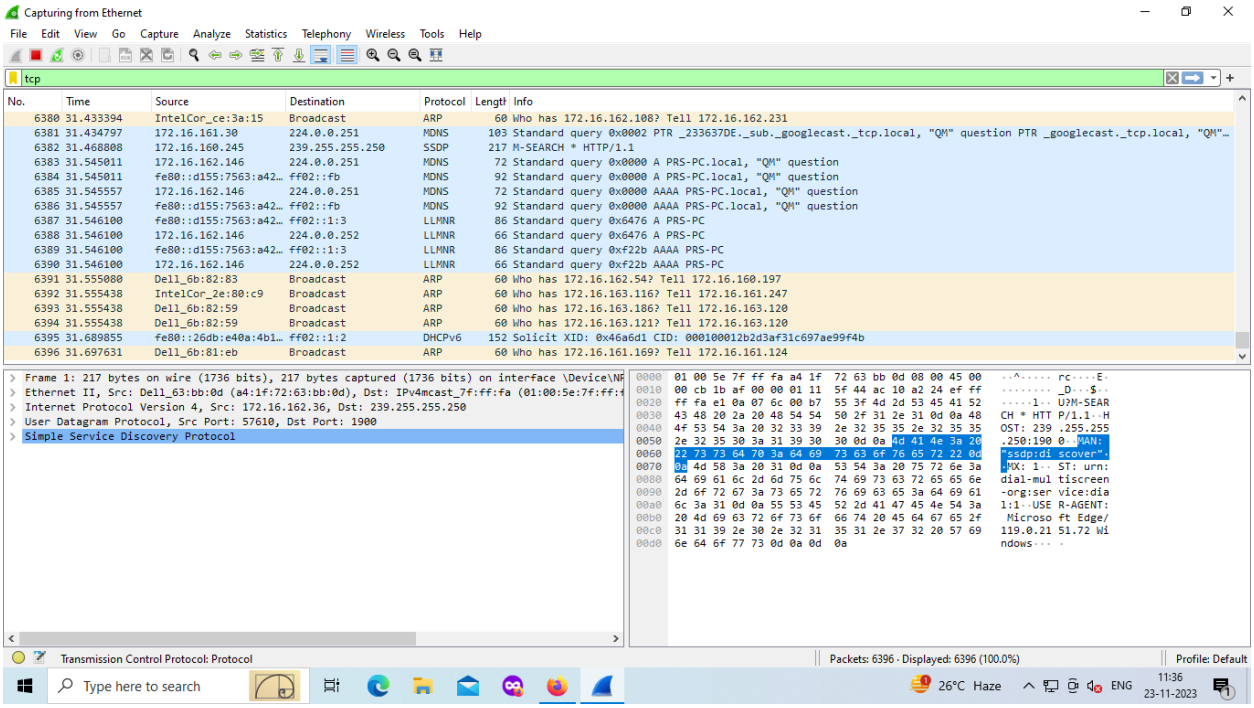
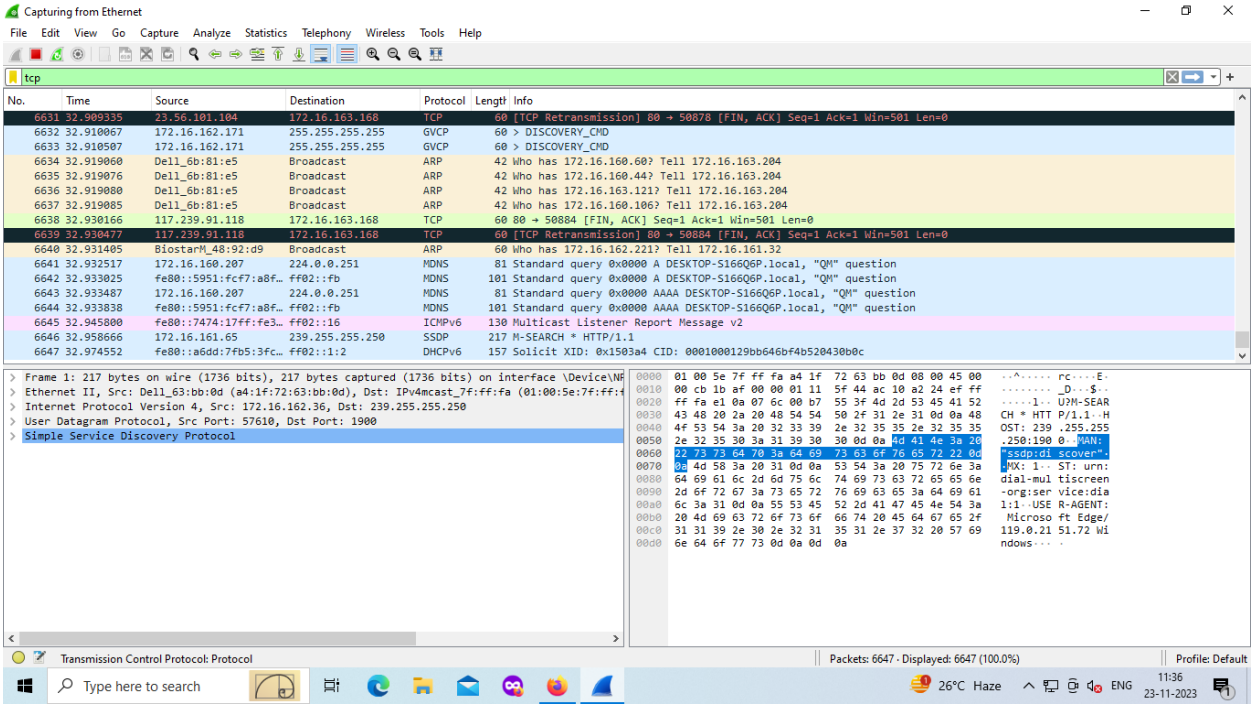
COMPUTER NETWORKS LAB

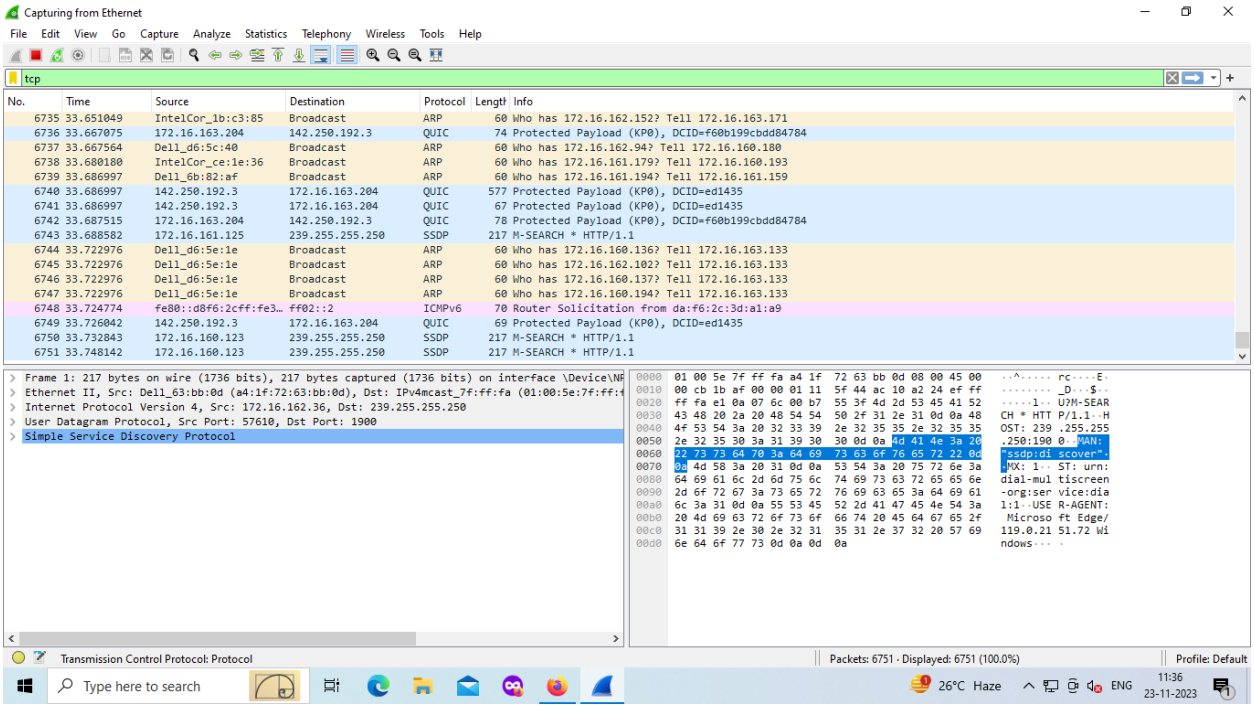
Name: Vedant Bhutada
Roll No.: 69
Batch: A4

