Lab Project

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Bandit Level 0 → Level 1

ssh bandit0@bandit.labs.overthewire.org -p 2220**(put this to connect to the game server on port 2220)**

(just change the bandit0 ->1->2... to access further levels)

Visit

Note: -for level 0 the password was bandit0

Steps: ls->cat readme

Password: ZjLjTmM6FvvyRnrb2rfNWOZOTa6ip5If (save the password in your notes for level1).

Exit

Note: Once connected to the server, you are on the Bandit Linux server

```
bandit0@bandit:~$ ls
readme
bandit0@bandit:~$ cat readme
Congratulations on your first steps into the bandit game!!
Please make sure you have read the rules at https://overthewire.org/rules/
If you are following a course, workshop, walkthrough or other educational activity,
please inform the instructor about the rules as well and encourage them to
contribute to the OverTheWire community so we can keep these games free!

The password you are looking for is: ZjLjTmM6FvvyRnrb2rfNWOZOTa6ip5If

bandit0@bandit:~$
```

Bandit Level 1 → Level 2

```
bandit0@bandit:~$ exit
logout
Connection to bandit.labs.overthewire.org closed.

C:\Users\3520 i5 16GB>ssh bandit1@bandit.labs.overthewire.org -p 2220
            _                   _     _ _
  | |__   __ _ _ __    __| (_) |_
  | '_ \ / _` | '_ \  / _` | | __|
  | |_) | (_| | | | | (_| | | |_
  |_.__/ \__,_|_| |_|\__,_|_|\__|


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

backend: gibson-1
bandit1@bandit.labs.overthewire.org's password:
Permission denied, please try again.
bandit1@bandit.labs.overthewire.org's password:
Permission denied, please try again.
bandit1@bandit.labs.overthewire.org's password:
bandit1@bandit.labs.overthewire.org: Permission denied (publickey,password).

C:\Users\3520 i5 16GB>ssh bandit1@bandit.labs.overthewire.org -p 2220
            _                   _     _ _
  | |__   __ _ _ __    __| (_) |_
  | '_ \ / _` | '_ \  / _` | | __|
  | |_) | (_| | | | | (_| | | |_
  |_.__/ \__,_|_| |_|\__,_|_|\__|


            This is an OverTheWire game server.
```

```
backend: gibson-1
bandit1@bandit.labs.overthewire.org's password:

        .----..            .----.            .---
       /'  /   \        ,/' . '|          /. ./|
      /   .     :     ,'  '  ' :        __' '
     .   /  ;.   \   ;   ;     /      /__./ \ : |
     ;  /   ;'        '---'/       --'       \:
     :  |   ;  \   |  |   :        | /---/ \ |    ' '
     |  :  |   |   |.  ;   ;       ;    \  \ ;       |
     .  |  ;   |   '----' |  |   \   ;      |
     '  ;  \;  /   |        '  |   :   \   \  .\  |
      \  \   ',  /   |    '   '  '   \   \   ; \ |
       ;   :     /    '    :   |    :     '  |--"
        \   \  .'     ;    |.'      \    \  ;
     www. `---` ver        '---' he        '---" ire.org


Welcome to OverTheWire!

If you find any problems, please report them to the #wargames channel on
discord or IRC.

--[ Playing the games ]--

  This machine might hold several wargames.
  If you are playing "somegame", then:

    * USERNAMES are somegame0, somegame1, ...
    * Most LEVELS are stored in /somegame/.
    * PASSWORDS for each level are stored in /etc/somegame_pass/.

  Write-access to homedirectories is disabled. It is advised to create a
  working directory with a hard-to-guess name in /tmp/.  You can use the
  command "mktemp -d" in order to generate a random and hard to guess
  directory in /tmp/.  Read-access to both /tmp/ is disabled and to /proc
```

Note: Add the password correctly use copy paste do not leave any spaces in between (the password is hidden it doesn't appear on screen just paste and enter).

```
bandit1@bandit:~$ ls
-
bandit1@bandit:~$ cat /home/bandit1/-
263JGJPfgU6LtdEvgfWU1XP5yac29mFx
bandit1@bandit:~$ exit
logout
Connection to bandit.labs.overthewire.org closed.

C:\Users\3520 i5 16GB>
```

There are Special ways to handle dashed files names you cannot use cat command directly

Like cat – or it will expect you to enter input. So use full path.

Steps: ls->cat/home/bandit1/-

Password: 263JGJPfgU6LtdEvgfWU1XP5yac29mFx (for level2)

Exit

Bandit Level 2 → Level 3

Note: it has spaces in its name. Linux treats spaces as separators between arguments, so you can't just do:

cat --spaces in this filename--

…because the shell thinks you're trying to read multiple files called --spaces, in, this, etc.

