

6.

1.

Packet number 5.

Mesaj de protocol: NOTIFY * HTTP/1.1\r\n

Exista 4 campuri in headerul UDP : Source Port , Destination Port , Length , Checksum.

The image shows a Wireshark capture of a network packet. The packet list shows a packet of type SSDP (Simple Service Discovery Protocol) with a length of 317 bytes. The packet details pane shows the following information:

- Frame 5: 317 bytes on wire (2536 bits), 317 bytes captured (2536 bits) on interface en0, id 0
- Ethernet II, Src: NarayInf_03:02:01 (00:05:04:03:02:01), Dst: IPv4mcast_7f:ff:fa (01:00:5e:7f:ff:fa)
- Internet Protocol Version 4, Src: 10.0.0.254, Dst: 239.255.255.250
- User Datagram Protocol, Src Port: 47931, Dst Port: 1900
 - Source Port: 47931
 - Destination Port: 1900
 - Length: 283
 - Checksum: 0xf7a8 [unverified]
 - [Checksum Status: Unverified]
 - [Stream index: 0]
 - [Timestamps]
 - UDP payload (275 bytes)
- Simple Service Discovery Protocol
 - NOTIFY * HTTP/1.1\r\n

The packet bytes pane shows the raw data of the packet, including the Ethernet II header, Internet Protocol Version 4 header, User Datagram Protocol header, and the Simple Service Discovery Protocol payload.

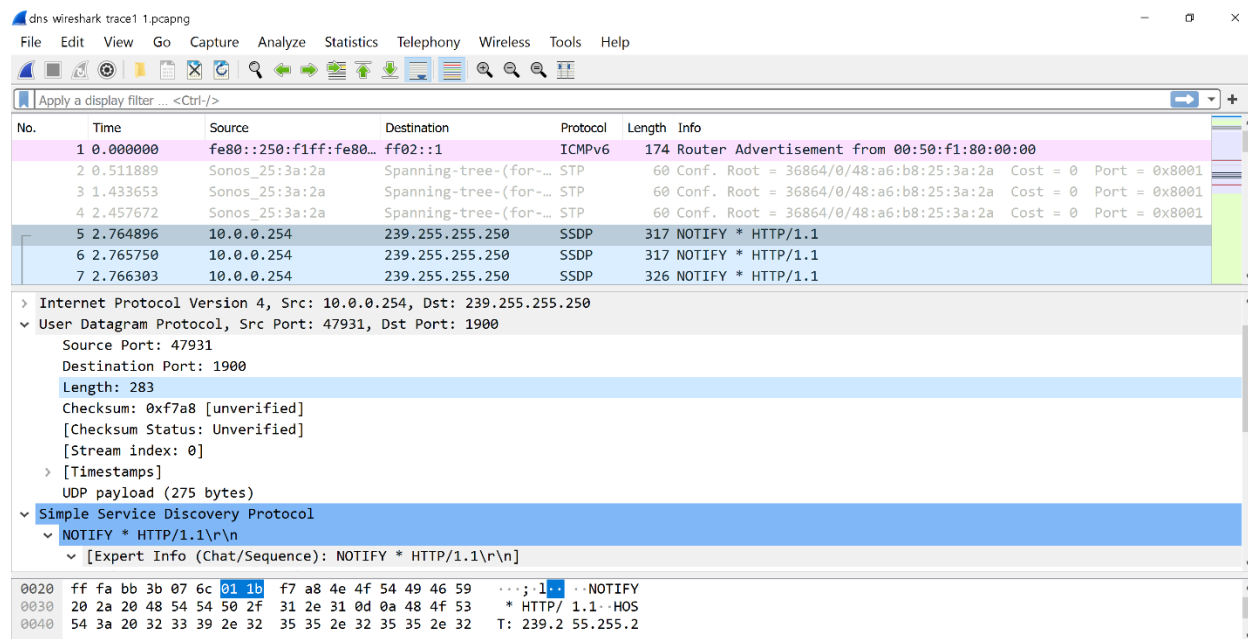
2.Fiecare camp de antet are lungimea de 2 bytes.

