Show Commands

This chapter describes the Cisco NX-OS unicast Routing Information Base (RIB) and the Forwarding Information Base (FIB) **show** commands.

show forwarding

To display forwarding information, use the **show forwarding** command.

show forwarding [**ip** | **ipv4**] {**adjacency** | **interfaces** | **route** | **trace** [**clear**] | **table** *id* | **pss** | **route**} [**ethernet** | **port-channel** | **vlan** *slot*] [**vrf** *vrf-name*]

Syntax Description

ip	(Optional) Displays the IPv4 forwarding information.
ipv4	(Optional) Displays the IPv4 forwarding information.
adjacency	Displays the adjacency information.
interfaces	Displays the forwarding information for interfaces on a module.
route	Displays the forwarding information for routes on a module.
trace	Displays the forwarding trace buffer on a module.
clear	(Optional) Clears the forwarding trace buffer on a module.
table *id*	Displays the forwarding information for a route table. The *id* range is from 0 to 2147483647.
pss	Displays route information from persistent storage.
route	Displays route information from the IP routing table.
ethernet *slot*	(Optional) Displays information for the ethernet. The slot range depends on the hardware platform.
port-channel *slot*	(Optional) Displays information for the port-channel. The slot range depends on the hardware platform.
vlan	(Optional) Displays information for the vlan. The slot range depends on the hardware platform.
vrf *vrf-name*	(Optional) Specifies the name of the virtual routing and forwarding (VRF) instance. The *vrf-name* argument can be specified as any case-sensitive, alphanumeric string up to 32 characters. The strings “default” and “all” are reserved VRF names.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

Use the **show forwarding** command on the supervisor to view forwarding information on a module. Optionally, you can use the **attach module** command to attach to a module and use the **show forwarding** command on the module.

Examples

This example shows how to display forwarding information for module 2:

```
switch# show forwarding route ethernet 2
```

Related Commands

Command	Description
show ip fib	Displays information about the FIB.

show forwarding distribution

To display forwarding distribution information, use the **show forwarding distribution** command.

show forwarding distribution [**clients** | **fib-state**]

Syntax Description

clients	(Optional) Displays the forwarding distribution information for unicast clients.
fib-state	(Optional) Displays the forwarding distribution state for unicast Forwarding Information Base (FIB).

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the forwarding information for unicast clients:

```
switch# show forwarding distribution clients
```

Related Commands

Command	Description
show ip fib distribution	Displays distribution information about the FIB.

show forwarding distribution multicast

To display information about multicast Forwarding Information Base (FIB) distribution messages, use the **show forwarding distribution multicast** command.

show forwarding distribution multicast [**messages**]

Syntax Description

messages	(Optional) Displays message information.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display information about multicast distribution messages:

```
switch(config)# show forwarding distribution multicast
Number of Multicast FIB Processes Active: 1
Slot     FIB State
   1        ACTIVE
switch#
```

show forwarding distribution multicast client

To display information about the multicast Forwarding Information Base (FIB) distribution client, use the **show forwarding distribution multicast client** command.

show forwarding distribution multicast client

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display information about the multicast FIB distribution client:

```
switch# show forwarding distribution multicast client
Client-name  Client-id  Shared Memory Name
mrib         1          mrib-mfdm
switch#
```

show forwarding distribution multicast outgoing-interface-list

To display information about the multicast Forwarding Information Base (FIB) outgoing interface (OIF) list, use the **show forwarding distribution multicast outgoing-interface-list** command.

show forwarding distribution multicast outgoing-interface-list {**L2** | **L3**} [*index*]

Syntax Description

L2	Specifies the Layer 2 OIF list.
L3	Specifies the Layer 3 OIF list.
index	(Optional) OIF list index.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display information about the multicast OIF list for Layer 3:

```
switch# show forwarding distribution multicast outgoing-interface-list L3
```

show forwarding distribution multicast route

To display information about the multicast Forwarding Information Base (FIB) distribution routes, use the **show forwarding distribution multicast route** command.

show forwarding distribution [**ip** | **ipv4**] **multicast route** [**table** *id* | **vrf** *vrf_name*] [[**group** {*group-addr* [*mask*] | *group-prefix*}] [**source** {*source-addr* [*source-mask*] | *source-prefix*}] | **summary**]

