```
No.
        Time
                                              Destination
                                                                    Protocol Length Info
                       Source
      1 0.000000
                       172.20.10.9
                                              18.140.166.148
                                                                    HTTP
                                                                              196
V3/01/12.245.119.128.ip/ HTTP/1.1
Frame 1: 196 bytes on wire (1568 bits), 196 bytes captured (1568 bits) on interface en0, id 0
Ethernet II, Src: Apple_cd:fc:62 (a4:d1:8c:cd:fc:62), Dst: 4e:57:ca:c5:1e:64 (4e:57:ca:c5:1e:
Internet Protocol Version 4, Src: 172.20.10.9, Dst: 18.140.166.148
Transmission Control Protocol, Src Port: 53165, Dst Port: 80, Seq: 1, Ack: 1, Len: 130
    Source Port: 53165
    Destination Port: 80
    [Stream index: 0]
    [TCP Segment Len: 130]
    Sequence number: 1
                          (relative sequence number)
    Sequence number (raw): 497113069
    [Next sequence number: 131
                                  (relative sequence number)]
                                (relative ack number)
    Acknowledgment number: 1
    Acknowledgment number (raw): 1609935329
    1000 .... = Header Length: 32 bytes (8)
    Flags: 0x018 (PSH, ACK)
    Window size value: 2056
    [Calculated window size: 2056]
    [Window size scaling factor: -1 (unknown)]
    Checksum: 0x9ded [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    [SEQ/ACK analysis]
    [Timestamps]
    TCP payload (130 bytes)
Hypertext Transfer Protocol
    GET /V3/01/12.245.119.128.ip/ HTTP/1.1\r\n
        [Expert Info (Chat/Sequence): GET /V3/01/12.245.119.128.ip/ HTTP/1.1\r\n]
        Request Method: GET
        Request URI: /V3/01/12.245.119.128.ip/
        Request Version: HTTP/1.1
    Host: http.00.h.sophosxl.net\r\n
    User-Agent: SXL/3.1\r\n
    Accept: */*\r\n
    Connection: Keep-Alive\r\n
    \r\setminus n
    [Full request URI: http://http.00.h.sophosxl.net/V3/01/12.245.119.128.ip/]
    [HTTP request 1/2]
    [Response in frame: 6]
    [Next request in frame: 13]
```

```
No.
        Time
                                              Destination
                                                                    Protocol Length Info
                       Source
      2 0.002618
                       172.20.10.9
                                              18.140.166.148
                                                                    HTTP
                                                                             196
V3/01/12.245.119.128.ip/ HTTP/1.1
Frame 2: 196 bytes on wire (1568 bits), 196 bytes captured (1568 bits) on interface en0, id 0
Ethernet II, Src: Apple_cd:fc:62 (a4:d1:8c:cd:fc:62), Dst: 4e:57:ca:c5:1e:64 (4e:57:ca:c5:1e:
Internet Protocol Version 4, Src: 172.20.10.9, Dst: 18.140.166.148
Transmission Control Protocol, Src Port: 53162, Dst Port: 80, Seq: 1, Ack: 1, Len: 130
    Source Port: 53162
    Destination Port: 80
    [Stream index: 1]
    [TCP Segment Len: 130]
    Sequence number: 1
                          (relative sequence number)
    Sequence number (raw): 166854961
    [Next sequence number: 131
                                  (relative sequence number)]
                                (relative ack number)
    Acknowledgment number: 1
    Acknowledgment number (raw): 1030029949
    1000 .... = Header Length: 32 bytes (8)
    Flags: 0x018 (PSH, ACK)
    Window size value: 2056
    [Calculated window size: 2056]
    [Window size scaling factor: -1 (unknown)]
    Checksum: 0xf01f [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    [SEQ/ACK analysis]
    [Timestamps]
    TCP payload (130 bytes)
Hypertext Transfer Protocol
    GET /V3/01/12.245.119.128.ip/ HTTP/1.1\r\n
        [Expert Info (Chat/Sequence): GET /V3/01/12.245.119.128.ip/ HTTP/1.1\r\n]
        Request Method: GET
        Request URI: /V3/01/12.245.119.128.ip/
        Request Version: HTTP/1.1
    Host: http.00.h.sophosxl.net\r\n
    User-Agent: SXL/3.1\r\n
    Accept: */*\r\n
    Connection: Keep-Alive\r\n
    \r\setminus n
    [Full request URI: http://http.00.h.sophosxl.net/V3/01/12.245.119.128.ip/]
    [HTTP request 1/1]
    [Response in frame: 5]
```

[HTTP request 1/1] [Response in frame: 7]

```
No.
