LABORATORIO N°1 SEGURIDAD Y PRIVACIDAD DE TI

CARLOS DAVID BARRERO – ESTEBAN AGUILERA ESCUELA COLOMBIANA DE INGENIERÍA JULIO GARAVITO FABIAN EDUARDO SIERRA SANCHEZ



Overthewire (Bandit 0-20)

Generalidades

Dominio: bandit.labs.overthewire.org

Puerto: 2220

Level 0 clave "bandit0" resultado "ZjLjTmM6FvvyRnrb2rfNWOZOTa6ip5If"

bandit0@bandit:~\$ whoami && id

bandit0

uid=11000(bandit0) gid=11000(bandit0) groups=11000(bandit0)

bandit0@bandit:~\$ uname -a

Linux gibson-0 6.14.0-1010-aws #10~24.04.1-Ubuntu SMP Fri Jul 18 20:44:30 UTC 2025 x86 64 x86 64 x86 64

GNU/Linux

bandit0@bandit:~\$ cat /etc/os-release

PRETTY NAME="Ubuntu 24.04.2 LTS"

NAME="Ubuntu"

VERSION ID="24.04"

VERSION="24.04.2 LTS (Noble Numbat)"

VERSION CODENAME=noble

ID=ubuntu

ID LIKE=debian

HOME URL="https://www.ubuntu.com/"

SUPPORT URL="https://help.ubuntu.com/"

BUG REPORT URL="https://bugs.launchpad.net/ubuntu/"

PRIVACY POLICY URL="https://www.ubuntu.com/legal/terms-and-policies/privacy-policy"

UBUNTU CODENAME=noble

LOGO=ubuntu-logo

bandit0@bandit:~\$ sudo apt update

sudo: /usr/bin/sudo must be owned by uid 0 and have the setuid bit set

bandit@bandit:~\$ sudo apt install -y htop tree lsb-release file lsof jq

sudo: /usr/bin/sudo must be owned by uid 0 and have the setuid bit set

Level 1 clave "ZjLjTmM6FvvyRnrb2rfNWOZOTa6ip5If" resultado "263JGJPfgU6LtdEvgfWU1XP5yac29mFx"

bandit1@bandit:~\$ ls -a

-bash_logout .bashrc .profile

bandit1@bandit:~\$ cat ./-

263JGJPfgU6LtdEvgfWU1XP5yac29mFx

Level 2 clave "263JGJPfgU6LtdEvgfWU1XP5yac29mFx" resultado "MNk8KNH3Usiio41PRUEoDFPqfxLPlSmx"

bandit2@bandit:~\$ dir

--spaces in this filename--

bandit2@bandit:~\$ cat -- "--spaces in this filename--"

MNk8KNH3Usiio41PRUEoDFPqfxLPlSmx

Level 3 clave "MNk8KNH3Usiio41PRUEoDFPqfxLPlSmx" resultado "2WmrDFRmJIq3IPxneAaMGhap0pFhF3NJ"

bandit3@bandit:~\$ ls -a

. .. .bash logout .bashrc inhere .profile

bandit3@bandit:~\$ cd inhere

bandit3@bandit:~/inhere\$ ls -a

.Hiding-From-You

bandit3@bandit:~/inhere\$ cat ...Hiding-FromYou

cat: ...Hiding-FromYou: No such file or directory

bandit3@bandit:~/inhere\$ cat Hiding-FromYou

cat: Hiding-FromYou: No such file or directory

bandit3@bandit:~/inhere\$ cat ...Hiding-From-You

2WmrDFRmJIq3IPxneAaMGhap0pFhF3NJ

Level 4 clave "2WmrDFRmJIq3IPxneAaMGhap0pFhF3NJ" resultado "4oQYVPkxZOOEOO5pTW81FB8j8lxXGUQw"

