

# LINUX

## POST INSTALLATION SETUP

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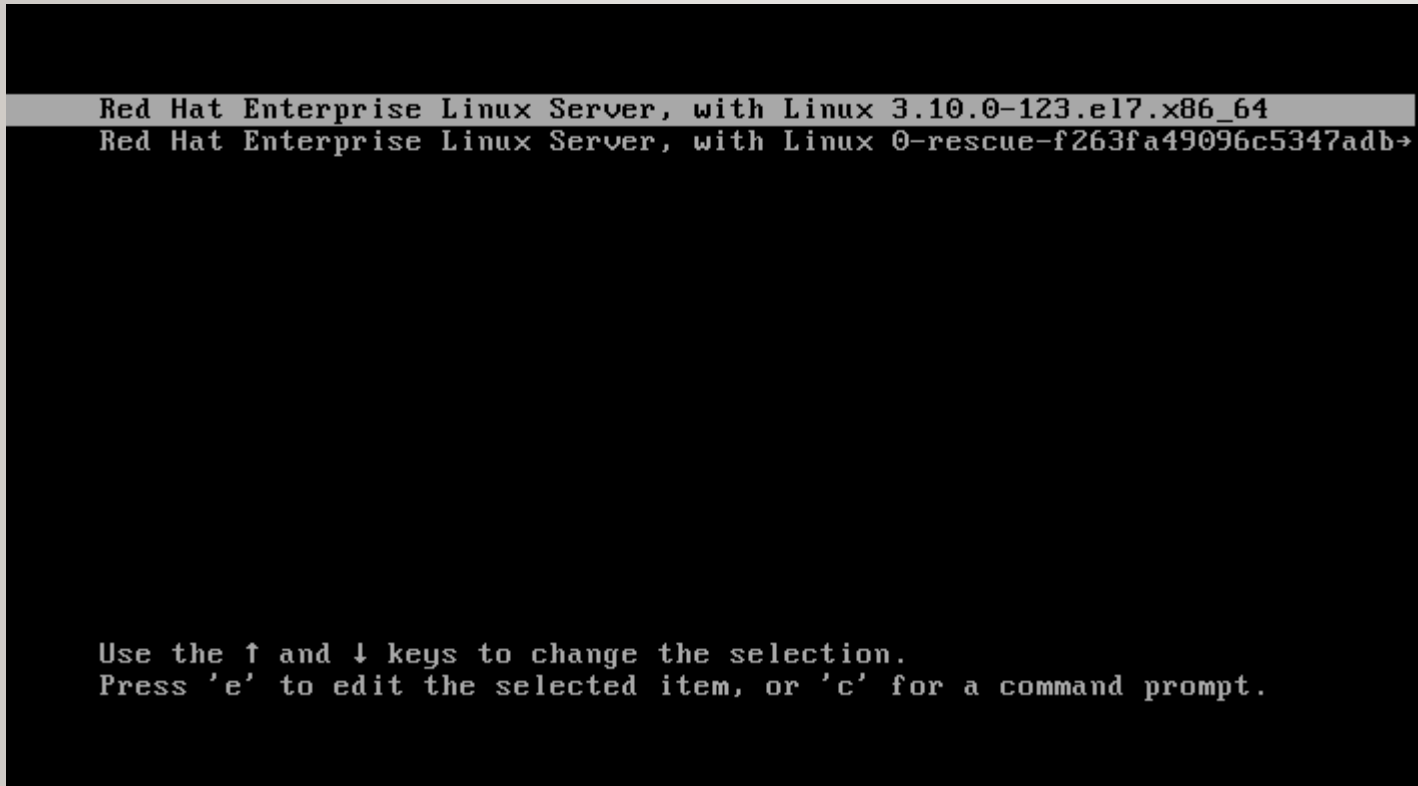
**SESSION - 3**

## **Session 3 - Agenda**

- Exploring Kdump and its usage
- Red Hat Subscription Manager
- Introduction to Terminal
- Hostname configuration
- Putty connection
- Setting up YUM repository.

