

定义

中级

一个例子

## 定义

### 漏洞概述

- 很多Web 站点都有文件上传的接口（比如注册时上传头像等），由于没有对上传的文件类型进行严格限制，导致攻击者可以上传一些恶意文件（比如Webshell）。
- 上传漏洞和SQL注入、XSS攻击等都是目前主流的Web攻击手法。 I

```
1  <?php
2      if (isset($_POST['Upload'])) {
3
4          $target_path = DVWA_WEB_PAGE_TO_ROOT."hackable/uploads/";//这个变量保存的是上
5          $target_path = $target_path . basename( $_FILES['uploaded']['name']);//这里
6
7          if(!move_uploaded_file($_FILES['uploaded']['tmp_name'], $target_path)) {/,
8
9              echo '<pre>';
10             echo 'Your image was not uploaded.';
11             echo '</pre>';
12
13         } else {
14
15             echo '<pre>';
16             echo $target_path . ' succesfully uploaded!';
17             echo '</pre>';
18
19         }
20
21     }
22 ?>
```

## 代码分析

\$\_FILES变量专门用于获取上传文件的各种信息。

- \$\_FILES['uploaded']['name'], 获取客户端文件的原名称;
- \$\_FILES['uploaded']['tmp\_name'], 获取文件被上传后在服务端存储的临时文件名。
- \$target\_path = DVWA\_WEB\_PAGE\_TO\_ROOT."hackable/uploads/";  
指定文件上传路径为 “网站根目录/hackable/uploads”
- \$target\_path = \$target\_path . basename(\$\_FILES['uploaded']['name']);  
指定上传之后的文件名及保存路径

## 中级

```
1 <?php
2     if (isset($_POST['Upload'])) {
3
4         $target_path = DVWA_WEB_PAGE_TO_ROOT."hackable/uploads/";
5         $target_path = $target_path . basename($_FILES['uploaded']['name']);
6         $uploaded_name = $_FILES['uploaded']['name'];
7         $uploaded_type = $_FILES['uploaded']['type'];
8         $uploaded_size = $_FILES['uploaded']['size'];
9
10        if (($uploaded_type == "image/jpeg") && ($uploaded_size < 100000)){
11
12
13            if(!move_uploaded_file($_FILES['uploaded']['tmp_name'], $target_path)){
14
15                echo '<pre>';
16                echo 'Your image was not uploaded.';
17                echo '</pre>';
18
19            } else {
20
21                echo '<pre>';
22                echo $target_path . ' succesfully uploaded!';
23                echo '</pre>';
24
25            }
26        }
27    } else {
```

```

28         echo '<pre>Your image was not uploaded.</pre>';
29     }
30 }
31 ?>

