



T Commands

This chapter describes the Cisco Nexus 1000V commands that begin with T.

table-map

To create or modify a QoS table map, use the **table-map** command. To remove the table map, use the **no** form of this command.

table-map *table-map-name*

no table-map *table-map-name*

| | |
|---------------------------|---|
| Syntax Description | <i>table-map-name</i> Specify the table map name. |
|---------------------------|---|

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

| | |
|----------------------|-------------------------------|
| Command Modes | Global configuration (config) |
|----------------------|-------------------------------|

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

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

Usage Guidelines

Examples This example shows how to create or access the my_table1 table map for configuration:

```
n1000v# configure terminal
n1000v(config)# table-map my_table1
```

```
n1000v(config-tmap)#
```

This example shows how to remove the my_table1 table map:

```
n1000v(config)# no table-map my_table1
n1000v(config)#
```

Related Commands

| Command | Description |
|---------------------------------------|--|
| from <i>src</i> to <i>dest</i> | Maps input field values to output field values in a QoS table map. |
| show table-map | Displays table maps. |
| policy-map | Creates and configures QoS policy maps. |
| class-map | Creates or modifies a QoS class map that defines a class of traffic. |

tac-pac

To generate troubleshooting information in a compressed file format for TAC. You can specify the target location where the file is saved using the command parameter.

tac-pac {bootflash | ftp | modflash | scp | sftp | tftp | volatile}



Note

Before you open a TAC case, always generate troubleshooting information file using the **tac-pac** command along with feature specific command outputs and attach the files to the case. The troubleshooting information contains complete information for the Cisco TAC engineers to understand the issue. The troubleshooting information file, in compressed file format, is easier to share and transfer.

| Syntax Description | | |
|--------------------|---|--|
| <i>bootflash</i> | Sets bootflash as destination location to save the troubleshooting information file. | |
| <i>ftp</i> | Sets FTP server as destination location to save the troubleshooting information file. | |
| <i>modflash</i> | Sets modflash as destination location to save the troubleshooting information file. | |
| <i>scp</i> | Sets SCP as destination location to save the troubleshooting information file. | |
| <i>sftp</i> | Sets a secured FTP server as destination location to save the troubleshooting information file. | |
| <i>tftp</i> | Sets TFTP server as destination location to save the troubleshooting information file. | |
| <i>volatile</i> | Sets volatile memory as destination location to save the troubleshooting information file. | |

Defaults volatile

Command Modes any

SupportedUserRoles network admin

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 5.2(1)SV3(1.1) | This command was introduced. |

Examples This example shows how generate troubleshooting information file for TAC and save it in the bootflash:

```

pri_vsm# tac-pac bootflash:
pri_vsm# dir bootflash:
      1006479      Nov 23 00:07:00 2015  show_tech_out.gz

```

This example shows how generate troubleshooting information file for TAC and save it in the volatile memory:

```

pri_vsm# tac-pac volatile
pri_vsm# dir volatile:
374382 Nov 23 00:07:00 2015 show_tech_out.gz

```

You can copy the troubleshooting information file to bootflash, FTP, or TFTP server using the **copy** command. For example:

```

pri_vsm# copy volatile:show_tech_out.gz bootflash:

```

Related Commands

| Command | Description |
|--------------------------|--|
| show tech-support | To collect switch information for Cisco TAC. |

tacacs+ enable

To enable TACACS+, use the **tacacs+ enable** command. To disable TACACS+, use the **no** form of this command.

tacacs+ enable

no tacacs+ enable

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Global configuration (config)

SupportedUserRoles network-admin

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

Examples This example shows how to enable TACACS+:

```
n1000v(config)# tacacs+ enable
n1000v(config)#
```

This example shows how to disable TACACS+:

```
n1000v(config)# no tacacs+ enable
n1000v(config)#
```

| Related Commands | Command | Description |
|------------------|---------------------------|--|
| | tacacs-server key | Designates the global key shared between the Cisco Nexus 1000V and the TACACS+ server hosts. |
| | tacacs-server host | Designates the key shared between the Cisco Nexus 1000V and this specific TACACS+ server host. |
| | show tacacs-server | Displays the TACACS+ server configuration. |

tacacs-server deadline

To set a periodic time interval where a nonreachable (nonresponsive) TACACS+ server is monitored for responsiveness, use the **tacacs-server deadline** command. To disable the monitoring of the nonresponsive TACACS+ server, use the **no** form of this command.

tacacs-server deadline *minutes*

no tacacs-server deadline *minutes*

| | | |
|---------------------------|-------------|--|
| Syntax Description | <i>time</i> | Specifies the time interval in minutes. The range is from 1 to 1440. |
|---------------------------|-------------|--|

| | |
|-----------------|-----------|
| Defaults | 0 minutes |
|-----------------|-----------|

| | |
|----------------------|-------------------------------|
| Command Modes | Global configuration (config) |
|----------------------|-------------------------------|

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

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

Usage Guidelines

Setting the time interval to zero disables the timer. If the dead-time interval for an individual TACACS+ server is greater than zero (0), that value takes precedence over the value set for the server group.

