tcpiplab

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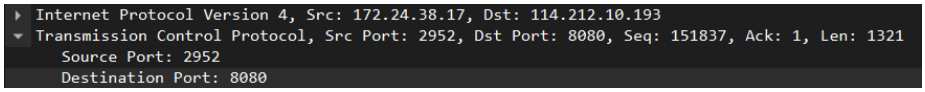
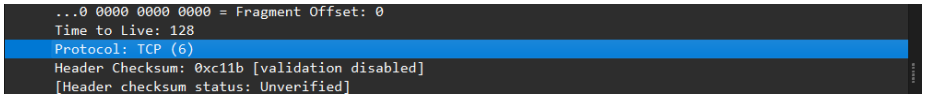
1.我的ID:172.24.38.17,TCP端口:2952

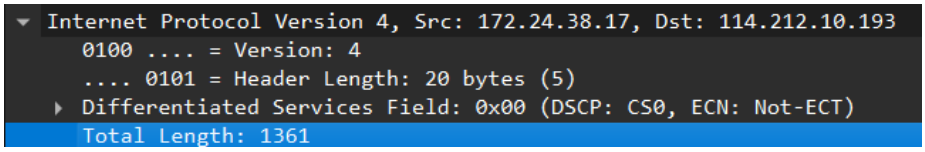
2.服务器端口:8080



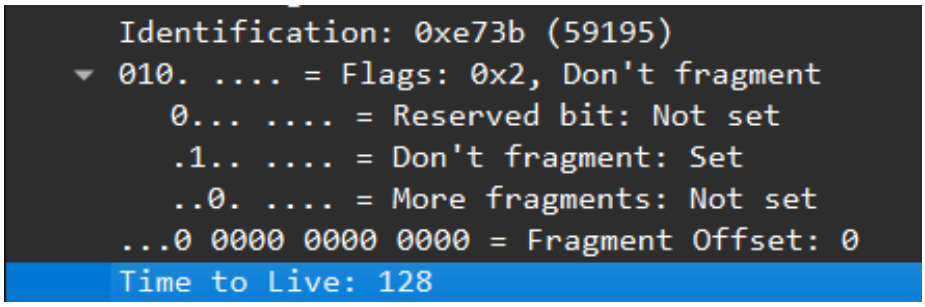
3.TCP(6)



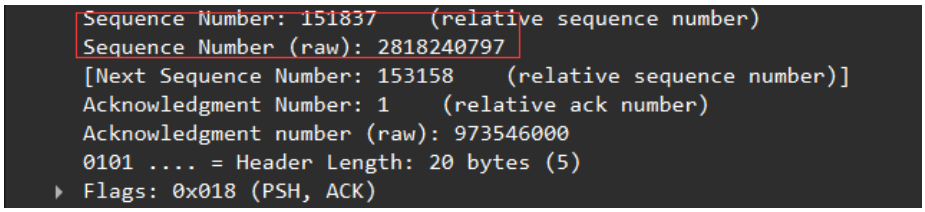
4.20bytes,有效负载为总长度-报头长度=1341



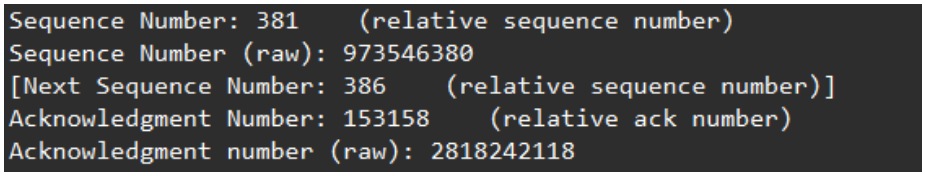
5.没分段,因为Don't fragment是Set,More fragments是Not set,
fragment offset也为0
6. 59195,128



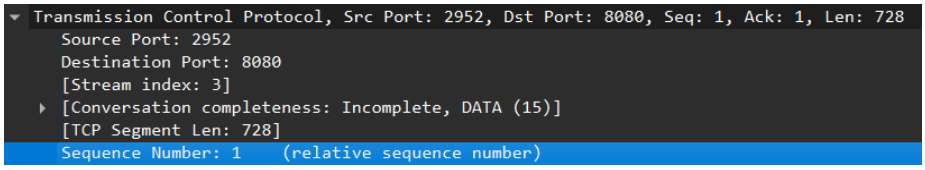
7.相对序列号为151837,绝对序列号为2818240797;根据三次握手,客户端发送SYN请求来建立连接 ,我找到发送的第一个请求并且发现我电脑把SYN标为151837从而建立连接,sequence number:2818240797是个随机值,以上是三次握手的第一步



8.381,153158(2818242118)Acknowledge number是前面那个的Next Sequence Number; 意思是服务器收到连接请求并且发送SYN-ACK确认,这是三次握手第二步骤



