

```
No.      Time      Source      Destination      Protocol Length Info
 49 2024-05-06 11:53:51,335666 172.20.10.2 128.119.245.12 HTTP 561 GET /wireshark-labs/HTTP-wireshark-
file4.html HTTP/1.1
Frame 49: 561 bytes on wire (4488 bits), 561 bytes captured (4488 bits) on interface \Device\NPF_{1C783651-C779-4443-
B85A-5E2C5079BE75}, id 0
Ethernet II, Src: Microsoft_66:9e:ab (70:bc:10:66:9e:ab), Dst: 92:e1:7b:23:9c:64 (92:e1:7b:23:9c:64)
Internet Protocol Version 4, Src: 172.20.10.2, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 62842, Dst Port: 80, Seq: 1, Ack: 1, Len: 507
  Source Port: 62842
  Destination Port: 80
  [Stream index: 4]
  [Conversation completeness: Complete, WITH_DATA (31)]
  [TCP Segment Len: 507]
  Sequence Number: 1 (relative sequence number)
  Sequence Number (raw): 2357452735
  [Next Sequence Number: 508 (relative sequence number)]
  Acknowledgment Number: 1 (relative ack number)
  Acknowledgment number (raw): 1919609151
  0101 .... = Header Length: 20 bytes (5)
  Flags: 0x018 (PSH, ACK)
  Window: 512
  [Calculated window size: 131072]
  [Window size scaling factor: 256]
  Checksum: 0xdbc2 [unverified]
  [Checksum Status: Unverified]
  Urgent Pointer: 0
  [Timestamps]
  [SEQ/ACK analysis]
  TCP payload (507 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]
    [GET /wireshark-labs/HTTP-wireshark-file4.html HTTP/1.1\r\n]
    [Severity level: Chat]
    [Group: Sequence]
  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 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/123.0.0.0 Safari/537.36 OPR/
109.0.0.0\r\n
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-
exchange;v=b3;q=0.7\r\n
Accept-Encoding: gzip, deflate\r\n
Accept-Language: de-DE,de;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: 52]
[Next request in frame: 92]
No.      Time      Source      Destination      Protocol Length Info
 52 2024-05-06 11:53:51,510715 128.119.245.12 172.20.10.2 HTTP 1355 HTTP/1.1 200 OK (text/html)
Frame 52: 1355 bytes on wire (10840 bits), 1355 bytes captured (10840 bits) on interface \Device\NPF_{1C783651-C779-4443-
B85A-5E2C5079BE75}, id 0
Ethernet II, Src: 92:e1:7b:23:9c:64 (92:e1:7b:23:9c:64), Dst: Microsoft_66:9e:ab (70:bc:10:66:9e:ab)
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 172.20.10.2
Transmission Control Protocol, Src Port: 80, Dst Port: 62842, Seq: 1, Ack: 508, Len: 1301
  Source Port: 80
  Destination Port: 62842
  [Stream index: 4]
  [Conversation completeness: Complete, WITH_DATA (31)]
  [TCP Segment Len: 1301]
  Sequence Number: 1 (relative sequence number)
  Sequence Number (raw): 1919609151
  [Next Sequence Number: 1302 (relative sequence number)]
  Acknowledgment Number: 508 (relative ack number)
  Acknowledgment number (raw): 2357453242
  0101 .... = Header Length: 20 bytes (5)
  Flags: 0x018 (PSH, ACK)
  Window: 237
  [Calculated window size: 30336]
  [Window size scaling factor: 128]
  Checksum: 0x2638 [unverified]
  [Checksum Status: Unverified]
  Urgent Pointer: 0
  [Timestamps]
  [SEQ/ACK analysis]
  TCP payload (1301 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: Mon, 06 May 2024 09:53:51 GMT\r\n
Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.33 mod_perl/2.0.11 Perl/v5.16.3\r\n
Last-Modified: Mon, 06 May 2024 05:59:01 GMT\r\n
ETag: "3ae-617c2c420431d"\r\n
Accept-Ranges: bytes\r\n
Content-Length: 942\r\n
[Content length: 942]
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: 0.175049000 seconds]
[Request in frame: 49]
[Next request in frame: 92]
[Next response in frame: 125]
[Request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html]
File Data: 942 bytes
