1 CPP Commands

Command	Function
clear cpu-protect counters	Clear CPP statistics.
clear cpu-protect counters mboard	Clear the CPP statistics on the master device.
clear cpu-protect statistics	Clear the CPP statistics on an interface.
cpu-protect type bandwidth	Configure bandwidth for a specified packet type.
cpu-protect cpu bandwidth	Configure a bandwidth for a CPU port.
cpu-protect intf-statistics enable	Enable the CPP statistics function for a port.
cpu-protect traffic-class bandwidth	Configure a bandwidth for a queue.
cpu-protect type traffic-class	Configure a priority queue for a specified packet type.
show cpu-protect	Display all the configurations and statistics of CPP.
show cpu-protect cpu	Display the configuration of a CPU port.
show cpu-protect mboard	Display all the configurations and statistics of CPP on the master device.
show cpu-protect statistics	Display packet statistics.
show cpu-protect summary	Display all the configurations and statistics of CPP on the master device.
show cpu-protect traffic-class	Display the configurations and statistics of a priority queue.
show cpu-protect type	Display the configurations and statistics of a packet type.

1.1 clear cpu-protect counters

Function

Run the **clear cpu-protect counters** command to clear CPP statistics.

Syntax

clear cpu-protect counters [**device** *device-number*]

Parameter Description

device *device-number*: Specifies the device number.

Command Modes

Privileged EXEC mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example clears CPP statistics.

```
Hostname> enable
Hostname# clear cpu-protect counters
```

Notifications

N/A

Platform Description

N/A

Related Commands

N/A

1.2 clear cpu-protect counters mboard

Function

Run the **clear cpu-protect counters mboard** command to clear the CPP statistics on the master device.

Syntax

clear cpu-protect counters mboard

Parameter Description

N/A

Command Modes

Privileged EXEC mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example clears the CPP statistics on the master device.

```
Hostname> enable
Hostname# clear cpu-protect counters mboard
```

Notifications

N/A

Platform Description

N/A

Related Commands

N/A

1.3 clear cpu-protect statistics

Function

Run the **clear cpu-protect statistics** command to clear the CPP statistics on an interface.

Syntax

clear cpu-protect statistics [**interface** *interface-type interface-number*]

Parameter Description

interface *interface-type interface-number*: Specifies the interface type and interface number.

Command Modes

Privileged EXEC mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example clears the CPP statistics on GigabitEthernet 0/1.

```
Hostname> enable
```

```
Hostname# clear cpu-protect statistics interface gigabitethernet 0/1
```

Notifications

N/A

Platform Description

N/A

Related Commands

N/A

1.4 cpu-protect type bandwidth

Function

Run the **cpu-protect type bandwidth** command to configure bandwidth for a specified packet type.

Run the **no** form of this command to remove this configuration.

Run the **default** form of this command to restore the default configuration.

No bandwidth is configured for a specified packet type by default. Each type of packet has the default bandwidth value.

Syntax

cpu-protect type *packet-type* **bandwidth** *bandwidth-value*

no cpu-protect type *packet-type* **bandwidth**

default cpu-protect type *packet-type* **bandwidth**

Parameter Description

packet-type: Specified packet type.

bandwidth-value: Configured bandwidth value, in pps. The value range is from 0 to 3000.

Command Modes

Global configuration mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example sets the bandwidth for BPDU packets to **200** pps.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# cpu-protect type bpdu bandwitdth 200
```

Notifications

N/A

Common Errors

N/A

Platform Description

N/A

Related Commands

N/A

1.5 cpu-protect cpu bandwidth

Function

Run the **cpu-protect cpu bandwidth** command to configure a bandwidth for a CPU port.

Run the **no** form of this command to remove this configuration.

Run the **default** form of this command to restore the default configuration.

The bandwidth for a CPU port is 2250 pps by default.

Syntax

cpu-protect cpu bandwidth *bandwidth-value*

no cpu-protect cpu

default cpu-protect cpu

Parameter Description

bandwidth-value: Configured bandwidth value, in pps. The value range is from 0 to 3000.

Command Modes

Global configuration mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example sets the bandwidth for a CPU port to **3000** pps.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# cpu-protect cpu bandwidth 3000
```

Notifications

N/A

Common Errors

N/A

Platform Description

N/A

Related Commands

N/A

1.6 cpu-protect intf-statistics enable

Function

Run the **cpu-protect intf-statistics enable** command to enable the CPP statistics function for a port.

