

實驗環境：window10 交大女二宿舍網路

## 1-1. Short : 5 個

The screenshot shows a Wireshark capture of an HTTP session. The packet list on the left shows 10 packets. The first 5 packets are GET requests from 140.113.137.177 to 140.113.235.47. The first packet is a 404 GET for /sywu1208/ICN/Project2/pro2\_1.html. The second is a 200 OK for /1.1. The third is a 302 Moved Temporarily for /Favicon.ico. The fourth is a 302 Moved Temporarily for /1.1. The fifth is a 301 Moved Permanently for /1.1. The sixth packet is a 200 OK for /1.1. The packet details pane shows the first packet's details: Ethernet II, Internet Protocol Version 4, Transmission Control Protocol, and Hypertext Transfer Protocol. The packet bytes pane shows the raw data of the first packet.

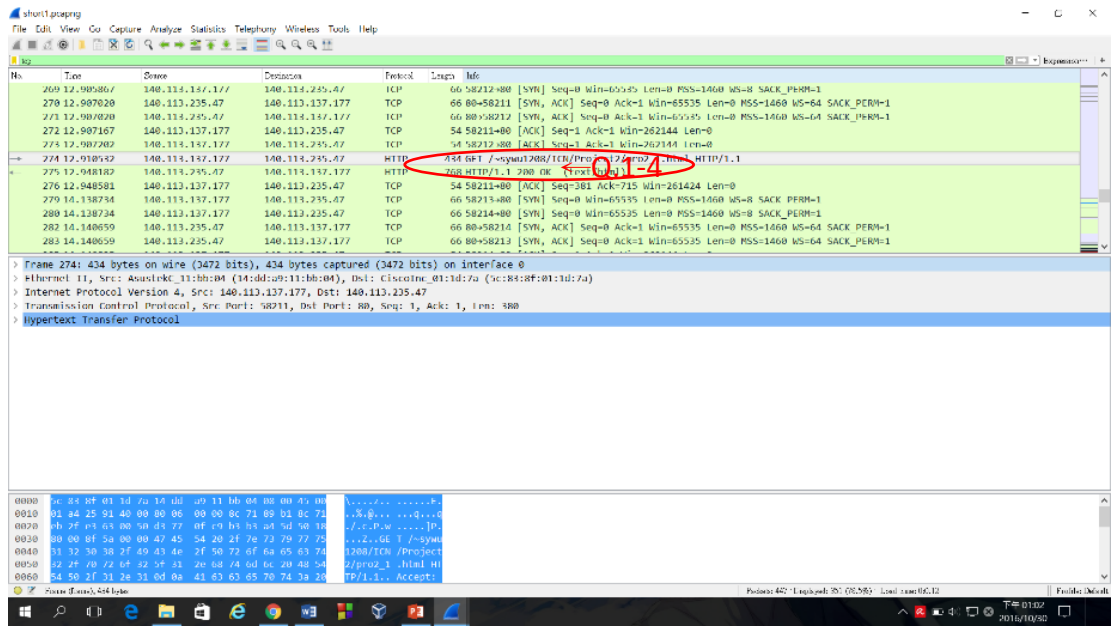
No.	Time	Source	Destination	Protocol	Length	Info
274	12.910532	140.113.137.177	140.113.235.47	HTTP	404	GET /sywu1208/ICN/Project2/pro2_1.html HTTP/1.1
275	12.948182	140.113.235.47	140.113.137.177	HTTP	768	HTTP/1.1 200 OK (text/html)
287	14.142781	140.113.137.177	140.113.235.47	HTTP	302	GET /Favicon.ico HTTP/1.1
289	14.144361	140.113.235.47	140.113.137.177	HTTP	425	HTTP/1.1 302 Moved Temporarily (text/html)
299	14.153918	140.113.137.177	140.113.235.47	HTTP	302	GET / HTTP/1.1
300	14.155463	140.113.235.47	140.113.137.177	HTTP	435	HTTP/1.1 302 Moved Temporarily (text/html)
302	14.158071	140.113.137.177	140.113.235.47	HTTP	301	GET /cswebsite HTTP/1.1
303	14.163776	140.113.235.47	140.113.137.177	HTTP	546	HTTP/1.1 301 Moved Permanently (text/html)
305	14.167260	140.113.137.177	140.113.235.47	HTTP	301	GET /cswebsite/ HTTP/1.1
332	14.228340	140.113.235.47	140.113.137.177	HTTP	571	HTTP/1.1 200 OK (text/html)

