No. Time Source Destination Protocol Length Info
11 4.025794 192.168.42.158 128.119.245.12 HTTP 608 GET /wireshark-labs/INTRO-wireshark-file1.html HTTP/1.1

Frame 11: 608 bytes on wire (4864 bits), 608 bytes captured (4864 bits)
Arrival Time: Apr 8, 2015 20:48:01.631444000 HKT
Epoch Time: 1428497281.631444000 seconds
[Time delta from previous captured frame: 0.000408000 seconds]
[Time delta from previous displayed frame: 0.000000000 seconds]
[Time since reference or first frame: 4.025794000 seconds]
Frame Number: 11
Frame Length: 608 bytes (4864 bits)
Capture Length: 608 bytes (4864 bits)
[Frame is marked: False]
[Frame is ignored: False]
[Protocols in frame: eth:ip:tcp:http]
[Coloring Rule Name: HTTP]
[Coloring Rule String: http || tcp.port == 80]
Ethernet II, Src: LiteonTe_41:4f:0c (44:6d:57:41:4f:0c), Dst: e4:d3:32:6e:5d:36 (e4:d3:32:6e:5d:36)
Destination: e4:d3:32:6e:5d:36 (e4:d3:32:6e:5d:36)
Address: e4:d3:32:6e:5d:36 (e4:d3:32:6e:5d:36)
....0 .... = IG bit: Individual address (unicast)
.... ..0. .... = LG bit: Globally unique address (factory default)
Source: LiteonTe_41:4f:0c (44:6d:57:41:4f:0c)
Address: LiteonTe_41:4f:0c (44:6d:57:41:4f:0c)
....0 .... = IG bit: Individual address (unicast)
.... ..0. .... = LG bit: Globally unique address (factory default)
Type: IP (0x0800)
Internet Protocol Version 4, Src: 192.168.42.158 (192.168.42.158), Dst: 128.119.245.12 (128.119.245.12)
Version: 4
Header length: 20 bytes
Differentiated Services Field: 0x00 (DSCP 0x00: Default; ECN: 0x00: Not-ECT (Not ECN-Capable Transport))
0000 00.. = Differentiated Services Codepoint: Default (0x00)
.... ..00 = Explicit Congestion Notification: Not-ECT (Not ECN-Capable Transport) (0x00)
Total Length: 594
Identification: 0xdd0a (56586)
Flags: 0x02 (Don't Fragment)
0... .... = Reserved bit: Not set
.1.. .... = Don't fragment: Set
..0. .... = More fragments: Not set
Fragment offset: 0
Time to live: 64
Protocol: TCP (6)
Header checksum: 0xfad0 [correct]
[Good: True]
[Bad: False]
Source: 192.168.42.158 (192.168.42.158)
Destination: 128.119.245.12 (128.119.245.12)
Transmission Control Protocol, Src Port: 40034 (40034), Dst Port: http (80), Seq: 1, Ack: 1, Len: 542

```
    Source port: 40034 (40034)
    Destination port: http (80)
    [Stream index: 1]
    Sequence number: 1    (relative sequence number)
    [Next sequence number: 543    (relative sequence number)]
    Acknowledgement number: 1    (relative ack number)
    Header length: 32 bytes
    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 .... = Acknowledgement: Set
        .... .... 1... = Push: Set
        .... .... .0.. = Reset: Not set
        .... .... ..0. = Syn: Not set
        .... .... ...0 = Fin: Not set
    Window size value: 115
    [Calculated window size: 14720]
    [Window size scaling factor: 128]
    Checksum: 0xc318 [validation disabled]
        [Good Checksum: False]
        [Bad Checksum: False]
    Options: (12 bytes)
        No-Operation (NOP)
        No-Operation (NOP)
        Timestamps: TSval 1993268, TSecr 1969108367
            Kind: Timestamp (8)
            Length: 10
            Timestamp value: 1993268
            Timestamp echo reply: 1969108367
    [SEQ/ACK analysis]
        [Bytes in flight: 542]
Hypertext Transfer Protocol
    GET /wireshark-labs/INTRO-wireshark-file1.html HTTP/1.1\r\n
        [Expert Info (Chat/Sequence): GET /wireshark-labs/INTRO-wireshark-file1.html
HTTP/1.1\r\n]
            [Message: GET /wireshark-labs/INTRO-wireshark-file1.html HTTP/1.1\r\n]
            [Severity level: Chat]
            [Group: Sequence]
        Request Method: GET
        Request URI: /wireshark-labs/INTRO-wireshark-file1.html
        Request Version: HTTP/1.1
    Host: gaia.cs.umass.edu\r\n
    Connection: keep-alive\r\n
    Cache-Control: max-age=0\r\n
    Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8\r\n
    User-Agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko)
Ubuntu Chromium/37.0.2062.120 Chrome/37.0.2062.120 Safari/537.36\r\n
    Accept-Encoding: gzip,deflate,sdch\r\n
    Accept-Language: zh-CN,zh;q=0.8,en-US;q=0.6,en;q=0.4\r\n
```

```
    If-None-Match: "51-513303a566c0a"\r\n
    If-Modified-Since: Wed, 08 Apr 2015 05:59:01 GMT\r\n
    \r\n
    [Full request URI: http://gaia.cs.umass.edu/wireshark-labs/INTRO-wireshark-file1.html]

0000  e4 d3 32 6e 5d 36 44 6d 57 41 4f 0c 08 00 45 00   ..2n]6DmWAO...E.