bandit4@bandit:~\$ ls -a

. .. .bash logout .bashrc inhere .profile

bandit4@bandit:~\$ cd inhere

bandit4@bandit:~/inhere\$ ls -a



```
. -file00 -file02 -file04 -file06 -file08
.. -file01 -file03 -file05 -file07 -file09
bandit4@bandit:~/inhere$ ls -1
total 40
-rw-r---- 1 bandit5 bandit4 33 Aug 15 13:16 -file00
-rw-r---- 1 bandit5 bandit4 33 Aug 15 13:16 -file01
-rw-r---- 1 bandit5 bandit4 33 Aug 15 13:16 -file02
-rw-r---- 1 bandit5 bandit4 33 Aug 15 13:16 -file03
-rw-r---- 1 bandit5 bandit4 33 Aug 15 13:16 -file04
-rw-r---- 1 bandit5 bandit4 33 Aug 15 13:16 -file05
-rw-r---- 1 bandit5 bandit4 33 Aug 15 13:16 -file06
-rw-r---- 1 bandit5 bandit4 33 Aug 15 13:16 -file07
-rw-r---- 1 bandit5 bandit4 33 Aug 15 13:16 -file08
-rw-r---- 1 bandit5 bandit4 33 Aug 15 13:16 -file09
bandit4@bandit:~/inhere$ file ./*
./-file00: Non-ISO extended-ASCII text, with no line terminators, with overstriking
./-file01: data
./-file02: data
./-file03: data
./-file04: data
./-file05: data
./-file06: data
./-file07: ASCII text
./-file08: data
./-file09: data
bandit4@bandit:~/inhere$ cat ./-file07
4oQYVPkxZOOEOO5pTW81FB8j8lxXGUQw
Level 5 clave "40QYVPkxZOOEOO5pTW81FB8j8lxXGUQw" resultado
"HWasnPhtq9AVKe0dmk45nxy20cvUa6EG"
bandit5@bandit:~$ ls
inhere
bandit5@bandit:~$ cd inhere
bandit5@bandit:~/inhere$ find -type f -size 1033c
./maybehere07/.file2
bandit5@bandit:~/inhere$ cat ./maybehere07/.file2
HWasnPhtq9AVKe0dmk45nxy20cvUa6EG
Level 6 clave "HWasnPhtq9AVKe0dmk45nxy20cvUa6EG" resultado "morbNTDkSW6jIlUc0ymOdMaLnOlFVAaj"
bandit6@bandit:~$ find / -user bandit7 -group bandit6 -size 33c 2>/dev/null
/var/lib/dpkg/info/bandit7.password
bandit6@bandit:~$ cat /var/lib/dpkg/info/bandit7.password
morbNTDkSW6jIlUc0ymOdMaLnOlFVAaj
Level 7 clave "morbNTDkSW6jIlUc0ymOdMaLnOlFVAaj" resultado "dfwvzFQi4mU0wfNbFOe9RoWskMLg7eEc"
bandit?@bandit:~$ grep millionth data.txt
            dfwvzFQi4mU0wfNbFOe9RoWskMLg7eEc
millionth
Level 8 clave "dfwvzFQi4mU0wfNbFOe9RoWskMLg7eEc" resultado "4CKMh1JI91bUIZZPXDqGanal4xvAg0JM"
bandit8@bandit:~$ sort data.txt | uniq -u
4CKMh1JI91bUIZZPXDqGanal4xvAg0JM
Level 9 clave "4CKMh1JI91bUIZZPXDqGanal4xvAg0JM" resultado "FGUW5ilLVJrxX9kMYMmlN4MgbpfMiqey"
bandit9@bandit:~$ strings data.txt | grep =
           = theg
VO=97
m=K1x
/i8D2[U?=
          == password
LU=W
       ==== is
=v
h = rw c
=}%q
=D!7
YU = <
```



5=fq vJ=ho

======= FGUW5ilLVJrxX9kMYMmlN4MgbpfMiqey

=AdD

Level 10 clave "FGUW5ilLVJrxX9kMYMmlN4MgbpfMiqey" resultado "dtR173fZKb0RRsDFSGsg2RWnpNVj3qRr"

bandit10@bandit:~\$ base64 -d data.txt

The password is dtR173fZKb0RRsDFSGsg2RWnpNVj3qRr

bandit10@bandit:~\$

Level 11 clave "dtR173fZKb0RRsDFSGsg2RWnpNVj3qRr" resultado "7x16WNeHIi5YkIhWsfFIqoognUTyj9Q4"

bandit11@bandit:~\$ cat data.txt | tr 'A-Za-z' 'N-ZA-Mn-za-m'