```

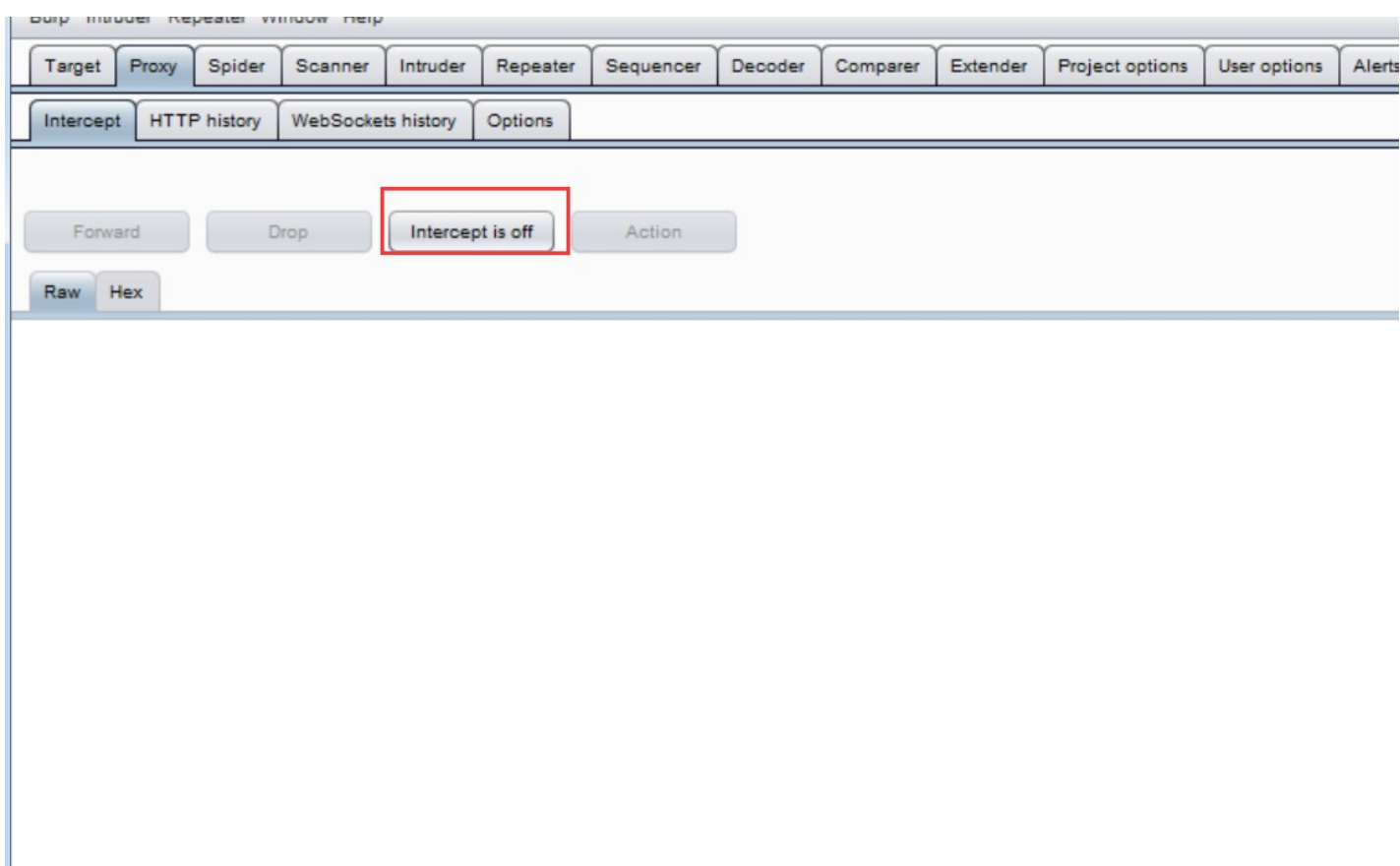
## 代码分析

- \$\_FILES['uploaded']['type']** 获取上传文件的 MIME 类型  
 MIME 类型用来设定某种扩展名文件的打开方式，当具有该扩展名的文件被访问时，浏览器会自动使用指定的应用程序来打开。  
 常见的 MIME 类型：
  - html 网页.html text/html
  - 普通文本.txt text/plain
  - GIF 图像.gif image/gif
  - JPEG 图像.jpeg.jpg image/jpeg

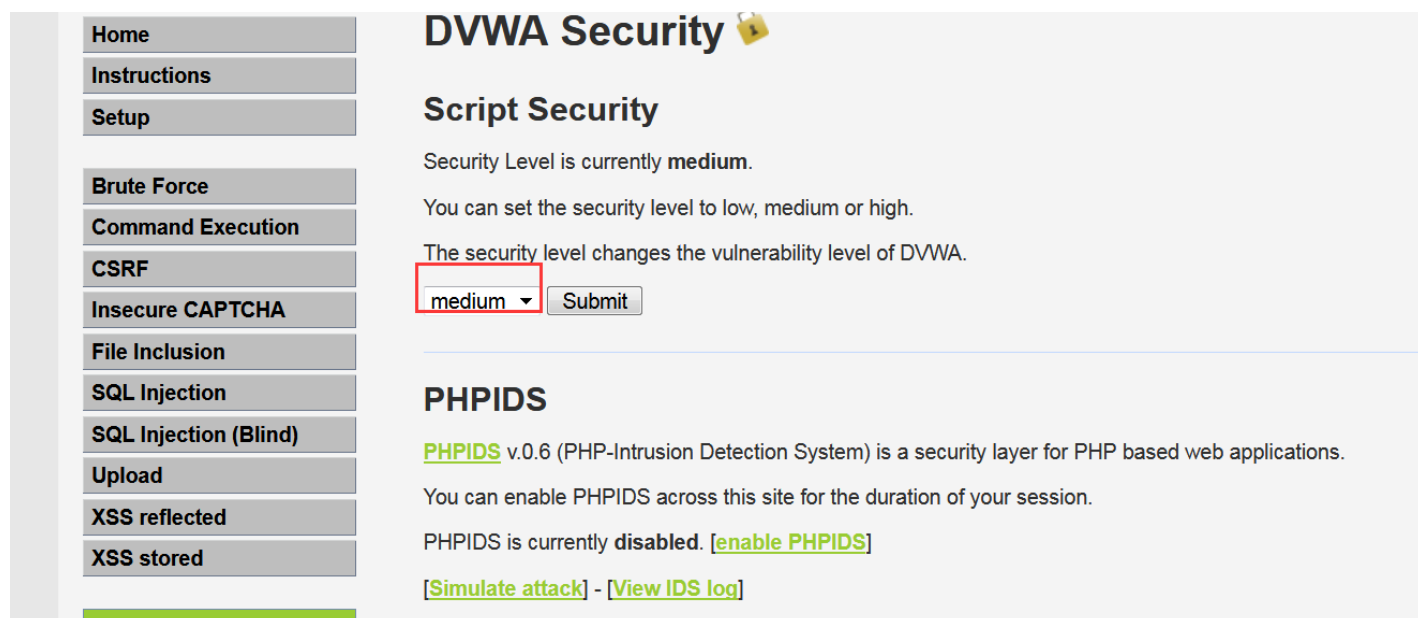
## 一个例子

设置代理





设置为中级：



Home

Instructions

Setup

Brute Force

Command Execution

CSRF

Insecure CAPTCHA

File Inclusion

SQL Injection

SQL Injection (Blind)

Upload

XSS reflected

# Vulnerability: File Upload

Choose an image to upload:

浏览...

