

# Finding vulnerability for guinean cybertaskforce ctf

Hi , my name is abdoul i am from guinea , i live in the beautiful city called labé

# **∂** Getting started

after i saw a post in twitter that guinean-cybertaskforce.com will organize a ctf challenge , i was so exited to to participate then i decide to signup and wait for the challenge

## **⊘** The Game begin

i receive my credential for the ctf challenge at Feb 19, 2022, 8:13 PM, then i wait until Feb 20, 2022, 1:00 AM to begin the ctf challenge

here the the challenge that i was able to solve ,not by order

## 

N'oublie pas d'accéder au serveur Discord!

Flag: GCSC2022{lien\_serveur\_discord}

link: https://discord.gg/3gvtd8N6

 $\mathcal{O}$  solution

i copied the discord link then replaced the lien serveur discord in the flag

GCSC2022{https://discord.gg/3gvtd8N6}

# 

Houhou!

On te présente ce formulaire du site web en cours de construction.

Interagit avec le serveur de la CyberBadCorp et trouve-lui un usage non sollicité.

Indice: -5 points

Flag: GCSC2022{flag\_ici}

link: http://challenges.guinean-cybertaskforce.com:5000/

link2: https://www.youtube.com/watch?v=5F 32HwJFDg

#### ⊘ solution

the link 1 http://challenges.guinean-cybertaskforce.com:5000/ was for the ctf challenge and second link was the La Fouine - Trois mots thanks for the second link too (i like la fouine)

when i opened the link 1 http://challenges.guinean-cybertaskforce.com:5000/, i have found that the page has a form for registration the first thing that came in my mind was to try for sqli, but i abandoned that idea the and filed all field

Please, register a new user to continue
Ihhhhhhhipjdfvvvvvvvvvv

donotexit@gmail.com
testssssssssssssssscom
Submit Query

as you seen in the image above , my idea was to add a long text in all the field to got an error , and i did that then i got an error requests.exceptions.ConnectionError

## requests.exceptions.ConnectionError

Traceback (most recent call last)

in the first error line , you'll see the flag GCSC%7BUt1llisseZ\_t0ujoUr\$\_c0ll4boRat0R%7D

the valide valide flag was GCSC2022{Ut1llisseZ t0ujoUr\$ c0ll4boRat0R}

just url decode the flag and replace GCSC to GCSC2022

it seen that debug mode was enable , from my point of view it give back the error when url take too long time to connect

# **⊘** Capture\_south-africa - AU super marché

Tu fais de la filature depuis plusieurs semaines sur un membre actif de la CyberBadCorp.

Tous les jours, il se rend dans cette même enseigne pour faire ses courses.

Tu as remarqué qu'il prend assez de temps dans le rayon des céréales.

Pointilleux sur les détails, tu décides de prendre une séquence photos des produits de ce rayon pour les analyser.

Sans surprise, tu trouves que cette image est un peu particulière à vue d'œil.

Arriveras-tu à trouver des informations qui feront avancer ta mission?

Flag: GCSC2022{flag\_ici}

link: https://drive.google.com/file/d/1mvDSKrvHt26G4rsqmiRO25\_om3pjH2RL/view?usp=sharing

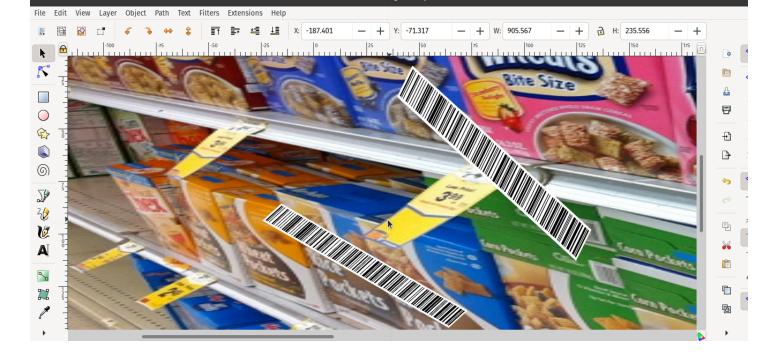
#### $\mathcal{O}$ solution

when i opened the google driver link , i have found that it was an svg image , called cereals.svg then first can thing that came to my mind was to zoom the image as to see if i can find the flag , but i was totally wrong after a few minute of testing different technique like like exiftool cereals.svg , i found nothing useful after litle bit of break , i got the idea to edit the image using an editor of text , me i used vim for that

after editing the image using vim cereals.svg , i have found in the second that the image image was created using Inkscape

<-- Created with Inkscape (http://www.inkscape.org/) --> as it seen that the image was created using Inkscape , i decide to install Inkscape in my computer after installing Inkscape , i opened the cereals.svg image with Inkscape then i found a weired barcode , i clicked in the barcode and zoomed the barcode

the image looked like this



i have installed a barcode scanner in my android , then i scanned it to find the flag

i used this flag to validate the challenge : GCSC{baR\_c0d3\$\_oR\_J4IL\_b4rZ}

# 

Mon Dieu! Le pire est arrivé.

