



## **Cisco ACI Switch Command Reference, NX-OS Release 13.x and Later Releases**

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## Using the CLI

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- [iBash and VSH, on page 3](#)
- [Bash Conventions and Extensions, on page 4](#)

## About the ACI Switch CLI

The ACI switch command-line interface (CLI) is iBash, which consists of the standard Bash command language interpreter shell plus a set of custom commands for ACI switches.



---

**Note** To reach the iBash shell, you must login as admin, and not as root.

---



## iBash and VSH

Virtual Shell (VSH or vshell), the traditional Cisco NX-OS switch interface, is not a supported mode for ACI. Limited VSH functionality is present by typing `vsh` in the iBash shell, but its use is not intended for normal operation. This guide does not describe VSH.

In some situations, it could be necessary to use VSH to obtain process tags for use in an iBash command. For example, in NX-OS releases that support multiple OSPF instances, an iBash command such as `show ip ospf database` displays output only from the first registered OSPF process. To display output from other OSPF processes, you must include a process tag in the command: `show ip ospf <ptag> database`. You can view the running processes and obtain the process tag using a VSH command, as in the following example:

```
(none)# vsh -c "show cli internal ctags" | grep -i ospf
 4276 281    119 ospf      multipodIn 2450  ready    ospf-multipodInternal
 4278 281    119 ospf      default    2455  ready    ospf-default
 4277 282    128 ospfv3     default    2478  ready    ospfv3-default
```

To display the output of the OSPF default process in this example, use the iBash command `show ip ospf default database`.

# Bash Conventions and Extensions

Bash (Bourne Again SHell) is a Unix shell or command-line interpreter supported by a variety of operating systems. You can use the Bash interface to directly access the ACI switches or you can develop Bash shell scripts to automate tasks. Bash provides a variety of command line and scripting features.

For more information about the Bash shell, see <http://www.gnu.org/software/bash/bash.html>.

## Network Naming Conventions

Bash uses a forward slash (/) as a separator for interfaces, network addresses, and other settings.

For example, Ethernet interface number 46 on switch module 1 is represented as `Eth1/46`.

## Command Completion

Bash provides tab completion for standard Linux commands and ACI switch-specific commands. When you press the **Tab** key at the end of a command or option abbreviation, Bash displays the command in full or the next available keyword or argument choice. Bash will also autocomplete unambiguous partial command arguments.



---

**Note** Bash will autocomplete partial commands without the **Tab** key only after you enter the first level command. For example, `show int br` will be autocompleted as `show interface brief`, but `sh int br` will not be autocompleted.

---

## Command History

The CLI supports the Bash shell history functions. To display the command history, you can use the **Up Arrow** or **Down Arrow**, as well as the history command.

You can reenter a command in the history by stepping through the history to recall the desired command and pressing **Enter**. You can also recall a command and change it before you enter it.

In addition, you can directly search for a previous command by pressing **Ctrl-r** and then typing part of the desired command until the command is displayed.

## Command Help

At any time, you can press the **Esc** key twice to display the options available at the current state of the command syntax. If you have not entered anything at the prompt, pressing the **Esc** key twice lists all available commands for the current command mode. If you have partially entered a command, pressing the **Esc** key twice lists all the keywords and arguments available at your current position in the command syntax.



---

**Note** The iBash CLI uses **Esc-ESC** instead of **?** to avoid a conflict with the use of  **\$?** as a possible Bash prompt shortcut.

---



## C Commands

---

- [clear counters, on page 6](#)

## clear counters

**clear counters** [ { **interface** { **all** | *type* } } ]

<b>clear</b>	Reset functions.
<b>counters</b>	Clear counters.
<b>interface</b>	Clear interface counters.
<b>all</b>	Clear all interface counters.
<i>type</i>	Interface. The values are ethernet, port-channel, mgmt, vlan, vfc, vfc-port-channel.



---

**Note** This command clears only the port-related statistics. It does not clear the VLAN counters.

---



## D Commands

---

- [debug reset interface, on page 8](#)

# debug reset interface

**debug reset interface** *arg0*

---

**Syntax Description**

---

**debug** CLI debug action.

---

**reset** Reset interface.

---

**interface** Interface to be reset.

---

*arg0* Interface. The type is interface\_mrange. The values are ethernet.

---



## F Commands

---

- [faults](#), on page 10

# faults

```
faults [ { system | { interface interface-name } | { module mod-id [ port port-id ] } } ] [ history | detail ] [ id ]
```

Syntax	Description
<b>faults</b>	Display faults.
<b>system</b>	System wide events.
<b>interface</b>	Interface events.
<b>module</b>	Module events.
<i>mod-id</i>	Module id. The type is integer. The range is from 1 to 30.
<b>port</b>	Port events.
<i>port-id</i>	Port id. The type is integer. The range is from 1 to 255.
<i>interface-name</i>	Interface name. The type is interface.
<b>history</b>	Historical information.
<b>detail</b>	Detailed information.
<i>id</i>	Specific fault id information. The type is string.





## H Commands

---

- [health](#), on page 12

# health

```
health [ { system | { interface interface-name } | { module mod-id [ port port-id ] } } ] [ history ]
```

## Syntax Description

<b>health</b>	Display health info.
<b>system</b>	System wide events.
<b>interface</b>	Interface events.
<b>module</b>	Module events.
<i>mod-id</i>	Module id. The type is integer. The range is from 1 to 30.
<b>port</b>	Port events.
<i>port-id</i>	Port id. The type is integer. The range is from 1 to 255.
<i>interface-name</i>	Interface name. The type is interface.
<b>history</b>	Historical information.



# I Commands

---

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# iping

**iping** [-dDFLnqrV][-V *vrf*][-c *count*][-i *wait*][-p *pattern*][-s *packetsize*][-t *timeout*][-S *source*] *host*

## Syntax Description

<b>iping</b>	Send ping packets.
<b>-d</b>	Debug mode.
<b>-D</b>	Dump info.
<b>-F</b>	Enables the do-not-fragment bit in the IPv4 header.
<b>-L</b>	Fill in loopback.
<b>-n</b>	Display only numeric info.
<b>-q</b>	Quiet output.
<b>-r</b>	Do not route packets.
<b>-v</b>	Display verbose output.
<b>-V vrf</b>	The Virtual Routing and Forwarding (VRF) instance from which to source the ping message.
<b>-c count</b>	Number of ping packets that are sent to the destination address. The default is 5.
<b>-i wait</b>	The time interval between sending of ping packets.
<b>-p pattern</b>	The data pattern of the ping payload. Different data patterns are used to troubleshoot framing errors and clocking problems on serial lines. The default is [0xABCD].
<b>-s packetsize</b>	Size of the ping packet (in bytes).
<b>-t timeout</b>	Timeout interval. The ping is declared successful only if the ECHO REPLY packet is received before this time interval.
<b>-S source</b>	The IP address or host name to show as source.
<i>host</i>	The IP address or host name of the destination EP.

## Examples

```
pod1-leaf1# iping -V overlay-1 10.0.59.154

PING 10.0.59.154 (10.0.59.154): 56 data bytes
64 bytes from 10.0.59.154: icmp_seq=0 ttl=55 time=0.254 ms
64 bytes from 10.0.59.154: icmp_seq=1 ttl=55 time=0.256 ms
64 bytes from 10.0.59.154: icmp_seq=2 ttl=55 time=0.245 ms
64 bytes from 10.0.59.154: icmp_seq=3 ttl=55 time=0.241 ms
64 bytes from 10.0.59.154: icmp_seq=4 ttl=55 time=0.23 ms

--- 10.0.59.154 ping statistics ---
5 packets transmitted, 5 packets received, 0.00% packet loss
```

```
round-trip min/avg/max = 0.23/0.245/0.256 ms
```

# iping6

**iping6** [-dDFLNgRrv][**-V** *vrf*][**-c** *count*][**-i** *wait*][**-p** *pattern*][**-s** *packetsize*][**-t** *timeout*][**-S** *source*] *host*

## Syntax Description

### iping6

<b>-V</b> <i>vrf</i>	The Virtual Routing and Forwarding (VRF) instance from which to source the ping message.
<b>-c</b> <i>count</i>	Number of ping packets that are sent to the destination address. The default is 5.
<b>-i</b> <i>wait</i>	The time interval between sending of ping packets.
<b>-p</b> <i>pattern</i>	The data pattern of the ping payload. Different data patterns are used to troubleshoot framing errors and clocking problems on serial lines. The default is [0xABCD].
<b>-s</b> <i>packetsize</i>	Size of the ping packet (in bytes).
<b>-t</b> <i>timeout</i>	Timeout interval. The ping is declared successful only if the ECHO REPLY packet is received before this time interval.
<b>-S</b> <i>source</i>	The IPv6 address or host name to show as source.
<i>host</i>	The IPv6 address or host name of the destination EP.

**Table 1: Command History**

Release	Modification
11.2	This command was introduced.

## Examples

```
pod1-leaf1# iping6 -V overlay-1 2001:0DB8::3/64
```

# itraceroute

**itraceroute** *dst-ip* [ { **payload** *pld-size* } ]

## Syntax Description

<b>itraceroute</b>	itraceroute.
<b>fabric</b>	Inside fabric.
<b>payload</b>	payload size.
<i>dst-ip</i>	Enter destination node IP. The type is ipaddr.
<i>pld-size</i>	Enter payload size: 20-8904 (system will add other headers). The type is integer. The range is from 20 to 8904.

## Usage Guidelines

Use this command to find multiple paths to a destination leaf from the current leaf. This command will execute a trace on the overlay VRF.

The **itraceroute** command provides the following improvements over traditional traceroute:

- Discovers and reports multiple paths
- Transits only a single probe packet per path
- Reports detailed node information
- Simulates tenant traffic, exploring paths under the applied policies

## Examples

```
pod1-leaf1# itraceroute 10.0.71.61

Node traceroute to 10.0.71.61, infra VRF overlay-1, from [10.0.71.63], payload 56 bytes
Path 1
  1: TEP      10.0.71.62  intf  eth1/35  0.596 ms
  2: TEP      10.0.71.61  intf  eth1/98  0.392 ms

Path 2
  1: TEP      10.0.71.62  intf  eth1/33  0.672 ms
  2: TEP      10.0.71.61  intf  eth1/97  0.432 ms

Path 3
  1: TEP      10.0.71.62  intf  eth1/35  0.693 ms
  2: TEP      10.0.71.61  intf  eth1/97  0.484 ms

Path 4
  1: TEP      10.0.71.62  intf  eth1/33  0.954 ms
  2: TEP      10.0.71.61  intf  eth1/98  0.824 ms
```

## itraceroute6 vrf

**itraceroute6** *dst-ip* **vrf** *vrf-name* [ { **payload** *pld-size* } ]

### Syntax Description

<b>itraceroute6</b>	itraceroute6.
<b>vrf</b>	tenant vrf.
<i>vrf-name</i>	tenant vrf name. The type is string.
<i>dst-ip</i>	Enter destination IPv6. The type is ipv6.
<b>payload</b>	payload size.
<i>pld-size</i>	Enter payload size: 20-8904 (system will add other headers). The type is integer. The range is from 20 to 8904.



# itracroute6 vrf encap vlan

**itracroute6** *dst-ip* **vrf** *vrf-name* **encap** **vlan** [*vlan-encap*] [ { **payload** *pld-size* } ]

**Syntax Description**

<b>itracroute6</b>	itracroute6.
<b>vrf</b>	tenant vrf.
<i>vrf-name</i>	tenant vrf name. The type is string.
<i>dst-ip</i>	Enter destination IPv6. The type is ipv6.
<b>encap</b>	source EP encap type.
<b>vlan</b>	vlan src EP.
<b>payload</b>	payload size.
<i>vlan-encap</i>	Enter Vlan Encap: 1-4095. The type is integer. The range is from 1 to 4095.
<i>pld-size</i>	Enter payload size: 20-8904 (system will add other headers). The type is integer. The range is from 20 to 8904.

# itraceroute6 vrf encap vxlan dst-mac

**itraceroute6** *dst-ip* **vrf** *vrf-name* **encap vxlan** [*vxlan-encap*] **dst-mac** *dst-mac* [ { **payload** *pld-size* } ]

**Syntax Description**

<b>itraceroute6</b>	itraceroute6.
<b>vrf</b>	tenant vrf.
<i>vrf-name</i>	tenant vrf name. The type is string.
<i>dst-ip</i>	Enter destination EP IPv6. The type is ipv6.
<b>dst-mac</b>	Destination EP MAC address.
<i>dst-mac</i>	Enter destination EP MAC address. The type is ethernet.
<b>encap</b>	source EP encap type.
<b>vxlan</b>	vxlan src EP.
<b>payload</b>	payload size.
<i>vxlan-encap</i>	Enter VTEP VxLAN encap: 4096-16777215. The type is integer. The range is from 4096 to 16777215.
<i>pld-size</i>	Enter payload size: 20-8904 (system will add other headers). The type is integer. The range is from 20 to 8904.

# itraceroute vrf

**itraceroute** [**external**] *dst-ip* **vrf** *vrf-name* [ { **payload** *pld-size* } ]

**Syntax Description**

<b>itraceroute</b>	itraceroute.
<b>vrf</b>	tenant vrf.
<i>vrf-name</i>	tenant vrf name. The type is string.
<i>dst-ip</i>	Enter destination IP. The type is ipaddr.
<b>payload</b>	payload size.
<i>pld-size</i>	Enter payload size: 20-8904 (system will add other headers). The type is integer. The range is from 20 to 8904.
<b>external</b>	Run itraceroute with 5-Tuple.

# itraceroute vrf encap vlan

**itraceroute** [**external** [ **max-ext-hops** *max-ext-hops* ] [ **ext-timeout-sec** *ext-timeout-sec* ] [ **ext-timeout-usec** *ext-timeout-usec* ] [ **ext-interval-sec** *ext-interval-sec* ] [ **ext-interval-usec** *ext-interval-usec* ] ] [**src-ip** *sip*] *dst-ip* **vrf** *vrf-name* **encap** **vlan** [*vlan-encap*] [**dst-mac** *dst-mac*] [ { **payload** *pld-size* } ] [ **icmp** | { **tcp** | **udp** } ] [ { **sport-start** *sps* **sport-end** *spe* } ] [ { **dport-start** *dps* **dport-end** *dpe* } ] ] [ **num-queries** *np* ]

Syntax Description	itraceroute	itraceroute.
<b>vrf</b>	tenant vrf.	
<i>vrf-name</i>	tenant vrf name. The type is string.	
<i>dst-ip</i>	Enter destination IP. The type is ipaddr.	
<b>encap</b>	source EP encap type.	
<b>vlan</b>	vlan src EP.	
<b>payload</b>	payload size.	
<i>vlan-encap</i>	Enter Vlan Encap: 1-4095. The type is integer. The range is from 1 to 4095.	
<i>pld-size</i>	Enter payload size: 20-8904 (system will add other headers). The type is integer. The range is from 20 to 8904.	
<b>external</b>	Run itraceroute with 5-Tuple.	
<b>src-ip</b>	Source EP IP.	
<i>sip</i>	Enter Source EP IP. The type is ipaddr.	
<b>dst-mac</b>	Destination EP MAC address.	
<i>dst-mac</i>	Enter destination EP MAC address. The type is ethernet.	
<b>sport-start</b>	Source port start.	
<i>sps</i>	Enter starting source port number: 1-65535. The type is integer. The range is from 0 to 65535.	
<b>sport-end</b>	Source port end.	
<i>spe</i>	Enter ending source port number: 1-65535. The type is integer. The range is from 0 to 65535.	
<b>dport-start</b>	Destination port start.	
<i>dps</i>	Enter starting Destination port number: 1-65535. The type is integer. The range is from 0 to 65535.	
<b>dport-end</b>	Destination port end.	

<i>dpe</i>	Enter ending Destination port number: 1-65535. The type is integer. The range is from 0 to 65535.
<b>tcp</b>	Start traceroute with TCP Protocol.
<b>udp</b>	Start traceroute with UDP Protocol.
<b>icmp</b>	Start traceroute with ICMP Protocol.
<b>num-queries</b>	Number of paths.
<i>np</i>	Enter number of paths. The type is integer. The range is from 1 to 65535.
<b>max-ext-hops</b>	Max Hops for External Traceroute.
<i>max-ext-hops</i>	Enter max Hops for External Traceroute. The type is integer. The range is from 1 to 255.
<b>ext-timeout-sec</b>	External timeout in sec.
<i>ext-timeout-sec</i>	Enter External timeout in sec. The type is integer.
<b>ext-timeout-usec</b>	External timeout in usec.
<i>ext-timeout-usec</i>	Enter External timeout in usec. The type is integer.
<b>ext-interval-sec</b>	External interval in sec.
<i>ext-interval-sec</i>	Enter External interval in sec. The type is integer.
<b>ext-interval-usec</b>	External interval in usec.
<i>ext-interval-usec</i>	Enter External interval in usec. The type is integer.

## itraceroute vrf encap vxlan

**itraceroute** [ **external** [ **max-ext-hops** *max-ext-hops* ] [ **ext-timeout-sec** *ext-timeout-sec* ] [ **ext-timeout-usec** *ext-timeout-usec* ] [ **ext-interval-sec** *ext-interval-sec* ] [ **ext-interval-usec** *ext-interval-usec* ] ] [ **src-ip** *sip* ] *dst-ip* **vrf** *vrf-name* **encap vxlan** [ *vxlan-encap* ] [ **dst-mac** *dst-mac* ] [ { **payload** *pld-size* } ] [ **icmp** | { **tcp** | **udp** } ] [ { **sport-start** *sps* **sport-end** *spe* } ] [ { **dport-start** *dps* **dport-end** *dpe* } ] ] [ **num-queries** *np* ]

### Syntax Description

<b>itraceroute</b>	itraceroute.
<b>vrf</b>	tenant vrf.
<i>vrf-name</i>	tenant vrf name. The type is string.
<i>dst-ip</i>	Enter destination EP IP. The type is ipaddr.
<b>dst-mac</b>	Destination EP MAC address.
<i>dst-mac</i>	Enter destination EP MAC address. The type is ethernet.
<b>encap</b>	source EP encap type.
<b>vxlan</b>	vxlan src EP.
<b>payload</b>	payload size.
<i>vxlan-encap</i>	Enter VTEP VxLAN encap: 4096-16777215. The type is integer. The range is from 4096 to 16777215.
<i>pld-size</i>	Enter payload size: 20-8904 (system will add other headers). The type is integer. The range is from 20 to 8904.
<b>external</b>	Run itraceroute with 5-Tuple.
<b>src-ip</b>	Source EP IP.
<i>sip</i>	Enter Source EP IP. The type is ipaddr.
<b>sport-start</b>	Starting source port to use.
<i>sps</i>	Enter starting source port number to use: 1-65535. The type is integer. The range is from 0 to 65535.
<b>sport-end</b>	Ending source port to use.
<i>spe</i>	Enter ending source port number to use: 1-65535. The type is integer. The range is from 0 to 65535.
<b>dport-start</b>	Starting destination port to use.
<i>dps</i>	Enter starting Destination port number to use: 1-65535. The type is integer. The range is from 0 to 65535.
<b>dport-end</b>	Ending Destination port to use.

<i>dpe</i>	Enter ending Destination port number to use: 1-65535. The type is integer. The range is from 0 to 65535.
<b>tcp</b>	Use TCP to send probes.
<b>udp</b>	Use UDP Protocol for traceroute.
<b>icmp</b>	Use ICMP ECHO to send probes.
<b>num-queries</b>	Number of probe packets per hop.
<i>np</i>	Enter number of probe packets per hop. The type is integer. The range is from 1 to 65535.
<b>max-ext-hops</b>	Max Hops for External Traceroute.
<i>max-ext-hops</i>	Enter max Hops for External Traceroute. The type is integer. The range is from 1 to 255.
<b>ext-timeout-sec</b>	External timeout in sec.
<i>ext-timeout-sec</i>	Enter External timeout in sec. The type is integer.
<b>ext-timeout-usec</b>	External timeout in usec.
<i>ext-timeout-usec</i>	Enter External timeout in usec. The type is integer.
<b>ext-interval-sec</b>	External interval in sec.
<i>ext-interval-sec</i>	Enter External interval in sec. The type is integer.
<b>ext-interval-usec</b>	External interval in usec.
<i>ext-interval-usec</i>	Enter External interval in usec. The type is integer.