## 1-2. Long : 6 個

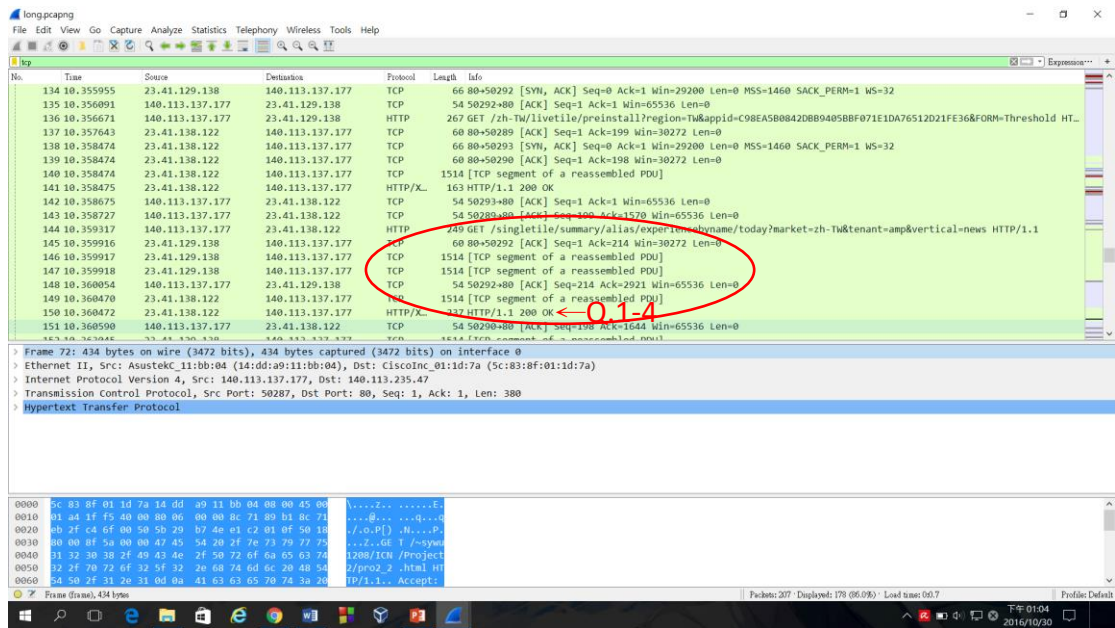
The screenshot shows a Wireshark capture of a longer HTTP session. The packet list on the left shows 18 packets. The first 6 packets are GET requests from 140.113.137.177 to 140.113.235.47. The first packet is a 404 GET for /sywu1208/ICN/Project2/pro2\_2.html. The second is a 200 OK for /1.1. The third is a 200 OK for /1.1. The fourth is a 200 OK for /1.1. The fifth is a 200 OK for /1.1. The sixth is a 200 OK for /1.1. The packet details pane shows the first packet's details: Ethernet II, Internet Protocol Version 4, Transmission Control Protocol, and Hypertext Transfer Protocol. The packet bytes pane shows the raw data of the first packet.