When the dead-time interval is 0 minutes, TACACS+ server monitoring is not performed unless the TACACS+ server is part of a server group and the dead-time interval for the group is greater than 0 minutes.

In global configuration mode, you must first enable the TACACS+ feature, using the **tacacs+ enable** command, before you can use any of the other TACACS+ commands to configure the feature.

Examples

This example shows how to configure the dead-time interval and enable periodic monitoring:

```
n1000v# config terminal
n1000v(config)# tacacs-server deadline 10
```

This example shows how to revert to the default dead-time interval and disable periodic monitoring:

```
n1000v# config terminal
n1000v(config)# no tacacs-server deadline 10
```

Related Commands

| Command | Description |
|---------------------------|--|
| deadtime | Sets a dead-time interval for monitoring a nonresponsive TACACS+ server. |
| show tacacs-server | Displays TACACS+ server information. |
| tacacs+ enable | Enables TACACS+. |

tacacs-server directed-request

To allow users to send authentication requests to a specific TACACS+ server when logging in, use the **radius-server directed request** command. To revert to the default, use the **no** form of this command.

tacacs-server directed-request

no tacacs-server directed-request

Syntax Description This command has no arguments or keywords.

Defaults Disabled

Command Modes Global configuration (config)

SupportedUserRoles network-admin

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

Usage Guidelines In global configuration mode, you must first enable the TACACS+ feature, using the **tacacs+ enable** command, before you can use any of the other TACACS+ commands to configure the feature.

The user can specify the *username@vrfname:hostname* during login, where *vrfname* is the virtual routing and forwarding (VRF) name to use and *hostname* is the name of a configured TACACS+ server. The username is sent to the server name for authentication.



Note

If you enable the directed-request option, the NX-OS device uses only the RADIUS method for authentication and not the default local method.

Examples This example shows how to allow users to send authentication requests to a specific TACACS+ server when logging in:

```
n1000v# config t
n1000v(config)# tacacs-server directed-request
```

This example shows how to disallow users to send authentication requests to a specific TACACS+ server when logging in:

```
n1000v# config t
n1000v(config)# no tacacs-server directed-request
```


| Related Commands | Command | Description |
|------------------|--|---|
| | show tacacs-server directed request | Displays a directed request TACACS+ server configuration. |
| | tacacs+ enable | Enables TACACS+. |

tacacs-server host

To configure TACACS+ server host parameters, use the **tacacs-server host** command in configuration mode. To revert to the defaults, use the **no** form of this command.

```
tacacs-server host {hostname | ipv4-address | ipv6-address}
  [key [0 | 7] shared-secret] [port port-number]
  [test {idle-time time | password password | username name}]
  [timeout seconds]
```

```
no tacacs-server host {hostname | ipv4-address | ipv6-address}
  [key [0 | 7] shared-secret] [port port-number]
  [test {idle-time time | password password | username name}]
  [timeout seconds]
```

Syntax Description

| | |
|---------------------------------|---|
| <i>hostname</i> | TACACS+ server Domain Name Server (DNS) name. The name is alphanumeric, case sensitive, and has a maximum of 256 characters. |
| <i>ipv4-address</i> | TACACS+ server IPv4 address in the <i>A.B.C.D</i> format. |
| <i>ipv6-address</i> | TACACS+ server IPv6 address in the <i>X:X:X:X</i> format. |
| key | (Optional) Configures the TACACS+ server's shared secret key. |
| 0 | (Optional) Configures a preshared key specified in clear text (indicated by 0) to authenticate communication between the TACACS+ client and server. This is the default. |
| 7 | (Optional) Configures a preshared key specified in encrypted text (indicated by 7) to authenticate communication between the TACACS+ client and server. |
| <i>shared-secret</i> | Preshared key to authenticate communication between the TACACS+ client and server. The preshared key is alphanumeric, case sensitive, and has a maximum of 63 characters. |
| port <i>port-number</i> | (Optional) Configures a TACACS+ server port for authentication. The range is from 1 to 65535. |
| test | (Optional) Configures parameters to send test packets to the TACACS+ server. |
| idle-time <i>time</i> | (Optional) Specifies the time interval (in minutes) for monitoring the server. The time range is 1 to 1440 minutes. |
| password <i>password</i> | (Optional) Specifies a user password in the test packets. The password is alphanumeric, case sensitive, and has a maximum of 32 characters. |
| username <i>name</i> | (Optional) Specifies a user name in the test packets. The username is alphanumeric, case sensitive, and has a maximum of 32 characters. |
| timeout <i>seconds</i> | (Optional) Configures a TACACS+ server timeout period (in seconds) between retransmissions to the TACACS+ server. The range is from 1 to 60 seconds. |

