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Task 5: Capture and Analyze Network Traffic Using Wireshark
Wireshark Network Traffic Capture and Analysis Report

📋 **Project Summary**

This report provides network traffic analysis performed using Wireshark as part of the Cybersecurity Internship. The goal was to capture live network packets, apply specific protocol filters, and summarize the captured data.

🎯 **Task Objective**

- **Perform a live capture of network traffic.**
- **Apply protocol-specific filters to extract meaningful insights.**
- **Document protocol-specific packet counts and observations.**

🛠 **Tools Utilized**

- **Wireshark: A packet analyzer tool used to capture and examine network packets.**

Protocol-Specific Analysis

Protocol	Total Packets	Insights
IPv6	16 packets	IPv6 traffic included DNS and MDNS queries.
IPv4	53 packets	Included local service discovery and DNS queries.
UDP	41 packets	Main protocol observed, covering SSDP, MDNS, and DNS.
TCP	Minimal or	TCP communication was not significant in

	None	**this capture.**
DNS	**8 packets**	**Domains like Grammarly were queried for name resolution.**
HTTP	**Not Captured**	**No visible HTTP traffic in this dataset.**
ICMP	**Not Captured**	**No ping or diagnostic traffic detected.**

Major Observations

- **UDP traffic was the most dominant.**
- **DNS Queries indicated communication with external web services like Grammarly.**
- **HTTP and ICMP traffic were absent, suggesting encrypted web browsing (likely HTTPS).**
- **Local network communication was heavily involved using SSDP and MDNS protocols.**

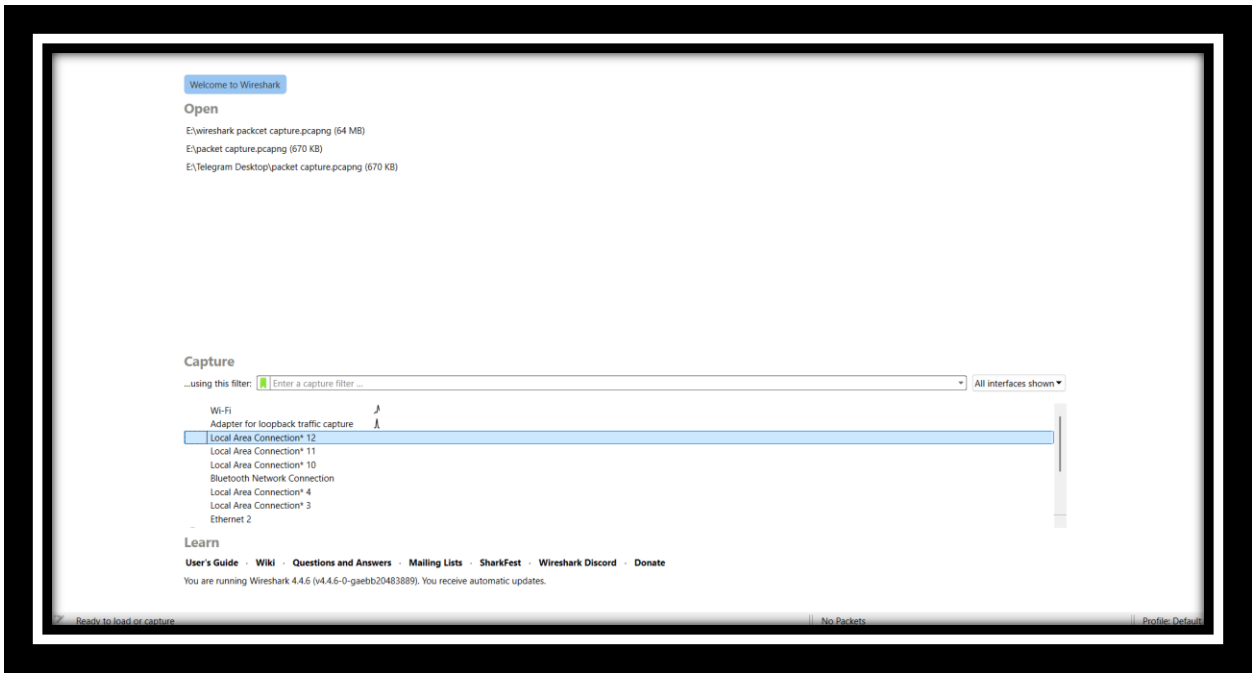
Included Screenshots

- **Protocol hierarchy summary.**
- **Network endpoints statistics.**
- **Device conversation records.**
- **UDP protocol filtered view.**

