

CSE1004 – LAB SUBMISSION 11 – 21/10/2020

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- ip.addr

The image shows a Wireshark packet capture window titled "*Wi-Fi". The menu bar includes File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Wireless, Tools, and Help. The toolbar contains various icons for packet capture and analysis. The packet list pane shows a list of captured packets with columns for No., Time, Source, Destination, Protocol, Length, and Info. The details pane shows the structure of the first packet (Frame 1), including Ethernet II, Internet Protocol Version 4, User Datagram Protocol, and Data (71 bytes). The packet bytes pane shows the raw data in hexadecimal and ASCII.

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	52.112.45.19	192.168.29.98	UDP	113	3481 → 50045 Len=71
2	0.065273	192.168.29.98	52.112.45.19	UDP	158	50048 → 3481 Len=116
3	0.120413	52.112.45.19	192.168.29.98	STUN	114	Binding Success Resp
4	0.120749	192.168.29.98	52.112.45.19	UDP	158	50016 → 3479 Len=116
5	0.128509	52.111.229.3	192.168.29.98	TLSv1.2	105	Application Data
6	0.168638	192.168.29.98	52.111.229.3	TCP	54	60540 → 443 [ACK] Seq=...

Frame 1: 113 bytes on wire (904 bits), 113 bytes captured (904 bits) on interface \Device\NPF_{69357D08-...} Ethernet II, Src: Sercomm_0c:ca:1e (14:ae:85:ec:ca:1e), Dst: 66:b2:80:00:46:e6 (66:b2:80:00:46:e6) Internet Protocol Version 4, Src: 52.112.45.19, Dst: 192.168.29.98 User Datagram Protocol, Src Port: 3481, Dst Port: 50045 Data (71 bytes) Data: 80c900050001587189b9c6cf83f6da16da7e173f60f5eeba... [Length: 71]

0000 66 b2 80 00 46 e6 14 ae 85 ec ca 1e 08 00 45 00 f...F... ..E
0010 00 63 2c 19 00 00 6b 11 e3 e3 34 70 2d 13 c0 a8 .c,...k...4p...
0020 1d 62 0d 99 c3 7d 00 4f 5a 81 80 c9 00 05 00 01 .b...}..0 Z...
0030 58 71 89 b9 c6 cf 83 f6 da 16 da 7e 17 3f 60 f5 Xq... ..~.?`
0040 ee ba ce 6c 9d 4e 1e 5f b6 d2 26 51 1a e6 e2 b6 ...l.N_...&Q...
0050 f9 11 aa 23 f1 ee 4a 07 1a fb 3e da be 52 80 6c ...#...J...>R.l
0060 c6 e4 80 08 ce 44 01 5f e5 61 3a cf 41 1b 65 6bD_...a:A·ek
0070 11

Source or Destination: IPv4 address | Packets: 8307 · Displayed: 8274 (99.6%) · Dropped: 0 (0.0%) | Profile: Default

- ip.addr == 172.16.50.254

*Wi-Fi

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

ip.addr == 52.112.45.19

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	52.112.45.19	192.168.29.98	UDP	182	3479 → 50016 Len=140
2	0.023297	52.112.45.19	192.168.29.98	UDP	170	3479 → 50016 Len=128
3	0.044665	52.112.45.19	192.168.29.98	UDP	169	3479 → 50016 Len=127
4	0.063290	52.112.45.19	192.168.29.98	UDP	168	3479 → 50016 Len=126
5	0.083347	52.112.45.19	192.168.29.98	UDP	169	3479 → 50016 Len=127
6	0.104375	52.112.45.19	192.168.29.98	UDP	185	3479 → 50016 Len=143

> Frame 1: 182 bytes on wire (1456 bits), 182 bytes captured (1456 bits) on interface \Device\NPF_{69357D06...}

> Ethernet II, Src: Sercomm_0c:ca:1e (14:ae:85:ec:ca:1e), Dst: 66:b2:80:00:46:e6 (66:b2:80:00:46:e6)

> Internet Protocol Version 4, Src: 52.112.45.19, Dst: 192.168.29.98

> User Datagram Protocol, Src Port: 3479, Dst Port: 50016

▼ Data (140 bytes)

Data: 91686753027428e30001542400000196bede000112deacbb...
[Length: 140]

```

0020 1d 62 0d 97 c3 60 00 94 a3 a0 91 68 67 53 02 74  ·b·.·.·.·hgS·t
0030 28 e3 00 01 54 24 00 00 01 96 be de 00 01 12 de  (·T$·.·.·.·
0040 ac bb c8 6d 5d 7f 87 e2 e6 08 41 bb ca 2e df 2d  ··m]·.·.·A·.·.
0050 dd 34 7b ac 5e cd a7 54 ca a1 55 8b 62 3f c3 fb  ·4{·^·T·.·U·b?·
0060 8e 24 09 ef e4 46 27 51 50 4d 3e 89 76 ce c0 72  ·$·F'Q PM>·v·r
0070 57 4a f3 d9 87 3c bb 8f 8b 33 95 e6 d0 31 70 31  WJ·.·<·.·3·.·1p1
0080 e6 24 76 97 ce 4c 2b 97 ab 9a be b1 9a b1 c0 94  ·$v·L+·.·.·.·
0090 8a bf 0a d3 bf 3d 47 3e c4 10 1a fe 68 79 7d fe  ·.·.=G>·.·.hy}·
00a0 a7 3d 6d a4 6f 00 00 04 34 a4 a6 01 90 0e 00 62  ·=m·o·.·.4·.·.·b

