ANS Performance Report

1

1. ANS Routing Forwarding Performance

1.1. Testing Environment

➢ CPU

Intel(R) Xeon(R) CPU E5-2683 v3 @ 2.00GHz

➢ NIC

02:00.0 Ethernet controller: Intel Corporation 82599ES 10-Gigabit SFI/SFP+ Network Connection (rev 01)

02:00.1 Ethernet controller: Intel Corporation 82599ES 10-Gigabit SFI/SFP+ Network Connection (rev 01)

➢ Version

dpdk-17.05.2.tar.xz

Pktgen Ver: 3.4.2 (DPDK 17.05.2)

➢ Network Topology
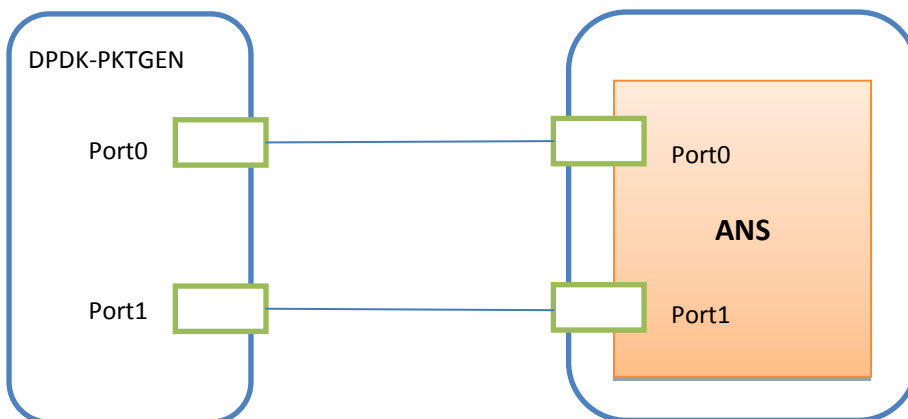
1.2. Testing Report

1.2.1. ANS (1 core) routing forward one way

Pktgen port 0 -> ans routing forward (1 core)-> pktgen port 1

➢ ANS startup command

./build/ans   -c 0x2 -n 1 --base-virtaddr=0x2aaa2aa0000 -- -p 0x3 --config="(0,0,1), (1,0,1)"

➢ Testing result

Packet Size (Bytes)	Throughput (Mpps)
64	11.25
128	Line Rate

```
- Ports 0-3 of 5   <Main Page>  Copyright (c) <2010-2017>, Intel Corporation
   Flags:Port      :    P------I---g---:0    P------I---g---:1
Link State         :       <UP-10000-FD>       <UP-10000-FD>      ----TotalRate----
Pkts/s Max/Rx      :                 0/0   11307419/11253492   11307419/11253492
       Max/Tx      :   14880911/14880872                 1/0   14880911/14880872
MBits/s Rx/Tx      :              0/9999              7562/0          7562/9999
Broadcast          :                   0                   0
Multicast          :                   0                   0
   64 Bytes        :                   0          8012265304
   65-127          :                   0                   0
   128-255         :                   0                   0
   256-511         :                   0                   0
   512-1023        :                   0                   0
   1024-1518       :                   0                   0
Runts/Jumbos       :                 0/0                 0/0
Errors Rx/Tx       :                 0/0                 0/0
Total Rx Pkts      :                   0          8006638196
      Tx Pkts      :         10588116148                   1
      Rx MBs       :                   0             5380460
      Tx MBs       :             7115214                   0
ARP/ICMP Pkts      :                 0/0                 1/0
                   :
Pattern Type       :             abcd...             abcd...
Tx Count/% Rate    :        Forever /100%        Forever /100%
PktSize/Tx Burst   :            64 /   64            64 /   64
Src/Dest Port      :          1234 / 5678          1234 / 5678
Pkt Type:VLAN ID   :       IPv4 / TCP:0001     IPv4 / TCP:0001
Dst  IP Address    :           10.1.0.10           10.0.0.10
Src  IP Address    :        10.0.0.10/24        10.1.0.10/24
Dst MAC Address    :   90:e2:ba:92:cc:0c   90:e2:ba:92:cc:0e
Src MAC Address    :   00:16:31:fb:00:58   00:16:31:fb:00:59
VendID/PCI Addr    :   8086:10fb/01:00.0   8086:10fb/01:00.1

-- Pktgen Ver: 3.4.2 (DPDK 17.05.2)  Powered by DPDK -------------------------
```