Line-based text data: text/html (23 lines)
<html>\n
<head>\n
<title>Lab2-4 file: Embedded URLs</title>\n
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">\n
</head>\n
\n
<body bgcolor="#FFFFFF" text="#000000">\n
\n
<p>\n
 </p>\n
<p>This little HTML file is being served by gaia.cs.umass.edu. \n
It contains two embedded images. The image above, also served from the \n
gaia.cs.umass.edu web site, is the logo of our publisher, Pearson. \n
The image of our 8th edition book cover below is stored at, and served from,\n
a WWW server kurose.cslash.net in France:</p>\n
<p align="left"></p>\n
And while we have your attention, you might want to take time to check out the\n
\t\t available open resources for this book at\n
\t\t <a href="http://gaia.cs.umass.edu/kurose_ross"> http://gaia.cs.umass.edu/kurose_ross</a>.\n
\n
</body>\n
</html>\n
No.      Time                               Source                               Destination                         Protocol Length Info
92 2024-05-06 11:53:51.819460      172.20.10.2                         128.119.245.12                     HTTP      507      GET /pearson.png HTTP/1.1
Frame 92: 507 bytes on wire (4056 bits), 507 bytes captured (4056 bits) on interface \Device\NPF_{1C783651-C779-4443-B85A-5E2C5079BE75}, id 0
Ethernet II, Src: Microsoft_66:9e:ab (70:bc:10:66:9e:ab), Dst: 92:e1:7b:23:9c:64 (92:e1:7b:23:9c:64)
Internet Protocol Version 4, Src: 172.20.10.2, Dst: 128.119.245.12
Transmission Control Protocol, Src Port: 62842, Dst Port: 80, Seq: 508, Ack: 1302, Len: 453
Source Port: 62842
Destination Port: 80
[Stream index: 4]
[Conversation completeness: Complete, WITH_DATA (31)]
[TCP Segment Len: 453]
Sequence Number: 508 (relative sequence number)
Sequence Number (raw): 2357453242
[Next Sequence Number: 961 (relative sequence number)]
Acknowledgment Number: 1302 (relative ack number)
Acknowledgment number (raw): 1919610452
0101 .... = Header Length: 20 bytes (5)
Flags: 0x018 (PSH, ACK)
Window: 507
[Calculated window size: 129792]
[Window size scaling factor: 256]
Checksum: 0xd032 [unverified]
[Checksum Status: Unverified]
Urgent Pointer: 0
[Timestamps]
[SEQ/ACK analysis]
TCP payload (453 bytes)
Hypertext Transfer Protocol
GET /pearson.png HTTP/1.1\r\n
[Expert Info (Chat/Sequence): GET /pearson.png HTTP/1.1\r\n]
[GET /pearson.png HTTP/1.1\r\n]
[Severity level: Chat]
[Group: Sequence]
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 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/123.0.0.0 Safari/537.36 OPR/109.0.0.0\r\nAccept: image/avif,image/webp,image/apng,image/svg+xml,image/*,*/*;q=0.8\r\nReferer: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html\r\nAccept-Encoding: gzip, deflate\r\nAccept-Language: de-DE,de;q=0.9,en-US;q=0.8,en;q=0.7\r\n\r\n[Full request URI: http://gaia.cs.umass.edu/pearson.png]\n[HTTP request 2/2]\n[Prev request in frame: 49]\n[Response in frame: 125]

No.	Time	Source	Destination	Protocol	Length	Info
125	2024-05-06 11:53:52,124356	128.119.245.12	172.20.10.2	HTTP	1464	HTTP/1.1 200 OK (PNG)

[BoundErrorUnreassembled Packet]

Frame 125: 1464 bytes on wire (11712 bits), 1464 bytes captured (11712 bits) on interface \Device\NPF_{1C783651-C779-4443-B85A-5E2C5079BE75}, id 0

Ethernet II, Src: 92:e1:7b:23:9c:64 (92:e1:7b:23:9c:64), Dst: Microsoft_66:9e:ab (70:bc:10:66:9e:ab)

Internet Protocol Version 4, Src: 128.119.245.12, Dst: 172.20.10.2

Transmission Control Protocol, Src Port: 80, Dst Port: 62842, Seq: 1302, Ack: 961, Len: 1410

Source Port: 80

Destination Port: 62842

[Stream index: 4]

[Conversation completeness: Complete, WITH_DATA (31)]

[TCP Segment Len: 1410]

