OverTheWire Bandit All Levels Walkthrough

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Tuğba Arslan June 28, 2024

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Bandit Level 0

https://overthewire.org/wargames/bandit/bandit0.html

Level Goal

The goal of this level is for you to log into the game using SSH. The host to which you need to connect is **bandit.labs.overthewire.org**, on port 2220. The username is **bandit0** and the password is **bandit0**. Once logged in, go to the Level 1 page to find out how to beat Level 1.

Password: bandit0

Host: bandit.labs.overthewire.org

Port: 2220

Here is the Bandit0's password: *bandit0*

Bandit Level 0 → Level 1

https://overthewire.org/wargames/bandit/bandit1.html

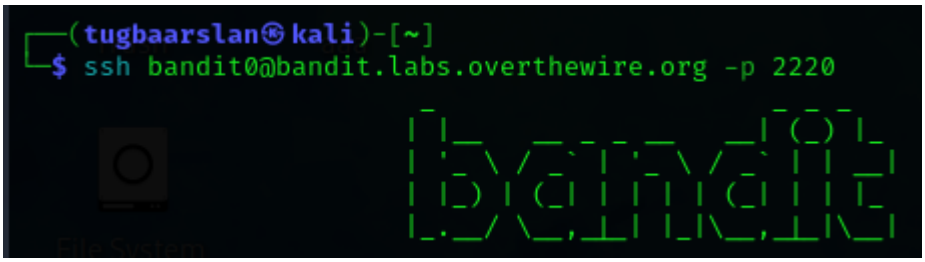
Level Goal

The password for the next level is stored in a file called **readme** located in the home directory. Use this password to log into bandit1 using SSH. Whenever you find a password for a level, use SSH (on port 2220) to log into that level and continue the game.

Password: bandit0

Host: bandit.labs.overthewire.org

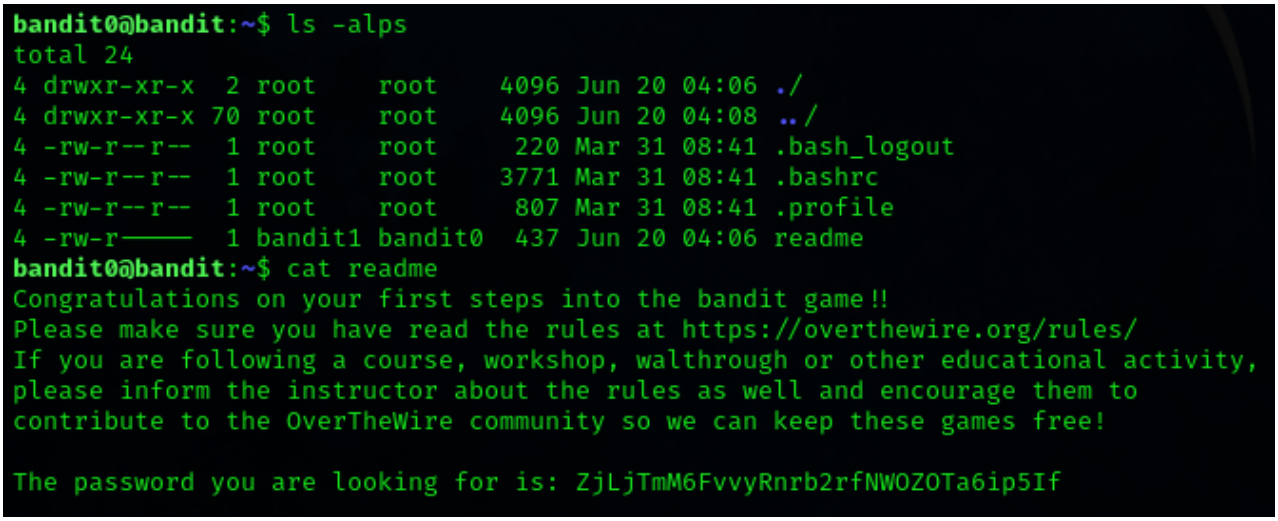
Port: 2220



> *Firstly, use this command and then write bandit0's password:*

$ ssh -p 2220

bandit0



> *Write these commands.*

$ ls -alps

$ cat readme

Here is the Bandit1's password: ZjLjTmM6FvvyRnrb2rfNWOZOTa6ip5If

Bandit Level 1 → Level 2

https://overthewire.org/wargames/bandit/bandit2.html

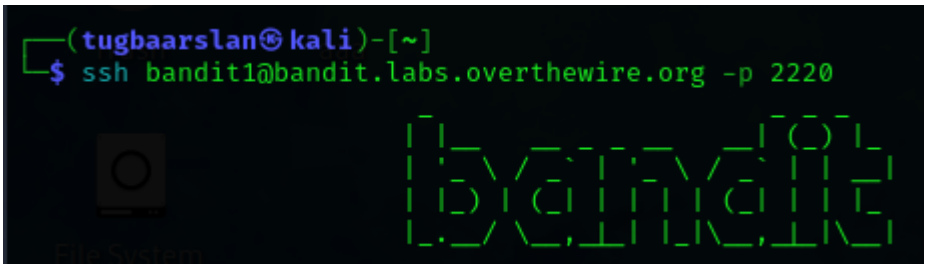
Level Goal

The password for the next level is stored in a file called — located in the home directory

Password: ZjLjTmM6FvvyRnrb2rfNWOZOTa6ip5If

Host: bandit.labs.overthewire.org

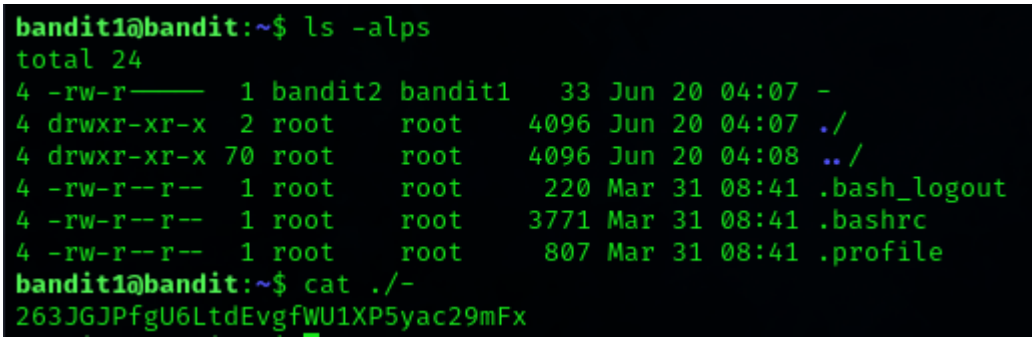
Port: 2220



> *Firstly, use this command and then write bandit1's password:*

$ ssh -p 2220

ZjLjTmM6FvvyRnrb2rfNWOZOTa6ip5If



> *Write these commands.*

$ ls -alps

$ cat ./-

Here is the Bandit2's password: 263JGJPfgU6LtdEvgfWU1XP5yac29mFx

Bandit Level 2 → Level 3

https://overthewire.org/wargames/bandit/bandit3.html

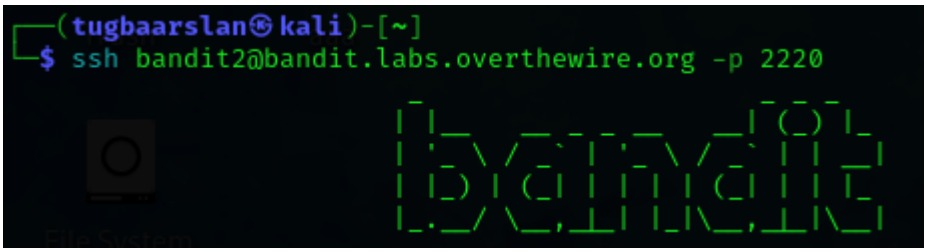
Level Goal

The password for the next level is stored in a file called **spaces in this filename** located in the home directory

Password: 263JGJPfgU6LtdEvgfWU1XP5yac29mFx

Host: bandit.labs.overthewire.org

Port: 2220



> *Firstly, use this command and then write bandit2's password:*

$ ssh -p 2220

263JGJPfgU6LtdEvgfWU1XP5yac29mFx

```
bandit2@bandit:~$ ls -alps
total 24
4 drwxr-xr-x  2 root    root    4096 Jun 20 04:07 ./
4 drwxr-xr-x 70 root    root    4096 Jun 20 04:08 ../
4 -rw-r--r--  1 root    root     220 Mar 31 08:41 .bash_logout
4 -rw-r--r--  1 root    root    3771 Mar 31 08:41 .bashrc
4 -rw-r--r--  1 root    root     807 Mar 31 08:41 .profile
4 -rw-r-----  1 bandit3 bandit2   33 Jun 20 04:07 spaces in this filename
bandit2@bandit:~$ cat 'spaces in this filename'
MNk8KNH3Usiio41PRUEoDFPqfxLPlSmx
```

> *Write these commands.*

$ ls -alps

$ cat 'spaces in this filename'

Here is the Bandit3's password: MNk8KNH3Usiio41PRUEoDFPqfxLPlSmx

Bandit Level 3 → Level 4

https://overthewire.org/wargames/bandit/bandit4.html

Level Goal

The password for the next level is stored in a hidden file in the **inhere** directory.

Password: MNk8KNH3Usiio41PRUEoDFPqfxLPlSmx

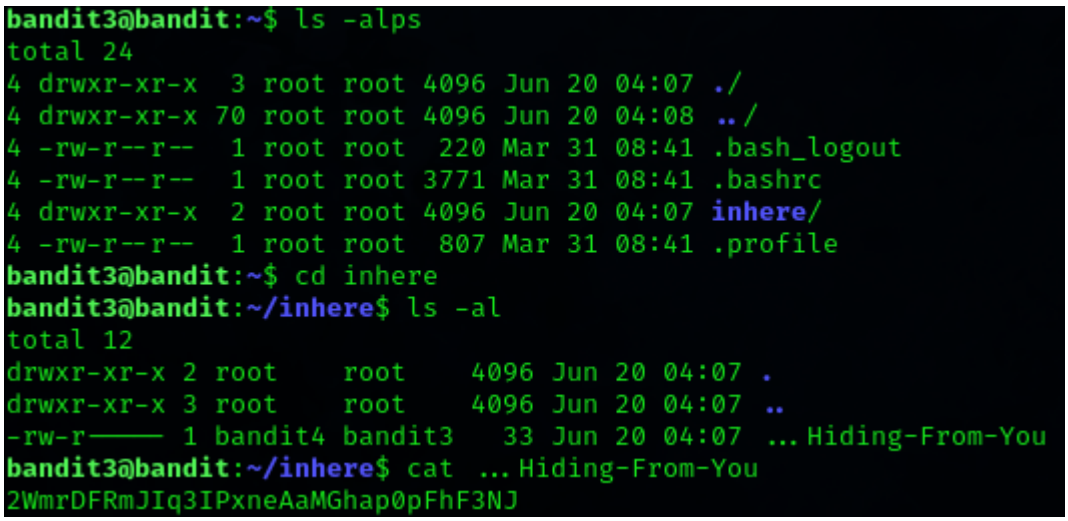
Host: bandit.labs.overthewire.org

Port: 2220

> *Firstly, use this command and then write bandit3's password:*

$ ssh -p 2220

MNk8KNH3Usiio41PRUEoDFPqfxLPlSmx



> *Write these commands.*

$ ls -alps

$ cd inhere

$ ls -al

$ cat …Hiding-From-You

Here is the Bandit4's password: 2WmrDFRmJIq3IPxneAaMGhap0pFhF3NJ

Bandit Level 4 → Level 5

https://overthewire.org/wargames/bandit/bandit5.html

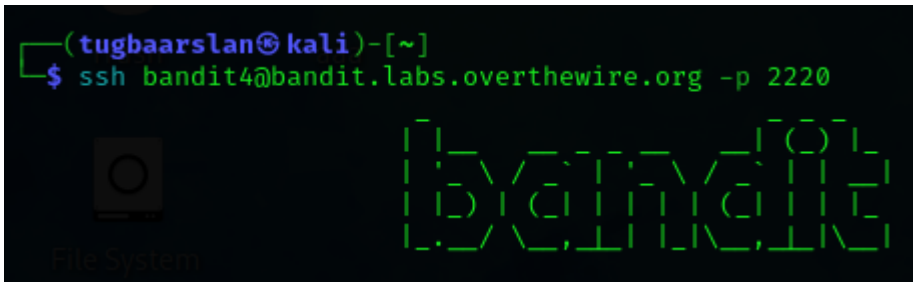
Level Goal

The password for the next level is stored in the only human-readable file in the **inhere** directory. Tip: if your terminal is messed up, try the "reset" command.

Password: 2WmrDFRmJIq3IPxneAaMGhap0pFhF3NJ

Host: bandit.labs.overthewire.org

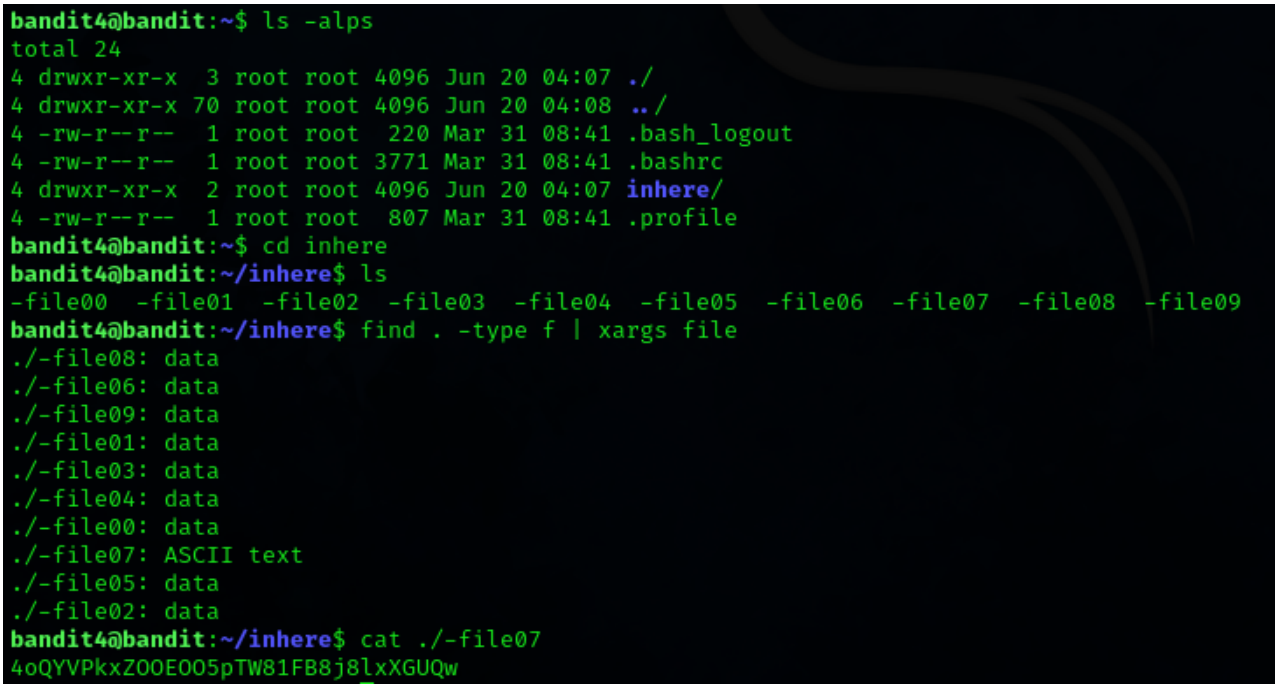
Port: 2220



> *Firstly, use this command and then write bandit4's password:*

$ ssh -p 2220

2WmrDFRmJIq3IPxneAaMGhap0pFhF3NJ



> *Write these commands.*

$ ls -alps

$ cd inhere

$ ls

$ find . -type f | xargs file

$ cat ./-file07

Here is the Bandit5's password: 4oQYVPkxZOOEOO5pTW81FB8j8lxXGUQw

Bandit Level 5 → Level 6

https://overthewire.org/wargames/bandit/bandit6.html

Level Goal

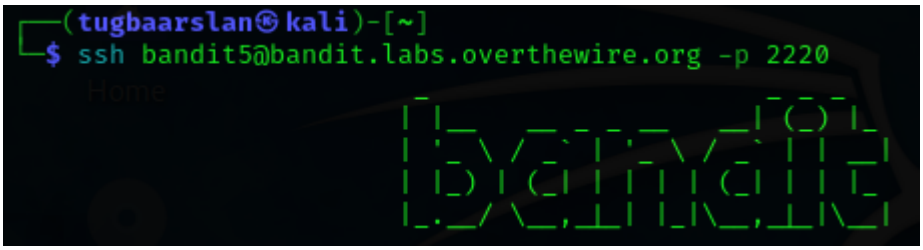
The password for the next level is stored in a file somewhere under the **inhere** directory and has all of the following properties:

- human-readable
- 1033 bytes in size
- not executable

Password: 4oQYVPkxZOOEOO5pTW81FB8j8lxXGUQw

Host: bandit.labs.overthewire.org

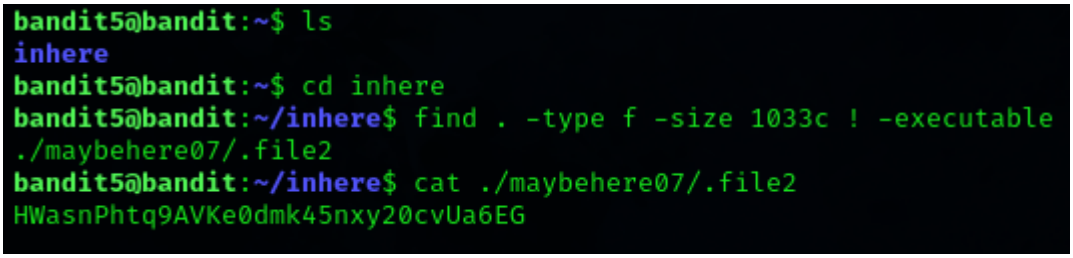
Port: 2220



> *Firstly, use this command and then write bandit5's password:*

$ ssh -p 2220

4oQYVPkxZOOEOO5pTW81FB8j8lxXGUQw



> *Write these commands.*

$ ls

$ cd inhere

$ find . -type f -size 1033c ! -executable

$ cat ./maybehere07/.file2

Here is the Bandit6's password: HWasnPhtq9AVKe0dmk45nxy20cvUa6EG

Bandit Level 6 → Level 7

https://overthewire.org/wargames/bandit/bandit7.html

Level Goal

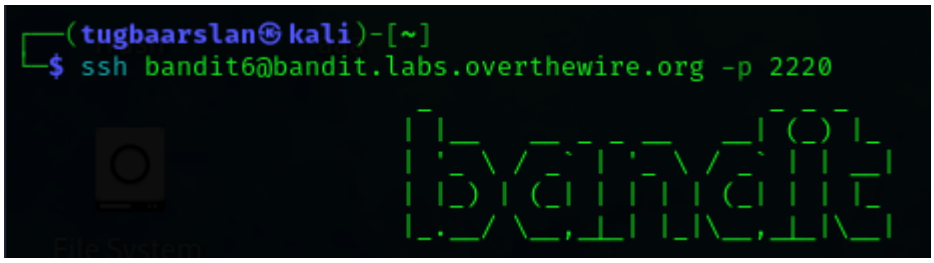
The password for the next level is stored **somewhere on the server** and has all of the following properties:

- owned by user bandit7
- owned by group bandit6
- 33 bytes in size

Password: HWasnPhtq9AVKe0dmk45nxy20cvUa6EG

Host: bandit.labs.overthewire.org

Port: 2220



> *Firstly, use this command and then write bandit6's password:*

$ ssh -p 2220

HWasnPhtq9AVKe0dmk45nxy20cvUa6EG

```
bandit6@bandit:~$ find / -type f -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
```

> *Write these commands.*

$ find / -type f -user bandit7 -group bandit6 -size 33c 2>/dev/null

$ cat /var/lib/dpkg/info/bandit7.password

Here is the Bandit7's password: morbNTDkSW6jIlUc0ymOdMaLnOlFVAaj

Bandit Level 7 → Level 8

https://overthewire.org/wargames/bandit/bandit8.html

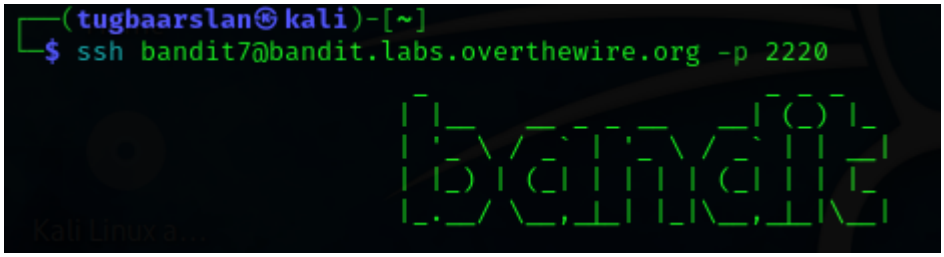
Level Goal

The password for the next level is stored in the file **data.txt** next to the word **millionth**

Password: morbNTDkSW6jIlUc0ymOdMaLnOlFVAaj

Host: bandit.labs.overthewire.org

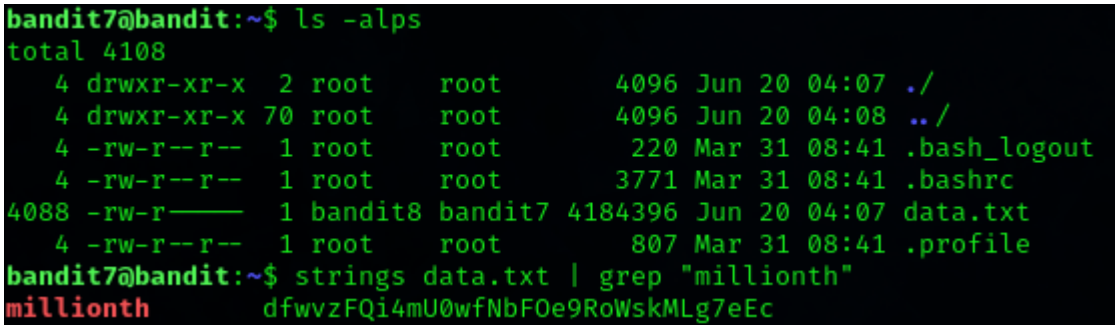
Port: 2220



> *Firstly, use this command and then write bandit7's password:*

$ ssh -p 2220

morbNTDkSW6jIlUc0ymOdMaLnOlFVAaj



> *Write these commands.*

$ ls -alps

$ strings data.txt | grep "millionth"

Here is the Bandit8's password: dfwvzFQi4mU0wfNbFOe9RoWskMLg7eEc

Bandit Level 8 → Level 9

https://overthewire.org/wargames/bandit/bandit9.html

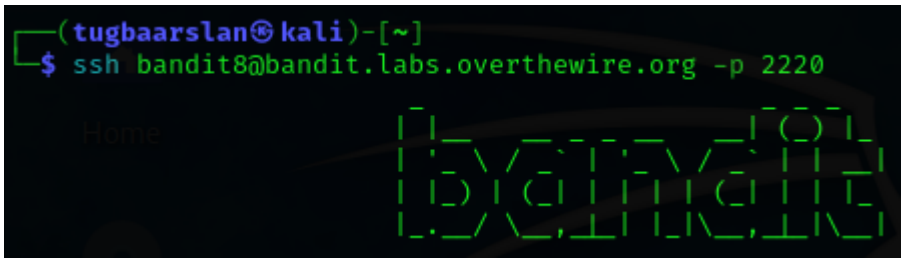
Level Goal

The password for the next level is stored in the file **data.txt** and is the only line of text that occurs only once

Password: dfwvzFQi4mU0wfNbFOe9RoWskMLg7eEc

Host: bandit.labs.overthewire.org

Port: 2220

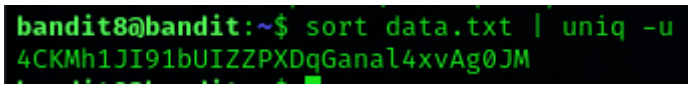


> *Firstly, use this command and then write bandit8's password:*

$ ssh -p 2220

dfwvzFQi4mU0wfNbFOe9RoWskMLg7eEc

> *Write this command.*



$ sort data.txt | uniq -u

Here is the Bandit9's password: 4CKMh1JI91bUIZZPXDqGanal4xvAg0JM

Bandit Level 9 → Level 10

https://overthewire.org/wargames/bandit/bandit10.html

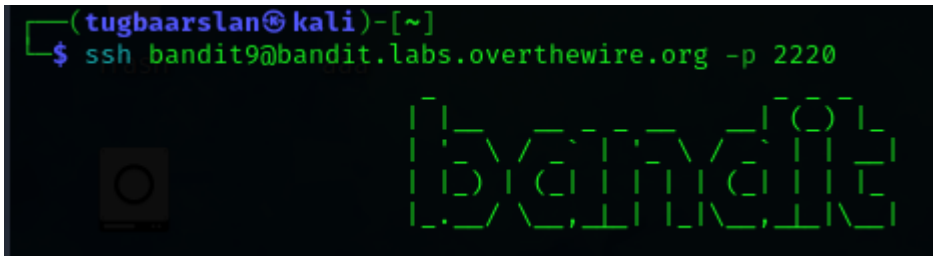
Level Goal

The password for the next level is stored in the file **data.txt** in one of the few human-readable strings, preceded by several '=' characters.

Password: 4CKMh1JI91bUIZZPXDqGanal4xvAg0JM

Host: bandit.labs.overthewire.org

Port: 2220



> *Firstly, use this command and then write bandit9's password:*

$ ssh -p 2220

4CKMh1JI91bUIZZPXDqGanal4xvAg0JM

> *Write this command.*

$ strings data.txt | grep "="

Here is the Bandit10's password: FGUW5ilLVJrxX9kMYMmlN4MgbpfMiqey

Bandit Level 10 → Level 11

https://overthewire.org/wargames/bandit/bandit11.html

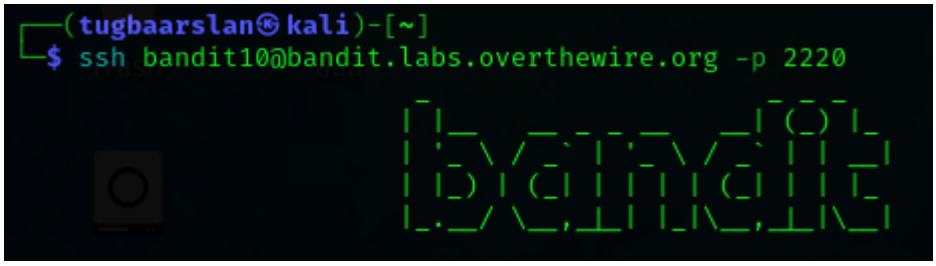
Level Goal

The password for the next level is stored in the file **data.txt**, which contains base64 encoded data

Password: FGUW5ilLVJrxX9kMYMmlN4MgbpfMiqey

Host: bandit.labs.overthewire.org

Port: 2220



> *Firstly, use this command and then write bandit10's password:*

$ ssh -p 2220

FGUW5ilLVJrxX9kMYMmlN4MgbpfMiqey

```
bandit10@bandit:~$ cat data.txt
VGhlIHBhc3N3b3JkIGlzIGR0UjE3M2ZaS2IwUlJzREZTR3NnMlJXbnBOVmozcVJyCg==
bandit10@bandit:~$ base64 -d data.txt
The password is dtR173fZKb0RRsDFSGsg2RWnpNVj3qRr
```

> *Write these commands.*

$ cat data.txt

$ base64 -d data.txt

Here is the Bandit11's password: dtR173fZKb0RRsDFSGsg2RWnpNVj3qRr

Bandit Level 11 → Level 12

https://overthewire.org/wargames/bandit/bandit12.html

Level Goal

The password for the next level is stored in the file **data.txt**, where all lowercase (a-z) and uppercase (A-Z) letters have been rotated by 13 positions

Password: dtR173fZKb0RRsDFSGsg2RWnpNVj3qRr

Host: bandit.labs.overthewire.org

Port: 2220

```
┌──(tugbaarslan㉿kali)-[~]
└─$ ssh bandit11@bandit.labs.overthewire.org -p 2220
                         _                     _ _ _
                        | |__   __ _ _ __   __| (_) |_
                        | '_ \ / _` | '_ \ / _` | | __|
                        | |_) | (_| | | | | (_| | | |_
                        |_.__/ \__,_|_| |_|\__,_|_|\__|
```

> *Firstly, use this command and then write bandit11's password:*

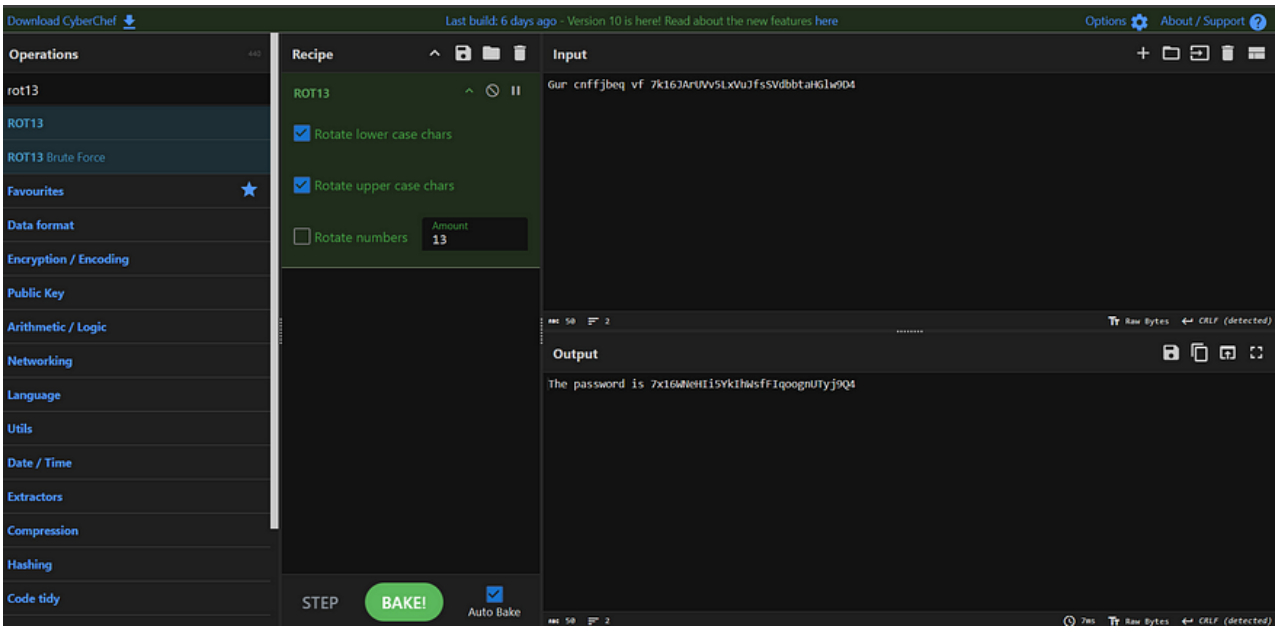
$ ssh -p 2220

dtR173fZKb0RRsDFSGsg2RWnpNVj3qRr

```
bandit11@bandit:~$ cat data.txt
Gur cnffjbeq vf 7k16JArUVv5LxVuJfsSVdbbtaHGlw9D4
```

> *Write this command.*

$ cat data.txt



> *Use CyberChef, decrypt encrypted text with rot13.*

Here is the Bandit12's password: 7x16WNeHIi5YkIhWsfFIqoognUTyj9Q4

Bandit Level 12 → Level 13

https://overthewire.org/wargames/bandit/bandit13.html

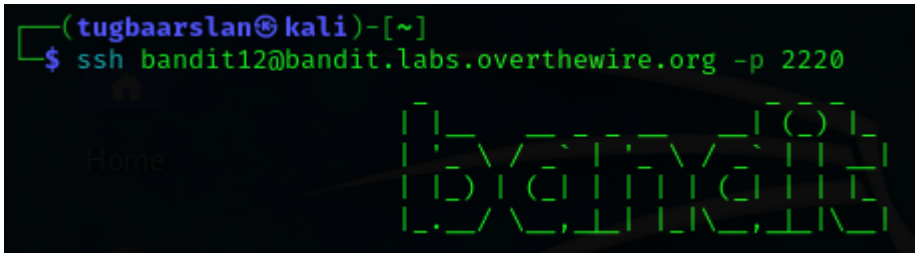
Level Goal

The password for the next level is stored in the file **data.txt**, which is a hexdump of a file that has been repeatedly compressed. For this level it may be useful to create a directory under /tmp in which you can work. Use mkdir with a hard to guess directory name. Or better, use the command "mktemp -d". Then copy the datafile using cp, and rename it using mv (read the manpages!)

