[Wiresharking Simple HTTP GET]

3-way handshake

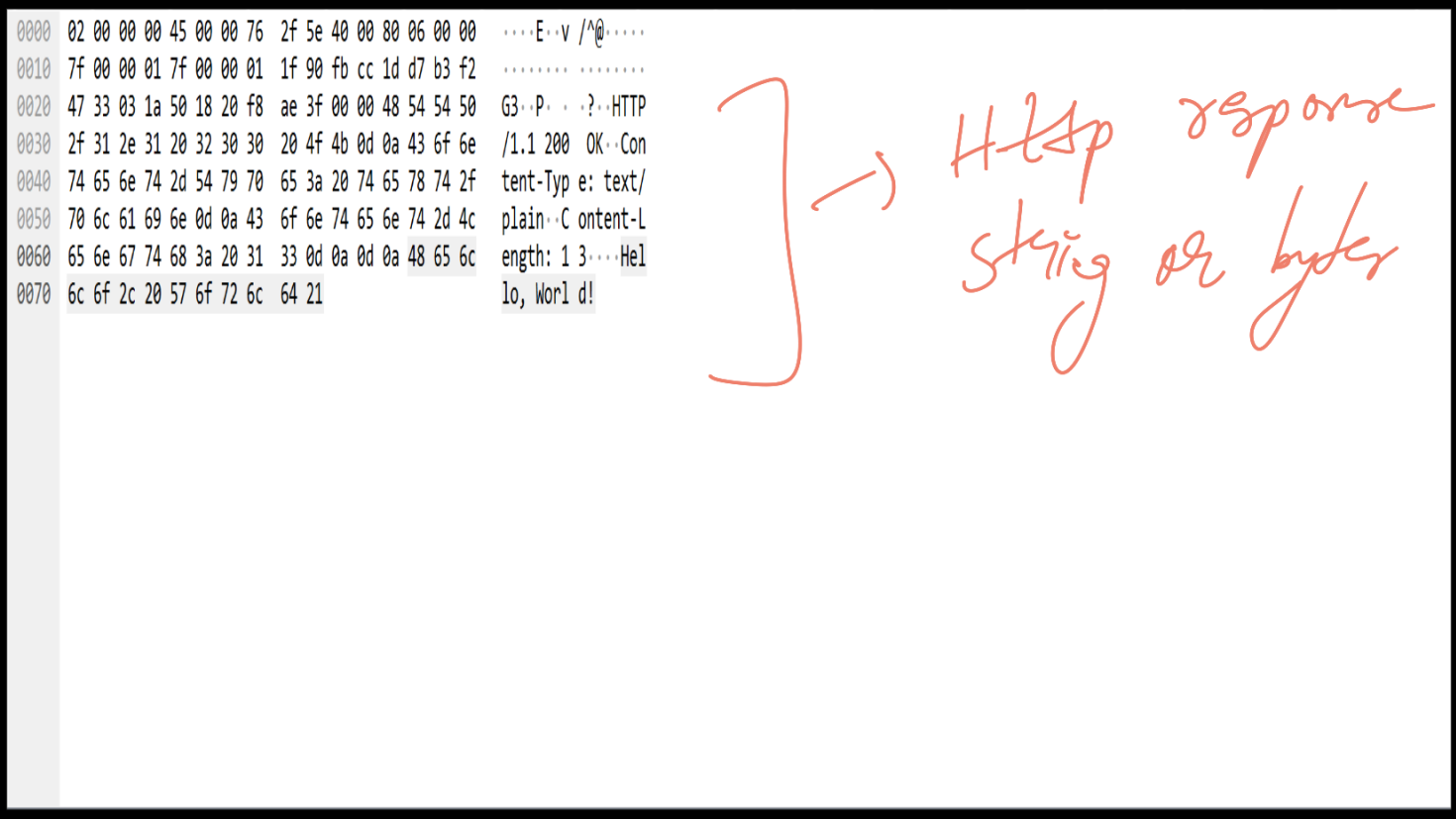
22	6.754069	127.0.0.1	127.0.0.1	TCP	56 64460 → 8080 [SYN] Seq=0 Win=65535 Len=0 MSS=65495 WS=256 SACK_PERM
23	6.754197	127.0.0.1	127.0.0.1	TCP	56 8080 → 64460 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=65495 WS=256 S
24	6.754409	127.0.0.1	127.0.0.1	TCP	44 64460 → 8080 [ACK] Seq=1 Ack=1 Win=2161152 Len=0
25	6.756360	127.0.0.1	127.0.0.1	HTTP	667 GET / HTTP/1.1
26	6.756628	127.0.0.1	127.0.0.1	TCP	44 8080 → 64460 [ACK] Seq=1 Ack=624 Win=2160640 Len=0
27	6.759171	127.0.0.1	127.0.0.1	HTTP	122 HTTP/1.1 200 OK (text/plain)
28	6.759351	127.0.0.1	127.0.0.1	TCP	44 64460 → 8080 [ACK] Seq=624 Ack=79 Win=2161152 Len=0
29	6.764377	127.0.0.1	127.0.0.1	TCP	44 8080 → 64460 [FIN, ACK] Seq=79 Ack=624 Win=2160640 Len=0
30	6.764479	127.0.0.1	127.0.0.1	TCP	44 64460 → 8080 [ACK] Seq=624 Ack=80 Win=2161152 Len=0
31	6.765196	127.0.0.1	127.0.0.1	TCP	44 64460 → 8080 [FIN, ACK] Seq=624 Ack=80 Win=2161152 Len=0
32	6.765415	127.0.0.1	127.0.0.1	TCP	44 8080 → 64460 [ACK] Seq=80 Ack=625 Win=2160640 Len=0