        Time
                       Source
                                             Destination
                                                                    Protocol Length Info
      3 0.013356
                       172.20.10.9
                                             18.140.166.148
                                                                    HTTP
V3/01/1.jverfunex-2qynof-2sUGGC-2qjverfunex-2qsvyr4-2rugzy.tnvn.pf.hznff.rqh.w/ HTTP/1.1
Frame 3: 251 bytes on wire (2008 bits), 251 bytes captured (2008 bits) on interface en0, id 0
Ethernet II, Src: Apple_cd:fc:62 (a4:d1:8c:cd:fc:62), Dst: 4e:57:ca:c5:1e:64 (4e:57:ca:c5:1e:
Internet Protocol Version 4, Src: 172.20.10.9, Dst: 18.140.166.148
Transmission Control Protocol, Src Port: 53159, Dst Port: 80, Seq: 1, Ack: 1, Len: 185
    Source Port: 53159
    Destination Port: 80
    [Stream index: 2]
    [TCP Segment Len: 185]
    Sequence number: 1
                          (relative sequence number)
    Sequence number (raw): 326523607
    [Next sequence number: 186
                                  (relative sequence number)]
    Acknowledgment number: 1
                                (relative ack number)
    Acknowledgment number (raw): 3324840599
    1000 .... = Header Length: 32 bytes (8)
    Flags: 0x018 (PSH, ACK)
    Window size value: 2059
    [Calculated window size: 2059]
    [Window size scaling factor: -1 (unknown)]
    Checksum: 0xf3b9 [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    [SEQ/ACK analysis]
    [Timestamps]
    TCP payload (185 bytes)
Hypertext Transfer Protocol
    GET /V3/01/1.jverfunex-2gynof-2sUGGC-2gjverfunex-2gsvyr4-2rugzy.tnvn.pf.hznff.rgh.w/ HTTP/
1.1\r\n
        [Expert Info (Chat/Sequence): GET /
V3/01/1.jverfunex-2gynof-2sUGGC-2gjverfunex-2gsvyr4-2rugzy.tnvn.pf.hznff.rqh.w/ HTTP/1.1\r\n]
        Request Method: GET
        Request URI: /
V3/01/1.jverfunex-2qynof-2sUGGC-2qjverfunex-2qsvyr4-2rugzy.tnvn.pf.hznff.rqh.w/
        Request Version: HTTP/1.1
    Host: http.00.h.sophosxl.net\r\n
    User-Agent: SXL/3.1\r\n
    Accept: */*\r\n
    Connection: Keep-Alive\r\n
    [Full request URI: http://http.00.h.sophosxl.net/
V3/01/1.jverfunex-2gynof-2sUGGC-2gjverfunex-2gsvyr4-2rugzy.tnvn.pf.hznff.rgh.w/]
```

[Next request in frame: 9]

```
No.
                       Source
                                                                    Protocol Length Info
        Time
                                              Destination
      4 0.184719
                       172.20.10.9
                                              128.119.245.12
                                                                    HTTP
                                                                             557
wireshark-labs/HTTP-wireshark-file4.html HTTP/1.1
Frame 4: 557 bytes on wire (4456 bits), 557 bytes captured (4456 bits) on interface en0, id 0
Ethernet II, Src: Apple_cd:fc:62 (a4:d1:8c:cd:fc:62), Dst: 4e:57:ca:c5:1e:64 (4e:57:ca:c5:1e:
Internet Protocol Version 4, Src: 172.20.10.9, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 53209, Dst Port: 80, Seq: 1, Ack: 1, Len: 491
    Source Port: 53209
    Destination Port: 80
    [Stream index: 3]
    [TCP Segment Len: 491]
    Sequence number: 1
                          (relative sequence number)
    Sequence number (raw): 3899702826
    [Next sequence number: 492
                                  (relative sequence number)]
    Acknowledgment number: 1
                                (relative ack number)
    Acknowledgment number (raw): 94385721
    1000 .... = Header Length: 32 bytes (8)
    Flags: 0x018 (PSH, ACK)
    Window size value: 2060
    [Calculated window size: 2060]
    [Window size scaling factor: -1 (unknown)]
    Checksum: 0x82ce [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    [SEQ/ACK analysis]
    [Timestamps]
    TCP payload (491 bytes)
Hypertext Transfer Protocol
    GET /wireshark-labs/HTTP-wireshark-file4.html HTTP/1.1\r\n
        [Expert Info (Chat/Sequence): GET /wireshark-labs/HTTP-wireshark-file4.html HTTP/
1.1\r\n]
        Request Method: GET
        Request URI: /wireshark-labs/HTTP-wireshark-file4.html
        Request Version: HTTP/1.1
    Host: gaia.cs.umass.edu\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 5) AppleWebKit/537.36 (KHTML,
like Gecko) Chrome/83.0.4103.97 Safari/537.36\r\n
    Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,image/appq,*/
*;q=0.8,application/signed-exchange;v=b3;q=0.9\r\n
    Accept-Encoding: gzip, deflate\r\n
    Accept-Language: ru-RU, ru; q=0.9, en-US; q=0.8, en; q=0.7 \ r \ n
    \r\n
    [Full request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html]
    [HTTP request 1/2]
    [Response in frame: 8]
```

```
Destination
                                                                    Protocol Length Info
No.