The image shows a Wireshark capture of a network packet. The packet list shows a packet of type SSDP (Simple Service Discovery Protocol) with a length of 317 bytes. The packet details pane shows the following information:

- Destination Port: 1900
- Length: 283
- Checksum: 0xf7a8 [unverified]
- [Checksum Status: Unverified]
- [Stream index: 0]
- [Timestamps]
- UDP payload (275 bytes)
- Simple Service Discovery Protocol
 - NOTIFY * HTTP/1.1\r\n

The packet bytes pane shows the raw data of the packet, including the Ethernet II header, Internet Protocol Version 4 header, User Datagram Protocol header, and the Simple Service Discovery Protocol payload.

3.Length(283) este suma celor 8 bytes din header si remaining data incapsulata in pachet.



No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	fe80::250:f1ff:fe80...	ff02::1	ICMPv6	174	Router Advertisement from 00:50:f1:80:00:00
2	0.511889	Sonos_25:3a:2a	Spanning-tree-(for-...	STP	60	Conf. Root = 36864/0/48:a6:b8:25:3a:2a Cost = 0 Port = 0x8001
3	1.433653	Sonos_25:3a:2a	Spanning-tree-(for-...	STP	60	Conf. Root = 36864/0/48:a6:b8:25:3a:2a Cost = 0 Port = 0x8001
4	2.457672	Sonos_25:3a:2a	Spanning-tree-(for-...	STP	60	Conf. Root = 36864/0/48:a6:b8:25:3a:2a Cost = 0 Port = 0x8001
5	2.764896	10.0.0.254	239.255.255.250	SSDP	317	NOTIFY * HTTP/1.1
6	2.765750	10.0.0.254	239.255.255.250	SSDP	317	NOTIFY * HTTP/1.1
7	2.766303	10.0.0.254	239.255.255.250	SSDP	326	NOTIFY * HTTP/1.1

Internet Protocol Version 4, Src: 10.0.0.254, Dst: 239.255.255.250

User Datagram Protocol, Src Port: 47931, Dst Port: 1900

Source Port: 47931

Destination Port: 1900

Length: 283

Checksum: 0xf7a8 [unverified]

[Checksum Status: Unverified]

[Stream index: 0]

[Timestamps]

UDP payload (275 bytes)

Simple Service Discovery Protocol

NOTIFY * HTTP/1.1\r\n

[Expert Info (Chat/Sequence): NOTIFY * HTTP/1.1\r\n]

0020 ff fa bb 3b 07 6c 01 1b f7 a8 4e 4f 54 49 46 59 ...:1..NOTIFY

0030 20 2a 20 48 54 54 50 2f 31 2e 31 0d 0a 48 4f 53 * HTTP/ 1.1..HOS

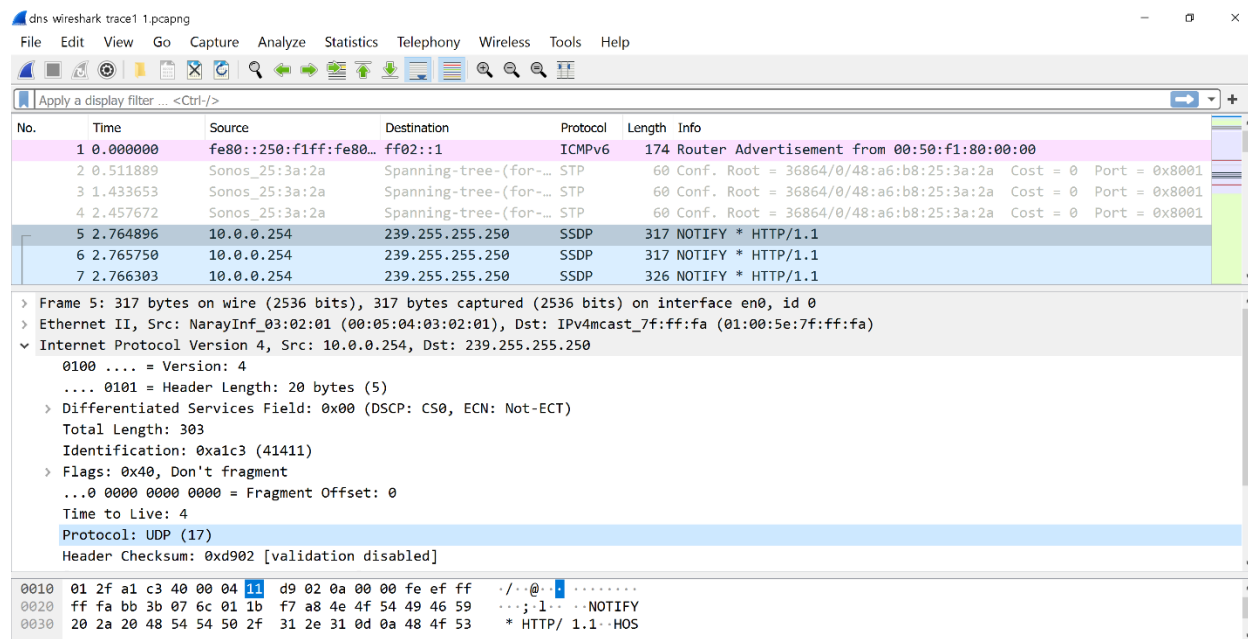
0040 54 3a 20 32 33 39 2e 32 35 35 2e 32 35 35 2e 32 T: 239.2 55.255.2

