

Network Layers

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1. 2 Extranet access users – EMAG

Vândut și livrat de **Euroshop**

Vândut și livrat de: **First Printex Solution**

3. 5 Protocols

```
> Frame 191: 1167 bytes on wire (9336 bits), 1167 bytes captured (9336 bits) on interface \Device\NPF_{F1A7D8CC-772B-4D92-A7CC-3463EF9E7AAD}, id 0
> Ethernet II, Src: Giga-Byt_96:e6:f2 (b4:2e:99:96:e6:f2), Dst: ASUSTekC_e4:dd:98 (54:a0:50:e4:dd:98)
> Internet Protocol Version 4, Src: 192.168.1.222, Dst: 213.163.86.250
√ User Datagram Protocol, Src Port: 56542, Dst Port: 50011
  Source Port: 56542
  Destination Port: 50011
  Length: 1133
  Checksum: 0xf3a2 [unverified]
  [Checksum Status: Unverified]
  [Stream index: 1]
  > [Timestamps]
    UDP payload (1125 bytes)
> Data (1125 bytes)
```

UDP: User Datagram Protocol

```
> Frame 197: 110 bytes on wire (880 bits), 110 bytes captured (880 bits) on interface \Device\NPF_{F1A7D8CC-772B-4D92-A7CC-3463EF9E7AAD}, id 0
> Ethernet II, Src: ASUSTekC_e4:dd:98 (54:a0:50:e4:dd:98), Dst: Giga-Byt_96:e6:f2 (b4:2e:99:96:e6:f2)
> Internet Protocol Version 4, Src: 213.163.86.250, Dst: 192.168.1.222
> User Datagram Protocol, Src Port: 50011, Dst Port: 56542
√ Real-time Transport Control Protocol (Payload-specific Feedback)
  10.. .... = Version: RFC 1889 Version (2)
  ..0. .... = Padding: False
  ...0 1111 = RTCP Feedback message type (FMT): Application Layer Feedback (15)
  Packet type: Payload-specific Feedback (206)
  Length: 5 (24 bytes)
  Sender SSRC: 0x000c0344 (787268)
  Media source SSRC: 0x64c66443 (1690723395)
  > Application Layer Feedback Type: 37282
  Length: 38392
  > [RTCP frame length check: Wrong (expected 24 bytes, found 68)]
```

RTCP: Real-time Transport Control Protocol

```
> Frame 273: 366 bytes on wire (2928 bits), 366 bytes captured (2928 bits) on interface \Device\NPF_{F1A7D8CC-772B-4D92-A7CC-3463EF9E7AAD}, id 0
> Ethernet II, Src: Apple_81:66:67 (80:be:05:81:66:67), Dst: IPv4mcast_fb (01:00:5e:00:00:fb)
> Internet Protocol Version 4, Src: 192.168.1.99, Dst: 224.0.0.251
> User Datagram Protocol, Src Port: 5353, Dst Port: 5353
√ Multicast Domain Name System (response)
  > Transaction ID: 0x0000
  > Flags: 0x8400 Standard query response, No error
    Questions: 0
    Answer RRs: 7
    Authority RRs: 0
    Additional RRs: 3
  > Answers
  > Additional records
  [Retransmitted response. Original response in: 46]
  [Retransmission: True]
```

MDNS: Multicast Domain Name System

```

> Frame 324: 60 bytes on wire (480 bits), 60 bytes captured (480 bits) on interface \Device\NPF_{F1A7D8CC-772B-4D92-A7CC-3463EF9E7AAD}, id 0
> Ethernet II, Src: ASUSTekC_e4:dd:98 (54:a0:50:e4:dd:98), Dst: Broadcast (ff:ff:ff:ff:ff:ff)
  Address Resolution Protocol (request)
    Hardware type: Ethernet (1)
    Protocol type: IPv4 (0x0800)
    Hardware size: 6
    Protocol size: 4
    Opcode: request (1)
    Sender MAC address: ASUSTekC_e4:dd:98 (54:a0:50:e4:dd:98)
    Sender IP address: 192.168.1.1
    Target MAC address: 00:00:00_00:00:00 (00:00:00:00:00:00)
    Target IP address: 192.168.1.76

