

EXPERIMENT 2:

Wi-Fi

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

100%

tcp

100%

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	172.18.48.132	52.113.194.132	TLSv1.2	96	Application Data
153	0.263034	172.18.48.132	52.113.194.132	TCP	96	[TCP Retransmission] 56536 → 443 [PSH, ACK] Seq=1 Ack=1 Win=513 Len=42
228	0.293149	52.113.194.132	172.18.48.132	TLSv1.2	1514	Ignored Unknown Record
229	0.293149	52.113.194.132	172.18.48.132	TCP	1514	443 → 56536 [PSH, ACK] Seq=1461 Ack=43 Win=321 Len=1460 [TCP segment of a reassembled PDU]
230	0.293149	52.113.194.132	172.18.48.132	TCP	1514	443 → 56536 [ACK] Seq=2921 Ack=43 Win=321 Len=1460 [TCP segment of a reassembled PDU]
231	0.293274	172.18.48.132	52.113.194.132	TCP	54	56536 → 443 [ACK] Seq=43 Ack=4381 Win=513 Len=0
232	0.299652	52.113.194.132	172.18.48.132	TCP	1514	443 → 56536 [ACK] Seq=4381 Ack=43 Win=321 Len=1460 [TCP segment of a reassembled PDU]
233	0.300236	172.18.48.132	52.113.194.132	TCP	54	56536 → 443 [ACK] Seq=43 Ack=5841 Win=513 Len=0
234	0.343581	52.113.194.132	172.18.48.132	TCP	1514	443 → 56536 [ACK] Seq=5841 Ack=43 Win=321 Len=1460 [TCP segment of a reassembled PDU]
246	0.388986	172.18.48.132	52.113.194.132	TCP	54	56536 → 443 [ACK] Seq=43 Ack=7301 Win=513 Len=0
247	0.423010	52.113.194.132	172.18.48.132	TCP	1514	[TCP Previous segment not captured] 443 → 56536 [PSH, ACK] Seq=11681 Ack=43 Win=321 Len=1460 [TCP segment of a reassembled PDU]
248	0.423096	172.18.48.132	52.113.194.132	TCP	66	[TCP Dup ACK 246#1] 56536 → 443 [ACK] Seq=43 Ack=7301 Win=513 Len=0 SLE=11681 SRE=13141
250	0.445283	52.113.194.132	172.18.48.132	TCP	1514	[TCP Retransmission] 443 → 56536 [ACK] Seq=7301 Ack=43 Win=321 Len=1460
250	0.445283	172.18.48.132	52.113.194.132	TCP	66	56536 → 443 [ACK] Seq=43 Ack=8761 Win=513 Len=0 SLE=11681 SRE=13141
280	0.479003	172.18.48.132	52.113.194.132	TCP	1514	[TCP Retransmission] 443 → 56536 [ACK] Seq=10221 Ack=43 Win=321 Len=1460
281	0.479004	172.18.48.132	52.113.194.132	TCP	66	56536 → 443 [ACK] Seq=43 Ack=10221 Win=513 Len=0 SLE=11681 SRE=13141
282	0.479058	52.113.194.132	172.18.48.132	TCP	1514	[TCP Retransmission] 443 → 56536 [ACK] Seq=10221 Ack=43 Win=321 Len=1460
283	0.479965	172.18.48.132	52.113.194.132	TCP	54	56536 → 443 [ACK] Seq=43 Ack=13141 Win=513 Len=0
1815	3.333696	204.79.197.239	172.18.48.132	TCP	60	443 → 56607 [FIN, ACK] Seq=1 Acko=1 Win=413 Len=0
2121	3.334130	204.79.197.239	172.18.48.132	TCP	60	443 → 56607 [RST, ACK] Seq=2 Acko=1 Win=413 Len=0
2128	3.464406	204.79.197.239	172.18.48.132	TCP	60	443 → 56536 [PSH, ACK] Seq=1 Acko=1 Win=245 Len=0
2199	4.166406	204.79.197.239	172.18.48.132	TCP	60	443 → 56608 [RST, ACK] Seq=2 Acko=1 Win=245 Len=0
3056	6.105404	52.113.194.132	172.18.48.132	TCP	1514	[TCP Spurious Retransmission] 443 → 56536 [ACK] Seq=8761 Ack=43 Win=321 Len=1460
3057	6.105556	172.18.48.132	52.113.194.132	TCP	66	[TCP Dup ACK 283#1] 56536 → 443 [ACK] Seq=43 Ack=13141 Win=513 Len=0 SLE=8761 SRE=10221
3081	6.145467	52.113.194.132	172.18.48.132	TCP	1514	443 → 56536 [ACK] Seq=13141 Ack=43 Win=321 Len=1460 [TCP segment of a reassembled PDU]
3082	6.148950	52.113.194.132	172.18.48.132	TCP	1514	443 → 56536 [ACK] Seq=1461 Ack=43 Win=321 Len=1460 [TCP segment of a reassembled PDU]
3083	6.149030	172.18.48.132	52.113.194.132	TCP	54	56536 → 443 [ACK] Seq=43 Ack=16061 Win=513 Len=0
3084	6.183160	52.113.194.132	172.18.48.132	TCP	1514	443 → 56536 [ACK] Seq=16061 Ack=43 Win=321 Len=1460 [TCP segment of a reassembled PDU]
3085	6.183160	52.113.194.132	172.18.48.132	TCP	1514	443 → 56536 [ACK] Seq=17521 Ack=43 Win=321 Len=1460 [TCP segment of a reassembled PDU]
3086	6.183246	172.18.48.132	52.113.194.132	TCP	54	56536 → 443 [ACK] Seq=43 Ack=18981 Win=513 Len=0
3087	6.185533	52.113.194.132	172.18.48.132	TCP	1514	443 → 56536 [ACK] Seq=18981 Ack=43 Win=321 Len=1460 [TCP segment of a reassembled PDU]
3088	6.188887	52.113.194.132	172.18.48.132	TCP	1514	443 → 56536 [ACK] Seq=20441 Ack=43 Win=321 Len=1460 [TCP segment of a reassembled PDU]
3089	6.188969	172.18.48.132	52.113.194.132	TCP	54	56536 → 443 [ACK] Seq=43 Ack=21901 Win=513 Len=0
3157	6.215781	52.113.194.132	172.18.48.132	TCP	1514	443 → 56536 [ACK] Seq=21901 Ack=43 Win=321 Len=1460 [TCP segment of a reassembled PDU]
3158	6.215781	172.18.48.132	52.113.194.132	TCP	1514	443 → 56536 [PSH, ACK] Seq=23261 Ack=43 Win=321 Len=1460 [TCP segment of a reassembled PDU]
3159	6.215855	172.18.48.132	52.113.194.132	TCP	54	56536 → 443 [ACK] Seq=43 Ack=24821 Win=513 Len=0
3179	6.221293	52.113.194.132	172.18.48.132	TCP	1514	443 → 56536 [ACK] Seq=24821 Ack=43 Win=321 Len=1460 [TCP segment of a reassembled PDU]