        Time
                       Source
      5 0.340593
                       18.140.166.148
                                             172.20.10.9
                                                                    HTTP
                                                                             106
                                                                                    HTTP/1.1
200 OK
Frame 5: 106 bytes on wire (848 bits), 106 bytes captured (848 bits) on interface en0, id 0
Ethernet II, Src: 4e:57:ca:c5:1e:64 (4e:57:ca:c5:1e:64), Dst: Apple_cd:fc:62 (a4:d1:8c:cd:fc:
Internet Protocol Version 4, Src: 18.140.166.148, Dst: 172.20.10.9
Transmission Control Protocol, Src Port: 80, Dst Port: 53162, Seq: 1, Ack: 131, Len: 40
    Source Port: 80
    Destination Port: 53162
    [Stream index: 1]
    [TCP Segment Len: 40]
    Sequence number: 1
                          (relative sequence number)
    Sequence number (raw): 1030029949
    [Next sequence number: 41
                                 (relative sequence number)]
    Acknowledgment number: 131
                                  (relative ack number)
    Acknowledgment number (raw): 166855091
    1000 .... = Header Length: 32 bytes (8)
    Flags: 0x018 (PSH, ACK)
    Window size value: 32
    [Calculated window size: 32]
    [Window size scaling factor: -1 (unknown)]
    Checksum: 0x7e2d [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    [SEQ/ACK analysis]
    [Timestamps]
    TCP payload (40 bytes)
Hypertext Transfer Protocol
    HTTP/1.1 200 OK\r\n
        [Expert Info (Chat/Sequence): HTTP/1.1 200 OK\r\n]
        Response Version: HTTP/1.1
        Status Code: 200
        [Status Code Description: OK]
        Response Phrase: OK
    Content-Length: 2\r\n
    \r\n
    [HTTP response 1/1]
    [Time since request: 0.337975000 seconds]
    [Request in frame: 2]
    [Request URI: http://http.00.h.sophosxl.net/V3/01/12.245.119.128.ip/]
    File Data: 2 bytes
    Data (2 bytes)
0000 0d 0a
                                                         . .
```

```
Destination
                                                                    Protocol Length Info
No.
