

Brief Description of the networking setup provided:

-IP subnet for the desktops and server:

10.0.0.0/8 Since the mask is 255.0 which is  $2^8$

-Which server is acting as DHCP server?

Srv1

-What you had to fix in the DHCP setup to reach 8.8.8.8:

Modify dhcp-option in srv1DHCP.conf from 3,10.0.0.111 to 3,10.0.0.1

-Why can you resolve nils.net? Briefly describe where h1 knows about a DNS server, and what its IP is.

The change in the DNS server to 8.8.8.8 made it possible to resolve nils.net. At first h1 is using localhost (127.0.0.1) as the DNS server, and as localhost does not have an entry for nils.net in order to route there, h1 initially could not ping nils.net. However, after manually changing the DNS server to 8.8.8.8 by modifying the resolv.conf file, and 8.8.8.8 had an entry for nils.net, h1 was able to successfully ping nils.net

In an actual situation outside of mininet, the DHCP server is supposed to provide the DNS server's IP address 8.8.8.8 to the host (h1 in this case). This will happen when we renew the DHCP lease and resolv.conf is automatically populated by the DHCP service

IP of nils.net: 8.8.8.2

IP of new DNS server 8.8.8.8

IP of h1: 10.0.0.105

-Who is doing the Nat'ing? Which address ranges it is translating between?

intGW is doing the NAT'ing. It is translating between private IP addresses 10.0.0.0/24 (10.0.0.1 – 254) and public IP address 2.2.2.2/24

-Did you manage to block srv2 from reaching the outside world?

Yes, by executing the commands 'iptables -I FORWARD -s 10.0.0.11 -j DROP and iptables -I INPUT -s 10.0.0.11 -j DROP

-Did you do any of the optional tasks?

NO.