

To record the client-server traffic I used the filter: tcp.port == 1337

The session in the command line:

```
Welcome! Please log in.
User: Bob
Password: simplepass
Hi Bob, good to see you.
is_primary: 101
response: Yes.
quit
```

The packet of the request “is_primary: 101” sent by the client:

tcp.port == 1337

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	127.0.0.1	127.0.0.1	TCP	68	59284 → 1337 [SYN, Seq=0 Win=65535 Len=0 MSS=16344 WS=64 TSval=2479092852 TSecr=0 SACK_PERM
2	0.000067	127.0.0.1	127.0.0.1	TCP	68	1337 → 59284 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=16344 WS=64 TSval=2912729438 TSecr=2479092852 SACK_PERM
3	0.000077	127.0.0.1	127.0.0.1	TCP	56	59284 → 1337 [ACK] Seq=1 Ack=1 Win=408256 Len=0 TSval=2479092852 TSecr=2912729438
4	0.000085	127.0.0.1	127.0.0.1	TCP	56	[TCP Window Update] 1337 → 59284 [ACK] Seq=1 Ack=1 Win=408256 Len=0 TSval=2912729438 TSecr=2479092852
5	0.000359	127.0.0.1	127.0.0.1	TCP	82	1337 → 59284 [PSH, ACK] Seq=1 Ack=1 Win=408256 Len=26 TSval=2912729438 TSecr=2479092852
6	0.000403	127.0.0.1	127.0.0.1	TCP	56	59284 → 1337 [ACK] Seq=1 Ack=27 Win=408256 Len=0 TSval=2479092852 TSecr=2912729438
7	3.357010	127.0.0.1	127.0.0.1	TCP	67	59284 → 1337 [PSH, ACK] Seq=1 Ack=27 Win=408256 Len=11 TSval=2479096209 TSecr=2912729438
8	3.357032	127.0.0.1	127.0.0.1	TCP	56	1337 → 59284 [ACK] Seq=27 Ack=12 Win=408256 Len=0 TSval=2912732795 TSecr=2479096209
9	3.357224	127.0.0.1	127.0.0.1	TCP	83	1337 → 59284 [PSH, ACK] Seq=27 Ack=12 Win=408256 Len=27 TSval=2912732795 TSecr=2479096209
10	3.357239	127.0.0.1	127.0.0.1	TCP	56	59284 → 1337 [ACK] Seq=12 Ack=54 Win=408192 Len=0 TSval=2479096209 TSecr=2912732795
11	10.0346...	127.0.0.1	127.0.0.1	TCP	79	59284 → 1337 [PSH, ACK] Seq=12 Ack=54 Win=408192 Len=23 TSval=2479102886 TSecr=2912732795
12	10.0346...	127.0.0.1	127.0.0.1	TCP	56	1337 → 59284 [ACK] Seq=54 Ack=35 Win=408256 Len=0 TSval=2912739472 TSecr=2479102886
13	10.0349...	127.0.0.1	127.0.0.1	TCP	83	1337 → 59284 [PSH, ACK] Seq=54 Ack=35 Win=408256 Len=27 TSval=2912739472 TSecr=2479102886
14	10.0349...	127.0.0.1	127.0.0.1	TCP	56	59284 → 1337 [ACK] Seq=35 Ack=81 Win=408192 Len=0 TSval=2479102886 TSecr=2912739472
15	39.6114...	127.0.0.1	127.0.0.1	TCP	74	59284 → 1337 [PSH, ACK] Seq=35 Ack=81 Win=408192 Len=18 TSval=2479132463 TSecr=2912739472
16	39.6115...	127.0.0.1	127.0.0.1	TCP	56	1337 → 59284 [ACK] Seq=81 Ack=53 Win=408192 Len=0 TSval=2912769049 TSecr=2479132463
17	39.6117...	127.0.0.1	127.0.0.1	TCP	73	1337 → 59284 [PSH, ACK] Seq=81 Ack=53 Win=408192 Len=17 TSval=2912769049 TSecr=2479132463
18	39.6117...	127.0.0.1	127.0.0.1	TCP	56	59284 → 1337 [ACK] Seq=53 Ack=98 Win=408192 Len=0 TSval=2479132463 TSecr=2912769049
19	45.9349...	127.0.0.1	127.0.0.1	TCP	56	59284 → 1337 [FIN, ACK] Seq=53 Ack=98 Win=408192 Len=0 TSval=2479138787 TSecr=2912769049
20	45.9350...	127.0.0.1	127.0.0.1	TCP	56	1337 → 59284 [ACK] Seq=98 Ack=54 Win=408192 Len=0 TSval=2912775373 TSecr=2479138787
21	45.9352...	127.0.0.1	127.0.0.1	TCP	56	1337 → 59284 [FIN, ACK] Seq=98 Ack=54 Win=408192 Len=0 TSval=2912775373 TSecr=2479138787
22	45.9352...	127.0.0.1	127.0.0.1	TCP	56	59284 → 1337 [ACK] Seq=54 Ack=99 Win=408192 Len=0 TSval=2479138787 TSecr=2912775373

> Frame 15: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on 0
> Null/Loopback
> Internet Protocol Version 4, Src: 127.0.0.1, Dst: 127.0.0.1
> Transmission Control Protocol, Src Port: 59284, Dst Port: 1337, Seq: 35, Ack: 81, Len: 18
Data (18 bytes)
Data: 31352369735f7072696d6172793a20313031
[Length: 18]

0000 02 00 00 00 45 00 00 46 00 00 40 00 40 06 00 00E.F..@.@...
0010 7f 00 00 01 7f 00 00 01 e7 94 05 39 93 b0 5e 999...^...
0020 1e 03 b8 a9 80 18 18 ea fe 3a 00 00 01 01 08 0a:.....
0030 93 c4 8f 2f ad 9c e0 90 31 35 23 69 73 5f 70 72 .../...15#is_pr
0040 69 6d 61 72 79 3a 20 31 30 31mary: 1 01

Data (data), 18 bytes Packets: 22 · Displayed: 22 (100.0%) · Dropped: 0 (0.0%) Profile: Default

As we can see, the packet sent by the client is byte encoded and transmitted over TCP. In addition, the content of the data is: “15#is_primary: 101” when “#” is the delimiter, “15” is the length of the request and “is_primary: 101” is the content of the request, which fits the format protocol of sent and received messages between the client and the server.