Activity VI : Recon and Defense (Network I)

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Q1. Notice the open ports. Does anything look suspicious, i.e., some ports that you are not aware of that are open on the VM or on your notebook?

Port that I'm not aware on Notebook: msrpc(135), microsift-ds(445), netbios_ssn(139)

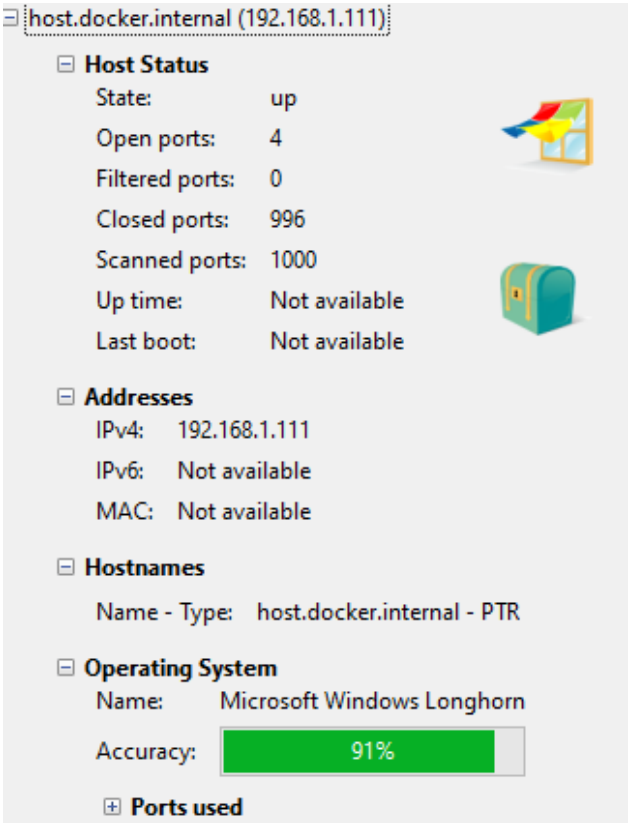
135	tcp	open	msrpc	Microsoft Windows RPC
139	tcp	open	netbios-ssn	Microsoft Windows netbios-ssn
445	tcp	open	microsoft-ds	
3306	tcp	open	mysql	MySQL (unauthorized)

On VM the port opened is what I expected

22	tcp	open	ssh	OpenSSH 7.6p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; protocol 2.0)
8080	tcp	open	http	Apache httpd 2.4.29 ((Ubuntu))

Q2. Look at the information provided by nmap about your OS's. Is the information correct? Why is it or why is it not correct?

It's correct

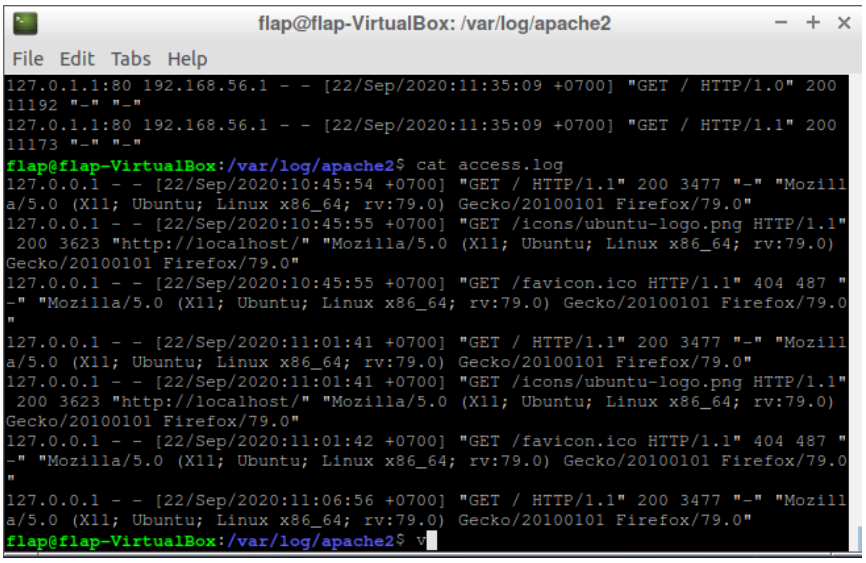


Q3. What do you think about the information you can get using nmap? Scary?

