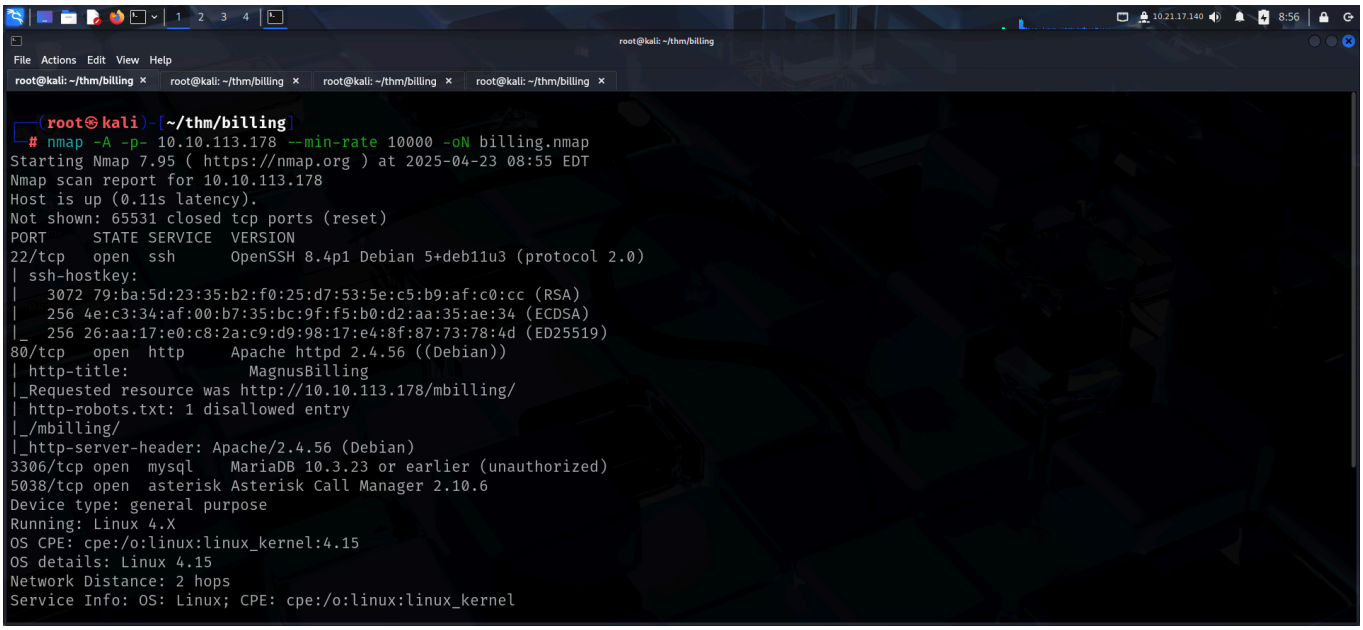
BILLING

To access the machine, click on the link given below:

- https://tryhackme.com/room/billing

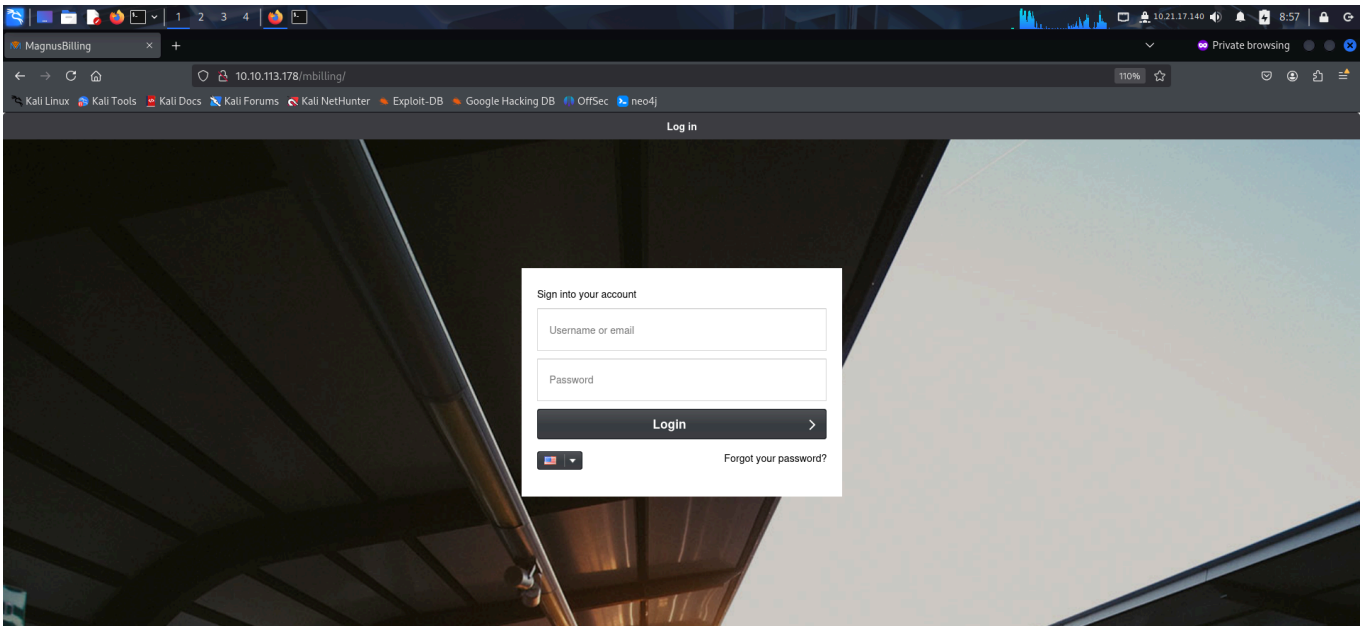
SCANNING

I performed an **nmap** aggressive scan on the target to find open ports, os information, service versions and to run a default nse script scan.

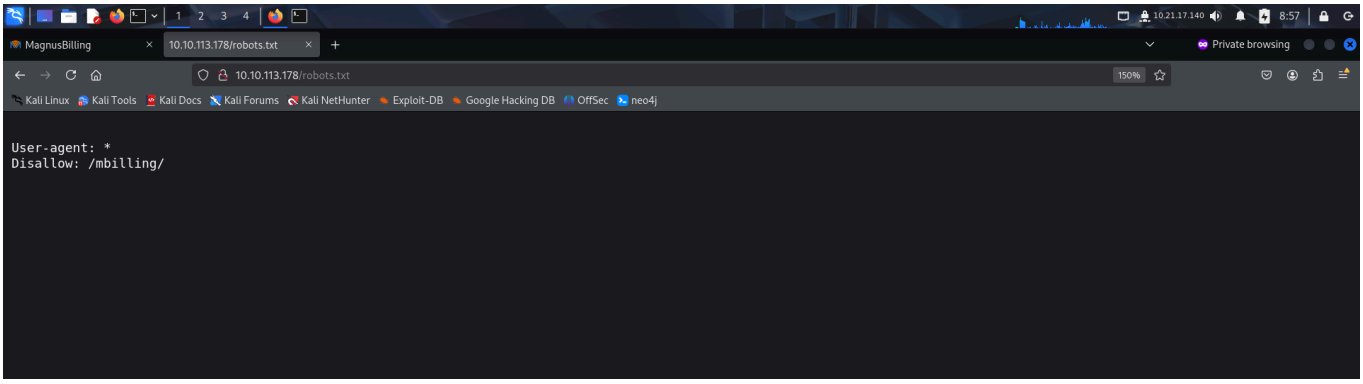


INITIAL ACCESS

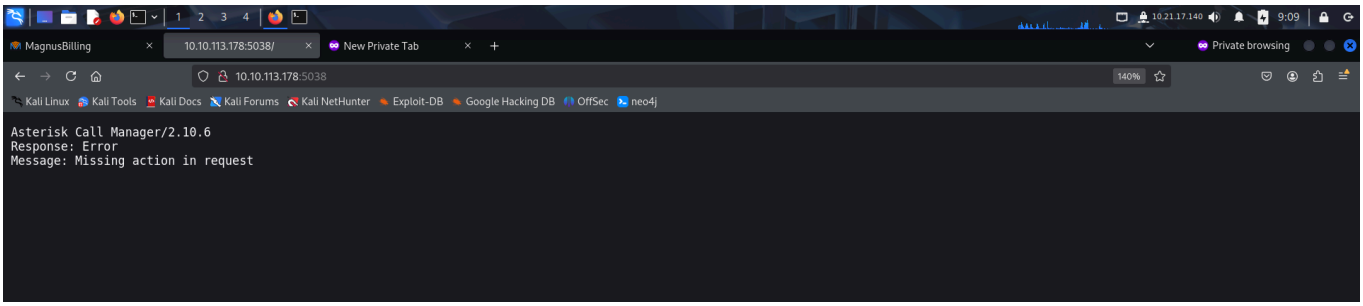
The target had a web server running so I accessed the web page through my browser.