Time: 25 mins

- After Installation you will be asked to accept the license. Please follow the instruction and accept it.
- By the time of reboot you will get this boot loader page

A screenshot of the Red Hat Enterprise Linux boot loader menu. The background is black. At the top, there are two menu items: "Red Hat Enterprise Linux Server, with Linux 3.10.0-123.el7.x86\_64" and "Red Hat Enterprise Linux Server, with Linux 0-rescue-f263fa49096c5347adb". The second item is highlighted with a light gray background and has a white arrow pointing to its end. At the bottom of the screen, there is a white text prompt that reads: "Use the ↑ and ↓ keys to change the selection. Press 'e' to edit the selected item, or 'c' for a command prompt."

```
Red Hat Enterprise Linux Server, with Linux 3.10.0-123.el7.x86_64
Red Hat Enterprise Linux Server, with Linux 0-rescue-f263fa49096c5347adb→

Use the ↑ and ↓ keys to change the selection.
Press 'e' to edit the selected item, or 'c' for a command prompt.
```

I suggest do not disturb this page until you experience troubleshooting techniques. In case you find more than one kernel version choose the one which is appropriate. Here the 2<sup>nd</sup> option is for troubleshooting your OS.

- Kdump is a kernel crash dumping mechanism.

It used to capture information from your system which causes the system crash. It occupies some system memory too.

Do not enable Kdump for practice servers.

► Kdump  
Subscription  
Registration

## Kdump

Kdump is a kernel crash dumping mechanism. In the event of a system crash, kdump will capture information from your system that can be invaluable in determining the cause of the crash. Note that kdump does require reserving a portion of system memory that will be unavailable for other uses.

☐ Enable kdump?

Kdump Memory Reservation: ☐ Automatic ☒ Manual

Memory Currently Reserved (MB): 0

Memory To Be Reserved (MB):

Total System Memory (MB): 994

Usable System Memory (MB): 866

Advanced kdump configuration

```
# Configures where to put the kdump /proc/vmcore files
#
# This file contains a series of commands to perform (in order) when a
# kernel crash has happened and the kdump kernel has been loaded. Directives
# in this file are only applicable to the kdump initramfs, and have no effect if
# the root filesystem is mounted and the normal init scripts are processed
#
# Currently only one dump target and path may be configured at once
# if the configured dump target fails, the default action will be preformed
# the default action may be configured with the default directive below. If the
# configured dump target succeeds
#
# Basics commands supported are:
# raw <partition> - Will dd /proc/vmcore into <partition>.
#
```

Forward

- After disabling the Kdump you will get this message, click yes and move forward.

