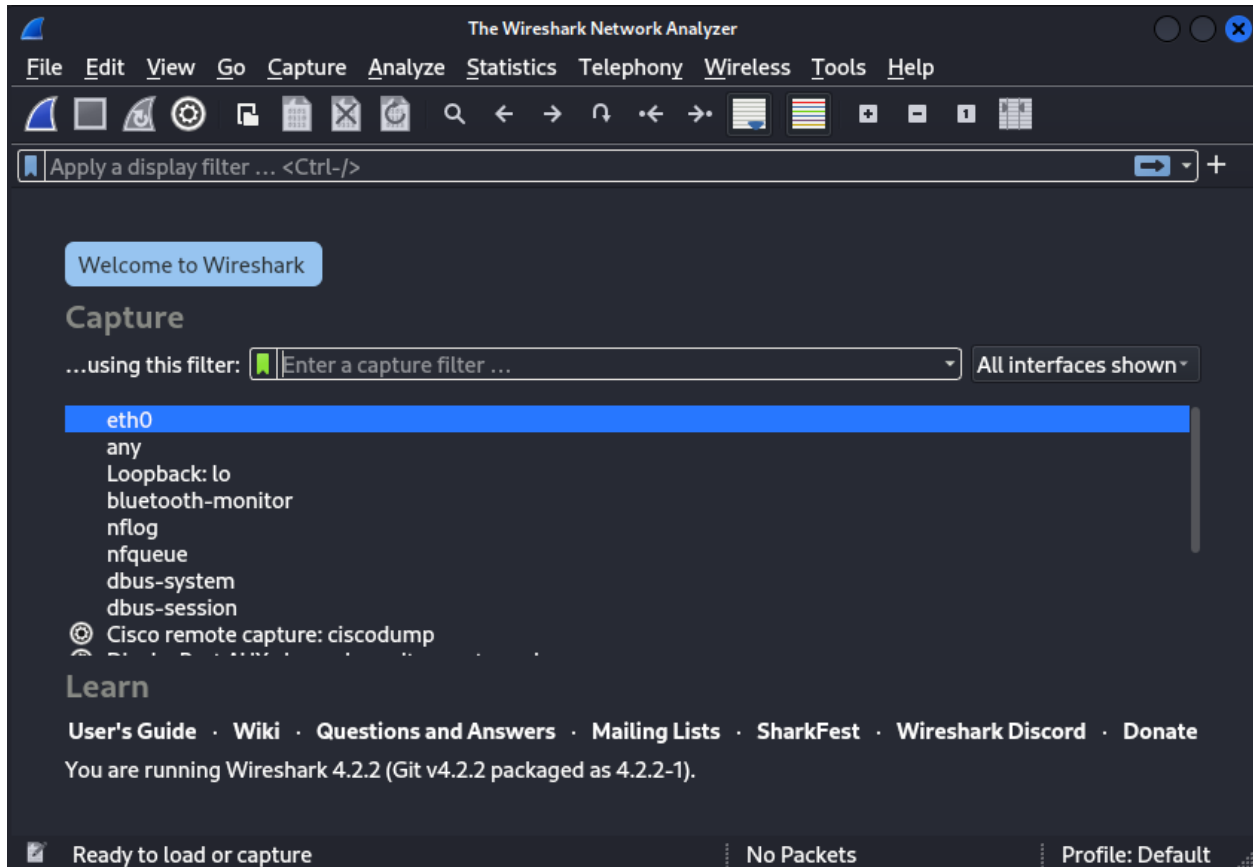


Intermediate Task

Task3: Analyze Network Traffic

In this task, I used **Wireshark** to capture and analyze network traffic.



Capturing from eth0

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

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

No.	Time	Source	Destination	Protocol	Length	Info
2428	26.746109874	172.217.19.202	10.0.2.15	TCP	4434	443 → 39122
2429	26.746118910	10.0.2.15	172.217.19.202	TCP	54	39122 → 443
2430	26.746487528	172.217.19.202	10.0.2.15	TLSv1.3	48614	Application
2431	26.746576784	10.0.2.15	172.217.19.202	TCP	54	39122 → 443
2432	26.753431706	3.160.188.95	10.0.2.15	TLSv1.2	2854	Server Hello
2433	26.753455676	10.0.2.15	3.160.188.95	TCP	54	43402 → 443
2434	26.754107444	3.160.188.95	10.0.2.15	TLSv1.2	1361	Certificate,
2435	26.754118959	10.0.2.15	3.160.188.95	TCP	54	43402 → 443
2436	26.755570585	172.217.19.202	10.0.2.15	TLSv1.3	19654	Application
2437	26.755583624	10.0.2.15	172.217.19.202	TCP	54	39122 → 443

Frame 1: 89 bytes on wire (712 bits), 89 bytes captured (712 bits) on interface eth0, id 0

Ethernet II, Src: PCSSystemtec_af:c1:19 (08:00:27:af:c1:19), Dst: 52:54:00:12:35:02 (52:54:00:12:35:02)

Internet Protocol Version 4, Src: 10.0.2.15, Dst: 192.168.0.1

User Datagram Protocol, Src Port: 43747, Dst Port: 53

Domain Name System (query)

eth0: <live capture in progress> Packets: 2437 · Displayed: 2437 (100.0%) Profile: Default

