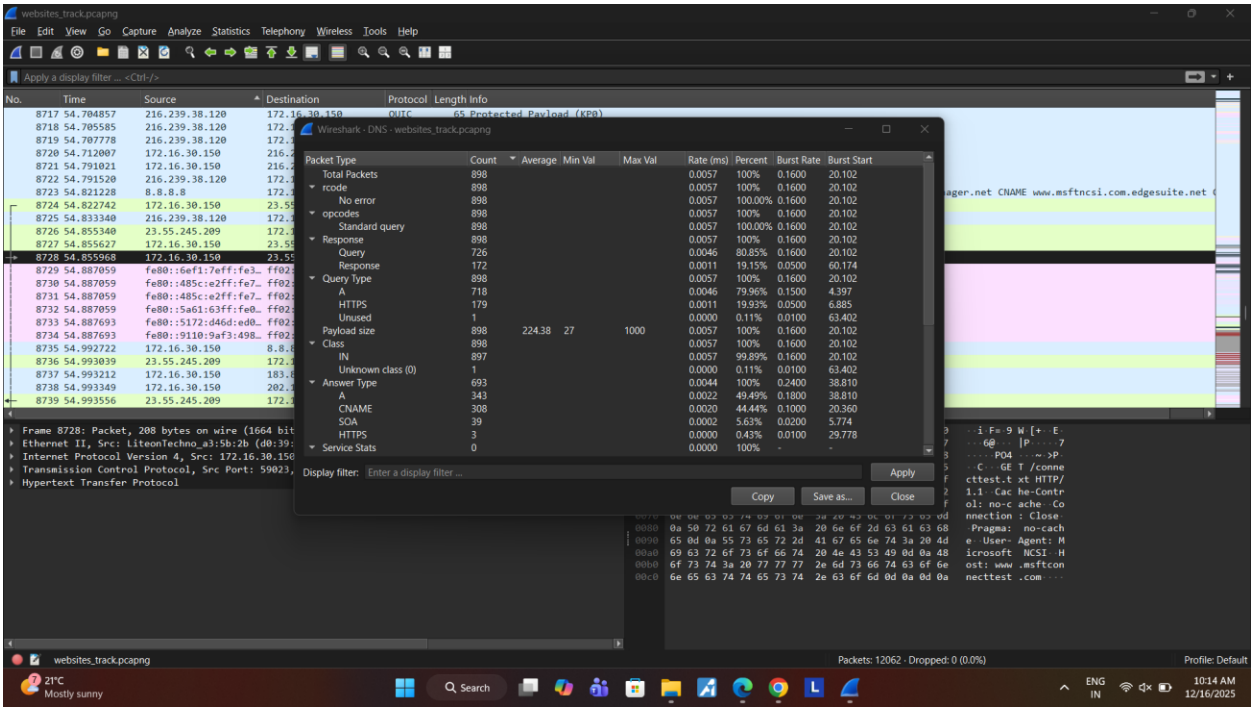
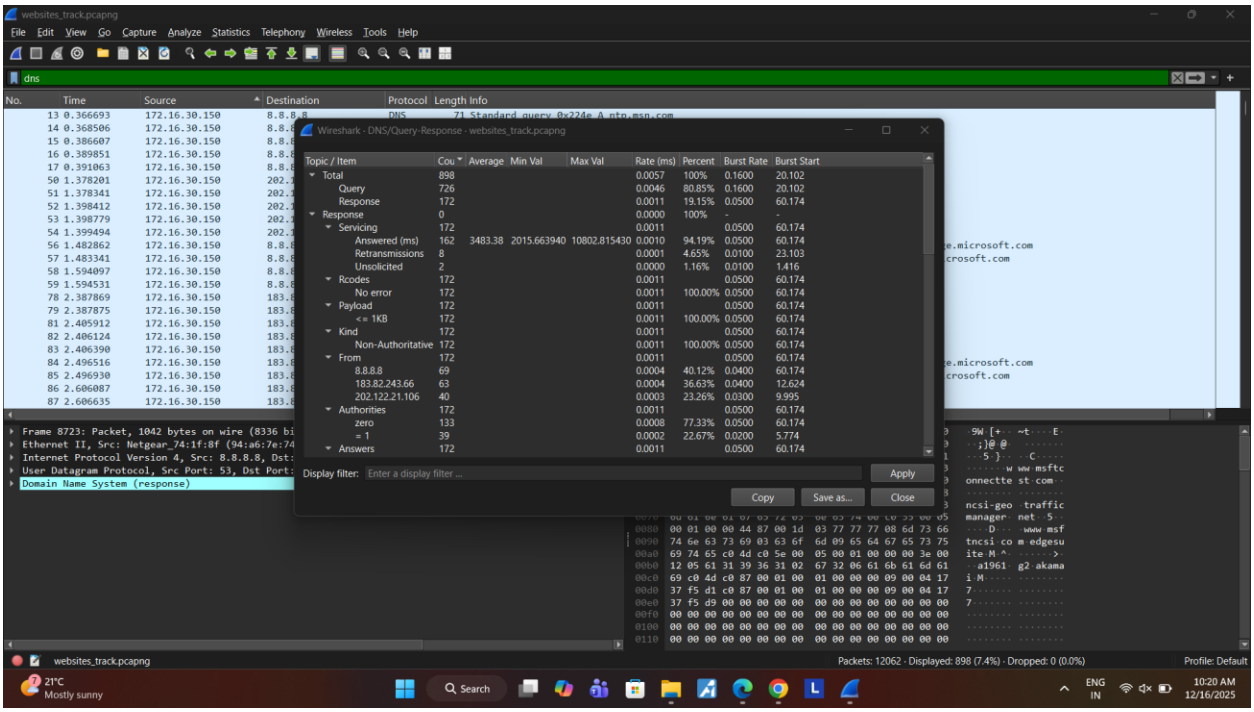
TASK 1

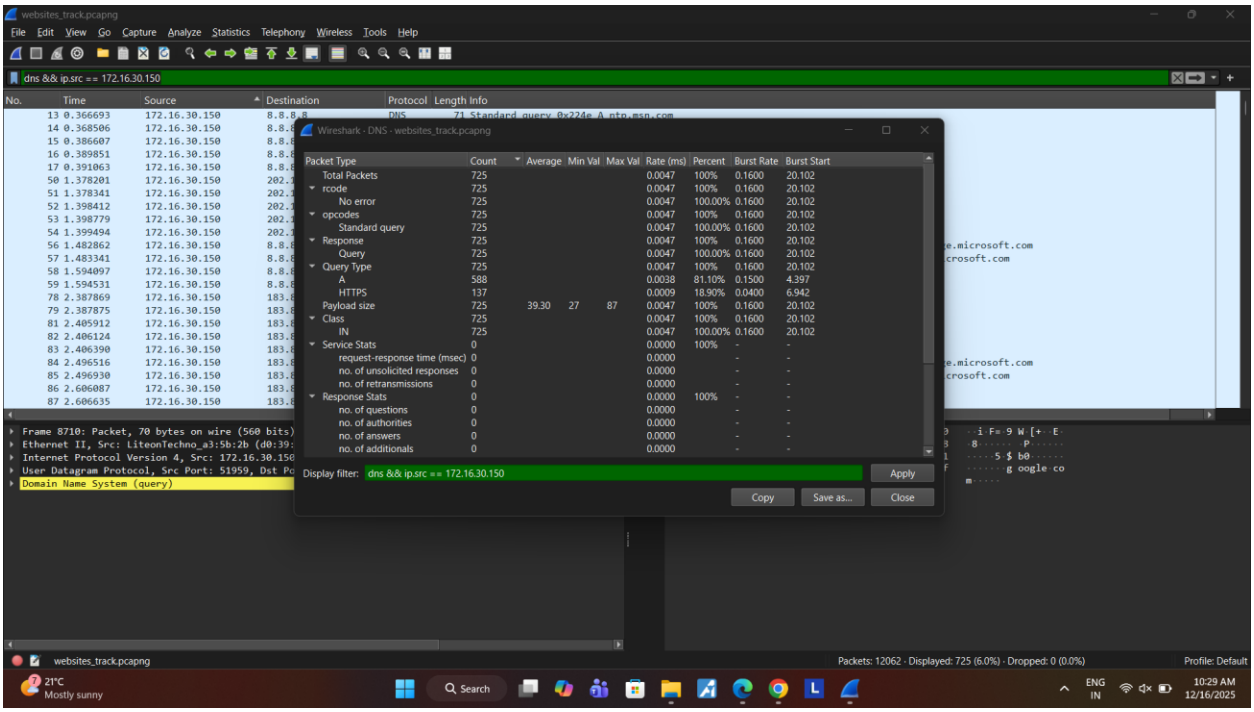
How many DNS queries are sent from your browser (host machine) to DNS Server(s) ?



How many DNS servers are involved



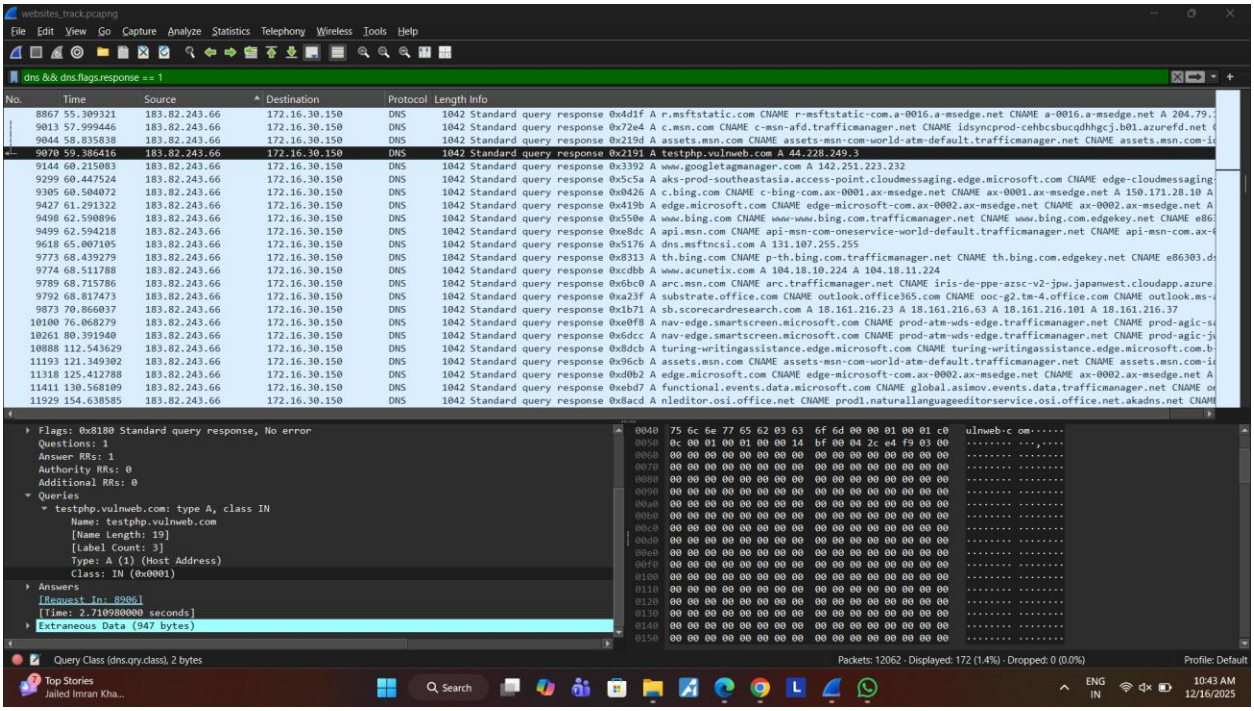
Which DNS Server replies with actual IP Address(es).