未选择文件。

Upload

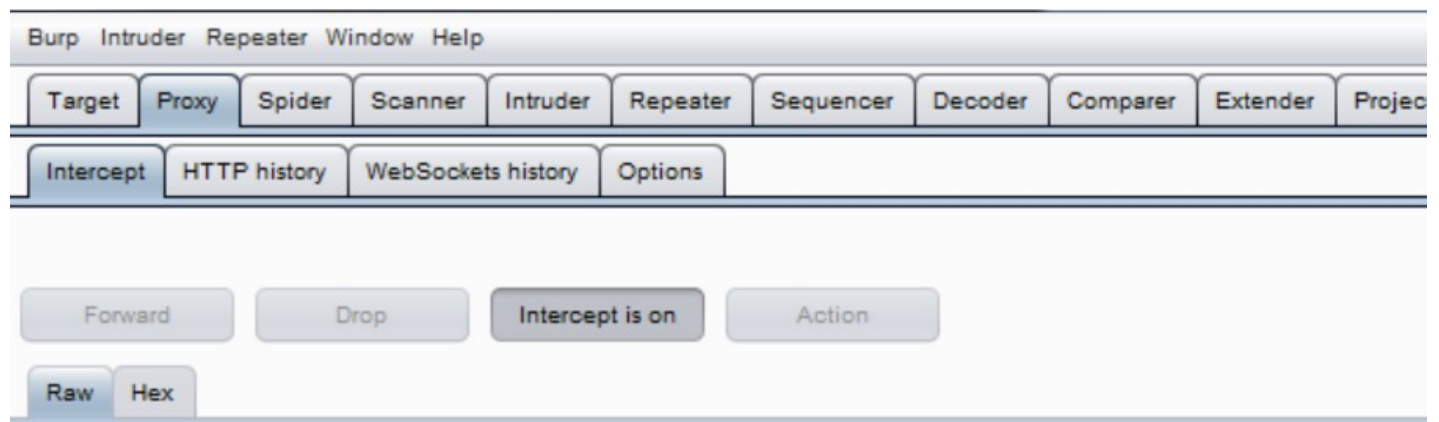
## More info

[http://www.owasp.org/index.php/Unrestricted File Upload](http://www.owasp.org/index.php/Unrestricted_File_Upload)

<http://blogs.securiteam.com/index.php/archives/1268>

<http://www.acunetix.com/websecurity/upload-forms-threat.htm>

打开拦截:



上传:

0.4/dvwa/vulnerabilities/upload/

用网址 JD 京东商城

## Vulnerability: File Upload

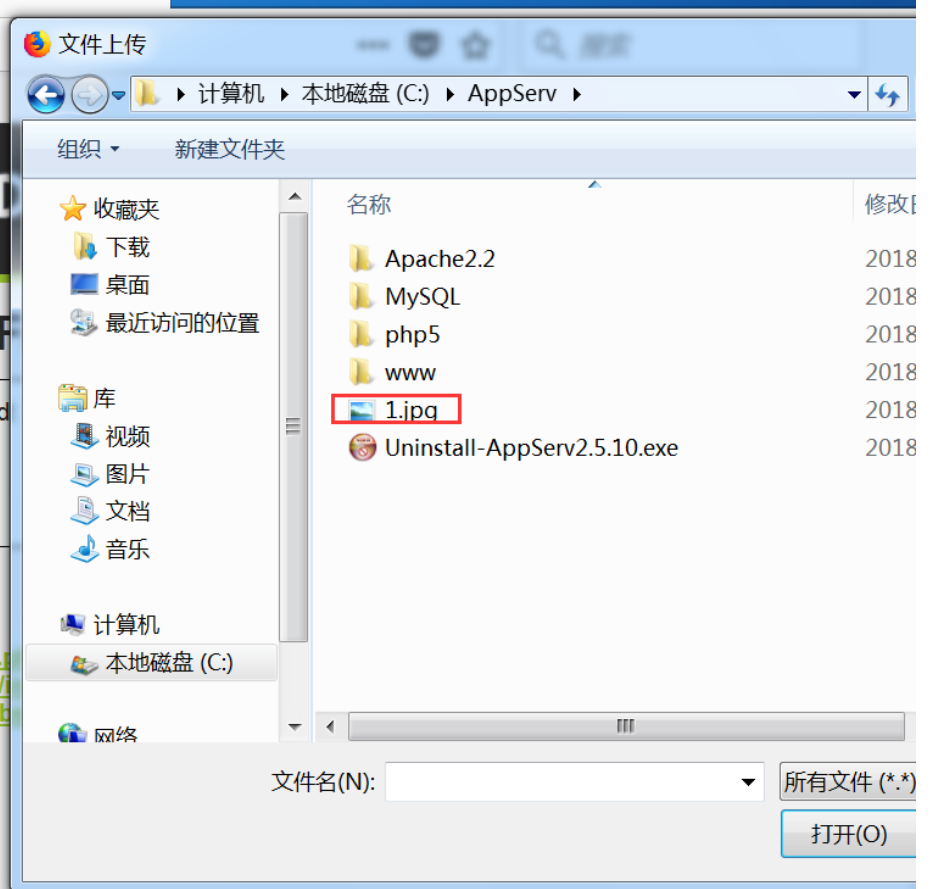
Choose an image to upload:

浏览... 未选择文件。

Upload

### More info

[http://www.owasp.org/index.php/Unrestricted\\_File\\_Upload](http://www.owasp.org/index.php/Unrestricted_File_Upload)  
<http://blogs.securiteam.com/index.php/archives/1268>  
<http://www.acunetix.com/websecurity/upload-forms-threat.html>



最常访问 火狐官方站点 新手上路 常用网址 JD 京东商城



## Vulnerability: File Upload

Choose an image to upload:

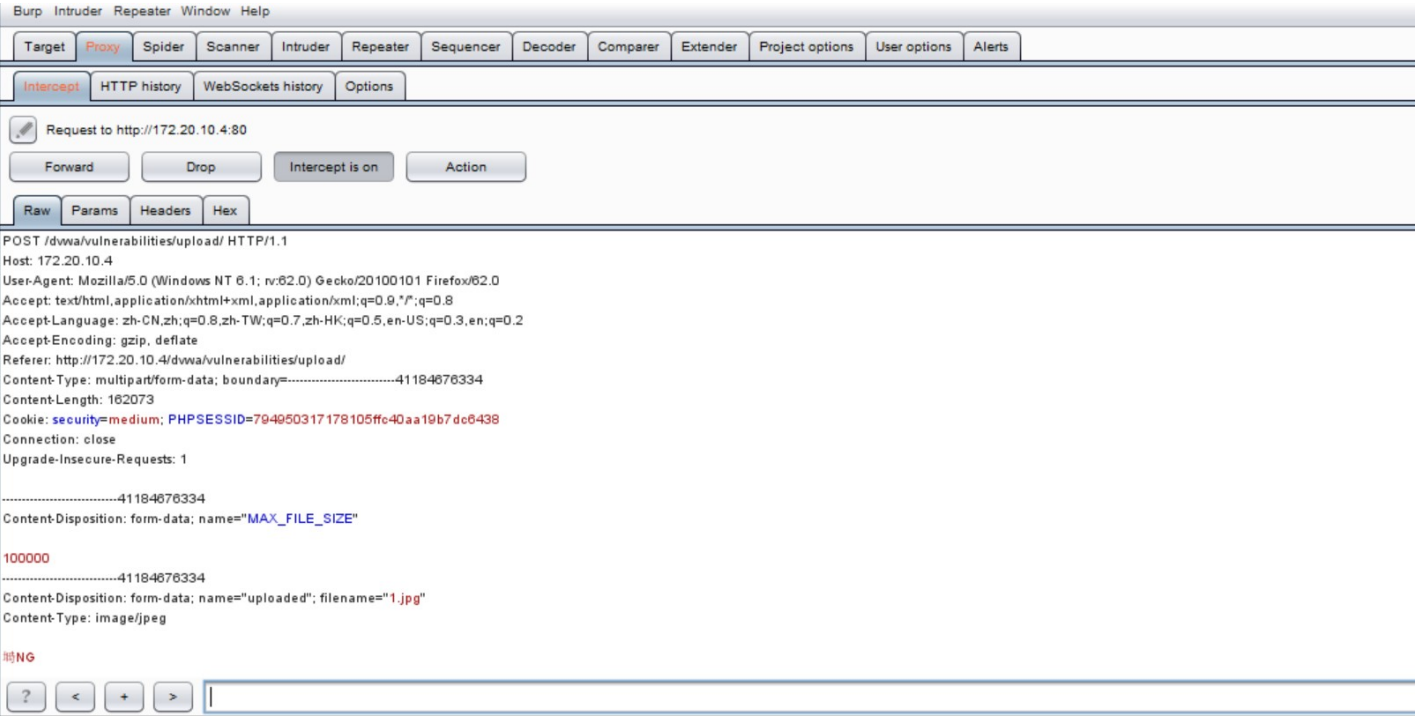
浏览... 1.jpg

Upload

### More info

[http://www.owasp.org/index.php/Unrestricted\\_File\\_Upload](http://www.owasp.org/index.php/Unrestricted_File_Upload)  
<http://blogs.securiteam.com/index.php/archives/1268>  
<http://www.acunetix.com/websecurity/upload-forms-threat.html>

可以看到:



host:就是访问的目标网站;