```

Data (data.data), 140 bytes || Packets: 847 · Displayed: 819 (96.7%) · Dropped: 0 (0.0%) || Profile: Default

- ip.dst

The image shows a Wireshark packet capture window titled '*Wi-Fi'. The filter bar at the top contains the filter 'ip.dst'. The packet list shows six packets, all of which are filtered. The first packet is selected, and its details are expanded in the 'Packet Details' pane. The 'Data' field shows the raw packet data in hexadecimal and ASCII.

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	52.112.45.19	192.168.29.98	UDP	182	3479 → 50016 Len=140
2	0.023297	52.112.45.19	192.168.29.98	UDP	170	3479 → 50016 Len=128
3	0.044665	52.112.45.19	192.168.29.98	UDP	169	3479 → 50016 Len=127
4	0.063290	52.112.45.19	192.168.29.98	UDP	168	3479 → 50016 Len=126
5	0.083347	52.112.45.19	192.168.29.98	UDP	169	3479 → 50016 Len=127
6	0.104375	52.112.45.19	192.168.29.98	UDP	185	3479 → 50016 Len=143

Frame 1: 182 bytes on wire (1456 bits), 182 bytes captured (1456 bits) on interface \Device\NPF_{69357D06...}

Ethernet II, Src: Sercomm_0c:ca:1e (14:ae:85:ec:ca:1e), Dst: 66:b2:80:00:46:e6 (66:b2:80:00:46:e6)

Internet Protocol Version 4, Src: 52.112.45.19, Dst: 192.168.29.98

User Datagram Protocol, Src Port: 3479, Dst Port: 50016

Data (140 bytes)

Data: 91686753027428e30001542400000196bede000112deacbb...
[Length: 140]

0020 1d 62 0d 97 c3 60 00 94 a3 a0 91 68 67 53 02 74 .b... .hgS.t
0030 28 e3 00 01 54 24 00 00 01 96 be de 00 01 12 de (...T\$. .
0040 ac bb c8 6d 5d 7f 87 e2 e6 08 41 bb ca 2e df 2d .m]... .A...
0050 dd 34 7b ac 5e cd a7 54 ca a1 55 8b 62 3f c3 fb .4{.^...T .U.b?...
0060 8e 24 09 ef e4 46 27 51 50 4d 3e 89 76 ce c0 72 .\$.F'Q PM>.v.r
0070 57 4a f3 d9 87 3c bb 8f 8b 33 95 e6 d0 31 70 31 WJ...<...3...1p1
0080 e6 24 76 97 ce 4c 2b 97 ab 9a be b1 9a b1 c0 94 .\$.v...L+...
0090 8a bf 0a d3 bf 3d 47 3e c4 10 1a fe 68 79 7d fe=G>hy}..
00a0 a7 3d 6d a4 6f 00 00 04 34 a4 a6 01 90 0e 00 62 .m.o... 4.....b

Destination: IPv4 address || Packets: 847 · Displayed: 847 (100.0%) · Dropped: 0 (0.0%) || Profile: Default

- ip.src

The image shows a Wireshark packet capture window titled "*Wi-Fi". The interface includes a menu bar (File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Wireless, Tools, Help) and a toolbar with various icons. A filter bar at the top shows "ip.src". Below this is a packet list table with columns: No., Time, Source, Destination, Protocol, Length, and Info.

No.	Time	Source	Destination	Protocol	Length	Info
982	18.427888	192.168.29.1	192.168.29.98	DNS	298	Standard query respo
983	18.433990	192.168.29.98	34.206.251.191	TCP	66	61080 → 443 [SYN] Se
984	18.485588	52.112.45.19	192.168.29.98	UDP	117	3480 → 50035 Len=75
985	18.491252	192.168.29.98	224.0.0.251	MDNS	79	Standard query 0x000
986	18.638491	34.236.78.72	192.168.29.98	TCP	54	443 → 61052 [RST] Se
987	18.661846	34.206.251.191	192.168.29.98	TCP	66	443 → 61080 [SYN, AC

Below the packet list, the "Packet 986" details pane is expanded, showing the following information:

- Frame 1: 132 bytes on wire (1056 bits), 132 bytes captured (1056 bits) on interface \Device\NPF_{69357D06}
- Ethernet II, Src: Sercomm_0c:ca:1e (14:ae:85:ec:ca:1e), Dst: 66:b2:80:00:46:e6 (66:b2:80:00:46:e6)
- Internet Protocol Version 4, Src: 52.112.45.19, Dst: 192.168.29.98
- User Datagram Protocol, Src Port: 3479, Dst Port: 50016
- Data (90 bytes)
 - Data: 91687d8d029a61e30001542400000001bede00011250f072...
 - [Length: 90]

At the bottom, the "Packet 986" bytes pane shows the raw data in hexadecimal and ASCII format:

```

0000  66 b2 80 00 46 e6 14 ae 85 ec ca 1e 08 00 45 00  f...F...E.
0010  00 76 02 ba 00 00 6c 11 0c 30 34 70 2d 13 c0 a8  .v...l..04p...
0020  1d 62 0d 97 c3 60 00 62 08 e6 91 68 7d 8d 02 9a  .b...`b...h}...
0030  61 e3 00 01 54 24 00 00 00 01 be de 00 01 12 50  a...T$...P
0040  f0 72 af f7 1a ab 26 b0 a7 4e b5 fe 3c 36 0a 31  .r...&..N<6.1
0050  a2 82 0c 02 5d 15 89 5e 88 d5 31 b3 e9 c8 88 e7  ....]^..1....
0060  2b f7 58 67 17 c1 65 1d 12 e2 8f f1 ba 14 3a 11  +Xg...e.....
0070  64 dc 02 00 00 04 34 f6 9a 01 be 7a 29 43 25 5a  d...4...z)C%Z
0080  72 68 b7 b9                                     rh...
  
```

The status bar at the bottom indicates: Source: IPv4 address | Packets: 1740 · Displayed: 1738 (99.9%) · Dropped: 0 (0.0%) | Profile: Default

- dns and http

No.	Time	Source	Destination	Protocol	Length	Info
133	2.414652	192.168.29.98	192.168.29.1	DNS	83	Standard query 0xcda
134	2.418425	192.168.29.1	192.168.29.98	DNS	315	Standard query respo
171	2.887443	192.168.29.98	192.168.29.1	DNS	105	Standard query 0x3d9
172	2.891758	192.168.29.1	192.168.29.98	DNS	159	Standard query respo
173	2.895761	192.168.29.98	192.168.29.1	DNS	79	Standard query 0xb19
174	2.899997	192.168.29.1	192.168.29.98	DNS	247	Standard query respo

> Frame 133: 83 bytes on wire (664 bits), 83 bytes captured (664 bits) on interface \Device\NPF_{69357D08-...}

> Ethernet II, Src: 66:b2:80:00:46:e6 (66:b2:80:00:46:e6), Dst: Sercomm_0c:ca:1e (14:ae:85:ec:ca:1e)

> Internet Protocol Version 4, Src: 192.168.29.98, Dst: 192.168.29.1

> User Datagram Protocol, Src Port: 62747, Dst Port: 53

> Domain Name System (query)

```

0000  14 ae 85 ec ca 1e 66 b2 80 00 46 e6 08 00 45 00  .....f. .F...E.
0010  00 45 47 d8 00 00 80 11 00 00 c0 a8 1d 62 c0 a8  .EG.... .b..
0020  1d 01 f5 1b 00 35 00 31 bb f6 cd ac 01 00 00 01  ....5.1 .....
0030  00 00 00 00 00 00 06 64 6d 32 33 30 36 07 73 74  ....d m2306.st
0040  6f 72 61 67 65 04 6c 69 76 65 03 63 6f 6d 00 00  orage.li ve.com..
0050  01 00 01  ...

```

Domain Name System: Protocol | Packets: 1740 · Displayed: 12 (0.7%) · Dropped: 0 (0.0%) | Profile: Default

dns and http was not working so I have executed only dns

- dns or tcp

Wireshark network traffic capture showing a TCP connection. The packet list shows a FIN packet (No. 4), an Encrypted Alert (No. 35), and several ACK and SYN packets. The packet details for frame 39 show the TCP header with Src Port 60903 and Dst Port 443. The packet bytes show the raw data in hexadecimal and ASCII.

No.	Time	Source	Destination	Protocol	Length	Info
4	0.038688	192.168.29.98	51.143.111.143	TCP	54	61373 → 443 [FIN, AC
35	0.550823	54.147.21.139	192.168.29.98	TLSv1.2	85	Encrypted Alert
39	0.592850	192.168.29.98	54.147.21.139	TCP	54	60903 → 443 [ACK] Se
135	2.421050	192.168.29.98	13.107.42.12	TCP	66	61067 → 443 [SYN] Se
136	2.440506	13.107.42.12	192.168.29.98	TCP	66	443 → 61067 [SYN, AC
137	2.440818	192.168.29.98	13.107.42.12	TCP	54	61067 → 443 [ACK] Se

Frame 39: 54 bytes on wire (432 bits), 54 bytes captured (432 bits) on interface \Device\NPF_{69357D08-8...}