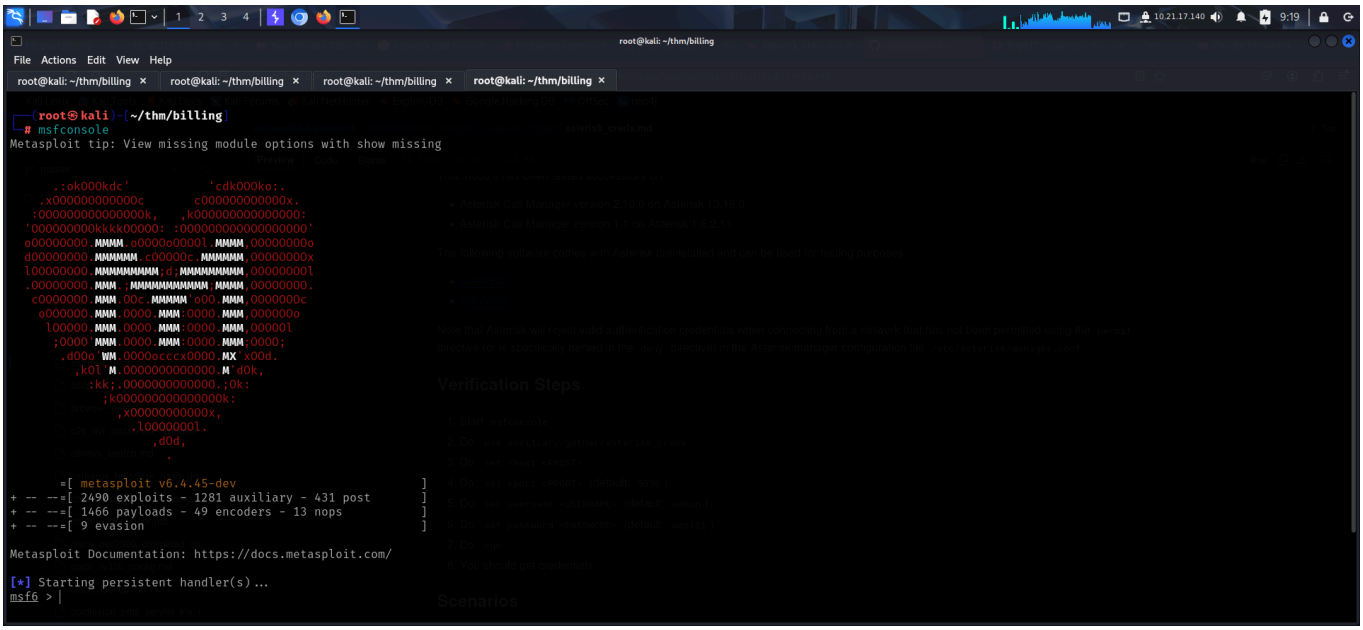
The `robots.txt` file also did not contain any new endpoint.