Sequence Number: 1302 (relative sequence number)

Sequence Number (raw): 1919610452

[Next Sequence Number: 2712 (relative sequence number)]

Acknowledgment Number: 961 (relative ack number)

Acknowledgment number (raw): 2357453695

0101 = Header Length: 20 bytes (5)

Flags: 0x010 (ACK)

Window: 245

[Calculated window size: 31360]

[Window size scaling factor: 128]

Checksum: 0x57bf [unverified]

[Checksum Status: Unverified]

Urgent Pointer: 0

[Timestamps]

[SEQ/ACK analysis]

TCP payload (1410 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: Mon, 06 May 2024 09:53:52 GMT\r\n

Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.33 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

[Content length: 3267]

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: 0.304896000 seconds]

[Prev request in frame: 49]

[Prev response in frame: 52]

[Request in frame: 92]

[Request URI: http://gaia.cs.umass.edu/pearson.png]

File Data: 1066 bytes

Portable Network Graphics

[BoundError Unreassembled Packet: PNG]

[Expert Info (Note/Reassemble): Unreassembled fragment (change preferences to enable reassembly)]

[Unreassembled fragment (change preferences to enable reassembly)]

[Severity level: Note]

[Group: Reassemble]

No.	Time	Source	Destination	Protocol	Length	Info
127	2024-05-06 11:53:52,124835	128.119.245.12	172.20.10.2	HTTP	1464	Continuation

Frame 127: 1464 bytes on wire (11712 bits), 1464 bytes captured (11712 bits) on interface \Device\NPF_{1C783651-C779-4443-B85A-5E2C5079BE75}, id 0

Ethernet II, Src: 92:e1:7b:23:9c:64 (92:e1:7b:23:9c:64), Dst: Microsoft_66:9e:ab (70:bc:10:66:9e:ab)

Internet Protocol Version 4, Src: 128.119.245.12, Dst: 172.20.10.2

Transmission Control Protocol, Src Port: 80, Dst Port: 62842, Seq: 2712, Ack: 961, Len: 1410

Source Port: 80

Destination Port: 62842

[Stream index: 4]

[Conversation completeness: Complete, WITH_DATA (31)]

[TCP Segment Len: 1410]

Sequence Number: 2712 (relative sequence number)
Sequence Number (raw): 1919611862
[Next Sequence Number: 4122 (relative sequence number)]
Acknowledgment Number: 961 (relative ack number)
Acknowledgment number (raw): 2357453695
0101 = Header Length: 20 bytes (5)
Flags: 0x010 (ACK)
Window: 245
[Calculated window size: 31360]
[Window size scaling factor: 128]
Checksum: 0xec29 [unverified]
[Checksum Status: Unverified]
Urgent Pointer: 0
[Timestamps]
[SEQ/ACK analysis]
TCP payload (1410 bytes)

Hypertext Transfer Protocol

File Data: 1410 bytes

Data (1410 bytes)

```
0000 93 3c 1e 16 75 a2 ba 8e 02 9c 5d 2a 8b b9 dc c7 .<..u.....]*....
0010 aa b8 34 f5 b0 a8 13 e5 da 9a 6c e2 6d b6 40 2e ..4.....l.m.@.
0020 68 4b 7b 9b e5 fb 68 ef f6 28 49 b5 cf 6f 2a b1 hK{...h..(I..o*.
0030 d9 65 56 7d 31 93 5e e9 39 4b 7d 14 ce 5f 5f 53 .eV}1.^.9K)..__S
0040 a6 73 b5 ff 68 d7 f9 2d 3f 05 bb 0c f5 a9 93 79 .s..h..-?.....y
0050 ef 19 97 82 4e 7b a6 56 3f 52 fd 66 bf e5 5b cc ....N{.V?R.f..[.
0060 5a a7 c4 16 6c 71 f5 49 4d fa 69 c2 e3 0b 65 f9 Z...lq.IM.i...e.
0070 ec 66 9f 88 8f f4 ee c6 de 9e dd de ce ca 49 f7 .f.....I.
0080 78 0a 1b f8 b1 86 65 8a fa e9 74 f9 f5 00 7f a7 x.....e...t....
0090 91 fc 61 b5 b0 0f ed 65 6c 73 c4 75 f8 99 5d 0d ..a....els.u...].
00a0 fe 38 e5 12 1f 5a db a5 a7 bd e8 be 74 56 0b a4 .8...Z.....tV..
00b0 5c d8 52 07 91 31 ef b1 fa ac a2 a0 5c ec 27 37 \.R..1.....\. '7
00c0 ee d3 e5 e3 88 ce 2a 08 8b da d6 09 59 a6 4b c3 .....*.Y.K.
00d0 9d eb 59 d6 af 74 0a ba b9 c5 a4 4f ea b0 7a 3f ..Y..t.....0..z?
00e0 e0 fa 62 de c5 c1 c4 1f d3 a4 7c ff b6 29 ed b6 ..b.....|...)..
00f0 eb ec 9c 57 e4 59 5f ca 0e 7d 49 4d 7a 32 97 11 ...W.Y_..}IMz2..
