

Wireshark

Τα screenshots είναι όλα απο το Session 2

- ECHO – IMAGE:**

The first screenshot shows a packet capture of a UDP echo request. The packet list displays 85 packets, with packet 8 selected. The packet details pane shows the structure of the packet: Ethernet II, Internet Protocol Version 4, User Datagram Protocol, and Data (5 bytes). The packet bytes pane shows the raw data in hexadecimal and ASCII.

The second screenshot shows a packet capture of a UDP echo response. The packet list displays 85 packets, with packet 9 selected. The packet details pane shows the structure of the packet: Ethernet II, Internet Protocol Version 4, User Datagram Protocol, and Data (32 bytes). The packet bytes pane shows the raw data in hexadecimal and ASCII.

[illegible]

- ECHO – AUDIO**

The screenshot shows the Wireshark interface with the file 'Echo Audio dpcm.pcapng' open. The packet list pane displays 23 UDP packets. Packet 7 is selected, showing details for an Ethernet II frame, an Internet Protocol Version 4 packet, and a User Datagram Protocol packet. The data field shows a 5-byte payload in hexadecimal: dc 02 8e 58 af e2.

No.	Time	Source	Destination	Protocol	Length	Info
3	1.627079	192.168.1.8	155.207.18.208	UDP	47	50219 → 38033 Len=5
4	2.529336	155.207.18.208	192.168.1.8	UDP	74	58033 → 48033 Len=32
5	2.530229	192.168.1.8	155.207.18.208	UDP	47	50219 → 38033 Len=5
6	3.927430	155.207.18.208	192.168.1.8	UDP	74	58033 → 48033 Len=32
7	3.928030	192.168.1.8	155.207.18.208	UDP	47	50219 → 38033 Len=5

Frame 7: 47 bytes on wire (376 bits), 47 bytes captured (376 bits) on interface \Device\NPF_{4728EDA9-DA0F-431E-9FFD-07E87FE0B5E4}, id 0
> Ethernet II, Src: LiteonTe_cf:b4:e7 (3c:95:09:cf:b4:e7), Dst: zte_58:af:e2 (dc:02:8e:58:af:e2)
> Internet Protocol Version 4, Src: 192.168.1.8, Dst: 155.207.18.208
> User Datagram Protocol, Src Port: 50219, Dst Port: 38033
> Data (5 bytes)
0000 dc 02 8e 58 af e2 3c 95 09 cf b4 e7 08 00 45 00 ...X...E-
0010 00 21 90 27 00 00 80 11 3a 55 c0 a8 01 08 9b cf ...I...:U.....
0020 12 d0 c4 2b 94 91 00 0d 8c 61 45 32 34 33 31 ...+.....aE2431

The screenshot shows the Wireshark interface with the file 'Echo Audio dpcm.pcapng' open. The packet list pane displays 23 UDP packets. Packet 10 is selected, showing details for an Ethernet II frame, an Internet Protocol Version 4 packet, and a User Datagram Protocol packet. The data field shows a 32-byte payload in hexadecimal, starting with 3c 95 09 cf b4 e7.

No.	Time	Source	Destination	Protocol	Length	Info
3	1.627079	192.168.1.8	155.207.18.208	UDP	47	50219 → 38033 Len=5
4	2.529336	155.207.18.208	192.168.1.8	UDP	74	58033 → 48033 Len=32
5	2.530229	192.168.1.8	155.207.18.208	UDP	47	50219 → 38033 Len=5
6	3.927430	155.207.18.208	192.168.1.8	UDP	74	58033 → 48033 Len=32
7	3.928030	192.168.1.8	155.207.18.208	UDP	47	50219 → 38033 Len=5
10	5.359010	155.207.18.208	192.168.1.8	UDP	74	58033 → 48033 Len=32