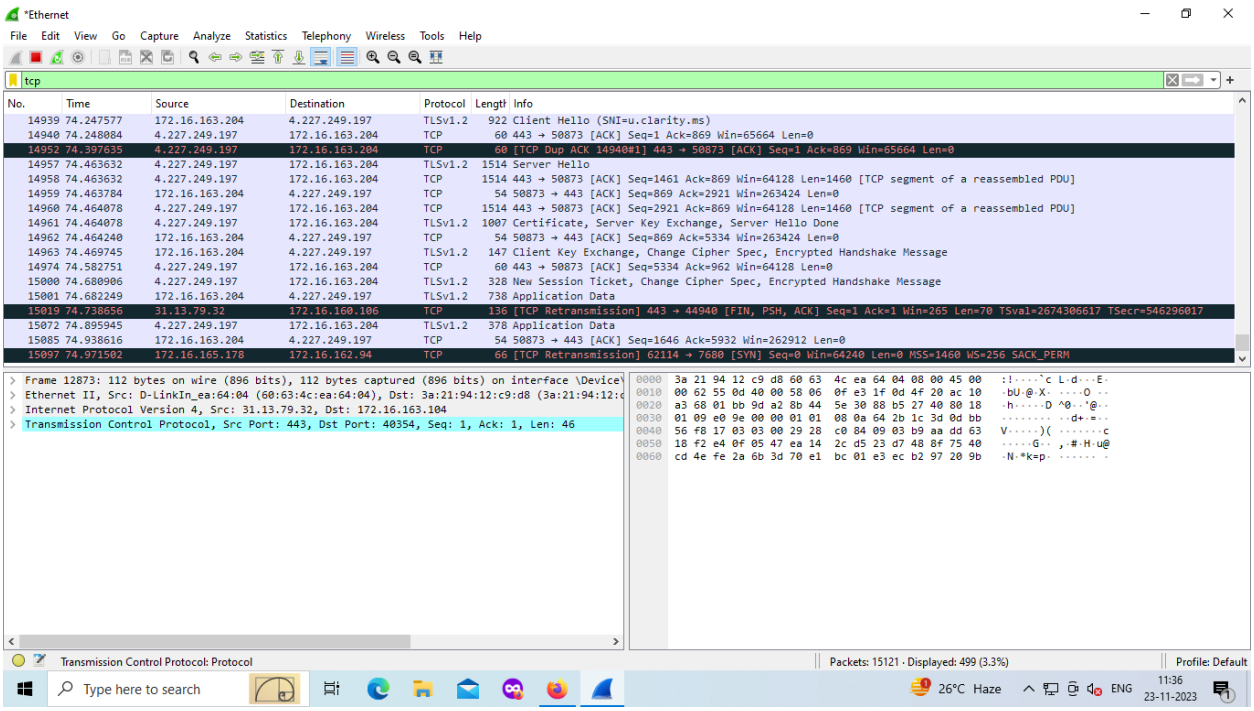
Aim: Demonstrate Analysis of Congestion Control Mechanism using Wireshark - Network Protocol Analyzer.

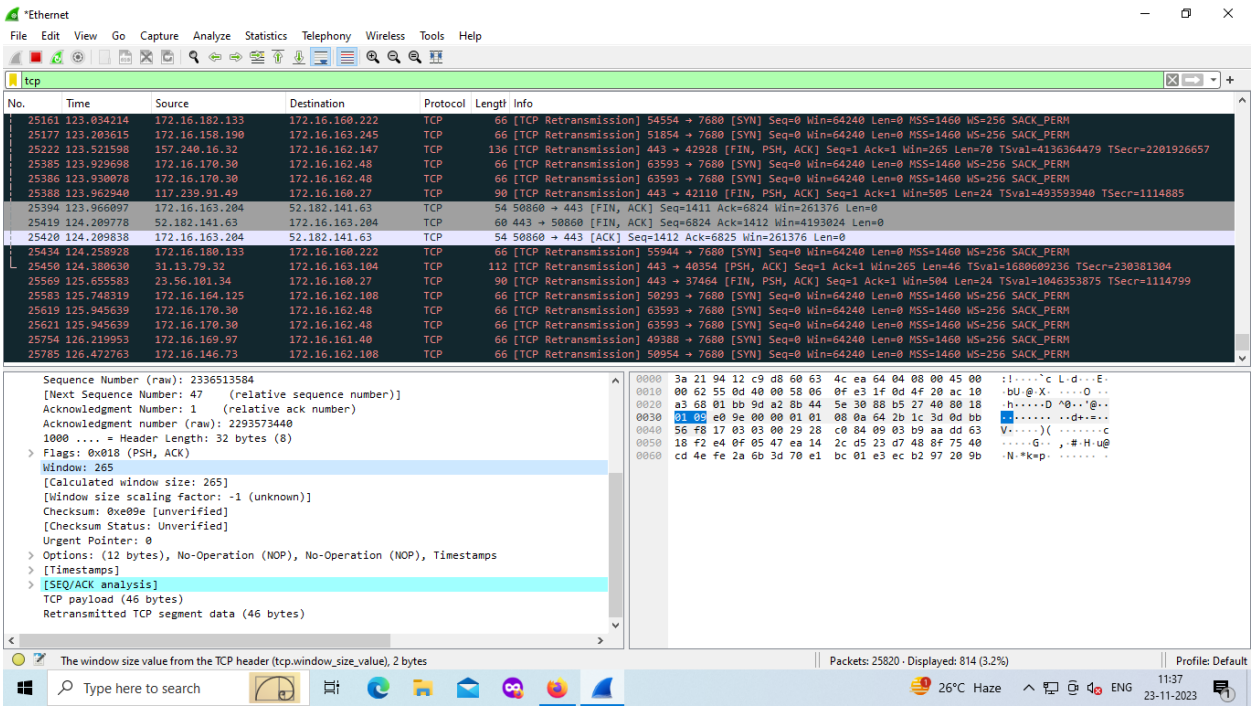
Screenhots:

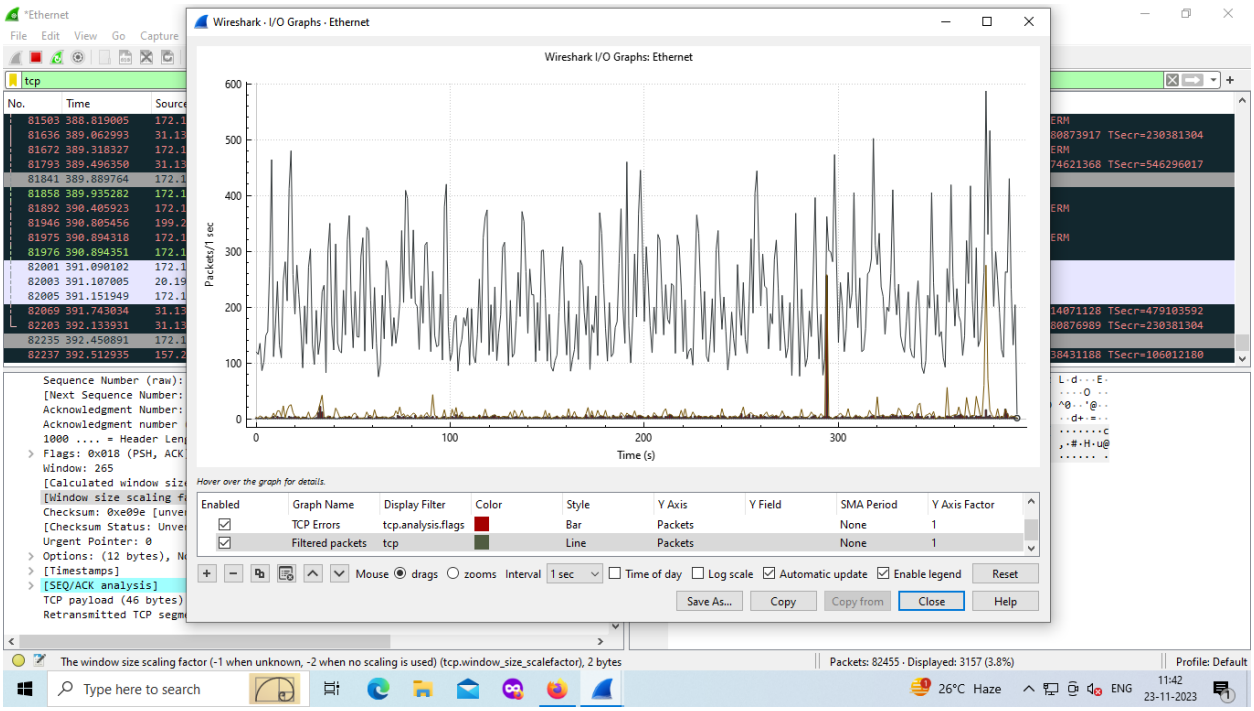


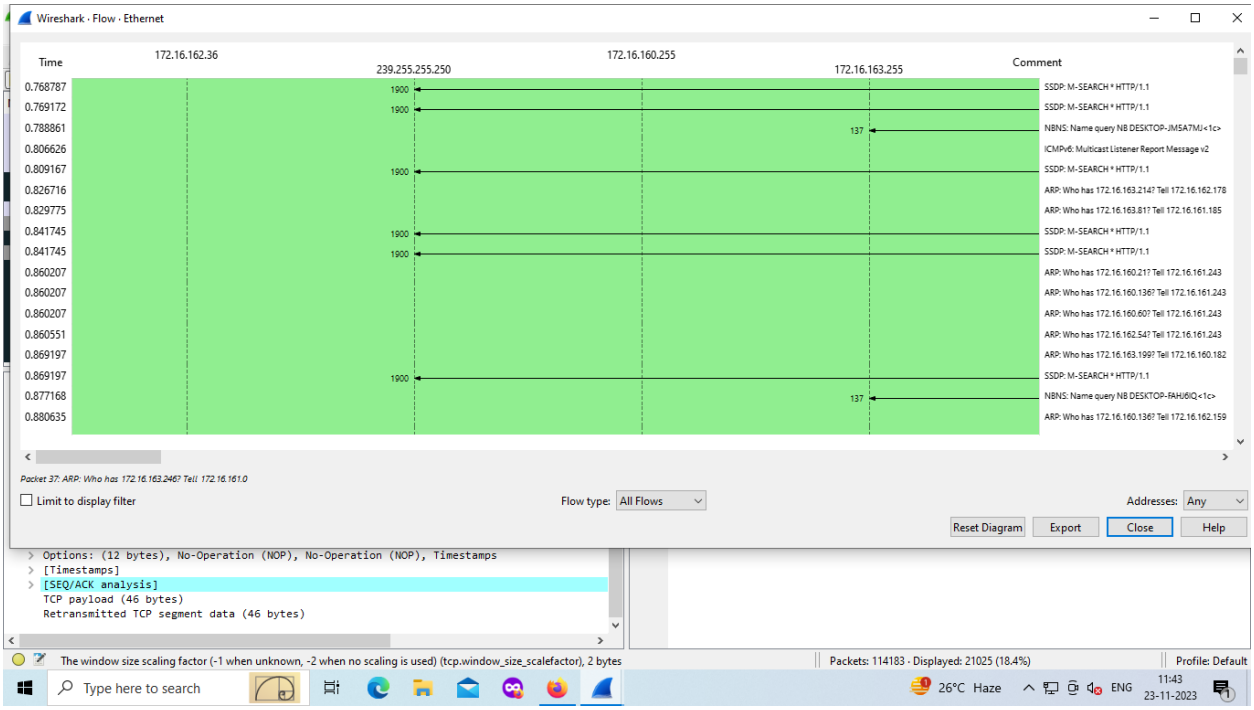

Capturing from Ethernet
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
tcp
No. Time Source Destination Protocol Length Info
6631 32.909335 23.56.101.104 172.16.163.168 TCP 60 [TCP Retransmission] 80 → 50878 [FIN, ACK] Seq=1 Ack=1 Win=501 Len=0
6632 32.910067 172.16.162.171 255.255.255.255 GVCP 60 > DISCOVERY_CMD
6633 32.910507 172.16.162.171 255.255.255.255 GVCP 60 > DISCOVERY_CMD
6634 32.919060 Dell_6b:81:e5 Broadcast ARP 42 Who has 172.16.160.60? Tell 172.16.163.204
6635 32.919076 Dell_6b:81:e5 Broadcast ARP 42 Who has 172.16.160.44? Tell 172.16.163.204
6636 32.919080 Dell_6b:81:e5 Broadcast ARP 42 Who has 172.16.163.121? Tell 172.16.163.204
6637 32.919085 Dell_6b:81:e5 Broadcast ARP 42 Who has 172.16.160.106? Tell 172.16.163.204
6638 32.930166 117.239.91.118 172.16.163.168 TCP 60 80 → 50884 [FIN, ACK] Seq=1 Ack=1 Win=501 Len=0
6639 32.930477 117.239.91.118 172.16.163.168 TCP 60 [TCP Retransmission] 80 → 50884 [FIN, ACK] Seq=1 Ack=1 Win=501 Len=0
6640 32.931405 BiostarM_48:92:d9 Broadcast ARP 60 Who has 172.16.162.221? Tell 172.16.161.32
6641 32.932517 172.16.160.207 224.0.0.251 MDNS 81 Standard query 0x0000 A DESKTOP-S166Q6P.local, "QM" question
6642 32.933025 fe80::5951:fcf7:a8f… ff02::fb MDNS 101 Standard query 0x0000 A DESKTOP-S166Q6P.local, "QM" question
6643 32.933487 172.16.160.207 224.0.0.251 MDNS 81 Standard query 0x0000 AAAA DESKTOP-S166Q6P.local, "QM" question
6644 32.933838 fe80::5951:fcf7:a8f… ff02::fb MDNS 101 Standard query 0x0000 AAAA DESKTOP-S166Q6P.local, "QM" question
6645 32.945800 fe80::7474:17ff:fe3… ff02::16 ICMPv6 130 Multicast Listener Report Message v2
6646 32.958666 172.16.161.65 239.255.255.250 SSDP 217 M-SEARCH * HTTP/1.1
6647 32.974552 fe80::a6dd:7fb5:3fc… ff02::1:2 DHCPv6 157 Solicit XID: 0x1503a4 CID: 0001000129bb646bf4b520430b0c
Frame 1: 217 bytes on wire (1736 bits), 217 bytes captured (1736 bits) on interface \Device\NF
Ethernet II, Src: Dell_63:bb:0d (a4:1f:72:63:bb:0d), Dst: IPv4mcast_7f:ff:fa (01:00:5e:7f:ff:
Internet Protocol Version 4, Src: 172.16.162.36, Dst: 239.255.255.250
User Datagram Protocol, Src Port: 57610, Dst Port: 1900
Simple Service Discovery Protocol
0000 01 00 5e 7f ff fa a4 1f 72 63 bb 0d 08 00 45 00 ..^..... rc....E.
0010 00 cb 1b af 00 00 01 11 5f 44 ac 10 a2 24 ef ff .... _D...$..
0020 ff fa e1 0a 07 6c 00 b7 55 3f 4d 2d 53 45 41 52 .....l.. U?M-SEAR
0030 43 48 20 2a 20 48 54 54 50 2f 31 2e 31 0d 0a 48 CH * HTT P/1.1..H
0040 4f 53 54 3a 20 32 33 39 2e 32 35 35 2e 32 35 35 OST: 239 .255.255
0050 2e 32 35 30 3a 31 39 30 30 0d 0a 4d 41 4e 3a 20 .250:190 0..MAN:
0060 22 73 73 64 70 3a 64 69 73 63 6f 76 65 72 22 0d "ssdp:di scover".
0070 0a 4d 58 3a 20 31 0d 0a 53 54 3a 20 75 72 6e 3a .MX: 1.. ST: urn:
0080 64 69 61 6c 2d 6d 75 6c 74 69 73 63 72 65 65 6e dial-mul tiscreen
0090 2d 6f 72 67 3a 73 65 72 76 69 63 65 3a 64 69 61 -org:ser vice:dia
00a0 6c 3a 31 0d 0a 55 53 45 52 2d 41 47 45 4e 54 3a l:1..USE R-AGENT:
00b0 20 4d 69 63 72 6f 73 6f 66 74 20 45 64 67 65 2f Microso ft Edge/
00c0 31 31 39 2e 30 2e 32 31 35 31 2e 37 32 20 57 69 119.0.21 51.72 Wi
00d0 6e 64 6f 77 73 0d 0a 0d 0a ndows···· ·
Transmission Control Protocol: Protocol
Packets: 6647 · Displayed: 6647 (100.0%)
Profile: Default
Type here to search
26°C Haze
ENG
11:36
23-11-2023