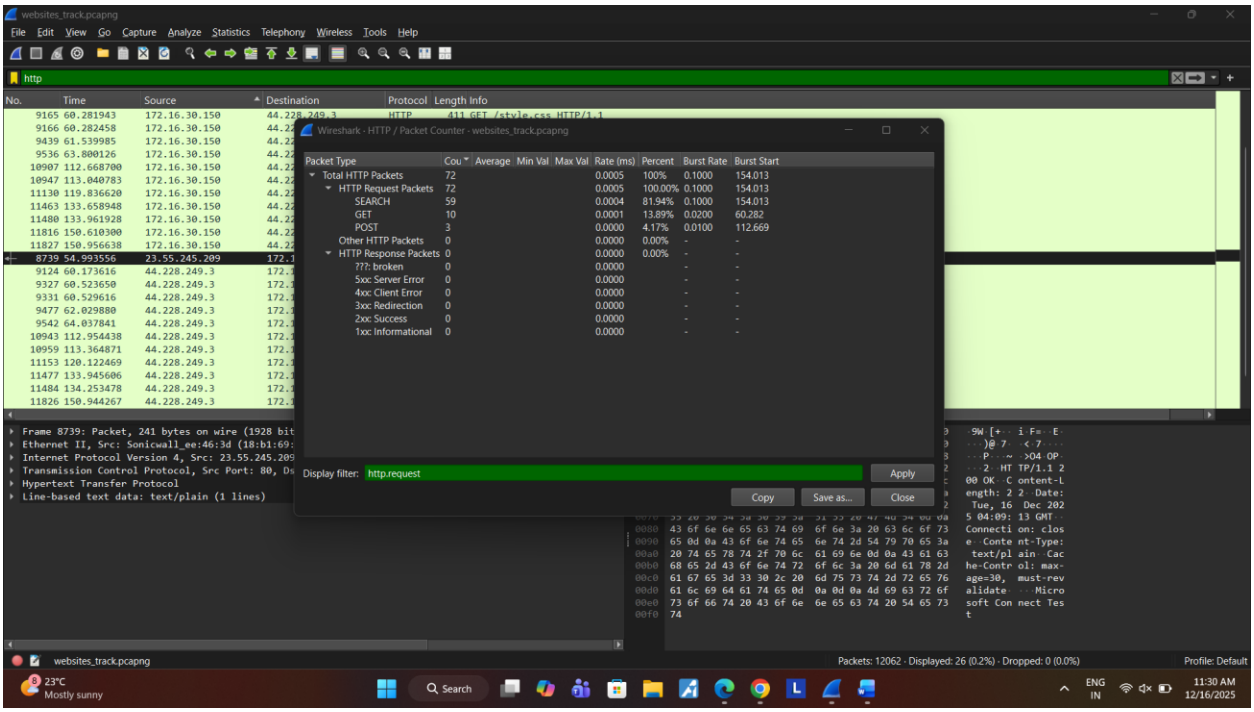
Do all DNS servers respond

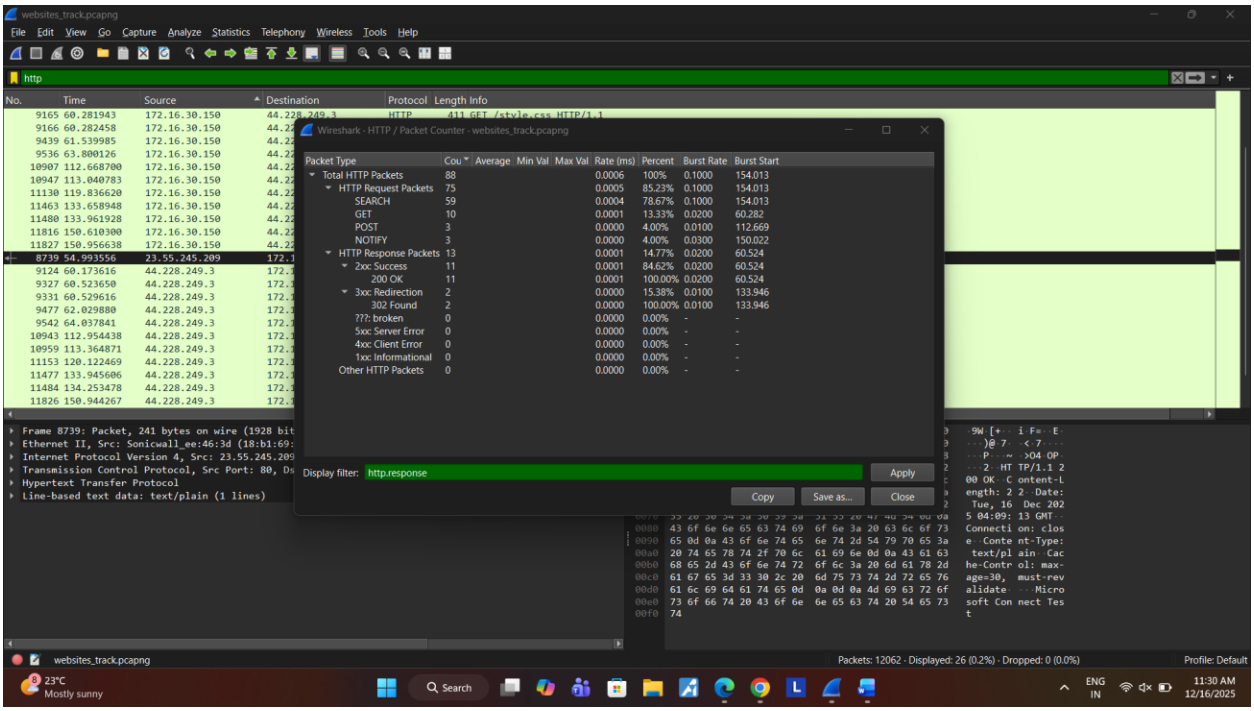
Ans: NO

Clearly list the resource records involved in resolving the IP address of the site, mentioning, Name, value, type, TTL appropriately in the complete resolving process of this DNS conversation including query/queries and response/answer(s).



2nd:


websites_track.pcapng
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http
No. Time Source Destination Protocol Length Info
9165 60.281943 172.16.30.150 44.228.249.3 HTTP 411 GET /style.css HTTP/1.1
9166 60.282458 172.16.30.150 44.22
9439 61.539985 172.16.30.150 44.22
9536 63.800126 172.16.30.150 44.22
10907 112.668700 172.16.30.150 44.22
10947 113.040783 172.16.30.150 44.22
11130 119.836620 172.16.30.150 44.22
11463 133.658948 172.16.30.150 44.22
11480 133.961928 172.16.30.150 44.22
11816 150.610300 172.16.30.150 44.22
11827 150.956638 172.16.30.150 44.22
8739 54.993556 23.55.245.209 172.1
9124 60.173616 44.228.249.3 172.1
9327 60.523650 44.228.249.3 172.1
9331 60.529616 44.228.249.3 172.1
9477 62.029880 44.228.249.3 172.1
9542 64.037841 44.228.249.3 172.1
10943 112.954438 44.228.249.3 172.1
10959 113.364871 44.228.249.3 172.1
11153 120.122469 44.228.249.3 172.1
11477 133.945606 44.228.249.3 172.1
11484 134.253478 44.228.249.3 172.1
11826 150.944267 44.228.249.3 172.1
Wireshark · HTTP / Packet Counter · websites_track.pcapng
Packet Type Cou Average Min Val Max Val Rate (ms) Percent Burst Rate Burst Start
Total HTTP Packets 72 0.0005 100% 0.1000 154.013
HTTP Request Packets 72 0.0005 100.00% 0.1000 154.013
SEARCH 59 0.0004 81.94% 0.1000 154.013
GET 10 0.0001 13.89% 0.0200 60.282
POST 3 0.0000 4.17% 0.0100 112.669
Other HTTP Packets 0 0.0000 0.00% - -
HTTP Response Packets 0 0.0000 0.00% - -
???: broken 0 0.0000 - -
5xx: Server Error 0 0.0000 - -
4xx: Client Error 0 0.0000 - -
3xx: Redirection 0 0.0000 - -
2xx: Success 0 0.0000 - -
1xx: Informational 0 0.0000 - -
Display filter: http.request
Apply
Copy
Save as...
Close
Frame 8739: Packet, 241 bytes on wire (1928 bit
Ethernet II, Src: Sonicwall_ee:46:3d (18:b1:69:
Internet Protocol Version 4, Src: 23.55.245.209
Transmission Control Protocol, Src Port: 80, Ds
Hypertext Transfer Protocol
Line-based text data: text/plain (1 lines)
websites_track.pcapng
Packets: 12062 · Displayed: 26 (0.2%) · Dropped: 0 (0.0%)
Profile: Default
23°C
Mostly sunny
Search
ENG
IN
11:30 AM
12/16/2025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11477 133.945606 44.228.249.3 172.1
11484 134.253478 44.228.249.3 172.1
11826 150.944267 44.228.249.3 172.1
Wireshark · HTTP / Packet Counter · websites_track.pcapng
Packet Type Cou Average Min Val Max Val Rate (ms) Percent Burst Rate Burst Start
Total HTTP Packets 88 0.0006 100% 0.1000 154.013
HTTP Request Packets 75 0.0005 85.23% 0.1000 154.013
SEARCH 59 0.0004 78.67% 0.1000 154.013
GET 10 0.0001 13.33% 0.0200 60.282
POST 3 0.0000 4.00% 0.0100 112.669
NOTIFY 3 0.0000 4.00% 0.0300 150.022
HTTP Response Packets 13 0.0001 14.77% 0.0200 60.524
2xx Success 11 0.0001 84.62% 0.0200 60.524
200 OK 11 0.0001 100.00% 0.0200 60.524
3xx Redirection 2 0.0000 15.38% 0.0100 133.946
302 Found 2 0.0000 100.00% 0.0100 133.946
???: broken 0 0.0000 0.00% - -
5xx Server Error 0 0.0000 0.00% - -
4xx Client Error 0 0.0000 0.00% - -
1xx Informational 0 0.0000 0.00% - -
Other HTTP Packets 0 0.0000 0.00% - -
Display filter: http.response
Apply
Copy
Save as...
Close
Frame 8739: Packet, 241 bytes on wire (1928 bit
Ethernet II, Src: Sonicwall_ee:46:3d (18:b1:69:
Internet Protocol Version 4, Src: 23.55.245.209
Transmission Control Protocol, Src Port: 80, Ds
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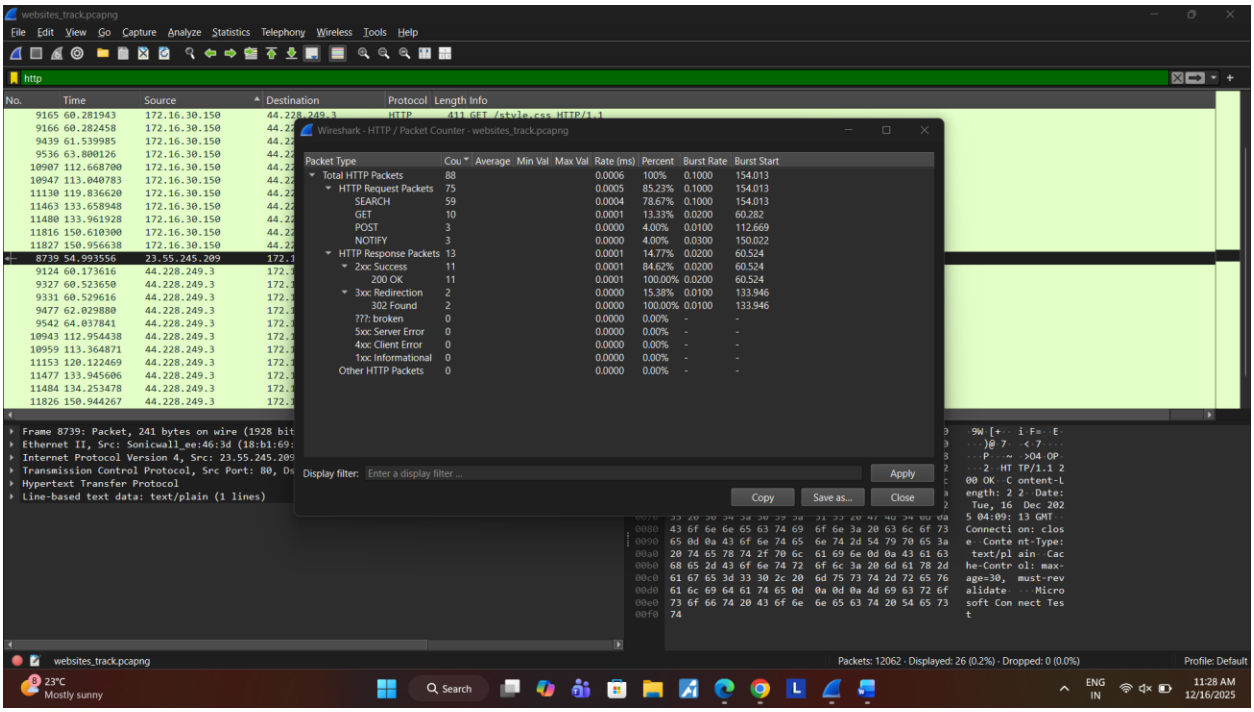
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1xx Informational 0 0.0000 0.00% - -
Other HTTP Packets 0 0.0000 0.00% - -
Display filter: Enter a display filter ...
Apply
Copy
Save as...
Close
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Internet Protocol Version 4, Src: 23.55.245.209
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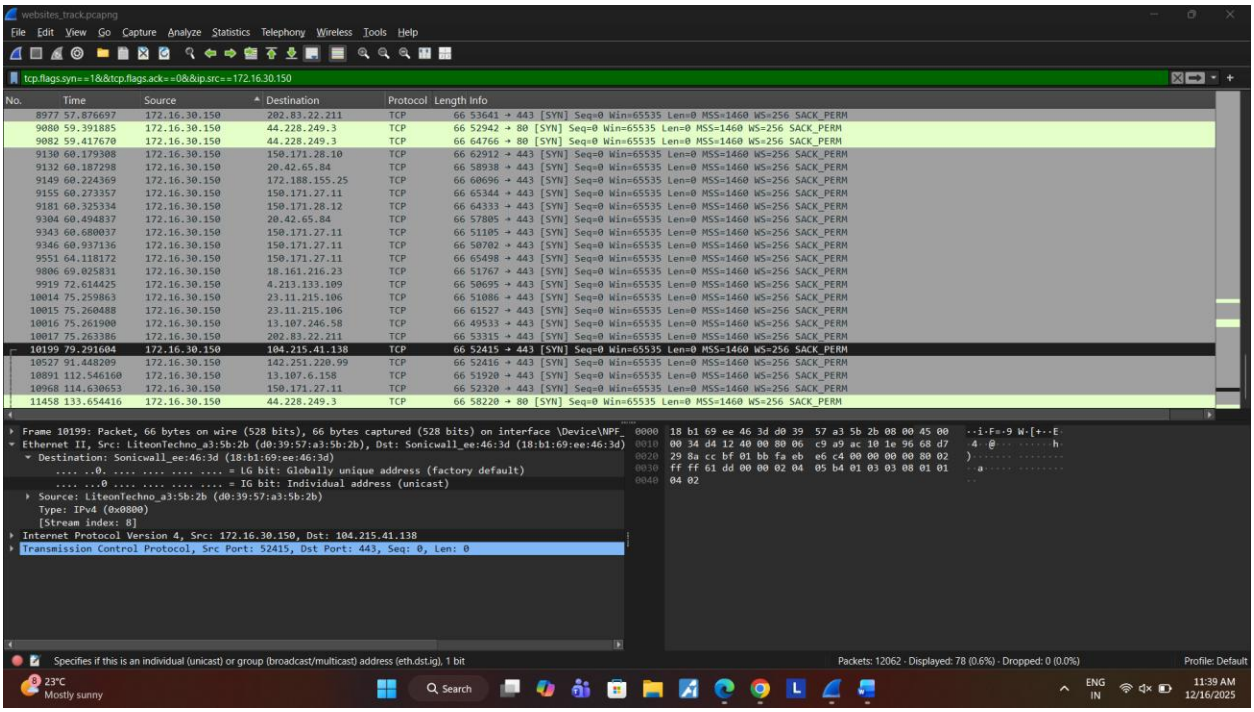
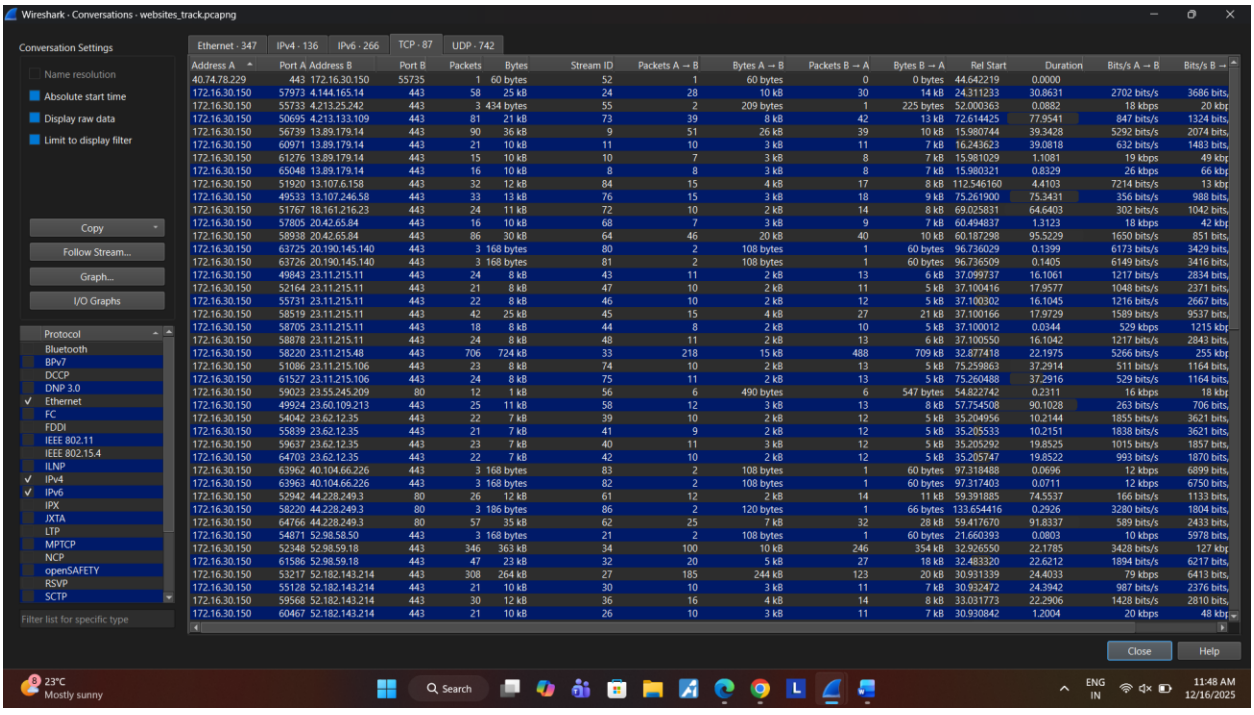
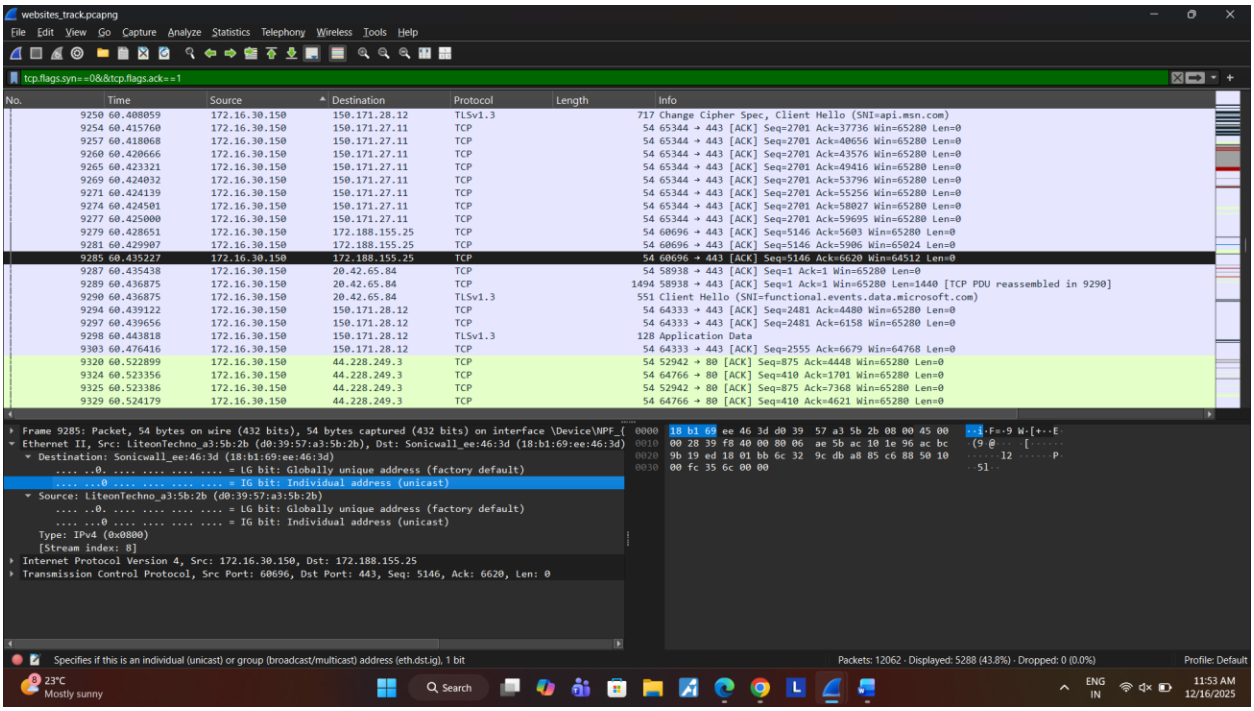
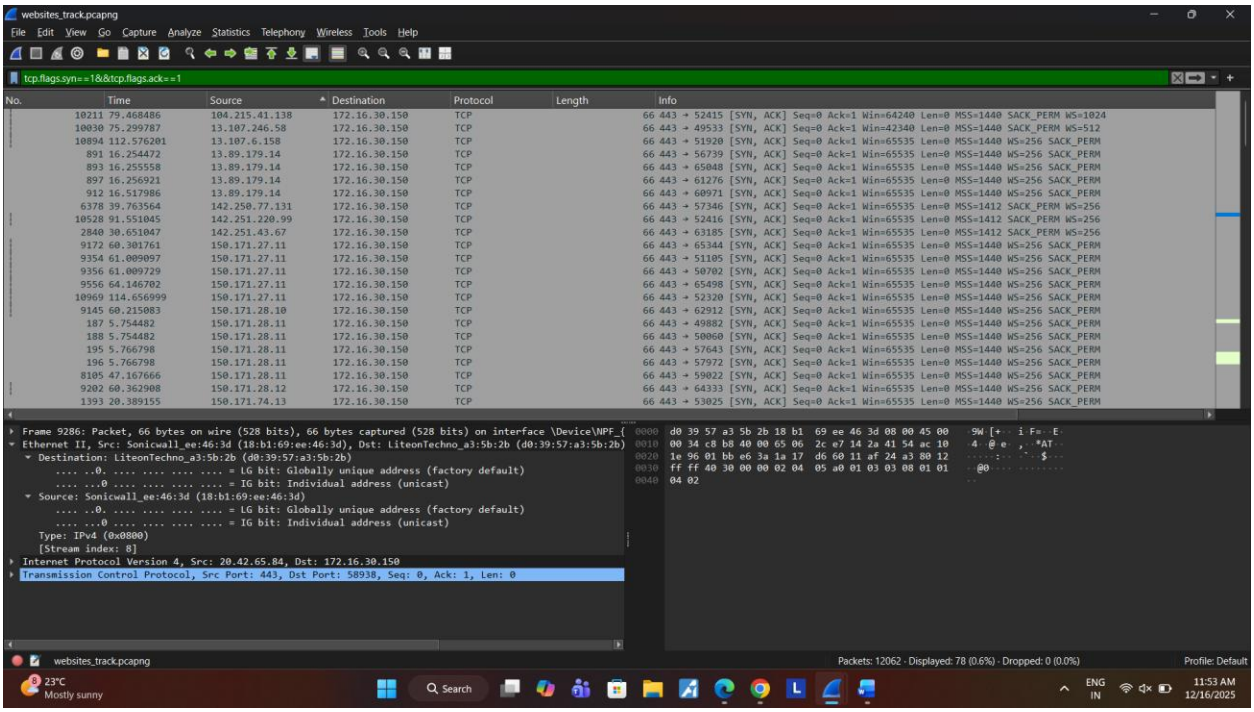
Packets: 12062 · Displayed: 26 (0.2%) · Dropped: 0 (0.0%)
Profile: Default
23°C
Mostly sunny
Search
ENG
IN
11:28 AM
12/16/2025

