

The screenshot displays the Wireshark interface with the following details:

- Packet List:**
 - 10. 192.168.1.102 → 192.168.1.1 (ARP Request)
 - 9. 192.168.1.102 → 192.168.1.1 (ARP Request)
 - 8. 192.168.1.102 → 192.168.1.1 (ARP Request)
 - 7. 192.168.1.102 → 192.168.1.1 (ARP Request)
 - 6. 192.168.1.102 → 192.168.1.1 (ARP Request)
 - 5. 192.168.1.102 → 192.168.1.1 (ARP Request)
 - 4. 192.168.1.102 → 192.168.1.1 (ARP Request)
 - 3. 192.168.1.102 → 192.168.1.1 (ARP Request)
 - 2. 192.168.1.102 → 192.168.1.1 (ARP Request)
 - 1. 192.168.1.102 → 192.168.1.1 (ARP Request)
- Packet Details (No. 10):**
 - Ethernet II, Src: Realtek-UTP-Card (08:00:27:00:00:00), Dst: 01:00:5E:00:00:01 (Broadcast)
 - Internet Protocol Version 4, Src: 192.168.1.102, Dst: 192.168.1.1
 - ARP, Operation: Request, Src MAC: 08:00:27:00:00:00, Dst MAC: 01:00:5E:00:00:01
- Packet Bytes:**

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0000  08 00 27 00 00 00 08 00 00 00 00 00 00 00 00 00  ...
0010  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0020  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0030  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0040  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0050  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0060  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0070  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0080  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0090  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0100  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0110  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0120  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0130  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0140  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0150  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0160  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0170  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0180  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0190  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0200  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0210  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0220  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0230  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0240  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0250  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0260  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0270  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0280  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0290  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0300  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0310  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0320  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0330  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0340  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0350  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0360  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0370  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0380  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0390  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0400  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0410  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0420  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0430  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0440  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
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0460  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0470  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0480  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0490  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0500  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0510  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0520  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0530  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0540  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0550  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0560  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0570  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0580  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0590  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...
0
```

an original copy of this photo has been submitted.

```
mininet> dpctl dump-flows
*** s1 -----
NXST_FLOW reply (xid=0x4):
```

- c. There are two timeouts for the openflow system: Idle and Hard. Idle timeout is the number of seconds to keep the entry when there is no live traffic. The hard timeout is after that many seconds, simply remove the entry from the table. For our table, the packets all had 60 idle and 0 hard (meaning hard timeout wasn't being used).
- d. The latency of the ping goes down over time because the protocol has ramp-up time. First to establish the connection and switch flow table entry, but also to ensure the bandwidth is stable.