

| No. | Time | Source | Destination | Protocol | Length | Info |
|-----|-------------|----------------|----------------|----------|--------|--|
| 19 | 7.827373646 | 192.168.44.201 | 128.119.245.12 | HTTP | 450 | GET /wireshark-labs/HTTP-wireshark-file1.html HTTP/1.1 |

Frame 19: 450 bytes on wire (3600 bits), 450 bytes captured (3600 bits) on interface 0
Interface id: 0 (bnep0)
Interface name: bnep0
Encapsulation type: Ethernet (1)
Arrival Time: Mar 13, 2020 14:41:40.762746608 EET
[Time shift for this packet: 0.000000000 seconds]
Epoch Time: 1584103300.762746608 seconds
[Time delta from previous captured frame: 0.000601067 seconds]
[Time delta from previous displayed frame: 0.000000000 seconds]
[Time since reference or first frame: 7.827373646 seconds]
Frame Number: 19
Frame Length: 450 bytes (3600 bits)
Capture Length: 450 bytes (3600 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: Azurewav_33:fb:eb (dc:85:de:33:fb:eb), Dst: Shanghai_3c:01:38 (fc:53:9e:3c:01:38)
Destination: Shanghai_3c:01:38 (fc:53:9e:3c:01:38)
Address: Shanghai_3c:01:38 (fc:53:9e:3c:01:38)
....0. = LG bit: Globally unique address (factory default)
....0. = IG bit: Individual address (unicast)
Source: Azurewav_33:fb:eb (dc:85:de:33:fb:eb)
Address: Azurewav_33:fb:eb (dc:85:de:33:fb:eb)
....0. = LG bit: Globally unique address (factory default)
....0. = IG bit: Individual address (unicast)
Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.44.201, 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: 436
Identification: 0x1fa5 (8101)
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: 64
Protocol: TCP (6)
Header checksum: 0xb6a9 [validation disabled]
[Header checksum status: Unverified]
Source: 192.168.44.201
Destination: 128.119.245.12
Transmission Control Protocol, Src Port: 48972, Dst Port: 80, Seq: 1, Ack: 1, Len: 384
Source Port: 48972
Destination Port: 80
[Stream index: 4]
[TCP Segment Len: 384]
Sequence number: 1 (relative sequence number)
[Next sequence number: 385 (relative sequence number)]
Acknowledgment number: 1 (relative ack number)
1000 = Header Length: 32 bytes (8)
Flags: 0x018 (PSH, ACK)
Window size value: 502
[Calculated window size: 64256]
[Window size scaling factor: 128]
Checksum: 0x0569 [unverified]
[Checksum Status: Unverified]
Urgent pointer: 0
Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
TCP Option - No-Operation (NOP)
TCP Option - No-Operation (NOP)
TCP Option - Timestamps: TSval 2281472218, TSecr 3795794315
[SEQ/ACK analysis]
[iRTT: 0.163690000 seconds]
[Bytes in flight: 384]
[Bytes sent since last PSH flag: 384]
[Timestamps]
[Time since first frame in this TCP stream: 0.164291067 seconds]

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[Time since previous frame in this TCP stream: 0.000601067 seconds]
TCP payload (384 bytes)
Hypertext Transfer Protocol
GET /wireshark-labs/HTTP-wireshark-file1.html HTTP/1.1\r\n
[Expert Info (Chat/Sequence): GET /wireshark-labs/HTTP-wireshark-file1.html HTTP/1.1\r\n]
[GET /wireshark-labs/HTTP-wireshark-file1.html HTTP/1.1\r\n]
[Severity level: Chat]
[Group: Sequence]
Request Method: GET
Request URI: /wireshark-labs/HTTP-wireshark-file1.html
Request Version: HTTP/1.1
Host: gaia.cs.umass.edu\r\n
User-Agent: Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:74.0) Gecko/20100101 Firefox/74.0\r\n
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8\r\n
Accept-Language: en-US,en;q=0.5\r\n
Accept-Encoding: gzip, deflate\r\n
DNT: 1\r\n
Connection: keep-alive\r\n
Upgrade-Insecure-Requests: 1\r\n
\r\n
[Full request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file1.html]
[HTTP request 1/2]
[Response in frame: 21]
[Next request in frame: 23]
No.      Time                Source                Destination            Protocol Length Info
