



TOPIC 6B

UBUNTU LINUX QUICK TOUR

1

Contents

- ❑ Logging in
- ❑ Running Commands (remotely)
- ❑ Managing Terminals
- ❑ Getting Help (man, info, HOWTO)

Contents

Notebook

Search This Course



Lab setup

1m 26s



1. Ubuntu Server

Ubuntu Server

1m 21s



Installing Ubuntu Server

5m 27s



Automated security updates

2m 6s

Connecting with SSH for initial configuration

1m 13s

2. Securing and Monitoring Your Server

Course Feedback

Help us make your experience better

Ubuntu Server

- Scalable
- Tools are designed with the cloud in mind
- Starts out "headless"
- Connect via SSH
- Minimal starting configuration makes a great base

01:20 / 01:21

1x



Overview

Transcript

View Offline

TTY Tele-TYpeWriter or Tele Type



Logging in

- ❓ The **root** user is the administrator of the system. The root password should be kept securely

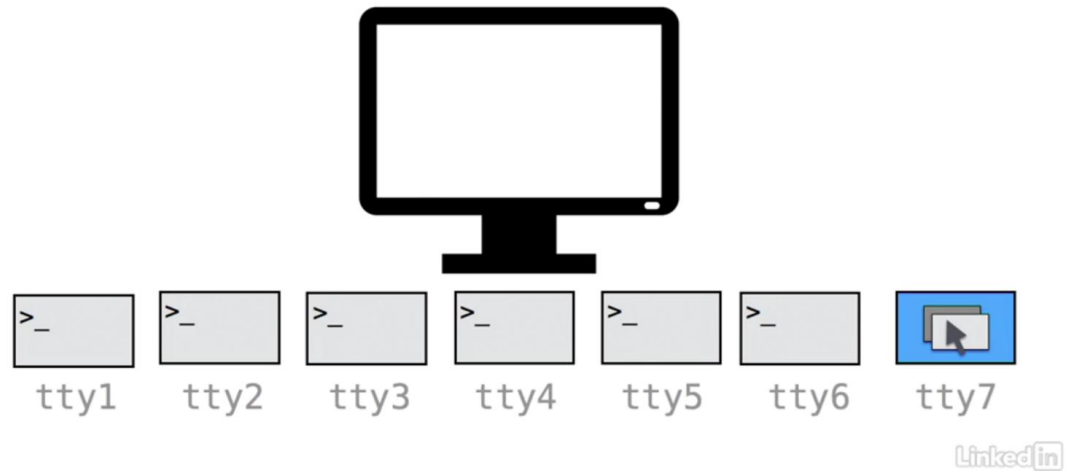
How to change root password in Ubuntu

The procedure to change the root user password on Ubuntu Linux:

1. Type the following command to become root user and issue passwd:
`sudo -i`
`passwd`
2. OR set a password for root user in a single go:
`sudo passwd root`
3. Test it your root password by typing the following command:
`su -`