Defaults

| Parameter | Default |
|-------------------|-----------|
| Idle-time | disabled |
| Server monitoring | disabled |
| Timeout | 1 seconds |
| Test username | test |
| Test password | test |

Command Modes

Global configuration (config)

Supported User Roles

network-admin

Command History

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

Usage Guidelines

You must use the **tacacs+ enable** command before you configure TACACS+.

When the idle time interval is 0 minutes, periodic TACACS+ server monitoring is not performed.

Examples

This example shows how to configure TACACS+ server host parameters:

```
n1000v# config terminal
n1000v(config)# tacacs-server host 10.10.2.3 key HostKey
n1000v(config)# tacacs-server host tacacs2 key 0 abcd
n1000v(config)# tacacs-server host tacacs3 key 7 1234
n1000v(config)# tacacs-server host 10.10.2.3 test idle-time 10
n1000v(config)# tacacs-server host 10.10.2.3 test username tester
n1000v(config)# tacacs-server host 10.10.2.3 test password 2B9ka5
```

Related Commands

| Command | Description |
|---------------------------|--------------------------------------|
| show tacacs-server | Displays TACACS+ server information. |
| tacacs+ enable | Enables TACACS+. |

tacacs-server key

To configure a global TACACS+ shared secret key, use the **tacacs-server key** command. To removed a configured shared secret, use the **no** form of this command.

```
tacacs-server key [0 | 7] shared-secret
```

```
no tacacs-server key [0 | 7] shared-secret
```

| Syntax Description | 0 | (Optional) Configures a preshared key specified in clear text to authenticate communication between the TACACS+ client and server. This is the default. |
|--------------------|----------------------|---|
| | 7 | (Optional) Configures a preshared key specified in encrypted text to authenticate communication between the TACACS+ client and server. |
| | <i>shared-secret</i> | Preshared key to authenticate communication between the TACACS+ client and server. The preshared key is alphanumeric, case sensitive, and has a maximum of 63 characters. |

Defaults None

Command Modes Global configuration (config)

SupportedUserRoles network-admin

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

Usage Guidelines You must configure the TACACS+ preshared key to authenticate the device on the TACACS+ server. The length of the key is restricted to 63 characters and can include any printable ASCII characters (white spaces are not allowed). You can configure a global key to be used for all TACACS+ server configurations on the device. You can override this global key assignment by using the **key** keyword in the **tacacs-server host** command.

You must use the **tacacs+ enable** command before you configure TACACS+.

Examples The following example shows how to configure TACACS+ server shared keys:

```
n1000v# config terminal
n1000v(config)# tacacs-server key AnyWord
n1000v(config)# tacacs-server key 0 AnyWord
n1000v(config)# tacacs-server key 7 public
```

| Related Commands | Command | Description |
|------------------|---------------------------|--------------------------------------|
| | show tacacs-server | Displays TACACS+ server information. |
| | tacacs+ enable | Enables TACACS+. |

tacacs-server timeout

To specify the time between retransmissions to the TACACS+ servers, use the **tacacs-server timeout** command. To revert to the default, use the **no** form of this command.

tacacs-server timeout *seconds*

no tacacs-server timeout *seconds*

| | | |
|---------------------------|----------------|---|
| Syntax Description | <i>seconds</i> | Seconds between retransmissions to the TACACS+ server. The range is from 1 to 60 seconds. |
|---------------------------|----------------|---|

| | |
|-----------------|-----------|
| Defaults | 5 seconds |
|-----------------|-----------|

| | |
|----------------------|-------------------------------|
| Command Modes | Global configuration (config) |
|----------------------|-------------------------------|

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

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

| | |
|-------------------------|--|
| Usage Guidelines | You must use the tacacs+ enable command before you configure TACACS+. |
|-------------------------|--|

| | |
|-----------------|---|
| Examples | This example shows how to configure the TACACS+ server timeout value: |
|-----------------|---|

```
n1000v# config terminal
n1000v(config)# tacacs-server timeout 3
```