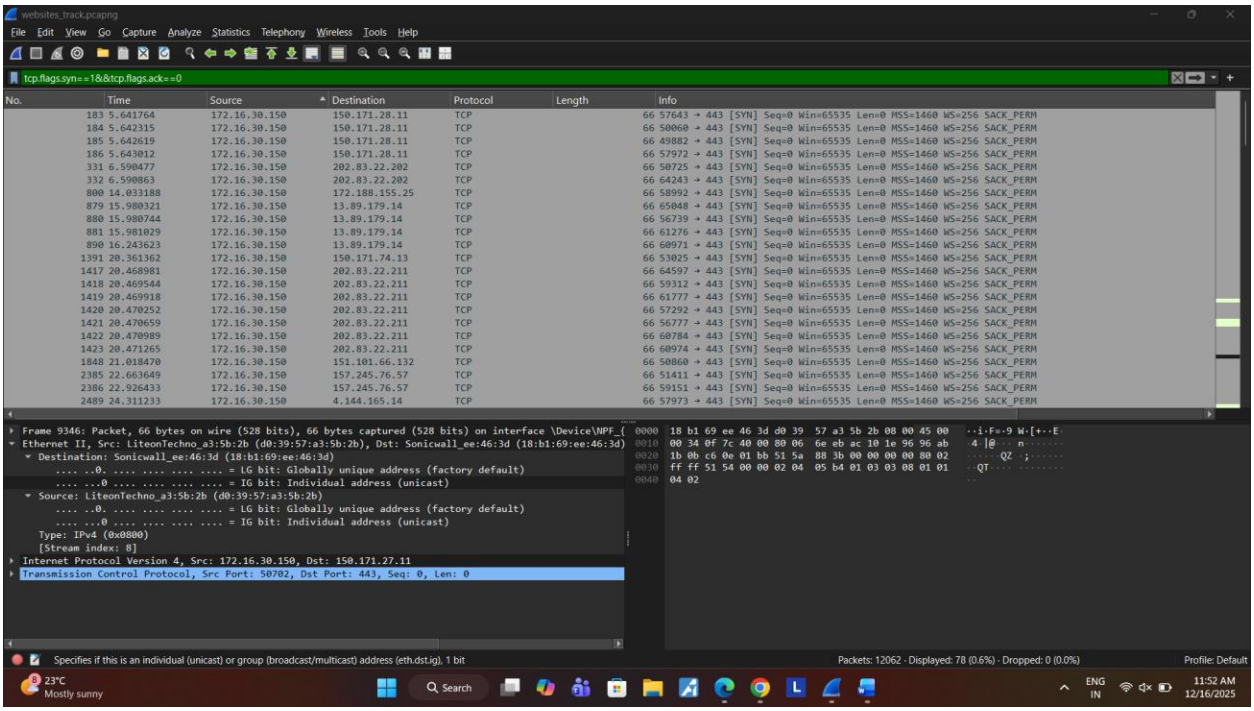
3rd:


websites_track.pcapng
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
tcp.flags.syn==1&&tcp.flags.ack==0&&ip.src==172.16.30.150
No. Time Source Destination Protocol Length Info
8977 57.876697 172.16.30.150 202.83.22.211 TCP 66 53641 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
9080 59.391885 172.16.30.150 44.228.249.3 TCP 66 52942 → 80 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
9082 59.417670 172.16.30.150 44.228.249.3 TCP 66 64766 → 80 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
9130 60.179308 172.16.30.150 150.171.28.10 TCP 66 62912 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
9132 60.187298 172.16.30.150 20.42.65.84 TCP 66 58938 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
9149 60.224369 172.16.30.150 172.188.155.25 TCP 66 60696 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
9155 60.273357 172.16.30.150 150.171.27.11 TCP 66 65344 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
9181 60.325334 172.16.30.150 150.171.28.12 TCP 66 64333 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
9304 60.494837 172.16.30.150 20.42.65.84 TCP 66 57805 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
9343 60.680037 172.16.30.150 150.171.27.11 TCP 66 51105 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
9346 60.937136 172.16.30.150 150.171.27.11 TCP 66 50702 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
9551 64.118172 172.16.30.150 150.171.27.11 TCP 66 65498 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
9806 69.025831 172.16.30.150 18.161.216.23 TCP 66 51767 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
9919 72.614425 172.16.30.150 4.213.133.109 TCP 66 50695 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
10014 75.259863 172.16.30.150 23.11.215.106 TCP 66 51086 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
10015 75.260488 172.16.30.150 23.11.215.106 TCP 66 61527 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
10016 75.261900 172.16.30.150 13.107.246.58 TCP 66 49533 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
10017 75.263386 172.16.30.150 202.83.22.211 TCP 66 53315 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
10199 79.291604 172.16.30.150 104.215.41.138 TCP 66 52415 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
10527 91.448209 172.16.30.150 142.251.220.99 TCP 66 52416 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
10891 112.546160 172.16.30.150 13.107.6.158 TCP 66 51920 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
10968 114.630653 172.16.30.150 150.171.27.11 TCP 66 52320 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
11458 133.654416 172.16.30.150 44.228.249.3 TCP 66 58220 → 80 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
Frame 10199: Packet, 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface \Device\NPF_
Ethernet II, Src: LiteonTechno_a3:5b:2b (d0:39:57:a3:5b:2b), Dst: Sonicwall_ee:46:3d (18:b1:69:ee:46:3d)
Destination: Sonicwall_ee:46:3d (18:b1:69:ee:46:3d)
.... ..0. .... = LG bit: Globally unique address (factory default)
....0 .... = IG bit: Individual address (unicast)
Source: LiteonTechno_a3:5b:2b (d0:39:57:a3:5b:2b)
Type: IPv4 (0x0800)
[Stream index: 8]
Internet Protocol Version 4, Src: 172.16.30.150, Dst: 104.215.41.138
Transmission Control Protocol, Src Port: 52415, Dst Port: 443, Seq: 0, Len: 0
0000 18 b1 69 ee 46 3d d0 39 57 a3 5b 2b 08 00 45 00
0010 00 34 d4 12 40 00 80 06 c9 a9 ac 10 1e 96 68 d7
0020 29 8a cc bf 01 bb fa eb e6 c4 00 00 00 00 80 02
0030 ff ff 61 dd 00 00 02 04 05 b4 01 03 03 08 01 01
0040 04 02
Specifies if this is an individual (unicast) or group (broadcast/multicast) address (eth.dst.ig), 1 bit
Packets: 12062 · Displayed: 78 (0.6%) · Dropped: 0 (0.0%)
Profile: Default
23°C Mostly sunny
Search
ENG IN
11:39 AM 12/16/2025

