

Module 7 Submission

HANDS-ON EXERCISES

1. Do the following:
 - Download Wireshark.
 - Start Wireshark.
 - Turn on Wireshark capture.
 - Type a URL in your browser window (not Wikipedia.org).
 - After a few seconds, stop the capture.
 - Answer the following questions:
 - 1a. What URL did you use? What was the IP address of the web-server?
 - 1b. Find the frame in which your PC sent the SYN packet. List the source and destination IP address, the source and destination port numbers, and the header checksum.
 - 1c. Select the SYN/ACK packet. List the source and destination IP address, the source and destination port numbers, and the header checksum.
 - 1d. Select the packet that acknowledges the SYN/ACK segment. List the source and destination IP address, the source and destination port numbers, and the header checksum.
2. Change the options so that only packets you send are recorded. Do a capture. Click on the window containing Wireshark and hit Alt-Enter. This captures the window to your clipboard. Paste it into your homework.

1a.

URL: <https://www.amazon.com/>

IP Address: 52.94.236.248

1b.

Source IP: 192.168.0.183

Destination IP: 52.94.236.248

Source Port: 29595

Destination Port: 80

Header checksum: 0x0000 (validation disabled)

1c.

Source IP: 52.94.236.248

Destination IP: 192.168.0.183

Source Port: 80

Destination Port: 29595

Header checksum: 0x4d1e (validation disabled)

1d.

Source IP: 52.94.236.248

Destination IP: 192.168.0.183

Source Port: 443

Destination Port: 29595

Header checksum: 0x1271 (validation disabled)

2.

Wireshark packet capture showing a list of network packets. The selected packet is a TCP segment from 52.94.236.248 to 192.168.0.183, port 443 to 29595. The packet details show it's a SYN packet with a sequence number of 30900 and a window size of 0. The packet bytes are displayed in hexadecimal and ASCII.

No.	Time	Source	Destination	Protocol	Length	Info
20	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
21	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
22	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
23	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
24	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
25	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
26	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
27	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
28	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
29	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
30	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
31	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
32	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
33	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
34	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
35	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
36	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
37	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
38	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
39	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
40	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
41	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
42	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
43	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
44	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
45	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
46	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
47	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0
48	0.000000	192.168.0.183	52.94.236.248	TCP	60	52.94.236.248 → 192.168.0.183 [ACK] Seq=30900 Win=0 Len=0