Syntax Description

ip	(Optional) Specifies IPV4 information.
ipv4	(Optional) Specifies IPV4 information.
table *id*	(Optional) Specifies the multicast routing table ID. The range is from 0 to 2147483647.
vrf *vrf_name*	(Optional) Specifies a virtual routing and forwarding (VRF) name. The name can be a maximum of 32 alphanumeric characters.
group	(Optional) Specifies an IPv4 multicast group.
group-addr	IPv4 multicast group address.
mask	(Optional) Mask for the group address.
group-prefix	(Optional) IPv4 multicast group prefix.
source	(Optional) Specifies an IPv4 multicast source.
source-addr	IPv4 source address.
source-mask	(Optional) Mask for the group address.
source-prefix	(Optional) IPv4 multicast source prefix.
summary	(Optional) Displays the route counts.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display information about all the multicast FIB distribution routes:

```
switch(config)# show forwarding distribution multicast route
IPv4 Multicast Routing Table for table-id: 1
Total number of groups: 5
Legend:
   C = Control Route
```

```
   D = Drop Route
   G = Local Group (directly connected receivers)
   O = Drop on RPF Fail
   P = Punt to supervisor
   d = Decap Route

  (*, 224.0.0.0/4), RPF Interface: NULL, flags: D
    Received Packets: 0 Bytes: 0
    Number of Outgoing Interfaces: 0
    Null Outgoing Interface List

  (*, 224.0.0.0/24), RPF Interface: NULL, flags: CP
    Received Packets: 0 Bytes: 0
    Number of Outgoing Interfaces: 0
    Null Outgoing Interface List

  (*, 224.0.1.39/32), RPF Interface: NULL, flags: CP
    Received Packets: 0 Bytes: 0
    Number of Outgoing Interfaces: 0
    Null Outgoing Interface List

  (*, 224.0.1.40/32), RPF Interface: NULL, flags: CP
    Received Packets: 0 Bytes: 0
    Number of Outgoing Interfaces: 0
    Null Outgoing Interface List

  (*, 232.0.0.0/8), RPF Interface: NULL, flags: D
    Received Packets: 0 Bytes: 0
    Number of Outgoing Interfaces: 0
    Null Outgoing Interface List
switch#
```

show forwarding inconsistency

To display the results of the forwarding inconsistency checker, use the **show forwarding inconsistency** command.

show forwarding inconsistency [**ip** | **ipv4**] [**unicast**] **module** *slot* [**vrf** *vrf-name*]

Syntax Description

ip	(Optional) Displays the IPv4 forwarding inconsistency information.
ipv4	(Optional) Displays the IPv4 forwarding inconsistency information.
unicast	(Optional) Displays the forwarding inconsistency information for unicast routes
module *slot*	Displays inconsistency information for the module. The slot range depends on the hardware platform.
vrf *vrf-name*	(Optional) Displays inconsistency information for the virtual routing and forwarding (VRF) instance. The *vrf-name* argument can be specified as any case-sensitive, alphanumeric string up to 32 characters. The strings “default” and “all” are reserved VRF names.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

Use the **show forwarding inconsistency** command to display the results of the **test forwarding inconsistency** command.

Examples

This example shows how to display the forwarding inconsistency information for module 2:

```
switch# show forwarding inconsistency module 2
```

Related Commands

Command	Description
clear forwarding inconsistency	Clears the forwarding inconsistency checker.
test forwarding inconsistency	Triggers the forwarding inconsistency checker.

show forwarding multicast outgoing-interface-list

To display information about the multicast Forwarding Information Base (FIB) outgoing interface (OIF) list, use the **show forwarding multicast outgoing-interface-list** command.

show forwarding multicast outgoing-interface-list [*index*]

Syntax Description

index	(Optional) OIF list index. The OIF list index is from 1 to 65535.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display information about the multicast FIB OIF list:

```
switch# show forwarding multicast outgoing-interface-list

  Outgoing Interface List Index: 1
  Reference Count: 1
    Ethernet1/5
switch#
```

Related Commands

Command	Description
clear ip igmp interface statistics	Clears the IGMP statistics for an interface.
ip igmp static-oif	Binds a multicast group to the outgoing interface (OIF).