0100 5f cc db 97 84 cc 59 7d e8 87 3a c5 5d eb 43 32 _.....Y}...].C2
0110 ca 3d b9 fc fe 98 19 f8 b5 82 3e b5 40 b0 53 f5 .=.....>.@.S.
0120 49 30 a3 6d 32 c4 5f c2 c3 f9 69 2b 5a 58 e8 a7 I0.m2._...i+ZX..
0130 f7 00 c4 82 76 35 18 d2 9c 8f 9f 5d 7c 4f 9b fb ....v5.....]|0..
0140 b5 62 36 b4 62 7c a7 ec dd c2 76 56 5a db 5b 2d .b6.b|....vVZ.[-
0150 e6 c3 3a 7b 64 fb 3e a5 18 96 8a 5d e7 10 9e 13 ...:{d.>.....}....
0160 63 3f 7b de cb 85 7c 60 21 91 87 44 85 d2 7a ba c?{...|`!..D..z.
0170 db a5 dc ea bb 20 f1 69 cf ef 80 62 2f a5 9f 23 .....i...b/..#.
0180 5d 92 78 30 f5 ff e0 d7 d7 47 fe 82 a3 40 d8 e9 ].x0.....G...@..
0190 ad ab 04 f1 17 f7 5f 4f ec 8e f6 be 28 17 be be ....._0....(...
01a0 dd c7 8e ff d2 2c cd f1 1f 05 7d 20 fb 00 f7 47 .....,....} ...G
01b0 fc 0c 5b 2e e6 23 3a c7 b0 94 0f b8 5f ac 5d 58 ..[#:....._]X
01c0 ba 63 99 65 fd 77 13 72 ed fe 22 2a fb 74 76 b3 .c.e.w3r..".*tv.
01d0 94 76 8e 28 c9 0f 17 ae 1d 62 7f bd c5 07 40 94 .v.(.....b....@.
01e0 25 f5 bd f8 bf 34 3f 92 dd cd 7d b9 06 ca 3c 09 %...4?...}...<.
01f0 a1 4a 1f df 45 bd 47 fd d7 6c a6 37 90 ed e6 32 .J..E.G..l.7...2
0200 17 38 0e 87 c3 e1 70 38 85 c3 8e 91 b7 3d 67 a5 .8....p8.....=g.
0210 d9 ed de 7a 0a c2 ef 22 6e b5 ab 6a f3 29 6f bb ...z..."n..j.)o.
0220 ce c4 75 67 54 d1 04 80 f6 da ec 00 ac d1 d8 77 ..ugT.....w
0230 4c 65 d5 c9 db b0 b3 31 86 f2 2b 23 fc b2 5f 57 Le.....1..+.#.._W
0240 04 cd 34 9b 39 5a 74 4e 7a 0e 54 5f 25 07 26 26 .4.9ZtNz.T_%.&&
0250 38 a0 54 d3 bf 71 49 f4 dd 98 fa 52 4f 01 47 9c 8.T...qI....RO.G.
0260 51 5e 06 9d 95 7d f5 a5 21 9c 0c 5e 2f 2f 8b ce Q^...}...!..^//..
0270 49 82 fa 86 01 13 e1 38 2f 8b ce 49 82 fa 3e 0c I.....8//I..>.
0280 7d c1 bb cb cb a4 33 92 a0 be 04 7d 2f fc 2f f2 }. ....3....}/./..
0290 7e 92 fa 36 54 af d7 73 b2 e8 9c 24 a9 5f c1 b4 ~..6T..s...$. _..
02a0 a7 2f c2 57 bd c5 d8 f0 f4 f1 a8 11 ff 66 73 31 ./W.....fs1
02b0 b8 ba 1a 56 3b 54 71 38 01 25 93 55 af 8f e0 21 ...V;Tq8%.U...!
02c0 bb 7e d5 6e 8d fa f8 ad e6 a0 ad b8 ab 39 88 a8 ~.n.....9...
02d0 8e 49 9f e6 c9 1a 0a 8a 03 de 20 85 76 78 92 60 .I..... .vx.`
02e0 f8 27 d6 fc f5 6a 58 9f fc bb d4 04 0e f9 be d7 .'...jX.....
02f0 f2 6e 87 96 55 d5 5d 47 a3 e7 42 ef d5 ef ea c3 .n..U..]G..B.....
0300 ea 5c f0 4c 6f 1c 99 66 dd fa a6 ae eb 0a a8 16 .\..Lo..f.....
0310 9b 8a a9 69 9a 6e 04 e9 e9 c3 52 ba f0 2c 86 61 38 ...i.n...R...a8
0320 23 b7 4d 4e 33 19 fa dd 61 bd 63 0d 7c c5 ab 86 #.MN3...a.c.|...