0010  02 52 dd 0a 40 00 40 06 fa d0 c0 a8 2a 9e 80 77   .R..@.@.....*..w
0020  f5 0c 9c 62 00 50 d5 e6 b4 c4 d8 7b ec 68 80 18   ...b.P.....{.h..
0030  00 73 c3 18 00 00 01 01 08 0a 00 1e 6a 34 75 5e   .s.........j4u^
0040  35 8f 47 45 54 20 2f 77 69 72 65 73 68 61 72 6b   5.GET /wireshark
0050  2d 6c 61 62 73 2f 49 4e 54 52 4f 2d 77 69 72 65   -labs/INTRO-wire
0060  73 68 61 72 6b 2d 66 69 6c 65 31 2e 68 74 6d 6c   shark-file1.html
0070  20 48 54 54 50 2f 31 2e 31 0d 0a 48 6f 73 74 3a    HTTP/1.1..Host:
0080  20 67 61 69 61 2e 63 73 2e 75 6d 61 73 73 2e 65    gaia.cs.umass.e
0090  64 75 0d 0a 43 6f 6e 6e 65 63 74 69 6f 6e 3a 20   du..Connection:
00a0  6b 65 65 70 2d 61 6c 69 76 65 0d 0a 43 61 63 68   keep-alive..Cach
00b0  65 2d 43 6f 6e 74 72 6f 6c 3a 20 6d 61 78 2d 61   e-Control: max-a
00c0  67 65 3d 30 0d 0a 41 63 63 65 70 74 3a 20 74 65   ge=0..Accept: te
00d0  78 74 2f 68 74 6d 6c 2c 61 70 70 6c 69 63 61 74   xt/html,applicat
00e0  69 6f 6e 2f 78 68 74 6d 6c 2b 78 6d 6c 2c 61 70   ion/xhtml+xml,ap
00f0  70 6c 69 63 61 74 69 6f 6e 2f 78 6d 6c 3b 71 3d   plication/xml;q=
0100  30 2e 39 2c 69 6d 61 67 65 2f 77 65 62 70 2c 2a   0.9,image/webp,*
0110  2f 2a 3b 71 3d 30 2e 38 0d 0a 55 73 65 72 2d 41   /*;q=0.8..User-A
0120  67 65 6e 74 3a 20 4d 6f 7a 69 6c 6c 61 2f 35 2e   gent: Mozilla/5.
0130  30 20 28 58 31 31 3b 20 4c 69 6e 75 78 20 78 38   0 (X11; Linux x8
0140  36 5f 36 34 29 20 41 70 70 6c 65 57 65 62 4b 69   6_64) AppleWebKi
0150  74 2f 35 33 37 2e 33 36 20 28 4b 48 54 4d 4c 2c   t/537.36 (KHTML,
0160  20 6c 69 6b 65 20 47 65 63 6b 6f 29 20 55 62 75    like Gecko) Ubu
0170  6e 74 75 20 43 68 72 6f 6d 69 75 6d 2f 33 37 2e   ntu Chromium/37.
