

ringzer0team CTF Challenges

Forensics - 3 - I love cat

The screen says we need to ssh to ringzer0team.com (<http://ringzer0team.com>) port 1000 with username and password is evidently 'cat'

```
ssh cat@ringzer0team.com -p 1000
```

Second step is just a little looking around our file system.

If you have still no idea, try to prompt some linux commands on shell environment. When execute many of commands, you will get the following output at below.

```
-rbash: su: command not found
```

This is your first knowledge of the system. You have been in `restricted shell` environment. `restricted shell` tells you can only execute pre-defined commands that admin setted.

Our next objective is which command is necessary to capture the flag. Maybe these steps are not necessary only one thing may enough to solve the challenge according to title :)

List your directory with `ls -al` command, you can see `flag.txt` file and `/bin` directory. when `cat` your `flag.txt` file, you will? receive the flag :)

```
***** WHERE IS THE FLAG ? *****
```

Hope is a good thing, Shawshank Redemption

Do not give up your challenge. You have complete the %80 of challenge. Solution relies on `cat` command and `flag.txt` file.

If i say lets execute `man cat` command and examine details of command. But `rbash` does not permit it. We can continue our solution over internet with looking manpage of `cat` command.

cat(1) - Linux man page

Name

cat - concatenate files and print on the standard output

Synopsis

cat [*OPTION*]... [*FILE*]...

Description

Concatenate **FILE**(s), or standard input, to standard output.

- A, --show-all**
equivalent to **-vET**
- b, --number-nonblank**
number nonempty output lines
- e**
equivalent to **-vE**
- E, --show-ends**
display \$ at end of each line
- n, --number**
number all output lines
- s, --squeeze-blank**
suppress repeated empty output lines
- t**
equivalent to **-vT**
- T, --show-tabs**
display TAB characters as ^I
- u**
(ignored)
- v, --show-nonprinting**
use ^ and M- notation, except for LFD and TAB
- help**
display this help and exit
- version**
output version information and exit

With no **FILE**, or when **FILE** is -, read standard input.

Try to prompt all variations of `cat` command on `flag.txt` file. We can not meaningful response until `cat -v flag.txt` command.

The output of `cat -v flag.txt` command is ;)

FLAG-0K14eDrm4t5g7KD54X8Dl3NNcZ956oCK^M***** WHERE IS THE FLAG ?

and tadaaaaa :)

FLAG-0K14eDrm4t5g7KD54X8Dl3NNcZ956oCK

cat -v shows non-printed character of file.

For detailed information about -v parameter;

https://www.cs.ait.ac.th/~on/O/oreilly/unix/upt/ch25_07.htm

(https://www.cs.ait.ac.th/~on/O/oreilly/unix/upt/ch25_07.htm)

REFERENCES:

<https://linux.die.net/man/1/cat> (<https://linux.die.net/man/1/cat>)

https://www.cs.ait.ac.th/~on/O/oreilly/unix/upt/ch25_07.htm

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documented by euphratesy