

```
1 27.32630583      6876676927669      645766174.9764      HTTP      944      GET /wireshark-labs/HTTP-wireshark-
file.7html HTTP/676
Frame 1: 944 bytes on wire (.620 bits), 944 bytes captured (.620 bits) on interface 8
Ethernet II, Src: IntelCor_3f:53:e8 (e8:1d:36:3f:53:e8), Dst: Alcatel-_02:a.:56 (4c:fa:a4:02:a.:56)
Internet Protocol Version ., Src: 6876676927669, Dst: 645766174.9764
Transmission Control Protocol, Src Port: .2500, Dst Port: 58, Seq: 6, Ack: 6, Len: .90
  Source Port: .2500
  Destination Port: 58
  [Stream index: 6]
  [TCP Segment Len: .90]
  Sequence number: 6      (relative sequence number)
  [Next sequence number: .92      (relative sequence number)]
  Acknowledgment number: 6      (relative ack number)
  6888 7777 = Header Length: 34 bytes (5)
  Flags: 8x865 (PSH, ACK)
  Window size value: 441
  [Calculated window size: 41364]
  [Window size scaling factor: 645]
  Checksum: 8x5df0 [unverified]
  [Checksum Status: Unverified]
  Urgent pointer: 8
  Options: (64 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
  [SEQ/ACK analysis]
  TCP payload (.90 bytes)
Hypertext Transfer Protocol
GET /wireshark-labs/HTTP-wireshark-file.7html HTTP/676\r\n
  [Expert Info (Chat/Sequence): GET /wireshark-labs/HTTP-wireshark-file.7html HTTP/676\r\n]
  Request Method: GET
  Request URI: /wireshark-labs/HTTP-wireshark-file.7html
  Request Version: HTTP/676
  Host: gaia7cs7umass7edu\r\n
  Connection: keep-alive\r\n
  Upgrade-Insecure-Requests: 6\r\n
  User-Agent: Mozilla/978 (X66; Linux x50_0.) AppleWebKit/932730 (KHTML, like Gecko) QtWebEngine/976878 Chrome/06787360376.8
Safari/932730\r\n
  Accept: text/html,application/xhtml+xml,application/xml;q=871,image/webp,image/apng,*/*;q=875\r\n
  Accept-Language: en-US,en\r\n
  X-Do-Not-Track: 6\r\n
  DNT: 6\r\n
  Accept-Encoding: gzip, deflate\r\n
\r\n
[Full request URI: http://gaia7cs7umass7edu/wireshark-labs/HTTP-wireshark-file.7html]
[HTTP request 6/3]
[Response in frame: 64]
[Next request in frame: 6.]
64 279435.9490      645766174.9764      6876676927669      HTTP      6631      HTTP/676 488 OK (text/html)
Frame 64: 6631 bytes on wire (1664 bits), 6631 bytes captured (1664 bits) on interface 8
Ethernet II, Src: Alcatel-_02:a.:56 (4c:fa:a4:02:a.:56), Dst: IntelCor_3f:53:e8 (e8:1d:36:3f:53:e8)
Internet Protocol Version ., Src: 645766174.9764, Dst: 6876676927669
Transmission Control Protocol, Src Port: 58, Dst Port: .2500, Seq: 6, Ack: .92, Len: 6823
  Source Port: 58
  Destination Port: .2500
  [Stream index: 6]
  [TCP Segment Len: 6823]
  Sequence number: 6      (relative sequence number)
  [Next sequence number: 682.      (relative sequence number)]
  Acknowledgment number: .92      (relative ack number)
  6888 7777 = Header Length: 34 bytes (5)
  Flags: 8x865 (PSH, ACK)
  Window size value: 439
  [Calculated window size: 38858]
  [Window size scaling factor: 645]
  Checksum: 8x6e1f [unverified]
  [Checksum Status: Unverified]
  Urgent pointer: 8
  Options: (64 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
  [SEQ/ACK analysis]
  TCP payload (6823 bytes)
Hypertext Transfer Protocol
HTTP/676 488 OK\r\n
  [Expert Info (Chat/Sequence): HTTP/676 488 OK\r\n]
  Request Version: HTTP/676
  Status Code: 488
  [Status Code Description: OK]
  Response Phrase: OK
  Date: Thu, 49 -an 4865 80:39:89 GMT\r\n
  Server: Apache/47.70 (CentOS) OpenSSL/67874k-fips PHP/97.760 mod_perl/478768 Perl/v976073\r\n
  Last-Modified: Thu, 49 -an 4865 80:39:86 GMT\r\n
  ETag: #4ca-90313fabd3.e2#\r\n
  Accept-Ranges: bytes\r\n
  Content-Length: 26.\r\n
  Keep-Alive: timeout=9, max=688\r\n
  Connection: Keep-Alive\r\n
  Content-Type: text/html; charset=UTF-5\r\n
\r\n
[HTTP response 6/3]
[Time since request: 87850285.93 seconds]
[Request in frame: 1]
[Next request in frame: 6.]