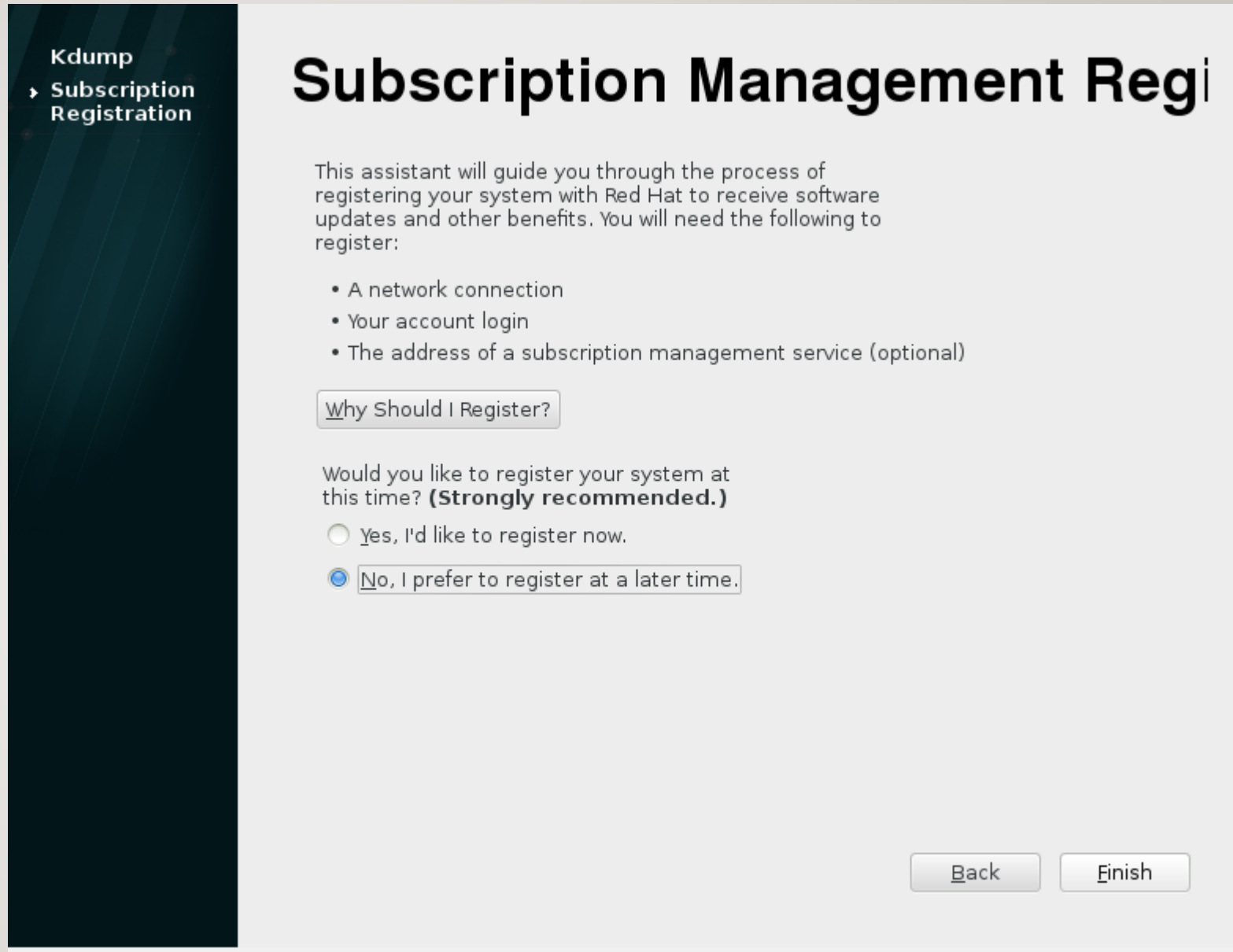


## Subscription Manager

It is a client program that enables Red Hat Customer Support features like OS patches and other red hat updates. Through subscription you get benefits like OS upgrade and server support. If you are enrolled for any Red Hat certification you will get this subscription until the certificate is valid.

Select “NO” for now.

Click Finish



Kdump  
→ Subscription Registration

# Subscription Management Registration

This assistant will guide you through the process of registering your system with Red Hat to receive software updates and other benefits. You will need the following to register:

- A network connection
- Your account login
- The address of a subscription management service (optional)

[Why Should I Register?](#)

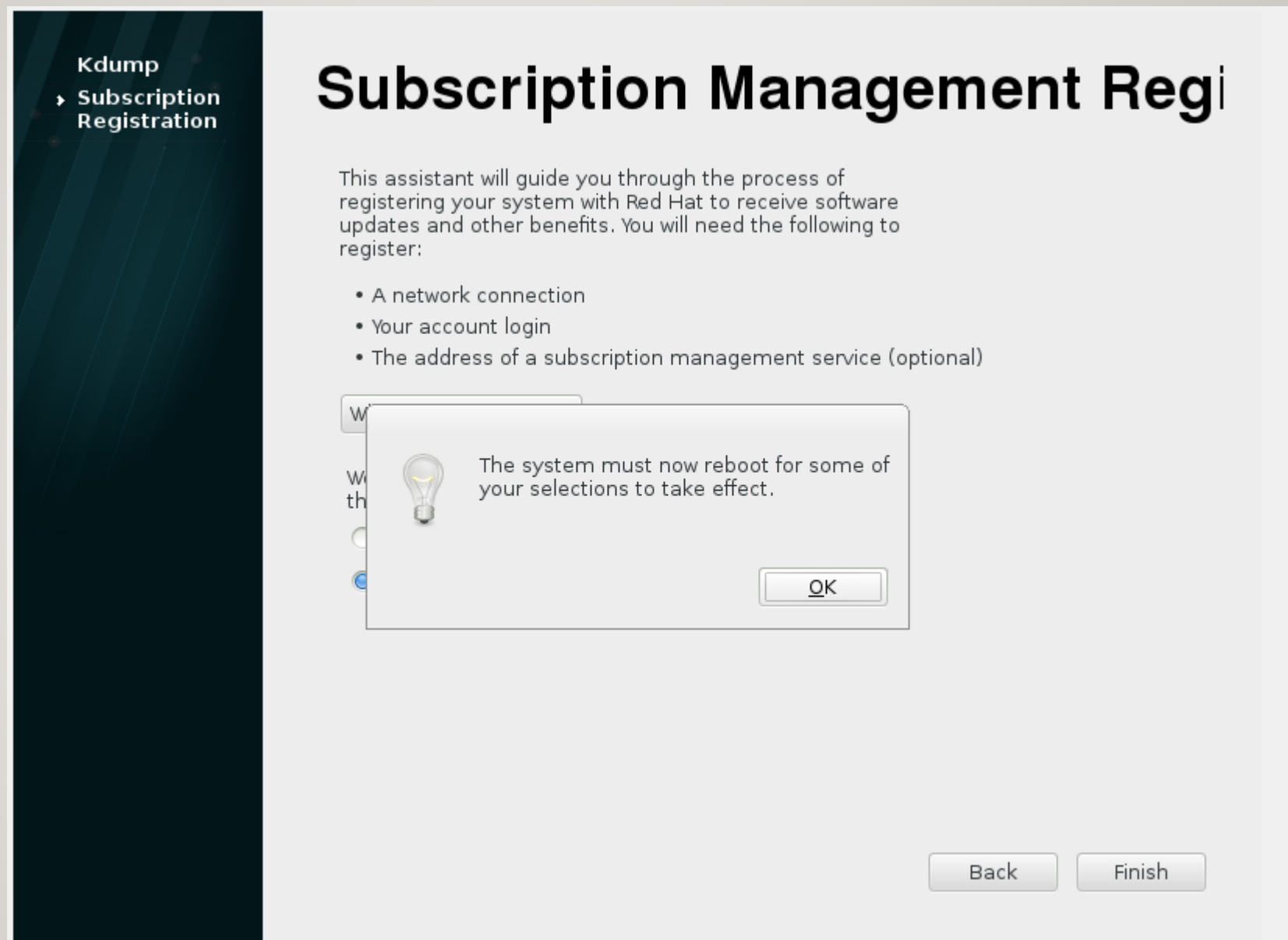
Would you like to register your system at this time? **(Strongly recommended.)**

