

Assignment 2 NetProg CWM

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Repository Link:

<https://github.com/MrJimbo2002/CWM-ProgNets/tree/main/assignment5>

The following figure corresponds to the ping test results under l3switch2.py control plane sending from server to client machine via the Pi switch.

```
ubuntu@ubuntu: ~/CWM-ProgNets/assignment5 × ubuntu@ub
ubuntu@ubuntu:~/CWM-ProgNets/assignment5$ ping 169.254.21.80
PING 169.254.21.80 (169.254.21.80) 56(84) bytes of data.
64 bytes from 169.254.21.80: icmp_seq=1 ttl=63 time=2.25 ms
64 bytes from 169.254.21.80: icmp_seq=2 ttl=63 time=2.31 ms
64 bytes from 169.254.21.80: icmp_seq=3 ttl=63 time=2.27 ms
64 bytes from 169.254.21.80: icmp_seq=4 ttl=63 time=2.28 ms
64 bytes from 169.254.21.80: icmp_seq=5 ttl=63 time=2.36 ms
64 bytes from 169.254.21.80: icmp_seq=6 ttl=63 time=2.20 ms
64 bytes from 169.254.21.80: icmp_seq=7 ttl=63 time=2.11 ms
64 bytes from 169.254.21.80: icmp_seq=8 ttl=63 time=2.20 ms
64 bytes from 169.254.21.80: icmp_seq=9 ttl=63 time=2.21 ms
64 bytes from 169.254.21.80: icmp_seq=10 ttl=63 time=2.13 ms
64 bytes from 169.254.21.80: icmp_seq=11 ttl=63 time=2.36 ms
64 bytes from 169.254.21.80: icmp_seq=12 ttl=63 time=2.11 ms
64 bytes from 169.254.21.80: icmp_seq=13 ttl=63 time=2.28 ms
64 bytes from 169.254.21.80: icmp_seq=14 ttl=63 time=2.27 ms
64 bytes from 169.254.21.80: icmp_seq=15 ttl=63 time=2.34 ms
64 bytes from 169.254.21.80: icmp_seq=16 ttl=63 time=2.14 ms
64 bytes from 169.254.21.80: icmp_seq=17 ttl=63 time=2.30 ms
64 bytes from 169.254.21.80: icmp_seq=18 ttl=63 time=2.13 ms
64 bytes from 169.254.21.80: icmp_seq=19 ttl=63 time=2.00 ms
64 bytes from 169.254.21.80: icmp_seq=20 ttl=63 time=2.18 ms
64 bytes from 169.254.21.80: icmp_seq=21 ttl=63 time=2.32 ms
64 bytes from 169.254.21.80: icmp_seq=22 ttl=63 time=2.11 ms
64 bytes from 169.254.21.80: icmp_seq=23 ttl=63 time=2.31 ms
64 bytes from 169.254.21.80: icmp_seq=24 ttl=63 time=2.22 ms
64 bytes from 169.254.21.80: icmp_seq=25 ttl=63 time=1.96 ms
64 bytes from 169.254.21.80: icmp_seq=26 ttl=63 time=1.93 ms
64 bytes from 169.254.21.80: icmp_seq=27 ttl=63 time=1.95 ms
64 bytes from 169.254.21.80: icmp_seq=28 ttl=63 time=2.16 ms
64 bytes from 169.254.21.80: icmp_seq=29 ttl=63 time=2.13 ms
64 bytes from 169.254.21.80: icmp_seq=30 ttl=63 time=2.11 ms
64 bytes from 169.254.21.80: icmp_seq=31 ttl=63 time=2.07 ms
64 bytes from 169.254.21.80: icmp_seq=32 ttl=63 time=2.09 ms
64 bytes from 169.254.21.80: icmp_seq=33 ttl=63 time=2.21 ms
64 bytes from 169.254.21.80: icmp_seq=34 ttl=63 time=2.18 ms
64 bytes from 169.254.21.80: icmp_seq=35 ttl=63 time=2.25 ms
64 bytes from 169.254.21.80: icmp_seq=36 ttl=63 time=2.28 ms
64 bytes from 169.254.21.80: icmp_seq=37 ttl=63 time=2.28 ms
64 bytes from 169.254.21.80: icmp_seq=38 ttl=63 time=2.15 ms
64 bytes from 169.254.21.80: icmp_seq=39 ttl=63 time=2.27 ms
64 bytes from 169.254.21.80: icmp_seq=40 ttl=63 time=2.21 ms
64 bytes from 169.254.21.80: icmp_seq=41 ttl=63 time=1.99 ms
64 bytes from 169.254.21.80: icmp_seq=42 ttl=63 time=2.18 ms
64 bytes from 169.254.21.80: icmp_seq=43 ttl=63 time=2.10 ms
64 bytes from 169.254.21.80: icmp_seq=44 ttl=63 time=2.17 ms
64 bytes from 169.254.21.80: icmp_seq=45 ttl=63 time=2.32 ms
64 bytes from 169.254.21.80: icmp_seq=46 ttl=63 time=2.22 ms
64 bytes from 169.254.21.80: icmp_seq=47 ttl=63 time=2.10 ms
64 bytes from 169.254.21.80: icmp_seq=48 ttl=63 time=2.04 ms
64 bytes from 169.254.21.80: icmp_seq=49 ttl=63 time=2.11 ms
64 bytes from 169.254.21.80: icmp_seq=50 ttl=63 time=2.13 ms
64 bytes from 169.254.21.80: icmp_seq=51 ttl=63 time=2.33 ms
```

The following figure demonstrates the iperf test outcomes under l3switch2.py control plane sending from server to client machine via the Pi switch.

```
ubuntu@ubuntu:~/CWM-ProgNets/assignments5$ iperf -c 169.254.21.80 -i 1 -t 10
-----
Client connecting to 169.254.21.80, TCP port 5001
TCP window size: 85.0 KByte (default)
-----
[  1] local 169.254.46.161 port 59628 connected with 169.254.21.80 port 5001
[ ID] Interval      Transfer    Bandwidth
[  1] 0.0000-1.0000 sec   90.6 KBytes  742 Kbits/sec
[  1] 1.0000-2.0000 sec   334 KBytes  2.73 Mbits/sec
[  1] 2.0000-3.0000 sec   256 KBytes  2.10 Mbits/sec
[  1] 3.0000-4.0000 sec   256 KBytes  2.10 Mbits/sec
[  1] 4.0000-5.0000 sec   383 KBytes  3.14 Mbits/sec
[  1] 5.0000-6.0000 sec   256 KBytes  2.10 Mbits/sec
[  1] 6.0000-7.0000 sec   256 KBytes  2.10 Mbits/sec
[  1] 7.0000-8.0000 sec   384 KBytes  3.15 Mbits/sec
[  1] 8.0000-9.0000 sec   255 KBytes  2.09 Mbits/sec
[  1] 9.0000-10.0000 sec  256 KBytes  2.10 Mbits/sec
[  1] 10.0000-10.4095 sec  128 KBytes  2.56 Mbits/sec
[  1] 0.0000-10.4095 sec  2.79 MBytes  2.25 Mbits/sec
```