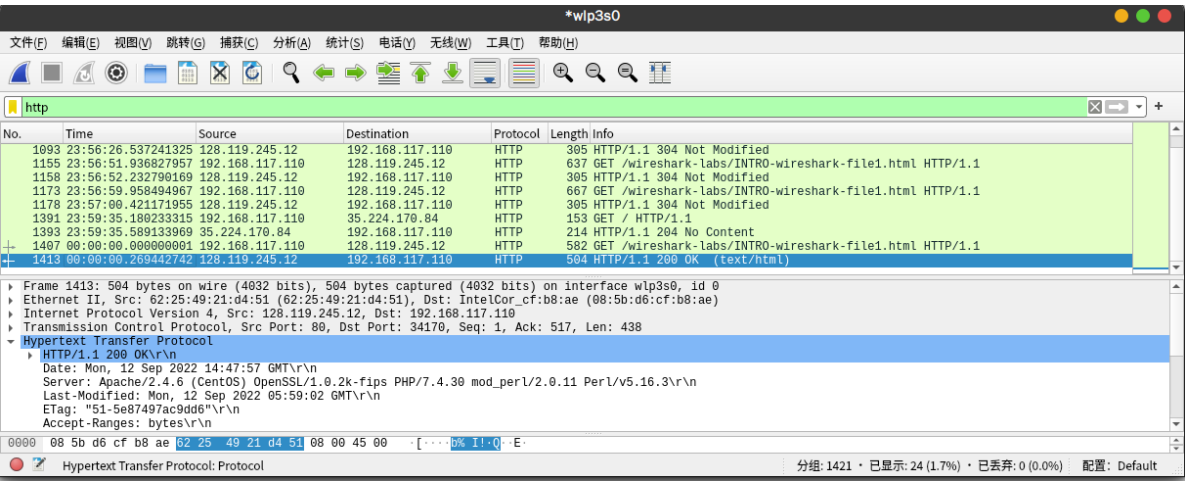# 计网入门实验

PB20000180 刘良宇

Q1

HTTP TCP ARP

Q2

（时间进行了平移方便参考）

用时约 0.269 秒

Q3

- 目标地址：128.119.245.12
- 本机地址：192.168.117.110

Q4

```
No.     Time              Source              Destination        Protocol Length Info
   1407 00:00:00.000000001 192.168.117.110    128.119.245.12     HTTP      582    GET /wireshark-labs/INTRO-wireshark-
file1.html HTTP/1.1
Frame 1407: 582 bytes on wire (4656 bits), 582 bytes captured (4656 bits) on interface wlp3s0, id 0
Ethernet II, Src: IntelCor_cf:b8:ae (08:5b:d6:cf:b8:ae), Dst: 62:25:49:21:d4:51 (62:25:49:21:d4:51)
Internet Protocol Version 4, Src: 192.168.117.110, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 34170, Dst Port: 80, Seq: 1, Ack: 1, Len: 516
Hypertext Transfer Protocol
    GET /wireshark-labs/INTRO-wireshark-file1.html HTTP/1.1\r\n
    Host: gaia.cs.umass.edu\r\n
    Connection: keep-alive\r\n
    Cache-Control: max-age=0\r\n
    Upgrade-Insecure-Requests: 1\r\n
    User-Agent: Mozilla/5.0 (Linux; Android 6.0; Nexus 5 Build/MRA58N) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/104.0.0.0
Mobile 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=b3;q=0.9\r\n
    Accept-Encoding: gzip, deflate\r\n
    Accept-Language: zh,en;q=0.9\r\n
    \r\n
    [Full request URI: http://gaia.cs.umass.edu/wireshark-labs/INTRO-wireshark-file1.html]
    [HTTP request 1/1]
    [Response in frame: 1413]
No.     Time              Source              Destination        Protocol Length Info
   1413 00:00:00.269442742 128.119.245.12     192.168.117.110    HTTP      504    HTTP/1.1 200 OK  (text/html)
Frame 1413: 504 bytes on wire (4032 bits), 504 bytes captured (4032 bits) on interface wlp3s0, id 0
Ethernet II, Src: 62:25:49:21:d4:51 (62:25:49:21:d4:51), Dst: IntelCor_cf:b8:ae (08:5b:d6:cf:b8:ae)
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.117.110
Transmission Control Protocol, Src Port: 80, Dst Port: 34170, Seq: 1, Ack: 517, Len: 438
Hypertext Transfer Protocol
    HTTP/1.1 200 OK\r\n
    Date: Mon, 12 Sep 2022 14:47:57 GMT\r\n
    Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.30 mod_perl/2.0.11 Perl/v5.16.3\r\n
    Last-Modified: Mon, 12 Sep 2022 05:59:02 GMT\r\n
    ETag: "51-5e87497ac9dd6"\r\n
    Accept-Ranges: bytes\r\n
    Content-Length: 81\r\n
    Keep-Alive: timeout=5, max=100\r\n
    Connection: Keep-Alive\r\n
    Content-Type: text/html; charset=UTF-8\r\n
    \r\n
    [HTTP response 1/1]
    [Time since request: -82077.140996597 seconds]
    [Request in frame: 1407]
    [Request URI: http://gaia.cs.umass.edu/wireshark-labs/INTRO-wireshark-file1.html]
    File Data: 81 bytes
Line-based text data: text/html (3 lines)
```