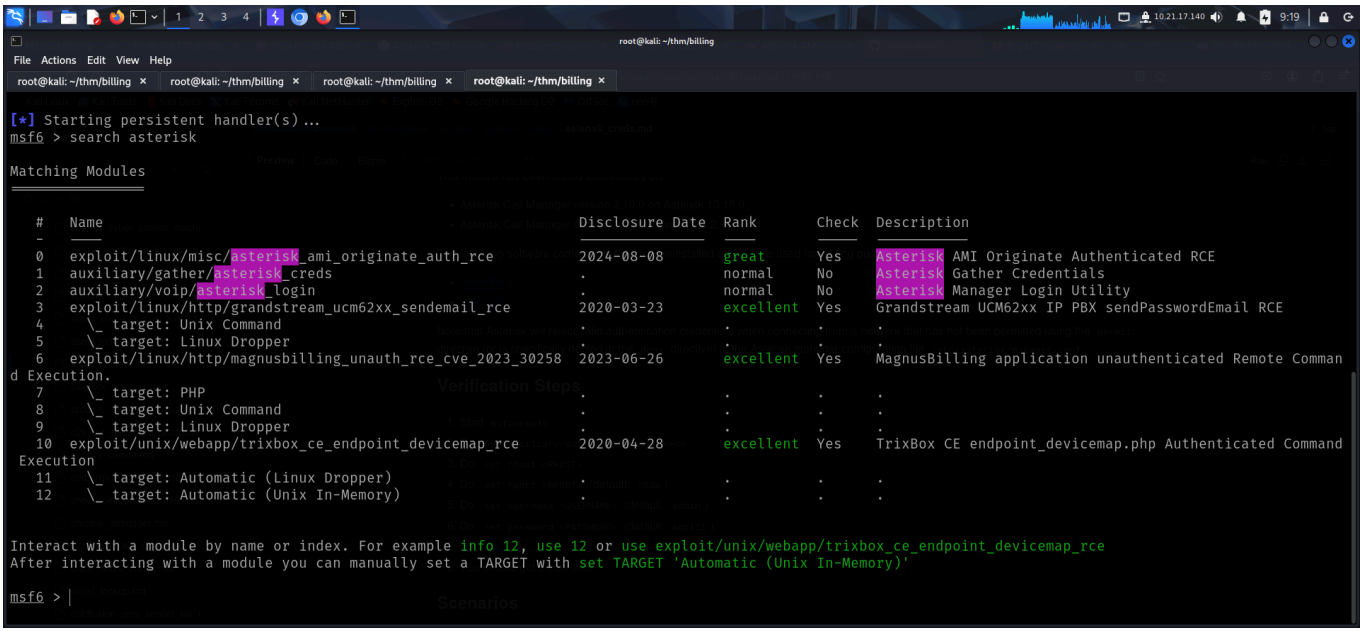
I also tried accessing the asterisk call manager port.

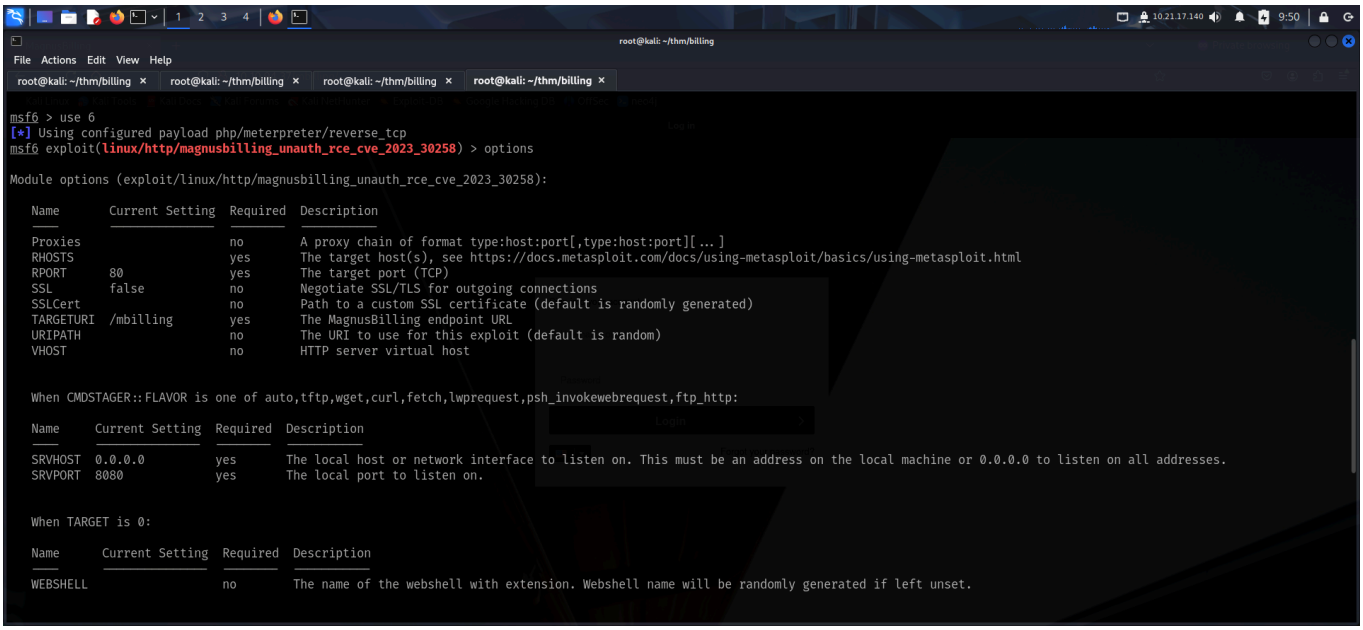


Since I did not get any leads, I started the **metasploit** framework and looked for exploits related to *asterisk* or *mbilling*.