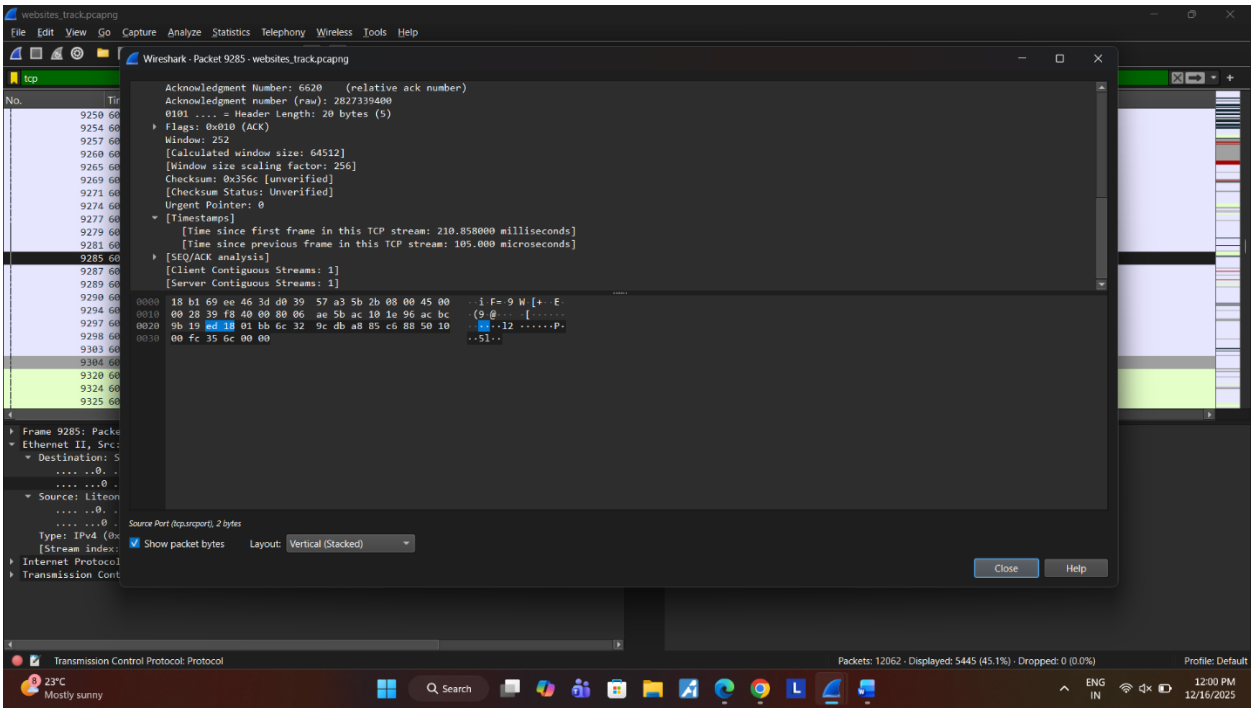

Wireshark · Conversations · websites_track.pcapng
Conversation Settings
Name resolution
Absolute start time
Display raw data
Limit to display filter
Copy
Follow Stream...
Graph...
I/O Graphs
Protocol
Bluetooth
BPv7
DCCP
DNP 3.0
Ethernet
FC
FDDI
IEEE 802.11
IEEE 802.15.4
ILNP
IPv4
IPv6
IPX
JXTA
LTP
MPTCP
NCP
openSAFETY
RSVP
SCTP
Filter list for specific type
Ethernet · 347 IPv4 · 136 IPv6 · 266 TCP · 87 UDP · 742
Address A Port A Address B Port B Packets Bytes Stream ID Packets A → B Bytes A → B Packets B → A Bytes B → A Rel Start Duration Bits/s A → B Bits/s B →
40.74.78.229 443 172.16.30.150 55735 1 60 bytes 52 1 60 bytes 0 0 bytes 44.642219 0.0000
172.16.30.150 57973 4.144.165.14 443 58 25 kB 24 28 10 kB 30 14 kB 24.311233 30.8631 2702 bits/s 3686 bits
172.16.30.150 55733 4.213.25.242 443 3 434 bytes 55 2 209 bytes 1 225 bytes 52.000363 0.0882 18 kbps 20 kbp
172.16.30.150 50695 4.213.133.109 443 81 21 kB 73 39 8 kB 42 13 kB 72.614425 77.9541 847 bits/s 1324 bits
172.16.30.150 56739 13.89.179.14 443 90 36 kB 9 51 26 kB 39 10 kB 15.980744 39.3428 5292 bits/s 2074 bits
172.16.30.150 60971 13.89.179.14 443 21 10 kB 11 10 3 kB 11 7 kB 16.243623 39.0818 632 bits/s 1483 bits
172.16.30.150 61276 13.89.179.14 443 15 10 kB 10 7 3 kB 8 7 kB 15.981029 1.1081 19 kbps 49 kbp
172.16.30.150 65048 13.89.179.14 443 16 10 kB 8 8 3 kB 8 7 kB 15.980321 0.8329 26 kbps 66 kbp
172.16.30.150 51920 13.107.6.158 443 32 12 kB 84 15 4 kB 17 8 kB 112.546160 4.4103 7214 bits/s 13 kbp
172.16.30.150 49533 13.107.246.58 443 33 13 kB 76 15 3 kB 18 9 kB 75.261900 75.3431 356 bits/s 988 bits
172.16.30.150 51767 18.161.216.23 443 24 11 kB 72 10 2 kB 14 8 kB 69.025831 64.6403 302 bits/s 1042 bits
172.16.30.150 57805 20.42.65.84 443 16 10 kB 68 7 3 kB 9 7 kB 60.494837 1.3123 18 kbps 42 kbp
172.16.30.150 58938 20.42.65.84 443 86 30 kB 64 46 20 kB 40 10 kB 60.187298 95.5229 1650 bits/s 851 bits
172.16.30.150 63725 20.190.145.140 443 3 168 bytes 80 2 108 bytes 1 60 bytes 96.736029 0.1399 6173 bits/s 3429 bits
172.16.30.150 63726 20.190.145.140 443 3 168 bytes 81 2 108 bytes 1 60 bytes 96.736509 0.1405 6149 bits/s 3416 bits
172.16.30.150 49843 23.11.215.11 443 24 8 kB 43 11 2 kB 13 6 kB 37.099737 16.1061 1217 bits/s 2834 bits
172.16.30.150 52164 23.11.215.11 443 21 8 kB 47 10 2 kB 11 5 kB 37.100416 17.9577 1048 bits/s 2371 bits
172.16.30.150 55731 23.11.215.11 443 22 8 kB 46 10 2 kB 12 5 kB 37.100302 16.1045 1216 bits/s 2667 bits
172.16.30.150 58519 23.11.215.11 443 42 25 kB 45 15 4 kB 27 21 kB 37.100166 17.9729 1589 bits/s 9537 bits
172.16.30.150 58705 23.11.215.11 443 18 8 kB 44 8 2 kB 10 5 kB 37.100012 0.0344 529 kbps 1215 kbp
172.16.30.150 58878 23.11.215.11 443 24 8 kB 48 11 2 kB 13 6 kB 37.100550 16.1042 1217 bits/s 2843 bits
172.16.30.150 58220 23.11.215.48 443 706 724 kB 33 218 15 kB 488 709 kB 32.877418 22.1975 5266 bits/s 255 kbp
172.16.30.150 51086 23.11.215.106 443 23 8 kB 74 10 2 kB 13 5 kB 75.259863 37.2914 511 bits/s 1164 bits
172.16.30.150 61527 23.11.215.106 443 24 8 kB 75 11 2 kB 13 5 kB 75.260488 37.2916 529 bits/s 1164 bits
172.16.30.150 59023 23.55.245.209 80 12 1 kB 56 6 490 bytes 6 547 bytes 54.822742 0.2311 16 kbps 18 kbp
172.16.30.150 49924 23.60.109.213 443 25 11 kB 58 12 3 kB 13 8 kB 57.754508 90.1028 263 bits/s 706 bits
172.16.30.150 54042 23.62.12.35 443 22 7 kB 39 10 2 kB 12 5 kB 35.204956 10.2144 1855 bits/s 3621 bits
172.16.30.150 55839 23.62.12.35 443 21 7 kB 41 9 2 kB 12 5 kB 35.205533 10.2151 1838 bits/s 3621 bits
172.16.30.150 59637 23.62.12.35 443 23 7 kB 40 11 3 kB 12 5 kB 35.205292 19.8525 1015 bits/s 1857 bits
172.16.30.150 64703 23.62.12.35 443 22 7 kB 42 10 2 kB 12 5 kB 35.205747 19.8522 993 bits/s 1870 bits
172.16.30.150 63962 40.104.66.226 443 3 168 bytes 83 2 108 bytes 1 60 bytes 97.318488 0.0696 12 kbps 6899 bits
172.16.30.150 63963 40.104.66.226 443 3 168 bytes 82 2 108 bytes 1 60 bytes 97.317403 0.0711 12 kbps 6750 bits
172.16.30.150 52942 44.228.249.3 80 26 12 kB 61 12 2 kB 14 11 kB 59.391885 74.5537 166 bits/s 1133 bits
172.16.30.150 58220 44.228.249.3 80 3 186 bytes 86 2 120 bytes 1 66 bytes 133.654416 0.2926 3280 bits/s 1804 bits
172.16.30.150 64766 44.228.249.3 80 57 35 kB 62 25 7 kB 32 28 kB 59.417670 91.8337 589 bits/s 2433 bits
172.16.30.150 54871 52.98.58.50 443 3 168 bytes 21 2 108 bytes 1 60 bytes 21.660393 0.0803 10 kbps 5978 bits
172.16.30.150 52348 52.98.59.18 443 346 363 kB 34 100 10 kB 246 354 kB 32.926550 22.1785 3428 bits/s 127 kbp
172.16.30.150 61586 52.98.59.18 443 47 23 kB 32 20 5 kB 27 18 kB 32.483320 22.6212 1894 bits/s 6217 bits
172.16.30.150 53217 52.182.143.214 443 308 264 kB 27 185 244 kB 123 20 kB 30.931339 24.4033 79 kbps 6413 bits
172.16.30.150 55128 52.182.143.214 443 21 10 kB 30 10 3 kB 11 7 kB 30.932472 24.3942 987 bits/s 2376 bits
172.16.30.150 59568 52.182.143.214 443 30 12 kB 36 16 4 kB 14 8 kB 33.031773 22.2906 1428 bits/s 2810 bits
172.16.30.150 60467 52.182.143.214 443 21 10 kB 26 10 3 kB 11 7 kB 30.930842 1.2004 20 kbps 48 kbp
Close
Help
23°C Mostly sunny
Search
ENG IN
11:48 AM 12/16/2025


