

OverTheWire Wargames

Bandit

Level 0:

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.

Bandit Level 0

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.

Commands you may need to solve this level

```
ssh
```

Helpful Reading Material

- [Secure Shell \(SSH\) on Wikipedia](#)
- [How to use SSH on wikiHow](#)

SSH is an encrypted communication that uses TCP/22.

```
ssh bandit0@bandit.labs.overthewire.org -p2220
```

Level 0 - Level 1:

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.

Bandit Level 0 → Level 1

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.

Commands you may need to solve this level

```
ls, cd, cat, file, du, find
```

NH2SXQwcBdpmTEzi3bvBHMM9H66vVXjL

Use this ASCII text as a password for level 1 - level 2.

```
ssh bandit1@bandit.labs.overthewire.org -p2220
```

Level 1 - Level 2:

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

Bandit Level 1 → Level 2

Level Goal

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

Commands you may need to solve this level

ls , cd , cat , file , du , find

Helpful Reading Material

Google Search for "dashed filename"

Advanced Bash-scripting Guide - Chapter 3 - Special Characters

<https://www.webservertalk.com/dashed-filename>

The link above briefly explained the dashed in filename.

Use ls command to list out the files in the home directory.

```
cat < <-filename>
```

```
cat < -
```

Or

```
cat ./<-filename>
```

```
cat ./-
```

```
rRGizSaX8Mk1RTb1CNQoXTcYZWU6lgzi
```

Level 2 - Level 3:

ssh bandit2@bandit.labs.overthewire.org -p 2220

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

Bandit Level 2 → Level 3

Level Goal

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

Commands you may need to solve this level

ls, cd, cat, file, du, find

Helpful Reading Material

Google Search for "spaces in filename"

ls command to list the files

spaces in this filename

To concatenate the file use backslash before the spaces

cat spaces\ in\ this\ filename

The cat command displays the content of a file.

aBZ0W5EmUfAf7kHTQeOwd8bauFJ2lAiG

```
bandit2@bandit:~$ ls
spaces in this filename
bandit2@bandit:~$ file spaces\ in\ this\ filename
spaces in this filename: ASCII text
bandit2@bandit:~$ cat spaces\ in\ this\ filename
aBZ0W5EmUfAf7kHTQeOwd8bauFJ2lAiG
bandit2@bandit:~$ cat spaces\ in\ this\ filename
aBZ0W5EmUfAf7kHTQeOwd8bauFJ2lAiG
```

Level 3 - Level 4:

ssh bandit3@bandit.labs.overthewire.org -p 2220

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

Bandit Level 3 → Level 4

Level Goal

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

Commands you may need to solve this level

ls , cd , cat , file , du , find

Use the find command to find the hidden files in inhere directory.
find command is the most flexible and powerful search tool.

cd inhere

find

.

./hidden

cat ./hidden

2EW7BBsr6aMMoJ2HjW067dm8EgX26xNe

```

bandit3@bandit:~$ ls
inhere
bandit3@bandit:~$ file inhere/
inhere/: directory
bandit3@bandit:~$ cd inhere/
bandit3@bandit:~/inhere$ ls
bandit3@bandit:~/inhere$ ls
bandit3@bandit:~/inhere$ ls -l
total 0
bandit3@bandit:~/inhere$ find
.
./.hidden
bandit3@bandit:~/inhere$ file ./hidden
./hidden: ASCII text
bandit3@bandit:~/inhere$ cat ./hidden
2EW7BBsr6aMMoJ2HjW067dm8EgX26xNe
bandit3@bandit:~/inhere$

```

Level 4 - Level 5:

ssh bandit4@bandit.labs.overthewire.org -p 2220

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.

Bandit Level 4 → Level 5

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.

Commands you may need to solve this level

ls, cd, cat, file, du, find

Use `file ./*` to get all file types in the current directory or use loop, idk how to use loop in bash.

```

bandit4@bandit:~$ ls
inhere
bandit4@bandit:~$ cd inhere/where directory. Tip: if your terminal is messed up, try the "reset" command.
bandit4@bandit:~/inhere$ ls
-file00 -file01 -file02 -file03 -file04 -file05 -file06 -file07 -file08 -file09
bandit4@bandit:~/inhere$ file ./-file00
./-file00: data
bandit4@bandit:~/inhere$ file ./-file01
./-file01: data
bandit4@bandit:~/inhere$ file ./-file02
./-file02: data
bandit4@bandit:~/inhere$ file ./-file03
./-file03: data
bandit4@bandit:~/inhere$ file ./-file04
./-file04: data
bandit4@bandit:~/inhere$ file ./-file05
./-file05: data
bandit4@bandit:~/inhere$ file ./-file06
./-file06: data
bandit4@bandit:~/inhere$ file ./-file07
./-file07: ASCII text
bandit4@bandit:~/inhere$ file ./-file08
./-file08: data
bandit4@bandit:~/inhere$ file ./-file09
./-file09: data
bandit4@bandit:~/inhere$ cat ./-file07
lrIWWI6bB37kxfiCQZqUdOIYfr6eEeqR

```

lrIWWI6bB37kxfiCQZqUdOIYfr6eEeqR

Bandit level 5 - 6

ssh bandit5@bandit.labs.overthewire.org -p 2220

Bandit Level 5 → Level 6

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

Commands you may need to solve this level

ls, cd, cat, file, du, find

use the properties to solve this problem

```
ndit:~/inhere$ find ./ -readable ! -executable -size 1033c  
./maybehere07/.file2  
bandit5@bandit:~/inhere$ cat maybehere07/.file2  
P4L4vucdmLnm8I7Vl7jG1ApGSfjYKqJU
```

