

No.	Time	Source	Destination	Protocol	Length	Info
70	2020-04-10 10:57:54.741765	192.168.0.104	128.119.245.12	HTTP	503	GET /wireshark-labs/HTTP-

wireshark-file2.html HTTP/1.1

Frame 70: 503 bytes on wire (4024 bits), 503 bytes captured (4024 bits) on interface \Device\NPF\_{8B2AC43E-1CB8-41A7-B95F-AC992137A31F}, id 0

Interface id: 0 (\Device\NPF\_{8B2AC43E-1CB8-41A7-B95F-AC992137A31F})

Interface name: \Device\NPF\_{8B2AC43E-1CB8-41A7-B95F-AC992137A31F}

Interface description: WLAN

Encapsulation type: Ethernet (1)

Arrival Time: Apr 10, 2020 10:57:54.741765000 中国标准时间

[Time shift for this packet: 0.000000000 seconds]

Epoch Time: 1586487474.741765000 seconds

[Time delta from previous captured frame: 0.000342000 seconds]

[Time delta from previous displayed frame: 0.000000000 seconds]

[Time since reference or first frame: 2.134381000 seconds]

Frame Number: 70

Frame Length: 503 bytes (4024 bits)

Capture Length: 503 bytes (4024 bits)

[Frame is marked: False]

[Frame is ignored: False]

[Protocols in frame: eth:ethertype:ip:tcp:http]

[Coloring Rule Name: HTTP]

[Coloring Rule String: http || tcp.port == 80 || http2]

Ethernet II, Src: IntelCor\_5f:7d:9b (ac:ed:5c:5f:7d:9b), Dst: Tp-LinkT\_42:91:ba (20:6b:e7:42:91:ba)

Destination: Tp-LinkT\_42:91:ba (20:6b:e7:42:91:ba)

Address: Tp-LinkT\_42:91:ba (20:6b:e7:42:91:ba)

.... 0. .... = LG bit: Globally unique address (factory default)

.... 0 .... = IG bit: Individual address (unicast)

Source: IntelCor\_5f:7d:9b (ac:ed:5c:5f:7d:9b)

Address: IntelCor\_5f:7d:9b (ac:ed:5c:5f:7d:9b)

.... 0. .... = LG bit: Globally unique address (factory default)

.... 0 .... = IG bit: Individual address (unicast)

Type: IPv4 (0x0800)

Internet Protocol Version 4, Src: 192.168.0.104, Dst: 128.119.245.12

0100 .... = Version: 4

.... 0101 = Header Length: 20 bytes (5)

Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)

0000 00.. = Differentiated Services Codepoint: Default (0)

.... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)

Total Length: 489

Identification: 0x20cb (8395)

Flags: 0x4000, Don't fragment

0... .... = Reserved bit: Not set

.1.. .... = Don't fragment: Set

..0. .... = More fragments: Not set

...0 0000 0000 0000 = Fragment offset: 0

Time to live: 128

Protocol: TCP (6)

Header checksum: 0xa1af [validation disabled]

[Header checksum status: Unverified]

Source: 192.168.0.104

Destination: 128.119.245.12

Transmission Control Protocol, Src Port: 58484, Dst Port: 80, Seq: 1, Ack: 1, Len: 449

Source Port: 58484

Destination Port: 80

[Stream index: 1]

[TCP Segment Len: 449]

Sequence number: 1 (relative sequence number)

Sequence number (raw): 1911689765

[Next sequence number: 450 (relative sequence number)]

Acknowledgment number: 1 (relative ack number)

Acknowledgment number (raw): 317979314

0101 .... = Header Length: 20 bytes (5)

Flags: 0x018 (PSH, ACK)

000. .... = Reserved: Not set

...0 .... = Nonce: Not set

.... 0... = Congestion Window Reduced (CWR): Not set

.... .0.. = ECN-Echo: Not set

.... ..0. = Urgent: Not set

.... ...1 .... = Acknowledgment: Set

.... .... 1... = Push: Set

.... .... .0.. = Reset: Not set

.... .... ..0. = Syn: Not set

.... .... ...0 = Fin: Not set

[TCP Flags: .....AP...]