Déterminé à faire tomber la CyberBadCorp, à tout prix, tu as malencontreusement cliqué sur un lien laissé exprès dans le téléphone que tu as analysé.

Cela a crypté uniquement ton rapport d'avancement sur ladite mission.

Retrouve vite la clef de déchiffrement et continue a les traquer.

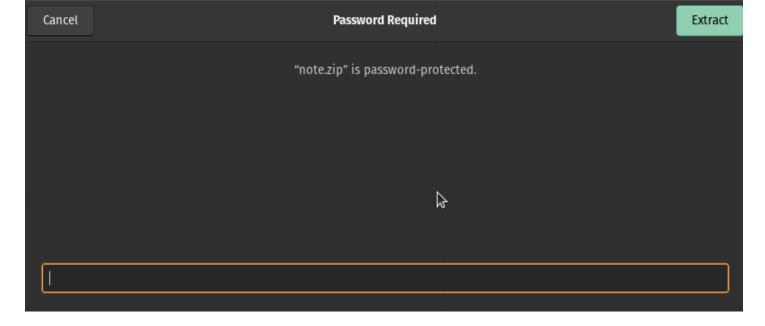
Flag: GCSC2022{flag\_ici}

link: https://drive.google.com/file/d/1QGIrPRp-vLr8W2vQsJfGCHiWJ58tFWQJ/view?usp=sharing

## $\mathcal{O}$ solution

it was my first time to touch cryptanalysis related ctf

when i opened the google driver link https://drive.google.com/file/d/1QGIrPRp-vLr8W2vQsJfGCHiWJ58tFWQJ/view?usp=sharing; i have found that it was a zip file that has a note.txt the first thing come to my mind was to donwload the note.zip to see if i can access to note.txt after downloading the zip file, i tried to extract the file but i got popup that password was required



I asked myself how i can extract the zip file that require password , something that i dont know my best friend here was google , after long hour searching tools , reading write-up related to cracking zip file and technique to crack the zip i have found a tools called fcrackzip and rockyou.txt wordlist

now its time to crack the file full cmd : fcrackzip -b -D -p /home/abdulsec/wordlist/rockyou.txt -u ./note.zip after two munite , we have the password : Catsandcows

```
PASSWORD FOUND!!!!: pw == Catsandcows

abdulsecapop-os:~/Downloads$ time fcrackzip -b -D -p /home/abdulsec/wordlist/rockyou.txt -u ./note.zip

PASSWORD FOUND!!!!: pw == Catsandcows

real 2m19.488s

user 1m40.999s
```

now , i was able the extract the zip file using the password : Catsandcows as i use linux , i used only cat note.txt to got the flag GCSC{p4\$sw0rD\_cr4ck1nG\_br34kZ\_GPUs} now you have just to replace GCSC to GCSC2022

the final flag was: GCSC{p4\$sw0rD\_cr4ck1nG\_br34kZ\_GPUs}

## **⊘** Capture-United-states iles vivent avec le rsa en france

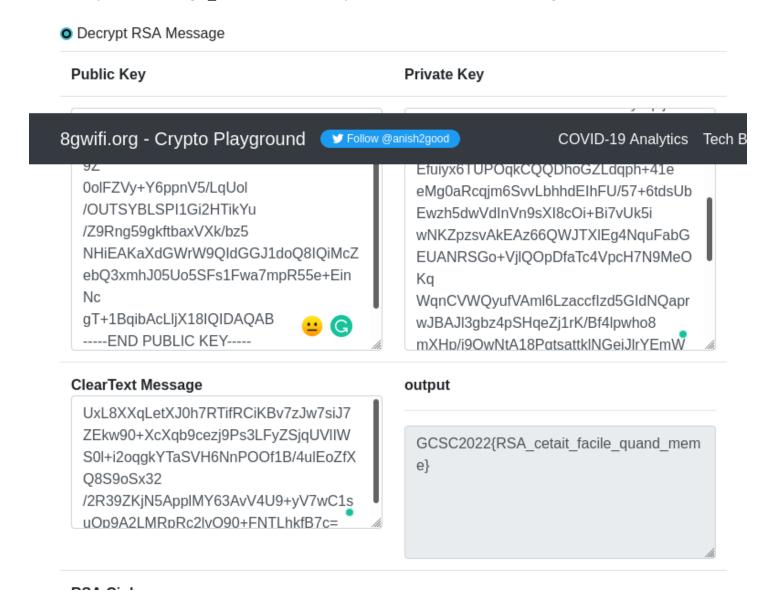
On te donne le crytosystème utilisé : message, clé privée et clé publique.