        Time
                       Source
      6 0.340597
                       18.140.166.148
                                             172.20.10.9
                                                                    HTTP
                                                                             106
                                                                                    HTTP/1.1
200 OK
Frame 6: 106 bytes on wire (848 bits), 106 bytes captured (848 bits) on interface en0, id 0
Ethernet II, Src: 4e:57:ca:c5:1e:64 (4e:57:ca:c5:1e:64), Dst: Apple_cd:fc:62 (a4:d1:8c:cd:fc:
Internet Protocol Version 4, Src: 18.140.166.148, Dst: 172.20.10.9
Transmission Control Protocol, Src Port: 80, Dst Port: 53165, Seq: 1, Ack: 131, Len: 40
    Source Port: 80
    Destination Port: 53165
    [Stream index: 0]
    [TCP Segment Len: 40]
    Sequence number: 1
                          (relative sequence number)
    Sequence number (raw): 1609935329
    [Next sequence number: 41
                                 (relative sequence number)]
    Acknowledgment number: 131
                                  (relative ack number)
    Acknowledgment number (raw): 497113199
    1000 .... = Header Length: 32 bytes (8)
    Flags: 0x018 (PSH, ACK)
    Window size value: 33
    [Calculated window size: 33]
    [Window size scaling factor: -1 (unknown)]
    Checksum: 0x2bfa [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    [SEQ/ACK analysis]
    [Timestamps]
    TCP payload (40 bytes)
Hypertext Transfer Protocol
    HTTP/1.1 200 OK\r\n
        [Expert Info (Chat/Sequence): HTTP/1.1 200 OK\r\n]
        Response Version: HTTP/1.1
        Status Code: 200
        [Status Code Description: OK]
        Response Phrase: OK
    Content-Length: 2\r\n
    \r\n
    [HTTP response 1/2]
    [Time since request: 0.340597000 seconds]
    [Request in frame: 1]
    [Next request in frame: 13]
    [Next response in frame: 25]
    [Request URI: http://http.00.h.sophosxl.net/V3/01/12.245.119.128.ip/]
    File Data: 2 bytes
    Data (2 bytes)
0000 0d 0a
```

```
Destination
                                                                    Protocol Length Info
No.
        Time
                       Source
      7 0.340979
                       18.140.166.148
                                             172.20.10.9
                                                                    HTTP
                                                                             125
                                                                                    HTTP/1.1
200 OK
Frame 7: 125 bytes on wire (1000 bits), 125 bytes captured (1000 bits) on interface en0, id 0
Ethernet II, Src: 4e:57:ca:c5:1e:64 (4e:57:ca:c5:1e:64), Dst: Apple_cd:fc:62 (a4:d1:8c:cd:fc:
Internet Protocol Version 4, Src: 18.140.166.148, Dst: 172.20.10.9
Transmission Control Protocol, Src Port: 80, Dst Port: 53159, Seq: 1, Ack: 186, Len: 59
    Source Port: 80
    Destination Port: 53159
    [Stream index: 2]
    [TCP Segment Len: 59]
    Sequence number: 1
                          (relative sequence number)
    Sequence number (raw): 3324840599
    [Next sequence number: 60
                                 (relative sequence number)]
    Acknowledgment number: 186
                                  (relative ack number)
    Acknowledgment number (raw): 326523792
    1000 .... = Header Length: 32 bytes (8)
    Flags: 0x018 (PSH, ACK)
    Window size value: 30
    [Calculated window size: 30]
    [Window size scaling factor: -1 (unknown)]
    Checksum: 0x6fd0 [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    [SEQ/ACK analysis]
    [Timestamps]
    TCP payload (59 bytes)
Hypertext Transfer Protocol
    HTTP/1.1 200 OK\r\n
        [Expert Info (Chat/Sequence): HTTP/1.1 200 OK\r\n]
        Response Version: HTTP/1.1
        Status Code: 200
        [Status Code Description: OK]
        Response Phrase: OK
    Content-Length: 20\r\n
    \r\n
    [HTTP response 1/1]
    [Time since request: 0.327623000 seconds]
    [Request in frame: 3]
    [Request URI: http://http.00.h.sophosxl.net/
V3/01/1.jverfunex-2qynof-2sUGGC-2qjverfunex-2qsvyr4-2rugzy.tnvn.pf.hznff.rqh.w/]
    File Data: 20 bytes
    Data (20 bytes)
     77 20 6c 20 68 20 30 62 20 38 31 34 30 31 36 34
                                                        w l h 0b 8140164
0010 31 39 0d 0a
                                                        19..
```

```
No.