Frame 3080: SA: baton on wire (A32 hit) SA: baton continued (A32 hit) on interface 1 (huawei)MDF :AGS5605-RC3E-A321-8FAR-05F2131787001 SA A

Transmission Control Protocol

Packets: 23997 · Displayed: 4958 (14.6%) · Dropped: 0 (0.0%)

Profile: Default

ENG

14:31

27-01-2023

[illegible]

EXPERIMENT 2:

Wireshark packet capture showing HTTP traffic. The packet list displays four packets:

No.	Time	Source	Destination	Protocol	Length	Info
63719	63.070239	172.18.48.132	172.18.55.89	HTTP	303	GET /smp_21_HTTP/1.1
63723	63.078442	172.18.48.132	172.18.57.84	HTTP	303	GET /smp_21_HTTP/1.1
63794	63.192467	172.18.55.89	172.18.48.132	HTTP/X	136	HTTP/1.1 200 OK
63920	63.492154	172.18.57.84	172.18.48.132	HTTP/X	138	HTTP/1.1 200 OK

The packet details pane shows the selected packet 63719, highlighting the Hypertext Transfer Protocol section.

Wireshark packet capture showing HTTP traffic. The packet list displays four packets:

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63719	63.070239	172.18.48.132	172.18.55.89	HTTP	303	GET /smp_21_HTTP/1.1
63723	63.078442	172.18.48.132	172.18.57.84	HTTP	303	GET /smp_21_HTTP/1.1
63794	63.192467	172.18.55.89	172.18.48.132	HTTP/X	136	HTTP/1.1 200 OK
63920	63.492154	172.18.57.84	172.18.48.132	HTTP/X	138	HTTP/1.1 200 OK

The packet details pane shows the selected packet 63719, highlighting the Internet Protocol Version 4 section.

