Traffic Monitoring Commands

This module describes the Cisco IOS XR Software commands to monitor traffic on the router.

For detailed information about monitoring packet drops concepts, configuration tasks, and examples, see the *Traffic Monitoring* chapter in the *System Monitoring Configuration Guide for Cisco 8000 Series Routers*.

hw-module profile packet-loss-alert

To enable log message alerts for traffic-impacting NPU interrupts, use the **hw-module profile packet-loss-alert** command in the XR Config mode.

hw-module profile packet-loss-alert { **3Min** | **5Min** }

Syntax Description		
	3Min	Specifies a 3 minute duration of packet loss to begin generating log messages. There are atleast 10 error interrupts per minute.
	5Min	Specifies a 5 minute duration of packet loss to begin generating log messages. There are atleast 10 error interrupts per minute.

Command Default This feature is disabled by default.

Command Modes XR Config mode

Command History

Release	Modification
Release 24.1.1	This command was introduced

Usage Guidelines Only line cards and routers with the Q100, Q200, P100 or G100 based Silicon One ASIC support this feature

Task ID

Task ID	Operation
profile	read, write

Example

Execute the **hw-module profile packet-loss-alert** command to enable system log alerts for packet loss:

```
Router# configure
Router(config)# hw-module profile packet-loss-alert 3Min
Router(config)# commit
```

show drops all

To display the packet drops, use the **show drops all** command in the XR EXEC mode.

show drops all { **commands location** | **location** | **ongoing location** } { *node-id* | **all** }

Syntax Description		
commands		Displays commands executed.
location		Specifies location of line-card or route processor.
ongoing		Shows drops occuring since last executed.

Command Default   None

Command Modes   XR EXEC mode

Command History

Release	Modification
Release 7.3.5	This command was introduced.

Usage Guidelines   No specific guidelines impact the use of this command.

Task ID

Task ID	Operations
interface	read
cisco-support	read

The **show packet drops all location all** command displays packet drops for all nodes on all locations

```
RP/0/RP0/CPU0:ios#show drops all location all
-----------------------------------------------
Printing Drop Counters for node 0/RP0/CPU0
-----------------------------------------------
```

```
------------------
MODULE arp
------------------


------------------
MODULE mac
------------------


------------------
MODULE npu_traps
------------------


Trap Type                                      NPU   Trap  Punt       Punt  Punt  Punt
Configured Hardware    Policer Avg-Pkt Packets              Packets
                                               ID    ID    Dest       VoQ   VLAN  TC   Rate(pps)
   Rate(pps)  Level   Size    Accepted           Dropped
   ==========================================================================================


UNKNOWN_VLAN_OR_BUNDLE_MEMBER(D*)              0     4     RPLC_CPU   200   1586  0     67
     134        IFG     64      0                  1
------------------
MODULE voq_drops
------------------


------------------
MODULE cef
------------------


------------------
MODULE fabric
------------------


------------------
MODULE lpts
------------------


------------------
MODULE spp
------------------
```

The **show packet drops all ongoing location** command displays the packet drops since last executed.

```
RP/0/RP0/CPU0:ios#show drops all ongoing location all


------------------------------------------------
Printing Drop Counters for node 0/RP0/CPU0
------------------------------------------------


------------------
MODULE arp
------------------
```

```
                ------------------
                MODULE mac
                ------------------


                ------------------
                MODULE npu_traps
                ------------------


                ------------------
                MODULE voq_drops
                ------------------


                ------------------
                MODULE cef
                ------------------


                ------------------
                MODULE fabric
                ------------------


                ------------------
                MODULE lpts
                ------------------


                ------------------
                MODULE spp
                ------------------
```