☐ Yes, I'd like to register now.

☒ No, I prefer to register at a later time.

[Back](#) [Finish](#)

- click OK



## **What is a Terminal?**

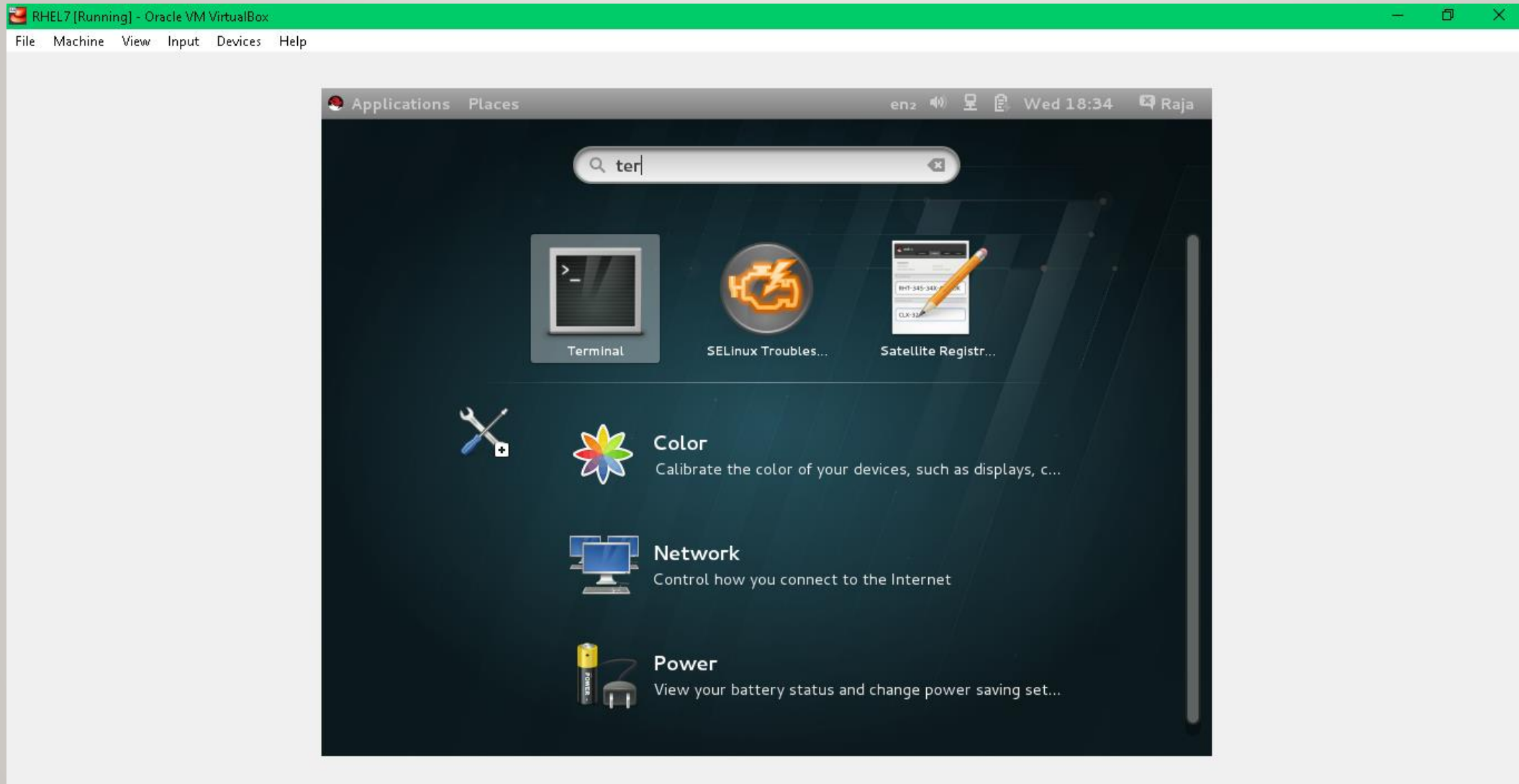
It is also known as command line or console is an interactive program which allows you to type commands, lines of text which are interpreted as instructions to control your computer.

