

Tan Shin Jie 1003715 Lab 6

Q1

h1 mask 255.255.255.0

h1 IPv4 10.0.0.105

Q2

srv1 and srv2 not in the same subnet

srv1 mask 255.255.255.0

srv2 mask 255.0.0.0

Q3

h1 directly reachable to srv1, 1 hop. So switch is not needed

```
mininet> h1 tracepath -n 10.0.0.10
 1?: [LOCALHOST] pmtu 1500
 1: 10.0.0.10 17.146ms reached
 1: 10.0.0.10 3.452ms reached
Resume: pmtu 1500 hops 1 back 1
mininet> S
```

Q4

hosts	gateway
h0	10.0.0.111
h1	10.0.0.111
h2	10.0.0.111
h3	10.0.0.111
h4	10.0.0.111
srv1	10.0.0.1
srv2	10.0.0.1

Q5

Cannot. Because the gateway is incorrect.

Q6

Yes, 10.0.0.1 (intGW) is the DHCP server

Q7

The gateway option (option=3) needs to be 10.0.0.1

Q8

Yes, after changing the gateway, h1 can reach 8.8.8.8.

Q9

Yes, I can ping it. The IP is 8.8.8.2 which under the same subnet as 8.8.8.8.

Q10

intGW provides the NAT service.

Q11

“sudo iptables -I FORWARD -s 10.0.0.11 -j DROP”

Is the rule that disabled srv2 from reaching 8.8.8.8