   21  8.022677728      128.119.245.12        192.168.44.201        HTTP      552      HTTP/1.1 200 OK (text/html)
Frame 21: 552 bytes on wire (4416 bits), 552 bytes captured (4416 bits) on interface 0
Interface id: 0 (bnep0)
Interface name: bnep0
Encapsulation type: Ethernet (1)
Arrival Time: Mar 13, 2020 14:41:40.958050690 EET
[Time shift for this packet: 0.000000000 seconds]
Epoch Time: 1584103300.958050690 seconds
[Time delta from previous captured frame: 0.004870703 seconds]
[Time delta from previous displayed frame: 0.195304082 seconds]
[Time since reference or first frame: 8.022677728 seconds]
Frame Number: 21
Frame Length: 552 bytes (4416 bits)
Capture Length: 552 bytes (4416 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: Shanghai_3c:01:38 (fc:53:9e:3c:01:38), Dst: Azurewav_33:fb:eb (dc:85:de:33:fb:eb)
Destination: Azurewav_33:fb:eb (dc:85:de:33:fb:eb)
Address: Azurewav_33:fb:eb (dc:85:de:33:fb:eb)
....0. .... = LG bit: Globally unique address (factory default)
....0. .... = IG bit: Individual address (unicast)
Source: Shanghai_3c:01:38 (fc:53:9e:3c:01:38)
Address: Shanghai_3c:01:38 (fc:53:9e:3c:01:38)
....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: 192.168.44.201
0100 .... = Version: 4
....0101 = Header Length: 20 bytes (5)
Differentiated Services Field: 0x04 (DSCP: Unknown, ECN: Not-ECT)
0000 01.. = Differentiated Services Codepoint: Unknown (1)
....00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
Total Length: 538
Identification: 0x189f (6303)
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: 44
Protocol: TCP (6)
Header checksum: 0xd145 [validation disabled]
[Header checksum status: Unverified]
Source: 128.119.245.12
Destination: 192.168.44.201
Transmission Control Protocol, Src Port: 80, Dst Port: 48972, Seq: 1, Ack: 385, Len: 486
Source Port: 80
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Destination Port: 48972
[Stream index: 4]
[TCP Segment Len: 486]
Sequence number: 1 (relative sequence number)
[Next sequence number: 487 (relative sequence number)]
Acknowledgment number: 385 (relative ack number)
1000 = Header Length: 32 bytes (8)
Flags: 0x018 (PSH, ACK)
Window size value: 235
[Calculated window size: 30080]
[Window size scaling factor: 128]
Checksum: 0x50fb [unverified]
[Checksum Status: Unverified]
Urgent pointer: 0
Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
 TCP Option - No-Operation (NOP)
 TCP Option - No-Operation (NOP)
 TCP Option - Timestamps: TSval 3795794502, TSecr 2281472218
[SEQ/ACK analysis]
 [iRTT: 0.163690000 seconds]
 [Bytes in flight: 486]
 [Bytes sent since last PSH flag: 486]
[Timestamps]
 [Time since first frame in this TCP stream: 0.359595149 seconds]
 [Time since previous frame in this TCP stream: 0.004870703 seconds]
TCP payload (486 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, 13 Mar 2020 12:41:40 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: Fri, 13 Mar 2020 05:59:01 GMT\r\n
 ETag: "80-5a0b62a83450c"\r\n
 Accept-Ranges: bytes\r\n
 Content-Length: 128\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: 0.195304082 seconds]
 [Request in frame: 19]
 [Next request in frame: 23]
 [Next response in frame: 24]
 [Request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file1.html]
 File Data: 128 bytes
Line-based text data: text/html (4 lines)
 <html>\r\n
 Congratulations. You've downloaded the file \r\n
 http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file1.html!\r\n
 </html>\r\n

| No. | Time | Source | Destination | Protocol | Length | Info |
|-----|----------------|----------------|----------------|----------|--------|------------------------|
| 1.1 | 23 8.110673349 | 192.168.44.201 | 128.119.245.12 | HTTP | 331 | GET /favicon.ico HTTP/ |

Frame 23: 331 bytes on wire (2648 bits), 331 bytes captured (2648 bits) on interface 0
Interface id: 0 (bnep0)