## R Commands

---

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# reload

reload

---

**Syntax Description**

---

**reload** Reload the chassis.

---

# reload fex

**reload fex** *fex\_id*

---

**Syntax Description**

---

**reload** Reload Information.

---

**fex** Fex.

---

*fex\_id* FEX number. The type is integer. The range is from 101 to 199.

---

# reload module

**reload module** *module\_id*

---

**Syntax Description**

---

**reload** Reload Information.

---

**module** Module.

---

*module\_id* <1-30> please enter the module number. The type is string.

---



## S Commands

---

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# setinservice

setinservice

---

**Syntax Description**

**setinservice** Put the node ports back in service.

---



---

**Note** This command does not update APIC policies. When this command is run in the switch, the port remains disabled in APIC.

---

# show

```
show { { ip eigrp {topology | route} [prefix | active | pending | zero-successors | all-links] vrf {vrf-name | all} } | { ipv6 eigrp {topology | route} [ipv6-prefix | active | pending | zero-successors | all-links] vrf {vrf-name | all} } }
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Display EIGRP information for IPv4 address family.
<b>eigrp</b>	Show EIGRP information.
<b>topology</b>	Display information on EIGRP topology (routes).
<b>route</b>	Display information on EIGRP routes.
<b>active</b>	Show Information on Active Routes only.
<b>pending</b>	Show Information on only the Routes pending on any replies.
<b>zero-successors</b>	Show Information on only the Routes having Zero Successors.
<b>all-links</b>	Show all Nexthops of a Route, not just Feasible Successors.
<i>prefix</i>	Show information on this Prefix only. The type is <i>ip</i> prefix.
<i>ipv6-prefix</i>	Show information on this ipv6 Prefix only. The type is <i>ipv6_prefix</i> .
<b>vrf</b>	Show EIGRP information per-VRF.
<i>vrf-name</i>	Name of the VRF. The type is string.
<b>all</b>	Show EIGRP information for all VRF.
<b>ipv6</b>	Display EIGRP information for IPv6 address family.

# show

```
show { { ip eigrp neighbors [detail] {iface0} | { [ address ] vrf {vrf-name| all} } } } | { { ipv6 eigrp neighbors [detail] {iface0} | { [ ipv6-address] vrf {vrf-name| all} } } }
```

## Syntax Description

<b>show</b>	Show running system information.
<b>ip</b>	Display EIGRP information for IPv4 address family.
<b>ipv6</b>	Display EIGRP information for IPv6 address family.
<b>eigrp</b>	Show EIGRP information.
<b>neighbors</b>	Display information on EIGRP neighbors (peers).
<b>detail</b>	Show detailed Information on Neighbors.
<i>iface0</i>	Show Peers on this interface only. The type is interface. The values are ethernet, port-channel, vlan, loopback.
<i>address</i>	Peer Address. The type is ipaddr.
<i>ipv6-address</i>	ipv6 Peer Address. The type is ipv6.
<b>vrf</b>	Show EIGRP information per-VRF.
<i>vrf-name</i>	Name of the VRF. The type is string.
<b>all</b>	Show EIGRP information for all VRF.

# show

**show** [*path*]

---

**Syntax Description**

---

**show** Show Command.

---

*path* directory of the mo. The type is string.

---

# show aaa

**show aaa {authentication | groups}**

---

**Syntax Description**

---

<b>show</b>	Show Information.
<b>aaa</b>	Authentication, Authorization and Accounting Information.
<b>authentication</b>	Authentication.
<b>groups</b>	Groups.

---



# show aaa user default-role

show aaa user default-role

Syntax	Description
<b>show</b>	Show Information.
<b>aaa</b>	Authentication, Authorization and Accounting configuration mode.
<b>user</b>	User.
<b>default-role</b>	Default role assigned by aaa-admin for remote authentication.

## show adjacency vrf

**show** { **ip** | **ipv6** } **adjacency** [ { *interface* | *ip-addr* } ] [ **detail** | **summary** | **non-best** ] **vrf** { *vrf-name* | **all** }

### Syntax Description

<b>show</b>	Show running system information.
<b>ip</b>	Display IP information.
<b>ipv6</b>	Display IPv6 information.
<b>adjacency</b>	Display adjacency table.
<i>interface</i>	Display specific interface adjacencies only. The type is interface.
<b>summary</b>	Show adjacency summary.
<i>ip-addr</i>	IPv4 source address. The type is ipaddr.
<b>non-best</b>	Show both best/non-best entries.
<b>detail</b>	Show detail information of adjacency entries.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	VRF name. The type is string.
<b>all</b>	Show adjacency entries for all vrfs.

# show bfd clients

## show bfd clients

Syntax	Description
<b>show</b>	Show running system information.
<b>bfd</b>	BFD commands.
<b>clients</b>	Bfd client list.

## show bfd ipv4 neighbors

```
show bfd ipv4 neighbors [{module module_no}] [{interface intf_id}] [{application bfd_cli_client_names}]
[{src-ip src_ip}] [{dest-ip dest_ip}] [{vrf {vrf-name | all}}] [details] [sort-by {src-ip | dest-ip | interface}]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>bfd</b>	BFD commands.
<b>ipv4</b>	Ipv4 neighbors.
<b>neighbors</b>	Neighbors.
<b>module</b>	Module.
<i>module_no</i>	module number. The type is uinteger. to 32. The range is from 0
<b>interface</b>	Interface.
<i>intf_id</i>	show bfd sessions based on interface id. The type is interface. The values are ethernet, loopback, vlan, tunnel.
<b>application</b>	Application.
<i>bfd_cli_client_names</i>	Application name. The type is string.
<b>src-ip</b>	Source ip.
<i>src_ip</i>	Source ip value. The type is ipaddr.
<b>dest-ip</b>	Destination ip.
<i>dest_ip</i>	Destination ip value. The type is ipaddr.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	VRF name. The type is string.
<b>all</b>	Display information for all VRFs.
<b>details</b>	Details.
<b>sort-by</b>	Sort by.

## show bfd ipv6 neighbors

```
show bfd ipv6 neighbors [{module module_no}] [{interface intf_id}] [{application bfd_cli_client_names}]
[{src-ip src_ipv6}] [{dest-ip dest_ipv6}] [{vrf {vrf-name | all}}] [details] [sort-by {src-ip | dest-ip | interface}]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>bfd</b>	BFD commands.
<b>ipv6</b>	Ipv6 neighbors.
<b>neighbors</b>	Neighbors.
<b>module</b>	Module.
<i>module_no</i>	module number. The type is uinteger. to 32. The range is from 0
<b>interface</b>	Interface.
<i>intf_id</i>	show bfd sessions based on interface id. The type is interface. The values are ethernet, loopback, vlan, tunnel.
<b>application</b>	Application.
<i>bfd_cli_client_names</i>	Application name. The type is string.
<b>src-ip</b>	Source ip.
<i>src_ipv6</i>	Source ipv6 value. The type is ipv6.
<b>dest-ip</b>	Destination ip.
<i>dest_ipv6</i>	Destination ipv6 value. The type is ipv6.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	VRF name. The type is string.
<b>all</b>	Display information for all VRFs.
<b>details</b>	Details.
<b>sort-by</b>	Sort by.

## show bfd neighbors

```
show bfd neighbors [{module module_no}] [{interface intf_id}] [{application bfd_cli_client_names}]
[{{src-ip src_ip}}] [{{dest-ip dest_ip}}] [{{vrf {vrf-name | all}}}] [details] [sort-by {src-ip | dest-ip | interface}]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>bfd</b>	BFD commands.
<b>neighbors</b>	Neighbors.
<b>module</b>	Module.
<i>module_no</i>	module number. The type is uinteger. to 32. The range is from 0
<b>interface</b>	Interface.
<i>intf_id</i>	show bfd sessions based on interface id. The type is interface. The values are ethernet, loopback, vlan, tunnel.
<b>application</b>	Application.
<i>bfd_cli_client_names</i>	Application name. The type is string.
<b>src-ip</b>	Source ip.
<i>src_ip</i>	Source ip value. The type is ipaddr.
<i>src_ipv6</i>	Source ipv6 value. The type is ipv6.
<b>dest-ip</b>	Destination ip.
<i>dest_ip</i>	Destination ip value. The type is ipaddr.
<i>dest_ipv6</i>	Destination ipv6 value. The type is ipv6.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	VRF name. The type is string.
<b>all</b>	Display information for all VRFs.
<b>details</b>	Details.
<b>sort-by</b>	Sort by.

# show bgp convergence

```
show bgp convergence [detail] [{vrf {vrf-name | ALL_VRFS_012345678901234}}]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>bgp</b>	Display BGP status and configuration.
<b>convergence</b>	Display BGP status and configuration.
<b>detail</b>	Display detailed information about convergence.
<b>vrf</b>	Virtual Router Context.
<i>vrf-name</i>	The type is string. VRF name.
<b>ALL_VRFS_012345678901234</b>	all.

## show bgp neighbors vrf

```
show bgp { { { ipv4 | ipv6 | vpnv4 | vpnv6 } unicast } | { l2vpn evpn } | all } neighbors [neighbor-id |
neighbor-prefix-id | ipv6-neighbor-id | ipv6-neighbor-prefix-id] vrf { vrf-name | ALL_VRFS_012345678901234
}
```

Syntax	Description
<b>show</b>	Show running system information.
<b>bgp</b>	Show BGP information.
<b>ipv4</b>	Display BGP information for IPv4 address family.
<b>ipv6</b>	Display BGP information for IPv6 address family.
<b>vpnv4</b>	Display BGP information for VPNv4 address family.
<b>vpnv6</b>	Display BGP information for VPNv6 address family.
<b>unicast</b>	Display BGP information for IPv4 unicast address family.
<b>l2vpn</b>	Display BGP information for L2VPN EVPN address family.
<b>evpn</b>	Display BGP information for L2VPN EVPN address family.
<b>all</b>	Display BGP information for all address families.
<b>neighbors</b>	Display BGP neighbor information.
<i>neighbor-id</i>	The type is ipaddr. IPv4 neighbor address.
<i>neighbor-prefix-id</i>	The type is ipprefix. IPv4 prefix neighbor address.
<i>ipv6-neighbor-id</i>	The type is ipv6. IPv6 neighbor address.
<i>ipv6-neighbor-prefix-id</i>	The type is ipv6_prefix. IPv6 prefix neighbor address.
<b>vrf</b>	Show BGP information for a VRF.
<b>ALL_VRFS_012345678901234</b>	all.
<i>vrf-name</i>	Name of the VRF. The type is string.



## show bgp process

```
show bgp [{vrf {vrf-name | ALL_VRFS_012345678901234}}] process [detail] [{vrf {vrf-name | ALL_VRFS_012345678901234}}]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>bgp</b>	Display BGP status and configuration.
<b>vrf</b>	Virtual Router Context.
<i>vrf-name</i>	The type is string. VRF name.
<b>ALL_VRFS_012345678901234</b>	all.
<b>process</b>	BGP global information.
<b>detail</b>	Detailed information.

# show bgp sessions vrf

```
show bgp sessions vrf { all | vrf-name }
```

---

**Syntax Description**

---

**show** Show running system information.

---

**bgp** Show BGP information.

---

**sessions** Show BGP sessions.

---

**vrf** Show BGP sessions in a VRF.

---

**all** Show BGP sessions for all VRFs.

---

*vrf-name* Name of the VRF. The type is string.

---

## show bgp summary vrf

```
show bgp { { { ipv4 | ipv6 | vpnv4 | vpnv6 } unicast } | { l2vpn evpn } | all } summary vrf { vrf-name |
ALL_VRFS_012345678901234 }
```

Syntax	Description
<b>show</b>	Show running system information.
<b>bgp</b>	Show BGP information.
<b>ipv4</b>	Display BGP information for IPv4 address family.
<b>ipv6</b>	Display BGP information for IPv6 address family.
<b>vpnv4</b>	Display BGP information for VPNv4 address family.
<b>vpnv6</b>	Display BGP information for VPNv6 address family.
<b>unicast</b>	Display BGP information for IPv4 unicast address family.
<b>l2vpn</b>	Display BGP information for L2VPN EVPN address family.
<b>evpn</b>	Display BGP information for L2VPN EVPN address family.
<b>all</b>	Display BGP information for all address families.
<b>summary</b>	Display summarized information of BGP state.
<b>vrf</b>	Show BGP information for a VRF.
<b>ALL_VRFS_012345678901234</b>	all.
<i>vrf-name</i>	Name of the VRF. The type is string.

## show bgp vrf

```
show bgp { { { ipv4 | vpv4 } unicast [ip-prefix] | { { ipv6 | vpv6 } unicast [ipv6-prefix] | { l2vpn evpn
[ipv4-rt | ipv6-rt | mac-address ] {route-type rtype} | {smad [{source src-v4-addr | src-v6-addr } ] [{group
grp-v4-addr | grp-v6-addr } ] [ {originator orig-v4-addr | orig-v6-addr } ] } } } } vrf {vrf-name |
ALL_VRFS_012345678901234}
```

Syntax	Description
<b>show</b>	Show running system information.
<b>bgp</b>	Display BGP status and configuration.
<b>ipv4</b>	Display BGP information for IPv4 address family.
<b>ipv6</b>	Display BGP information for IPv6 address family.
<b>vpv4</b>	Display BGP information for VPNv4 address family.
<b>vpv6</b>	Display BGP information for VPNv6 address family.
<b>unicast</b>	Display unicast SAFI information.
<b>l2vpn</b>	Display BGP information for L2VPN EVPN address family.
<b>evpn</b>	Display BGP information for L2VPN EVPN address family.
<i>ip-prefix</i>	The type is ipprefix. IP address.
<i>ipv6-prefix</i>	The type is ipv6_prefix. IPv6 prefix.
<i>ipv4-rt</i>	The type is ipaddr. IP address.
<i>ipv6-rt</i>	The type is ipv6. IPv6 address.
<i>mac-address</i>	The type is ethernet. MAC address.
<b>route-type</b>	EVPN route type number.
<i>rtype</i>	The type is uinteger. EVPN route type number. The range is from 1 to 6.
<b>smad</b>	EVPN SMAD routes.
<b>source</b>	EVPN SMAD route source.
<i>src-v4-addr</i>	The type is ipaddr. IP address.
<i>src-v6-addr</i>	The type is ipv6. IPv6 address.
<b>group</b>	EVPN SMAD route group.
<i>grp-v4-addr</i>	The type is ipaddr. IP address.
<i>grp-v6-addr</i>	The type is ipv6. IPv6 address.
<b>originator</b>	EVPN SMAD route originator.

<i>orig-v4-addr</i>	The type is ipaddr. IP address.
<i>orig-v6-addr</i>	The type is ipv6. IPv6 address.
<b>vrf</b>	Virtual Router Context.
<i>vrf-name</i>	The type is string. VRF name.
<b>ALL_VRFS_012345678901234</b>	all.

# show cdp all

## show cdp all

---

**Syntax Description**

---

**show** Show running system information.

---

**cdp** Show Cisco Discovery Protocol information.

---

**all** Show all interfaces in CDP database.

---

# show cdp entry

```
show cdp entry { all | { name dev-id } }
```

---

**Syntax Description**

---

**show** Show running system information.

---

**cdp** Show Cisco Discovery Protocol information.

---

**entry** Show CDP entries in database.

---

**all** Show all CDP entries in database.

---

**name** Show a specific CDP entry matching a name.

---

*dev-id* Device ID (Max Size 256). The type is string.

---

# show cdp global

## show cdp global

---

**Syntax Description**

---

**show** Show running system information.

---

**cdp** Show Cisco Discovery Protocol information.

---

**global** Show CDP global parameters.

---



# show cdp interface

**show cdp interface** *arg0*

Syntax	Description
<b>show</b>	Show running system information.
<b>cdp</b>	Show Cisco Discovery Protocol information.
<b>interface</b>	Show CDP parameters for an interface.
<i>arg0</i>	Interface. The type is interface. The values are ethernet, mgmt.

# show cdp neighbors

**show cdp neighbors** [ { **interface** *arg0* } ] [ **detail** ]

## Syntax Description

<b>show</b>	Show running system information.
<b>cdp</b>	Show Cisco Discovery Protocol information.
<b>neighbors</b>	Show CDP neighbors.
<b>interface</b>	Show CDP neighbors on an interface.
<i>arg0</i>	Interface. The type is interface. The values are ethernet, mgmt.
<b>detail</b>	Show CDP neighbors detailed.

# show cdp traffic interface

**show cdp traffic interface** *arg0*

Syntax	Description
<b>show</b>	Show running system information.
<b>cdp</b>	Show Cisco Discovery Protocol information.
<b>traffic</b>	Show cdp traffic statistics.
<b>interface</b>	Show cdp traffic statistics on an interface.
<i>arg0</i>	Interface. The type is interface. The values are ethernet, mgmt.

# show clock

## show clock

Syntax	Description
<b>show</b>	Show running system information.
<b>clock</b>	Display current Date.

# show copp policy

**show copp policy**

Syntax	Description
<b>show</b>	Show running system information.
<b>copp</b>	Control Plane Policing (CoPP) information.
<b>policy</b>	CoPP policies.

# show copp policy stats

show copp policy stats

---

**Syntax Description**

---

**show** Show running system information.

---

**copp** Control Plane Policing (CoPP) information.

---

**policy** CoPP policies.

---

**stats** CoPP policies packet statistics.

---

# show copyright

**show copyright**

Syntax	Description
<b>show</b>	Show running system information.
<b>copyright</b>	Copyright information.

# show cores

**show cores [history]**

---

**Syntax Description**

---

**show** Show information.

---

**cores** Show all core dumps for the current vdc.

---

**history** Show core dumps history.

---



# show dcimgr mem-stats

show dcimgr mem-stats

Syntax	Description
<b>show</b>	Show running system information.
<b>dcimgr</b>	Show dci-Mgr information.
<b>mem-stats</b>	Show dcimgr memstats.

# show dcimgr repo eteps

show dcimgr repo eteps

Syntax	Description
<b>show</b>	Show running system information.
<b>dcimgr</b>	Display DCI Mgr information.
<b>repo</b>	Display Object Store info.
<b>eteps</b>	Display Remote site Tunnels endpoints.

# show dcimgr repo sclass-maps

```
show dcimgr repo sclass-maps { [detail | verbose] }
```

Syntax	Description
<b>show</b>	Show running system information.
<b>dcimgr</b>	Display DCI Mgr information.
<b>repo</b>	Display Object Store info.
<b>sclass-maps</b>	Display Sclass map translations.
<b>detail</b>	Display detailed information.
<b>verbose</b>	Verbose Display.

# show dcimgr repo vnid-maps

```
show dcimgr repo vnid-maps { [detail | verbose] }
```

## Syntax Description

<b>show</b>	Show running system information.
<b>dcimgr</b>	Display DCI Mgr information.
<b>repo</b>	Display Object Store info.
<b>vnid-maps</b>	Display Vnid map translations.
<b>detail</b>	Display detailed information.
<b>verbose</b>	Verbose Display.

# show diagnostic content module

**show diagnostic content module** { **all** | *module\_id* }

Syntax	Description
<b>show</b>	Show information.
<b>diagnostic</b>	Diagnostic commands.
<b>content</b>	Show diagnostic test content.
<b>module</b>	Module Keyword.
<b>all</b>	Select all module ID.
<i>module_id</i>	Module ID. The type is string.

# show diagnostic result module

**show diagnostic result module** { **all** | { *module\_id* [ { **test** *test\_id* } ] } } [**detail**]

## Syntax Description

<b>show</b>	Show information.
<b>diagnostic</b>	Diagnostic commands.
<b>result</b>	Show diagnostic test result.
<b>module</b>	Module Keyword.
<b>all</b>	Select all module ID.
<b>test</b>	Diagnostic test selection.
<b>detail</b>	Detailed result.
<i>module_id</i>	Module ID. The type is string.
<i>test_id</i>	Test ID. The type is string.