Password: 7x16WNeHIi5YkIhWsfFIqoognUTyj9Q4

Host: bandit.labs.overthewire.org

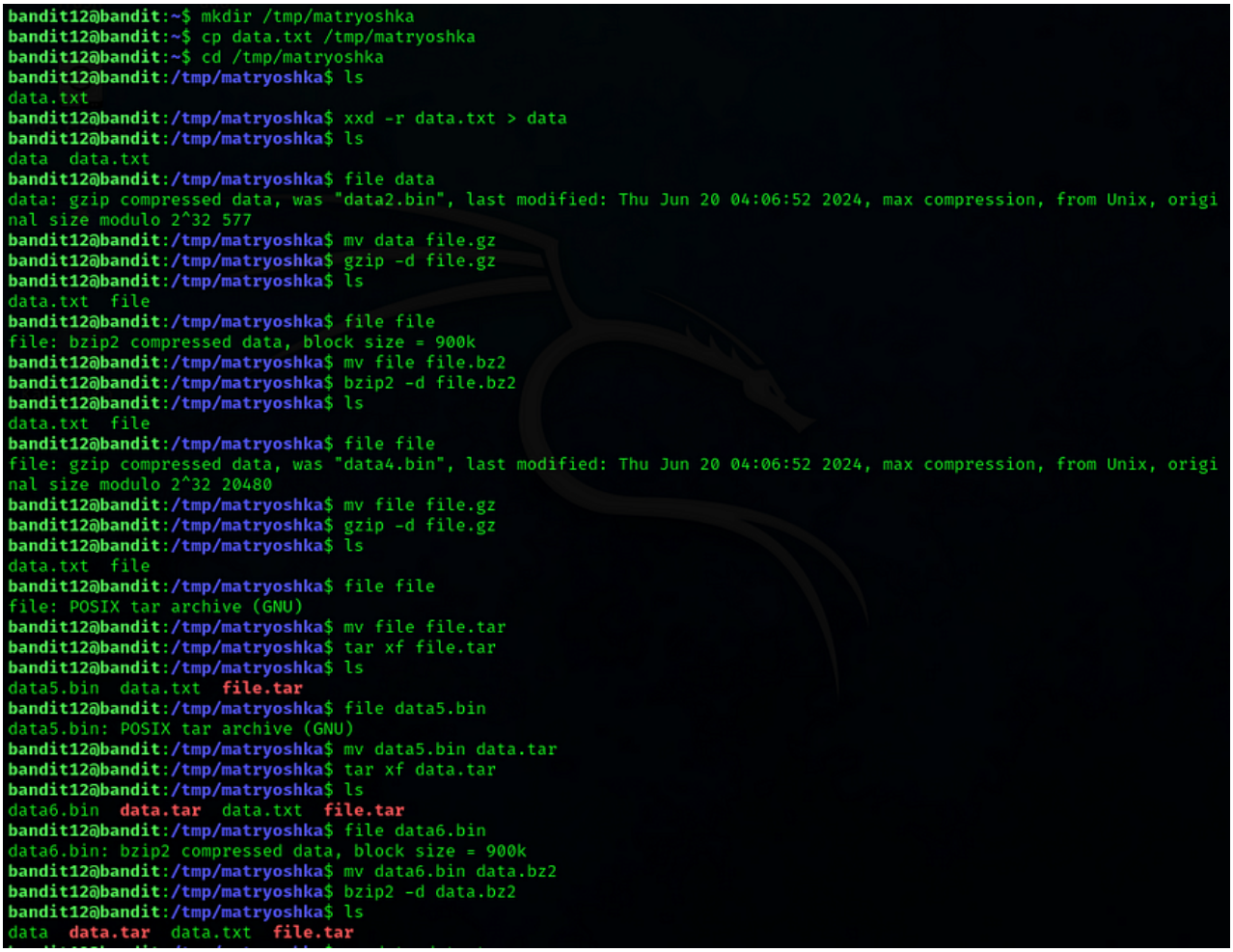
Port: 2220



> *Firstly, use this command and then write bandit12's password:*

$ ssh -p 2220

7x16WNeHIi5YkIhWsfFIqoognUTyj9Q4



> *Write these commands.*

$ mkdir /tmp/matryoshka

$ cp data.txt /tmp/matryoshka

$ cd /tmp/matryoshka

$ ls

$ xxd -r data.txt > data

$ ls

$ file data

$ mv data file.gz

$ gzip -d file.gz

$ ls

$ file file

$ mv file file.bz2

$ bzip2 -d file.bz2

$ ls

$ file file

$ mv file file.gz

$ gzip -d file.gz

$ ls

$ file file

$ mv file file.tar

$ tar xf file.tar

$ ls

$ file data5.bin

$ mv data5.bin data.tar

$ tar xf data.tar

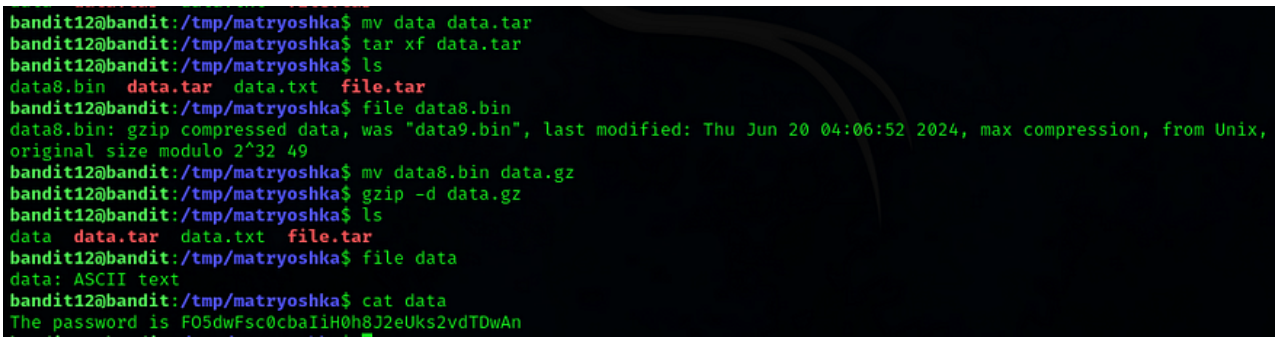
$ ls

$ file data6.bin

$ mv data6.bin data.bz2

$ bzip2 -d data.bz2

$ ls



> *Write these commands.*

$ mv data data.tar

$ tar xf data.tar

$ ls

$ file data8.bin

$ mv data8.bin data.gz

$ gzip -d data.gz

$ ls

$ file data

$ cat data

Here is the Bandit13's password: FO5dwFsc0cbaIiH0h8J2eUks2vdTDwAn

Bandit Level 13 → Level 14

https://overthewire.org/wargames/bandit/bandit14.html

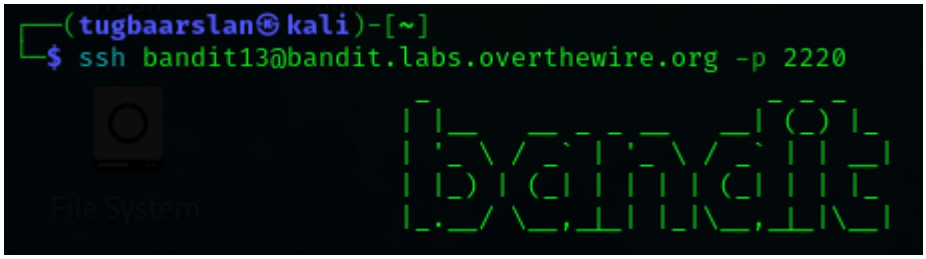
Level Goal

The password for the next level is stored in **/etc/bandit_pass/bandit14 and can only be read by user bandit14**. For this level, you don't get the next password, but you get a private SSH key that can be used to log into the next level. **Note: localhost** is a hostname that refers to the machine you are working on

Password: FO5dwFsc0cbaIiH0h8J2eUks2vdTDwAn

Host: bandit.labs.overthewire.org

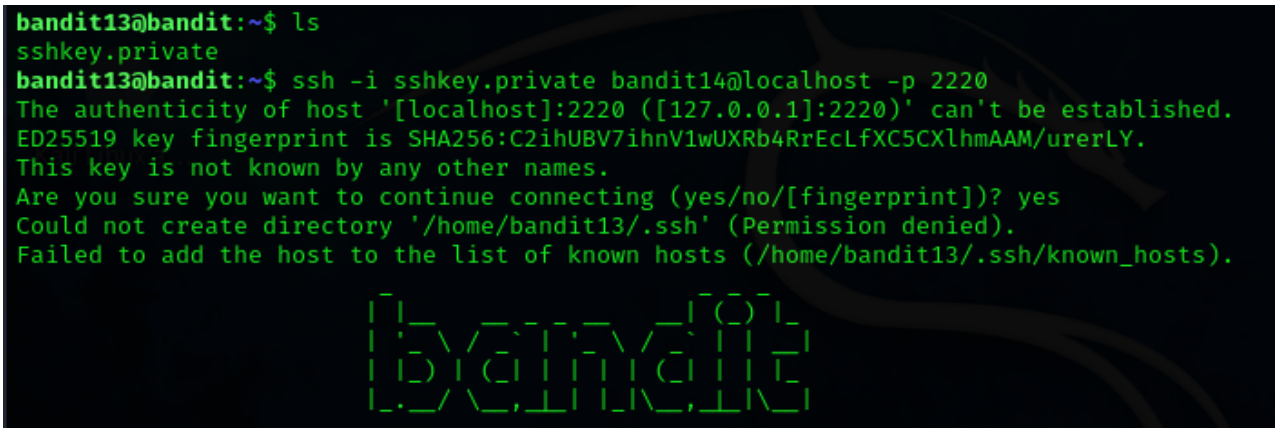
Port: 2220



> *Firstly, use this command and then write bandit13's password:*

$ ssh -p 2220

FO5dwFsc0cbaIiH0h8J2eUks2vdTDwAn



> *Write these commands.*

$ ls

$ ssh -i sshkey.private bandit14@localhost -p 2220

> *You are now in bandit14.*

Bandit Level 14 → Level 15

https://overthewire.org/wargames/bandit/bandit15.html

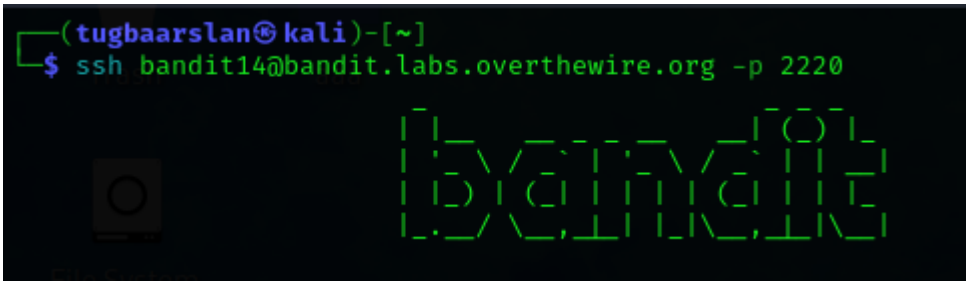
Level Goal

The password for the next level can be retrieved by submitting the password of the current level to port 30000 on localhost.

Password: MU4VWeTyJk8ROof1qqmcBPaLh7lDCPvS

Host: bandit.labs.overthewire.org

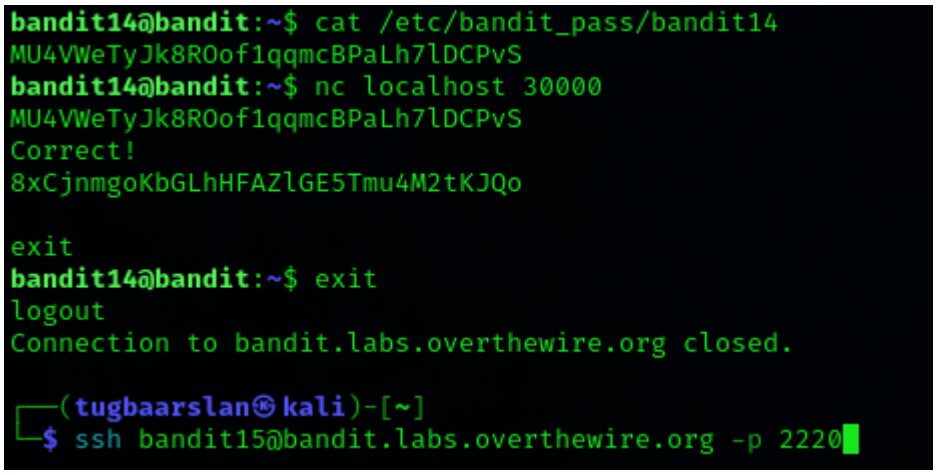
Port: 2220



> *Firstly, use this command and then write bandit14's password:*

$ ssh -p 2220

MU4VWeTyJk8ROof1qqmcBPaLh7lDCPvS



> *Then, write and enter this command:*

$ cat /etc/bandit_pass/bandit14

> *After use the nc command with bandit14's password:*

$ nc localhost 30000MU4VWeTyJk8ROof1qqmcBPaLh7lDCPvS

Here is the Bandit15's password: 8xCjnmgoKbGLhHFAZlGE5Tmu4M2tKJQo

Bandit Level 15 → Level 16

https://overthewire.org/wargames/bandit/bandit16.html

Level Goal

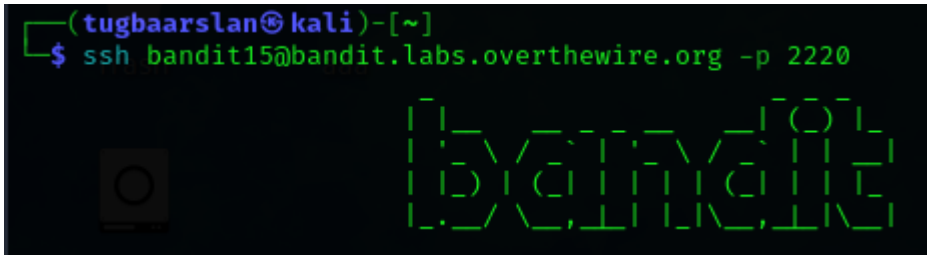
The password for the next level can be retrieved by submitting the password of the current level to port 30001 on localhost using SSL encryption.