websites_track.pcapng
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
tcp.flags.syn==0&&tcp.flags.ack==1
No. Time Source Destination Protocol Length Info
9250 60.408059 172.16.30.150 150.171.28.12 TLSv1.3 717 Change Cipher Spec, Client Hello (SNI=api.msn.com)
9254 60.415760 172.16.30.150 150.171.27.11 TCP 54 65344 → 443 [ACK] Seq=2701 Ack=37736 Win=65280 Len=0
9257 60.418068 172.16.30.150 150.171.27.11 TCP 54 65344 → 443 [ACK] Seq=2701 Ack=40656 Win=65280 Len=0
9260 60.420666 172.16.30.150 150.171.27.11 TCP 54 65344 → 443 [ACK] Seq=2701 Ack=43576 Win=65280 Len=0
9265 60.423321 172.16.30.150 150.171.27.11 TCP 54 65344 → 443 [ACK] Seq=2701 Ack=49416 Win=65280 Len=0
9269 60.424032 172.16.30.150 150.171.27.11 TCP 54 65344 → 443 [ACK] Seq=2701 Ack=53796 Win=65280 Len=0
9271 60.424139 172.16.30.150 150.171.27.11 TCP 54 65344 → 443 [ACK] Seq=2701 Ack=55256 Win=65280 Len=0
9274 60.424501 172.16.30.150 150.171.27.11 TCP 54 65344 → 443 [ACK] Seq=2701 Ack=58027 Win=65280 Len=0
9277 60.425000 172.16.30.150 150.171.27.11 TCP 54 65344 → 443 [ACK] Seq=2701 Ack=59695 Win=65280 Len=0
9279 60.428651 172.16.30.150 172.188.155.25 TCP 54 60696 → 443 [ACK] Seq=5146 Ack=5603 Win=65280 Len=0
9281 60.429907 172.16.30.150 172.188.155.25 TCP 54 60696 → 443 [ACK] Seq=5146 Ack=5906 Win=65024 Len=0
9285 60.435227 172.16.30.150 172.188.155.25 TCP 54 60696 → 443 [ACK] Seq=5146 Ack=6620 Win=64512 Len=0
9287 60.435438 172.16.30.150 20.42.65.84 TCP 54 58938 → 443 [ACK] Seq=1 Ack=1 Win=65280 Len=0
9289 60.436875 172.16.30.150 20.42.65.84 TCP 1494 58938 → 443 [ACK] Seq=1 Ack=1 Win=65280 Len=1440 [TCP PDU reassembled in 9290]
9290 60.436875 172.16.30.150 20.42.65.84 TLSv1.3 551 Client Hello (SNI=functional.events.data.microsoft.com)
9294 60.439122 172.16.30.150 150.171.28.12 TCP 54 64333 → 443 [ACK] Seq=2481 Ack=4480 Win=65280 Len=0
9297 60.439656 172.16.30.150 150.171.28.12 TCP 54 64333 → 443 [ACK] Seq=2481 Ack=6158 Win=65280 Len=0
9298 60.443818 172.16.30.150 150.171.28.12 TLSv1.3 128 Application Data
9303 60.476416 172.16.30.150 150.171.28.12 TCP 54 64333 → 443 [ACK] Seq=2555 Ack=6679 Win=64768 Len=0
9320 60.522899 172.16.30.150 44.228.249.3 TCP 54 52942 → 80 [ACK] Seq=875 Ack=4448 Win=65280 Len=0
9324 60.523356 172.16.30.150 44.228.249.3 TCP 54 64766 → 80 [ACK] Seq=410 Ack=1701 Win=65280 Len=0
9325 60.523386 172.16.30.150 44.228.249.3 TCP 54 52942 → 80 [ACK] Seq=875 Ack=7368 Win=65280 Len=0
9329 60.524179 172.16.30.150 44.228.249.3 TCP 54 64766 → 80 [ACK] Seq=410 Ack=4621 Win=65280 Len=0
Frame 9285: Packet, 54 bytes on wire (432 bits), 54 bytes captured (432 bits) on interface \Device\NPF_{
Ethernet II, Src: LiteonTechno_a3:5b:2b (d0:39:57:a3:5b:2b), Dst: Sonicwall_ee:46:3d (18:b1:69:ee:46:3d)
Destination: Sonicwall_ee:46:3d (18:b1:69:ee:46:3d)
.... ..0. .... = LG bit: Globally unique address (factory default)
....0 .... = IG bit: Individual address (unicast)
Source: LiteonTechno_a3:5b:2b (d0:39:57:a3:5b:2b)
.... ..0. .... = LG bit: Globally unique address (factory default)
....0 .... = IG bit: Individual address (unicast)
Type: IPv4 (0x0800)
[Stream index: 8]
Internet Protocol Version 4, Src: 172.16.30.150, Dst: 172.188.155.25
Transmission Control Protocol, Src Port: 60696, Dst Port: 443, Seq: 5146, Ack: 6620, Len: 0
0000 18 b1 69 ee 46 3d d0 39 57 a3 5b 2b 08 00 45 00
0010 00 28 39 f8 40 00 80 06 ae 5b ac 10 1e 96 ac bc
0020 9b 19 ed 18 01 bb 6c 32 9c db a8 85 c6 88 50 10
0030 00 fc 35 6c 00 00
Specifies if this is an individual (unicast) or group (broadcast/multicast) address (eth.dst.ig), 1 bit
Packets: 12062 · Displayed: 5288 (43.8%) · Dropped: 0 (0.0%)
Profile: Default
23°C Mostly sunny
Search
ENG IN
11:53 AM 12/16/2025

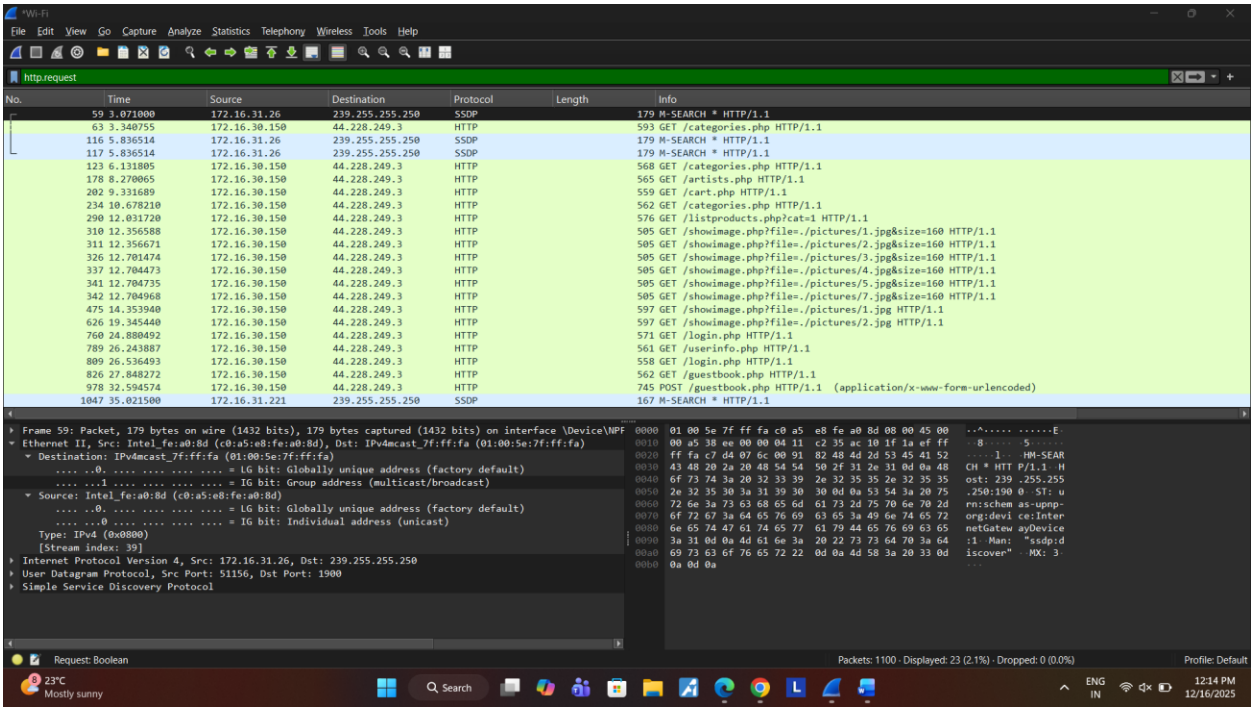

websites_track.pcapng
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
tcp.flags.syn==1&&tcp.flags.ack==1
No. Time Source Destination Protocol Length Info
10211 79.468486 104.215.41.138 172.16.30.150 TCP 66 443 → 52415 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1440 SACK_PERM WS=1024
10030 75.299787 13.107.246.58 172.16.30.150 TCP 66 443 → 49533 [SYN, ACK] Seq=0 Ack=1 Win=42340 Len=0 MSS=1440 SACK_PERM WS=512
10894 112.576201 13.107.6.158 172.16.30.150 TCP 66 443 → 51920 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1440 WS=256 SACK_PERM
891 16.254472 13.89.179.14 172.16.30.150 TCP 66 443 → 56739 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1440 WS=256 SACK_PERM
893 16.255558 13.89.179.14 172.16.30.150 TCP 66 443 → 65048 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1440 WS=256 SACK_PERM
897 16.256921 13.89.179.14 172.16.30.150 TCP 66 443 → 61276 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1440 WS=256 SACK_PERM
912 16.517986 13.89.179.14 172.16.30.150 TCP 66 443 → 60971 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1440 WS=256 SACK_PERM
6378 39.763564 142.250.77.131 172.16.30.150 TCP 66 443 → 57346 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1412 SACK_PERM WS=256
10528 91.551045 142.251.220.99 172.16.30.150 TCP 66 443 → 52416 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1412 SACK_PERM WS=256
2840 30.651047 142.251.43.67 172.16.30.150 TCP 66 443 → 63185 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1412 SACK_PERM WS=256
9172 60.301761 150.171.27.11 172.16.30.150 TCP 66 443 → 65344 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1440 WS=256 SACK_PERM
9354 61.009097 150.171.27.11 172.16.30.150 TCP 66 443 → 51105 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1440 WS=256 SACK_PERM
9356 61.009729 150.171.27.11 172.16.30.150 TCP 66 443 → 50702 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1440 WS=256 SACK_PERM
9556 64.146702 150.171.27.11 172.16.30.150 TCP 66 443 → 65498 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1440 WS=256 SACK_PERM
10969 114.656999 150.171.27.11 172.16.30.150 TCP 66 443 → 52320 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1440 WS=256 SACK_PERM
9145 60.215083 150.171.28.10 172.16.30.150 TCP 66 443 → 62912 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1440 WS=256 SACK_PERM
187 5.754482 150.171.28.11 172.16.30.150 TCP 66 443 → 49882 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1440 WS=256 SACK_PERM
188 5.754482 150.171.28.11 172.16.30.150 TCP 66 443 → 50060 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1440 WS=256 SACK_PERM
195 5.766798 150.171.28.11 172.16.30.150 TCP 66 443 → 57643 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1440 WS=256 SACK_PERM
196 5.766798 150.171.28.11 172.16.30.150 TCP 66 443 → 57972 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1440 WS=256 SACK_PERM
8105 47.167666 150.171.28.11 172.16.30.150 TCP 66 443 → 59022 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1440 WS=256 SACK_PERM
9202 60.362908 150.171.28.12 172.16.30.150 TCP 66 443 → 64333 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1440 WS=256 SACK_PERM
1393 20.389155 150.171.74.13 172.16.30.150 TCP 66 443 → 53025 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1440 WS=256 SACK_PERM
Frame 9286: Packet, 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface \Device\NPF_{
Ethernet II, Src: Sonicwall_ee:46:3d (18:b1:69:ee:46:3d), Dst: LiteonTechno_a3:5b:2b (d0:39:57:a3:5b:2b)
Destination: LiteonTechno_a3:5b:2b (d0:39:57:a3:5b:2b)
.... ..0. .... = LG bit: Globally unique address (factory default)
....0 .... = IG bit: Individual address (unicast)
Source: Sonicwall_ee:46:3d (18:b1:69:ee:46:3d)
.... ..0. .... = LG bit: Globally unique address (factory default)
....0 .... = IG bit: Individual address (unicast)
Type: IPv4 (0x0800)
[Stream index: 8]
Internet Protocol Version 4, Src: 20.42.65.84, Dst: 172.16.30.150
Transmission Control Protocol, Src Port: 443, Dst Port: 58938, Seq: 0, Ack: 1, Len: 0
0000 d0 39 57 a3 5b 2b 18 b1 69 ee 46 3d 08 00 45 00
0010 00 34 c8 b8 40 00 65 06 2c e7 14 2a 41 54 ac 10
0020 1e 96 01 bb e6 3a 1a 17 d6 60 11 af 24 a3 80 12
0030 ff ff 40 30 00 00 02 04 05 a0 01 03 03 08 01 01
0040 04 02
websites_track.pcapng
Packets: 12062 · Displayed: 78 (0.6%) · Dropped: 0 (0.0%)
Profile: Default
23°C Mostly sunny
Search
ENG IN
11:53 AM 12/16/2025


websites_track.pcapng
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
tcp.flags.syn==1&&tcp.flags.ack==0
No. Time Source Destination Protocol Length Info
183 5.641764 172.16.30.150 150.171.28.11 TCP 66 57643 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
184 5.642315 172.16.30.150 150.171.28.11 TCP 66 50060 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
185 5.642619 172.16.30.150 150.171.28.11 TCP 66 49882 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
186 5.643012 172.16.30.150 150.171.28.11 TCP 66 57972 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
331 6.590477 172.16.30.150 202.83.22.202 TCP 66 50725 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
332 6.590863 172.16.30.150 202.83.22.202 TCP 66 64243 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
800 14.033188 172.16.30.150 172.188.155.25 TCP 66 58992 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
879 15.980321 172.16.30.150 13.89.179.14 TCP 66 65048 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
880 15.980744 172.16.30.150 13.89.179.14 TCP 66 56739 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
881 15.981029 172.16.30.150 13.89.179.14 TCP 66 61276 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
890 16.243623 172.16.30.150 13.89.179.14 TCP 66 60971 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
1391 20.361362 172.16.30.150 150.171.74.13 TCP 66 53025 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
1417 20.468981 172.16.30.150 202.83.22.211 TCP 66 64597 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
1418 20.469544 172.16.30.150 202.83.22.211 TCP 66 59312 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
1419 20.469918 172.16.30.150 202.83.22.211 TCP 66 61777 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
1420 20.470252 172.16.30.150 202.83.22.211 TCP 66 57292 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
1421 20.470659 172.16.30.150 202.83.22.211 TCP 66 56777 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
1422 20.470989 172.16.30.150 202.83.22.211 TCP 66 60784 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
1423 20.471265 172.16.30.150 202.83.22.211 TCP 66 60974 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
1848 21.018470 172.16.30.150 151.101.66.132 TCP 66 50860 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
2385 22.663649 172.16.30.150 157.245.76.57 TCP 66 51411 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
2386 22.926433 172.16.30.150 157.245.76.57 TCP 66 59151 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
2489 24.311233 172.16.30.150 4.144.165.14 TCP 66 57973 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
Frame 9346: Packet, 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface \Device\NPF_{
Ethernet II, Src: LiteonTechno_a3:5b:2b (d0:39:57:a3:5b:2b), Dst: Sonicwall_ee:46:3d (18:b1:69:ee:46:3d)
Destination: Sonicwall_ee:46:3d (18:b1:69:ee:46:3d)
.... ..0. .... = LG bit: Globally unique address (factory default)
....0 .... = IG bit: Individual address (unicast)
Source: LiteonTechno_a3:5b:2b (d0:39:57:a3:5b:2b)
.... ..0. .... = LG bit: Globally unique address (factory default)
....0 .... = IG bit: Individual address (unicast)
Type: IPv4 (0x0800)
[Stream index: 8]
Internet Protocol Version 4, Src: 172.16.30.150, Dst: 150.171.27.11
Transmission Control Protocol, Src Port: 50702, Dst Port: 443, Seq: 0, Len: 0
0000 18 b1 69 ee 46 3d d0 39 57 a3 5b 2b 08 00 45 00
0010 00 34 0f 7c 40 00 80 06 6e eb ac 10 1e 96 96 ab
0020 1b 0b c6 0e 01 bb 51 5a 88 3b 00 00 00 00 80 02
0030 ff ff 51 54 00 00 02 04 05 b4 01 03 03 08 01 01
0040 04 02
Specifies if this is an individual (unicast) or group (broadcast/multicast) address (eth.dst.ig), 1 bit
Packets: 12062 · Displayed: 78 (0.6%) · Dropped: 0 (0.0%)
Profile: Default
23°C
Mostly sunny
Search
ENG
IN
11:52 AM
12/16/2025

