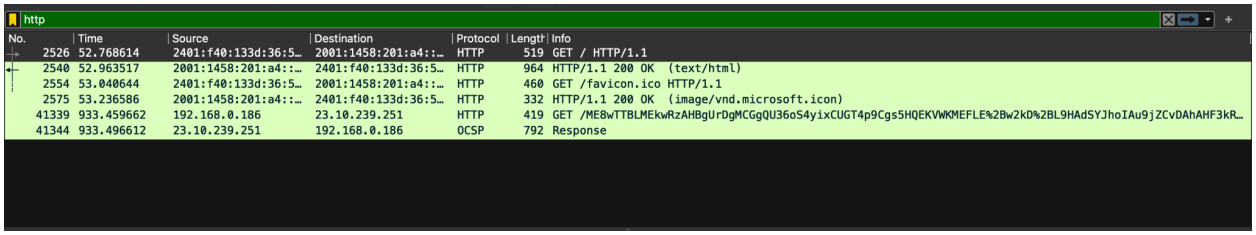
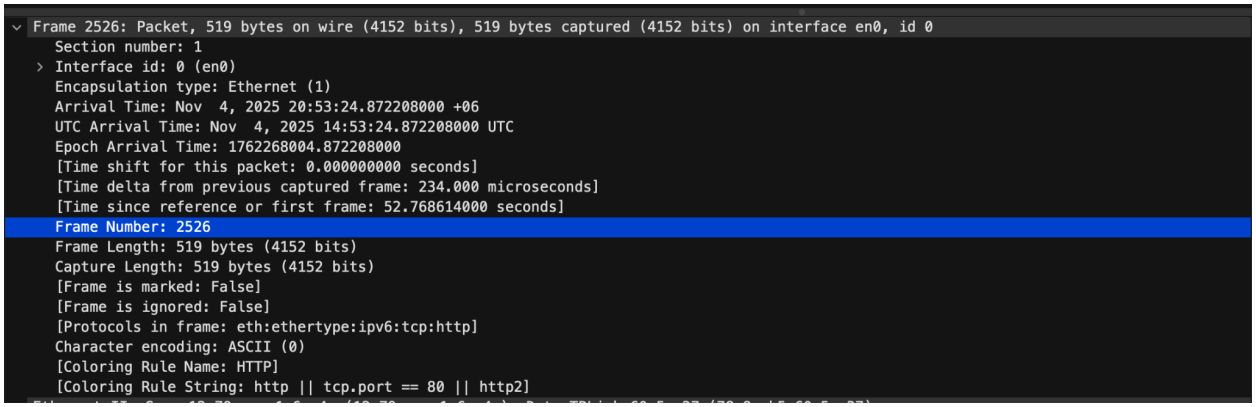
WEBSITE: http://info.cern.ch

NETWORK TRAFFIC:

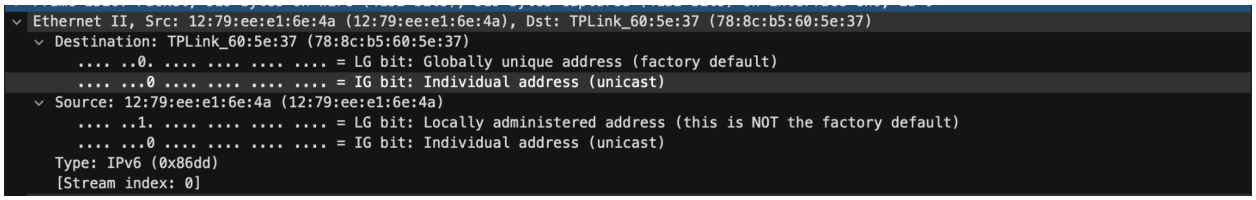


HTTP REQUEST:

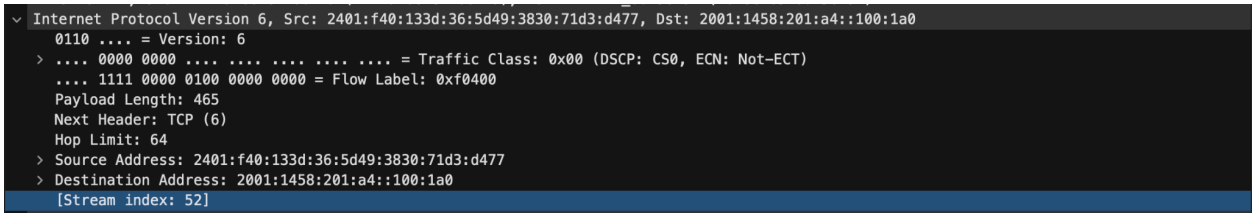
1.This falls under DATA LINK LAYER. It captured an Ethernet frame (Frame 2526) containing 519 bytes.



