

Cyber Warriors: A Comprehensive Introduction to Cybersecurity Tools and Techniques

Lab 5 – Network Surveillance

Lab Description and Instructions

We learn how to carry out basic network reconnaissance using two popular tools, namely *nmap* and *WireShark*. We will limit our reconnaissance to the local network and all of our VM's traffic (local and external). To learn about the local network we will first learn the local IP address of our VM using:

```
ifconfig (e.g. 192.168.13.101)
```

First, we will scan for all computers (hosts) and services on the local network using *nmap* as follows:

```
nmap 192.168.13.101/24
```

Next, we will observe traffic (network packets) on the local link using WireShark (graphical).

Homework:

Try all the above steps in your VM. Additionally, scan for all open ports on the host 192.168.12.2. Use *WireShark* to find out if and when your VM is communicating with the 192.168.12.2.