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CS 446 UMB Fall 2022

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Graphical user interface, text, application, email

Description automatically generated

1. The IP Address 192.168.7.161 and the port number is 61196

Graphical user interface, application, Word

Description automatically generated

1. The Sequence number is 9346553

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Description automatically generated

The flag of the packet signifies that it is SYN

1. The Sequence number SYNACK is 2807728820. The value of the Acknowledgement field in SYNACK segment is 9346554. Gaia determined this value by incrementing the SYN Sequence number. We have an acknowledgement number of 1 in this SYNACK. This should mean that it successfully acknowledged the SYN argument.

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1. The Sequence number of the HTTP protocol is 2034707662

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This TCP data segment was received at 15:56:21.424916000. The TCP ACK was received at 15:56:21.450840000. The RTT value is then 0.027244000 seconds.

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This TCP data segment was received at 15:56:21.43596000. The TCP ACK was received at 15:56:21.449937000. The RTT value is then 0.028359000 seconds.

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Description automatically generated

This TCP data segment was received at 15:56:21.420331000. The TCP ACK was received at 15:56:21.447909000. The RTT value is then 0.028591000seconds.

The way I determined the 3 TCP segments is that I looked for packets in which my IP was uploading data, this means it would be the source. Then I would look at the Seq number of that ACK and find where the server IP has an Ack value of the Seq number from my IP address packet.

1. The size of the available buffer space advertised at the received for the entire trace is 5894. It does not seem to throttle the sender.

Graphical user interface, text, application

Description automatically generated

1. By getting the size of the file and dividing by the time of the entire TCP connection. I obtained this from the 200OK HTTP Protocol and checked the time since first frame. That value was 0.108253000 sec. I got the size of the file through windows file explorer and that was 149,000 bytes. Doing 149,000/ 0.108253000 we get 1,376,405.272833085 bytes per second.
2. For some reason the graph that I obtained is nowhere near the one that was given as an example. I think the reason might be because of the speed of my internet and computer. For this reason, I don’t see a congestion or slow phase.

Calendar

Description automatically generated