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

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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

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

clear	Reset functions.
counters	Clear counters.
interface	Clear interface counters.
all	Clear all interface counters.
type	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

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

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

Syntax Description

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

H Commands

health

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

Syntax Description

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

I Commands

iping

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

Syntax Description

iping	Send ping packets.
-d	Debug mode.
-D	Dump info.
-F	Enables the do-not-fragment bit in the IPv4 header.
-L	Fill in loopback.
-n	Display only numeric info.
-q	Quiet output.
-r	Do not route packets.
-v	Display verbose output.
-V *vrf*	The Virtual Routing and Forwarding (VRF) instance from which to source the ping message.
-c *count*	Number of ping packets that are sent to the destination address. The default is 5.
-i *wait*	The time interval between sending of ping packets.
-p *pattern*	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].
-s *packetsize*	Size of the ping packet (in bytes).
-t *timeout*	Timeout interval. The ping is declared successful only if the ECHO REPLY packet is received before this time interval.
-S *source*	The IP address or host name to show as source.
host	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	
-V *vrf*	The Virtual Routing and Forwarding (VRF) instance from which to source the ping message.
-c *count*	Number of ping packets that are sent to the destination address. The default is 5.
-i *wait*	The time interval between sending of ping packets.
-p *pattern*	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].
-s *packetsize*	Size of the ping packet (in bytes).
-t *timeout*	Timeout interval. The ping is declared successful only if the ECHO REPLY packet is received before this time interval.
-S *source*	The IPv6 address or host name to show as source.
host	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

itraceroute	itraceroute.
fabric	Inside fabric.
payload	payload size.
dst-ip	Enter destination node IP. The type is ipaddr.
pld-size	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

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

itraceroute6 vrf encap vlan

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

Syntax Description

itraceroute6	itraceroute6.
vrf	tenant vrf.
vrf-name	tenant vrf name. The type is string.
dst-ip	Enter destination IPv6. The type is ipv6.
encap	source EP encap type.
vlan	vlan src EP.
payload	payload size.
vlan-encap	Enter Vlan Encap: 1-4095. The type is integer. The range is from 1 to 4095.
pld-size	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

itraceroute6	itraceroute6.
vrf	tenant vrf.
vrf-name	tenant vrf name. The type is string.
dst-ip	Enter destination EP IPv6. The type is ipv6.
dst-mac	Destination EP MAC address.
dst-mac	Enter destination EP MAC address. The type is ethernet.
encap	source EP encap type.
vxlan	vxlan src EP.
payload	payload size.
vxlan-encap	Enter VTEP VxLAN encap: 4096-16777215. The type is integer. The range is from 4096 to 16777215.
pld-size	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

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

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

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

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

R Commands

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

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

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

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

show	Show Information.
aaa	Authentication, Authorization and Accounting Information.
authentication	Authentication.
groups	Groups.

show aaa user default-role

show aaa user default-role

Syntax Description

show	Show Information.
aaa	Authentication, Authorization and Accounting configuration mode.
user	User.
default-role	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

show	Show running system information.
ip	Display IP information.
ipv6	Display IPv6 information.
adjacency	Display adjacency table.
interface	Display specific interface adjacencies only. The type is interface.
summary	Show adjacency summary.
ip-addr	IPV4 source address. The type is ipaddr.
non-best	Show both best/non-best entries.
detail	Show detail information of adjacency entries.
vrf	Display per-VRF information.
vrf-name	VRF name. The type is string.
all	Show adjacency entries for all vrfs.

show bfd clients

show bfd clients

Syntax Description

show	Show running system information.
bfd	BFD commands.
clients	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

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

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

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

show bgp convergence

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

Syntax Description

show	Show running system information.
bgp	Display BGP status and configuration.
convergence	Display BGP status and configuration.
detail	Display detailed information about convergence.
vrf	Virtual Router Context.
vrf-name	The type is string. VRF name.
ALL_VRFS_012345678901234	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

show	Show running system information.
bgp	Show BGP information.
ipv4	Display BGP information for IPv4 address family.
ipv6	Display BGP information for IPv6 address family.
vpnv4	Display BGP information for VPNv4 address family.
vpnv6	Display BGP information for VPNv6 address family.
unicast	Display BGP information for IPv4 unicast address family.
l2vpn	Display BGP information for L2VPN EVPN address family.
evpn	Display BGP information for L2VPN EVPN address family.
all	Display BGP information for all address families.
neighbors	Display BGP neighbor information.
neighbor-id	The type is ipaddr. IPv4 neighbor address.
neighbor-prefix-id	The type is ipprefix. IPv4 prefix neighbor address.
ipv6-neighbor-id	The type is ipv6. IPv6 neighbor address.
ipv6-neighbor-prefix-id	The type is ipv6_prefix. IPv6 prefix neighbor address.
vrf	Show BGP information for a VRF.
ALL_VRFS_012345678901234	all.
vrf-name	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

show	Show running system information.
bgp	Display BGP status and configuration.
vrf	Virtual Router Context.
vrf-name	The type is string. VRF name.
ALL_VRFS_012345678901234	all.
process	BGP global information.
detail	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