0330 fa 6d a1 eb 80 93 e8 3e ba bc 62 56 e0 79 fc f9 .m.....>..bV.y..
0340 4f a8 b7 95 7d f5 15 32 ef 47 5e a5 1d f8 76 e4 0...}.2.G^...v.
0350 08 ee 20 fa c8 dc ab 8c 83 35 b1 e3 0a 9a 4f c6 .. ....5....O.
0360 a5 e1 04 df ad fb 2e 1a c4 0a b2 fa 55 69 05 41 .....Ui.A
0370 30 37 84 8a 46 d4 d7 7d b3 15 0c 8f 3d 30 74 07 07..F..}....=0t.
0380 87 57 ff 15 46 9f 5b 2a 55 3d d3 51 5c 03 be 32 .W..F.[*U=.Q\..2
0390 87 27 d5 1d 90 a4 1e e5 7c 05 3a 74 08 8c c5 11 .'.....|.:t....
03a0 39 af 10 0b 5e 4d c1 c1 0e 5f e8 82 e0 93 c0 ac 9...^M....._.....
03b0 56 a0 fa e6 ed 6a d2 30 d1 1e 02 7e d5 34 a3 b3 V...j..0....~.4..
03c0 98 02 51 3f 34 a8 91 a8 ea 82 87 73 cd 1d 1c 43 ..Q?4.....s...C
03d0 a7 34 70 3c 30 89 fa 8d 16 1a 8c 1f 48 c3 09 ea .4p<0.....H...
03e0 27 f0 d2 da 0a fc 35 30 05 23 ba e6 1d f8 a4 63 '.....50.#.....c
03f0 a1 3f 9b 60 ba 68 42 78 1c 2e 90 da 55 f4 ed 3a .?..`hBx....U...
0400 18 8c 4a dd 01 e5 42 d3 08 d5 f7 3c b2 91 00 1b .J...B....<....
0410 8b 48 f1 d0 14 5c aa a8 6a 6b 82 62 d1 56 35 5d .H...\.j.k.b.V5]
0420 33 1c 55 98 89 b4 d6 49 04 33 24 a8 ef e8 70 a4 3.U....I.3$.p.
```

0430 1b 81 48 81 1c 87 1e 70 91 0f 51 35 e8 5c 63 ab ..H....p..Q5.\c.
0440 61 75 10 65 37 a8 5e a8 c0 88 e9 fb e0 2f 03 9c au.e7.^...../..
0450 7a a0 51 cb e7 9d 82 d5 5b 0e ab 08 8e 96 df 23 z.Q.....[.....#
0460 56 81 ab e1 84 8a 0a 30 72 8d 93 91 a0 1e 0e b4 V.....0r.....
0470 fe 0a de 72 d8 75 0f c5 34 72 0e 9a 96 06 9e a5 ...r.u..4r.....
0480 70 2c 0c 3c 14 81 7a e5 3a b0 d9 f5 c1 79 4a 0e p,.<..z.:...yJ..
0490 73 1a cb 09 d4 df f9 f8 74 18 70 bd 70 64 02 f5 s.....t.p.pd..
04a0 0a 59 66 d0 de e3 f4 c5 f7 be fa 3a 98 ae 3a f4 .Yf.....:...
04b0 09 9c d0 f4 15 2d 1d 87 78 1d b8 42 73 f0 54 1e-..x..Bs.T.
04c0 54 e8 da 08 aa d7 70 7a 9c c0 94 06 a7 86 4e f9 T.....pz.....N.
04d0 6d a5 45 5f 73 98 85 6c 00 86 d1 69 12 ab 48 92 m.E_s..l...i..H..
04e0 2d 09 f4 70 9f 8e 3d f5 75 90 c3 5d 94 dd 60 b4 ~..p..=.u..]..`..
04f0 29 54 bb cb 32 83 44 0c 18 2b 8e 1e 19 be af 9e)T..2.D..+.....
0500 ad 94 ee 60 96 d0 a2 e0 00 45 01 fc b7 ef c1 60 ...`.....E.....`
0510 66 6c 41 c3 3b 8e ac 72 a9 5a 1b b6 21 7e 4c fd f1A.;..r.Z.!~L..
0520 08 1b 66 b5 4d cd 11 d0 65 ae 61 f2 a3 a6 3d 32 ..f.M...e.a...=2
0530 4e 70 03 27 4e a8 98 38 a4 be e4 a1 39 3c 66 8d Np.'N..8....9<f..
0540 47 63 a9 31 87 82 d9 7d 87 ad a2 87 e6 ea 07 d5 Gc.1...}.....