Window size value: 1024

[Calculated window size: 262144]

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[Window size scaling factor: 256]
Checksum: 0x684a [unverified]
[Checksum Status: Unverified]
Urgent pointer: 0
[SEQ/ACK analysis]
    [iRTT: 0.327458000 seconds]
    [Bytes in flight: 449]
    [Bytes sent since last PSH flag: 449]
[Timestamps]
    [Time since first frame in this TCP stream: 0.327800000 seconds]
    [Time since previous frame in this TCP stream: 0.000342000 seconds]
TCP payload (449 bytes)
Hypertext Transfer Protocol
GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1\r\n
    [Expert Info (Chat/Sequence): GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1\r\n]
    [GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1\r\n]
    [Severity level: Chat]
    [Group: Sequence]
Request Method: GET
Request URI: /wireshark-labs/HTTP-wireshark-file2.html
Request Version: HTTP/1.1
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8\r\n
Accept-Language: zh-Hans-CN,zh-Hans;q=0.8,en-US;q=0.5,en;q=0.3\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/70.0.3538.102
Safari/537.36 Edge/18.18362\r\n
Accept-Encoding: gzip, deflate\r\n
Host: gaia.cs.umass.edu\r\n
Connection: Keep-Alive\r\n
\r\n
[Full request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file2.html]
[HTTP request 1/1]
[Response in frame: 77]
No.      Time                               Source                Destination            Protocol Length Info
   77  2020-04-10 10:57:55.074194      128.119.245.12        192.168.0.104          HTTP      784    HTTP/1.1 200 OK (text/
html)
Frame 77: 784 bytes on wire (6272 bits), 784 bytes captured (6272 bits) on interface \Device\NPF_{8B2AC43E-1CB8-41A7-B95F-AC992137A31F}, id 0
    Interface id: 0 (\Device\NPF_{8B2AC43E-1CB8-41A7-B95F-AC992137A31F})
        Interface name: \Device\NPF_{8B2AC43E-1CB8-41A7-B95F-AC992137A31F}
        Interface description: WLAN
    Encapsulation type: Ethernet (1)
    Arrival Time: Apr 10, 2020 10:57:55.074194000 中国标准时间
    [Time shift for this packet: 0.000000000 seconds]
    Epoch Time: 1586487475.074194000 seconds
    [Time delta from previous captured frame: 0.006081000 seconds]
    [Time delta from previous displayed frame: 0.332429000 seconds]
    [Time since reference or first frame: 2.466810000 seconds]
    Frame Number: 77
    Frame Length: 784 bytes (6272 bits)
    Capture Length: 784 bytes (6272 bits)
    [Frame is marked: False]
    [Frame is ignored: False]
    [Protocols in frame: eth:ethertype:ip:tcp:http:data-text-lines]
    [Coloring Rule Name: HTTP]
    [Coloring Rule String: http || tcp.port == 80 || http2]
Ethernet II, Src: Tp-LinkT_42:91:ba (20:6b:e7:42:91:ba), Dst: IntelCor_5f:7d:9b (ac:ed:5c:5f:7d:9b)
    Destination: IntelCor_5f:7d:9b (ac:ed:5c:5f:7d:9b)
        Address: IntelCor_5f:7d:9b (ac:ed:5c:5f:7d:9b)
            .... 0. .... = LG bit: Globally unique address (factory default)
            .... 0. .... = IG bit: Individual address (unicast)
    Source: Tp-LinkT_42:91:ba (20:6b:e7:42:91:ba)
        Address: Tp-LinkT_42:91:ba (20:6b:e7:42:91:ba)
            .... 0. .... = LG bit: Globally unique address (factory default)
