Bandit Write-Up: Levels 5 —> 10

OverTheWire Bandit Write-Up: Levels 5 to 10

This write-up covers the transition from **Level 5 to Level 10** in OverTheWire's Bandit wargame, including the SSH connection process and solving the challenges for each level. The format follows the same structure as the previous write-ups, with screenshots provided for reference.

Level 5 → Level 6: Finding a Specific File

Level Goal

- The password for the next level is stored in a file somewhere under the `inhere` directory and has the following properties:
  - Human-readable
  - 1033 bytes in size
  - Not executable

Steps to Solve Level 5 → Level 6

1. Log into Bandit5

Command

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

Password for SSH Login

- The password for `bandit5` is: `4oQYVPkxZOOEOO5pTW81FB8j8lxXGUQw`

Explanation

- The `ssh` command is used to connect to the Bandit server.
- `bandit5` is the username for Level 5.
- `bandit.labs.overthewire.org` is the server address.
- `-p 2220` specifies the port number.

2. Navigate to the `inhere` Directory

Command

`cd inhere`

Explanation

- The `cd` command is used to change the current directory.
- `inhere` is the directory where the target file is located.

3. List the Contents of the `inhere` Directory

Command

```
ls
```

Explanation

- The `ls` command lists all files and directories in the current directory.
- This reveals multiple directories named `maybehere00` to `maybehere19`.

4. Find the File with Specific Properties

Command

```
du -a -b | grep 1033
```

Explanation

- The `du -a -b` command lists the sizes of all files and directories in bytes.
- The `grep 1033` command filters the output to show only files that are 1033 bytes in size.
- This reveals that the file `./maybehere07/.file2` is 1033 bytes in size.

5. Navigate to the Directory Containing the File

Command

```
cd maybehere07
```

Explanation

- The `cd` command is used to change the current directory to `maybehere07`.

6. Read the File

Command

```
cat .file2
```

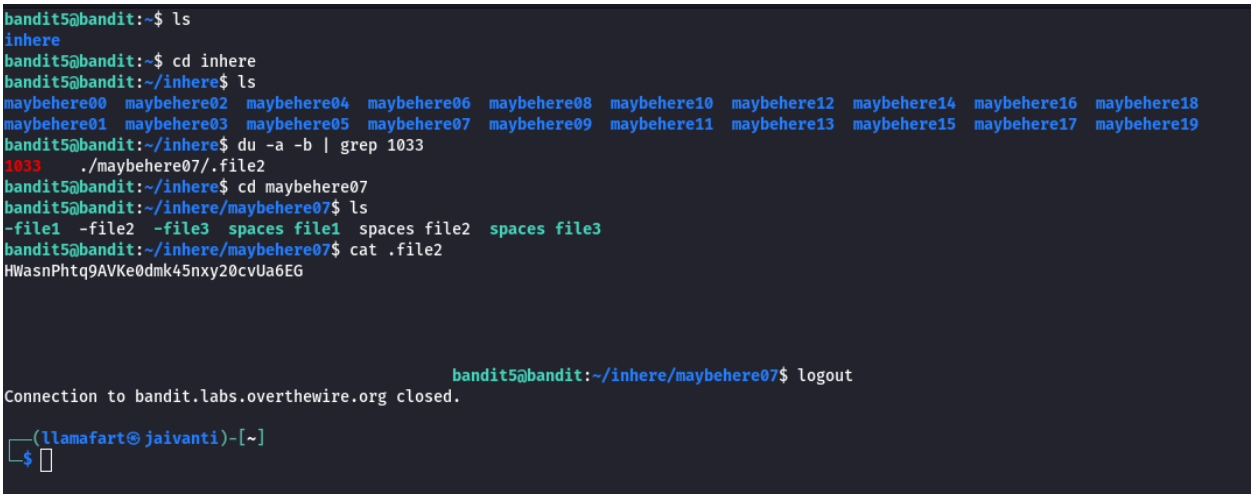
Explanation

- The `cat` command is used to display the contents of a file.
- The file `.file2` contains the password for Level 6.

