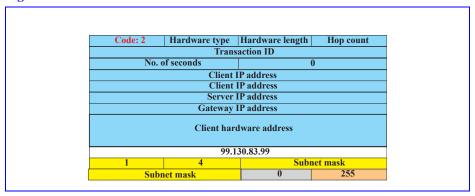
CHAPTER 16

Host Configuration: BOOTP and DHCP

Exercises

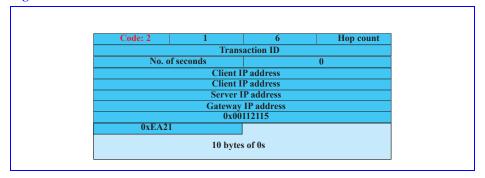
- 1. The minimum length of a BOOTP packet is 44 bytes since the server name field, the boot filename field and the options field are optional. The maximum is 300 bytes.
- 3. Figure 16.1 shows an example of the *padding* option. We assume that the packet is using the *subnet mask* option. We also need the *end of list* option.

Figure 16.1 Exercise 3



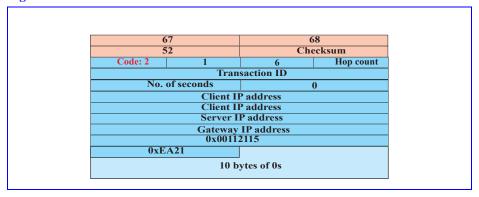
- 5. $2^{16} 1 = 65,535$
- 7. See Figure 16.2.

Figure 16.2 Exercise 7



9. See Figure 16.3.

Figure 16.3 Exercise 9



- 11. See Figure 16.4.
- 13. A newly added host needs to know the address of a router in order to send a message outside of its own local network.
- 15. BOOTP needs the services of TFTP because the BOOTP packet is of a set size and format. If a BOOTP client needs more information than a packet can hold, the client must retrieve the information using some other method.

Figure 16.4 Exercise 11