show forwarding multicast route

To display information about the IPv4 Forwarding Information Base (FIB) multicast routes, use the **show forwarding multicast route** command.

show forwarding [**vrf** {*vrf-name* | **all**}] [**ip** | **ipv4**] **multicast route** {[**group** {*group-addr* [*group-mask*] | *group-prefix*} | **source** {*source-addr* [*source-mask*] | *source-prefix*} | **module** *num* | **vrf** {*vrf-name* | **all**}] | **summary** [**vrf** {*vrf-name* | **all**}]}

Syntax Description

vrf	(Optional) Displays information for a specified virtual routing and forwarding (VRF) instance.
vrf-name	VRF name. The name can be a maximum of 32 alphanumeric characters and is case sensitive.
all	Displays information for all VRFs.
ip	(Optional) Specifies IPv4.
ipv4	(Optional) Specifies IPv4.
group	(Optional) Specifies an IPv4 multicast group address.
group-addr	IPv4 multicast group address.
group-mask	(Optional) IPv4 multicast group address mask.
group-prefix	(Optional) IPv4 multicast group prefix.
source	(Optional) Specifies an IPv4 multicast source address.
source-addr	IPv4 multicast source address.
source-mask	IPv4 multicast source address mask.
source-prefix	IPv4 multicast source prefix.
summary	Displays route counts.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display information about the IPv4 multicast FIB routes:

```
switch# show forwarding multicast route

IPv4 Multicast Routing table table-id:1
Total number of groups: 1
```

```
Legend:
   C = Control Route
   D = Drop Route
   G = Local Group (directly connected receivers)
   O = Drop on RPF failure
   P = Punt to Supervisor
   W = Wildcard
   d = OTV Decap route

  (*, 230.0.0.0/32), RPF Interface: NULL, flags: DG
    Received Packets: 0 Bytes: 0
    Number of Outgoing Interfaces: 1
    Outgoing Interface List Index: 1
      Ethernet1/5 Outgoing Packets:0 Bytes:0
switch#
```

This example shows how to display the summary information about the IPv4 multicast FIB routes:

```
switch# show forwarding multicast route summary

IPv4 Multicast Routing Table for Context "default"
Total number of routes: 1
Total number of (*,G) routes: 1
Total number of (S,G) routes: 0
Total number of (*,G-prefix) routes: 0
Group count: 1
Prefix insert fail count: 9
switch#
```

Related Commands

Command	Description
clear ip mroute	Clears the multicast routing table.

show ip adjacency

To display adjacency information, use the **show ip adjacency** command.

show ip adjacency [*ip-addr* | *interface*] [**detail**] [**non-best**] [**statistics**] [**summary**] [**vrf** *vrf-name* | **all** | **default** | **management**]

Syntax Description

ip-addr	(Optional) IPv4 source address. The format is x.x.x.x.
interface	(Optional) Interface. Use *?* to determine the supported interface types.
detail	(Optional) Displays detailed adjacency information.
non-best	(Optional) Displays both the best and nonbest adjacency information.
statistics	(Optional) Displays adjacency statistics.
summary	(Optional) Displays a summary of the adjacency information.
vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.
all	(Optional) Displays adjacency statistics for all VRF entries.
default	(Optional) Displays adjacency statistics for the default VRF.
management	(Optional) Displays adjacency statistics for the management VRF.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

The counter values in the output of **show ip adjacency** {**statistics** | **detail**} command are cleared after a supervisor module switchover.

Examples

This example shows how to display a summary of the adjacency information:

```
switch# show ip adjacency summary

IP Adjacency Table for VRF default
Total number of entries: 1
Address         MAC Address     Pref Source     Interface
2.2.2.100       000a.000a.000a  1    Static     Ethernet1/2
switch#
```

Related Commands

Command	Description
show forwarding adjacency	Displays forwarding adjacency information.

show ip adjacency summary

To display the IP adjacency summary, use the **show ip adjacency summary** command.

show ip adjacency summary

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to display the IP adjacency summary:

```
switch# show ip adjacency summary
I
IP AM Table - Adjacency Summary

  Static  : 1
  Dynamic : 0
  Others  : 0
  Total   : 1

switch#
```

Related Commands

Command	Description
ip arp timeout	Configures ARP.

show ip fib

To display forwarding information, use the **show ip fib** command.

show ip fib {**adjacency** | **interfaces** | **route**} **module** *slot*

Syntax Description

adjacency	Displays the adjacency information.
interfaces	Displays the forwarding information for interfaces on a module.
route	Displays the forwarding information for routes on a module.
module *slot*	Displays information for the module. The slot range depends on the hardware platform.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

Use the **show ip fib** command on the supervisor to view forwarding information on a module. Optionally, you can use the **attach module** command to attach to a module and use the **show ip fib** command on the module.