# show diagnostic status module

**show diagnostic status module** *module\_id*

Syntax	Description
<b>show</b>	Show information.
<b>diagnostic</b>	Diagnostic commands.
<b>status</b>	Show test status(running/enqueued).
<b>module</b>	<1-30> Module number.
<i>module_id</i>	Module ID. The type is string.

# show dot1x

**show dot1x** [ **all** | { **interface** *if-name* } ]

---

**Syntax Description**

---

**show** Show running system information.

---

**dot1x** Show Dot1x information.

---

**all** Show Dot1x information for all Interfaces.

---

**interface** Show Dot1x information for specific interface.

---

*if-name* Interface. The type is interface. The values are ethernet.

---



# show dpp policy

**show dpp policy**

Syntax	Description
<b>show</b>	Show running system information.
<b>dpp</b>	Data Plane Policing (DPP) information.
<b>policy</b>	DPP policies.

## show eigrp interfaces

```
show { ip | ipv6 } eigrp interfaces [brief] { arg0 | { vrf { all | vrf-name } } }
```

### Syntax Description

<b>show</b>	Show running system information.
<b>ip</b>	Display EIGRP information for IPv4 address family.
<b>ipv6</b>	Display EIGRP information for IPv6 address family.
<b>eigrp</b>	Show EIGRP information.
<b>interfaces</b>	Display information on EIGRP enabled interface.
<b>brief</b>	Show only Brief information.
<i>arg0</i>	Interface. The type is interface. The values are ethernet, port-channel, vlan, loopback.
<b>vrf</b>	Show EIGRP information per-VRF.
<b>all</b>	Show EIGRP information for all VRF.
<i>vrf-name</i>	Name of the VRF. The type is string.

## show eigrp traffic vrf

```
show { ip | ipv6 } eigrp traffic vrf { all | vrf-name }
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Display EIGRP information for IPv4 address family.
<b>ipv6</b>	Display EIGRP information for IPv6 address family.
<b>eigrp</b>	Show EIGRP information.
<b>traffic</b>	Display EIGRP traffic Statistics.
<b>vrf</b>	Show EIGRP information for a VRF.
<b>all</b>	Show EIGRP information for all VRFs.
<i>vrf-name</i>	Name of the VRF. The type is string.

## show endpoint

```
show endpoint [ { { mac mac-addr } | { ip ip-addr | ipv6-addr } [ detail ] } | [ { { vrf vrf-name } | { vlan vlan-id } } | { interface interface-name } ] [ { summary | detail } ] ] ]
```

Syntax	Description
<b>show</b>	End point commands.
<b>endpoint</b>	End point.
<b>mac</b>	Mac address information.
<b>ip</b>	IPv4/IPv6 address information.
<b>vrf</b>	VRF.
<b>vlan</b>	VLAN.
<b>interface</b>	Interface.
<b>summary</b>	Endpoint summary information.
<b>detail</b>	Endpoint detailed information.
<i>mac-addr</i>	MAC Address. The type is ethernet.
<i>ip-addr</i>	IP address. The type is ipaddr.
<i>ipv6-addr</i>	IPV6 address. The type is ipv6.
<i>vrf-name</i>	VRF Name. The type is string.
<i>vlan-id</i>	VLAN ID. The type is integer. The range is from 1 to 4095.
<i>interface-name</i>	Interface name. The type is interface.

# show environment

`show environment [ fan | power | temperature ]`

Syntax	Description
<code>show</code>	Show Information.
<code>environment</code>	Environment Information.
<code>fan</code>	Fan Information.
<code>power</code>	Power supply Information.
<code>temperature</code>	Sensor Temperature Information.



**Note** In the command output of the `show environment power` command, the Total Power Allocated (budget) summary data will be provided only for Cisco Nexus 9504, 9508, and 9516 modular spine switches. The Total Power Allocated (budget) summary data will not be provided for Cisco Nexus 9336 fixed spine switches or for leaf switches.

## show environment fex

**show environment fex** { *fexid* | **all** } [ { **fan** | **power** | **temperature** } ]

### Syntax Description

<b>show</b>	Show running system information.
<b>environment</b>	System environment information.
<b>fex</b>	Show fex environment information.
<i>fexid</i>	FEX number. The type is integer. The range is from 101 to 199.
<b>all</b>	Show information for all FEX.
<b>fan</b>	Fan information.
<b>power</b>	Power capacity and power distribution information.
<b>temperature</b>	Temperature sensor information.

# show fcoe

**show fcoe [ database ]**

<b>Syntax</b>	<b>Description</b>
<b>show</b>	Show running system information.
<b>fcoe</b>	Show FCOE parameters.
<b>database</b>	Show FCOE database.

# show fex

**show fex** [ { *fexid* [**detail** | **version** | **transceiver**] } | **detail** ]

---

**Syntax Description**

---

<b>show</b>	Show running system information.
<b>fex</b>	Show FEX information.
<b>detail</b>	Detailed information.
<b>transceiver</b>	Show FEX.
<b>version</b>	Show the software version.
<i>fexid</i>	FEX number. The type is integer. The range is from 101 to 199.

---



## show fhs bt

```
show fhs bt [summary | detailed] { {all | static | local | data} [ {bd-vlan vlan-id} | {bd-vnid vnid} ] [sclass epg-sclass] [ {ipv4 ipv4-addr | {all-ip}} | {ipv6 ipv6-addr | {all-ip}} ] [mac mac-addr]} | { {arp | dhcpv4} [ {bd-vlan vlan-id} | {bd-vnid vnid} ] [sclass epg-sclass] [ {ipv4 ipv4-addr | {all-ip}} ] [mac mac-addr]} | { {nd | dhcpv6} [ {bd-vlan vlan-id} | {bd-vnid vnid} ] [sclass epg-sclass] [ {ipv6 ipv6-addr | {all-ip}} ] [mac mac-addr]} }
```

### Syntax Description

<b>show</b>	Show running system information.
<b>fhs</b>	Show information about SISF.
<b>bt</b>	Show SISF binding table information.
<b>summary</b>	Show SISF binding table summary information.
<b>detailed</b>	detailed information.
<b>all</b>	all protocol entries.
<b>arp</b>	arp entries.
<b>dhcpv4</b>	dhcpv4 entries.
<b>nd</b>	nd entries.
<b>dhcpv6</b>	dhcpv6 entries.
<b>static</b>	static entries.
<b>local</b>	local entries.
<b>data</b>	data entries.
<b>bd-vlan</b>	bridge domain encap.
<b>bd-vnid</b>	bridge domain vnid.
<i>vlan-id</i>	bd vlan. The type is integer. The range is from 1 to 4095.
<i>vnid</i>	bd vnid. The type is integer. The range is from 0 to 16777215.
<b>sclass</b>	epg sclass.
<i>epg-sclass</i>	epg sclass. The type is integer. The range is from 1 to 65534.
<b>ipv4</b>	ipv4 address family.
<b>ipv6</b>	ipv6 address family.
<i>ipv4-addr</i>	ipv4 address. The type is ipaddr.
<i>ipv6-addr</i>	ipv6 address. The type is ipv6.

---

**all-ip** all ip addresses.

---

**mac** mac address.

---

*mac-addr* mac address. The type is ethernet.

---

## show fhs counters

```
show fhs counters { {arp {request|reply|all}} | {dhcpv4
{ack|decline|discover|inform|leaseactive|leasequery|leaseunassigned|leaseunknown|nack|offer|release|request|all}}
| {nd {na|ns|ra|redirect|rs|all}} | {dhcpv6
{advertise|confirm|decline|informationreq|rebind|reconfigure|relayforw|relayreply|release|renew|reply|request|solicit|all}}
| {all} } [ {bd-vlan vlan-id} | {bd-vnid vnid} ]
```

### Syntax Description

<b>show</b>	Show running system information.
<b>fhs</b>	Show information about SISF.
<b>counters</b>	Show SISF counters.
<b>arp</b>	arp protocol.
<b>dhcpv4</b>	dhcpv4 protocol.
<b>nd</b>	neighbour discovery protocol.
<b>dhcpv6</b>	dhcpv6 protocol.
<b>request</b>	request counters.
<b>reply</b>	reply counters.
<b>all</b>	all counters.
<b>ack</b>	acknowledgment counters.
<b>decline</b>	decline counters.
<b>discover</b>	discover counters.
<b>inform</b>	inform counters.
<b>leaseactive</b>	leaseactive counters.
<b>leasequery</b>	leasequery counters.
<b>leaseunassigned</b>	leaseunassigned counters.
<b>leaseunknown</b>	leaseunknown counters.
<b>nack</b>	negative acknowledgment counters.
<b>offer</b>	offer counters.
<b>release</b>	release counters.
<b>na</b>	neighbor advert counters.
<b>ns</b>	neighbor solicit counters.

<b>ra</b>	router advert counters.
<b>redirect</b>	redirect counters.
<b>rs</b>	router solicit counters.
<b>advertise</b>	advertise counters.
<b>confirm</b>	confirm counters.
<b>informationreq</b>	information request counters.
<b>rebind</b>	rebind counters.
<b>reconfigure</b>	reconfigure counters.
<b>relayforw</b>	relay forward counters.
<b>relayreply</b>	relay reply counters.
<b>renew</b>	renew counters.
<b>solicit</b>	solicit counters.
<b>bd-vlan</b>	bridge domain encap.
<b>bd-vnid</b>	bridge domain vnid.
<i>vlan-id</i>	bd vlan. The type is integer. The range is from 1 to 4095.
<i>vnid</i>	bd vnid. The type is integer. The range is from 0 to 16777215.

## show fhs features

```
show fhs features { {all} | {ipinspect-v4} | {ipinspect-v6} | {raguard} | {srcguard} } [ {bd-vlan vlan-id} |
{bd-vnid vnid} ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>fhs</b>	Show information about SISF.
<b>features</b>	Show SISF feature.
<b>all</b>	all features.
<b>ipinspect-v4</b>	ipv4inspect.
<b>ipinspect-v6</b>	ipv6inspect.
<b>raguard</b>	routeguard.
<b>srcguard</b>	sourceguard.
<b>bd-vlan</b>	bridge domain encap.
<b>bd-vnid</b>	bridge domain vnid.
<i>vlan-id</i>	bd vlan. The type is integer. The range is from 1 to 4095.
<i>vnid</i>	bd vnid. The type is integer. The range is from 0 to 16777215.

# show flow cache

**show flow cache** [ipv4 | ipv6 | ce]

---

**Syntax Description**

---

**show** Show running system information.

---

**flow** Show NetFlow information.

---

**cache** Show NetFlow Exporter Cache.

---

**ipv4** Show ipv4 cache entries.

---

**ipv6** Show ipv6 cache entries.

---

**ce** Show ce cache entries.

---

# show flow exporter

## show flow exporter

Syntax	Description
<b>show</b>	Show running system information.
<b>flow</b>	Show NetFlow information.
<b>exporter</b>	Show NetFlow Exporter Configuration and Statistics.

# show flow hw-profile

## show flow hw-profile

Syntax	Description
<b>show</b>	Show running system information.
<b>flow</b>	Show information about netflow.
<b>hw-profile</b>	Hardware Profile.



# show flow interface

## show flow interface

Syntax	Description
<b>show</b>	Show running system information.
<b>flow</b>	Show NetFlow information.
<b>interface</b>	Flow interface information.

# show flow monitor

## show flow monitor

Syntax	Description
<b>show</b>	Show running system information.
<b>flow</b>	Show NetFlow information.
<b>monitor</b>	Show Monitor Configuration.

# show flow record

## show flow record

Syntax	Description
<b>show</b>	Show running system information.
<b>flow</b>	Show NetFlow information.
<b>record</b>	Show Record Configuration.

# show flow timers

## show flow timers

Syntax	Description
<b>show</b>	Show running system information.
<b>flow</b>	Show NetFlow information.
<b>timers</b>	Show Timer Values.

# show flow vlan

## show flow vlan

Syntax	Description
<b>show</b>	Show running system information.
<b>flow</b>	Show NetFlow information.
<b>vlan</b>	Flow vlan information.

# show hardware

## show hardware

Syntax	Description
<b>show</b>	Show running system information.
<b>hardware</b>	Show hardware information.

# show hostname

## show hostname

Syntax	Description
<b>show</b>	Show running system information.
<b>hostname</b>	Hostname.

# show hsrp bfd-sessions

**show hsrp bfd-sessions** [**interface** *interface-id* [**to** {*addr\_v4* | *addr\_v6*}]] [**ipv4** | **ipv6**]

## Syntax Description

<b>show</b>	Show running system information.
<b>hsrp</b>	Hot Standby Router Protocol (HSRP) information.
<b>bfd-sessions</b>	BFD sessions.
<b>interface</b>	Interface.
<i>interface-id</i>	The type is interface. Interface. The values are ethernet, port-channel, vlan.
<b>to</b>	To IP address.
<i>addr_v4</i>	IPv4 destination address for BFD session. The type is ipaddr.
<i>addr_v6</i>	IPv6 destination address for BFD session. The type is ipv6.
<b>ipv4</b>	IPv4 groups only.
<b>ipv6</b>	IPv6 groups only.



# show hsrp delay

```
show hsrp delay [{interface interface-id}]
```

## Syntax Description

<b>show</b>	Show running system information.
<b>hsrp</b>	Hot Standby Router Protocol (HSRP) information.
<b>interface</b>	Groups on this interface.
<i>interface-id</i>	The type is interface. Interface. The values are ethernet, port-channel, vlan.
<b>delay</b>	Group initialisation delay.

## show hsrp +

**show hsrp** [{interface *interface-id*}] [{group *group-number*}] [{active | init | learn | listen | speak | standby}]+ [all] [{brief [all1]} | {stats}] [{ipv4 | ipv6}]

Syntax	Description
<b>show</b>	Show running system information.
<b>hsrp</b>	Hot Standby Router Protocol (HSRP) information.
<b>interface</b>	Groups on this interface.
<i>interface-id</i>	The type is interface. Interface. The values are ethernet, port-channel, vlan.
<b>active</b>	Groups in active state.
<b>init</b>	Groups in init state.
<b>learn</b>	Groups in learn state.
<b>listen</b>	Groups in listen state.
<b>speak</b>	Groups in speak state.
<b>standby</b>	Groups in standby state.
<b>group</b>	Group number.
<i>group-number</i>	The type is integer. Group Number. The range is from 0 to 4095.
<b>all</b>	Include groups in disabled state.
<b>brief</b>	Brief output.
<b>stats</b>	HSRP packet stats output.
<b>ipv4</b>	HSRP V4 Groups.
<b>ipv6</b>	HSRP V6 Groups.
<b>all1</b>	Brief output.

# show hsrp summary

show hsrp summary

Syntax	Description
<b>show</b>	Show running system information.
<b>hsrp</b>	Hot Standby Router Protocol (HSRP) information.
<b>summary</b>	Show HSRP summary.

# show interface

**show interface** [ *arg0* ]

Syntax	Description
<b>show</b>	Show running system information.
<b>interface</b>	Interface.
<i>arg0</i>	Interface. The type is interface_mrange.

# show interface brief

**show interface** [ *arg0* ] **brief**

Syntax	Description
<b>show</b>	Show running system information.
<b>interface</b>	Interface.
<i>arg0</i>	Interface. The type is interface_mrange.
<b>brief</b>	Show brief info of interface.

# show interface capabilities

**show interface** [ *arg0* ] **capabilities**

---

**Syntax Description**

---

**show** Show running system information.

---

**interface** Interface.

---

*arg0* Ethernet Interface. The type is interface\_mrange. The values are ethernet.

---

**capabilities** Show interface capabilities information.

---

# show interface counters

**show interface *arg0* counters**

---

**Syntax Description**

---

**show** Show running system information.

---

**interface** Show interface status and information.

---

*arg0* Interface. The type is interface\_mrange. The values are ethernet, port-channel, vlan, mgmt, vfc, vfc-port-channel.

---

**counters** Show interface counters.

---

# show interface counters

```
show interface counters [ { fex fex-id } | { module mod-id } ]
```

## Syntax Description

<b>show</b>	Show running system information.
<b>interface</b>	Show interface status and information.
<b>counters</b>	Show interface counters.
<b>fex</b>	Enter fex ID.
<i>fex-id</i>	Enter FEX number. The type is integer. The range is from 101 to 199.
<b>module</b>	Limit display to interfaces on module.
<i>mod-id</i>	Enter module number. The type is integer. The range is from 1 to 30.



# show interface counters brief

**show interface *arg0* counters brief**

---

**Syntax Description**

---

**show** Show running system information.

---

**interface** Show interface status and information.

---

*arg0* Interface. The type is interface\_mrange. The values are ethernet, port-channel, vfc, vfc-port-channel.

---

**counters** Show interface counters.

---

**brief** Show interface counters in brief.

---

# show interface counters detailed

**show interface** [ *arg0* ] **counters detailed** [ { **all** [ **snmp** ] } | **snmp** ]

## Syntax Description

<b>show</b>	Show running system information.
<b>interface</b>	Show interface status and information.
<i>arg0</i>	Interface. The type is interface_mrange. The values are ethernet, port-channel, vlan, mgmt, vfc, vfc-port-channel.
<b>counters</b>	Show interface counters.
<b>detailed</b>	Show only non-zero counters.
<b>all</b>	Show every interface counter.
<b>snmp</b>	Show SNMP MIB values.

# show interface counters errors

**show interface *arg0* counters errors**

Syntax	Description
<b>show</b>	Show running system information.
<b>interface</b>	Show interface status and information.
<i>arg0</i>	Interface. The type is interface_mrange. The values are ethernet, port-channel, mgmt.
<b>counters</b>	Show interface counters.
<b>errors</b>	Show interface error counters.

## show interface counters errors

**show interface counters errors** [ { **fex** *fex-id* } | { **module** *mod-id* } ]

### Syntax Description

<b>show</b>	Show running system information.
<b>interface</b>	Show interface status and information.
<b>counters</b>	Show interface counters.
<b>errors</b>	Show interface error counters.
<b>fex</b>	Enter fex ID.
<i>fex-id</i>	Enter FEX number. The type is integer. The range is from 101 to 199.
<b>module</b>	Limit display to interfaces on module.
<i>mod-id</i>	Enter module number. The type is integer. The range is from 1 to 30.

# show interface counters snmp

`show interface arg0 counters snmp`

Syntax	Description
<b>show</b>	Show running system information.
<b>interface</b>	Show interface status and information.
<i>arg0</i>	Interface. The type is interface_mrange. The values are ethernet, port-channel, vlan, mgmt.
<b>counters</b>	Show interface counters.
<b>snmp</b>	Show SNMP MIB values.

# show interface counters snmp

```
show interface counters snmp [ { fex fex-id } | { module mod-id } ]
```

## Syntax Description

<b>show</b>	Show running system information.
<b>interface</b>	Show interface status and information.
<b>counters</b>	Show interface counters.
<b>snmp</b>	Show SNMP MIB values.
<b>fex</b>	Enter fex ID.
<i>fex-id</i>	Enter FEX number. The type is integer. The range is from 101 to 199.
<b>module</b>	Limit display to interfaces on module.
<i>mod-id</i>	Enter module number. The type is integer. The range is from 1 to 30.

# show interface debounce

**show interface [ *arg0* ] debounce**

Syntax	Description
<b>show</b>	Show running system information.
<b>interface</b>	Show interface status and information.
<i>arg0</i>	Interface. The type is interface_mrange. The values are ethernet.
<b>debounce</b>	Show interface debounce time information.

# show interface description

**show interface** [ *arg0* ] **description**

---

**Syntax Description**

---

**show** Show running system information.

---

**interface** Interface.

---

*arg0* Interface. The type is interface\_mrange.

---

**description** Show interface description.

---



# show interface fex-fabric

**show interface fex-fabric**

<b>Syntax</b>	<b>Description</b>
<b>show</b>	Show running system information.
<b>interface</b>	Show interface status and information.
<b>fex-fabric</b>	Show all FEX fabric ports.