1.2.2. ANS (1 core) routing forward one way with 1000 route

Pktgen port 0 -> ans routing forward (1 core)-> pktgen port 1

➢ ANS startup command
./build/ans   -c 0x2 -n 1 --base-virtaddr=0x2aaa2aa0000 -- -p 0x3 --config="(0,0,1), (1,0,1)"

➢ Testing result

Packet Size (Bytes)	Throughput (Mpps)
64	11.29
128	Line Rate

```
| Ports 0-3 of 5    <Main Page>  Copyright (c) <2010-2017>, Intel Corporation
   Flags:Port    :    P------I---g---:0   P------I---g---:1
Link State       :       <UP-10000-FD>      <UP-10000-FD>      ----TotalRate----
Pkts/s Max/Rx    :                 0/0  11294280/11290957  11294280/11290957
       Max/Tx    :   14880906/14880887               0/0  14880906/14880887
MBits/s Rx/Tx    :              0/9999            7587/0          7587/9999
Broadcast        :                   0                 0
Multicast        :                   0                 0
   64 Bytes      :                   0        3245819634
   65-127        :                   0                 0
   128-255       :                   0                 0
   256-511       :                   0                 0
   512-1023      :                   0                 0
   1024-1518     :                   0                 0
Runts/Jumbos     :                 0/0               0/0
Errors Rx/Tx     :                 0/0               0/0
Total Rx Pkts    :                   0        3242996636
      Tx Pkts    :          4281717080                 0
      Rx MBs     :                   0           2179293
      Tx MBs     :             2877313                 0
ARP/ICMP Pkts    :                 0/0               0/0
                 :
Pattern Type     :             abcd...           abcd...
Tx Count/% Rate  :       Forever /100%     Forever /100%
PktSize/Tx Burst :            64 /   64         64 /   64
Src/Dest Port    :          1234 / 5678       1234 / 5678
Pkt Type:VLAN ID :       IPv4 / TCP:0001    IPv4 / TCP:0001
Dst  IP Address  :           10.1.0.10          10.0.0.10
Src  IP Address  :        10.0.0.10/24       10.1.0.10/24
Dst MAC Address  :   90:e2:ba:92:cc:0c   90:e2:ba:92:cc:0e
Src MAC Address  :   00:16:31:fb:00:58   00:16:31:fb:00:59
VendID/PCI Addr  :    8086:10fb/01:00.0   8086:10fb/01:00.1

-- Pktgen Ver: 3.4.2 (DPDK 17.05.2)  Powered by DPDK ------------------------
```

1.2.3. ANS (1 core) routing forward both way

Pktgen port 0 <-> ans routing forward (1 core) <-> pktgen port 1

➢ ANS startup command
./build/ans   -c 0x2 –n 1 –base-virtaddr=0x2aaa2aa0000 -- -p 0x3 –config="(0,0,1), (1,0,1)"

➢ Testing result

Packet Size (Bytes)	Throughput (Mpps)
64	10.88
128	Line Rate

```
/ Ports 0-3 of 5    <Main Page>  Copyright (c) <2010-2017>, Intel Corporation
   Flags:Port      :    P------I---g---:0    P------I---g---:1
Link State         :     <UP-10000-FD>        <UP-10000-FD>      ----TotalRate----
Pkts/s Max/Rx      :     5443580/5442400    5443592/5442400    10887172/10884800
       Max/Tx      :   14880923/14880888  14880929/14880894    29761852/29761782
MBits/s Rx/Tx      :          3657/9999          3657/9999          7314/19999
Broadcast          :                  0                  0
Multicast          :                  0                  0
   64 Bytes        :          179979124          180148088
   65-127          :                  0                  0
   128-255         :                  0                  0
   256-511         :                  0                  0
   512-1023        :                  0                  0
   1024-1518       :                  0                  0
Runts/Jumbos       :                0/0                0/0
Errors Rx/Tx       :                0/0                0/0
Total Rx Pkts      :          177257988          177426904
      Tx Pkts      :          484721739          484370083
      Rx MBs       :             119117             119230
      Tx MBs       :             325732             325496
ARP/ICMP Pkts      :                0/0                0/0
                   :
Pattern Type       :            abcd...            abcd...
Tx Count/% Rate    :       Forever /100%       Forever /100%
PktSize/Tx Burst   :           64 /   64           64 /   64
Src/Dest Port      :         1234 / 5678         1234 / 5678
Pkt Type:VLAN ID   :      IPv4 / TCP:0001     IPv4 / TCP:0001
Dst  IP Address    :          10.1.0.10          10.0.0.10
Src  IP Address    :       10.0.0.10/24       10.1.0.10/24
Dst MAC Address    :  90:e2:ba:92:cc:0c  90:e2:ba:92:cc:0e
Src MAC Address    :  00:16:31:fb:00:58  00:16:31:fb:00:59
VendID/PCI Addr    :  8086:10fb/01:00.0  8086:10fb/01:00.1

-- Pktgen Ver: 3.4.2 (DPDK 17.05.2)  Powered by DPDK -----------------------------
```

