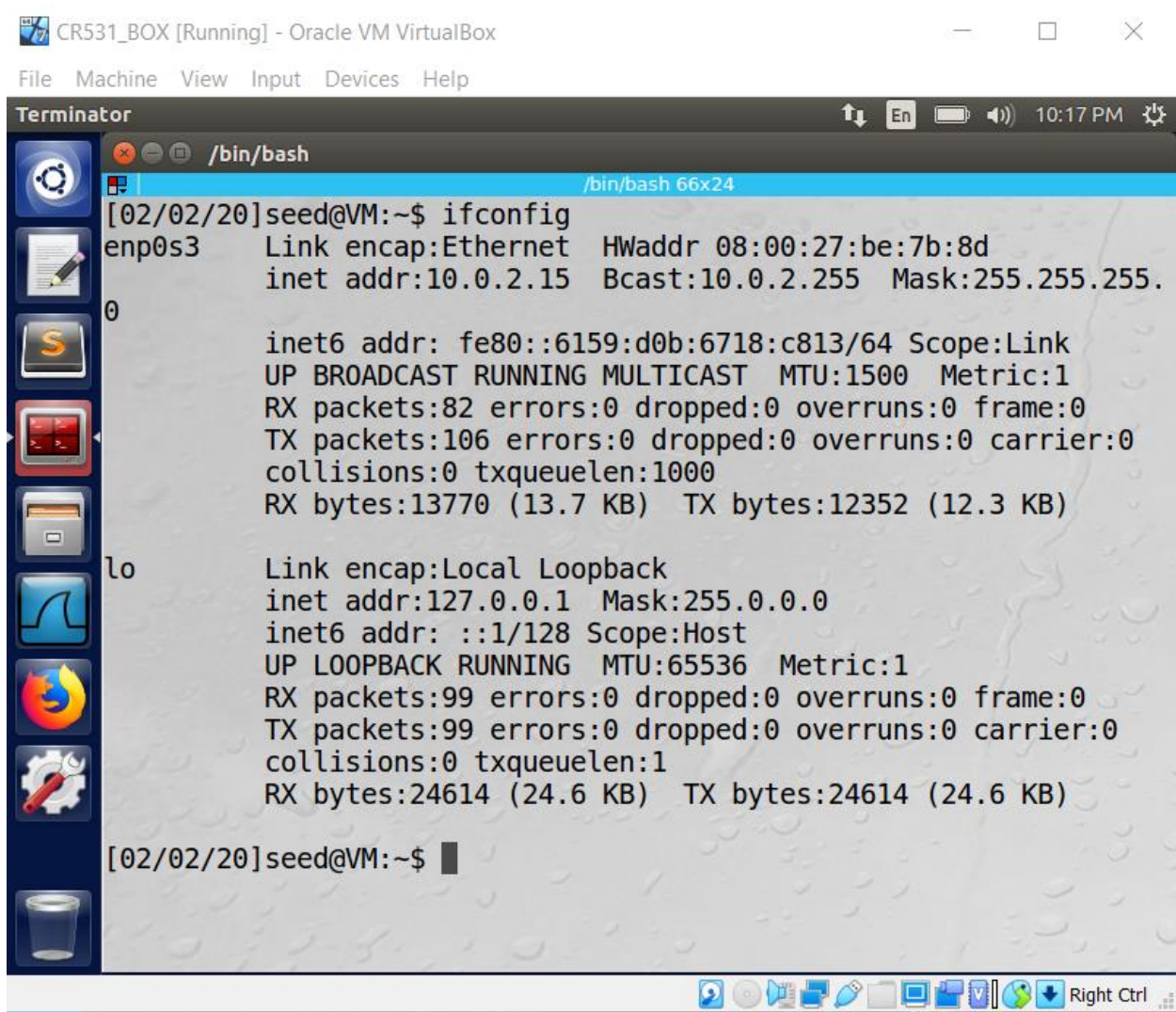


Foundations Network Security

Chakradhar Reddy Donuri

E949F496

Ubuntu VM



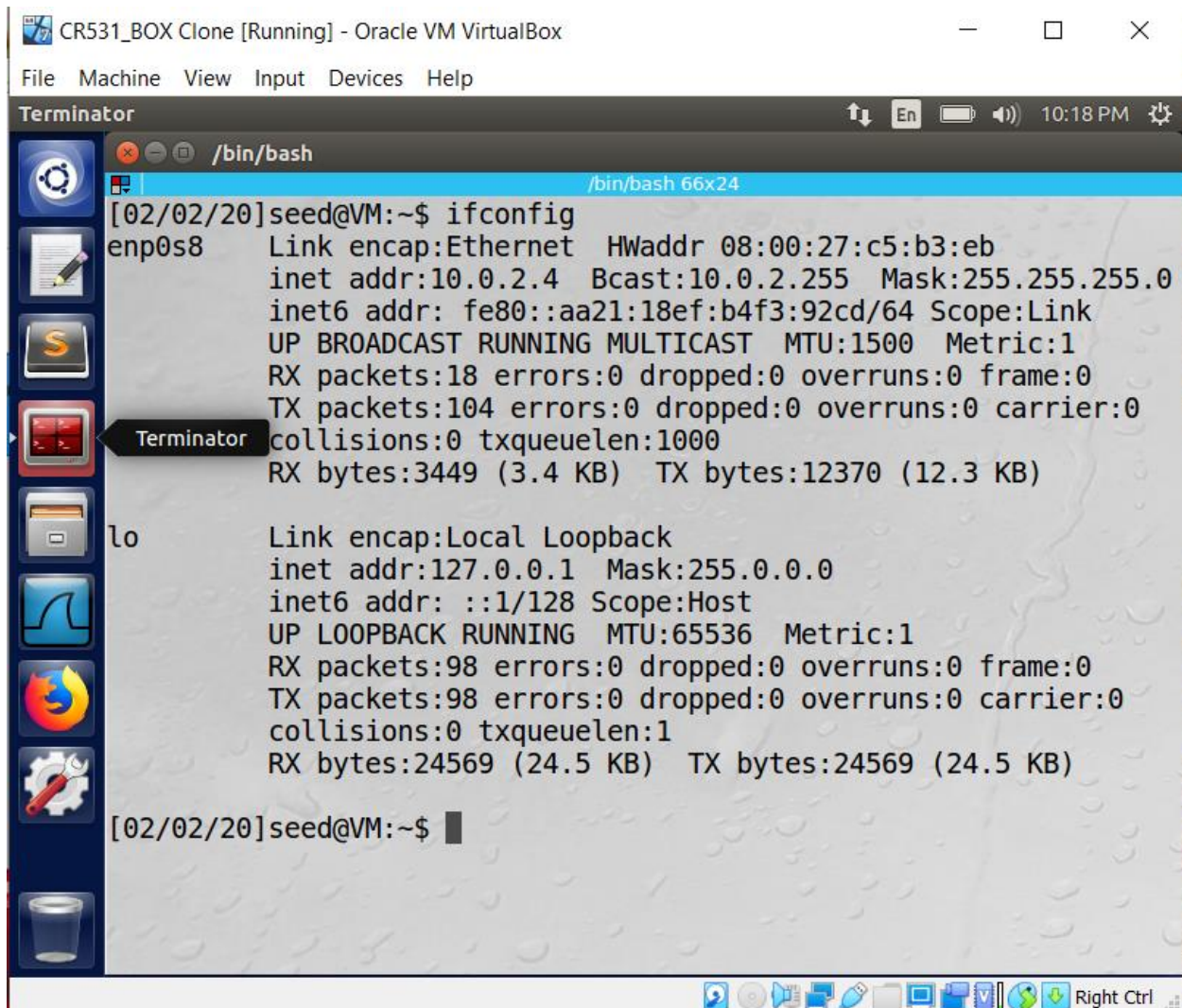
The screenshot shows a VirtualBox window titled "CR531_BOX [Running] - Oracle VM VirtualBox". Inside the window is a Terminator terminal window titled "/bin/bash". The terminal displays the output of the command `ifconfig` for the `enp0s3` interface. The output shows the interface is up and running, with an IP address of `10.0.2.15` and a broadcast address of `10.0.2.255`. It also shows the link encap as Ethernet and the hardware address as `08:00:27:be:7b:8d`. The terminal also shows the output for the `lo` (loopback) interface, which is also up and running, with an IP address of `127.0.0.1` and a broadcast address of `255.0.0.0`. The terminal window has a title bar with standard window controls and a status bar at the bottom showing the time as 10:17 PM.

```
CR531_BOX [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Terminator /bin/bash
[02/02/20]seed@VM:~$ ifconfig
enp0s3  Link encap:Ethernet  HWaddr 08:00:27:be:7b:8d
        inet addr:10.0.2.15  Bcast:10.0.2.255  Mask:255.255.255.
        inet6 addr: fe80::6159:d0b:6718:c813/64 Scope:Link
        UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
        RX packets:82 errors:0 dropped:0 overruns:0 frame:0
        TX packets:106 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:13770 (13.7 KB)  TX bytes:12352 (12.3 KB)

lo      Link encap:Local Loopback
        inet addr:127.0.0.1  Mask:255.0.0.0
        inet6 addr: ::1/128 Scope:Host
        UP LOOPBACK RUNNING  MTU:65536  Metric:1
        RX packets:99 errors:0 dropped:0 overruns:0 frame:0
        TX packets:99 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1
        RX bytes:24614 (24.6 KB)  TX bytes:24614 (24.6 KB)

[02/02/20]seed@VM:~$
```