Run the **no** form of this command to disable this feature.

Run the **default** form of this command to restore the default configuration.

The CPP statistics function for any port is disabled by default.

Syntax

cpu-protect intf-statistics enable

no cpu-protect intf-statistics enable

default cpu-protect intf-statistics enable

Parameter Description

N/A

Command Modes

Global configuration mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example enables the CPP statistics function on a port.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# cpu-protect intf-statistics enable
```

Notifications

N/A

Common Errors

N/A

Platform Description

N/A

Related Commands

N/A

1.7 cpu-protect traffic-class bandwidth

Function

Run the **cpu-protect traffic-class bandwidth** command to configure a bandwidth for a queue.

Run the **no** form of this command to remove this configuration.

Run the **default** form of this command to restore the default configuration.

No bandwidth is configured for a queue by default. Each queue has the default bandwidth value.

Syntax

cpu-protect traffic-class *traffic-class-number* **bandwidth** *bandwidth-value*

no cpu-protect traffic-class *traffic-class-number*

default cpu-protect traffic-class *traffic-class-number*

Parameter Description

traffic-class-number: Specified priority queue. The value range is from 0 to 7.

bandwidth-value: Configured bandwidth value, in pps. The value range is from 0 to 3000.

Command Modes

Global configuration mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example sets the bandwidth for queue 5 to **2500** pps.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# cpu-protect traffic-class 5 bandwidth 2500
```

Notifications

N/A

Common Errors

N/A

Platform Description

N/A

Related Commands

N/A

1.8 cpu-protect type traffic-class

Function

Run the **cpu-protect type traffic-class** command to configure a priority queue for a specified packet type.

Run the **no** form of this command to remove this configuration.

Run the **default** form of this command to restore the default configuration.

Each packet type has the corresponding priority queue by default.

Syntax

cpu-protect type *packet-type* **traffic-class** *traffic-class-number*

no cpu-protect type *packet-type* **traffic-class**

default cpu-protect type *packet-type* **traffic-class**

Parameter Description

packet-type: Specified packet type.

traffic-class-number: Priority queue for a specified packet. The value range is from 0 to 7.

Command Modes

Global configuration mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example configures priority queue 5 for BPDU packets.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# cpu-protect type bpdu traffic-class 5
```

Notifications

N/A

Common Errors

N/A

Platform Description

N/A

Related Commands

N/A

1.9 show cpu-protect

Function

Run the **show cpu-protect** command to display all the configurations and statistics of CPP.

Syntax

show cpu-protect [**device** *device-number*]

Parameter Description

device-number: Specified device number.

Command Modes

All modes except the user EXEC mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example displays all the configurations and statistics of CPP.

```
Hostname> enable
Hostname# show cpu-protect
%cpu port bandwidth: 100000(pps)
Traffic-class   Bandwidth(pps)  Rate(pps)  Drop(pps)
 0              6000            0          0
 1              6000            0          0
 2              6000            0          0
 3              6000            0          0
 4              6000            0          0
 5              6000            0          0
 6              6000            0          0
 7              6000            0          0
Packet Type         Traffic-class  Bandwidth(pps)  Rate(pps)  Drop(pps)  Total
Total Drop
```