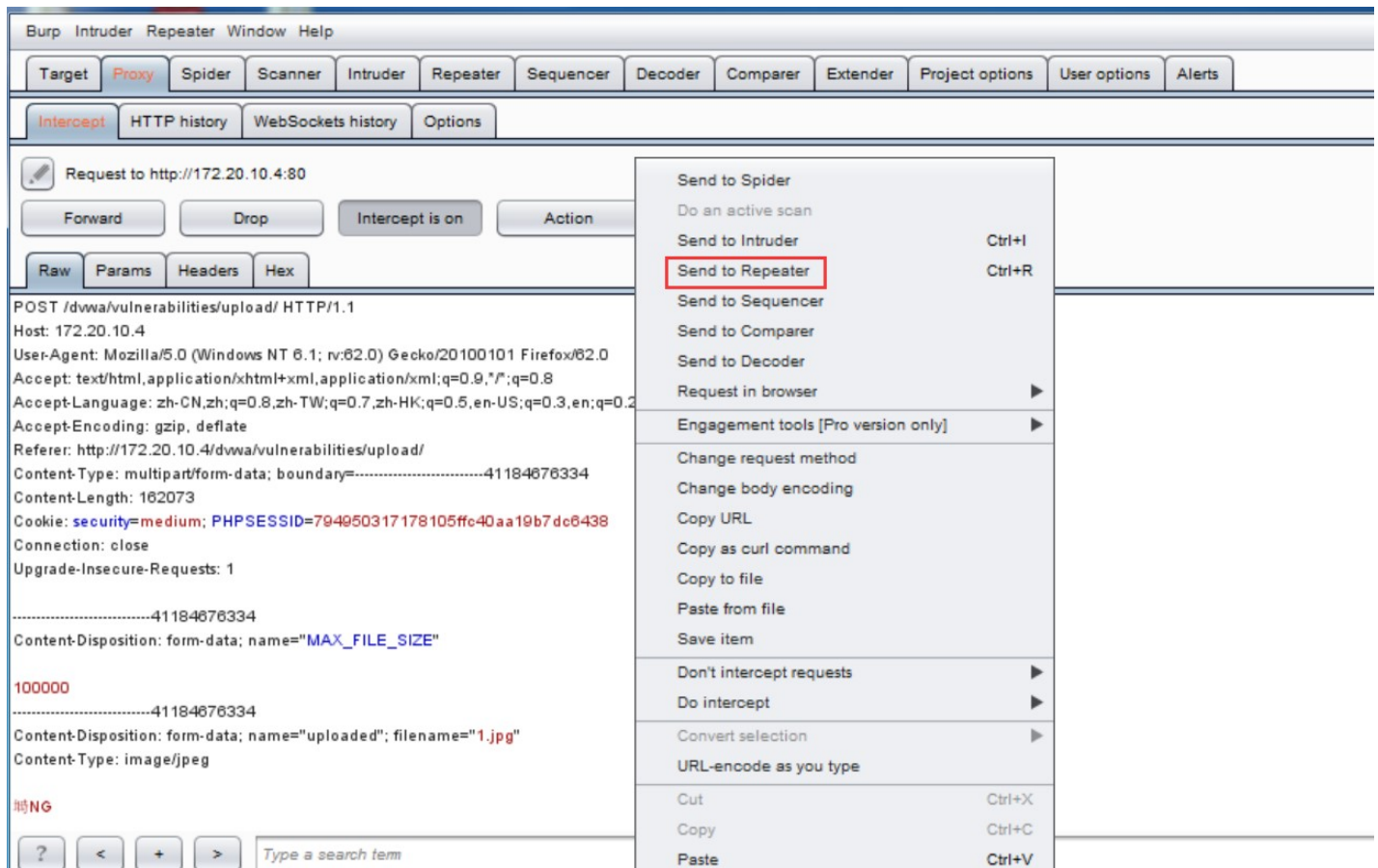
referer:是访问目标站点之前的那个url;