0180  30 2e 32 30 36 32 2e 31 32 30 20 43 68 72 6f 6d   0.2062.120 Chrom
0190  65 2f 33 37 2e 30 2e 32 30 36 32 2e 31 32 30 20   e/37.0.2062.120
01a0  53 61 66 61 72 69 2f 35 33 37 2e 33 36 0d 0a 41   Safari/537.36..A
01b0  63 63 65 70 74 2d 45 6e 63 6f 64 69 6e 67 3a 20   ccept-Encoding:
01c0  67 7a 69 70 2c 64 65 66 6c 61 74 65 2c 73 64 63   gzip,deflate,sdc
01d0  68 0d 0a 41 63 63 65 70 74 2d 4c 61 6e 67 75 61   h..Accept-Langua
01e0  67 65 3a 20 7a 68 2d 43 4e 2c 7a 68 3b 71 3d 30   ge: zh-CN,zh;q=0
01f0  2e 38 2c 65 6e 2d 55 53 3b 71 3d 30 2e 36 2c 65   .8,en-US;q=0.6,e
0200  6e 3b 71 3d 30 2e 34 0d 0a 49 66 2d 4e 6f 6e 65   n;q=0.4..If-None
0210  2d 4d 61 74 63 68 3a 20 22 35 31 2d 35 31 33 33   -Match: "51-5133
0220  30 33 61 35 36 36 63 30 61 22 0d 0a 49 66 2d 4d   03a566c0a"..If-M
0230  6f 64 69 66 69 65 64 2d 53 69 6e 63 65 3a 20 57   odified-Since: W
0240  65 64 2c 20 30 38 20 41 70 72 20 32 30 31 35 20   ed, 08 Apr 2015
0250  30 35 3a 35 39 3a 30 31 20 47 4d 54 0d 0a 0d 0a   05:59:01 GMT....

No.     Time        Source                Destination           Protocol Length Info
     17 4.514580    128.119.245.12        192.168.42.158        HTTP     308    HTTP/1.1 304 Not
Modified

Frame 17: 308 bytes on wire (2464 bits), 308 bytes captured (2464 bits)
    Arrival Time: Apr  8, 2015 20:48:02.120230000 HKT
    Epoch Time: 1428497282.120230000 seconds
    [Time delta from previous captured frame: 0.003862000 seconds]
```

[Time delta from previous displayed frame: 0.488786000 seconds]
[Time since reference or first frame: 4.514580000 seconds]
Frame Number: 17
Frame Length: 308 bytes (2464 bits)
Capture Length: 308 bytes (2464 bits)
[Frame is marked: False]
[Frame is ignored: False]
[Protocols in frame: eth:ip:tcp:http]
[Coloring Rule Name: HTTP]
[Coloring Rule String: http || tcp.port == 80]
Ethernet II, Src: e4:d3:32:6e:5d:36 (e4:d3:32:6e:5d:36), Dst: LiteonTe_41:4f:0c (44:6d:57:41:4f:0c)
Destination: LiteonTe_41:4f:0c (44:6d:57:41:4f:0c)
Address: LiteonTe_41:4f:0c (44:6d:57:41:4f:0c)
....0 .... = IG bit: Individual address (unicast)
.... ..0. .... = LG bit: Globally unique address (factory default)
Source: e4:d3:32:6e:5d:36 (e4:d3:32:6e:5d:36)
Address: e4:d3:32:6e:5d:36 (e4:d3:32:6e:5d:36)
....0 .... = IG bit: Individual address (unicast)
.... ..0. .... = LG bit: Globally unique address (factory default)
Type: IP (0x0800)
Internet Protocol Version 4, Src: 128.119.245.12 (128.119.245.12), Dst: 192.168.42.158 (192.168.42.158)
Version: 4
Header length: 20 bytes
Differentiated Services Field: 0x00 (DSCP 0x00: Default; ECN: 0x00: Not-ECT (Not ECN-Capable Transport))
0000 00.. = Differentiated Services Codepoint: Default (0x00)
.... ..00 = Explicit Congestion Notification: Not-ECT (Not ECN-Capable Transport) (0x00)
Total Length: 294
Identification: 0xdbc2 (56258)
Flags: 0x02 (Don't Fragment)
0... .... = Reserved bit: Not set
.1.. .... = Don't fragment: Set
..0. .... = More fragments: Not set
Fragment offset: 0
Time to live: 43
Protocol: TCP (6)
Header checksum: 0x1245 [correct]
[Good: True]
[Bad: False]
Source: 128.119.245.12 (128.119.245.12)
Destination: 192.168.42.158 (192.168.42.158)
