver for SNMP traps or informs.
<b>snmp-server location</b>	Configures sysLocation (the SNMP location).
<b>snmp-server protocol enable</b>	Enables SNMP.
<b>snmp-server tcp-session</b>	Enables a one-time authentication for SNMP over a TCP session.
<b>snmp-server user</b>	Configures an SNMP user with authentication and privacy parameters.



# show ssh

To display information about the Secure Shell (SSH) sessions, use the **show ssh** command.

```
show ssh {key [dsa | rsa] | server}
```

Syntax Description	key	Displays the SSH key.
	dsa	(Optional) Displays the Digital Signature Algorithm (DSA) SSH keys.
	rsa	(Optional) Displays the Rivest, Shamir, and Adleman (RSA) SSH keys.
	server	Displays if the SSH server is enabled or not.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

## Examples

This example shows how to display the SSH key:

```
n1000v# show ssh key
*****
rsa Keys generated:Tue Dec 18 14:05:14 2012

ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQgQDYBHLZgAs3cz5RtwgUcOveGEfVn/pUHs5Lq8vfPF
5Rrtt6Kvb7GZx58o+K1SVD2pP9GTJS4dJchdo9O80HMmeTY2VRg0XSQ2xi9VJsKmf6yOkw3x9yTijm9
698dUTaFTo8YjMaPjBlb6/g6f3Zf9NN2DapzOJreh0lJMDhqeZow==

bitcount:1024
fingerprint:
a2:25:3b:33:63:d0:cb:61:ee:65:87:19:83:09:1a:d7
*****
could not retrieve dsa key information
*****
```

This example shows how to display the SSH RSA key:

```
n1000v# show ssh key rsa
*****
rsa Keys generated:Wed Feb 27 14:44:30 2013

ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAQgQCtXrFuRgBYeHpeZYwgdoyzsQG8jRLcZce7E+vNpnWn9N8R+K+qaqChgmlQdv
pVFHAt7nnyQwnvmGnroZ4wEq7vHH15CFJrJGrzw1mH1QKqoC83IAdUwUykFMVe8JkyTkorIaMG0B
o+OMtqDQOPPeF0r3VtjZNN92cERDCwCuUBQ==
```

```

bitcount:1024
fingerprint:
9a:e8:e6:50:3a:dd:f9:ca:f3:7f:26:b6:80:fe:c5:ec
*****

```

This example shows how to display the SSH server:

```

n1000v# show ssh server
ssh version 2 is enabled

```

#### Related Commands

Command	Description
<b>clear ssh hosts</b>	Clears the SSH host sessions.
<b>clear ssh session</b>	Clears SSH sessions.
<b>feature netflow</b>	Enables the NetFlow.
<b>feature ssh</b>	Enables the SSH server.
<b>ssh</b>	Create an SSH session.

# show startup-config

To display information about the network startup configuration, use the **show startup-config** command.

```
show startup-config [aaa | acllog [all] | aclmgr [all] | adjmgr [all] | bfd [all] | cdp [all] |
cert-enroll | dot1x [all] | eem | exclude {aaa | callhome | cdp | cert-enroll | cfs | eem | license
| ntp | radius | security | vshd} | exclude-provision | expand-port-profile | glsb | hsrp | ip [all]
| l3vm [all] | license [all] | log | netflow [all] | network segment [manager {switch} | policy
policy_name] | ntp [all] | radius | rpm [all] | security | snmp [all] | vdc-all | vlan | vrf
{vrf_name | default | management} | vrrp | vservice [node | path] [vservice_name] | vshd |
wccp [all]]
```

Syntax	Description
<b>aaa</b>	(Optional) Displays the authentication, authorization, and accounting (AAA) configuration.
<b>acllog</b>	(Optional) Displays the startup configuration for the access control list (ACL) log.
<b>all</b>	(Optional) Displays the current operating configuration with defaults.
<b>aclmgr</b>	(Optional) Displays the startup configuration for the ACL manager.
<b>adjmgr</b>	(Optional) Displays adjacency manager (AM) information.
<b>bfd</b>	(Optional) Displays the startup configuration for Bidirectional Forwarding Detection (BFD).
<b>cdp</b>	(Optional) Displays the Cisco Discovery Protocol configuration.
<b>cert-enroll</b>	(Optional) Displays the certificate configuration.
<b>dot1x</b>	(Optional) Displays the startup configuration for dot1x.
<b>eem</b>	(Optional) Displays the embedded event manager (EEM) startup configuration.
<b>exclude</b>	(Optional) Specifies the exclusion of the startup configuration of listed features.
<b>callhome</b>	Specifies the exclusion of the startup configuration of callhome.
<b>cfs</b>	Specifies the exclusion of the startup configuration of the Cisco Fabric Services (CFS).
<b>exclude-provision</b>	(Optional) Specifies the exclusion of the configuration for any offline preprovision interfaces.
<b>expand-port-profile</b>	(Optional) Displays the expand port profile.
<b>glsb</b>	(Optional) Displays the Gateway Load Balancing Protocol (GLBP) startup configuration.
<b>hsrp</b>	(Optional) Displays the Hot Standby Router Protocol (HSRP) startup configuration.
<b>ip</b>	(Optional) Displays IP information.
<b>l3vm</b>	(Optional) Displays the Layer 3 virtual module (VM) information.
<b>license</b>	(Optional) Displays the licensing configuration.
<b>log</b>	(Optional) Displays the execution log of last used ASCII startup configuration.
<b>netflow</b>	(Optional) Displays the NetFlow configuration.
<b>network segment</b>	(Optional) Displays the network segment information.

<b>manager</b>	(Optional) Displays network segmentation manager (NSM) information.
<b>switch</b>	Displays the switch information.
<b>policy</b>	(Optional) Specifies NSM network segment policy information.
<i>policy_name</i>	NSM network segment policy name. The name is a maximum of 80 characters.
<b>ntp</b>	(Optional) Displays Network Time Protocol (NTP) information.
<b>port-profile</b>	(Optional) Displays the port profile configuration.
<b>radius</b>	(Optional) Displays the Remote Authentication Dial-In User Service (RADIUS) configuration.
<b>rpm</b>	(Optional) Displays the route policy manager (RPM) information.
<b>security</b>	(Optional) Displays the security configuration.
<b>snmp</b>	(Optional) Displays the Simple Network Management Protocol (SNMP) configuration.
<b>spanning-tree</b>	(Optional) Displays spanning tree (SPT) information.
<b>vdc-all</b>	(Optional) Displays the configuration from all virtual device contexts (VDCs).
<b>vlan</b>	(Optional) Displays VLAN commands.
<b>vrf</b>	(Optional) Displays virtual routing and forwarding (VRF) information.
<i>vrf_name</i>	VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>	Displays the adjacency entries for all VRFs.
<b>default</b>	Displays a known VRF name.
<b>management</b>	Displays the management interface.
<b>vrrp</b>	(Optional) Displays the Virtual Router Redundancy Protocol (VRRP) startup configuration.
<b>vservice</b>	(Optional) Displays the virtual service (vService) configuration.
<b>node</b>	(Optional) Displays the vService node configuration.
<i>vservice_name</i>	(Optional) the vService node and path name.
<b>path</b>	(Optional) Displays the vService path configuration.
<b>vshd</b>	(Optional) Displays the running configuration for the virtual shared hardware device (VSHD).
<b>wccp</b>	(Optional) Displays the startup configuration for the Web Cache Communication Protocol (WCCP).

**Defaults**

Displays information about the network startup configuration.

**Command Modes**

Any

**SupportedUserRoles**

network-admin

**Command History**

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

**Usage Guidelines**

The exclude command allows the user to enter a list of one to four items, each separated by white space. Exceeding four items will result in an 'Invalid command' message.

**Examples**

This example shows how to display information about the AAA startup configuration:

```
n1000v# show startup-config aaa
!Command: show startup-config aaa
!Time: Tue Feb 26 03:55:46 2013
!Startup config saved at: Mon Feb 25 14:55:27 2013
```

```
version 5.2(1)SM1(5.1)
```

This example shows how to display all of the information about the BFD startup configuration:

```
n1000v# show startup-config bfd all
!Command: show startup-config bfd all
!Time: Tue Feb 26 03:56:33 2013
!Startup config saved at: Mon Feb 25 14:55:27 2013
```

```
version 5.2(1)SM1(5.1)
```

This example shows how to display all of the information about the Cisco Discovery Protocol startup configuration:

```
n1000v# show startup-config cdp all
!Command: show startup-config cdp all
!Time: Tue Feb 26 03:58:05 2013
```

```
version 5.2(1)SM1(5.1)
cdp advertise v2
cdp enable
cdp holdtime 180
cdp timer 60
cdp format device-id system-name
```

```
interface mgmt0
  cdp enable
```

This example shows how to display information about how to hide startup configuration information for offline preprovision interfaces:

```
n1000v# show startup-config exclude-provision

!Command: show startup-config exclude-provision
```

```

!Time: Tue Feb 26 04:13:18 2013
!Startup config saved at: Mon Feb 25 14:55:27 2013

version 5.2(1)SM1(5.1)
hostname nexus1000v

feature telnet
feature scp-server
feature sftp-server
feature tacacs+
feature netflow
feature lacp
feature dhcp
feature network-segmentation-manager

username adminbackup password 5 ! role network-operator
username admin password 5 $1$BDbVzz6B$CxD7xT9iwTJ51rq.XPhH1 role network-admin

banner motd #Nexus 1000V Switch
#
ip domain-lookup
errdisable recovery cause failed-port-state
mac access-list test-mac
    statistics per-entry
    30 permit 0002.3000.0000 0000.00FF.FFFF any
    40 permit 0002.3100.0000 0000.00FF.FFFF any
    50 permit 0002.3200.0000 0000.00FF.FFFF any
    60 permit 0002.3300.0000 0000.00FF.FFFF any
    70 permit 0002.3400.0000 0000.00FF.FFFF any
    80 permit 0002.3500.0000 0000.00FF.FFFF any
    90 permit 0002.3600.0000 0000.00FF.FFFF any
.
.
.
snmp-server user admin auth md5 0x524afc847e9ae2f1d543c649bbc1e858 priv
0x524afc847e9ae2f1d543c649bbc1e858 localizedkey engineID 128:0:0:9:3:2:0:12:
0:0:0
rmon event 1 log trap public description FATAL(1) owner PMON@FATAL
rmon event 2 log trap public description CRITICAL(2) owner PMON@CRITICAL
rmon event 3 log trap public description ERROR(3) owner PMON@ERROR
rmon event 4 log trap public description WARNING(4) owner PMON@WARNING
rmon event 5 log trap public description INFORMATION(5) owner PMON@INFO
.
.
.
vrf context management

