

## Week 5 Journal – Offensive Security

### RTFM

Time	Who	Process	How (commands/notes/actions taken)	Outcome (what happened as a result)
18/08 /24  5:10	Sami p	Gain access to the challenge and the linux environment	Login to Scoreboard url: <a href="https://offsec.site/ctf1/">https://offsec.site/ctf1/</a> to gain access to challenge  Login to Web kali desktop portal: <a href="https://offsec.site/kali/">https://offsec.site/kali/</a> to gain access to virtual linux environment  Using credential Provided	Gain access to the linux server

5:30	Sami p	<p>Read the challenge and access the challenge using telnet</p> <p>Installed telnet</p> <p>Login to RTFM challenge using telnet</p>	<p>Choose the challenge “RTFM”</p> <p>Sudo apt install telnet</p> <p>telnet 10.55.1.10</p>	<p>Login to the server 10.55.1.10 where the “RTFM” is located using guest.</p>
5:40	Sami p	<p>Learned more about the challenge</p>	<p>Ls -la</p> <p>Googled the title of the challenge “RTFM”</p> <p>And the hint given</p>	<p>RTFM meant “Read the fucking manual”</p> <p>Could not find anything about the hint</p>

5:50	Sami p	Searched for linux manual	Googled the command for linux manual  guest@flag01: ~\$ help  guest@flag01: ~\$ man  guest@flag01: ~\$ man man	Learned about man command  Learned there is manual for different studd in linux which can be accessed through man command
6:00	Sami p	Tried various man command with different options and keywords	guest@flag01: ~\$ man ls  guest@flag01: ~\$ man man  guest@flag01: ~\$ man pages  guest@flag01: ~\$ man flag  guest@flag01: ~\$ man -k flag  NAME  flag - false flag	Got access to a man flag page which was filled with with filler text in latin.  Relaized it was a custom man page and it was a step forward toward finding the flag  Scrolled to th bottom of the page but could not fing anything

			SYNOPSIS	
6:20	Sami p	Tried various other man command and other command to find the flag	flag	
			DESCRIPTION flag Lore	Could not get any closer to finding the flag. So decided to revisit the man flag page.

```
26 cd .profile  
27 ls\  
28 ls  
29 cat .bash_logout  
30 cat .bashrc  
31 ls  
32 ls -la  
33 cat .profile  
34 ls  
35 ls -la  
36 cat .lessht  
37 cd .cache/  
38 ls\  
39 ls  
40 exit  
41 cd ..  
42 ls
```

43 readme  
44 help  
45 history  
46 help name  
47 help flag  
48 help help  
49 man -k flag  
50 man flag  
51 daylight  
52 man daylight  
53 exit  
54 man man  
55 man flag  
56 man based  
57 man base  
And other various commands

6:30	Sami p	Revisited man flag page and analyzed the page more carefully	guest@flag01: ~\$man flag  Scrolled to the middle of man flag page and found the following:  OPTIONS  MZQWY43FEBTGYYLH  SEE ALSO  flag(1) offsec(7) rtfm(8)  Entered the "MZQWY43FEBTGYYLH" as flag	Flag was incorrect  But another hint Found  Check the offsec and rtfm page also
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6:40

Sami  
p

Vist the man offsec and man  
rtfm page

guest@flag01: ~\$man offsec

Scorlled to the middle of the page and found this:

OPTIONS

MZQWY43FEBTGYYLH

SEE ALSO

flag(1) ctf(6) rtfm(8)

This doesnot seem like it

guest@flag01:~\$ man rtfm

OPTIONS

MZWGCZ33GVTGEZRMUZTQNTGG44DMNJRMQYT  
AZRRHFSTINJWGEZTSYJWGQZX2==

SEE ALSO

flag(1) ctf(6) offsec(7)

The

"MZWGCZ33GVTGEZRMUZTQNTGG44DMNJRMQYT  
AZRRHFSTINJWGEZTSYJWGQZX2==" seems like the

Entered

"MZWGCZ33GVTGEZRMUZTQ  
NTGG44DMNJRMQYT AZRRHFS  
TINJWGEZTSYJWGQZX2==" as  
the flag

It was incorrect.