Transmission Control Protocol, Src Port: http (80), Dst Port: 40034 (40034), Seq: 1, Ack: 543, Len: 242
Source port: http (80)
Destination port: 40034 (40034)
[Stream index: 1]
Sequence number: 1 (relative sequence number)
[Next sequence number: 243 (relative sequence number)]
Acknowledgement number: 543 (relative ack number)
Header length: 32 bytes
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 .... = Acknowledgement: Set
        .... .... 1... = Push: Set
        .... .... .0.. = Reset: Not set
        .... .... ..0. = Syn: Not set
        .... .... ...0 = Fin: Not set
    Window size value: 122
    [Calculated window size: 15616]
    [Window size scaling factor: 128]
    Checksum: 0xe0c1 [validation disabled]
      [Good Checksum: False]
      [Bad Checksum: False]
    Options: (12 bytes)
      No-Operation (NOP)
      No-Operation (NOP)
      Timestamps: TSval 1969108905, TSecr 1993268
        Kind: Timestamp (8)
        Length: 10
        Timestamp value: 1969108905
        Timestamp echo reply: 1993268
    [SEQ/ACK analysis]
      [Bytes in flight: 242]
Hypertext Transfer Protocol
    HTTP/1.1 304 Not Modified\r\n
      [Expert Info (Chat/Sequence): HTTP/1.1 304 Not Modified\r\n]
        [Message: HTTP/1.1 304 Not Modified\r\n]
        [Severity level: Chat]
        [Group: Sequence]
      Request Version: HTTP/1.1
      Status Code: 304
      Response Phrase: Not Modified
    Date: Wed, 08 Apr 2015 12:48:02 GMT\r\n
    Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.1e-fips PHP/5.4.16 mod_perl/2.0.9-dev
Perl/v5.16.3\r\n
    Connection: Keep-Alive\r\n
    Keep-Alive: timeout=5, max=100\r\n
    ETag: "51-513303a566c0a"\r\n
    \r\n

0000  44 6d 57 41 4f 0c e4 d3 32 6e 5d 36 08 00 45 00   DmWAO...2n]6..E.
0010  01 26 db c2 40 00 2b 06 12 45 80 77 f5 0c c0 a8   .&..@.+..E.w....
0020  2a 9e 00 50 9c 62 d8 7b ec 68 d5 e6 b6 e2 80 18   *..P.b.{.h......
0030  00 7a e0 c1 00 00 01 01 08 0a 75 5e 37 a9 00 1e   .z........u^7...
0040  6a 34 48 54 54 50 2f 31 2e 31 20 33 30 34 20 4e   j4HTTP/1.1 304 N
0050  6f 74 20 4d 6f 64 69 66 69 65 64 0d 0a 44 61 74   ot Modified..Dat
0060  65 3a 20 57 65 64 2c 20 30 38 20 41 70 72 20 32   e: Wed, 08 Apr 2
0070  30 31 35 20 31 32 3a 34 38 3a 30 32 20 47 4d 54   015 12:48:02 GMT
0080  0d 0a 53 65 72 76 65 72 3a 20 41 70 61 63 68 65   ..Server: Apache
```

```
0090  2f 32 2e 34 2e 36 20 28 43 65 6e 74 4f 53 29 20   /2.4.6 (CentOS)
00a0  4f 70 65 6e 53 53 4c 2f 31 2e 30 2e 31 65 2d 66   OpenSSL/1.0.1e-f
00b0  69 70 73 20 50 48 50 2f 35 2e 34 2e 31 36 20 6d   ips PHP/5.4.16 m
00c0  6f 64 5f 70 65 72 6c 2f 32 2e 30 2e 39 2d 64 65   od_perl/2.0.9-de
00d0  76 20 50 65 72 6c 2f 76 35 2e 31 36 2e 33 0d 0a   v Perl/v5.16.3..
00e0  43 6f 6e 6e 65 63 74 69 6f 6e 3a 20 4b 65 65 70   Connection: Keep
00f0  2d 41 6c 69 76 65 0d 0a 4b 65 65 70 2d 41 6c 69   -Alive..Keep-Ali
0100  76 65 3a 20 74 69 6d 65 6f 75 74 3d 35 2c 20 6d   ve: timeout=5, m
0110  61 78 3d 31 30 30 0d 0a 45 54 61 67 3a 20 22 35   ax=100..ETag: "5
0120  31 2d 35 31 33 33 30 33 61 35 36 36 63 30 61 22   1-513303a566c0a"
0130  0d 0a 0d 0a                                       ....
```