CSSE 490-- Network Security

Rose-Hulman Institute of Technology

Concept Lab: Introduction to Firewalls

Learning Objectives

At the end of this concept lab, you should be able to:

- Define how a firewall works in the context of a Linux box.

- Experiment with different filtering rules using 'nftables'.

- Add `nftables` rules to restrict access to your private network for certain individuals and/or applications.

Name: _____

Question	Points	Score
Question 1	5	
Question 2	5	
Question 3	5	
Question 4	5	
Question 5	10	
Total:	30	

1 Map the running services

The questions below refer to the first step of this concept lab.

Question 1. (5 points) List out the services running on the `server` container.

Question 2. (5 points) For each service running there, list a command that you can use to test if that service is running and reachable.

2 Simple `nft` firewall

The questions below refer to the second step of this concept lab.

Question 3. (5 points) What do you expect the impact of the chain we have added to be?

Question 4. (5 points) Verify your answer by running a simple command from the `client` or `server` containers.

Question 5. (10 points) How would you change the chain above to make sure that this observed behavior does not take place?