计算机网络——实验一

花昌诚 PB20030866

1.

HTTP,TCP,DNS

2.

```
184 2022-09-11 16:14:58.332514        192.168.183.27        128.119.245.12        HTTP        652 GET /wireshark-labs/INTRO-wireshark-
200 2022-09-11 16:14:58.594584        128.119.245.12        192.168.183.27        HTTP        492 HTTP/1.1 200 OK  (text/html)
```

如图所示，当改变时间显示格式后可以看到，从发送HTTP GET消息到收到HTTP OK回复所需时间大概为0.26秒。

3.

从Internet Protcol Version中可以看出，目标网址为192.168.183.27，电脑网址为128.119.245.12

4.

打印出的两条HTTP信息截图如下

```
No.     Time                    Source              Destination         Protocol Length Info
    184 2022-09-11 16:14:58.332514    192.168.183.27      128.119.245.12      HTTP      652     GET /wireshark-labs/INTRO-
wireshark-file1.html HTTP/1.1
Frame 184: 652 bytes on wire (5216 bits), 652 bytes captured (5216 bits) on interface \Device\NPF_{7E1D773D-
A8C5-4870-9FA7-9A41D83C33E0}, id 0
Ethernet II, Src: IntelCor_5c:a4:22 (34:cf:f6:5c:a4:22), Dst: 42:b4:c8:7f:f8:d3 (42:b4:c8:7f:f8:d3)
Internet Protocol Version 4, Src: 192.168.183.27, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 64866, Dst Port: 80, Seq: 1, Ack: 1, Len: 598
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
    Upgrade-Insecure-Requests: 1\r\n
    User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/105.0.0.0 Safari/
537.36 Edg/105.0.1343.33\r\n
    Accept: text/html,application/xhtml+xml,application/xml;q=0.9,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-CN,zh;q=0.9,en;q=0.8,en-GB;q=0.7,en-US;q=0.6\r\n
    If-None-Match: "51-5e7fbe49c8fb1"\r\n
    If-Modified-Since: Tue, 06 Sep 2022 05:59:01 GMT\r\n
    \r\n
    [Full request URI: http://gaia.cs.umass.edu/wireshark-labs/INTRO-wireshark-file1.html]
    [HTTP request 1/2]
    [Response in frame: 200]
    [Next request in frame: 214]
```

```
No.    Time                          Source            Destination        Protocol Length Info
   200 2022-09-11 16:14:58.594584    128.119.245.12    192.168.183.27     HTTP     492    HTTP/1.1 200 OK  (text/
html)
Frame 200: 492 bytes on wire (3936 bits), 492 bytes captured (3936 bits) on interface \Device\NPF_{7E1D773D-
A8C5-4870-9FA7-9A41D83C33E0}, id 0
Ethernet II, Src: 42:b4:c8:7f:f8:d3 (42:b4:c8:7f:f8:d3), Dst: IntelCor_5c:a4:22 (34:cf:f6:5c:a4:22)
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.183.27
Transmission Control Protocol, Src Port: 80, Dst Port: 64866, Seq: 1, Ack: 599, Len: 438
Hypertext Transfer Protocol
    HTTP/1.1 200 OK\r\n
    Date: Sun, 11 Sep 2022 08:14:59 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: Sun, 11 Sep 2022 05:59:01 GMT\r\n
    ETag: "51-5e86079cbdf11"\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 1/2]
    [Time since request: 0.262070000 seconds]
    [Request in frame: 184]
    [Next request in frame: 214]
    [Next response in frame: 246]
    [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)
    <html>\n
    Congratulations!  You've downloaded the first Wireshark lab file!\n
    </html>\n
```