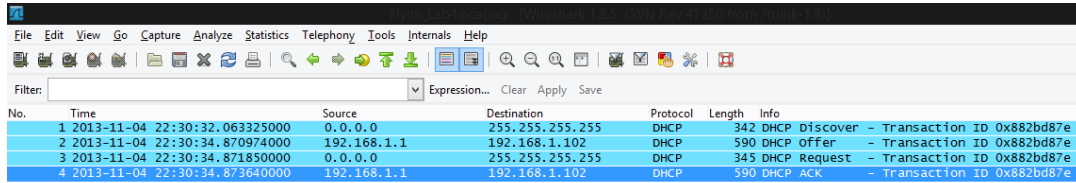


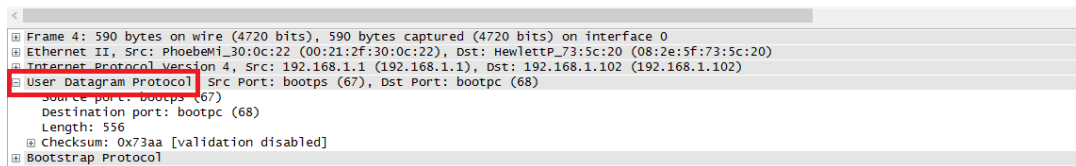
IST 220 Lab 4 – DHCP

Tim Flynn

1.



No.	Time	Source	Destination	Protocol	Length	Info
1	2013-11-04 22:30:32.063325000	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discover - Transaction ID 0x882bd87e
2	2013-11-04 22:30:34.870974000	192.168.1.1	192.168.1.102	DHCP	590	DHCP Offer - Transaction ID 0x882bd87e
3	2013-11-04 22:30:34.871850000	0.0.0.0	255.255.255.255	DHCP	345	DHCP Request - Transaction ID 0x882bd87e
4	2013-11-04 22:30:34.873640000	192.168.1.1	192.168.1.102	DHCP	590	DHCP ACK - Transaction ID 0x882bd87e



Frame 4: 590 bytes on wire (4720 bits), 590 bytes captured (4720 bits) on interface 0
Ethernet II, Src: PhoebeWi30:0c:22 (00:21:2f:30:0c:22), Dst: HewlettP_73:5c:20 (08:2e:5f:73:5c:20)
Internet Protocol Version 4, Src: 192.168.1.1 (192.168.1.1), Dst: 192.168.1.102 (192.168.1.102)
User Datagram Protocol, Src port: bootps (67), Dst Port: bootpc (68)
Source port: bootps (67)
Destination port: bootpc (68)
Length: 556
Checksum: 0x73aa [validation disabled]
Bootstrap Protocol

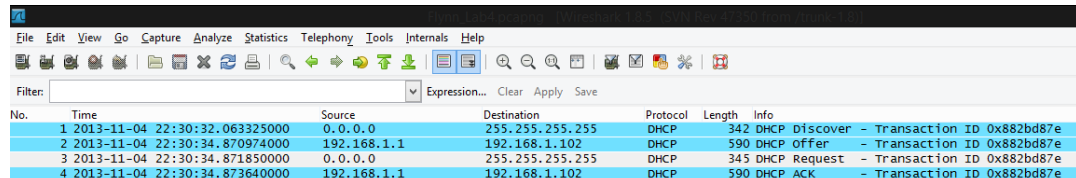
DHCP uses **UDP** for transport

2. The MAC (link-layer) address of the client is: **08:2e:5f:73:5c:20**

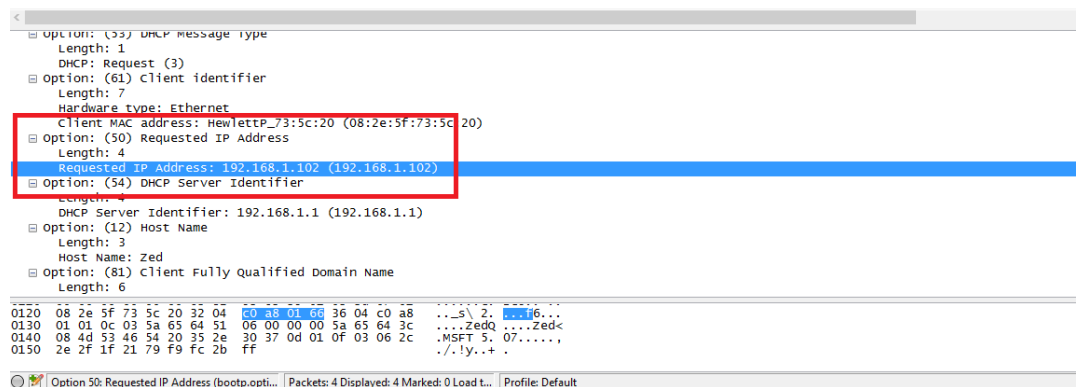
3. The transaction ID for the DHCP messages is: **0x882bd87e**

4. The IP address for the DHCP server is: **92.168.1.1** --This is the source IP of the DHCP Offer and ACK, which are sent by the DHCP server, making it the DHCP servers IP address.

5.



No.	Time	Source	Destination	Protocol	Length	Info
1	2013-11-04 22:30:32.063325000	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discover - Transaction ID 0x882bd87e
2	2013-11-04 22:30:34.870974000	192.168.1.1	192.168.1.102	DHCP	590	DHCP Offer - Transaction ID 0x882bd87e
3	2013-11-04 22:30:34.871850000	0.0.0.0	255.255.255.255	DHCP	345	DHCP Request - Transaction ID 0x882bd87e
4	2013-11-04 22:30:34.873640000	192.168.1.1	192.168.1.102	DHCP	590	DHCP ACK - Transaction ID 0x882bd87e



Option: (50) DHCP message type
Length: 1
DHCP: Request (3)
Option: (61) Client identifier
Length: 7
Hardware type: Ethernet
Client MAC address: HewlettP_73:5c:20 (08:2e:5f:73:5c:20)
Option: (50) Requested IP Address
Length: 4
Requested IP Address: 192.168.1.102 (192.168.1.102)
Option: (54) DHCP Server Identifier
Length: 4
DHCP Server Identifier: 192.168.1.1 (192.168.1.1)
Option: (12) Host Name
Length: 3
Host Name: Zed
Option: (81) Client Fully Qualified Domain Name
Length: 6

0120 08 2e 5f 73 5c 20 32 04 00 01 00 00 36 04 c0 a8 ...S) 2. 192.168.1.102
0130 01 01 0c 03 5a 65 64 51 06 00 00 00 5a 65 64 3c ...zedq...zedc
0140 08 4d 53 46 54 20 35 2e 30 37 0d 01 0f 03 06 2c ...MSFT S. 07.....
0150 2e 2f 1f 21 79 f9 fc 2b ff ././y..+.

Option 50: Requested IP Address (bootp.opti... | Packets: 4 Displayed: 4 Marked: 0 Load t... | Profile: Default

The requested IP specified by the client is: **192.168.1.102**

6. The IP address lease time is: **86400s (1 day)**

7. DHCP provides a message type, letting you know whether is an ACK, Offer, or other type of packet. Also, it provides the subnet mask, the Domain Name Servers used, the domain name, information on NetBIOS and End information. The subnet mask helps identify the subnet, the Domain Name Servers show you all the different IP's of routers used in the interaction, the Domain name gives you information about the routers domain, and the End packet helps to specify the end of the packet.