

Packet Analysis for connection - Wireshark

8	38.241452	127.0.0.1	127.0.0.1	TCP	68 54425 → 1337 [SYN] Seq=0 Win=65535 Len=0 MSS=16344 WS=64 TSval=34008...
9	38.241546	127.0.0.1	127.0.0.1	TCP	68 1337 → 54425 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=16344 WS=64 ...
10	38.241565	127.0.0.1	127.0.0.1	TCP	56 54425 → 1337 [ACK] Seq=1 Ack=1 Win=408320 Len=0 TSval=3400855550 TSe...
11	38.241579	127.0.0.1	127.0.0.1	TCP	56 [TCP Window Update] 1337 → 54425 [ACK] Seq=1 Ack=1 Win=408320 Len=0 ...
12	38.241669	127.0.0.1	127.0.0.1	TCP	80 1337 → 54425 [PSH, ACK] Seq=1 Ack=1 Win=408320 Len=24 TSval=34653616...
13	38.241700	127.0.0.1	127.0.0.1	TCP	56 54425 → 1337 [ACK] Seq=1 Ack=25 Win=408320 Len=0 TSval=3400855550 TS...
15	43.232177	127.0.0.1	127.0.0.1	TCP	66 54425 → 1337 [PSH, ACK] Seq=1 Ack=25 Win=408320 Len=10 TSval=3400860...
16	43.232211	127.0.0.1	127.0.0.1	TCP	56 1337 → 54425 [ACK] Seq=25 Ack=11 Win=408320 Len=0 TSval=3465366601 T...
17	43.232317	127.0.0.1	127.0.0.1	TCP	58 1337 → 54425 [PSH, ACK] Seq=25 Ack=11 Win=408320 Len=0 TSval=3465366...
18	43.232332	127.0.0.1	127.0.0.1	TCP	56 54425 → 1337 [ACK] Seq=11 Ack=27 Win=408320 Len=0 TSval=3400860541 T...
19	47.640611	127.0.0.1	127.0.0.1	TCP	77 54425 → 1337 [PSH, ACK] Seq=11 Ack=27 Win=408320 Len=21 TSval=340086...
20	47.640641	127.0.0.1	127.0.0.1	TCP	56 1337 → 54425 [ACK] Seq=27 Ack=32 Win=408320 Len=0 TSval=3465371009 T...
21	47.640730	127.0.0.1	127.0.0.1	TCP	80 1337 → 54425 [PSH, ACK] Seq=27 Ack=32 Win=408320 Len=24 TSval=346537...
22	47.640746	127.0.0.1	127.0.0.1	TCP	56 54425 → 1337 [ACK] Seq=32 Ack=51 Win=408320 Len=0 TSval=3400864949 T...

Client Port: 54425, Server Port: 1337, Both running on same IP: 127.0.0.1

Packet 1: Client initiates a TCP connection to the server by sending a SYN packet.

Packet 2: Server responds with a SYN-ACK packet, acknowledging the connection request.

Packet 3: Client completes the TCP handshake by sending an ACK packet.

Packet 4: Server sends a TCP Window Update (ACK), indicating available buffer space.

Packet 5: Server sends the welcome message ("Welcome! Please log in.") to the client.

Packet 6: Client acknowledges receipt of the welcome message.

Packet 7: Client sends its username to the server as part of the login process.

Packet 8: Server acknowledges receipt of the username.

Packet 9: Server sends an "OK" message to prompt the client for the password.

Packet 10: Client acknowledges receipt of the "OK" message.

Packet 11: Client sends its password to the server to complete authentication.

Packet 12: Server acknowledges receipt of the password.

Packet 13: Server sends the login result (e.g., "Hi Bob, good to see you") to the client.

Packet 14: Client acknowledges receipt of the login result, completing the authentication phase.