

1. Find some tcp packet received by your laptop and explore it.

I found a tcp packet in the list of incoming packets

Wireshark packet capture showing a list of TCP packets. The selected packet is a TCP Reset (RST) from 10.91.54.148 to 188.138.155.250. The packet details show Ethernet II, Internet Protocol Version 4, and Transmission Control Protocol. The packet bytes are displayed at the bottom.

2. Which protocols are used inside the tcp packet?

Inside the given packet the following protocols are used

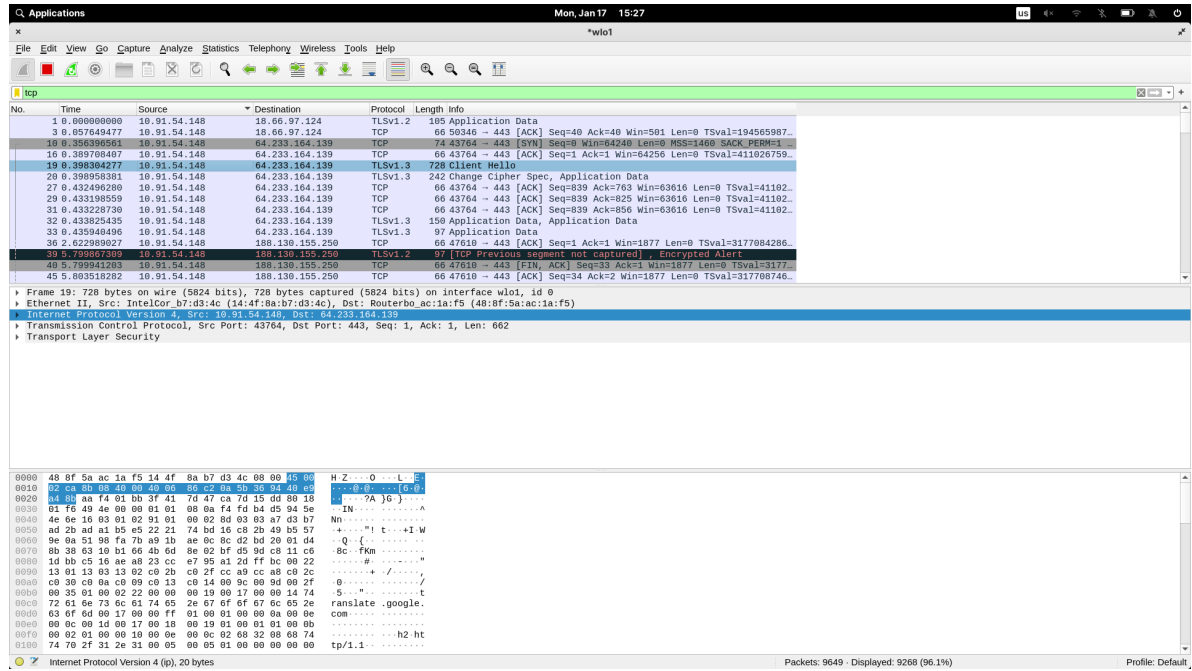
- Internet Protocol Version 4
- Transmission Control Protocol

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3. Who sent this package? What is the ip address and port of source host?

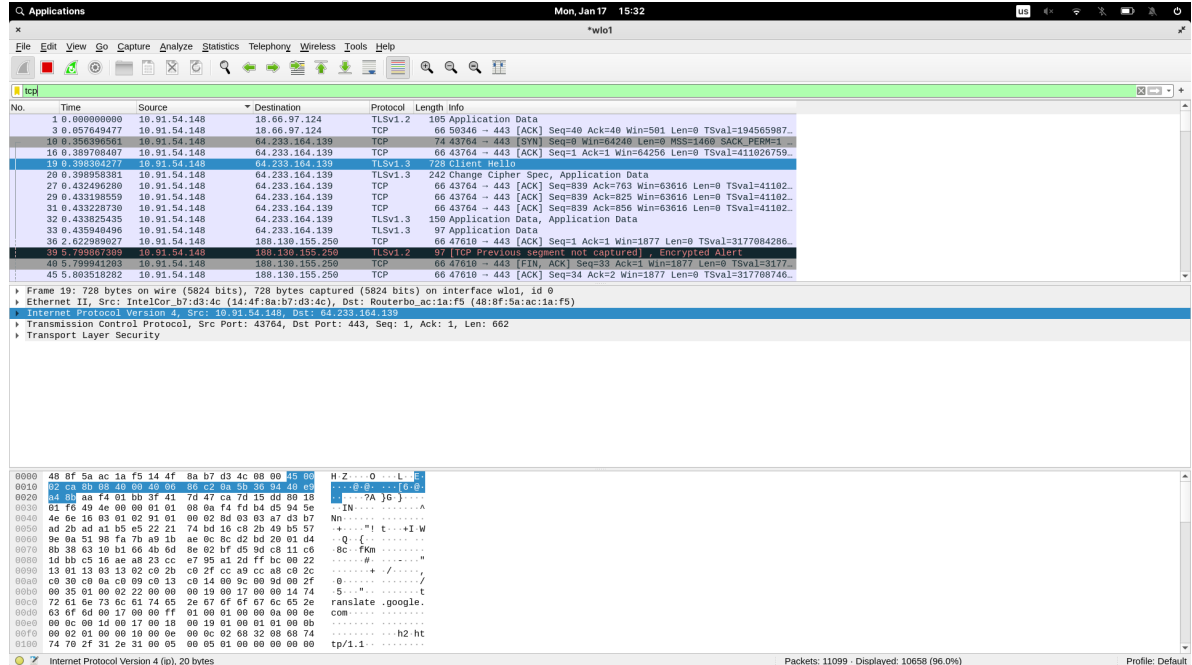
The packet was sent by 10.91.54.148 as is stated besides Internet Protocol Version 4

The port of the packet is 43764 as is stated besides Transmission Control Protocol



4. How do we filter out packets containing the tcp protocol?

In the upper corner there is a bar where filters can be applied. For example, if only TCP packets are needed, `tcp` can be typed in that bar.



