

LAB EXERCISE - 7

EXERCISE QUESTIONS :

1. Are DHCP messages sent over UDP or TCP?
2. What is the link-layer (e.g., Ethernet) address of your host?
3. What values in the DHCP discover message differentiate this message from the DHCP request message?
4. What is the value of the Transaction-ID in each of the first four discover/Offer/Request/ACK) DHCP messages? What is the purpose of the Transaction-ID field?
5. 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.
6. What is the IP address of your DHCP server?
7. 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.
8. 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?
9. Explain the purpose of the lease time. How long is the lease time in your experiment?
10. What is the purpose of the DHCP release message? Does the DHCP server issue an acknowledgment of receipt of the client's DHCP request?