```

```
ip route 0.0.0.0/0 10.105.225.161

vlan
1,10,20,30,40,50,60,80,200-302,304,306,308,310,312,314,316,318,320,322,324,326,328,330,332
,334,336,338,340,342,344,346,348,350,352,354,356,358,
360,362,364,366,368,370,372,374,376,378,380,382,384,386,388,390,392,394,396,398,400-403,40
5-406,408,410,412,414,416
vlan 418,420,422,424,426,428,430,432,436,438,440,1000,2012
flow exporter exporter2
  transport udp 9996
  source lc-exp 10.105.225.180/27
  dscp 63
  version 9
flow exporter e123456789012345678901234567890123456789
  transport udp 6
  source lc-exp 10.105.225.180/27
  dscp 63
  version 9
.
.
.
lACP offload
port-channel load-balance ethernet source-mac
port-profile default max-ports 32
port-profile default port-binding static
port-profile type vethernet NSM_template_vlan
  no shutdown
  guid 83ef9f6f-d9c5-44d9-91b4-451645189695
  description NSM default port-profile for VLAN networks. Do not delete.
  state enabled
port-profile type vethernet NSM_template_segmentation
  no shutdown
  guid b228a787-7546-48e3-ad44-d9871754d9e9
  description NSM default port-profile for VXLAN networks. Do not delete.
  state enabled
port-profile type ethernet PortChannelProfile
  channel-group auto
  no shutdown
  guid ad99025e-dadd-46e9-8486-cfc1a0d5d796
  max-ports 512
  state enabled
.
.
.
system storage-loss log time 30

interface mgmt0
  ip address 10.105.225.180/27
```

```

interface Vethernet1
  inherit port-profile
  dynpp_4a4baaec-30e6-4686-b130-24f31acbdcb2_2c97d33c-44b5-4e93-9b2e-d96ad521bad4
  description 1000V
  dvport uuid "D962C7C4-DF69-4254-A07C-E67F33CF887B"

interface Vethernet2
  inherit port-profile
  dynpp_4a4baaec-30e6-4686-b130-24f31acbdcb2_2c97d33c-44b5-4e93-9b2e-d96ad521bad4
  description 1000V
  dvport uuid "1BD62078-9929-4118-9098-EB396D9BC143"

interface Ethernet3/5
  inherit port-profile Uplink-MGMT

interface Ethernet4/5
  inherit port-profile Uplink-MGMT

interface control0
  no snmp trap link-status
  line console
  line vty
  boot kickstart bootflash:/n1000vh-dk9-kickstart.5.2.1.SM1.5.0.4.bin sup-1
  boot system bootflash:/n1000vh-dk9.5.2.1.SM1.5.0.4.bin sup-1
  boot kickstart bootflash:/n1000vh-dk9-kickstart.5.2.1.SM1.5.0.4.bin sup-2
  boot system bootflash:/n1000vh-dk9.5.2.1.SM1.5.0.4.bin sup-2
  ...

```

This example shows how to display all of the information about the IP start up configuration:

```

n1000v# show startup-config ip all
!Command: show startup-config ip all
!
!Command: show startup-config ip all
!Time: Thu May 30 14:45:54 2013
!Startup config saved at: Mon May 27 16:37:08 2013

version 5.2(1)SM1(5.1)
vrf context management
  ip route 0.0.0.0/0 10.105.225.161
  ip internal event-history static-rt size small
  ip internal event-history vrf-errors size small
  ip internal event-history cli size small
  ip internal event-history ppf size small
  ip internal event-history ha size small
  ip internal event-history snmp size small
  ip internal event-history ipc size small
  ip internal event-history log size small
  ip internal event-history errors size small

interface mgmt0
  ip address 10.105.225.180/27

```

This example shows how to display information about the network segment startup configuration:



```
n1000v# show startup-config network segment

!Command: show startup-config network segment
!Time: Thu May 30 14:47:58 2013
!Startup config saved at: Mon May 27 16:37:08 2013

version 5.2(1)SM1(5.1)
feature network-segmentation-manager

nsm ip pool template default-Abhi-Pool
  ip address 192.168.5.10 192.168.5.254
  network 192.168.5.0 255.255.255.0
  default-router 192.168.5.1
  netbt
  ip reserved 192.168.5.30
  ip reserved 192.168.5.31
  ip reserved 192.168.5.39
  ip reserved 192.168.5.40
  netbios-name-server 192.168.5.7
  netbios-name-server 192.168.5.8
  netbios-name-server 192.168.5.9
  netbios-name-server 192.168.5.6
  dns-server 192.168.5.2
  dns-server 192.168.5.3
  dns-server 192.168.5.4
  dns-server 192.168.5.5
nsm ip pool template test
  ip address 10.1.1.20 10.1.1.50
  network 10.1.1.0 255.255.255.0
  default-router 10.1.1.1
  ip reserved 10.1.1.25
  ip reserved 10.1.1.26
  ip reserved 10.1.1.27
  netbios-name-server 10.1.1.45
  netbios-name-server 10.1.1.46
  netbios-name-server 10.1.1.47
  dns-server 10.1.1.35
  dns-server 10.1.1.36
nsm logical network OTHERS-N1K
nsm logical network Nexus1000V-Even
nsm logical network Nexus1000V-Odd
nsm logical network OTHER-N1k-2
nsm logical network System-Fabric
nsm logical network Cisco-New
nsm network segment pool ND_VLAN_200
  guid d6792668-52c7-4ac0-b5b2-b349a7b714b2
  member-of logical network Nexus1000V-Even
nsm network segment pool ND_VLAN_201
  guid b84e4b66-fe4b-4f43-8af8-f317720b42a4
  member-of logical network Nexus1000V-Odd
nsm network segment pool ND_VLAN_202
  guid 930dfa53-d7d3-4f97-9aa9-54178f4748db
  member-of logical network Nexus1000V-Even
...
```

This example shows how to display information about the RADIUS server startup configuration:

```
n1000v# show startup-config radius

!Command: show startup-config radius
!Time: Wed Feb 27 18:07:21 2013
!Startup config saved at: Wed Feb 27 17:24:30 2013
```

```
version 5.2(1)SM1(5.1)
```

This example shows how to display information about the vService startup configuration:

```
n1000v# show startup-config vservice
!Command: show startup-config vservice
!Time: Wed Feb 27 18:09:15 2013
!Startup config saved at: Wed Feb 27 17:24:30 2013
```

```
version 5.2(1)SM1(5.1)
vservice global type vsg
    tcp state-checks
```

This example shows how to display information about the VSHD startup configuration:

```
n1000v# show startup-config vshd
!Command: show startup-config vshd
!Time: Wed Feb 27 18:10:45 2013
!Startup config saved at: Wed Feb 27 17:24:30 2013
```

```
version 5.2(1)SM1(5.1)
line vty
```

#### Related Commands

Command	Description
<b>description</b>	Adds a description to the network segmentation policy.
<b>id</b>	Associates a network segmentation policy with the tenant ID.
<b>show running-config</b>	Displays the running configuration.

# show startup-config interface control

To display the control interface startup configuration, use the **show startup-config interface control** command.

```
show startup-config interface control if_num [expand-port-profile | membership
[expand-port-profile]]
```

Syntax Description	
<i>if_num</i>	Control interface number. The only valid value is 0.
<b>expand-port-profile</b>	(Optional) Displays expanded port profile information.
<b>membership</b>	(Optional) Displays membership information.

**Defaults** Displays the control interface startup configuration.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the control interface startup configuration:

```
n1000v# show startup-config interface control 0

!Command: show startup-config interface control0
!Time: Wed May 29 14:46:48 2013
!Startup config saved at: Mon May 27 16:37:08 2013

version 5.2(1)SM1(5.1)

interface control0
  no snmp trap link-status
```

Related Commands	Command	Description
	<b>copy running-config startup-config</b>	Copies the running configuration to the startup configuration.
	<b>default shutdown</b>	Removes a configured administrative state from a port profile and returns its member interfaces to the default state (shutdown).
	<b>disable-loop-detection</b>	Disables the loop detection mechanism to support a redundant routing protocol.

Command	Description
<b>feature network-segmentation-manager</b>	Enables the NSM feature.
<b>id</b>	Associates a network segmentation policy with the tenant ID.
<b>pinning id</b>	Pins virtual Ethernet traffic to a specific subgroup.
<b>pinning-sgid</b>	Pins control or packet VLAN traffic to a specific subgroup.
<b>port-profile</b>	Creates a port profile and enter port profile configuration mode.
<b>service-policy</b>	Configures a service policy for an interface.
<b>setup</b>	The basic system configuration dialog for creating or modifying a configuration file.
<b>show running-config</b>	Displays the current running configuration.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>write erase debug</b>	Erases the startup debug configuration in the persistent memory.

# show startup-config interface ethernet

To display the Ethernet interface startup configuration, use the **show startup-config interface ethernet** command.

```
show startup-config interface ethernet slot/chassis_num / port/slot_num [, port_num
[expand-port-profile] | expand-port-profile]
```

Syntax Description		
	<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.
	<i>/</i>	Slash separator.
	<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
	<b>expand-port-profile</b>	(Optional) Displays expanded port profile information.
	<i>.</i>	(Optional) Specifies the subinterface separator (dot .)
	<i>port_num</i>	Port number. The range is from 1 to 4093.

**Defaults** Displays the Ethernet interface startup configuration.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the Ethernet interface startup configuration:

```
n1000v# show startup-config interface ethernet 3/5
!Time: Thu May 30 11:57:44 2013
!Startup config saved at: Mon May 27 16:37:08 2013

version 5.2(1)SM1(5.1)

interface Ethernet3/5
  inherit port-profile Uplink-MGMT
```

Related Commands	Command	Description
	<b>copy running-config startup-config</b>	Copies the running configuration to the startup configuration.
	<b>default shutdown</b>	Removes a configured administrative state from a port profile and returns its member interfaces to the default state (shutdown).

Command	Description
<b>disable-loop-detection</b>	Disables the loop detection mechanism to support a redundant routing protocol.
<b>feature network-segmentation -manager</b>	Enables the NSM feature.
<b>id</b>	Associates a network segmentation policy with the tenant ID.
<b>pinning id</b>	Pins virtual Ethernet traffic to a specific subgroup.
<b>pinning-sgid</b>	Pins control or packet VLAN traffic to a specific subgroup.
<b>port-profile</b>	Creates a port profile and enter port profile configuration mode.
<b>service-policy</b>	Configures a service policy for an interface.
<b>setup</b>	The basic system configuration dialog for creating or modifying a configuration file.
<b>show running-config</b>	Displays the current running configuration.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>write erase debug</b>	Erases the startup debug configuration in the persistent memory.

# show startup-config interface mgmt

To display the management interface startup configuration, use the **show startup-config interface mgmt** command.

```
show startup-config interface mgmt mgmt_if_num [expand-port-profile | membership
[expand-port-profile]]
```

Syntax Description	
<i>mgmt_if_num</i>	Management interface number. The only valid value is 0.
<b>expand-port-profile</b>	(Optional) Displays expanded port profile information.
<b>membership</b>	(Optional) Displays membership information.