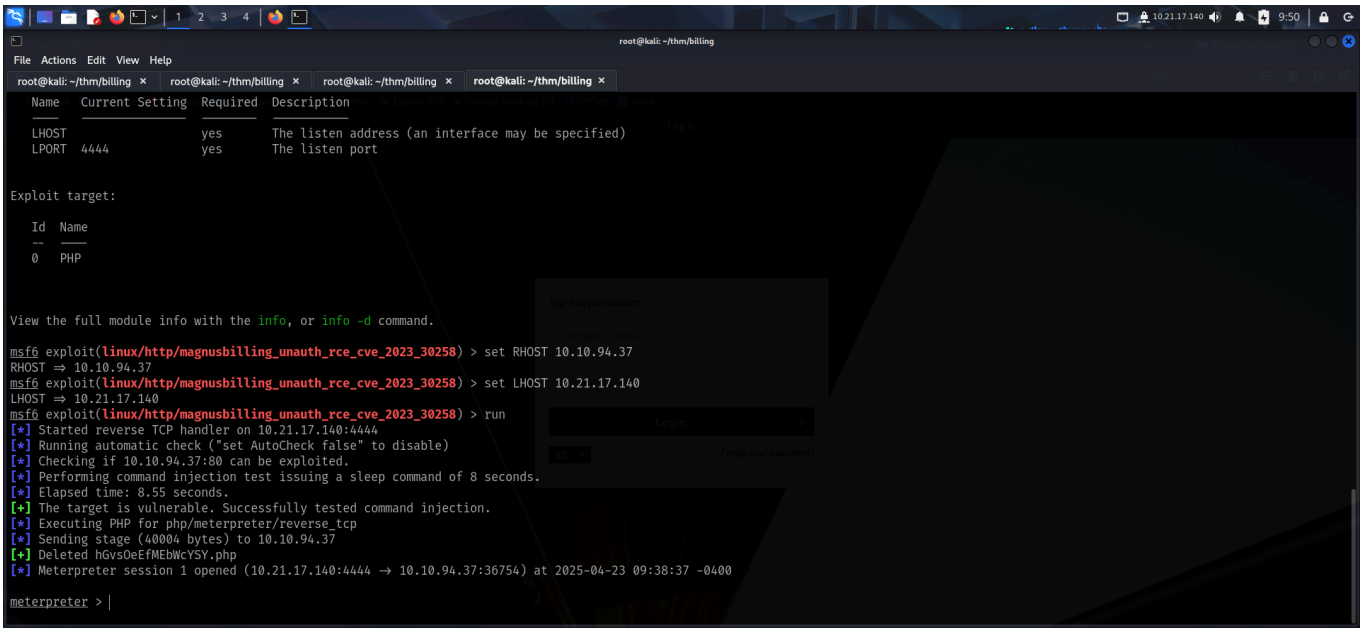


Since there was a well ranked exploit for the *mbilling* service, I decided to give it a try.