```
bpdu                6               128             0           0           0
0
arp                 1               3000            0           0           0
0
tpp                 6               128             0           0           0
0           dot1x               2               1500            0           0
0             0
gvrp                5               128             0           0           0
0           rldp                5               128             0           0
0             0
lacp                5               256             0           0           0
0           rerp                5               128             0           0
0             0
reup                5               128             0           0           0
0           lldp                5               768             0           0
0             0
cdp                 5               768             0           0           0
0           dhcps               2               1500            0           0
0             0
dhcps6              2               1500            0           0           0
0           dhcp6-client        2               1500            0           0
0             0
dhcp6-server        2               1500            0           0           0
0           dhcp-relay-c        2               1500            0           0
0             0
dhcp-relay-s        2               1500            0           0           0
0           option82            2               1500            0           0
0             0
unknown-v6mc        1               128             0           0           0
0           xgv6-ipmc           1               128             0           0
0             0
stargv6-ipmc        1               128             0           0           0
0           unknown-v4mc        1               128             0           0
0             0
xgv-ipmc            2               128             0           0           0
0           stargv-ipmc         2               128             0           0
0             0
udp-helper          1               128             0           0           0
0           dvmrp               4               128             0           0
0             0           igmp                2             1000            0
0          0             0
icmp                3               1600            0           0           0
0           ospf                4               2000            0           0
0             0
```

```
ospf3            4           2000          0         0         0
0           pim              4           1000          0         0
0             0
pimv6            4           1000          0         0         0
0           rip              4           128           0         0
0             0
ripng            4           128           0         0         0
0           vrrp             6           256           0         0
0             0
vrrpv6           6           256           0         0         0
0
ttl0             0           128           0         0         0
0
ttl1             0           2000          0         0         0
0           hop-limit        0           800           0         0
0             0
local-ipv4       3           4000          0         0         0
0           local-ipv6       3           4000          0         0
0             0
v4uc-route       1           800           0         0         0
0           v6uc-route       1           800           0         0
0             0
rt-host          4           3000          0         0         0
0           mld              2           1000          0         0
0             0
nd-snp-ns-na     1           3000          0         0         0
0
nd-snp-rs        1           1000          0         0         0
0           nd-snp-ra-redirect  1        1000          0         0
0             0
erps             5           128           0         0         0
0
mpls-ttl0        4           128           0         0         0
0           mpls-ttl1        4           128           0         0
0             0
mpls-ctrl        4           128           0         0         0
0           isis             4           2000          0         0
0             0
bgp              4           2000          0         0         0
0           cfm              5           512           0         0
0             0
web-auth         2           2000          0         0         0
0           fcoe-fip         4           1000          0         0
0             0
```

```
fcoe-local          4              1000            0          0          0
0           bfd                 6              5120            0          0
0             0
micro-bfd           6              5120            0          0          0
0           micro-bfd-v6        6              5120            0          0
0             0
dldp                6              3200            0          0          0
0           other               0              4096            0          0
0             0
trill               4              1000            0          0          0
0           efm                 5              1000            0          0
0             0
ipv6-all            0              2000            0          0          0
0           ip-option           0              800             0          0
0             0
mgmt                -              4000            4          0          4639
0           dns                 2              200             0          0
0             0
sdn                 0              5000            0          0          0
0           sdn_of_fetch        0              5000            0          0
0             0
sdn_of_copy         0              5000            0          0          0
0           sdn_of_trap         0              5000            0          0
0             0
vxlan-non-uc        1              512             0          0          0
0           local-telnet        3              1000            0          0
0             0
local-snmp          3              1000            0          0          0
0           local-ssh           3              1000            0          0
0             0
```

Table 1-1Output Fields of the show cpu-protect Command

Field	Description
%cpu port bandwidth	Bandwidth for a CPU port
Traffic-class	Priority queue
Bandwidth(pps)	Bandwidth
Rate(pps)	Rate
Drop(pps)	Packet loss rate
Packet Type	Packet type
Total	Total number of received packets
Total Drop	Total number of lost packets

Notifications

N/A

Platform Description

N/A

Related Commands

N/A

1.10 show cpu-protect cpu

Function

Run the **show cpu-protect cpu** command to display the configuration of a CPU port.

Syntax

show cpu-protect cpu

Parameter Description

N/A

Command Modes

All modes except the user EXEC mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example displays the configuration of a CPU port.