Helpful note: Getting "HEARTBEATING" and "Read R BLOCK"? Use -ign_eof and read the "CONNECTED COMMANDS" section in the manpage. Next to 'R' and 'Q', the 'B' command also works in this version of that command…

Password: 8xCjnmgoKbGLhHFAZlGE5Tmu4M2tKJQo

Host: bandit.labs.overthewire.org

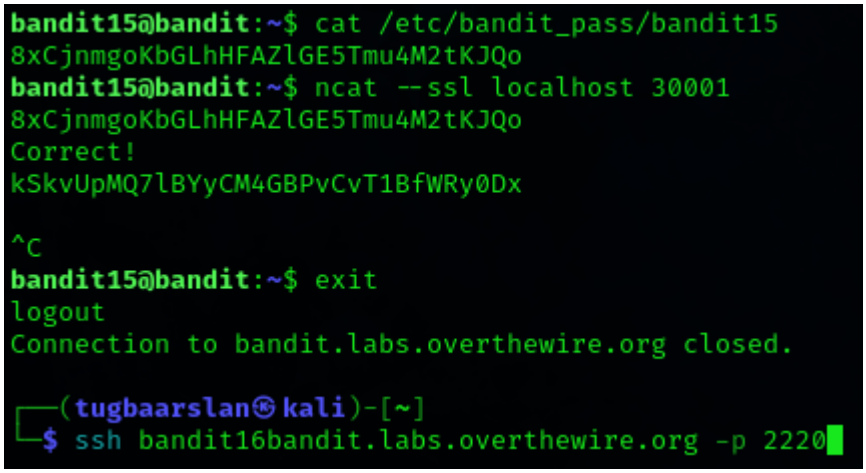
Port: 2220



> *Firstly, use this command and then write bandit15's password:*

$ ssh -p 2220

8xCjnmgoKbGLhHFAZlGE5Tmu4M2tKJQo



> *Then, write and enter this command:*

$ cat /etc/bandit_pass/bandit15

> *After use the ncat command with bandit14's password:*

$ ncat — ssl localhost 300018xCjnmgoKbGLhHFAZlGE5Tmu4M2tKJQo

Here is the Bandit16's password: kSkvUpMQ7lBYyCM4GBPvCvT1BfWRy0Dx

Bandit Level 16 → Level 17

https://overthewire.org/wargames/bandit/bandit17.html

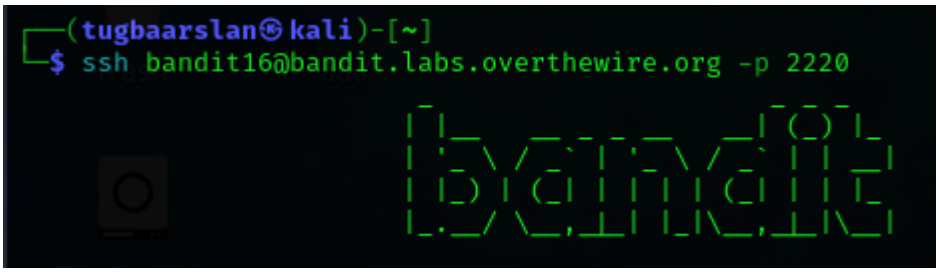
Level Goal

The credentials for the next level can be retrieved by submitting the password of the current level to a port on localhost in the range 31000 to 32000. First find out which of these ports have a server listening on them. Then find out which of those speak SSL and which don't. There is only 1 server that will give the next credentials, the others will simply send back to you whatever you send to it.

Password: kSkvUpMQ7lBYyCM4GBPvCvT1BfWRy0Dx

Host: bandit.labs.overthewire.org

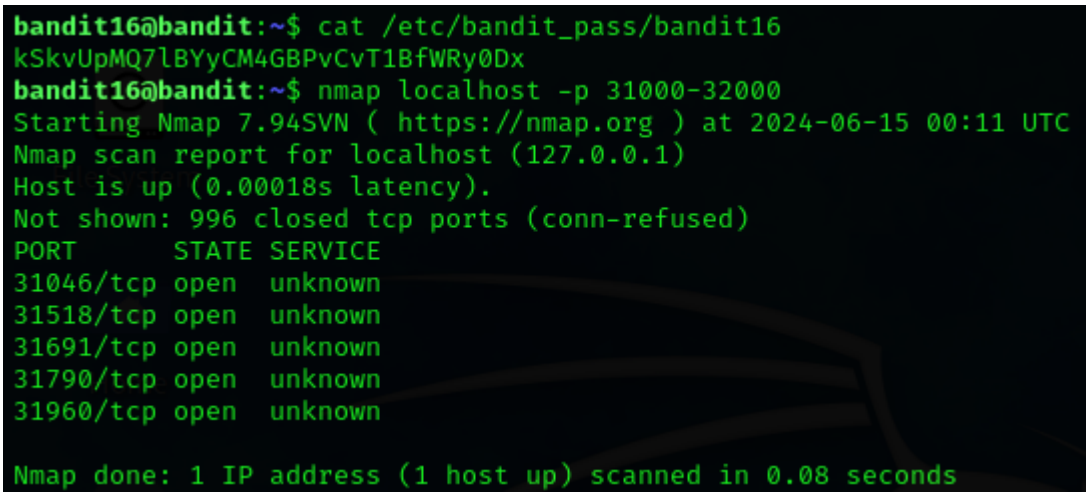
Port: 2220



> *Firstly, use this command and then write bandit16's password:*

$ ssh -p 2220

kSkvUpMQ7lBYyCM4GBPvCvT1BfWRy0Dx



> *Then, write and enter this command:*

$ cat /etc/bandit_pass/bandit16

> *After this, nmap scan should be done:*

$ nmap localhost -p 31000–32000

> *Now, use ncat command with bandit16's password. I used 31790 TCP port:*

$ ncat — ssl localhost 31790kSkvUpMQ7lBYyCM4GBPvCvT1BfWRy0Dx

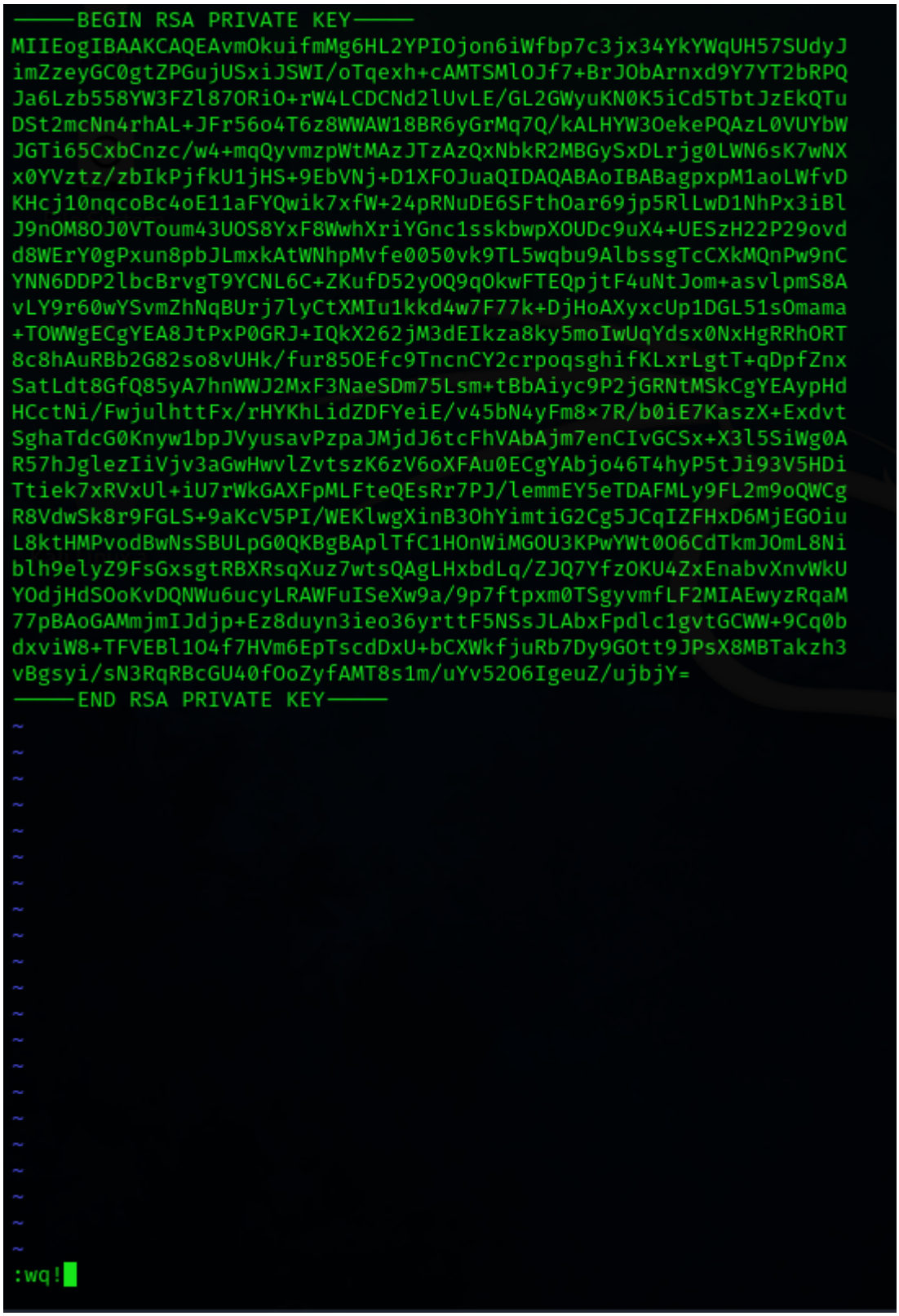
> *When the private key is shown to us, exit that area with CTRL+C and enter the personal area by typing the exit command.*

^C

$ exit

> *Then write the vim command.*

$ vim key



> *Then paste the text we found into it. After paste it, write this command.*

> *Type the chmod command, because we need to give read permission.*

$ chmod 400 key

> *Finally, you can login with key:*

Here is the login path: ssh -i key bandit17@bandit.labs.overthewire.org -p 2220

Bandit Level 17 → Level 18

https://overthewire.org/wargames/bandit/bandit18.html

Level Goal

There are 2 files in the homedirectory: passwords.old and passwords.new. The password for the next level is in passwords.new and is the only line that has been changed between passwords.old and passwords.new

NOTE: if you have solved this level and see 'Byebye!' when trying to log into bandit18, this is related to the next level, bandit19

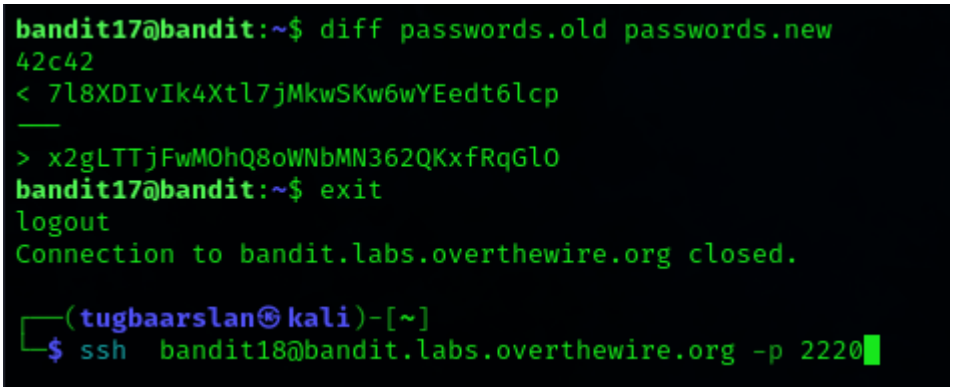
Login path: ssh -i key -p 2220

Host: bandit.labs.overthewire.org

Port: 2220

> *Firstly, login with key:*

$ ssh -i key -p 2220



> *Then, use the diff command and exit that area. Since one of the two options is a password, you should try entering both results as a password.*

$ diff passwords.old passwords.new

Here is the Bandit18's password: x2gLTTjFwMOhQ8oWNbMN362QKxfRqGlO

Bandit Level 18 → Level 19

https://overthewire.org/wargames/bandit/bandit19.html

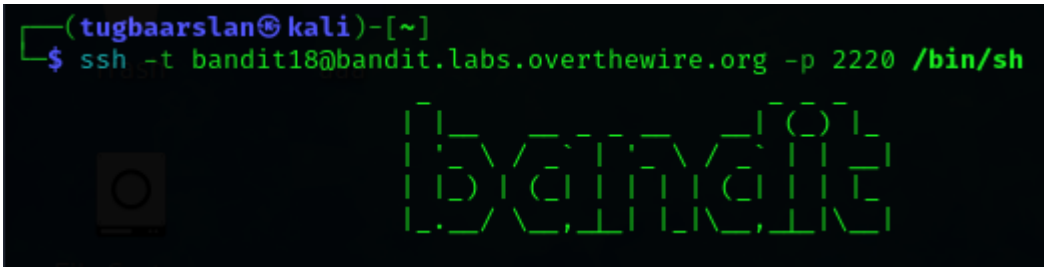
Level Goal

The password for the next level is stored in a file readme in the homedirectory. Unfortunately, someone has modified .bashrc to log you out when you log in with SSH.

Password: x2gLTTjFwMOhQ8oWNbMN362QKxfRqGlO

Host: bandit.labs.overthewire.org

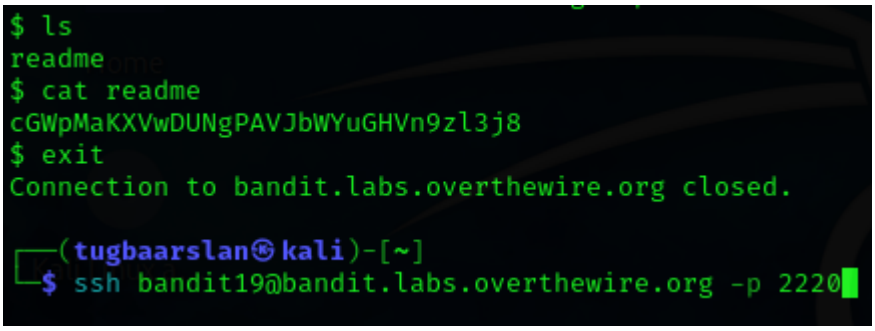
Port: 2220



> *Firstly, when logging in use -t parameter and /bin/sh bash scripts. Then type bandit18's password:*

$ ssh -t bandit18@bandit.labs.overthewire.org -p 2220 /bin/sh

x2gLTTjFwMOhQ8oWNbMN362QKxfRqGlO



> *Execute ls command, you will find readme file. Read the file you found with the cat command and exit.*

$ ls

$ cat readme

$ exit

Here is the Bandit19's password: cGWpMaKXVwDUNgPAVJbWYuGHVn9zl3j8

Bandit Level 19 → Level 20

https://overthewire.org/wargames/bandit/bandit20.html

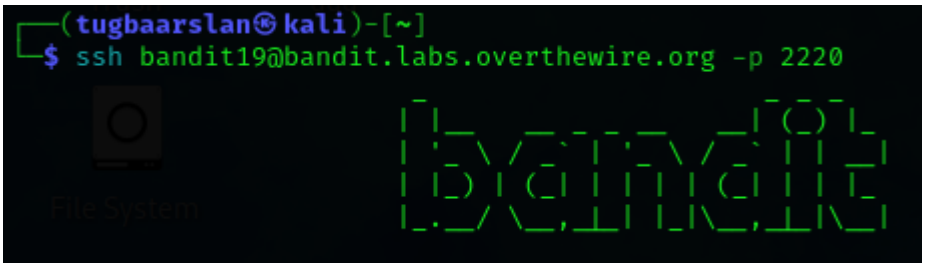
Level Goal

To gain access to the next level, you should use the setuid binary in the homedirectory. Execute it without arguments to find out how to use it. The password for this level can be found in the usual place (/etc/bandit_pass), after you have used the setuid binary.

