Rocky Enterprise Linux 9.2 Manual Pages on command 'ip-stats.8'

$ man ip-stats.8

IP-STATS(8) Linux IP-STATS(8)

NAME

ip-stats - manage and show interface statistics

SYNOPSIS

ip stats { COMMAND | help }

ip stats show [dev DEV] [group GROUP [subgroup SUBGROUP [suite

SUITE] ...] ...] ...

ip stats set dev DEV l3_stats { on | off }

DESCRIPTION

ip stats set

is used for toggling whether a certain HW statistics suite is

collected on a given netdevice. The following statistics suites

are supported:

l3_stats L3 stats reflect traffic that takes place in a HW de?

vice on an object that corresponds to the given software

netdevice.

ip stats show

is used for showing stats on a given netdevice, or dumping sta?

tistics across all netdevices. By default, all stats are re?
quested. It is possible to filter which stats are requested by
using the group and subgroup keywords.

It is possible to specify several groups, or several subgroups
for one group. When no subgroups are given for a group, all the
subgroups are requested.

The following groups are recognized:

group link - Link statistics. The same suite that "ip -s link
show" shows.

group offload - A group that contains a number of HW-oriented
statistics. See below for individual subgroups within
this group.

group xstats - Extended statistics. A subgroup identifies the
type of netdevice to show the statistics for.

group xstats_slave - Extended statistics for the slave of a net?
device of a given type. A subgroup identifies the type of
master netdevice.

group afstats - A group for address-family specific netdevice
statistics.

group offload subgroups:

subgroup cpu_hit - The cpu_hit statistics suite is useful on
hardware netdevices. The link statistics on these devices
reflect both the hardware- and software-datapath traffic.
The cpu_hit statistics then only reflect software-data?
path traffic.

subgroup hw_stats_info - This suite does not include traffic
statistics, but rather communicates the state of other
statistics. Through this subgroup, it is possible to dis?
cover whether a given statistic was enabled, and when it
was, whether any device driver actually configured its
device to collect these statistics. For example, l3_stats
was enabled in the following case, but no driver has in?
stalled it:

ip stats show dev swp1 group offload subgroup
hw_stats_info
56: swp1: group offload subgroup hw_stats_info
l3_stats on used off
After an L3 address is added to the netdevice, the
counter will be installed:
ip addr add dev swp1 192.0.2.1/28
ip stats show dev swp1 group offload subgroup
hw_stats_info
56: swp1: group offload subgroup hw_stats_info
l3_stats on used on

subgroup l3_stats - These statistics reflect L3 traffic that takes place in HW on an object that corresponds to the netdevice. Note that this suite is disabled by default and needs to be first enabled through ip stats set.

For example:

```
# ip stats show dev swp2.200 group offload subgroup
l3_stats
112: swp2.200: group offload subgroup l3_stats on used on
   RX:  bytes packets errors dropped   mcast
        8900      72      2       0       3
   TX:  bytes packets errors dropped
        7176      58      0       0
```

Note how the l3_stats_info for the selected group is also part of the dump.

group xstats and group xstats_slave subgroups:

subgroup bridge [suite stp] [suite mcast] - Statistics for STP and, respectively, IGMP / MLD (under the keyword mcast) traffic on bridges and their slaves.

subgroup bond [suite 802.3ad] - Statistics for LACP traffic on bond devices and their slaves.

group afstats subgroups:

subgroup mpls - Statistics for MPLS traffic seen on the netde?

vice. For example:

ip stats show dev veth01 group afstats subgroup mpls

3: veth01: group afstats subgroup mpls

RX: bytes packets errors dropped noroute

0 0 0 0 0

TX: bytes packets errors dropped

216 2 0 0

EXAMPLES

ip stats set dev swp1 l3_stats on

Enables collection of L3 HW statistics on swp1.

ip stats show group offload

Shows all offload statistics on all netdevices.

ip stats show dev swp1 group link

Shows link statistics on the given netdevice.

SEE ALSO

ip(8), ip-link(8),

AUTHOR

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iproute2 16 Mar 2022 IP-STATS(8)