Ethernet II, Src: 66:b2:80:00:46:e6 (66:b2:80:00:46:e6), Dst: Sercomm_0c:ca:1e (14:ae:85:ec:ca:1e)

Internet Protocol Version 4, Src: 192.168.29.98, Dst: 54.147.21.139

Transmission Control Protocol, Src Port: 60903, Dst Port: 443, Seq: 1, Ack: 32, Len: 0

0000 14 ae 85 ec ca 1e 66 b2 80 00 46 e6 08 00 45 00f. .F...E.
 0010 00 28 63 50 40 00 80 06 00 00 c0 a8 1d 62 36 93 .(cP@... ..b6.
 0020 15 8b ed e7 01 bb 62 fc 9d 77 d0 2e 80 35 50 10b. .w...5P.
 0030 01 fd 2a 43 00 00 ...*C..

Transmission Con...otocol: Protoc| Packets: 1740 · Displayed: 754 (43.3%) · Dropped: 0 (0.0%) | Profile: Default

dns or tcp was not working so I have attached tcp

- tcp.port == 8008

Wireshark capture window titled "*Wi-Fi". The filter bar shows "tcp.port == 80". The packet list shows two packets:

No.	Time	Source	Destination	Protocol	Length	Info
169	2.856332	192.168.29.98	117.18.237.29	TCP	54	61358 → 80 [FIN, ACK] Seq=1
785	12.456817	192.168.29.98	117.18.237.29	TCP	54	61358 → 80 [RST, ACK] Seq=2

The details pane for the selected packet (No. 785) shows:

- > Frame 169: 54 bytes on wire (432 bits), 54 bytes captured (432 bits) on interface \Device\NPF_{69357D08-...}
- > Ethernet II, Src: 66:b2:80:00:46:e6 (66:b2:80:00:46:e6), Dst: Sercomm_0c:ca:1e (14:ae:85:ec:ca:1e)
- > Internet Protocol Version 4, Src: 192.168.29.98, Dst: 117.18.237.29
- > Transmission Control Protocol, Src Port: 61358, Dst Port: 80, Seq: 1, Ack: 1, Len: 0

The packet bytes pane shows the raw data in hexadecimal and ASCII:

```

0000  14 ae 85 ec ca 1e 66 b2 80 00 46 e6 08 00 45 00  .....f...F...E.
0010  00 28 60 c1 40 00 80 06 00 00 c0 a8 1d 62 75 12  .(`.@... ..bu.
0020  ed 1d ef ae 00 50 49 e9 f2 3f 20 84 b1 ac 50 11  ....PI..? ...P.
0030  01 fe 40 55 00 00                                ..@U..
  
```

The status bar at the bottom shows: wireshark_Wi-Fi_...25_a25844.pcapng | Packets: 1740 · Displayed: 2 (0.1%) · Dropped: 0 (0.0%) | Profile: Default

- tcp.analysis.flags

The image shows a Wireshark packet capture window titled "*Wi-Fi". The menu bar includes File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Wireless, Tools, and Help. The toolbar contains various icons for packet capture and analysis. The packet list pane shows a list of captured packets, with packet 529 selected. The packet details pane shows the structure of the selected packet, including Ethernet II, Internet Protocol Version 4, and Transmission Control Protocol. The packet bytes pane shows the raw data of the selected packet in hexadecimal and ASCII.

No.	Time	Source	Destination	Protocol	Length	Info
529	4.682094	52.239.177.36	192.168.29.98	TCP	66	[TCP Dup ACK 335#1]
530	4.682094	52.239.177.36	192.168.29.98	TCP	66	[TCP Dup ACK 335#2]
531	4.682094	52.239.177.36	192.168.29.98	TCP	66	[TCP Dup ACK 335#3]
532	4.682094	52.239.177.36	192.168.29.98	TCP	66	[TCP Dup ACK 335#4]
533	4.682094	52.239.177.36	192.168.29.98	TCP	66	[TCP Dup ACK 335#5]
534	4.682094	52.239.177.36	192.168.29.98	TCP	66	[TCP Dup ACK 335#6]

> Frame 529: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface \Device\NPF_{69357D08-...}

> Ethernet II, Src: Sercomm_0c:ca:1e (14:ae:85:ec:ca:1e), Dst: 66:b2:80:00:46:e6 (66:b2:80:00:46:e6)

> Internet Protocol Version 4, Src: 52.239.177.36, Dst: 192.168.29.98

> Transmission Control Protocol, Src Port: 443, Dst Port: 61068, Seq: 7406, Ack: 41223, Len: 0

```

0000  66 b2 80 00 46 e6 14 ae 85 ec ca 1e 08 00 45 00  f...F... ..E.
0010  00 34 4b 20 40 00 65 06 06 86 34 ef b1 24 c0 a8  .4K @.e. .4.$..
0020  1d 62 01 bb ee 8c 8d 17 6f 49 30 b7 24 0d 80 10  .b.....oI0.$...
0030  03 fc b5 cd 00 00 01 05 0a 30 b7 29 ad 30 b7     .....  .0.)0.
0040  2f 4d                                             /M

```

TCP Analysis Flags: Label | Packets: 1740 · Displayed: 44 (2.5%) · Dropped: 0 (0.0%) | Profile: Default

- !(arp or dns or icmp)

The image shows a Wireshark packet capture window titled "*Wi-Fi". The menu bar includes File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Wireless, Tools, and Help. The toolbar contains various icons for file operations, capture control, and analysis. The filter bar at the top displays the filter "!(arp or dns or icmp)".