The password is 7x16WNeHIi5YkIhWsfFIqoognUTyj9Q4

bandit11@bandit:~\$

Level 12 clave "7x16WNeHIi5YkIhWsfFIqoognUTyj9Q4" resultado "FO5dwFsc0cbaIiH0h8J2eUks2vdTDwAn"

bandit12@bandit:/tmp/tmp.VZmDtndzDG\$ file data

data: POSIX tar archive (GNU)

bandit12@bandit:/tmp/tmp.VZmDtndzDG\$ tar -xf data

bandit12@bandit:/tmp/tmp.VZmDtndzDG\$ ls

data data5.bin data6 data8.bin data.hex

bandit12@bandit:/tmp/tmp.VZmDtndzDG\$ file data8.bin

data8.bin: gzip compressed data, was "data9.bin", last modified: Fri Aug 15 13:15:53 2025, max compression, from

Unix, original size modulo 2³² 49

bandit12@bandit:/tmp/tmp.VZmDtndzDG\$ mv data8.bin data8,gz

bandit12@bandit:/tmp/tmp.VZmDtndzDG\$ mv data8.gz data8.gz

bandit12@bandit:/tmp/tmp.VZmDtndzDG\$ gunzip data8.gz

bandit12@bandit:/tmp/tmp.VZmDtndzDG\$ ls

data data5.bin data6 data8 data.hex

bandit12@bandit:/tmp/tmp.VZmDtndzDG\$ file data8

data8: ASCII text

bandit12@bandit:/tmp/tmp.VZmDtndzDG\$ cat data8

The password is FO5dwFsc0cbaIiH0h8J2eUks2vdTDwAn

bandit12@bandit:/tmp/tmp.VZmDtndzDG\$

Level 13 clave "FO5dwFsc0cbaIiH0h8J2eUks2vdTDwAn" resultado "MU4VWeTyJk8ROoflggmcBPaLh7lDCPvS"

bandit14@bandit:~\$ cat /etc/bandit pass/bandit14

MU4VWeTyJk8ROof1qqmcBPaLh7lDCPvS

Level 14 clave "MU4VWeTyJk8ROof1qqmcBPaLh7lDCPvS" resultado

"8xCjnmgoKbGLhHFAZlGE5Tmu4M2tKJQo"

bandit14@bandit:~\$ cat /etc/bandit_pass/bandit14

MU4VWeTyJk8ROof1qqmcBPaLh7lDCPvS

bandit14@bandit:~\$ ^C

bandit14@bandit:~\$ nc localhost 30000

MU4VWeTyJk8ROof1qqmcBPaLh7lDCPvS

Correct!

8xCjnmgoKbGLhHFAZlGE5Tmu4M2tKJQo

Level 15 clave "8xCjnmgoKbGLhHFAZlGE5Tmu4M2tKJQo" resultado

"kSkvUpMQ7lBYyCM4GBPvCvT1BfWRy0Dx"

bandit15@bandit:~\$ neat --ssl localhost 30001

8xCjnmgoKbGLhHFAZlGE5Tmu4M2tKJQo

Correct!

kSkvUpMQ7lBYyCM4GBPvCvT1BfWRy0Dx

Level 16 clave "kSkvUpMQ7lBYyCM4GBPvCvT1BfWRy0Dx" resultado "----BEGIN RSA PRIVATE KEY----