0550 0b 42 1b a0 39 be ef b9 ee 20 bc 08 0c fc e0 8d .B..9.... ..
0560 10 e0 40 4d f3 f6 db 7e f3 43 ea c7 41 fb cc 70 ..@M...~.C..A..p
0570 07 4d 32 01 60 b6 88 6d 24 d1 62 83 16 99 f3 aa .M2.`..m\$.b.....
0580 6f 8f o.

No. Time Source Destination Protocol Length Info
128 2024-05-06 11:53:52,124835 128.119.245.12 172.20.10.2 HTTP 845 Continuation
Frame 128: 845 bytes on wire (6760 bits), 845 bytes captured (6760 bits) on interface \Device\NPF_{1C783651-C779-4443-B85A-5E2C5079BE75}, id 0
Ethernet II, Src: 92:e1:7b:23:9c:64 (92:e1:7b:23:9c:64), Dst: Microsoft_66:9e:ab (70:bc:10:66:9e:ab)
Internet Protocol Version 4, Src: 128.119.245.12, Dst: 172.20.10.2
Transmission Control Protocol, Src Port: 80, Dst Port: 62842, Seq: 4122, Ack: 961, Len: 791
Source Port: 80
Destination Port: 62842
[Stream index: 4]
[Conversation completeness: Complete, WITH_DATA (31)]
[TCP Segment Len: 791]
Sequence Number: 4122 (relative sequence number)
Sequence Number (raw): 1919613272
[Next Sequence Number: 4913 (relative sequence number)]
Acknowledgment Number: 961 (relative ack number)
Acknowledgment number (raw): 2357453695
0101 = Header Length: 20 bytes (5)
Flags: 0x018 (PSH, ACK)
Window: 245
[Calculated window size: 31360]
[Window size scaling factor: 128]
Checksum: 0x667e [unverified]
[Checksum Status: Unverified]
Urgent Pointer: 0
[Timestamps]
[SEQ/ACK analysis]
TCP payload (791 bytes)
Hypertext Transfer Protocol
File Data: 791 bytes
Data (791 bytes)
0000 01 57 c3 f9 a2 49 26 22 4a ec 42 2b 46 3b be f5 .W...I&"J.B+F;..
0010 b3 d1 6a 9c a9 be 81 9c 0f 07 c0 f4 5e b1 04 78 ..j.....^..x
0020 76 8d ad 60 9e 5c 5c 63 9e 55 3d b5 1c 13 d0 1a v..`.\c.U=.....
0030 3b 48 78 83 d0 6f 8c 5a b7 b7 15 e1 80 fa 52 d5 ;Hx..o.Z.....R..
0040 15 30 9a db 0a a2 07 8e 48 ec f4 77 51 d5 7d 5e .0.....H..wQ.}^
0050 f5 49 6d 3c 61 df 39 0c 4f f5 96 e7 f9 c2 e8 7a .Imka.9.O.....z
0060 70 c8 f7 b0 cc d7 89 7e ff 1a 5f 37 a6 be ff 8b p.....~.._7....
0070 d4 b7 51 ab 3b ed 7b 8d b1 a7 1b e6 02 4e 94 83 ..Q.;.{.....N..
0080 f3 1e 5e a6 5e 71 74 2d d4 8f 12 5b 82 ef 03 f5 ..^..^qt-...[....
0090 a3 d2 6f 50 0f 73 15 aa 77 13 78 6a 39 a4 2c 3d ..oP.s..w.xj9.,=
00a0 98 f3 03 7a 8b 15 d8 f6 09 f8 72 e6 fe e0 06 f3 ...z.....r.....
00b0 de c2 56 29 d4 5b 67 57 0f 5d 1a 2e ef 71 9e 14 ..V).[gW.]....q..
00c0 18 ec 38 41 1e a9 1e 70 67 b5 51 ed 5f 29 05 7a ..8A...pg.Q._).z
00d0 62 a5 7b 90 f3 1b a5 df a0 be 63 a6 56 97 6d c6 b.{.....C.V.m..
00e0 96 43 ea fb 23 ea 45 13 2a f4 ec b0 22 66 fa 1c .C.#{.E.*...f..
00f0 e1 7a 6f 97 7e 83 fa 3b 4f 48 f1 62 b0 87 8f 5e .zo.~..;0H.b...^
0100 1e 52 df eb d2 b7 c6 9e 80 44 05 2c fb 13 24 90 .R.....D.,..\$.
0110 d9 b8 c0 f1 0e f2 6c fe ea d1 15 51 90 d2 c0 58l....Q...X
0120 58 e8 4c a1 72 28 eb f5 1c 83 be 3d 0c 4a 46 94 X.L.r(.....=.JF..
