

This set of instructions are tested on OpenSUSE Leap 15.2 in Oracle VirtualBox

This lab will be divided into three sections:

1. Basic Network Configuration
2. Network troubleshooting

Wherever you see **@αβxyz**, change it to the first letters of your names, concatenate **b23** and last 3 digits of your reg number.

E.g.: John Doe S19B23/000 becomes **jdb23000**

A. Basic Network Configuration

Step 1. Hostname and IP address assignment

1. Issue the following commands at the terminal of your Linux machine and at record each output.
 - (a) `uname -n` _____
 - (b) `hostname` _____
 - (c) `hostnamectl` _____
 - (d) `cat /proc/sys/kernel/hostname` _____
 - (e) `cat /etc/hosts` _____
 - (f) `hostname -f` _____
 - (g) `cat /etc/hostname` _____
 - (h) `cat /etc/resolv.conf` _____
2. Set a new hostname for your machine using the set of instructions listed below:
 - (a) edit /etc/hosts file (use any editor) and replace every entry of **localhost** with **@αβxyz-u1mz** (requires root privileges)
 - (b) at the terminal prompt, type `hostname @αβxyz-u1mz`
 - (c) What output do you get with:
 - i. `ping localhost` _____
`ping @αβxyz-u1mz` _____
 - iii. `uname -n` _____
 - iv. `hostname` _____
 - v. `hostnamectl` _____
 - vi. `cat /proc/sys/kernel/hostname` _____
 - vii. `cat /etc/hosts` _____
 - viii. `hostname -f` _____
 - ix. `cat /etc/hostname` _____
 - x. `cat /etc/resolv.conf` _____
 - (d) At the terminal prompt, type:
 - i. `sudo hostnamectl --static set-hostname st_@αβxyz-u1mz`

ii. `sudo hostnamectl --transient set-hostname @αβxyz-ulmz`

(e) What output do you get with:

i. `ping st_@αβxyz-ulmz` _____

ii. `ping @αβxyz-ulmz` _____

iii. `uname -n` _____

iv. `hostname` _____

v. `hostnamectl` _____

vi. `cat /proc/sys/kernel/hostname` _____

vii. `cat /etc/hosts` _____

viii. `hostname -f` _____

ix. `cat /etc/hostname` _____

x. `cat /etc/resolv.conf` _____

Step 2. Network troubleshooting

1. Ping tests
2. Traceroute tests