The string seems to be encoded.

			flag	
6:50	Sami p	Decode the string to get the flag	<pre>echo "MZWGCZ33GVTGEZRVMUZTQNTGG44DMNJRQMQT AZRRHFSTINJWGEZTSYJWGQZX2=="   base32 -- decode  flag{5fbf5e386f78651d10f19e456139a643}  Found the flag "5fbf5e386f78651d10f19e456139a643"</pre>	<p>Entered the flag "5fbf5e386f78651d10f19e456139a643" Correct flag Challenge Completed</p>

## Spartan

Time	Who	Process	How (commands/notes/actions taken)	Outcome (what happened as a result)
August 21st, 6:58: 41 PM	Ayush	Trying to find the CTF for sunlight part called spartan	<p>Opened Link <a href="https://offsec.site/ctf1/challenges#Gone%20fishin'-7">https://offsec.site/ctf1/challenges#Gone%20fishin'-7</a> through iLearn for CTF 1</p> <p>Opened link <a href="https://offsec.site/kali/">https://offsec.site/kali/</a> through iLearn for Web kali desktop portal</p> <p>Logged in with given credentials</p> <p>Opened Terminal Emulator on Kali web</p> <p>Saw the challenges on Sunlight zone and chose "Spartan"</p> <p>It shows "telnet to 10.x.1.40 where x is your team number"</p> <p>Went to web kali and typed telnet 10.55.1.40 as 55 is our team number</p> <p>Shows telnet not found</p>	Got flag :  flag{f5052eab8924bff54b1a1b82dcd28cb4}

So I have to install telnet first with the command “sudo apt install telnet” and installed telnet

In terminal typed “telnet 10.55.1.20” then I got asked for flag2 login and I login as a guest.

Typed csh then bash got “1% Reset tty pgrp from 1077 to 1074”

Again typed csh got “2%” then typed bash

Then lastly typed csh again and got “3%” and now I typed flag and got

“ZmxhZ3tmNTA1MmVhYjg5MjRiZmY1NGIxYTFiODJkY2QyOGNiNH0K”

Then I used base 64 to decode this text.

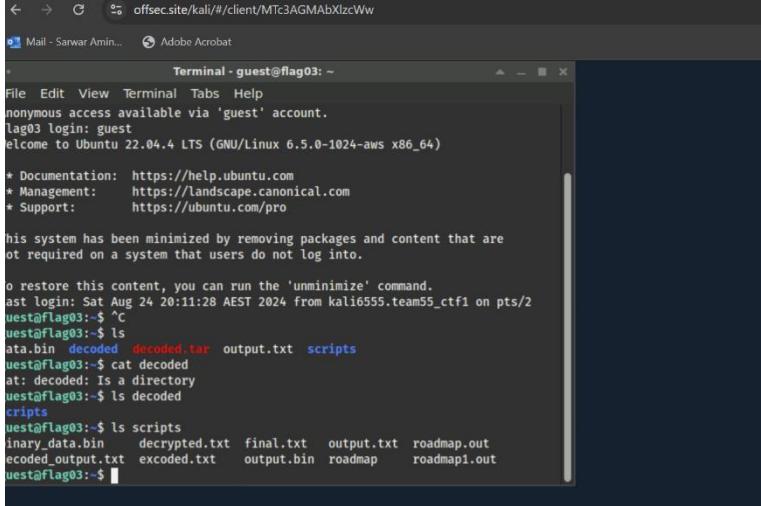
I typed “echo  
ZmxhZ3tmNTA1MmVhYjg5MjRiZmY1NGIxYTFiODJkY2  
QyOGNiNH0K | base64 -d”

August 22-24	Ayush	Trying to find other CTFs which are not done	Tried everything to find the ctf but could not get it.	No result found
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CTF1- Yousra Mehrin, Student ID: 48638218

