

# CSSE 490 -- NETWORK SECURITY

## Rose-Hulman Institute of Technology

### Concept Lab: Hiding a port

#### Learning Objectives

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

- Examine a way to hide a web service behind a firewall while only allowing authenticated services through it.

Name: \_\_\_\_\_

Question	Points	Score
<b>Question 1</b>	5	
<b>Question 2</b>	5	
<b>Question 3</b>	5	
<b>Question 4</b>	5	
Total:	20	

## 1 Step 1: Network Discovery

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

**Question 1.** (5 points) Which port is open on the `workstation` container? And what service is it running?

**Question 2.** (5 points) Observe the network traffic capture during network discovery, how did `nmap` figure out what service is running on that port on `workstation`?

## 2 Step 2: Extracting the Secret

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

**Question 3.** (5 points) Please write down the command you used to access the service along with the secret message you extracted.

**Question 4.** (5 points) Our goal in this setup is to hide port 80 on the `server` from the outside world, unless you have some form of authentication happening first. However, accessing a browser window from the terminal is not ideal (imagine accessing banner from `lynx`).

If you were to solve this problem, how would you approach hiding port 80 on the server from unauthenticated users, while still allowing users with correct permissions to send packets to port 80?