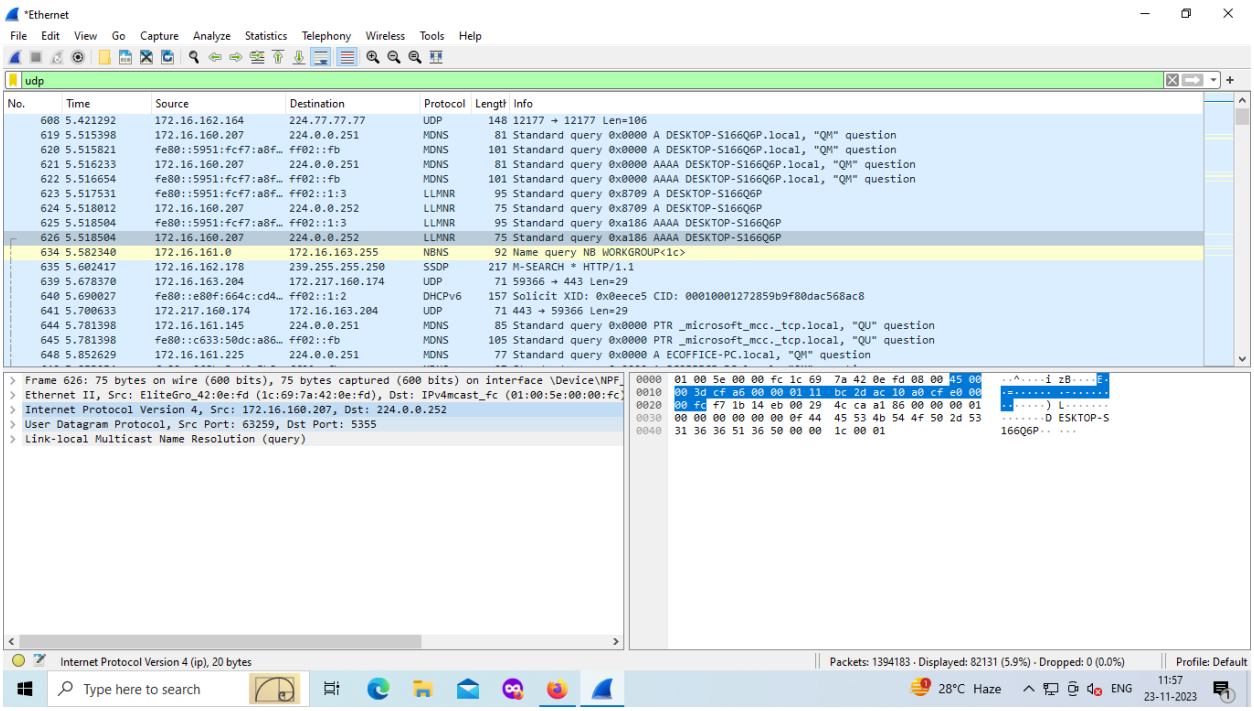

Capturing from Ethernet
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
tcp
No. Time Source Destination Protocol Length Info
6735 33.651049 IntelCor_1b:c3:85 Broadcast ARP 60 Who has 172.16.162.152? Tell 172.16.163.171
6736 33.667075 172.16.163.204 142.250.192.3 QUIC 74 Protected Payload (KP0), DCID=f60b199cbdd84784
6737 33.667564 Dell_d6:5c:40 Broadcast ARP 60 Who has 172.16.162.94? Tell 172.16.160.180
6738 33.680180 IntelCor_ce:1e:36 Broadcast ARP 60 Who has 172.16.161.179? Tell 172.16.160.193
6739 33.686997 Dell_6b:82:af Broadcast ARP 60 Who has 172.16.161.194? Tell 172.16.161.159
6740 33.686997 142.250.192.3 172.16.163.204 QUIC 577 Protected Payload (KP0), DCID=ed1435
6741 33.686997 142.250.192.3 172.16.163.204 QUIC 67 Protected Payload (KP0), DCID=ed1435
6742 33.687515 172.16.163.204 142.250.192.3 QUIC 78 Protected Payload (KP0), DCID=f60b199cbdd84784
6743 33.688582 172.16.161.125 239.255.255.250 SSDP 217 M-SEARCH * HTTP/1.1
6744 33.722976 Dell_d6:5e:1e Broadcast ARP 60 Who has 172.16.160.136? Tell 172.16.163.133
6745 33.722976 Dell_d6:5e:1e Broadcast ARP 60 Who has 172.16.162.102? Tell 172.16.163.133
6746 33.722976 Dell_d6:5e:1e Broadcast ARP 60 Who has 172.16.160.137? Tell 172.16.163.133
6747 33.722976 Dell_d6:5e:1e Broadcast ARP 60 Who has 172.16.160.194? Tell 172.16.163.133
6748 33.724774 fe80::d8f6:2cff:fe3… ff02::2 ICMPv6 70 Router Solicitation from da:f6:2c:3d:a1:a9
6749 33.726042 142.250.192.3 172.16.163.204 QUIC 69 Protected Payload (KP0), DCID=ed1435
6750 33.732843 172.16.160.123 239.255.255.250 SSDP 217 M-SEARCH * HTTP/1.1
6751 33.748142 172.16.160.123 239.255.255.250 SSDP 217 M-SEARCH * HTTP/1.1
Frame 1: 217 bytes on wire (1736 bits), 217 bytes captured (1736 bits) on interface \Device\NF
Ethernet II, Src: Dell_63:bb:0d (a4:1f:72:63:bb:0d), Dst: IPv4mcast_7f:ff:fa (01:00:5e:7f:ff:
Internet Protocol Version 4, Src: 172.16.162.36, Dst: 239.255.255.250
User Datagram Protocol, Src Port: 57610, Dst Port: 1900
Simple Service Discovery Protocol
0000 01 00 5e 7f ff fa a4 1f 72 63 bb 0d 08 00 45 00 ..^..... rc....E.
0010 00 cb 1b af 00 00 01 11 5f 44 ac 10 a2 24 ef ff .... _D...$..
0020 ff fa e1 0a 07 6c 00 b7 55 3f 4d 2d 53 45 41 52 .....l.. U?M-SEAR
0030 43 48 20 2a 20 48 54 54 50 2f 31 2e 31 0d 0a 48 CH * HTT P/1.1..H
0040 4f 53 54 3a 20 32 33 39 2e 32 35 35 2e 32 35 35 OST: 239 .255.255
0050 2e 32 35 30 3a 31 39 30 30 0d 0a 4d 41 4e 3a 20 .250:190 0..MAN:
0060 22 73 73 64 70 3a 64 69 73 63 6f 76 65 72 22 0d "ssdp:di scover".
0070 0a 4d 58 3a 20 31 0d 0a 53 54 3a 20 75 72 6e 3a .MX: 1.. ST: urn:
0080 64 69 61 6c 2d 6d 75 6c 74 69 73 63 72 65 65 6e dial-mul tiscreen
0090 2d 6f 72 67 3a 73 65 72 76 69 63 65 3a 64 69 61 -org:ser vice:dia
00a0 6c 3a 31 0d 0a 55 53 45 52 2d 41 47 45 4e 54 3a l:1..USE R-AGENT:
00b0 20 4d 69 63 72 6f 73 6f 66 74 20 45 64 67 65 2f Microso ft Edge/
00c0 31 31 39 2e 30 2e 32 31 35 31 2e 37 32 20 57 69 119.0.21 51.72 Wi
00d0 6e 64 6f 77 73 0d 0a 0d 0a ndows···· ·
Transmission Control Protocol: Protocol
Packets: 6751 · Displayed: 6751 (100.0%)
Profile: Default
Type here to search
26°C Haze
ENG
11:36
23-11-2023