Indice: -5 points Flag: GCSC2022{flag\_ici}

link: https://drive.google.com/drive/folders/1p9aQ2-PMoY5yXjqQLj83CH-JDXV1qvgR?usp=sharing



when i clicked in the google driver link https://drive.google.com/drive/folders/1p9aQ2-PMoY5yXjqQLj83CH-JDXV1qvgR?usp=sharing , i have found a folder called RSA that has three files cl3\_publique.txt cl3\_priv3e.txt message\_chiffr3.txt after a few minute googling , i found this web site https://8gwifi.org/rsafunctions.jsp i copied cl3\_publique.txt text and i pasted it in Public Key field i copied cl3\_priv3e.txt text and i pasted it in private key field i copied message\_chiffr3.txt and i pasted it ClearText Message field



in the output i got the flag GCSC2022{RSA\_cetait\_facile\_quand\_meme} an i used that flag to validate the challenge

# 

Cette nuit encore, un nouvel incident de sécurité s'est produit du côté de la préfecture de Kankan.

Apres avoir eu un accès au SI, le malveillant tente d'exfiltrer des informations par l'envoi d'une image d'apparence anodine.

Il semble que c'est la technique utilisée par la CyberBadCorp avant que tu ne rejoignes le rang des cybercombattants guinéens.

Analyse attentivement cette image et trouve l'information exfiltrée.

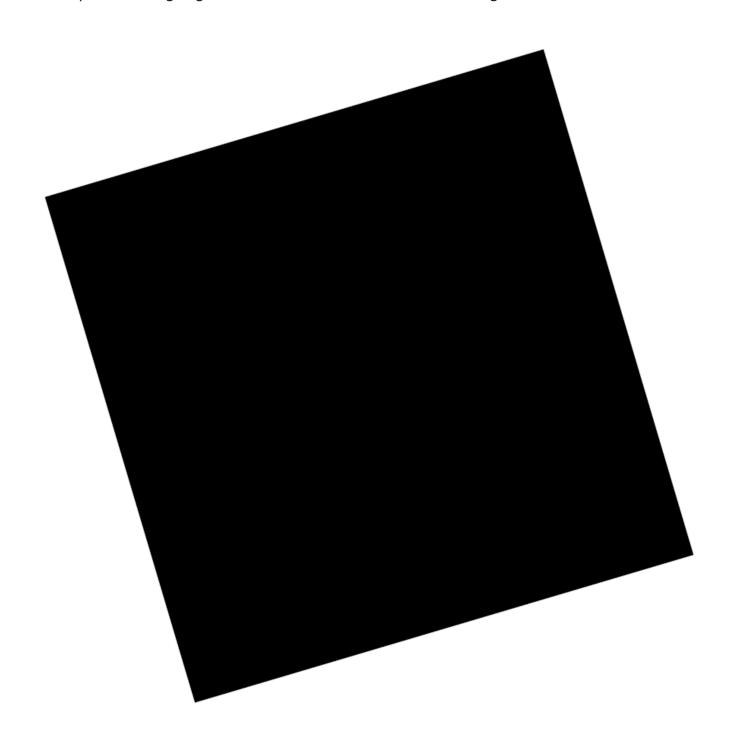
Flag: GCSC2022{flag\_ici}

link: https://drive.google.com/file/d/1RhUenex0V-\_OFWJ8nJzUUB6QDEIUfIn9/view?

usp=sharing

## $\varnothing$ solution

when i opened the google driver link, i have found this image



now its time google to learn more about steganalysis after few munites of googling , i have found this web site https://aperisolve.fr/

#### What is this?

Aperi'Solve is an online platform which performs layer analysis on image. The platform also uses zsteg, steghide, outguess, exiftool, binwalk, foremost and strings for deeper steganography analysis. The platform supports the following images format: .png, .jpg, .gif, .bmp, .jpeg, .jfif, .jpe, .tiff...

after i uploaded the image in the platform , i got a differnt view supperimposed of image here the result of on of the image that showed the flag



i just changed the GCSC from the image to GCSC2022 to validate the challenge

## 

Les régions minières du pays attirent de plus en plus la CyberBadCorp.