            .... 0. .... = IG bit: Individual address (unicast)
    Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.0.104
    0100 .... = Version: 4
    .... 0101 = Header Length: 20 bytes (5)
    Differentiated Services Field: 0x04 (DSCP: LE, ECN: Not-ECT)
        0000 01.. = Differentiated Services Codepoint: Lower Effort (1)
        .... 00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
    Total Length: 770
    Identification: 0x22a8 (8872)
    Flags: 0x4000, Don't fragment
        0... .... = Reserved bit: Not set
        .1.. .... = Don't fragment: Set
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    ..0. .... = More fragments: Not set
...0 0000 0000 0000 = Fragment offset: 0
Time to live: 44
Protocol: TCP (6)
Header checksum: 0xf2b5 [validation disabled]
[Header checksum status: Unverified]
Source: 128.119.245.12
Destination: 192.168.0.104
Transmission Control Protocol, Src Port: 80, Dst Port: 58484, Seq: 1, Ack: 450, Len: 730
Source Port: 80
Destination Port: 58484
[Stream index: 1]
[TCP Segment Len: 730]
Sequence number: 1 (relative sequence number)
Sequence number (raw): 317979314
[Next sequence number: 731 (relative sequence number)]
Acknowledgment number: 450 (relative ack number)
Acknowledgment number (raw): 1911690214
0101 .... = Header Length: 20 bytes (5)
Flags: 0x018 (PSH, ACK)
    000. .... = Reserved: Not set
    ...0 .... = Nonce: Not set
    .... 0... = Congestion Window Reduced (CWR): Not set
    .... .0.. = ECN-Echo: Not set
    .... ..0. = Urgent: Not set
    .... ...1 = Acknowledgment: Set
    .... .... 1... = Push: Set
    .... .... .0.. = Reset: Not set
    .... .... ..0. = Syn: Not set
    .... .... ...0 = Fin: Not set
    [TCP Flags: .....AP...]
Window size value: 237
[Calculated window size: 30336]
[Window size scaling factor: 128]
Checksum: 0x9e5c [unverified]
[Checksum Status: Unverified]
Urgent pointer: 0
[SEQ/ACK analysis]
    [iRTT: 0.327458000 seconds]
    [Bytes in flight: 730]
    [Bytes sent since last PSH flag: 730]
[Timestamps]
    [Time since first frame in this TCP stream: 0.660229000 seconds]
    [Time since previous frame in this TCP stream: 0.006081000 seconds]
TCP payload (730 bytes)
Hypertext Transfer Protocol
HTTP/1.1 200 OK\r\n
    [Expert Info (Chat/Sequence): HTTP/1.1 200 OK\r\n]
    [HTTP/1.1 200 OK\r\n]
    [Severity level: Chat]
    [Group: Sequence]
Response Version: HTTP/1.1
Status Code: 200
[Status Code Description: OK]
Response Phrase: OK
Date: Fri, 10 Apr 2020 02:57:55 GMT\r\n
Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/5.4.16 mod_perl/2.0.11 Perl/v5.16.3\r\n
Last-Modified: Thu, 09 Apr 2020 05:59:02 GMT\r\n
ETag: "173-5a2d5504e6963"\r\n
Accept-Ranges: bytes\r\n
Content-Length: 371\r\n
    [Content length: 371]
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: 0.332429000 seconds]
[Request in frame: 70]
[Request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file2.html]
File Data: 371 bytes
Line-based text data: text/html (10 lines)
\r\n
<html>\r\n
\r\n
Congratulations again! Now you've downloaded the file lab2-2.html. <br>\r\n
This file's last modification date will not change. <p>\r\n