Logging in

Consoles

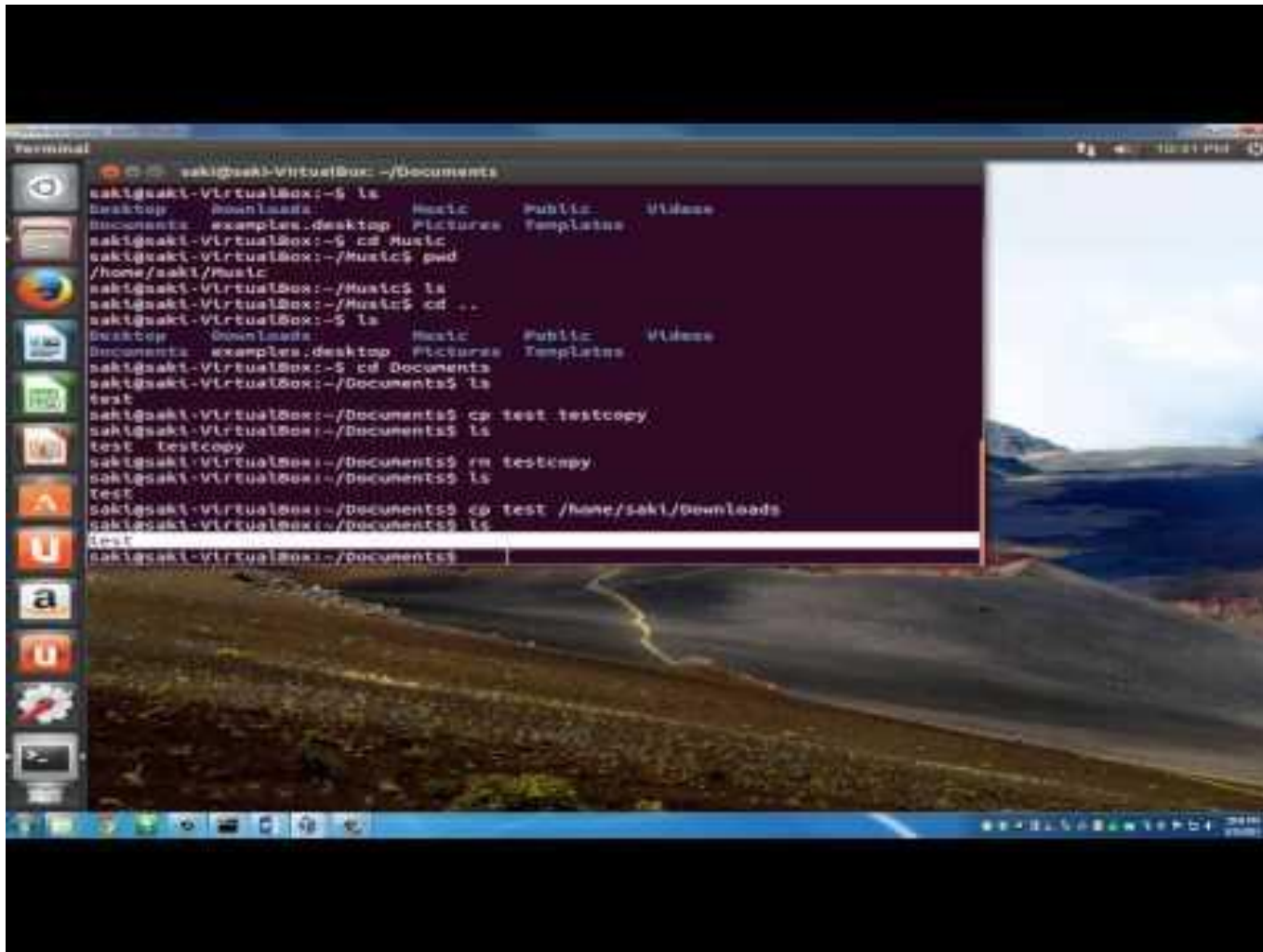


Open a Linux Terminal Using Ctrl+Alt +T

The easiest way to open a terminal is to use the key combination of **Ctrl+Alt+T**. Simply hold all three keys at the same time, and a terminal window will open.

 An active terminal will quit if you tell it there's no more input. That can be done with a quick `Control+D`.

Demo



The screenshot shows a Linux desktop environment. A terminal window is open, displaying a series of commands and their outputs. The desktop background is a landscape image. The terminal window title is "sakigasaki-VirtualBox: ~/Documents". The terminal content is as follows:

```
sakigasaki-VirtualBox: ~/Documents
sakigasaki-VirtualBox:~$ ls
Desktop  Downloads  Music  Public  Videos
Documents  examples.desktop  Pictures  Templates
sakigasaki-VirtualBox:~$ cd Music
sakigasaki-VirtualBox:~/Music$ pwd
/home/saki/Music
sakigasaki-VirtualBox:~/Music$ ls
sakigasaki-VirtualBox:~/Music$ cd ..
sakigasaki-VirtualBox:~$ ls
Desktop  Downloads  Music  Public  Videos
Documents  examples.desktop  Pictures  Templates
sakigasaki-VirtualBox:~$ cd Documents
sakigasaki-VirtualBox:~/Documents$ ls
test
sakigasaki-VirtualBox:~/Documents$ cp test testcopy
sakigasaki-VirtualBox:~/Documents$ ls
test  testcopy
sakigasaki-VirtualBox:~/Documents$ rm testcopy
sakigasaki-VirtualBox:~/Documents$ ls
test
sakigasaki-VirtualBox:~/Documents$ cp test /home/saki/downloads
sakigasaki-VirtualBox:~/Documents$ ls
test
sakigasaki-VirtualBox:~/Documents$
```