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

show bgp vrf

show bgp { { { ipv4 | vpnv4 } unicast [*ip-prefix***]} | { { ipv6 | vpnv6 } 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

show	Show running system information.
bgp	Display BGP status and configuration.
ipv4	Display BGP information for IPv4 address family.
ipv6	Display BGP information for IPv6 address family.
vpnv4	Display BGP information for VPNv4 address family.
vpnv6	Display BGP information for VPNv6 address family.
unicast	Display unicast SAFI information.
l2vpn	Display BGP information for L2VPN EVPN address family.
evpn	Display BGP information for L2VPN EVPN address family.
ip-prefix	The type is ipprefix. IP address.
ipv6-prefix	The type is ipv6_prefix. IPv6 prefix.
ipv4-rt	The type is ipaddr. IP address.
ipv6-rt	The type is ipv6. IPv6 address.
mac-address	The type is ethernet. MAC address.
route-type	EVPN route type number.
rtype	The type is uinteger. EVPN route type number. The range is from 1 to 6.
smad	EVPN SMAD routes.
source	EVPN SMAD route source.
src-v4-addr	The type is ipaddr. IP address.
src-v6-addr	The type is ipv6. IPv6 address.
group	EVPN SMAD route group.
grp-v4-addr	The type is ipaddr. IP address.
grp-v6-addr	The type is ipv6. IPv6 address.
originator	EVPN SMAD route originator.

orig-v4-addr	The type is ipaddr. IP address.
orig-v6-addr	The type is ipv6. IPv6 address.
vrf	Virtual Router Context.
vrf-name	The type is string. VRF name.
ALL_VRFS_012345678901234	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

show	Show running system information.
cdp	Show Cisco Discovery Protocol information.
interface	Show CDP parameters for an interface.
arg0	Interface. The type is interface. The values are ethernet, mgmt.

show cdp neighbors

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

Syntax Description

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

show cdp traffic interface

show cdp traffic interface *arg0*

Syntax Description

show	Show running system information.
cdp	Show Cisco Discovery Protocol information.
traffic	Show cdp traffic statistics.
interface	Show cdp traffic statistics on an interface.
arg0	Interface. The type is interface. The values are ethernet, mgmt.

show clock

show clock

Syntax Description

show	Show running system information.
clock	Display current Date.

show copp policy

show copp policy

Syntax Description

show	Show running system information.
copp	Control Plane Policing (CoPP) information.
policy	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

show	Show running system information.
copyright	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

show	Show running system information.
dcimgr	Show dci-Mgr information.
mem-stats	Show dcimgr memstats.

show dcimgr repo eteps

show dcimgr repo eteps

Syntax Description

show	Show running system information.
dcimgr	Display DCI Mgr information.
repo	Display Object Store info.
eteps	Display Remote site Tunnels endpoints.

show dcimgr repo sclass-maps

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

Syntax Description

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

show dcimgr repo vnid-maps

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

Syntax Description

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

show diagnostic content module

show diagnostic content module { all | *module_id* **}**

Syntax Description

show	Show information.
diagnostic	Diagnostic commands.
content	Show diagnostic test content.
module	Module Keyword.
all	Select all module ID.
module_id	Module ID. The type is string.

show diagnostic result module

show diagnostic result module { all | { *module_id* **[{ test** *test_id* **}] } } [detail]**

Syntax Description

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

show diagnostic status module

show diagnostic status module *module_id*

Syntax Description

show	Show information.
diagnostic	Diagnostic commands.
status	Show test status(running/enqueued).
module	<1-30> Module number.
module_id	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

show	Show running system information.
dpp	Data Plane Policing (DPP) information.
policy	DPP policies.

show eigrp interfaces

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

Syntax Description

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

show eigrp traffic vrf

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

Syntax Description

show	Show running system information.
ip	Display EIGRP information for IPv4 address family.
ipv6	Display EIGRP information for IPv6 address family.
eigrp	Show EIGRP information.
traffic	Display EIGRP traffic Statistics.
vrf	Show EIGRP information for a VRF.
all	Show EIGRP information for all VRFs.
vrf-name	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

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

show environment

show environment [fan | power | temperature]

Syntax Description

show	Show Information.
environment	Environment Information.
fan	Fan Information.
power	Power supply Information.
temperature	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

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

show fcoe

show fcoe [database]

Syntax Description

show	Show running system information.
fcoe	Show FCOE paramaters.
database	Show FCOE database.

show fex

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

Syntax Description

show	Show running system information.
fex	Show FEX information.
detail	Detailed information.
transceiver	Show FEX.
version	Show the software version.
fexid	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

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

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

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

show	Show running system information.
fhs	Show information about SISF.
features	Show SISF feature.
all	all features.
ipinspect-v4	ipv4inpsect.
ipinspect-v6	ipv6inpsect.
raguard	routerguard.
srcguard	sourceguard.
bd-vlan	bridge domain encap.
bd-vnid	bridge domain vnid.
vlan-id	bd vlan. The type is integer. The range is from 1 to 4095.
vnid	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

show	Show running system information.
flow	Show NetFlow information.
exporter	Show NetFlow Exporter Configuration and Statistics.