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[Next response in frame: 46]
File Data: 26. bytes
Line-based text data: text/html
  6. 27934505484      6876676927669      645766174.9764      HTTP      .13      GET /pearson7png HTTP/676
Frame 6.: .13 bytes on wire (31.. bits), .13 bytes captured (31.. bits) on interface 8
Ethernet II, Src: IntelCor_3f:53:e8 (e8:1d:36:3f:53:e8), Dst: Alcatel-_02:a.:56 (4c:fa:a4:02:a.:56)
Internet Protocol Version ., Src: 6876676927669, Dst: 645766174.9764
Transmission Control Protocol, Src Port: .2500, Dst Port: 58, Seq: .92, Ack: 682., Len: .42
  Source Port: .2500
  Destination Port: 58
  [Stream index: 6]
  [TCP Segment Len: .42]
  Sequence number: .92      (relative sequence number)
  [Next sequence number: 55.      (relative sequence number)]
  Acknowledgment number: 682.      (relative ack number)
  6888 7777 = Header Length: 34 bytes (5)
  Flags: 8x865 (PSH, ACK)
  Window size value: 4.9
  [Calculated window size: 36308]
  [Window size scaling factor: 645]
  Checksum: 8x6868 [unverified]
  [Checksum Status: Unverified]
  Urgent pointer: 8
  Options: (64 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
  [SEQ/ACK analysis]
  TCP payload (.42 bytes)
Hypertext Transfer Protocol
  GET /pearson7png HTTP/676\r\n
    [Expert Info (Chat/Sequence): GET /pearson7png HTTP/676\r\n]
    Request Method: GET
    Request URI: /pearson7png
    Request Version: HTTP/676
  Host: gaia7cs7umass7edu\r\n
  Connection: keep-alive\r\n
  User-Agent: Mozilla/978 (X66; Linux x50_0.) AppleWebKit/932730 (KHTML, like Gecko) QtWebEngine/976878 Chrome/06787360376.8
  Safari/932730\r\n
  Accept: image/webp,image/apng,image/*,*/*;q=875\r\n
  Accept-Language: en-US,en\r\n
  X-Do-Not-Track: 6\r\n
  DNT: 6\r\n
  Referer: http://gaia7cs7umass7edu/wireshark-labs/HTTP-wireshark-file.7html\r\n
  Accept-Encoding: gzip, deflate\r\n
  \r\n
  [Full request URI: http://gaia7cs7umass7edu/pearson7png]
  [HTTP request 4/3]
  [Prev request in frame: 1]
  [Response in frame: 46]
  [Next request in frame: 465]
  46 270486.66.8      645766174.9764      6876676927669      HTTP      699      HTTP/676 488 OK (PNG)
Frame 46: 699 bytes on wire (64.8 bits), 699 bytes captured (64.8 bits) on interface 8
Ethernet II, Src: Alcatel-_02:a.:56 (4c:fa:a4:02:a.:56), Dst: IntelCor_3f:53:e8 (e8:1d:36:3f:53:e8)
Internet Protocol Version ., Src: 645766174.9764, Dst: 6876676927669
Transmission Control Protocol, Src Port: 58, Dst Port: .2500, Seq: .910, Ack: 55., Len: 51
  Source Port: 58
  Destination Port: .2500
  [Stream index: 6]
  [TCP Segment Len: 51]
  Sequence number: .910      (relative sequence number)
  [Next sequence number: .059      (relative sequence number)]
  Acknowledgment number: 55.      (relative ack number)
  6888 7777 = Header Length: 34 bytes (5)
  Flags: 8x865 (PSH, ACK)
  Window size value: 4.3
  [Calculated window size: 3668.]
