

### CFAI: ASSIGNMETN 3:

DARSHAN CHOUHAN

The file F\_Step\_1. pcapng

Username – johan

Password – Flapper

Apply a display filter ... <Ctrl-F> Expression...

No.	Time	Source	Destination	Protocol	Length	Info
187	23.234438	172.16.40.104	107.152.24.197	TLSv1.2	192	Client Key Exchange, Change Cipher Spec, Encrypted Handshake Message
188	23.278382	159.203.238.50	172.16.40.104	FTP	104	Response: 530 Please login with USER and PASS.
189	23.278466	172.16.40.104	159.203.238.50	TCP	66	50699 → 21 [ACK] Seq=21 Ack=97 Win=131648 Len=0 TSval=1099263664 TSecr=373482611
190	23.278783	172.16.40.104	159.203.238.50	FTP	77	Request: USER john
191	23.328449	172.16.40.101	172.16.40.255	NBNS	92	Name query NB BC-ALTIRIS-AP02:00
192	23.412121	107.152.24.197	172.16.40.104	TLSv1.2	340	New Session Ticket, Change Cipher Spec, Encrypted Handshake Message
193	23.412256	172.16.40.104	107.152.24.197	TCP	66	50702 → 443 [ACK] Seq=644 Ack=3654 Win=130784 Len=0 TSval=1099263797 TSecr=2514970433
194	23.412719	172.16.40.104	107.152.24.197	TLSv1.2	824	Application Data
195	23.599278	::	ff02::1:ffbb:a85a	ICMPv6	78	Neighbor Solicitation for fe80::e6c8:1ff:febb:a85a
196	23.614237	::	ff02::16	ICMPv6	90	Multicast Listener Report Message v2

> Frame 190: 77 bytes on wire (616 bits), 77 bytes captured (616 bits) on interface 0  
> Ethernet II, Src: Apple\_c3:9e:b3 (ac:bc:32:c3:9e:b3), Dst: RuijieMe\_35:38:33 (58:69:6c:35:38:33)  
> Internet Protocol Version 4, Src: 172.16.40.104, Dst: 159.203.238.50  
> Transmission Control Protocol, Src Port: 50699, Dst Port: 21, Seq: 21, Ack: 97, Len: 11  
> File Transfer Protocol (FTP)  
[Current working directory: ]

0000 58 69 6c 35 38 33 ac bc 32 c3 9e b3 00 00 45 00 X1583...2....E:  
0010 00 3f ff 9c 40 00 00 06 d8 a5 ac 10 28 68 9f cb ?..@..(h..  
0020 ee 32 c6 0b 00 15 f3 ed af 49 d8 fb eb d4 00 18 2.....I.....  
0030 10 12 88 87 00 00 01 01 00 0a 41 85 6e b0 16 42 .....A.n..B  
0040 e4 73 55 53 45 52 20 6a 6f 68 6e 0d 0a ..sUSER j ohn..

Apply a display filter <Ctrl-F> Expression...

No.	Time	Source	Destination	Protocol	Length	Info
200	24.055177	172.16.40.104	159.203.238.50	TCP	77	[TCP Retransmission] 50699 → 21 [PSH, ACK] Seq=21 Ack=97 Win=131648 Len=11 TSval=1099264438 TSecr=373482611
201	24.091827	172.16.40.101	172.16.40.255	NBNS	92	Name query NB BC-ALTIRIS-AP02<00>
202	24.346566	159.203.238.50	172.16.40.104	FTP	100	Response: 331 Please specify the password.
203	24.346620	172.16.40.104	159.203.238.50	TCP	66	50699 → 21 [ACK] Seq=32 Ack=131 Win=131616 Len=0 TSval=1099264729 TSecr=373482864
204	24.346737	172.16.40.104	159.203.238.50	FTP	80	Request: PASS Flapper
205	24.512392	::	ff02::16	ICMPv6	90	Multicast Listener Report Message v2
206	24.921285	172.16.40.101	172.16.40.255	NBNS	92	Name query NB BC-ALTIRIS-AP02<00>
207	25.087426	172.16.40.104	159.203.238.50	TCP	80	[TCP Retransmission] 50699 → 21 [PSH, ACK] Seq=32 Ack=131 Win=131616 Len=14 TSval=1099265468 TSecr=373482864
208	25.172770	fe80::e6c8:1ff:febb::	ff02::16	ICMPv6	90	Multicast Listener Report Message v2
209	25.370829	159.203.238.50	172.16.40.104	TCP	66	21 → 50699 [ACK] Seq=131 Ack=46 Win=29184 Len=0 TSval=373483131 TSecr=1099265468