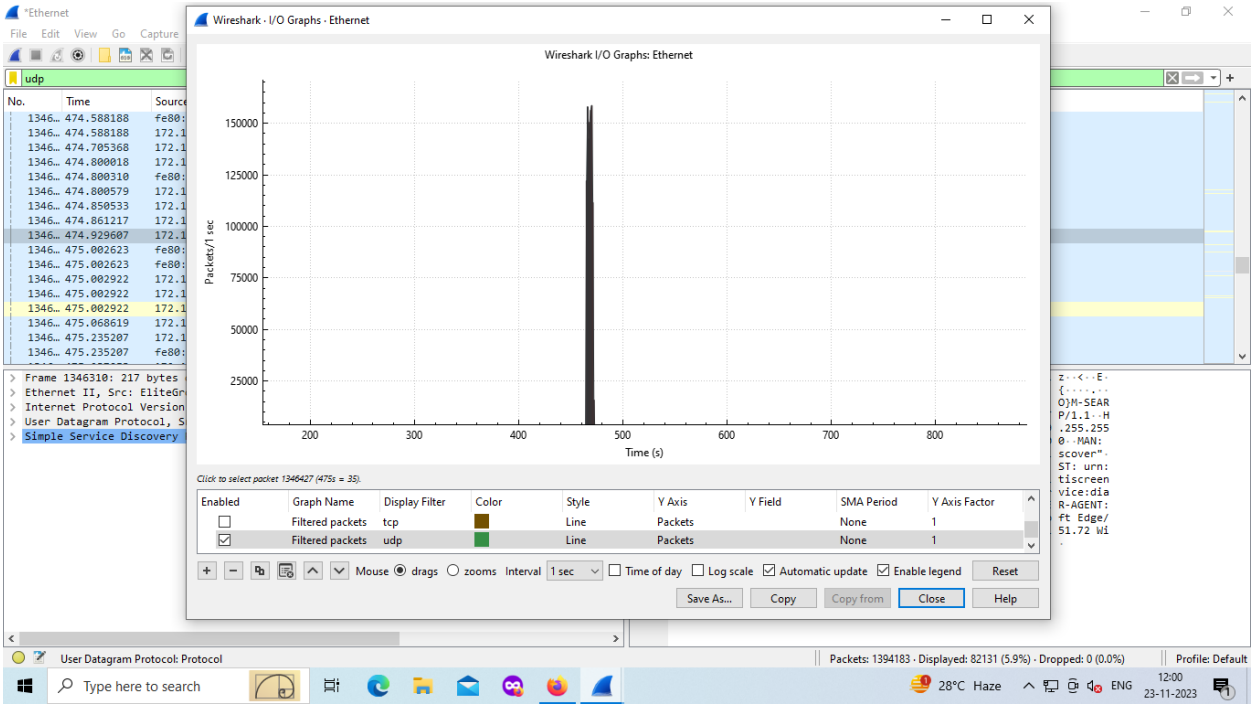

*Ethernet
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
tcp
No. Time Source Destination Protocol Length Info
14939 74.247577 172.16.163.204 4.227.249.197 TLSv1.2 922 Client Hello (SNI=u.clarity.ms)
14940 74.248084 4.227.249.197 172.16.163.204 TCP 60 443 → 50873 [ACK] Seq=1 Ack=869 Win=65664 Len=0
14952 74.397635 4.227.249.197 172.16.163.204 TCP 60 [TCP Dup ACK 14940#1] 443 → 50873 [ACK] Seq=1 Ack=869 Win=65664 Len=0
14957 74.463632 4.227.249.197 172.16.163.204 TLSv1.2 1514 Server Hello
14958 74.463632 4.227.249.197 172.16.163.204 TCP 1514 443 → 50873 [ACK] Seq=1461 Ack=869 Win=64128 Len=1460 [TCP segment of a reassembled PDU]
14959 74.463784 172.16.163.204 4.227.249.197 TCP 54 50873 → 443 [ACK] Seq=869 Ack=2921 Win=263424 Len=0
14960 74.464078 4.227.249.197 172.16.163.204 TCP 1514 443 → 50873 [ACK] Seq=2921 Ack=869 Win=64128 Len=1460 [TCP segment of a reassembled PDU]
14961 74.464078 4.227.249.197 172.16.163.204 TLSv1.2 1007 Certificate, Server Key Exchange, Server Hello Done
14962 74.464240 172.16.163.204 4.227.249.197 TCP 54 50873 → 443 [ACK] Seq=869 Ack=5334 Win=263424 Len=0
14963 74.469745 172.16.163.204 4.227.249.197 TLSv1.2 147 Client Key Exchange, Change Cipher Spec, Encrypted Handshake Message
14974 74.582751 4.227.249.197 172.16.163.204 TCP 60 443 → 50873 [ACK] Seq=5334 Ack=962 Win=64128 Len=0
15000 74.680906 4.227.249.197 172.16.163.204 TLSv1.2 328 New Session Ticket, Change Cipher Spec, Encrypted Handshake Message
15001 74.682249 172.16.163.204 4.227.249.197 TLSv1.2 738 Application Data
15019 74.738656 31.13.79.32 172.16.160.106 TCP 136 [TCP Retransmission] 443 → 44940 [FIN, PSH, ACK] Seq=1 Ack=1 Win=265 Len=70 TSval=2674306617 TSecr=546296017
15072 74.895945 4.227.249.197 172.16.163.204 TLSv1.2 378 Application Data
15085 74.938616 172.16.163.204 4.227.249.197 TCP 54 50873 → 443 [ACK] Seq=1646 Ack=5932 Win=262912 Len=0
15097 74.971502 172.16.165.178 172.16.162.94 TCP 66 [TCP Retransmission] 62114 → 7680 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM
Frame 12873: 112 bytes on wire (896 bits), 112 bytes captured (896 bits) on interface \Device\
Ethernet II, Src: D-LinkIn_ea:64:04 (60:63:4c:ea:64:04), Dst: 3a:21:94:12:c9:d8 (3a:21:94:12:
Internet Protocol Version 4, Src: 31.13.79.32, Dst: 172.16.163.104
Transmission Control Protocol, Src Port: 443, Dst Port: 40354, Seq: 1, Ack: 1, Len: 46
0000 3a 21 94 12 c9 d8 60 63 4c ea 64 04 08 00 45 00 :!....`c L.d...E.
0010 00 62 55 0d 40 00 58 06 0f e3 1f 0d 4f 20 ac 10 .bU.@.X. ....O ..
0020 a3 68 01 bb 9d a2 8b 44 5e 30 88 b5 27 40 80 18 .h.....D ^0..'@..
0030 01 09 e0 9e 00 00 01 01 08 0a 64 2b 1c 3d 0d bb ....d+.=..
0040 56 f8 17 03 03 00 29 28 c0 84 09 03 b9 aa dd 63 V.....)(.......c
0050 18 f2 e4 0f 05 47 ea 14 2c d5 23 d7 48 8f 75 40 .....G.. ,.#.H.u@
0060 cd 4e fe 2a 6b 3d 70 e1 bc 01 e3 ec b2 97 20 9b .N.*k=p. ..... .
Transmission Control Protocol: Protocol
Packets: 15121 · Displayed: 499 (3.3%)
Profile: Default
Type here to search
26°C Haze
ENG
11:36
23-11-2023

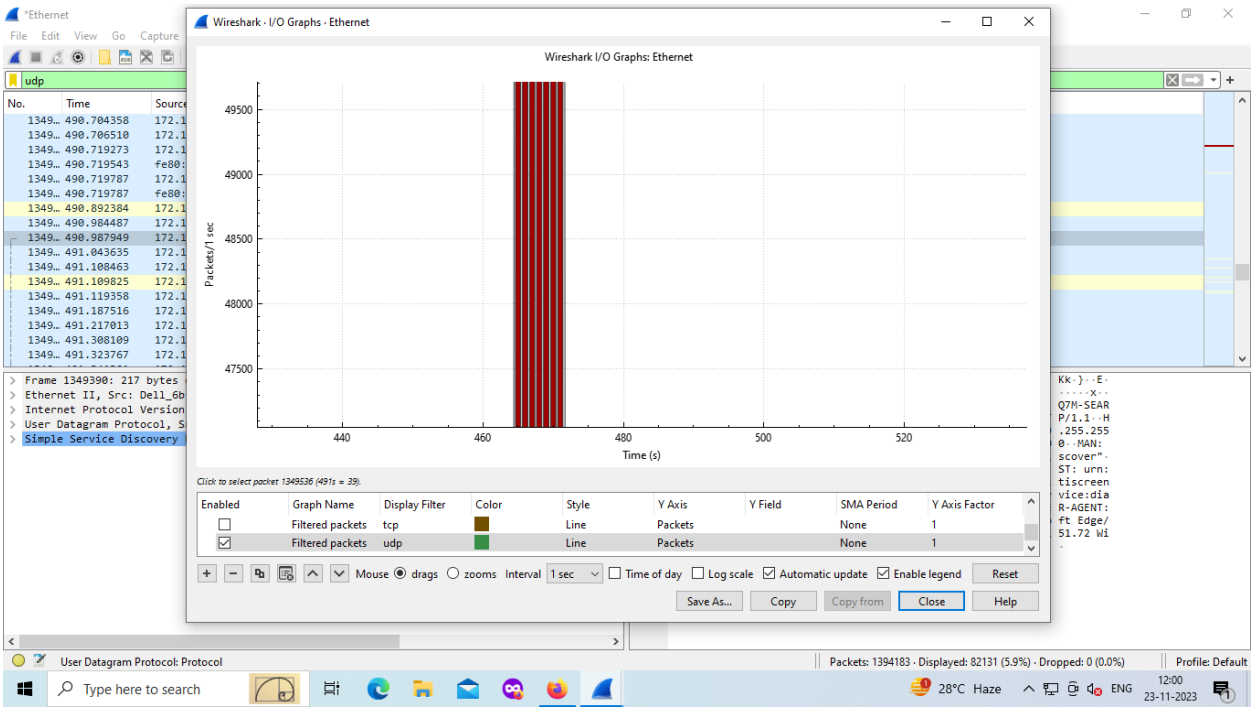

*Ethernet
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
tcp
No. Time Source Destination Protocol Length Info
25161 123.034214 172.16.182.133 172.16.160.222 TCP 66 [TCP Retransmission] 54554 → 7680 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM
25177 123.203615 172.16.158.190 172.16.163.245 TCP 66 [TCP Retransmission] 51854 → 7680 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM
25222 123.521598 157.240.16.32 172.16.162.147 TCP 136 [TCP Retransmission] 443 → 42928 [FIN, PSH, ACK] Seq=1 Ack=1 Win=265 Len=70 TSval=4136364479 TSecr=2201926657
25385 123.929698 172.16.170.30 172.16.162.48 TCP 66 [TCP Retransmission] 63593 → 7680 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM
25386 123.930078 172.16.170.30 172.16.162.48 TCP 66 [TCP Retransmission] 63593 → 7680 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM
25388 123.962940 117.239.91.49 172.16.160.27 TCP 90 [TCP Retransmission] 443 → 42110 [FIN, PSH, ACK] Seq=1 Ack=1 Win=505 Len=24 TSval=493593940 TSecr=1114885
25394 123.966097 172.16.163.204 52.182.141.63 TCP 54 50860 → 443 [FIN, ACK] Seq=1411 Ack=6824 Win=261376 Len=0
25419 124.209778 52.182.141.63 172.16.163.204 TCP 60 443 → 50860 [FIN, ACK] Seq=6824 Ack=1412 Win=4193024 Len=0
25420 124.209838 172.16.163.204 52.182.141.63 TCP 54 50860 → 443 [ACK] Seq=1412 Ack=6825 Win=261376 Len=0
25434 124.258928 172.16.180.133 172.16.160.222 TCP 66 [TCP Retransmission] 55944 → 7680 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM
25450 124.380630 31.13.79.32 172.16.163.104 TCP 112 [TCP Retransmission] 443 → 40354 [PSH, ACK] Seq=1 Ack=1 Win=265 Len=46 TSval=1680609236 TSecr=230381304
25569 125.655583 23.56.101.34 172.16.160.27 TCP 90 [TCP Retransmission] 443 → 37464 [FIN, PSH, ACK] Seq=1 Ack=1 Win=504 Len=24 TSval=1046353875 TSecr=1114799
25583 125.748319 172.16.164.125 172.16.162.108 TCP 66 [TCP Retransmission] 50293 → 7680 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM
25619 125.945639 172.16.170.30 172.16.162.48 TCP 66 [TCP Retransmission] 63593 → 7680 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM
25621 125.945639 172.16.170.30 172.16.162.48 TCP 66 [TCP Retransmission] 63593 → 7680 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM
25754 126.219953 172.16.169.97 172.16.161.40 TCP 66 [TCP Retransmission] 49388 → 7680 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM
25785 126.472763 172.16.146.73 172.16.162.108 TCP 66 [TCP Retransmission] 50954 → 7680 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM
Sequence Number (raw): 2336513584
[Next Sequence Number: 47 (relative sequence number)]
Acknowledgment Number: 1 (relative ack number)
Acknowledgment number (raw): 2293573440
1000 .... = Header Length: 32 bytes (8)
Flags: 0x018 (PSH, ACK)
Window: 265
[Calculated window size: 265]
[Window size scaling factor: -1 (unknown)]
Checksum: 0xe09e [unverified]
[Checksum Status: Unverified]
Urgent Pointer: 0
Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
[Timestamps]
[SEQ/ACK analysis]
TCP payload (46 bytes)
Retransmitted TCP segment data (46 bytes)
0000 3a 21 94 12 c9 d8 60 63 4c ea 64 04 08 00 45 00 :!....`c L.d...E.
0010 00 62 55 0d 40 00 58 06 0f e3 1f 0d 4f 20 ac 10 .bU.@.X. ....O ..
0020 a3 68 01 bb 9d a2 8b 44 5e 30 88 b5 27 40 80 18 .h.....D ^0..'@..
0030 01 09 e0 9e 00 00 01 01 08 0a 64 2b 1c 3d 0d bb ....d+.=..
0040 56 f8 17 03 03 00 29 28 c0 84 09 03 b9 aa dd 63 V.....)(.......c
0050 18 f2 e4 0f 05 47 ea 14 2c d5 23 d7 48 8f 75 40 .....G.. ,.#.H.u@
0060 cd 4e fe 2a 6b 3d 70 e1 bc 01 e3 ec b2 97 20 9b .N.*k=p. ..... .
The window size value from the TCP header (tcp.window_size_value), 2 bytes
Packets: 25820 · Displayed: 814 (3.2%)
Profile: Default
Type here to search
26°C Haze
ENG
11:37
23-11-2023