0130 cf 5a 7b 82 e0 36 4a e9 45 56 e5 ab fe 5a d9 77 .Z{..6J.EV...Z.w
0140 7e bd 5b 0a e4 52 f9 f0 d0 8a d7 73 2a 74 5b 6a ~.[.R.....s*t[j
0150 e2 04 df bd f6 e2 85 86 10 35 0a 02 f5 d4 98 9d5.....
0160 bd da 01 d5 1e cc 7b cc 4d 9d 4e 17 aa ac 32 f9{.M.N...2..
0170 10 aa 38 a0 5e f0 c8 1e 07 a8 0f 1b a6 03 f0 49 ..8.^.....I
0180 83 fa dc c4 8d b6 11 e7 52 ff e4 ec af bb 18 5bR.....[
0190 d3 c2 3e 47 48 bd 8b 3e 88 9a 36 78 6b de eb c2 ..>GH..>.6xk...
01a0 a5 51 8f a6 76 a2 7a 41 27 4a 9a a6 1f ee 15 56 .Q..v.za'J.....V
01b0 15 c1 a4 3e 09 4a eb b0 b9 71 36 f5 c8 8f 82 93 ...>.J...q6.....
01c0 7c e3 e6 0e dd de 77 87 81 4d d7 63 3f 5c 9f d1 |.....w..M.c?\..
01d0 ee cf 85 82 ed 45 b7 de 33 e8 f1 4b 56 4f 4d 14E..3..KVOM..
01e0 c1 c1 bd 72 7b a5 53 a1 d5 74 b5 28 44 ce 33 ef ...r{.S..t.(D.3..
01f0 27 03 33 28 bf f4 4e 62 db c8 1e 3b 70 59 76 8c '.3(..Nb...;pYv..
0200 f1 70 6c b8 3e 4e 0f 0d d8 b3 12 4c 63 3c f6 c1 .pl.>N.....Lc<..

0210 54 b0 51 07 6b d1 ec 44 76 b2 eb 38 50 ef e8 15 T.Q.k..Dv..8P...
0220 21 90 39 59 79 54 f5 3c f0 34 37 8c 1a cb 33 da !.9YyT.<.47...3.
0230 d1 fe 11 35 44 49 bf a8 64 eb a9 d9 e9 6f 69 b4 ...5DI..d....oi.
0240 7d df 31 43 bc ae b1 4a ba 63 d0 14 5c 1d 6c 6c }.1C...J.c..\..ll
0250 2b ba a1 b4 48 06 68 98 46 05 1c 34 fc 2b 68 b0 +...H.h.F..4.+h.
0260 e5 eb 95 8a db 05 aa 9a 63 0f 9d d1 b9 6d bd 46c....m.F
0270 e1 d4 53 b4 c9 02 8c 9d 30 5f 54 57 5d 85 69 66 ..S.....0_TW].if
0280 5d 8f 3d 5f af c2 fb 05 b7 1a 7e c3 be 12 7c 64].=_.....~....[d
0290 d3 6d 3b c8 26 93 95 6f c0 d7 8a d3 3a 5d 73 eb .m;.&..o.....]s.
02a0 c9 8a 91 dc 35 ec d5 87 ad 76 6b 60 b1 63 d3 ac5....vk`.c..
02b0 52 77 58 7a a3 79 d5 82 e3 d0 b3 3a 18 2b 9a b5 RwxZ.y.....:+...
02c0 3d 01 0e c4 75 7d b8 12 5a f3 bd b6 f4 c4 1a ac =...u}..Z.....
02d0 74 6d 3c a2 f2 62 a7 19 d2 09 ce df 27 07 fe 0f tm<..b.....'....
02e0 b7 56 39 1c 0e 87 c3 e1 70 38 1c 0e 87 c3 e1 70 .V9.....p8.....p
02f0 38 1c 0e 87 c3 e1 70 38 1c 0e 87 c3 e1 70 38 9c 8.....p8.....p8.
0300 42 f2 1f ff 8d ea 68 93 cc bc bc 00 00 00 00 49 B.....h.....I
0310 45 4e 44 ae 42 60 82 END.B`.
