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CSCD330
Lab#6

1. What is the IP address of your host? What is the IP address of the destination Host?

   Mine: 192.168.56.1 Dest: 143.89.14.34.

2. Why is it that an ICMP packet does not have source and destination port Numbers?

   ICMP only has info for that pertains to the network layer and not any more.

3. Examine one of the ping request packets sent by your host. What are the ICMP type and code numbers? What other fields does this ICMP packet have? How many bytes are the checksum, sequence number and identifier fields?

   ICMP type is 8, codes are 0. ICMP has checksum, identifier, sequence number, and data. Both checksum and identifier are two bytes

4. Examine the corresponding ping reply packet. What are the ICMP type and code numbers? What other fields does this ICMP packet have? How many bytes are the checksum, sequence number and identifier fields?

   Type and code are 0, and just like above the fields are the same. Also as above the bytes are the same.

5. What is the IP address of your host? What is the IP address of the target destination host?

   Mine: 192.168.56.1 and Dest: is 138.96.146.2.

6. If ICMP sent UDP packets instead (as in Unix/Linux), would the IP protocol number still be 01 for the probe packets? If not, what would it be?

   No, would be 0x11.

7. Examine the ICMP echo packet in your screenshot. Is this different from the ICMP ping query packets in the first half of this lab? If yes, how so?

    No, it is the same.

8. Examine the ICMP error packet in your screenshot. It has more fields than the ICMP echo packet. What is included in those fields?

    IP header, 8 bytes of the original ICMP packet that the error is for.

9. Examine the last three ICMP packets received by the source host. How are these packets different from the ICMP error packets? Why are they different?

    They are of type 0, not 11, because the datagrams made it to the destination before the TTL expired.

10. Within the tracert measurements, is there a link whose delay is significantly longer than others? Refer to the screenshot in Figure 4, is there a link whose delay is significantly longer than others? On the basis of the router names, can you guess the location of the two routers on the end of this link?

    Yes, form 11 to 12. New York and Aubervilliers.