5. How do we filter out packets from some specific host?

To filter out packets from a specific host, we can write down the following in the filter bar

`ip.src == 10.91.54.148` or `ip.addr == 10.91.54.148`

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ip.src == 10.91.54.148 or ip.addr == 10.91.54.148

No.	Time	Source	Destination	Protocol	Length	Info
1834	66.392617241	10.91.54.148	91.108.56.163	TCP	66	50516 → 443 [ACK] Seq=1004 Ack=144076 Win=303872 Len=0 TSval=...
1832	66.392591630	10.91.54.148	91.108.56.163	TCP	66	50516 → 443 [ACK] Seq=1004 Ack=142848 Win=301056 Len=0 TSval=...
1838	66.392247060	10.91.54.148	91.108.56.163	TCP	66	50516 → 443 [ACK] Seq=1004 Ack=141620 Win=298112 Len=0 TSval=...
1828	66.392210563	10.91.54.148	91.108.56.163	TCP	66	50516 → 443 [ACK] Seq=1004 Ack=148392 Win=295168 Len=0 TSval=...
1826	66.391028047	10.91.54.148	91.108.56.163	TCP	66	50516 → 443 [ACK] Seq=1004 Ack=139164 Win=292352 Len=0 TSval=...
1824	66.391011533	10.91.54.148	91.108.56.163	TCP	66	50516 → 443 [ACK] Seq=1004 Ack=137936 Win=289408 Len=0 TSval=...
1822	66.390681086	10.91.54.148	91.108.56.163	TCP	66	50516 → 443 [ACK] Seq=1004 Ack=136708 Win=286464 Len=0 TSval=...
1820	66.390664026	10.91.54.148	91.108.56.163	TCP	66	50516 → 443 [ACK] Seq=1004 Ack=135480 Win=283648 Len=0 TSval=...
1818	66.389652040	10.91.54.148	91.108.56.163	TCP	66	50516 → 443 [ACK] Seq=1004 Ack=134252 Win=280784 Len=0 TSval=...
1816	66.389634483	10.91.54.148	91.108.56.163	TCP	66	50516 → 443 [ACK] Seq=1004 Ack=133024 Win=277888 Len=0 TSval=...
1814	66.389607351	10.91.54.148	91.108.56.163	TCP	66	50516 → 443 [ACK] Seq=1004 Ack=131796 Win=274944 Len=0 TSval=...
1812	66.389592644	10.91.54.148	91.108.56.163	TCP	66	50516 → 443 [ACK] Seq=1004 Ack=130568 Win=272000 Len=0 TSval=...
1810	66.388331193	10.91.54.148	91.108.56.163	TCP	66	50516 → 443 [ACK] Seq=1004 Ack=129340 Win=269184 Len=0 TSval=...
1808	66.388303873	10.91.54.148	91.108.56.163	TCP	66	50516 → 443 [ACK] Seq=1004 Ack=128112 Win=266240 Len=0 TSval=...
1806	66.387355893	10.91.54.148	91.108.56.163	TCP	66	50516 → 443 [ACK] Seq=1004 Ack=126884 Win=263296 Len=0 TSval=...

Arrival Time: Jan 17, 2002 15:15:14.392911431 EAT
[Time shift for this packet: 0.000000000 seconds]
Epoch Time: 1642421714.392911431 seconds
[Time delta from previous captured frame: 0.000032159 seconds]
[Time delta from previous displayed frame: 0.000032159 seconds]
[Time since reference or first frame: 66.389652040 seconds]
Frame Number: 1818
Frame Length: 66 bytes (528 bits)
Capture Length: 66 bytes (528 bits)
[Frame is marked: False]
[Frame is ignored: False]
[Protocols in frame: eth:ethertype:ip:tcp]
[Coloring Rule Name: TCP]
[Coloring Rule String: tcp]

Ethernet II, Src: IntelCor_b7:d3:4c (14:4f:8a:b7:d3:4c), Dst: Routerbo_ac:1a:f5 (48:8f:5a:ac:1a:f5)

Internet Protocol Version 4, Src: 10.91.54.148, Dst: 91.108.56.163

```

0000  48 8f 5a ac 1a f5 14 4f 8a b7 d3 4c 08 00 45 08  H.Z...O...L...
0010  08 34 9d 00 20 00 00 00 c7 f0 06 5b 5c 94 50 06  4..B.O...[G..]
0020  55 54 c5 54 d1 b0 df 3f de 8a 9f 26 ad 9d 80 10  5..T.?...&
0030  08 91 e3 d1 00 00 01 01 08 0a 01 0b 08 ef f6 f8  8...a....
0040  8f ca

```

Internet Protocol Version 4 (ip), 20 bytes

Packets: 12793 · Displayed: 12775 (99.9%)

Profile: Default