MIIEogIBAAKCAQEAvmOkuifmMg6HL2YPIOjon6iWfbp7c3jx34YkYWqUH57SUdyJ

imZzeyGC0gtZPGujUSxiJSWI/oTqexh+cAMTSMlOJf7+BrJObArnxd9Y7YT2bRPQ

Ja6Lzb558YW3FZl87ORiO+rW4LCDCNd2lUvLE/GL2GWyuKN0K5iCd5TbtJzEkQTu

DSt2mcNn4rhAL+JFr56o4T6z8WWAW18BR6yGrMq7Q/kALHYW3OekePQAzL0VUYbW

JGTi65CxbCnzc/w4+mqQyvmzpWtMAzJTzAzQxNbkR2MBGySxDLrjg0LWN6sK7wNX

x0YVztz/zbIkPjfkU1jHS+9EbVNj+D1XFOJuaQIDAQABAoIBABagpxpM1aoLWfvD

KHcj10nqcoBc4oE11aFYQwik7xfW+24pRNuDE6SFthOar69jp5RlLwD1NhPx3iBl



J9nOM8OJ0VToum43UOS8YxF8WwhXriYGnc1sskbwpXOUDc9uX4+UESzH22P29ovd d8WErY0gPxun8pbJLmxkAtWNhpMvfe0050vk9TL5wqbu9AlbssgTcCXkMQnPw9nC YNN6DDP2lbcBrvgT9YCNL6C+ZKufD52yOQ9qOkwFTEQpjtF4uNtJom+asvlpmS8A vLY9r60wYSvmZhNqBUrj7lyCtXMIu1kkd4w7F77k+DjHoAXyxcUp1DGL51sOmama +TOWWgECgYEA8JtPxP0GRJ+IQkX262jM3dEIkza8ky5moIwUqYdsx0NxHgRRhORT 8c8hAuRBb2G82so8vUHk/fur85OEfc9TncnCY2crpoqsghifKLxrLgtT+qDpfZnx SatLdt8GfQ85yA7hnWWJ2MxF3NaeSDm75Lsm+tBbAiyc9P2jGRNtMSkCgYEAypHd HCctNi/FwjulhttFx/rHYKhLidZDFYeiE/v45bN4yFm8x7R/b0iE7KaszX+Exdvt SghaTdcG0Knyw1bpJVyusavPzpaJMjdJ6tcFhVAbAjm7enCIvGCSx+X3l5SiWg0A R57hJglezIiVjv3aGwHwvlZvtszK6zV6oXFAu0ECgYAbjo46T4hyP5tJi93V5HDi Ttiek7xRVxUl+iU7rWkGAXFpMLFteQEsRr7PJ/lemmEY5eTDAFMLy9FL2m9oQWCg R8VdwSk8r9FGLS+9aKcV5PI/WEKlwgXinB3OhYimtiG2Cg5JCqIZFHxD6MjEGOiu L8ktHMPvodBwNsSBULpG0QKBgBAplTfC1HOnWiMGOU3KPwYWt0O6CdTkmJOmL8Ni blh9elyZ9FsGxsgtRBXRsqXuz7wtsQAgLHxbdLq/ZJQ7YfzOKU4ZxEnabvXnvWkU YOdjHdSOoKvDQNWu6ucyLRAWFuISeXw9a/9p7ftpxm0TSgyvmfLF2MIAEwyzRqaM 77pBAoGAMmjmIJdjp+Ez8duyn3ieo36yrttF5NSsJLAbxFpdlc1gvtGCWW+9Cq0b dxviW8+TFVEBl1O4f7HVm6EpTscdDxU+bCXWkfjuRb7Dy9GOtt9JPsX8MBTakzh3 vBgsyi/sN3RqRBcGU40fOoZyfAMT8s1m/uYv52O6IgeuZ/ujbjY= ----END RSA PRIVATE KEY-----"

bandit16@bandit:~\$ nmap localhost -p 31000-32000

Starting Nmap 7.94SVN (https://nmap.org) at 2025-08-25 20:12 UTC

Nmap scan report for localhost (127.0.0.1)

Host is up (0.00014s latency).

Not shown: 996 closed tcp ports (conn-refused)

PORT STATE SERVICE

31046/tcp open unknown

31518/tcp open unknown

31691/tcp open unknown

31790/tcp open unknown

31960/tcp open unknown

bandit16@bandit:~\$ ncat --ssl localhost 31790

kSkvUpMQ7lBYyCM4GBPvCvT1BfWRy0Dx

Correct!