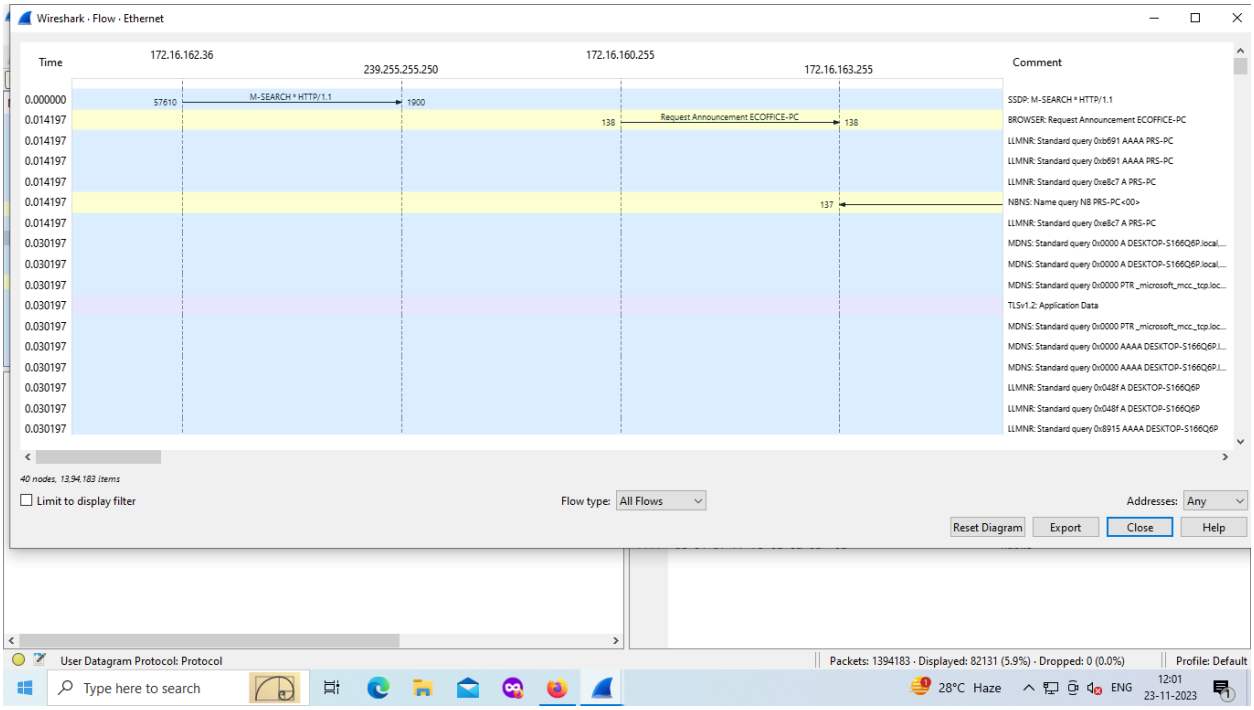

Wireshark · I/O Graphs · Ethernet
Wireshark I/O Graphs: Ethernet
Packets/1 sec
Time (s)
Hover over the graph for details.
Enabled
Graph Name
Display Filter
Color
Style
Y Axis
Y Field
SMA Period
Y Axis Factor
TCP Errors
tcp.analysis.flags
Bar
Packets
None
1
Filtered packets
tcp
Line
Packets
None
1
Mouse drags zooms
Interval 1 sec
Time of day
Log scale
Automatic update
Enable legend
Reset
Save As...
Copy
Copy from
Close
Help

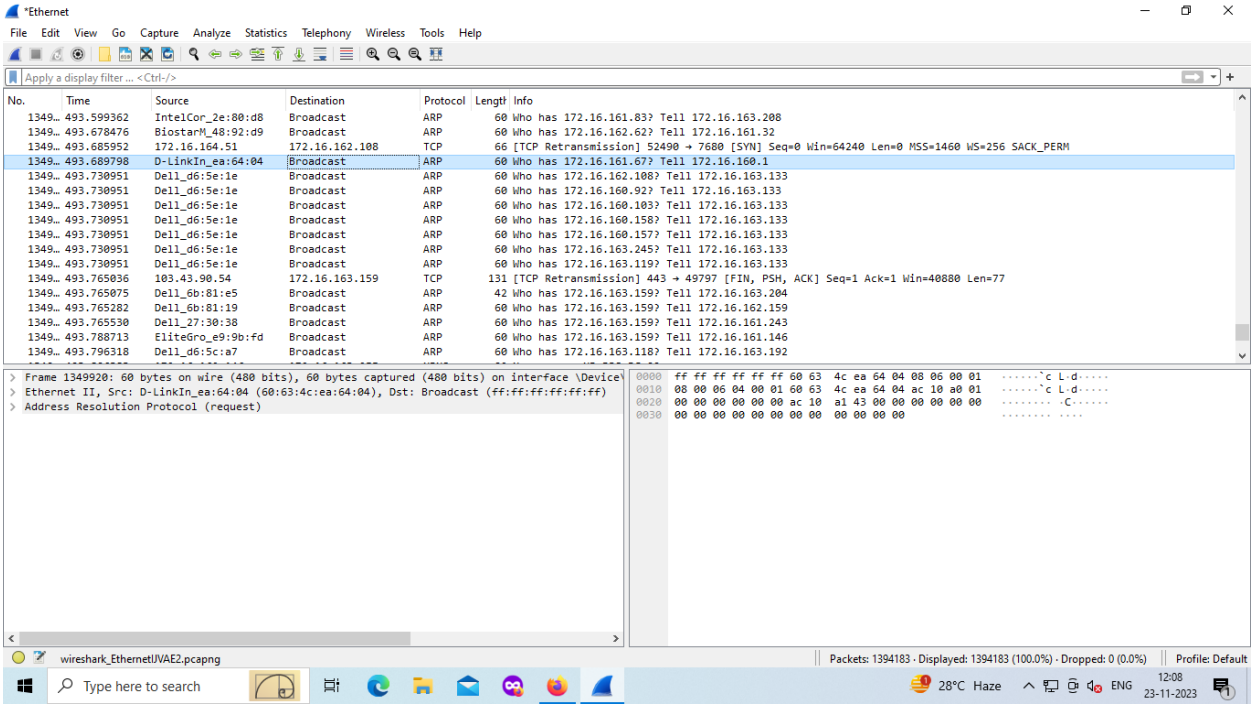

Wireshark · Flow · Ethernet
Time
172.16.162.36
239.255.255.250
172.16.160.255
172.16.163.255
Comment
Limit to display filter
Flow type: All Flows
Addresses: Any
Reset Diagram
Export
Close
Help

