

Desktop Environments

- Before DE there was the CLI

GNOME	KDE	XFE
MATE	BUDGIE	LXDE
Cinnamon	Openbox	LXQT
Pantheon	Deeping DE	Fluxbox

Desktop Environments (cont)

- GUI: A Graphical User Interface
- DE: A Desktop Environment
- Different Linux Distributions ship with different desktop environments. The most common being GNOME and KDE.
 - Desktop Settings
 - Displays Manager
 - File Manager
 - Icons
 - Favorites Bar
 - Launcher
 - Menus
 - Panels
 - System Tray
 - Widgets
 - Window Manager

The GNOME Desktop Environment

The GNOME DE

- The default desktop in Ubuntu is GNOME 3.
 - Debian
 - Fedora
 - Red Hat Enterprise Linux
 - Oracle Linux
- GNOME was an acronym for **GNU Network Object Model Environment** .
- GNOME was started on **August 15, 1997, by Miguel de Icaza and Federico Mena.**

Authors




authors

Other Desktop Environment

The KDE Desktop Environment



The XFCE Desktop Environment

- XFCE is a lightweight desktop environment that aims to be fast and low on system resources, while still being appealing and user friendly.
- The XFCE project was started by Olivier Fourdan in 1996. XFCE

The Mate Desktop Environment

- The Mate is the continuation of GNOME 2. Mate

The Cinnamon Desktop Environment



The LXQT Desktop Environment



The Deepin Desktop Environment



The Pantheon Desktop Environment



The Raspberry Pi OS Desktop Environment



Sources



Useful Resources



The Bash Shell

The History of the Bash Shell

- Shells make large-scale IT possible.
- They're a necessary component to modern computing.

The Linux Terminal

- CLI- A Command-Line Interface
 - They are **Two ways** to access the CLI:
 - *Terminal Emulator*
 - *Linux Console*

Console Terminals



Terminal Emulator



The Bash Shell

- The GNU bash shell is program that provides interactive access to the Linux system

Bash shortcuts | Command Editing Shortcuts



Shell Prompt



Let's Try some basic commands

- **date** *displays the current time and date*
- **cal** *displays a calendar of the current month*
- **df** *displays the current amount of free space on our disk drives*
- **free** *displays the amount of free memory*
- **uname** *displays information about your system*
- **clear** *clears the screen*

Command history



Sources



Hoe to navigate the filesystem

The Linux Directory Structure



The Nemo file manager



Note!

There are a bunch of file managers options for Linux.

Navigating the FS in the CLI

The Linux Directory Structure





Commands to move around the filesystem



The pwd command

Displays the current working directory

The Cd Command

Changes the current working directory.  

Bash Features

- **Tab Completion** - autocompletes a command by pressing the tab key
- **Arrow Keys** - allows you to move, edit, and repeat commands
- **Ctrl + a** - go to the start of the command line
- **Ctrl + e** - go to the end of command line

Listing Files and Directories



Examples of LS command

- **ls** - List the content of the present working directory
- **ls -a** - List all the files inside the current working directory including hidden files.
- **ls -a ~/Pictures** - List all the files inside a given directory.
- **ls -lr ~/Pictures** - Long list all the files inside a given directory recursively.



Special Note