  [Window size scaling factor: 645]
  Checksum: 8xb2ab [unverified]
  [Checksum Status: Unverified]
  Urgent pointer: 8
  Options: (64 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
  [SEQ/ACK analysis]
  TCP payload (51 bytes)
  TCP segment data (51 bytes)
[. Reassembled TCP Segments (3066 bytes): J62(662.), J65(662.), J48(662.), J46(51)]
Hypertext Transfer Protocol
  HTTP/676 488 OK\r\n
    [Expert Info (Chat/Sequence): HTTP/676 488 OK\r\n]
    Request Version: HTTP/676
    Status Code: 488
    [Status Code Description: OK]
    Response Phrase: OK
  Date: Thu, 49 -an 4865 80:39:89 GMT\r\n
  Server: Apache/47.70 (CentOS) OpenSSL/67874k-fips PHP/97.760 mod_perl/478768 Perl/v976073\r\n
  Last-Modified: Sat, 80 Aug 4860 68:85:6. GMT\r\n
  ETag: #cc3-9310.9c2f6ee2#\r\n
  Accept-Ranges: bytes\r\n
  Content-Length: 3402\r\n
  Keep-Alive: timeout=9, max=11\r\n
  Connection: Keep-Alive\r\n
  Content-Type: image/png\r\n
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\r\n
[HTTP response 4/3]
[Time since request: 87852424135 seconds]
[Prev request in frame: 1]
[Prev response in frame: 64]
[Request in frame: 6.]
[Next request in frame: 465]
[Next response in frame: 448]
File Data: 3402 bytes
Portable Network Graphics
 45 27136160003 6876676927669 645766174.8718 HTTP 982 GET /"kurose/cover_9th_ed7 pg HTTP/676
Frame 45: 982 bytes on wire (.890 bits), 982 bytes captured (.890 bits) on interface 8
Ethernet II, Src: IntelCor_3f:53:e8 (e8:1d:36:3f:53:e8), Dst: Alcatel-_02:a.:56 (4c:fa:a4:02:a.:56)
Internet Protocol Version ., Src: 6876676927669, Dst: 645766174.8718
Transmission Control Protocol, Src Port: 918.5, Dst Port: 58, Seq: 6, Ack: 6, Len: ..6
Source Port: 918.5
Destination Port: 58
[Stream index: 4]
[TCP Segment Len: ..6]
Sequence number: 6 (relative sequence number)
[Next sequence number: ..4 (relative sequence number)]
Acknowledgment number: 6 (relative ack number)
6888 7777 = Header Length: 34 bytes (5)
Flags: 8x865 (PSH, ACK)
Window size value: 441
[Calculated window size: 41364]
[Window size scaling factor: 645]
Checksum: 8x63d2 [unverified]
[Checksum Status: Unverified]
Urgent pointer: 8
Options: (64 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
[SEQ/ACK analysis]
TCP payload (..6 bytes)
Hypertext Transfer Protocol
GET /"kurose/cover_9th_ed7 pg HTTP/676\r\n
[Expert Info (Chat/Sequence): GET /"kurose/cover_9th_ed7 pg HTTP/676\r\n]
Request Method: GET
Request URI: /"kurose/cover_9th_ed7 pg
Request Version: HTTP/676
Host: manic7cs7umass7edu\r\n
Connection: keep-alive\r\n
User-Agent: Mozilla/978 (X66; Linux x50_0.) AppleWebKit/932730 (KHTML, like Gecko) QtWebEngine/976878 Chrome/06787360376.8
Safari/932730\r\n
Accept: image/webp,image/apng,image/*,*/*;q=875\r\n
Accept-Language: en-US,en\r\n
