**Branden Barnes** 

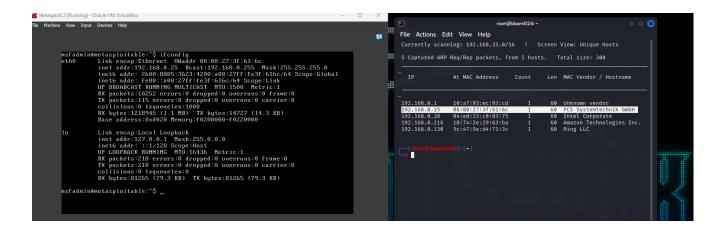
**Professor Vatsa** 

**CYSE 450** 

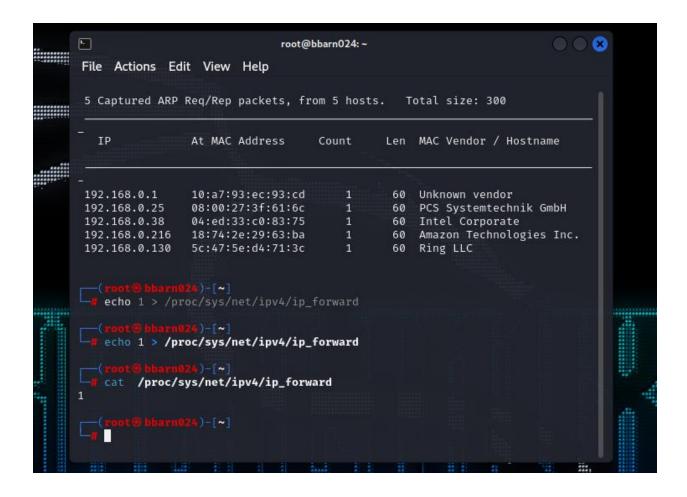
**Packet Sniffing** 

## Task: Performing an ARP Spoofing Attack

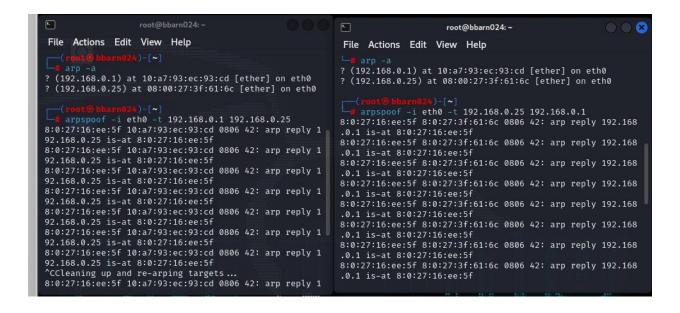
1-2. Power on and login to Kali Linux and Metasploitable 2. Open a root terminal on the Kali Linux virtual machine and discover the IP addresses of the other machines on the network to spoof them.



3. Enable IP forwarding.



4-5. Generate multiple fake ARP replies. Also, trick the router into believing you are the victim so that you can intercept incoming internet traffic on the victim's behalf.



6. Check the Arp table in the target Machine.

```
To access official Ubuntu documentation, please visit: http://help.ubuntu.com/
No mail.
msfadmin@metasploitable:~$ arp -a
? (192.168.0.1) at 10:A7:93:EC:93:CD [ether] on eth0
msfadmin@metasploitable:~$ arp -a
? (192.168.0.28) at 08:00:27:16:EE:5F [ether] on eth0
? (192.168.0.1) at 08:00:27:16:EE:5F [ether] on eth0
msfadmin@metasploitable:~$
```

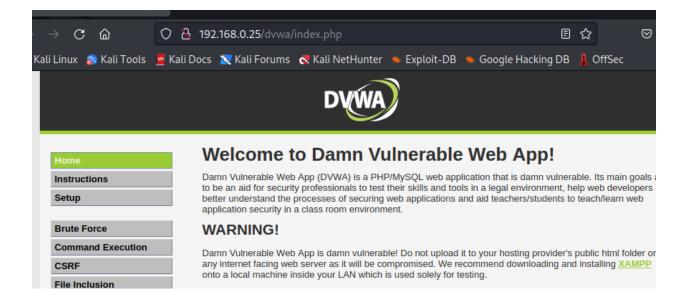
The MAC address changed to the Kali MAC address.