## **How to reach Terminal?**

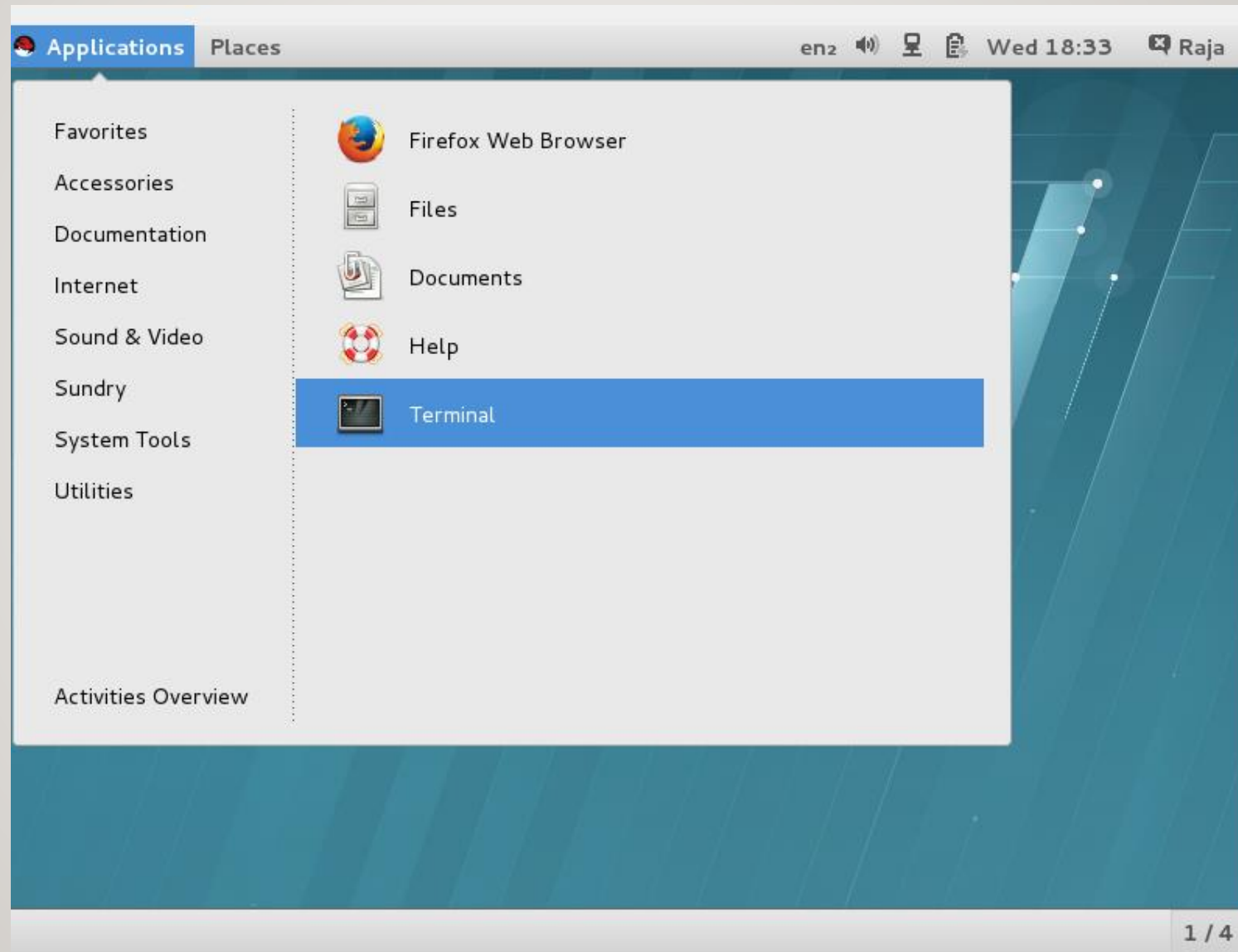
There are many ways to reach terminal, here are some example.



