

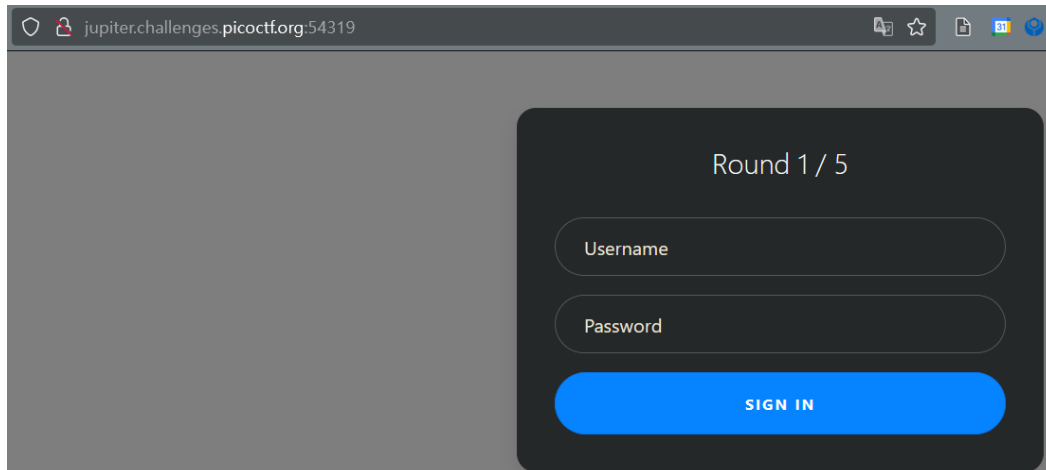
NGWN-P1
B10932017 張祐禎

Part 1

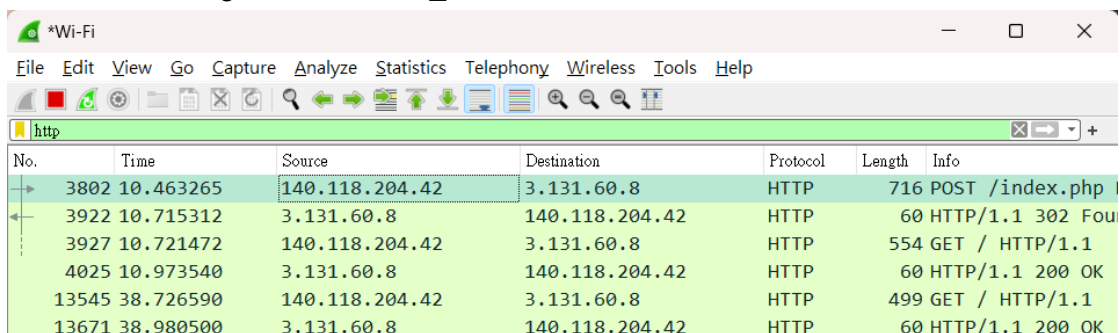
1. URL: <http://jupiter.challenges.picoctf.org:54319/> (Web Gauntlet)

