Lee Gui An (1002651) 50.012 Networks Lab 6: A Network

Part 3: Warming Up

- 1) The IP Subnet is 10.0.0.0/24.
- 2) Yes, srv1 and srv2 are in the same subnet.
- 3) We are unable to see the switch, since the switch acts as the localhost controller (and has no IP address). The switch sits on 255.255.255.
- 4) The gateway is 10.0.0.111.
- 5) We cannot reach 8.8.8.2, since we do not have a resolution path (that is, a path telling us which hops we need to make to reach it)
- 6) The DHCP server exists and is 10.0.0.10 (srv1).

Part 4: Configuring the System

- 7) Yes: The DHCP server is currently configured to use 10.0.0.111 as the router when the gateway is actually 10.0.0.1.
- 8) Yes, I can reach Google's DNS service.
- 9) Yes, I can reach test.net. This is because previously, we were using an internal loopback server to resolve our DNS queries instead, by changing the value to 8.8.8.8, we reference the google DNS server to resolve test.net.
- 10) This node is intGW.
- 11) I added the rule:

iptables -I FORWARD -d 10.0.0.11 -j DROP