This example shows how to revert to the default TACACS+ server timeout value:

```
n1000v# config terminal
n1000v(config)# no tacacs-server timeout 3
```

| Related Commands | Command | Description |
|------------------|---------------------------|--------------------------------------|
| | show tacacs-server | Displays TACACS+ server information. |
| | tacacs+ enable | Enables TACACS+. |

tail

To display the last lines of a file, use the **tail** command.

```
tail [filesystem://module/][directory/]filename lines
```

| Syntax Description | |
|---------------------|--|
| <i>filesystem</i> : | (Optional) Name of a file system. The name is case sensitive. |
| <i>//module/</i> | (Optional) Identifier for a supervisor module. Valid values are sup-active , sup-local , sup-remote , or sup-standby . The identifiers are case sensitive. |
| <i>directory/</i> | (Optional) Name of a directory. The name is case sensitive. |
| <i>filename</i> | Name of the command file. The name is case sensitive. |
| <i>lines</i> | (Optional) Number of lines to display. The range is from 0 to 80. |

| Defaults | |
|----------|--|
| 10 lines | |

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

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

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

Examples This example shows how to display the last 10 lines of a file:

```
n1000v# tail bootflash:startup.cfg
ip arp inspection filter marp vlan 9
ip dhcp snooping vlan 13
ip arp inspection vlan 13
ip dhcp snooping
ip arp inspection validate src-mac dst-mac ip
ip source binding 10.3.2.2 0f00.60b3.2333 vlan 13 interface Ethernet2/46
ip source binding 10.2.2.2 0060.3454.4555 vlan 100 interface Ethernet2/10
logging level dhcp_snoop 6
logging level eth_port_channel 6
```

This example shows how to display the last 20 lines of a file:

```
n1000v# tail bootflash:startup.cfg 20
area 99 virtual-link 1.2.3.4
router rip Enterprise
router rip foo
  address-family ipv4 unicast
router bgp 33.33
event manager applet sctest
monitor session 1
monitor session 2
```

```

ip dhcp snooping vlan 1
ip arp inspection vlan 1
ip arp inspection filter marp vlan 9
ip dhcp snooping vlan 13
ip arp inspection vlan 13
ip dhcp snooping
ip arp inspection validate src-mac dst-mac ip
ip source binding 10.3.2.2 0f00.60b3.2333 vlan 13 interface Ethernet2/46
ip source binding 10.2.2.2 0060.3454.4555 vlan 100 interface Ethernet2/10
logging level dhcp_snoop 6
logging level eth_port_channel 6

```

Related Commands

| Command | Description |
|-------------|---|
| cd | Changes the current working directory. |
| copy | Copies files. |
| dir | Displays the directory contents. |
| pwd | Displays the name of the current working directory. |

telnet

To create a Telnet session, use the **telnet** command.

```
telnet {ipv4-address | hostname} [port-number] [vrf vrf-name]
```

| Syntax Description | | |
|----------------------------|--|---|
| <i>ipv4-address</i> | | IPv4 address of the remote device. |
| <i>hostname</i> | | Hostname of the remote device. The name is alphanumeric, case sensitive, and has a maximum of 64 characters. |
| <i>port-number</i> | | (Optional) Port number for the Telnet session. The range is from 1 to 65535. |
| vrf <i>vrf-name</i> | | (Optional) Specifies the virtual routing and forwarding (VRF) name to use for the Telnet session. The name is case sensitive. |

| Defaults | |
|----------|-------------|
| | Port 23 |
| | Default VRF |

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

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

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

| Usage Guidelines | |
|------------------|---|
| | To use this command, you must enable the Telnet server using the feature telnet command. |

Examples This example shows how to start a Telnet session using an IPv4 address:

```
n1000v# telnet 10.10.1.1 vrf management
```

| Related Commands | Command | Description |
|------------------|-----------------------|----------------------------|
| | clear line | Clears Telnet sessions. |
| | feature telnet | Enables the Telnet server. |

template data timeout

To designate a timeout period for resending NetFlow template data, use the **template data timeout** command. To remove the timeout period, use the **no** form of this command.

