Old Dominion University

CYSE 270 Linux System for Cybersecurity

Assignment #12

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Task A – Network Configuration

- 1. In the virtual box setting, connect two VMs in the same internal network, "internal_{UIN}".
 - a. Replace {UIN} with your real UIN.

😗 Oracle VM

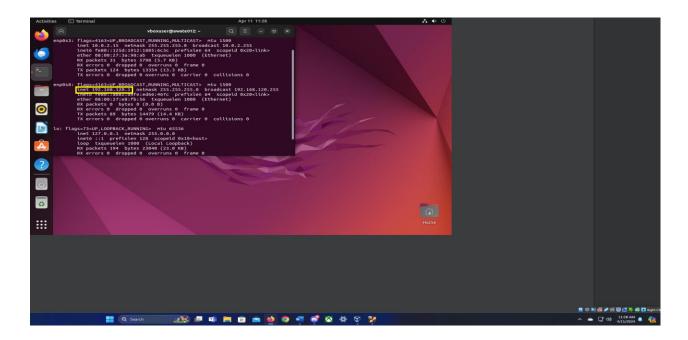
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 Change the hostname of the Client VM to "{MIDASname}-Client". Replace {MIDASname} with your real MIDAS name.

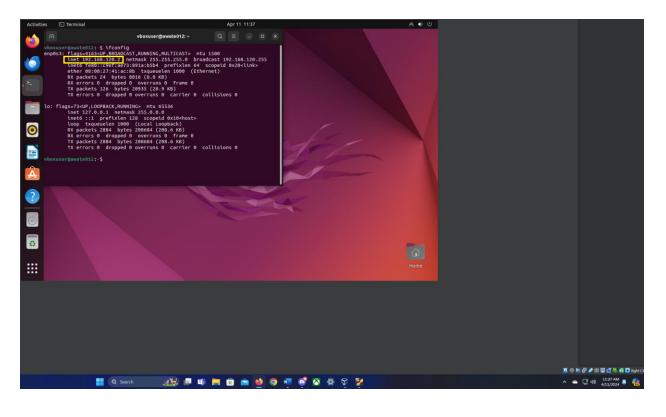
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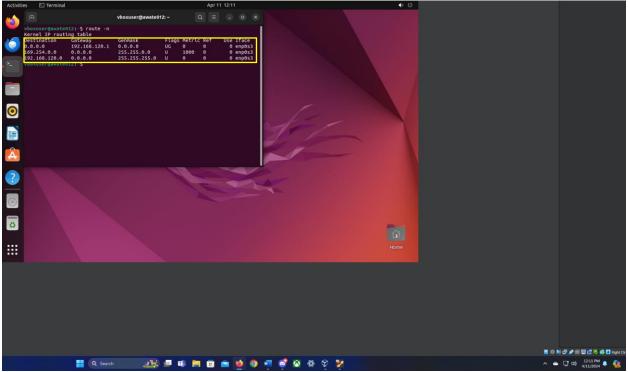
3. Configure the temporary IP address on the Gateway Ubuntu, as shown in Figure 1.

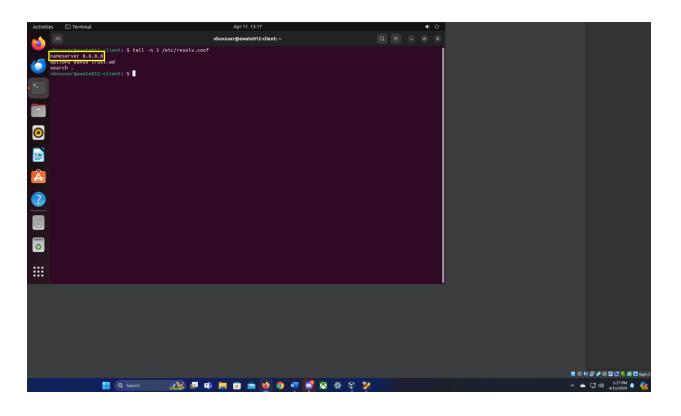


4. Configure the temporary IP address, routing table, and DNS server on Client VM as shown in

Figure 1.



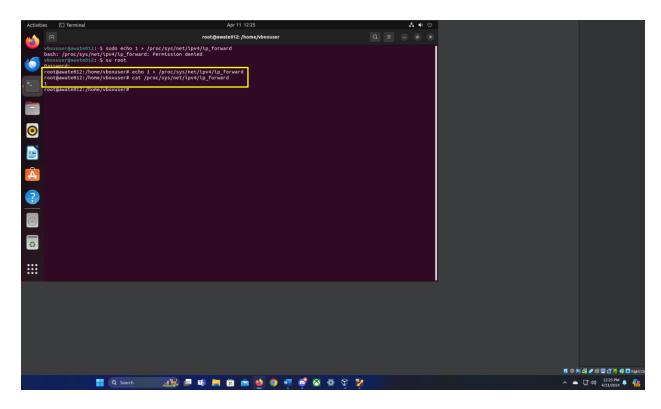




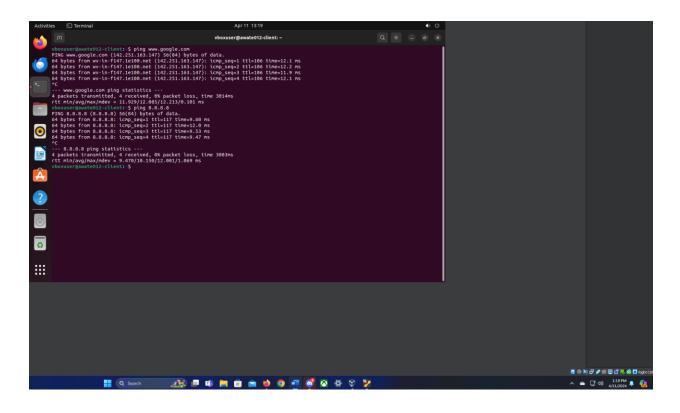
5. Configure gateway Ubuntu to enable IP forwarding (to forward the traffic) (also NAT

configuration).

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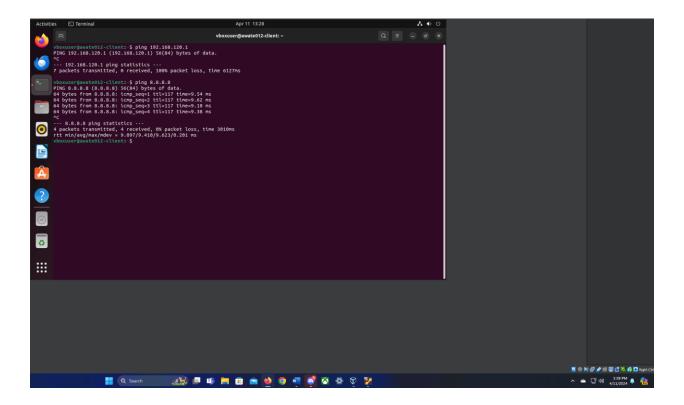
6. Test your pine connection to 8.8.8.8 and <u>www.google.com</u> in the client VM, respectively.



Task B – Firewall Configuration

- Configure the iptables on the gateway Ubuntu to block all the inbound ICMP packets from the Client VM.
 - a. After setting up rules for the gateway to drop ICMP packets from the client, we can no

longer send a ping request to the gateway. We can still ping out to other addresses.



2. Configure the iptables on the gateway Ubuntu to block all the outbound ICMP packets that

originated from the gateway Ubuntu itself.

a. After setting up iptables rules, all ICMP packets were rejected

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