7. Logout

Command

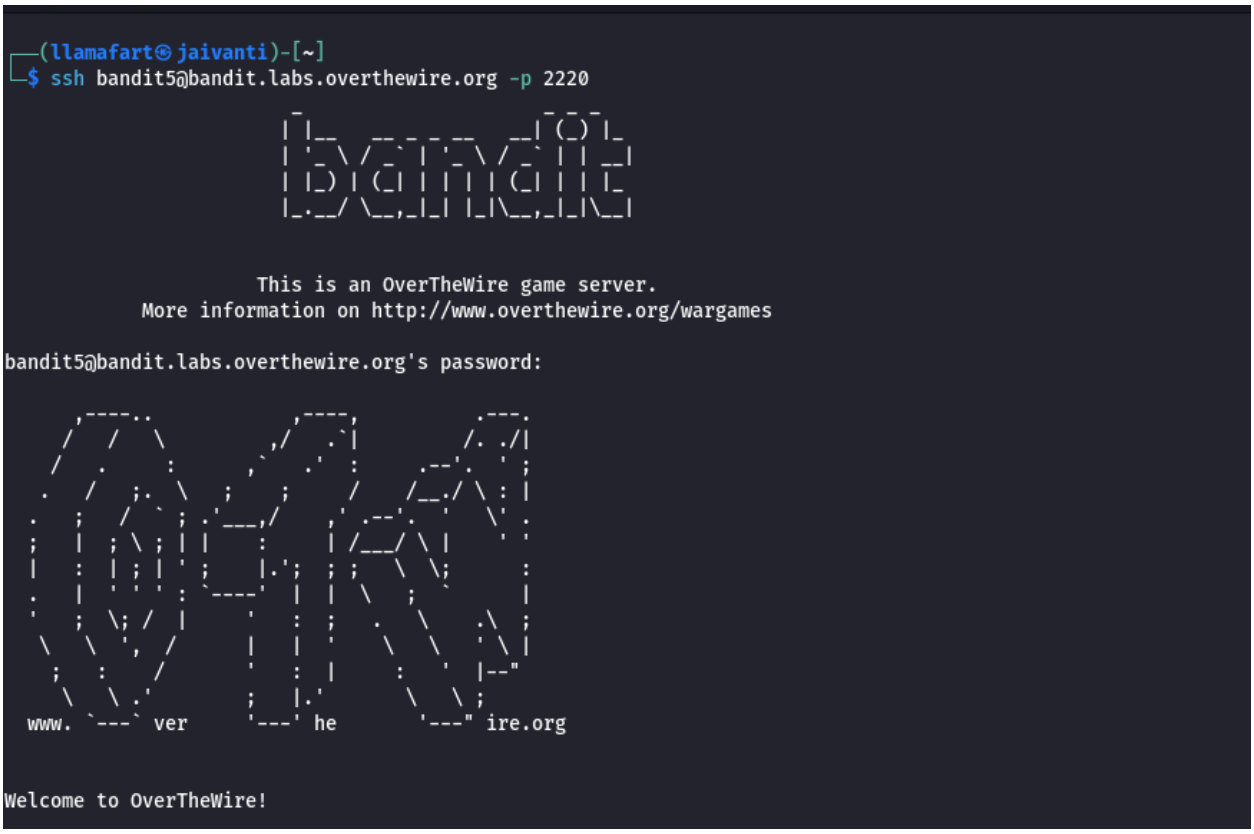
`logout`

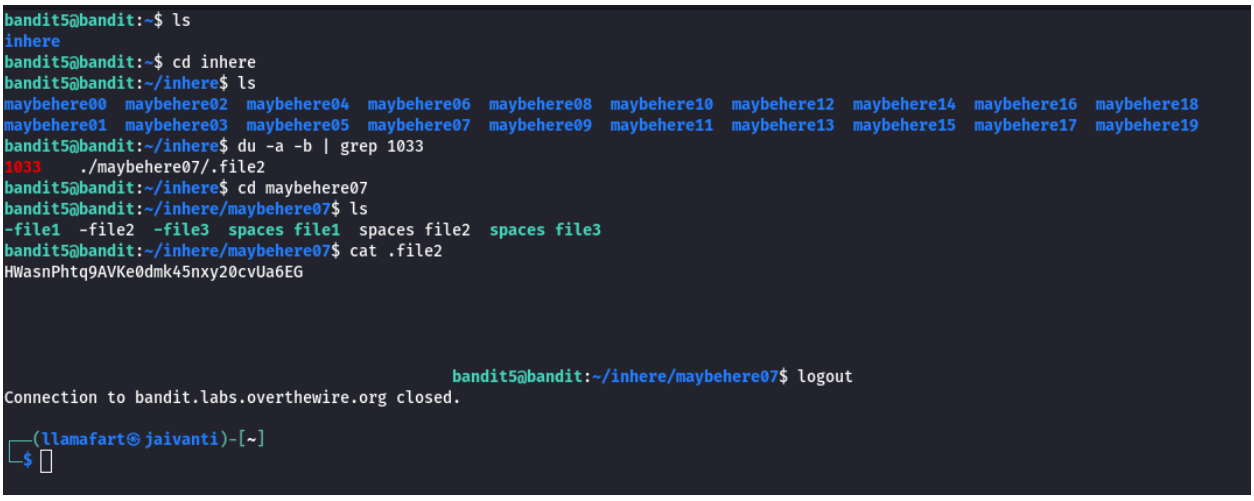


Password for Level 6

- The password for `bandit6` is: `HWasnPhtq9AVKe0dmk45nxy20cvUa6EG`

Screenshots





- The screenshot shows the terminal after logging into `bandit5`.
- The `cd inhere` command is used to navigate to the `inhere` directory.
- The `ls` command lists the directories in the `inhere` directory.

- The `du -a -b | grep 1033` command identifies the file `./maybehere07/.file2` as 1033 bytes in size.
- The `cat .file2` command is used to read the file, revealing the password for Level 6.

Conclusion

This level teaches how to locate a specific file based on its properties, such as size and readability. By using commands like `du`, `grep`, and `cat`, you can efficiently search for and retrieve the required information. These skills are valuable for navigating and managing files in Linux systems.

Level 6 → Level 7: Finding a File with Specific Ownership and Size

Level Goal

- The password for the next level is stored in a file somewhere on the server and has the following properties:
  - Owned by user `bandit7`
  - Owned by group `bandit6`
  - 33 bytes in size

Steps to Solve Level 6 → Level 7

1. Log into Bandit6

Command

`ssh` `bandit6@bandit.labs.overthewire.org` `-p 2220`

Password for SSH Login

- The password for `bandit6` is: `HWasnPhtq9AVKe0dmk45nxy20cvUa6EG`

Explanation

- The `ssh` command is used to connect to the Bandit server.
- `bandit6` is the username for Level 6.
- `bandit.labs.overthewire.org` is the server address.
- `-p 2220` specifies the port number.

2. Find the File with Specific Properties

Command

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

Explanation

- The `find` command is used to search for files in the directory tree.
- `/` specifies the root directory to start the search.
- `type f` ensures that only files are searched.
- `user bandit7` filters files owned by the user `bandit7`.
- `group bandit6` filters files owned by the group `bandit6`.
- `size 33c` filters files that are exactly 33 bytes in size.
- `2> /dev/null` suppresses error messages (e.g., permission denied errors).
- This reveals the file `/var/lib/dpkg/info/bandit7.password`.