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

udp

No.	Time	Source	Destination	Protocol	Length	Info
3179	57.959817140	192.229.221.95	10.0.2.15	TCP	60	[TCP Keep-Alive ACK] 80 → 41896 [ACK] Seq=738 Ack=417 Win=65535 Len=0
3180	59.755844241	PCSSystemtec_af:c1:19	52:54:00:12:35:02	ARP	42	Who has 10.0.2.2? Tell 10.0.2.15
3181	59.756223885	52:54:00:12:35:02	PCSSystemtec_af:c1:19	ARP	60	10.0.2.2 is at 52:54:00:12:35:02
3182	59.759110997	10.0.2.15	35.190.72.216	TLSv1.3	93	Application Data
3183	59.759811723	35.190.72.216	10.0.2.15	TCP	60	443 → 56268 [ACK] Seq=3991 Ack=1087 Win=65535 Len=0
3184	59.826524372	35.190.72.216	10.0.2.15	TLSv1.3	93	Application Data
3185	59.871408999	10.0.2.15	35.190.72.216	TCP	54	56268 → 443 [ACK] Seq=1087 Ack=4030 Win=30660 Len=0
3186	60.023150676	10.0.2.15	118.103.237.10	TCP	54	[TCP Keep-Alive] 52040 → 80 [ACK] Seq=416 Ack=890 Win=31231 Len=0
3187	60.023405511	118.103.237.10	10.0.2.15	TCP	60	[TCP Keep-Alive ACK] 80 → 52040 [ACK] Seq=890 Ack=417 Win=65535 Len=0
3188	60.519024420	10.0.2.15	92.123.48.179	TCP	54	[TCP Keep-Alive] 52420 → 80 [ACK] Seq=297 Ack=584079 Win=65535 Len=0
3189	60.519053486	92.123.48.179	10.0.2.15	TCP	60	[TCP Keep-Alive ACK] 80 → 52428 [ACK] Seq=584079 Ack=298 Win=65535 Len=0
3190	60.775690572	10.0.2.15	118.103.237.10	TCP	54	[TCP Keep-Alive] 52042 → 80 [ACK] Seq=416 Ack=890 Win=31231 Len=0
3191	60.775731591	10.0.2.15	118.103.237.10	TCP	54	[TCP Keep-Alive] 43674 → 80 [ACK] Seq=2080 Ack=4449 Win=31230 Len=0
3192	60.776022525	118.103.237.10	10.0.2.15	TCP	60	[TCP Keep-Alive ACK] 80 → 52042 [ACK] Seq=890 Ack=417 Win=65535 Len=0
3193	60.776022697	118.103.237.10	10.0.2.15	TCP	60	[TCP Keep-Alive ACK] 80 → 43674 [ACK] Seq=4449 Ack=2081 Win=65535 Len=0
3194	62.315412480	10.0.2.15	118.103.237.10	TCP	54	[TCP Keep-Alive] 51390 → 80 [ACK] Seq=1240 Ack=2670 Win=31230 Len=0
3195	62.315762922	118.103.237.10	10.0.2.15	TCP	60	[TCP Keep-Alive ACK] 80 → 51390 [ACK] Seq=2670 Ack=1249 Win=65535 Len=0
3196	64.876521989	10.0.2.15	172.217.17.35	TCP	54	[TCP Keep-Alive] 45196 → 80 [ACK] Seq=412 Ack=702 Win=31545 Len=0
3197	64.876834556	172.217.17.35	10.0.2.15	TCP	60	[TCP Keep-Alive ACK] 80 → 45196 [ACK] Seq=702 Ack=413 Win=65535 Len=0
3198	65.645220834	10.0.2.15	172.217.17.35	TCP	54	[TCP Keep-Alive] 45204 → 80 [ACK] Seq=412 Ack=702 Win=31545 Len=0
3199	65.645597984	172.217.17.35	10.0.2.15	TCP	60	[TCP Keep-Alive ACK] 80 → 45204 [ACK] Seq=702 Ack=413 Win=65535 Len=0

Frame 1: 89 bytes on wire (712 bits), 89 bytes captured (712 bits) on interface eth0, id 0

Ethernet II, Src: PCSSystemtec_af:c1:19 (08:00:27:af:c1:19), Dst: 52:54:00:12:35:02 (52:54:00:12:35:02)

Internet Protocol Version 4, Src: 10.0.2.15, Dst: 192.168.0.1

User Datagram Protocol, Src Port: 43747, Dst Port: 53

Domain Name System (query)

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Wireshark interface showing a packet capture on eth0. The top menu bar includes File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Wireless, Tools, and Help. The packet list pane on the left shows a list of captured packets, with packet 4567 selected. The packet details pane on the right shows the structure of the selected packet, including Ethernet II, Internet Protocol Version 4, and Transmission Control Protocol. The packet bytes pane at the bottom shows the raw data of the selected packet.

Wireshark interface showing a packet capture on eth0. The top menu bar includes File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Wireless, Tools, and Help. The packet list pane on the left shows a list of captured packets, with packet 4567 selected. The packet details pane on the right shows the structure of the selected packet, including Ethernet II, Internet Protocol Version 4, and Transmission Control Protocol. The packet bytes pane at the bottom shows the raw data of the selected packet.