**Defaults** Displays the management interface startup configuration.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the management interface startup configuration:

```
n1000v# show startup-config interface mgmt 0
!Command: show startup-config interface mgmt0
!Time: Thu May 30 14:51:13 2013
!Startup config saved at: Mon May 27 16:37:08 2013

version 5.2(1)SM1(5.1)

interface mgmt0
 ip address 10.105.225.180/27
```

Related Commands	Command	Description
	<b>copy running-config startup-config</b>	Copies the running configuration to the startup configuration.
	<b>default shutdown</b>	Removes a configured administrative state from a port profile and returns its member interfaces to the default state (shutdown).
	<b>disable-loop-detection</b>	Disables the loop detection mechanism to support a redundant routing protocol.

Command	Description
<b>feature network-segmentation -manager</b>	Enables the NSM feature.
<b>id</b>	Associates a network segmentation policy with the tenant ID.
<b>pinning id</b>	Pins virtual Ethernet traffic to a specific subgroup.
<b>pinning-sgid</b>	Pins control or packet VLAN traffic to a specific subgroup.
<b>port-profile</b>	Creates a port profile and enter port profile configuration mode.
<b>service-policy</b>	Configures a service policy for an interface.
<b>setup</b>	The basic system configuration dialog for creating or modifying a configuration file.
<b>show running-config</b>	Displays the current running configuration.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts no longer used by a vNIC or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>write erase debug</b>	Erases the startup debug configuration in the persistent memory.



# show startup-config interface port-channel

To display the port channel interface startup configuration, use the **show startup-config interface port-channel** command.

```
show startup-config interface port-channel port_chan_num [. sub_if_num [expand-port-profile
| membership [expand-port-profile]] | expand-port-profile | membership
[expand-port-profile]]
```

Syntax Description	
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
.	(Optional) Specifies the subinterface separator (dot .)
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.
<b>expand-port-profile</b>	(Optional) Displays expanded port profile information.
<b>membership</b>	(Optional) Displays membership information.

**Defaults** Displays the port channel interface startup configuration.

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the port channel interface startup configuration:

```
n1000v# show startup-config interface port-channel 1

!Command: show startup-config interface port-channel5
!Time: Tue Apr 23 13:49:02 2013
!Startup config saved at: Mon Apr 22 10:59:34 2013

version 5.2(1)SM1(5.1)

interface port-channel5
  inherit port-profile Macpin
  vem 5
  switchport trunk allowed vlan 203,205,207,209,211,213,215,217,219,221
  switchport trunk allowed vlan add 223,225,227,229,231,233,235,237,239
  switchport trunk allowed vlan add 241,243,245,247,249,251,253,255,257
  switchport trunk allowed vlan add 261-263,265,267,269,271,273,275,277
  switchport trunk allowed vlan add 281,283,285,287,289,291,293,295,297
  switchport trunk allowed vlan add 299,302,304,306,308,310,312,314,316
  switchport trunk allowed vlan add 318,320,322,324,326,328,330,332,334
  switchport trunk allowed vlan add 336,338,340,342,344,346,348,350,352
  switchport trunk allowed vlan add 354,356,358,360,362,364,366,368,370
```

```
switchport trunk allowed vlan add 372,374,376,378,380,382,384,386,388
switchport trunk allowed vlan add 390,392,394,396,398,400-402,2012
```

Related Commands	Command	Description
	<b>copy running-config startup-config</b>	Copies the running configuration to the startup configuration.
	<b>default shutdown</b>	Removes a configured administrative state from a port profile and returns its member interfaces to the default state (shutdown).
	<b>disable-loop-detection</b>	Disables the loop detection mechanism to support a redundant routing protocol.
	<b>feature network-segmentation-manager</b>	Enables the NSM feature.
	<b>id</b>	Associates a network segmentation policy with the tenant ID.
	<b>pinning id</b>	Pins virtual Ethernet traffic to a specific subgroup.
	<b>pinning-sgid</b>	Pins control or packet VLAN traffic to a specific subgroup.
	<b>port-profile</b>	Creates a port profile and enter port profile configuration mode.
	<b>service-policy</b>	Configures a service policy for an interface.
	<b>setup</b>	The basic system configuration dialog for creating or modifying a configuration file.
	<b>show running-config</b>	Displays the current running configuration.
	<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
	<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts no longer used by a vNIC or hypervisor port.
	<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
	<b>write erase debug</b>	Erases the startup debug configuration in the persistent memory.

# show startup-config interface vethernet

To display information about the virtual Ethernet interface startup configuration, use the **show startup-config interface vethernet** command.

```
show startup-config interface vethernet vethernet_num [expand-port-profile | membership
expand-port-profile]
```

Syntax Description	
<i>vethernet_num</i>	Virtual Ethernet number. The range is from 1 to 1048575.
<b>expand-port-profile</b>	(Optional) Displays expanded port profile information.
<b>membership</b>	(Optional) Displays membership information.

**Defaults** Displays information about the virtual Ethernet interface startup configuration.

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the startup configuration for the virtual Ethernet interface:

```
n1000v# show startup-config interface vethernet 1 expand-port-profile
!Command: show startup-config interface Vethernet1 expand-port-profile
!Time: Tue Feb 26 04:55:14 2013
!Startup config saved at: Mon Feb 25 14:55:27 2013

version 5.2(1)SM1(5.1)

interface Vethernet1
```

Related Commands	Command	Description
	<b>copy running-config startup-config</b>	Copies the running configuration to the startup configuration.
	<b>default shutdown</b>	Removes a configured administrative state from a port profile and returns its member interfaces to the default state (shutdown).
	<b>disable-loop-detection</b>	Disables the loop detection mechanism to support a redundant routing protocol.

Command	Description
<b>feature network-segmentation-manager</b>	Enables the NSM feature.
<b>id</b>	Associates a network segmentation policy with the tenant ID.
<b>pinning id</b>	Pins virtual Ethernet traffic to a specific subgroup.
<b>pinning-sgid</b>	Pins control or packet VLAN traffic to a specific subgroup.
<b>port-profile</b>	Creates a port profile and enter port profile configuration mode.
<b>service-policy</b>	Configures a service policy for an interface.
<b>setup</b>	The basic system configuration dialog for creating or modifying a configuration file.
<b>show running-config</b>	Displays the current running configuration.
<b>svs veth auto-config-purge</b>	Enables the VSM to remove all manual configurations on a virtual Ethernet interface when the system administrator changes a port profile on the interface.strat or changes a port profile on the interface.
<b>svs veth auto-delete</b>	Enables the VSM to automatically delete DVPorts no longer used by a virtual network interface card or hypervisor port.
<b>svs veth auto-setup</b>	Enables the VSM to automatically create a virtual Ethernet interface when a new port is activated on a host.
<b>write erase debug</b>	Erases the startup debug configuration in the persistent memory.

# show startup-config port-profile

To display information about the port profile startup configuration, use the **show startup-config port-profile** command.

```
show startup-config port-profile [port_profile_name]
```

<b>Syntax Description</b>	<i>port_profile_name</i>	(Optional) Port profile name. The name is a maximum of 80 case-sensitive, alphanumeric characters.
---------------------------	--------------------------	--

<b>Defaults</b>	Displays information about the port profile startup configuration.
-----------------	--

<b>Command Modes</b>	Any
----------------------	-----

<b>Supported User Roles</b>	network-admin
-----------------------------	---------------

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display a list of commands and available startup configuration port profiles:

```
n1000v# show startup-config port-profile ?
<CR>
>                                Redirect it to a file
>>                               Redirect it to a file in append mode
CDP-Policy
DATA-Lacp
DATA-Lacp-System
DATA-Macpin
DATA-Macpin-System
Eth-Profile-Mgmt
Lacp-Policy
Macpin-Policy
Macpin-Policy2
NSM_template_segmentation
NSM_template_vlan
PORT_CHANNEL

Uplink-MGMT
Uplink-MGMT-Host-180
```

```

Uplink_Even_Lacp
Uplink_Even_Macpin
large-pp
system-veth
uplink_network_default_policy
veth-no-policy
veth-policy
veth-policy1
veth-policy2
|
Pipe command output to filter

```

This example shows how to display information about the port profile startup configuration:

```

n1000v# show startup-config port-profile
!Command: show startup-config port-profile
!Time: Thu Feb 28 12:54:26 2013
!Startup config saved at: Thu Feb 28 10:18:11 2013

version 5.2(1)SM1(5.1)
port-profile default max-ports 32
port-profile default port-binding static
port-profile type vethernet NSM_template_vlan
  no shutdown
  guid 68bb01b1-ce5f-420f-92d6-4fb0bb3c6e0b
  description NSM default port-profile for VLAN networks. Do not delete.
  state enabled
port-profile type vethernet NSM_template_segmentation
  no shutdown
  guid d8fc84eb-1462-4fd9-8de8-ee806fab79e4
  description NSM default port-profile for VXLAN networks. Do not delete.
  state enabled
port-profile type ethernet ETH1
  no shutdown
  guid a2674200-64ca-411e-83c9-a92e0bd508c0
  max-ports 512
  state enabled
port-profile type vethernet VETH1
  no shutdown
  guid 39e631a2-0828-45e3-a33a-28cd2ef14d02
  publish port-profile
  state enabled
port-profile type ethernet uplink_network_default_policy
  no shutdown
  guid b77be06a-5e10-4fa3-a654-7585a1f0e017
  max-ports 512
  description NSM created profile. Do not delete.
...

```

This example shows how to display information about a specific port profile startup configuration:

```

n1000v# show startup-config port-profile uplink_network_default_policy
!Command: show startup-config port-profile uplink_network_default_policy
!Time: Thu Feb 28 12:55:41 2013
!Startup config saved at: Thu Feb 28 10:18:11 2013

version 5.2(1)SM1(5.1)
port-profile type ethernet uplink_network_default_policy

```

```
no shutdown
guid b77be06a-5e10-4fa3-a654-7585a1f0e017
max-ports 512
description NSM created profile. Do not delete.
state enabled
```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>description</b>	Adds a description to the network segmentation policy.
<b>id</b>	Associates a network segmentation policy with the tenant ID.
<b>show running-config</b>	Displays the running configuration.
<b>show running-config port profile</b>	Displays the running configuration port profiles.
<b>show startup-config</b>	Displays the startup configuration.