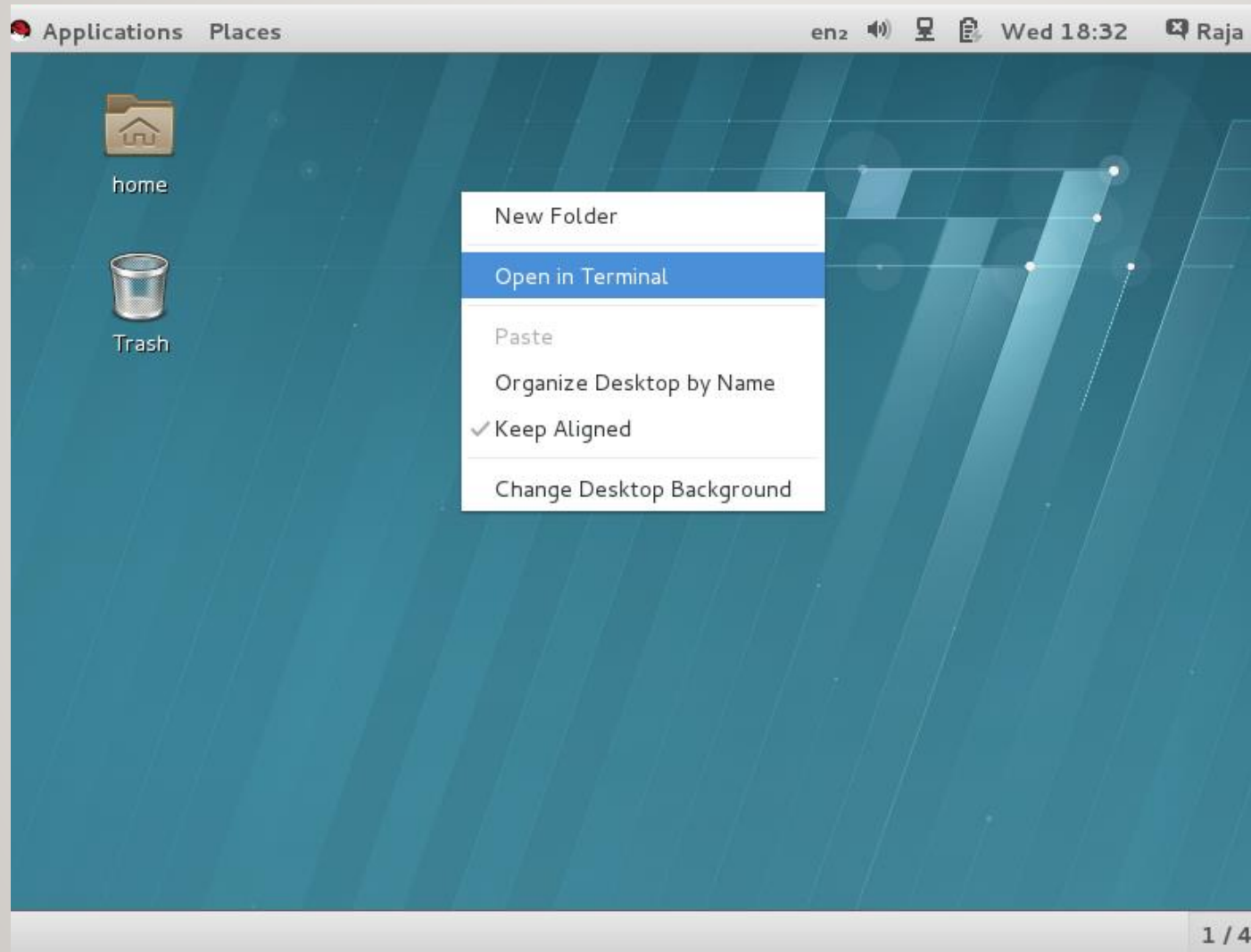
- press Windows key to reach a search bar and type terminal,