Password: cGWpMaKXVwDUNgPAVJbWYuGHVn9zl3j8

Host: bandit.labs.overthewire.org

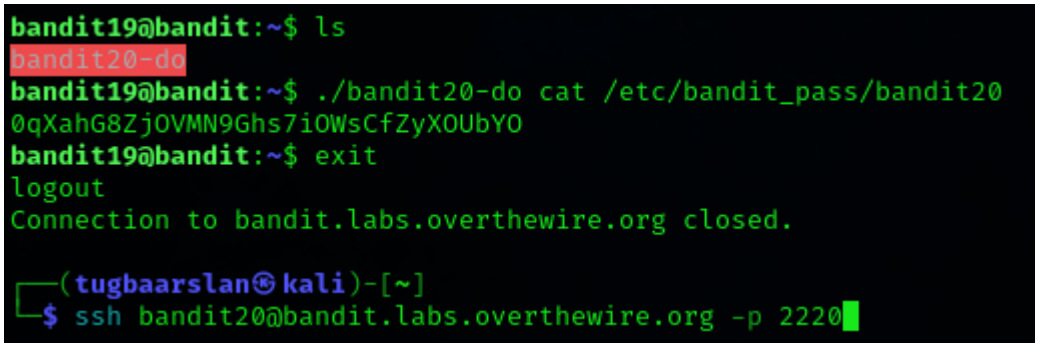
Port: 2220



> *Firstly, use this command and then write bandit19's password:*

$ ssh -p 2220

cGWpMaKXVwDUNgPAVJbWYuGHVn9zl3j8



> *Then, write the ls command and we see the target directory.*

$ ls

> *We use this command to display the data in:*

$ ./bandit20-do cat /etc/bandit_pass/bandit20

Here is the Bandit20's password: 0qXahG8ZjOVMN9Ghs7iOWsCfZyXOUbYO

Bandit Level 20 → Level 21

https://overthewire.org/wargames/bandit/bandit21.html

Level Goal

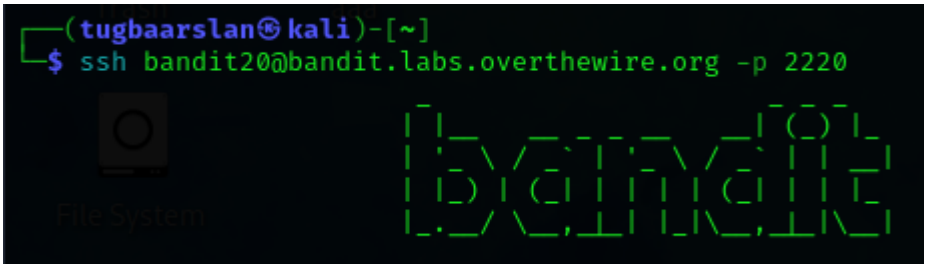
There is a setuid binary in the homedirectory that does the following: it makes a connection to localhost on the port you specify as a commandline argument. It then reads a line of text from the connection and compares it to the password in the previous level (bandit20). If the password is correct, it will transmit the password for the next level (bandit21).

NOTE: Try connecting to your own network daemon to see if it works as you think

Password: 0qXahG8ZjOVMN9Ghs7iOWsCfZyXOUbYO

Host: bandit.labs.overthewire.org

Port: 2220

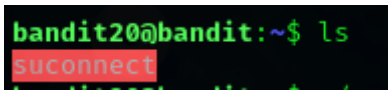


> *Firstly, use this command and then write bandit20's password:*

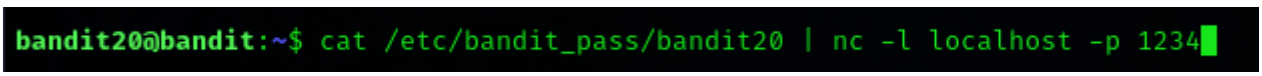
$ ssh -p 2220

0qXahG8ZjOVMN9Ghs7iOWsCfZyXOUbYO

> *Then, write the ls command and we see the target directory.*



$ ls



> *Press CTRL+T and write this command on the new screen and run it.*

$ cat /etc/bandit_pass/bandit20 | nc -l localhost -p 1234

> *or*

$ cat /etc/bandit_pass/bandit20 | nc -l -p 1234

> *Go back to the previous screen and run this command.*

```
bandit20@bandit:~$ ./suconnect 1234
Read: 0qXahG8ZjOVMN9Ghs7iOWsCfZyXOUbYO
Password matches, sending next password
```

$ ./suconnect 1234

```
bandit20@bandit:~$ cat /etc/bandit_pass/bandit20 | nc -l -p 1234
EeoULMCra2q0dSkYj561DX7s1CpBuOBt
```

> *Go back to the new page and the new password is here.*

Here is the Bandit21's password: EeoULMCra2q0dSkYj561DX7s1CpBuOBt

Bandit Level 21 → Level 22

https://overthewire.org/wargames/bandit/bandit22.html

Level Goal

A program is running automatically at regular intervals from **cron**, the time-based job scheduler. Look in **/etc/cron.d/** for the configuration and see what command is being executed.

Password: EeoULMCra2q0dSkYj561DX7s1CpBuOBt

Host: bandit.labs.overthewire.org

Port: 2220

```
┌──(tugbaarslan㉿kali)-[~]
└─$ ssh bandit21@bandit.labs.overthewire.org -p 2220
                         _                     _ _ _
                        | |__   __ _ _ __   __| (_) |_
                        | '_ \ / _` | '_ \ / _` | | __|
                        | |_) | (_| | | | | (_| | | |_
                        |_.__/ \__,_|_| |_|\__,_|_|\__|
```

> *Firstly, use this command and then write bandit21's password:*

$ ssh -p 2220

EeoULMCra2q0dSkYj561DX7s1CpBuOBt

```
bandit21@bandit:~$ ls /etc/cron.d/
cronjob_bandit22  cronjob_bandit23  cronjob_bandit24  e2scrub_all  otw-tmp-dir  sysstat
bandit21@bandit:~$ cat /etc/cron.d/cronjob_bandit22
@reboot bandit22 /usr/bin/cronjob_bandit22.sh &> /dev/null
* * * * * bandit22 /usr/bin/cronjob_bandit22.sh &> /dev/null
bandit21@bandit:~$ cat /usr/bin/cronjob_bandit22.sh
#!/bin/bash
chmod 644 /tmp/t7O6lds9S0RqQh9aMcz6ShpAoZKF7fgv
cat /etc/bandit_pass/bandit22 > /tmp/t7O6lds9S0RqQh9aMcz6ShpAoZKF7fgv
bandit21@bandit:~$ cat /tmp/t7O6lds9S0RqQh9aMcz6ShpAoZKF7fgv
tRae0UfB9v0UzbCdn9cY0gQnds9GF58Q
bandit21@bandit:~$ exit
logout
Connection to bandit.labs.overthewire.org closed.
```

> *Then, run these commands one by one.*

$ ls /etc/cron.d/

$ cat /etc/cron.d/cronjob_bandit22

$ cat /usr/bin/cronjob_bandit22.sh

$ cat /tmp/t7O6lds9S0RqQh9aMcz6ShpAoZKF7fgv

Here is the Bandit22's password: tRae0UfB9v0UzbCdn9cY0gQnds9GF58Q

Bandit Level 22 → Level 23

https://overthewire.org/wargames/bandit/bandit23.html

Level Goal

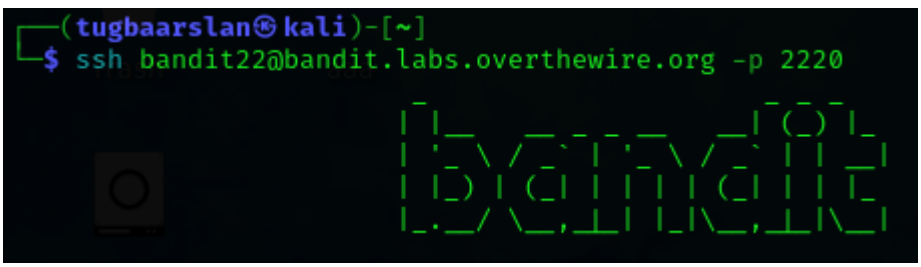
A program is running automatically at regular intervals from **cron**, the time-based job scheduler. Look in **/etc/cron.d/** for the configuration and see what command is being executed.

NOTE: Looking at shell scripts written by other people is a very useful skill. The script for this level is intentionally made easy to read. If you are having problems understanding what it does, try executing it to see the debug information it prints.

Password: tRae0UfB9v0UzbCdn9cY0gQnds9GF58Q

Host: bandit.labs.overthewire.org

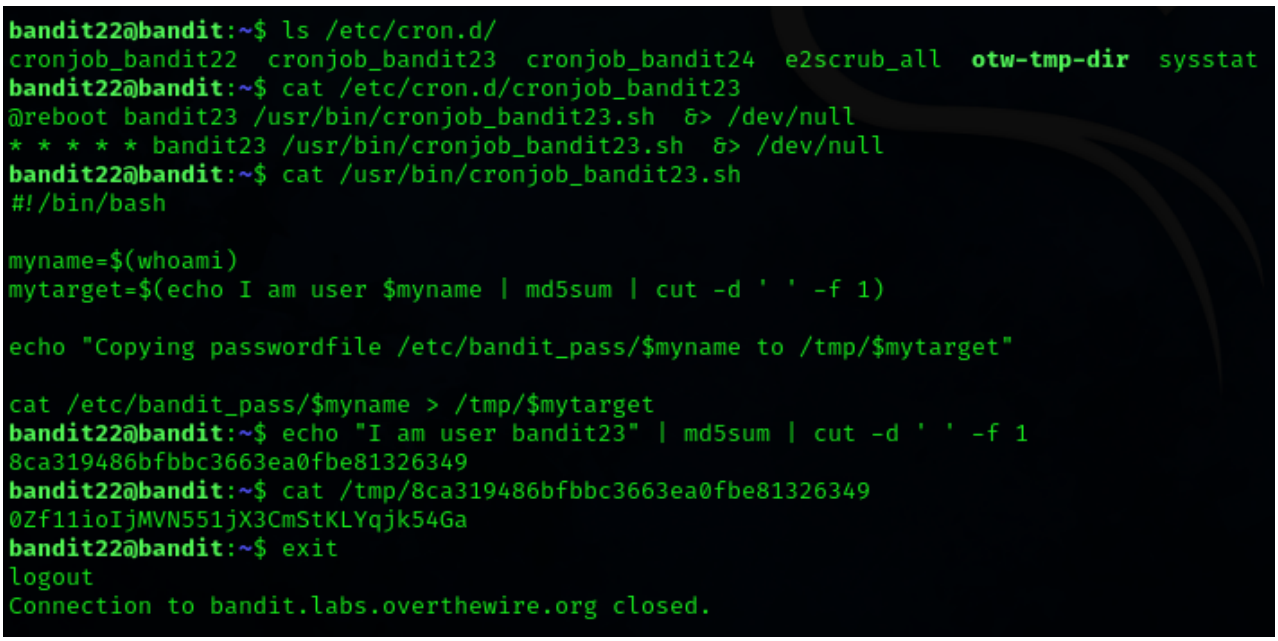
Port: 2220



> *Firstly, use this command and then write bandit22's password:*

$ ssh -p 2220

tRae0UfB9v0UzbCdn9cY0gQnds9GF58Q



> *Then, run these commands one by one.*

$ ls /etc/cron.d/

$ cat /etc/cron.d/cronjob_bandit23

$ cat /usr/bin/cronjob_bandit23.sh

$ echo "I am user bandit23" | md5sum | cut -d ' ' -f 1

$ cat /tmp/8ca319486bfbbc3663ea0fbe81326349

Here is the Bandit23's password: 0Zf11ioIjMVN551jX3CmStKLYqjk54Ga

Bandit Level 23 → Level 24

https://overthewire.org/wargames/bandit/bandit24.html

Level Goal

A program is running automatically at regular intervals from **cron**, the time-based job scheduler. Look in **/etc/cron.d/** for the configuration and see what command is being executed.

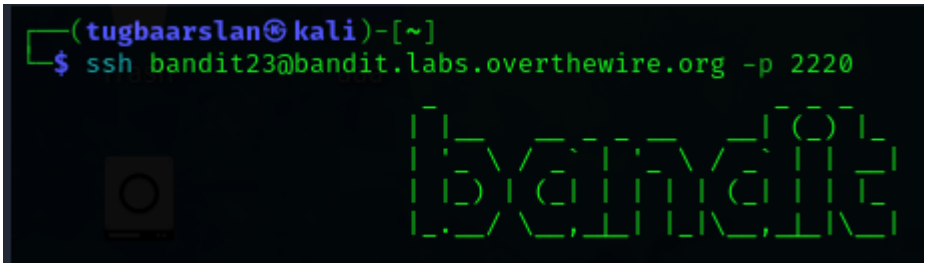
NOTE: This level requires you to create your own first shell-script. This is a very big step and you should be proud of yourself when you beat this level!

NOTE 2: Keep in mind that your shell script is removed once executed, so you may want to keep a copy around…

Password: 0Zf11ioIjMVN551jX3CmStKLYqjk54Ga

Host: bandit.labs.overthewire.org

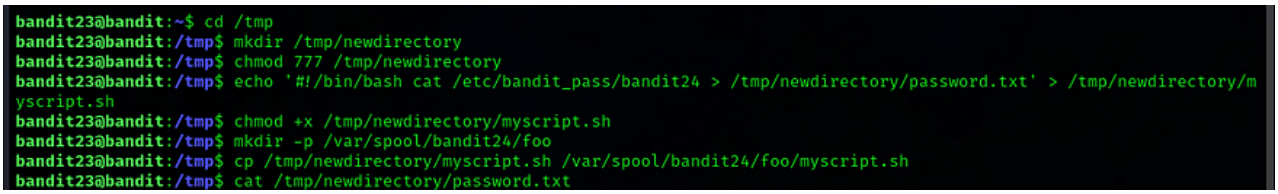
Port: 2220



> *Firstly, use this command and then write bandit23's password:*

$ ssh -p 2220

0Zf11ioIjMVN551jX3CmStKLYqjk54Ga



> *Then, run these commands one by one.*

$ cd /tmp

$ mkdir /tmp/newdirectory

$ chmod 777 /tmp/newdirectory

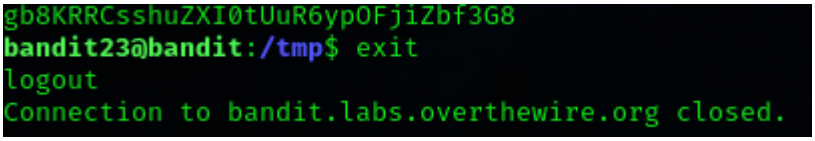
$ echo '#!/bin/bash cat /etc/bandit_pass/bandit24 > /tmp/newdirectory/password.txt' > /tmp/newdirectory/myscript.sh

$ chmod +x /tmp/newdirectory/myscript.sh

$ mkdir -p /var/spool/bandit24/foo

$ cp /tmp/newdirectory/myscript.sh /var/spool/bandit24/foo/myscript.sh

$ cat /tmp/newdirectory/password.txt



Here is the Bandit24's password: gb8KRRCsshuZXI0tUuR6ypOFjiZbf3G8

Bandit Level 24 → Level 25

https://overthewire.org/wargames/bandit/bandit25.html

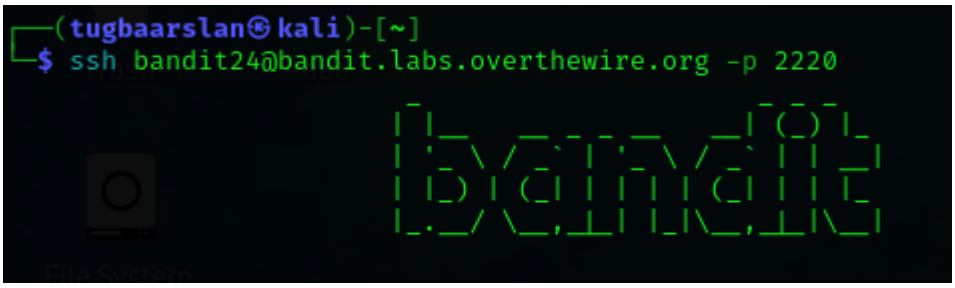
Level Goal

A daemon is listening on port 30002 and will give you the password for bandit25 if given the password for bandit24 and a secret numeric 4-digit pincode. There is no way to retrieve the pincode except by going through all of the 10000 combinations, called brute-forcing.
You do not need to create new connections each time

