



Zachodniopomorski
Uniwersytet Techniczny
w Szczecinie

Network Systems Administration

Report 1

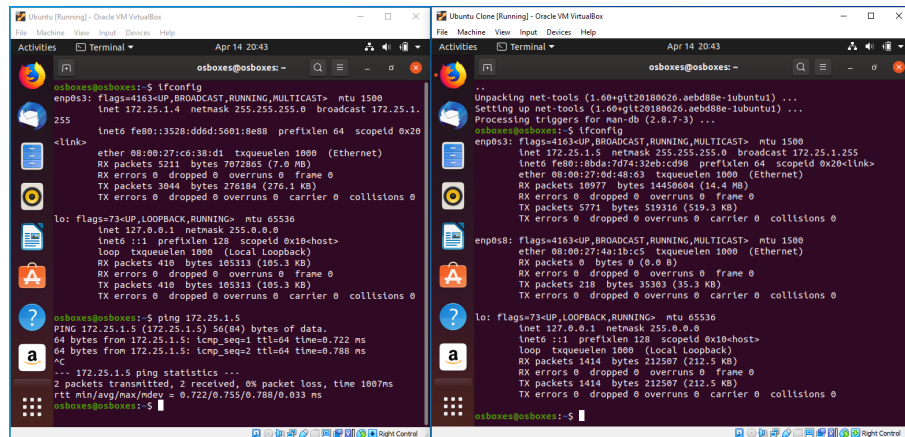
dr inż. Piotr Lech

Abdurrahman Karaoluk

ka46312

A.Completed Tasks

- 1- Downloading and installing VirtualBox on the computer.
- 2- Installing a Ubuntu virtual machine on VirtualBox.
- 3- Cloning ubuntu virtual machine that has been installed.
- 4- Connecting and pinging virtual machines.



```
osboxes@osboxes:~$ ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 172.25.1.4 netmask 255.255.255.0 broadcast 172.25.1.255
    ether 08:00:27:c6:38:d1 txqueuelen 1000 (Ethernet)
    RX packets 5211 bytes 7072865 (7.0 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 3044 bytes 276184 (276.1 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 410 bytes 105313 (105.3 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 410 bytes 105313 (105.3 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

osboxes@osboxes:~$ ping 172.25.1.5
PING 172.25.1.5 (172.25.1.5) 56(84) bytes of data:
64 bytes from 172.25.1.5: icmp_seq=1 ttl=64 time=0.722 ms
64 bytes from 172.25.1.5: icmp_seq=2 ttl=64 time=0.788 ms
^C
--- 172.25.1.5 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1007ms
rtt min/avg/max/ndev = 0.722/0.755/0.788/0.033 ms

osboxes@osboxes:~$
```

```
osboxes@osboxes:~$ ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 172.25.1.5 netmask 255.255.255.0 broadcast 172.25.1.255
    ether 08:00:27:c6:38:d1 txqueuelen 1000 (Ethernet)
    RX packets 10977 bytes 14450604 (14.4 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 5771 bytes 58316 (58.3 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

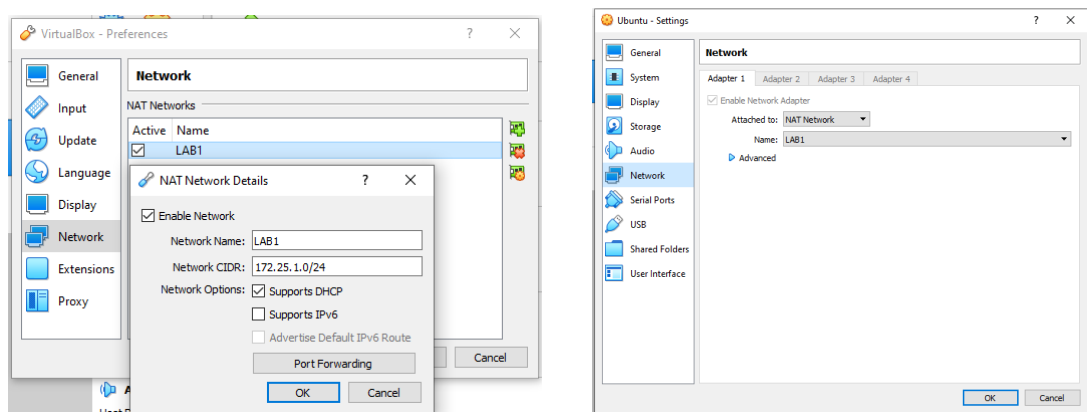
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 1414 bytes 212507 (212.5 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 1414 bytes 212507 (212.5 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

osboxes@osboxes:~$
```

B.Questions and Answers

Q1- How to configure virtual machines (also from linux)?

A1- I created a network in VirtualBox as below and I selected this network from the settings of virtual machines.



Q2- What practical configurations from Table 6.1 can be used?

A2- As I showed in the previous answer, I used NAT Network. Because NAT network is a type of internal network that allows outbound connections