7. Extract the URLs running.

```
-(branden⊛ bbarn024)-[~]
8. L<mark>$ sudo</mark> urlsnarf -i eth0
27 sudo: unable to resolve host bbarn024: Name or service not known
8.
   [sudo] password for branden:
   urlsnarf: listening on eth0 [tcp port 80 or port 8080 or port 3128]
   192.168.0.28 - - [21/Mar/2024:15:45:29 -0400] "POST http://r3.o.lencr.org/ HTTP/1.1" - -
27
   illa/5.0 (X11; Linux x86_64; rv:102.0) Gecko/20100101 Firefox/102.0"
   192.168.0.28 - - [21/Mar/2024:15:45:29 -0400] "POST http://r3.o.lencr.org/ HTTP/1.1"
27
   illa/5.0 (X11; Linux x86_64; rv:102.0) Gecko/20100101 Firefox/102.0"
8. 192.168.0.28 - - [21/Mar/2024:15:45:29 -0400] "POST http://r3.o.lencr.org/ HTTP/1.1" - - "-"
27
   illa/5.0 (X11; Linux x86_64; rv:102.0) Gecko/20100101 Firefox/102.0"
8.
   192.168.0.28 - - [21/Mar/2024:15:45:29 -0400] "POST http://r3.o.lencr.org/ HTTP/1.1" - - "-"
   illa/5.0 (X11; Linux x86_64; rv:102.0) Gecko/20100101 Firefox/102.0"
8. 192.168.0.28 - - [21/Mar/2024:15:45:29 -0400] "POST http://ocsp.pki.goog/gts1c3 HTTP/1.1" - -
27
    "Mozilla/5.0 (X11; Linux x86_64; rv:102.0) Gecko/20100101 Firefox/102.0
   192.168.0.28 - - [21/Mar/2024:15:45:29 -0400] "POST http://r3.o.lencr.org/ HTTP/1.1" - - "-" "
   illa/5.0 (X11; Linux x86_64; rv:102.0) Gecko/20100101 Firefox/102.0"
   192.168.0.28 - - [21/Mar/2024:15:45:29 -0400] "POST http://r3.o.lencr.org/ HTTP/1.1" - - "-" "
   illa/5.0 (X11; Linux x86_64; rv:102.0) Gecko/20100101 Firefox/102.0"
   192.168.0.28 - - [21/Mar/2024:15:45:31 -0400] "POST http://r3.o.lencr.org/ HTTP/1.1" - - "-"
```

8. Open a browser in kali Linux and type the IP address of Metasploitable (Target Machine). Then go to DVWA page which would look like the following screenshot.

Login using username: admin and password: password.



9. Now open Wireshark and analyze HTTP POST packet to capture the credentials you used to login to DVWA page in Metasploitable2 VM.

```
Protocol Length Info
      HTTP
                438 GET /dvwa/ HTTP/1.1
      HTTP
                548 HTTP/1.1 302 Found
      HTTP
                514 GET /dvwa/login.php HTTP/1.1
      HTTP
                 71 HTTP/1.1 200 OK (text/html)
      HTTP
                671 POST /dvwa/login.php HTTP/1.1
                                                    (application/x-www-form-urlenc
      HTTP
                457 HTTP/1.1 302 Found
                528 GET /dvwa/index.php HTTP/1.1
      HTTP
      HTTP
                654 HTTP/1.1 200 OK (text/html)
      HTTP
                439 GET /dvwa/dvwa/css/main.css HTTP/1.1
      HTTP
               4307 HTTP/1.1 200 OK (text/css)
                                                                           27 16 ee
▶ Frame 1040: 671 bytes on wire (5368 bit! 0000
                                                 08 00 27 3f 61 6c 08 00
 Ethernet II, Src: PcsCompu_16:ee:5f (08 0010
                                                 02 91 18 29 40 00 40 06
                                                                           9e b8 c0
 Internet Protocol Version 4, Src: 192.1( 0020 00 19 bb 82 00 50 79 17
                                                                           6f
                                                                              91 8a
```

10. Open Burp Suite in Kali Linux to harvest the credentials.

