MPCS 54001, Winter 2021

Lab 1 - Solutions

Due: January 15 at 11:59 pm

Submit your assignment to Gradescope. If you need help, post questions to Ed Discussion. As a reminder, if you make a public post on Ed Discussion, please don't give away the answer! Please submit one pdf per group, answering the questions which appear on the last page. Gradescope will allow you to submit one pdf and add all group members to it.

- 1. List 3 different protocols that appear in the protocol column in the unfiltered packetlisting window in step 7 above.
 - Any three would work, but typically should be three of HTTP, TCP, MDNS, DNS, ICMPv6, ARP, LLMNR, NBNS, TLSv1.2 etc.
- 2. How long did it take from when the HTTP GET message was sent until the HTTP OK reply was received? (By default, the value of the Time column in the packet-listing window is the amount of time, in seconds, since Wireshark tracing began. To display the Time field in time-of-day format, select the Wireshark *View* pull down menu, then select Time *Display Format*, then select *Time-of-day*.)
 - The correct value should be the difference between time-stamps on the get and reply messages, which are attached in question 4. If they are not there, an estimate is around 0.034 seconds but of course this will vary by connection
- 3. What is the Internet address of the gaia.cs.umass.edu (also known as www-net.cs.umass.edu)? What is the Internet address of your computer?
 - These should match what is attached for question 4. In my example, they were 128.119.245.12 for gaia.cs.umass.edu and 192.168.0.54 for my computer.

4. Print the two HTTP messages (GET and OK) referred to in question 2 above. To do so, select *Print* from the Wireshark *File* command menu, and select the "Selected Packet Only" and "Print as displayed" radial buttons, and then click OK.

Check that these are attached.