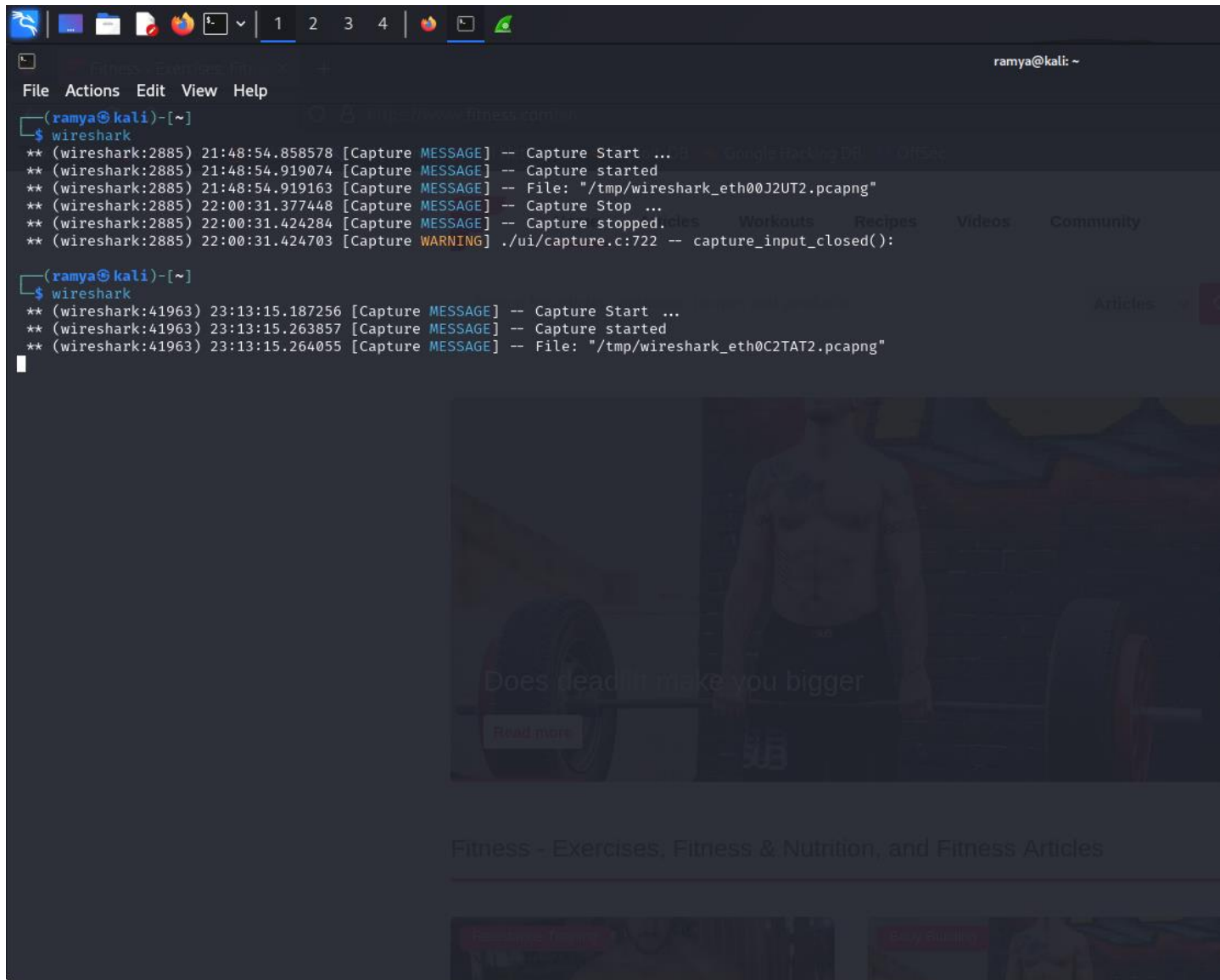


TCP Session Establishment and Termination

Bakka Ramyasree

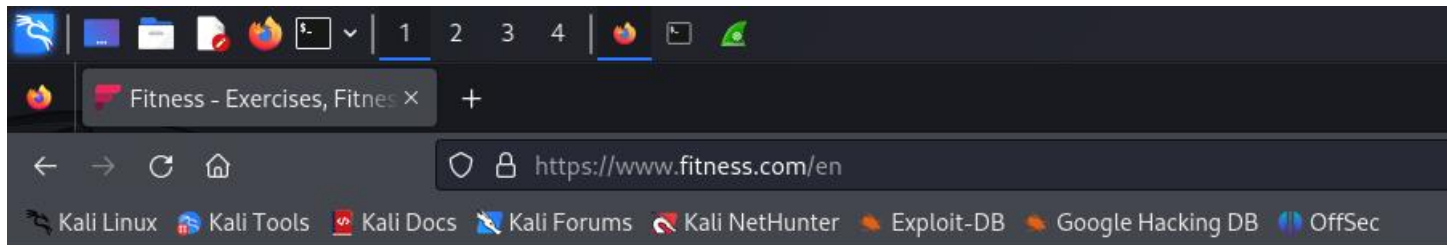
Open Wireshark and Start Capturing



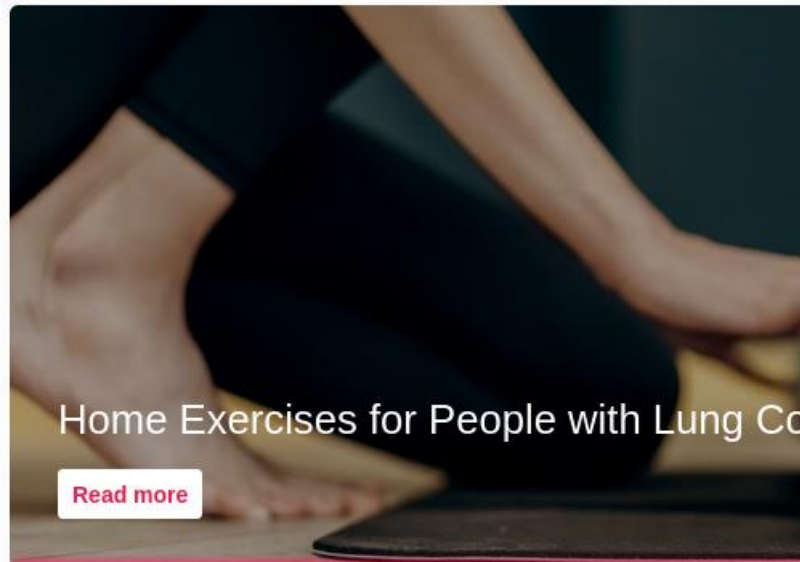
```
(ramya@kali)-[~]
$ wireshark
** (wireshark:2885) 21:48:54.858578 [Capture MESSAGE] -- Capture Start ...
** (wireshark:2885) 21:48:54.919074 [Capture MESSAGE] -- Capture started
** (wireshark:2885) 21:48:54.919163 [Capture MESSAGE] -- File: "/tmp/wireshark_eth00J2UT2.pcapng"
** (wireshark:2885) 22:00:31.377448 [Capture MESSAGE] -- Capture Stop ...
** (wireshark:2885) 22:00:31.424284 [Capture MESSAGE] -- Capture stopped;
** (wireshark:2885) 22:00:31.424703 [Capture WARNING] ./ui/capture.c:722 -- capture_input_closed():

(ramya@kali)-[~]
$ wireshark
** (wireshark:41963) 23:13:15.187256 [Capture MESSAGE] -- Capture Start ...
** (wireshark:41963) 23:13:15.263857 [Capture MESSAGE] -- Capture started
** (wireshark:41963) 23:13:15.264055 [Capture MESSAGE] -- File: "/tmp/wireshark_eth0C2TAT2.pcapng"
```

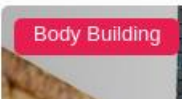
Initiate a TCP Connection:



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Identify the Three-Way Handshake:

Terminal Emulator
Use the command line

File Edit **Terminal Emulator** Use the command line Statistics Telephony Wireless Tools Help

