Name: I.D.: בס”ד

Date:

**Advanced Computer Networks – רשתות מחשבים מתקדם**

**Laboratory 01 - Wireshark Exercise:**

Credit: Laura Chappell, Wireshark Workbook

This laboratory allows a review of the principles learnt in the “Introduction to Telecom” course. For this laboratory, we advise downloading the last version of Wireshark. You can also follow the installation instructions from p. 12 of “computer networks” from Barak Gonen, Omer Rosenbaum, and Shlomi Hod for a complete and working installation of the required applications for this course.

For each question, try to use the right filter to get the answer.

Important note:

For each question, **add explanation of what you did + screenshot**, to get maximal score.

Good Luck 😊

Classwork:

1. What is the IP address of the DNS/HTTP client in the trace file *wwb001-http.pcapng*?
2. What is the IP address of the DNS server?
3. What DNS response time is seen in the trace file?
4. Do you think that this trace was taken (captured) closer to the HTTP client or closer to the HTTP server?

Homework:

1. What are the IP addresses of the HTTP servers to which the client successfully connected?
2. What are the HTTP host names of the target HTTP servers?
3. What HTTP error response(s) are seen in this trace file?
4. What requested web object could not be found on the HTTP server?
5. What Uniform Resource Identifier (URI) does the client request first in this trace file?
6. What TCP port numbers did the client open to communicate with the HTTP server?
7. How many TCP SYN packets did the client send to the HTTP servers?
8. What words are seen in the featureb.jpg image?
9. What is the average throughput rate (bits per second) in this trace file?
10. How many UDP streams are in the trace file?
11. What is the purpose of TCP stream 7?
12. How many times does the packets per second rate reach over 125 in this trace file?

The End