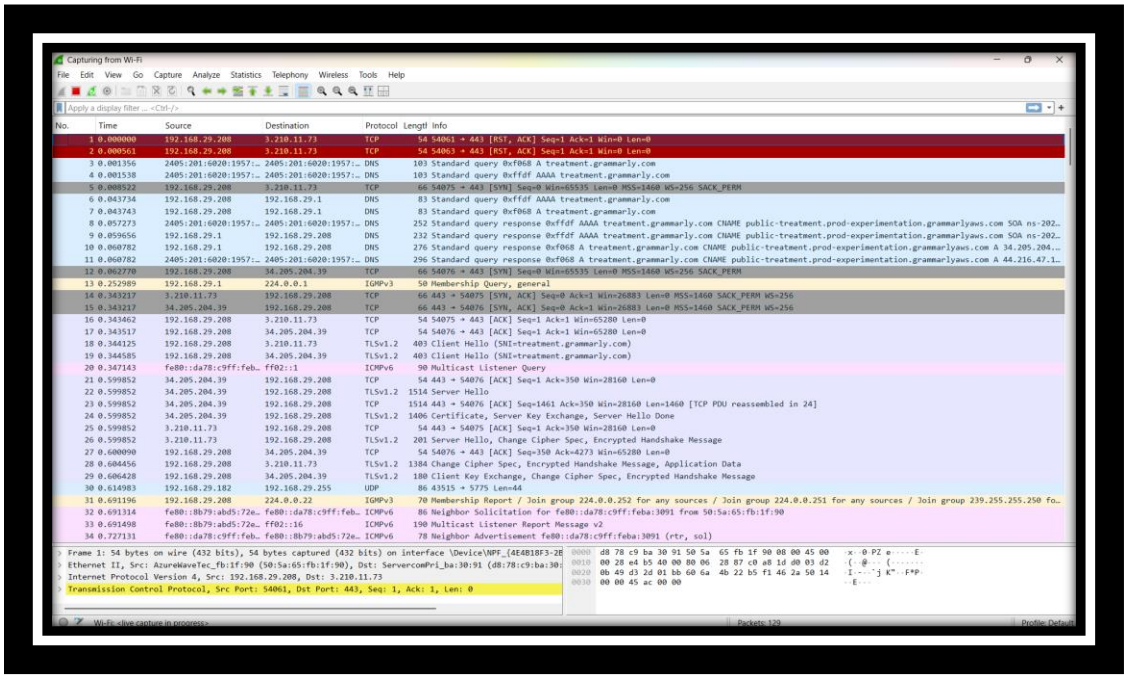
Final Remarks

The packet capture primarily revealed local discovery traffic and DNS queries. The absence of HTTP suggests encrypted traffic using TLS. No ICMP packets were detected, indicating no active ping tests during the session.

