Introduction to Raspbian OS

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Contents

***Abstract*—This manual explains about the installation of Raspbian OS in Raspberry Pi, basic commands of Raspbion OS, and installation of internal & external software's (external means third party software)**

1 Introduction

Raspbian is Debian-based computer operating system for Raspberry pi, it is free & open source and it is Linux flavor.

1.1 Birth of Linux

Unix was introduced in 1969 and Linux was created or named by "LINUS TORVALDS" in 1991. But Linux is not Unix.

1.2 Comparison of Raspbian with Ubuntu

Raspbain will accepts all the commands, almost all the dependence's and packages of Ubuntu 14.04 LTS.

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2 Installation

3 Basic Commands

- *ls* : List of current directory.
- *pwd* : Print working directory.
- *cd* : Used for migration between directories. Example:
  - *cd Documents* ↓ press enter, get into Documents directory.
  - *cd ..* ↓ press enter, come back to previous directory.
  - *cd /* ↓ press enter, use this command in any directory to get into root directory.
- *mkdir* ***filename*** : Make directory with **filename**
- *rmdir* ***filename*** : Remove empty directory with **filename**
- *rm -r* ***filename*** : Remove non empty directory with **filename**
- *rm* ***filename.extension*** : Remove or delete file with **filename.extension**.
  Example: *rm abc.c / abc.py / abc.txt / abc.html*
- *clear* : To clear the terminal.
- *exit* : Exit the terminal.
- *reboot* : To restart / reboot the Pi.
- *shutdown -h* : To shutdown after a minute.
- *shutdown -h now* : To shutdown immediately.

4 Programming Editors

There are many programming editors available in Raspbian OS like *geney / Python IDEL etc.* but their is an inbuilt editor which is common in every Linux OS i.e. *nano* editor.
We highly prefer to use terminal based text editor

5 Package Installation

This section explains about the installation of software's from the Linux repository.

```
sudo apt-get update
sudo apt-get install <name of the
   package>
```

6 Third Party Software Installation

This section explains about the installation of third part software developed for Pi or can be used with Pi. Third party software's comes with .deb extension or .gz extension.

6.1 Installation of .deb file

6.2 Installation of .gz file

References

[1] Raspberry Pi, urlhttp://www.raspberrypi.com/.
[2] Linux Foundations.