

Lab 2: Use basic networking tools

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This lab counts towards your class participation grade

Initial Setup

- We will utilize the VMs we created in LAB 1.
- Open a terminal (can be in your browser or on your laptop) and log into the VMs.

Turn in the following (you may use Google and/or collaborate with other students)

Please submit *one* PDF with your work. You might find the “man” command to be very useful.

SSH into two instances and perform the following tests:

1. Run ping between two instances and record the outputs for both internal and external interfaces. (5pts)
2. Submit the output as a screenshot and a table that briefly explains each field of the output. (5pts)
3. Install traceroute (sudo apt update && sudo apt install traceroute).
4. Run traceroute to “tntech.edu”, record the output (5 pts)
5. Submit the output as a screenshot and briefly explain each field (5 pts)
6. Run ifconfig and record the output. (5pts)
7. Submit the output as a screenshot and the following information for an interface such as “eth0”: IP address, Ethernet Address, netmask, and MTU (5 pts)
8. Run the folloiwng command “ip route show” and submit the output as a screenshot (5 pts)
9. Explain the first line of the output (5 pts)

[← Lab 1: Setting Up and Testing Virtual Machines on Google Cloud](#)

[Schedule →](#)