- **SELECTING INTERFACE OR MODE FOR CAPTURING PACKETS**

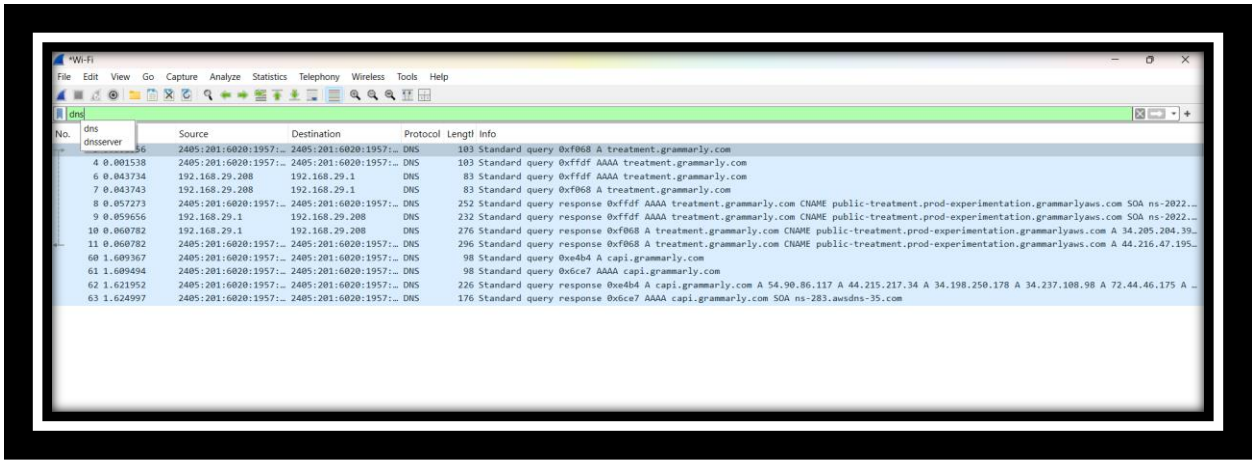


- **Packet capture starts**

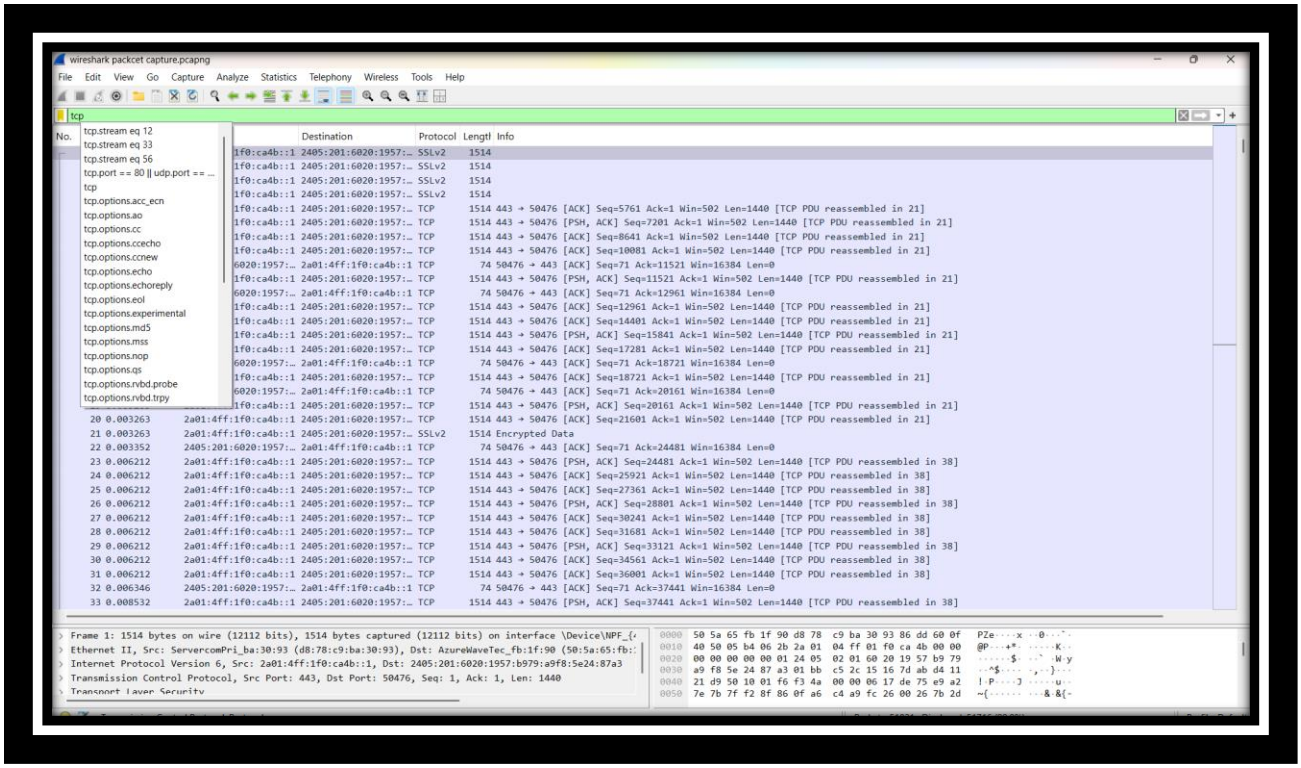


APPLYING FILTERS

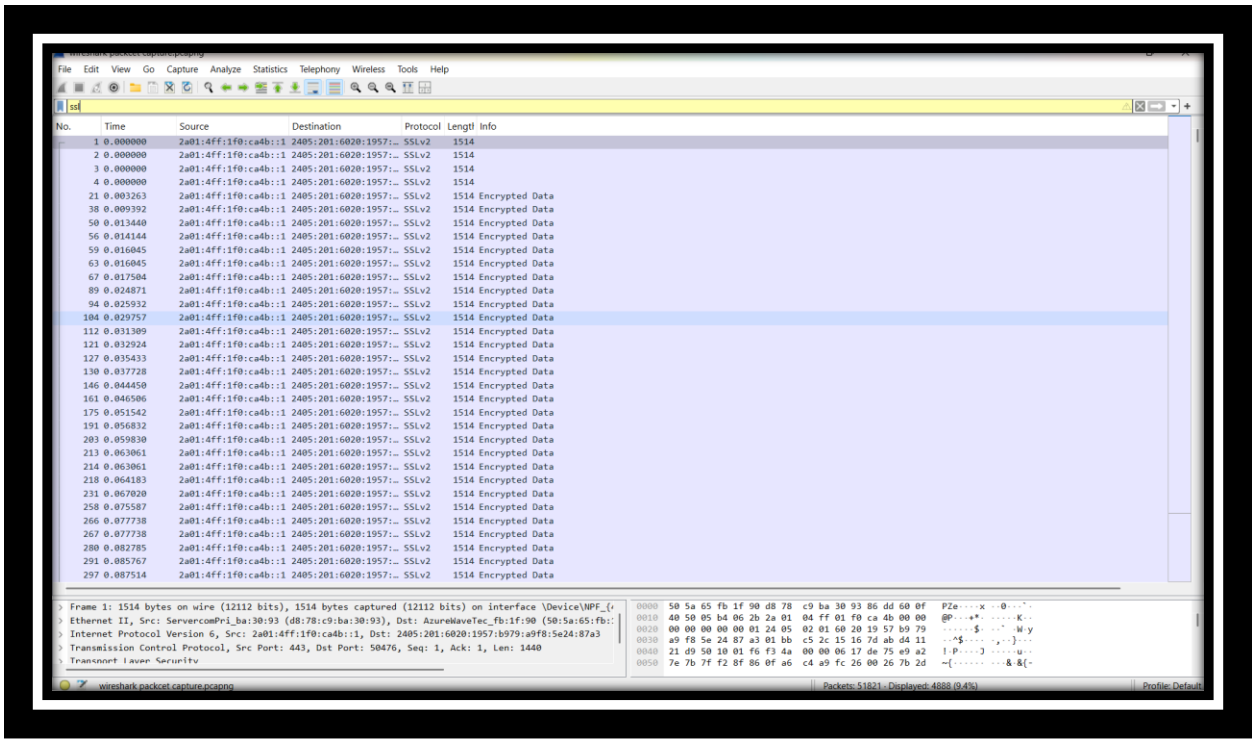
- **DNS**


*Wi-Fi
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
dns
dns
dnsserver
No. Source Destination Protocol Lengtl Info
4 0.001538 2405:201:6020:1957:… 2405:201:6020:1957:… DNS 103 Standard query 0xffdf AAAA treatment.grammarly.com
6 0.043734 192.168.29.208 192.168.29.1 DNS 83 Standard query 0xffdf AAAA treatment.grammarly.com
7 0.043743 192.168.29.208 192.168.29.1 DNS 83 Standard query 0xf068 A treatment.grammarly.com
8 0.057273 2405:201:6020:1957:… 2405:201:6020:1957:… DNS 252 Standard query response 0xffdf AAAA treatment.grammarly.com CNAME public-treatment.prod-experimentation.grammarlyaws.com SOA ns-2022.…
9 0.059656 192.168.29.1 192.168.29.208 DNS 232 Standard query response 0xffdf AAAA treatment.grammarly.com CNAME public-treatment.prod-experimentation.grammarlyaws.com SOA ns-2022.…
10 0.060782 192.168.29.1 192.168.29.208 DNS 276 Standard query response 0xf068 A treatment.grammarly.com CNAME public-treatment.prod-experimentation.grammarlyaws.com A 34.205.204.39…
11 0.060782 2405:201:6020:1957:… 2405:201:6020:1957:… DNS 296 Standard query response 0xf068 A treatment.grammarly.com CNAME public-treatment.prod-experimentation.grammarlyaws.com A 44.216.47.195…
60 1.609367 2405:201:6020:1957:… 2405:201:6020:1957:… DNS 98 Standard query 0xe4b4 A capi.grammarly.com
61 1.609494 2405:201:6020:1957:… 2405:201:6020:1957:… DNS 98 Standard query 0x6ce7 AAAA capi.grammarly.com
62 1.621952 2405:201:6020:1957:… 2405:201:6020:1957:… DNS 226 Standard query response 0xe4b4 A capi.grammarly.com A 54.90.86.117 A 44.215.217.34 A 34.198.250.178 A 34.237.108.98 A 72.44.46.175 A …
63 1.624997 2405:201:6020:1957:… 2405:201:6020:1957:… DNS 176 Standard query response 0x6ce7 AAAA capi.grammarly.com SOA ns-283.awsdns-35.com