# show stun statistics

To display Secure Tunnel (STUN) statistical information, use the **show stun statistics** command.

```
show stun statistics {protocol_name | brief}
```

Syntax Description		
	<i>protocol_name</i>	Protocol name.
	<b>brief</b>	Displays a brief statistical summary for all the protocols.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

## Examples

This example shows how to display a brief statistical summary of STUN information:

```
n1000v# show stun statistics brief
Protocol: Direction          TxPkts          RxPkts          DropPkts
-----
0:  VSM          1234492         1550156          0
    VEM          1550156         1234512          20
1:  VSM          227168          67774            0
    VEM           67774          227168            0
2:  VSM          597129          687448            0
    VEM          687448          597129            0
3:  VSM          162513          162515            0
    VEM          162515          162513            0
4:  VSM           3              5                0
    VEM           5              3                0
5:  VSM           0              0                0
    VEM           0              0                324926
```



# show svcs

To display Server Virtualization Switch (SVS) information, use the **show svcs** command.

```
show svcs { aipcdrops | connections [svs_connect_name] | domain | neighbors | upgrade {status}}
```

Syntax Description		
<b>aipcdrops</b>		Displays Asynchronous Inter-process Communication (AIPC) packets dropped for not matching the domain-ID field 0 or local domain-ID 0.
<b>connections</b>		Displays connection information.
<i>svs_connect_name</i>		(Optional) SVS connection name. The name is a maximum of 64 characters.
<b>domain</b>		Displays the domain configuration.
<b>neighbors</b>		Displays SVS neighbor information.
<b>upgrade</b>		Displays SVS upgrade information.
<b>status</b>		Displays the SVS upgrade status.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display SVS AIPC drops:

```
n1000v# show svcs aipcdrops
```

```
Active Domain ID: 1023
```

```
AIPC Interface MAC: 0015-5de1-854c
```

```
Inband Interface MAC: 0015-5de1-854e
```

```
Src MAC           Type      Domain-id  Node-id    Last learnt (Sec. ago)
```

```
-----
```

This example shows how to display the SVS domain configuration:

```
n1000v# show svcs domain
```

```
SVS domain config:
```

```
Domain id:      1023
```

```
Control vlan:  1
```

```
Packet vlan:   1
```

```
Control mode:  L3
```

```
Switch guid:   e19ff967-8526-4e1d-bef2-b737801de793
```

```
L3 control interface: mgmt0
Status: Config not pushed to Management Server.
```

Related Commands	Command	Description
	<b>connect</b>	Initiates a connection with the SCVMM.
	<b>domain id</b>	Assigns a domain ID to the domain.
	<b>name</b>	Names a VLAN.
	<b>remote</b>	Connects to remote machines.
	<b>show sv</b>	Displays the domain configuration.
	<b>show sv</b>	Displays the configuration for the specified VLAN.
	<b>sv license transfer src-vem</b>	Transfers licenses from a source VEM to another VEM, or to the VSM pool of available licenses.
	<b>sv license volatile</b>	Enables volatile licenses so that whenever a VEM is taken out of service its licenses are returned to the VSM pool of available licenses.
	<b>sv mode</b>	Configures a transport mode for control and packet traffic in the VSM domain.
	<b>sv-domain</b>	Creates the domain and places you into CLI SVS domain configuration mode.

# show switch edition

To display information about the switch edition, 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

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Usage Guidelines** There are 2 switch editions, Advanced and Essential.

**Examples** This example shows how to display information about the switch edition:

```
n1000v# show switch edition
Switch Edition: Advanced

Advanced Features
Feature Name      Feature State
-----
vxlan-gateway    enabled

Licenses Available: 501
Licenses In Use: 11
License Expiry Date: Never

n1000v# show switch edition
Switch Edition: Essential

Advanced Features
Feature Name      Feature State
-----
vxlan-gateway    disabled

Licenses Available: 48
Licenses In Use: 0
License Expiry Date: Never
```

■ show switch edition

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>show switchname</b>	Displays the switchname.

# show switchname

To display the switchname, use the **show switchname** command.

**show switchname**

---

**Syntax Description** This command has no arguments or keywords.

---

**Defaults** None

---

**Command Modes** Any

---

**SupportedUserRoles** network-admin

---

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

---

---

**Examples** This example shows how to display the switchname:

```
n1000v# show switchname
n1000v
```

---

Related Commands	Command	Description
	switchname	Configures the hostname for a device.

---

# show system

To display information about the system, use the **show system** command.

```
show system { cores | error-id { error | list } | exception-info | index-table allocation | pss shrink
status [details] | redundancy status | reset-reason [module module_num] | resources |
standby manual-boot | uptime | vem { feature level | version range } | vlan reserved }
```

Syntax	Description
<b>cores</b>	Displays the core transfer option.
<b>error-id</b>	Displays descriptions about errors.
<i>error</i>	Hexadecimal value for a specific error. The range is from 0x0 to 0xffffffff.
<b>list</b>	Displays a description about all error IDs.
<b>exception-info</b>	Displays last exception log information.
<b>statistics</b>	Displays the inband statistics.
<b>status</b>	Displays selective packet discard information.
<b>index-table allocation</b>	Displays the manage index table allocation usage.
<b>pss shrink status</b>	Displays last persistent storage service (PSS) shrink status.
<b>details</b>	(Optional) Displays last PSS shrink status details.
<b>redundancy status</b>	Displays redundancy status.
<b>reset-reason</b>	Displays last reset reason.
<b>module</b>	(Optional) Specifies per-module reset reason code.
<i>module_num</i>	Module number. The range is from 1 to 66.
<b>resources</b>	Displays system resources.
<b>standby manual-boot</b>	Displays system standby manual boot option.
<b>uptime</b>	Show how long the system has been up and running.
<b>vem</b>	Displays virtual Ethernet Module (VEM) information.
<b>feature level</b>	Displays the VEM feature level.
<b>version range</b>	Displays VEM version related information.
<b>vlan reserved</b>	Displays VLAN allocation status.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples**

This example shows how to display information about the system resources:

```
nexus1000v# show system resources
Load average:  1 minute: 0.00   5 minutes: 0.00   15 minutes: 0.00
Processes   :  289 total, 2 running
CPU states  :  1.0% user,   0.0% kernel,  99.0% idle
Memory usage: 2064844K total, 1368044K used, 696800K free
Current memory status: OK
```

This example shows how to display a list of system errors:

```
nexus1000v# show system error-id list

Common errors:
0x00000000 (SYSERR_SUCCESS): "success".
0x00000001 (SYSERR_NOMEM): "not enough memory".
0x00000002 (SYSERR_PSS_ERROR): "error while accessing PSS".
0x00000003 (SYSERR_CMI_NO_RESPONSE_PAYLOAD): "no cmi response payload".
0x00000004 (SYSERR_CMI_NULL_RECEIVE_BUF): "null cmi receive buffer".
0x00000005 (SYSERR_MGMT_ERROR): "unknown error".
0x00000006 (SYSERR_MGMT_NO_ENTRY): "entry not present".
0x00000007 (SYSERR_MGMT_NO_OBJECT): "object not present".
0x00000008 (SYSERR_MGMT_CREATION_FAILED): "error in creation".
0x00000009 (SYSERR_MGMT_DELETION_FAILED): "error in deleting".
0x0000000A (SYSERR_MGMT_INCONSISTENT_VALUE): "wrong value".
0x0000000B (SYSERR_IFINDEX_INVALID_TYPE): "if_index type invalid".
0x0000000C (SYSERR_IFINDEX_TYPE_MISMATCH): "if_index type mismatch".
0x0000000D (SYSERR_IFINDEX_TYPE_OUT_OF_RANGE): "if_index type out of range".
0x0000000E (SYSERR_IFINDEX_INVALID_ARG): "if_index arg invalid".
0x0000000F (SYSERR_FU_INVALID_ARG): "fu arg invalid".
0x00000010 (SYSERR_FU_FAILURE): "fu unknown error".
0x00000011 (SYSERR_FU_HASHTABLE_NOT_INITIALIZED): "fu hashtable not initialized".
0x00000012 (SYSERR_FU_HASHTABLE_KEY_NOT_PRESENT): "fu hashtable key not present".
0x00000013 (SYSERR_FU_HASHTABLE_EMPTY): "fu hashtable empty".
0x00000014 (SYSERR_FU_FSM_NOT_SYSTEM_MSG): "fu not a system message".
0x00000015 (SYSERR_FU_FSM_MSG_PROCESSED): "fu fsm message processed".
0x00000016 (SYSERR_FU_CQ_QUEUE_FULL): "fu cqueue full".
0x00000017 (SYSERR_FU_CQ_QUEUE_EMPTY): "fu cqueue empty".
0x00000018 (SYSERR_FU_CQ_NODE_ALLOC_FAILED): "fu cqueue node allocation failed".
0x00000019 (SYSERR_FU_CQ_INVALID_CQ_PTR): "fu cqueue invalid pointer".
0x0000001A (SYSERR_FU_CQ_INVALID_NODE_FOR_CQ): "fu cqueue invalid node".
0x0000001B (SYSERR_FU_CQ_NODE_NOT_FOUND): "fu cqueue node not found".
0x0000001C (SYSERR_FU_PSEL_Q_ENTRY_NOT_PRESENT): "fu priority select queue entry
not present".
0x0000001D (SYSERR_FU_HA_NOT_STDBY_MSG): "fu ha not a standby message".
0x0000001E (SYSERR_FU_STDBY_EVENT_GENERATED): "fu ha standby event generated".
...
```

This example shows how to display system error by its hex address:

```
nexus1000v# show system error-id 0x0000001C

Error Facility: (null)
Error Description: fu priority select queue entry not present
```

This example shows how to display information about the system uptime:

```
n1000v# show system uptime
System start time:      Sat Mar  2 16:35:51 2013
System uptime:         0 days, 2 hours, 37 minutes, 21 seconds
Kernel uptime:        0 days, 2 hours, 38 minutes, 9 seconds
```

Related Commands	Command	Description
	<b>system redundancy role</b>	Configures a redundancy role for the VSM.
	<b>system storage-loss</b>	Detects and configure storage connectivity losses.
	<b>system switchover</b>	Switches over to the standby supervisor.
	<b>system update vem feature level</b>	Changes the software version supported on VEMs.