Interface name: bnep0
Encapsulation type: Ethernet (1)
Arrival Time: Mar 13, 2020 14:41:41.046046311 EET
[Time shift for this packet: 0.000000000 seconds]
Epoch Time: 1584103301.046046311 seconds
[Time delta from previous captured frame: 0.087911977 seconds]
[Time delta from previous displayed frame: 0.087995621 seconds]
[Time since reference or first frame: 8.110673349 seconds]
Frame Number: 23
Frame Length: 331 bytes (2648 bits)
Capture Length: 331 bytes (2648 bits)
[Frame is marked: False]
[Frame is ignored: False]

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[Protocols in frame: eth:ethertype:ip:tcp:http]
[Coloring Rule Name: HTTP]
[Coloring Rule String: http || tcp.port == 80 || http2]
Ethernet II, Src: Azurewav_33:fb:eb (dc:85:de:33:fb:eb), Dst: Shanghai_3c:01:38 (fc:53:9e:3c:01:38)
  Destination: Shanghai_3c:01:38 (fc:53:9e:3c:01:38)
    Address: Shanghai_3c:01:38 (fc:53:9e:3c:01:38)
      ....0. .... = LG bit: Globally unique address (factory default)
      ....0. .... = IG bit: Individual address (unicast)
  Source: Azurewav_33:fb:eb (dc:85:de:33:fb:eb)
    Address: Azurewav_33:fb:eb (dc:85:de:33:fb:eb)
      ....0. .... = LG bit: Globally unique address (factory default)
      ....0. .... = IG bit: Individual address (unicast)
  Type: IPv4 (0x0800)
Internet Protocol Version 4, Src: 192.168.44.201, 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: 317
  Identification: 0x1fa7 (8103)
  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: 64
  Protocol: TCP (6)
  Header checksum: 0xb71e [validation disabled]
  [Header checksum status: Unverified]
  Source: 192.168.44.201
  Destination: 128.119.245.12
Transmission Control Protocol, Src Port: 48972, Dst Port: 80, Seq: 385, Ack: 487, Len: 265
  Source Port: 48972
  Destination Port: 80
  [Stream index: 4]
  [TCP Segment Len: 265]
  Sequence number: 385 (relative sequence number)
  [Next sequence number: 650 (relative sequence number)]
  Acknowledgment number: 487 (relative ack number)
  1000 .... = Header Length: 32 bytes (8)
  Flags: 0x018 (PSH, ACK)
  Window size value: 501
  [Calculated window size: 64128]
  [Window size scaling factor: 128]
  Checksum: 0x3d3a [unverified]
  [Checksum Status: Unverified]
  Urgent pointer: 0
  Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    TCP Option - No-Operation (NOP)
    TCP Option - No-Operation (NOP)
    TCP Option - Timestamps: TSval 2281472501, TSecr 3795794502
  [SEQ/ACK analysis]
    [iRTT: 0.163690000 seconds]
    [Bytes in flight: 265]
    [Bytes sent since last PSH flag: 265]
  [Timestamps]
    [Time since first frame in this TCP stream: 0.447590770 seconds]
    [Time since previous frame in this TCP stream: 0.087911977 seconds]
  TCP payload (265 bytes)
Hypertext Transfer Protocol
  GET /favicon.ico HTTP/1.1\r\n
    [Expert Info (Chat/Sequence): GET /favicon.ico HTTP/1.1\r\n]
      [GET /favicon.ico HTTP/1.1\r\n]
      [Severity level: Chat]
      [Group: Sequence]
    Request Method: GET
    Request URI: /favicon.ico
    Request Version: HTTP/1.1
  Host: gaia.cs.umass.edu\r\n
  User-Agent: Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:74.0) Gecko/20100101 Firefox/74.0\r\n
  Accept: image/webp,*/*\r\n
  Accept-Language: en-US,en;q=0.5\r\n
  Accept-Encoding: gzip, deflate\r\n
  DNT: 1\r\n
  Connection: keep-alive\r\n
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[Full request URI: http://gaia.cs.umass.edu/favicon.ico]
[HTTP request 2/2]
[Prev request in frame: 19]
[Response in frame: 24]
No.      Time                Source                Destination          Protocol Length Info
   24  8.305064962        128.119.245.12        192.168.44.201      HTTP      550      HTTP/1.1 404 Not Found
(text/html)
Frame 24: 550 bytes on wire (4400 bits), 550 bytes captured (4400 bits) on interface 0
  Interface id: 0 (bnep0)