### Mirror Maze

Time	Who	Process	How (commands/notes/actions taken)	Outcome (what happened as a result)
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19:30	*YM	<p>For the CTF 1 challenges, I tried the problem called “Mirror Maze”. My first step was to login to the telnet server with respect to my team number as a replacement of x.</p>	<p>In the terminal I entered the following commands to connect to the telnet server.</p> <pre>telnet 10.55.1.30</pre> <p>Then I logged in to the guest account using the password: guest.</p>	I could successfully login to the guest account in the telnet server.
19:34	*YM	<p>I entered command for listing all the files and directories and explored options to see where I can find the specific flag for this task.</p>	<p>I used the ls command to view all the files and directories. I found a few directories and files. I then used these commands to explore the possible files that could contain the flag for the given task. The commands I used are shown in the screenshot below:</p>  <pre>Terminal - guest@flag03: ~ File Edit View Terminal Tabs Help anonymous access available via 'guest' account. lag03 login: guest elcome to Ubuntu 22.04.4 LTS (GNU/Linux 6.5.0-1024-aws x86_64)  * Documentation: https://help.ubuntu.com * Management: https://landscape.canonical.com * Support: https://ubuntu.com/pro  his system has been minimized by removing packages and content that are not required on a system that users do not log into.  o restore this content, you can run the 'unminimize' command. ast login: Sat Aug 24 20:11:28 AEST 2024 from kali6555.team55_ctf1 on pts/2 uest@Flag03:~\$ ^C uest@Flag03:~\$ ls ata.bin decoded decoded.tar output.txt scripts uest@Flag03:~\$ cat decoded at: decoded: Is a directory uest@Flag03:~\$ ls decoded scripts uest@Flag03:~\$ ls scripts inary_data.bin decrypted.txt final.txt output.txt roadmap.out decoded_output.txt excoed.txt output.bin roadmap roadmap1.out uest@Flag03:~\$</pre>	<p>I found a directory named “decoded”. When I entered that directory, I was forwarded to a “scripts” directory. And once I entered the directory, I found multiple text files which could contain the flag I was looking for.</p>

19:45	*YM	I found a file named decoded.tar which needed to be decoded. I tried to find out necessary commands to get access to this tar file.	I entered the following command in the terminal to decode the tar file:  tar -xvf decoded.tar	It displayed a directory named:  scripts/roadmap
19:58	*YM	I explored the “scripts” directory using various commands to find the relevant files containing the flag.	Previously I used ls script command as shown in the snippet above to explore the necessary files and the directory. I used that again and found roadmap.out file. I used the following command to learn detail about the file type:  file scripts.roadmap.out	The mentioned command gave the following output:  scripts/roadmap.out: ASCII text  I tried to decompress the bzip2 file by using the command:  bunzip2 scripts/roadmap  However, the output showed that the scripts/roadmap.out already exists in the terminal.

20:20	*YM	<p>Since I figured out that the roadmap.out file in the script directory contains the flag we are looking for, I used various commands to find the output content.</p>	<p>At first, I used the cat scripts/roadmap.out command but found a huge file containing various ASCII codes. After that, I used the following command to find the particular content in the big file.</p> <pre>grep "CTF{" scripts/roadmap.out</pre>	<p>Even after trying to find a specific command in the huge file content, there was no display found. Hence, after rigorous attempts, I was unable to find the required flag for the task</p>
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CTF1 (**Gone fishin'**) – Chistha Khan (48728470)

Time	Who	Process	How (commands/notes/actions taken)	Outcome (what happened as a result)
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August 22, 10:25	Chist hia	Trying to login as guest in the Linux terminal for <b>Gone fishin'</b>	<p>Wrote telnet command and pressed enter.</p> <p>A login module appeared where after entering guest it logged in as guest@flag04</p> <p>telnet 10.55.1.40</p> <p>here 55 is the group number assigned to us.</p>	Logged in as a guest user.
August 22, 12:05	Chist hia	Trying to locate clue about the flag	<p>wrote ls -la to see all the file under /home/guest.</p> <p>A script file named copyfile.sh was located which after opening with cat copyfile.sh command showed a code snippet.</p>	Analyzed code showed the way to locate the flag file.

August 22, 14:44	Chist hia	Trying to locate the flag file	<p>Copied the code from copyfile.sh and create a new.sh file using below commands:</p> <p>Touch new.sh</p> <p>And populated the copied code in here using below command for text inputting prompt:</p> <p>nano new.sh</p> <p>Cntrl + O</p> <p>Enter</p> <p>Cntrl + X</p> <p>After that, created a file named request under /tmp and ran the modified commands.</p> <p>./new.sh</p> <p>sh new.sh</p>	<p>The location of the flag was written in the request file:</p> <p>/home/eve/flag.txt</p>
August 22, 17:50	Chist hia	Trying to read the flag.txt file to find out the flag	<p>First, checked the permission using the below command,</p> <p>ls -l /home/eve/flag.txt</p> <p>it showed no permission for guest user:</p> <p>-rw-----</p>	<p>Used all means, AI, online document but could not extract the flag.</p>

Then, tried to run the script file meeting all the condition but failed to extract the flag from flag.txt since no read permission were given to the guest user.