----BEGIN RSA PRIVATE KEY-----

 $\label{eq:mileogibaak} MIIEogIBAAKCAQEAvmOkuifmMg6HL2YPIOjon6iWfbp7c3jx34YkYWqUH57SUdyJimZzeyGC0gtZPGujUSxiJSWI/oTqexh+cAMTSMIOJf7+BrJObArnxd9Y7YT2bRPQ\\ Ja6Lzb558YW3FZl87ORiO+rW4LCDCNd2lUvLE/GL2GWyuKN0K5iCd5TbtJzEkQTuDSt2mcNn4rhAL+JFr56o4T6z8WWAW18BR6yGrMq7Q/kALHYW3OekePQAzL0VUYbWJGTi65CxbCnzc/w4+mqQyvmzpWtMAzJTzAzQxNbkR2MBGySxDLrjg0LWN6sK7wNXx0YVztz/zblkPjfkU1jHS+9EbVNj+D1XFOJuaQIDAQABAoIBABagpxpM1aoLWfvDKHcj10nqcoBc4oE11aFYQwik7xfW+24pRNuDE6SFthOar69jp5RlLwD1NhPx3iBlJ9nOM8OJ0VToum43UOS8YxF8WwhXriYGnc1sskbwpXOUDc9uX4+UESzH22P29ovdd8WErY0gPxun8pbJLmxkAtWNhpMvfe0050vk9TL5wqbu9AlbssgTcCXkMQnPw9nCYNN6DDP2lbcBrvgT9YCNL6C+ZKufD52yOQ9qOkwFTEQpjtF4uNtJom+asvlpmS8AvLY9r60wYSvmZhNqBUrj7lyCtXMIu1kkd4w7F77k+DjHoAXyxcUp1DGL51sOmama$



+TOWWgECgYEA8JtPxP0GRJ+IQkX262jM3dElkza8ky5moIwUqYdsx0NxHgRRhORT
8c8hAuRBb2G82so8vUHk/fur85OEfc9TncnCY2crpoqsghifKLxrLgtT+qDpfZnx
SatLdt8GfQ85yA7hnWWJ2MxF3NaeSDm75Lsm+tBbAiyc9P2jGRNtMSkCgYEAypHd
HCctNi/FwjulhttFx/rHYKhLidZDFYeiE/v45bN4yFm8x7R/b0iE7KaszX+Exdvt
SghaTdcG0Knyw1bpJVyusavPzpaJMjdJ6tcFhVAbAjm7enCIvGCSx+X315SiWg0A
R57hJglezIiVjv3aGwHwvlZvtszK6zV6oXFAu0ECgYAbjo46T4hyP5tJi93V5HDi
Ttiek7xRVxUl+iU7rWkGAXFpMLFteQEsRr7PJ/lemmEY5cTDAFMLy9FL2m9oQWCg
R8VdwSk8r9FGLS+9aKcV5PI/WEKlwgXinB3OhYimtiG2Cg5JCqlZFHxD6MjEGOiu
L8ktHMPvodBwNsSBULpG0QKBgBAplTfC1HOnWiMGOU3KPwYWt0O6CdTkmJOmL8Ni
blh9elyZ9FsGxsgtRBXRsqXuz7wtsQAgLHxbdLq/ZJQ7YfzOKU4ZxEnabvXnvWkU
YOdjHdSOoKvDQNWu6ucyLRAWFuISeXw9a/9p7ftpxm0TSgyvmfLF2MIAEwyzRqaM
77pBAoGAMmjmIJdjp+Ez8duyn3ieo36yrttF5NSsJLAbxFpdlc1gvtGCWW+9Cq0b
dxviW8+TFVEBI1O4f7HVm6EpTscdDxU+bCXWkfjuRb7Dy9GOtt9JPsX8MBTakzh3
vBgsyi/sN3RqRBcGU40fOoZyfAMT8s1m/uYv52O6IgeuZ/ujbjY=
-----END RSA PRIVATE KEY-----

 $^{\wedge}C$

bandit16@bandit:~\$ nano bandit17.key

Unable to create directory /home/bandit16/.local/share/nano/: No such file or directory It is required for saving/loading search history or cursor positions.

bandit16@bandit:~\$ nano bandit17.key

Unable to create directory /home/bandit16/.local/share/nano/: No such file or directory It is required for saving/loading search history or cursor positions.

bandit16@bandit:~\$ ^C

bandit16@bandit:~\$ nano bandit17.key

Unable to create directory /home/bandit16/.local/share/nano/: No such file or directory It is required for saving/loading search history or cursor positions.