Ubuntu Clone VM

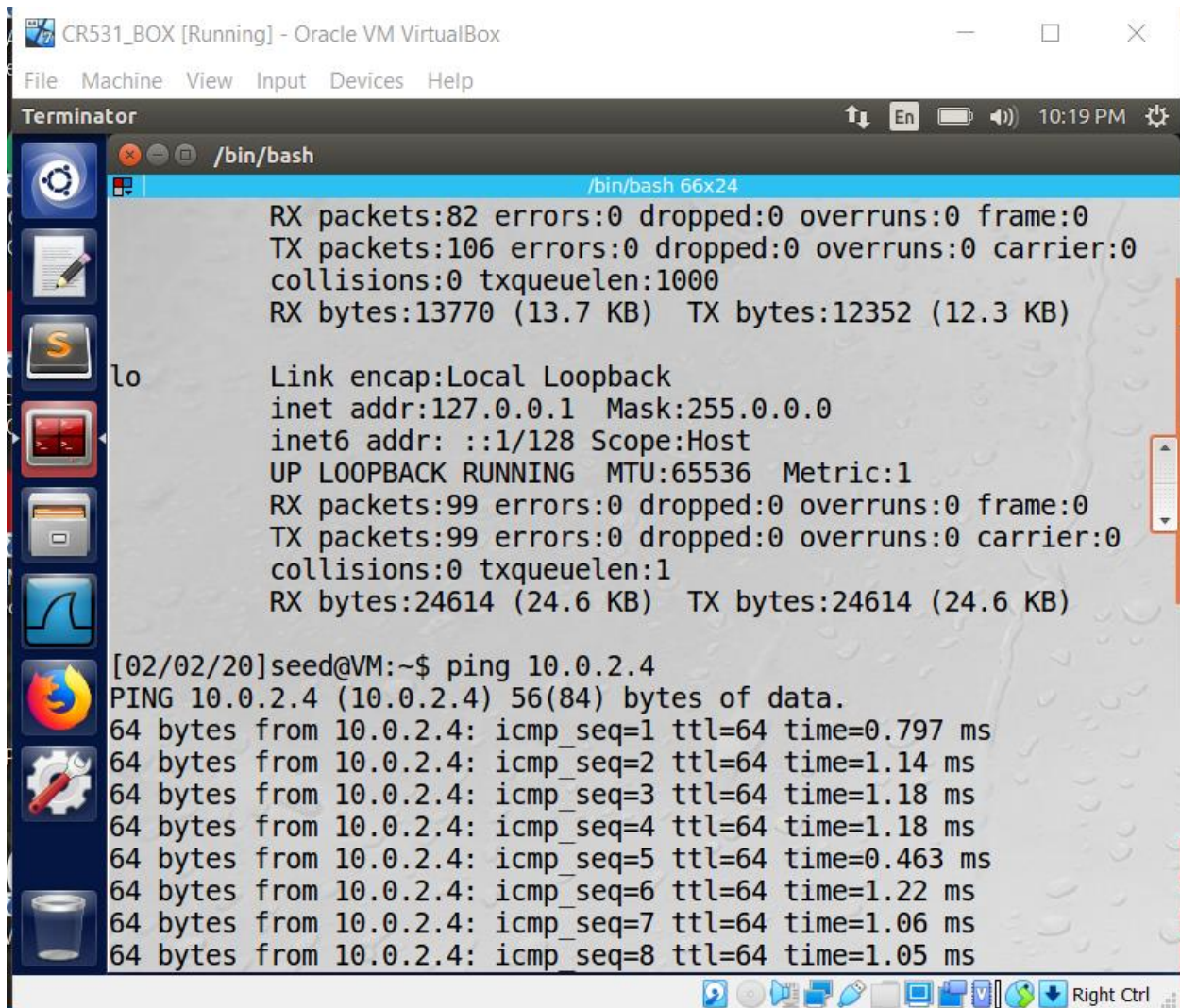


```
CR531_BOX Clone [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Terminator
/bin/bash
[02/02/20]seed@VM:~$ ifconfig
enp0s8  Link encap:Ethernet  HWaddr 08:00:27:c5:b3:eb
        inet addr:10.0.2.4  Bcast:10.0.2.255  Mask:255.255.255.0
        inet6 addr: fe80::aa21:18ef:b4f3:92cd/64 Scope:Link
        UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
        RX packets:18 errors:0 dropped:0 overruns:0 frame:0
        TX packets:104 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1000
        RX bytes:3449 (3.4 KB)  TX bytes:12370 (12.3 KB)

lo      Link encap:Local Loopback
        inet addr:127.0.0.1  Mask:255.0.0.0
        inet6 addr: ::1/128 Scope:Host
        UP LOOPBACK RUNNING  MTU:65536  Metric:1
        RX packets:98 errors:0 dropped:0 overruns:0 frame:0
        TX packets:98 errors:0 dropped:0 overruns:0 carrier:0
        collisions:0 txqueuelen:1
        RX bytes:24569 (24.5 KB)  TX bytes:24569 (24.5 KB)

[02/02/20]seed@VM:~$
```