1.2.4. ANS (2 core) routing forward both way

Pktgen port 0 <-> ans routing forward (2 core) <-> pktgen port 1

➢   ANS startup command

#./build/ans   -c 0x6 –n 1 –base-virtaddr=0x2aaa2aa0000 -- -p 0x3 –config=”(0,0,1), (1,0,2)”

➢   Testing result

Packet Size (Bytes)	Throughput (Mpps)
64	20.71
128	Line Rate

```
- Ports 0-3 of 5    <Main Page>  Copyright (c) <2010-2017>, Intel Corporation
   Flags:Port      :    P------I---g---:0    P------I---g---:1
Link State         :       <UP-10000-FD>       <UP-10000-FD>      ----TotalRate----
Pkts/s Max/Rx      :   10356124/10355876   10356136/10355856   20712260/20711732
       Max/Tx      :   14880927/14880870   14880939/14880858   29761866/29761728
MBits/s Rx/Tx      :           6959/9999           6959/9999         13918/19999
Broadcast          :                   0                   0
Multicast          :                   0                   0
   64 Bytes        :           828449435           828450948
   65-127          :                   0                   0
   128-255         :                   0                   0
   256-511         :                   0                   0
   512-1023        :                   0                   0
   1024-1518       :                   0                   0
Runts/Jumbos       :                 0/0                 0/0
Errors Rx/Tx       :                 0/0                 0/0
Total Rx Pkts      :           819388023           819389544
      Tx Pkts      :          1189461185          1189130630
      Rx MBs       :              550628              550629
      Tx MBs       :              799317              799095
ARP/ICMP Pkts      :                13/0                17/0
                   :
Pattern Type       :             abcd...             abcd...
Tx Count/% Rate    :        Forever /100%       Forever /100%
PktSize/Tx Burst   :           64 /   64           64 /   64
Src/Dest Port      :         1234 / 5678         1234 / 5678
Pkt Type:VLAN ID   :      IPv4 / TCP:0001     IPv4 / TCP:0001
Dst  IP Address    :           10.1.0.10           10.0.0.10
Src  IP Address    :        10.0.0.10/24        10.1.0.10/24
Dst MAC Address    :   90:e2:ba:92:cc:0c   90:e2:ba:92:cc:0e
Src MAC Address    :   00:16:31:fb:00:58   00:16:31:fb:00:59
VendID/PCI Addr    :   8086:10fb/01:00.0   8086:10fb/01:00.1

-- Pktgen Ver: 3.4.2 (DPDK 17.05.2)  Powered by DPDK -------------------------
```

1.2.5. ANS (1 core) routing forward one way with 1000 ACL

Pktgen port 0 -> ans routing forward (1 core)-> pktgen port 1

➢ ANS startup command

./build/ans   -c 0x2 -n 1 --base-virtaddr=0x2aaa2aa0000 -- -p 0x3 --config="(0,0,1), (1,0,1)"

ans> acl add index 1   srcaddr 2.0.0.0/24 dstaddr 3.0.0.0/24 srcportstart 0 srcportend 65535
dstportstart 1   dstportend 1   protocol 0 iface any drop

….

ans> acl add index 1000 srcaddr 2.0.0.0/24 dstaddr 3.0.0.0/24 srcportstart 0 srcportend 65535
dstportstart 1000 dstportend 1000 protocol 0 iface any drop

