PROX Screens

While PROX is running, 1 to 8 change the view on the system.

Pressing 1 switches to the main screen showing per core statistics. When PROX is started, this is the screen shown by default. Please read the note below for more info on the "idle (%)" time

Pressing 2 switches to show port-based information.

Pressing 3 shows information (i.e. occupancy, memory usage, ...) about memory pools.

If there are tasks with mode=lat, 4 displays latency measurements made during the last second by each of those tasks.

5 displays DPDK ring information.

6 is for L4 generation.

7 displays packet lengths

8 displays statistics for the "interrupt" mode

Page Up and Page Down can be used to view per core statistics that would otherwise not fit on the screen.

Escape quits PROX.

The history of previously entered commands can be navigated using the Up and Down arrows.

Statistics can be reset with 0.

Note on idle time

The PROX idle measure gives an indication on how "idle" the task is to receive additional packets. It is completely different than the CPU idle time.

It counts as idle the time spent polling for packets when there are no packets. This means:

- When there are 2 tasks, they only get 50% each (theoretical max)
- Each task usually has the following loop: Poll for RX packets – handle the RX packets – do everything else such as check for timers
  - So, “everything else” is also counted as busy
  - “Everything else” is also called much more often when no packets are received
- Even when there are no incoming packets Qos tasks checks their queues for any “stored” mbufs ready for dequeuing, which also takes quite some time.

Conclusion: The idle time is especially important when it approaches 0%. This is a good indication that the task is (almost) maxed out and is not able to deal with more packets coming in. When the idle time is higher, there is still capacity to do more.

Note about the idle time being “close to 0%”. Even with 0% idle time, the system might be able to receive more packets. An idle time of 0% means that we receive a bulk of packets in all loops, but we do not know how many packets we did receive per loop. In theory, we could have received only 1 packet per loop and we might be able to receive more packets per loop. If you want to investigate the distribution of packets arriving, please use the “rx distr start” and “rx distr show” commands.