Data transfer

Connection close

0030	2f 20 48 54 54 50 2f 31	2e 31 0d 0a 48 6f 73 74	/ HTTP/1 .1··Host
0040	3a 20 6c 6f 63 61 6c 68	6f 73 74 3a 38 30 38 30	: localh ost:8080
0050	0d 0a 43 6f 6e 6e 65 63	74 69 6f 6e 3a 20 6b 65	··Connec tion: ke
0060	65 70 2d 61 6c 69 76 65	0d 0a 73 65 63 2d 63 68	ep-alive ··sec-ch
0070	2d 75 61 3a 20 22 42 72	61 76 65 22 3b 76 3d 22	-ua: "Br ave";v="
0080	31 33 31 22 2c 20 22 43	68 72 6f 6d 69 75 6d 22	131", "C hromium"
0090	3b 76 3d 22 31 33 31 22	2c 20 22 4e 6f 74 5f 41	;v="131" , "Not_A
00a0	20 42 72 61 6e 64 22 3b	76 3d 22 32 34 22 0d 0a	Brand"; v="24"··
00b0	73 65 63 2d 63 68 2d 75	61 2d 6d 6f 62 69 6c 65	sec-ch-u a-mobile
00c0	3a 20 3f 30 0d 0a 73 65	63 2d 63 68 2d 75 61 2d	: ?0··se c-ch-ua-
00d0	70 6c 61 74 66 6f 72 6d	3a 20 22 57 69 6e 64 6f	platform : "Windo
00e0	77 73 22 0d 0a 55 70 67	72 61 64 65 2d 49 6e 73	ws"··Upg rade-Ins
00f0	65 63 75 72 65 2d 52 65	71 75 65 73 74 73 3a 20	ecure-Re quests:
0100	31 0d 0a 55 73 65 72 2d	41 67 65 6e 74 3a 20 4d	1··User- Agent: M
0110	6f 7a 69 6c 6c 61 2f 35	2e 30 20 28 57 69 6e 64	ozilla/5 .0 (Wind
0120	6f 77 73 20 4e 54 20 31	30 2e 30 3b 20 57 69 6e	ows NT 1 0.0; Win
0130	36 34 3b 20 78 36 34 29	20 41 70 70 6c 65 57 65	64; x64) AppleWe
0140	62 4b 69 74 2f 35 33 37	2e 33 36 20 28 4b 48 54	bKit/537 .36 (KHT
0150	4d 4c 2c 20 6c 69 6b 65	20 47 65 63 6b 6f 29 20	ML, like Gecko)
0160	43 68 72 6f 6d 65 2f 31	33 31 2e 30 2e 30 2e 30	Chrome/1 31.0.0.0
0170	20 53 61 66 61 72 69 2f	35 33 37 2e 33 36 0d 0a	Safari/ 537.36··

Http req header as string or bytes



* TCP connection creation and Data transfer and closing is handled by Operating System Code
* Backend http server process defines how to process http req
  - Application layer

* Our Backend server process only get full http req

* All the reassembly of frames and segment is handled by code written inside OS.

↳ Note Each Req is splitted into Multiple frames of some size depends on underlying medium like Ethernet/Optic fibre etc.