Apply a display filter ... <Ctrl-/>

No.	Time	Source	Destination	Protocol	Length	Info
70	44.334654287	192.168.100.5	167.86.117.76	TLSv1.2	164	Application I
71	44.335134074	167.86.117.76	192.168.100.5	TCP	60	443 → 53618
72	44.343092277	192.168.100.5	167.86.117.76	TLSv1.2	161	Application I
73	44.343807224	192.168.100.5	167.86.117.76	TLSv1.2	166	Application I
74	44.344410526	167.86.117.76	192.168.100.5	TCP	60	443 → 53618
75	44.344416125	192.168.100.5	167.86.117.76	TLSv1.2	162	Application I
76	44.357622368	192.168.100.5	192.168.1.1	DNS	87	Standard quer
77	44.363849757	192.168.1.1	192.168.100.5	DNS	103	Standard quer
78	44.364585735	192.168.100.5	142.250.217.138	TCP	74	43864 → 443
79	44.380985784	142.250.217.138	192.168.100.5	TCP	60	443 → 43864
80	44.381059459	192.168.100.5	142.250.217.138	TCP	54	43864 → 443
81	44.382284002	192.168.100.5	142.250.217.138	TLSv1.3	726	Client Hello
82	44.382619855	192.168.100.5	142.250.217.138	TLSv1.3	60	Change Cipher
83	44.382752181	192.168.100.5	142.250.217.138	TLSv1.3	672	Application I

Frame 79: 60 bytes on wire (480 bits), 60 bytes captured (480 bits) on interface eth0, id 0

Ethernet II, Src: 52:54:00:12:35:00 (52:54:00:12:35:00), Dst: PCSSystemtec_ba:e1:32 (08:00:27:ba:e1:32)

Internet Protocol Version 4, Src: 142.250.217.138, Dst: 192.168.100.5

Transmission Control Protocol, Src Port: 443, Dst Port: 43864, Seq: 0, Ack: 1, Len: 0

Source Port: 443

Destination Port: 43864

[Stream index: 10]

[Conversation completeness: Complete, WITH_DATA (31)]

[TCP Segment Len: 0]

Sequence Number: 0 (relative sequence number)

Sequence Number (raw): 317000

[Next Sequence Number: 1 (relative sequence number)]

Acknowledgment Number: 1 (relative ack number)

Acknowledgment number (raw): 2184487436

0110 = Header Length: 24 bytes (6)

Flags: 0x012 (SYN, ACK)

Window: 32768

[Calculated window size: 32768]

Checksum: 0xe341 [unverified]

[Checksum Status: Unverified]

Urgent Pointer: 0

Options: (4 bytes), Maximum segment size

[Timestamps]

[SEQ/ACK analysis]

wireshark_eth0C2TAT2.pcapng

Wireshark interface showing a packet capture file (wireshark_eth0C2TAT2.pcapng). The packet list displays several frames, with Frame 78 selected. The packet details pane shows the structure of the selected frame, including Ethernet II, Internet Protocol Version 4, and Transmission Control Protocol (TCP) fields.

Text Editor
Simple Text Editor

File Edit Capture Analyze Statistics Telephony Wireless Tools Help

Apply a display filter ... <Ctrl-/>

No.	Time	Source	Destination	Protocol	Length
70	44.334654287	192.168.100.5	167.86.117.76	TLSv1.2	
71	44.335134074	167.86.117.76	192.168.100.5	TCP	
72	44.343092277	192.168.100.5	167.86.117.76	TLSv1.2	
73	44.343807224	192.168.100.5	167.86.117.76	TLSv1.2	
74	44.344410526	167.86.117.76	192.168.100.5	TCP	
75	44.344416125	192.168.100.5	167.86.117.76	TLSv1.2	
76	44.357622368	192.168.100.5	192.168.1.1	DNS	
77	44.363849757	192.168.1.1	192.168.100.5	DNS	
78	44.364585735	192.168.100.5	142.250.217.138	TCP	
79	44.380985784	142.250.217.138	192.168.100.5	TCP	
80	44.381059459	192.168.100.5	142.250.217.138	TCP	
81	44.382284002	192.168.100.5	142.250.217.138	TLSv1.3	
82	44.382619855	192.168.100.5	142.250.217.138	TLSv1.3	
83	44.382752181	192.168.100.5	142.250.217.138	TLSv1.3	

