İlk yedi maddede ip adreslerini ve konfigrasyon ayarlarıyla ilgili olarak kullanıcının wireshark programına hazır etmektedir.

örneğin

1.Cmd`yi açıp ipconfig /release komutunu girdim. Böylece mevcut ip bırakıldı

2.wireshark açıldı

1. Are DHCP messages sent over UDP or TCP?

UDP ile çalışır

1. Draw a timing datagram illustrating the sequence of the first four-packet

Discover/Offer/Request/ACK DHCP exchange between the client and server. For

each packet, indicated the source and destination port numbers. Are the port

numbers the same as in the example given in this lab assignment?

anlamadım

1. What is the link-layer (e.g., Ethernet) address of your host?

00:08:74:4f:36:23

4. What values in the DHCP discover message differentiate this message from the

DHCP request message?

Dhcp katmanında opinion içerisinde gördüğüm kadarıyla 53tür

1. What is the value of the Transaction-ID in each of the first four (Discover/Offer/Request/ACK) DHCP messages?

0x3e5e0ce3

0x3e5e0ce3

0x3e5e0ce3

0x3e5e0ce3

What are the values of the

Transaction-ID in the second set (Request/ACK) set of DHCP messages?

What is

the purpose of the Transaction-ID field?

6. A host uses DHCP to obtain an IP address, among other things. But a host’s IP

address is not confirmed until the end of the four-message exchange! If the IP

address is not set until the end of the four-message exchange, then what values are

used in the IP datagrams in the four-message exchange? For each of the four

DHCP messages (Discover/Offer/Request/ACK DHCP), indicate the source and

destination IP addresses that are carried in the encapsulating IP datagram.

Dhcp discover , offer , request ve ack adımları gerçekleşir

7. What is the IP address of your DHCP server?

192.168.1.1

8. What IP address is the DHCP server offering to your host in the DHCP Offer

message? Indicate which DHCP message contains the offered DHCP address.

192.168.1.101

Dhcp protokolü içinde opinion içerisinde teklifi görebiliriz.

9. In the example screenshot in this assignment, there is no relay agent between the

host and the DHCP server. What values in the trace indicate the absence of a relay

agent? Is there a relay agent in your experiment? If so what is the IP address of

the agent?

10. Explain the purpose of the router and subnet mask lines in the DHCP offer

message.

255.255.255.128

11. In the DHCP trace file noted in footnote 2, the DHCP server offers a specific IP

address to the client (see also question 8. above). In the client’s response to the

1 gün olarak ayarlanmış kill timesi. Buna da Lease süresi denmektedir.

3 What do we mean by “annotate”? If you hand in a paper copy, please highlight where in the printout

you’ve found the answer and add some text (preferably with a colored pen) noting what you found in what

you ‘ve highlight. If you hand in an electronic copy, it would be great if you could also highlight and

annotate.

first server OFFER message, does the client accept this IP address? Where in the

client’s RESPONSE is the client’s requested address?

12. Explain the purpose of the lease time. How long is the lease time in your

experiment?

Lease time ağ içindeki ipleri dağıltmaya yarayan servist olar Dhcp serverin sona erme süresidir. Süre bitmeden kullanıcı tekrar bağlanırsa, bu değer yenilenir

13. What is the purpose of the DHCP release message? Does the DHCP server issue

Lease süresi bittiğinde kullanıcıya ip adresini bırakması gerektiğinin mesajıdır. Manuel olarak ipconfig /release yazarakta yapılabilir

an acknowledgment of receipt of the client’s DHCP request? What would happen

if the client’s DHCP release message is lost?

14. Clear the bootp filter from your Wireshark window. Were any ARP packets sent

or received during the DHCP packet-exchange period? If so, explain the purpose

of those ARP packets.