Frame 10: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface \Device\NPF_{4728EDA9-DA0F-431E-9FFD-07E87FE0B5E4}, id 0
> Ethernet II, Src: zte_58:af:e2 (dc:02:8e:58:af:e2), Dst: LiteonTe_cf:b4:e7 (3c:95:09:cf:b4:e7)
> Internet Protocol Version 4, Src: 155.207.18.208, Dst: 192.168.1.8
> User Datagram Protocol, Src Port: 58033, Dst Port: 48033
> Data (32 bytes)
0000 3c 95 09 cf b4 e7 dc 02 8e 58 af e2 08 00 45 00 <.....X....E-
0010 00 3c 00 81 00 00 79 11 d0 e0 9b cf 12 d0 c0 a8 <.....:.....
0020 01 08 e2 b1 bb a1 00 28 52 34 50 53 54 41 52 54(R4PSTART
0030 20 32 33 2d 31 31 2d 32 30 32 30 20 32 30 3a 34 23-11-2 020 20:4
0040 36 3a 30 35 20 50 53 54 4f 50 6:05 PST OP

The screenshot shows the Wireshark interface with the file 'Echo Audio dpcm.pcapng' open. The packet list pane displays 23 captured packets, all of which are UDP packets from 192.168.1.8 to 155.207.18.208. Packet 19 is selected, and the packet details pane shows the following information:

- Ethernet II, Src: LiteonTe_cf:b4:e7 (3c:95:09:cf:b4:e7), Dst: zte_58:af:e2 (dc:02:8e:58:af:e2)
- Internet Protocol Version 4, Src: 192.168.1.8, Dst: 155.207.18.208
- User Datagram Protocol, Src Port: 50220, Dst Port: 38033
- Data (9 bytes)
- Data: 413832303046393939

The packet bytes pane shows the raw data in hexadecimal and ASCII:

```
0000 dc 02 8e 58 af e2 3c 95 09 cf b4 e7 08 00 45 00  ...X<.....E-
0010 00 25 90 2c 00 00 00 11 3a 4c c0 a8 01 08 9b cf  %,....:L.....
0020 12 d0 c4 2c 94 91 00 11 20 d6 41 38 32 30 30 46  ....-A8200F
0030 39 39 39                                     999
```

The screenshot shows the Wireshark interface with the file 'Echo Audio dpcm.pcapng' open. The packet list pane displays 23 captured packets, all of which are UDP packets from 192.168.1.8 to 155.207.18.208. Packet 19 is selected, and the packet details pane shows the following information:

- Frame 19: 170 bytes on wire (1360 bits), 170 bytes captured (1360 bits) on interface \Device\NPF_{4728EDA9-DA0F-431E-9FFD-07E87FE0B5E4}, id 0
- Ethernet II, Src: zte_58:af:e2 (dc:02:8e:58:af:e2), Dst: LiteonTe_cf:b4:e7 (3c:95:09:cf:b4:e7)
- Internet Protocol Version 4, Src: 155.207.18.208, Dst: 192.168.1.8
- User Datagram Protocol, Src Port: 58033, Dst Port: 48033
- Data (128 bytes)

The packet bytes pane shows the raw data in hexadecimal and ASCII:

```
0000 3c 95 09 cf b4 e7 dc 02 8e 58 af e2 08 00 45 00  <.....X....E-
0010 00 9c 00 85 00 00 00 79 11 d0 7c 9b cf 12 d0 c0 a8  ....y.....
0020 01 08 e2 b1 bb a1 00 88 72 23 e5 e5 2a 88 b6 9b  ....r#.....
0030 b3 9d 58 5b a0 01 aa 5b 76 b6 a5 69 8d 8b 67 89  ...X[...v...i...g-
0040 ae d6 88 98 aa 58 94 a9 0a 75 c5 5a 66 c7 b1 4f  ....X...u.ZF...O
0050 f8 36 3c 9c 90 db 72 ad 7a a8 6d 88 46 99 98 83  ...6<...r.z.m.F...
0060 dd b1 5f 7b 49 52 f5 a6 87 cc ab 38 5b d2 65 03  ..._IR...8[e...
0070 aa 74 a6 89 77 68 a8 a8 ac 47 fd 8d ba 57 e4 4a  ...t'wh...G...W-J
0080 d7 19 82 88 49 95 93 bc 67 bb 57 68 82 fa 39 87  ....I...g'wh...9-
0090 5d 7c d3 fc 69 38 a6 5c 69 d6 d9 86 5a a3 bb 28  ]|...18\...Z...(-
```