```
Hostname> enable
Hostname# show cpu-protect cpu
%cpu port bandwidth: 32000(pps)
```

Table 1-1Output Fields of the show cpu-protect cpu Command

Field	Description
%cpu port bandwidth	Configured bandwidth of a CPU port

Notifications

N/A

Platform Description

N/A

Related Commands

N/A

1.11 show cpu-protect mboard

Function

Run the **show cpu-protect mboard** command to display all the configurations and statistics of CPP on the master device.

Syntax

show cpu-protect mboard

Parameter Description

N/A

Command Modes

All modes except the user EXEC mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example displays all the configurations and statistics of CPP on the master device.

```
Hostname> enable
Hostname# show cpu-protect mboard
%cpu port bandwidth: 80000(pps)
Traffic-class   Bandwidth(pps)  Rate(pps)       Drop(pps)
 0              8000            0               0
 1              8000            0               0
 2              8000            0               0
 3              8000            0               0
 4              8000            0               0
 5              8000            0               0
 6              8000            0               0
 7              8000            0               0
Packet Type         Traffic-class  Bandwidth(pps)  Rate(pps)  Drop(pps)  Total
Total Drop
bpdu                6              128             0          0          0
0
```

```
arp                 3               10000           0           0           0
0
arp-dai             3               10000           0           0           0
0
arp-proxy           3               10000           0           0           0
0
tpp                 7               128             0           0           0
0
dot1x               4               128             0           0           0
0
gvrp                5               128             0           0           0
0
rldp                6               128             0           0           0
0
lacp                6               128             0           0           0
0
rerp                6               128             0           0           0
0
reup                6               128             0           0           0
0
lldp                5               128             0           0           0
0
cdp                 5               128             0           0           0
0
dhcps               4               128             0           0           0
0
dhcps6              4               128             0           0           0
0
dhcp6-client        4               128             0           0           0
0
dhcp6-server        4               128             0           0           0
0
dhcp-relay-c        4               128             0           0           0
0
dhcp-relay-s        4               128             0           0           0
0
option82            4               128             0           0           0
0
unknown-v6mc        3               128             0           0           0
0
known-v6mc          3               128             0           0           0
0
xgv6-ipmc           3               128             0           0           0
0
stargv6-ipmc        3               128             0           0           0
0
```

```
unknown-v4mc        3               128             0           0           0
0
known-v4mc          3               128             0           0           0
0
xgv-ipmc            3               128             0           0           0
0
sgv-ipmc            3               128             0           0           0
0
udp-helper          4               128             0           0           0
0
dvmrp               5               128             0           0           0
0
igmp                4               128             0           0           0
0
icmp                4               128             0           0           0
0
ospf                5               128             0           0           0
0
ospf3               5               128             0           0           0
0
pim                 6               128             0           0           0
0
pimv6               6               128             0           0           0
0
rip                 6               128             0           0           0
0
ripng               6               128             0           0           0
0
vrrp                6               128             0           0           0
0
vrrp6               6               128             0           0           0
0
ttl0                6               128             0           0           0
0
ttl1                6               128             0           0           0
0
err_hop_limit       1               800             0           0           0
0
local-ipv4          6               128             0           0           0
0
local-ipv6          6               128             0           0           0
0
route-host-v4       0               4096            0           0           0
0
route-host-v6       0               4096            0           0           0
0
```