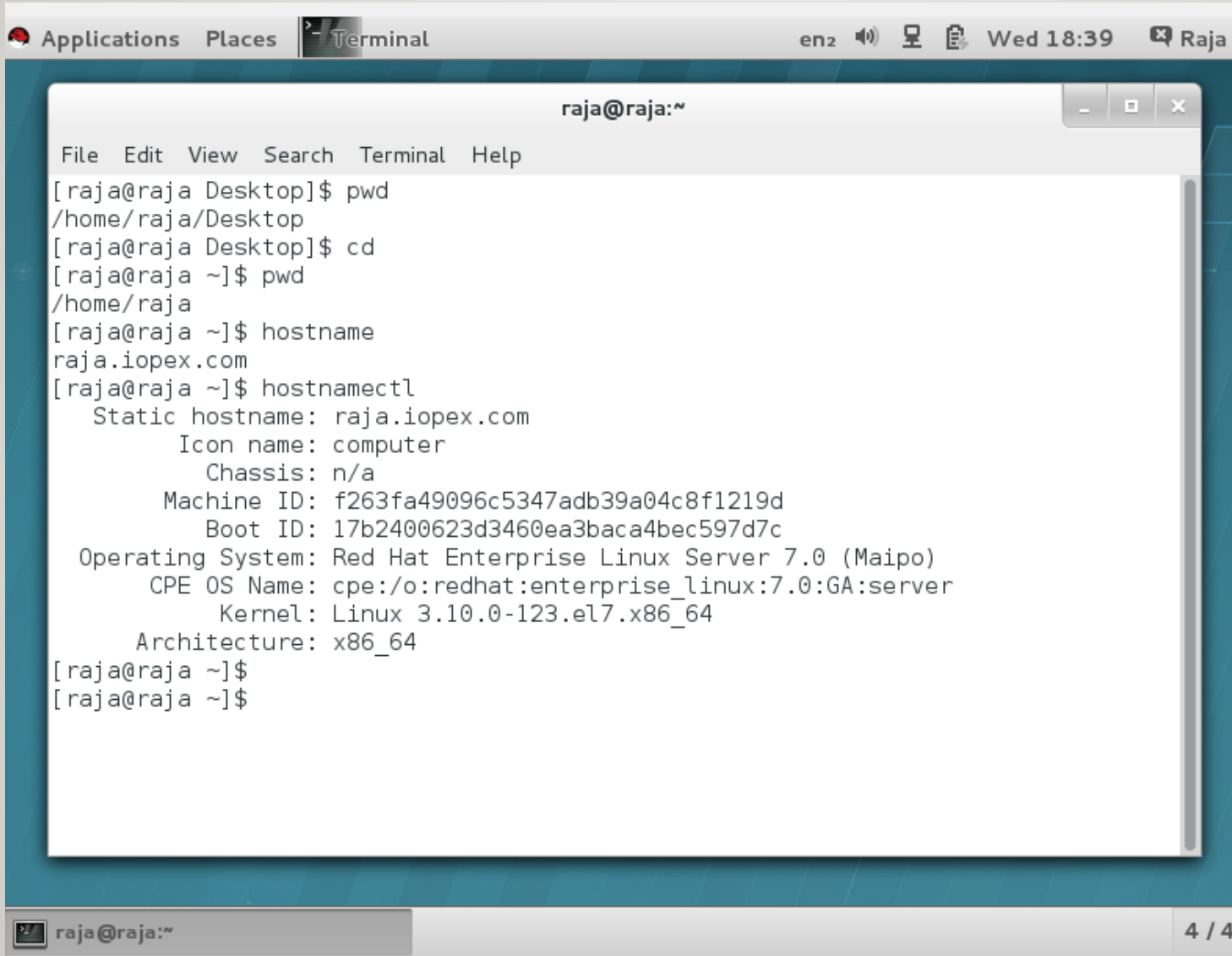
- Click Applications→ Favourites→ Terminal



- Right click on Desktop choose Open in Terminal.