# show system clis event-history

To display information about the system command-line interface (CLI) event history, use the **show system clis event-history** command.

```
show system clis event-history {cli | client | errors | ha | nvdb | parser}
```

Syntax Description	cli	Displays a log of command events.
	client	Displays a log of client interaction events.
	errors	Displays a log of errors.
	ha	Displays a log of high availability events.
	nvdb	Displays a log of NVDB and persistent storage service (PSS) events.
	parser	Displays a log of parser events.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the system NVDB events:

```
n1000v# show system clis event-history nvdb
2013 Apr 12 15:00:30.810000 clis [2229]: [5889]: nvdb: transient thread created
2013 Apr 12 08:40:07.220000 clis [2229]: [2229]: nvdb: rx if removed
2013 Apr 12 08:39:20.520000 clis [2229]: [2229]: nvdb: rx layer 2 change
2013 Apr 12 08:39:20.460000 clis [2229]: [2229]: nvdb: rx pcm change
2013 Apr 12 08:39:20.440000 clis [2229]: [2229]: nvdb: rx layer 2 change
2013 Apr 12 08:39:20.270000 clis [2229]: [2229]: nvdb: rx layer 2 change
2013 Apr 12 08:39:19.870000 clis [2229]: [2229]: nvdb: rx if created
2013 Apr 12 08:33:20.310000 clis [2229]: [2229]: nvdb: rx if removed
2013 Apr 12 08:16:54.190000 clis [2229]: [2229]: nvdb: rx if created
2013 Apr 12 08:16:36.020000 clis [2229]: [2229]: nvdb: rx if removed
2013 Apr 12 08:16:28.340000 clis [2229]: [2229]: nvdb: rx layer 2 change
2013 Apr 12 08:16:28.320000 clis [2229]: [2229]: nvdb: rx layer 2 change
2013 Apr 12 08:16:27.790000 clis [2229]: [2229]: nvdb: Processed acfg gen req for comp = 0
type = 1 all = 0 vrf = null
2013 Apr 12 08:16:27.790000 clis [2229]: [2229]: nvdb: Rcvd acfg gen req for comp = 0 type
= 1 all = 0 vrf = null
2013 Apr 12 08:16:27.790000 clis [2229]: [2229]: nvdb: rx ascii config gen
...
```

Related Commands	Command	Description
	<b>system pss</b>	System PSS commands.
	<b>system redundancy role</b>	Configures a redundancy role for the VSM.
	<b>system storage-loss</b>	Detects and configure storage connectivity losses.
	<b>system switchover</b>	Switches over to the standby supervisor.
	<b>system update vem feature level</b>	Changes the software version supported on VEMs.

# show table-map

To display the table map, use the **show table-map** command.

```
show table-map [table_map_name | cir-markdown-map | pir-markdown-map]
```

Syntax Description	
<i>table_map_name</i>	(Optional) Table map name. The name is a maximum of 40 case sensitive, alphanumeric characters.
<b>cir-markdown-map</b>	(Optional) Displays the exceed color markdown map.
<b>pir-markdown-map</b>	(Optional) Displays the violate color markdown map.

**Defaults** Displays all the table maps.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display table map information:

```
n1000v# show table-map

Table-map cir-markdown-map
  default copy
  from 10,12 to 12
  from 18,20 to 20
  from 26,28 to 28
  from 34,36 to 36

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

Table-map cos-dscp-map
  default copy

Table-map cos-precedence-map
  default copy
...
```

This example shows how to display a table map by name:

```
n1000v# show table-map cir-markdown-map
```

## ■ show table-map

```
Table-map cir-markdown-map
  default copy
  from 10,12 to 12
  from 18,20 to 20
  from 26,28 to 28
  from 34,36 to 36
```

---

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>default (table map)</b>	The default action for mapping input field values to output field values in a table map.

---

# show tacacs-server

To display Terminal Access Controller Access Control System Plus (TACACS+) configuration information, use the **show tacacs-server** command.

```
show tacacs-server [dns_or_ip | directed-request | groups [group_name] | sorted | statistics
  [dns_or_ip]]
```

Syntax Description	
<i>dns_or_ip</i>	(Optional) DNS name or IP address.
<b>directed-request</b>	(Optional) Displays the directed server enable configuration.
<b>groups</b>	(Optional) Displays information about the TACACS+ server group configuration.
<i>group_name</i>	(Optional) TACACS+ server group name. The name is a maximum of 127 characters.
<b>sorted</b>	(Optional) Displays the TACACS+ servers sorted by server name.
<b>statistics</b>	(Optional) Displays TACACS+ statistics.

**Defaults** Displays TACACS+ configuration information.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display TACACS+ configuration information:

```
n1000v# show tacacs-server
timeout value:5
deadtime value:0
source interface:any available
total number of servers:0
```

Related Commands	Command	Description
	<b>deadtime</b>	Sets a dead time interval for monitoring a nonresponsive TACACS+ server.
	<b>tacacs+ enable</b>	Enables the TACACS+ server.
	<b>tacacs-server host</b>	Designates the key shared between the Cisco Nexus 1000V and this specific TACACS+ server host.

<b>Command</b>	<b>Description</b>
<b>tacacs-server key</b>	Designates the global key shared between the Cisco Nexus 1000V and the TACACS+ server hosts.
<b>tacacs-server timeout</b>	Configures the time between retransmissions to the TACACS+ servers.

# show tech-support

To display technical support information, use the **show tech-support** command.

```
show tech-support {aclmgr | adjmgr | bootvar | bridge-domain | brief | cert-enroll | cli | clis |
  commands | details | dhcp | eem | ethpm | ethport | ha | im | include-time | internal | ip | l3vm
  | lacp | license | netflow | npacl | ntp | pktmgr | port | port-channel | port-profile | routing |
  rpm | sal | smm | snmp | sockets | sup-filesys | svcs | sysmgr | vlan | vvlan | xml}
```

Syntax Description		
<b>aclmgr</b>		Displays the access control list (ACL) commands.
<b>adjmgr</b>		Displays adjacency manager (AM) information.
<b>bootvar</b>		Displays detailed information for boot variable troubleshooting.
<b>bridge-domain</b>		Displays information for segmentation troubleshooting.
<b>brief</b>		Displays the switch summary.
<b>cert-enroll</b>		Displays certificate information.
<b>cli</b>		Displays information for parser troubleshooting.
<b>clis</b>		Displays information for command-line interface (CLI) server troubleshooting.
<b>commands</b>		Displays commands executed as part of show technical support commands.
<b>details</b>		Displays detailed information for troubleshooting.
<b>dhcp</b>		Displays detailed information for Dynamic Host Configuration Protocol (DHCP) troubleshooting.
<b>eem</b>		Displays embedded event manager (EEM) technical support information.
<b>ethpm</b>		Displays detailed information for the Ethernet port manager (ETHPM) troubleshooting.
<b>ethport</b>		Displays detailed information for Ethernet port (ETHPORT) troubleshooting.
<b>ha</b>		Displays detailed information for high availability troubleshooting.
<b>im</b>		Displays detailed information for index mapping (IM) troubleshooting.
<b>include-time</b>		Displays technical support and capture time taken to execute each command.
<b>internal</b>		Displays internal information for troubleshooting.
<b>ip</b>		Displays IP information.
<b>l3vm</b>		Displays virtual routing and forwarding (VRF) information.
<b>lacp</b>		Displays detailed information for Link Aggregation Control Protocol (LACP) component.
<b>license</b>		Displays licensing information.
<b>netflow</b>		Displays information about NetFlow technical support.
<b>npacl</b>		Displays NPACL information.
<b>ntp</b>		Displays information for Network Time Protocol (NTP) troubleshooting.
<b>pktmgr</b>		Displays packet manager information.
<b>port</b>		Displays detailed information for port manager troubleshooting.
<b>port-channel</b>		Displays detailed information for port channel troubleshooting.

<b>port-profile</b>	Displays information for troubleshooting port profiles.
<b>routing</b>	Displays routing information technical support.
<b>rpm</b>	Displays information about route policy manager (RPM) technical support.
<b>sal</b>	Displays information about Service Abstraction Layer (SAL) technical support.
<b>smm</b>	Displays information about shared memory technical support.
<b>snmp</b>	Displays information related to Simple Network Management Protocol (SNMP) technical support.
<b>sockets</b>	Displays the sockets status and configuration technical support.
<b>sup-filesys</b>	Displays file system related issues.
<b>svs</b>	Displays technical support information for the Server Virtualization Switch (SVS).
<b>sysmgr</b>	Displays detailed information for system management troubleshooting.
<b>vlan</b>	Displays detailed information for VLAN troubleshooting.
<b>vvlan</b>	Displays detailed information for voice VLAN troubleshooting.
<b>xml</b>	Displays information for XML troubleshooting.

**Defaults**

None

**Command Modes**

Any

**SupportedUserRoles**

network-admin

**Command History**

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

**Usage Guidelines**

Following many of the above commands with a space, then a question mark (?) will bring-up menus of additional arguments or keywords. If the menu contains a carriage return <cr>, with or without additional options, the command may be terminated at that level or, if they exist, one of the options may be chosen.

**Examples**

This example shows how to display technical support information for the ACL manager:

```
n1000v# show tech-support aclmgr
`show system internal aclmgr status`
Current operation: None
last operation: CLI configuration
Last operation status: success
CLI:

`show system internal aclmgr log`
2013-03-02 18:26:40.549682 [0x0004a80f] Responding to MTS message with status 0x0
```



```

2013-03-02 18:26:40.570733 DESTROYING session ff01018210000190
2013-03-02 18:26:40.782523 [0x0004aa19] Received MEMBER_DOWN event...
2013-03-02 18:26:40.786322 [PLAN]
  0: ACLMGR_PLANNING_SESSION_ID (1) (not done)
  1: ACLMGR_PLANNING_MTS_EVENT_DETAILS (2) (not done)
      type = 61453 (MTS_OPC_ETHPM_BUNDLE_MEMBER_DOWN);
  2: ACLMGR_PLANNING_COMMIT (3) (not done)
2013-03-02 18:26:40.786330 [0x0004aa19] Responding to MTS message with status 0x0
2013-03-02 18:26:40.786335 [0x0004aa19] .....MEMBER_DOWN includes bundle/ifindex
0x1600000b/0x25014000
2013-03-02 18:26:40.787342 DESTROYING session ff01018210000191
2013-03-02 18:26:41.110305 [0x0004ab31] Received PHY_CLEANUP event for ifindex
0x25014000...
2013-03-02 18:26:41.114345 [PLAN]
  0: ACLMGR_PLANNING_SESSION_ID (1) (not done)
  1: ACLMGR_PLANNING_MTS_EVENT_DETAILS (2) (not done)
      type = 61446 (MTS_OPC_ETHPM_PORT_PHY_CLEANUP);
  2: ACLMGR_PLANNING_COMMIT (3) (not done)
2013-03-02 18:26:41.114353 [0x0004ab31] Responding to MTS message with status 0x0
2013-03-02 18:26:41.116801 DESTROYING session ff01018210000192
2013-03-02 18:26:41.124687 [PLAN]
  0: ACLMGR_PLANNING_SESSION_ID (1) (not done)
  1: ACLMGR_PLANNING_MTS_EVENT_DETAILS (2) (not done)
      type = 62483 (MTS_OPC_IM_PORT_L2_PARAM_CHANGE);
  2: ACLMGR_PLANNING_COMMIT (3) (not done)
2013-03-02 18:26:41.124694 [0x0004ab4d] Responding to MTS message with status 0x0
2013-03-02 18:26:41.125792 DESTROYING session ff01018210000193
2013-03-02 18:26:41.172917 [PLAN]
  0: ACLMGR_PLANNING_SESSION_ID (1) (not done)
  1: ACLMGR_PLANNING_MTS_EVENT_DETAILS (2) (not done)
      type = 62483 (MTS_OPC_IM_PORT_L2_PARAM_CHANGE);
  2: ACLMGR_PLANNING_COMMIT (3) (not done)
2013-03-02 18:26:41.172924 [0x0004abab] Responding to MTS message with status 0x0
2013-03-02 18:26:41.173937 DESTROYING session ff01018210000194
...