- ECHO – COPTER**

The screenshot shows a Wireshark capture of a UDP stream. The packet list pane displays 32 packets, all of which are part of a single flow from source 192.168.1.8 to destination 155.207.18.208 on ports 57954 and 38033. The packet details pane for packet 3 shows the following structure:

- Frame 3: 47 bytes on wire (376 bits), 47 bytes captured (376 bits) on interface \Device\NPF_{4728EDA9-DA0F-431E-9FFD-07E87FE085E4}, id 0
- Ethernet II, Src: LiteonTe_cf:b4:e7 (3c:95:09:cf:b4:e7), Dst: zte_58:af:e2 (dc:02:8e:58:af:e2)
- Internet Protocol Version 4, Src: 192.168.1.8, Dst: 155.207.18.208
- User Datagram Protocol, Src Port: 57954, Dst Port: 38033
- Data (5 bytes)

The raw data for the data field is shown in hexadecimal and ASCII:

```
0000 dc 02 8e 58 af e2 3c 95 09 cf b4 e7 08 00 45 00  ...X...<.....E.
0010 00 21 e6 26 00 00 00 11 e4 55 c0 a8 01 08 9b cf  ...!.&.....U.....
0020 12 d0 e2 62 94 91 00 0d 6e 2a 45 32 34 33 31  ...b.....n"E2431
```

The screenshot shows a Wireshark capture of a UDP stream. The packet list pane displays 32 packets, all of which are part of a single flow from source 155.207.18.208 to destination 192.168.1.8 on ports 58033 and 48033. The packet details pane for packet 4 shows the following structure:

- Frame 4: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface \Device\NPF_{4728EDA9-DA0F-431E-9FFD-07E87FE085E4}, id 0
- Ethernet II, Src: zte_58:af:e2 (dc:02:8e:58:af:e2), Dst: LiteonTe_cf:b4:e7 (3c:95:09:cf:b4:e7)
- Internet Protocol Version 4, Src: 155.207.18.208, Dst: 192.168.1.8
- User Datagram Protocol, Src Port: 58033, Dst Port: 48033
- Data (32 bytes)

The raw data for the data field is shown in hexadecimal and ASCII:

```
0000 3c 95 09 cf b4 e7 dc 02 8e 58 af e2 08 00 45 00  <.....X....E.
0010 00 3c cc 88 00 00 79 11 04 d9 9b cf 12 d0 c0 a8  <.....y.....
0020 01 08 e2 b1 bb a1 00 28 54 3c 50 53 54 41 52 54  .....( T<PSTART
0030 20 32 33 2d 31 31 2d 32 30 32 30 20 32 31 3a 30  23-11-2 020 21:0
0040 33 3a 31 30 20 50 53 54 4f 50 3:10 PST OP
```

The screenshot shows a Wireshark capture of UDP traffic. The packet list displays 32 packets, all of which are UDP datagrams from source 192.168.1.8 to destination 155.207.18.208. The selected packet (No. 30) is a UDP datagram with a length of 5 bytes. The packet details pane shows the following information:

- Frame 30: 47 bytes on wire (376 bits), 47 bytes captured (376 bits) on interface \Device\NPF_{4728EDA9-DA0F-431E-9FFD-07E87FE0B5E4}, id 0
- Ethernet II, Src: LiteonTe_cf:b4:e7 (3c:95:09:cf:b4:e7), Dst: zte_58:af:e2 (dc:02:8e:58:af:e2)
- Internet Protocol Version 4, Src: 192.168.1.8, Dst: 155.207.18.208
- User Datagram Protocol, Src Port: 57955, Dst Port: 38078
- Data (5 bytes)

