EPICODE

Andrea Rocca
CSPT0323

Cybersecurity Analyst

Week 1 - W1D4 Pratica

Creazione e configurazione laboratorio virtuale

Requisiti

Si richiede allo studente di creare un laboratorio virtuale, con le seguenti caratteristiche:

- Installazione di **Oracle VirtualBox**
- Installazione e configurazione di **Kali Linux**
- Installazione e configurazione di **Metasploitable**
- Installazione e configurazione di **Windows 7**

- La macchine virtuali **devono essere in grado di comunicare tra di loro su rete interna** (evidenze ping tra la macchine)
- Il sistema host **non deve comunicare** con l'ambiente

Andrea Rocca
CSPT0323

Kali Linux / 192.168.50.100

Verifica IP

```
                                    kali@kali: ~

File   Actions   Edit   View   Help
┌──(kali㊀kali)-[~]
└─$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.50.100  netmask 255.255.255.0  broadcast 192.168.50.255
        inet6 fe80::a00:27ff:fecb:7ef5  prefixlen 64  scopeid 0×20<link>
        ether 08:00:27:cb:7e:f5  txqueuelen 1000  (Ethernet)
        RX packets 65  bytes 5578 (5.4 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 19  bytes 2634 (2.5 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

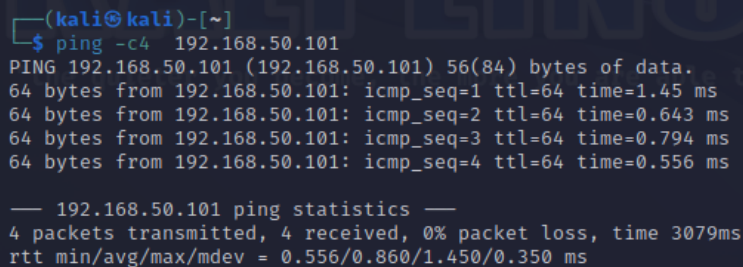## Ping verso sistema host (192.168.1.21)

```
┌──(kali㊀kali)-[~]
└─$ ping -c4  192.168.1.21
PING 192.168.1.21 (192.168.1.21) 56(84) bytes of data.
From 192.168.50.100 icmp_seq=1 Destination Host Unreachable
From 192.168.50.100 icmp_seq=2 Destination Host Unreachable
From 192.168.50.100 icmp_seq=3 Destination Host Unreachable
From 192.168.50.100 icmp_seq=4 Destination Host Unreachable

── 192.168.1.21 ping statistics ──
4 packets transmitted, 0 received, +4 errors, 100% packet loss, time 3078ms
pipe 4
```

Cybersecurity Analyst / Week1 - W1D4 Pratica
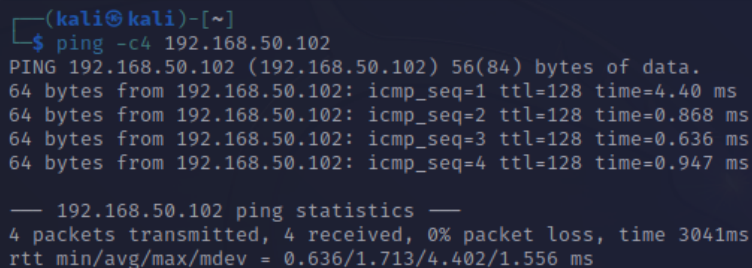# Creazione e configurazione laboratorio virtuale

Kali Linux / 192.168.50.100

Ping verso Metasploitable (192.168.50.101)

```
┌──(kali㉿kali)-[~]
└─$ ping -c4  192.168.50.101
PING 192.168.50.101 (192.168.50.101) 56(84) bytes of data.
64 bytes from 192.168.50.101: icmp_seq=1 ttl=64 time=1.45 ms
64 bytes from 192.168.50.101: icmp_seq=2 ttl=64 time=0.643 ms
64 bytes from 192.168.50.101: icmp_seq=3 ttl=64 time=0.794 ms
64 bytes from 192.168.50.101: icmp_seq=4 ttl=64 time=0.556 ms

─── 192.168.50.101 ping statistics ───
4 packets transmitted, 4 received, 0% packet loss, time 3079ms
rtt min/avg/max/mdev = 0.556/0.860/1.450/0.350 ms
```

Ping verso Windows 7 (192.168.50.102)

```
┌──(kali㉿kali)-[~]
└─$ ping -c4 192.168.50.102
PING 192.168.50.102 (192.168.50.102) 56(84) bytes of data.
64 bytes from 192.168.50.102: icmp_seq=1 ttl=128 time=4.40 ms
64 bytes from 192.168.50.102: icmp_seq=2 ttl=128 time=0.868 ms
64 bytes from 192.168.50.102: icmp_seq=3 ttl=128 time=0.636 ms
64 bytes from 192.168.50.102: icmp_seq=4 ttl=128 time=0.947 ms

─── 192.168.50.102 ping statistics ───
4 packets transmitted, 4 received, 0% packet loss, time 3041ms
rtt min/avg/max/mdev = 0.636/1.713/4.402/1.556 ms
```

Cybersecurity Analyst / Week1 - W1D4 Pratica

Creazione e configurazione laboratorio virtuale

Andrea Rocca
CSPT0323

Metasploitable / 192.168.50.101

Verifica IP

