Demystifying Networking
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Lecture - 61
TCP Connection Closure

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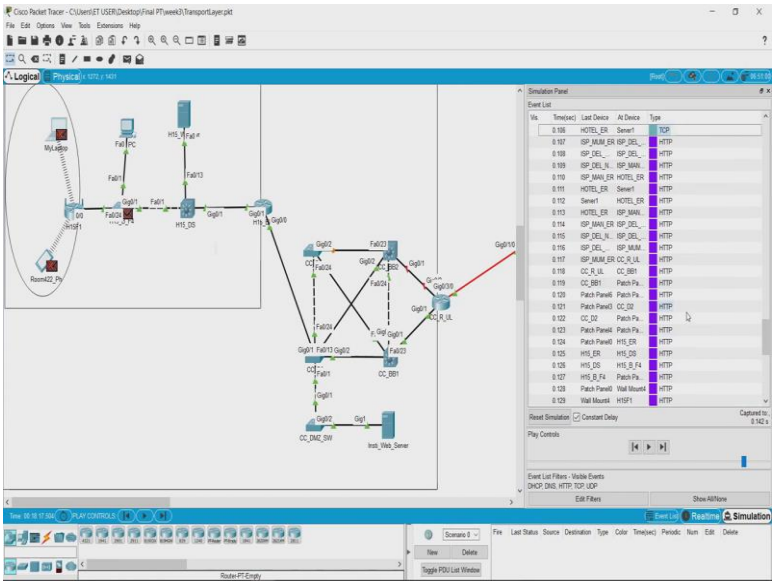

After all these HTTP packets are transferred from server to the laptop, connection closure should happen.

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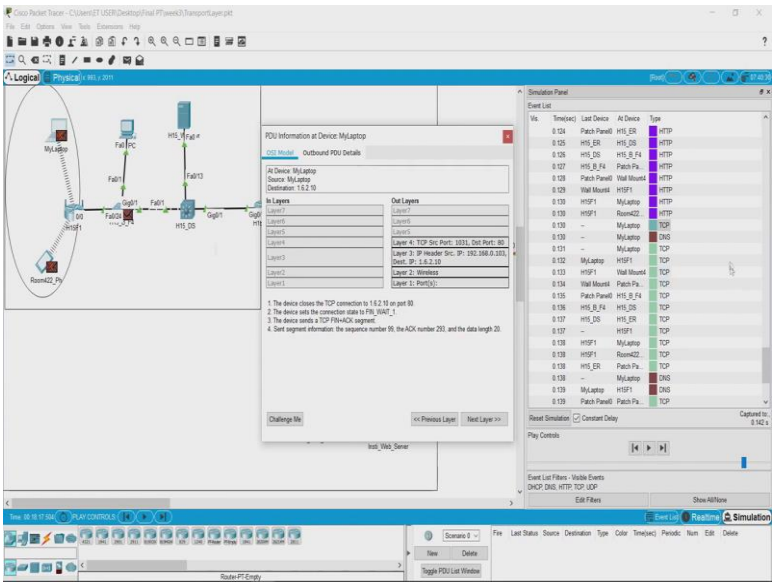

As soon as all the HTTP packets are received at the client site, that is the laptop, it starts TCP transaction to close the connection. Here we can see that the device closes the TCP connection to 1.6.2.10 on port 80 and the device sets the connection state to FIN_WAIT_1, that is it is waiting for one acknowledgment before it actually closes the connection. And it sends a TCP FIN+ACK segment (FIN stands for final and ACK for acknowledgment).

Now, we can see that the TCP FIN+ACK has reached the server of the hotel.

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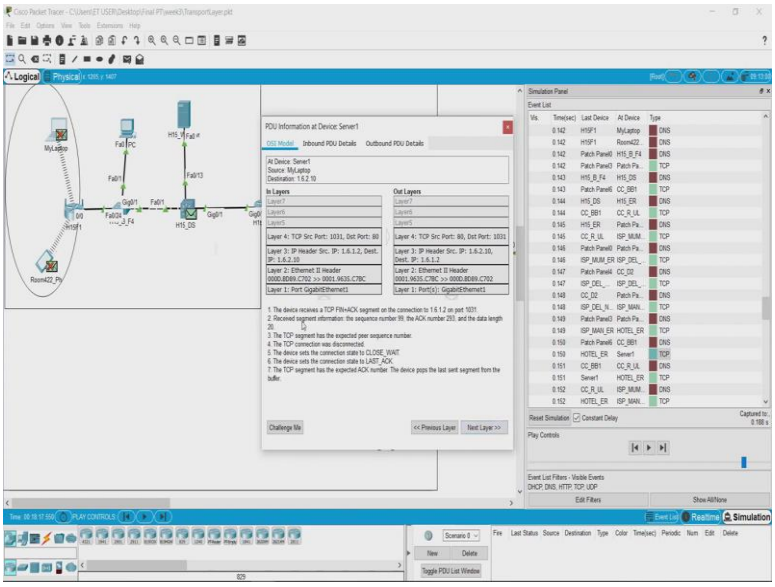