No.	Time	Source	Destination	Protocol	Length	Info
72	6.858816	140.113.137.177	140.113.235.47	HTTP	404	GET /sywu1208/ICN/Project2/pro2_2.html HTTP/1.1
83	6.859200	140.113.235.47	140.113.137.177	HTTP	670	HTTP/1.1 200 OK (text/html)
132	10.355187	140.113.137.177	23.41.138.122	HTTP	259	GET /singletile/summary/alias/experiencebyname/today?market=zh-Tw&tenant=amp&vertical=finance HTTP/1.1
133	10.355797	140.113.137.177	23.41.138.122	HTTP	261	GET /singletile/summary/alias/experiencebyname/today?market=zh-Tw&tenant=amp&vertical=sports HTTP/1.1
136	10.356671	140.113.137.177	23.41.129.138	HTTP	267	GET /zh-Tw/livetile/preinstall?region=TW&appid=C98EASB08420BB9405BBF071E1DA76512D21FE368F08M-Threshold HTTP/1.1
141	10.358475	23.41.138.122	140.113.137.177	HTTP/XL	163	HTTP/1.1 200 OK
144	10.359317	140.113.137.177	23.41.138.122	HTTP	269	GET /singletile/summary/alias/experiencebyname/today?market=zh-Tw&tenant=amp&vertical=news HTTP/1.1
150	10.360472	23.41.138.122	140.113.137.177	HTTP/XL	237	HTTP/1.1 200 OK
153	10.363047	23.41.129.138	140.113.137.177	HTTP/XL	289	HTTP/1.1 200 OK
157	10.363798	23.41.138.122	140.113.137.177	HTTP/XL	187	HTTP/1.1 200 OK
181	15.525259	140.113.137.177	140.113.235.47	HTTP	506	GET /sywu1208/ICN/Project2/pro2_2.html HTTP/1.1
185	15.551087	140.113.235.47	140.113.137.177	HTTP	678	HTTP/1.1 200 OK (text/html)