> Frame 204: 80 bytes on wire (640 bits), 80 bytes captured (640 bits) on interface 0  
 > Ethernet II, Src: Apple\_c3:9e:b3 (ac:bc:32:c3:9e:b3), Dst: RuijieMe\_35:38:33 (58:69:6c:35:38:33)  
 > Internet Protocol Version 4, Src: 172.16.40.104, Dst: 159.203.238.50  
 > Transmission Control Protocol, Src Port: 50699, Dst Port: 21, Seq: 32, Ack: 131, Len: 14  
 > File Transfer Protocol (FTP)  
 [Current working directory: ]

```

0000  58 69 6c 35 38 33 ac bc 32 c3 9e b3 08 00 45 00  X11583...2.....E:
0010  00 42 8d 52 40 00 00 06 4a ed ac 10 28 68 9f cb  :B R@ @ J... (h...
0020  ee 32 c6 0b 00 15 f3 ed af 54 d8 fb eb f6 80 18  :2.....T.....
0030  10 11 12 8f 00 00 01 01 00 0a 41 85 72 d9 16 42  :.....A.r..B
0040  e5 70 50 41 53 53 20 46 6c 61 70 70 65 72 0d 0a  :pPASS F.lapper..
  
```

File h\_Step\_2.pcapng

Username – Isaac

Password – Slapper

The image shows a Wireshark packet capture analysis of an HTTP login request. The top pane displays a list of packets, with packet 84 selected. The middle pane shows the details of packet 84, which is an HTTP POST request to /login.php. The bottom pane shows the raw packet data in hexadecimal and ASCII.

**Packet List:**

No.	Time	Source	Destination	Protocol	Length	Info
20	9.633426226	172.16.1.1	172.16.1.129	HTTP	504	GET /login.htm HTTP/1.1
22	9.634160517	172.16.1.129	172.16.1.1	HTTP	674	HTTP/1.1 200 OK (text/html)
24	9.739398054	172.16.1.1	172.16.1.129	HTTP	470	GET /favicon.ico HTTP/1.1
25	9.739677846	172.16.1.129	172.16.1.1	HTTP	569	HTTP/1.1 404 Not Found (text/html)
49	21.631365064	172.16.1.1	172.16.1.129	HTTP	657	POST /login.php HTTP/1.1 (application/x-www-form-urlencoded)
51	21.632384019	172.16.1.129	172.16.1.1	HTTP	448	HTTP/1.1 200 OK (text/html)
66	27.780805408	172.16.1.1	172.16.1.129	HTTP	657	POST /login.php HTTP/1.1 (application/x-www-form-urlencoded)
68	27.781384254	172.16.1.129	172.16.1.1	HTTP	447	HTTP/1.1 200 OK (text/html)
84	33.813057139	172.16.1.1	172.16.1.129	HTTP	657	POST /login.php HTTP/1.1 (application/x-www-form-urlencoded)
86	33.813631007	172.16.1.129	172.16.1.1	HTTP	419	HTTP/1.1 200 OK (text/html)

**Packet Details (Packet 84):**

- Frame 84: 657 bytes on wire (5256 bits), 657 bytes captured (5256 bits) on interface 0
- Ethernet II, Src: Vmware\_c0:00:08 (00:50:56:c0:00:08), Dst: Vmware\_e1:fe:3f (00:0c:29:e1:fe:3f)
- Internet Protocol Version 4, Src: 172.16.1.1, Dst: 172.16.1.129
- Transmission Control Protocol, Src Port: 55696, Dst Port: 80, Seq: 1, Ack: 1, Len: 591
- Hypertext Transfer Protocol
- HTTP POST /login.php HTTP/1.1 (application/x-www-form-urlencoded)
- Form item: "u" = "Isaac"
- Form item: "p" = "Slapper"
- Form item: "canvas" = "Submit"

**Raw Packet Data (Hex/ASCII):**

```
0000  00 0c 29 e1 fe 3f 00 50 56 c0 00 08 08 00 45 00  ..P.V....E.
0010  02 83 20 2b 40 00 06 bd a7 ac 10 01 01 ac 10  ..+@.....
0020  01 81 d9 90 00 50 b8 c1 93 69 7d 45 3d d4 80 18  ....P...i}E=...
0030  10 15 40 40 00 00 01 01 08 0a 24 7f f7 22 d0 7a  ..@K...-$-".z
0040  6d 9e 50 4f 53 54 20 2f 6c 6f 67 69 6e 2e 70 68  m POST / login.ph
0050  70 20 48 54 54 50 2f 31 2e 31 0d 0a 48 6f 73 74  p HTTP/1 .1..Host
0060  3a 20 31 37 32 2e 31 36 2e 31 2e 31 32 39 0d 0a  : 172.16 .1.129..
0070  43 6f 6e 6e 65 63 74 69 6f 6e 3a 20 6b 65 65 70  Connecti on: keep
0080  2d 61 6c 69 76 65 0d 0a 43 6f 6e 74 65 6e 74 2d  -alive.. Content-
0090  4c 65 6e 67 74 68 3a 20 33 31 0d 0a 43 61 63 68  Length: 31..Cach
00a0  65 2d 43 6f 6e 74 72 6f 6c 3a 20 6d 61 78 2d 61  e-Contro l: max-a
00b0  67 65 3d 30 0d 0a 4f 72 69 67 69 6e 3a 20 68 74  ge=0..Or igin: ht
00c0  74 70 3a 2f 2f 31 37 32 2e 31 36 2e 31 2e 31 32  tp://172 .16.1.12
```