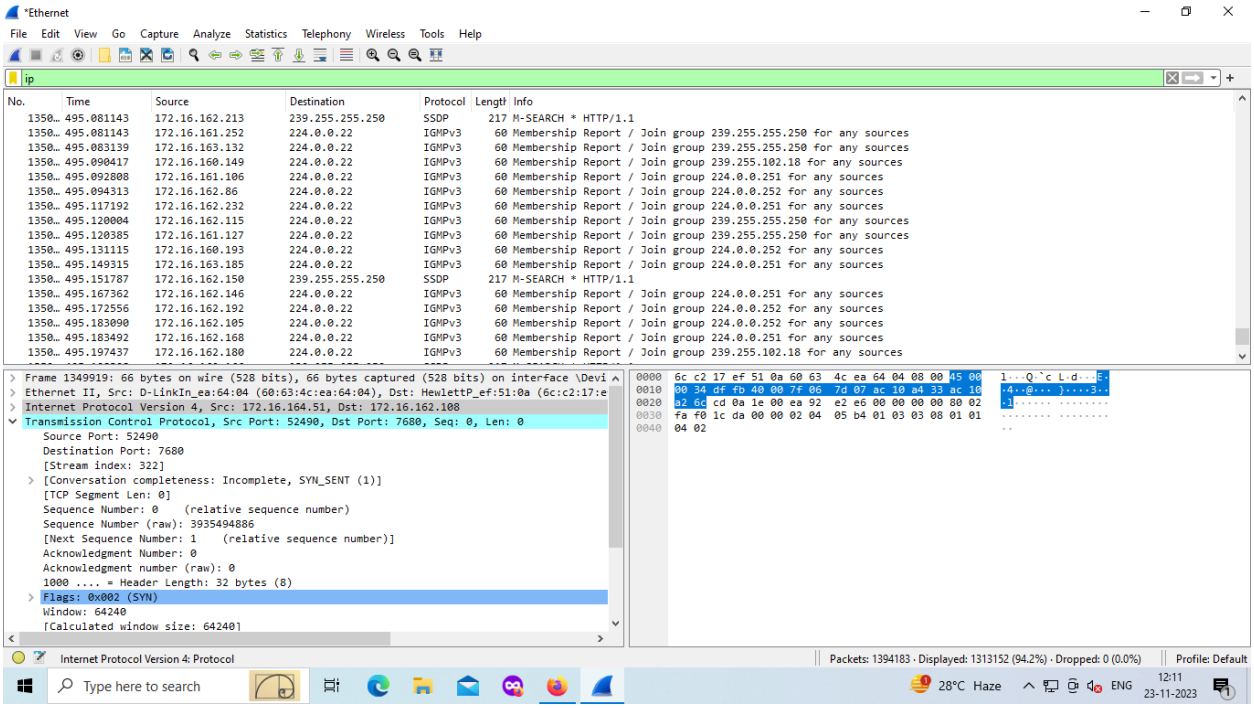

*Ethernet
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
udp
No. Time Source Destination Protocol Length Info
608 5.421292 172.16.162.164 224.77.77.77 UDP 148 12177 → 12177 Len=106
619 5.515398 172.16.160.207 224.0.0.251 MDNS 81 Standard query 0x0000 A DESKTOP-S166Q6P.local, "QM" question
620 5.515821 fe80::5951:fcf7:a8f... ff02::fb MDNS 101 Standard query 0x0000 A DESKTOP-S166Q6P.local, "QM" question
621 5.516233 172.16.160.207 224.0.0.251 MDNS 81 Standard query 0x0000 AAAA DESKTOP-S166Q6P.local, "QM" question
622 5.516654 fe80::5951:fcf7:a8f... ff02::fb MDNS 101 Standard query 0x0000 AAAA DESKTOP-S166Q6P.local, "QM" question
623 5.517531 fe80::5951:fcf7:a8f... ff02::1:3 LLMNR 95 Standard query 0x8709 A DESKTOP-S166Q6P
624 5.518012 172.16.160.207 224.0.0.252 LLMNR 75 Standard query 0x8709 A DESKTOP-S166Q6P
625 5.518504 fe80::5951:fcf7:a8f... ff02::1:3 LLMNR 95 Standard query 0xa186 AAAA DESKTOP-S166Q6P
626 5.518504 172.16.160.207 224.0.0.252 LLMNR 75 Standard query 0xa186 AAAA DESKTOP-S166Q6P
634 5.582340 172.16.161.0 172.16.163.255 NBNS 92 Name query NB WORKGROUP<1c>
635 5.602417 172.16.162.178 239.255.255.250 SSDP 217 M-SEARCH * HTTP/1.1
639 5.678370 172.16.163.204 172.217.160.174 UDP 71 59366 → 443 Len=29
640 5.690027 fe80::e80f:664c:cd4... ff02::1:2 DHCPv6 157 Solicit XID: 0x0eece5 CID: 00010001272859b9f80dac568ac8
641 5.700633 172.217.160.174 172.16.163.204 UDP 71 443 → 59366 Len=29
644 5.781398 172.16.161.145 224.0.0.251 MDNS 85 Standard query 0x0000 PTR _microsoft_mcc._tcp.local, "QU" question
645 5.781398 fe80::c633:50dc:a86... ff02::fb MDNS 105 Standard query 0x0000 PTR _microsoft_mcc._tcp.local, "QU" question
648 5.852629 172.16.161.225 224.0.0.251 MDNS 77 Standard query 0x0000 A ECOFFICE-PC.local, "QM" question
Frame 626: 75 bytes on wire (600 bits), 75 bytes captured (600 bits) on interface \Device\NPF_
Ethernet II, Src: EliteGro_42:0e:fd (1c:69:7a:42:0e:fd), Dst: IPv4mcast_fc (01:00:5e:00:00:fc)
Internet Protocol Version 4, Src: 172.16.160.207, Dst: 224.0.0.252
User Datagram Protocol, Src Port: 63259, Dst Port: 5355
Link-local Multicast Name Resolution (query)
0000 01 00 5e 00 00 fc 1c 69 7a 42 0e fd 08 00 45 00
0010 00 3d cf a6 00 00 01 11 bc 2d ac 10 a0 cf e0 00
0020 00 fc f7 1b 14 eb 00 29 4c ca a1 86 00 00 00 01
0030 00 00 00 00 00 00 0f 44 45 53 4b 54 4f 50 2d 53
0040 31 36 36 51 36 50 00 00 1c 00 01
166Q6P
Internet Protocol Version 4 (ip), 20 bytes
Packets: 1394183 · Displayed: 82131 (5.9%) · Dropped: 0 (0.0%)
Profile: Default
Type here to search
28°C Haze
ENG
11:57
23-11-2023

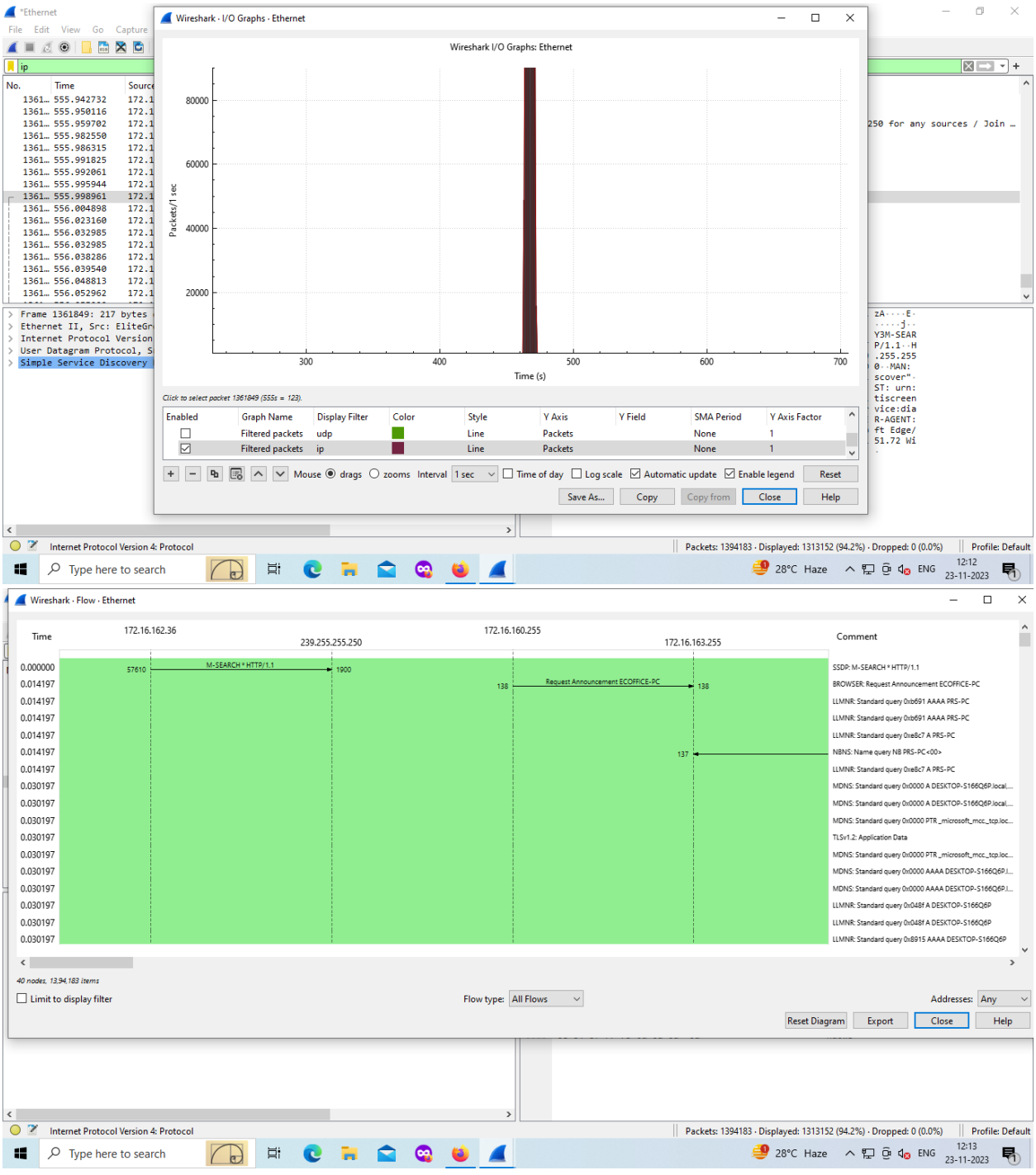

*Ethernet
Wireshark · I/O Graphs · Ethernet
Wireshark I/O Graphs: Ethernet
Packets/1 sec
150000
125000
100000
75000
50000
25000
200
300
400
500
600
700
800
Time (s)
Click to select packet 1346427 (475s = 35).
Enabled Graph Name Display Filter Color Style Y Axis Y Field SMA Period Y Axis Factor
Filtered packets tcp Line Packets None 1
Filtered packets udp Line Packets None 1
Mouse drags zooms Interval 1 sec Time of day Log scale Automatic update Enable legend Reset
Save As... Copy Copy from Close Help
User Datagram Protocol: Protocol
Packets: 1394183 · Displayed: 82131 (5.9%) · Dropped: 0 (0.0%)
Profile: Default
Type here to search
28°C Haze
ENG
12:00
23-11-2023