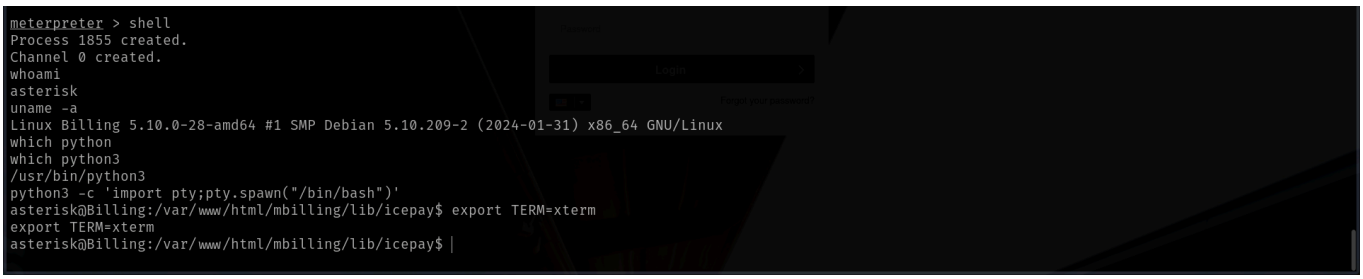




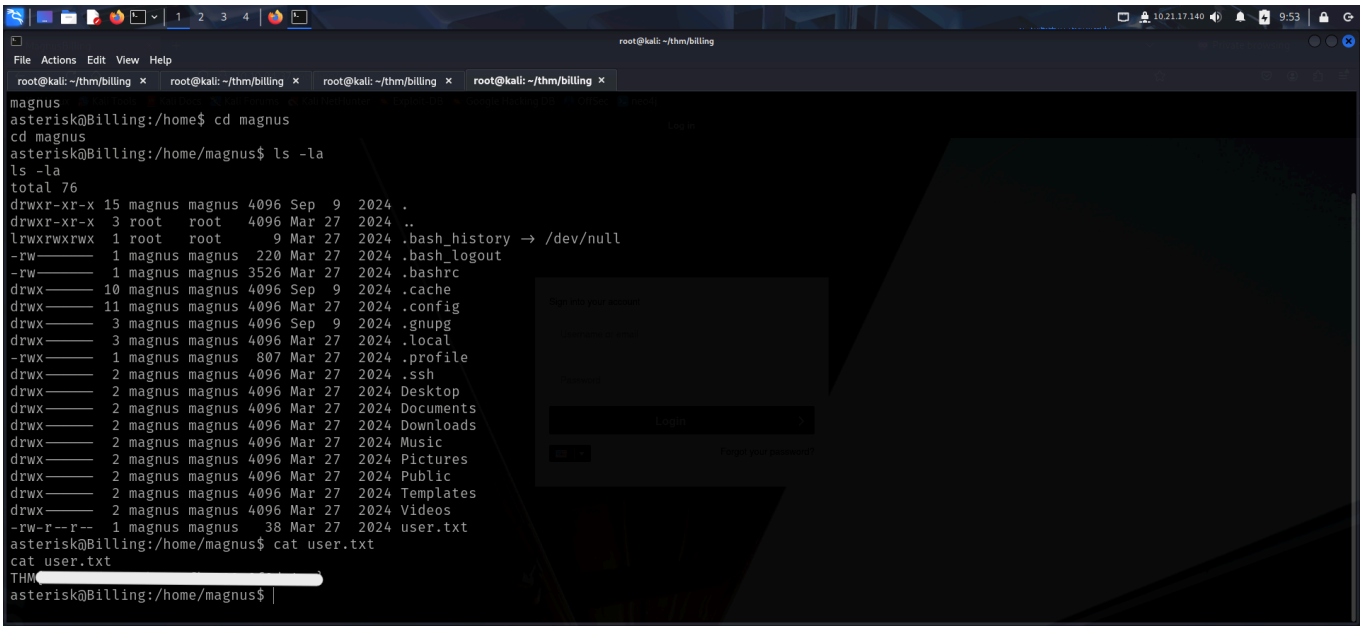
I configured the required options and ran the exploit. Luckily, I got a reverse meterpreter shell.



I spawned a **pty bash** shell and enumerated information about the current user and os kernel.

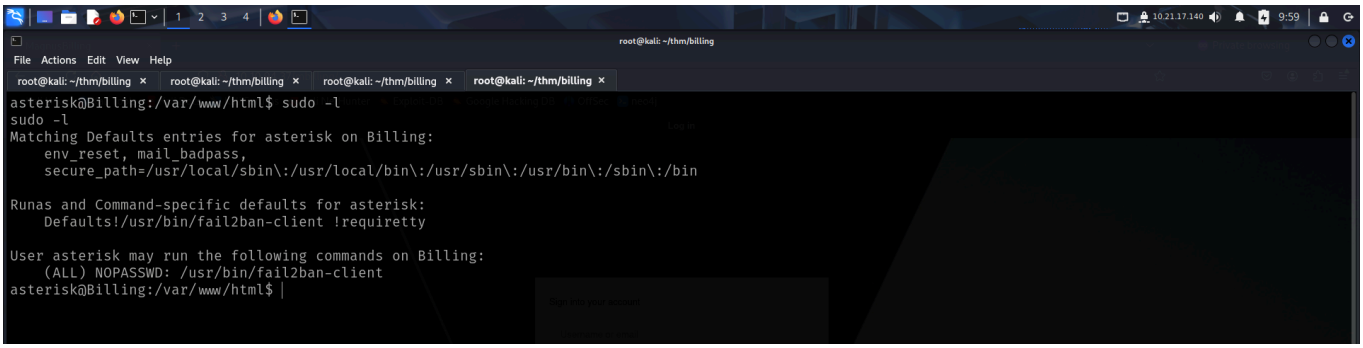


I then looked for the flag and found it in *magnus* user's home directory.