EXPERIMENT 2:

The screenshot shows the Wireshark interface with a packet capture of an HTTP GET request. The packet list on the left shows five packets, with the fourth packet (No. 63920) selected. The packet details pane on the right shows the structure of the selected packet, which is an HTTP GET request. The packet bytes pane at the bottom shows the raw data of the packet.

No.	Time	Source	Destination	Protocol	Length	Info
63719	63.070239	172.18.48.132	172.18.55.89	HTTP	303	GET /smp_21_ HTTP/1.1
63723	63.078442	172.18.48.132	172.18.57.84	HTTP	303	GET /smp_21_ HTTP/1.1
63794	63.192467	172.18.55.89	172.18.48.132	HTTP/X..	136	HTTP/1.1 200 OK
63920	63.492154	172.18.57.84	172.18.48.132	HTTP/X..	138	HTTP/1.1 200 OK

Transmission Control Protocol, Src Port: 56771, Dst Port: 7676, Seq: 1, Ack: 1, Len: 249

- Source Port: 56771
- Destination Port: 7676
- [Stream index: 19]
- [Conversation completeness: Complete, WITH_DATA (31)]
- [TCP Segment Len: 249]
- Sequence Number: 1 (relative sequence number)
- Sequence Number (raw): 2009723898
- [Next Sequence Number: 250 (relative sequence number)]
- Acknowledgment Number: 1 (relative ack number)
- Acknowledgment number (raw): 2577188539
- 0101 = Header Length: 20 bytes (5)
- Flags: 0x018 (PSH, ACK)
- Window: 513
- [calculated window size: 131320]
- [Window size scaling factor: 256]
- Checksum: 0x78c5 [unverified]
- [Checksum Status: Unverified]
- Urgent Pointer: 0
- [Timestamps]
- [SEQ/ACK analysis]
- TCP payload (249 bytes)

Hypertext Transfer Protocol

Transmission Control Protocol (tcp), 20 bytes

Packets: 174244 · Displayed: 4 (0.0%) · Dropped: 0 (0.0%)

Profile: Default

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The screenshot shows the Wireshark interface with a packet capture of an HTTP GET request. The packet list on the left shows five packets, with the fourth packet (No. 63920) selected. The packet details pane on the right shows the structure of the selected packet, which is an HTTP GET request. The packet bytes pane at the bottom shows the raw data of the packet.

No.	Time	Source	Destination	Protocol	Length	Info
63719	63.070239	172.18.48.132	172.18.55.89	HTTP	303	GET /smp_21_ HTTP/1.1
63723	63.078442	172.18.48.132	172.18.57.84	HTTP	303	GET /smp_21_ HTTP/1.1
63794	63.192467	172.18.55.89	172.18.48.132	HTTP/X..	136	HTTP/1.1 200 OK
63920	63.492154	172.18.57.84	172.18.48.132	HTTP/X..	138	HTTP/1.1 200 OK

Frame 63719: 303 bytes on wire (2424 bits), 303 bytes captured (2424 bits) on interface \Device\NPF_{A658F695-B63F-43E3-BF48-95C213178790}, id 0

Ethernet II, Src: LiteonE_84:8d:23 (14:5a:fc:84:8d:23), Dst: SamsungE_86:7f:83 (14:bb:6e:86:7f:83)

Internet Protocol Version 4, Src: 172.18.48.132, Dst: 172.18.55.89

Transmission Control Protocol, Src Port: 56771, Dst Port: 7676, Seq: 1, Ack: 1, Len: 249

Hypertext Transfer Protocol

- GET /smp_21_ HTTP/1.1\r\n
- Host: 172.18.55.89:7676\r\n
- Connection: keep-alive\r\n
- User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/109.0.0.0 Safari/537.36 Edg/109.0.1518.69\r\n
- Accept-Encoding: gzip, deflate\r\n
- \r\n
- [Full request URI: http://172.18.55.89:7676/smp_21_]
- [HTTP request 1/1]
- [Response in frame: 63794]

Hypertext Transfer Protocol (http), 249 bytes

Packets: 174244 · Displayed: 4 (0.0%) · Dropped: 0 (0.0%)

Profile: Default

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