Frame 78: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface
Ethernet II, Src: PCSSystemtec_ba:e1:32 (08:00:27:ba:e1:32), Dst: 52:54:00:12
Internet Protocol Version 4, Src: 192.168.100.5, Dst: 142.250.217.138
Transmission Control Protocol, Src Port: 43864, Dst Port: 443, Seq: 0, Len: 0
Source Port: 43864
Destination Port: 443
[Stream index: 10]
[Conversation completeness: Complete, WITH_DATA (31)]
[TCP Segment Len: 0]
Sequence Number: 0 (relative sequence number)
Sequence Number (raw): 2184487435
[Next Sequence Number: 1 (relative sequence number)]
Acknowledgment Number: 0
Acknowledgment number (raw): 0
1010 = Header Length: 40 bytes (10)
Flags: 0x002 (SYN)
000. = Reserved: Not set
...0 = Accurate ECN: Not set
.... 0... = Congestion Window Reduced: Not set
.... .0.. = ECN-Echo: Not set
.... ..0. = Urgent: Not set
.... ...0 = Acknowledgment: Not set
.... 0... = Push: Not set
....0.. = Reset: Not set
....1. = Syn: Set
....0 = Fin: Not set

wireshark_eth0C2TAT2.pcapng

Analyze the Handshake: A stable connection is established between a client and a server through the TCP three-way handshake, which synchronizes sequence numbers and verifies that both are prepared for communication.

SYN, SYN-ACK, and ACK are the three primary phases in the TCP three-way handshake.

By sending the server a SYN (synchronize) packet, the client starts the TCP connection.

This packet synchronizes the initial sequence number (ISN) for the connection and signals the client's desire to connect to the server.

Here 78 79 80 packets are the 3 packets

Step78: SYNFirst, sync (or SYN). Flags on a packet: ACK = 0 and SYN = 1.

SEQ (Sequence Number): Sequence number:21844874354 ACK=0

Step79: The second step is the SYN-ACK (Synchronize-Acknowledgment) packet.

The server replies with a SYN-ACK packet after receiving the SYN packet.

This packet accomplishes two goals:

Sets the ACK flag to indicate receipt of the SYN packet from the client.

gives its initial sequence number (ISN) and sends its own SYN to the client to let it know it is prepared to connect as well.

Information about the packet: SYN :317000 , ACK=1

ACK (Acknowledgment) Packet

Purpose:

After receiving the SYN-ACK packet, the client sends an ACK packet back to the server.

This packet acknowledges the receipt of the server's SYN-ACK and completes the handshake process.

The connection is now established, and both sides are ready to exchange data Packet 80: SYN:2184487436, ACK=317001

Due to the fact that this is the first packet and there is no data to acknowledge yet, the acknowledgement number (ACK) is 0.

Wireshark interface showing a packet capture file: wireshark_eth0C2TAT2.pcapng.

Menu: File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Wireless, Tools, Help.

Toolbar: [Icons for various functions]

Filter: Apply a display filter ... <Ctrl-/>

No.	Time	Source	Destination	Protocol
70	44.334654287	192.168.100.5	167.86.117.76	TLSv1.2
71	44.335134074	167.86.117.76	192.168.100.5	TCP
72	44.343092277	192.168.100.5	167.86.117.76	TLSv1.2
73	44.343807224	192.168.100.5	167.86.117.76	TLSv1.2
74	44.344410526	167.86.117.76	192.168.100.5	TCP
75	44.344416125	192.168.100.5	167.86.117.76	TLSv1.2
76	44.357622368	192.168.100.5	192.168.1.1	DNS
77	44.363849757	192.168.1.1	192.168.100.5	DNS
78	44.364585735	192.168.100.5	142.250.217.138	TCP
79	44.380985784	142.250.217.138	192.168.100.5	TCP
80	44.381059459	192.168.100.5	142.250.217.138	TCP
81	44.382284002	192.168.100.5	142.250.217.138	TLSv1.3
82	44.382619855	192.168.100.5	142.250.217.138	TLSv1.3
83	44.382752181	192.168.100.5	142.250.217.138	TLSv1.3

Frame 79 details:

- Frame 79: 60 bytes on wire (480 bits), 60 bytes captured (480 bits) on interface
- Ethernet II, Src: 52:54:00:12:35:00 (52:54:00:12:35:00), Dst: PCSSystem
- Internet Protocol Version 4, Src: 142.250.217.138, Dst: 192.168.100.5
- Transmission Control Protocol, Src Port: 443, Dst Port: 43864, Seq: 0, A
 - Source Port: 443
 - Destination Port: 43864
 - [Stream index: 10]
 - [Conversation completeness: Complete, WITH_DATA (31)]
 - [TCP Segment Len: 0]
 - Sequence Number: 0 (relative sequence number)
 - Sequence Number (raw): 317000
 - [Next Sequence Number: 1 (relative sequence number)]
 - Acknowledgment Number: 1 (relative ack number)
 - Acknowledgment number (raw): 2184487436
 - 0110 = Header Length: 24 bytes (6)
 - Flags: 0x012 (SYN, ACK)
 - 000. = Reserved: Not set
 - ...0 = Accurate ECN: Not set
 - 0... = Congestion Window Reduced: Not set
 -0.. = ECN-Echo: Not set
 -0. = Urgent: Not set
 -1 = Acknowledgment: Set
 - 0... = Push: Not set
 -0.. = Reset: Not set
 -1. = Syn: Set
 -0 = Fin: Not set

File: wireshark_eth0C2TAT2.pcapng

Wireshark interface showing a packet capture file named `wireshark_eth0C2TAT2.pcapng`.

Menu: File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Wireless, Tools, Help

Toolbar: [Icons for various functions like capture, display, and analysis]

Filter: Apply a display filter ... <Ctrl-/>

No.	Time	Source	Destination	Protocol
70	44.334654287	192.168.100.5	167.86.117.76	TLSv1.2
71	44.335134074	167.86.117.76	192.168.100.5	TCP
72	44.343092277	192.168.100.5	167.86.117.76	TLSv1.2
73	44.343807224	192.168.100.5	167.86.117.76	TLSv1.2
74	44.344410526	167.86.117.76	192.168.100.5	TCP
75	44.344416125	192.168.100.5	167.86.117.76	TLSv1.2
76	44.357622368	192.168.100.5	192.168.1.1	DNS
77	44.363849757	192.168.1.1	192.168.100.5	DNS
78	44.364585735	192.168.100.5	142.250.217.138	TCP
79	44.380985784	142.250.217.138	192.168.100.5	TCP
80	44.381059459	192.168.100.5	142.250.217.138	TCP
81	44.382284002	192.168.100.5	142.250.217.138	TLSv1.3
82	44.382619855	192.168.100.5	142.250.217.138	TLSv1.3
83	44.382752181	192.168.100.5	142.250.217.138	TLSv1.3

Packet 80 Details:

- Frame 80: 54 bytes on wire (432 bits), 54 bytes captured (432 bits) on interface
- Ethernet II, Src: PCSSystemtec_ba:e1:32 (08:00:27:ba:e1:32), Dst: 52:54:00:12:35:00
- Internet Protocol Version 4, Src: 192.168.100.5, Dst: 142.250.217.138
- Transmission Control Protocol, Src Port: 43864, Dst Port: 443, Seq: 1, Ack: 317001
 - Source Port: 43864
 - Destination Port: 443
 - [Stream index: 10]
 - [Conversation completeness: Complete, WITH_DATA (31)]
 - [TCP Segment Len: 0]
 - Sequence Number: 1 (relative sequence number)
 - Sequence Number (raw): 2184487436
 - [Next Sequence Number: 1 (relative sequence number)]
 - Acknowledgment Number: 1 (relative ack number)
 - Acknowledgment number (raw): 317001
 - 0101 = Header Length: 20 bytes (5)
 - Flags: 0x010 (ACK)
 - 000. = Reserved: Not set
 - ...0 = Accurate ECN: Not set
 - 0... = Congestion Window Reduced: Not set
 -0.. = ECN-Echo: Not set
 -0. = Urgent: Not set
 -1 = Acknowledgment: Set
 - 0... = Push: Not set
 -0.. = Reset: Not set
 -0. = Syn: Not set
 -0 = Fin: Not set

File: wireshark_eth0C2TAT2.pcapng

Wireshark interface showing a packet capture file named `wireshark_eth0C2TAT2.pcapng`.