template data timeout *time*

no template data timeout

| Syntax Description | <i>time</i> A time period between 1 and 86400 seconds. | | | | |
|---------------------------|--|---------|--------------|--------------|------------------------------|
| Defaults | None | | | | |
| Command Modes | Netflow flow exporter version 9 configuration (config-flow-exporter-version-9) | | | | |
| SupportedUserRoles | network-admin | | | | |
| Command History | <table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>4.0(4)SV1(1)</td> <td>This command was introduced.</td> </tr> </tbody> </table> | Release | Modification | 4.0(4)SV1(1) | This command was introduced. |
| Release | Modification | | | | |
| 4.0(4)SV1(1) | This command was introduced. | | | | |

Examples

This example shows how to configure a 3600-second timeout period for resending NetFlow flow exporter template data:

```
n1000v# config t
n1000v(config)# flow exporter ExportTest
n1000v(config-flow-exporter)# version 9
n1000v(config-flow-exporter-version-9)# template data timeout 3600
```

This example shows how to remove the timeout period for resending NetFlow flow exporter template data:

```
n1000v# config t
n1000v(config)# flow exporter ExportTest
n1000v(config-flow-exporter)# version 9
n1000v(config-flow-exporter-version-9)# no template data timeout
n1000v(config-flow-exporter)#
```

| Related Commands | Command | Description |
|-------------------------|---------------------------|--|
| | flow exporter | Creates a Flexible NetFlow flow exporter. |
| | flow record | Creates a Flexible NetFlow flow record. |
| | flow monitor | Creates a Flexible NetFlow flow monitor. |
| | show flow exporter | Displays information about the NetFlow flow exporter. |
| | show flow record | Displays information about NetFlow flow records. |
| | show flow monitor | Displays information about the NetFlow flow monitor. |
| | version 9 | Designates NetFlow export version 9 in the NetFlow exporter. |

terminal event-manager bypass

To bypass the CLI event manager, use the **terminal event-manager bypass** command.

terminal event-manager bypass

Syntax Description This command has no arguments or keywords.

Defaults Event manager is enabled.

Command Modes Any

SupportedUserRoles network-admin
network-operator

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

Examples This example shows how to disable the CLI event manager:

```
n1000v# terminal event-manager bypass
n1000v#
```

| Related Commands | Command | Description |
|------------------|---------------|----------------------------------|
| | show terminal | Displays terminal configuration. |

terminal length

To set the number of lines that appear on the screen, use the **terminal length** command.

terminal length *number*

| | | |
|---------------------------|---------------|---|
| Syntax Description | <i>number</i> | Number of lines. The range of valid values is 0 to 511. |
|---------------------------|---------------|---|

| | |
|-----------------|----------|
| Defaults | 28 lines |
|-----------------|----------|

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

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

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

| | |
|-------------------------|--|
| Usage Guidelines | Set <i>number</i> to 0 to disable pausing. |
|-------------------------|--|

| | |
|-----------------|--|
| Examples | This example shows how to set the number of lines that appear on the screen: |
|-----------------|--|

```
n1000v# terminal length 60
n1000v#
```

| Related Commands | Command | Description |
|-------------------------|----------------------|--------------------------------------|
| | show terminal | Displays the terminal configuration. |

terminal monitor

To enable logging for Telnet or Secure Shell (SSH), use the **terminal monitor** command. To disable logging, use the **no** form of this command.

terminal monitor

no terminal monitor

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin

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

Usage Guidelines This command does not disable all messages from being printed to the console. Messages such as “module add” and “remove events” will still be logged to the console.

Examples This example shows how to enable logging for Telnet or SSH:

```
n1000v# terminal monitor
n1000v#
```

| Related Commands | Command | Description |
|------------------|---------------------------------|---|
| | show terminal | Displays the terminal configuration. |
| | terminal length | Sets the number of lines that appear on the screen. |
| | terminal width | Sets the terminal width. |
| | terminal type | Specifies the terminal type. |
| | terminal session-timeout | Sets the session timeout. |

terminal session-timeout

To set session timeout, use the **terminal session-timeout** command.

terminal session-timeout *time*

| | |
|---------------------------|---|
| Syntax Description | <i>time</i> Timeout time, in seconds. The range of valid values is 0 to 525600. |
|---------------------------|---|

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

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

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

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

| | |
|-------------------------|--|
| Usage Guidelines | Set <i>time</i> to 0 to disable timeout. |
|-------------------------|--|

| | |
|-----------------|--|
| Examples | This example shows how to set session timeout: |
|-----------------|--|

```
n1000v# terminal session-timeout 100
n1000v#
```

| Related Commands | Command | Description |
|-------------------------|----------------------|--------------------------------------|
| | show terminal | Displays the terminal configuration. |

terminal terminal-type

To specify the terminal type, use the **terminal terminal-type** command.