Examples

This example shows how to display the forwarding information for module 1:

```
switch# show ip fib route module 1

IPv4 routes for table default/base

------------------+------------------+----------------------
Prefix            | Next-hop         | Interface
------------------+------------------+----------------------
0.0.0.0/32          Drop               Null0
255.255.255.255/32  Receive            sup-eth1
switch#
```

Related Commands

Command	Description
show forwarding	Displays information about the FIB.

show ip fib distribution

To display forwarding distribution information, use the **show ip fib distribution** command.

show ip fib distribution [**clients** | **state**]

Syntax Description

clients	(Optional) Displays the forwarding distribution information for unicast clients.
state	(Optional) Displays the forwarding distribution state for unicast FIB.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the forwarding information for unicast clients:

```
switch# show ip fib distribution clients
```

Related Commands

Command	Description
show forwarding distribution	Displays distribution information about the FIB.

show ip load-sharing

To display IP load sharing information, use the **show ip load-sharing** command.

show ip load-sharing

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the IP load sharing information:

```
switch# show ip load-sharing
```

Related Commands

Command	Description
show ip load-sharing	Displays IP load sharing.

show ip process

To display formation about the IP process, use the **show ip process** command.

show ip process [**vrf** *vrf-name*]

Syntax Description

vrf *vrf-name*	(Optional) Specifies the name of the virtual routing and forwarding (VRF) instance. The *vrf-name* argument can be specified as any case-sensitive, alphanumeric string up to 32 characters. The strings “default” and “all” are reserved VRF names.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Examples

This example shows details about the IP process:

```
switch(config)# show ip process
VRF default
  VRF id is 1
  Base table id is 1
  Auto discard is disabled
  Auto discard is not added
  Auto Null broadcast is configured
  Auto Punt broadcast is configured
  Static discard is not configured
  Number of static default route configured is 0
  Number of ip unreachable configured is 0
  Iodlist: 73 74
  Local address list:  1.1.1.1          2.2.2.1          21.1.1.1
switch(config)#
```

show ip route

To display routes from the unicast Routing Information Base (RIB), use the **show ip route** command.

show ip route [**all** | *addr* | *hostname* | *prefix* | *route-type* | **interface** *type number* | **next-hop** *addr*]] [**vrf** *vrf-name*]

Syntax Description

all	(Optional) Displays all routes.
addr	(Optional) IPv4 address. The format is x.x.x.x.
hostname	Hostname. The *name* can be any case-sensitive, alphanumeric string up to 80 characters.
prefix	(Optional) IPv4 prefix. The format is x.x.x.x/length. The length range is from 1 to 32.
route-type	(Optional) Type of route. Use **?** to see the list of types.
interface *type number*	(Optional) Displays the routes for an interface. Use **?** to see the supported interfaces.
next-hop *addr*	(Optional) Displays routes with this next-hop address. The format is x.x.x.x.
vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the route table:

```
switch(config)# show ip route all
```

Related Commands

Command	Description
clear ip route	Clears entries in the route table.

show ip static-route

To display static routes from the unicast Routing Information Base (RIB), use the **show ip static-route** command.