The packet bytes pane shows the raw data in hexadecimal and ASCII:

```
0000  dc 02 8e 58 af e2 3c 95 09 cf b4 e7 08 00 45 00  ...X...<.....E-
0010  00 21 e6 2d 00 00 80 11 e4 4e c0 a8 01 08 9b cf  ...!.....N.....
0020  12 d0 e2 63 94 be 00 0d 59 ff 51 32 39 30 34     ...c.....Y.Q2904
```

The screenshot shows a Wireshark capture of a single UDP datagram. The packet list displays 1 packet, which is a UDP datagram from source 155.207.18.208 to destination 192.168.1.8. The selected packet (No. 35) is a UDP datagram with a length of 113 bytes. The packet details pane shows the following information:

- Frame 35: 155 bytes on wire (1240 bits), 155 bytes captured (1240 bits) on interface \Device\NPF_{4728EDA9-DA0F-431E-9FFD-07E87FE0B5E4}, id 0
- Ethernet II, Src: zte_58:af:e2 (dc:02:8e:58:af:e2), Dst: LiteonTe_cf:b4:e7 (3c:95:09:cf:b4:e7)
- Internet Protocol Version 4, Src: 155.207.18.208, Dst: 192.168.1.8
- User Datagram Protocol, Src Port: 62278, Dst Port: 48078
- Data (113 bytes)

The packet bytes pane shows the raw data in hexadecimal and ASCII:

```
0000  3c 95 09 cf b4 e7 dc 02 8e 58 af e2 08 00 45 00  <.....X....E-
0010  00 8d cc 8d 00 00 79 11 04 83 9b cf 12 d0 c0 a8  ...y.....
0020  01 08 f3 46 bb ce 00 79 a2 91 49 54 48 41 4b 49  ...F...y...ITHAKI
0030  43 4f 50 54 45 52 20 32 33 2d 31 31 2d 32 30 32  COPTER 2 3-11-202
0040  30 20 32 31 3a 30 33 3a 32 38 20 4c 4d 4f 54 4f  0 21:03: 28 LMOTO
0050  52 3d 30 30 30 20 52 4d 4f 54 4f 52 3d 30 30 30  R=000 RM OTOR=000
0060  20 41 4c 54 49 54 55 44 45 3d 30 37 37 20 54 45  ALTITUD E=077 TE
0070  4d 50 45 52 41 54 55 52 45 3d 2b 32 33 2e 36 33  MPERATUR E=+23.63
0080  20 50 52 45 53 53 55 52 45 3d 31 30 31 37 2e 36  PRESSUR E=1017.6
0090  35 20 54 45 4c 45 4d 45 54 52 59                5 TELEME TRY
```


- **ECHO – OBD II**

obd.pcapng

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udp

No.	Time	Source	Destination	Protocol	Length	Info
3	0.651870	192.168.1.8	155.207.18.208	UDP	47	51470 → 38033 Len=5
4	1.950312	155.207.18.208	192.168.1.8	UDP	74	58033 → 48033 Len=32
5	1.951471	192.168.1.8	155.207.18.208	UDP	47	51470 → 38033 Len=5
6	4.043183	155.207.18.208	192.168.1.8	UDP	74	58033 → 48033 Len=32
7	4.043841	192.168.1.8	155.207.18.208	UDP	47	51470 → 38033 Len=5
8	6.229355	155.207.18.208	192.168.1.8	UDP	74	58033 → 48033 Len=32
9	6.229905	192.168.1.8	155.207.18.208	UDP	47	51470 → 38033 Len=5
10	7.691357	155.207.18.208	192.168.1.8	UDP	74	58033 → 48033 Len=32
11	7.692060	192.168.1.8	155.207.18.208	UDP	47	51470 → 38033 Len=5
13	10.004981	155.207.18.208	192.168.1.8	UDP	74	58033 → 48033 Len=32
15	20.542364	192.168.1.8	155.207.18.208	UDP	56	51471 → 38033 Len=14
16	20.645428	155.207.18.208	192.168.1.8	UDP	53	58033 → 48033 Len=11
17	20.646383	192.168.1.8	155.207.18.208	UDP	56	51471 → 38033 Len=14
18	20.710690	155.207.18.208	192.168.1.8	UDP	53	58033 → 48033 Len=11
19	20.711205	192.168.1.8	155.207.18.208	UDP	56	51471 → 38033 Len=14
20	20.835605	155.207.18.208	192.168.1.8	UDP	53	58033 → 48033 Len=11
21	20.836163	192.168.1.8	155.207.18.208	UDP	56	51471 → 38033 Len=14
22	20.944435	155.207.18.208	192.168.1.8	UDP	53	58033 → 48033 Len=11