```
mld                 0               1000            0           0           0
0
nd-snp-ns-na        6               128             0           0           0
0
nd-snp-rs           6               128             0           0           0
0
nd-snp-ra-redirect  6               128             0           0           0
0
nd-non-snp          6               128             0           0           0
0
erps                4               128             0           0           0
0
mpls-ttl0           6               128             0           0           0
0
mpls-ttl1           6               128             0           0           0
0
mpls-ctrl           6               128             0           0           0
0
isis                5               2000            0           0           0
0
bgp                 1               128             0           0           0
0
cfm                 0               128             0           0           0
0
fcoe-fip            6               128             0           0           0
0
fcoe-local          6               128             0           0           0
0
bfd-echo            6               5120            0           0           0
0
bfd-ctrl            6               5120            0           0           0
0
madp                7               1000            0           0           0
0
ip4-other           6               128             0           0           0
0
ip6-other           6               128             0           0           0
0
non-ip-other        6               20000           0           0           0
0
trill               2               1000            0           0           0
0
trill-oam           2               1000            0           0           0
0
efm                 2               1000            0           0           0
0
```

Table 1-1Output Fields of the show cpu-protect mboard Command

Field	Description
%cpu port bandwidth	Bandwidth for a CPU port
Traffic-class	Priority queue
Bandwidth(pps)	Bandwidth
Rate(pps)	Rate
Drop(pps)	Packet loss rate
Packet Type	Packet type
Total	Total number of received packets
Total Drop	Total number of lost packets

Notifications

N/A

Platform Description

N/A

Related Commands

N/A

1.12 show cpu-protect statistics

Function

Run the **show cpu-protect statistics** command to display packet statistics.

Syntax

show cpu-protect statistics { **interface** *interface-type interface-number* | **type** *packet-type* }

Parameter Description

interface *interface-type interface-number*: Displays statistics of a specified interface.

type *packet-type*: Displays the statistics of a specified packet type.

Command Modes

All modes except the user EXEC mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example displays the packet statistics on GigabitEthernet 0/1.

```
Hostname> enable
Hostname# show cpu-protect statistics interface gigabitethernet 0/1
Gi0/1
Packet Type         Rate(pps)  Drop(pps)  Total         Total Drop
bpdu                0          0          0             0
arp                 0          0          248053        0
tpp                 0          0          0             0
dot1x               0          0          0             0
gvrp                0          0          0             0
rldp                0          0          0             0
lacp                0          0          0             0
rerp                0          0          0             0
reup                0          0          0             0
lldp                0          0          560           0
cdp                 0          0          0             0
dhcps               0          0          0             0
dhcps6              0          0          0             0
dhcp6-client        0          0          0             0
dhcp6-server        0          0          0             0
dhcp-relay-c        0          0          0             0
dhcp-relay-s        0          0          0             0
option82            0          0          0             0
unknown-v6mc        0          0          0             0
xgv6-ipmc           0          0          0             0
stargv6-ipmc        0          0          0             0
unknown-v4mc        0          0          0             0
xgv-ipmc            0          0          0             0
stargv-ipmc         0          0          0             0
udp-helper          0          0          0             0
dvmrp               0          0          0             0
igmp                0          0          0             0
icmp                0          0          0             0
ospf                0          0          0             0
ospf3               0          0          0             0
pim                 0          0          0             0
pimv6               0          0          0             0
rip                 0          0          0             0
ripng               0          0          0             0
vrrp                0          0          0             0
vrrpv6              0          0          0             0
ttl0                0          0          0             0
ttl1                0          0          0             0
hop-limit           0          0          0             0
```

```
local-ipv4          0          0          0          0
local-ipv6          0          0          0          0
v4uc-route          0          0          0          0
v6uc-route          0          0          0          0
rt-host             0          0          0          0
mld                 0          0          0          0
nd-snp-ns-na        0          0          0          0
nd-snp-rs           0          0          0          0
nd-snp-ra-redirect  0          0          0          0
erps                0          0          0          0
mpls-ttl0           0          0          0          0
mpls-ttl1           0          0          0          0
mpls-ctrl           0          0          0          0
isis                0          0          0          0
bgp                 0          0          0          0
cfm                 0          0          0          0
web-auth            0          0          0          0
fcoe-fip            0          0          0          0
fcoe-local          0          0          0          0
bfd                 0          0          0          0
micro-bfd           0          0          0          0
micro-bfd-v6        0          0          0          0
dldp                0          0          0          0
other               0          0          0          0
trill               0          0          0          0
efm                 0          0          0          0
ipv6-all            0          0          0          0
ip-option           0          0          0          0
mgmt                0          0          0          0
dns                 0          0          0          0
sdn                 0          0          0          0
sdn_of_fetch        0          0          0          0
sdn_of_copy         0          0          0          0
sdn_of_trap         0          0          0          0
vxlan-non-uc        0          0          0          0
```

Table 1-1Output Fields of the show cpu-protect statistics Command

Field	Description
Rate(pps)	Rate
Drop(pps)	Packet loss rate
Packet Type	Packet type
Total	Total number of packets
Total Drop	Total number of lost packets

Field	Description
Interface	Interface name

The following example displays the configurations and statistics of ARP packets on the master device.