The packet list shows the following details:

No.	Time	Source	Destination	Protocol
70	44.334654287	192.168.100.5	167.86.117.76	TLSv1.2
71	44.335134074	167.86.117.76	192.168.100.5	TCP
72	44.343092277	192.168.100.5	167.86.117.76	TLSv1.2
73	44.343807224	192.168.100.5	167.86.117.76	TLSv1.2
74	44.344410526	167.86.117.76	192.168.100.5	TCP
75	44.344416125	192.168.100.5	167.86.117.76	TLSv1.2
76	44.357622368	192.168.100.5	192.168.1.1	DNS
77	44.363849757	192.168.1.1	192.168.100.5	DNS
78	44.364585735	192.168.100.5	142.250.217.138	TCP
79	44.380985784	142.250.217.138	192.168.100.5	TCP
80	44.381059459	192.168.100.5	142.250.217.138	TCP
81	44.382284002	192.168.100.5	142.250.217.138	TLSv1.3
82	44.382619855	192.168.100.5	142.250.217.138	TLSv1.3
83	44.382752181	192.168.100.5	142.250.217.138	TLSv1.3

Packet 81 details:

- Frame 81: 726 bytes on wire (5808 bits), 726 bytes captured (5808 bits)
- Ethernet II, Src: PCSSystemtec_ba:e1:32 (08:00:27:ba:e1:32), Dst: 52:54:00:12:35:00
- Internet Protocol Version 4, Src: 192.168.100.5, Dst: 142.250.217.138
- Transmission Control Protocol, Src Port: 43864, Dst Port: 443, Seq: 1, Ack: 317001
 - Source Port: 43864
 - Destination Port: 443
 - [Stream index: 10]
 - [Conversation completeness: Complete, WITH_DATA (31)]
 - [TCP Segment Len: 672]
 - Sequence Number: 1 (relative sequence number)
 - Sequence Number (raw): 2184487436
 - [Next Sequence Number: 673 (relative sequence number)]
 - Acknowledgment Number: 1 (relative ack number)
 - Acknowledgment number (raw): 317001
 - 0101 = Header Length: 20 bytes (5)
 - Flags: 0x018 (PSH, ACK)
 - 000. = Reserved: Not set
 - ...0 = Accurate ECN: Not set
 - 0... = Congestion Window Reduced: Not set
 -0.. = ECN-Echo: Not set
 -0. = Urgent: Not set
 -1 = Acknowledgment: Set
 - 1... = Push: Set
 - 0.. = Reset: Not set
 -0. = Syn: Not set
 -0 = Fin: Not set

Session Termination: Identify the packets used to terminate the TCP session (FIN, FIN-ACK, ACK).

- **544,545,546,547 packets**

Wireshark interface showing a packet capture file named `wireshark_eth0C2TAT2.pcapng`.

The packet list displays several packets, with packet 544 selected. The packet details pane shows the structure of the selected packet:

- Frame 544: 54 bytes on wire (432 bits), 54 bytes captured (432 bits) on interface
- Ethernet II, Src: PCSSystemtec_ba:e1:32 (08:00:27:ba:e1:32), Dst: 52:54:00:12
- Internet Protocol Version 4, Src: 192.168.100.5, Dst: 142.250.68.3
- Transmission Control Protocol, Src Port: 58148, Dst Port: 80, Seq: 2, Ack: 1, Source Port: 58148, Destination Port: 80, [Stream index: 1]
- [Conversation completeness: Incomplete (20)]
- [TCP Segment Len: 0]
- Sequence Number: 2 (relative sequence number)
- Sequence Number (raw): 155242485
- [Next Sequence Number: 3 (relative sequence number)]
- Acknowledgment Number: 1 (relative ack number)
- Acknowledgment number (raw): 188179
- 0101 = Header Length: 20 bytes (5)
- Flags: 0x011 (FIN, ACK)
- 000. = Reserved: Not set
- ...0 = Accurate ECN: Not set
- 0... = Congestion Window Reduced: Not set
-0.. = ECN-Echo: Not set
-0. = Urgent: Not set
-1 = Acknowledgment: Set
- 0... = Push: Not set
-0.. = Reset: Not set
-0. = Syn: Not set
-1 = Fin: Set