# show interface flowcontrol

**show interface** *arg0* **flowcontrol**

---

**Syntax Description**

---

<b>show</b>	Show running system information.
<b>interface</b>	Show interface status and information.
<i>arg0</i>	Interface. The type is interface_mrange. The values are ethernet, port-channel.
<b>flowcontrol</b>	Show interface flowcontrol information.

---

# show interface flowcontrol

```
show interface flowcontrol [ { fex fex-id } | { module mod-id } ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>interface</b>	Show interface status and information.
<b>flowcontrol</b>	Show interface flowcontrol information.
<b>fex</b>	Limit display to interfaces on a FEX.
<i>fex-id</i>	Enter FEX number. The type is integer. The range is from 101 to 164.
<b>module</b>	Limit display to interfaces on module.
<i>mod-id</i>	Enter module number. The type is integer. The range is from 1 to 30.

# show interface mac-address

**show interface** [ *arg0* ] **mac-address**

---

**Syntax Description**

---

**show** Show running system information.

---

**interface** Show interface status and information.

---

*arg0* Interface. The type is interface\_mrange. The values are ethernet, port-channel, vlan, mgmt.

---

**mac-address** Show interface MAC address.

---

# show interface priority-flow-control

`show interface [ arg0 ] priority-flow-control [ details ]`

Syntax	Description
<b>show</b>	Show running system information.
<b>interface</b>	Show interface status and information.
<i>arg0</i>	Ethernet Interface. The type is <code>interface_mrange</code> . The values are ethernet.
<b>priority-flow-control</b>	Show interface PFC information.
<b>details</b>	Show interface PFC detail information.

# show interface snmp-ifindex

## show interface snmp-ifindex

Syntax	Description
<b>show</b>	Show running system information.
<b>interface</b>	Show interface status and information.
<b>snmp-ifindex</b>	Show snmp ifindex list.

# show interface status

```
show interface arg0 status [ err-disabled | err-vlans ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>interface</b>	Show interface status and information.
<i>arg0</i>	Interface. The type is interface_mrange. The values are ethernet, port-channel, vlan, mgmt, loopback, tunnel.
<b>status</b>	Show interface line status.
<b>err-disabled</b>	Show interface error disabled state.
<b>err-vlans</b>	Show errored vlans.

## show interface status

**show interface status** [ **down** | **err-disabled** | **err-vlans** | { **fex** *fex-id* } | **inactive** | { **module** *mod-id* } | **up** ]

### Syntax Description

<b>show</b>	Show running system information.
<b>interface</b>	Show interface status and information.
<b>status</b>	Show interface line status.
<b>down</b>	Show interface down state.
<b>err-disabled</b>	Show interface error disabled state.
<b>err-vlans</b>	Show errored vlans.
<b>fex</b>	Limit display to interfaces on a FEX.
<i>fex-id</i>	Enter FEX number. The type is integer. The range is from 101 to 164.
<b>inactive</b>	Show interface inactive state.
<b>module</b>	Limit display to interfaces on module.
<i>mod-id</i>	Enter module number. The type is integer. The range is from 1 to 30.
<b>up</b>	Show interface up state.



# show interface switchport

**show interface** [ *arg0* ] **switchport**

Syntax	Description
<b>show</b>	Show running system information.
<b>interface</b>	Show interface status and information.
<i>arg0</i>	Interface. The type is interface_mrange. The values are ethernet, port-channel.
<b>switchport</b>	Show interface switchport information.

# show interface transceiver

**show interface** [ *arg0* ] **transceiver** [ **fex-fabric** ] [ **calibrations** | **details** | **sprom** ]

## Syntax Description

<b>show</b>	Show Information.
<b>interface</b>	Interface.
<i>arg0</i>	Ethernet Interface. The type is interface_mrange. The values are ethernet.
<b>transceiver</b>	Transceiver Information.
<b>fex-fabric</b>	Show FEX interface transceiver information.
<b>calibrations</b>	Show interface transceiver calibration information.
<b>details</b>	Show interface transceiver detail information.
<b>sprom</b>	Show interface transceiver sprom information.

# show interface trunk

**show interface *arg0* trunk**

Syntax	Description
<b>show</b>	Show running system information.
<b>interface</b>	Show interface status and information.
<i>arg0</i>	Interface. The type is interface_mrange. The values are ethernet, port-channel.
<b>trunk</b>	Show interface trunk information.

# show interface trunk

**show interface trunk** [ { **vlan** *vlan-id* } | { **fex** *fex-id* } | { **module** *mod-id* } ]

## Syntax Description

<b>show</b>	Show running system information.
<b>interface</b>	Show interface status and information.
<b>trunk</b>	Show interface trunk information.
<b>fex</b>	Limit display to interfaces on a FEX.
<i>fex-id</i>	Enter FEX number. The type is integer. The range is from 101 to 164.
<b>module</b>	Limit display to interfaces on module.
<i>mod-id</i>	Enter module number. The type is integer. The range is from 1 to 30.
<b>vlan</b>	Show per vlan information for trunk.
<i>vlan-id</i>	Enter vlan range. The type is integer_mrange. The range is from 1 to 4095.

# show inventory

```
show inventory [ chassis | fans | power_supply | {module [arg0]} ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>inventory</b>	System inventory information.
<b>module</b>	system inventory module information.
<b>fans</b>	system inventory fan information.
<b>chassis</b>	system inventory chassis information.
<b>power_supply</b>	system inventory power supply information.
<i>arg0</i>	please enter the module number. The type is integer. The range is from 1 to 30.

# show ip arp

```
show ip arp [ { ip-address | detail | static | interface | { summary [interface] } | { statistics [ interface ] } } ] [ { vrf { all | vrf-name } } ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Display IP information.
<b>arp</b>	Display ARP table and statistics.
<b>statistics</b>	Display ARP statistics.
<b>static</b>	Display Static ARP entries.
<b>summary</b>	Display ARP adjacency summary.
<b>detail</b>	Display detailed information.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display all VRFs.
<i>interface</i>	Name of the Interface. The type is interface.
<i>ip-address</i>	Ip Address. The type is ipaddr.
<i>vrf-name</i>	Name of the VRF. The type is string.

# show ip bgp neighbors vrf

```
show ip bgp neighbors [ arg0 ] vrf { all | vrf-name }
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Display BGP information for IPv4 address family.
<b>bgp</b>	Show BGP information.
<b>neighbors</b>	Display all configured BGP neighbors.
<i>arg0</i>	Display one particular BGP neighbor. The type is ipaddr.
<b>vrf</b>	Show BGP sessions in a VRF.
<b>all</b>	Show BGP sessions for all VRFs.
<i>vrf-name</i>	Name of the VRF. The type is string.

## show ip bgp nexthop-database

```
show ip bgp [{ {ipv4 {unicast | multicast}} | all }] nexthop-database[{vrf {vrf-name |
ALL_VRFS_012345678901234}}]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Display IP information.
<b>bgp</b>	Display BGP status and configuration.
<b>ipv4</b>	Display BGP information for IPv4 address family.
<b>unicast</b>	Display BGP information for IPv4 unicast address family.
<b>multicast</b>	Display BGP information for IPv4 multicast address family.
<b>all</b>	Display BGP information for all address families.
<b>nexthop-database</b>	Display nexthop database.
<b>vrf</b>	Virtual Router Context.
<i>vrf-name</i>	The type is string. VRF name.
<b>ALL_VRFS_012345678901234</b>	all.



# show ip bgp nexthop

```
show ip bgp nexthop ipnexthop [{vrf {vrf-name | ALL_VRFS_012345678901234}}]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Display IP information.
<b>bgp</b>	Display BGP status and configuration.
<b>nexthop</b>	Display routes matching the nexthop.
<i>ipnexthop</i>	The type is ipaddr. Nexthop address.
<b>vrf</b>	Virtual Router Context.
<i>vrf-name</i>	The type is string. VRF name.
<b>ALL_VRFS_012345678901234</b>	all.

## show ip bgp summary vrf

`show {ip | ipv6} bgp summary vrf {vrf-name | ALL_VRFS_012345678901234}`

Syntax	Description
<code>show</code>	Show running system information.
<code>ip</code>	Display IP information.
<code>ipv6</code>	Display IPv6 information.
<code>bgp</code>	Display BGP status and configuration.
<code>summary</code>	Show summary information.
<code>vrf</code>	Virtual Router Context.
<i>vrf-name</i>	The type is string. VRF name.
<code>ALL_VRFS_012345678901234</code>	all.

# show ip bgp vrf

**show ip bgp** *{ip-addr|ip-prefix}* **vrf** *vrf-name*

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Display IP information.
<b>bgp</b>	Display BGP status and configuration.
<i>ip-addr</i>	The type is ipaddr. IP address.
<i>ip-prefix</i>	The type is ipprefix. IP prefix.
<b>vrf</b>	Virtual Router Context.
<i>vrf-name</i>	The type is string. VRF name.

# show ip community-list

**show ip community-list** [ *strarg* ]

---

**Syntax Description**

---

<b>show</b>	Show running system information.
<b>ip</b>	Display IP information.
<b>community-list</b>	List community-list.
<i>strarg</i>	Name of prefix list (Max Size 100). The type is string.

---

# show ip dhcp client

```
show ip dhcp client [ statistics [ { interface intfname } ] ]
```

## Syntax Description

**show** Show running system information.

**ip** Display IP information.

**dhcp** Show items in DHCP.

**client** DHCP client.

**statistics** Statistics related to DHCP.

**interface** DHCP client address of the interface.

*intfname* Slot/chassis number. The type is interface. The values are ethernet, port-channel, vlan, loopback.

# show ip dhcp global statistics

## show ip dhcp global statistics

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Display IP information.
<b>dhcp</b>	Show items in DHCP.
<b>global</b>	DHCP global stats.
<b>statistics</b>	Statistics related to DHCP.

## show ip dhcp relay

```
show ip dhcp relay [ { { statistics [ { interface intfname } ] } | { address [ { detail | { interface intfname [ detail ] } ] } } | { discover [ { interface intfname } ] | detail } ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Display IP information.
<b>dhcp</b>	Show items in DHCP.
<b>relay</b>	DHCP Relay.
<b>address</b>	DHCP relay address.
<b>discover</b>	DHCP relay node discovery.
<b>statistics</b>	Statistics related to DHCP.
<b>detail</b>	DHCP relay detailed information.
<b>interface</b>	DHCP relay address of the interface.
<i>intfname</i>	Slot/chassis number. The type is interface. The values are ethernet, port-channel, vlan, loopback.

# show ip eigrp event vrf

**show** {ip|ipv6} eigrp event vrf {*vrf-name* | **all**}

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Display IP information.
<b>ipv6</b>	Display IPv6 information.
<b>eigrp</b>	Display EIGRP status and configuration.
<b>event</b>	IP-EIGRP Events.
<b>vrf</b>	Virtual Router Context.
<i>vrf-name</i>	The type is string. VRF name.
<b>all</b>	Display information for all VRFs.



# show ip eigrp vrf

**show {ip|ipv6} eigrp [detail] vrf {vrf-name | all}**

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Display IP information.
<b>ipv6</b>	Display IPv6 information.
<b>eigrp</b>	Display EIGRP status and configuration.
<b>detail</b>	Display detailed information.
<b>vrf</b>	Virtual Router Context.
<i>vrf-name</i>	The type is string. VRF name.
<b>all</b>	Display information for all VRFs.

# show ip extcommunity-list

**show ip extcommunity-list** [ *strarg* ]

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Display IP information.
<b>extcommunity-list</b>	List extcommunity-list.
<i>strarg</i>	Name of prefix list (Max Size 100). The type is string.

# show ip igmp gipo joins

show ip igmp gipo joins

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Display IP information.
<b>igmp</b>	Display IGMP status and configuration.
<b>gipo</b>	Show IGMP gipo information.
<b>joins</b>	Show IGMP gipo Join Summary.

# show ip igmp interface

**show ip igmp interface** [*intf*] [**brief**] [**vrf** {*vrf-name* | **all**}]

## Syntax Description

<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>igmp</b>	IGMP protocol events.
<b>interface</b>	IGMP Interface.
<i>intf</i>	Display neighbors on single interface name. The type is interface. The values are brief, ethernet, loopback, port-channel, tunnel, vlan, vrf.
<b>brief</b>	Display properties on single IGMP interface in brief.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	VRF name (Max Size 32).
<b>all</b>	Display information for all VRFs.

# show ip igmp snooping

```
show ip igmp snooping [ { vlan vlan } ] [ extended ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>igmp</b>	Show IGMP information.
<b>snooping</b>	IGMP Snooping information.
<b>vlan</b>	Display Vlan IGMP snooping membership information.
<b>extended</b>	Display Extended Vlan IGMP snooping membership information.
<i>vlan</i>	Specify vlan-id. The type is integer. The range is from 1 to 4095.

# show ip igmp snooping explicit-tracking

```
show ip igmp snooping explicit-tracking [ { vlan vlan } ] [ encap ] [ extended ]
```

## Syntax Description

<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>igmp</b>	Show IGMP information.
<b>snooping</b>	IGMP Snooping information.
<b>explicit-tracking</b>	Display explicit-tracking database for IGMPv3.
<b>vlan</b>	Display Vlan explicit-tracking database.
<b>encap</b>	Display Encap Vlan explicit-tracking database.
<b>extended</b>	Display Extended Vlan explicit-tracking database.
<i>vlan</i>	Specify vlan-id. The type is integer. The range is from 1 to 4095.

## show ip igmp snooping groups ++

**show ip igmp snooping groups** [ *group* | *source* ]+ [ { **vlan** *vlan* } ] [ **encap** ] [ **extended** ] [ **detail** | **summary** ]+

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>igmp</b>	Show IGMP information.
<b>snooping</b>	Show IGMP Snooping information.
<b>groups</b>	Display snooping information for group address.
<i>group</i>	Multicast IP address of single group to display. The type is ipaddr.
<i>source</i>	Source IP address. The type is ipaddr.
<b>detail</b>	Display detailed information for the group.
<b>summary</b>	Display snooping group summary.
<b>vlan</b>	Display Vlan IGMP snooping membership information.
<b>encap</b>	Display Encap Vlan IGMP snooping membership information.
<b>extended</b>	Display Extended Vlan IGMP snooping membership information.
<i>vlan</i>	Specify vlan-id. The type is integer. The range is from 1 to 4095.

# show ip igmp snooping lookup-mode

**show ip igmp snooping lookup-mode** [ { *vlan* *vlan* } ] [ **extended** ]

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>igmp</b>	Show IGMP information.
<b>snooping</b>	IGMP Snooping information.
<b>lookup-mode</b>	IGMP Snooping lkup mode information.
<b>vlan</b>	Display Vlan information.
<b>extended</b>	Display Extended Vlan IGMP snooping lkup mode information.
<i>vlan</i>	Specify vlan-id. The type is integer. The range is from 1 to 4095.



# show ip igmp snooping mrouter

```
show ip igmp snooping mrouter [ { vlan vlan } ] [ encap ] [ extended ] [ detail ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>igmp</b>	Show IGMP information.
<b>snooping</b>	IGMP Snooping information.
<b>mrouter</b>	Display multicast routers detected.
<b>detail</b>	Display detailed mrouter information.
<b>vlan</b>	Display Vlan multicast router information.
<b>encap</b>	Display Encap Vlan IGMP snooping mrouter information.
<b>extended</b>	Display Extended Vlan IGMP snooping mrouter information.
<i>vlan</i>	Specify vlan-id. The type is integer. The range is from 1 to 4095.

# show ip igmp snooping querier

**show ip igmp snooping querier** [ { **vlan** *vlan* } ] [ **extended** ] [ **detail** ]

## Syntax Description

<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>igmp</b>	Show IGMP information.
<b>snooping</b>	IGMP Snooping information.
<b>querier</b>	Display snooping querier information.
<b>detail</b>	Display detailed information.
<b>vlan</b>	Display Vlan IGMP snooping querier information.
<b>extended</b>	Display Extended Vlan IGMP snooping Querier information.
<i>vlan</i>	Specify vlan-id. The type is integer. The range is from 1 to 4095.

# show ip igmp snooping statistics

```
show ip igmp snooping statistics [ { vlan vlan } ] [ extended ] [ global ]
```

## Syntax Description

<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>igmp</b>	Show IGMP information.
<b>snooping</b>	IGMP Snooping information.
<b>statistics</b>	Display packet/error counter statistics.
<b>global</b>	Display global statistics.
<b>vlan</b>	Display vlan statistics.
<b>extended</b>	Display Extended Vlan IGMP snooping statistics information.
<i>vlan</i>	Specify vlan-id. The type is integer. The range is from 1 to 4095.

# show ip igmp vrf all

## show ip igmp vrf all

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Display IP information.
<b>igmp</b>	Display IGMP status and configuration.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display information for all VRFs.

# show ip interface

```
show ip interface [ {brief [include-secondary]} | interface | ip-addr ] [ operational ] [ { vrf { all | vrf-name } } ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Display IP information.
<b>interface</b>	Display IP related interface information.
<b>brief</b>	Show brief info of interface.
<b>include-secondary</b>	Display summary of all IP addresses.
<b>operational</b>	Display only interfaces that are administratively enabled.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display all VRFs.
<i>interface</i>	Name of the Interface. The type is interface. The values are ethernet, port-channel, vlan, mgmt, loopback, tunnel.
<i>ip-addr</i>	Ip Address. The type is ipaddr.
<i>vrf-name</i>	Name of the VRF. The type is string.
<i>local-addr</i>	Display interface for local IP address. The type is string.

## show ip mroute

```
show ip mroute [[detail] | {summary [count | software-forwarded | rpf-failed]} | { [group [source]
[shared-tree | source-tree] ]}] [[flags] | [detail] | [summary [software-forwarded | rpf-failed]]] [vrf
{vrf-name | all}]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display information for all VRFs.
<b>mroute</b>	Display IP multicast routing table.
<b>summary</b>	Display route counts and packet rates.
<b>shared-tree</b>	Display route for *,G entries.
<b>source-tree</b>	Display route for S,G entries.
<b>software-forwarded</b>	Display software switched route counts only.
<b>rpf-failed</b>	Display RPF failure statistics.
<i>source</i>	Source IP address. The type is ipaddr.
<i>group</i>	Multicast IP address of single group to display. The type is ipaddr.
<i>vrf-name</i>	The type is string. VRF name.
<b>count</b>	Display route counts only.
<b>detail</b>	Display detailed route attributes.
<b>flags</b>	Display detailed route attributes.

# show ip msdp count

**show ip msdp count** [*as-number*] [**vrf** {*vrf-name* | **all** }]

## Syntax Description

<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>msdp</b>	Display MSDP status and configuration.
<b>count</b>	Display SA cache counters.
<i>as-number</i>	AS number. The type is asn.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	The type is string. VRF name (Max Size 32).
<b>all</b>	Display information for all VRFs.

## show ip msdp mesh-group

**show ip msdp mesh-group** [*mesh-name*] [**vrf** {*vrf-name* | **all** }]

### Syntax Description

<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>msdp</b>	Display MSDP status and configuration.
<b>mesh-group</b>	Display members of mesh-group.
<i>mesh-name</i>	Display single mesh-group. The type is string.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	The type is string. VRF name (Max Size 32).
<b>all</b>	Display information for all VRFs.



