

Before implementing reflector.p4:

The screenshot shows a Wireshark window titled "Capturing from enx0c37965f8a1d". The packet list contains six entries, all of which are UDP packets from 192.168.10.1 to 192.168.10.2 on port 50000 to 1024. The packet details pane shows the structure of the first packet: Ethernet II, Internet Protocol Version 4, User Datagram Protocol, and Data (22 bytes).

No.	Time	Source	Destination	Protocol	Length	Info
195	6.192787317	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024 Len=22
196	6.193834969	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024 Len=22
197	6.248948303	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024 Len=22
198	6.249977050	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024 Len=22
199	6.304811485	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024 Len=22
200	6.305870848	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024 Len=22

Frame 1: 64 bytes on wire (512 bits), 64 bytes captured (512 bits) on interface enx0c37965f8a1d, id 0  
Ethernet II, Src: 00:00:00\_00:00:02 (00:00:00:00:00:02), Dst: 00:00:00\_00:00:01 (00:00:00:00:00:01)  
Internet Protocol Version 4, Src: 192.168.10.1, Dst: 192.168.10.2  
User Datagram Protocol, Src Port: 50000, Dst Port: 1024  
Data (22 bytes)

After implementing reflector.p4 :

table\_add MyIngress.src\_mac\_drop MyIngress.drop 00:00:00:00:00:02 ==>

The screenshot shows a Wireshark window titled "Capturing from enx0c37965f8a1d". The packet list contains five entries, all of which are UDP packets from 192.168.10.1 to 192.168.10.2 on port 50000 to 1024. The packet details pane shows the structure of the first packet: Ethernet II, Internet Protocol Version 4, User Datagram Protocol, and Data (22 bytes).

No.	Time	Source	Destination	Protocol	Length	Info
95	5.940879817	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024 Len=22
96	6.024893813	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024 Len=22
97	6.088976872	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024 Len=22
98	6.148816206	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024 Len=22
99	6.212787098	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024 Len=22
100	6.296945150	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024 Len=22

Frame 1: 64 bytes on wire (512 bits), 64 bytes captured (512 bits) on interface enx0c37965f8a1d, id 0  
Ethernet II, Src: 00:00:00\_00:00:02 (00:00:00:00:00:02), Dst: 00:00:00\_00:00:01 (00:00:00:00:00:01)  
Internet Protocol Version 4, Src: 192.168.10.1, Dst: 192.168.10.2  
User Datagram Protocol, Src Port: 50000, Dst Port: 1024  
Data (22 bytes)

The number of packets has been halved as the source packets have been dropped.

Now using CWM to execute the swap command:

1	0.000000000	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024	Len=22
2	0.001386586	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024	Len=22
3	0.056955895	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024	Len=22
4	0.057946319	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024	Len=22
5	0.117093361	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024	Len=22
6	0.118188667	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024	Len=22
7	0.196836170	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024	Len=22
8	0.197864661	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024	Len=22
9	0.276944045	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024	Len=22
10	0.277910110	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024	Len=22
11	0.344935184	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024	Len=22
12	0.346061211	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024	Len=22
13	0.404952888	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024	Len=22
14	0.406047755	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024	Len=22
15	0.481047702	192.168.10.1	192.168.10.2	UDP	64	50000 → 1024	Len=22
▶ Frame 2: 64 bytes on wire (512 bits), 64 bytes captured (512 bits) on interface enx0c37965f8a1d, id 0 ▶ Ethernet II, Src: 00:00:00_00:00:01 (00:00:00:00:00:01), Dst: 00:00:00_00:00:02 (00:00:00:00:00:02) ▶ Internet Protocol Version 4, Src: 192.168.10.1, Dst: 192.168.10.2 ▶ User Datagram Protocol, Src Port: 50000, Dst Port: 1024 ▶ Data (22 bytes)							

0000	00 00 00 00 00 02 00 00	00 00 00 01 08 00	45 00	.....E.
0010	00 32 00 01 00 00 40 11	e5 66 c0 a8 0a 01 c0 a8	2....@.f.....	
0020	0a 02 c3 50 04 00 00 1e	cb 5e 6b 70 76 68 6f 6c	..P....^kpvhol	
0030	6c 67 78 73 75 68 6c 76	70 66 74 71 70 74 6a 63	lgxsuhlv pftqptjc	