Ping from Ubuntu VM



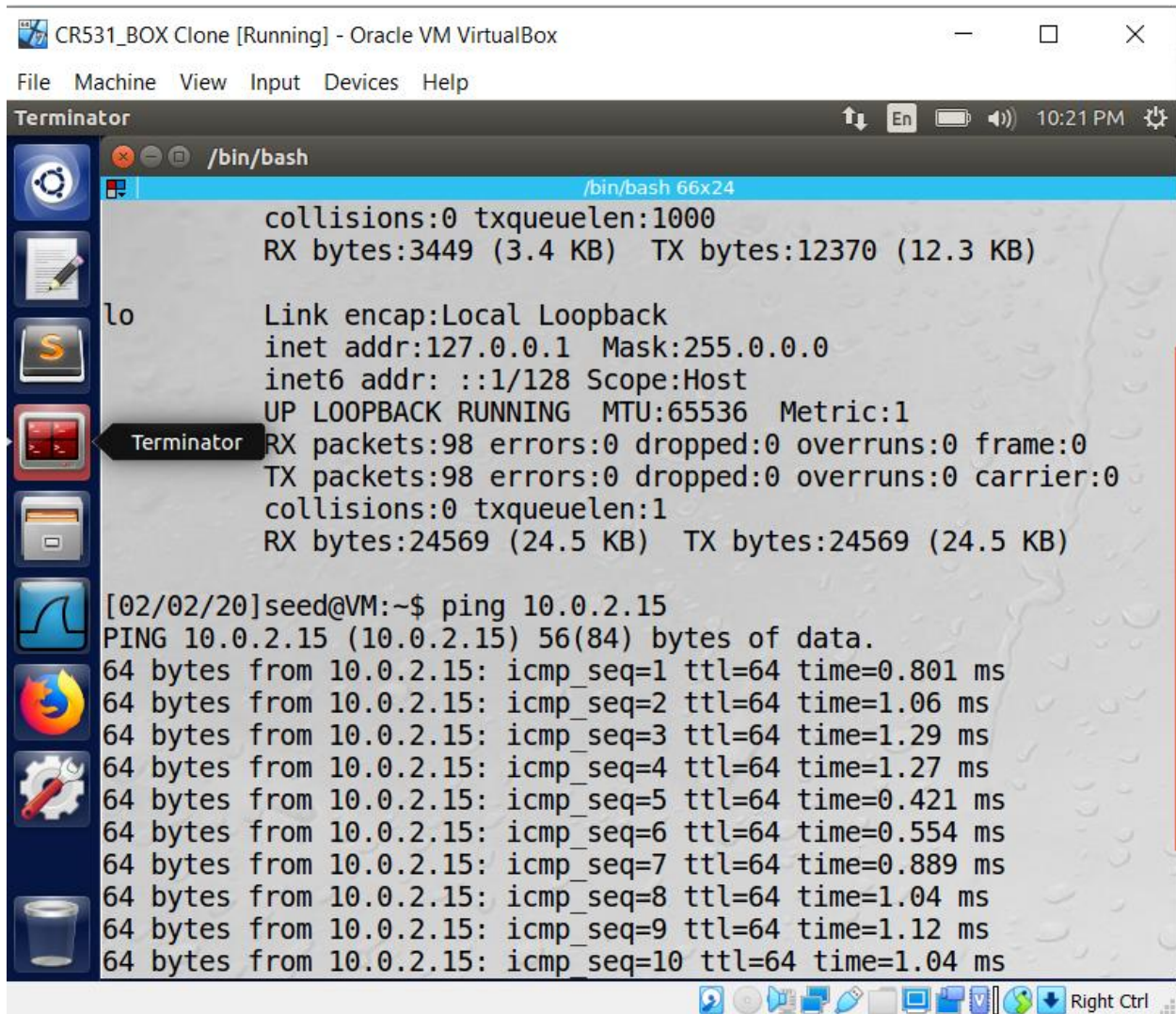
The screenshot shows a VirtualBox window titled "CR531_BOX [Running] - Oracle VM VirtualBox". Inside, a "Terminator" terminal window is open, displaying a bash shell. The terminal shows network statistics for a loopback interface, followed by a ping command to 10.0.2.4. The ping results show 8 successful packets with varying round-trip times.

```
CR531_BOX [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Terminator
/bin/bash
/bin/bash 66x24
RX packets:82 errors:0 dropped:0 overruns:0 frame:0
TX packets:106 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1000
RX bytes:13770 (13.7 KB) TX bytes:12352 (12.3 KB)

lo
Link encap:Local Loopback
inet addr:127.0.0.1 Mask:255.0.0.0
inet6 addr: ::1/128 Scope:Host
UP LOOPBACK RUNNING MTU:65536 Metric:1
RX packets:99 errors:0 dropped:0 overruns:0 frame:0
TX packets:99 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1
RX bytes:24614 (24.6 KB) TX bytes:24614 (24.6 KB)

[02/02/20]seed@VM:~$ ping 10.0.2.4
PING 10.0.2.4 (10.0.2.4) 56(84) bytes of data.
64 bytes from 10.0.2.4: icmp_seq=1 ttl=64 time=0.797 ms
64 bytes from 10.0.2.4: icmp_seq=2 ttl=64 time=1.14 ms
64 bytes from 10.0.2.4: icmp_seq=3 ttl=64 time=1.18 ms
64 bytes from 10.0.2.4: icmp_seq=4 ttl=64 time=1.18 ms
64 bytes from 10.0.2.4: icmp_seq=5 ttl=64 time=0.463 ms
64 bytes from 10.0.2.4: icmp_seq=6 ttl=64 time=1.22 ms
64 bytes from 10.0.2.4: icmp_seq=7 ttl=64 time=1.06 ms
64 bytes from 10.0.2.4: icmp_seq=8 ttl=64 time=1.05 ms
```