terminal terminal-type *type*

| | | |
|---------------------------|--|--------------------------------------|
| Syntax Description | <i>type</i> | Terminal type. |
| Defaults | None | |
| Command Modes | Any | |
| SupportedUserRoles | network-admin network-operator | |
| Command History | Release | Modification |
| | 4.0(4)SV1(1) | This command was introduced. |
| Examples | This example shows how to specify the terminal type: n1000v# terminal terminal-type vt100 n1000v# | |
| Related Commands | Command | Description |
| | show terminal | Displays the terminal configuration. |

terminal tree-update

To update the main parse tree, use the **terminal tree-update** command.

terminal tree-update

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

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

Examples This example shows how to update the main parse tree:

```
n1000v# terminal tree-update
n1000v#
```

| Related Commands | Command | Description |
|-------------------------|----------------------|--------------------------------------|
| | show terminal | Displays the terminal configuration. |

terminal width

To set terminal width, use the **terminal width** command.

terminal width *number*

| | | |
|---------------------------|---------------|--|
| Syntax Description | <i>number</i> | Number of characters on a single line. The range of valid values is 24 to 511. |
|---------------------------|---------------|--|

| | |
|-----------------|-------------|
| Defaults | 102 columns |
|-----------------|-------------|

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

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

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

| | |
|-----------------|---|
| Examples | This example shows how to set terminal width: |
|-----------------|---|

```
n1000v# terminal width 60
n1000v#
```

| | | |
|-------------------------|----------------------|--------------------------------------|
| Related Commands | Command | Description |
| | show terminal | Displays the terminal configuration. |

test aaa

To test for AAA on a RADIUS server or server group, use the **test aaa** command.

```
test aaa {group group-name user-name password | server radius address {user-name password |  
vrf vrf-name user-name password}}
```

Syntax Description

| | |
|-------------------|--|
| group | Specifies an AAA server group. |
| <i>group-name</i> | AAA server group name. The range of valid values is 1 to 32. |
| <i>user-name</i> | User name. The range of valid values is 1 to 32. |
| <i>password</i> | User password. The range of valid values is 1 to 32. |
| server | Specifies an AAA server. |
| radius | Specifies a RADIUS server. |
| <i>address</i> | IP address or DNS name. |
| vrf | Specifies a virtual route. |
| <i>vrf-name</i> | Virtual route.name. |

Defaults

None

Command Modes

Any

Supported User Roles

network-admin
network-operator

Command History

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

Examples

This example shows how to test for AAA on RADIUS server:

```
n1000v# test aaa server radius ts1 vrf route1 user1 9w8e7r  
n1000v#
```

Related Commands

| Command | Description |
|-----------------|---------------------------|
| show aaa | Displays AAA information. |

timers bgp <keepalive-timer> <hold-timer>

timers bgp <keepalive-timer> <hold-timer>

To configure Keepalive interval timer and holdtimer for bgp, use the **timers bgp <keepalive-timer> <hold-timer>** command.

timers bgp <keepalive-timer> <hold-timer>

Syntax Description This command has no arguments or keywords.

Defaults None

Command Modes Any

SupportedUserRoles network-admin
network-operator

| Command History | Release | Modification |
|-----------------|----------------|------------------------------|
| | 5.2(1)SV3(1.1) | This command was introduced. |

Examples This example shows how to configure Keepalive interval timer and holdtimer for bgp:

```
n1000v(config-router)# timers bgp 180 180
```

| Related Commands | Command | Description |
|------------------|-----------------|---------------------------|
| | show aaa | Displays AAA information. |

track network-state enable

To enable Network State Tracking for all VEMs configured with a vPC-HM port-profile , use the **track network-state enable** command. To disable Network State Tracking, use the **no** form of this command.

track network-state enable

no track network-state

Syntax Description This command has no arguments or keywords.

Defaults disabled

Command Modes Global configuration (config)

SupportedUserRoles network-admin

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

Usage Guidelines None

Examples This example shows how to enable Network State Tracking for all VEMs configured with a vPC-HM port-profile:

```
n1000v# config t
n1000v(config)# track network-state enable
n1000v(config)#
```

This example shows how to disable Network State Tracking:

```
n1000v(config)# no track network-state
n1000v(config)#
```

| Related Commands | Command | Description |
|------------------|---|---|
| | show network-state tracking config | Displays the Network State Tracking configuration for verification. |
| | show network-state tracking {module modID interface channelID} | Displays the Network State Tracking status for a module or interface. |

track network-state interval

To specify an interval of time, from 1 to 10 seconds, between which Network State Tracking broadcasts are sent to pinpoint link failure on a port channel configured for vPC-HM, use the **track network-state interval** command. To remove the configured interval, use the **no** form of this command.