1-3. Short : 0 個



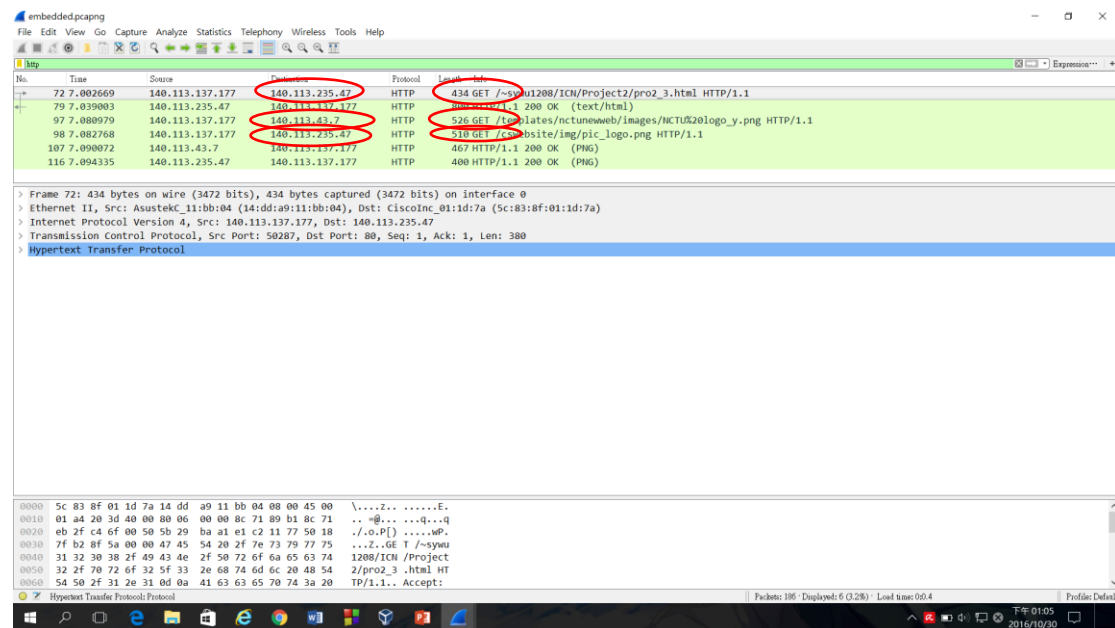
1-4. Long : 3 個



1-5. Short : 200 OK

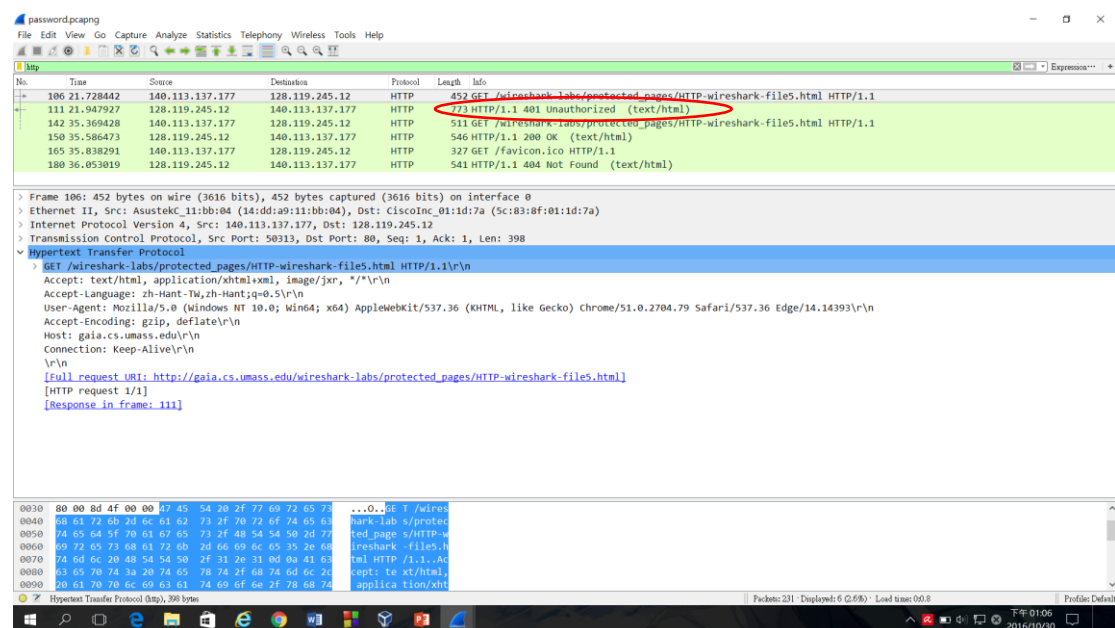
Long : 200 OK

## 2-1. 3 個(140.113.235.47/140.113.43.7/140.113.235.47)

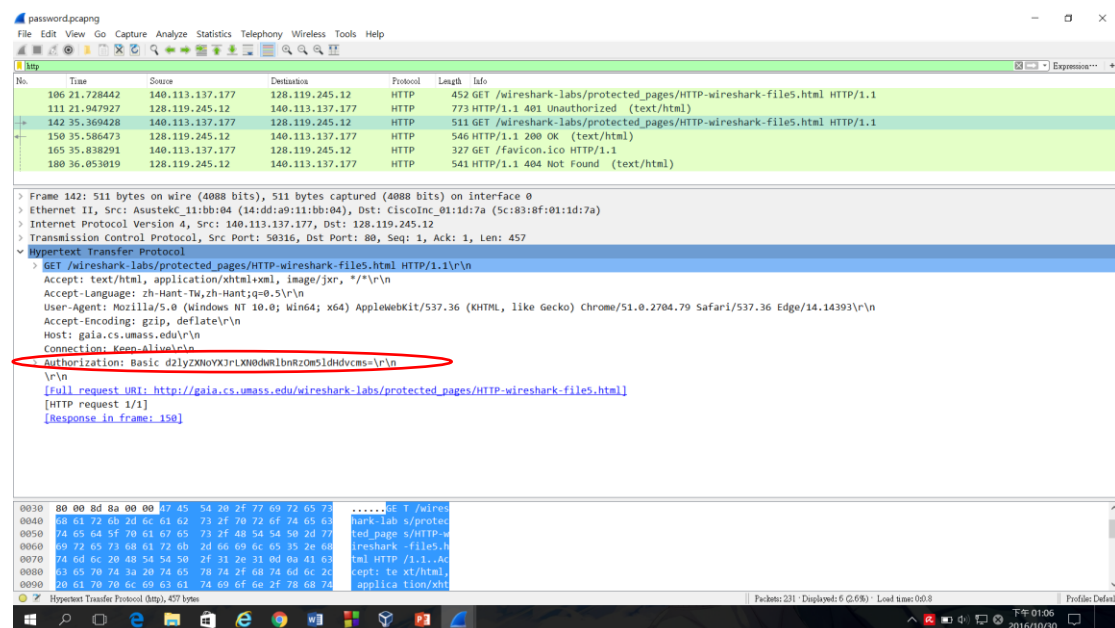


2-2. 平行下載，由上圖可知 brower 一次傳送了兩個 HTTP GET request messages，並沒有等待上一個 HTTP 回應才傳送下一個，故是兩張影像平行下載。

