

# B04901110 林冠宇 電網導 p18

destination [www.facebook.com](http://www.facebook.com)

a.

13:32					
# hops					
13	26.082	25.908		average	8.602571
13	4.294	4.221	4.449	standard deviation	7.269977
13	5.834	5.809	8.717		
13	4.053	4.092	4.069		
13	7.521	7.617	7.77		
17:08					
13	5.612	5.613	5.609	average	5.215267
13	4.365	4.673	4.544	standard deviation	0.88469
13	4.794	4.869	4.842		
13	4.163	4.158	4.776		
13	6.745	6.74	6.726		
02:53					
13	8.799	9.316	8.572	average	5.9326
13	3.894	3.835	3.626	standard deviation	1.96023
13	4.215	5.472	5.451		
13	4.335	4.141	4.977		
13	7.306	7.297	7.753		

edge-star-mini-shv-01-tpe1.facebook.com (31.13.87.36) is the destination.

b. the number of routers remain 13 for 50 data, but the paths change from time to time.

c. Since I did this task in NTU, the ISP the packets pass through involved (TAnet – Taiwan academic network, TPIX-TW – PeeringDB – an IXP, and the facebook ISP located in US).

In this case, no large delay occur at the peering interfaces between adjacent ISPs.

d. –(a)

destination: [www.ucla.com](http://www.ucla.com) - gateway.lb.it.ucla.edu [164.67.228.152]

13:32:

delay

average – 155ms deviation- 5.664ms

17:08:

average – 122ms deviation- 13.664ms

02:53:

average – 134ms deviation- 7.664ms

(calculated via excel)

d-(b) No, the hops remain 20 in all data.

d-c about 4 ISPs are involved in the task, which are TAnet, ASnet, Indiana University ISP, and UCLA network. No apparent large delay occurred at peering interfaces.