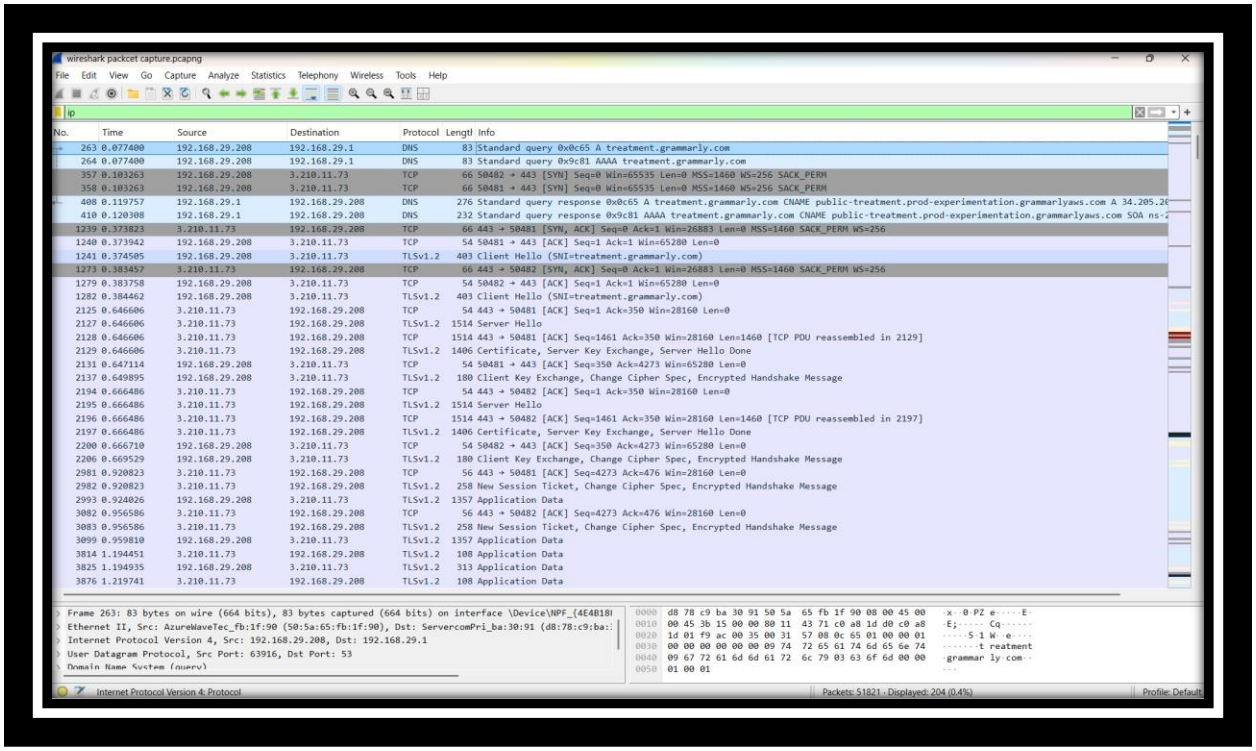
TCP


wireshark packcet capture.pcapng
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
tcp
tcp.stream eq 12
tcp.stream eq 33
tcp.stream eq 56
tcp.port == 80 || udp.port == …
tcp
tcp.options.acc_ecn
tcp.options.ao
tcp.options.cc
tcp.options.ccecho
tcp.options.ccnew
tcp.options.echo
tcp.options.echoreply
tcp.options.eol
tcp.options.experimental
tcp.options.md5
tcp.options.mss
tcp.options.nop
tcp.options.qs
tcp.options.rvbd.probe
tcp.options.rvbd.trpy
No. Destination Protocol Lengtl Info
1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514
1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514
1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514
1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514
1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [ACK] Seq=5761 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 21]
1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [PSH, ACK] Seq=7201 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 21]
1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [ACK] Seq=8641 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 21]
1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [ACK] Seq=10081 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 21]
6020:1957:… 2a01:4ff:1f0:ca4b::1 TCP 74 50476 → 443 [ACK] Seq=71 Ack=11521 Win=16384 Len=0
1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [PSH, ACK] Seq=11521 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 21]
6020:1957:… 2a01:4ff:1f0:ca4b::1 TCP 74 50476 → 443 [ACK] Seq=71 Ack=12961 Win=16384 Len=0
1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [ACK] Seq=12961 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 21]
1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [ACK] Seq=14401 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 21]
1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [PSH, ACK] Seq=15841 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 21]
1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [ACK] Seq=17281 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 21]
6020:1957:… 2a01:4ff:1f0:ca4b::1 TCP 74 50476 → 443 [ACK] Seq=71 Ack=18721 Win=16384 Len=0
1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [ACK] Seq=18721 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 21]
6020:1957:… 2a01:4ff:1f0:ca4b::1 TCP 74 50476 → 443 [ACK] Seq=71 Ack=20161 Win=16384 Len=0
1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [PSH, ACK] Seq=20161 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 21]
20 0.003263 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [ACK] Seq=21601 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 21]
21 0.003263 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
22 0.003352 2405:201:6020:1957:… 2a01:4ff:1f0:ca4b::1 TCP 74 50476 → 443 [ACK] Seq=71 Ack=24481 Win=16384 Len=0
23 0.006212 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [PSH, ACK] Seq=24481 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 38]
24 0.006212 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [ACK] Seq=25921 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 38]
25 0.006212 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [ACK] Seq=27361 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 38]
26 0.006212 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [PSH, ACK] Seq=28801 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 38]
27 0.006212 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [ACK] Seq=30241 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 38]
28 0.006212 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [ACK] Seq=31681 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 38]
29 0.006212 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [PSH, ACK] Seq=33121 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 38]
30 0.006212 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [ACK] Seq=34561 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 38]
31 0.006212 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [ACK] Seq=36001 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 38]
32 0.006346 2405:201:6020:1957:… 2a01:4ff:1f0:ca4b::1 TCP 74 50476 → 443 [ACK] Seq=71 Ack=37441 Win=16384 Len=0
33 0.008532 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… TCP 1514 443 → 50476 [PSH, ACK] Seq=37441 Ack=1 Win=502 Len=1440 [TCP PDU reassembled in 38]
Frame 1: 1514 bytes on wire (12112 bits), 1514 bytes captured (12112 bits) on interface \Device\NPF_{
Ethernet II, Src: ServercomPri_ba:30:93 (d8:78:c9:ba:30:93), Dst: AzureWaveTec_fb:1f:90 (50:5a:65:fb:
Internet Protocol Version 6, Src: 2a01:4ff:1f0:ca4b::1, Dst: 2405:201:6020:1957:b979:a9f8:5e24:87a3
Transmission Control Protocol, Src Port: 443, Dst Port: 50476, Seq: 1, Ack: 1, Len: 1440
Transport Layer Security
0000 50 5a 65 fb 1f 90 d8 78 c9 ba 30 93 86 dd 60 0f PZe····x ··0···`·
0010 40 50 05 b4 06 2b 2a 01 04 ff 01 f0 ca 4b 00 00 @P···+* ·····K··
0020 00 00 00 00 00 01 24 05 02 01 60 20 19 57 b9 79 ·····$· ··` ·W·y
0030 a9 f8 5e 24 87 a3 01 bb c5 2c 15 16 7d ab d4 11 ··^$···· ·,··}···
0040 21 d9 50 10 01 f6 f3 4a 00 00 06 17 de 75 e9 a2 !·P····J ·····u··
0050 7e 7b 7f f2 8f 86 0f a6 c4 a9 fc 26 00 26 7b 2d ~{····· ···&·&{-

