ĐẠI HỌC QUỐC GIA THÀNH PHỐ HỒ CHÍ MINH TRƯỜNG ĐẠI HỌC BÁCH KHOA KHOA KHOA HỌC & KỸ THUẬT MÁY TÍNH



MẠNG MÁY TÍNH (CO3094)

Báo cáo Lab 2 3b: Wireshark Lab – UDP

Giảng viên: Nguyễn Tấn Đạt

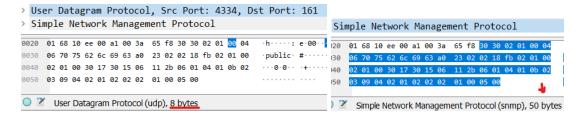
SV thực hiện: Đinh Như Tân – 1915040

T
p. Hồ Chí Minh, Tháng 10/2021



- 1. Select one UDP packet from your trace. From this packet, determine how many fields there are in the UDP header. (You shouldn't look in the textbook! Answer these questions directly from what you observe in the packet trace.) Name these fields.
 - The UDP header contains 4 fields: source port, destination port, length, and checksum
- 2. By consulting the displayed information in Wireshark's packet content field for this packet, determine the length (in bytes) of each of the UDP header fields.

 Each of the UDP header fields is 2 bytes long
- 3. The value in the Length field is the length of what? (You can consult the text for this answer). Verify your claim with your captured UDP packet 8 bytes UDP packet header added with 50 bytes payload from Application Layer equals to the length of 58 butes.

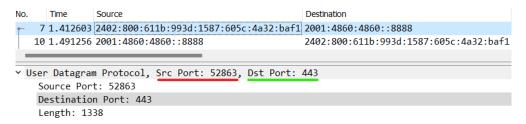


- 4. What is the maximum number of bytes that can be included in a UDP payload? The maximum number of bytes that can be included in a UDP payload is $2^{16} 1$ less the header bytes. This gives 65535 8 = 65527 bytes.
- 5. What is the largest possible source port number? The largest possible source port number is 2^{16} or $2^{16} 1 = 65535$
- 6. What is the protocol number for UDP? Give your answer in both hexadecimal and decimal notation. To answer this question, you'll need to look into the Protocol field of the IP datagram containing this UDP segment (see Figure 4.13 in the text, and the discussion of IP header fields)

 The IP protocol number for UDP is 0x11 hex, which is 17 in decimal value

7. Examine a pair of UDP packets in which your host sends the first UDP packet and the second UDP packet is a reply to this first UDP packet. Describe the relationship between the port numbers in the two packets.

The source port number from the source IP sends the request packet to the destination IP's destination port number. During the sending of a response, the source IP that sent the request packet becomes the destination and it's source port becomes the destination port. The response sender's IP and port number turns to the source.



Báo cáo bài lab



No. Time Source Destination
7 1.412603 2402:800:611b:993d:1587:605c:4a32:baf1 2001:4860:4860::8888
10 1.491256 2001:4860:4860::8888 2402:800:611b:993d:1587:605c:4a32:baf1

V User Datagram Protocol, Src Port: 443, Dst Port: 52863
Source Port: 443
Destination Port: 52863
Length: 1338

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