```
To access official Ubuntu documentation, please visit:
http://help.ubuntu.com/
No mail.
msfadmin@metasploitable:~$ ifconfig
eth0      Link encap:Ethernet  HWaddr 08:00:27:88:db:1d
          inet addr:192.168.50.101  Bcast:192.168.50.255  Mask:255.255.255.0
          inet6 addr: fe80::a00:27ff:fe88:db1d/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:21 errors:0 dropped:0 overruns:0 frame:0
          TX packets:71 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:1777 (1.7 KB)  TX bytes:5418 (5.2 KB)
          Base address:0xd020 Memory:f0200000-f0220000
```

Ping verso sistema host (192.168.1.21)

```
msfadmin@metasploitable:~$ ping -c4 192.168.1.21
PING 192.168.1.21 (192.168.1.21) 56(84) bytes of data.
From 192.168.50.101 icmp_seq=1 Destination Host Unreachable
From 192.168.50.101 icmp_seq=2 Destination Host Unreachable
From 192.168.50.101 icmp_seq=3 Destination Host Unreachable
From 192.168.50.101 icmp_seq=4 Destination Host Unreachable

--- 192.168.1.21 ping statistics ---
4 packets transmitted, 0 received, +4 errors, 100% packet loss, time 3001ms
, pipe 3
```

Cybersecurity Analyst / Week1 - W1D4 Pratica
Creazione e configurazione laboratorio virtuale

Andrea Rocca
CSPT0323

Metasploitable / 192.168.50.101

Ping verso Kali Linux (192.168.50.100)

```
msfadmin@metasploitable:~$ ping -c4 192.168.50.100
PING 192.168.50.100 (192.168.50.100) 56(84) bytes of data.
64 bytes from 192.168.50.100: icmp_seq=1 ttl=64 time=1.01 ms
64 bytes from 192.168.50.100: icmp_seq=2 ttl=64 time=0.879 ms
64 bytes from 192.168.50.100: icmp_seq=3 ttl=64 time=0.900 ms
64 bytes from 192.168.50.100: icmp_seq=4 ttl=64 time=0.891 ms

--- 192.168.50.100 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 2997ms
rtt min/avg/max/mdev = 0.879/0.921/1.014/0.054 ms
```

Ping verso Windows 7 (192.168.50.102)

```
msfadmin@metasploitable:~$ ping -c4 192.168.50.102
PING 192.168.50.102 (192.168.50.102) 56(84) bytes of data.
64 bytes from 192.168.50.102: icmp_seq=1 ttl=128 time=6.07 ms
64 bytes from 192.168.50.102: icmp_seq=2 ttl=128 time=0.777 ms
64 bytes from 192.168.50.102: icmp_seq=3 ttl=128 time=1.01 ms
64 bytes from 192.168.50.102: icmp_seq=4 ttl=128 time=0.604 ms

--- 192.168.50.102 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 2997ms
rtt min/avg/max/mdev = 0.604/2.115/6.071/2.288 ms
```

Cybersecurity Analyst / Week1 - W1D4 Pratica

Creazione e configurazione laboratorio virtuale

Windows 7 / 192.168.50.102

Verifica IP

```
C:\Windows\system32\cmd.exe

Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation.  All rights reserved.

C:\Users\Windows 7>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

   Connection-specific DNS Suffix  . :
   Link-local IPv6 Address . . . . . : fe80::f57c:508f:416a:8081%11
   IPv4 Address. . . . . . . . . . . : 192.168.50.102
   Subnet Mask . . . . . . . . . . . : 255.255.255.0
   Default Gateway . . . . . . . . . : 192.168.50.1
```

Ping verso sistema host (192.168.1.21)

```
C:\Users\Windows 7>ping 192.168.1.21

Pinging 192.168.1.21 with 32 bytes of data:
Reply from 192.168.50.102: Destination host unreachable.
Reply from 192.168.50.102: Destination host unreachable.
Reply from 192.168.50.102: Destination host unreachable.
Reply from 192.168.50.102: Destination host unreachable.

Ping statistics for 192.168.1.21:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
```

Cybersecurity Analyst / Week1 - W1D4 Pratica
Creazione e configurazione laboratorio virtuale

Andrea Rocca
CSPT0323

EPICODE

Windows 7 / 192.168.50.102

Ping verso Kali Linux (192.168.50.100)

```
C:\Users\Windows 7>ping 192.168.50.100

Pinging 192.168.50.100 with 32 bytes of data:
Reply from 192.168.50.100: bytes=32 time=3ms TTL=64
Reply from 192.168.50.100: bytes=32 time=1ms TTL=64
Reply from 192.168.50.100: bytes=32 time<1ms TTL=64
Reply from 192.168.50.100: bytes=32 time=1ms TTL=64

Ping statistics for 192.168.50.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 3ms, Average = 1ms
```

Ping verso Metasploitable (192.168.50.101)

```
C:\Users\Windows 7>ping 192.168.50.101

Pinging 192.168.50.101 with 32 bytes of data:
Reply from 192.168.50.101: bytes=32 time=10ms TTL=64
Reply from 192.168.50.101: bytes=32 time=1ms TTL=64
Reply from 192.168.50.101: bytes=32 time<1ms TTL=64
Reply from 192.168.50.101: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.50.101:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 10ms, Average = 2ms
```

Cybersecurity Analyst / Week1 - W1D4 Pratica
Creazione e configurazione laboratorio virtuale