    Interface name: bnep0
  Encapsulation type: Ethernet (1)
  Arrival Time: Mar 13, 2020 14:41:41.240437924 EET
  [Time shift for this packet: 0.000000000 seconds]
  Epoch Time: 1584103301.240437924 seconds
  [Time delta from previous captured frame: 0.194391613 seconds]
  [Time delta from previous displayed frame: 0.194391613 seconds]
  [Time since reference or first frame: 8.305064962 seconds]
  Frame Number: 24
  Frame Length: 550 bytes (4400 bits)
  Capture Length: 550 bytes (4400 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: Shanghai_3c:01:38 (fc:53:9e:3c:01:38), Dst: Azurewav_33:fb:eb (dc:85:de:33:fb:eb)
  Destination: Azurewav_33:fb:eb (dc:85:de:33:fb:eb)
    Address: Azurewav_33:fb:eb (dc:85:de:33:fb:eb)
      ....0. .... = LG bit: Globally unique address (factory default)
      ....0. .... = IG bit: Individual address (unicast)
  Source: Shanghai_3c:01:38 (fc:53:9e:3c:01:38)
    Address: Shanghai_3c:01:38 (fc:53:9e:3c:01:38)
      ....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: 192.168.44.201
  0100 .... = Version: 4
  ....0101 = Header Length: 20 bytes (5)
  Differentiated Services Field: 0x04 (DSCP: Unknown, ECN: Not-ECT)
    0000 01.. = Differentiated Services Codepoint: Unknown (1)
    ....00 = Explicit Congestion Notification: Not ECN-Capable Transport (0)
  Total Length: 536
  Identification: 0x18a0 (6304)
  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: 44
  Protocol: TCP (6)
  Header checksum: 0xd146 [validation disabled]
  [Header checksum status: Unverified]
  Source: 128.119.245.12
  Destination: 192.168.44.201
Transmission Control Protocol, Src Port: 80, Dst Port: 48972, Seq: 487, Ack: 650, Len: 484
  Source Port: 80
  Destination Port: 48972
  [Stream index: 4]
  [TCP Segment Len: 484]
  Sequence number: 487 (relative sequence number)
  [Next sequence number: 971 (relative sequence number)]
  Acknowledgment number: 650 (relative ack number)
  1000 .... = Header Length: 32 bytes (8)
  Flags: 0x018 (PSH, ACK)
  Window size value: 243
  [Calculated window size: 31104]
  [Window size scaling factor: 128]
  Checksum: 0x5f03 [unverified]
  [Checksum Status: Unverified]
  Urgent pointer: 0
  Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    TCP Option - No-Operation (NOP)
    TCP Option - No-Operation (NOP)
    TCP Option - Timestamps: TSval 3795794770, TSecr 2281472501
  [SEQ/ACK analysis]
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[This is an ACK to the segment in frame: 23]
[The RTT to ACK the segment was: 0.194391613 seconds]
[iRTT: 0.163690000 seconds]
[Bytes in flight: 484]
[Bytes sent since last PSH flag: 484]
[Timestamps]
[Time since first frame in this TCP stream: 0.641982383 seconds]
[Time since previous frame in this TCP stream: 0.194391613 seconds]
TCP payload (484 bytes)
Hypertext Transfer Protocol
HTTP/1.1 404 Not Found\r\n
[Expert Info (Chat/Sequence): HTTP/1.1 404 Not Found\r\n]
[HTTP/1.1 404 Not Found\r\n]
[Severity level: Chat]
[Group: Sequence]
Response Version: HTTP/1.1
Status Code: 404
[Status Code Description: Not Found]
Response Phrase: Not Found
Date: Fri, 13 Mar 2020 12:41:41 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
Content-Length: 209\r\n
Keep-Alive: timeout=5, max=99\r\n
Connection: Keep-Alive\r\n
Content-Type: text/html; charset=iso-8859-1\r\n
\r\n
[HTTP response 2/2]
[Time since request: 0.194391613 seconds]
[Prev request in frame: 19]
[Prev response in frame: 21]
[Request in frame: 23]
[Request URI: http://gaia.cs.umass.edu/favicon.ico]
File Data: 209 bytes
Line-based text data: text/html (7 lines)
<!DOCTYPE HTML PUBLIC "-//IETF//DTD HTML 2.0//EN">\n
<html><head>\n
<title>404 Not Found</title>\n
</head><body>\n
<h1>Not Found</h1>\n
<p>The requested URL /favicon.ico was not found on this server.</p>\n
</body></html>\n
```