➢ Testing result

Packet Size (Bytes)	Throughput (Mpps)
64	8.13
128	14.28
256	Line Rate

=========64 byte ========

```
/ Ports 0-3 of 5    <Main Page>  Copyright (c) <2010-2017>, Intel Corporation
   Flags:Port    :   P------I---g---:0   P------I---g---:1
Link State       :     <UP-10000-FD>       <UP-10000-FD>      ----TotalRate----
Pkts/s Max/Rx    :               0/0   8133341/8133341        8133341/8133341
      Max/Tx     :  14880917/14880891             0/0       14880917/14880891
MBits/s Rx/Tx    :            0/9999            5465/0            5465/9999
Broadcast        :                 0                 0
Multicast        :                 0                 0
  64 Bytes       :                 0         146386760
  65-127         :                 0                 0
  128-255        :                 0                 0
  256-511        :                 0                 0
  512-1023       :                 0                 0
  1024-1518      :                 0                 0
Runts/Jumbos     :               0/0               0/0
Errors Rx/Tx     :               0/0               0/0
Total Rx Pkts    :                 0         143341283
      Tx Pkts    :         262493617                 0
      Rx MBs     :                 0             96325
      Tx MBs     :            176395                 0
ARP/ICMP Pkts    :               0/0               0/0
                 :
Pattern Type     :           abcd...           abcd...
Tx Count/% Rate  :      Forever /100%      Forever /100%
PktSize/Tx Burst :          64 /   64          64 /   64
Src/Dest Port    :        1234 / 5678        1234 / 5678
Pkt Type:VLAN ID :     IPv4 / TCP:0001     IPv4 / TCP:0001
Dst  IP Address  :         10.1.0.10         10.0.0.10
Src  IP Address  :      10.0.0.10/24      10.1.0.10/24
Dst MAC Address  :  90:e2:ba:92:cc:0c  90:e2:ba:92:cc:0e
Src MAC Address  :  00:16:31:fb:00:58  00:16:31:fb:00:59
VendID/PCI Addr  :  8086:10fb/01:00.0  8086:10fb/01:00.1
```

=========128 byte ========

```
/ Ports 0-3 of 5   <Main Page>  Copyright (c) <2010-2017>, Intel Corporation
  Flags:Port     :    P------I---g---:0    P------I---g---:1
Link State       :       <UP-10000-FD>       <UP-10000-FD>     ----TotalRate----
Pkts/s Max/Rx    :                0/0   8109417/8104924    8109417/8104924
       Max/Tx    :    8445932/8445925                0/0    8445932/8445925
MBits/s Rx/Tx    :             0/9999             9596/0          9596/9999
Broadcast        :                  0                  0
Multicast        :                  0                  0
   64 Bytes      :                  0                  0
   65-127        :                  0                  0
   128-255       :                  0          308055350
   256-511       :                  0                  0
   512-1023      :                  0                  0
   1024-1518     :                  0                  0
Runts/Jumbos     :                0/0                0/0
Errors Rx/Tx     :                0/0                0/0
Total Rx Pkts    :                  0          301976663
      Tx Pkts    :          314672683                  0
      Rx MBs     :                  0             357540
      Tx MBs     :             372572                  0
ARP/ICMP Pkts    :                0/0                0/0
                 :
Pattern Type     :            abcd...            abcd...
Tx Count/% Rate  :       Forever /100%      Forever /100%
PktSize/Tx Burst :          128 /   64         128 /   64
Src/Dest Port    :         1234 / 5678        1234 / 5678
Pkt Type:VLAN ID :      IPv4 / TCP:0001     IPv4 / TCP:0001
Dst  IP Address  :          10.1.0.10          10.0.0.10
Src  IP Address  :       10.0.0.10/24       10.1.0.10/24
Dst MAC Address  :  90:e2:ba:92:cc:0c  90:e2:ba:92:cc:0e
Src MAC Address  :  00:16:31:fb:00:58  00:16:31:fb:00:59
VendID/PCI Addr  :  8086:10fb/01:00.0  8086:10fb/01:00.1
```

1.2.6. ANS (2 core) routing forward both way with 1000 ACL

Pktgen port 0 <-> ans routing forward (2 core) <-> pktgen port 1

➢ ANS startup command

#./build/ans   -c 0x6 –n 1 –base-virtaddr=0x2aaa2aa0000 -- -p 0x3 –config="(0,0,1), (1,0,2)"

ans> acl add index 1   srcaddr 2.0.0.0/24 dstaddr 3.0.0.0/24 srcportstart 0 srcportend 65535 dstportstart 1   dstportend 1   protocol 0 iface any drop