It knows I've docker but beside that it's not scary yet maybe I'm not running many service that's sensitive

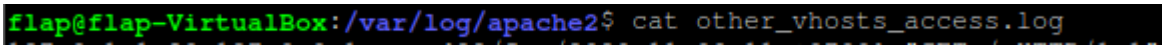
Q4. Look at the access.log file for the web server in your Linux VM. What IP addresses do you see accessing the Web server? Who owns these IP addresses?

It's from browser within VM

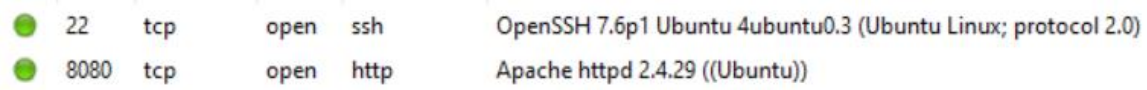


Q5. Find the nmap scan in the Web server log. Copy the lines from the log file that were created because of the nmap scan.

127.0.1.1:80 192.168.56.1 - - [22/Sep/2020:12:23:12 +0700] "GET / HTTP/1.1" 200 11173 "-" "-"



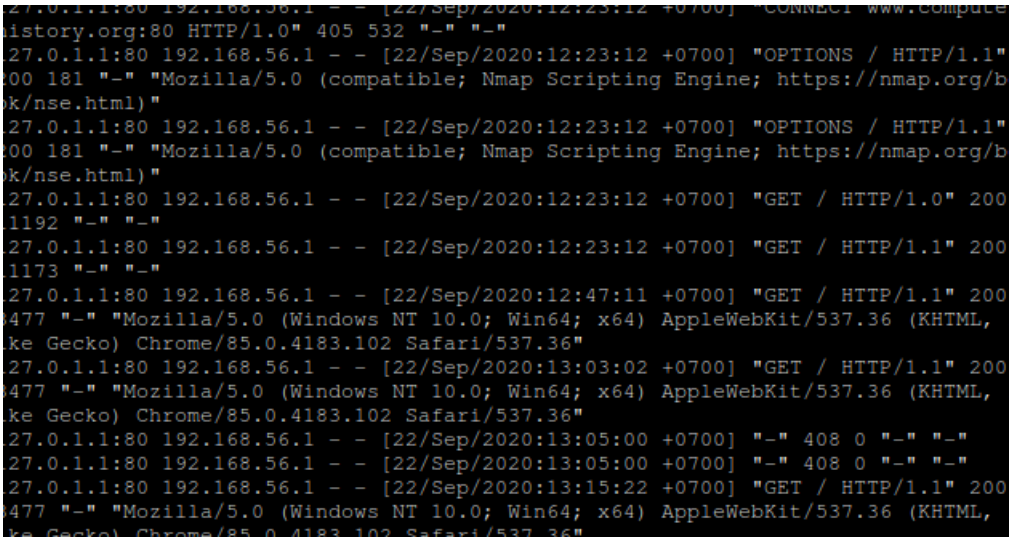
Q6. After you successfully install your iptable rule(s), how do the reported results from your new nmap scan compare to your previous scan before using iptables? Look to see if OS detection, port open results, etc. have changed. Something(s) have definitely changed.



Nothing change

Q7. Notice that nmap can still figure out you have Apache httpd running. Look at the access.log file for the web server in your Linux VM. Are the logs the same as in Part II?

Yes



Q8. Explain how you could prevent nmap from reaching the web server while still allowing legitimate clients to get service. Will a firewall be sufficient for this? Or do you need some other device? Please think critically about this.

Initially we can filter by browser application but if nmap sproof that there is no way.
We need tools to supervise how frequent one ip send request

Q9. What are your firewall rules? Run iptables -L on your VM and enter the output here.

```
Chain INPUT (policy DROP)
target     prot opt source               destination
ACCEPT     tcp  --  anywhere             anywhere             tcp dpt:http-alt
ACCEPT     tcp  --  192.168.56.1         anywhere             tcp dpt:ssh

Chain FORWARD (policy ACCEPT)
target     prot opt source               destination

Chain OUTPUT (policy ACCEPT)
target     prot opt source               destination
```