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Thus if you download this multiple times on your browser, a complete copy <br>\n
will only be sent once by the server due to the inclusion of the IN-MODIFIED-SINCE<br>\n
field in your browser's HTTP GET request to the server.\n
\n
</html>\n
No.      Time      Source      Destination      Protocol Length Info
  122 2020-04-10 10:58:00.950460 192.168.0.104 128.119.245.12 HTTP 615 GET /wireshark-labs/HTTP-
wireshark-file2.html HTTP/1.1
Frame 122: 615 bytes on wire (4920 bits), 615 bytes captured (4920 bits) on interface \Device\NPF_{8B2AC43E-1CB8-41A7-B95F-
AC992137A31F}, id 0
  Interface id: 0 (\Device\NPF_{8B2AC43E-1CB8-41A7-B95F-AC992137A31F})
    Interface name: \Device\NPF_{8B2AC43E-1CB8-41A7-B95F-AC992137A31F}
    Interface description: WLAN
  Encapsulation type: Ethernet (1)
  Arrival Time: Apr 10, 2020 10:58:00.950460000 中国标准时间
  [Time shift for this packet: 0.000000000 seconds]
  Epoch Time: 1586487480.950460000 seconds
  [Time delta from previous captured frame: 0.000877000 seconds]
  [Time delta from previous displayed frame: 5.191056000 seconds]
  [Time since reference or first frame: 8.343076000 seconds]
  Frame Number: 122
  Frame Length: 615 bytes (4920 bits)
  Capture Length: 615 bytes (4920 bits)
  [Frame is marked: False]
  [Frame is ignored: False]
  [Protocols in frame: eth:ethertype:ip:tcp:http]
  [Coloring Rule Name: HTTP]
  [Coloring Rule String: http || tcp.port == 80 || http2]
Ethernet II, Src: IntelCor_5f:7d:9b (ac:ed:5c:5f:7d:9b), Dst: Tp-LinkT_42:91:ba (20:6b:e7:42:91:ba)
  Destination: Tp-LinkT_42:91:ba (20:6b:e7:42:91:ba)
    Address: Tp-LinkT_42:91:ba (20:6b:e7:42:91:ba)
      ....0. .... = LG bit: Globally unique address (factory default)
      ....0. .... = IG bit: Individual address (unicast)
  Source: IntelCor_5f:7d:9b (ac:ed:5c:5f:7d:9b)
    Address: IntelCor_5f:7d:9b (ac:ed:5c:5f:7d:9b)
      ....0. .... = LG bit: Globally unique address (factory default)
      ....0. .... = IG bit: Individual address (unicast)
  Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.0.104, Dst: 128.119.245.12
  0100 .... = Version: 4
  ....0101 = Header Length: 20 bytes (5)
  Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
    0000 00.. = Differentiated Services Codepoint: Default (0)
    ....00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
  Total Length: 601
  Identification: 0x20d8 (8408)
  Flags: 0x4000, Don't fragment
    0... .... = Reserved bit: Not set
    .1.. .... = Don't fragment: Set
    ..0. .... = More fragments: Not set
  ...0 0000 0000 0000 = Fragment offset: 0
  Time to live: 128
  Protocol: TCP (6)
  Header checksum: 0xa132 [validation disabled]
  [Header checksum status: Unverified]
  Source: 192.168.0.104
  Destination: 128.119.245.12
Transmission Control Protocol, Src Port: 58485, Dst Port: 80, Seq: 1, Ack: 1, Len: 561
  Source Port: 58485
  Destination Port: 80
  [Stream index: 2]
  [TCP Segment Len: 561]
  Sequence number: 1 (relative sequence number)
  Sequence number (raw): 858589428
  [Next sequence number: 562 (relative sequence number)]
  Acknowledgment number: 1 (relative ack number)
  Acknowledgment number (raw): 3779338377
  0101 .... = Header Length: 20 bytes (5)
  Flags: 0x018 (PSH, ACK)
    000. .... = Reserved: Not set
    ...0 .... = Nonce: Not set
    ....0... = Congestion Window Reduced (CWR): Not set
    ....0... = ECN-Echo: Not set
    ....0. .... = Urgent: Not set
    ....1. .... = Acknowledgment: Set
    ....1... = Push: Set
    ....0... = Reset: Not set
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.... ..0. = Syn: Not set
.... ..0 = Fin: Not set
[TCP Flags: .....AP...]
Window size value: 1024
[Calculated window size: 262144]
[Window size scaling factor: 256]
Checksum: 0x310e [unverified]
[Checksum Status: Unverified]
Urgent pointer: 0
[SEQ/ACK analysis]
[iRTT: 0.323356000 seconds]
[Bytes in flight: 561]
[Bytes sent since last PSH flag: 561]
[Timestamps]
[Time since first frame in this TCP stream: 6.536118000 seconds]
[Time since previous frame in this TCP stream: 5.212695000 seconds]
TCP payload (561 bytes)
Hypertext Transfer Protocol
GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1\r\n
[Expert Info (Chat/Sequence): GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1\r\n]
[GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1\r\n]
[Severity level: Chat]
[Group: Sequence]
Request Method: GET
Request URI: /wireshark-labs/HTTP-wireshark-file2.html
Request Version: HTTP/1.1
Cache-Control: max-age=0\r\n
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8\r\n
Accept-Language: zh-Hans-CN,zh-Hans;q=0.8,en-US;q=0.5,en;q=0.3\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/70.0.3538.102
Safari/537.36 Edge/18.18362\r\n
Accept-Encoding: gzip, deflate\r\n
Host: gaia.cs.umass.edu\r\n