If we look into the packet we can see that the device receives a TCP FIN+ACK segment on this connection and the received segment information are as follows: The sequence number is 99, acknowledgement number is 293 and data length is 20. All these are as expected and server gets to know that the device wants to disconnect the TCP connection. So, the device sets the connection state to CLOSE_WAIT and it sets the connection state to last acknowledgment.

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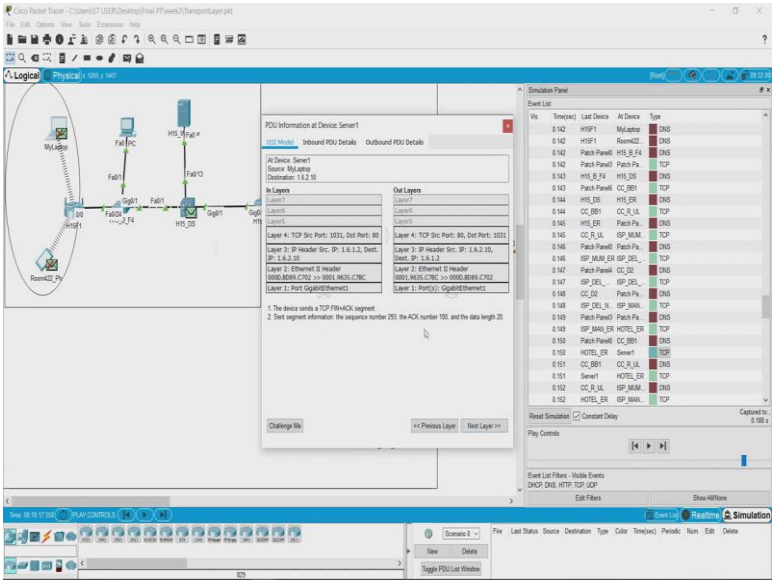

And then device again sends a TCP final acknowledgment to the laptop. Device here is server; server sends a TCP final acknowledgment to the laptop.

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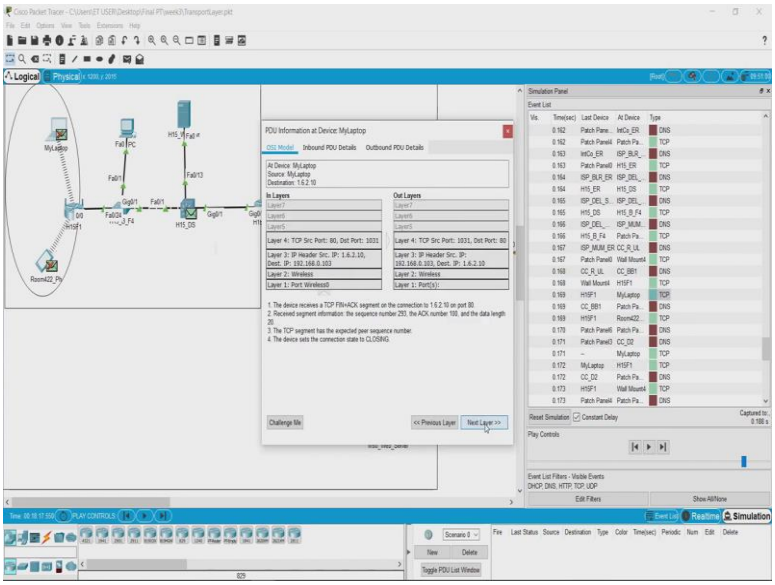

The final acknowledgment from server has reached laptop now, and it received, the received segment information are as follows: sequence number is 293, acknowledgment number is 100 and the data length 20 and now the device, that is, the laptop sets the connection state to closing.