- Here is your terminal with some basic commands



The image shows a terminal window titled "Terminal" with a menu bar (File, Edit, View, Search, Terminal, Help) and a title bar (Applications, Places, Terminal, en2, Wed 18:39, Raja). The terminal prompt is "raja@raja:~". The user enters the following commands and receives the following output:

```
[raja@raja Desktop]$ pwd
/home/raja/Desktop
[raja@raja Desktop]$ cd
[raja@raja ~]$ pwd
/home/raja
[raja@raja ~]$ hostname
raja.iopex.com
[raja@raja ~]$ hostnamectl
  Static hostname: raja.iopex.com
            Icon name: computer
            Chassis: n/a
            Machine ID: f263fa49096c5347adb39a04c8f1219d
            Boot ID: 17b2400623d3460ea3baca4bec597d7c
    Operating System: Red Hat Enterprise Linux Server 7.0 (Maipo)
      CPE OS Name: cpe:/o:redhat:enterprise_linux:7.0:GA:server
        Kernel: Linux 3.10.0-123.el7.x86_64
    Architecture: x86_64
[raja@raja ~]$
[raja@raja ~]$
```

The terminal window has a status bar at the bottom showing "raja@raja:~" and "4 / 4".

# HOSTNAME

- A hostname is the name of any computer that is connected to a network that is uniquely identified over a network. It can be accessed without using an IP address.
- By default, the hostname of a system can be set during the installation of OS. Even if we install a virtual machine, it is dynamically assigned by the system. But, there may be some conditions whenever we want to change the hostname. The hostname command will let us do so.

You can use either of following methods to change your hostname

1. use hostnamectl command
2. use NetworkManager command: nmcli
3. use NetworkManager user interface tool: nmtui
4. edit /etc/hostname file directly in RHEL6 (a reboot is required)

Note: for now we gonna discuss hostnamectl command in detail

You need to be a super user (root) or a Sudo user to change hostname.

Commands:

# hostname → displays current hostname

# hostname <new-name> → to update hostname

Changing hostname permanently:

# hostnamectl set-hostname <new-name> → to change hostname

# hostnamectl → to display machine details

- LAB session on Hostname

## How to configure putty in windows?

- PuTTY is one of the most widely used open-source SSH clients used to connect to Cloud server, Networking devices, and Virtual private servers. It can also allow users to remotely access computers over SSH, Telnet, Rlogin network protocols
- Use this link to download putty for windows (64 bit or 32 bit) depends on your machine configuration.

<https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>

- Ensure that you comply with the license requirements.
- Launch the Putty.



- LAB session on Putty connection in RHEL7

## YUM repository Configuration

- One of the most important post installation setup is Yum repolist configuration.
- yum is the primary tool for **getting, installing, deleting, querying, and managing** Red Hat Enterprise Linux RPM software packages from official Red Hat software repositories, as well as other third-party repositories. yum is used in Red Hat Enterprise Linux versions 5 and later.
- Only when yum is configured you will be able install any packages
- You can use rpm commands instead of yum but need to face dependency errors.

- LAB Session on yum repository configuration.
- Step 1: detect the dvd iso location. Usually in /run/media/<username>/
- Step 2: copy all packages from the iso file (inside Packages dir) paste it in a local directory.  
Create a directory to paste all packages example: #mkdir /home/repos → userdefined name
- Step 3: change your present working directory to the copied location  
#cd /home/repos/
- Step 4: install the createrepo package using rpm command  
# rpm -ivh createrepo<press tab>
- Step 5: fire the command createrepo <copied location>. example: createrepo /home/repos/
- Step 6: create a config file in the yum repos location  
# vi /etc/yum.repos.d/<filename>.repo

/etc/yum.repos.d/rhel7.repo

Press 'i' to edit the file and enter details as mentioned.

[rhel7]

name=rhel7

baseurl=file:///home/repos/

enabled=1

gpgcheck=0

Press 'Esc'

Type ":wq" to save and exit

#yum clean all

#yum repolist all

- 
- **Next Session : Basic Commands and Keyboard shortcuts.**