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

Syntax Description

vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.
all	(Optional) Specifies all virtual router contexts (VRF) name.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the static routes:

```
switch(config)# show ip static-route
```

Related Commands

Command	Description
ip route	Configures a static route.

show routing

To display routing information, use the **show routing** command.

show routing [**ip** | **ipv4**] [*address* | *hostname* | *prefix* | *route-type* | **clients** | **hidden-nh interface** *type number* | **next-hop** *addr* | **recursive-next-hop** [*addr*]] [**vrf** *vrf-name*]

Syntax Description

ip	(Optional) Displays the routing information for the network.
ipv4	(Optional) Displays the routing information for the IPv4 network.
address	(Optional) IPv4 address. IPv4 address format is x.x.x.x.
hostname	Hostname. The *name* can be any case-sensitive, alphanumeric string up to 80 characters.
prefix	(Optional) IPv4 prefix. IPv4 prefix format is x.x.x.x/length.
route-type	(Optional) Type of route. Use **?** to see the list of types.
clients	(Optional) Displays the routing clients.
hidden-nh	(Optional) Displays hidden next-hop information.
interface *type number*	(Optional) Displays the routes for an interface. The interface can be one of the following: • **mgmt**—Management interface. The default management interface is 0. • **vlan**—VLAN interface. The VLAN interface number is from 1 to 4094.
next-hop *addr*	(Optional) Displays routes with this next-hop address. The format is x.x.x.x.
recursive next-hop *addr*	(Optional) Displays routes with this recursive next-hop address. The format is x.x.x.x.
vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The VRF can be one of the following: • *vrf-name*—VRF name. The name can be any case-sensitive, alphanumeric string up to 32 characters. • **all**—Specifies all VRFs. • **default**—Specifies the default VRF. • **management**—Specifies the management VRF.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the route table:

```
switch(config)# show ip routing
```

Related Commands

Command	Description
clear ip route	Clears entries in the route table.

show routing memory estimate

To display an estimate of routing memory requirements, use the **show routing memory estimate** command.

show routing memory estimate [**routes** *num-routes* **next-hops** *num-hop-addresses*]

Syntax Description

routes	(Optional) Specifies the unicast Routing Information Base (RIB) memory estimate for the number of routes.
num-routes	Number of routes. The range is from 1000 to 1,000,000.
next-hops	(Optional) Specifies the unicast RIB memory estimate for the number of next hops per route.
num-hop-addresses	Number of next-hop addresses per route. The range is from 1 to 16.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Usage Guidelines

Use the **show routing memory estimate** command to estimate the memory required for a selected number of routes and number of next-hop addresses per route.

Examples

This example shows how to display the route table:

```
switch# show routing memory estimate routes 1000 next-hops 1
Shared memory estimates:
  Current max     32 MB;  27495 routes with 16 nhs
          in-use   1 MB;     11 routes with  1 nhs (average)
  Configured max  32 MB;  27495 routes with 16 nhs
  Estimate         0 MB;   1000 routes with  1 nhs
```

show routing hash

To display the route selected for a particular source and destination address, use the **show routing hash** command.

show routing hash *source-addr dest-addr* [*source-port dest-port*]] [**vrf** *vrf-name*]

Syntax Description

source-addr	Source IPv4 address. IPv4 address format is x.x.x.x.
dest-addr	Destination IPv4 address. IPv4 address format is x.x.x.x.
source-port	(Optional) Source port. The range is from 1 to 65535.
dest-port	(Optional) Destination port. The range is from 1 to 65535.
vrf *vrf-name*	(Optional) Specifies the virtual router context (VRF) name. The name can be any case-sensitive, alphanumeric string up to 32 characters.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the route selected to reach 30.0.0.2 from 10.0.0.5:

```
switch# show routing hash  10.0.0.5 30.0.0.2
```

Related Commands

Command	Description
clear ip route	Clears entries in the route table.

show sockets client

To display information about the sockets clients, use the **show sockets client** command.

show sockets client [**pid** *id*] [**raw** | **tcp** | **udp**] [**detail**]

Syntax Description

pid *id*	(Optional) Displays the socket client information for a specific process. The *id* range is from 1 to 65535.
raw	(Optional) Displays information about the raw client.
tcp	(Optional) Displays information about the TCP client.
udp	(Optional) Displays information about the UDP client.
detail	(Optional) Displays information about the detailed client.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the UDP socket client information:

```
switch# show sockets client udp

Total number of UDP clients: 9

client: syslogd, pid: 4367, sockets: 2

client: ntpd, pid: 4602, sockets: 3

client: ntp, pid: 4591, sockets: 2

client: radiusd, pid: 4586, sockets: 2

client: dhcp_snoop, pid: 5260, sockets: 1

client: pim, pid: 5296, sockets: 1

client: mcecm, pid: 5265, sockets: 1

client: snmpd, pid: 4609, sockets: 2

client: hsrp_engine, pid: 9588, sockets: 2

Statistics: Cancels 12777, Cancel-unblocks 11257, Cancel-misses 0
            Select-drops 1520, Select-wakes 11257,
switch#
```