```

This example shows how to query for command branches under **tech-support ip**, then chooses **igmp** as an option:

```

n1000v# show tech-support ip ?
<CR>
>      Redirect it to a file
>>    Redirect it to a file in append mode
brief  Brief information
igmp   Display IGMP status and configuration
|      Pipe command output to filter

n1000v# show tech-support ip igmp
`show running-config igmp`

!Command: show running-config igmp
!Time: Tue Apr 23 14:36:17 2013

version 5.2(1)SM1(5.1)
vlan configuration 77
  no ip igmp snooping explicit-tracking

`show system internal sysmgr service name igmp`
Service "igmp" ("igmp", 35):
  UUID = 0x11E, PID = 2655, SAP = 352
  State: SRV_STATE_HANDSHAKED (entered at time Mon Apr 22 10:37:49 2013).
  Restart count: 1
  Time of last restart: Mon Apr 22 10:37:48 2013.
  The service never crashed since the last reboot.

```

```

Tag = N/A
Plugin ID: 1

`show system internal feature-mgr feature state | include igmp`
`show processes threads igmp`
Thread-name                               Pid      Stack-base Stack-size Bytes used
MaxTimeigmp:worker-thread                 2980     0xb2342000 0x1f000   0x1054
  3% 0
igmp:ip-thread                             2979     0xb2362000 0x1f000   0x2744   8% 10
igmp:main-thread                           2978     0xb2382000 0x3f000   0x620c  10% 110
igmp:igmp-cli-thread                       2677     0xb240b000 0x3f000   0x5198   8% 10
igmp:gq-proxy-response-th                 2674     0xb242ce000 0x1f000   0x1014   3% 0
igmp:rib-update-thread                    2673     0xb244ee000 0x1f000   0x1c6c   6% 0
igmp:igmp-sysmgr-thread                   2672     0xb2549000 0x1f000   0x3f8c  13% 10
igmp:active-timer-thread                  2667     0xb2569000 0x1f000   0x2084   7% 0
`show ip client igmp`

Client: igmp, uuid: 286, pid: 2655, extended pid: 2655
...

```

This example shows how to display port profile technical support information:

```

n1000v# show tech-support port-profile
`show port-profile`

port-profile CDP-Policy
  type: Ethernet
  description:
  status: enabled
  max-ports: 512
  min-ports: 1
  inherit:
  config attributes:
    channel-group auto mode on sub-group cdp
    no shutdown
  evaluated config attributes:
    channel-group auto mode on sub-group cdp
    no shutdown
  assigned interfaces:
  port-group:
  system vlans: none
  capability l3control: no
  capability iscsi-multipath: no
  capability vxlan: no
  capability l3-vn-service: no
  port-profile role: none
  port-binding: static

port-profile DATA-Lacp
  type: Ethernet
  description: NSM created profile. Do not delete.
  status: enabled
  max-ports: 512
  min-ports: 1
  inherit: Lacp-Policy
  config attributes:
  ...

```

This example shows how to display brief sockets technical support information:

```

n1000v# show tech-support sockets brief
`show sockets buffers`
TCPUDP Packet buffer status:

```

```
Packet mbuf statistics:

mbufs obtained from page pool      285
clusters obtained from page pool   228
spare                               0
free clusters                       21
times failed to find space         0
times waited for space            0
times drained protocols for space  0

Types
  Free          0
  Data         208
  Out of band data 0
  Security rights 0
  Socket name   0
  Control      0
  Socket Options 0
  Header       1

Free      addr
          0x86caf00

`show sockets statistics all`

TCP v4 Received:
  12537 total packets received,      8158 packets received in sequence,
  380582 bytes received in sequence,  61 duplicate-only packets received,
  5100 duplicate-only bytes received,  2 packets with some duplicate data,
  616 dup. bytes in part-dup. packets, 289 out-of-order packets received
...
```

# show telnet server

To display the status of the Telnet server, 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

---

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

---



---

**Examples** This example shows how to display the status of the Telnet server:

```
n1000v# show telnet server
telnet service enabled
```

---

Related Commands	Command	Description
	<b>feature telnet</b>	Enables a Telnet server.
	<b>telnet</b>	Creates and configures a Telnet session.

---

# show terminal

To display information about the terminal, use the **show terminal** command.

**show terminal [internal info]**

<b>Syntax Description</b>	<b>internal info</b> (Optional) Displays terminal internal information.				
<b>Defaults</b>	Displays brief information about the terminal.				
<b>Command Modes</b>	Any				
<b>SupportedUserRoles</b>	network-admin				
<b>Command History</b>	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>5.2(1)SK1(1.1)</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	5.2(1)SK1(1.1)	This command was introduced.
Release	Modification				
5.2(1)SK1(1.1)	This command was introduced.				

## Examples

This example shows how to display information about the terminal:

```
n1000v# show terminal
TTY: /dev/pts/2 Type: "vt100"
Length: 22 lines, Width: 61 columns
Session Timeout: 30 minutes
Event Manager CLI event bypass: yes
Redirection mode: ascii
Accounting log all commands (including show commands): no
Vlan mutex value: 1
Vlan batch mode: yes
```

This example shows how to display internal terminal information:

```
n1000v# show terminal internal info
Process info:
Name: vsh
State: R (running)
Tgid: 14225
Pid: 14225
PPid: 14186
TracerPid: 0
Uid: 2002 2002 2002 2002
Gid: 503 503 503 503
FDSize: 256
Groups: 503
VmPeak: 129364 kB
VmSize: 128640 kB
VmLck: 0 kB
VmHWM: 12168 kB
VmRSS: 11908 kB
VmData: 2908 kB
```

## show terminal

```

VmStk:          84 kB
VmExe:          48 kB
VmLib:         18836 kB
VmPTE:          96 kB
Threads:        1
SigQ:          0/16383
SigPnd: 0000000000000000
ShdPnd: 0000000000000000
SigBlk: 0000001000000000
SigIgn: 0000000000300004
SigCgt: 0000000180007002
...
Memory limits:
core file size      (blocks, -c) unlimited
data seg size      (kbytes, -d) unlimited
scheduling priority (-e) 0
file size          (blocks, -f) unlimited
pending signals    (-i) 16383
max locked memory  (kbytes, -l) 32
max memory size    (kbytes, -m) unlimited
open files         (-n) 1024
pipe size          (512 bytes, -p) 8
POSIX message queues (bytes, -q) 819200
real-time priority (-r) 0
stack size         (kbytes, -s) 8192
cpu time           (seconds, -t) unlimited
max user processes (-u) 1024
virtual memory     (kbytes, -v) 286933
file locks         (-x) unlimited

```

## Related Commands

Command	Description
<b>configure terminal</b>	Accesses configuration commands in the CLI global configuration mode.
<b>exec-timeout</b>	Configures the length of time, in minutes, that an inactive Telnet or SSH session remains open until it automatically shuts down.
<b>terminal event-manager bypass</b>	Bypasses the CLI event manager.
<b>terminal length</b>	Sets the number of lines that appear on the screen.
<b>terminal monitor</b>	Enables logging for Telnet or SSH.
<b>terminal session-timeout</b>	Sets the session timeout.
<b>terminal terminal-type</b>	Sets the terminal type.
<b>terminal tree-update</b>	Updates the main parse tree.
<b>terminal width</b>	Sets the terminal width.

# show upgrade mode

To display upgrade mode information, use the **show upgrade mode** command.

**show upgrade mode**

---

**Syntax Description** This command has no arguments or keywords.

---

**Defaults** None

---

**Command Modes** Any

---

**SupportedUserRoles** network-admin

---

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

---

---

**Examples** This example shows how to display information about the upgrade mode:

```
n1000v# show upgrade mode
Upgrade mode: Normal
```

---

Related Commands	Command	Description
	<b>show version</b>	Displays the software version.

---

# show username

To display information about the users, use the **show username** command.

```
show username {user_name keypair}
```

Syntax Description	<i>user_name</i>	User name. The name is a maximum of 28 case-sensitive characters.
	<b>keypair</b>	The Secure Shell (SSH) key pairs.

Defaults	None
----------	------

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

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

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

Examples	This example shows how to display information about a user:
----------	---

```
n1000v# show username admin keypair
*****

could not retrieve rsa key information
*****

could not retrieve dsa key information
*****
```

Related Commands	Command	Description
	<b>clear user</b>	Clears a user session.
	<b>show users</b>	Displays information about the logged in users.
	<b>username</b>	Creates and configures a user account.



# show users

To display information about the logged in users, use the **show users** command.

## show users

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the users that are logged in to the system:

```
n1000v# show users
NAME      LINE      TIME      IDLE      PID COMMENT
admin    pts/0     May 30 14:11 .         29577 (10.61.92.212) session=ssh *
admin    pts/2     May 29 19:54 03:56    11962 (10.105.225.143) session=ssh
```

Related Commands	Command	Description
	<b>clear user</b>	Clears a user session.
	<b>exec-timeout</b>	Configures the length of time, in minutes, that an inactive Telnet or SSH session remains open before it is automatically shut down.
	<b>show username</b>	Displays information about the users.
	<b>username admin password</b>	Changes the network administration password in the running configuration.

# show uufb status

To display the status of the Unknown Unicast Flood Blocking (UUFB), use the **show uufb status** command.

## show uufb status

**Syntax Description** This command has no arguments or keywords.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display the UUFB status:

```
n1000v# show uufb status
UUFB Status: Disabled
```

# show version

To display information about the switch version, use the **show version** command.

```
show version [image {bootflash: | modflash: | volatile:} | internal {build-identifier |
srg-compare {ks | module module_num | system} {bootflash: | volatile:}} | module
module_num]
```

Syntax Description	
<b>image</b>	(Optional) Displays the software version of a given image.
<b>bootflash:</b>	Enter bootflash Uniform Resource Identifier (URI) to compare.
<b>modflash:</b>	Enter modflash URI to compare.
<b>volatile:</b>	Enter volatile URI to compare.
<b>internal</b>	(Optional) Displays internal commands.
<b>build-identifier</b>	Displays the build ID of currently running software versions.
<b>srg-compare</b>	Displays the software compatibility results between two image.
<b>ks</b>	Specifies the kickstart image to be compared
<b>module</b>	Specifies the system image containing module information to be compared.
<i>module_num</i>	Module number. The range is from 1 to 66.
<b>system</b>	Specifies the system image to be compared.