4.Numarul maxim de octeti care pot fi inclusi intr-un payload UDP :

$$2^{16} - 1 - 8 \text{ (bytes din header)} = 65527$$

5.Cel mai mare numar de port posibil : $2^{16} - 1 = 65535$

6.Numarul de protocol pentru UDP : 17 in decimal , 0x11 in hex.



No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	fe80::250:f1ff:fe80...	ff02::1	ICMPv6	174	Router Advertisement from 00:50:f1:80:00:00
2	0.511889	Sonos_25:3a:2a	Spanning-tree-(for-...	STP	60	Conf. Root = 36864/0/48:a6:b8:25:3a:2a Cost = 0 Port = 0x8001
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5	2.764896	10.0.0.254	239.255.255.250	SSDP	317	NOTIFY * HTTP/1.1
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Frame 5: 317 bytes on wire (2536 bits), 317 bytes captured (2536 bits) on interface en0, id 0

Ethernet II, Src: NarayInf_03:02:01 (00:05:04:03:02:01), Dst: IPv4mcast_7f:ff:fa (01:00:5e:7f:ff:fa)

Internet Protocol Version 4, Src: 10.0.0.254, Dst: 239.255.255.250

0100 = Version: 4

.... 0101 = Header Length: 20 bytes (5)

Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)

Total Length: 303

Identification: 0xa1c3 (41411)

Flags: 0x40, Don't fragment

...0 0000 0000 0000 = Fragment Offset: 0

Time to Live: 4

Protocol: UDP (17)

Header Checksum: 0xd902 [validation disabled]

0010 01 2f a1 c3 40 00 04 11 d9 02 0a 00 00 fe ef ff ./..@..

0020 ff fa bb 3b 07 6c 01 1b f7 a8 4e 4f 54 49 46 59 ...:1..NOTIFY

0030 20 2a 20 48 54 54 50 2f 31 2e 31 0d 0a 48 4f 53 * HTTP/ 1.1..HOS

7. Numerele de pachet sunt : 15 , 17.

Relatia dintre porturi : Portul sursa al pachetului UDP trimis de host este portul destinatie al pachetului de reply , iar portul destinatie este portul sursa al pachetului de reply. (53 si 58350)

The top screenshot shows a Wireshark capture of network traffic. The display filter is set to 'dns'. The packet list shows several packets, with packet 17 selected. The packet details pane shows the structure of the selected packet: Ethernet II, Internet Protocol Version 4, User Datagram Protocol, and Domain Name System (response). The packet bytes pane shows the raw data of the selected packet.

The bottom screenshot shows the same Wireshark capture. The display filter is set to 'dns'. The packet list shows several packets, with packet 15 selected. The packet details pane shows the structure of the selected packet: Ethernet II, Internet Protocol Version 4, User Datagram Protocol, and Domain Name System (query). The packet bytes pane shows the raw data of the selected packet.