The packet list pane shows a table of captured packets:

No.	Time	Source	Destination	Protocol	Length	Info
523	4.595510	13.107.42.12	192.168.29.98	TCP	60	443 → 61071 [ACK] Seq=...
524	4.595510	13.107.42.12	192.168.29.98	TCP	60	443 → 61071 [ACK] Seq=...
525	4.596130	13.107.42.12	192.168.29.98	TCP	60	443 → 61071 [ACK] Seq=...
526	4.596130	13.107.42.12	192.168.29.98	TCP	60	443 → 61071 [ACK] Seq=...
527	4.601824	52.112.45.19	192.168.29.98	UDP	117	3480 → 50035 Len=75
528	4.619489	192.168.29.98	52.112.45.19	UDP	237	50016 → 3479 Len=195

The details pane for the selected packet (No. 528) shows the following structure:

- > Frame 529: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface \Device\NPF_{69357D08-...}
- > Ethernet II, Src: Sercomm_0c:ca:1e (14:ae:85:ec:ca:1e), Dst: 66:b2:80:00:46:e6 (66:b2:80:00:46:e6)
- > Internet Protocol Version 4, Src: 52.239.177.36, Dst: 192.168.29.98
- > Transmission Control Protocol, Src Port: 443, Dst Port: 61068, Seq: 7406, Ack: 41223, Len: 0

The packet bytes pane shows the raw data in hexadecimal and ASCII:

```

0000  66 b2 80 00 46 e6 14 ae 85 ec ca 1e 08 00 45 00  f...F... ..E.
0010  00 34 4b 20 40 00 65 06 06 86 34 ef b1 24 c0 a8  .4K @.e. .4.$..
0020  1d 62 01 bb ee 8c 8d 17 6f 49 30 b7 24 0d 80 10  .b..... oI0.$...
0030  03 fc b5 cd 00 00 01 01 05 0a 30 b7 29 ad 30 b7  ..... ..0.)..0.
0040  2f 4d                                           /M
  
```

The status bar at the bottom indicates: wireshark_Wi-F..._a25844.pcapn | Packets: 1740 · Displayed: 1724 (99.1%) · Dropped: 0 (0.0%) | Profile: Default

- http.request

The image shows a Wireshark packet capture window titled "*Wi-Fi". The filter bar at the top contains the text "http.request". The packet list pane shows four packets, all of which are SSDP M-SEARCH requests from 192.168.29.98 to 239.255.255.250. The first packet (No. 662) is selected, and its details pane shows the following structure:

- Frame 662: 209 bytes on wire (1672 bits), 209 bytes captured (1672 bits) on interface \Device\NPF_{69357...}
- Ethernet II, Src: 66:b2:80:00:46:e6 (66:b2:80:00:46:e6), Dst: IPv4mcast_7f:ff:fa (01:00:5e:7f:ff:fa)
- Internet Protocol Version 4, Src: 192.168.29.98, Dst: 239.255.255.250
- User Datagram Protocol, Src Port: 53633, Dst Port: 1900
- Simple Service Discovery Protocol

The packet bytes pane shows the raw data of the selected packet, including the Ethernet II header, IP header, UDP header, and the SSDP M-SEARCH message body.

- http.response.code
- http.response.code == 200

- tcp.flags.syn

The image shows a Wireshark packet capture window titled "*Wi-Fi". The menu bar includes File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Wireless, Tools, and Help. The toolbar contains various icons for packet capture and analysis. The packet list pane shows several packets, with packet 10 selected. The packet details pane shows the structure of packet 10, and the packet bytes pane shows the raw data.