-readable = file is readable

! -executable = the file is not executable

-size 1033c = 1033 bytes in size

P4L4vucdmLnm8I7Vl7jG1ApGSfjYKqJU

Level 6 - Level 7 to login

```
ssh bandit6@bandit.labs.overthewire.org -p2220
```

Password: P4L4vucdmLnm8I7VI7jG1ApGSfjYKqJU

Bandit Level 6 → Level 7

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

Commands you may need to solve this level

ls, cd, cat, file, du, find, grep

To search by the user we use -user, -group to show the owner of the group, and -size to search the size.

```
find / -group bandit6 -user bandit7 -size 33c | grep password
```

Or

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

To remove the permission denied messages

It outputs the path of our password /var/lib/dpkg/info/bandit7.password

Move to the directory by using cd /var/lib/dpkg/info/ then cat the file OR
cat /var/lib/dpkg/info/bandit7.password

It displays the password for our next level:

z7WtoNQU2XfjmMtWA8u5rN4vzqu4v99S

Level 7 - 8

ssh bandit7@bandit.labs.overthewire.org -p 2220

Bandit Level 7 → Level 8

Level Goal

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

Commands you may need to solve this level

man, grep, sort, uniq, strings, base64, tr, tar, gzip, bzip2, xxd

In this level, I used grep to filter the **millionth**. Grep is a powerful tool for filtering, you can use other tools to retrieve the password.

```
bandit7@bandit:~$ ls
data.txt
bandit7@bandit:~$ cat data.txt | grep millionth
millionth      TESKZC0XvTetK0S9xNwm25STk5iWrBvP
bandit7@bandit:~$
```

TESKZC0XvTetK0S9xNwm25STk5iWrBvP

Level 8 - 9

Bandit Level 8 → Level 9

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

Commands you may need to solve this level

`grep`, `sort`, `uniq`, `strings`, `base64`, `tr`, `tar`, `gzip`, `bzip2`, `xxd`

Helpful Reading Material

[Piping and Redirection](#)

Use `sort` and `uniq` command

```
bandit8@bandit:~$ ls
data.txt
bandit8@bandit:~$ less data.txt
bandit8@bandit:~$ man sort
bandit8@bandit:~$ man uniq
bandit8@bandit:~$ man sort
bandit8@bandit:~$ sort data.txt | uniq -u
EN632PlfYiZbn3PhVK3XOGSlnInNE00t
bandit8@bandit:~$ man sort
bandit8@bandit:~$ exit
logout
```

EN632PlfYiZbn3PhVK3XOGSlnInNE00t

Level 9 - 10

Bandit Level 9 → Level 10

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.

Commands you may need to solve this level

grep, sort, uniq, strings, base64, tr, tar, gzip, bzip2, xxd

Use strings command and grep to filter the '=' characters

```
bandit9@bandit:~$ strings data.txt | grep ==  
f===== theM  
===== password  
===== is  
===== G7w8LIi6J3kTb8A7j9LgrywtEUlyyp6s
```

G7w8LIi6J3kTb8A7j9LgrywtEUlyyp6s

Level 10 - 11

Bandit Level 10 → Level 11

Level Goal

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

Commands you may need to solve this level

grep, sort, uniq, strings, base64, tr, tar, gzip, bzip2, xxd

Helpful Reading Material

[Base64 on Wikipedia](#)

Use base64 command, -d to decode the base64 data

```
bandit10@bandit:~$ cat data.txt  
VGhlIH8hc3N3b3JkIGlzIDZ6UGV6aUxkUjJSS05kTl1GTmI2b1ZDS3pwaGxYSEJNCg==  
bandit10@bandit:~$ cat data.txt | base64 -d  
The password is 6zPeziLdR2RKNdNYFNb6nVCKzphlXHBM  
bandit10@bandit:~$ man base64  
bandit10@bandit:~$ echo 'VGhlIH8hc3N3b3JkIGlzIDZ6UGV6aUxkUjJSS05kTl1GTmI2b1ZDS3pwaGxYSEJNCg=='  
| base64 -d  
The password is 6zPeziLdR2RKNdNYFNb6nVCKzphlXHBM
```

6zPeziLdR2RKNdNYFNb6nVCKzphlXHBM

Level 11 - 12

Bandit Level 11 → Level 12

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

Commands you may need to solve this level

`grep, sort, uniq, strings, base64, tr, tar, gzip, bzip2, xxd`

Helpful Reading Material

[Rot13 on Wikipedia](#)

Use `tr` to translate the data

```
bandit11@bandit:~$ cat data.txt | tr 'A-Za-z' 'N-ZA-Mn-za-m'
The password is JVNBBFSmZwKKOP0XbFXOoW8chDz5yVRv
```

JVNBBFSmZwKKOP0XbFXOoW8chDz5yVRv

Level 12 - 13

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 using `mkdir`. For example: `mkdir /tmp/myname123`. Then copy the datafile using `cp`, and rename it using `mv` (read the manpages!)

Use `file` to identify what file to decompress

Rename it to specific file extension to decompress it.

`gzip - .gz`

`bzip2 .bz`

`tar - .tar`

`gzip -d <filename>` to decompress gzip compressed data

`bzip2 -d <filename>` to decompress bzip compressed data

`tar -xf <filename>` to decompress tar file