

GameShell e comandi Kali Linux

Come da traccia il progetto è iniziato con il download e l'installazione del gioco con i comandi:

```
sudo apt install gettext man-db procps psmisc nano tree bsdmainutils x11-apps
wget
```

```
wget https://github.com/phyver/GameShell/releases/download/latest/gameshell.sh
```

```
(kali㉿kali)-[~]
$ wget https://github.com/phyver/GameShell/releases/download/latest/gameshell.sh
--2023-07-14 08:08:08-- https://github.com/phyver/GameShell/releases/download/latest/gameshell.sh
Resolving github.com (github.com)... 140.82.121.4
Connecting to github.com (github.com)|140.82.121.4|:443... connected.
HTTP request sent, awaiting response... 302 Found
Location: https://objects.githubusercontent.com/github-production-release-asset-2e65be/94422621/256fa322-4848-4caa-a59c-06c7985f4a2d?X-Amz-Algorithm=AWS4-HMAC-SHA256X-Amz-Credential=AKIAIWNYAX4CSVEH53A2F20230714%2Fus-east-1%2F3%2Faws4_request&X-Amz-Date=20230714T120814Z&X-Amz-Expires=3006X-Amz-Signature=a82050a0021feb1f97e4571905dd0f3b2de2ea2e7a4e3c15632fdd8a712f5eb06X-Amz-SignedHeaders=host&actor_id=0&key_id=0&repo_id=94422621&response-content-disposition=attachment%3B%20filename%3Dgameshell.sh&response-content-type=application%2Foctet-stream [following]
--2023-07-14 08:08:08-- https://objects.githubusercontent.com/github-production-release-asset-2e65be/94422621/256fa322-4848-4caa-a59c-06c7985f4a2d?X-Amz-Algorithm=AWS4-HMAC-SHA256X-Amz-Credential=AKIAIWNYAX4CSVEH53A2F20230714%2Fus-east-1%2F3%2Faws4_request&X-Amz-Date=20230714T120814Z&X-Amz-Expires=3006X-Amz-Signature=a82050a0021feb1f97e4571905dd0f3b2de2ea2e7a4e3c15632fdd8a712f5eb06X-Amz-SignedHeaders=host&actor_id=0&key_id=0&repo_id=94422621&response-content-disposition=attachment%3B%20filename%3Dgameshell.sh&response-content-type=application%2Foctet-stream
Resolving objects.githubusercontent.com (objects.githubusercontent.com)... 185.199.109.133, 185.199.111.133, 185.199.108.133, ...
Connecting to objects.githubusercontent.com (objects.githubusercontent.com)|185.199.109.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 201297 (197K) [application/octet-stream]
Saving to: 'gameshell.sh'

gameshell.sh          100%[=====] 196.58K --.-KB/s   in 0.06s

2023-07-14 08:08:09 (3.35 MB/s) - 'gameshell.sh' saved [201297/201297]
```

```
[mission 1]$ ls
Castle Forest Garden Mountain Stall
[mission 1]$ cd Castle
[mission 1]$ ls
Cellar Great_hall Main_building Main_tower Observatory
[mission 1]$ cd Main_tower
[mission 1]$ ls
First_floor
[mission 1]$ First_floor
First_floor: command not found
[mission 1]$ cd First_floor
[mission 1]$ ls
Second_floor
[mission 1]$ cd Second_floor
[mission 1]$ ls
Top_of_the_tower
[mission 1]$ cd Top_of_the_tower
[mission 1]$ ls
[mission 1]$ gsh check
Congratulations, mission 1 has been successfully completed!

      +-----+
      | Use the command
      | $ gsh help
      | to get the list of "gsh" commands.
      +-----+
[mission 2]$
```

Dopo aver completato i primi livelli come da slide sono andati avanti, con le missioni man mano sempre più complesse.

Ho trovato molto interessante il tipo di apprendimento tramite gioco su shell. Ho imparato nuovi comandi molto utili, come ad esempio la creazione di alias per velocizzare la scrittura di quest'ultimi.

```
kali㉿kali:~
```

File Actions Edit View Help

| Use the command
| \$ gsh help
| to get the list of "gsh" commands.

~/Castle/Main_tower/First_floor
[mission 14] \$ gsh goal

(__..
(__/__) Mission goal
(__/__) _____
(__/__) Checking for hidden files is taking too long!
(__/__) Create an alias "la" to run the command ``ls -A`` in order to list all files, including hidden ones, with only 2 letters.
(__/__) Define the synonym
(__/__) la
(__/__) for the command
(__/__) ls -A
(__/__) and check that it works as expected.
(__/__) How fortunate, there is a nice rock hidden just where you are.
(__/__) _____
(__/__) Useful commands
(__/__) _____
(__/__) alias STRING='COMMAND'
(__/__) Create a synonym for a string, that will stand for a command.

Molto utile anche l'utilizzo delle lettere jolly “*” e “?” (wildcards) per velocizzare la manipolazione dei file, come si può vedere dalla prima parte di questa figura:

È stato difficile capire bene la “file redirection” ma con un di trial and error sono riuscito ad andare avanti.

```

File Actions Edit View Help
hash [-lr] [-p pathname] [-dt] [name ...]
help [-dms] [pattern ...]
kali@kali: ~

~/Castle/Observatory
[mission 34] $ gg

Mission goal
-----
Merlin has turned crazy... He paces around the observatory tower and mumbles incoherently.
You need to filter out his ramblings to discover the secret key he is the only one to know.

Hint
-----
It is likely that Merlin's message is riddled with errors.
To complete this mission, you have to give the secret key **using a file redirection**.

Useful commands
-----
./FILE
Run an executable file as a program. Needless to say that Merlin is executable ...

COMMAND > FILE
Send standard output (stdout) for the command to a file.
(The file is overwritten.)

COMMAND 2> FICHIER
Send error output (stderr) for the command to a file.
(The file is overwritten.)

COMMAND < FILE
Send the file to the standard input (stdin) of the command.

```

Alla fine sono riuscito ad arrivare alla missione 42. Purtroppo anche per motivi di tempo e lavoro devo consegnare il progetto fino a questa missione.

Ciò non toglie che approfondirò lo studio dello Ceasar shift cipher in modo da imparare nuovi comandi ed arrivare alla fine del gioco.

```

File Actions Edit View Help
kali@kali: ~

Mission goal
-----
A secret message has been found, it is kept in the drawer in Merlin's office. It was probably enciphered using a Caesar shift cipher.
Decrypt it by making an exhaustive search from the command line.

Hint
-----
All other secret messages that have been found were using a shift between 10 and 16.

Useful commands
-----
tr STRING1 STRING2
Replace each character STRING1[i] by STRING2[i] on the standard input, and output the result.
Remark: "tr" is an abbreviation for "translate".

Example: if
STRING1 = "abcdef"
STRING2 = "klmnop"
the file will be output with the following substitution (other characters are left unchanged)
a → k b → l c → m
d → n e → o f → p

Note: instead of "abcdefghijklmno", it is possible to write "a-g".
This command is particularly useful with a redirection '<>'.


```

[mission 42] \$ cd Castle/Main_building/Library/Merlin_s_office/Drawer/

Anselmo Buonamici

Progetto M2