show flow hw-profile

show flow hw-profile

Syntax Description

show	Show running system information.
flow	Show information about netflow.
hw-profile	Hardware Profile.

show flow interface

show flow interface

Syntax Description

show	Show running system information.
flow	Show NetFlow information.
interface	Flow interface information.

show flow monitor

show flow monitor

Syntax Description

show	Show running system information.
flow	Show NetFlow information.
monitor	Show Monitor Configuration.

show flow record

show flow record

Syntax Description

show	Show running system information.
flow	Show NetFlow information.
record	Show Record Configuration.

show flow timers

show flow timers

Syntax Description

show	Show running system information.
flow	Show NetFlow information.
timers	Show Timer Values.

show flow vlan

show flow vlan

Syntax Description

show	Show running system information.
flow	Show NetFlow information.
vlan	Flow vlan information.

show hardware

show hardware

Syntax Description

show	Show running system information.
hardware	Show hardware information.

show hostname

show hostname

Syntax Description

show	Show running system information.
hostname	Hostname.

show hsrp bfd-sessions

show hsrp bfd-sessions [interface *interface-id* **[to {***addr_v4* | *addr_v6***}]] [ipv4 | ipv6]**

Syntax Description

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

show hsrp delay

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

Syntax Description

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

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

show hsrp summary

show hsrp summary

Syntax Description

show	Show running system information.
hsrp	Hot Standby Router Protocol (HSRP) information.
summary	Show HSRP summary.

show interface

show interface [*arg0* **]**

Syntax Description

show	Show running system information.
interface	Interface.
arg0	Interface. The type is interface_mrange.

show interface brief

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

Syntax Description

show	Show running system information.
interface	Interface.
arg0	Interface. The type is interface_mrange.
brief	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

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

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.
detailed	Show only non-zero counters.
all	Show every interface counter.
snmp	Show SNMP MIB values.

show interface counters errors

show interface *arg0* **counters errors**

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, mgmt.
counters	Show interface counters.
errors	Show interface error counters.

show interface counters errors

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

Syntax Description

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

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.
counters	Show interface counters.
snmp	Show SNMP MIB values.

show interface counters snmp

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

Syntax Description

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

show interface debounce

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

Syntax Description

show	Show running system information.
interface	Show interface status and information.
arg0	Interface. The type is interface_mrange. The values are ethernet.
debounce	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

Syntax Description

show	Show running system information.
interface	Show interface status and information.
fex-fabric	Show all FEX fabric ports.

show interface flowcontrol

show interface *arg0* **flowcontrol**

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.
flowcontrol	Show interface flowcontrol information.

show interface flowcontrol

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

Syntax Description

show	Show running system information.
interface	Show interface status and information.
flowcontrol	Show interface flowcontrol information.
fex	Limit display to interfaces on a FEX.
fex-id	Enter FEX number. The type is integer. The range is from 101 to 164.
module	Limit display to interfaces on module.
mod-id	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

show	Show running system information.
interface	Show interface status and information.
arg0	Ethernet Interface. The type is interface_mrange. The values are ethernet.
priority-flow-control	Show interface PFC information.
details	Show interface PFC detail information.

show interface snmp-ifindex

show interface snmp-ifindex

Syntax Description

show	Show running system information.
interface	Show interface status and information.
snmp-ifindex	Show snmp ifindex list.

show interface status

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

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, loopback, tunnel.
status	Show interface line status.
err-disabled	Show interface error disabled state.
err-vlans	Show errored vlans.

show interface status

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

Syntax Description

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

show interface switchport

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

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.
switchport	Show interface switchport information.

show interface transceiver

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

Syntax Description

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

show interface trunk

show interface *arg0* **trunk**

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.
trunk	Show interface trunk information.

show interface trunk

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

Syntax Description

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

show	Show running system information.
inventory	System inventory information.
module	system inventory module information.
fans	system inventory fan information.
chassis	system inventory chassis information.
power_supply	system inventory power supply information.
arg0	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

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

show ip bgp neighbors vrf

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

Syntax Description

show	Show running system information.
ip	Display BGP information for IPv4 address family.
bgp	Show BGP information.
neighbors	Display all configured BGP neighbors.
arg0	Display one particular BGP neighbor. The type is ipaddr.
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 ip bgp nexthop-database

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

Syntax Description

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

show ip bgp nexthop

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

Syntax Description

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

show ip bgp summary vrf

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

Syntax Description

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

show ip bgp vrf

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

Syntax Description

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

show ip community-list

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

Syntax Description

show	Show running system information.
ip	Display IP information.
community-list	List community-list.
strarg	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

show	Show running system information.
ip	Display IP information.
dhcp	Show items in DHCP.
global	DHCP global stats.
statistics	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

show	Show running system information.
ip	Display IP information.
dhcp	Show items in DHCP.
relay	DHCP Relay.
address	DHCP relay address.
discover	DHCP relay node discovery.
statistics	Statistics related to DHCP.
detail	DHCP relay detailed information.
interface	DHCP relay address of the interface.
intfname	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