                                              Destination
                                                                    Protocol Length Info
        Time
                       Source
      8 0.382482
                       128.119.245.12
                                              172.20.10.9
                                                                    HTTP
                                                                             1138
                                                                                    HTTP/1.1
200 OK (text/html)
Frame 8: 1138 bytes on wire (9104 bits), 1138 bytes captured (9104 bits) on interface en0, id
Ethernet II, Src: 4e:57:ca:c5:1e:64 (4e:57:ca:c5:1e:64), Dst: Apple_cd:fc:62 (a4:d1:8c:cd:fc:
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 172.20.10.9
Transmission Control Protocol, Src Port: 80, Dst Port: 53209, Seq: 1, Ack: 492, Len: 1072
    Source Port: 80
    Destination Port: 53209
    [Stream index: 3]
    [TCP Segment Len: 1072]
    Sequence number: 1
                          (relative sequence number)
    Sequence number (raw): 94385721
    [Next sequence number: 1073
                                   (relative sequence number)]
    Acknowledgment number: 492
                                  (relative ack number)
    Acknowledgment number (raw): 3899703317
    1000 .... = Header Length: 32 bytes (8)
    Flags: 0x018 (PSH, ACK)
    Window size value: 235
    [Calculated window size: 235]
    [Window size scaling factor: -1 (unknown)]
    Checksum: 0x0acf [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    [SEQ/ACK analysis]
    [Timestamps]
    TCP payload (1072 bytes)
Hypertext Transfer Protocol
    HTTP/1.1 200 OK\r\n
        [Expert Info (Chat/Sequence): HTTP/1.1 200 OK\r\n]
        Response Version: HTTP/1.1
        Status Code: 200
        [Status Code Description: OK]
        Response Phrase: OK
    Date: Thu, 11 Jun 2020 22:44:43 GMT\r\n
    Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.6 mod_perl/2.0.11 Perl/
v5.16.3\r\n
    Last-Modified: Thu, 11 Jun 2020 05:59:04 GMT\r\n
    ETag: "2ca-5a7c8a86862d0"\r\n
    Accept-Ranges: bytes\r\n
    Content-Length: 714\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\setminus n
    [HTTP response 1/2]
    [Time since request: 0.197763000 seconds]
    [Request in frame: 4]
    [Next request in frame: 9]
    [Next response in frame: 12]
    [Request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html]
    File Data: 714 bytes
Line-based text data: text/html (17 lines)
```

```
No.
        Time
                                              Destination
                                                                    Protocol Length Info
                       Source
      9 0.481916
                       172.20.10.9
                                              128.119.245.12
                                                                    HTTP
                                                                              489
pearson.png HTTP/1.1
Frame 9: 489 bytes on wire (3912 bits), 489 bytes captured (3912 bits) on interface en0, id 0
Ethernet II, Src: Apple_cd:fc:62 (a4:d1:8c:cd:fc:62), Dst: 4e:57:ca:c5:1e:64 (4e:57:ca:c5:1e:
Internet Protocol Version 4, Src: 172.20.10.9, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 53209, Dst Port: 80, Seq: 492, Ack: 1073, Len: 423
    Source Port: 53209
    Destination Port: 80
    [Stream index: 3]
    [TCP Segment Len: 423]
    Sequence number: 492
                            (relative sequence number)
    Sequence number (raw): 3899703317
    [Next sequence number: 915
                                  (relative sequence number)]
    Acknowledgment number: 1073
                                   (relative ack number)
    Acknowledgment number (raw): 94386793
    1000 .... = Header Length: 32 bytes (8)
    Flags: 0x018 (PSH, ACK)
    Window size value: 2048
    [Calculated window size: 2048]
    [Window size scaling factor: -1 (unknown)]
    Checksum: 0xd736 [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    [SEQ/ACK analysis]
    [Timestamps]
    TCP payload (423 bytes)
Hypertext Transfer Protocol
    GET /pearson.png HTTP/1.1\r\n
        [Expert Info (Chat/Sequence): GET /pearson.png HTTP/1.1\r\n]
        Request Method: GET
        Request URI: /pearson.png
        Request Version: HTTP/1.1
    Host: gaia.cs.umass.edu\r\n
    Connection: keep-alive\r\n
    User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_5) AppleWebKit/537.36 (KHTML,
like Gecko) Chrome/83.0.4103.97 Safari/537.36\r\n
    Accept: image/webp,image/apng,image/*,*/*;q=0.8\r\n
    Referer: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html\r\n
    Accept-Encoding: gzip, deflate\r\n
    Accept-Language: ru-RU, ru; q=0.9, en-US; q=0.8, en; q=0.7 \ r \ n
    \r\setminus n
    [Full request URI: http://gaia.cs.umass.edu/pearson.png]
    [HTTP request 2/2]
    [Prev request in frame: 4]
    [Response in frame: 12]
```

```
No.