track network-state interval *intv*

no track network-state interval

| | | |
|---------------------------|-------------|--|
| Syntax Description | <i>intv</i> | Broadcast interval (from 1 to 10 seconds). The default is 5 seconds. |
|---------------------------|-------------|--|

| | |
|-----------------|-----------|
| Defaults | 5 seconds |
|-----------------|-----------|

| | |
|----------------------|-------------------------------|
| Command Modes | Global configuration (config) |
|----------------------|-------------------------------|

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

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

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

Examples This example shows how to specify an interval for sending broadcasts:

```
n1000v(config)# track network-state interval 8
n1000v(config)#
```

This example shows how to remove the broadcast interval configuration:

```
n1000v(config)# no track network-state interval
n1000v(config)#
```

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

track network-state threshold miss-count

To specify the maximum number of Network State Tracking broadcasts that can be missed consecutively before a split network is declared, use the **track network-state threshold miss-count** command. To remove the configuration, use the **no** form of this command.

track network-state threshold miss-count *count*

no track network-state threshold miss-count

| | | |
|---------------------------|--------------|---|
| Syntax Description | <i>count</i> | Specifies the number of Network State Tracking broadcasts that can be missed from 3 to 7. The default is 5. |
|---------------------------|--------------|---|

| | |
|-----------------|---------------------|
| Defaults | 5 missed broadcasts |
|-----------------|---------------------|

| | |
|----------------------|-------------------------------|
| Command Modes | Global configuration (config) |
|----------------------|-------------------------------|

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

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

Examples This example shows how to configure the maximum number of Network State Tracking broadcasts that can be missed:

```
n1000v# config t
n1000v(config)# network-state tracking threshold miss-count 7
n1000v(config)#
```

This example shows how to remove the configuration:

```
n1000v(config)# no network-state tracking threshold miss-count
n1000v(config)#
```

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

track network-state split action

To specify the action to take if a split network is detected by Network State Tracking, use the **track network-state split action** command. To remove the configuration, use the **no** form of this command.

track network-state split action

no track network-state split action

| Syntax Description | Command | Description |
|--------------------|-----------------|---|
| | repin | If a split network is detected by Network State Tracking, the traffic is pinned to another uplink. (the default) |
| | log-only | If a split network is detected by Network State Tracking, traffic is not repinned, and system messages are logged only. |

Defaults repin

Command Modes Global configuration (config)

Supported User Roles network-admin

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

Examples This example shows how to specify the action to take if Network State Tracking detects a split network:

```
n1000v# config t
n1000v(config)# track network-state split action repin
n1000v(config)#
```

This example shows how to remove the configuration:

```
n1000v(config)# no track network-state split action repin
n1000v(config)#
```

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

traceroute

To discover the routes that packets take when traveling to an IPv4 address, use the **traceroute** command.

```
traceroute {dest-ipv4-addr | hostname} [vrf vrf-name] [show-mpls-hops] [source src-ipv4-addr]
```

| Syntax Description | |
|------------------------------------|---|
| <i>dest-ipv4-addr</i> | IPv4 address of the destination device. The format is <i>A.B.C.D</i> . |
| <i>hostname</i> | Name of the destination device. The name is case sensitive. |
| vrf <i>vrf-name</i> | (Optional) Specifies the virtual routing and forwarding (VRF) to use. The name is case sensitive. |
| show-mpls-hops | (Optional) Displays the Multiprotocol Label Switching (MPLS) hops. |
| source <i>src-ipv4-addr</i> | (Optional) Specifies a source IPv4 address. The format is <i>A.B.C.D</i> . |

Defaults

Uses the default VRF.
Does not show the MPLS hops.
Uses the management IPv4 address for the source address.

Command Modes

Any

Supported User Roles

network-admin

Command History

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

Usage Guidelines

To use IPv6 addressing for discovering the route to a device, use the **traceroute6** command.