Steps: ls->cat ". /--spaces in this filename--"

Password: MNk8KNH3Usiio41PRUEoDFPqfxLPlSmx (for level3)

exit

Bandit Level 3 → Level 4

```
C:\Users\3520 i5 16GB>ssh bandit3@bandit.labs.overthewire.org -p 2220
               _                     _ _ _
              | |__   __ _ _ __   __| (_) |_
              | '_ \ / _` | '_ \ / _` | | __|
              | |_) | (_| | | | | (_| | | |_
              |_.__/ \__,_|_| |_|\__,_|_|\__|

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

backend: gibson-1
bandit3@bandit.labs.overthewire.org's password:

        ____..           ____               .---.
       /'   / \         ,/'   .`|          /. ./|
      /    .  :        ,'   .'  |        __.'  ,'.
     .    /  ;. \     ;   ;   /       /__._/\ : |
    .    ;  /  `; ;    `---./     ,'   __'.  \'
    ;    |  ;  \ ; |       :       | /___/ \ \  |
    |    :  |;  ;  ;.  ,---'        |  |   '\  ;  |
    :    ; \; /  |  :   |  \         '   \  ; .  |
     \   \  ;  /  |  |   |   \       \   \  ;  :  |
      ;   ;  \ ; /   |   :   |        \   \  ;  \  ;
       \   \ .'    ;  |.'         \    \  ;  |--"
    www.  `---` ver   '---' he     '---" ire.org

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discord or IRC.

--[ Playing the games ]--
```

```
bandit3@bandit:~$ ls
inhere
bandit3@bandit:~$ cd inhere
bandit3@bandit:~/inhere$ ls -a
.   ..    ...Hiding-From-You
bandit3@bandit:~/inhere$ cd ...Hiding-From-You
-bash: cd: ...Hiding-From-You: Not a directory
bandit3@bandit:~/inhere$ cat ...Hiding-From-You
2WmrDFRmJIq3IPxneAaMGhap0pFhF3NJ
bandit3@bandit:~/inhere$ exit
logout
Connection to bandit.labs.overthewire.org closed.

C:\Users\3520 i5 16GB>
```

Note: After the ls command we found a directory name inhere.

Inside that directory we found hidden files

ls -a command is used to find files hidden from us (files whose name starts with

(.)dot)

Steps: ls->cd inhere->ls -a ->cat …Hiding-From-You

Password: 2WmrDFRmJIq3IPxneAaMGhap0pFhF3NJ (for level 4)

Bandit Level 4 → Level 5

```
bandit4@bandit:~$ ls
inhere
bandit4@bandit:~$ cd inhere
bandit4@bandit:~/inhere$ ls -a
.   ..   -file00  -file01  -file02  -file03  -file04  -file05  -file06  -file07  -file08  -file09
bandit4@bandit:~/inhere$ cat ./-file00
cat ./-file01
...
\◆G◆I◆d◆◆ ◆`"◆◆g◆◆◆    '◆◆◆◆◆ʃ◆Y◆◆:bl◆A◆◆t◆1◆v%gM◆◆◆◆◆◆...: command not found
bandit4@bandit:~/inhere$ cat ./-file00
\◆G◆I◆d◆◆ ◆`"◆◆g◆◆◆    '◆◆◆◆◆ʃbandit4@bandit:~/inhere$ cat ./-file01
◆Y◆◆:bl◆A◆◆t◆1◆v%gM◆◆◆◆◆◆bandit4@bandit:~/inhere$ cat ./-file02
◆
 ◆◆u.Tqʃ`h◆◆◆Ee◆+◆<◆◆"!^"◆bandit4@bandit:~/inhere$ cat ./-file03
Jˊ٩◆◆◆◆>jŠʃ◆◆C◆f◆w◆◆f>◆<?◆bandit4@bandit:~/inhere$ cat ./-file04
◆>◆◆@F◆◆kYq~Jjs◆o◆◆;◆◆◆6◆◆◆d◆Hbandit4@bandit:~/inhere$ cat ./-file05
@◆9◆◆I◆}◆v¸◆◆C◆◆◆◆◆Cy>f◆|7◆`ibandit4@bandit:~/inhere$ cat ./-file06
◆}
  ◆ʊ◆ᵺ◆Hz◆◆◆◆1◆Uk◆U◆◆◆켄◆Ubandit4@bandit:~/inhere$ cat ./-file07
4oQYVPkxZOOEOO5pTW81FB8j8lxXGUQw
bandit4@bandit:~/inhere$ cat ./-file08
x◆◆◆◆/vSj◆5f`}◆3Y◆ń◆◆=9]bandit4@bandit:~/inhere$
```

Note: Files that start with - are tricky in Linux because many commands think - means an option, not a filename.

- For example, cat -file00 would fail because Linux thinks -file00 is a command option

In here we have several files in there inhere directory we checked all until we get the password in -file07

Steps: ls ->cd inhere->ls -a-> cat ./-file00

Password: 4oQYVPkxZOOEOO5pTW81FB8j8lxXGUQw (for level 5)