```
Hostname> enable
Hostname# show cpu-protect statistics type arp
arp
Interface           Rate(pps)  Drop(pps)  Total         Total Drop
Te0/33              0          0          248053        0
Te0/34              0          0          0             0
Te0/35              0          0          0             0
Te0/36              0          0          0             0
```

Notifications

N/A

Related Commands

N/A

1.13 show cpu-protect summary

Function

Run the **show cpu-protect summary** command to display all the configurations and statistics of CPP on the master device.

Syntax

show cpu-protect summary

Parameter Description

N/A

Command Modes

All modes except the user EXEC mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example displays all the configurations and statistics of CPP on the master device.

```
Hostname> enable
Hostname# show cpu-protect summary
%cpu port bandwidth: 100000(pps)
Traffic-class   Bandwidth(pps)  Rate(pps)  Drop(pps)
 0              6000            0          0
 1              6000            0          0
 2              6000            0          0
 3              6000            0          0
 4              6000            0          0
 5              6000            0          0
 6              6000            0          0
 7              6000            0          0
Packet Type         Traffic-class  Bandwidth(pps)  Rate(pps)  Drop(pps)  Total
Total Drop
bpdu                6              128             0          0          0
0
arp                 1              3000            0          0          0
0
tpp                 6              128             0          0          0
0
dot1x               2              1500            0          0          0
0
gvrp                5              128             0          0          0
0
rldp                5              128             0          0          0
0
lacp                5              256             0          0          0
0
rerp                5              128             0          0          0
0
reup                5              128             0          0          0
0
lldp                5              768             0          0          0
0
cdp                 5              768             0          0          0
0
dhcps               2              1500            0          0          0
0
dhcps6              2              1500            0          0          0
0
dhcp6-client        2              1500            0          0          0
0
dhcp6-server        2              1500            0          0          0
0
dhcp-relay-c        2              1500            0          0          0
0
```

```
dhcp-relay-s        2               1500            0           0           0
0
option82            2               1500            0           0           0
0
unknown-v6mc        1               128             0           0           0
0
xgv6-ipmc           1               128             0           0           0
0
stargv6-ipmc        1               128             0           0           0
0
unknown-v4mc        1               128             0           0           0
0
xgv-ipmc            2               128             0           0           0
0
stargv-ipmc         2               128             0           0           0
0
udp-helper          1               128             0           0           0
0
dvmrp               4               128             0           0           0
0
igmp                2               1000            0           0           0
0
icmp                3               1600            0           0           0
0
ospf                4               2000            0           0           0
0
ospf3               4               2000            0           0           0
0
pim                 4               1000            0           0           0
0
pimv6               4               1000            0           0           0
0
rip                 4               128             0           0           0
0
ripng               4               128             0           0           0
0
vrrp                6               256             0           0           0
0
vrrpv6              6               256             0           0           0
0
ttl0                0               128             0           0           0
0
ttl1                0               2000            0           0           0
0
hop-limit           0               800             0           0           0
0
```