No. Time Source Destination Protocol Length Info
159 2024-05-06 11:53:52,524329 172.20.10.2 178.79.137.164 HTTP 474 GET /8E_cover_small.jpg HTTP/1.1
Frame 159: 474 bytes on wire (3792 bits), 474 bytes captured (3792 bits) on interface \Device\NPF_{1C783651-C779-4443-B85A-5E2C5079BE75}, id 0
Ethernet II, Src: Microsoft_66:9e:ab (70:bc:10:66:9e:ab), Dst: 92:e1:7b:23:9c:64 (92:e1:7b:23:9c:64)
Internet Protocol Version 4, Src: 172.20.10.2, Dst: 178.79.137.164
Transmission Control Protocol, Src Port: 62853, Dst Port: 80, Seq: 1, Ack: 1, Len: 420
Source Port: 62853
Destination Port: 80
[Stream index: 15]
[Conversation completeness: Complete, WITH_DATA (31)]
[TCP Segment Len: 420]
Sequence Number: 1 (relative sequence number)
Sequence Number (raw): 3435664612
[Next Sequence Number: 421 (relative sequence number)]
Acknowledgment Number: 1 (relative ack number)
Acknowledgment number (raw): 1127960928
0101 = Header Length: 20 bytes (5)
Flags: 0x018 (PSH, ACK)
Window: 512
[Calculated window size: 131072]
[Window size scaling factor: 256]
Checksum: 0x23eb [unverified]
[Checksum Status: Unverified]
Urgent Pointer: 0
[Timestamps]
[SEQ/ACK analysis]
TCP payload (420 bytes)
Hypertext Transfer Protocol
GET /8E_cover_small.jpg HTTP/1.1\r\n
[Expert Info (Chat/Sequence): GET /8E_cover_small.jpg HTTP/1.1\r\n]
[GET /8E_cover_small.jpg HTTP/1.1\r\n]
[Severity level: Chat]
[Group: Sequence]
Request Method: GET
Request URI: /8E_cover_small.jpg
Request Version: HTTP/1.1
Host: kurose.cslash.net\r\n
Connection: keep-alive\r\n
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/123.0.0.0 Safari/537.36 OPR/109.0.0.0\r\n
Accept: image/avif,image/webp,image/apng,image/svg+xml,image/*,*/*;q=0.8\r\n
Referer: http://gaia.cs.umass.edu/\r\n
Accept-Encoding: gzip, deflate\r\n
Accept-Language: de-DE,de;q=0.9,en-US;q=0.8,en;q=0.7\r\n
\r\n
[Full request URI: http://kurose.cslash.net/8E_cover_small.jpg]
[HTTP request 1/1]
[Response in frame: 161]
No. Time Source Destination Protocol Length Info
161 2024-05-06 11:53:52,571801 178.79.137.164 172.20.10.2 HTTP 225 HTTP/1.1 301 Moved Permanently
Frame 161: 225 bytes on wire (1800 bits), 225 bytes captured (1800 bits) on interface \Device\NPF_{1C783651-C779-4443-B85A-5E2C5079BE75}, id 0
Ethernet II, Src: 92:e1:7b:23:9c:64 (92:e1:7b:23:9c:64), Dst: Microsoft_66:9e:ab (70:bc:10:66:9e:ab)
Internet Protocol Version 4, Src: 178.79.137.164, Dst: 172.20.10.2
Transmission Control Protocol, Src Port: 80, Dst Port: 62853, Seq: 1, Ack: 421, Len: 171
Source Port: 80
Destination Port: 62853
[Stream index: 15]
[Conversation completeness: Complete, WITH_DATA (31)]
[TCP Segment Len: 171]
Sequence Number: 1 (relative sequence number)
Sequence Number (raw): 1127960928
[Next Sequence Number: 172 (relative sequence number)]
Acknowledgment Number: 421 (relative ack number)
Acknowledgment number (raw): 3435665032
0101 = Header Length: 20 bytes (5)
Flags: 0x018 (PSH, ACK)
Window: 501

[Calculated window size: 64128]
[Window size scaling factor: 128]
Checksum: 0x5bb5 [unverified]
[Checksum Status: Unverified]
Urgent Pointer: 0
[Timestamps]
[SEQ/ACK analysis]
TCP payload (171 bytes)
Hypertext Transfer Protocol
HTTP/1.1 301 Moved Permanently\r\n
[Expert Info (Chat/Sequence): HTTP/1.1 301 Moved Permanently\r\n]
[HTTP/1.1 301 Moved Permanently\r\n]
[Severity level: Chat]
[Group: Sequence]
Response Version: HTTP/1.1
Status Code: 301
[Status Code Description: Moved Permanently]
Response Phrase: Moved Permanently
Location: https://kurose.cslash.net/8E_cover_small.jpg\r\n
Content-Length: 0\r\n
[Content length: 0]
Date: Mon, 06 May 2024 09:53:53 GMT\r\n
Server: lighttpd/1.4.47\r\n
\r\n
[HTTP response 1/1]
[Time since request: 0.047472000 seconds]
[Request in frame: 159]
[Request URI: http://kurose.cslash.net/8E_cover_small.jpg]