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

show ip eigrp vrf

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

Syntax Description

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

show ip extcommunity-list

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

Syntax Description

show	Show running system information.
ip	Display IP information.
extcommunity-list	List extcommunity-list.
strarg	Name of prefix list (Max Size 100). The type is string.

show ip igmp gipo joins

show ip igmp gipo joins

Syntax Description

show	Show running system information.
ip	Display IP information.
igmp	Display IGMP status and configuration.
gipo	Show IGMP gipo information.
joins	Show IGMP gipo Join Summary.

show ip igmp interface

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

Syntax Description

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

show ip igmp snooping

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

Syntax Description

show	Show running system information.
ip	Show IP information.
igmp	Show IGMP information.
snooping	IGMP Snooping information.
vlan	Display Vlan IGMP snooping membership information.
extended	Display Extended Vlan IGMP snooping membership information.
vlan	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

show	Show running system information.
ip	Show IP information.
igmp	Show IGMP information.
snooping	IGMP Snooping information.
explicit-tracking	Display explicit-tracking database for IGMPv3.
vlan	Display Vlan explicit-tracking database.
encap	Display Encap Vlan explicit-tracking database.
extended	Display Extended Vlan explicit-tracking database.
vlan	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

show	Show running system information.
ip	Show IP information.
igmp	Show IGMP information.
snooping	Show IGMP Snooping information.
groups	Display snooping information for group address.
group	Multicast IP address of single group to display. The type is ipaddr.
source	Source IP address. The type is ipaddr.
detail	Display detailed information for the group.
summary	Display snooping group summary.
vlan	Display Vlan IGMP snooping membership information.
encap	Display Encap Vlan IGMP snooping membership information.
extended	Display Extended Vlan IGMP snooping membership information.
vlan	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

show	Show running system information.
ip	Show IP information.
igmp	Show IGMP information.
snooping	IGMP Snooping information.
lookup-mode	IGMP Snooping lkup mode information.
vlan	Display Vlan information.
extended	Display Extended Vlan IGMP snooping lkup mode information.
vlan	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

show	Show running system information.
ip	Show IP information.
igmp	Show IGMP information.
snooping	IGMP Snooping information.
mrouter	Display multicast routers detected.
detail	Display detailed mrouter information.
vlan	Display Vlan multicast router information.
encap	Display Encap Vlan IGMP snooping mrouter information.
extended	Display Extended Vlan IGMP snooping mrouter information.
vlan	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

show	Show running system information.
ip	Show IP information.
igmp	Show IGMP information.
snooping	IGMP Snooping information.
querier	Display snooping querier information.
detail	Display detailed information.
vlan	Display Vlan IGMP snooping querier information.
extended	Display Extended Vlan IGMP snooping Querier information.
vlan	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

show	Show running system information.
ip	Show IP information.
igmp	Show IGMP information.
snooping	IGMP Snooping information.
statistics	Display packet/error counter statistics.
global	Display global statistics.
vlan	Display vlan statistics.
extended	Display Extended Vlan IGMP snooping statistics information.
vlan	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

show	Show running system information.
ip	Display IP information.
igmp	Display IGMP status and configuration.
vrf	Display per-VRF information.
all	Display information for all VRFs.

show ip interface

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

Syntax Description

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

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

show ip msdp count

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

Syntax Description

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

show ip msdp mesh-group

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

Syntax Description

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

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

show ip msdp peer

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

Syntax Description

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

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

show ip msdp rpf

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

Syntax Description

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

show ip msdp sources

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

Syntax Description

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

show ip msdp summary

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

Syntax Description

show	Show running system information.
ip	Show IP information.
msdp	Display MSDP status and configuration.
summary	Display MSDP peer summary.
vrf	Display per-VRF information.
vrf-name	The type is string. VRF name (Max Size 32).
all	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** *advid***} | {adv-router-name** *adv-name***}] [vrf {***vrf-name* **| all}]**

Syntax Description

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

vrf	Display per-VRF information.
vrf-name	The type is string. VRF name.
all	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

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

vrf	Display per-VRF information.
vrf-name	The type is string. VRF name.
all	Display information for all VRFs.

show ip ospf interface

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

Syntax Description

show	Show running system information.
ip	Ipv4.
ospf	Display OSPF status and configuration.
interface	OSPF enabled interface.
arg0	Interface. The type is interface. The values are ethernet, port-channel, vlan, loopback.
brief	Display summary of OSPF interfaces.
vrf	Display per-VRF information.
all	Display information for all VRFs.
vrf-name	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

show	Show running system information.
ip	Ipv4.
ospf	Display OSPF status and configuration.
neighbors	Neighbor list.
ip	Router ID of neighbor. The type is ipaddr.
detail	Show detailed neighbor display.
arg0	Interface. The type is interface. The values are ethernet, port-channel, vlan, loopback.
summary	Summary of neighbors.
vrf	Display per-VRF information.
all	Display information for all VRFs.
vrf-name	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

show	Show running system information.
ip	Ipv4.
ospf	Display OSPF status and configuration.
route	Internal OSPF routes.
ip	Show single OSPF route. The type is ipaddr.
ippfx	Show single exact match OSPF route. The type is ipprefix.
summary	Show route counts.
longer-prefixes	Show exact match and more specific routes.
vrf	Display per-VRF information.
all	Display information for all VRFs.
vrf-name	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