Examples

This example shows how to discover a route to a device:

```
n1000v# traceroute 172.28.255.18 vrf management
traceroute to 172.28.255.18 (172.28.255.18), 30 hops max, 40 byte packets
 1 172.28.230.1 (172.28.230.1) 0.746 ms 0.595 ms 0.479 ms
 2 172.24.114.213 (172.24.114.213) 0.592 ms 0.51 ms 0.486 ms
 3 172.20.147.50 (172.20.147.50) 0.701 ms 0.58 ms 0.486 ms
 4 172.28.255.18 (172.28.255.18) 0.495 ms 0.43 ms 0.482 ms
```

Related Commands

| Command | Description |
|--------------------|--|
| traceroute6 | Discovers the route to a device using IPv6 addressing. |

transport ip address A.B.C.D gateway A.B.C.D

Configures VXLAN termination or a VTEP on the VXLAN gateway. Creating VTEP port-profile is similar to the steps described under *Configuring vmknics for VXLAN Encapsulation* except the vmware port-group command which is not supported on the VXLAN gateway.

[no] transport ip address A.B.C.D gateway A.B.C.D



Note

Starting with Release 5.2(1)SV3(1.15), Cisco Nexus 1000V for VMware vSphere does not support the VXLAN gateway feature.

Syntax Description

| | |
|----------------|---|
| <i>A.B.C.D</i> | IPv4 address of the encapsulation device. |
| <i>A.B.C.D</i> | IPv4 default gateway address of the encapsulation device. |

Defaults

None.

Command Modes

Port-profile configuration (config-port-prof)

Supported User Roles

network-admin

Command History

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

Usage Guidelines

Configures VXLAN termination or a VTEP on the VXLAN gateway.

Examples

This example shows how to configure transport ip address:

```
n1000v# config t
n1000v(config)# port-profile type vethernet vmknics_vtep
n1000v(config-port-prof)# transport ip address 192.168.10.100 255.255.255.0 gateway
192.168.10.1
```

This example shows how to remove transport ip address:

```
n1000v# config t
n1000v(config)# port-profile type vethernet vmknics_vtep
n1000v(config-port-prof)# no transport ip address 192.168.10.100 255.255.255.0 gateway
192.168.10.1
```

Related Commands None.

transport udp (NetFlow)

To add a destination UDP port from the NetFlow exporter to the collector, use the **transport udp** command. To remove the port, use the **no** form of this command.

transport udp *portnumber*

no transport udp

| | |
|------------------------|---|
| Command History | <i>portnumber</i> Destination UDP number from 1 to 65535. |
|------------------------|---|

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

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

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

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

| | |
|-------------------------|--|
| Usage Guidelines | Avoid using well-known ports 1-1024 when possible. |
|-------------------------|--|

| | |
|-----------------|---|
| Examples | This example shows how to add UDP 200 to the flow exporter: |
|-----------------|---|

```
n1000v(config)# flow exporter ExportTest
n1000v(config-flow-exporter)# transport udp 200
```

This example shows how to remove UDP 200 from the flow exporter:

```
n1000v(config)# flow exporter ExportTest
n1000v(config-flow-exporter)# no transport udp 200
```

| Related Commands | Command | Description |
|------------------|---------------------------|---|
| | flow exporter | Creates a Flexible NetFlow flow exporter. |
| | flow record | Creates a Flexible NetFlow flow record. |
| | flow monitor | Creates a Flexible NetFlow flow monitor. |
| | show flow exporter | Displays information about the NetFlow flow exporter. |
| | show flow record | Displays information about NetFlow flow records. |
| | show flow monitor | Displays information about the NetFlow flow monitor. |

type

To define the network segmentation policy type, use the **type** command. To remove the network segmentation policy type, use the **no** form of this command.

```
type {nw_type}

no type [{nw_type}]
```

| Syntax Description | <i>nw_type</i> | The type of the network segmentation policy. |
|--------------------|----------------|--|
|--------------------|----------------|--|

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

| Command Modes | Network Segment Policy configuration (config-network-segment-policy) |
|---------------|--|
|---------------|--|

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

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

Usage Guidelines

The policy type can be Segmentation or VLAN. For segmentation policy, VXLAN is used. For more information, see the *Cisco Nexus 1000V VXLAN Configuration Guide, Release 4.2(1)SV2(1.1)*.

The policy type corresponds to the network pools in the vCloud Director. The policy type Segmentation corresponds to the network isolation-backed network pool in the vCloud Director. The policy type VLAN corresponds to the VLAN-backed network pool in the vCloud Director.

Once configured, the type cannot be changed.

Examples This example shows how to define the network segmentation policy type:

```
n1000v# configure terminal
n1000v(config)# network-segment policy abc-policy-vxlan
n1000v(config-network-segment-policy)# type segmentation
n1000v(config-network-segment-policy)
```

■ type

| Related Commands | Command | Description |
|------------------|--|---|
| | network-segment policy | Creates a network segmentation policy. |
| | show run network-segment policy | Displays the network segmentation policy configuration. |