## show ip msdp +

```
show ip msdp {sa-cache | route} [ group | source ]+ [asn] [{peer ipaddr}] [detail] [vrf {vrf-name | all }]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>msdp</b>	Display MSDP status and configuration.
<b>sa-cache</b>	Display MSDP SA route cache.
<b>route</b>	Display MSDP SA route cache.
<i>source</i>	Display group/source address for SA. The type is ipaddr.
<i>group</i>	Display group/source address for SA. The type is ipaddr.
<i>asn</i>	AS number. The type is asn.
<b>peer</b>	Display MSDP SA received from single peer.
<i>ipaddr</i>	IP address of peer for SA. The type is ipaddr.
<b>detail</b>	Display detailed information.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	The type is string. VRF name (Max Size 32).
<b>all</b>	Display information for all VRFs.

## show ip msdp peer

**show ip msdp peer** [*ipaddr*] [**vrf** {*vrf-name* | **all** }]

### Syntax Description

<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>msdp</b>	Display MSDP status and configuration.
<b>peer</b>	Display MSDP peer information.
<i>ipaddr</i>	IP address of MSDP peer. The type is ipaddr.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	The type is string. VRF name (Max Size 32).
<b>all</b>	Display information for all VRFs.

## show ip msdp policy statistics sa-policy

**show ip msdp policy statistics sa-policy** *ipaddr* {**in** | **out**} [**vrf** {*vrf-name* | **all** }]

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>msdp</b>	Display MSDP status and configuration.
<b>policy</b>	Policy information.
<b>statistics</b>	Policy statistics.
<b>sa-policy</b>	Configured SA policy for MSDP peer.
<i>ipaddr</i>	IP address of MSDP peer for SA policy. The type is ipaddr.
<b>in</b>	Input policy.
<b>out</b>	Output policy.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	The type is string. VRF name (Max Size 32).
<b>all</b>	Display information for all VRFs.

# show ip msdp rpf

**show ip msdp rpf** [*rpaddr*] [**vrf** {*vrf-name* | **all** }]

## Syntax Description

<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>msdp</b>	Display MSDP status and configuration.
<b>rpf</b>	Display RPF-peer for RP address.
<i>rpaddr</i>	IP address of RP. The type is ipaddr.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	The type is string. VRF name (Max Size 32).
<b>all</b>	Display information for all VRFs.

# show ip msdp sources

**show ip msdp sources** [**vrf** {*vrf-name* | **all** }]

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>msdp</b>	Display MSDP status and configuration.
<b>sources</b>	Display learned sources with their group counts and limits.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	The type is string. VRF name (Max Size 32).
<b>all</b>	Display information for all VRFs.

# show ip msdp summary

**show ip msdp summary** [*vrf* {*vrf-name* | **all** }]

## Syntax Description

<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>msdp</b>	Display MSDP status and configuration.
<b>summary</b>	Display MSDP peer summary.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	The type is string. VRF name (Max Size 32).
<b>all</b>	Display information for all VRFs.

## show ip ospf database

```
show ip ospf [ptag] database [[[network | asbr-summary | summary | router | opaque-link | opaque-area
| nssa-external] [{area area-id-ip}] | {external [{ext_tag tag_val}] | opaque-as] [lsid] [self-originated |
{adv-router adv-id] | {adv-router-name adv-name } ] [vrf {vrf-name | all}]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Display IP information.
<b>ospf</b>	Display OSPF status and configuration.
<b>ptag</b>	Process tag, when multiple OSPF instances exist.
<b>database</b>	Link-state Database Summary.
<b>network</b>	Display network LSAs.
<b>asbr-summary</b>	Display type 4 (asbr-summary) LSAs.
<b>summary</b>	Display type 3 (network-summary) LSAs.
<b>router</b>	Display router LSAs.
<b>opaque-link</b>	Display Opaque Link-Local LSAs.
<b>opaque-area</b>	Display Opaque Area LSAs.
<b>nssa-external</b>	Display type 7 (NSSA external) LSAs.
<b>area</b>	Display only LSA's in this area.
<i>area-id-ip</i>	The type is ipaddr. Area Id as an integer or ip address.
<b>external</b>	Display type 5 (external) LSAs.
<b>ext_tag</b>	Restrict display by tag.
<i>tag_val</i>	The type is uinteger. 32-bit tag value.
<b>opaque-as</b>	Display Opaque AS LSAs.
<i>lsid</i>	The type is ipaddr. Restrict display by link state ID.
<b>self-originated</b>	Display only self-originated LSAs.
<b>adv-router</b>	Restrict display by Advertising router.
<i>adv-id</i>	The type is ipaddr. Advertising router ID.
<b>adv-router-name</b>	Restrict display by Advertising router name.
<i>adv-name</i>	The type is string. DNS Name of the Advertising router.

<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	The type is string. VRF name.
<b>all</b>	Display information for all VRFs.

**Usage Guidelines**

In NX-OS releases that support multiple OSPF instances, a command such as `show ip ospf database` displays output only from the first registered OSPF process. To display output from other OSPF processes, you must include a process tag in the command: `show ip ospf <ptag> database`. You can view the running processes and obtain the process tag using a VSH command, as in the following example:

```
(none)# vsh -c "show cli internal ctags" | grep -i ospf
 4276 281    119 ospf      multipodIn 2450  ready    ospf-multipodInternal
 4278 281    119 ospf      default    2455  ready    ospf-default
 4277 282    128 ospfv3     default    2478  ready    ospfv3-default
```

To display the output of the OSPF default process in this example, use the command `show ip ospf default database`.



## show ip ospf database detail

**show ip ospf database** [[[**network** | **asbr-summary** | **summary** | **router** | **opaque-link** | **opaque-area** | **nssa-external**] [{**area** *area-id-ip*}] | {**external** [{**ext\_tag** *tag\_val*}] } | **opaque-as**] [*lsid*] [**self-originated** | **adv-router** *advid*] | {**adv-router-name** *adv-name* } ] **detail** [**vrf** {*vrf-name* | **all**}]

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Display IP information.
<b>ospf</b>	Display OSPF status and configuration.
<b>database</b>	Link-state Database Summary.
<b>network</b>	Display network LSAs.
<b>asbr-summary</b>	Display type 4 (asbr-summary) LSAs.
<b>summary</b>	Display type 3 (network-summary) LSAs.
<b>router</b>	Display router LSAs.
<b>opaque-link</b>	Display Opaque Link-Local LSAs.
<b>opaque-area</b>	Display Opaque Area LSAs.
<b>nssa-external</b>	Display type 7 (NSSA external) LSAs.
<b>area</b>	Display only LSA's in this area.
<i>area-id-ip</i>	The type is ipaddr. Area Id as an integer or ip address.
<b>external</b>	Display type 5 (external) LSAs.
<b>ext_tag</b>	Restrict display by tag.
<i>tag_val</i>	The type is uinteger. 32-bit tag value.
<b>opaque-as</b>	Display Opaque AS LSAs.
<i>lsid</i>	The type is ipaddr. Restrict display by link state ID.
<b>self-originated</b>	Display only self-originated LSAs.
<b>adv-router</b>	Restrict display by Advertising router.
<i>advid</i>	The type is ipaddr. Advertising router ID.
<b>adv-router-name</b>	Restrict display by Advertising router name.
<i>adv-name</i>	The type is string. DNS Name of the Advertising router.
<b>detail</b>	Display LSA in detail.

---

<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	The type is string. VRF name.
<b>all</b>	Display information for all VRFs.

---

# show ip ospf interface

```
show ip ospf interface { arg0 | { [ brief ] vrf { all | vrf-name } } }
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Ipv4.
<b>ospf</b>	Display OSPF status and configuration.
<b>interface</b>	OSPF enabled interface.
<i>arg0</i>	Interface. The type is interface. The values are ethernet, port-channel, vlan, loopback.
<b>brief</b>	Display summary of OSPF interfaces.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display information for all VRFs.
<i>vrf-name</i>	VRF name (Max Size 32). The type is string.

## show ip ospf neighbors

```
show ip ospf neighbors { arg0 [ { ip [ detail ] } | detail | summary ] [vrf { all | vrf-name } ] } | [ { ip [ detail ] } | detail | summary ] vrf { all | vrf-name }
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Ipv4.
<b>ospf</b>	Display OSPF status and configuration.
<b>neighbors</b>	Neighbor list.
<i>ip</i>	Router ID of neighbor. The type is ipaddr.
<b>detail</b>	Show detailed neighbor display.
<i>arg0</i>	Interface. The type is interface. The values are ethernet, port-channel, vlan, loopback.
<b>summary</b>	Summary of neighbors.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display information for all VRFs.
<i>vrf-name</i>	VRF name (Max Size 32). The type is string.

## show ip ospf route vrf

```
show ip ospf route [ summary | { ippfx [ longer-prefixes ] [ summary ] } | ip ] vrf { all | vrf-name }
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Ipv4.
<b>ospf</b>	Display OSPF status and configuration.
<b>route</b>	Internal OSPF routes.
<i>ip</i>	Show single OSPF route. The type is ipaddr.
<i>ippfx</i>	Show single exact match OSPF route. The type is ipprefix.
<b>summary</b>	Show route counts.
<b>longer-prefixes</b>	Show exact match and more specific routes.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display information for all VRFs.
<i>vrf-name</i>	VRF name (Max Size 32). The type is string.

# show ip ospf summary-address vrf

```
show ip ospf summary-address vrf { all | vrf-name }
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Ipv4.
<b>ospf</b>	Display OSPF status and configuration.
<b>summary-address</b>	Summary-address redistribution information.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display information for all VRFs.
<i>vrf-name</i>	VRF name (Max Size 32). The type is string.

# show ip ospf traffic

```
show ip ospf traffic { arg0 | { vrf { all | vrf-name } } }
```

## Syntax Description

<b>show</b>	Show running system information.
<b>ip</b>	Ipv4.
<b>ospf</b>	Display OSPF status and configuration.
<b>traffic</b>	Packet counters.
<i>arg0</i>	Interface. The type is interface. The values are ethernet, port-channel, vlan, loopback.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display information for all VRFs.
<i>vrf-name</i>	VRF name (Max Size 32). The type is string.

# show ip ospf vrf

**show ip ospf vrf** { **all** | *vrf-name* }

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Ipv4.
<b>ospf</b>	Display OSPF status and configuration.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display information for all VRFs.
<i>vrf-name</i>	VRF name (Max Size 32). The type is string.



## show ip pim group-range

```
show ip pim group-range [group] [vrf {vrf-name | all}]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>pim</b>	Display PIM status and configuration.
<b>group-range</b>	Display the various group-ranges.
<i>group</i>	IP address of the group to display. The type is ipaddr.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	The type is string. VRF name (Max Size 32).
<b>all</b>	Display information for all VRFs.

## show ip pim interface

**show ip pim interface** [*intf*] [**brief**] [**vrf** {*vrf-name* | **all**}]

### Syntax Description

<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>pim</b>	Display PIM status and configuration.
<b>interface</b>	Display PIM interface related information.
<i>intf</i>	Display properties on single PIM interface. The type is interface. The values are brief, ethernet, loopback, port-channel, tunnel, vlan, vrf.
<b>brief</b>	Display one line status per PIM interface.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	The type is string. VRF name (Max Size 32).
<b>all</b>	Display information for all VRFs.

# show ip pim neighbor

**show ip pim neighbor** {[*interface*] | [*ipaddr*]} [**vrf** {*vrf-name* | **all**}]

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>pim</b>	Display PIM status and configuration.
<b>neighbor</b>	Display PIM neighbor related information.
<i>interface</i>	Display neighbors on single interface name. The type is interface. The values are ethernet, loopback, port-channel, tunnel, vlan, vrf.
<i>ipaddr</i>	IP address of single neighbor to display. The type is ipaddr.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	The type is string. VRF name (Max Size 32).
<b>all</b>	Display information for all VRFs.

## show ip pim oif-list

**show ip pim oif-list** *group* [*source*] [**vrf** {*vrf-name* | **all**}]

### Syntax Description

<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>pim</b>	Display PIM status and configuration.
<b>oif-list</b>	Display interfaces for oif-list of PIM route.
<i>group</i>	Group address to display. The type is ipaddr.
<i>source</i>	Source address to display. The type is ipaddr.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	The type is string. VRF name (Max Size 32).
<b>all</b>	Display information for all VRFs.

# show ip pim route

**show ip pim route** [{*group* [*source*]}] [**vrf** {*vrf-name* | **all** }]

## Syntax Description

<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>pim</b>	Display PIM status and configuration.
<b>route</b>	Display PIM route cache.
<i>group</i>	Multicast IP address of single group to display. The type is ipaddr.
<i>source</i>	Source IP address. The type is ipaddr.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	The type is string. VRF name (Max Size 32).
<b>all</b>	Display information for all VRFs.

# show ip pim rp

**show ip pim rp** [*group*] [**vrf** {*vrf-name* | **all**}]

## Syntax Description

<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>pim</b>	Display PIM status and configuration.
<b>rp</b>	Display PIM RP, Auto-RP, and BSR related information.
<i>group</i>	Display RP for group address. The type is ipaddr.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	The type is string. VRF name (Max Size 32).
<b>all</b>	Display information for all VRFs.

## show ip pim statistics

**show ip pim statistics** [**vrf** {*vrf-name* | **all**}]

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Show IP information.
<b>pim</b>	Display PIM status and configuration.
<b>statistics</b>	Display PIM Statistics per-VRF.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	The type is string. VRF name (Max Size 32).
<b>all</b>	Display information for all VRFs.

# show ip prefix-list

**show ip prefix-list** [ *strarg* ]

---

**Syntax Description**

---

**show** Show running system information.

---

**ip** Display IP information.

---

**prefix-list** List IP prefix lists.

---

*strarg* Name of prefix list (Max Size 100). The type is string.

---



# show ip process

```
show ip process [ { vrf { all | vrf-name } } ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Display IP information.
<b>process</b>	Display IP global information.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display all VRFs.
<i>vrf-name</i>	Name of the VRF. The type is string.

## show ip route

```
show ip route { [ ip-addr | ip-prefix [{longer-prefixes|shorter-prefixes}] ] [ bgp | eigrp | ospf ] [ {
next-hop nh } | { interface intf } | { updated [ { since stime } ] [ { until utime } ] } ]+ [ summary | detail
] vrf {vrf-name | all} } | { vrf {vrf-name | all} [ ip-addr | ip-prefix [{longer-prefixes|shorter-prefixes}] ]
[ { next-hop nh } | { interface intf } | { updated [ { since stime } ] [ { until utime } ] } ]+ [ summary |
detail ] } }
```

### Syntax Description

<b>show</b>	Show running system information.
<b>ip</b>	Display IP information.
<b>route</b>	Display routing information.
<i>ip-addr</i>	Display single route longest match lookup. The type is ipaddr.
<i>ip-prefix</i>	Display single exact match route. The type is ipprefix.
<b>longer-prefixes</b>	Display matching routes with mask-lengths >= prefix.
<b>shorter-prefixes</b>	Display matching routes with mask-lengths <= prefix.
<b>next-hop</b>	Display routes with this next-hop only.
<i>nh</i>	Next hop address. The type is ipaddr.
<b>interface</b>	Display routes with this output interface only.
<i>intf</i>	Interface Name. The type is interface.
<b>updated</b>	Display routes filtered by last updated time.
<b>since</b>	Display those routes updated since this time.
<i>stime</i>	Since this date/time [[CC]YY-][MM-DD-]HH:MM[:SS]. The type is string.
<b>until</b>	Display those routes updated until this time.
<i>utime</i>	Until this date/time [[CC]YY-][MM-DD-]HH:MM[:SS]. The type is string.
<b>summary</b>	Display route counts.
<b>detail</b>	Display routes in full detail.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	VRF name. The type is string.
<b>bgp</b>	
<b>ospf</b>	
<b>eigrp</b>	
<b>all</b>	Display information for all VRFs.

## show ip static-route

```
show ip static-route [ { vrf { all | vrf-name } } ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ip</b>	Display IP information.
<b>static-route</b>	Display configured static routes.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display all VRFs.
<i>vrf-name</i>	Name of the VRF. The type is string.

# show ipsec sa

**show ipsec sa [detail]**

Syntax	Description
<b>show</b>	Show running system information.
<b>ipsec</b>	Show ipsec related information.
<b>sa</b>	Ipssec Security Associations.
<b>detail</b>	Ipssec Security Associations detailed information.

# show ipv6 bgp neighbors vrf

```
show ipv6 bgp neighbors [ arg0 ] vrf { all | vrf-name }
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ipv6</b>	Display BGP information for IPv6 address family.
<b>bgp</b>	Show BGP information.
<b>neighbors</b>	Display all configured BGP neighbors.
<i>arg0</i>	Display one particular BGP neighbor. The type is ipv6.
<b>vrf</b>	Show BGP sessions in a VRF.
<b>all</b>	Show BGP sessions for all VRFs.
<i>vrf-name</i>	Name of the VRF. The type is string.

# show ipv6 bgp nexthop-database

show ipv6 bgp nexthop-database [{vrf {*vrf-name* | ALL\_VRFS\_012345678901234}}]

Syntax	Description
<b>show</b>	Show running system information.
<b>ipv6</b>	Display IPv6 information.
<b>bgp</b>	Display BGP status and configuration.
<b>nexthop-database</b>	Display nexthop database.
<b>vrf</b>	Virtual Router Context.
<i>vrf-name</i>	The type is string. VRF name.
<b>ALL_VRFS_012345678901234</b>	all.

# show ipv6 bgp nexthop

**show ipv6 bgp nexthop** *ipv6nexthop* [{**vrf** {*vrf-name* | **ALL\_VRFS\_012345678901234**}]

Syntax	Description
<b>show</b>	Show running system information.
<b>ipv6</b>	Display IPv6 information.
<b>bgp</b>	Display BGP status and configuration.
<b>nexthop</b>	Display routes matching the nexthop.
<i>ipv6nexthop</i>	The type is ipv6. Nexthop address.
<b>vrf</b>	Virtual Router Context.
<i>vrf-name</i>	The type is string. VRF name.
<b>ALL_VRFS_012345678901234</b>	all.

# show ipv6 dhcp relay

```
show ipv6 dhcp relay [ { statistics } | { address [ { detail | { interface intfname [ detail ] } } ] } ]
```

## Syntax Description

<b>show</b>	Show running system information.
<b>ipv6</b>	Display IPv6 information.
<b>dhcp</b>	Show items in DHCP.
<b>relay</b>	DHCP Relay.
<b>address</b>	DHCP relay address.
<b>detail</b>	DHCP relay detailed information.
<b>interface</b>	DHCP relay address of the interface.
<i>intfname</i>	Slot/chassis number. The type is interface. The values are ethernet, port-channel, vlan, loopback.
<b>statistics</b>	Statistics related to DHCP.



# show ipv6 icmp adjacency

```
show ipv6 icmp adjacency [interface] [detail] [vrf {vrf-name | all}]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ipv6</b>	Display IPv6 information.
<b>icmp</b>	Display ICMPv6 information.
<b>adjacency</b>	Show IPv6 dynamic learnt adjacency entry.
<b>detail</b>	Display detailed information.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display information for all VRFs.
<i>interface</i>	Interface name to display. The type is interface.
<i>vrf-name</i>	VRF name. The type is string.

## show ipv6 icmp interface

**show ipv6 icmp interface** [*interface*] [**detail**] [**vrf** {*vrf-name* | **all**}]

### Syntax Description

<b>all</b>	Display information for all VRFs.
<b>show</b>	Show running system information.
<b>interface</b>	Show IPv6 dynamic learnt adjacency entry.
<b>detail</b>	Display detailed information.
<b>vrf</b>	Display per-VRF information.
<b>ipv6</b>	Display IPv6 information.
<b>icmp</b>	Display ICMPv6 information.
<i>interface</i>	Interface name to display. The type is interface.
<i>vrf-name</i>	VRF name. The type is string.

# show ipv6 interface

```
show ipv6 interface [ { brief [include-secondary] } | interface | ipv6-addr ] [ { vrf { all | vrf-name } } ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ipv6</b>	Display IPv6 information.
<b>interface</b>	Display IPv6 related interface information.
<b>brief</b>	Show brief info of interface.
<b>include-secondary</b>	Display summary of all IPv6 addresses.
<b>operational</b>	Display only interfaces that are administratively enabled.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display all VRFs.
<i>interface</i>	Name of the Interface. The type is interface. The values are ethernet, port-channel, vlan, mgmt, loopback, vrf.
<i>ipv6-addr</i>	Ipv6 Address. The type is ipv6.
<i>vrf-name</i>	Name of the VRF. The type is string.
<i>local-addr</i>	Display interface for local IPv6 address. The type is string.