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

show ip ospf traffic

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

Syntax Description

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

show ip ospf vrf

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

Syntax Description

show	Show running system information.
ip	Ipv4.
ospf	Display OSPF status and configuration.
vrf	Display per-VRF information.
all	Display information for all VRFs.
vrf-name	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

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

show ip pim interface

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

Syntax Description

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

show ip pim neighbor

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

Syntax Description

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

show ip pim oif-list

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

Syntax Description

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

show ip pim route

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

Syntax Description

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

show ip pim rp

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

Syntax Description

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

show ip pim statistics

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

Syntax Description

show	Show running system information.
ip	Show IP information.
pim	Display PIM status and configuration.
statistics	Display PIM Statistics per-VRF.
vrf	Display per-VRF information.
vrf-name	The type is string. VRF name (Max Size 32).
all	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

show	Show running system information.
ip	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 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

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

show ip static-route

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

Syntax Description

show	Show running system information.
ip	Display IP information.
static-route	Display configured static routes.
vrf	Display per-VRF information.
all	Display all VRFs.
vrf-name	Name of the VRF. The type is string.

show ipsec sa

show ipsec sa [detail]

Syntax Description

show	Show running system information.
ipsec	Show ipsec retaed information.
sa	Ipsec Security Associations.
detail	Ipsec Security Associations detailed information.

show ipv6 bgp neighbors vrf

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

Syntax Description

show	Show running system information.
ipv6	Display BGP information for IPv6 address family.
bgp	Show BGP information.
neighbors	Display all configured BGP neighbors.
arg0	Display one particular BGP neighbor. The type is ipv6.
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 ipv6 bgp nexthop-database

show ipv6 bgp nexthop-database [{vrf {*vrf-name* | ALL_VRFS_012345678901234}}]

Syntax Description

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

show ipv6 bgp nexthop

show ipv6 bgp nexthop *ipv6nexthop* **[{vrf {***vrf-name* **| ALL_VRFS_012345678901234}}]**

Syntax Description

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

show ipv6 dhcp relay

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

Syntax Description

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

show ipv6 icmp adjacency

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

Syntax Description

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

show ipv6 icmp interface

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

Syntax Description

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

show ipv6 interface

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

Syntax Description

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

show ipv6 mld snooping

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

Syntax Description

show	Show running system information.
ipv6	Show IPv6 information.
mld	Show MLD information.
snooping	MLD Snooping information.
vlan	Display Vlan MLD snooping membership information.
vlan	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

show	Show running system information.
ipv6	Show IPv6 information.
mld	Show MLD information.
snooping	MLD Snooping information.
explicit-tracking	Display explicit-tracking database for MLDv2.
vlan	Display Vlan explicit-tracking database.
encap	Display Encap Vlan explicit-tracking database.
vlan	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

show	Show running system information.
ipv6	Show IPv6 information.
mld	Show MLD information.
snooping	Show MLD Snooping information.
groups	Display snooping information for group address.
group	Multicast IP address of single group to display. The type is ipv6.
source	Source IP address. The type is ipv6.
detail	Display detailed information for the group.
summary	Display snooping group summary.
vlan	Display Vlan MLD snooping membership information.
encap	Display Encap Vlan MLD snooping membership information.
vlan	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

show	Show running system information.
ipv6	Show IPv6 information.
mld	Show MLD information.
snooping	MLD Snooping information.
lookup-mode	MLD Snooping lkup mode information.
vlan	Display Vlan information.
vlan	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

show	Show running system information.
ipv6	Show IPv6 information.
mld	Show MLD information.
snooping	MLD Snooping information.
mrouter	Display multicast routers detected.
detail	Display detailed mrouter information.
vlan	Display Vlan multicast router information.
encap	Display Encap Vlan MLD snooping membership information.
vlan	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

show	Show running system information.
ipv6	Show IPv6 information.
mld	Show MLD information.
snooping	MLD Snooping information.
querier	Display snooping querier information.
detail	Display detailed information.
vlan	Display Vlan MLD snooping querier information.
vlan	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

show	Show running system information.
ipv6	Show IPv6 information.
mld	Show MLD information.
snooping	MLD Snooping information.
statistics	Display packet/error counter statistics.
global	Display global statistics.
vlan	Display vlan statistics.
vlan	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

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

show ipv6 prefix-list

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

Syntax Description

show	Show running system information.
ipv6	Display IPv6 information.
prefix-list	List IPv6 prefix lists.
strarg	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

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

show ipv6 static-route

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

Syntax Description

show	Show running system information.
ipv6	Display IP information.
static-route	Display configured static routes.
vrf	Display per-VRF information.
all	Display all VRFs.
vrf-name	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