X-Do-Not-Track: 6\r\n
DNT: 6\r\n
Referer: http://gaia7cs7umass7edu/wireshark-labs/HTTP-wireshark-file.7html\r\n
Accept-Encoding: gzip, deflate\r\n
\r\n
[Full request URI: http://manic7cs7umass7edu/"kurose/cover_9th_ed7 pg]
[HTTP request 6/6]
[Response in frame: 38]
 38 5789623313. 645766174.8718 6876676927669 HTTP 944 HTTP/676 384 Found (text/html)
Frame 38: 944 bytes on wire (.620 bits), 944 bytes captured (.620 bits) on interface 8
Ethernet II, Src: Alcatel-_02:a.:56 (4c:fa:a4:02:a.:56), Dst: IntelCor_3f:53:e8 (e8:1d:36:3f:53:e8)
Internet Protocol Version ., Src: 645766174.8718, Dst: 6876676927669
Transmission Control Protocol, Src Port: 58, Dst Port: 918.5, Seq: 6, Ack: ..4, Len: .90
Source Port: 58
Destination Port: 918.5
[Stream index: 4]
[TCP Segment Len: .90]
Sequence number: 6 (relative sequence number)
[Next sequence number: .92 (relative sequence number)]
Acknowledgment number: ..4 (relative ack number)
6888 7777 = Header Length: 34 bytes (5)
Flags: 8x865 (PSH, ACK)
Window size value: 4.3
[Calculated window size: 69994]
[Window size scaling factor: 0.]
Checksum: 8x9409 [unverified]
[Checksum Status: Unverified]
Urgent pointer: 8
Options: (64 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
[SEQ/ACK analysis]
TCP payload (.90 bytes)
Hypertext Transfer Protocol
HTTP/676 384 Found\r\n
[Expert Info (Chat/Sequence): HTTP/676 384 Found\r\n]
Request Version: HTTP/676
Status Code: 384
[Status Code Description: Found]
Response Phrase: Found
Date: Thu, 49 -an 4865 80:39:89 GMT\r\n
Server: Apache\r\n
Location: http://caite7cs7umass7edu/"kurose/cover_9th_ed7 pg\r\n
Content-Length: 43.\r\n
Connection: close\r\n
Content-Type: text/html; charset=iso-5591-6\r\n
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\r\n
[HTTP response 6/6]
[Time since request: 87661562426 seconds]
[Request in frame: 45]
File Data: 43. bytes
Line-based text data: text/html
.4 57480811416 6876676927669 645766174.8718 HTTP 982 GET /"kurose/cover_9th_ed7 pg HTTP/676
Frame .4: 982 bytes on wire (.890 bits), 982 bytes captured (.890 bits) on interface 8
Ethernet II, Src: IntelCor_3f:53:e8 (e8:1d:36:3f:53:e8), Dst: Alcatel-_02:a.:56 (4c:fa:a4:02:a.:56)
Internet Protocol Version ., Src: 6876676927669, Dst: 645766174.8718
Transmission Control Protocol, Src Port: 91898, Dst Port: 58, Seq: 6, Ack: 6, Len: ..6
Source Port: 91898
Destination Port: 58
[Stream index: 3]
[TCP Segment Len: ..6]
Sequence number: 6 (relative sequence number)
[Next sequence number: ..4 (relative sequence number)]
Acknowledgment number: 6 (relative ack number)
6888 7777 = Header Length: 34 bytes (5)
Flags: 8x865 (PSH, ACK)
Window size value: 441
[Calculated window size: 41364]
[Window size scaling factor: 645]
Checksum: 8xb.8c [unverified]