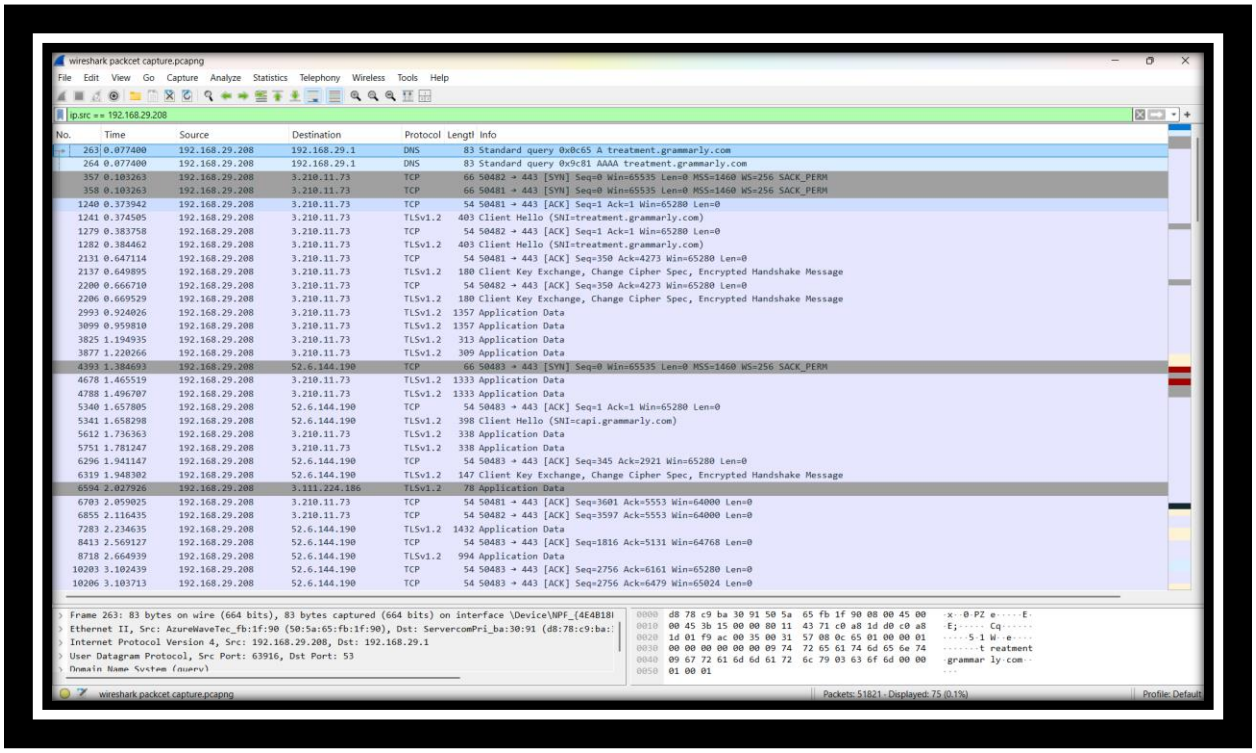
SSL


File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
ssl
No. Time Source Destination Protocol Lengtl Info
1 0.000000 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514
2 0.000000 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514
3 0.000000 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514
4 0.000000 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514
21 0.003263 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
38 0.009392 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
50 0.013440 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
56 0.014144 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
59 0.016045 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
63 0.016045 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
67 0.017504 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
89 0.024871 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
94 0.025932 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
104 0.029757 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
112 0.031309 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
121 0.032924 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
127 0.035433 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
130 0.037728 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
146 0.044450 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
161 0.046506 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
175 0.051542 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
191 0.056832 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
203 0.059830 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
213 0.063061 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
214 0.063061 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
218 0.064183 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
231 0.067020 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
258 0.075587 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
266 0.077738 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
267 0.077738 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
280 0.082785 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
291 0.085767 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
297 0.087514 2a01:4ff:1f0:ca4b::1 2405:201:6020:1957:… SSLv2 1514 Encrypted Data
Frame 1: 1514 bytes on wire (12112 bits), 1514 bytes captured (12112 bits) on interface \Device\NPF_{
Ethernet II, Src: ServercomPri_ba:30:93 (d8:78:c9:ba:30:93), Dst: AzureWaveTec_fb:1f:90 (50:5a:65:fb:
Internet Protocol Version 6, Src: 2a01:4ff:1f0:ca4b::1, Dst: 2405:201:6020:1957:b979:a9f8:5e24:87a3
Transmission Control Protocol, Src Port: 443, Dst Port: 50476, Seq: 1, Ack: 1, Len: 1440
Transport Layer Security
0000 50 5a 65 fb 1f 90 d8 78 c9 ba 30 93 86 dd 60 0f PZe····x ··0···`·
0010 40 50 05 b4 06 2b 2a 01 04 ff 01 f0 ca 4b 00 00 @P···+*· ·····K··
0020 00 00 00 00 00 01 24 05 02 01 60 20 19 57 b9 79 ·····$· ··` ·W·y
0030 a9 f8 5e 24 87 a3 01 bb c5 2c 15 16 7d ab d4 11 ··^$···· ·,··}···
0040 21 d9 50 10 01 f6 f3 4a 00 00 06 17 de 75 e9 a2 !·P····J ·····u··
0050 7e 7b 7f f2 8f 86 0f a6 c4 a9 fc 26 00 26 7b 2d ~{····· ·····& &{-
wireshark packcet capture.pcapng
Packets: 51821 · Displayed: 4888 (9.4%)
Profile: Default