                                             Destination
                                                                    Protocol Length Info
        Time
                       Source
     12 0.863579
                       128.119.245.12
                                             172.20.10.9
                                                                    HTTP
                                                                             900
200 OK (PNG)
Frame 12: 900 bytes on wire (7200 bits), 900 bytes captured (7200 bits) on interface en0, id 0
Ethernet II, Src: 4e:57:ca:c5:1e:64 (4e:57:ca:c5:1e:64), Dst: Apple_cd:fc:62 (a4:d1:8c:cd:fc:
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 172.20.10.9
Transmission Control Protocol, Src Port: 80, Dst Port: 53209, Seq: 3849, Ack: 915, Len: 834
    Source Port: 80
    Destination Port: 53209
    [Stream index: 3]
    [TCP Segment Len: 834]
    Sequence number: 3849
                             (relative sequence number)
    Sequence number (raw): 94389569
    [Next sequence number: 4683
                                   (relative sequence number)]
    Acknowledgment number: 915
                                  (relative ack number)
    Acknowledgment number (raw): 3899703740
    1000 .... = Header Length: 32 bytes (8)
    Flags: 0x018 (PSH, ACK)
    Window size value: 243
    [Calculated window size: 243]
    [Window size scaling factor: -1 (unknown)]
    Checksum: 0xe177 [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    [SEQ/ACK analysis]
    [Timestamps]
    TCP payload (834 bytes)
    TCP segment data (834 bytes)
[3 Reassembled TCP Segments (3610 bytes): #10(1388), #11(1388), #12(834)]
Hypertext Transfer Protocol
    HTTP/1.1 200 OK\r\n
        [Expert Info (Chat/Sequence): HTTP/1.1 200 OK\r\n]
        Response Version: HTTP/1.1
        Status Code: 200
        [Status Code Description: OK]
        Response Phrase: OK
    Date: Thu, 11 Jun 2020 22:44:44 GMT\r\n
    Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.6 mod perl/2.0.11 Perl/
v5.16.3\r\n
    Last-Modified: Sat, 06 Aug 2016 10:08:14 GMT\r\n
    ETag: "cc3-539645c7f1ee7"\r\n
    Accept-Ranges: bytes\r\n
    Content-Length: 3267\r\n
    Keep-Alive: timeout=5, max=99\r\n
    Connection: Keep-Alive\r\n
    Content-Type: image/png\r\n
    \r\n
    [HTTP response 2/2]
    [Time since request: 0.381663000 seconds]
    [Prev request in frame: 4]
    [Prev response in frame: 8]
    [Request in frame: 9]
    [Request URI: http://gaia.cs.umass.edu/pearson.png]
    File Data: 3267 bytes
Portable Network Graphics
```

```
No.
                       Source
                                             Destination
                                                                    Protocol Length Info
        Time
     13 0.905217
                       172.20.10.9
                                             18.140.166.148
                                                                             237
V3/01/1.k-7rxhebfr-2spbire-5s5gu-5srq-2rwct.znavp.pf.hznff.rqh.w/ HTTP/1.1
Frame 13: 237 bytes on wire (1896 bits), 237 bytes captured (1896 bits) on interface en0, id 0
Ethernet II, Src: Apple_cd:fc:62 (a4:d1:8c:cd:fc:62), Dst: 4e:57:ca:c5:1e:64 (4e:57:ca:c5:1e:
Internet Protocol Version 4, Src: 172.20.10.9, Dst: 18.140.166.148
Transmission Control Protocol, Src Port: 53165, Dst Port: 80, Seq: 131, Ack: 41, Len: 171
    Source Port: 53165
    Destination Port: 80
    [Stream index: 0]
    [TCP Segment Len: 171]
    Sequence number: 131
                            (relative sequence number)
    Sequence number (raw): 497113199
    [Next sequence number: 302
                                  (relative sequence number)]
    Acknowledgment number: 41
                                 (relative ack number)
    Acknowledgment number (raw): 1609935369
    1000 .... = Header Length: 32 bytes (8)
    Flags: 0x018 (PSH, ACK)
    Window size value: 2056
    [Calculated window size: 2056]
    [Window size scaling factor: -1 (unknown)]
    Checksum: 0x308b [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    [SEQ/ACK analysis]
    [Timestamps]
    TCP payload (171 bytes)
Hypertext Transfer Protocol
    GET /V3/01/1.k-7rxhebfr-2spbire-5s5qu-5srq-2rwct.znavp.pf.hznff.rgh.w/ HTTP/1.1\r\n
        [Expert Info (Chat/Sequence): GET /
V3/01/1.k-7rxhebfr-2spbire-5s5gu-5srq-2rwct.znavp.pf.hznff.rqh.w/ HTTP/1.1\r\n]
        Request Method: GET
        Request URI: /V3/01/1.k-7rxhebfr-2spbire-5s5gu-5srq-2rwct.znavp.pf.hznff.rqh.w/
        Request Version: HTTP/1.1
    Host: http.00.h.sophosxl.net\r\n
    User-Agent: SXL/3.1\r\n
    Accept: */*\r\n
    Connection: Keep-Alive\r\n
    \r\n
    [Full request URI: http://http.00.h.sophosxl.net/
V3/01/1.k-7rxhebfr-2spbire-5s5gu-5srq-2rwct.znavp.pf.hznff.rqh.w/]
    [HTTP request 2/2]
    [Prev request in frame: 1]
    [Response in frame: 25]
```

```
No.