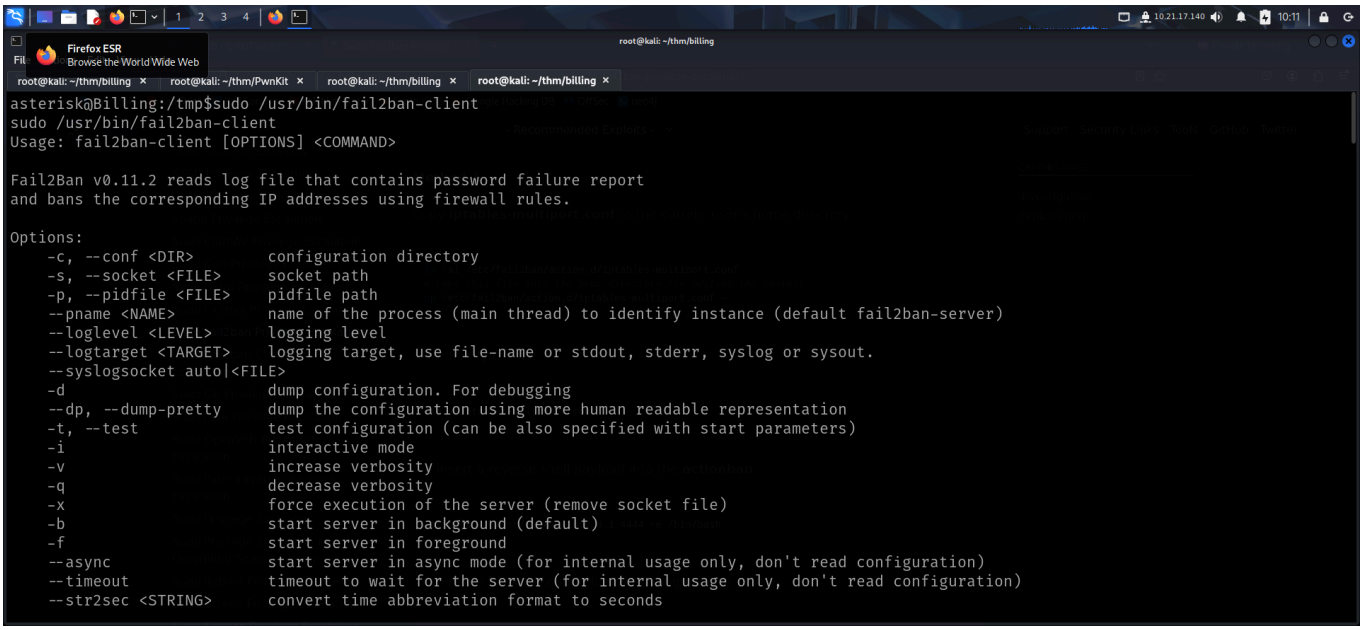


PRIVILEGE ESCALATION

I looked for **sudo** permissions and found out that I could run a particular command as sudo without a password.