## 3-1. 401 unauthorized

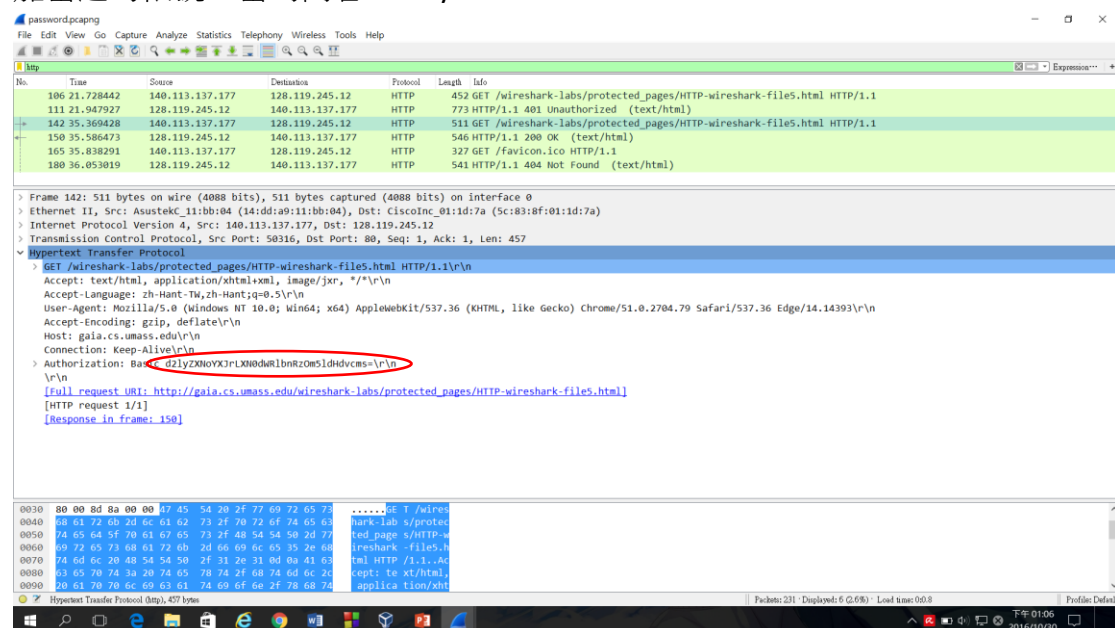


## 3-2. Authorization : Basic



Bonus :

加密過的帳號、密碼內容：d2lyZXNoYXJrLXN0dWRlbnRzOm5ldHdvcmcs=



心得：

這次實驗比上次更能清楚的了解網路的運作，很多意想不到的結果出現在這次實驗中，像是雖然上課有說封包會切割然後再傳送，但實際看到還是會有種好神奇的感覺，或是自己也不會想到當開啟一個有圖片的網站的時候還要再送一個 get message 下載圖片。這次實驗感覺學到了不少，對網路也有更深的一層認識~