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

show isis database vrf

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

Syntax Description

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

show isis dteps vrf

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

Syntax Description

show	Show running system information.
isis	Display IS-IS status and configuration.
dteps	ISIS Dynamic Tunnel EndPoint database.
vrf	VRF name.
all	Display information for all VRFs.
vrf-name	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

show	Show running system information.
isis	Display IS-IS status and configuration.
interface	Display IS-IS interface information.
level-1	Display Level-1 interfaces.
brief	Brief display of IS-IS interfaces.
intf_arg	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 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

show	Show running system information.
isis	Display IS-IS status and configuration.
route	Display IS-IS route information.
vrf	VRF name.
all	Display information for all VRFs.
vrf-name	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

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

show lacp interface

show lacp interface *arg0*

Syntax Description

show	Show running system information.
lacp	LACP protocol.
interface	Specify an interface.
arg0	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

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

show lacp system-identifier

show lacp system-identifier

Syntax Description

show	Show running system information.
lacp	LACP protocol.
system-identifier	Show system-identifier information.

show lldp dcbx interface

show lldp dcbx interface *if0*

Syntax Description

show	Show running system information.
lldp	Show information about lldp.
dcbx	Show dcbx information.
interface	show lldp interface information.
if0	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

show	Show running system information.
lldp	Show information about lldp.
interface	Show lldp interface information.
arg0	Interface. The type is interface. The values are ethernet, mgmt.

show lldp neighbors

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

Syntax Description

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

show lldp timers

show lldp timers

Syntax Description

show	Show running system information.
lldp	Show information about lldp.
timers	Show lldp timers.

show lldp tlv-select

show lldp tlv-select

Syntax Description

show	Show running system information.
lldp	Show information about lldp.
tlv-select	Show lldp tlv-select.

show lldp traffic

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

Syntax Description

show	Show running system information.
lldp	Show information about lldp.
traffic	Show lldp counters.
interface	Show lldp interface information.
arg0	Interface. The type is interface. The values are ethernet, mgmt.

show locator-led status

show locator-led status

Syntax Description

show	Show running system information.
locator-led	Blink locator led on device.
status	Status.

show logging ip access-list cache

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

Syntax Description

show	Show running system information.
logging	Logging information.
ip	IP configuration.
access-list	Access-list.
cache	show entries in ACLLOG cache.
permit	action is permit.
deny	action is deny.

show logging ip access-list drop-codes

show logging ip access-list drop-codes

Syntax Description

show	Show running system information.
logging	Logging information.
ip	IP configuration.
access-list	Access-list.
drop-codes	Drop Codes.

show logging ip access-list span

show logging ip access-list span

Syntax Description

show	Show running system information.
logging	Logging information.
ip	IP configuration.
access-list	Access-list.
span	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

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

show macsec mka session

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

Syntax Description

show	Show running system information.
macsec	Show MACSEC information.
mka	Show MACSEC mka information.
session	Show MACSEC mka session information.
details	Show MACSEC mka session details.
interface	Show MACSEC mka session information for interface.
ethernet	Show MACSEC mka session information for ethernet interface.
interface	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

show	Show running system information.
macsec	Show MACSEC information.
mka	Show MACSEC mka information.
summary	Show MACSEC mka summary information.
session	Show MACSEC mka session information.
details	Show MACSEC mka session details.
interface	Show MACSEC mka session information for interface.
ethernet	Show MACSEC mka session information for ethernet interface.
interface	Name of the Interface. The type is string.

show macsec secy statistics

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

Syntax Description

show	Show running system information.
macsec	Show MACSEC information.
secy	Show MACSEC secy information.
statistics	Show MACSEC secy statistics information.
interface	Show MACSEC secy statistics information for interface.
ethernet	Show MACSEC secy statistics information for ethernet interface.
interface	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

show	Show running system information.
monitor	Show SPAN information.

show monitor session

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

Syntax Description

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

show npv external-interface-usage

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

Syntax Description

show	Show running system information.
npv	Show Npv information.
external-interface-usage	Show external interface usage by server interfaces.
server-interface	Show external interface usage by a server interface.
arg0	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

show	Show running system information.
npv	Show Npv information.
flogi-table	Show information about FLOGI sessions.
vsan	Show information about FLOGI sessions for a VSAN.
vsan-id	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

show	Show running system information.
npv	Show Npv information.
flogi-table	Show information about FLOGI sessions.
interface	Show information about FLOGI sessions for a server interface.
arg0	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

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

show ntp authentication-keys

show ntp authentication-keys

Syntax Description

show	Show running system information.
ntp	Show NTP information.
authentication-keys	Display authentication keys.

show ntp authentication-status

show ntp authentication-status

Syntax Description

show	Show running system information.
ntp	Show NTP information.
authentication-status	NTP Authentication Status.

show ntp peer-status

show ntp peer-status

Syntax Description

show	Show running system information.
ntp	Show NTP information.
peer-status	Show the status for all the server/peers.

show ntp peers

show ntp peers

Syntax Description

show	Show running system information.
ntp	Show NTP information.
peers	Show all the peers..

