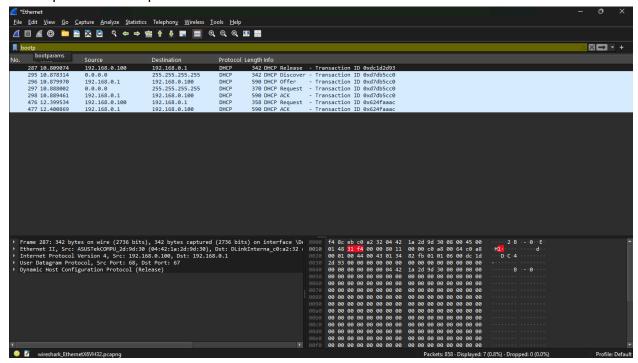
In Wireshark ,
DHCP packets are captured by using
Ipconfig /release
Ipconfig /renew

This will force the client to send a DHCP Discover message and proceed through the DORA process.

# DHCP packets are captured

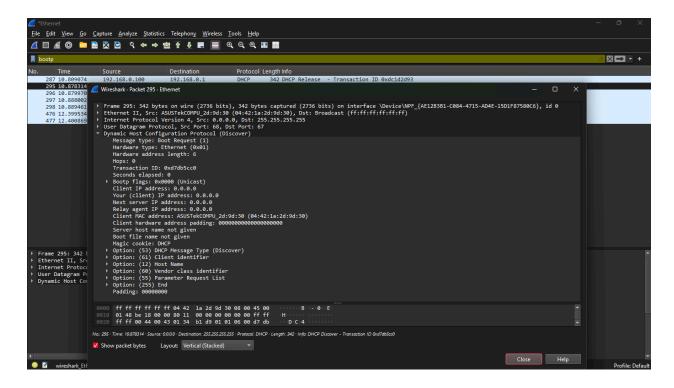


Filtering the command using "bootp" and gathering up DHCP process. The DORA process takes place

#### **Discover - DORA**

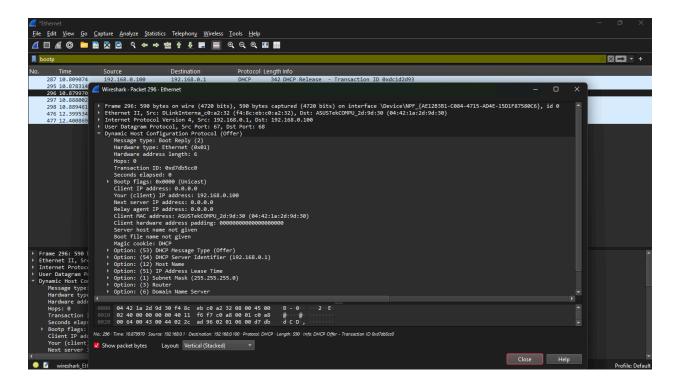
The client (e.g., your computer) broadcasts a DHCP Discover message to find available DHCP servers.

It uses 0.0.0.0 as IP and broadcasts to destination IP as 255.255.255.0



# Offer - DORA

A DHCP server responds with a DHCP Offer message, proposing an available IP address (e.g., 192.168.1.100). This is sent as a unicast or broadcast, depending on the network setup



### Request - DORA

The client broadcasts a DHCP Request message to accept the offered IP address. It includes the server's identifier to confirm which offer it's accepting

```
Wireshark Packet 297 Ethemet

Wireshark Packet 297 Ethemet

Frame 297: 370 bytes on wire (2960 bits), 370 bytes captured (2960 bits) on interface \Device\NPF_{AE128381-C084-4715-AD4E-15D1F87580C6}, id 0

Frame 297: 370 bytes on wire (2960 bits), 370 bytes captured (2960 bits) on interface \Device\NPF_{AE128381-C084-4715-AD4E-15D1F87580C6}, id 0

Final Packet 297: 370 bytes on wire (2960 bits), 370 bytes captured (2960 bits) on interface \Device\NPF_{AE128381-C084-4715-AD4E-15D1F87580C6}, id 0

Final Packet 297: 370 bytes on wire (2960 bits), 370 bytes captured (2960 bits) on interface \Device\NPF_{AE128381-C084-4715-AD4E-15D1F87580C6}, id 0

Final Packet 297: 370 bytes on wire (2960 bits), 370 bytes captured (2960 bits) on interface \Device\NPF_{AE128381-C084-4715-AD4E-15D1F87580C6}, id 0

Final Packet 297: 370 bytes on wire (2960 bits), 370 bytes captured (2960 bits) on interface \Device\NPF_{AE128381-C084-4715-AD4E-15D1F87580C6}, id 0

Final Packet 297: 370 bytes on wire (2960 bits), 370 bytes captured (2960 bits) on interface \Device\NPF_{AE128381-C084-4715-AD4E-15D1F87580C6}, id 0

Final Packet 297: 370 bytes (8000 bytes), 570 bytes and 570 bytes on wire (2960 bits), 370 bytes captured (2960 bits) on interface \Device\NPF_{AE128381-C084-4715-AD4E-15D1F87580C6}, id 0

Final Packet 297: 370 bytes and 570 bytes on wire (2960 bytes), 570 bytes on wire
```

# Acknowledge - DORA

The DHCP server sends a DHCP ACK message to confirm the IP assignment. It includes the IP address, lease time, subnet mask, gateway, DNS servers, etc.