[Checksum Status: Unverified]
Urgent pointer: 8
Options: (64 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
[SEQ/ACK analysis]
TCP payload (..6 bytes)
Hypertext Transfer Protocol
GET /"kurose/cover_9th_ed7 pg HTTP/676\r\n
[Expert Info (Chat/Sequence): GET /"kurose/cover_9th_ed7 pg HTTP/676\r\n]
Request Method: GET
Request URI: /"kurose/cover_9th_ed7 pg
Request Version: HTTP/676
Host: caite7cs7umass7edu\r\n
Connection: keep-alive\r\n
User-Agent: Mozilla/978 (X66; Linux x50_0.) AppleWebKit/932730 (KHTML, like Gecko) QtWebEngine/976878 Chrome/06787360376.8
Safari/932730\r\n
Accept: image/webp,image/apng,image/*,*/*;q=875\r\n
Accept-Language: en-US,en\r\n
X-Do-Not-Track: 6\r\n
DNT: 6\r\n
Referer: http://gaia7cs7umass7edu/wireshark-labs/HTTP-wireshark-file.7html\r\n
Accept-Encoding: gzip, deflate\r\n
\r\n
[Full request URI: http://caite7cs7umass7edu/"kurose/cover_9th_ed7 pg]
12. One GET request was sent, frame 12
13. Frame 22
[HTTP request 2/6]
[Response in frame: 48.]
48. 57082008486 645766174.8718 6876676927669 HTTP 36. HTTP/676 488 OK (-PEG -FIF image)
14. 200 OK
Frame 48: 36. bytes on wire (4964 bits), 36. bytes captured (4964 bits) on interface 8
Ethernet II, Src: Alcatel-_02:a.:56 (4c:fa:a4:02:a.:56), Dst: IntelCor_3f:53:e8 (e8:1d:36:3f:53:e8)
Internet Protocol Version ., Src: 645766174.8718, Dst: 6876676927669
Transmission Control Protocol, Src Port: 58, Dst Port: 91898, Seq: 688109, Ack: ..4, Len: 4.5
15. 10 segments were needed
Source Port: 58
Destination Port: 91898
[Stream index: 3]
[TCP Segment Len: 4.5]
Sequence number: 688109 (relative sequence number)
[Next sequence number: 68646. (relative sequence number)]
Acknowledgment number: ..4 (relative ack number)
6888 7777 = Header Length: 34 bytes (5)
Flags: 8x861 (FIN, PSH, ACK)
Window size value: 4.3
[Calculated window size: 69994]
[Window size scaling factor: 0.]
Checksum: 8xf5.a [unverified]
[Checksum Status: Unverified]
Urgent pointer: 8
Options: (64 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
[SEQ/ACK analysis]
TCP payload (4.5 bytes)
TCP segment data (4.5 bytes)
[52 Reassembled TCP Segments (686464 bytes): J..(662.), J.0(662.), J.5(662.), J98(662.), J94(662.), J9.(662.), J90(662.),
J95(662.), J08(662.), J04(662.), J0.(662.), J00(662.), J05(662.), J28(662.), J24(662.), J2.(662.), J29(662.), J20(662.)]
Hypertext Transfer Protocol
HTTP/676 488 OK\r\n
[Expert Info (Chat/Sequence): HTTP/676 488 OK\r\n]
Request Version: HTTP/676
Status Code: 488
[Status Code Description: OK]
Response Phrase: OK
Date: Thu, 49 -an 4865 80:39:89 GMT\r\n
Server: Apache\r\n
Last-Modified: Tue, 69 Sep 4881 65:43:42 GMT\r\n
ETag: #2588.-65a05-.23a6e8e0e9c8#\r\n
Accept-Ranges: bytes\r\n
Content-Length: 688105\r\n
Connection: close\r\n
```