Trois de leurs membres décident de s'installer dans la région de Kamsar afin de dépouiller le plus d'entreprises d'exploitation.

En cours de chemin, ils s'arrêtent un moment dans un village pour manger et se reposer avant de reprendre la route. Ils en profitent aussi pour recharger leurs appareils dans un télécentre.

Le gérant du télécentre, agent secret, dumpe le contenu de leurs téléphones qu'il te transmet à des fins d'analyse pour des questions de sécurité nationale.

Lors de tes analyses, tu remarques qu'à un moment donné, tous les trois ont utilisé le même téléphone pour se connecter à une application de messagerie instantanée étrange.

Tu as vite retrouvé la base de données reliée à cette application. Maintenant, trouve leurs mots de passe.

Flag: GCSC2022{Password1\_Password2\_Password3)

link: https://drive.google.com/file/d/1YL5jgnjy1-w5k9vdlVofSjQy2J9uVjr3/view?usp=sharing

### $\mathcal{O}$ solution

when i opened the google driver link https://drive.google.com/file/d/1YL5jgnjy1-w5k9vdlVofSjQy2J9uVjr3/view?usp=sharing i saw a file that has an extension .db with the name BD application mobile then i downloaded the file locally and i changed the name BD application mobile.db to mobile.db if you google the extension .db you will it's a sqlite database

if you dont have sqlite in your computer then , install it

to use the db type in your computer the following cmd sqlite3 mobile.db

SQLite version 3.35.5 2021-04-19 18:32:05 Enter ".help" for usage hints.

sqlite> .database

main: /home/abdulsec/labs/ctf/mobile.db r/w

sqlite> .tables

users

sqlite> select \* from users ...> ;

John|ODI3MDQ0MGMwZTk0MTExZDExZmFmMzg1MTI1Nzc4ZTc=

Marie|NDFkNTM4YTcxYjJhYTYwMDRkNTM0MjM3NzEwNDFjOWMK

Luc|NGVmY2RhYzg1YzZjNDk0YjNjZWY4NzgxY2M2Mzk4MDUK

sqlite> now you have user with base64 encoded password its time to decode the password

when you decode the password ODI3MDQ0MGMwZTk0MTExZDExZmFmMzg1MTI1Nzc4ZTc= of John you got this 8270440c0e94111d11faf385125778e7

when you decode the password of NDFkNTM4YTcxYjJhYTYwMDRkNTM0MjM3NzEwNDFjOWMK Marie you got this 41d538a71b2aa6004d53423771041c9c

when you decode the password of NGVmY2RhYzg1YzZjNDk0YjNjZWY4NzgxY2M2Mzk4MDUK Luc you got this 4efcdac85c6c494b3cef8781cc639805

now we got md5 password hash , we need again to crack the password to got the plain text password

after a few minutes of googling , i found this free website https://crackstation.net/ for password hash cracking

after cracking John md5 password i got this : p1ntap after cracking Marie md5 password i got this : fd1972 after cracking Luc md5 password i got this : AdDiCtIoN

now we have

user password

John | p1ntap

Marie| fd1972

Luc | AdDiCtIoN

now i have to use the three password to validate the challenge

the final flag are GCSC2022{p1ntap\_fd1972\_AdDiCtIoN)

## **⊘** Campture-Angola quelle audace

Les membres de la CyberBadCorp décident de célébrer leur dernier coup qui a permis l'arrêt de nombreux SI de l'administration guinéenne.

Sur la mission depuis plusieurs semaines, tu sais qu'ils communiquent par tous les moyens.

Alors tu tentes le coup par le coup : tu t'y invites et enregistres toutes les musiques jouées à cette soirée.

Tu as vu combien ils étaient en feu particulièrement sur cette musique. Analyse-la et disnous ce que tu trouves.