Part 2

1. Your selected URL => screenshot_1

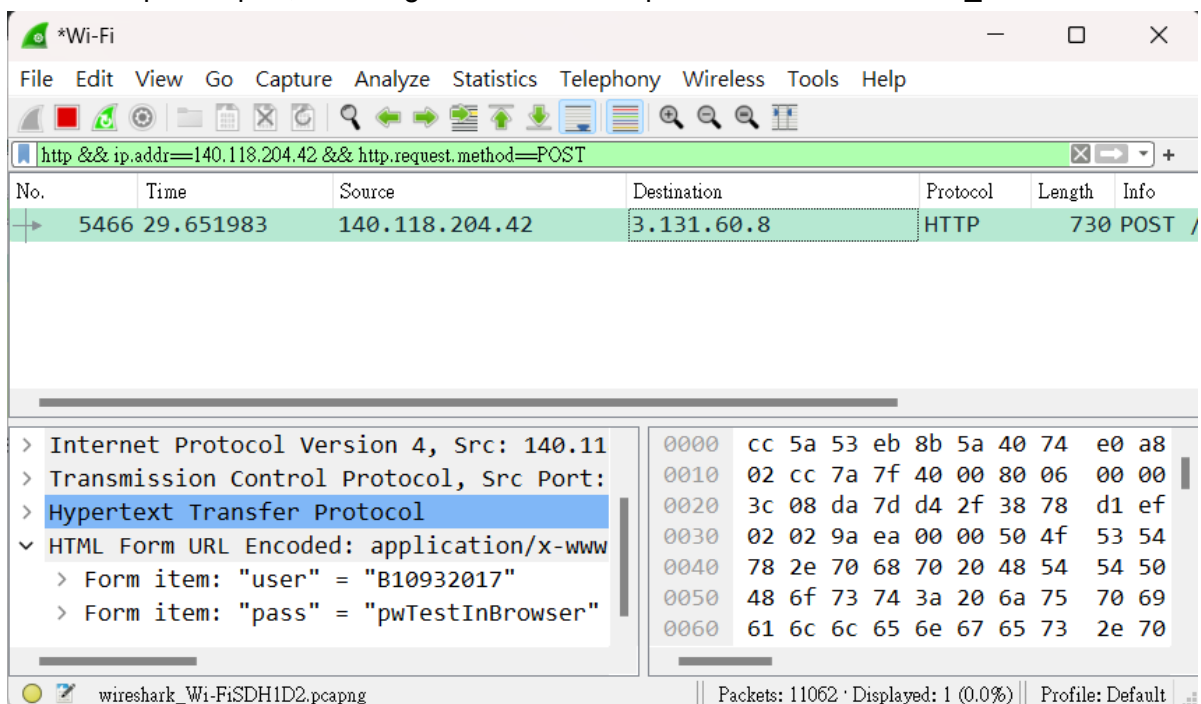


2. Wireshark sniffing => screenshot_2



No.	Time	Source	Destination	Protocol	Length	Info
3802	10.463265	140.118.204.42	3.131.60.8	HTTP	716	POST /index.php
3922	10.715312	3.131.60.8	140.118.204.42	HTTP	60	HTTP/1.1 302 Found
3927	10.721472	140.118.204.42	3.131.60.8	HTTP	554	GET / HTTP/1.1
4025	10.973540	3.131.60.8	140.118.204.42	HTTP	60	HTTP/1.1 200 OK
13545	38.726590	140.118.204.42	3.131.60.8	HTTP	499	GET / HTTP/1.1
13671	38.980500	3.131.60.8	140.118.204.42	HTTP	60	HTTP/1.1 200 OK

3. Wireshark packet part, including the account and password => screenshot_3



Wireshark packet capture details for the selected packet (No. 5466):

- Internet Protocol Version 4, Src: 140.118.204.42, Dst: 3.131.60.8
- Transmission Control Protocol, Src Port: 5466, Dst Port: 80
- Hypertext Transfer Protocol
- HTML Form URL Encoded: application/x-www-form-urlencoded
 - Form item: "user" = "B10932017"
 - Form item: "pass" = "pwTestInBrowser"

Packet bytes (hex):

```
0000 cc 5a 53 eb 8b 5a 40 74 e0 a8
0010 02 cc 7a 7f 40 00 80 06 00 00
0020 3c 08 da 7d d4 2f 38 78 d1 ef
0030 02 02 9a ea 00 00 50 4f 53 54
0040 78 2e 70 68 70 20 48 54 54 50
0050 48 6f 73 74 3a 20 6a 75 70 69
0060 61 6c 6c 65 6e 67 65 73 2e 70
```

Part 3

1. Python program to send a packet to URL => screenshot_4.

```
B10932017_P1.py > ...
1  import requests
2
3  x = requests.post(
4      'http://jupiter.challenges.picoctf.org:54319/',
5      data = {'user': 'B10932017',
6              'pass': 'using_Python_to_post'
7              }
8  )
9
10 print(x.text)
```

2. Packet sniffing by Wireshark => screenshot_5

The screenshot shows the Wireshark interface with a packet capture on the *Wi-Fi interface. The filter is set to `http && ip.addr==140.118.204.42 && http.request.method==POST`. Two packets are displayed:

No.	Time	Source	Destination	Protocol	Length	Info
5466	29.651983	140.118.204.42	3.131.60.8	HTTP	730	POST /
39875	213.931376	140.118.204.42	3.131.60.8	HTTP	94	POST /

The selected packet (No. 39875) is expanded to show the following details:

- Transmission Control Protocol, Src Port: 5600
- [2 Reassembled TCP Segments (277 bytes): #398
- Hypertext Transfer Protocol
- HTML Form URL Encoded: application/x-www-form-urlencoded
 - Form item: "user" = "B10932017"
 - Form item: "pass" = "using_Python_to_post"

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

Offset	Hex	ASCII
0000	cc 5a 53 eb 8b 5a 40 74 e0	
0010	00 50 7a 89 40 00 80 06 00	
0020	3c 08 da c7 d4 2f 7b 48 1c	
0030	01 03 98 6e 00 00 75 73 65	
0040	32 30 31 37 26 70 61 73 73	
0050	50 79 74 68 6f 6e 5f 74 6f	

The status bar at the bottom indicates: `wireshark_Wi-FiSDH1D2.pcapng`, `Packets: 41791 · Displayed: 2 (0.0%)`, and `Profile: Default`.