Password: gb8KRRCsshuZXI0tUuR6ypOFjiZbf3G8

Host: bandit.labs.overthewire.org

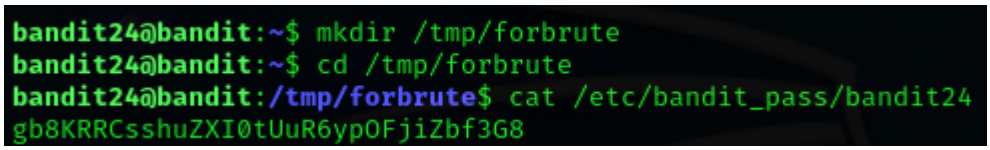
Port: 2220



> *Firstly, use this command and then write bandit24's password:*

$ ssh -p 2220

gb8KRRCsshuZXI0tUuR6ypOFjiZbf3G8



> *Then, run these commands.*

$ mkdir /tmp/forbrute

$ cd /tmp/forbrute

$ cat /etc/bandit_pass/bandit24

> *Then, create a file.*

$ vim brute.sh

> *Write this script inside.*

#!/bin/bash

```
#!/bin/bash

bandit24=gb8KRRCsshuZXI0tUuR6ypOFjiZbf3G8

for pin in {0000..9999}; do
    echo "$bandit24 $pin"
done | nc localhost 30002
```

bandit24=gb8KRRCsshuZXI0tUuR6ypOFjiZbf3G8

for pin in {0000..9999}; do echo “$bandit24 $pin”done | nc localhost 30002

```
bandit24@bandit:/tmp/forbrute$ chmod 777 brute.sh
```

```
bandit24@bandit:/tmp/forbrute$ chmod +x ./brute.sh
```

> *You can use one of these commands.*

$ chmod 777 brute.sh

> *or*

$ chmod +x ./brute.sh

```
bandit24@bandit:/tmp/forbrute$ ./brute.sh
I am the pincode checker for user bandit25. Please enter the password for user bandit24 and the secret pincode on a
ine, separated by a space.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
```

> *Then, write this command.*

$ ./brute.sh

> *Brute Force attack has begun.*

```
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Correct!
The password of user bandit25 is iCi86ttT4KSNe1armKiwbQNmB3YJP3q4
```

> *Password found.*

Here is the Bandit25’s password: iCi86ttT4KSNe1armKiwbQNmB3YJP3q4

Bandit Level 25 → Level 26

https://overthewire.org/wargames/bandit/bandit26.html

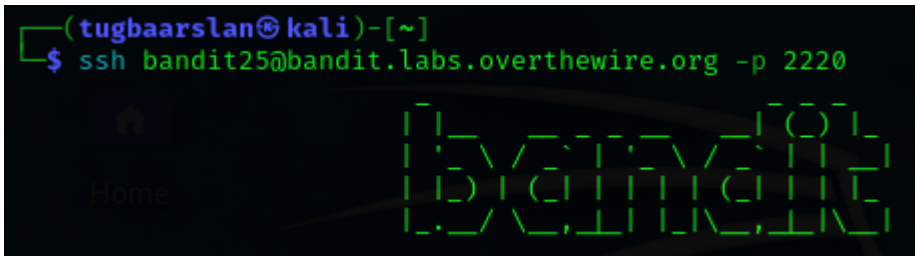
Level Goal

Logging in to bandit26 from bandit25 should be fairly easy… The shell for user bandit26 is not **/bin/bash**, but something else. Find out what it is, how it works and how to break out of it.

Password: iCi86ttT4KSNe1armKiwbQNmB3YJP3q4

Host: bandit.labs.overthewire.org

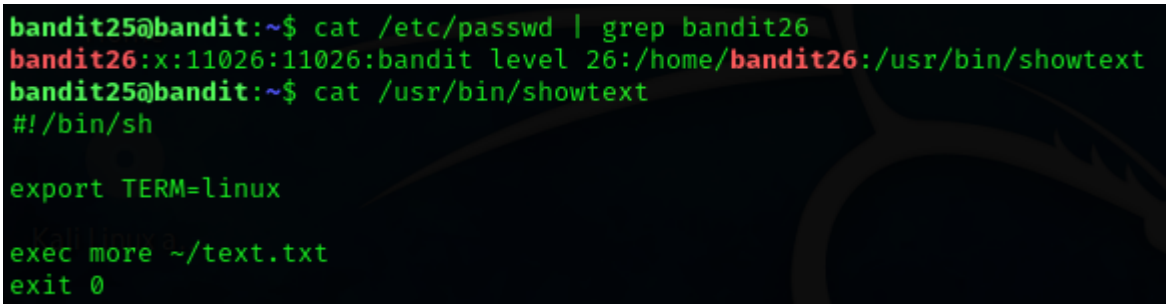
Port: 2220



> *Firstly, use this command and then write bandit25's password:*

$ ssh -p 2220

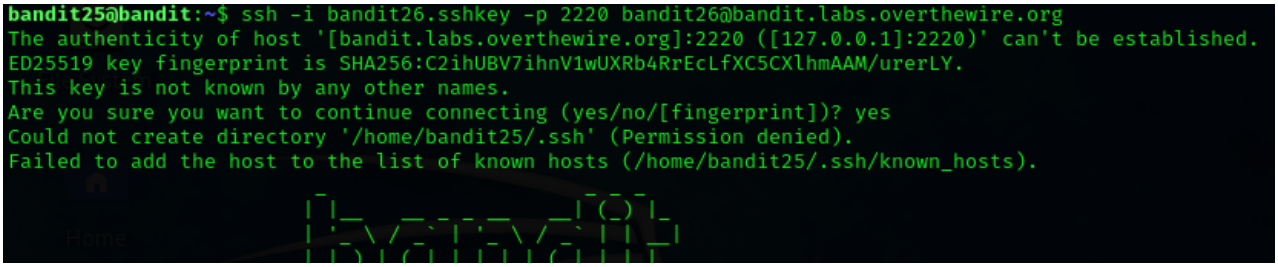
iCi86ttT4KSNe1armKiwbQNmB3YJP3q4



> *Then, run these commands.*

$ cat /etc/passwd | grep bandit26

$ cat /usr/bin/showtext



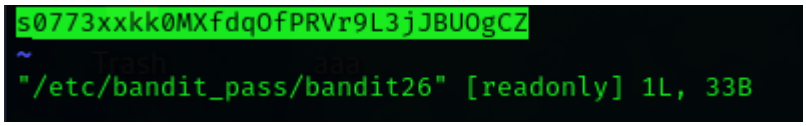
> *Send a connection request with the ssh command. Don't forget to make the terminal a very small window before running this command.*

$ `ssh -i bandit26.sshkey -p 2220 bandit26@bandit.labs.overthewire.org`

> *Switch to vi mode by pressing the letter 'v'.*

> *Write this command.*

:e /etc/bandit_pass/bandit26



Here is the Bandit26's password: 0773xxkk0MXfdqOfPRVr9L3jJBUOgCZ

Bandit Level 26 → Level 27

https://overthewire.org/wargames/bandit/bandit27.html

Level Goal

Good job getting a shell! Now hurry and grab the password for bandit27!

Password: 0773xxkk0MXfdqOfPRVr9L3jJBUOgCZ

Host: bandit.labs.overthewire.org

Port: 2220

> *Write this command when you in the vi mode.*

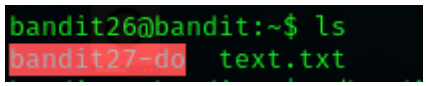
:set shell=/bin/bash

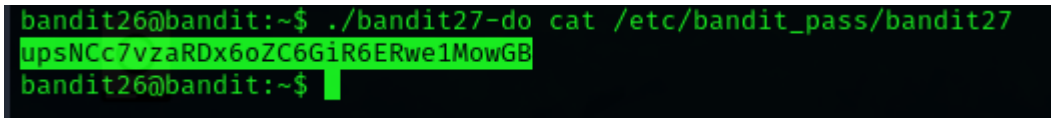
> *Press Enter and then add this command.*

:shell

> *View the contents of the directory.*

$ ls





> *Write this command and find the password.*

./bandit27-do cat /etc/bandit_pass/bandit27

Here is the Bandit27's password: upsNCc7vzaRDx6oZC6GiR6ERwe1MowGB

Bandit Level 27 → Level 28

https://overthewire.org/wargames/bandit/bandit28.html

Level Goal

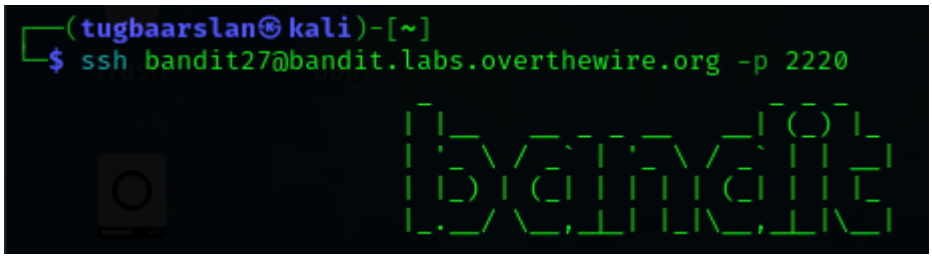
There is a git repository at `ssh://bandit27-git@localhost/home/bandit27-git/repo` via the port `2220`. The password for the user `bandit27-git` is the same as for the user `bandit27`.

Clone the repository and find the password for the next level.

Password: upsNCc7vzaRDx6oZC6GiR6ERwe1MowGB

Host: bandit.labs.overthewire.org

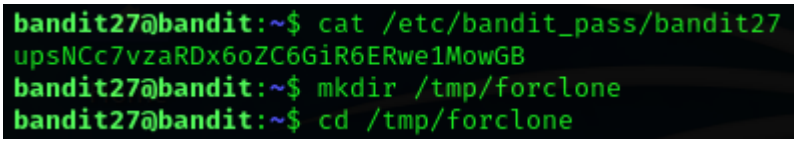
Port: 2220



> *Firstly, use this command and then write bandit27's password:*

$ ssh -p 2220

upsNCc7vzaRDx6oZC6GiR6ERwe1MowGB

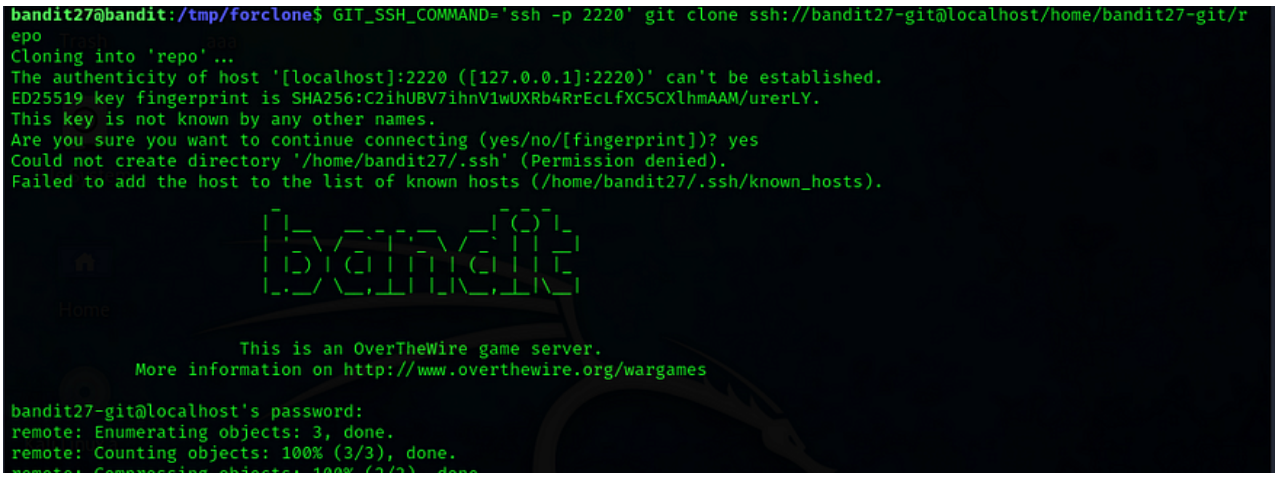


> *Write these commands.*

$ cat /etc/bandit_pass/bandit27

$ mkdir /tmp/forclone

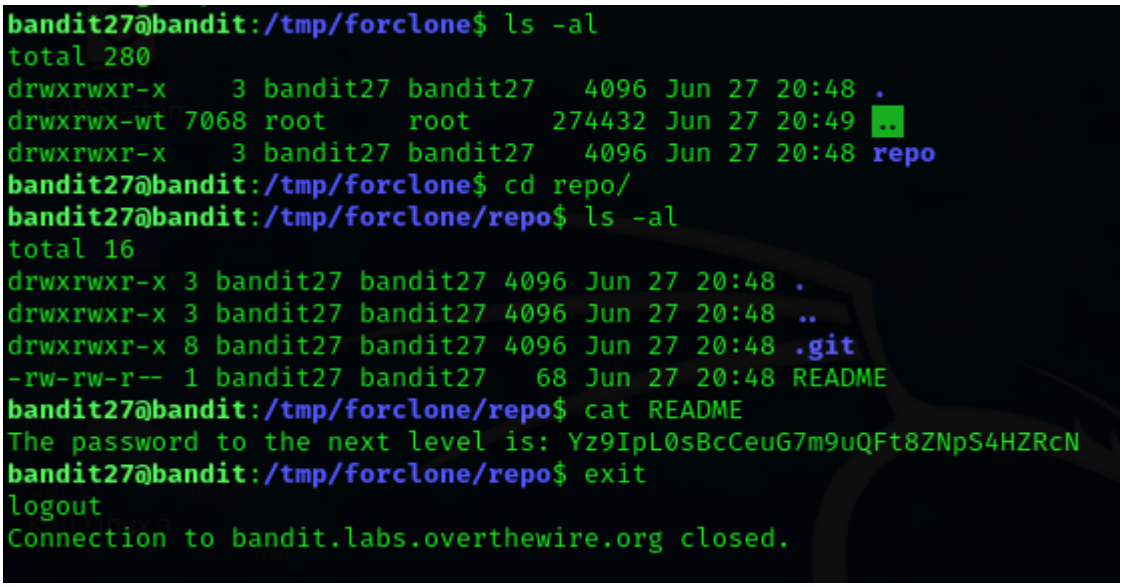
$ cd /tmp/forclone



> *Type the command required to clone git and enter the password bandit27.*

$ GIT_SSH_COMMAND='ssh -p 2220' git clone ssh://bandit27-git@localhost/home/bandit27-git/repo

upsNCc7vzaRDx6oZC6GiR6ERwe1MowGB



> *Write these commands and find the password.*

$ ls -al

$ cd repo/

$ ls -al

$ cat README

Here is the Bandit28's password: Yz9IpL0sBcCeuG7m9uQFt8ZNpS4HZRcN

Bandit Level 28 → Level 29

https://overthewire.org/wargames/bandit/bandit29.html

Level Goal

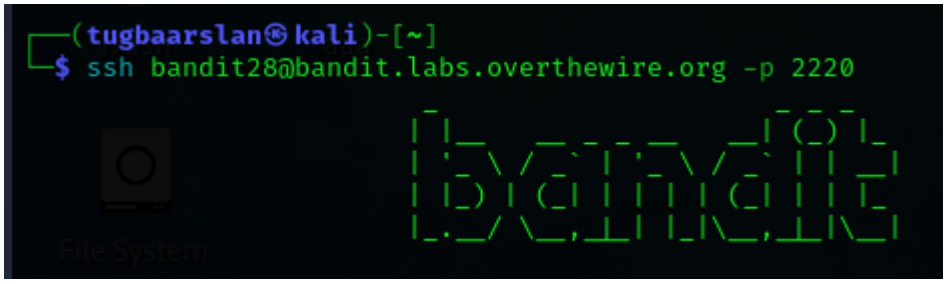
There is a git repository at `ssh://bandit28-git@localhost/home/bandit28-git/repo` via the port `2220`. The password for the user `bandit28-git` is the same as for the user `bandit28`.