Flag: GCSC2022{flag\_ici}

link: https://drive.google.com/file/d/1vKmVkd3dwDqffSAekIz4vJuz6pDOKB49/view?usp=sharing

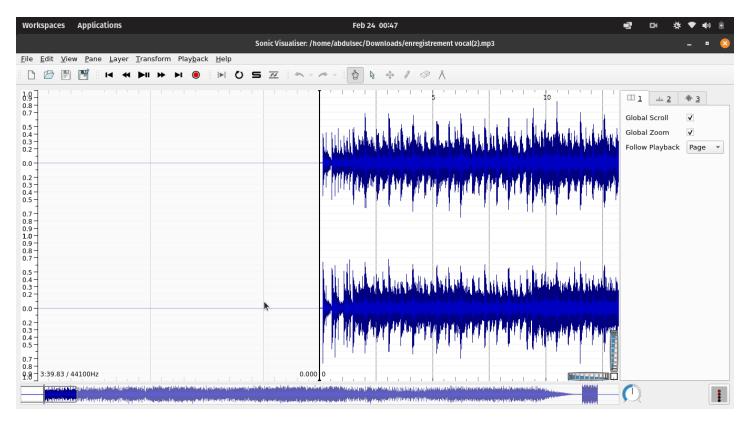
### $\mathcal{O}$ solution

when i opened the google driver link

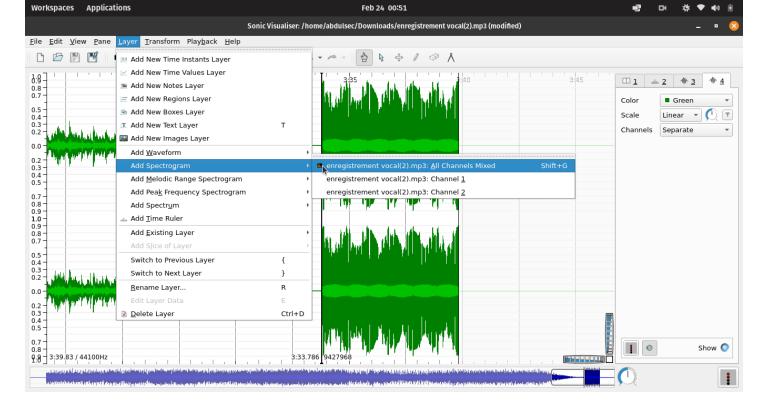
https://drive.google.com/file/d/1vKmVkd3dwDqffSAekIz4vJuz6pDOKB49/view? usp=sharing i have found an audio file , then i downloaded it locally , but i have no idea what to do with the audio after a few hour spend in youtube , i have now idea how to find flag in mp3 in all the recommendation for the tools , i choose to use https://www.sonicvisualiser.org/

sonicvisualiser: Sonic Visualiser is an application for viewing and analysing the contents of music audio files

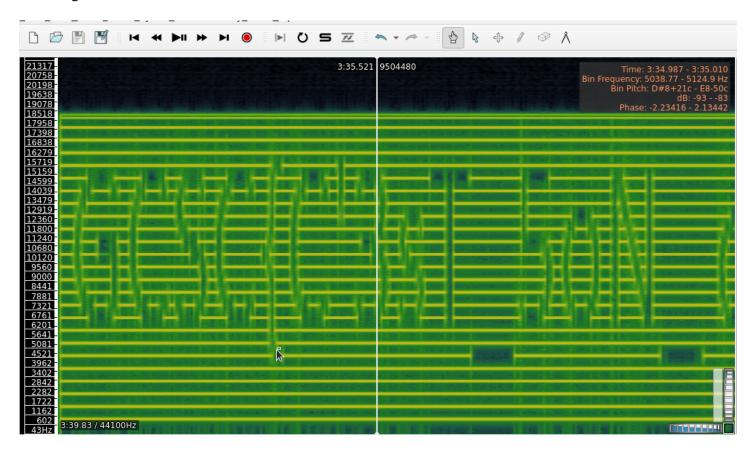
the first thing i did was to open the audio file with sonicvisualiser



now go layer then add spectogram with all channel mixed



now play song until the weird song , then made pause and zoom the image , you will got the flag



in the image you have this flag: GCSC{C'3sT\_5oN\_oU\_1m4g3?}

now replace just GCSC to GCSC2020 { C'3sT\_5oN\_oU\_1m4g3?} and validate the challenge

## ∂ Game over

thank you for creating this amazing ctf challenge , to be honest with you i never liked ctf challenge , but after this i will try to learn more about ctf related challenge

stay safe and healthy

best regards abdulsec