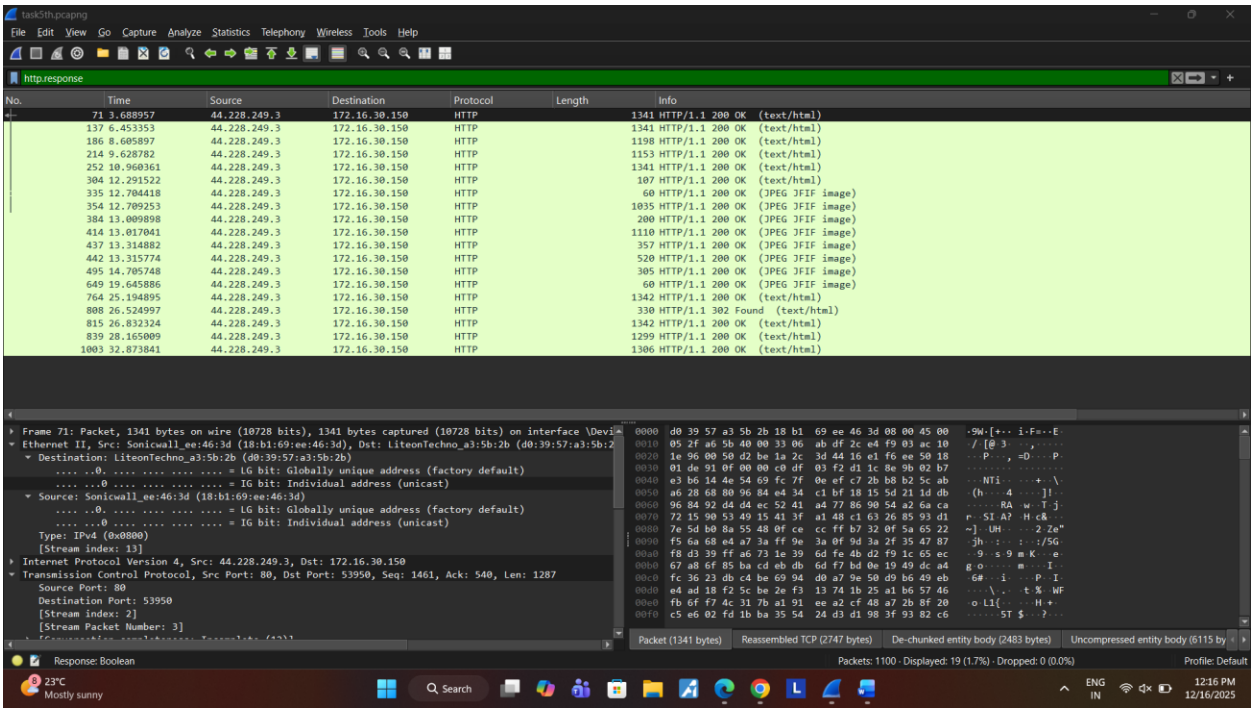
4th:


websites_track.pcapng
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
Wireshark - Packet 9285 · websites_track.pcapng
Acknowledgment Number: 6620 (relative ack number)
Acknowledgment number (raw): 2827339400
0101 .... = Header Length: 20 bytes (5)
Flags: 0x010 (ACK)
Window: 252
[Calculated window size: 64512]
[Window size scaling factor: 256]
Checksum: 0x356c [unverified]
[Checksum Status: Unverified]
Urgent Pointer: 0
[Timestamps]
[Time since first frame in this TCP stream: 210.858000 milliseconds]
[Time since previous frame in this TCP stream: 105.000 microseconds]
[SEQ/ACK analysis]
[Client Contiguous Streams: 1]
[Server Contiguous Streams: 1]
0000 18 b1 69 ee 46 3d d0 39 57 a3 5b 2b 08 00 45 00
0010 00 28 39 f8 40 00 80 06 ae 5b ac 10 1e 96 ac bc
0020 9b 19 ed 18 01 bb 6c 32 9c db a8 85 c6 88 50 10
0030 00 fc 35 6c 00 00
Source Port (tcp.srcport), 2 bytes
Show packet bytes
Layout: Vertical (Stacked)
Close
Help
Transmission Control Protocol: Protocol
Packets: 12062 · Displayed: 5445 (45.1%) · Dropped: 0 (0.0%)
Profile: Default
23°C
Mostly sunny
Search
ENG
IN
12:00 PM
12/16/2025

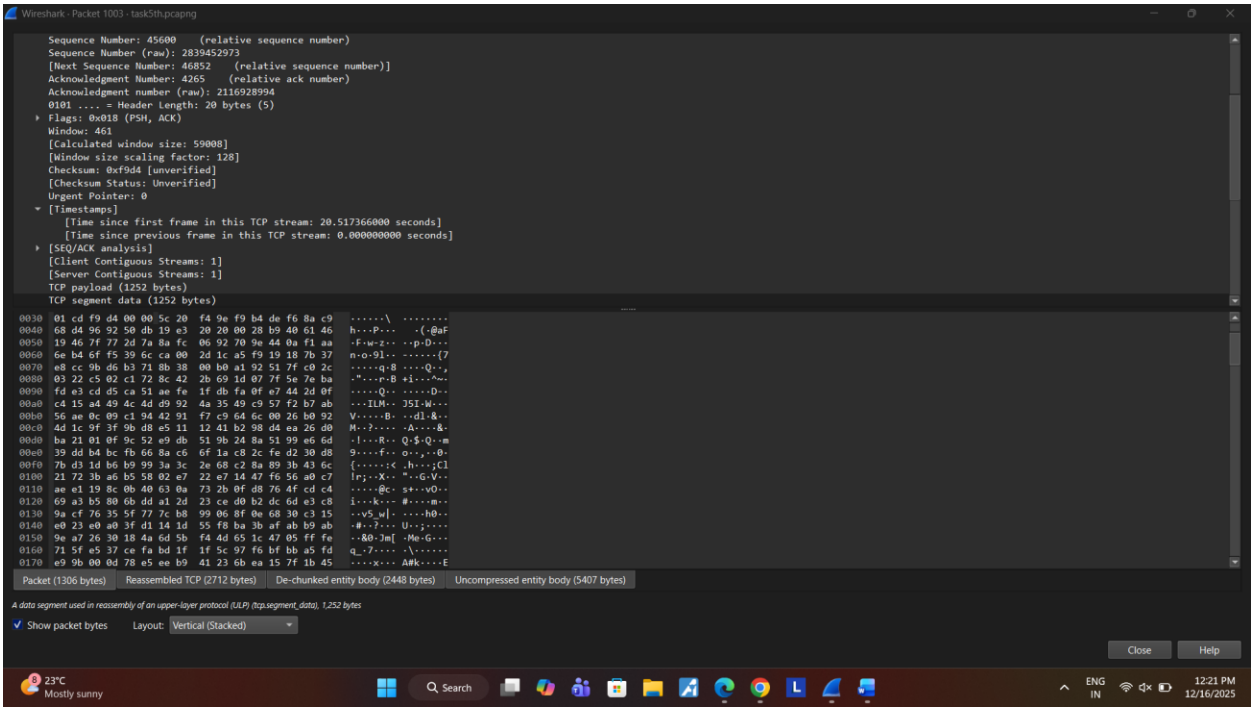
5th:


*Wi-Fi
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http.request
No. Time Source Destination Protocol Length Info
59 3.071000 172.16.31.26 239.255.255.250 SSDP 179 M-SEARCH * HTTP/1.1
63 3.340755 172.16.30.150 44.228.249.3 HTTP 593 GET /categories.php HTTP/1.1
116 5.836514 172.16.31.26 239.255.255.250 SSDP 179 M-SEARCH * HTTP/1.1
117 5.836514 172.16.31.26 239.255.255.250 SSDP 179 M-SEARCH * HTTP/1.1
123 6.131805 172.16.30.150 44.228.249.3 HTTP 568 GET /categories.php HTTP/1.1
178 8.270065 172.16.30.150 44.228.249.3 HTTP 565 GET /artists.php HTTP/1.1
202 9.331689 172.16.30.150 44.228.249.3 HTTP 559 GET /cart.php HTTP/1.1
234 10.678210 172.16.30.150 44.228.249.3 HTTP 562 GET /categories.php HTTP/1.1
290 12.031720 172.16.30.150 44.228.249.3 HTTP 576 GET /listproducts.php?cat=1 HTTP/1.1
310 12.356588 172.16.30.150 44.228.249.3 HTTP 505 GET /showimage.php?file=./pictures/1.jpg&size=160 HTTP/1.1
311 12.356671 172.16.30.150 44.228.249.3 HTTP 505 GET /showimage.php?file=./pictures/2.jpg&size=160 HTTP/1.1
326 12.701474 172.16.30.150 44.228.249.3 HTTP 505 GET /showimage.php?file=./pictures/3.jpg&size=160 HTTP/1.1
337 12.704473 172.16.30.150 44.228.249.3 HTTP 505 GET /showimage.php?file=./pictures/4.jpg&size=160 HTTP/1.1
341 12.704735 172.16.30.150 44.228.249.3 HTTP 505 GET /showimage.php?file=./pictures/5.jpg&size=160 HTTP/1.1
342 12.704968 172.16.30.150 44.228.249.3 HTTP 505 GET /showimage.php?file=./pictures/7.jpg&size=160 HTTP/1.1
475 14.353940 172.16.30.150 44.228.249.3 HTTP 597 GET /showimage.php?file=./pictures/1.jpg HTTP/1.1
626 19.345440 172.16.30.150 44.228.249.3 HTTP 597 GET /showimage.php?file=./pictures/2.jpg HTTP/1.1
760 24.880492 172.16.30.150 44.228.249.3 HTTP 571 GET /login.php HTTP/1.1
789 26.243887 172.16.30.150 44.228.249.3 HTTP 561 GET /userinfo.php HTTP/1.1
809 26.536493 172.16.30.150 44.228.249.3 HTTP 558 GET /login.php HTTP/1.1
826 27.848272 172.16.30.150 44.228.249.3 HTTP 562 GET /guestbook.php HTTP/1.1
978 32.594574 172.16.30.150 44.228.249.3 HTTP 745 POST /guestbook.php HTTP/1.1 (application/x-www-form-urlencoded)
1047 35.021500 172.16.31.221 239.255.255.250 SSDP 167 M-SEARCH * HTTP/1.1
Frame 59: Packet, 179 bytes on wire (1432 bits), 179 bytes captured (1432 bits) on interface \Device\NPF
Ethernet II, Src: Intel_fe:a0:8d (c0:a5:e8:fe:a0:8d), Dst: IPv4mcast_7f:ff:fa (01:00:5e:7f:ff:fa)
Destination: IPv4mcast_7f:ff:fa (01:00:5e:7f:ff:fa)
.... ..0. .... = LG bit: Globally unique address (factory default)
....1 .... = IG bit: Group address (multicast/broadcast)
Source: Intel_fe:a0:8d (c0:a5:e8:fe:a0:8d)
.... ..0. .... = LG bit: Globally unique address (factory default)
....0 .... = IG bit: Individual address (unicast)
Type: IPv4 (0x0800)
[Stream index: 39]
Internet Protocol Version 4, Src: 172.16.31.26, Dst: 239.255.255.250
User Datagram Protocol, Src Port: 51156, Dst Port: 1900
Simple Service Discovery Protocol
0000 01 00 5e 7f ff fa c0 a5 e8 fe a0 8d 08 00 45 00
0010 00 a5 38 ee 00 00 04 11 c2 35 ac 10 1f 1a ef ff
0020 ff fa c7 d4 07 6c 00 91 82 48 4d 2d 53 45 41 52
0030 43 48 20 2a 20 48 54 54 50 2f 31 2e 31 0d 0a 48
0040 6f 73 74 3a 20 32 33 39 2e 32 35 35 2e 32 35 35
0050 2e 32 35 30 3a 31 39 30 30 0d 0a 53 54 3a 20 75
0060 72 6e 3a 73 63 68 65 6d 61 73 2d 75 70 6e 70 2d
0070 6f 72 67 3a 64 65 76 69 63 65 3a 49 6e 74 65 72
0080 6e 65 74 47 61 74 65 77 61 79 44 65 76 69 63 65
0090 3a 31 0d 0a 4d 61 6e 3a 20 22 73 73 64 70 3a 64
00a0 69 73 63 6f 76 65 72 22 0d 0a 4d 58 3a 20 33 0d
00b0 0a 0d 0a
Request: Boolean
Packets: 1100 · Displayed: 23 (2.1%) · Dropped: 0 (0.0%)
Profile: Default
23°C
Mostly sunny
Search
ENG
IN
12:14 PM
12/16/2025

6th:

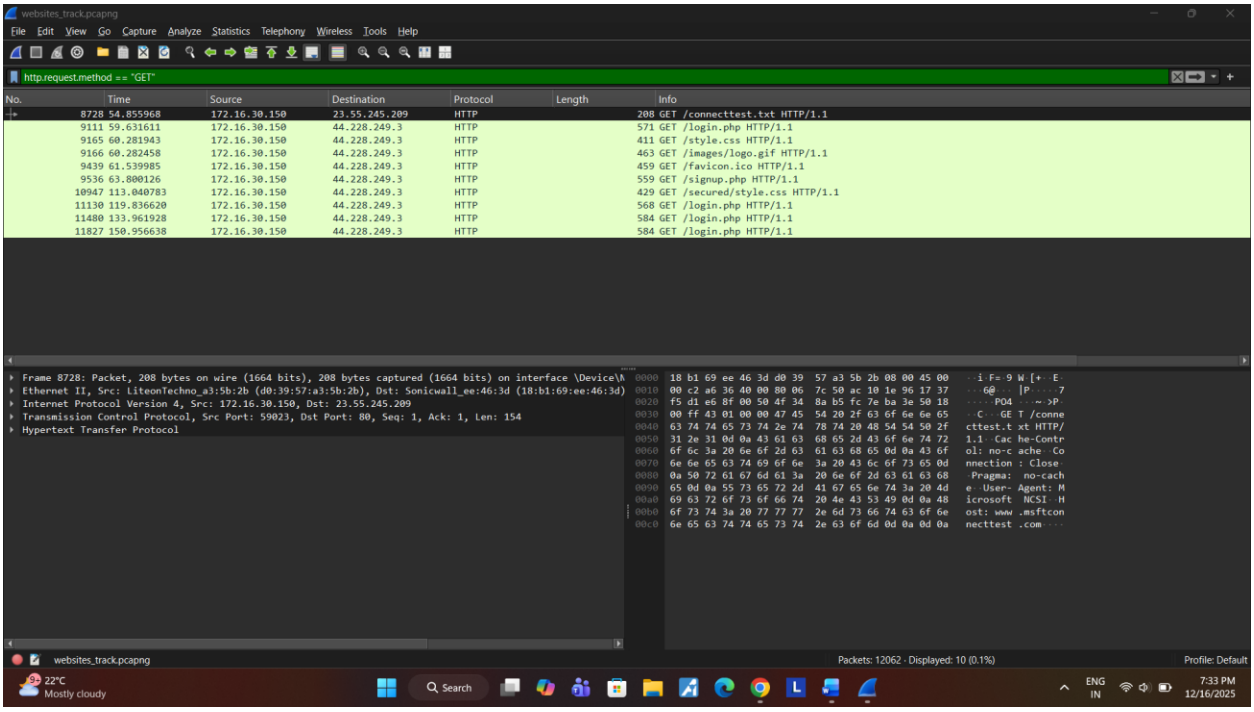

task5th.pcapng
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http.response
No. Time Source Destination Protocol Length Info
71 3.688957 44.228.249.3 172.16.30.150 HTTP 1341 HTTP/1.1 200 OK (text/html)
137 6.453353 44.228.249.3 172.16.30.150 HTTP 1341 HTTP/1.1 200 OK (text/html)
186 8.605897 44.228.249.3 172.16.30.150 HTTP 1198 HTTP/1.1 200 OK (text/html)
214 9.628782 44.228.249.3 172.16.30.150 HTTP 1153 HTTP/1.1 200 OK (text/html)
252 10.960361 44.228.249.3 172.16.30.150 HTTP 1341 HTTP/1.1 200 OK (text/html)
304 12.291522 44.228.249.3 172.16.30.150 HTTP 107 HTTP/1.1 200 OK (text/html)
335 12.704418 44.228.249.3 172.16.30.150 HTTP 60 HTTP/1.1 200 OK (JPEG JFIF image)
354 12.709253 44.228.249.3 172.16.30.150 HTTP 1035 HTTP/1.1 200 OK (JPEG JFIF image)
384 13.009898 44.228.249.3 172.16.30.150 HTTP 200 HTTP/1.1 200 OK (JPEG JFIF image)
414 13.017041 44.228.249.3 172.16.30.150 HTTP 1110 HTTP/1.1 200 OK (JPEG JFIF image)
437 13.314882 44.228.249.3 172.16.30.150 HTTP 357 HTTP/1.1 200 OK (JPEG JFIF image)
442 13.315774 44.228.249.3 172.16.30.150 HTTP 520 HTTP/1.1 200 OK (JPEG JFIF image)
495 14.705748 44.228.249.3 172.16.30.150 HTTP 305 HTTP/1.1 200 OK (JPEG JFIF image)
649 19.645886 44.228.249.3 172.16.30.150 HTTP 60 HTTP/1.1 200 OK (JPEG JFIF image)
764 25.194895 44.228.249.3 172.16.30.150 HTTP 1342 HTTP/1.1 200 OK (text/html)
808 26.524997 44.228.249.3 172.16.30.150 HTTP 330 HTTP/1.1 302 Found (text/html)
815 26.832324 44.228.249.3 172.16.30.150 HTTP 1342 HTTP/1.1 200 OK (text/html)
839 28.165009 44.228.249.3 172.16.30.150 HTTP 1299 HTTP/1.1 200 OK (text/html)
1003 32.873841 44.228.249.3 172.16.30.150 HTTP 1306 HTTP/1.1 200 OK (text/html)
Frame 71: Packet, 1341 bytes on wire (10728 bits), 1341 bytes captured (10728 bits) on interface \Devi
Ethernet II, Src: Sonicwall_ee:46:3d (18:b1:69:ee:46:3d), Dst: LiteonTechno_a3:5b:2b (d0:39:57:a3:5b:2
Destination: LiteonTechno_a3:5b:2b (d0:39:57:a3:5b:2b)
.... ..0. .... = LG bit: Globally unique address (factory default)
....0 .... = IG bit: Individual address (unicast)
Source: Sonicwall_ee:46:3d (18:b1:69:ee:46:3d)
.... ..0. .... = LG bit: Globally unique address (factory default)
....0 .... = IG bit: Individual address (unicast)
Type: IPv4 (0x0800)
[Stream index: 13]
Internet Protocol Version 4, Src: 44.228.249.3, Dst: 172.16.30.150
Transmission Control Protocol, Src Port: 80, Dst Port: 53950, Seq: 1461, Ack: 540, Len: 1287
Source Port: 80
Destination Port: 53950
[Stream index: 2]
[Stream Packet Number: 3]
Response: Boolean
Packet (1341 bytes)
Reassembled TCP (2747 bytes)
De-chunked entity body (2483 bytes)
Uncompressed entity body (6115 by
Packets: 1100 · Displayed: 19 (1.7%) · Dropped: 0 (0.0%)
Profile: Default
23°C
Mostly sunny
Search
ENG
IN
12:16 PM
12/16/2025

7th:

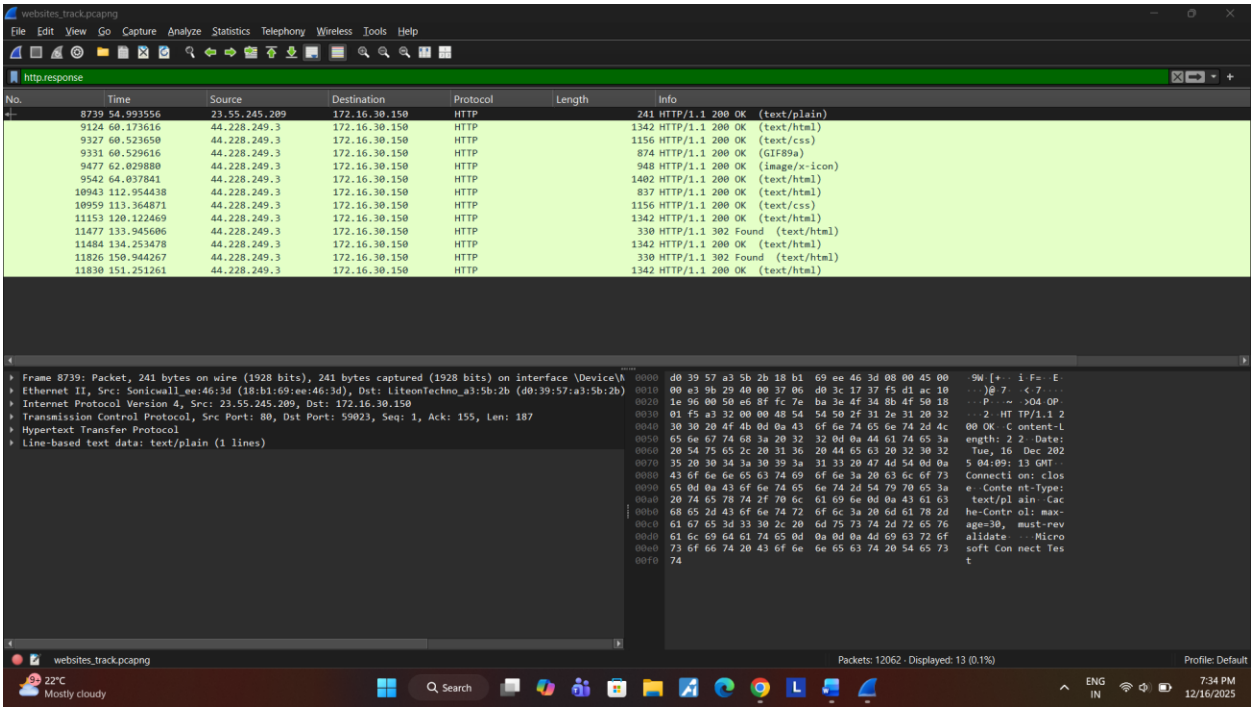

Wireshark · Packet 1003 · task5th.pcapng
Sequence Number: 45600 (relative sequence number)
Sequence Number (raw): 2839452973
[Next Sequence Number: 46852 (relative sequence number)]
Acknowledgment Number: 4265 (relative ack number)
Acknowledgment number (raw): 2116928994
0101 .... = Header Length: 20 bytes (5)
Flags: 0x018 (PSH, ACK)
Window: 461
[Calculated window size: 59008]
[Window size scaling factor: 128]
Checksum: 0xf9d4 [unverified]
[Checksum Status: Unverified]
Urgent Pointer: 0
[Timestamps]
[Time since first frame in this TCP stream: 20.517366000 seconds]
[Time since previous frame in this TCP stream: 0.000000000 seconds]
[SEQ/ACK analysis]
[Client Contiguous Streams: 1]
[Server Contiguous Streams: 1]
TCP payload (1252 bytes)
TCP segment data (1252 bytes)
Packet (1306 bytes)
Reassembled TCP (2712 bytes)
De-chunked entity body (2448 bytes)
Uncompressed entity body (5407 bytes)
A data segment used in reassembly of an upper-layer protocol (ULP) (tcp.segment_data), 1,252 bytes
Show packet bytes
Layout: Vertical (Stacked)
Close
Help
23°C
Mostly sunny
Search
ENG
IN
12:21 PM
12/16/2025

Task 2:

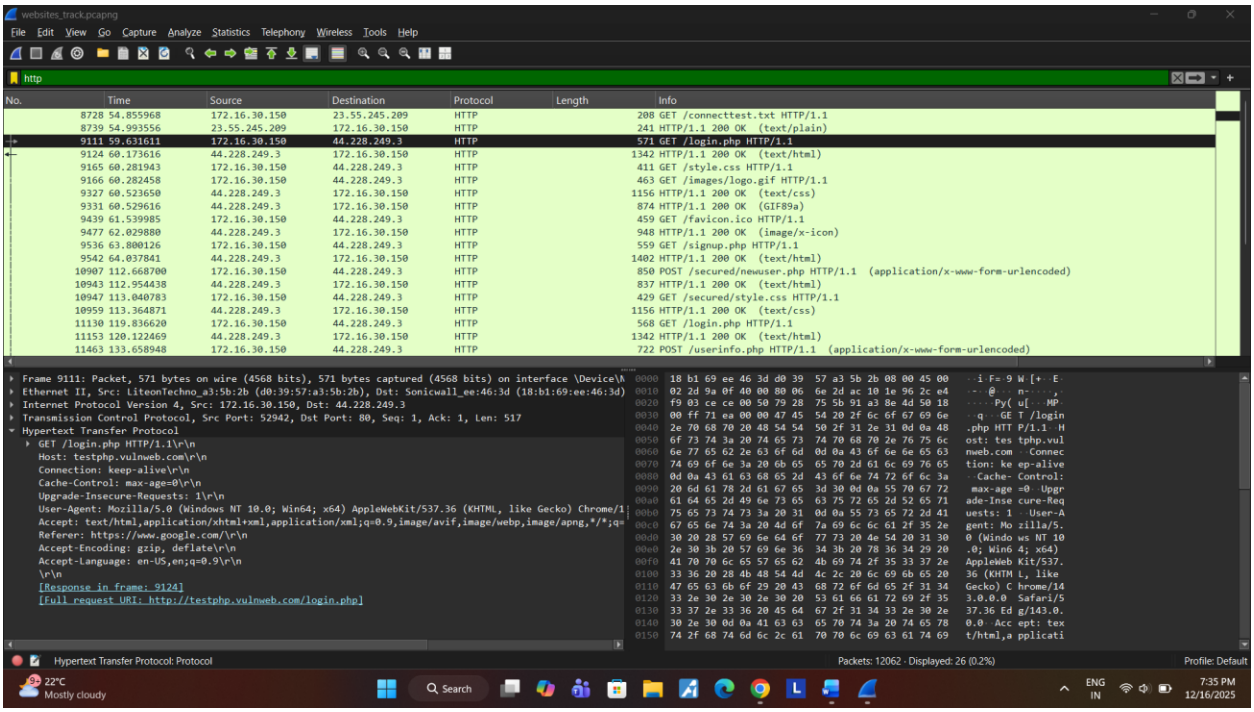
How many conditional GETs are sent by browser to the server ?



Make a list for each of the file/object downloaded, how many times the server sends the full contents of the respective file/object ?