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No.	Time	Source	Destination	Protocol	Length
540	61.695776777	142.250.68.3	192.168.100.5	TCP	
541	63.377500111	192.168.100.5	34.149.100.209	TLSv1.2	
542	63.401468502	34.149.100.209	192.168.100.5	TLSv1.2	
543	63.401519686	192.168.100.5	34.149.100.209	TCP	
544	64.414274076	192.168.100.5	142.250.68.3	TCP	
545	64.414775560	142.250.68.3	192.168.100.5	TCP	
546	64.437308619	142.250.68.3	192.168.100.5	TCP	
547	64.437328209	192.168.100.5	142.250.68.3	TCP	
548	71.683386153	192.168.100.5	142.250.68.3	TCP	
549	71.683683021	142.250.68.3	192.168.100.5	TCP	
550	81.923713899	192.168.100.5	142.250.68.3	TCP	
551	81.923992805	142.250.68.3	192.168.100.5	TCP	
552	85.378760397	192.168.100.5	142.250.217.131	TLSv1.2	
553	85.399385767	142.250.217.131	192.168.100.5	TLSv1.2	

▶

Frame 545: 60 bytes on wire (480 bits), 60 bytes captured (480 bits) on interface

▶

Ethernet II, Src: 52:54:00:12:35:00 (52:54:00:12:35:00), Dst: PCSSystemtec_ba

▶

Internet Protocol Version 4, Src: 142.250.68.3, Dst: 192.168.100.5

▼

Transmission Control Protocol, Src Port: 80, Dst Port: 58148, Seq: 1, Ack: 3,

Source Port: 80

Destination Port: 58148

[Stream index: 1]

▶ [Conversation completeness: Incomplete (20)]

[TCP Segment Len: 0]

Sequence Number: 1 (relative sequence number)

Sequence Number (raw): 188179

[Next Sequence Number: 1 (relative sequence number)]

Acknowledgment Number: 3 (relative ack number)

Acknowledgment number (raw): 155242486

0101 = Header Length: 20 bytes (5)

▼ Flags: 0x010 (ACK)

000. = Reserved: Not set

...0 = Accurate ECN: Not set

.... 0... = Congestion Window Reduced: Not set

.... .0.. = ECN-Echo: Not set

.... ..0. = Urgent: Not set

.... ...1 = Acknowledgment: Set

.... 0... = Push: Not set

....0.. = Reset: Not set

....0. = Syn: Not set

....0 = Fin: Not set

This shows the raw value of the acknowledgment number (tcp.ack_raw), 4 byte(s)



File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help



Apply a display filter ... <Ctrl-/>

No.	Time	Source	Destination	Protocol	Length
540	61.695776777	142.250.68.3	192.168.100.5	TCP	
541	63.377500111	192.168.100.5	34.149.100.209	TLSv1.2	
542	63.401468502	34.149.100.209	192.168.100.5	TLSv1.2	
543	63.401519686	192.168.100.5	34.149.100.209	TCP	
544	64.414274076	192.168.100.5	142.250.68.3	TCP	
545	64.414775560	142.250.68.3	192.168.100.5	TCP	
546	64.437308619	142.250.68.3	192.168.100.5	TCP	
547	64.437328209	192.168.100.5	142.250.68.3	TCP	
548	71.683386153	192.168.100.5	142.250.68.3	TCP	
549	71.683683021	142.250.68.3	192.168.100.5	TCP	
550	81.923713899	192.168.100.5	142.250.68.3	TCP	
551	81.923992805	142.250.68.3	192.168.100.5	TCP	
552	85.378760397	192.168.100.5	142.250.217.131	TLSv1.2	
553	85.399385767	142.250.217.131	192.168.100.5	TLSv1.2	

- ```

> Frame 546: 60 bytes on wire (480 bits), 60 bytes captured (480 bits) on inter
> Ethernet II, Src: 52:54:00:12:35:00 (52:54:00:12:35:00), Dst: PCSSystemtec_ba
> Internet Protocol Version 4, Src: 142.250.68.3, Dst: 192.168.100.5
> Transmission Control Protocol, Src Port: 80, Dst Port: 58148, Seq: 1, Ack: 3,