Wireshark · I/O Graphs · Ethernet
Wireshark I/O Graphs: Ethernet
Packets/1 sec
Time (s)
Click to select packet 1349536 (491s = 39).
Enabled
Graph Name
Display Filter
Color
Style
Y Axis
Y Field
SMA Period
Y Axis Factor
Filtered packets
tcp
Line
Packets
None
Filtered packets
udp
Line
Packets
None
Mouse drags zooms Interval 1 sec Time of day Log scale Automatic update Enable legend Reset
Save As... Copy Copy from Close Help


Wireshark · Flow · Ethernet
Time
172.16.162.36
239.255.255.250
172.16.160.255
172.16.163.255
Comment
M-SEARCH * HTTP/1.1
Request Announcement ECOFFICE-PC
40 nodes, 13,94,183 items
Limit to display filter
Flow type: All Flows
Addresses: Any
Reset Diagram Export Close Help


*Ethernet
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
Apply a display filter ... <Ctrl-/>
No. Time Source Destination Protocol Length Info
1349... 493.599362 IntelCor_2e:80:d8 Broadcast ARP 60 Who has 172.16.161.83? Tell 172.16.163.208
1349... 493.678476 BiostarM_48:92:d9 Broadcast ARP 60 Who has 172.16.162.62? Tell 172.16.161.32
1349... 493.685952 172.16.164.51 172.16.162.108 TCP 66 [TCP Retransmission] 52490 → 7680 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM
1349... 493.689798 D-LinkIn_ea:64:04 Broadcast ARP 60 Who has 172.16.161.67? Tell 172.16.160.1
1349... 493.730951 Dell_d6:5e:1e Broadcast ARP 60 Who has 172.16.162.108? Tell 172.16.163.133
1349... 493.730951 Dell_d6:5e:1e Broadcast ARP 60 Who has 172.16.160.92? Tell 172.16.163.133
1349... 493.730951 Dell_d6:5e:1e Broadcast ARP 60 Who has 172.16.160.103? Tell 172.16.163.133
1349... 493.730951 Dell_d6:5e:1e Broadcast ARP 60 Who has 172.16.160.158? Tell 172.16.163.133
1349... 493.730951 Dell_d6:5e:1e Broadcast ARP 60 Who has 172.16.160.157? Tell 172.16.163.133
1349... 493.730951 Dell_d6:5e:1e Broadcast ARP 60 Who has 172.16.163.245? Tell 172.16.163.133
1349... 493.730951 Dell_d6:5e:1e Broadcast ARP 60 Who has 172.16.163.119? Tell 172.16.163.133
1349... 493.765036 103.43.90.54 172.16.163.159 TCP 131 [TCP Retransmission] 443 → 49797 [FIN, PSH, ACK] Seq=1 Ack=1 Win=40880 Len=77
1349... 493.765075 Dell_6b:81:e5 Broadcast ARP 42 Who has 172.16.163.159? Tell 172.16.163.204
1349... 493.765282 Dell_6b:81:19 Broadcast ARP 60 Who has 172.16.163.159? Tell 172.16.162.159
1349... 493.765530 Dell_27:30:38 Broadcast ARP 60 Who has 172.16.163.159? Tell 172.16.161.243
1349... 493.788713 EliteGro_e9:9b:fd Broadcast ARP 60 Who has 172.16.163.159? Tell 172.16.161.146
1349... 493.796318 Dell_d6:5c:a7 Broadcast ARP 60 Who has 172.16.163.118? Tell 172.16.163.192
Frame 1349920: 60 bytes on wire (480 bits), 60 bytes captured (480 bits) on interface \Device\
Ethernet II, Src: D-LinkIn_ea:64:04 (60:63:4c:ea:64:04), Dst: Broadcast (ff:ff:ff:ff:ff:ff)
Address Resolution Protocol (request)
0000 ff ff ff ff ff ff 60 63 4c ea 64 04 08 06 00 01
0010 08 00 06 04 00 01 60 63 4c ea 64 04 ac 10 a0 01
0020 00 00 00 00 00 00 ac 10 a1 43 00 00 00 00 00 00
0030 00 00 00 00 00 00 00 00 00 00 00 00
wireshark_EthernetJVAE2.pcapng
Packets: 1394183 · Displayed: 1394183 (100.0%) · Dropped: 0 (0.0%)
Profile: Default
Type here to search
28°C Haze
ENG
12:08
23-11-2023


*Ethernet
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
ip
No. Time Source Destination Protocol Length Info
1350... 495.081143 172.16.162.213 239.255.255.250 SSDP 217 M-SEARCH * HTTP/1.1
1350... 495.081143 172.16.161.252 224.0.0.22 IGMPv3 60 Membership Report / Join group 239.255.255.250 for any sources
1350... 495.083139 172.16.163.132 224.0.0.22 IGMPv3 60 Membership Report / Join group 239.255.255.250 for any sources
1350... 495.090417 172.16.160.149 224.0.0.22 IGMPv3 60 Membership Report / Join group 239.255.102.18 for any sources
1350... 495.092808 172.16.161.106 224.0.0.22 IGMPv3 60 Membership Report / Join group 224.0.0.251 for any sources
1350... 495.094313 172.16.162.86 224.0.0.22 IGMPv3 60 Membership Report / Join group 224.0.0.252 for any sources
1350... 495.117192 172.16.162.232 224.0.0.22 IGMPv3 60 Membership Report / Join group 224.0.0.251 for any sources
1350... 495.120004 172.16.162.115 224.0.0.22 IGMPv3 60 Membership Report / Join group 239.255.255.250 for any sources
1350... 495.120385 172.16.161.127 224.0.0.22 IGMPv3 60 Membership Report / Join group 239.255.255.250 for any sources
1350... 495.131115 172.16.160.193 224.0.0.22 IGMPv3 60 Membership Report / Join group 224.0.0.252 for any sources
1350... 495.149315 172.16.163.185 224.0.0.22 IGMPv3 60 Membership Report / Join group 224.0.0.251 for any sources
1350... 495.151787 172.16.162.150 239.255.255.250 SSDP 217 M-SEARCH * HTTP/1.1
1350... 495.167362 172.16.162.146 224.0.0.22 IGMPv3 60 Membership Report / Join group 224.0.0.251 for any sources
1350... 495.172556 172.16.162.192 224.0.0.22 IGMPv3 60 Membership Report / Join group 224.0.0.252 for any sources
1350... 495.183090 172.16.162.105 224.0.0.22 IGMPv3 60 Membership Report / Join group 224.0.0.252 for any sources
1350... 495.183492 172.16.162.168 224.0.0.22 IGMPv3 60 Membership Report / Join group 224.0.0.251 for any sources
1350... 495.197437 172.16.162.180 224.0.0.22 IGMPv3 60 Membership Report / Join group 239.255.102.18 for any sources
Frame 1349919: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface \Devi
Ethernet II, Src: D-LinkIn_ea:64:04 (60:63:4c:ea:64:04), Dst: HewlettP_ef:51:0a (6c:c2:17:e
Internet Protocol Version 4, Src: 172.16.164.51, Dst: 172.16.162.108
Transmission Control Protocol, Src Port: 52490, Dst Port: 7680, Seq: 0, Len: 0
Source Port: 52490
Destination Port: 7680
[Stream index: 322]
[Conversation completeness: Incomplete, SYN_SENT (1)]
[TCP Segment Len: 0]
Sequence Number: 0 (relative sequence number)
Sequence Number (raw): 3935494886
[Next Sequence Number: 1 (relative sequence number)]
Acknowledgment Number: 0
Acknowledgment number (raw): 0
1000 .... = Header Length: 32 bytes (8)
Flags: 0x002 (SYN)
Window: 64240
[Calculated window size: 64240]
0000 6c c2 17 ef 51 0a 60 63 4c ea 64 04 08 00 45 00
0010 00 34 df fb 40 00 7f 06 7d 07 ac 10 a4 33 ac 10
0020 a2 6c cd 0a 1e 00 ea 92 e2 e6 00 00 00 00 80 02
0030 fa f0 1c da 00 00 02 04 05 b4 01 03 03 08 01 01
0040 04 02
Internet Protocol Version 4: Protocol
Packets: 1394183 · Displayed: 1313152 (94.2%) · Dropped: 0 (0.0%)
Profile: Default
Type here to search
28°C Haze
ENG
12:11
23-11-2023


Wireshark · I/O Graphs · Ethernet
Wireshark I/O Graphs: Ethernet
Packets/1 sec
Time (s)
Wireshark · Flow · Ethernet
Time
172.16.162.36
239.255.255.250
172.16.160.255
172.16.163.255
Comment
M-SEARCH * HTTP/1.1
Request Announcement ECOFFICE-PC
Internet Protocol Version 4: Protocol
Packets: 1394183 · Displayed: 1313152 (94.2%) · Dropped: 0 (0.0%)
Profile: Default
Type here to search
28°C Haze
ENG
12:12
23-11-2023
12:13
23-11-2023