Clone the repository and find the password for the next level.

Password: Yz9IpL0sBcCeuG7m9uQFt8ZNpS4HZRcN

Host: bandit.labs.overthewire.org

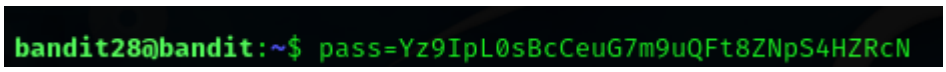
Port: 2220



> *Firstly, use this command and then write bandit28's password:*

$ ssh -p 2220

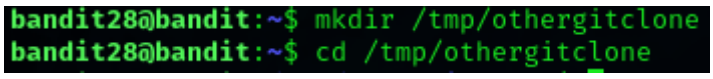
Yz9IpL0sBcCeuG7m9uQFt8ZNpS4HZRcN



> *Write this command.*

$ pass=Yz9IpL0sBcCeuG7m9uQFt8ZNpS4HZRcN

> *Type these commands too.*



$ mkdir /tmp/othergitclone

$ cd /tmp/othergitclone

```
bandit28@bandit:/tmp/othergitclone$ GIT_SSH_COMMAND='ssh -p 2220' git clone ssh://bandit28-git@localhost/home/bandit28-
git/repo
Cloning into 'repo'...
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])? yes
Could not create directory '/home/bandit28/.ssh' (Permission denied).
Failed to add the host to the list of known hosts (/home/bandit28/.ssh/known_hosts).
                         _                     _ _ _
                        | |__   __ _ _ __   __| (_) |_
                        | '_ \ / _` | '_ \ / _` | | __|
                        | |_) | (_| | | | | (_| | | |_
                        |_.__/ \__,_|_| |_|\__,_|_|\__|


                      This is an OverTheWire game server.
            More information on http://www.overthewire.org/wargames

bandit28-git@localhost's password:
remote: Enumerating objects: 9, done.
remote: Counting objects: 100% (9/9), done.
remote: Compressing objects: 100% (6/6), done.
```

> *Type the command required to clone git and enter the password bandit28.*

$ GIT_SSH_COMMAND='ssh -p 2220' git clone ssh://bandit28-git@localhost/home/bandit28-git/repo

Yz9IpL0sBcCeuG7m9uQFt8ZNpS4HZRcN

```
bandit28@bandit:/tmp/othergitclone$ ls -al
total 280
drwxrwxr-x    3 bandit28 bandit28   4096 Jun 27 22:01 .
drwxrwx-wt 7117 root     root     274432 Jun 27 22:02 ..
drwxrwxr-x    3 bandit28 bandit28   4096 Jun 27 22:01 repo
bandit28@bandit:/tmp/othergitclone$ cd repo/
bandit28@bandit:/tmp/othergitclone/repo$ ls -al
total 16
drwxrwxr-x 3 bandit28 bandit28 4096 Jun 27 22:01 .
drwxrwxr-x 3 bandit28 bandit28 4096 Jun 27 22:01 ..
drwxrwxr-x 8 bandit28 bandit28 4096 Jun 27 22:01 .git
-rw-rw-r-- 1 bandit28 bandit28  111 Jun 27 22:01 README.md
bandit28@bandit:/tmp/othergitclone/repo$ cat README.md
# Bandit Notes
Some notes for level29 of bandit.

## credentials

- username: bandit29
- password: xxxxxxxxxx
```

> *Write these commands.*

$ ls -al

$ cd repo/

$ ls -al

$ cat README.md

```
bandit28@bandit:/tmp/othergitclone/repo$ git log
commit ad9a337071c5e3d4509559d36128b38a0e5571f1 (HEAD → master, origin/master, origin/HEAD)
Author: Morla Porla <morla@overthewire.org>
Date:   Thu Jun 20 04:07:12 2024 +0000

    fix info leak

commit 229f6001e1ff407bb935b82a94c6749e41a0693e
Author: Morla Porla <morla@overthewire.org>
Date:   Thu Jun 20 04:07:12 2024 +0000

    add missing data

commit ea882192c25642e69627b13179f9fb98f409ed5d
Author: Ben Dover <noone@overthewire.org>
Date:   Thu Jun 20 04:07:12 2024 +0000

    initial commit of README.md
bandit28@bandit:/tmp/othergitclone/repo$ git branch
* master
bandit28@bandit:/tmp/othergitclone/repo$ git checkout 229f6001e1ff407bb935b82a94c6749e41a0693e
Note: switching to '229f6001e1ff407bb935b82a94c6749e41a0693e'.

You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by switching back to a branch.
```

> *Since we cannot view the password, type these commands. Then add the data in one of them to the 'checkout' command.*

$ git log

$ git branch

$ git checkout 229f6001e1ff407bb935b82a94c6749e41a0693e

```
bandit28@bandit:/tmp/othergitclone/repo$ cat README.md
# Bandit Notes
Some notes for level29 of bandit.

## credentials

- username: bandit29
- password: 4pT1t5DENaYuqnqvadYs1oE4QLCdjmJ7
```

> *Write this command and find the password.*

$ cat README.md

Here is the Bandit29's password: 4pT1t5DENaYuqnqvadYs1oE4QLCdjmJ7

Bandit Level 29 → Level 30

https://overthewire.org/wargames/bandit/bandit30.html

Level Goal

There is a git repository at `ssh://bandit29-git@localhost/home/bandit29-git/repo` via the port `2220`. The password for the user `bandit29-git` is the same as for the user `bandit29`.

Clone the repository and find the password for the next level.

Password: 4pT1t5DENaYuqnqvadYs1oE4QLCdjmJ7

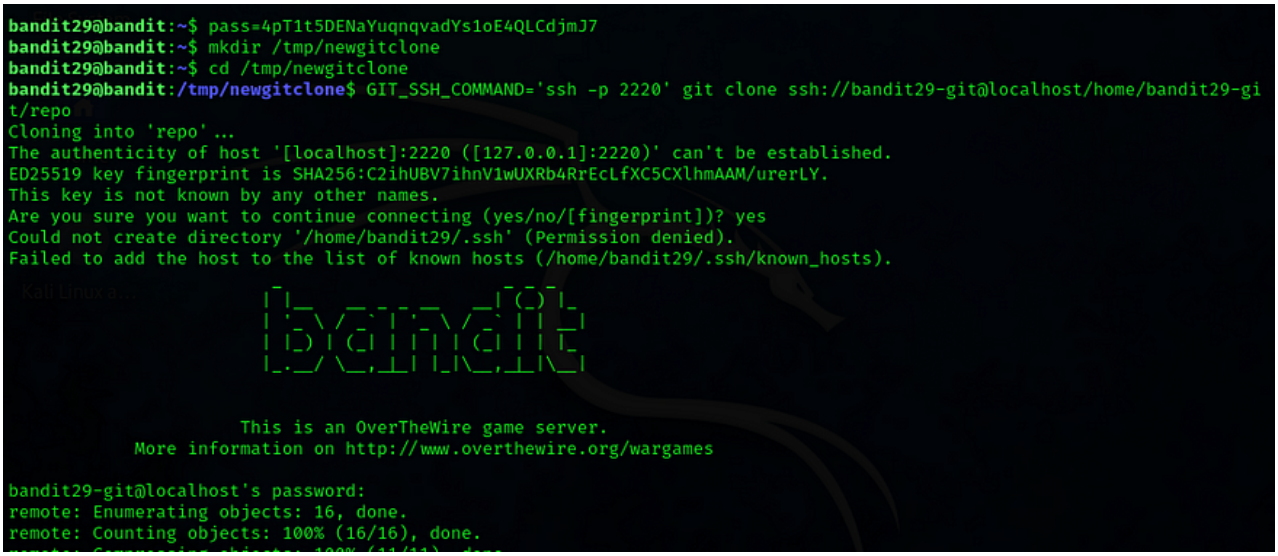
Host: bandit.labs.overthewire.org

Port: 2220

> *Firstly, use this command and then write bandit29's password:*

$ ssh -p 2220

4pT1t5DENaYuqnqvadYs1oE4QLCdjmJ7



> *Write these commands. Then, enter the password of Bandit29.*

$ pass=4pT1t5DENaYuqnqvadYs1oE4QLCdjmJ7

$ mkdir /tmp/newgitclone

$ cd /tmp/newgitclone

$ GIT_SSH_COMMAND='ssh -p 2220' git clone ssh://bandit29-git@localhost/home/bandit29-git/repo

4pT1t5DENaYuqnqvadYs1oE4QLCdjmJ7

```
bandit29@bandit:/tmp/newgitclone$ ls -al
total 280
drwxrwxr-x    3 bandit29 bandit29   4096 Jun 27 22:20 .
drwxrwx-wt 7136 root     root     274432 Jun 27 22:22 ..
drwxrwxr-x    3 bandit29 bandit29   4096 Jun 27 22:20 repo
bandit29@bandit:/tmp/newgitclone$ cd repo
bandit29@bandit:/tmp/newgitclone/repo$ ls
README.md
bandit29@bandit:/tmp/newgitclone/repo$ cat README.md
# Bandit Notes
Some notes for bandit30 of bandit.

## credentials

- username: bandit30
- password: <no passwords in production!>
```

> *Write these commands.*

$ ls -al

$ cd repo

$ ls

$ cat README.md

```
bandit29@bandit:/tmp/newgitclone/repo$ git branch -r
  origin/HEAD -> origin/master
  origin/dev
  origin/master
  origin/sploits-dev
```

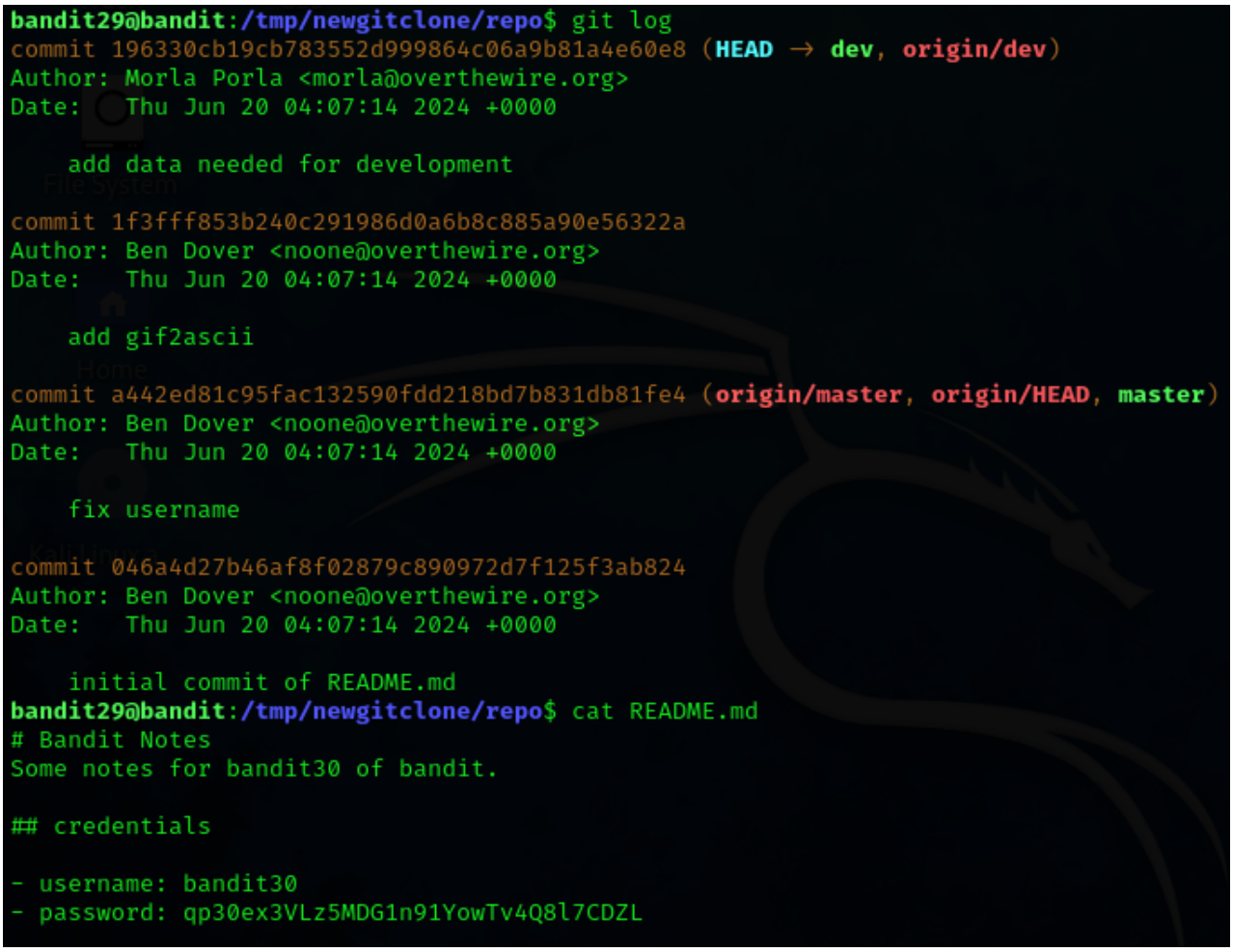
> *Type these commands to view the password.*

$ git branch -r

```
bandit29@bandit:/tmp/newgitclone/repo$ git checkout dev
branch 'dev' set up to track 'origin/dev'.
Switched to a new branch 'dev'
```

> *Add this command as well.*

$ git checkout dev



> *You will get the password when you review and try again.*

$ git log

$ cat README.md

Here is the Bandit30's password: qp30ex3VLz5MDG1n91YowTv4Q8l7CDZL

Bandit Level 30 → Level 31

https://overthewire.org/wargames/bandit/bandit31.html

Level Goal

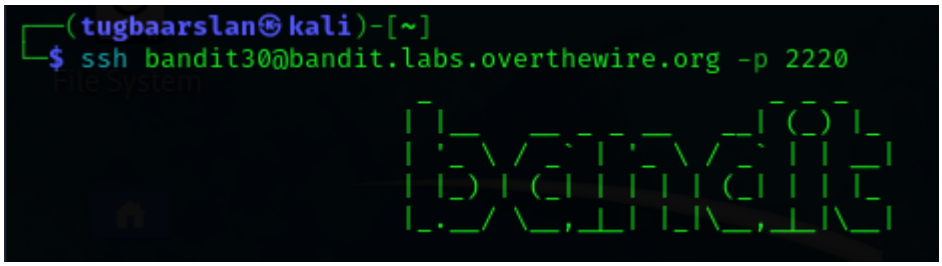
There is a git repository at `ssh://bandit30-git@localhost/home/bandit30-git/repo` via the port `2220`. The password for the user `bandit30-git` is the same as for the user `bandit30`.

Clone the repository and find the password for the next level.