No.	Time	Source	Destination	Protocol	Length	Info
10	0.161524	52.40.45.67	192.168.29.98	TLSv1.2	85	Application Data
14	0.203173	192.168.29.98	52.40.45.67	TCP	54	61182 → 8883 [ACK] S
23	0.320367	192.168.29.98	52.111.240.8	TLSv1.2	89	Application Data
28	0.402752	52.111.240.8	192.168.29.98	TCP	54	443 → 60926 [ACK] Se
151	0.976886	192.168.29.98	52.114.158.91	TCP	66	61542 → 443 [SYN] Se
183	1.191200	52.114.158.91	192.168.29.98	TCP	66	443 → 61542 [SYN, AC

Frame 10: 85 bytes on wire (680 bits), 85 bytes captured (680 bits) on interface \Device\NPF_{69357D08-8...}

Ethernet II, Src: Sercomm_0c:ca:1e (14:ae:85:ec:ca:1e), Dst: 66:b2:80:00:46:e6 (66:b2:80:00:46:e6)

Internet Protocol Version 4, Src: 52.40.45.67, Dst: 192.168.29.98

Transmission Control Protocol, Src Port: 8883, Dst Port: 61182, Seq: 1, Ack: 1, Len: 31

Transport Layer Security

```

0000  66 b2 80 00 46 e6 14 ae 85 ec ca 1e 08 00 45 00  f...F... ..E.
0010  00 47 68 e0 40 00 e1 06 f1 5a 34 28 2d 43 c0 a8  .Gh.@... .Z4(-C..
0020  1d 62 22 b3 ee fe 87 f5 83 d0 87 0e 9a 0a 50 18  .b"..... ..P.
0030  00 bd 91 ce 00 00 17 03 03 00 1a 00 00 00 00 00  .....
0040  00 0e 36 c4 1c 92 d3 1e 3b c6 b6 28 a3 5f aa db  ..6..... ;..('..
0050  a4 92 84 d7 db  .....

```

Syn: Boolean || Packets: 33037 · Displayed: 4111 (12.4%) · Dropped: 0 (0.0%) || Profile: Default

- `tcp.flags.syn == 1`

Wireshark packet capture window titled "*Wi-Fi". The filter bar shows `tcp.flags.syn == 1`. The packet list shows several TCP SYN packets. The selected packet (Frame 386) is a SYN packet from 52.114.158.91 to 192.168.29.98. The packet details show Ethernet II, Internet Protocol Version 4, and Transmission Control Protocol. The packet bytes are displayed in hexadecimal and ASCII.

Destination	Protocol	Length	Info
52.114.158.91	TCP	66	61542 → 443 [SYN] Seq=0 Win=65535 [TCP CHECKSUM INCORRECT] Le...
192.168.29.98	TCP	66	443 → 61542 [SYN, ACK] Seq=0 Ack=1 Win=8192 Len=0 MSS=1440 WS...
52.114.158.91	TCP	66	61543 → 443 [SYN] Seq=0 Win=65535 [TCP CHECKSUM INCORRECT] Le...
192.168.29.98	TCP	66	443 → 61543 [SYN, ACK] Seq=0 Ack=1 Win=8192 Len=0 MSS=1440 WS...
13.107.42.12	TCP	66	61544 → 443 [SYN] Seq=0 Win=64240 [TCP CHECKSUM INCORRECT] Le...
192.168.29.98	TCP	66	443 → 61544 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1440 W...

> Frame 386: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface \Device\NPF_{69357D08-...}

> Ethernet II, Src: Sercomm_0c:ca:1e (14:ae:85:ec:ca:1e), Dst: 66:b2:80:00:46:e6 (66:b2:80:00:46:e6)

> Internet Protocol Version 4, Src: 52.114.158.91, Dst: 192.168.29.98

> Transmission Control Protocol, Src Port: 443, Dst Port: 61543, Seq: 0, Ack: 1, Len: 0

0000 66 b2 80 00 46 e6 14 ae 85 ec ca 1e 08 00 45 00 f...F...E..

0010 00 34 21 40 40 00 69 06 3f ac 34 72 9e 5b c0 a8 .4!@@.i.?.4r.[..

0020 1d 62 01 bb f0 67 56 9e 99 99 c7 62 4f ed 80 12 .b...gV...b0...

0030 20 00 a4 91 00 00 02 04 05 a0 01 03 03 08 01 01

0040 04 02 ..

wireshark_Wi-Fi...0_a12984.pcapng | Packets: 33037 · Displayed: 38 (0.1%) · Dropped: 0 (0.0%) | Profile: Default

- `tcp.flags.reset == 1`

Wireshark packet capture window titled "*Wi-Fi". The filter bar shows `tcp.flags.reset == 1`. The packet list displays the following packets:

No.	Time	Source	Destination	Protocol	Length	Info
4235	26.082820	52.113.206.3	192.168.29.98	TCP	54	443 → 61443 [RST, AC]
5242	33.005146	52.113.194.132	192.168.29.98	TCP	54	443 → 61486 [RST, AC]
5280	33.401039	192.168.29.98	52.4.219.165	TCP	54	61516 → 443 [RST, AC]
5282	33.401679	192.168.29.98	52.4.219.165	TCP	54	61517 → 443 [RST, AC]
5284	33.402441	192.168.29.98	52.4.219.165	TCP	54	61518 → 443 [RST, AC]
5300	33.623473	52.4.219.165	192.168.29.98	TCP	54	443 → 61516 [RST, Se]

The details pane for packet 4235 shows the following layers:

- Frame 4235: 54 bytes on wire (432 bits), 54 bytes captured (432 bits) on interface \Device\NPF_{69357D08}
- Ethernet II, Src: Sercomm_0c:ca:1e (14:ae:85:ec:ca:1e), Dst: 66:b2:80:00:46:e6 (66:b2:80:00:46:e6)
- Internet Protocol Version 4, Src: 52.113.206.3, Dst: 192.168.29.98
- Transmission Control Protocol, Src Port: 443, Dst Port: 61443, Seq: 1, Ack: 1, Len: 0

The hex and ASCII dump at the bottom shows the raw data of the packet:

```

0000  66 b2 80 00 46 e6 14 ae 85 ec ca 1e 08 00 45 00  f...F... ..E.
0010  00 28 95 ec 40 00 65 06 9f 64 34 71 ce 03 c0 a8  .(..@.e. .d4q...
0020  1d 62 01 bb f0 03 e5 ef 32 46 2f 01 be a3 50 14  .b..... 2F/...P.
0030  00 00 d7 b7 00 00                                .....
  
```

The status bar at the bottom indicates: `wireshark_Wi-Fi...0_a12984.pcapng` | Packets: 33037 · Displayed: 22 (0.1%) · Dropped: 0 (0.0%) | Profile: Default

- tcp.port in {80 443 8080}

*Wi-Fi

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

tcp.port in {80 443 8080}

No.	Time	Source	Destination	Protocol	Length	Info
16667	115.311864	52.114.15.101	192.168.29.98	TCP	590	443 → 61158 [ACK] Seq: 627139, Win: 0, Len: 0
16668	115.311864	52.114.15.101	192.168.29.98	TLSv1.2	590	Application Data [TLSv1.2] Seq: 627139, Len: 536
16669	115.311864	52.114.15.101	192.168.29.98	TCP	590	443 → 61158 [ACK] Seq: 627139, Win: 0, Len: 0
16670	115.312291	192.168.29.98	52.114.15.101	TCP	54	61158 → 443 [ACK] Seq: 11512, Win: 0, Len: 0
16671	115.312398	52.114.15.101	192.168.29.98	TCP	590	443 → 61158 [ACK] Seq: 627139, Win: 0, Len: 0
16672	115.312398	52.114.15.101	192.168.29.98	TCP	590	443 → 61158 [ACK] Seq: 627139, Win: 0, Len: 0

> Frame 16669: 590 bytes on wire (4720 bits), 590 bytes captured (4720 bits) on interface \Device\NPF_{693...}

> Ethernet II, Src: Sercomm_0c:ca:1e (14:ae:85:ec:ca:1e), Dst: 66:b2:80:00:46:e6 (66:b2:80:00:46:e6)

> Internet Protocol Version 4, Src: 52.114.15.101, Dst: 192.168.29.98

> Transmission Control Protocol, Src Port: 443, Dst Port: 61158, Seq: 627139, Ack: 11512, Len: 536

0000 66 b2 80 00 46 e6 14 ae 85 ec ca 1e 08 00 45 00 f...F...E..

0010 02 40 c1 83 00 00 6c 06 69 53 34 72 0f 65 c0 a8 .@...l..iS4r.e..

0020 1d 62 01 bb ee e6 98 54 f5 00 c3 f8 b4 b6 50 10 .b...T...P..

0030 08 03 b7 ca 00 00 ff b5 12 71 1c 4e ec 0d 4f e3q.N.O..

0040 44 eb c6 14 ec 5a 9a f5 3e c3 87 24 e5 02 53 ca D...Z...>\$.S..

0050 11 85 0f ee b8 f6 03 4e fd 37 61 8c 7d a1 b9 e6N..7a}...

0060 7c f2 31 73 02 89 5a 88 61 4b a8 d3 c0 b1 3d e2 |.1s..Z..aK....=

0070 eb 51 95 bf 2f 70 53 7b 0d 13 ba 07 19 b2 64 52 .Q../pS{.....dR

0080 6d 81 e5 f5 38 6d f7 8c 13 12 2f 04 3e 00 1d 38 m...8m.../..>..8

wireshark_Wi-...a12984.pcapng | Packets: 33037 · Displayed: 4030 (12.2%) · Dropped: 0 (0.0%) | Profile: Default

- ip.addr ne 192.168.4.1

*Wi-Fi

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

ip.addr ne 192.168.4.1

No.	Time	Source	Destination	Protocol	Length	Info
28385	198.325577	192.168.29.98	52.114.74.45	TLSv1.2	1494	Ignored Unknown Reco
28386	198.325577	192.168.29.98	52.114.74.45	TLSv1.2	1032	Ignored Unknown Reco
28387	198.327322	52.112.45.19	192.168.29.98	UDP	1249	3481 → 50048 Len=120
28388	198.327322	52.112.45.19	192.168.29.98	UDP	1249	3481 → 50048 Len=120
28389	198.327322	52.112.45.19	192.168.29.98	UDP	1249	3481 → 50048 Len=120
28390	198.327322	52.112.45.19	192.168.29.98	UDP	1249	3481 → 50048 Len=120