```
local-ipv4          3               4000            0           0           0
0
local-ipv6          3               4000            0           0           0
0
v4uc-route          1               800             0           0           0
0
v6uc-route          1               800             0           0           0
0
rt-host             4               3000            0           0           0
0
mld                 2               1000            0           0           0
0
nd-snp-ns-na        1               3000            0           0           0
0
nd-snp-rs           1               1000            0           0           0
0
nd-snp-ra-redirect  1               1000            0           0           0
0
erps                5               128             0           0           0
0
mpls-ttl0           4               128             0           0           0
0
mpls-ttl1           4               128             0           0           0
0
mpls-ctrl           4               128             0           0           0
0
isis                4               2000            0           0           0
0
bgp                 4               2000            0           0           0
0
cfm                 5               512             0           0           0
0
web-auth            2               2000            0           0           0
0
fcoe-fip            4               1000            0           0           0
0
fcoe-local          4               1000            0           0           0
0
bfd                 6               5120            0           0           0
0
micro-bfd           6               5120            0           0           0
0
micro-bfd-v6        6               5120            0           0           0
0
dldp                6               3200            0           0           0
0
```

```
other               0               4096            0               0               0
0
trill               4               1000            0               0               0
0
efm                 5               1000            0               0               0
0
ipv6-all            0               2000            0               0               0
0
ip-option           0               800             0               0               0
0
mgmt                -               4000            4               0               4639
0
dns                 2               200             0               0               0
0
sdn                 0               5000            0               0               0
0
sdn_of_fetch        0               5000            0               0               0
0
sdn_of_copy         0               5000            0               0               0
0
sdn_of_trap         0               5000            0               0               0
0
vxlan-non-uc        1               512             0               0               0
0
local-telnet        3               1000            0               0               0
0
local-snmp          3               1000            0               0               0
0
local-ssh           3               1000            0               0               0
0
```

Table 1-1Output Fields of the show cpu-protect summary Command

Field	Description
%cpu port bandwidth	Bandwidth for a CPU port
Traffic-class	Priority queue
Bandwidth(pps)	Bandwidth
Rate(pps)	Rate
Drop(pps)	Packet loss rate
Packet Type	Packet type
Total	Total number of received packets
Total Drop	Total number of lost packets

Notifications

N/A

Platform Description

N/A

Related Commands

N/A

1.14 show cpu-protect traffic-class

Function

Run the **show cpu-protect traffic-class** command to display the configurations and statistics of a priority queue.

Syntax

show cpu-protect traffic-class { **all** | *traffic-class-number* } [**device** *device-number*]

Parameter Description

all: Displays all priority queue information.

traffic-class-number: Information of a specified priority queue. The value range is from 0 to 7.

device *device-number*: Specifies the device number.

Command Modes

All modes except the user EXEC mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example displays the configurations and statistics of all priority queues on the master device.

```
Hostname> enable
Hostname# show cpu-protect traffic-class all
Traffic-class   Bandwidth(pps)  Rate(pps)       Drop(pps)
 0              8000            0               0
 1              8000            0               0
 2              8000            0               0
 3              8000            0               0
 4              8000            0               0
 5              3200            0               0
 6              8000            0               0
```

```
7                8000             0                0
```

Table 1-1Output Fields of the show cpu-protect traffic-class Command

Field	Description
Traffic-class	Priority queue
Bandwidth(pps)	Bandwidth
Rate(pps)	Rate
Drop(pps)	Packet loss rate

Notifications

N/A

Platform Description

N/A

Related Commands

N/A

1.15 show cpu-protect type

Function

Run the **show cpu-protect type** command to display the configurations and statistics of a packet type.

Syntax

show cpu-protect type *packet-type* [**device** *device-number*]

Parameter Description

packet-type: Specified packet type.

device *device-number*: Specifies the device number.

Command Modes

All modes except the user EXEC mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example displays the configurations and statistics of ICMP packets on the master device.

```
Hostname> enable
```

```
Hostname# show cpu-protect type icmp
Packet Type         Traffic-class  Bandwidth(pps)  Rate(pps)  Drop(pps)  Total
Total Drop
icmp                5              1500             50        0          10000
100
```

Table 1-1Output Fields of the show cpu-protect type Command

Field	Description
Traffic-class	Priority queue
Bandwidth(pps)	Bandwidth
Rate(pps)	Rate
Drop(pps)	Packet loss rate
Packet Type	Packet type
Total	Total number of received packets
Total Drop	Total number of lost packets

Notifications

N/A

Platform Description

N/A

Related Commands

N/A