Password: qp30ex3VLz5MDG1n91YowTv4Q8l7CDZL

Host: bandit.labs.overthewire.org

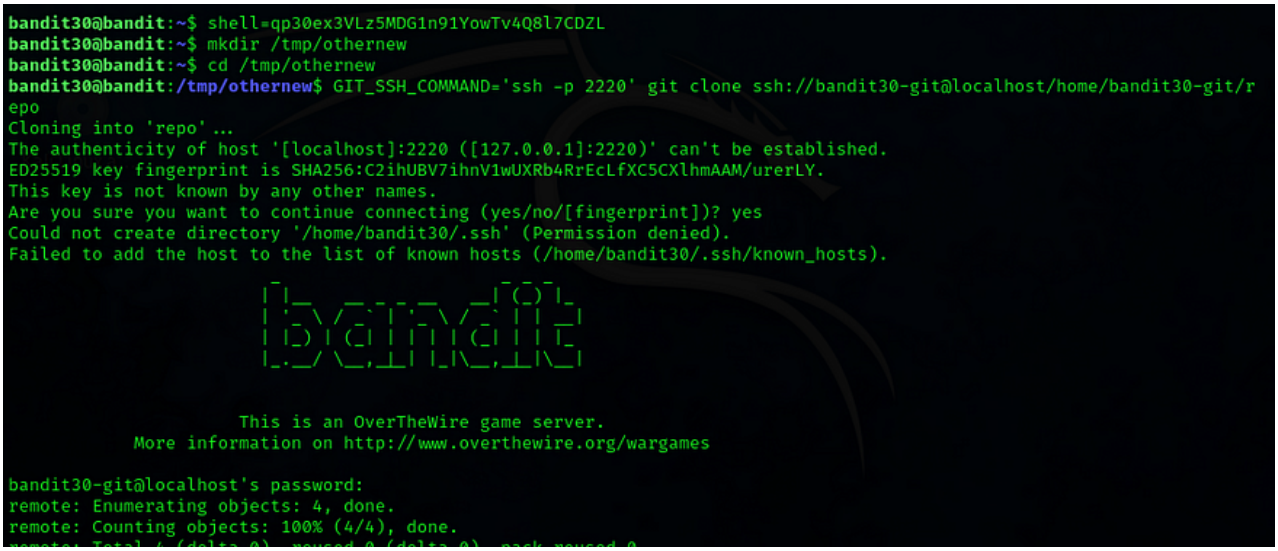
Port: 2220



> *Firstly, use this command and then write bandit30's password:*

$ ssh -p 2220

qp30ex3VLz5MDG1n91YowTv4Q8l7CDZL



> *Write these commands. Then, enter the password of Bandit30.*

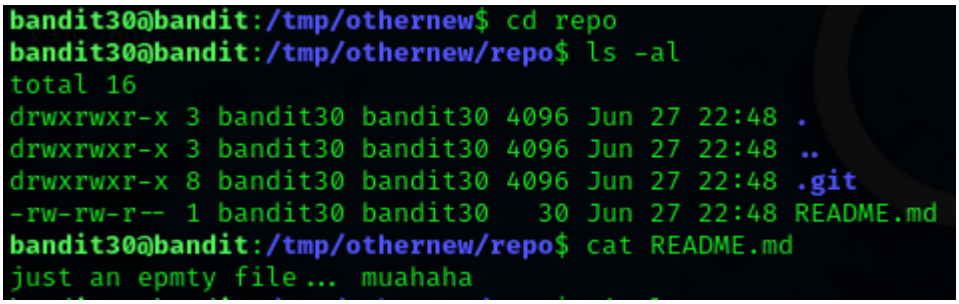
$ shell=qp30ex3VLz5MDG1n91YowTv4Q8l7CDZL

$ mkdir /tmp/othernew

$ cd /tmp/othernew

$ GIT_SSH_COMMAND='ssh -p 2220' git clone ssh://bandit30-git@localhost/home/bandit30-git/repo

qp30ex3VLz5MDG1n91YowTv4Q8l7CDZL



> *Write these commands.*

$ cd repo

$ ls -al

$ cat README.md

> *Type these commands and find the password.*

$ git tag

$ git show secret

Here is the Bandit31's password: fb5S2xb7bRyFmAvQYQGEqsbhVyJqhnDy

Bandit Level 31 → Level 32

https://overthewire.org/wargames/bandit/bandit32.html

Level Goal

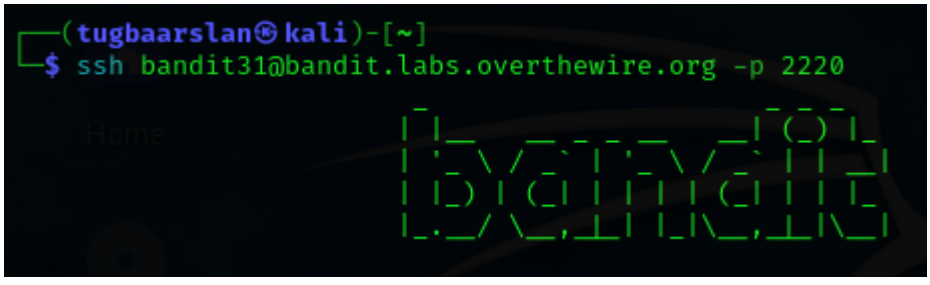
There is a git repository at `ssh://bandit31-git@localhost/home/bandit31-git/repo` via the port `2220`. The password for the user `bandit31-git` is the same as for the user `bandit31`.

Clone the repository and find the password for the next level.

Password: fb5S2xb7bRyFmAvQYQGEqsbhVyJqhnDy

Host: bandit.labs.overthewire.org

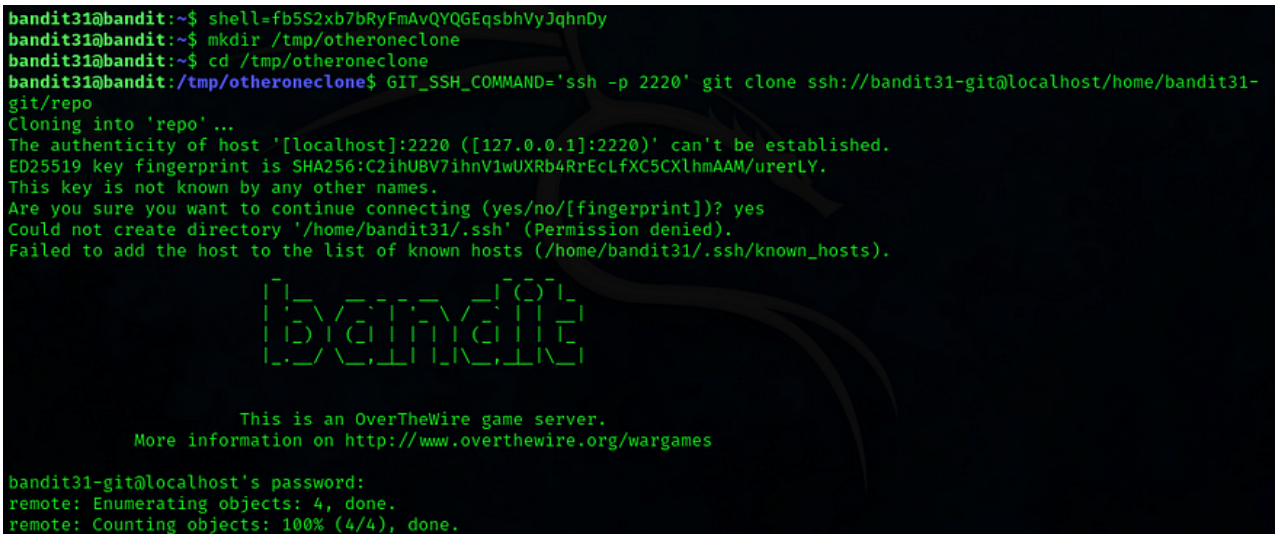
Port: 2220



> *Firstly, use this command and then write bandit31's password:*

$ ssh -p 2220

fb5S2xb7bRyFmAvQYQGEqsbhVyJqhnDy



> *Write these commands. Then, enter the password of Bandit31.*

$ shell=fb5S2xb7bRyFmAvQYQGEqsbhVyJqhnDy

$ mkdir /tmp/otheroneclone

$ cd /tmp/otheroneclone

$ GIT_SSH_COMMAND=’ssh -p 2220' git clone ssh://bandit31-git@localhost/home/bandit31-git/repo

fb5S2xb7bRyFmAvQYQGEqsbhVyJqhnDy

```
bandit31@bandit:/tmp/otheroneclone$ ls -al
total 284
drwxrwxr-x    3 bandit31 bandit31   4096 Jun 27 23:10 .
drwxrwx-wt 7167 root     root     278528 Jun 27 23:11 ..
drwxrwxr-x    3 bandit31 bandit31   4096 Jun 27 23:11 repo
bandit31@bandit:/tmp/otheroneclone$ cd repo
bandit31@bandit:/tmp/otheroneclone/repo$ ls -al
total 20
drwxrwxr-x 3 bandit31 bandit31 4096 Jun 27 23:11 .
drwxrwxr-x 3 bandit31 bandit31 4096 Jun 27 23:10 ..
drwxrwxr-x 8 bandit31 bandit31 4096 Jun 27 23:11 .git
-rw-rw-r-- 1 bandit31 bandit31    6 Jun 27 23:11 .gitignore
-rw-rw-r-- 1 bandit31 bandit31  147 Jun 27 23:11 README.md
bandit31@bandit:/tmp/otheroneclone/repo$ cat .gitignore
*.txt
bandit31@bandit:/tmp/otheroneclone/repo$ cat README.md
This time your task is to push a file to the remote repository.

Details:
    File name: key.txt
    Content: 'May I come in?'
    Branch: master

bandit31@bandit:/tmp/otheroneclone/repo$ git branch
* master
bandit31@bandit:/tmp/otheroneclone/repo$ ls -al
total 20
drwxrwxr-x 3 bandit31 bandit31 4096 Jun 27 23:11 .
drwxrwxr-x 3 bandit31 bandit31 4096 Jun 27 23:10 ..
drwxrwxr-x 8 bandit31 bandit31 4096 Jun 27 23:11 .git
-rw-rw-r-- 1 bandit31 bandit31    6 Jun 27 23:11 .gitignore
-rw-rw-r-- 1 bandit31 bandit31  147 Jun 27 23:11 README.md
bandit31@bandit:/tmp/otheroneclone/repo$ rm .gitignore
bandit31@bandit:/tmp/otheroneclone/repo$ echo "May I come in?" > key.txt
bandit31@bandit:/tmp/otheroneclone/repo$ cat key.txt
May I come in?
bandit31@bandit:/tmp/otheroneclone/repo$ git add key.txt
bandit31@bandit:/tmp/otheroneclone/repo$ git commit -m "Added key.txt"
[master e6c66ac] Added key.txt
 1 file changed, 1 insertion(+)
 create mode 100644 key.txt
```

> *Write these commands.*

$ ls -al

$ cd repo

$ ls -al

$ cat .gitignore

$ cat README.md

$ git branch

$ ls -al

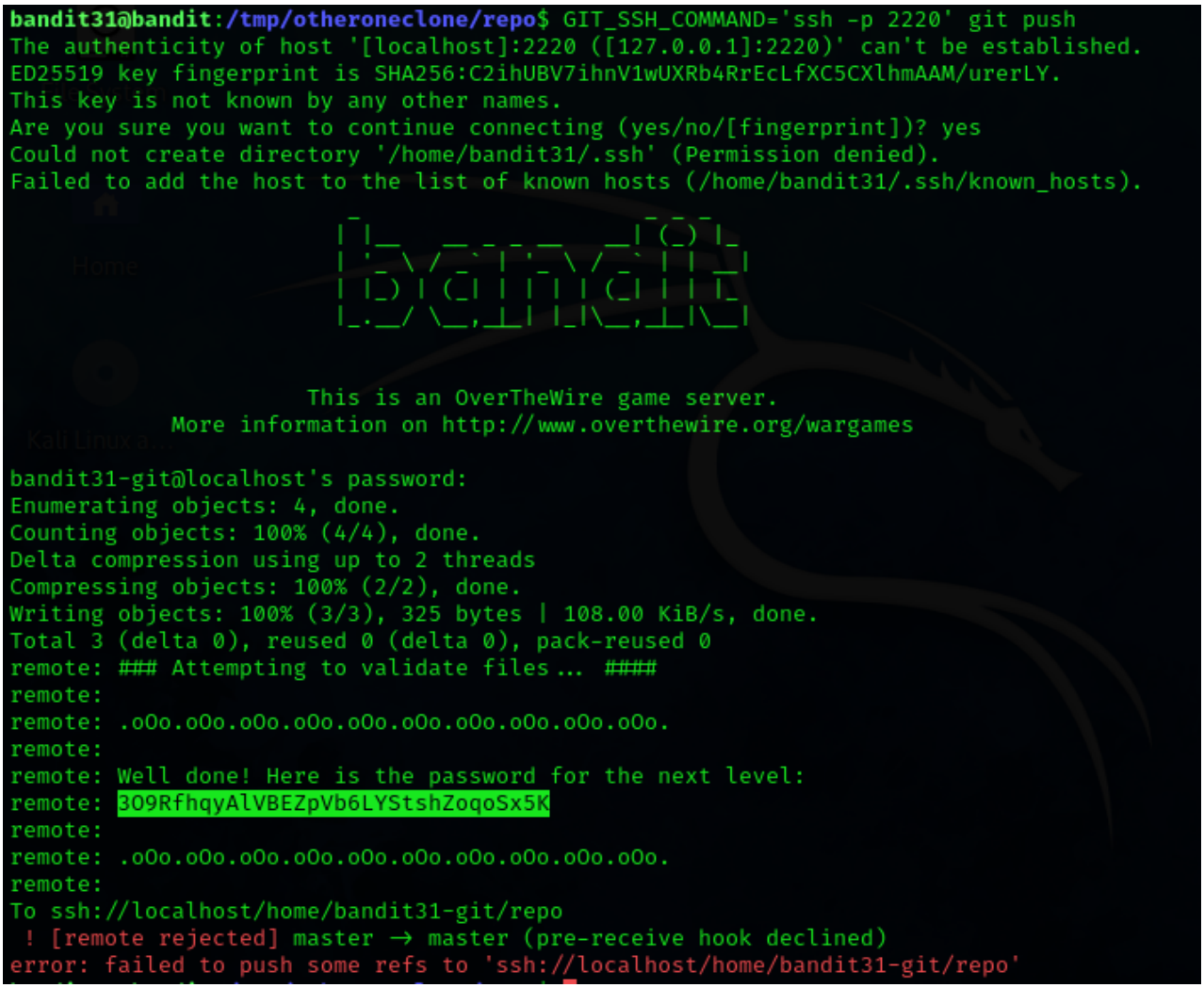
$ rm .gitignore

$ echo “May I come in?” > key.txt

$ cat key.txt

$ git add key.txt

$ git commit -m “Added key.txt”



> *Type the command needed to run git push and enter the password bandit31. So you can find the new password.*

$ GIT_SSH_COMMAND=’ssh -p 2220' git push

fb5S2xb7bRyFmAvQYQGEqsbhVyJqhnDy

Here is the Bandit32’s password: 3O9RfhqyAlVBEZpVb6LYStshZoqoSx5K

Bandit Level 32 → Level 33

https://overthewire.org/wargames/bandit/bandit33.html

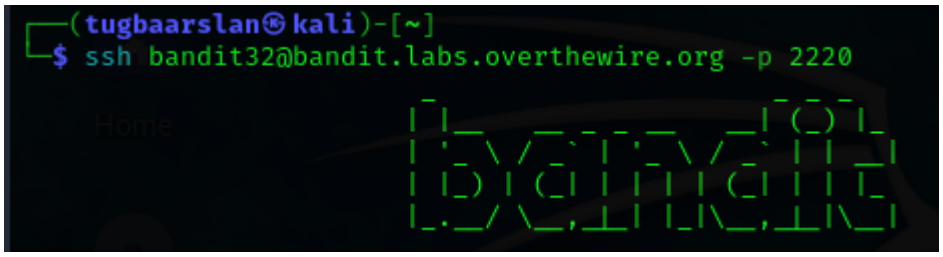
Level Goal

After all this `git` stuff, it's time for another escape. Good luck!

Password: 3O9RfhqyAlVBEZpVb6LYStshZoqoSx5K

Host: bandit.labs.overthewire.org

Port: 2220

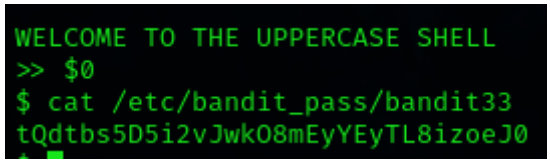


> *Firstly, use this command and then write bandit32's password:*

$ ssh -p 2220

3O9RfhqyAlVBEZpVb6LYStshZoqoSx5K

> *Type these commands and find the password.*



>> $0

$ cat /etc/bandit_pass/bandit33

Here is the Bandit33's password: tQdtbs5D5i2vJwkO8mEyYEyTL8izoeJ0

Congratulations, everything is done! Thanks for reading my work.

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