Bandit Level 5 → Level 6

```
C:\Users\3520 i5 16GB>ssh bandit5@bandit.labs.overthewire.org -p 2220



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

backend: gibson-1
bandit5@bandit.labs.overthewire.org's password:




                www.  `---` ver      '---' he       '---" ire.org
```

```
bandit5@bandit:~$ ls
inhere
bandit5@bandit:~$ cd inhere
bandit5@bandit:~/inhere$ ls -a
.   maybehere00  maybehere02  maybehere04  maybehere06  maybehere08  maybehere10  maybehere12  maybehere14  maybehere16  maybehere18
..  maybehere01  maybehere03  maybehere05  maybehere07  maybehere09  maybehere11  maybehere13  maybehere15  maybehere17  maybehere19
bandit5@bandit:~/inhere$ find . -type f -size 1033c ! -executable
./maybehere07/.file2
bandit5@bandit:~/inhere$ file ./maybehere07/.file2
./maybehere07/.file2: ASCII text, with very long lines (1000)
bandit5@bandit:~/inhere$ cat ./maybehere07/.file2
HWasnPhtq9AVKe0dmk45nxy20cvUa6EG
```

Note: maybehere00.. are directories which has several files inside it.

Steps: ls -> cd inhere-> ls -a-> find . -type f -size 1033c ! -executable

Passwords: HWasnPhtq9AVKe0dmk45nxy20cvUa6EG (level 6)

Bandit Level 6 → Level 7

```
C:\Users\3520 i5 16GB>ssh bandit6@bandit.labs.overthewire.org -p 2220

                        _                   _     _ _
                       | |__   __ _ _ __   __| (_) |_
                       | '_ \ / _` | '_ \ / _` | | __|
                       | |_) | (_| | | | | (_| | | |_
                       |_.__/ \__,_|_| |_|\__,_|_|\__|


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

backend: gibson-1
bandit6@bandit.labs.overthewire.org's password:



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discord or IRC.

--[ Playing the games ]--

  This machine might hold several wargames.
  If you are playing "somegame", then:

    * USERNAMES are somegame0, somegame1, ...
```

```
bandit6@bandit:~$ ls
bandit6@bandit:~$ find /home -user bandit7 -group bandit6 -size 33c 2>/dev/null
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
bandit6@bandit:~$
```

Note:

find

- The Linux command used to search for files and directories based on certain criteria.

/home

- The directory where the search starts.
- /home contains the user directories (like /home/bandit0, /home/bandit1, …).

-user bandit7

- Only find files owned by the user bandit7.
- Skips files owned by other users.

-group bandit6

- Only find files belonging to the group bandit6.
- Skips files in other groups.

-size 33c

- Only find files with exactly 33 bytes.
- c stands for bytes (k=kilobytes, M=megabytes, etc.).

2>/dev/null

- Suppresses error messages like "Permission denied."
- 2> → redirects standard error (stderr)
- /dev/null → a special place that discards anything sent to it (like a trash bin).

/ → searches **all directories**

Steps: find / -user bandit7 -group bandit6 -size 33c 2>/dev/null

Password: morbNTDkSW6jIlUc0ymOdMaLnOlFVAaj (level 7)

Bandit Level 7 → Level 8

Note: grep searches for a pattern in a file

[pattern] → the word or phrase you are looking for

This will print the line(s) containing the word millionth

If I do cat data.txt command

o/p:

Steps: ls->grep "millionth" data.txt

Password: dfwvzFQi4mU0wfNbFOe9RoWskMLg7eEc (level 8)

Bandit Level 8→ Level 9

```
C:\Users\3520 i5 16GB>ssh bandit8@bandit.labs.overthewire.org -p 2220

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

backend: gibson-1
bandit8@bandit.labs.overthewire.org's password:
```

```
bandit8@bandit:~$ ls
data.txt
bandit8@bandit:~$ cat data.txt | less

bandit8@bandit:~$ sort data.txt | uniq -u
4CKMh1JI91bUIZZPXDqGanal4xvAg0JM
bandit8@bandit:~$
```


Note: ort → group duplicates together

uniq -u → print only the lines that appear once

The | (pipe) takes the output of sort and sends it as input to uniq -u

 The output = password

Steps: ls-> sort data.txt | uniq -u

Password: 4CKMh1JI91bUIZZPXDqGanal4xvAg0JM (level 9)

Bandit Level 9→ Level 10

```
bandit9@bandit:~$
bandit9@bandit:~$ ls
data.txt
bandit9@bandit:~$ file data.txt
data.txt: data
bandit9@bandit:~$ strings data.txt | grep "="
========== the
S=s*$u
[=u~]/
hW\=
=}y2|
=RiaT
1j=\
========== password
f=+n
Q========== is%
="K@
n7X=
F<'=
!=v5~6
>u`9J========== FGUW5ilLVJrxX9kMYMmlN4MgbpfMiqey
Fb=G
bandit9@bandit:~$
```

Note: data.txt: data

That means it's not plain text, probably binary or encoded.

So we need to use strings to extract human-readable parts, because the password is hidden inside.

Steps: file data.txt->string data.txt | grep "="

Password: FGUW5ilLVJrxX9kMYMmlN4MgbpfMiqey (level 10)

Bandit Level 10 → Level 11

 Note: base64 --decode data.txt

This converts the Base64-encoded text back into human-readable text.

The output will be the password for Bandit Level 11.

Steps: ls-> file data.txt-> base64 –decode data.txt

Password: dtR173fZKb0RRsDFSGsg2RWnpNVj3qRr (level 11)