….

ans> acl add index 1000 srcaddr 2.0.0.0/24 dstaddr 3.0.0.0/24 srcportstart 0 srcportend 65535 dstportstart 1000 dstportend 1000 protocol 0 iface any drop

➢ Testing result

Packet Size (Bytes)	Throughput (Mpps)

64	16.35
128	28.14
256	Line Rate

=========64 byte ========

```
| Ports 0-3 of 5   <Main Page>  Copyright (c) <2010-2017>, Intel Corporation
  Flags:Port   :   P------I---g---:0   P------I---g---:1
Link State    :     <UP-10000-FD>       <UP-10000-FD>      ----TotalRate----
Pkts/s Max/Rx :     8257806/8253439     8100028/8092483    16357811/16345922
     Max/Tx   :   14881272/14880663   14881415/14880708    29762687/29761371
MBits/s Rx/Tx :           5546/9999           5438/9999          10984/19999
Broadcast     :                   0                   0
Multicast     :                   0                   0
  64 Bytes    :           409716464           402230028
  65-127      :                   0                   0
  128-255     :                   0                   0
  256-511     :                   0                   0
  512-1023    :                   0                   0
  1024-1518   :                   0                   0
Runts/Jumbos  :                 0/0                 0/0
Errors Rx/Tx  :                 0/0                 0/0
Total Rx Pkts :           401475384           394144067
     Tx Pkts  :           742717264           742717280
     Rx MBs   :              269791              264864
     Tx MBs   :              499106              499106
ARP/ICMP Pkts :                 0/0                 0/0
              :
Pattern Type  :            abcd...             abcd...
Tx Count/% Rate :      Forever /100%       Forever /100%
PktSize/Tx Burst :        64 /   64           64 /   64
Src/Dest Port :         1234 / 5678         1234 / 5678
Pkt Type:VLAN ID :    IPv4 / TCP:0001     IPv4 / TCP:0001
Dst  IP Address :           10.1.0.10           10.0.0.10
Src  IP Address :        10.0.0.10/24        10.1.0.10/24
Dst MAC Address :   90:e2:ba:92:cc:0c   90:e2:ba:92:cc:0e
Src MAC Address :   00:16:31:fb:00:58   00:16:31:fb:00:59
VendID/PCI Addr :   8086:10fb/01:00.0   8086:10fb/01:00.1
```

=========128 byte ========

```
- Ports 0-3 of 5   <Main Page>  Copyright (c) <2010-2017>, Intel Corporation
   Flags:Port      :    P------I---g---:0    P------I---g---:1
Link State         :       <UP-10000-FD>       <UP-10000-FD>     ----TotalRate----
Pkts/s Max/Rx      :    7986284/7985756     7985992/7985780   15971936/15971536
       Max/Tx      :    8445927/8445927     8445923/8445916   16891843/16891843
MBits/s Rx/Tx      :         9455/9999           9455/9999         18910/19999
Broadcast          :                 0                   0
Multicast          :                 0                   0
  64 Bytes         :                 0                   0
  65-127           :                 0                   0
  128-255          :         191783796           191820879
  256-511          :                 0                   0
  512-1023         :                 0                   0
  1024-1518        :                 0                   0
Runts/Jumbos       :               0/0                 0/0
Errors Rx/Tx       :               0/0                 0/0
Total Rx Pkts      :         184795984           184833095
      Tx Pkts      :         195468872           195424285
      Rx MBs       :            218798              218842
      Tx MBs       :            231435              231382
ARP/ICMP Pkts      :               0/0                 0/0
                   :
Pattern Type       :            abcd...             abcd...
Tx Count/% Rate    :      Forever /100%       Forever /100%
PktSize/Tx Burst   :          128 /   64         128 /   64
Src/Dest Port      :         1234 / 5678        1234 / 5678
Pkt Type:VLAN ID   :      IPv4 / TCP:0001    IPv4 / TCP:0001
Dst  IP Address    :         10.1.0.10           10.0.0.10
Src  IP Address    :      10.0.0.10/24        10.1.0.10/24
Dst MAC Address    :  90:e2:ba:92:cc:0c   90:e2:ba:92:cc:0e
Src MAC Address    :  00:16:31:fb:00:58   00:16:31:fb:00:59
VendID/PCI Addr    :  8086:10fb/01:00.0   8086:10fb/01:00.1
```