3. Read the File

Command

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

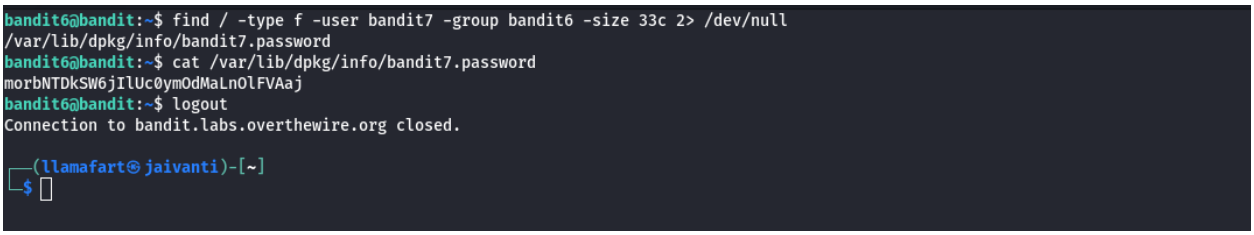
Explanation

- The `cat` command is used to display the contents of a file.
- The file `/var/lib/dpkg/info/bandit7.password` contains the password for Level 7.

4. Logout

Command

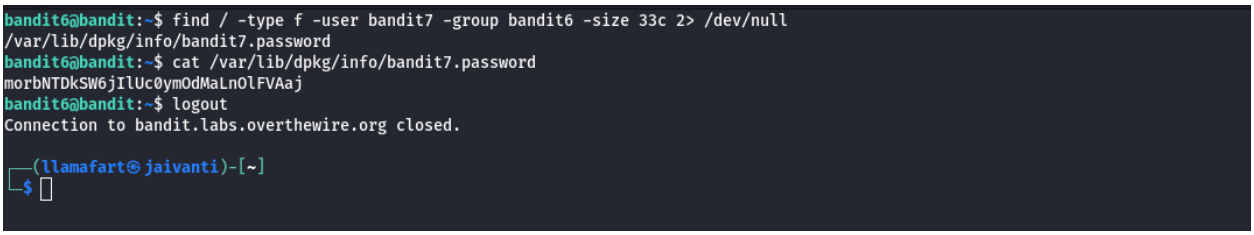
`logout`



Password for Level 7

- The password for `bandit7` is: **`morbNTDkSW6jIlUc0ymOdMaLnOlFVAaj`**

Screenshots



- The screenshot shows the terminal during the SSH login process for `bandit6`.
- The screenshot shows the terminal after logging into `bandit6`.
- The `find` command is used to locate the file with specific properties.
- The `cat` command is used to read the file, revealing the password for Level 7.

Level 7 → Level 8: Finding a Password Next to a Specific Word

Level Goal

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

Steps to Solve Level 7 → Level 8

1. Log into Bandit7

Command

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

Password for SSH Login

- The password for `bandit7` is: `morbNTDkSW6jIlUc0ymOdMaLnOlFVAaj`

Explanation

- The `ssh` command is used to connect to the Bandit server.
- `bandit7` is the username for Level 7.
- `bandit.labs.overthewire.org` is the server address.
- `-p 2220` specifies the port number.

2. Locate the File `data.txt`

Command

`ls`

Explanation

- The `ls` command lists all files and directories in the current directory.
- This reveals the file `data.txt`.

3. Search for the Word `millionth` in `data.txt`

Command

`grep millionth data.txt`

Explanation

- The `grep` command is used to search for a specific word or pattern in a file.
- `millionth` is the word to search for.
- `data.txt` is the file to search within.
- The output shows the password next to the word `millionth`.

4. Logout

Command

`logout`

```
bandit7@bandit:~$ grep millionth data.txt
millionth       dfwvzFQi4mU0wfNbFOe9RoWskMLg7eEc
bandit7@bandit:~$ logout
Connection to bandit.labs.overthewire.org closed.

┌──(llamafart㉿jaivanti)-[~]
└─$
```

Password for Level 8

- The password for `bandit8` is: `dfwvzFQi4mU0wfNbFOe9RoWskMLg7eEc`

Screenshots

- The screenshot shows the terminal during the SSH login process for `bandit7`.
- The screenshot shows the terminal after logging into `bandit7`.
- The `grep millionth data.txt` command is used to search for the word `millionth` in the file `data.txt`, revealing the password for Level 8.