# show ipv6 mld snooping

**show ipv6 mld snooping** [ { **vlan** *vlan* } ]

---

**Syntax Description**

---

<b>show</b>	Show running system information.
<b>ipv6</b>	Show IPv6 information.
<b>mld</b>	Show MLD information.
<b>snooping</b>	MLD Snooping information.
<b>vlan</b>	Display Vlan MLD snooping membership information.
<i>vlan</i>	Specify vlan-id. The type is integer. The range is from 1 to 4095.

---

# show ipv6 mld snooping explicit-tracking

```
show ipv6 mld snooping explicit-tracking [ { vlan vlan } ] [encap]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ipv6</b>	Show IPv6 information.
<b>mld</b>	Show MLD information.
<b>snooping</b>	MLD Snooping information.
<b>explicit-tracking</b>	Display explicit-tracking database for MLDv2.
<b>vlan</b>	Display Vlan explicit-tracking database.
<b>encap</b>	Display Encap Vlan explicit-tracking database.
<i>vlan</i>	Specify vlan-id. The type is integer. The range is from 1 to 4095.

## show ipv6 mld snooping groups

**show ipv6 mld snooping groups** [ { [ *group* ] [ *source* ] } [ { **vlan** *vlan* } ] ] [ **detail** | **summary** ] [ **encap** ]

### Syntax Description

<b>show</b>	Show running system information.
<b>ipv6</b>	Show IPv6 information.
<b>mld</b>	Show MLD information.
<b>snooping</b>	Show MLD Snooping information.
<b>groups</b>	Display snooping information for group address.
<i>group</i>	Multicast IP address of single group to display. The type is ipv6.
<i>source</i>	Source IP address. The type is ipv6.
<b>detail</b>	Display detailed information for the group.
<b>summary</b>	Display snooping group summary.
<b>vlan</b>	Display Vlan MLD snooping membership information.
<b>encap</b>	Display Encap Vlan MLD snooping membership information.
<i>vlan</i>	Specify vlan-id. The type is integer. The range is from 1 to 4095.

# show ipv6 mld snooping lookup-mode

show ipv6 mld snooping lookup-mode [ { vlan *vlan* } ]

Syntax	Description
<b>show</b>	Show running system information.
<b>ipv6</b>	Show IPv6 information.
<b>mld</b>	Show MLD information.
<b>snooping</b>	MLD Snooping information.
<b>lookup-mode</b>	MLD Snooping lkup mode information.
<b>vlan</b>	Display Vlan information.
<i>vlan</i>	Specify vlan-id. The type is integer. The range is from 1 to 4095.

# show ipv6 mld snooping mrouter

**show ipv6 mld snooping mrouter** [ { *vlan* *vlan* } ] [**detail**] [**encap**]

## Syntax Description

<b>show</b>	Show running system information.
<b>ipv6</b>	Show IPv6 information.
<b>mld</b>	Show MLD information.
<b>snooping</b>	MLD Snooping information.
<b>mrouter</b>	Display multicast routers detected.
<b>detail</b>	Display detailed mrouter information.
<b>vlan</b>	Display Vlan multicast router information.
<b>encap</b>	Display Encap Vlan MLD snooping membership information.
<i>vlan</i>	Specify vlan-id. The type is integer. The range is from 1 to 4095.



# show ipv6 mld snooping querier

show ipv6 mld snooping querier [ { vlan *vlan* } ] [detail]

Syntax	Description
<b>show</b>	Show running system information.
<b>ipv6</b>	Show IPv6 information.
<b>mld</b>	Show MLD information.
<b>snooping</b>	MLD Snooping information.
<b>querier</b>	Display snooping querier information.
<b>detail</b>	Display detailed information.
<b>vlan</b>	Display Vlan MLD snooping querier information.
<i>vlan</i>	Specify vlan-id. The type is integer. The range is from 1 to 4095.

# show ipv6 mld snooping statistics

**show ipv6 mld snooping statistics** [**global** | { **vlan** *vlan* } ]

## Syntax Description

<b>show</b>	Show running system information.
<b>ipv6</b>	Show IPv6 information.
<b>mld</b>	Show MLD information.
<b>snooping</b>	MLD Snooping information.
<b>statistics</b>	Display packet/error counter statistics.
<b>global</b>	Display global statistics.
<b>vlan</b>	Display vlan statistics.
<i>vlan</i>	Specify vlan-id. The type is integer. The range is from 1 to 4095.

## show ipv6 nd interface

**show ipv6 nd interface** [*interface*] [**detail**] [**prefix**] [**vrf** {*vrf-name* | **all**}]

Syntax	Description
<b>all</b>	Display information for all VRFs.
<b>show</b>	Show running system information.
<b>interface</b>	Show IPv6 dynamic learnt adjacency entry.
<b>detail</b>	Display detailed information.
<b>prefix</b>	Display List of ICMPv6 RA prefix.
<b>vrf</b>	Display per-VRF information.
<b>ipv6</b>	Display IPv6 information.
<b>nd</b>	Display ND information.
<i>interface</i>	Interface name to display. The type is interface.
<i>vrf-name</i>	VRF name. The type is string.

# show ipv6 prefix-list

**show ipv6 prefix-list** [ *strarg* ]

---

**Syntax Description**

---

<b>show</b>	Show running system information.
<b>ipv6</b>	Display IPv6 information.
<b>prefix-list</b>	List IPv6 prefix lists.
<i>strarg</i>	Name of prefix list (Max Size 100). The type is string.

---

# show ipv6 process

```
show ipv6 process [ { vrf { all | vrf-name } } ]
```

## Syntax Description

---

**show** Show running system information.

---

**ipv6** Display IP information.

---

**process** Display IP global information.

---

**vrf** Display per-VRF information.

---

**all** Display all VRFs.

---

*vrf-name* Name of the VRF. The type is string.

---

## show ipv6 route + vrf

```
show ipv6 route [ ipv6-addr | { ipv6-prefix [{longer-prefixes|shorter-prefixes}] } ] [ bgp | eigrp | ospf ] [
{ next-hop next-hop } | { interface interface } | { updated { [since stime ] [until utime] } } ]+ [ summary |
detail ] vrf {vrf-name | all}
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ipv6</b>	Display IP information.
<b>route</b>	Display routing information.
<i>ipv6-addr</i>	Display single route longest match lookup. The type is ipv6.
<i>ipv6-prefix</i>	Display single exact match route. The type is ipv6_prefix.
<b>longer-prefixes</b>	Display matching routes with mask-lengths >= prefix.
<b>shorter-prefixes</b>	Display matching routes with mask-lengths <= prefix.
<b>next-hop</b>	Display routes with this next-hop only.
<i>next-hop</i>	Next hop address. The type is ipv6.
<b>interface</b>	Display routes with this output interface only.
<i>interface</i>	Interface Name. The type is interface.
<b>updated</b>	Display routes filtered by last updated time.
<b>since</b>	Display those routes updated since this time.
<i>stime</i>	Since this date/time [[CC]YY-][MM-DD-]HH:MM[:SS]. The type is string.
<b>until</b>	Display those routes updated until this time.
<i>utime</i>	Until this date/time [[CC]YY-][MM-DD-]HH:MM[:SS]. The type is string.
<b>summary</b>	Display route counts.
<b>detail</b>	Display routes in full detail.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	VRF name. The type is string.
<b>bgp</b>	
<b>ospf</b>	
<b>eigrp</b>	
<b>all</b>	Display information for all VRFs.

# show ipv6 static-route

```
show ipv6 static-route [ { vrf { all | vrf-name } } ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ipv6</b>	Display IP information.
<b>static-route</b>	Display configured static routes.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display all VRFs.
<i>vrf-name</i>	Name of the VRF. The type is string.

## show isis adjacency vrf

**show isis adjacency** [{system-id *sid*}] [*interface*] [**detail**] **vrf** { **all** | *vrf-name* }

### Syntax Description

<b>show</b>	Show running system information.
<b>isis</b>	Display IS-IS status and configuration.
<b>adjacency</b>	Display IS-IS adjacency information.
<i>interface</i>	IS-IS interface. The type is interface. The values are ethernet.
<b>system-id</b>	Hostname or System ID.
<i>sid</i>	Hostname or System ID (in the form of XXXX.XXXX.XXXX). The type is string.
<b>detail</b>	Display IS-IS detail adjacency information.
<b>vrf</b>	VRF name.
<b>all</b>	Display information for all VRFs.
<i>vrf-name</i>	Specify VRF Name. The type is string.



## show isis database vrf

```
show isis database [level-1|l1] [lid] vrf { all | vrf-name }
```

### Syntax Description

<b>show</b>	Show running system information.
<b>isis</b>	Display IS-IS status and configuration.
<b>database</b>	Display IS-IS database information.
<b>level-1</b>	Display IS-IS Level-1 routing link state database.
<b>l1</b>	Display IS-IS Level-1 routing link state database.
<i>lid</i>	LSP ID in the form of XXXX.XXXX.XXXX.XX-XX. The type is lsp_id.
<b>vrf</b>	VRF name.
<b>all</b>	Display information for all VRFs.
<i>vrf-name</i>	Specify VRF Name. The type is string.

# show isis dteps vrf

**show isis dteps vrf** { **all** | *vrf-name* }

## Syntax Description

<b>show</b>	Show running system information.
<b>isis</b>	Display IS-IS status and configuration.
<b>dteps</b>	ISIS Dynamic Tunnel EndPoint database.
<b>vrf</b>	VRF name.
<b>all</b>	Display information for all VRFs.
<i>vrf-name</i>	Specify VRF Name. The type is string.

## show isis interface vrf

```
show isis interface [ brief | intf_arg ] [level-1] vrf { all | vrf-name }
```

### Syntax Description

<b>show</b>	Show running system information.
<b>isis</b>	Display IS-IS status and configuration.
<b>interface</b>	Display IS-IS interface information.
<b>level-1</b>	Display Level-1 interfaces.
<b>brief</b>	Brief display of IS-IS interfaces.
<i>intf_arg</i>	IS-IS interface. The type is interface. The values are ethernet.
<b>vrf</b>	VRF name.
<b>all</b>	Display information for all VRFs.
<i>vrf-name</i>	Specify VRF Name. The type is string.

# show isis protocol vrf

**show isis protocol vrf** { **all** | *vrf-name* }

---

**Syntax Description**

---

**show** Show running system information.

---

**isis** Display IS-IS status and configuration.

---

**protocol** Display IS-IS process information.

---

**vrf** VRF name.

---

**all** Display information for all VRFs.

---

*vrf-name* Specify VRF Name. The type is string.

---

## show isis route vrf

```
show isis route vrf { all | vrf-name }
```

Syntax	Description
<b>show</b>	Show running system information.
<b>isis</b>	Display IS-IS status and configuration.
<b>route</b>	Display IS-IS route information.
<b>vrf</b>	VRF name.
<b>all</b>	Display information for all VRFs.
<i>vrf-name</i>	Specify VRF Name. The type is string.

# show isis statistics vrf

```
show isis statistics vrf { all | vrf-name }
```

---

**Syntax Description**

---

**show** Show running system information.

---

**isis** Display IS-IS status and configuration.

---

**statistics** Display IS-IS protocol statistics.

---

**vrf** VRF name.

---

**all** Display information for all VRFs.

---

*vrf-name* Specify VRF Name. The type is string.

---

## show isis traffic vrf

```
show isis traffic [interface] vrf { all | vrf-name }
```

### Syntax Description

---

**show** Show running system information.

---

**isis** Display IS-IS status and configuration.

---

**traffic** Display IS-IS traffic information.

---

*interface* IS-IS interface. The type is interface. The values are ethernet.

---

**vrf** VRF name.

---

**all** Display information for all VRFs.

---

*vrf-name* Specify VRF Name. The type is string.

---

# show lacp counters

**show lacp counters** [ { **interface** *arg0* } ]

## Syntax Description

<b>show</b>	Show running system information.
<b>lacp</b>	LACP protocol.
<b>counters</b>	LACP counters.
<b>interface</b>	Specify a port-channel.
<i>arg0</i>	Port Channel interface. The type is interface_mrange. The values are port-channel.



# show lacp interface

**show lacp interface** *arg0*

Syntax	Description
<b>show</b>	Show running system information.
<b>lacp</b>	LACP protocol.
<b>interface</b>	Specify an interface.
<i>arg0</i>	Interface. The type is interface. The values are ethernet.

# show lacp neighbor

**show lacp neighbor** [ { **interface** *arg0* } ]

---

**Syntax Description**

---

**show** Show running system information.

---

**lacp** LACP protocol.

---

**neighbor** LACP interface neighbor.

---

**interface** Specify a port-channel.

---

*arg0* Port Channel interface. The type is interface\_mrange. The values are port-channel.

---

# show lacp port-channel

```
show lacp port-channel [ { interface arg0 } ]
```

## Syntax Description

<b>show</b>	Show running system information.
<b>lacp</b>	LACP protocol.
<b>port-channel</b>	LACP port-channels.
<b>interface</b>	Specify a port-channel.
<i>arg0</i>	Port Channel interface. The type is interface_mrange. The values are port-channel.

# show lacp system-identifier

show lacp system-identifier

Syntax	Description
<b>show</b>	Show running system information.
<b>lacp</b>	LACP protocol.
<b>system-identifier</b>	Show system-identifier information.

# show lldp dcbx interface

**show lldp dcbx interface** *if0*

Syntax	Description
<b>show</b>	Show running system information.
<b>lldp</b>	Show information about lldp.
<b>dcbx</b>	Show dcbx information.
<b>interface</b>	show lldp interface information.
<i>if0</i>	The type is interface. Enter interface. The values are ethernet.

# show lldp entry

**show lldp entry** [ *sys-name* ]

---

**Syntax Description**

---

**show** Show running system information.

---

**lldp** Show information about lldp.

---

**entry** Show lldp entry information.

---

*sys-name* Peer's System name. The type is string.

---

# show lldp interface

**show lldp interface** *arg0*

Syntax	Description
<b>show</b>	Show running system information.
<b>lldp</b>	Show information about lldp.
<b>interface</b>	Show lldp interface information.
<i>arg0</i>	Interface. The type is interface. The values are ethernet, mgmt.

# show lldp neighbors

**show lldp neighbors** [ { **interface** *arg0* } ] [ **detail** ]

---

**Syntax Description**

---

<b>show</b>	Show running system information.
<b>lldp</b>	Show information about lldp.
<b>neighbors</b>	Show lldp neighbor information.
<b>interface</b>	Show lldp neighbor information on an interface.
<i>arg0</i>	Interface. The type is interface. The values are ethernet, mgmt.
<b>detail</b>	Show lldp neighbor detail information.

---



# show lldp timers

show lldp timers

Syntax	Description
<b>show</b>	Show running system information.
<b>lldp</b>	Show information about lldp.
<b>timers</b>	Show lldp timers.

# show lldp tlv-select

show lldp tlv-select

Syntax	Description
<b>show</b>	Show running system information.
<b>lldp</b>	Show information about lldp.
<b>tlv-select</b>	Show lldp tlv-select.

# show lldp traffic

```
show lldp traffic [ { interface arg0 } ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>lldp</b>	Show information about lldp.
<b>traffic</b>	Show lldp counters.
<b>interface</b>	Show lldp interface information.
<i>arg0</i>	Interface. The type is interface. The values are ethernet, mgmt.

# show locator-led status

## show locator-led status

Syntax	Description
<b>show</b>	Show running system information.
<b>locator-led</b>	Blink locator led on device.
<b>status</b>	Status.

# show logging ip access-list cache

show logging ip access-list cache { permit | deny }

Syntax	Description
<b>show</b>	Show running system information.
<b>logging</b>	Logging information.
<b>ip</b>	IP configuration.
<b>access-list</b>	Access-list.
<b>cache</b>	show entries in ACLLOG cache.
<b>permit</b>	action is permit.
<b>deny</b>	action is deny.

# show logging ip access-list drop-codes

show logging ip access-list drop-codes

Syntax	Description
<b>show</b>	Show running system information.
<b>logging</b>	Logging information.
<b>ip</b>	IP configuration.
<b>access-list</b>	Access-list.
<b>drop-codes</b>	Drop Codes.

# show logging ip access-list span

show logging ip access-list span

Syntax	Description
<b>show</b>	Show running system information.
<b>logging</b>	Logging information.
<b>ip</b>	IP configuration.
<b>access-list</b>	Access-list.
<b>span</b>	show entries in ACLLOG span.

## show mac address-table +

```
show mac address-table [ { static | dynamic } ] [ {address mac-addr} | {vlan id} | {interface interface-name} ]+
```

Syntax	Description
<b>show</b>	Show running system information.
<b>mac</b>	Mac addr information.
<b>address-table</b>	MAC Address Table.
<b>static</b>	Display Static Entries.
<b>dynamic</b>	Display Dynamic Entries.
<b>address1</b>	address.
<b>vlan1</b>	VLAN.
<b>address</b>	address.
<b>interface</b>	Interface.
<b>vlan</b>	VLAN.
<i>mac-addr</i>	MAC Address. The type is ethernet.
<i>id</i>	VLAN ID. The type is integer. The range is from 1 to 4095.
<i>interface-name</i>	Interface name. The type is interface.



# show macsec mka session

**show macsec mka session** [ **details** | { **interface ethernet** *interface* } ]

## Syntax Description

<b>show</b>	Show running system information.
<b>macsec</b>	Show MACSEC information.
<b>mka</b>	Show MACSEC mka information.
<b>session</b>	Show MACSEC mka session information.
<b>details</b>	Show MACSEC mka session details.
<b>interface</b>	Show MACSEC mka session information for interface.
<b>ethernet</b>	Show MACSEC mka session information for ethernet interface.
<i>interface</i>	Name of the Interface. The type is string.

# show macsec mka statistics

**show macsec mka statistics** [ **interface ethernet** *interface* ]

---

**Syntax Description**

---

**show** Show running system information.

---

**macsec** Show MACSEC information.

---

**mka** Show MACSEC mka information.

---

**statistics** Show MACSEC mka statistics information.

---

**interface** Show MACSEC mka statistics information for interface.

---

**ethernet** Show MACSEC mka statistics information for ethernet interface.

---

*interface* Name of the Interface. The type is string.

---

# show macsec mka summary

show macsec mka summary

Syntax	Description
<b>show</b>	Show running system information.
<b>macsec</b>	Show MACSEC information.
<b>mka</b>	Show MACSEC mka information.
<b>summary</b>	Show MACSEC mka summary information.
<b>session</b>	Show MACSEC mka session information.
<b>details</b>	Show MACSEC mka session details.
<b>interface</b>	Show MACSEC mka session information for interface.
<b>ethernet</b>	Show MACSEC mka session information for ethernet interface.
<i>interface</i>	Name of the Interface. The type is string.

# show macsec secy statistics

**show macsec secy statistics** [ **interface ethernet** *interface* ]

---

**Syntax Description**

---

<b>show</b>	Show running system information.
<b>macsec</b>	Show MACSEC information.
<b>secy</b>	Show MACSEC secy information.
<b>statistics</b>	Show MACSEC secy statistics information.
<b>interface</b>	Show MACSEC secy statistics information for interface.
<b>ethernet</b>	Show MACSEC secy statistics information for ethernet interface.
<i>interface</i>	Name of the Interface. The type is string.

---

# show module

**show module** [*arg0*]

---

**Syntax Description**

---

**show** Show Information.

---

**module** Module.

---

*arg0* please enter the module number. The type is integer. The range is from 1 to 30.

---

# show module fex

**show module fex** {**all** | *fexid*}

---

**Syntax Description**

---

**show** Show running system information.

---

**module** Show module information.

---

**fex** Show fex module information.

---

*fexid* FEX number. The type is integer. The range is from 101 to 199.

---

**all** Show information for all FEX.

---

# show monitor

## show monitor

Syntax	Description
<b>show</b>	Show running system information.
<b>monitor</b>	Show SPAN information.

## show monitor session

**show monitor session** { **all** | *session\_id* | { **range** *session\_range* } } [ **brief** | **extended** ]

### Syntax Description

<b>show</b>	Show running system information.
<b>monitor</b>	Show SPAN information.
<b>session</b>	Show session information.
<b>all</b>	All sessions.
<i>session_id</i>	Session Id 1-255. The type is integer. The range is from 1 to 255.
<b>range</b>	Specify a range.
<i>session_range</i>	session range(s): 1-4, 7, or 1-5,7-19. The type is integer_mrange. The range is from 1 to 255.
<b>brief</b>	Brief information.
<b>extended</b>	Session extended info like encaps, vlan filters per interfaces.