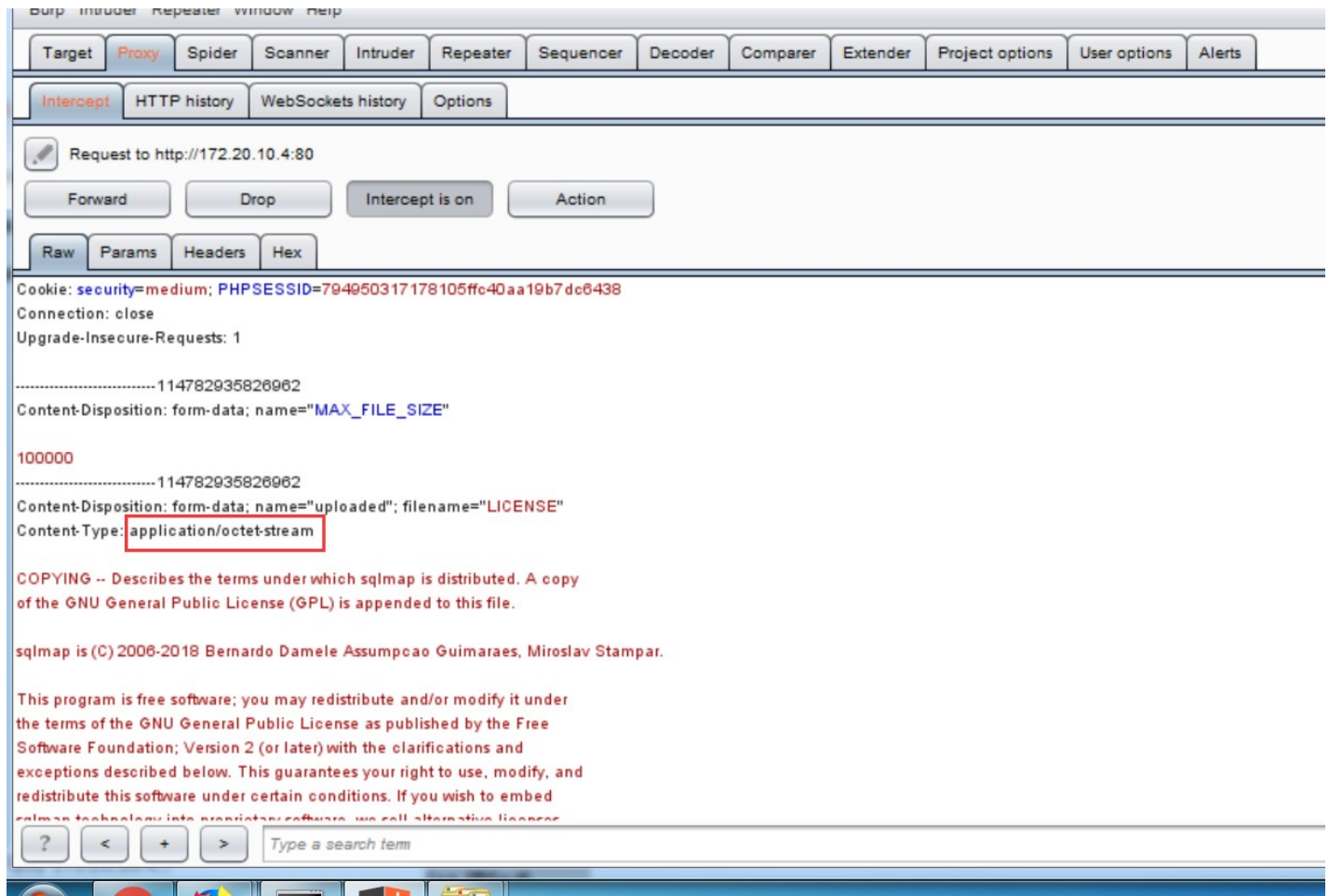
这里的content-type就是mil类型;刚才的那个\$\_FileS获取的就是这个;



为了绕过(如果不是image/jpeg类型),可以右击-->send to repeater;