> Frame 5: 47 bytes on wire (376 bits), 47 bytes captured (376 bits) on interface \Device\NPF_{4728EDA9-DA0F-431E-9FFD-07E87FE0B5E4}, id 0
> Ethernet II, Src: LiteonTe_cf:b4:e7 (3c:95:09:cf:b4:e7), Dst: zte_58:af:e2 (dc:02:8e:58:af:e2)
> Internet Protocol Version 4, Src: 192.168.1.8, Dst: 155.207.18.208
> User Datagram Protocol, Src Port: 51470, Dst Port: 38033
> Data (5 bytes)

```
0000  dc 02 8e 58 af e2 3c 95 09 cf b4 e7 08 00 45 00  ...X-<-.....E-
0010  00 21 04 02 00 00 00 11 c6 7a c0 a8 01 08 9b cf  .!.....z.....
0020  12 d0 c9 0e 94 91 00 0d 87 7e 45 32 34 33 31  ....~E2431
```

obd.pcapng

Packets: 80 · Displayed: 76 (95.0%) · Ignored: 1 (1.3%) Profile: Default

obd.pcapng

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

udp

No.	Time	Source	Destination	Protocol	Length	Info
3	0.651870	192.168.1.8	155.207.18.208	UDP	47	51470 → 38033 Len=5
4	1.950312	155.207.18.208	192.168.1.8	UDP	74	58033 → 48033 Len=32
5	1.951471	192.168.1.8	155.207.18.208	UDP	47	51470 → 38033 Len=5
6	4.043183	155.207.18.208	192.168.1.8	UDP	74	58033 → 48033 Len=32
7	4.043841	192.168.1.8	155.207.18.208	UDP	47	51470 → 38033 Len=5
8	6.229355	155.207.18.208	192.168.1.8	UDP	74	58033 → 48033 Len=32
9	6.229905	192.168.1.8	155.207.18.208	UDP	47	51470 → 38033 Len=5
10	7.691357	155.207.18.208	192.168.1.8	UDP	74	58033 → 48033 Len=32
11	7.692060	192.168.1.8	155.207.18.208	UDP	47	51470 → 38033 Len=5
13	10.004981	155.207.18.208	192.168.1.8	UDP	74	58033 → 48033 Len=32
15	20.542364	192.168.1.8	155.207.18.208	UDP	56	51471 → 38033 Len=14
16	20.645428	155.207.18.208	192.168.1.8	UDP	53	58033 → 48033 Len=11
17	20.646383	192.168.1.8	155.207.18.208	UDP	56	51471 → 38033 Len=14
18	20.710690	155.207.18.208	192.168.1.8	UDP	53	58033 → 48033 Len=11
19	20.711205	192.168.1.8	155.207.18.208	UDP	56	51471 → 38033 Len=14
20	20.835605	155.207.18.208	192.168.1.8	UDP	53	58033 → 48033 Len=11
21	20.836163	192.168.1.8	155.207.18.208	UDP	56	51471 → 38033 Len=14
22	20.944435	155.207.18.208	192.168.1.8	UDP	53	58033 → 48033 Len=11

