

1

The screenshot displays the Wireshark network protocol analyzer interface. The top menu bar includes options like File, Edit, View, Capture, Analyze, Statistics, Telephony, Wireless, Instruments, and Help. The toolbar contains various icons for file operations, capture control, and analysis. The packet list pane shows a single captured packet, No. 1, which is a DHCP Discover packet. The packet details pane shows the structure of the packet, including the Ethernet II header, Internet Protocol Version 4 header, User Datagram Protocol header, and Dynamic Host Configuration Protocol (DHCP) layer. The packet bytes pane shows the raw data of the packet, with the DHCP Discover payload highlighted in blue. The status bar at the bottom indicates that the packet is a User Datagram Protocol (UDP) packet, 8 bytes in size, and that the profile is Default.

No.	Time	Source	Destination	Protocol	Length	Info
40	5.953238	0.0.0.0	255.255.255.255	DHCP	346	DHCP Discover - Transaction ID 0xe9956e2f
300	35.981552	0.0.0.0	255.255.255.255	DHCP	346	DHCP Discover - Transaction ID 0xe9956e2f
402	46.890330	0.0.0.0	255.255.255.255	DHCP	344	DHCP Discover - Transaction ID 0x4f24a177
419	47.294991	192.168.1.1	192.168.1.63	DHCP	342	DHCP Offer - Transaction ID 0x4f24a177
420	47.296581	0.0.0.0	255.255.255.255	DHCP	370	DHCP Request - Transaction ID 0x4f24a177
425	47.570020	192.168.1.1	192.168.1.63	DHCP	342	DHCP ACK - Transaction ID 0x4f24a177
1469	76.120026	0.0.0.0	255.255.255.255	DHCP	346	DHCP Discover - Transaction ID 0x96a9bc4a

> Frame 300: 346 bytes on wire (2768 bits), 346 bytes captured (2768 bits) on interface \Device\NPF_{45939136-950B-4A86-B5D2-5B481}

> Ethernet II, Src: 52:ff:20:6b:3c:a4 (52:ff:20:6b:3c:a4), Dst: Broadcast (ff:ff:ff:ff:ff:ff)

> Internet Protocol Version 4, Src: 0.0.0.0, Dst: 255.255.255.255

> User Datagram Protocol, Src Port: 68, Dst Port: 67

Source Port: 68

Destination Port: 67

Length: 312

Checksum: 0x3696 [unverified]

[Checksum Status: Unverified]

[Stream index: 3]

> [Timestamps]

UDP payload (304 bytes)

> Dynamic Host Configuration Protocol (Discover)

0020 ff ff 00 44 00 43 01 38 36 96 01 01 06 00 e9 95 ...D.C.8 6.....

0030 6e 2f 00 00 00 00 00 00 00 00 00 00 00 00 00 n/.....

User Datagram Protocol (udp), 8 byte(s) | Пакеты: 1475 · Показаны: 7 (0.5%) · Потеряно: 0 (0.0%) | Профиль: Default

1) UDP

*Ethernet

Файл Редактирование Просмотр Запуск Захват Анализ Статистика Телефония Беспроводной Инструменты Помощь

bootp

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425	47.570020	192.168.1.1	192.168.1.63	DHCP	342	DHCP ACK - Transaction ID 0x4f24a177

> Frame 402: 344 bytes on wire (2752 bits), 344 bytes captured (2752 bits) on interface \Device\NPF_{45939136-950B-4A86-B5D2-5B4810D...}

✓ Ethernet II, Src: HewlettP_0e:f2:25 (84:a9:3e:0e:f2:25), Dst: Broadcast (ff:ff:ff:ff:ff:ff)

- Destination: Broadcast (ff:ff:ff:ff:ff:ff)
Address: Broadcast (ff:ff:ff:ff:ff:ff)
.... ..1. = LG bit: Locally administered address (this is NOT the factory default)
.... ..1. = IG bit: Group address (multicast/broadcast)
- Source: HewlettP_0e:f2:25 (84:a9:3e:0e:f2:25)
Address: HewlettP_0e:f2:25 (84:a9:3e:0e:f2:25)
.... ..0. = LG bit: Globally unique address (factory default)
.... ..0. = IG bit: Individual address (unicast)
Type: IPv4 (0x0800)

> Internet Protocol Version 4, Src: 0.0.0.0, Dst: 255.255.255.255

> User Datagram Protocol, Src Port: 68, Dst Port: 67

> Dynamic Host Configuration Protocol (Discover)

0000 ff ff ff ff ff ff 84 a9 3e 0e f2 25 08 00 45 00 >...%..E.
0010 01 4a ef 06 00 00 40 11 00 00 00 00 00 00 ff ff .J....@.

Source Hardware Address (eth.src), 6 byte(s) || Пакеты: 1475 · Показаны: 7 (0.5%) · Потеряно: 0 (0.0%) || Профиль: Default

2) Address: HewlettP_0e:f2:25 (84:a9:3e:0e:f2:25)

3) Request - Transaction ID 0x4f24a177

ACK - Transaction ID 0x4f24a177

ID генерируется случайно клиентом, чтобы связать запрос с ответом на него

4) Src: 0.0.0.0, Dst: 255.255.255.255

5) 192.168.1.1

*Ethernet

Файл Редактирование Просмотр Запуск Захват Анализ Статистика Телефония Беспроводной Инструменты Помощь

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Server host name not given
Boot file name not given
Magic cookie: DHCP
> Option: (53) DHCP Message Type (Offer)
> Option: (54) DHCP Server Identifier (192.168.1.1)
▼ Option: (51) IP Address Lease Time
  Length: 4
  IP Address Lease Time: (25200s) 7 hours
> Option: (58) Renewal Time Value
> Option: (59) Rebinding Time Value
> Option: (1) Subnet Mask (255.255.255.0)
> Option: (3) Router
> Option: (6) Domain Name Server
> Option: (255) End
Padding: 00000000000000000000000000000000
  
```

```

0120  a8 01 01 33 04 00 00 62 70 3a 04 00 00 31 38 3b  ...3...b p:...18;
0130  04 00 00 56 22 01 04 ff ff ff 00 03 04 c0 a8 01  ...V"....
  
```

Option 51: IP Address Lease Time (dhcp.option.ip_address_lease_time), 4 byte(s) | Пакеты: 1475 · Показаны: 7 (0.5%) · Потеряно: 0 (0.0%) | Профиль: Default

6) IP Address Lease Time: (25200s) 7 hours

Срок аренды показывает время, на которое адрес был выдан. Он ограничен, чтобы IP адреса занимали только активные клиенты