show ntp statistics peer ipaddr

show ntp statistics peer ipaddr *arg0*

Syntax Description

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

show ntp trusted-keys

show ntp trusted-keys

Syntax Description

show	Show running system information.
ntp	Show NTP information.
trusted-keys	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** *advid***} | {adv-router-name** *adv-name***}]] [{vrf {***vrf-name* **| all}}]**

Syntax Description

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

advid	The type is ipaddr. Advertising router ID.
adv-router-name	Restrict display by Advertising router name.
adv-name	The type is string. DNS Name of the Advertising router.
vrf	Display per-VRF information.
vrf-name	The type is string. VRF name.
all	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

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

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

show ospfv3 interface

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

Syntax Description

show	Show running system information.
ipv6	Display IPv6 information.
ospfv3	Display OSPFv3 status and configuration.
interface	OSPFv3 enabled interface.
arg0	Interface. The type is interface. The values are ethernet, port-channel, vlan, loopback.
brief	Display summary of OSPFv3 interfaces.
vrf	Display per-VRF information.
all	Display information for all VRFs.
vrf-name	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

show	Show running system information.
ipv6	Display IPv6 information.
ospfv3	Display OSPFv3 status and configuration.
neighbors	Neighbor list.
ip	Router ID of neighbor. The type is ipaddr.
detail	Show detailed neighbor display.
arg0	Interface. The type is interface. The values are ethernet, port-channel, vlan, loopback.
summary	Summary of neighbors.
vrf	Display per-VRF information.
all	Display information for all VRFs.
vrf-name	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

show	Show running system information.
ipv6	Display IPv6 information.
ospfv3	Display OSPFv3 status and configuration.
route	Internal OSPFv3 routes.
ipv6-addr	Show single OSPFv3 route. The type is ipv6.
ipv6-prefix	Show single exact match OSPFv3 route. The type is ipv6_prefix.
summary	Show route counts.
longer-prefixes	Show exact match and more specific routes.
vrf	Display per-VRF information.
all	Display information for all VRFs.
vrf-name	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

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

show ospfv3 traffic

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

Syntax Description

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

show ospfv3 vrf

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

Syntax Description

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

show port-channel capacity

show port-channel capacity

Syntax Description

show	Show running system information.
port-channel	Show port-channel information.
capacity	Capacity information.

show port-channel database

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

Syntax Description

show	Show running system information.
port-channel	Show port-channel information.
database	Show port-channel database.
interface	Specify a port-channel.
if0	. The type is interface_mrange. The values are port-channel.

show port-channel extended

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

Syntax Description

show	Show running system information.
port-channel	Show port-channel information.
extended	Show port-channel extended.
interface	Specify a port-channel.
if0	. The type is interface. The values are port-channel.

show port-channel summary

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

Syntax Description

show	Show running system information.
port-channel	Show port-channel information.
summary	Show port-channel summary.
interface	Specify a port-channel.
if0	. The type is interface. The values are port-channel.

show port-channel traffic

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

Syntax Description

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

show port-channel usage

show port-channel usage

Syntax Description

show	Show running system information.
port-channel	Show port-channel information.
usage	Show port-channel number usage.

show porttrack

show porttrack

Syntax Description

show	Show running system information.
porttrack	Port Tracking.

show processes

show processes

Syntax Description

show	Show running system information.
processes	Show processes.

show processes cpu

show processes cpu

Syntax Description

show	Show running system information.
processes	Show processes.
cpu	Show processes CPU Info.

show processes cpu sort

show processes cpu sort

Syntax Description

show	Show running system information.
processes	Show processes.
cpu	Show processes CPU Info.
sort	Show processes CPU Info (Sorted by Cpu Util).

show processes memory

show processes memory

Syntax Description

show	Show running system information.
processes	Show processes.
memory	Show processes Memory Info.

show ptp brief

show ptp brief

Syntax Description

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

show ptp clock

show ptp clock

Syntax Description

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

show ptp clock foreign-masters record

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

Syntax Description

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

show ptp corrections

show ptp corrections

Syntax Description

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

show ptp counters

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

Syntax Description

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

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

show ptp parent

show ptp parent

Syntax Description

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

show publickey

show publickey

Syntax Description

show	Show public key from certificate.
publickey	public key information.

show radius-server

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

Syntax Description

show	Show Information.
radius-server	Radius-server.
sorted	Sorted server list.
groups	Radius server groups.
grp-name	Group Name. The type is string.

show redundancy status

show redundancy status

Syntax Description

show	Show running system information.
redundancy	Show system redundancy status.
status	Current redundancy status.

show route-map

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

Syntax Description

show	Show running system information.
route-map	Route-map information.
strarg	Route-map name (Max Size 100). The type is string.

show san-port-channel database

show san-port-channel database

Syntax Description

show	Show running system information.
san-port-channel	Show san-port-channel information.
database	Show san-port-channel database.

show san-port-channel summary

show san-port-channel summary

Syntax Description

show	Show running system information.
san-port-channel	Show san-port-channel information.
summary	Show san-port-channel summary.

show san-port-channel usage

show san-port-channel usage

Syntax Description

show	Show running system information.
san-port-channel	Show san-port-channel information.
usage	Show san-port-channel usage.

