

RHCEv8 Online Class 02052021 10:00pm  
RHCSA-sysadmin  
-Installation  
-Accessing the Command Line  
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## How to Install Linux

- 1-Install Linux on local host
- 2-online platform
- 3-COSS online servers

### 1-Install Linux on local host

steps:

1-1-download and Install virt-platform over Guest OS

1-1-1-Oracle VirtualBox

<https://www.virtualbox.org/wiki/Downloads>

1-1-2-Download CentOS 8.3 iso image

[http://isoredirect.centos.org/centos/8/isos/x86\\_64/](http://isoredirect.centos.org/centos/8/isos/x86_64/)

[http://centos.mirror.snu.edu.in/centos/8.3.2011/isos/x86\\_64/](http://centos.mirror.snu.edu.in/centos/8.3.2011/isos/x86_64/)

[http://centos.mirror.snu.edu.in/centos/8.3.2011/isos/x86\\_64/CentOS-8.3.2011-x86\\_64-dvd1.iso](http://centos.mirror.snu.edu.in/centos/8.3.2011/isos/x86_64/CentOS-8.3.2011-x86_64-dvd1.iso)

follow record to install Linux

### 2-Online Platform

<https://www.katacoda.com/>

### 3-COSS online servers

## ACCESSING THE COMMAND LINE

### INTRODUCTION TO THE BASH SHELL

how access to Linux

1-cli

2-gui

3-web access

#### what is cli?

1-cli

-cli, **command line** its text-based interface. users run commands on cli and get respond from Linux.

-cli provided by **SHELL**

in RHEL default shell is **BASH**-Bourne-Again SHell

# echo \$SHELL

/bin/bash

2-gui-Graphical User Interface

access to Linux through gui mode

after login to Linux cli, watch **bash prompt**:

[root@servera ~]#

root ->current login user

servera ->hostname

~ ->Tilde/Tilda symbol. this section says where is your location on Linux.

#/\$ ->**#**->superuser(root) **\$**->regular user

#### Linux Command Structure

<command> <option> <argument/target location>

# ls

# ls /

# ls -a

# ls -a /mnt

#### what is option

using option to filter output of command. Linux options started by '-'

### find out bash prompt through commands

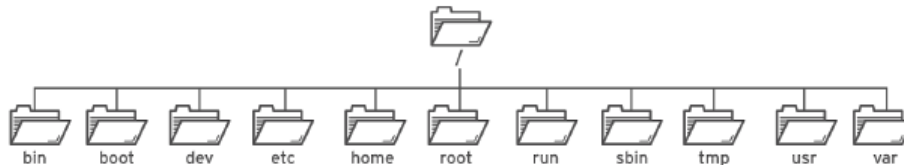
```
# whoami
# hostname
<FQDN> Fully Qualified Domain Name
# hostname --help          ->shows command's options
# hostname -s
or
# hostname --short
# hostname -i
# hostname -d
# pwd                      ->print working directory
```

### Managing Files from the Command Line

#### what is Filesystem Hierarchy Structure/System-FHS

-inverted tree directory based structure started by '/'

-'/' its root of FHS



```
# Ctrl+I
or
# clear    ->clear screen
# ls /
bin dev home lib64 mnt proc run srv tmp var boot etc lib media opt root sbin sys usr
```

```
/root    ->root user home dir
/home    ->other users home dir
/boot    ->OS boot files
/etc     ->stored Linux configuration files
/dev     ->stored Linux device files
/mnt     ->mount external storages likes pendrive, external hard disk
/media   ->mount CD/DVD , iso images
/bin     ->executable binary files/commands accessible by root and users
/sbin    ->super executable binary files/commands accessible just by root
```

ex:

to find out commands home dir:

```
# which <command>
```

or

```
# type -a <command>
```

```
# which fdisk
```

```
/usr/sbin/fdisk
```

or

```
# type -a fdisk
```

```
fdisk is /usr/sbin/fdisk
```

```
# which id
```

```
/usr/bin/id
```

#### concept

-what is TAB completion

by pressing TAB key on keyboard we are be able to complete commands and path on Linux.

ex:

```
# ls
```

```
# lsmem
```

```
# lspcu
```

```
# lsblk
```

```
# lspci
```

```
# ls SCSI
```

```
# lsusb
```

```
/proc    ->comes from process. shows running kernel process
```

```
# cat /proc/cpuinfo
```

```
# cat /proc/partitions
```

```
# cat /proc/meminfo
```

/opt	-> location to install application on Linux
/lib	->library files 32bit
/lib64	->library files 64bit
/tmp	->temp files are here
/var	->variable files are here

change location on FHS by using 'cd' command

```
# pwd
/root
# cd /tmp
# pwd
/tmp
# cd /opt
# pwd
/opt
```

```
# cal
# bc
# date
# uptime
# passwd
```

#### **shortcuts**

1-Ctrl+c	->terminate
2-Ctrl+d	->save and quit
3-Ctrl+z	->stop/freeze

#### **collect OS name and version**

```
# hostnamectl
# cat /etc/redhat-release
```