```

ARP: Address Resolution Protocol

```

> Frame 485: 54 bytes on wire (432 bits), 54 bytes captured (432 bits) on interface \Device\NPF_{F1A7D8CC-772B-4D92-A7CC-3463EF9E7AAD}, id 0
> Ethernet II, Src: Giga-Byt_96:e6:f2 (b4:2e:99:96:e6:f2), Dst: ASUSTekC_e4:dd:98 (54:a0:50:e4:dd:98)
> Internet Protocol Version 4, Src: 192.168.1.222, Dst: 162.159.136.234
  Transmission Control Protocol, Src Port: 52612, Dst Port: 443, Seq: 1, Ack: 60, Len: 0
    Source Port: 52612
    Destination Port: 443
    [Stream index: 0]
    [TCP Segment Len: 0]
    Sequence Number: 1 (relative sequence number)
    Sequence Number (raw): 1666180198
    [Next Sequence Number: 1 (relative sequence number)]
    Acknowledgment Number: 60 (relative ack number)
    Acknowledgment number (raw): 2171575882
    0101 .... = Header Length: 20 bytes (5)
  > Flags: 0x010 (ACK)
    Window: 63341
    [Calculated window size: 63341]
    [Window size scaling factor: -1 (unknown)]
    Checksum: 0xee2a [unverified]
    [Checksum Status: Unverified]
    Urgent Pointer: 0
  > [SEQ/ACK analysis]
  > [Timestamps]

```

TCP: Transmission Control Protocol

4. Frame 720

718	11.010831	192.168.1.222	172.217.16.110	UDP	75	55737 → 443 Len=33
719	11.010830	172.217.16.110	192.168.1.222	UDP	1392	443 → 55737 Len=1350
720	11.012321	172.217.16.110	192.168.1.222	UDP	1392	443 → 55737 Len=1350
721	11.012424	172.217.16.110	192.168.1.222	UDP	1392	443 → 55737 Len=1350
722	11.012462	192.168.1.222	172.217.16.110	UDP	75	55737 → 443 Len=33

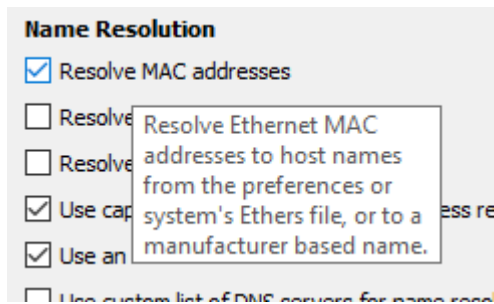
Start acquisition time: 11.012321s from start

5. Frame 180

178	3.938227	192.168.1.222	82.76.79.147	UDP	75	59520 → 443 Len=33
179	3.938695	82.76.79.147	192.168.1.222	UDP	1392	443 → 59520 Len=1350
180	3.938804	82.76.79.147	192.168.1.222	UDP	1392	443 → 59520 Len=1350
181	3.938923	82.76.79.147	192.168.1.222	UDP	1392	443 → 59520 Len=1350
182	3.939086	82.76.79.147	192.168.1.222	UDP	1392	443 → 59520 Len=1350

Frame size: 1392 bytes

6. Resolve MAC address setting



With:

```
Ethernet II, Src: ASUSTekC_e4:dd:98 (54:a0:50:e4:dd:98), Dst: Giga-Byt_96:e6:f2 (b4:2e:99:96:e6:f2)
```

Without:

```
Ethernet II, Src: 54:a0:50:e4:dd:98, Dst: b4:2e:99:96:e6:f2
```

Shows the manufacturer/vendor/host names based on the first 3 bytes of the MAC address