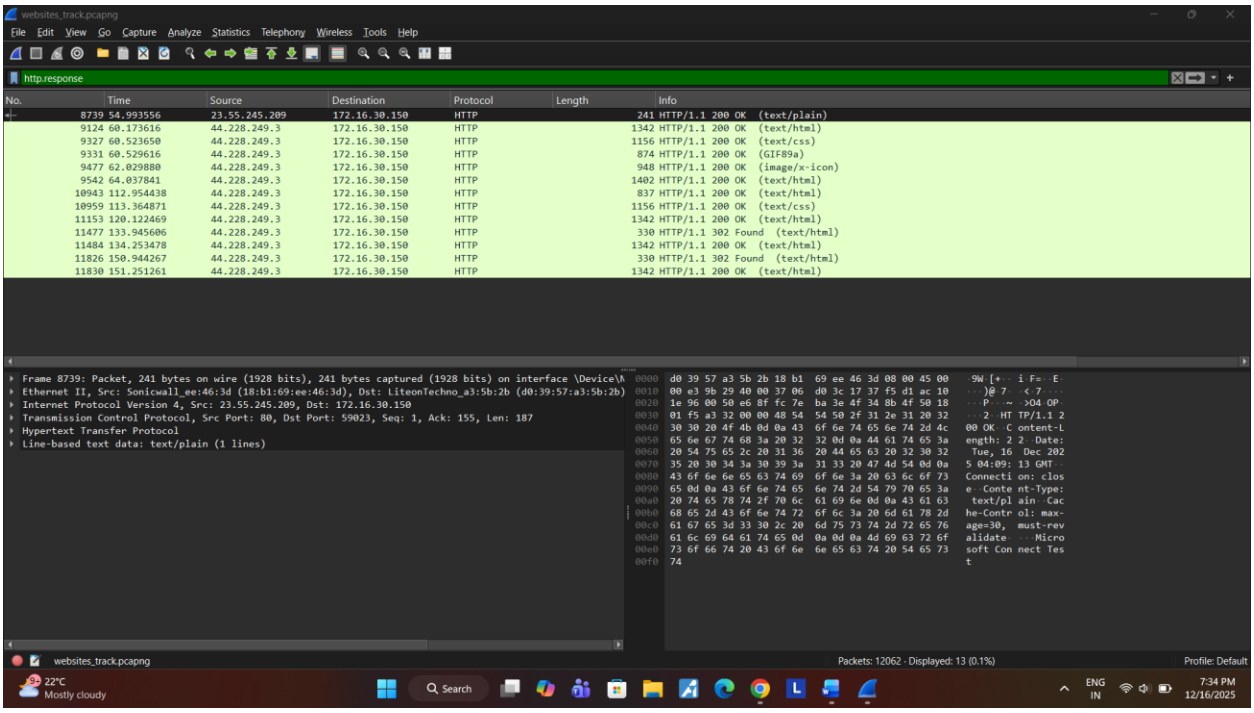
List the headers of HTTP which influence this functionality.

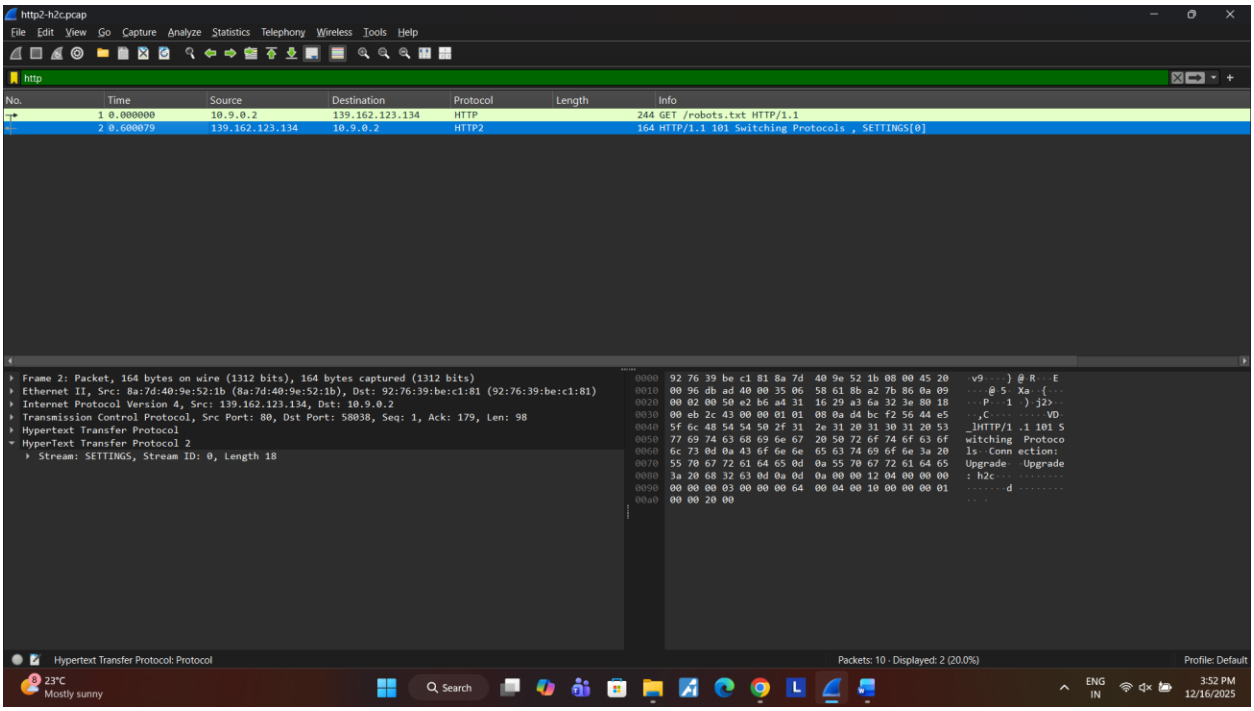


Task3:

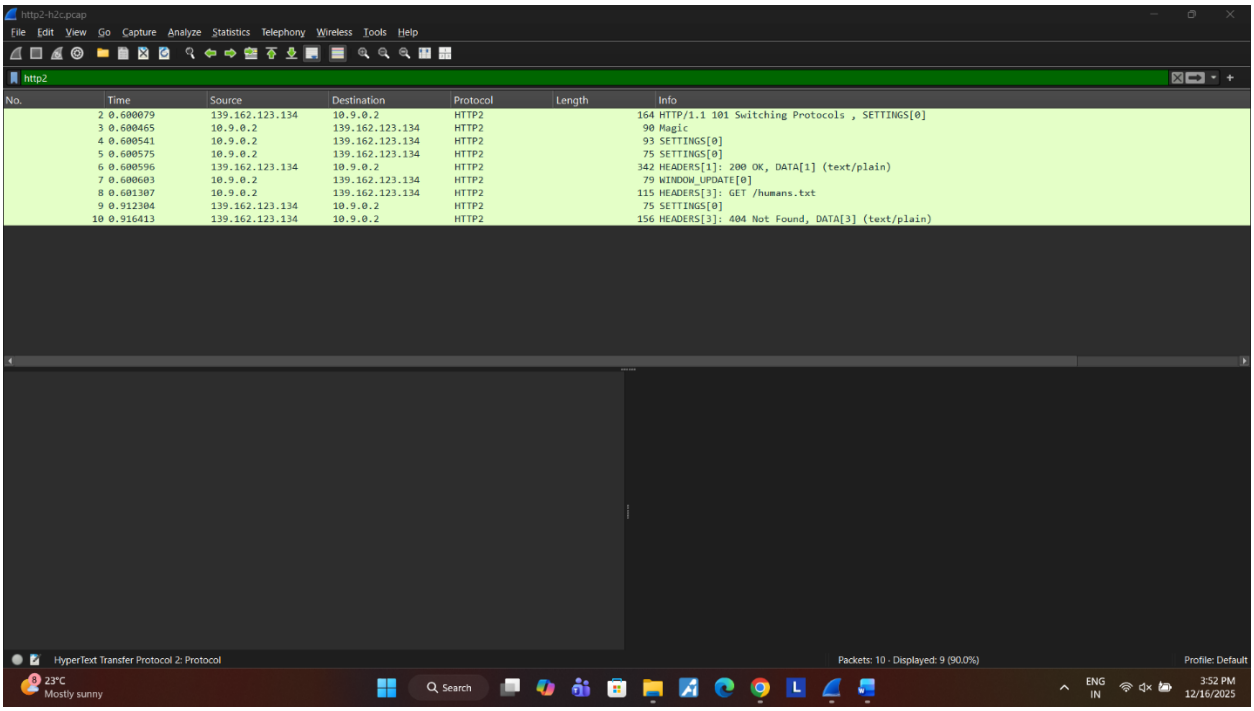
Analyze the attached HTTP/2 packet (http2-h2c.pcap: Included in zip file) capture using Wireshark to answer the following (Hint : Use Statistics->HTTP, HTTP2 windows).

1: How many HTTP/2 and HTTP/1.1 packets are present?

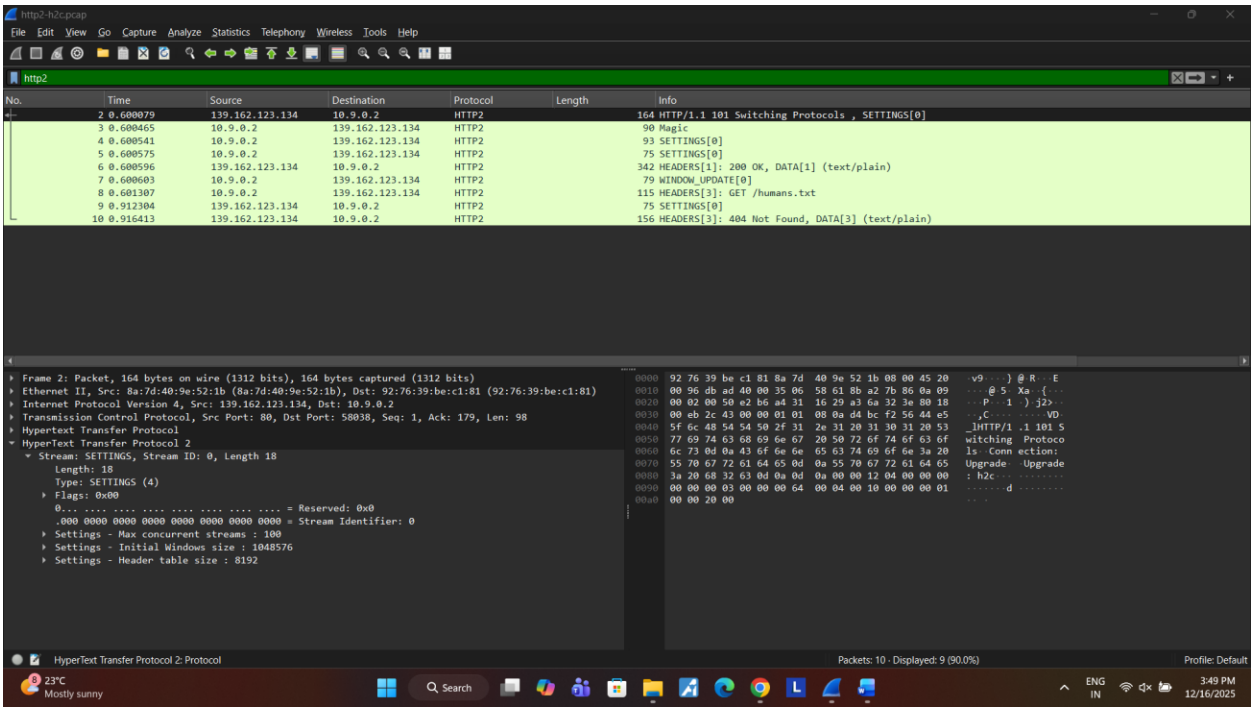




2: How many HTTP/2 packets are exchanged between client and server here before the first object is fetched ?



3: What main difference do you observe in headers of HTTP/2 packets displayed here, compared to the headers of HTTP/1.1 packets ?


http2-h2c.pcap
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
http2
No. Time Source Destination Protocol Length Info
2 0.600079 139.162.123.134 10.9.0.2 HTTP2 164 HTTP/1.1 101 Switching Protocols , SETTINGS[0]
3 0.600465 10.9.0.2 139.162.123.134 HTTP2 90 Magic
4 0.600541 10.9.0.2 139.162.123.134 HTTP2 93 SETTINGS[0]
5 0.600575 10.9.0.2 139.162.123.134 HTTP2 75 SETTINGS[0]
6 0.600596 139.162.123.134 10.9.0.2 HTTP2 342 HEADERS[1]: 200 OK, DATA[1] (text/plain)
7 0.600603 10.9.0.2 139.162.123.134 HTTP2 79 WINDOW_UPDATE[0]
8 0.601307 10.9.0.2 139.162.123.134 HTTP2 115 HEADERS[3]: GET /humans.txt
9 0.912304 139.162.123.134 10.9.0.2 HTTP2 75 SETTINGS[0]
10 0.916413 139.162.123.134 10.9.0.2 HTTP2 156 HEADERS[3]: 404 Not Found, DATA[3] (text/plain)
Frame 2: Packet, 164 bytes on wire (1312 bits), 164 bytes captured (1312 bits)
Ethernet II, Src: 8a:7d:40:9e:52:1b (8a:7d:40:9e:52:1b), Dst: 92:76:39:be:c1:81 (92:76:39:be:c1:81)
Internet Protocol Version 4, Src: 139.162.123.134, Dst: 10.9.0.2
Transmission Control Protocol, Src Port: 80, Dst Port: 58038, Seq: 1, Ack: 179, Len: 98
Hypertext Transfer Protocol
HyperText Transfer Protocol 2
Stream: SETTINGS, Stream ID: 0, Length 18
Length: 18
Type: SETTINGS (4)
Flags: 0x00
0... .... = Reserved: 0x0
.000 0000 0000 0000 0000 0000 0000 0000 = Stream Identifier: 0
Settings - Max concurrent streams : 100
Settings - Initial Windows size : 1048576
Settings - Header table size : 8192
0000 92 76 39 be c1 81 8a 7d 40 9e 52 1b 08 00 45 20
0010 00 96 db ad 40 00 35 06 58 61 8b a2 7b 86 0a 09
0020 00 02 00 50 e2 b6 a4 31 16 29 a3 6a 32 3e 80 18
0030 00 eb 2c 43 00 00 01 01 08 0a dd bc f2 56 44 e5
0040 5f 6c 48 54 54 50 2f 31 2e 31 20 31 30 31 20 53
0050 77 69 74 63 68 69 6e 67 20 50 72 6f 74 6f 63 6f
0060 6c 73 0d 0a 43 6f 6e 6e 65 63 74 69 6f 6e 3a 20
0070 55 70 67 72 61 64 65 0d 0a 55 70 67 72 61 64 65
0080 3a 20 68 32 63 0d 0a 0d 0a 00 00 12 04 00 00 00
0090 00 00 00 03 00 00 00 64 00 04 00 10 00 00 00 01
00a0 00 00 20 00
HyperText Transfer Protocol 2: Protocol
Packets: 10 · Displayed: 9 (90.0%)
Profile: Default
23°C
Mostly sunny
Search
ENG
IN
3:49 PM
12/16/2025