# show npv external-interface-usage

show npv external-interface-usage [ { server-interface *arg0* } ]

Syntax	Description
<b>show</b>	Show running system information.
<b>npv</b>	Show Npv information.
<b>external-interface-usage</b>	Show external interface usage by server interfaces.
<b>server-interface</b>	Show external interface usage by a server interface.
<i>arg0</i>	Interface. The type is interface. The values are vfc, vfc-port-channel.

# show npv flogi-table

**show npv flogi-table** [ { **vsan** *vsan-id* } ]

---

**Syntax Description**

---

<b>show</b>	Show running system information.
<b>npv</b>	Show Npv information.
<b>flogi-table</b>	Show information about FLOGI sessions.
<b>vsan</b>	Show information about FLOGI sessions for a VSAN.
<i>vsan-id</i>	Vsan-id. The type is integer_range. The range is from 1 to 4093.

---

# show npv flogi-table interface

**show npv flogi-table interface** *arg0*

Syntax	Description
<b>show</b>	Show running system information.
<b>npv</b>	Show Npv information.
<b>flogi-table</b>	Show information about FLOGI sessions.
<b>interface</b>	Show information about FLOGI sessions for a server interface.
<i>arg0</i>	Interface. The type is interface. The values are vfc, vfc-port-channel.

# show npv status

**show npv status** [ { **vsan** *vsan-id* } ]

---

**Syntax Description**

---

**show** Show running system information.

---

**npv** Show Npv information.

---

**status** Show Npv Status.

---

**vsan** Show NPV status for a specific VSAN.

---

*vsan-id* Vsan-id. The type is integer\_range. The range is from 1 to 4093.

---

# show npv traffic-map

```
show npv traffic-map [ { server-interface arg0 } ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>npv</b>	Show Npv information.
<b>traffic-map</b>	Show information about Traffic Map.
<b>server-interface</b>	Show information about Traffic map for a server interface.
<i>arg0</i>	Interface. The type is interface. The values are vfc, vfc-port-channel.

# show ntp authentication-keys

show ntp authentication-keys

Syntax	Description
<b>show</b>	Show running system information.
<b>ntp</b>	Show NTP information.
<b>authentication-keys</b>	Display authentication keys.

# show ntp authentication-status

show ntp authentication-status

Syntax	Description
<b>show</b>	Show running system information.
<b>ntp</b>	Show NTP information.
<b>authentication-status</b>	NTP Authentication Status.

# show ntp peer-status

show ntp peer-status

Syntax	Description
<b>show</b>	Show running system information.
<b>ntp</b>	Show NTP information.
<b>peer-status</b>	Show the status for all the server/peers.



# show ntp peers

show ntp peers

Syntax	Description
<b>show</b>	Show running system information.
<b>ntp</b>	Show NTP information.
<b>peers</b>	Show all the peers..

# show ntp statistics peer ipaddr

**show ntp statistics peer ipaddr** *arg0*

## Syntax Description

<b>show</b>	Show running system information.
<b>ntp</b>	Show NTP information.
<b>statistics</b>	Show the NTP statistics.
<b>peer</b>	Show the per-peer statistics counter of a peer..
<b>ipaddr</b>	Peer's IP address.
<i>arg0</i>	The type is string. A.B.C.D.

# show ntp trusted-keys

show ntp trusted-keys

Syntax	Description
<b>show</b>	Show running system information.
<b>ntp</b>	Show NTP information.
<b>trusted-keys</b>	Display trusted keys.

## show ospfv3 database

```
show ospfv3 [{vrf {vrf-name | all}}] database [router | network | intra-area-prefix | {inter-area {irouter | iprefix}} | nssa-external | area-unknown | [{link | link-unknown | grace} [interface]][area area-id-ip]] | {external [{tag tag_val}] | as-unknown} [lsid] [self-originated | {adv-router adv-id} | {adv-router-name adv-name} ] [{vrf {vrf-name | all}}]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ospfv3</b>	Display OSPFv3 status and configuration.
<b>database</b>	Link-state Database Summary.
<b>router</b>	Display router LSAs.
<b>network</b>	Display network LSAs.
<b>intra-area-prefix</b>	Display Intra-Area-Prefix LSAs.
<b>inter-area</b>	Display inter-area LSAs.
<b>irouter</b>	Display Inter-Area-Router LSAs.
<b>iprefix</b>	Display Inter-Area-Prefix LSAs.
<b>nssa-external</b>	Display type 7 (NSSA external) LSAs.
<b>area-unknown</b>	Display area-scope unknown LSAs.
<b>link</b>	Display Link LSAs.
<b>link-unknown</b>	Display link-scope unknown LSAs.
<b>grace</b>	Display Grace LSAs.
<i>interface</i>	The type is interface. Display only LSA's on this Interface.
<b>area</b>	Display only LSA's in this area.
<i>area-id-ip</i>	The type is ipaddr. Area Id as an integer or ip address.
<b>external</b>	Display type 5 (external) LSAs.
<b>tag</b>	Restrict display by tag.
<i>tag_val</i>	The type is uinteger. 32-bit tag value.
<b>as-unknown</b>	Display as-scope unknown LSAs.
<i>lsid</i>	The type is ipaddr. Restrict display by link state ID.
<b>self-originated</b>	Display only self-originated LSAs.
<b>adv-router</b>	Restrict display by Advertising router.

<i>adv-id</i>	The type is ipaddr. Advertising router ID.
<b>adv-router-name</b>	Restrict display by Advertising router name.
<i>adv-name</i>	The type is string. DNS Name of the Advertising router.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	The type is string. VRF name.
<b>all</b>	Display information for all VRFs.

## show ospfv3 database detail

```
show ospfv3 [{vrf {vrf-name | all}}] database [router | network | intra-area-prefix | {inter-area {irouter | iprefix}} | nssa-external | area-unknown | [{link | link-unknown | grace} [interface]][area area-id-ip]] | {external [{tag tag_val}] | as-unknown} [lsid] [self-originated | {adv-router advid} | {adv-router-name adv-name}] detail [{vrf {vrf-name | all}}]
```

### Syntax Description

<b>show</b>	Show running system information.
<b>ospfv3</b>	Display OSPFv3 status and configuration.
<b>database</b>	Link-state Database Summary.
<b>router</b>	Display router LSAs.
<b>network</b>	Display network LSAs.
<b>intra-area-prefix</b>	Display Intra-Area-Prefix LSAs.
<b>inter-area</b>	Display inter-area LSAs.
<b>irouter</b>	Display Inter-Area-Router LSAs.
<b>iprefix</b>	Display Inter-Area-Prefix LSAs.
<b>nssa-external</b>	Display type 7 (NSSA external) LSAs.
<b>area-unknown</b>	Display area-scope unknown LSAs.
<b>link</b>	Display Link LSAs.
<b>link-unknown</b>	Display link-scope unknown LSAs.
<b>grace</b>	Display Grace LSAs.
<i>interface</i>	The type is interface. Display only LSA's on this Interface.
<b>area</b>	Display only LSA's in this area.
<i>area-id-ip</i>	The type is ipaddr. Area Id as an integer or ip address.
<b>external</b>	Display type 5 (external) LSAs.
<b>tag</b>	Restrict display by tag.
<i>tag_val</i>	The type is uinteger. 32-bit tag value.
<b>as-unknown</b>	Display as-scope unknown LSAs.
<i>lsid</i>	The type is ipaddr. Restrict display by link state ID.
<b>self-originated</b>	Display only self-originated LSAs.
<b>adv-router</b>	Restrict display by Advertising router.

<i>adv-id</i>	The type is ipaddr. Advertising router ID.
<b>adv-router-name</b>	Restrict display by Advertising router name.
<i>adv-name</i>	The type is string. DNS Name of the Advertising router.
<b>detail</b>	Display LSA in detail.
<b>vrf</b>	Display per-VRF information.
<i>vrf-name</i>	The type is string. VRF name.
<b>all</b>	Display information for all VRFs.

# show ospfv3 interface

```
show [ipv6] ospfv3 interface { arg0 | { [ brief ] vrf { all | vrf-name } } }
```

## Syntax Description

<b>show</b>	Show running system information.
<b>ipv6</b>	Display IPv6 information.
<b>ospfv3</b>	Display OSPFv3 status and configuration.
<b>interface</b>	OSPFv3 enabled interface.
<i>arg0</i>	Interface. The type is interface. The values are ethernet, port-channel, vlan, loopback.
<b>brief</b>	Display summary of OSPFv3 interfaces.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display information for all VRFs.
<i>vrf-name</i>	VRF name (Max Size 32). The type is string.



## show ospfv3 neighbors

```
show [ipv6] ospfv3 neighbors { arg0 [ { ip [ detail ] } | detail | summary ] [vrf { all | vrf-name } ] } | { { { ip [ detail ] } | detail | summary } vrf { all | vrf-name } }
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ipv6</b>	Display IPv6 information.
<b>ospfv3</b>	Display OSPFv3 status and configuration.
<b>neighbors</b>	Neighbor list.
<i>ip</i>	Router ID of neighbor. The type is ipaddr.
<b>detail</b>	Show detailed neighbor display.
<i>arg0</i>	Interface. The type is interface. The values are ethernet, port-channel, vlan, loopback.
<b>summary</b>	Summary of neighbors.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display information for all VRFs.
<i>vrf-name</i>	VRF name (Max Size 32). The type is string.

## show ospfv3 route vrf

```
show [ipv6] ospfv3 route [ summary | { ipv6-prefix [ longer-prefixes ] [ summary ] } | ipv6-addr ] vrf {
all | vrf-name }
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ipv6</b>	Display IPv6 information.
<b>ospfv3</b>	Display OSPFv3 status and configuration.
<b>route</b>	Internal OSPFv3 routes.
<i>ipv6-addr</i>	Show single OSPFv3 route. The type is ipv6.
<i>ipv6-prefix</i>	Show single exact match OSPFv3 route. The type is ipv6_prefix.
<b>summary</b>	Show route counts.
<b>longer-prefixes</b>	Show exact match and more specific routes.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display information for all VRFs.
<i>vrf-name</i>	VRF name (Max Size 32). The type is string.

## show ospfv3 summary-address vrf

```
show [ipv6] ospfv3 summary-address vrf { all | vrf-name }
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ipv6</b>	Display IPv6 information.
<b>ospfv3</b>	Display OSPFv3 status and configuration.
<b>summary-address</b>	Summary-address redistribution information.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display information for all VRFs.
<i>vrf-name</i>	VRF name (Max Size 32). The type is string.

# show ospfv3 traffic

```
show [ipv6] ospfv3 traffic { arg0 | { vrf { all | vrf-name } } }
```

## Syntax Description

<b>show</b>	Show running system information.
<b>ipv6</b>	Display IPv6 information.
<b>ospfv3</b>	Display OSPFv3 status and configuration.
<b>traffic</b>	Packet counters.
<i>arg0</i>	Interface. The type is interface. The values are ethernet, port-channel, vlan, loopback.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display information for all VRFs.
<i>vrf-name</i>	VRF name (Max Size 32). The type is string.

# show ospfv3 vrf

**show [ipv6] ospfv3 vrf { all | vrf-name }**

Syntax	Description
<b>show</b>	Show running system information.
<b>ipv6</b>	Display IPv6 information.
<b>ospfv3</b>	Display OSPFv3 status and configuration.
<b>vrf</b>	Display per-VRF information.
<b>all</b>	Display information for all VRFs.
<i>vrf-name</i>	VRF name (Max Size 32). The type is string.

# show port-channel capacity

show port-channel capacity

Syntax	Description
<b>show</b>	Show running system information.
<b>port-channel</b>	Show port-channel information.
<b>capacity</b>	Capacity information.

# show port-channel database

```
show port-channel database [ { interface if0 } ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>port-channel</b>	Show port-channel information.
<b>database</b>	Show port-channel database.
<b>interface</b>	Specify a port-channel.
<i>if0</i>	. The type is interface_mrange. The values are port-channel.

# show port-channel extended

```
show port-channel extended [ { interface if0 } ]
```

## Syntax Description

<b>show</b>	Show running system information.
<b>port-channel</b>	Show port-channel information.
<b>extended</b>	Show port-channel extended.
<b>interface</b>	Specify a port-channel.
<i>if0</i>	. The type is interface. The values are port-channel.



# show port-channel summary

```
show port-channel summary [ { interface if0 } ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>port-channel</b>	Show port-channel information.
<b>summary</b>	Show port-channel summary.
<b>interface</b>	Specify a port-channel.
<i>if0</i>	. The type is interface. The values are port-channel.

# show port-channel traffic

**show port-channel traffic** [ { **interface** *if0* } ]

---

**Syntax Description**

---

<b>show</b>	Show running system information.
<b>port-channel</b>	Show port-channel information.
<b>traffic</b>	Show port-channel traffic statistics.
<b>interface</b>	Specify a port-channel.
<i>if0</i>	. The type is interface. The values are port-channel.

---

# show port-channel usage

show port-channel usage

Syntax	Description
<b>show</b>	Show running system information.
<b>port-channel</b>	Show port-channel information.
<b>usage</b>	Show port-channel number usage.

# show porttrack

show porttrack

Syntax	Description
<b>show</b>	Show running system information.
<b>porttrack</b>	Port Tracking.

# show processes

show processes

Syntax	Description
show	Show running system information.
processes	Show processes.

# show processes cpu

## show processes cpu

Syntax	Description
<b>show</b>	Show running system information.
<b>processes</b>	Show processes.
<b>cpu</b>	Show processes CPU Info.

# show processes cpu sort

show processes cpu sort

Syntax	Description
<b>show</b>	Show running system information.
<b>processes</b>	Show processes.
<b>cpu</b>	Show processes CPU Info.
<b>sort</b>	Show processes CPU Info (Sorted by Cpu Util).

# show processes memory

show processes memory

Syntax	Description
<b>show</b>	Show running system information.
<b>processes</b>	Show processes.
<b>memory</b>	Show processes Memory Info.



# show ptp brief

## show ptp brief

Syntax	Description
<b>show</b>	Show running system information.
<b>ptp</b>	Precision Time Protocol (IEEE 1588) Subsystem.
<b>brief</b>	PTP port states in brief.
<b>__readonly__</b>	Read Only.
<b>TABLE_ptp</b>	ptp table.
<i>ptp-ifindex</i>	The type is string. ptp ifindex.
<i>state</i>	The type is string. ptp bmc state.
<i>ptp-end</i>	The type is string. End of table.

# show ptp clock

## show ptp clock

### Syntax Description

<b>show</b>	Show running system information.
<b>ptp</b>	Precision Time Protocol (IEEE 1588) Subsystem.
<b>clock</b>	PTP local clock.
<b>__readonly__</b>	Read Only.
<i>domain-id</i>	The type is integer. Domain Id.
<i>clock-id</i>	The type is string. Clock Id.
<i>priority1</i>	The type is integer. Priority2.
<i>priority2</i>	The type is integer. Priority2.
<i>num-ports</i>	The type is integer. Number of PTP ports.
<i>class</i>	The type is integer. Class.
<i>accuracy</i>	The type is integer. Clock accuracy.
<i>scaled-log-variance</i>	The type is integer. scaled log variance.
<i>offset-from-master</i>	The type is integer. Offset from master.
<i>mean-path-delay-to-master</i>	The type is integer. Mean path delay to master.
<i>steps-removed</i>	The type is integer. Steps removed.

# show ptp clock foreign-masters record

```
show ptp clock foreign-masters record [ { interface if0 } ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>ptp</b>	Precision Time Protocol (IEEE 1588) Subsystem.
<b>clock</b>	PTP clock.
<b>foreign-masters</b>	foreign-masters.
<b>record</b>	record.
<b>interface</b>	Specify interface.
<i>if0</i>	The type is interface. . The values are ethernet.
<b>__readonly__</b>	Read Only.
<b>TABLE_ptp</b>	ptp table.
<i>interface-name</i>	The type is string. Interface name.
<i>clock-id</i>	The type is string. Clock Id.
<i>priority1</i>	The type is integer. Priority2.
<i>priority2</i>	The type is integer. Priority2.
<i>class</i>	The type is integer. Class.
<i>accuracy</i>	The type is integer. Clock accuracy.
<i>scaled-log-variance</i>	The type is integer. scaled log variance.
<i>steps-removed</i>	The type is integer. Steps removed.
<i>is-gm</i>	The type is integer. Is Grandmaster.
<i>ptp-end</i>	The type is string. End of table.

# show ptp corrections

## show ptp corrections

Syntax	Description
<b>show</b>	Show running system information.
<b>ptp</b>	Precision Time Protocol (IEEE 1588) Subsystem.
<b>__readonly__</b>	Read Only.
<b>corrections</b>	Display last few corrections.
<b>TABLE_ptp</b>	ptp table.
<i>intf-name</i>	The type is string. interface name.
<i>sup-time</i>	The type is string. sup time.
<i>correction-val</i>	The type is integer. correction value.
<i>mean-path-delay</i>	The type is integer. mean path delay.
<i>ptp-end</i>	The type is string. End of table.

# show ptp counters

show ptp counters { {interface *if0*} | all }

Syntax	Description
<b>show</b>	Show running system information.
<b>ptp</b>	Precision Time Protocol (IEEE 1588) Subsystem.
<b>__readonly__</b>	Read Only.
<b>counters</b>	Display PTP packet counters.
<b>interface</b>	Enter the port interface.
<b>all</b>	Displays all information.
<i>if0</i>	The type is interface. . The values are ethernet.
<b>TABLE_ptp</b>	ptp table.
<i>interface_name</i>	The type is string. interface name.
<i>tx-announce-pkts</i>	The type is integer. No. of TX Announce Packets.
<i>tx-sync-pkts</i>	The type is integer. No. of TX Sync Packets.
<i>tx-follow-up-pkts</i>	The type is integer. No. of TX Follow-up Packets.
<i>tx-delay-req-pkts</i>	The type is integer. No. of TX Delay Request Packets.
<i>tx-delay-resp-pkts</i>	The type is integer. No. of TX Delay Response Packets.
<i>tx-pdelay-req-pkts</i>	The type is integer. No. of TX PDelay Request Packets.
<i>tx-pdelay-resp-pkts</i>	The type is integer. No. of TX PDelay Response Packets.
<i>tx-pdelay-follow-up-pkts</i>	The type is integer. No. of TX PDelay Follow-up Packets.
<i>tx-mgmt-pkts</i>	The type is integer. No. of TX PTP management Packets.
<i>rx-announce-pkts</i>	The type is integer. No. of RX Announce Packets.
<i>rx-sync-pkts</i>	The type is integer. No. of RX Sync Packets.
<i>rx-follow-up-pkts</i>	The type is integer. No. of RX Follow-up Packets.
<i>rx-delay-req-pkts</i>	The type is integer. No. of RX Delay Request Packets.
<i>rx-delay-resp-pkts</i>	The type is integer. No. of RX Delay Response Packets.
<i>rx-pdelay-req-pkts</i>	The type is integer. No. of RX PDelay Request Packets.
<i>rx-pdelay-resp-pkts</i>	The type is integer. No. of RX PDelay Response Packets.
<i>rx-pdelay-follow-up-pkts</i>	The type is integer. No. of RX PDelay Follow-up Packets.

---

<i>rx-mgmt-pkts</i>	The type is integer. No. of RX PTP management Packets.
<i>ptp-end</i>	The type is string. End of table.

---

# show ptp parent

## show ptp parent

Syntax	Description
<b>show</b>	Show running system information.
<b>ptp</b>	Precision Time Protocol (IEEE 1588) Subsystem.
<b>parent</b>	PTP parent clock.
<b>__readonly__</b>	Read Only.
<i>clock-id</i>	The type is string. Clock Id.
<i>port-num</i>	The type is integer. Port number.
<i>obs-parent-offset</i>	The type is string. observed parent offset.
<i>obs-parent-clk-phase-chg</i>	The type is string. observed parent clock phase change.
<i>gm-id</i>	The type is string. Grandmaster Id.
<i>gm-class</i>	The type is integer. Grandmaster class.
<i>gm-accuracy</i>	The type is integer. Clock accuracy.
<i>gm-scaled-log-variance</i>	The type is integer. scaled log variance.
<i>gm-priority1</i>	The type is integer. GM Priority1.
<i>gm-priority2</i>	The type is integer. GM Priority2.