BasicLogin\_intermediate.pcapng

Username –WALDO

Password – VERYSECURE

tcp.stream eq 1

No.	Time	Source	Destination	Protocol	Length	Info
11	4.762720068	172.16.1.1	172.16.1.129	TCP	78	55838 → 80 [SYN] Seq=0 Win=65535 Len=0 MSS=1460 WS=32 TSval=614233171 TSecr=0 SACK_PERM=1
12	4.762729002	172.16.1.129	172.16.1.1	TCP	74	80 → 55838 [SYN, ACK] Seq=0 Ack=1 Win=28960 Len=0 MSS=1460 SACK_PERM=1 TSval=3498897295 TSecr=614233171 WS=...
14	4.762814709	172.16.1.1	172.16.1.129	TCP	66	55838 → 80 [ACK] Seq=1 Ack=1 Win=131744 Len=0 TSval=614233171 TSecr=3498897295
37	14.764138544	172.16.1.1	172.16.1.129	HTTP	534	GET /secret/index.html HTTP/1.1
38	14.764176015	172.16.1.129	172.16.1.1	TCP	66	80 → 55838 [ACK] Seq=1 Ack=469 Win=30080 Len=0 TSval=3498907294 TSecr=614243148
39	14.765466565	172.16.1.129	172.16.1.1	HTTP	514	HTTP/1.1 200 OK (text/html)
40	14.765679995	172.16.1.1	172.16.1.129	TCP	66	55838 → 80 [ACK] Seq=469 Ack=449 Win=131296 Len=0 TSval=614243149 TSecr=3498907295
42	15.489831529	172.16.1.1	172.16.1.129	HTTP	453	GET /favicon.ico HTTP/1.1
43	15.490024569	172.16.1.129	172.16.1.1	HTTP	569	HTTP/1.1 404 Not Found (text/html)
44	15.490120257	172.16.1.1	172.16.1.129	TCP	66	55838 → 80 [ACK] Seq=856 Ack=952 Win=130816 Len=0 TSval=614243871 TSecr=3498908019

[Timestamps]  
TCP payload (468 bytes)

Hypertext Transfer Protocol

GET /secret/index.html HTTP/1.1\r\n

Host: 172.16.1.129\r\n

Connection: keep-alive\r\n

Authorization: Basic V0FHREB6VksWVNFQ1VSQ==\r\n

Credentials: WALDO:VERYSECURE

Upgrade-Insecure-Requests: 1\r\n

User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10\_11\_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/66.0.3359.170 Safari/537.36 OPR/53.0.2907.99\r\n

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,image/apng,\*/\*;q=0.8\r\n

Accept-Encoding: gzip, deflate\r\n

0000 6e 3a 20 6b 65 65 70 2d 61 6c 69 76 65 0d 0a 41 n: keep-alive...  
0090 75 74 68 6f 72 69 7a 61 74 69 6f 6e 3a 20 42 61 uthoriza tion: Ba  
00a0 73 69 63 20 56 30 46 4d 52 45 38 36 56 6b 56 53 sic V0FH REB6Vks  
00b0 57 56 4e 46 51 31 56 53 52 51 3d 3d 0d 0a 55 70 WNFQ1VS RQ==\r\n  
00c0 67 72 61 64 65 2d 49 6e 73 65 63 75 72 65 2d 52 grade-In secure-R  
00d0 65 71 75 65 73 74 73 3a 20 31 0d 0a 55 73 65 72 equests: 1·User  
00e0 2d 41 67 65 6e 74 3a 20 4d 6f 7a 69 6c 6c 61 2f -Agent: Mozilla/  
00f0 35 2e 30 20 28 4d 61 63 69 6e 74 6f 73 68 3b 20 5.0 (Mac intosh;  
0100 49 6e 74 65 6c 20 4d 61 63 20 4f 53 20 58 20 31 Intel Ma c OS X 1  
0110 30 5f 31 31 5f 36 29 20 41 70 70 6c 65 57 65 62 0\_11\_6) AppleWeb  
0120 4b 69 74 2f 35 33 37 2e 33 36 20 28 4b 48 54 4d Kit/537. 36 (KHTM  
0130 4c 2c 20 6c 69 6b 65 20 47 65 63 6b 6f 29 20 43 L, like Gecko) C  
0140 68 72 6f 6d 65 2f 36 36 2e 30 2e 33 33 35 39 2e hrome/66 .0.3359.