

How do I measure the packet rate performance of the Sniffer10G software?

Model:

10G-PCIE2-8C2-2S

Software:

Sniffer10G software

Operating System:

Support both Windows and Linux Operating Systems.

Information:

To measure packet rate performance of the Sniffer10G v2 software, you can run **snf-pktgen.c** on the “server” host system to generate the packets for injection and run **snf_simple_recv.c** on the “client” host system to receive the packets.

On the Linux test system insure that **/opt/snf/bin/tests/** has been added to the current **\$PATH** variable.

On the “server” host system, open a command window and type the following command to generate 1 billion 60-byte packets:

```
$ snf_pktgen -s 60 -n 1000000000
```

On the “client” host system, open a command window and type the following command:

```
$ snf_simple_recv -t
```

And the following output will appear:

```
14843291 pkts (890597460B) in 1.001 secs (14827884 pps), Avg Pkt: 60, BW (Gbps): 7.117
14843663 pkts (890619780B) in 1.001 secs (14828242 pps), Avg Pkt: 60, BW (Gbps): 7.118
14841101 pkts (890466060B) in 1.001 secs (14825697 pps), Avg Pkt: 60, BW (Gbps): 7.116
14845703 pkts (890742180B) in 1.001 secs (14830250 pps), Avg Pkt: 60, BW (Gbps): 7.119
14842322 pkts (890539320B) in 1.001 secs (14826946 pps), Avg Pkt: 60, BW (Gbps): 7.117
14842292 pkts (890537520B) in 1.001 secs (14826902 pps), Avg Pkt: 60, BW (Gbps): 7.117
14843007 pkts (890580420B) in 1.001 secs (14827601 pps), Avg Pkt: 60, BW (Gbps): 7.117
14842392 pkts (890543520B) in 1.001 secs (14826942 pps), Avg Pkt: 60, BW (Gbps): 7.117
```

The execution of this test will report for each second the packet rate(pps). The packet rate is 14.8 Mpps, or line rate for 60-byte packets.

Important Notes:



Always start the **snf_simple_rcv** process before you start running the packet generator (**snf_pktgen**).

Always stop the packet generator (**snf_pktgen**) before you stop the **snf_simple_rcv** process.

Otherwise, if the packet generator is sending packets, but **snf_simple_rcv** is not running, then you will see the overflow counter (**Net overflow drop** in the **myri_counters** output) increasing. This situation occurs because there is no Sniffer10G program consuming the packets through the Sniffer10G API, and the packets are instead being delivered to the Ethernet portion of the driver, which will attempt to drop them as fast as possible, but will not be able to sustain the packet rate.

You cannot run **snf_pktgen** traffic through a router/switch. Snf_pktgen is a toy packet generator to demonstrate the use of Sniffer10G inject functionally. It sends packets comprised of all zeroes, which will be dropped by a router or switch.

This test assumes that port 0 (if using a 2-port adapter) of “client” and “server” are connected point to point.

<u>Revision</u>	<u>Date</u>	<u>Change</u>
1	7/6/2016	Initial Draft
2	8/2/2016	Feedback