Commands

- ❑ The **who** command shows who is logged in
- ❑ The **whoami** print effective userid
- ❑ The **ifconfig** command shows the IP address(es) of the systems
- ❑ The **su** command to switch user
 - **su -** (with a hyphen) specify that the user should effectively log in as the new user.
- ❑ The **ssh** (secure shell) allows users to log in to remote machines
 - The other machine must be configured to allow such remote logins
 - **-X** to enable X11 forwarding

Basic command in shell

- ❑ cat - show file content
- ❑ touch – create an empty file (if absent)
- ❑ ls – list directory content
- ❑ cd – change directory content
- ❑ cp – copy file / folder
- ❑ mv – move file / folder

Basic command in shell

mv – move file / folder

Renaming files with “mv” Command. A simple way to **rename** files and folders is with the mv command (shortened from “move”). Its primary purpose is moving files and folders, but it can also **rename** them, since the act of **renaming** a file is interpreted by the filesystem as moving it from one name to another.

<https://www.maketecheasier.com/rename-files-in-linux/>

Shell

- ❓ A **shell** is an interactive process that allows the user to run a text command.

When you type characters in the window, the terminal draws these characters in the window in addition to sending it to the shell's (or other program's) stdin. The characters the shell outputs to stdout and stderr get sent to the terminal, which in turn draws these characters in the window.

- ❓ There are many different shells for Linux.

- ❓ The default shell in Ubuntu Linux is the **bash shell**.

This is defined in the \$SHELL environmental variable. You can check by typing `echo $SHELL` in the terminal.

```
$ echo $SHELL
```

```
/bin/bash
```

Managing Terminals

❓ Terminal Control Sequences

Control-C	Abnormal interrupt – terminate the current process
Control-D	To signal end of input
Control-H	Backspace
Control-S	Freeze the terminal display (thaw with Control-Q)
Control-Q	Thaw the terminal display
Control-U	Erase current line
Control-Z	Suspend the current process

❓ The **tab** key can be used, when typing, to help complete commands and files

Man pages (Getting Help)

❓ Manual pages (or “man pages”) provides reference information for Linux systems.

❓ Option for man pages

● **man -k <keyword>**

Displays pages of name and title containing <keyword>

May need **makewhatis** to regenerate the man database

● **man -K <keyword>**

Search <keyword> within the man pages

● **man <section> <keyword>**

Shows specific section of man pages

Man pages

- ❓ Man pages are organised in 8 standard chapters.

Chapter	Audience	Topic
1	standard users	Commands
2	developers	System Calls
3	developers	Library Calls
4	administrators	Device Files
5	standard users	File Formats
6	standard users	Games
7	standard users	General Information
8	administrators	Admin Commands

Man pages

Navigation in man pages:

- space View next page
- b View previous page
- q Quit
- /<text> Search for the word <text>
- n Find next occurrence of the search term

info pages

- ❑ Contains hyperlink-like structure
- ❑ May not covered as widely (usually newer commands)

- ❑ Navigation in info

<SPACE> or <enter>	move down (into link)
--------------------	-----------------------

 or <backspace>	move up (out of link)
----------------------	-----------------------

b	move to top
---	-------------

<tab>	next node
-------	-----------

p / n	previous / next node
-------	----------------------

Howto documents

- ❑ Article on “how to” complete certain task, in plain text write out.
- ❑ Found on the web at <http://tldp.org/docs.html>
- ❑ Found in selected command.
- ❑ /usr/share/doc/<program>/HOWTO

Summary

- ❑ Switching user (su)
- ❑ Logging to graphical and virtual consoles (ssh & ssh -X)
- ❑ Working with terminal display
- ❑ Getting help through man, info, HOWTO pages