Conclusion

This level teaches how to search for specific text within a file using the `grep` command. By using `grep`, you can efficiently locate the required information in large files. This skill is essential for working with text files and logs in Linux systems.

Level 8 → Level 9: Finding the Unique Line in a File

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.

Steps to Solve Level 8 → Level 9

1. Log into Bandit8

Command

`ssh` `bandit8@bandit.labs.overthewire.org` `-p 2220`

Password for SSH Login

- The password for `bandit8` is: `dfwvzFQi4mU0wfNbFOe9RoWskMLg7eEc`

Explanation

- The `ssh` command is used to connect to the Bandit server.
- `bandit8` is the username for Level 8.
- `bandit.labs.overthewire.org` is the server address.

- `-p 2220` specifies the port number.

2. Locate the File `data.txt`

Command

`ls`

Explanation

- The `ls` command lists all files and directories in the current directory.
- This reveals the file `data.txt`.

3. Find the Unique Line in `data.txt`

Command

`sort data.txt | uniq -u`

Explanation

- The `sort` command sorts the lines in `data.txt`.
- The `uniq -u` command filters out lines that occur only once.
- The output shows the unique line, which is the password for Level 9.

4. Logout

Command

`logout`

Password for Level 9

- The password for `bandit9` is: `4CKMh1JI91bUIZZPXDqGanal4xvAg0JM`

Screenshots

- The screenshot shows the terminal during the SSH login process for `bandit8`.
- The screenshot shows the terminal after logging into `bandit8`.
- The `sort data.txt | uniq -u` command is used to find the unique line in the file `data.txt`, revealing the password for Level 9.

Conclusion

This level teaches how to find a unique line in a file using the `sort` and `uniq` commands. By combining these commands, you can efficiently filter out duplicate lines and identify the unique one. This skill is useful for analyzing log files and other text data in Linux systems.

Level 9 → Level 10: Finding a Human-Readable String Preceded by '=' Characters

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.

Steps to Solve Level 9 → Level 10

1. Log into Bandit9

Command

`ssh` `bandit9@bandit.labs.overthewire.org` `-p 2220`

Password for SSH Login

- The password for `bandit9` is: `4CKMh1JI91bUIZZPXDqGanal4xvAg0JM`

Explanation

- The `ssh` command is used to connect to the Bandit server.
- `bandit9` is the username for Level 9.

- `bandit.labs.overthewire.org` is the server address.
- `p 2220` specifies the port number.

2. Locate the File `data.txt`

Command

`ls`

Explanation

- The `ls` command lists all files and directories in the current directory.
- This reveals the file `data.txt`.

3. Extract Human-Readable Strings and Search for '=' Characters

Command

`strings data.txt | grep ===`

Explanation

- The `strings` command extracts human-readable strings from a binary file.
- The `grep ===` command filters the output to show only lines containing `===`.
- The output shows the password preceded by `=` characters.

4. Logout

Command

`logout`

```
bandit9@bandit:~$ ls
data.txt
bandit9@bandit:~$ strings data.txt | grep ===
}========== the
3JprD========== passwordi
~fDV3========== is
D9========= FGUW5ilLVJrxX9kMYMmlN4MgbpfMiqey
bandit9@bandit:~$ logout
Connection to bandit.labs.overthewire.org closed.

┌──(llamafart㉿jaivanti)-[~]
└─$
```

Password for Level 10

- The password for `bandit10` is: `FGUW5ilLVJrxX9kMYMmlN4MgbpfMiqey`

Screenshots

- The screenshot shows the terminal during the SSH login process for `bandit9`.
- The screenshot shows the terminal after logging into `bandit9`.
- The `strings data.txt | grep ===` command is used to extract human-readable strings and filter for lines containing `===`, revealing the password for Level 10.

Conclusion

This level teaches how to extract human-readable strings from a binary file and search for specific patterns using the `strings` and `grep` commands. These skills are essential for analyzing binary files and logs in Linux systems, especially when searching for specific information.