Computer Networking Lab HTTP

Please capture some related screenshots to support your answer.

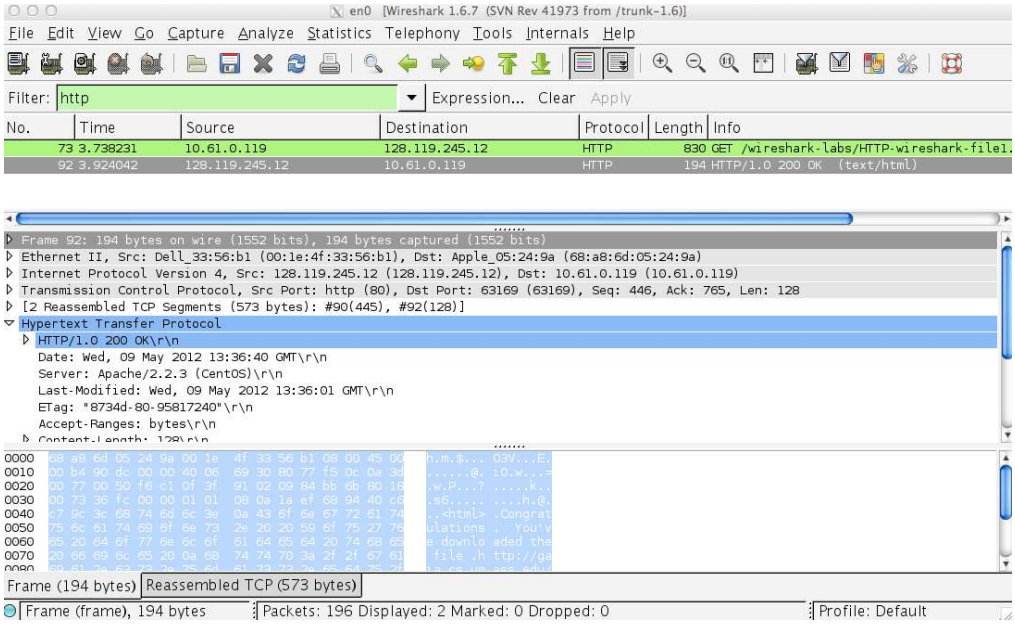
In this lab, we'll explore a few aspects of the HTTP protocol. Before beginning these labs, you might want to review Section 2.2 of the text.[1]

The Basic HTTP GET/response interaction

Let's begin our exploration of HTTP by downloading a web file.
Do the following steps:

- Start up your web browser.
- Open Wireshark and start capturing.
- Enter the following to your browser
  http://gaia.cs.umass.edu/wireshark-labs/INTRO-wireshark-file1.html
)
- Stop Wireshark packet capture.
- Type http in the filter field of the Wireshark and press enter so that only HTTP messages will be displayed.

For example, your Wireshark window should look similar to the window shown in Figure 1.



The example in Figure 1 shows in the packet-listing window that two HTTP messages were captured: the GET message (from browser to the gaia.cs.umass.edu web server)

---

[1] References to figures and sections are for the 7th edition of our text, *Computer Networks, A Top-down Approach, 7th ed., J.F. Kurose and K.W. Ross, Addison-Wesley/Pearson, 2016.*

and the response message from the server to browser. The packet-contents window shows details of the selected message (in this case the HTTP OK message, which is highlighted in the packet-listing window). Recall that since the HTTP message was carried inside a TCP segment, which was carried inside an IP datagram, which was carried within an Ethernet frame, Wireshark displays the Frame, Ethernet, IP, and TCP packet information as well. We want to minimize the amount of non-HTTP data displayed (we're interested in HTTP here, and will be investigating these other protocols is later labs), so make sure the boxes at the far left of the Frame, Ethernet, IP and TCP information have a plus sign or a right-pointing triangle (which means there is hidden, undisplayed information), and the HTTP line has a minus sign or a down-pointing triangle (which means that all information about the HTTP message is displayed).

By looking at the information in the HTTP GET and response messages, Answer the following questions:

1. What is the IP address of your computer?
2. What is the IP address of the server?
3. What version of HTTP are your browser and the server running?
4. What languages does your browser indicate that it can accept to the server?
5. What is the status code for the first response message?