        Time
                                              Destination
                                                                    Protocol Length Info
                       Source
     14 1.034635
                       172.20.10.9
                                              128.119.245.12
                                                                    HTTP
                                                                              503
~kurose/cover_5th_ed.jpg HTTP/1.1
Frame 14: 503 bytes on wire (4024 bits), 503 bytes captured (4024 bits) on interface en0, id 0
Ethernet II, Src: Apple_cd:fc:62 (a4:d1:8c:cd:fc:62), Dst: 4e:57:ca:c5:1e:64 (4e:57:ca:c5:1e:
Internet Protocol Version 4, Src: 172.20.10.9, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 53212, Dst Port: 80, Seq: 1, Ack: 1, Len: 437
    Source Port: 53212
    Destination Port: 80
    [Stream index: 4]
    [TCP Segment Len: 437]
    Sequence number: 1
                          (relative sequence number)
    Sequence number (raw): 3300181491
    [Next sequence number: 438
                                   (relative sequence number)]
    Acknowledgment number: 1
                                (relative ack number)
    Acknowledgment number (raw): 4025996995
    1000 .... = Header Length: 32 bytes (8)
    Flags: 0x018 (PSH, ACK)
    Window size value: 2060
    [Calculated window size: 2060]
    [Window size scaling factor: -1 (unknown)]
    Checksum: 0x4b22 [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    [SEQ/ACK analysis]
    [Timestamps]
    TCP payload (437 bytes)
Hypertext Transfer Protocol
    GET /~kurose/cover 5th ed.jpg HTTP/1.1\r\n
        [Expert Info (Chat/Sequence): GET /~kurose/cover_5th_ed.jpg HTTP/1.1\r\n]
        Request Method: GET
        Request URI: /~kurose/cover 5th ed.jpg
        Request Version: HTTP/1.1
    Host: manic.cs.umass.edu\r\n
    Connection: keep-alive\r\n
    User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_5) AppleWebKit/537.36 (KHTML,
like Gecko) Chrome/83.0.4103.97 Safari/537.36\r\n
    Accept: image/webp,image/apng,image/*,*/*;q=0.8\r\n
    Referer: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html\r\n
    Accept-Encoding: gzip, deflate\r\n
    Accept-Language: ru-RU, ru; q=0.9, en-US; q=0.8, en; q=0.7 \ r \ n
    \r\setminus n
    [Full request URI: http://manic.cs.umass.edu/~kurose/cover 5th ed.jpg]
    [HTTP request 1/1]
    [Response in frame: 88]
```

```
No.