**Defaults** Displays information about the switch version.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Usage Guidelines** When you type the bootflash:, modflash:, or volatile: options and then press the Tab Key, the command-line interface (CLI) lists a selection of filenames contained in the named directory.

**Examples** This example shows how to display information about the bootflash files:

```
n1000v# show version image bootflash:<Tab>
bootflash:///          bootflash://module-2/      bootflash://sup-2/
bootflash://sup-local/  bootflash://sup-standby/
bootflash://module-1/   bootflash://sup-1/          bootflash://sup-active/
bootflash://sup-remote/
```

This example shows how to display information about the version:

```
n1000v# show version
Cisco Nexus Operating System (NX-OS) Software
TAC support: http://www.cisco.com/tac
Documents:
http://www.cisco.com/en/US/products/ps9372/tsd_products_support_series_home.html
Copyright (c) 2002-2013, Cisco Systems, Inc. All rights reserved.
The copyrights to certain works contained herein are owned by
other third parties and are used and distributed under license.
Some parts of this software are covered under the GNU Public
License. A copy of the license is available at
http://www.gnu.org/licenses/gpl.html.

Software
  loader:      version unavailable [last: loader version not available]
  kickstart:   version 5.2(1)SM1(5.1) [build 5.2(1)SM1(5.0.7)]
  system:      version 5.2(1)SM1(5.1) [build 5.2(1)SM1(5.0.7)]
  kickstart image file is: bootflash:///n1000vh-dk9-kickstart.5.2.1.SM1.5.0.7.bin
  kickstart compile time:  2/28/2013 19:00:00 [03/01/2013 03:12:52]
  system image file is:    bootflash:///n1000vh-dk9.5.2.1.SM1.5.0.7.bin
  system compile time:     2/28/2013 19:00:00 [03/01/2013 05:49:34]

Hardware
  cisco Nexus 1000V Chassis ("Virtual Supervisor Module")
  Intel(R) Xeon(R) CPU          with 2064844 kB of memory.
  Processor Board ID T155DE1854D

  Device name: nexus1000v
  bootflash:   3122988 kB

Kernel uptime is 0 day(s), 0 hour(s), 58 minute(s), 43 second(s)

plugin
  Core Plugin, Ethernet Plugin, Virtualization Plugin
```

This example shows how to display information about the version build:

```
n1000v# show version internal build-identifier
Kickstart image file: bootflash:///n1000vh-dk9-kickstart.5.2.1.SM1.5.0.327.bin : S0
System image file: bootflash:///n1000vh-dk9.5.2.1.SM1.5.0.327.bin : S0
```

#### Related Commands

Command	Description
<b>reload module</b>	Reloads one of the VSMs in a redundant pair.

# show vlan

To display internal information about the VLAN broadcast domains, use the **show vlan** command.

```
show vlan [access-list access_list_name | access-map access_map_name | all-ports | brief | dot1q
tag native | filter [access-map access_map_name | vlan vlan_id] | id vlan_id | name vlan_name
| summary]
```

Syntax	Description
<b>access-list</b>	(Optional) Specifies the VLAN access list.
<i>access_list_name</i>	VLAN access list name.
<b>access-map</b>	(Optional) Specifies the VLAN access maps.
<i>access_map_name</i>	VLAN access map name.
<b>all-ports</b>	(Optional) Displays all ports on VLAN.
<b>brief</b>	(Optional) Displays all VLAN status in brief.
<b>dot1q tag native</b>	(Optional) Displays the native dot1q tag parameters.
<b>filter</b>	(Optional) Displays information about VLAN filters.
<b>vlan</b>	(Optional) Specifies the access map applied to a VLAN.
<i>vlan_id</i>	VLAN identification number. The range is from 1 to 3967 and 4048 to 4093 or range(s): 1 to 5, 10 or 2-5,7-19.
<b>id</b>	(Optional) Displays the VLAN status by VLAN identification number.
<b>name</b>	(Optional) Specifies the VLAN status by VLAN name.
<i>vlan_name</i>	VLAN name. The maximum is 32 case-sensitive, alphanumeric characters.
<b>summary</b>	(Optional) Displays VLAN summary information.

**Defaults** Displays internal information about the VLAN broadcast domains.

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the configured VLANs:

```
n1000v# show vlan
VLAN Name                               Status    Ports
-----
1    default                               active
10   VLAN0010                              active
```

```

20 VLAN0020 active
30 VLAN0030 active
40 VLAN0040 active
50 VLAN0050 active
200 VLAN0200 active
201 VLAN0201 active
202 VLAN0202 active
203 VLAN0203 active
204 VLAN0204 active
205 VLAN0205 active
206 VLAN0206 active
207 VLAN0207 active
Eth5/3, Eth5/4, Eth6/3, Eth6/4
.
.
.

```

```

VLAN Type Vlan-mode
-----
1 enet CE
10 enet CE
20 enet CE
30 enet CE
40 enet CE
50 enet CE
200 enet CE
201 enet CE
202 enet CE
203 enet CE
204 enet CE
205 enet CE
206 enet CE
207 enet CE

```

This example shows how to display information about the VLAN ports:

```
n1000v# show vlan all-ports
```

VLAN	Name	Status	Ports
1	default	active	
10	VLAN0010	active	
20	VLAN0020	active	
30	VLAN0030	active	
40	VLAN0040	active	
50	VLAN0050	active	
200	VLAN0200	active	
201	VLAN0201	active	
202	VLAN0202	active	
203	VLAN0203	active	
204	VLAN0204	active	
205	VLAN0205	active	
206	VLAN0206	active	
207	VLAN0207	active	
208	VLAN0208	active	
209	VLAN0209	active	
210	VLAN0210	active	
211	VLAN0211	active	Po1, Po4, Po7, Po10, Eth3/5 Eth3/6, Eth4/5, Eth4/6, Eth5/5 Eth5/6, Eth6/5, Eth6/6
...			

This example shows how to display brief information about the VLAN ports:

```
n1000v# show vlan brief
```

```

VLAN Name                Status    Ports
-----
1    default                active
10   VLAN0010               active
20   VLAN0020               active
30   VLAN0030               active
40   VLAN0040               active
50   VLAN0050               active
200  VLAN0200               active
201  VLAN0201               active
202  VLAN0202               active
203  VLAN0203               active
204  VLAN0204               active
205  VLAN0205               active
206  VLAN0206               active
207  VLAN0207               active
208  VLAN0208               active
209  VLAN0209               active
210  VLAN0210               active
211  VLAN0211               active    Po1, Po4, Po7, Po10, Eth3/5
                                   Eth3/6, Eth4/5, Eth4/6, Eth5/5
                                   Eth5/6, Eth6/5, Eth6/6
...

```

**Related Commands**

Command	Description
<b>domain id</b>	Assigns a domain ID to the domain.
<b>show svcs-domain</b>	Displays the domain configuration.
<b>show vlan-id</b>	Displays the configuration for the specified VLAN.
<b>shutdown</b>	Shuts down switching on a VLAN.
<b>svcs-domain</b>	Creates the domain and places you into CLI SVS domain configuration mode.
<b>switchport trunk allowed vlan</b>	Sets the list of allowed VLANs on the trunking interface.
<b>switchport trunk native vlan</b>	Configures the trunking parameters on an interface.
<b>system vlan</b>	Adds the system VLAN to a port profile.

# show vnm-pa

To display virtual network manager (VNM) policy agent information, use the **show vnm-pa** command.

```
show vnm-pa {status | tech-support}
```

Syntax Description	status	Displays VNM policy agent status.
	tech-support	Displays VNM policy agent technical support generation.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display information about the VNM policy agent:

```
n1000v# show vnm-pa status
VNM Policy-Agent status is - Not Installed
```

Related Commands	Command	Description
	vnm-policy-agent	Configures the VNM policy agent.



# show vrf

To display virtual routing and forwarding (VRF) information, use the **show vrf** command.

```
show vrf [vrf_name | all | default | detail | interface [control if_num | ethernet slot/chassis_num / port/slot_num [. port_num] | mgmt mgmt_if_num | port-channel port_chan_num [. sub_if_num] | vethernet vethernet_num] | management [detail | interface [control if_num | ethernet slot/chassis_num / port/slot_num [. port_num] | mgmt mgmt_if_num | port-channel port_chan_num [. sub_if_num] | vethernet vethernet_num]]]
```

## Syntax Description

<i>vrf_name</i>	(Optional) VRF name. The name is a maximum of 32 case-sensitive, alphanumeric characters.
<b>all</b>	(Optional) Displays adjacency entries for all VRFs.
<b>default</b>	(Optional) Displays a known VRF name.
<b>detail</b>	(Optional) Displays detailed VRF information.
<b>interface</b>	(Optional) Displays VRF interface information.
<b>control</b>	(Optional) Specifies the control interface.
<i>if_num</i>	Control interface number.
<b>ethernet</b>	(Optional) Specifies an Ethernet IEEE 802.3z interface.
<i>slot/chassis_num</i>	Slot/chassis number. The range is from 1 to 66.
/	Slash separator.
<i>port/slot_num</i>	Port/slot number. The range is from 1 to 128.
.	(Optional) Specifies the subinterface separator (dot .)
<i>port_num</i>	Port number. The range is from 1 to 64.
<b>mgmt</b>	(Optional) Specifies a management interface.
<i>mgmt_if_num</i>	Management interface number. The only valid value is 0.
<b>port-channel</b>	(Optional) Specifies a port channel interface.
<i>port_chan_num</i>	Port channel number. The range is from 1 to 4096.
<i>sub_if_num</i>	Subinterface number. The range is from 1 to 4093.
<b>vethernet</b>	(Optional) Specifies a virtual Ethernet interface.
<i>vethernet_num</i>	Virtual Ethernet number. The range is from 1 to 1048575.
<b>management</b>	(Optional) Displays the management interface.

## Defaults

Displays information about all VRF instances.

## Command Modes

Any

## SupportedUserRoles

network-admin

**Command History**

Release	Modification
5.2(1)SK1(1.1)	This command was introduced.

**Examples**

This example shows how to display information about VRF instances:

```
n1000v# show vrf
show vrf
VRF-Name                VRF-ID State  Reason
default                  1 Up      --
management               2 Up      --
```

This example shows how to display information about the VRF management interface:

```
n1000v# show vrf interface mgmt 0
Interface      VRF-Name                VRF-ID Site-of-Origin
mgmt0          management               2      --
```

**Related Commands**

Command	Description
<b>vrf</b>	Configures VRF parameters.