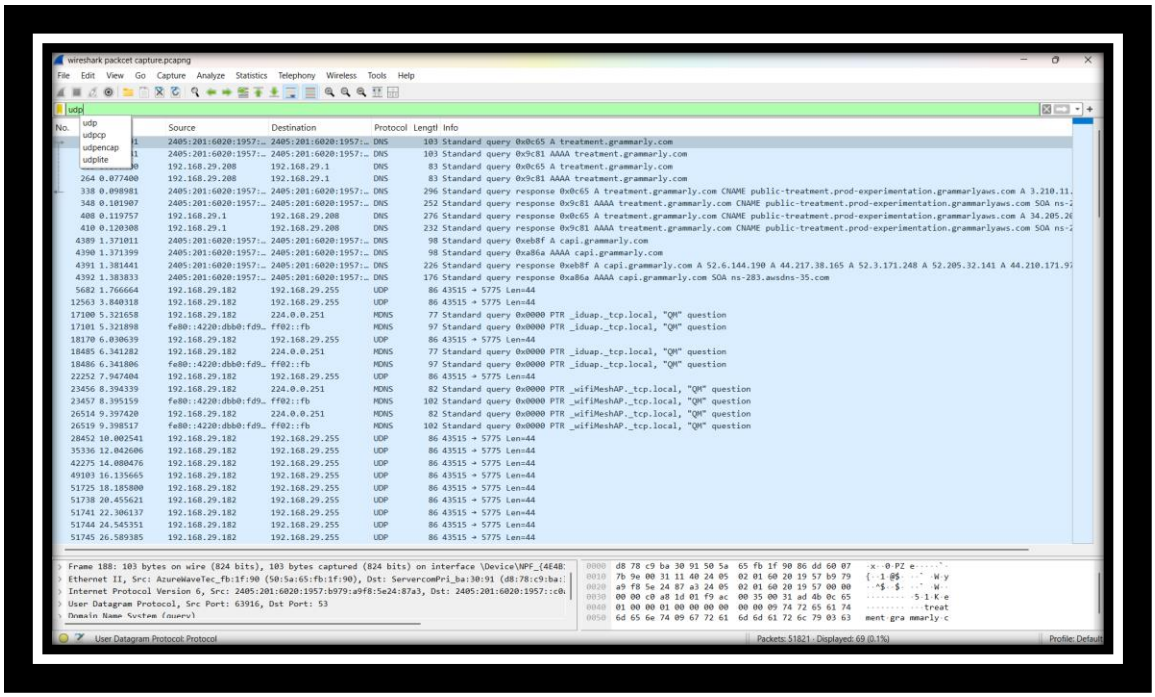
IP


wireshark packcet capture.pcapng
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
ip
No. Time Source Destination Protocol Lengtl Info
263 0.077400 192.168.29.208 192.168.29.1 DNS 83 Standard query 0x0c65 A treatment.grammarly.com
264 0.077400 192.168.29.208 192.168.29.1 DNS 83 Standard query 0x9c81 AAAA treatment.grammarly.com
357 0.103263 192.168.29.208 3.210.11.73 TCP 66 50482 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
358 0.103263 192.168.29.208 3.210.11.73 TCP 66 50481 → 443 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=256 SACK_PERM
408 0.119757 192.168.29.1 192.168.29.208 DNS 276 Standard query response 0x0c65 A treatment.grammarly.com CNAME public-treatment.prod-experimentation.grammarlyaws.com A 34.205.2
410 0.120308 192.168.29.1 192.168.29.208 DNS 232 Standard query response 0x9c81 AAAA treatment.grammarly.com CNAME public-treatment.prod-experimentation.grammarlyaws.com SOA ns-
1239 0.373823 3.210.11.73 192.168.29.208 TCP 66 443 → 50481 [SYN, ACK] Seq=0 Ack=1 Win=26883 Len=0 MSS=1460 SACK_PERM WS=256
1240 0.373942 192.168.29.208 3.210.11.73 TCP 54 50481 → 443 [ACK] Seq=1 Ack=1 Win=65280 Len=0
1241 0.374505 192.168.29.208 3.210.11.73 TLSv1.2 403 Client Hello (SNI=treatment.grammarly.com)
1273 0.383457 3.210.11.73 192.168.29.208 TCP 66 443 → 50482 [SYN, ACK] Seq=0 Ack=1 Win=26883 Len=0 MSS=1460 SACK_PERM WS=256
1279 0.383758 192.168.29.208 3.210.11.73 TCP 54 50482 → 443 [ACK] Seq=1 Ack=1 Win=65280 Len=0
1282 0.384462 192.168.29.208 3.210.11.73 TLSv1.2 403 Client Hello (SNI=treatment.grammarly.com)
2125 0.646606 3.210.11.73 192.168.29.208 TCP 54 443 → 50481 [ACK] Seq=1 Ack=350 Win=28160 Len=0
2127 0.646606 3.210.11.73 192.168.29.208 TLSv1.2 1514 Server Hello
2128 0.646606 3.210.11.73 192.168.29.208 TCP 1514 443 → 50481 [ACK] Seq=1461 Ack=350 Win=28160 Len=1460 [TCP PDU reassembled in 2129]
2129 0.646606 3.210.11.73 192.168.29.208 TLSv1.2 1406 Certificate, Server Key Exchange, Server Hello Done
2131 0.647114 192.168.29.208 3.210.11.73 TCP 54 50481 → 443 [ACK] Seq=350 Ack=4273 Win=65280 Len=0
2137 0.649895 192.168.29.208 3.210.11.73 TLSv1.2 180 Client Key Exchange, Change Cipher Spec, Encrypted Handshake Message
2194 0.666486 3.210.11.73 192.168.29.208 TCP 54 443 → 50482 [ACK] Seq=1 Ack=350 Win=28160 Len=0
2195 0.666486 3.210.11.73 192.168.29.208 TLSv1.2 1514 Server Hello
2196 0.666486 3.210.11.73 192.168.29.208 TCP 1514 443 → 50482 [ACK] Seq=1461 Ack=350 Win=28160 Len=1460 [TCP PDU reassembled in 2197]
2197 0.666486 3.210.11.73 192.168.29.208 TLSv1.2 1406 Certificate, Server Key Exchange, Server Hello Done
2200 0.666710 192.168.29.208 3.210.11.73 TCP 54 50482 → 443 [ACK] Seq=350 Ack=4273 Win=65280 Len=0
2206 0.669529 192.168.29.208 3.210.11.73 TLSv1.2 180 Client Key Exchange, Change Cipher Spec, Encrypted Handshake Message
2981 0.920823 3.210.11.73 192.168.29.208 TCP 56 443 → 50481 [ACK] Seq=4273 Ack=476 Win=28160 Len=0
2982 0.920823 3.210.11.73 192.168.29.208 TLSv1.2 258 New Session Ticket, Change Cipher Spec, Encrypted Handshake Message
2993 0.924026 192.168.29.208 3.210.11.73 TLSv1.2 1357 Application Data
3082 0.956586 3.210.11.73 192.168.29.208 TCP 56 443 → 50482 [ACK] Seq=4273 Ack=476 Win=28160 Len=0
3083 0.956586 3.210.11.73 192.168.29.208 TLSv1.2 258 New Session Ticket, Change Cipher Spec, Encrypted Handshake Message
3099 0.959810 192.168.29.208 3.210.11.73 TLSv1.2 1357 Application Data
3814 1.194451 3.210.11.73 192.168.29.208 TLSv1.2 108 Application Data
3825 1.194935 192.168.29.208 3.210.11.73 TLSv1.2 313 Application Data
3876 1.219741 3.210.11.73 192.168.29.208 TLSv1.2 108 Application Data
Frame 263: 83 bytes on wire (664 bits), 83 bytes captured (664 bits) on interface \Device\NPF_{4E4B18
Ethernet II, Src: AzureWaveTec_fb:1f:90 (50:5a:65:fb:1f:90), Dst: ServercomPri_ba:30:91 (d8:78:c9:ba:
Internet Protocol Version 4, Src: 192.168.29.208, Dst: 192.168.29.1
User Datagram Protocol, Src Port: 63916, Dst Port: 53
Domain Name System (query)
0000 d8 78 c9 ba 30 91 50 5a 65 fb 1f 90 08 00 45 00 ·x··0·PZ e·····E·
0010 00 45 3b 15 00 00 80 11 43 71 c0 a8 1d d0 c0 a8 ·E;····· Cq·····
0020 1d 01 f9 ac 00 35 00 31 57 08 0c 65 01 00 00 01 ·····5·1 W··e····
0030 00 00 00 00 00 00 09 74 72 65 61 74 6d 65 6e 74 ·······t reatment
0040 09 67 72 61 6d 6d 61 72 6c 79 03 63 6f 6d 00 00 ·grammar ly·com··
0050 01 00 01 ···
Internet Protocol Version 4: Protocol
Packets: 51821 · Displayed: 204 (0.4%)
Profile: Default