2. ANS UDP APP Performance

2.1. Testing Environment

➢   CPU

Intel(R) Xeon(R) CPU E5-2683 v3 @ 2.00GHz

➢   NIC

02:00.0 Ethernet controller: Intel Corporation 82599ES 10-Gigabit SFI/SFP+ Network Connection (rev 01)
02:00.1 Ethernet controller: Intel Corporation 82599ES 10-Gigabit SFI/SFP+ Network Connection (rev 01)

➢   Version

dpdk-17.05.2.tar.xz

Pktgen Ver: 3.4.2 (DPDK 17.05.2)

➢ Network Topology
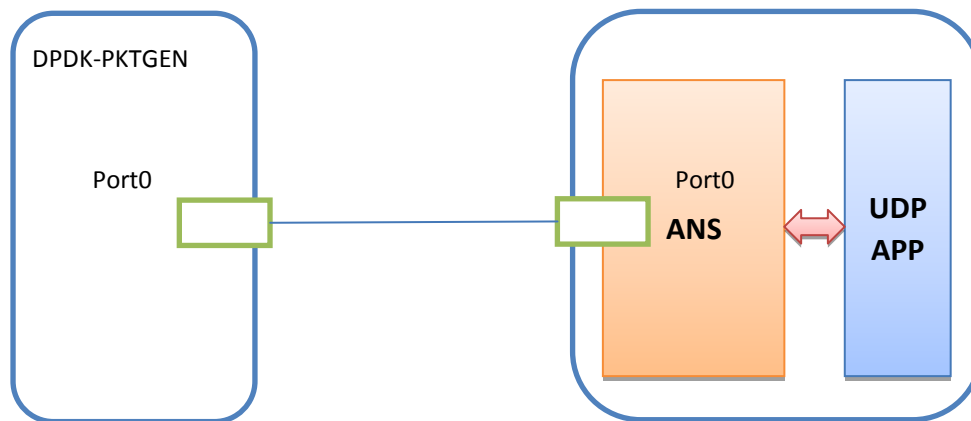
2.2. Testing Report

2.2.1. ANS (1 core) UDP APP send throughput

ans udp app(1 fd) -> ans L4/L3/L2(1 core)-> pktgen port 0

➢ ANS startup command
  # ./build/ans   -c 0x2 -n 1 --base-virtaddr=0x2aaa2aa0000 -- -p 0x3 --config="(0,0,1), (1,0,1)"
  # ./build/dpdk_udp 4
➢ Testing result

Packet Size (Bytes)	Throughput (MBps)
64	3664
128	5971
256	10000

```
===64 bytes
```

```
\ Ports 0-3 of 5   <Main Page>  Copyright (c) <2010-2017>, Intel Corporation
   Flags:Port      :    P------I---g---:0    P--------------:1
Link State         :       <UP-10000-FD>       <UP-10000-FD>    ----TotalRate----
Pkts/s Max/Rx      :     5210681/5205704                 0/0    5210681/5205704
       Max/Tx      :                 0/0                 0/0                0/0
MBits/s Rx/Tx      :              3664/0                 0/0             3664/0
Broadcast          :                   0                   0
Multicast          :                   0                   0
  64 Bytes         :                   0                   0
  65-127           :            25823518                   0
  128-255          :                   0                   0
  256-511          :                   0                   0
  512-1023         :                   0                   0
  1024-1518        :                   0                   0
Runts/Jumbos       :                 0/0                 0/0
Errors Rx/Tx       :                 0/0                 0/0
Total Rx Pkts      :            23869570                   0
      Tx Pkts      :                   0                   0
      Rx MBs       :               16804                   0
      Tx MBs       :                   0                   0
ARP/ICMP Pkts      :                 0/0                 0/0
                   :
Pattern Type       :             abcd...             abcd...
Tx Count/% Rate    :        Forever /100%       Forever /100%
PktSize/Tx Burst   :            64 /   64           64 /   64
Src/Dest Port      :         9999 / 8888        1234 / 5678
Pkt Type:VLAN ID   :       IPv4 / UDP:0001     IPv4 / TCP:0001
Dst  IP Address    :            10.0.0.2         192.168.0.1
Src  IP Address    :         10.0.0.10/24      192.168.1.1/24
Dst MAC Address    :   90:e2:ba:92:cc:0c   00:16:31:fb:00:58
Src MAC Address    :   00:16:31:fb:00:58   00:16:31:fb:00:59
VendID/PCI Addr    :   8086:10fb/01:00.0   8086:10fb/01:00.1

-- Pktgen Ver: 3.4.2 (DPDK 17.05.2)  Powered by DPDK --------------------------
```