# show vservice brief

To display brief information about virtual services (vServices), use the **show vservice brief** command.

```
show vservice brief [module module_num | node-ipaddr node_ipv4_address [module
module_num] | node-l3 [module module_num | node-ipaddr node_ipv4_address [module
module_num]] | node-name node_name [module module_num]]
```

Syntax Description		
<b>module</b>	(Optional) Specifies the module filter.	
<i>module_num</i>	Module number. The range is from 3 to 66.	
<b>node-ipaddr</b>	(Optional) Specifies the IP address filter.	
<i>node_ipv4_address</i>	Virtual service node's data interface IPv4 address.	
<b>node-l3</b>	(Optional) Displays the vService node with the Layer 3 adjacency filter.	
<b>node-name</b>	(Optional) Specifies the name filter.	
<i>node_name</i>	Virtual service node/path name.	

**Defaults** Displays brief information about all vServices.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display brief vService information:

```
n1000v# show vservice brief
```

Related Commands	Command	Description
	<b>show vservice</b>	Displays information about the vService.

# show vservice connection

To display information about the virtual service (vService) connections maintained at the virtual Ethernet module (VEM), use the **show vservice connection** command.

```
show vservice connection [module module_num | node-ipaddr node_ipv4_address [module
module_num] | node-l3 [module module_num | node-ipaddr node_ipv4_address [module
module_num]] | node-name node_name [module module_num] | port-profile port_prof_name
[module module_num] | service-profile service_prof_name [module module_num]]
```

Syntax Description		
<b>module</b>	(Optional) Specifies the module filter.	
<i>module_num</i>	Module number. The range is from 3 to 66.	
<b>node-ipaddr</b>	(Optional) Specifies the IP address filter.	
<i>node_ipv4_address</i>	Virtual service node's data interface IPv4 address.	
<b>node-l3</b>	(Optional) Displays the vService node with the Layer 3 adjacency filter.	
<b>node-name</b>	(Optional) Specifies the name filter.	
<i>node_name</i>	Virtual service node/path name.	
<b>port-profile</b>	(Optional) Specifies a port profile filter.	
<i>port_prof_name</i>	Port profile name. The name is a maximum of 80 case-sensitive, alphanumeric characters.	
<b>service-profile</b>	(Optional) Specifies the service profile filter.	
<i>service_prof_name</i>	Service Profile name.	

**Defaults** Displays information about the vService connection.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display vService connection information:

```
n1000v# show vservice connection
```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>show vservice</b>	Displays information about the vService.

# show vservice detail

To display detailed information about the virtual services (vServices) in use, use the **show vservice detail** command.

```
show vservice detail [module module_num | node-ipaddr node_ipv4_address [module
module_num] | node-l3 [module module_num | node-ipaddr node_ipv4_address [module
module_num]] | node-name node_name [module module_num]]
```

Syntax Description		
<b>module</b>	(Optional) Specifies the module filter.	
<i>module_num</i>	Module number. The range is from 3 to 66.	
<b>node-ipaddr</b>	(Optional) Specifies the IP address filter.	
<i>node_ipv4_address</i>	Virtual service node's data interface IPv4 address.	
<b>node-l3</b>	(Optional) Displays the vService node with the Layer 3 adjacency filter.	
<b>node-name</b>	(Optional) Specifies the name filter.	
<i>node_name</i>	Virtual service node/path name.	

**Defaults** Displays details of the vService.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display detailed information about the vService:

```
n1000v# show vservice detail
```

Related Commands	Command	Description
	<b>show vservice</b>	Displays information about the vService.

# show vservice license

To display information about the virtual service (vService) license, use the **show vservice license** command.

```
show vservice license { brief | module module_num }
```

Syntax Description	Parameter	Description
	<b>brief</b>	Displays brief information about the vServices in use on all modules.
	<b>module</b>	(Optional) Specifies the module filter.
	<i>module_num</i>	Module number. The range is from 3 to 66.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display brief information about the vService license:

```
n1000v# show vservice license brief
```

Related Commands	Command	Description
	<b>show vservice</b>	Displays information about the vService.

# show vservice node brief

To display brief information about the virtual service (vService) node, use the **show vservice node brief** command.

```
show vservice node brief [ipaddr node_ipv4_address [module module_num] | I3 [module
module_num | ipaddr node_ipv4_address [module module_num]] | module module_num |
name node_name [module module_num]]
```

Syntax Description		
<b>ipaddr</b>	(Optional) Specifies the IP address filter.	
<i>node_ipv4_address</i>	Virtual service node's data interface IPv4 address.	
<b>module</b>	(Optional) Specifies the module filter.	
<i>module_num</i>	Module number. The range is from 3 to 66.	
<b>I3</b>	(Optional) Displays the vService node with the Layer 3 adjacency filter.	
<b>name</b>	(Optional) Specifies the name filter.	
<i>node_name</i>	Virtual service node/path name.	

**Defaults** Displays brief information about the vService nodes.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display brief information about the vService node:

```
n1000v# show vservice node brief
```

Related Commands	Command	Description
	<b>show vservice</b>	Displays information about the vService.



# show vservice node detail

To display detailed information about the virtual service (vService) node, use the **show vservice node detail** command.

```
show vservice node detail [ipaddr node_ipv4_address [module module_num] | I3 [module
module_num | ipaddr node_ipv4_address [module module_num]] | module module_num |
name node_name [module module_num]]
```

Syntax Description		
<b>ipaddr</b>	(Optional) Specifies the IP address filter.	
<i>node_ipv4_address</i>	Virtual service node's data interface IPv4 address.	
<b>module</b>	(Optional) Specifies the module filter.	
<i>module_num</i>	Module number. The range is from 3 to 66.	
<b>I3</b>	(Optional) Displays the vService node with the Layer 3 adjacency filter.	
<b>name</b>	(Optional) Specifies the name filter.	
<i>node_name</i>	Virtual service node/path name.	

**Defaults** Displays detailed information about the vService nodes.

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display detailed information about the vService node:

```
n1000v# show vservice node detail
```

Related Commands	Command	Description
	<b>show vservice</b>	Displays information about the vService.

# show vservice node mac brief

To display brief information about the virtual service (vService) node MAC, use the **show vservice node mac brief** command.

```
show vservice node mac brief [ipaddr node_ipv4_address [module module_num] | l3 [module
module_num | ipaddr node_ipv4_address [module module_num]] | module module_num |
name node_name [module module_num]]
```

Syntax	Description
<b>ipaddr</b>	(Optional) Specifies the IP address filter.
<i>node_ipv4_address</i>	Virtual service node's data interface IPv4 address.
<b>module</b>	(Optional) Specifies the module filter.
<i>module_num</i>	Module number. The range is from 3 to 66.
<b>l3</b>	(Optional) Displays the vService node with the Layer 3 adjacency filter.
<b>name</b>	(Optional) Specifies the name filter.
<i>node_name</i>	Virtual service node/path name.

**Defaults** None

**Command Modes** Any

**Supported User Roles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**Examples** This example shows how to display brief information about the vService node MAC:

```
n1000v# show vservice node mac brief
```

Related Commands	Command	Description
	<b>show vservice</b>	Displays information about the vService.

# show vservice port

To display information about the ports attached to the virtual service (vService) nodes, use the **show vservice port** command.

```
show vservice port {brief | detail} [module module_num | node-ipaddr node_ipv4_address
[module module_num] | node-l3 [module module_num | node-ipaddr node_ipv4_address
[module module_num]] | node-name node_name [module module_num] | port-profile
port_prof_name [module module_num] | service-profile service_prof_name [module
module_num] | vethernet vethernet_num [module module_num]]
```

Syntax Description		
<b>brief</b>		Displays brief information of all vServices in use on all modules.
<b>detail</b>		Displays detailed information of all vService in use.
<b>module</b>		(Optional) Specifies the module filter.
<i>module_num</i>		Module number. The range is from 3 to 66.
<b>node-ipaddr</b>		(Optional) Specifies the IP address filter.
<i>node_ipv4_address</i>		Virtual service node's data interface IPv4 address.
<b>node-l3</b>		(Optional) Displays the vService node with the Layer 3 adjacency filter.
<b>node-name</b>		(Optional) Specifies the name filter.
<i>node_name</i>		Virtual service node/path name.
<b>port-profile</b>		(Optional) Specifies a port profile filter.
<i>port_prof_name</i>		Port profile name. The name is a maximum of 80 case-sensitive, alphanumeric characters.
<b>service-profile</b>		(Optional) Specifies the service profile filter.
<i>service_prof_name</i>		Service profile name.
<b>vethernet</b>		(Optional) Specifies a virtual Ethernet interface.
<i>vethernet_num</i>		Virtual Ethernet number. The range is from 1 to 1048575.
<b>port</b>		Information about ports attached to the VSNs.
<b>statistics</b>		Statistics for the virtual path (vPath) and core.

**Defaults** None

**Command Modes** Any

**SupportedUserRoles** network-admin

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

**show vservice port****Examples**

This example shows how to display detailed vService port information:

```
n1000v# show vservice port detail
```

**Related Commands**

Command	Description
<code>show vservice</code>	Displays information about the vService.

# show vservice statistics

To display virtual service (vService) statistics, use the **show vservice statistics** command.

```
show vservice statistics [ip node_ipv4_address [module module_num] | module module_num]
```

Syntax Description	ip	(Optional) Specifies the IP address filter.
	<i>node_ipv4_address</i>	Virtual service node's data interface IPv4 address.
module	(Optional) Specifies the module filter.	
	<i>module_num</i>	Module number. The range is from 3 to 66.

Defaults	None
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Command Modes	Any
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SupportedUserRoles	network-admin
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Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

Examples	This example shows how to display vService statistical information:
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```
n1000v# show vservice statistics
```

Related Commands	Command	Description
	<b>show vservice</b>	Displays information about the vService.

# show vxlan statistics

To display VXLAN statistics, use the **show vxlan statistics** command.

```
show vxlan statistics {module module_num | interface vethernet vethernet_num}
```

Syntax Description	module	Displays the statistics of the specified module. The range is from 3 to 514.
	interface vethernet	Displays the statistics of the specified vEthernet interface. The range is from 1 to 1048575.

**Defaults** None

**Command Modes** Any

**Supported User Roles** network-admin  
network-operator

Command History	Release	Modification
	5.2(1)SK1(1.1)	This command was introduced.

## Examples

This example shows how to display VXLAN statistics information for module 3:

```
n1000v# show vxlan statistics module 3
      Veth      Ucast      Mcast/Repl      Ucast      Mcast      Total
      Encaps      Encaps      Decaps      Decaps      Drops
      Veth9      158697      254      2089      0      0
      Veth10      0      6      46      0      0
      Veth11      158697      7      1215      0      0
      Veth12      0      6      46      0      0
      .
      .
      .
      Veth69      0      6      0      0      0
```

This example shows how to display the VXLAN statistics information for vEthernet interface 1:

```
n1000v# show vxlan statistics interface vethernet 1
Unicast Encapsulations: 0
Multicast Encapsulations/HeadEnd Replications: 0
Unicast Decapsulations: 0
```

Related Commands	show bridge-domain	Displays bridge-domain configurations.
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