# show publickey

## show publickey

Syntax	Description
<code>show</code>	Show public key from certificate.
<code>publickey</code>	public key information.



# show radius-server

```
show radius-server [sorted | {groups [grp-name]}]
```

Syntax	Description
<b>show</b>	Show Information.
<b>radius-server</b>	Radius-server.
<b>sorted</b>	Sorted server list.
<b>groups</b>	Radius server groups.
<i>grp-name</i>	Group Name. The type is string.

# show redundancy status

show redundancy status

Syntax	Description
<b>show</b>	Show running system information.
<b>redundancy</b>	Show system redundancy status.
<b>status</b>	Current redundancy status.

# show route-map

**show route-map** [ *strarg* ]

Syntax	Description
<b>show</b>	Show running system information.
<b>route-map</b>	Route-map information.
<i>strarg</i>	Route-map name (Max Size 100). The type is string.

# show san-port-channel database

show san-port-channel database

Syntax	Description
<b>show</b>	Show running system information.
<b>san-port-channel</b>	Show san-port-channel information.
<b>database</b>	Show san-port-channel database.

# show san-port-channel summary

show san-port-channel summary

Syntax	Description
<b>show</b>	Show running system information.
<b>san-port-channel</b>	Show san-port-channel information.
<b>summary</b>	Show san-port-channel summary.

# show san-port-channel usage

show san-port-channel usage

Syntax	Description
<b>show</b>	Show running system information.
<b>san-port-channel</b>	Show san-port-channel information.
<b>usage</b>	Show san-port-channel usage.

## show service copy info

```
show service copy info [ { group [ gid ] } | { destination [ { ip dip | dipv6 } { vnid dvnid | dvnidhex } ] } ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>service</b>	Display service information.
<b>copy</b>	Display service copy information.
<b>info</b>	Display service copy information.
<b>group</b>	Display group information.
<b>destination</b>	Display destination information.
<b>ip</b>	ip address of destination.
<b>ipv6</b>	ipv6 address of destination.
<b>vnid</b>	vnid address of destination.
<i>gid</i>	group number. The type is integer. The range is from 0 to 65535.
<i>dip</i>	The type is ipaddr. IP address.
<i>dipv6</i>	The type is ipv6. IPv6 address.
<i>dvnid</i>	vnid number. The type is integer.
<i>dvnidhex</i>	vnid number. The type is hex.

## show service redir info

```
show service redir info [ { group [ gid ] } | { destination [ { ip dip | dipv6 } { vnid dvnid | dvnidhex } ] } ]
```

### Syntax Description

<b>show</b>	Show running system information.
<b>service</b>	Display service information.
<b>redir</b>	Display service redirect information.
<b>info</b>	Display service redirect information.
<b>group</b>	Display group information.
<b>destination</b>	Display destination information.
<b>ip</b>	ip address of destination.
<b>vnid</b>	vnid address of destination.
<i>gid</i>	group number. The type is integer. The range is from 0 to 65535.
<i>dip</i>	The type is ipaddr. IP address.
<i>dipv6</i>	The type is ipv6. IPv6 address.
<i>dvnidhex</i>	vnid number. The type is hex.
<i>dvnid</i>	vnid number. The type is integer.



# show snmp

## show snmp

Syntax	Description
<b>show</b>	Show running system information.
<b>snmp</b>	Display SNMP information.

# show snmp community

## show snmp community

Syntax	Description
<b>show</b>	Show running system information.
<b>snmp</b>	Display SNMP information.
<b>community</b>	Display SNMP Community information.

# show snmp context

**show snmp context**

<b>Syntax</b>	<b>Description</b>
<b>show</b>	Show running system information.
<b>snmp</b>	Display SNMP information.
<b>context</b>	Display SNMP Context information.

# show snmp engineID

show snmp engineID

Syntax	Description
<b>show</b>	Show running system information.
<b>snmp</b>	Display SNMP information.
<b>engineID</b>	Show snmp engineID.

# show snmp host

show snmp host

Syntax	Description
<b>show</b>	Show commands.
<b>snmp</b>	Show snmp internal information.
<b>host</b>	show snmp hosts.

# show snmp summary

## show snmp summary

Syntax	Description
<b>show</b>	Show running system information.
<b>snmp</b>	Display SNMP information.
<b>summary</b>	Display SNMP Summary.

# show snmp user

**show snmp user**

Syntax	Description
<b>show</b>	Show running system information.
<b>snmp</b>	Display SNMP information.
<b>user</b>	Display SNMP User information.

# show sprom

**show sprom** { **backplane** | { **module** *arg1* } | { **fan** *arg0* } | { **powersupply** *arg2* } | **sup** | **stby-sup** | **all** }

## Syntax Description

<b>show</b>	Show running system information.
<b>sprom</b>	Show SPROM contents.
<b>all</b>	show all sproms contents.
<b>powersupply</b>	show powersupply sprom contents.
<b>module</b>	show linecard module sprom contents.
<b>fan</b>	show fan module sprom contents.
<b>stby-sup</b>	show stanby supervisor sprom contents.
<b>sup</b>	show supervisor sprom contents.
<b>backplane</b>	show backplane clock module sprom contents.
<i>arg0</i>	please enter the fan number. The type is integer. The range is from 1 to 15.
<i>arg1</i>	please enter the module number. The type is integer. The range is from 1 to 30.
<i>arg2</i>	please enter the powersupply number. The type is integer. The range is from 1 to 10.



# show switchname

show switchname

Syntax	Description
<b>show</b>	Show running system information.
<b>switchname</b>	Show the system's hostname.

# show system error-id

`show system error-id { list | iO }`

## Syntax Description

<b>show</b>	Show running system information.
<b>system</b>	System-related show commands.
<b>error-id</b>	Show description about errors.
<b>list</b>	Show description about all error IDs.
<i>iO</i>	The type is hex. Show description about specific error. The range is from 0x0 to 0xffffffff.

# show system mode

**show system mode**

Syntax	Description
<b>show</b>	Show running system information.
<b>system</b>	System-related commands.
<b>mode</b>	Show system mode.

# show system redundancy status

show system redundancy [ ha ] status

Syntax	Description
<b>show</b>	Show running system information.
<b>system</b>	System-related show commands.
<b>redundancy</b>	Show system redundancy status.
<b>status</b>	Current redundancy status.
<b>ha</b>	Vdc redundancy status.

## show system reset-reason

```
show system reset-reason [ { module arg0 } ]
```

Syntax	Description
<b>show</b>	Show running system information.
<b>system</b>	System-related show commands.
<b>reset-reason</b>	Show last reset reason.
<b>module</b>	Module.
<i>arg0</i>	please enter the module number. The type is integer. The range is from 1 to 30.

# show system reset-reason fex

`show system reset-reason fex fexid`

---

**Syntax Description**

---

<b>show</b>	Show running system information.
<b>system</b>	System-related show commands.
<b>reset-reason</b>	Show last reset reason.
<b>fex</b>	Show fex last reset reason.
<i>fexid</i>	FEX number. The type is integer. The range is from 101 to 199.

---

# show system resources

show system resources

Syntax	Description
<b>show</b>	Show running system information.
<b>system</b>	System-related show commands.
<b>resources</b>	Show system resources.

# show system uptime

**show system uptime**

---

**Syntax Description**

---

**show** Show running system information.

---

**system** System information.

---

**uptime** How long the system has been up.

---



# show tacacs-server

```
show tacacs-server [sorted | {groups [grp-name]}]
```

Syntax	Description
<b>show</b>	Show Information.
<b>tacacs-server</b>	Tacacs-server.
<b>sorted</b>	Sorted server list.
<b>groups</b>	Tacacs server groups.
<i>grp-name</i>	Group Name. The type is string.

# show tech-support analytics brief

## show tech-support analytics brief

Syntax	Description
<b>show</b>	Show running system information.
<b>tech-support</b>	Gather information for trouble shooting.
<b>analytics</b>	Show Policyelem tech-support information.
<b>brief</b>	Brief information.

# show users

**show users**

---

**Syntax Description**

---

**show** Show running system information.

---

**users** Show users logged onto the system and their sessions.

---

# show version

## show version

---

**Syntax Description**

---

**show** Show running system information.

---

**version** Show running firmware version and basic system information.

---

# show version module

**show version module** [*arg0*]

---

**Syntax Description**

---

**show** Show running system information.

---

**version** Show the software version.

---

**module** Module.

---

*arg0* please enter the module number. The type is integer. The range is from 1 to 30.

---

# show vlan

**show vlan [extended]**

Syntax	Description
<b>show</b>	Show running system information.
<b>vlan</b>	VLAN status.
<b>extended</b>	VLAN extended info like encaps.

# show vlan all-ports

**show vlan all-ports**

Syntax	Description
<b>show</b>	Show running system information.
<b>vlan</b>	VLAN status.
<b>all-ports</b>	Show all ports on VLAN.

# show vlan brief

## show vlan brief

Syntax	Description
<b>show</b>	Show running system information.
<b>vlan</b>	VLAN status.
<b>brief</b>	All VLAN status in brief.



# show vlan fcoe

**show vlan fcoe** [ *vlan-id* ]

---

**Syntax Description**

---

**show** Show running system information.

---

**vlan** VLAN status.

---

**fcoe** FCOE Configuration.

---

*vlan-id* VLAN ID 1-3967 or range(s): 1-5, 10 or 2-5,7-19. The type is integer\_mrange. The range is from 1 to 4095.

---

# show vlan id

**show vlan id** *vlan-id* [**extended**]

---

**Syntax Description**

---

**show** Show running system information.

---

**vlan** VLAN status.

---

**id** VLAN status by VLAN id.

---

*vlan-id* VLAN ID 1-3967 or range(s): 1-5, 10 or 2-5,7-19. The type is integer\_mrange. The range is from 1 to 4095.

---

**extended** VLAN extended info like encaps.

---

# show vlan reserved

show vlan reserved [extended]

Syntax	Description
<b>show</b>	Show running system information.
<b>vlan</b>	VLAN status.
<b>reserved</b>	
<b>extended</b>	VLAN extended info like encaps.

# show vlan summary

## show vlan summary

Syntax	Description
<b>show</b>	Show running system information.
<b>vlan</b>	VLAN status.
<b>summary</b>	VLAN summary information.

# show vpc

```
show vpc [ { vpc-number | { brief [ { vpc vpc-number } ] } | { extended [ { vpc vpc-number } ] } ] ]
```

## Syntax Description

<b>show</b>	Show running system information.
<b>vpc</b>	Virtual Port Channel configuration.
<b>brief</b>	Brief display of vPC status.
<b>extended</b>	Extended display of vPC status.
<b>vpc-number</b>	Enter a Virtual Port Channel number. The type is integer. to 4096. The range is from 1

## show vpc consistency-parameters

```
show vpc consistency-parameters { global | { interface if } | { vpc vpc-num } }
```

### Syntax Description

<b>show</b>	Show running system information.
<b>vpc</b>	Virtual Port Channel configuration.
<b>consistency-parameters</b>	Show vPC Consistency Parameters.
<b>global</b>	Global Parameters.
<b>interface</b>	Specify interface.
<i>if</i>	. The type is interface. The values are port-channel.
<i>vpc-num</i>	Enter a Virtual Port Channel number. The type is integer. to 4096. The range is from 1

# show vpc orphan-ports

show vpc orphan-ports

Syntax	Description
<b>show</b>	Show running system information.
<b>vpc</b>	Virtual Port Channel configuration.
<b>orphan-ports</b>	Show vPC orphan ports.

# show vpc peer-keepalive

show vpc peer-keepalive

Syntax	Description
<b>show</b>	Show running system information.
<b>vpc</b>	Virtual Port Channel configuration.
<b>peer-keepalive</b>	vPC keepalive status.



# show vpc role

## show vpc role

Syntax	Description
<b>show</b>	Show running system information.
<b>vpc</b>	Virtual Port Channel configuration.
<b>role</b>	vPC role status.

# show vpc statistics peer-keepalive

show vpc statistics peer-keepalive

Syntax	Description
<b>show</b>	Show running system information.
<b>vpc</b>	Virtual Port Channel configuration.
<b>statistics</b>	Statistics.
<b>peer-keepalive</b>	peer keepalive module related statistics.

# show vpc statistics vpc

`show vpc statistics vpc vpc_num`

Syntax	Description
<b>show</b>	Show running system information.
<b>vpc</b>	Virtual Port Channel configuration.
<b>statistics</b>	Statistics.
<i>vpc_num</i>	Enter a Virtual Port Channel number. The type is integer. to 4096. The range is from 1

# show vrf

**show vrf** [*vrf-name* | **all**] [**detail** [**extended**]] [{**order id**}]

## Syntax Description

<b>show</b>	Show running system information.
<b>vrf</b>	Display VRF information.
<i>vrf-name</i>	VRF name. The type is <i>vrf_name</i> .
<b>all</b>	Display VRF information for all VRFs.
<b>order</b>	Specify ordering.
<b>id</b>	Order by ID.
<b>detail</b>	Display VRF detail information.
<b>extended</b>	Display extended VRF information.

# show vrf interface

**show vrf** [*vrf-name* | **all** ] **interface** [*interface*]

---

**Syntax Description**

---

**show** Show running system information.

---

**vrf** Display VRF information.

---

*vrf-name* VRF name. The type is vrf\_name.

---

**all** Display VRF information for all VRFs.

---

**interface** Display interface VRF information.

---

*interface* Display interface VRF information. The type is interface.

---

# show vsan

**show vsan** [ *vsan-id* ]

---

**Syntax Description**

---

**show** Show running system information.

---

**vsan** Show vsan information.

---

*vsan-id* VSAN is range <1-4078>. The type is integer\_range. The range is from 1 to 4078.

---

# show vsan membership

**show vsan [ *vsan-id* ] membership**

Syntax	Description
<b>show</b>	Show running system information.
<b>vsan</b>	Show vsan information.
<b>membership</b>	Show membership information.
<i>vsan-id</i>	VSAN is range <1-4078>. The type is integer_range. The range is from 1 to 4078.

# show vsan membership interface

**show vsan membership interface** { *arg0* }

---

**Syntax Description**

---

<b>show</b>	Show running system information.
<b>vsan</b>	Show vsan information.
<b>membership</b>	Show membership information.
<b>interface</b>	Show membership information for interface(s).
<i>arg0</i>	Interface. The type is interface. The values are vfc, vfc-port-channel.

---



# show vsan usage

show vsan usage

Syntax	Description
<b>show</b>	Show running system information.
<b>vsan</b>	Show vsan information.
<b>usage</b>	Show vsan usage in the system.

# show zoning-filter

```
show zoning-filter [ { filter id } ]
```

---

**Syntax Description**

---

<b>show</b>	Show running system information.
<b>zoning-filter</b>	Display Zoning-Filter information.
<b>filter</b>	Display Zoning-Filter information using this Filter.
<i>id</i>	Filter ID/string. The type is string.

---

## show zoning-rule +

```
show zoning-rule [ { src-epg epg0 } | { dst-epg epg1 } | { scope scopeId } | { filter filt } ]+
```

Syntax	Description
<b>show</b>	Show running system information.
<b>zoning-rule</b>	Display Zoning-Rule information.
<b>src-epg</b>	Display Source EPG information.
<i>epg0</i>	Source EPG number. The type is integer. The range is from 0 to 65535.
<b>dst-epg</b>	Display Destination EPG information.
<i>epg1</i>	Destination EPG number. The type is integer. The range is from 0 to 65535.
<b>scope</b>	Display Rules for this Scope.
<i>scopeId</i>	Scope ID. The type is integer. The range is from 1 to 16777215.
<b>filter</b>	Display Rules using this Filter.
<i>filt</i>	Filter ID/string. The type is string.





## T Commands

---

- [techsupport local](#), on page 328

# techsupport local

## techsupport local

---

**Syntax Description**

---

**techsupport** Tech Support collection.

---

**local** collect techsupport for this node.

---



## APPENDIX **A**

# Configuring Switch Management

- [Configuring Switch Console Settings, on page 329](#)

## Configuring Switch Console Settings

In the switch command line interface, use the `console_speed_setup.sh` command to locally configure the console settings.



**Note** When you configure the settings from the console, the new settings take effect immediately. When you configure the settings from an SSH session, the new settings take effect upon the next switch reboot.

The following example shows the use of the command. To change a setting, type **y** and follow the prompts. To view the settings without making changes, type **n** to every question.

```
Leaf-1# console_speed_setup.sh

Configure the Baud rate? (yes/no) [y]: n
Configure the Databits? (yes/no) [y]: n
Configure the Parity? (yes/no) [y]: n
Configure the Stop bits? (yes/no) [y]: n
databits_val 3
stopbits_val 0
parity_val 0
These are the new settings
Serial parameters become effective immediately on serial console
For SSH session, the serial parameters will take effect on the next reboot
/isan/Utils/cmsoio -w console 12.3
/bin/stty 115200 cs8 -cstopb

Would you like to proceed? (yes/no) [n]: n
Leaf-1#
```

For the default console settings, including the initial baud rate, refer to the *Hardware Installation Guide* for the switch model.







## APPENDIX **B**

# Using Boot Loader Commands

- [Using Boot Loader Commands, on page 331](#)
- [boot \(loader command\), on page 331](#)
- [cmdline \(loader command\), on page 332](#)
- [set gw \(loader command\), on page 332](#)
- [set ip \(loader command\), on page 333](#)

## Using Boot Loader Commands

When the switch starts up in the boot loader mode, a set of commands is available to set kernel kickstart parameters that may be required during advanced troubleshooting and recovery options. These commands are not used in normal operation.

### boot (loader command)

**boot** *protocol* : // *location*

<b>Syntax Description</b>	<i>protocol</i>	Only tftp is supported.
	<i>location</i>	The server address or hostname and path to the image file to be booted.

**Usage Guidelines** Use this command to download and boot from an image file on a remote TFTP server.

#### Example

This example causes the switch to download and boot from the specified image file on the remote server.

```
loader> boot tftp://192.2.0.123/images/bootimage1
```

## cmdline (loader command)

**cmdline** [**clear\_config**] [**clear\_log**] [**init\_system**] [**no\_hap\_reset**]

### Syntax Description

<b>clear_config</b>	Clears all configuration databases and causes a stateless reload. This option is useful when upgrading the switch from an old and incompatible software image, such as a pre-release image.
<b>clear_log</b>	Completely clears all core files and logs within the switch. This option is useful when the switch fails to boot due to full partitions.
<b>init_system</b>	Securely erases and repartitions the disk.
<b>no_hap_reset</b>	Prevents a switch from continuously reloading due to a process failure. With this option, the switch will not reload after a failure, but will stop with a login prompt to allow troubleshooting.

### Usage Guidelines

One or more options can be appended to the base `cmdline` command, but the entire command must be entered on a single line.

### Example

This example shows the command with one option:

```
Aborting config file read and autoboot
No autoboot or failed autoboot. falling to loader

Loader Version 7.17

loader > cmdline no_hap_reset
loader >
```

This example shows the command with two options:

```
loader > cmdline init_system clear_config
loader >
```

## set gw (loader command)

**set gw** *ipaddress*

### Syntax Description

*ipaddress* The gateway IP address for the switch.

### Usage Guidelines

Use this command to configure the gateway IP address for the switch.

**Example**

```
loader> set gw 192.2.0.1
```

## set ip (loader command)

```
set ip ipaddress mask
```

**Syntax Description**

*ipaddress* The management IP address to be assigned to the switch.

*mask* The subnet mask of the management IP address.

**Usage Guidelines**

Use this command to configure the initial management IP address for the switch.

**Example**

```
loader> set ip 192.2.0.123 255.255.255.0
```

■ set ip (loader command)