> Frame 6: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface \Device\NPF_{4728EDA9-DA0F-431E-9FFD-07E87FE0B5E4}, id 0
> Ethernet II, Src: zte_58:af:e2 (dc:02:8e:58:af:e2), Dst: LiteonTe_cf:b4:e7 (3c:95:09:cf:b4:e7)
> Internet Protocol Version 4, Src: 155.207.18.208, Dst: 192.168.1.8
> User Datagram Protocol, Src Port: 58033, Dst Port: 48033
> Data (32 bytes)

```
0000  3c 95 09 cf b4 e7 dc 02 8e 58 af e2 08 00 45 00  <.....X....E-
0010  00 3c 0f f0 00 00 79 11 c1 71 9b cf 12 d0 c0 a8  .<.....y..q.....
0020  01 08 e2 b1 bb a1 00 28 4f 36 50 53 54 41 52 54  .....( O6PSTART
0030  20 32 33 2d 31 31 2d 32 30 32 30 20 32 31 3a 30  23-11-2 020 21:0
0040  35 3a 34 36 20 50 53 54 4f 50                    5:46 PST OP
```

obd.pcapng

Packets: 80 · Displayed: 76 (95.0%) · Ignored: 1 (1.3%) Profile: Default

The screenshot shows the Wireshark interface with the file 'obd.pcapng' open. The packet list on the left shows 22 packets. Packet 15 is selected, and the packet details pane on the right shows the following information:

- Frame 15: 56 bytes on wire (448 bits), 56 bytes captured (448 bits) on interface \Device\NPF_{4728EDA9-DA0F-431E-9FFD-07E87FE0B5E4}, id 0
- Ethernet II, Src: LiteonTe_cf:b4:e7 (3c:95:09:cf:b4:e7), Dst: zte_58:af:e2 (dc:02:8e:58:af:e2)
- Internet Protocol Version 4, Src: 192.168.1.8, Dst: 155.207.18.208
- User Datagram Protocol, Src Port: 51471, Dst Port: 38033
- Data (14 bytes)

The packet bytes pane shows the raw data in hexadecimal and ASCII:

```
0000  dc 02 8e 58 af e2 3c 95 09 cf b4 e7 08 00 45 00  ...X...<.....E..
0010  00 2a 04 07 00 00 80 11 c6 6c c0 a8 01 08 9b cf  ..*.....1.....
0020  12 d0 c9 0f 94 91 00 16 91 37 56 38 35 37 33 4f  .....7V85730
0030  42 44 3d 30 31 20 31 46                          BD=01 1F
```

The screenshot shows the Wireshark interface with the file 'obd.pcapng' open. The packet list on the left shows 22 packets. Packet 18 is selected, and the packet details pane on the right shows the following information:

- Frame 18: 53 bytes on wire (424 bits), 53 bytes captured (424 bits) on interface \Device\NPF_{4728EDA9-DA0F-431E-9FFD-07E87FE0B5E4}, id 0
- Ethernet II, Src: zte_58:af:e2 (dc:02:8e:58:af:e2), Dst: LiteonTe_cf:b4:e7 (3c:95:09:cf:b4:e7)
- Internet Protocol Version 4, Src: 155.207.18.208, Dst: 192.168.1.8
- User Datagram Protocol, Src Port: 58033, Dst Port: 48033
- Data (11 bytes)

The packet bytes pane shows the raw data in hexadecimal and ASCII:

```
0000  3c 95 09 cf b4 e7 dc 02 8e 58 af e2 08 00 45 00  <.....X.....E..
0010  00 27 0f f5 00 00 79 11 c1 81 9b cf 12 d0 c0 a8  ..'.....y.....
0020  01 08 e2 b1 bb a1 00 13 d1 41 34 31 20 31 46 20  .....A41 1F
0030  30 30 20 30 35                                  00 05
```