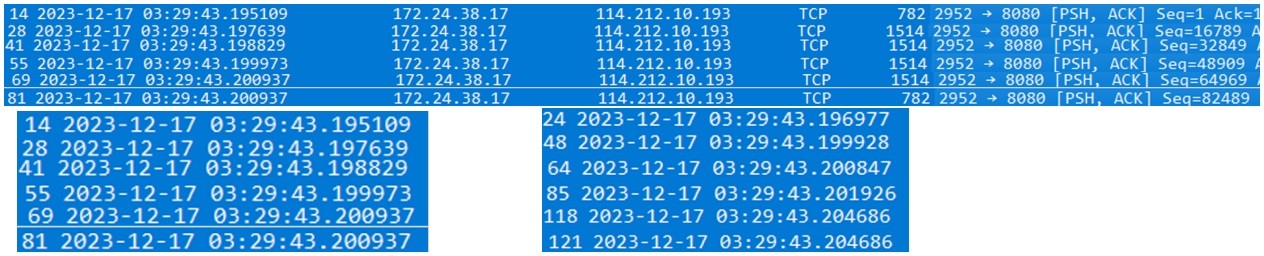
9. 1



10.如表所示;

序列号	发送时间	ACK序号	接收时间	RTT	EstimatedRTT
14	0.195109	24	0.196977	0.00187	0.001868
28	0.197639	48	0.199928	0.00229	0.001920625
41	0.198829	64	0.200847	0.00202	0.001932797
55	0.199973	85	0.201926	0.00195	0.001935322
69	0.200937	118	0.204686	0.00375	0.002162032
81	0.200937	121	0.204686	0.00375	0.002360403

EstimatedRTT=0.875*EstimatedRTT+0.125*SampleRTT



(a) 发送时间 (b) 接收时间

11.由ACK号,可知长度各为

1)729-1=728

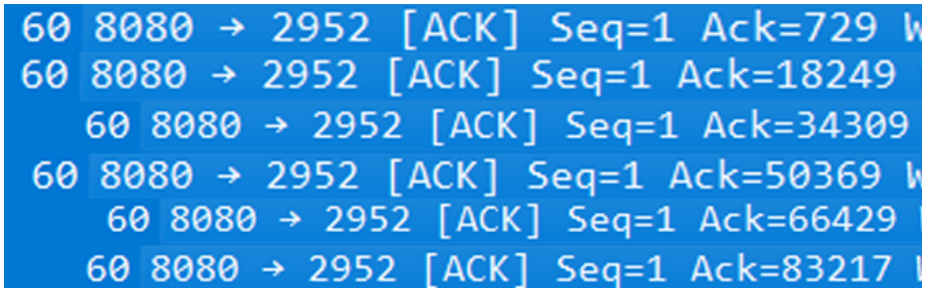
2)18249-729=17520

3)34309-18429=15880

4)50369-34309=16060

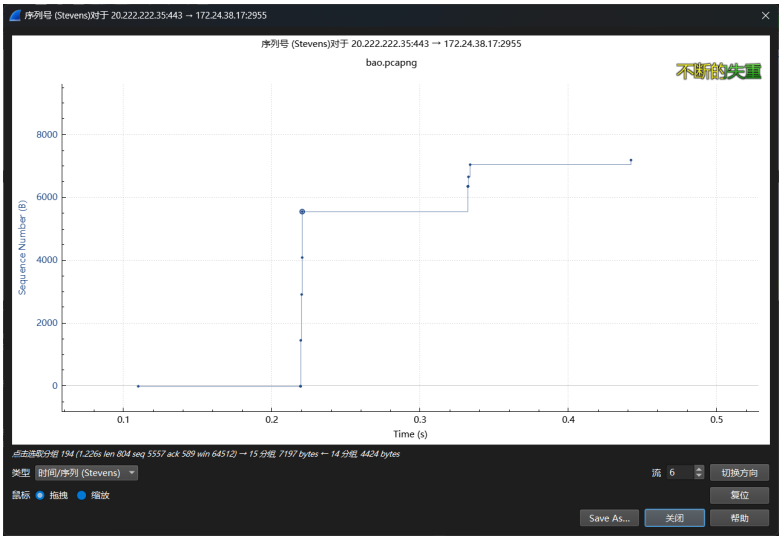
5)66429-50369=16060

6)83217-66429=16788



12.30720字节(只需看第一个确认(窗口递增)),发送器永远不会因为接收器缓冲区空间不足而被抑制

13.没有,为此我检查了TCP数据段的序列号,发现是单调递增的



14.1460,注意到大致都是1460的倍数(16060=1460*11,17520=1460*12)
比1460大就可以识别发晚了的情况,我这里就都是这样的(汗颜)
15.可以通过第一个TCP数据的序列号和最后一个ACK的序列号计算,此处取六个好了
(121-14)/(0.204686-0.195109)=11172.6(字节/秒)