> Frame 16669: 590 bytes on wire (4720 bits), 590 bytes captured (4720 bits) on interface \Device\NPF_{693...}

> Ethernet II, Src: Sercomm_0c:ca:1e (14:ae:85:ec:ca:1e), Dst: 66:b2:80:00:46:e6 (66:b2:80:00:46:e6)

> Internet Protocol Version 4, Src: 52.114.15.101, Dst: 192.168.29.98

> Transmission Control Protocol, Src Port: 443, Dst Port: 61158, Seq: 627139, Ack: 11512, Len: 536

192.168.4.1 is not displayed

0000	66 b2 80 00 46 e6 14 ae 85 ec ca 1e 08 00 45 00	f...F... ..E.
0010	02 40 c1 83 00 00 6c 06 69 53 34 72 0f 65 c0 a8	·@...l· iS4r·e·
0020	1d 62 01 bb ee e6 98 54 f5 00 c3 f8 b4 b6 50 10	·b...·T ...·P.
0030	08 03 b7 ca 00 00 ff b5 12 71 1c 4e ec 0d 4f e3 ·q·N·O·
0040	44 eb c6 14 ec 5a 9a f5 3e c3 87 24 e5 02 53 ca	D...·Z... >·\$·S.
0050	11 85 0f ee b8 f6 03 4e fd 37 61 8c 7d a1 b9 e6N ·7a}·...
0060	7c f2 31 73 02 89 5a 88 61 4b a8 d3 c0 b1 3d e2	·1s·Z· aK...=·
0070	eb 51 95 bf 2f 70 53 7b 0d 13 ba 07 19 b2 64 52	·Q.../pS{dR
0080	6d 81 e5 f5 38 6d f7 8c 13 12 2f 04 3e 00 1d 38	m...8m... ·/·>·8

wireshark_Wi-...a12984.pcapn | Packets: 33037 · Displayed: 32995 (99.9%) · Dropped: 0 (0.0%) | Profile: Default

- not ip.addr eq 192.168.4.1

Wireshark packet capture window showing a list of network packets. The filter bar at the top contains the expression `not ip.addr eq 192.168.4.1`.

No.	Time	Source	Destination	Protocol	Length	Info
16679	115.312398	52.114.15.101	192.168.29.98	TLSv1.2	226	Application Data
16680	115.312463	192.168.29.98	52.114.15.101	TCP	54	61158 → 443 [ACK] Seq=627139
16681	115.318470	52.112.45.19	192.168.29.98	UDP	180	3479 → 50016 Len=138
16682	115.325080	192.168.29.98	52.114.15.101	TLSv1.2	456	Application Data
16683	115.337317	52.112.45.19	192.168.29.98	UDP	175	3479 → 50016 Len=133
16684	115.346594	52.112.45.19	192.168.29.98	STUN	114	Binding Success Response

Frame 16680: 590 bytes on wire (4720 bits), 590 bytes captured (4720 bits) on interface \Device\NPF_{693...}

Ethernet II, Src: Sercomm_0c:ca:1e (14:ae:85:ec:ca:1e), Dst: 66:b2:80:00:46:e6 (66:b2:80:00:46:e6)

Internet Protocol Version 4, Src: 52.114.15.101, Dst: 192.168.29.98

Transmission Control Protocol, Src Port: 443, Dst Port: 61158, Seq: 627139, Ack: 11512, Len: 536

192.168.4.1 is not visible

0000 66 b2 80 00 46 e6 14 ae 85 ec ca 1e 08 00 45 00 f...F... ..E..

0010 02 40 c1 83 00 00 6c 06 69 53 34 72 0f 65 c0 a8 .@....l..iS4r.e..

0020 1d 62 01 bb ee e6 98 54 f5 00 c3 f8 b4 b6 50 10 .b....T.....P..

0030 08 03 b7 ca 00 00 ff b5 12 71 1c 4e ec 0d 4f e3q.N.O..

0040 44 eb c6 14 ec 5a 9a f5 3e c3 87 24 e5 02 53 ca D...Z...>.\$..S..

0050 11 85 0f ee b8 f6 03 4e fd 37 61 8c 7d a1 b9 e6N..7a}...
 0060 7c f2 31 73 02 89 5a 88 61 4b a8 d3 c0 b1 3d e2 |.1s..Z..aK....=
 0070 eb 51 95 bf 2f 70 53 7b 0d 13 ba 07 19 b2 64 52 .Q../pS{dR
 0080 6d 81 e5 f5 38 6d f7 8c 13 12 2f 04 3e 00 1d 38 m...8m...../>..8

wireshark_Wi...12984.pcapng | Packets: 33037 · Displayed: 33037 (100.0%) · Dropped: 0 (0.0%) | Profile: Default