bandit16@bandit:~\$ cd /tmp/

bandit16@bandit:/tmp\$ touch bandit17.key

bandit16@bandit:/tmp\$ nano bandit17.key

Unable to create directory /home/bandit16/.local/share/nano/: No such file or directory It is required for saving/loading search history or cursor positions.

bandit16@bandit:/tmp\$ ls -l bandit17.key

-rw-rw-r-- 1 bandit16 bandit16 1676 Aug 25 20:37 bandit17.key

bandit16@bandit:/tmp\$ chmod 700 bandit17.key

bandit16@bandit:/tmp\$ ssh -i bandit17.key bandit17@localhost -p 2220

The authenticity of host '[localhost]:2220 ([127.0.0.1]:2220)' can't be established.

ED25519 key fingerprint is SHA256:C2ihUBV7ihnV1wUXRb4RrEcLfXC5CXlhmAAM/urerLY.

This key is not known by any other names.

Are you sure you want to continue connecting (yes/no/[fingerprint])?

Nota: En este nivel se guardo esta respuesta en nano y se le dio un nombre .key para acceder directamente al siguiente nivel utilizando el puerto y el host correspondientes (ssh -i bandit17.key bandit17@localhost -p 2220)



```
Level 17 clave "" resultado "x2gLTTjFwMOhQ8oWNbMN362QKxfRqGlO"
bandit17@bandit:~$ ls
passwords.new passwords.old
bandit17@bandit:~$ diff passwords.old passwords.new
< x2gLTTjFwMOhQ8oWNbMN362QKxfRqGlO
Level 18 clave "x2gLTTjFwMOhQ8oWNbMN362QKxfRqGlO" resultado
"cGWpMaKXVwDUNgPAVJbWYuGHVn9zl3j8"
                   ~=~=~= PuTTY log 2025.08.25 16:04:27 =~=~=~=~=~=~=
login as: bandit18
Pre-authentication banner message from server:
             |'_\/_`|'_\/_`||__|
             |_.__/\__,_|_|\__|
            This is an OverTheWire game server.
       More information on http://www.overthewire.org/wargames
| backend: gibson-1
End of banner message from server
bandit18@bandit.labs.overthewire.org's password:
cGWpMaKXVwDUNgPAVJbWYuGHVn9zl3j8
Level 19 clave "cGWpMaKXVwDUNgPAVJbWYuGHVn9zl3j8" resultado
"0qXahG8ZjOVMN9Ghs7iOWsCfZyXOUbYO"
bandit19@bandit:~$ ls -la
total 36
drwxr-xr-x 2 root root
                         4096 Aug 15 13:16.
drwxr-xr-x 150 root root 4096 Aug 15 13:18 ...
-rwsr-x--- 1 bandit20 bandit19 14884 Aug 15 13:16 bandit20-do
                        220 Mar 31 2024 .bash_logout
-rw-r--r-- 1 root root
                        3851 Aug 15 13:09 .bashrc
-rw-r--r-- 1 root
                 root
-rw-r--r- 1 root root
                        807 Mar 31 2024 .profile
bandit19@bandit:~$ ./badnit20-do
-bash: ./badnit20-do: No such file or directory
bandit19@bandit:~$ ./bandit20-do
Run a command as another user.
Example: ./bandit20-do id
bandit19@bandit:~$ ./bandit20-do ls /etc/bandit pass/
bandit0 bandit13 bandit18 bandit22 bandit27 bandit31 bandit6
bandit1 bandit14 bandit19 bandit23 bandit28 bandit32 bandit7
bandit10 bandit15 bandit2 bandit24 bandit29 bandit33 bandit8
bandit11 bandit16 bandit20 bandit25 bandit3 bandit4 bandit9
bandit12 bandit17 bandit21 bandit26 bandit30 bandit5
bandit19@bandit:~$ ./bandit20-do ls /etc/bandit pass/bandit20
/etc/bandit pass/bandit20
bandit19@bandit:~$ ./bandit20-do cat /etc/bandit pass/bandit20
0qXahG8ZjOVMN9Ghs7iOWsCfZyXOUbYO
Level 20 clave "0qXahG8ZjOVMN9Ghs7jOWsCfZyXOUbYO"
```