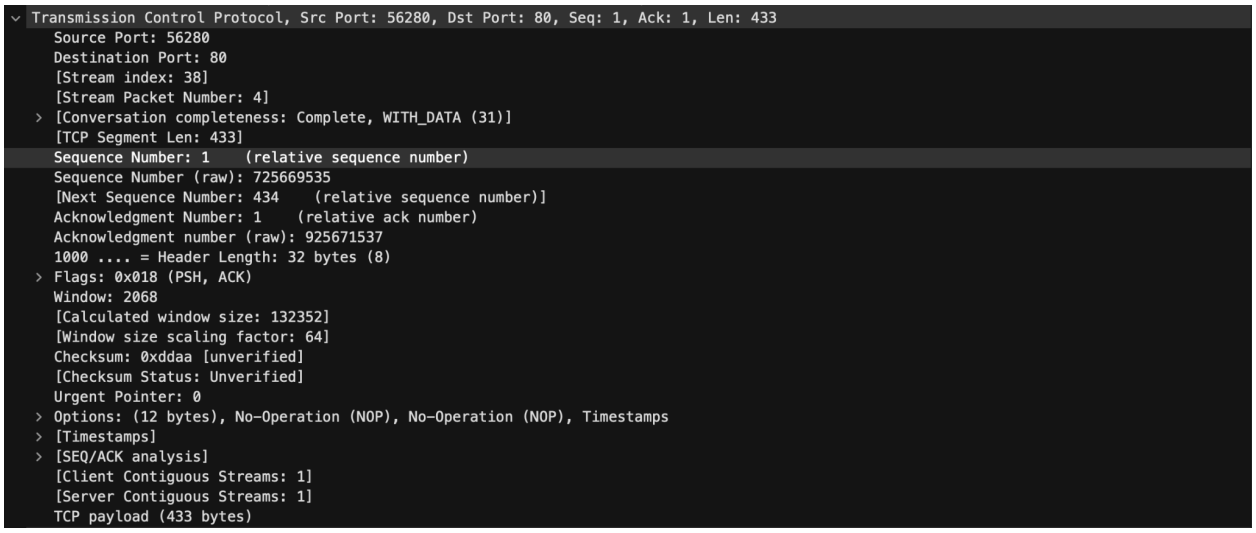
2. This falls under DATA LINK LAYER. It defines MAC-level addressing and the packet is sent from 12:79:ee:e1:6e:4a to 78:8c:b5:60:5e:37 using the Ethernet II.



3. This falls under NETWORK LAYER. It Encapsulates the logical (IP) routing info. Here Next Header = TCP (6) indicates the next layer is TCP.



4. This falls under TRANSPORT LAYER. Here source port 56280 and destination port 80 .



5. This falls under APPLICATION LAYER. Here GET / HTTP/1.1 request to info.cern.ch with headers means that the web browser's request for a webpage.

```
Hypertext Transfer Protocol
  > GET / HTTP/1.1\r\n
    Host: info.cern.ch\r\n
    Connection: keep-alive\r\n
    Upgrade-Insecure-Requests: 1\r\n
    User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/140.0.0.0 Safari/537.36\r\n
    Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b…
    Accept-Encoding: gzip, deflate\r\n
    Accept-Language: en-US,en;q=0.9\r\n
    \r\n
    [Response in frame: 2540]
    [Full request URI: http://info.cern.ch/]
```

HTTP RESPONSE:

1. This falls under DATA LINK LAYER. It captured an Ethernet frame (Frame 2540) containing 964 bytes.

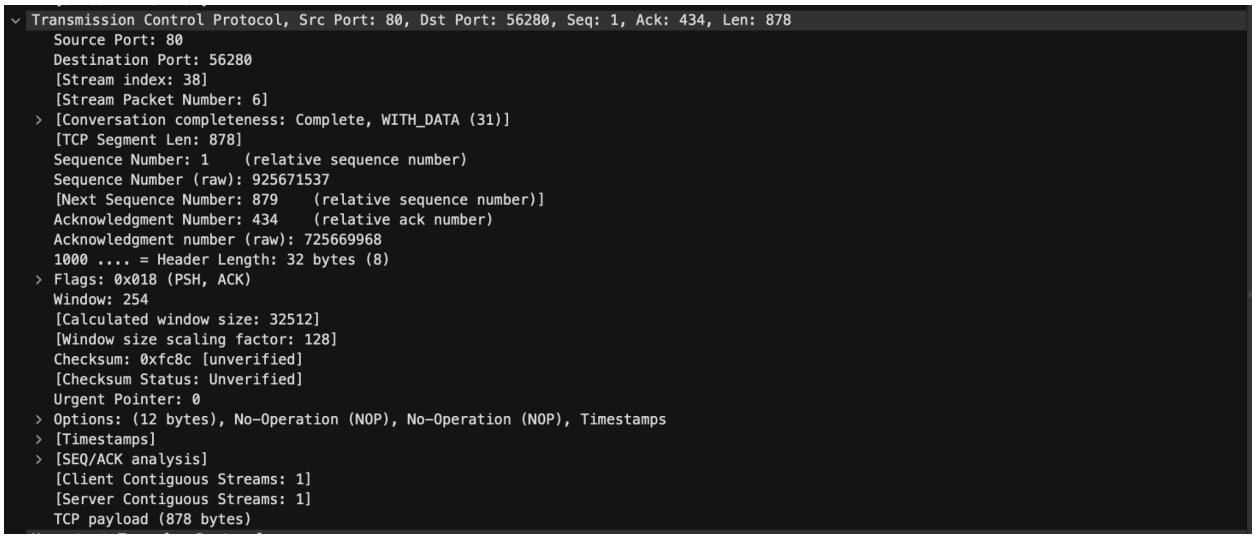
```
Frame 2540: Packet, 964 bytes on wire (7712 bits), 964 bytes captured (7712 bits) on interface en0, id 0
    Section number: 1
  > Interface id: 0 (en0)
    Encapsulation type: Ethernet (1)
    Arrival Time: Nov  4, 2025 20:53:25.067111000 +06
    UTC Arrival Time: Nov  4, 2025 14:53:25.067111000 UTC
    Epoch Arrival Time: 1762268005.067111000
    [Time shift for this packet: 0.000000000 seconds]
    [Time delta from previous captured frame: 1.608000 milliseconds]
    [Time delta from previous displayed frame: 194.903000 milliseconds]
    [Time since reference or first frame: 52.963517000 seconds]
    Frame Number: 2540
    Frame Length: 964 bytes (7712 bits)
    Capture Length: 964 bytes (7712 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ipv6:tcp:http:data-text-lines]
    Character encoding: ASCII (0)
    [Coloring Rule Name: HTTP]
    [Coloring Rule String: http || tcp.port == 80 || http2]
```

2. This falls under DATA LINK LAYER. It defines MAC-level addressing and the packet is sent from 78:8c:b5:60:5e:37 to 12:79:ee:e1:6e:4a using the Ethernet II.

```
Ethernet II, Src: TPLink_60:5e:37 (78:8c:b5:60:5e:37), Dst: 12:79:ee:e1:6e:4a (12:79:ee:e1:6e:4a)
  Destination: 12:79:ee:e1:6e:4a (12:79:ee:e1:6e:4a)
      .... ..1. .... .... .... .... = LG bit: Locally administered address (this is NOT the factory default)
      .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
  Source: TPLink_60:5e:37 (78:8c:b5:60:5e:37)
      .... ..0. .... .... .... .... = LG bit: Globally unique address (factory default)
      .... ...0 .... .... .... .... = IG bit: Individual address (unicast)
    Type: IPv6 (0x86dd)
    [Stream index: 0]
```

3. This falls under NETWORK LAYER. It Encapsulates the logical (IP) routing info. Here Next Header = TCP (6) indicates the next layer is TC

4. This falls under TRANSPORT LAYER. Here source port 56280 and destination port 80



5. This falls under APPLICATION LAYER. It contains HTTP/1.1 200 OK message, meaning the web server successfully processed the client's GET request.