Related Commands

Command	Description
clear sockets statistics	Clears socket statistics.
show sockets connection	Displays information about the socket connection.
show sockets statistics	Displays information about the socket statistics.

show sockets connection

To display information about the sockets connection, use the **show sockets connection** command.

show sockets connection [**pid** *id*] [**local** *address* | **foreign** *address* | **raw** | **tcp** | **udp**] [**detail**]

Syntax Description

pid *id*	(Optional) Displays the socket client information for a specific process. the *id* range is from 1 to 65535.
local *address*	(Optional) Displays information about all the TCP connections with the specified local address. The *address* can be an IPv4 address.
foreign *address*	(Optional) Displays information about all the TCP connections with the specified foreign address. The *address* can be an IPv4 address.
raw	(Optional) Displays information about the raw client.
tcp	(Optional) Displays information about the TCP client.
udp	(Optional) Displays information about the UDP client.
detail	(Optional) Displays information about the detailed client.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the TCP socket connection information:

```
switch# show sockets connection tcp

Total number of tcp sockets: 4
Active connections (including servers)
Protocol State/       Recv-Q/   Local Address(port)/
         Context      Send-Q    Remote Address(port)
tcp6     LISTEN       0         *(22)
         Wildcard     0         *(*)

tcp6     LISTEN       0         *(23)
         Wildcard     0         *(*)

tcp      LISTEN       0         *(161)
         Wildcard     0         *(*)

tcp      ESTABLISHED  0         172.29.231.33(23)
         management   4         72.163.177.151(1559)


switch#
```

Related Commands

Command	Description
clear sockets statistics	Clears the socket statistics.
show sockets client	Displays information about the socket client.
show sockets statistics	Displays the socket statistics.

show sockets statistics

To display the socket statistics, use the **show sockets statistics** command.

show sockets statistics [**all** | **raw** | **rawsum** | **tcp** | **tcpsum** | **udp** | **udpsum**]

Syntax Description

all	(Optional) Displays all the socket statistics.
raw	(Optional) Displays the socket statistics for the raw IPv4 protocol socket statistics.
rawsum	(Optional) Displays a summary of the socket statistics for the raw IPv4 protocol socket statistics.
tcp	(Optional) Displays the socket statistics for the TCP IPv4 protocol.
tcpsum	(Optional) Displays a summary of the socket statistics for the TCP IPv4 protocols.
udp	(Optional) Displays the socket statistics for the UDP IPv4 protocol.
udpsum	(Optional) Displays a summary of the socket statistics for the UDP IPv4 protocols.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modified
5.2(1)N1(1)	This command was introduced.

Examples

This example shows how to display the TCP socket statistics:

```
switch# show sockets statistics tcp
TCP v4 Received:
        11622 packets total
        0 checksum error, 0 bad offset, 0 too short, 0 MD5 error
        8782 packets (33566 bytes) in sequence
        0 duplicate packets (0 bytes)
        0 partially dup packets (0 bytes)
        0 out-of-order packets (0 bytes)
        0 packets (0 bytes) with data after window
        0 packets after close
        0 window probe packets, 0 window update packets
        2 duplicate ack packets, 0 ack packets with unsent data
        9349 ack packets (890960 bytes)
TCP v4 Sent:
        9543 total, 0 urgent packets
        3 control packets
        9492 data packets (890955 bytes)
        0 data packets (0 bytes) retransmitted
        48 ack only packets
        0 window probe packets, 0 window update packets
TCP v4:
0 connections initiated, 6 connections accepted, 6 connections established
6 connections closed (including 2 dropped, 0 embryonic dropped)
```

```
0 total rxmt timeout, 0 connections dropped in rxmt timeout
0 keepalive timeout, 0 keepalive probe, 0 connections dropped in keepalive
switch#
```

Related Commands

Command	Description
clear sockets statistics	Clears socket statistics.
show sockets client	Displays information about the socket client.
show sockets connection	Displays information about the socket connection.