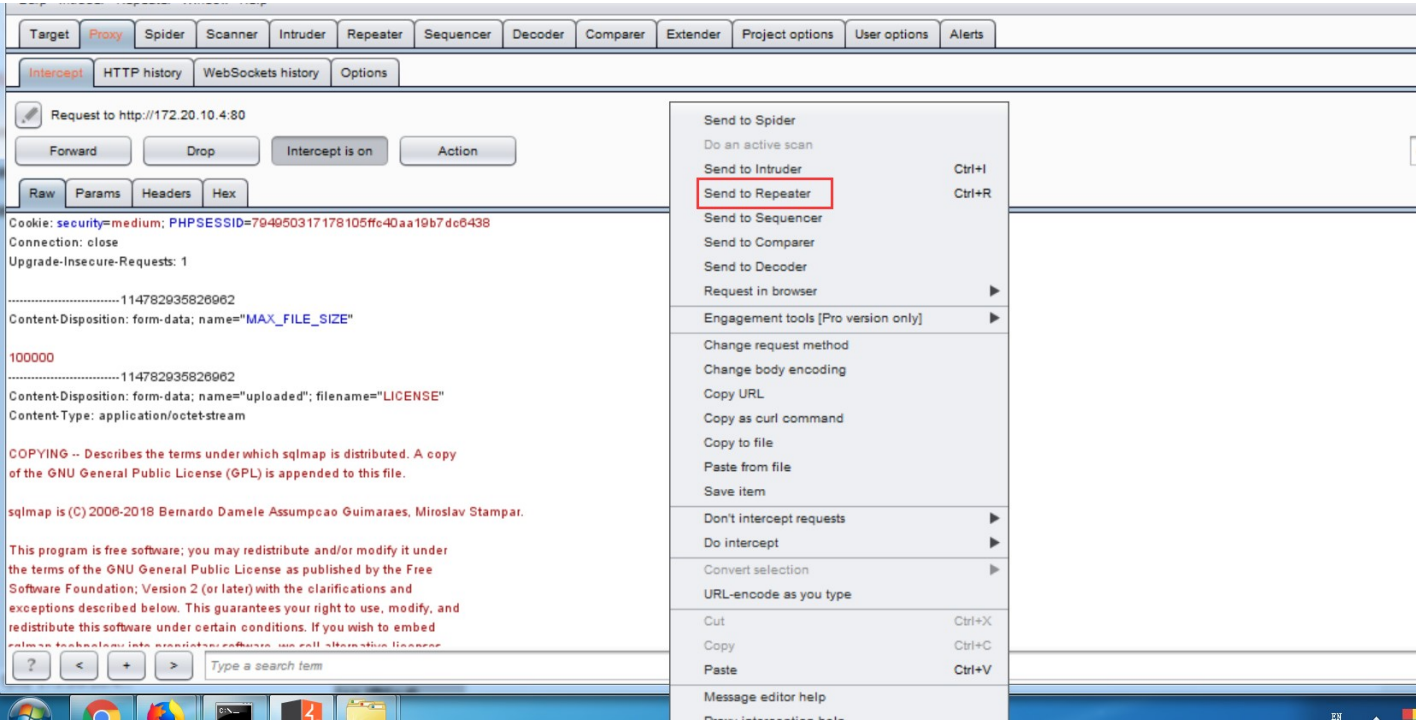


下面这个上传的不是image/jpeg这个类型:





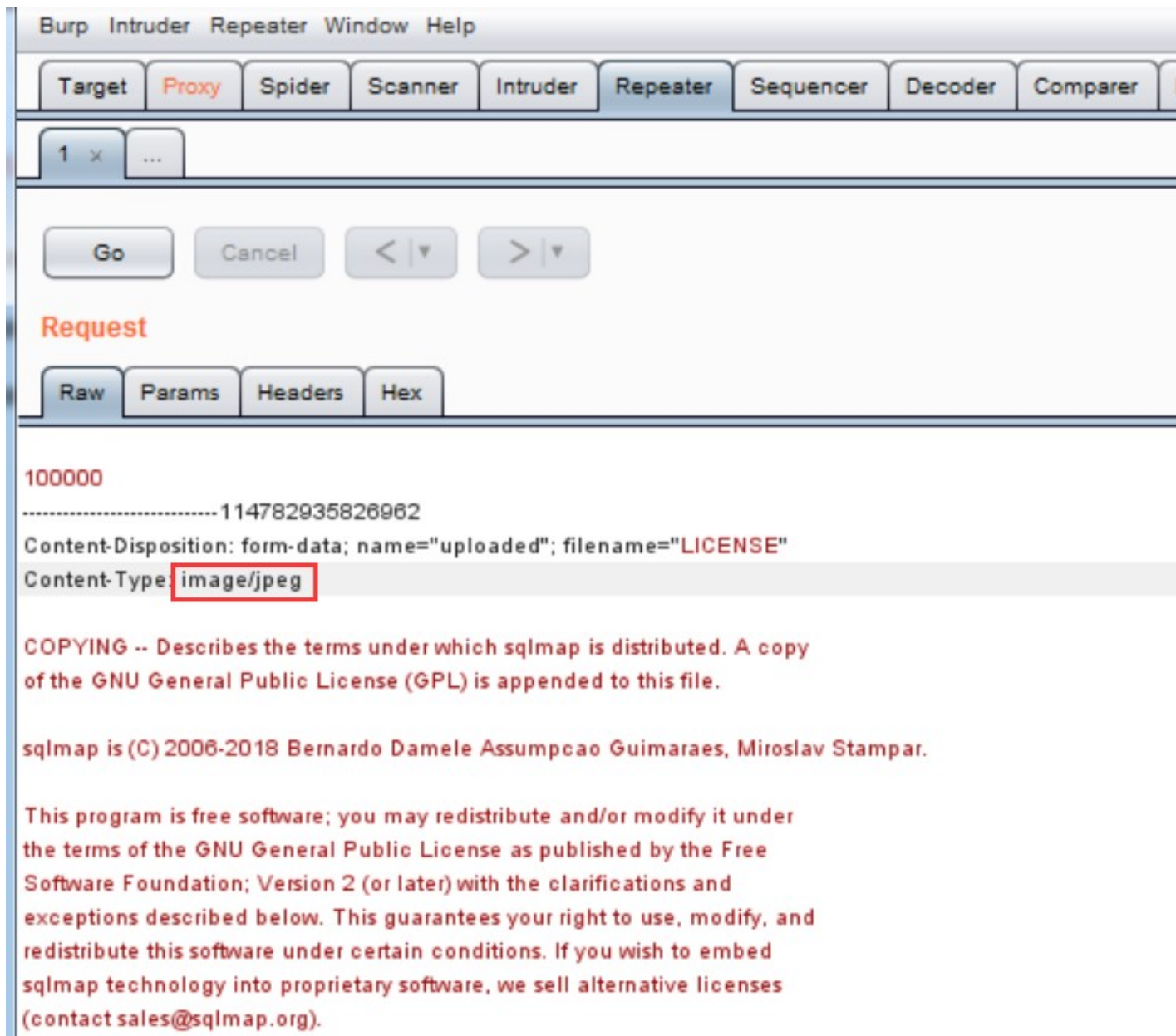
send to repeater:



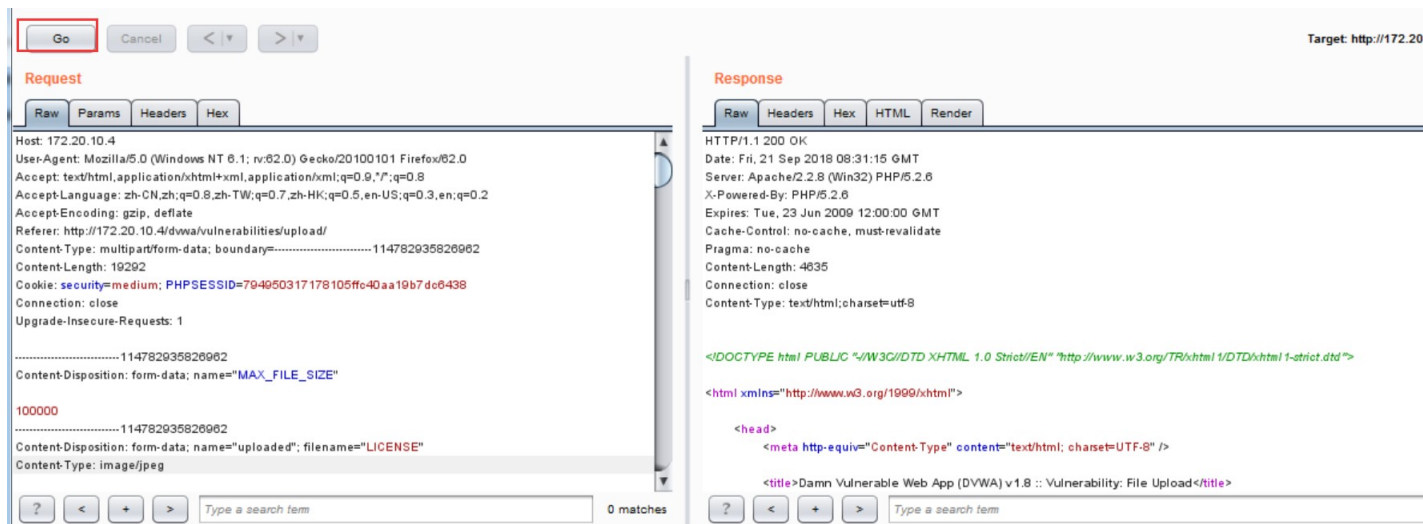
repeater这个模块适合改包！！！！

intruder适合暴力破解！

改包:



go一下:



绕过成功:

The screenshot displays the Burp Suite interface. The top menu bar includes options like Target, Proxy, Spider, Scanner, Intruder, Repeater, Sequencer, Decoder, Comparer, Extender, Project options, User options, and Alerts. The main window is split into two panes. The left pane, titled 'Request', shows the raw HTTP request details, including the Host (172.20.10.4), User-Agent (Mozilla/5.0), and various headers. The right pane, titled 'Response', shows the raw HTTP response details, including the status code (200) and the response body. The response body contains a message: '...hackable/uploads/LICENSE succesfully uploaded!'. The 'More info' section at the bottom of the response pane is also visible.

高级:

```
1 <?php
2 if (isset($_POST['Upload'])) {
3
4     $target_path = DVWA_WEB_PAGE_TO_ROOT."hackable/uploads/";
5     $target_path = $target_path . basename($_FILES['uploaded']['name']);
6     $uploaded_name = $_FILES['uploaded']['name'];
7     $uploaded_ext = substr($uploaded_name, strrpos($uploaded_name, '.') + 1);
8     $uploaded_size = $_FILES['uploaded']['size'];
9
10    if (($uploaded_ext == "jpg" || $uploaded_ext == "JPG" || $uploaded_ext ==
11
12
13    if(!move_uploaded_file($_FILES['uploaded']['tmp_name'], $target_path))
14
15        echo '<pre>';
16        echo 'Your image was not uploaded.';
17        echo '</pre>';
18
19    } else {
20
21        echo '<pre>';
22        echo $target_path . ' succesfully uploaded!';
23        echo '</pre>';
24
25    }
26 }
27
28 else{
```

```
29
30     echo '<pre>';
31     echo 'Your image was not uploaded.';
32     echo '</pre>';
33
34 }
35
36 }
37 ?>
38
```

## 代码分析

- `$uploaded_ext = substr($uploaded_name, strrpos($uploaded_name, '.') + 1);`

首先利用`strrpos()`函数查找“.”在变量`$uploaded_name`中出现的位置，然后将得到的数值加1，最后利用`substr()`函数从变量`$uploaded_name`的指定位置截取部分字符串。

这条语句的作用就是从上传的文件名中截取出扩展名部分。

edu.51cto.com

## 代码分析及防范方法

- `if (($uploaded_ext == "jpg" || $uploaded_ext == "JPG" || $uploaded_ext == "jpeg" || $uploaded_ext == "JPEG") && ($uploaded_size < 100000)){`

判断上传文件扩展名是否是大写或小写的jpg/jpeg，并且大小小于100k。

定义白名单是安全性比较高的一种防御措施。

对上传的文件在服务器上存储时进行重命名。