```

Source Port: 80

Destination Port: 58148

```
[Stream index: 1]
```

- ```

[Conversation completeness: Incomplete (20)]

```

```
[TCP Segment Len: 0]
```

```
Sequence Number: 1      (relative sequence number)
```

Sequence Number (raw): 188179

```
[Next Sequence Number: 2      (relative sequence number)]
```

```
Acknowledgment Number: 3      (relative ack number)
```

Acknowledgment number (raw): 155242486

```
0101 .... = Header Length: 20 bytes (5)
```

- Flags: 0x011 (FIN, ACK)

```
000. .... = Reserved: Not set
```

```
...0 ... = Accurate ECN: Not set
```

```
..... 0..... = Congestion Window Reduced: Not set
```

```
.....0..... = ECN-Echo: Not set
```

```
.....0..... = Urgent: Not set
```

```
.....1..... = Acknowledgment:
```

```
.....1..... = Acknowledgment: Set
.....0..... = Push: Not set
```

```

.....0... = Push: Not set
.....0... = Reset: Not set

```

```
.....0.. = Reset: Not set
.....0.. = Syn: Not set
```

```
..... 0. = Syn: Not set
1 = Fin: Set
```

- 1 = Fill; Set



This shows the raw value of the acknowledgment number (tcp.ack_raw), 4 byte(s)

1

2

3

4

File
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No.	Time	Source	Destination	Protocol	Length
540	61.695776777	142.250.68.3	192.168.100.5	TCP	
541	63.377500111	192.168.100.5	34.149.100.209	TLSv1.2	
542	63.401468502	34.149.100.209	192.168.100.5	TLSv1.2	
543	63.401519686	192.168.100.5	34.149.100.209	TCP	
544	64.414274076	192.168.100.5	142.250.68.3	TCP	
545	64.414775560	142.250.68.3	192.168.100.5	TCP	
546	64.437308619	142.250.68.3	192.168.100.5	TCP	
547	64.437328209	192.168.100.5	142.250.68.3	TCP	
548	71.683386153	192.168.100.5	142.250.68.3	TCP	
549	71.683683021	142.250.68.3	192.168.100.5	TCP	
550	81.923713899	192.168.100.5	142.250.68.3	TCP	
551	81.923992805	142.250.68.3	192.168.100.5	TCP	
552	85.378760397	192.168.100.5	142.250.217.131	TLSv1.2	
553	85.399385767	142.250.217.131	192.168.100.5	TLSv1.2	

Frame 547: 54 bytes on wire (432 bits), 54 bytes captured (432 bits) on interface
Ethernet II, Src: PCSSystemtec_ba:e1:32 (08:00:27:ba:e1:32), Dst: 52:54:00:12
Internet Protocol Version 4, Src: 192.168.100.5, Dst: 142.250.68.3
Transmission Control Protocol, Src Port: 58148, Dst Port: 80, Seq: 3, Ack: 2,
Source Port: 58148
Destination Port: 80
[Stream index: 1]
[Conversation completeness: Incomplete (20)]
[TCP Segment Len: 0]
Sequence Number: 3 (relative sequence number)
Sequence Number (raw): 155242486
[Next Sequence Number: 3 (relative sequence number)]
Acknowledgment Number: 2 (relative ack number)
Acknowledgment number (raw): 188180
0101 = Header Length: 20 bytes (5)
Flags: 0x010 (ACK)
000. = Reserved: Not set
...0 = Accurate ECN: Not set
.... 0... = Congestion Window Reduced: Not set
.... .0.. = ECN-Echo: Not set
.... ..0. = Urgent: Not set
.... ...1 = Acknowledgment: Set
.... 0... = Push: Not set
....0.. = Reset: Not set
....0. = Syn: Not set
....0 = Fin: Not set

This shows the raw value of the acknowledgment number (tcp.ack_raw), 4 byte(s)