                                             Destination
                                                                    Protocol Length Info
        Time
                       Source
     25 1.214589
                       18.140.166.148
                                             172.20.10.9
                                                                    HTTP
                                                                             125
                                                                                    HTTP/1.1
200 OK
Frame 25: 125 bytes on wire (1000 bits), 125 bytes captured (1000 bits) on interface en0, id 0
Ethernet II, Src: 4e:57:ca:c5:1e:64 (4e:57:ca:c5:1e:64), Dst: Apple_cd:fc:62 (a4:d1:8c:cd:fc:
Internet Protocol Version 4, Src: 18.140.166.148, Dst: 172.20.10.9
Transmission Control Protocol, Src Port: 80, Dst Port: 53165, Seq: 41, Ack: 302, Len: 59
    Source Port: 80
    Destination Port: 53165
    [Stream index: 0]
    [TCP Segment Len: 59]
    Sequence number: 41
                           (relative sequence number)
    Sequence number (raw): 1609935369
    [Next sequence number: 100
                                  (relative sequence number)]
    Acknowledgment number: 302
                                  (relative ack number)
    Acknowledgment number (raw): 497113370
    1000 .... = Header Length: 32 bytes (8)
    Flags: 0x018 (PSH, ACK)
    Window size value: 34
    [Calculated window size: 34]
    [Window size scaling factor: -1 (unknown)]
    Checksum: 0x2eb1 [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    [SEQ/ACK analysis]
    [Timestamps]
    TCP payload (59 bytes)
Hypertext Transfer Protocol
    HTTP/1.1 200 OK\r\n
        [Expert Info (Chat/Sequence): HTTP/1.1 200 OK\r\n]
        Response Version: HTTP/1.1
        Status Code: 200
        [Status Code Description: OK]
        Response Phrase: OK
    Content-Length: 20\r\n
    \r\n
    [HTTP response 2/2]
    [Time since request: 0.309372000 seconds]
    [Prev request in frame: 1]
    [Prev response in frame: 6]
    [Request in frame: 13]
    [Request URI: http://http.00.h.sophosxl.net/
V3/01/1.k-7rxhebfr-2spbire-5s5qu-5srq-2rwct.znavp.pf.hznff.rgh.w/]
    File Data: 20 bytes
    Data (20 bytes)
0000 77 20 6c 20 68 20 30 62 20 38 31 34 30 31 36 34
                                                        w l h 0b 8140164
0010 31 39 0d 0a
                                                         19..
```

```
No.
                                             Destination
                                                                    Protocol Length Info
        Time
                       Source
     88 1.694721
                       128.119.245.12
                                             172.20.10.9
                                                                    HTTP
                                                                             1447
                                                                                    HTTP/1.1
200 OK (JPEG JFIF image)
Frame 88: 1447 bytes on wire (11576 bits), 1447 bytes captured (11576 bits) on interface en0,
Ethernet II, Src: 4e:57:ca:c5:1e:64 (4e:57:ca:c5:1e:64), Dst: Apple_cd:fc:62 (a4:d1:8c:cd:fc:
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 172.20.10.9
Transmission Control Protocol, Src Port: 80, Dst Port: 53212, Seq: 99937, Ack: 438, Len: 1381
    Source Port: 80
    Destination Port: 53212
    [Stream index: 4]
    [TCP Segment Len: 1381]
                              (relative sequence number)
    Sequence number: 99937
    Sequence number (raw): 4026096931
    [Next sequence number: 101318
                                     (relative sequence number)]
    Acknowledgment number: 438
                                  (relative ack number)
    Acknowledgment number (raw): 3300181928
    1000 .... = Header Length: 32 bytes (8)
    Flags: 0x018 (PSH, ACK)
    Window size value: 235
    [Calculated window size: 235]
    [Window size scaling factor: -1 (unknown)]
    Checksum: 0x9737 [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    [SEQ/ACK analysis]
    [Timestamps]
    TCP payload (1381 bytes)
    TCP segment data (1381 bytes)
[73 Reassembled TCP Segments (101317 bytes): #15(1388), #16(1388), #17(1388), #18(1388),
#19(1388), #20(1388), #21(1388), #22(1388), #23(1388), #24(1388), #26(1388), #27(1388),
#28(1388), #29(1388), #30(1388), #31(1388), #32(1388), #33(1388]
Hypertext Transfer Protocol
    HTTP/1.1 200 OK\r\n
        [Expert Info (Chat/Sequence): HTTP/1.1 200 OK\r\n]
        Response Version: HTTP/1.1
        Status Code: 200
        [Status Code Description: OK]
        Response Phrase: OK
    Date: Thu, 11 Jun 2020 22:44:44 GMT\r\n
    Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.6 mod_perl/2.0.11 Perl/
v5.16.3\r\n
    Last-Modified: Tue, 15 Sep 2009 18:23:27 GMT\r\n
    ETag: "18a68-473a1e0e6e5c0"\r\n
    Accept-Ranges: bytes\r\n
    Content-Length: 100968\r\n
    Keep-Alive: timeout=5, max=100\r\n
    Connection: Keep-Alive\r\n
    Content-Type: image/jpeg\r\n
    [HTTP response 1/1]
    [Time since request: 0.660086000 seconds]
    [Request in frame: 14]
    [Request URI: http://manic.cs.umass.edu/~kurose/cover_5th_ed.jpg]
    File Data: 100968 bytes
JPEG File Interchange Format
```