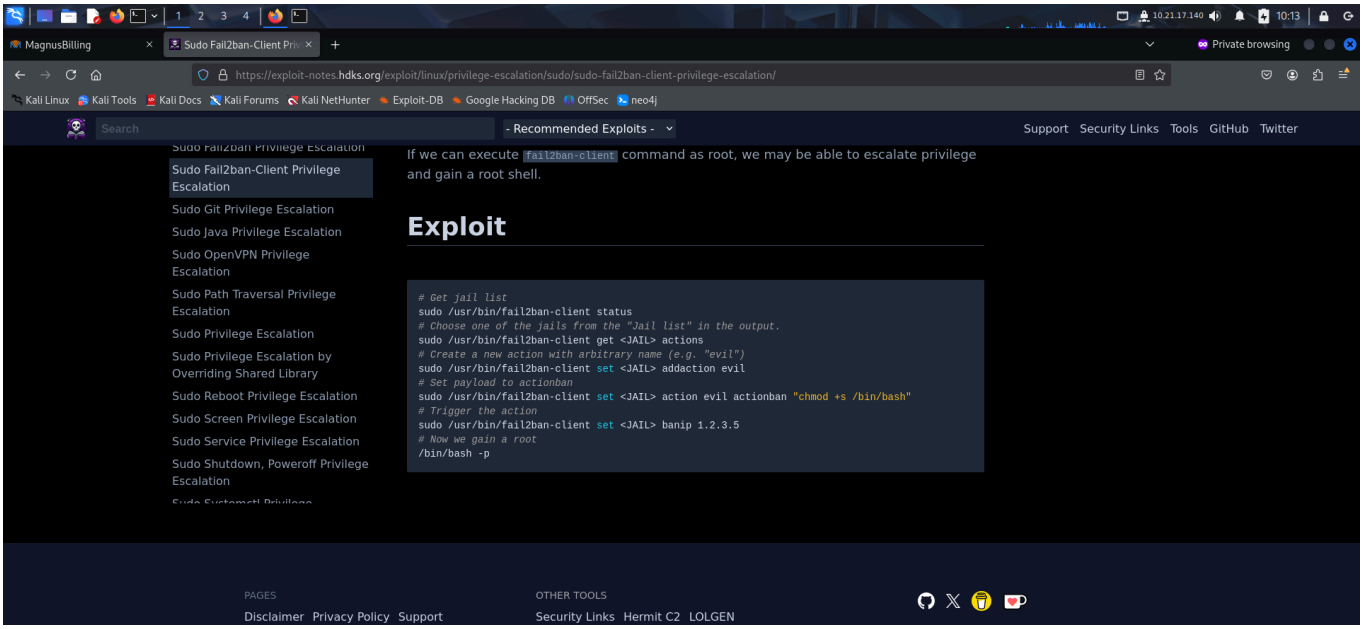


I looked like banning and unbanning IPs.

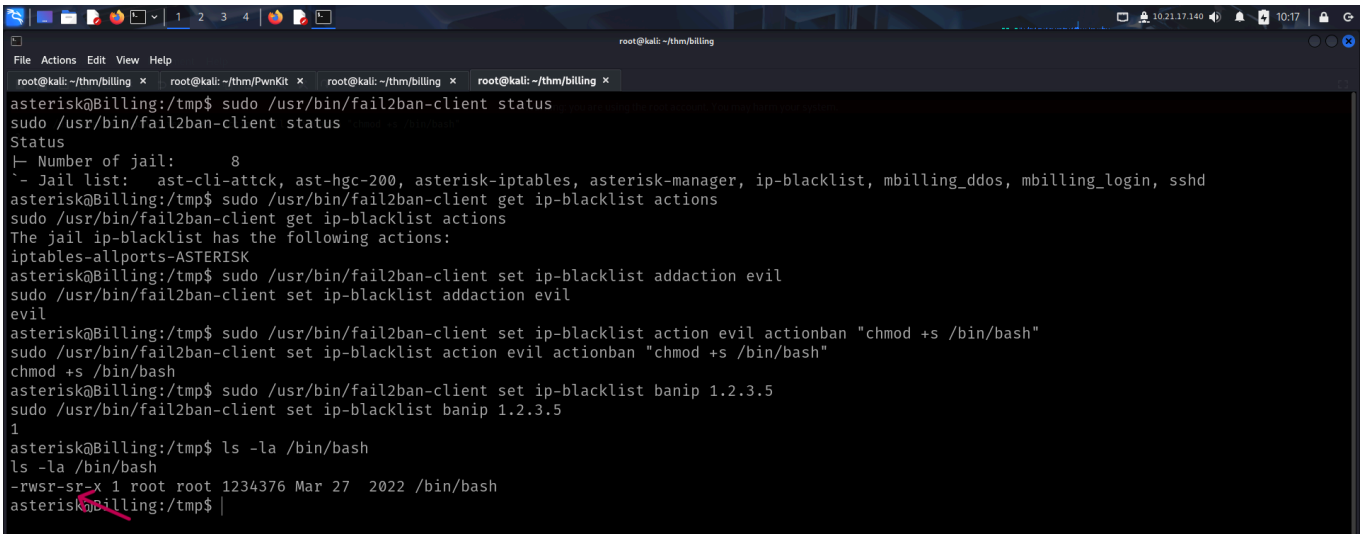


This was the first time I came across such an attack vector. So I searched online and found this guide that showed how it could be used for privilege escalation:

- https://exploit-notes.hdks.org/exploit/linux/privilege-escalation/sudo/sudo-fail2ban-client-privilege-escalation/



I copied the steps shown and managed to add an **suid** bit on `/bin/bash`.



Finally, I executed `/bin/bash` in privileged mode and found the root flag inside the `/root` directory.