IP SRC ==192.168.29.208



UDP



Detailed Protocol-wise Analysis:

1. IP Source (ip.src)

From the Endpoints statistics:

- **The most active IP sources:**
    - **6c:e8:c6:c7:fe:d2 with 51,763 packets (SSDP related traffic).**
    - **d8:78:c9:ba:30:91 with 13,591 packets.**
    - **Other minor IP sources involved in smaller packet counts.**

Observation:
The majority of traffic is local broadcast/multicast related to SSDP and MDNS protocols.

2. DNS Traffic

From the Filtered Display and Packet List:

- **Total DNS packets: 8 packets**
- **Domains queried:**
    - **treatment.grammarly.com**
    - **capi.grammarly.com**
- **Both IPv6 and IPv4 DNS resolutions observed.**

Observation:
DNS queries are mainly directed toward Grammarly services, indicating web application communication.

3. HTTP Traffic

- **HTTP traffic not detected in the provided capture based on your filtered views and protocol hierarchy.**

Note:
If browsing occurred over HTTPS, it would not appear as HTTP but as encrypted TLS traffic.

4. ICMP Traffic

- **ICMP traffic not detected in this capture.**

Possible Reason:
No ping or traceroute operations were performed during the capture.

5. TCP Traffic

- **TCP traffic is negligible or not prominently visible in the provided screenshots.**
- **Likely traffic was predominantly UDP-based services.**

6. UDP Traffic

From the Protocol Hierarchy and Filters:

- **Total UDP packets: 41 packets**
- **UDP was used for:**
    - **Simple Service Discovery Protocol (SSDP): 22 packets**
    - **Multicast Domain Name System (MDNS): 4 packets**
    - **Domain Name System (DNS): 8 packets**
    - **Other local broadcast messages.**

Observation:
UDP traffic dominated this capture and was mainly involved in network service discovery and name resolution.

Key Observations:

- **The network traffic captured was mostly service discovery and DNS resolution related.**
- **Major IP traffic sources were local devices broadcasting service discovery packets.**
- **No HTTP (unencrypted web) or ICMP traffic was found.**
- **DNS queries indicate that some web-related services (like Grammarly) were accessed.**