Ping from Ubuntu Clone VM



The screenshot shows an Oracle VM VirtualBox window titled "CR531_BOX Clone [Running] - Oracle VM VirtualBox". Inside the window is a Terminator terminal window titled "Terminator" with a "/bin/bash" prompt. The terminal displays network statistics for a loopback interface, followed by a ping command and its output.

```
collisions:0 txqueuelen:1000
RX bytes:3449 (3.4 KB) TX bytes:12370 (12.3 KB)

lo
Link encap:Local Loopback
inet addr:127.0.0.1 Mask:255.0.0.0
inet6 addr: ::1/128 Scope:Host
UP LOOPBACK RUNNING MTU:65536 Metric:1
RX packets:98 errors:0 dropped:0 overruns:0 frame:0
TX packets:98 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1
RX bytes:24569 (24.5 KB) TX bytes:24569 (24.5 KB)

[02/02/20]seed@VM:~$ ping 10.0.2.15
PING 10.0.2.15 (10.0.2.15) 56(84) bytes of data.
64 bytes from 10.0.2.15: icmp_seq=1 ttl=64 time=0.801 ms
64 bytes from 10.0.2.15: icmp_seq=2 ttl=64 time=1.06 ms
64 bytes from 10.0.2.15: icmp_seq=3 ttl=64 time=1.29 ms
64 bytes from 10.0.2.15: icmp_seq=4 ttl=64 time=1.27 ms
64 bytes from 10.0.2.15: icmp_seq=5 ttl=64 time=0.421 ms
64 bytes from 10.0.2.15: icmp_seq=6 ttl=64 time=0.554 ms
64 bytes from 10.0.2.15: icmp_seq=7 ttl=64 time=0.889 ms
64 bytes from 10.0.2.15: icmp_seq=8 ttl=64 time=1.04 ms
64 bytes from 10.0.2.15: icmp_seq=9 ttl=64 time=1.12 ms
64 bytes from 10.0.2.15: icmp_seq=10 ttl=64 time=1.04 ms
```