=== 128 byte

```
/ Ports 0-3 of 5   <Main Page>  Copyright (c) <2010-2017>, Intel Corporation
   Flags:Port      :     P------I---g---:0   P--------------:1
Link State         :       <UP-10000-FD>      <UP-10000-FD>     ----TotalRate----
Pkts/s Max/Rx      :     4920384/4910858                0/0    4920384/4910858
       Max/Tx      :                 0/0                0/0                0/0
MBits/s Rx/Tx      :              5971/0                0/0             5971/0
Broadcast          :                   0                  0
Multicast          :                   0                  0
   64 Bytes        :                   0                  0
   65-127          :                   0                  0
   128-255         :           193424100                  0
   256-511         :                   0                  0
   512-1023        :                   0                  0
   1024-1518       :                   0                  0
Runts/Jumbos       :                 0/0                0/0
Errors Rx/Tx       :                 0/0                0/0
Total Rx Pkts      :           192808306                  0
      Tx Pkts      :                   0                  0
      Rx MBs       :              234454                  0
      Tx MBs       :                   0                  0
ARP/ICMP Pkts      :                 0/0                0/0
                   :
Pattern Type       :             abcd...            abcd...
Tx Count/% Rate    :        Forever /100%       Forever /100%
PktSize/Tx Burst   :            64 /   64           64 /   64
Src/Dest Port      :          9999 / 8888         1234 / 5678
Pkt Type:VLAN ID   :        IPv4 / UDP:0001     IPv4 / TCP:0001
Dst  IP Address    :            10.0.0.2           192.168.0.1
Src  IP Address    :         10.0.0.10/24        192.168.1.1/24
Dst MAC Address    :   90:e2:ba:92:cc:0c   00:16:31:fb:00:58
Src MAC Address    :   00:16:31:fb:00:58   00:16:31:fb:00:59
VendID/PCI Addr    :   8086:10fb/01:00.0   8086:10fb/01:00.1

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```

=== 256 byte

```
| Ports 0-3 of 5    <Main Page>  Copyright (c) <2010-2017>, Intel Corporation
   Flags:Port      :    P------I---g---:0    P--------------:1
Link State         :      <UP-10000-FD>        <UP-10000-FD>      ----TotalRate----
Pkts/s Max/Rx      :     4464334/4464332                 0/0      4464334/4464332
       Max/Tx      :                 0/0                 0/0                  0/0
MBits/s Rx/Tx      :             10000/0                 0/0              10000/0
Broadcast          :                   0                   0
Multicast          :                   0                   0
   64 Bytes        :                   0                   0
   65-127          :                   0                   0
   128-255         :                   0                   0
   256-511         :           173572751                   0
   512-1023        :                   0                   0
   1024-1518       :                   0                   0
Runts/Jumbos       :                 0/0                 0/0
Errors Rx/Tx       :                 0/0                 0/0
Total Rx Pkts      :           169666154                   0
      Tx Pkts      :                   0                   0
      Rx MBs       :              380052                   0
      Tx MBs       :                   0                   0
ARP/ICMP Pkts      :                 0/0                 0/0
                   :
Pattern Type       :             abcd...             abcd...
Tx Count/% Rate    :        Forever /100%       Forever /100%
PktSize/Tx Burst   :            64 /   64           64 /   64
Src/Dest Port      :          9999 / 8888         1234 / 5678
Pkt Type:VLAN ID   :       IPv4 / UDP:0001     IPv4 / TCP:0001
Dst  IP Address    :            10.0.0.2         192.168.0.1
Src  IP Address    :         10.0.0.10/24       192.168.1.1/24
Dst MAC Address    :   90:e2:ba:92:cc:0c   00:16:31:fb:00:58
Src MAC Address    :   00:16:31:fb:00:58   00:16:31:fb:00:59
VendID/PCI Addr    :   8086:10fb/01:00.0   8086:10fb/01:00.1

-- Pktgen Ver: 3.4.2 (DPDK 17.05.2)  Powered by DPDK --------------------------
```