show service copy info

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

Syntax Description

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

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

show snmp

show snmp

Syntax Description

show	Show running system information.
snmp	Display SNMP information.

show snmp community

show snmp community

Syntax Description

show	Show running system information.
snmp	Display SNMP information.
community	Display SNMP Community information.

show snmp context

show snmp context

Syntax Description

show	Show running system information.
snmp	Display SNMP information.
context	Display SNMP Context information.

show snmp engineID

show snmp engineID

Syntax Description

show	Show running system information.
snmp	Display SNMP information.
engineID	Show snmp engineID.

show snmp host

show snmp host

Syntax Description

show	Show commands.
snmp	Show snmp internal information.
host	show snmp hosts.

show snmp summary

show snmp summary

Syntax Description

show	Show running system information.
snmp	Display SNMP information.
summary	Display SNMP Summary.

show snmp user

show snmp user

Syntax Description

show	Show running system information.
snmp	Display SNMP information.
user	Display SNMP User information.

show sprom

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

Syntax Description

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

show switchname

show switchname

Syntax Description

show	Show running system information.
switchname	Show the system's hostname.

show system error-id

show system error-id { list | *i0* **}**

Syntax Description

show	Show running system information.
system	System-related show commands.
error-id	Show description about errors.
list	Show description about all error IDs.
i0	The type is hex. Show description about specific error. The range is from 0x0 to 0xffffffff.

show system mode

show system mode

Syntax Description

show	Show running system information.
system	System-related commands.
mode	Show system mode.

show system redundancy status

show system redundancy [ha] status

Syntax Description

show	Show running system information.
system	System-related show commands.
redundancy	Show system redundancy status.
status	Current redundancy status.
ha	Vdc redundancy status.

show system reset-reason

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

Syntax Description

show	Show running system information.
system	System-related show commands.
reset-reason	Show last reset reason.
module	Module.
arg0	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

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

show system resources

show system resources

Syntax Description

show	Show running system information.
system	System-related show commands.
resources	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

show	Show Information.
tacacs-server	Tacacs-server.
sorted	Sorted server list.
groups	Tacacs server groups.
grp-name	Group Name. The type is string.

show tech-support analytics brief

show tech-support analytics brief

Syntax Description

show	Show running system information.
tech-support	Gather information for trouble shooting.
analytics	Show Policyelem tech-support information.
brief	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

show	Show running system information.
vlan	VLAN status.
extended	VLAN extended info like encaps.

show vlan all-ports

show vlan all-ports

Syntax Description

show	Show running system information.
vlan	VLAN status.
all-ports	Show all ports on VLAN.

show vlan brief

show vlan brief

Syntax Description

show	Show running system information.
vlan	VLAN status.
brief	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

show	Show running system information.
vlan	VLAN status.
reserved	
extended	VLAN extended info like encaps.

show vlan summary

show vlan summary

Syntax Description

show	Show running system information.
vlan	VLAN status.
summary	VLAN summary information.

show vpc

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

Syntax Description

show	Show running system information.
vpc	Virtual Port Channel configuration.
brief	Brief display of vPC status.
extended	Extended display of vPC status.
vpc-number	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

show	Show running system information.
vpc	Virtual Port Channel configuration.
consistency-parameters	Show vPC Consistency Parameters.
global	Global Parameters.
interface	Specify interface.
if	. The type is interface. The values are port-channel.
vpc-num	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

show	Show running system information.
vpc	Virtual Port Channel configuration.
orphan-ports	Show vPC orphan ports.

show vpc peer-keepalive

show vpc peer-keepalive

Syntax Description

show	Show running system information.
vpc	Virtual Port Channel configuration.
peer-keepalive	vPC keepalive status.

show vpc role

show vpc role

Syntax Description

show	Show running system information.
vpc	Virtual Port Channel configuration.
role	vPC role status.

show vpc statistics peer-keepalive

show vpc statistics peer-keepalive

Syntax Description

show	Show running system information.
vpc	Virtual Port Channel configuration.
statistics	Statistics.
peer-keepalive	peer keepalive module related statistics.

show vpc statistics vpc

show vpc statistics vpc *vpc_num*

Syntax Description

show	Show running system information.
vpc	Virtual Port Channel configuration.
statistics	Statistics.
vpc_num	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

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.
order	Specify ordering.
id	Order by ID.
detail	Display VRF detail information.
extended	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

show	Show running system information.
vsan	Show vsan information.
membership	Show membership information.
vsan-id	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

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

show vsan usage

show vsan usage

Syntax Description

show	Show running system information.
vsan	Show vsan information.
usage	Show vsan usage in the system.

show zoning-filter

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

Syntax Description

show	Show running system information.
zoning-filter	Display Zoning-Filter information.
filter	Display Zoning-Filter information using this Filter.
id	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

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

T Commands

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

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/cmosio -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

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*

Syntax Description

protocol	Only tftp is supported.
location	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

clear_config	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.
clear_log	Completely clears all core files and logs within the switch. This option is useful when the switch fails to boot due to full partitions.
init_system	Securely erases and repartitions the disk.
no_hap_reset	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
```