If-Modified-Since: Thu, 09 Apr 2020 05:59:02 GMT\r\n
If-None-Match: "173-5a2d5504e6963"\r\n
Connection: Keep-Alive\r\n
\r\n
[Full request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file2.html]
[HTTP request 1/1]
[Response in frame: 124]
No.      Time                               Source                               Destination                         Protocol Length Info
124 2020-04-10 10:58:01.279198      128.119.245.12                      192.168.0.104                      HTTP      294      HTTP/1.1 304 Not Modified
Frame 124: 294 bytes on wire (2352 bits), 294 bytes captured (2352 bits) on interface \Device\NPF_{8B2AC43E-1CB8-41A7-B95F-AC992137A31F}, id 0
Interface id: 0 (\Device\NPF_{8B2AC43E-1CB8-41A7-B95F-AC992137A31F})
Interface name: \Device\NPF_{8B2AC43E-1CB8-41A7-B95F-AC992137A31F}
Interface description: WLAN
Encapsulation type: Ethernet (1)
Arrival Time: Apr 10, 2020 10:58:01.279198000 中国标准时间
[Time shift for this packet: 0.000000000 seconds]
Epoch Time: 1586487481.279198000 seconds
[Time delta from previous captured frame: 0.004335000 seconds]
[Time delta from previous displayed frame: 0.328738000 seconds]
[Time since reference or first frame: 8.671814000 seconds]
Frame Number: 124
Frame Length: 294 bytes (2352 bits)
Capture Length: 294 bytes (2352 bits)
[Frame is marked: False]
[Frame is ignored: False]
[Protocols in frame: eth:ethertype:ip:tcp:http]
[Coloring Rule Name: HTTP]
[Coloring Rule String: http || tcp.port == 80 || http2]
Ethernet II, Src: Tp-LinkT_42:91:ba (20:6b:e7:42:91:ba), Dst: IntelCor_5f:7d:9b (ac:ed:5c:5f:7d:9b)
Destination: IntelCor_5f:7d:9b (ac:ed:5c:5f:7d:9b)
Address: IntelCor_5f:7d:9b (ac:ed:5c:5f:7d:9b)
.... ..0. .... = LG bit: Globally unique address (factory default)
.... ..0 .... = IG bit: Individual address (unicast)
Source: Tp-LinkT_42:91:ba (20:6b:e7:42:91:ba)
Address: Tp-LinkT_42:91:ba (20:6b:e7:42:91:ba)
.... ..0. .... = LG bit: Globally unique address (factory default)
.... ..0 .... = IG bit: Individual address (unicast)
Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 192.168.0.104
0100 .... = Version: 4
.... 0101 = Header Length: 20 bytes (5)
Differentiated Services Field: 0x04 (DSCP: LE, ECN: Not-ECT)
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    0000 01.. = Differentiated Services Codepoint: Lower Effort (1)
    .... ..00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
Total Length: 280
Identification: 0xd0e0 (53472)
Flags: 0x4000, Don't fragment
    0... .... = Reserved bit: Not set
    .1.. .... = Don't fragment: Set
    ..0. .... = More fragments: Not set
...0 0000 0000 0000 = Fragment offset: 0
Time to live: 43
Protocol: TCP (6)
Header checksum: 0x4767 [validation disabled]
[Header checksum status: Unverified]
Source: 128.119.245.12
Destination: 192.168.0.104
Transmission Control Protocol, Src Port: 80, Dst Port: 58485, Seq: 1, Ack: 562, Len: 240
Source Port: 80
Destination Port: 58485
[Stream index: 2]
[TCP Segment Len: 240]
Sequence number: 1 (relative sequence number)
Sequence number (raw): 3779338377
[Next sequence number: 241 (relative sequence number)]
Acknowledgment number: 562 (relative ack number)
Acknowledgment number (raw): 858589989
0101 .... = Header Length: 20 bytes (5)
Flags: 0x018 (PSH, ACK)
    000. .... = Reserved: Not set
    ...0 .... = Nonce: Not set
    .... 0... = Congestion Window Reduced (CWR): Not set
    .... .0.. = ECN-Echo: Not set
    .... ..0. = Urgent: Not set
    .... ...1 = Acknowledgment: Set
    .... .... 1... = Push: Set
    .... .... .0.. = Reset: Not set
    .... .... ..0. = Syn: Not set
    .... .... ...0 = Fin: Not set
[TCP Flags: .....AP...]
Window size value: 237
[Calculated window size: 30336]
[Window size scaling factor: 128]
Checksum: 0x98ff [unverified]
[Checksum Status: Unverified]
Urgent pointer: 0
[SEQ/ACK analysis]
    [iRTT: 0.323356000 seconds]
    [Bytes in flight: 240]
    [Bytes sent since last PSH flag: 240]
[Timestamps]
    [Time since first frame in this TCP stream: 6.864856000 seconds]
    [Time since previous frame in this TCP stream: 0.004335000 seconds]
TCP payload (240 bytes)
Hypertext Transfer Protocol
HTTP/1.1 304 Not Modified\r\n
    [Expert Info (Chat/Sequence): HTTP/1.1 304 Not Modified\r\n]
    [HTTP/1.1 304 Not Modified\r\n]
    [Severity level: Chat]
    [Group: Sequence]
Response Version: HTTP/1.1
Status Code: 304
[Status Code Description: Not Modified]
Response Phrase: Not Modified
Date: Fri, 10 Apr 2020 02:58:01 GMT\r\n
Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/5.4.16 mod_perl/2.0.11 Perl/v5.16.3\r\n
Connection: Keep-Alive\r\n
Keep-Alive: timeout=5, max=100\r\n
ETag: "173-5a2d5504e6963"\r\n
\r\n
[HTTP response 1/1]
[Time since request: 0.328738000 seconds]
[Request in frame: 122]
[Request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file2.html]

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