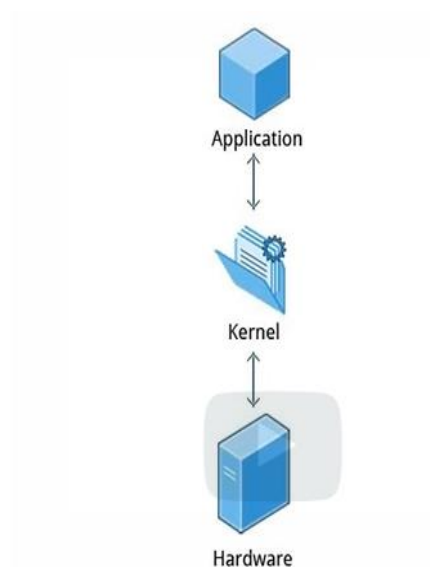


# Linux Terminology

1. Before we begin using Linux, we need to be aware of some basic terms such as the below:
  - Kernel
  - Distribution
  - boot loader
  - service
  - filesystem
  - X Window system
  - desktop environment
  - Command line.
2. The above are the very commonly used terms by the Linux community.

## Kernel:

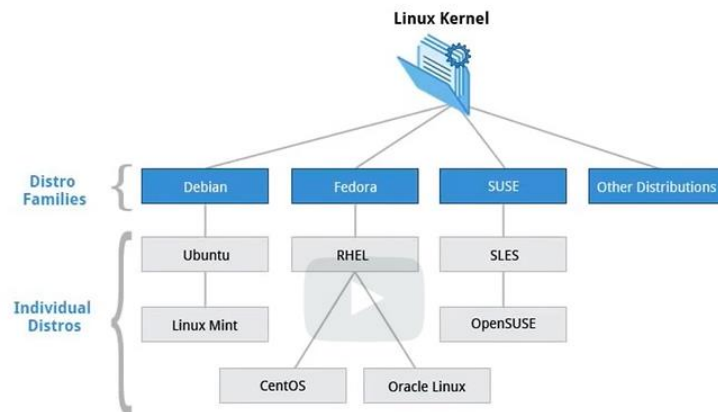
1. The kernel is considered the brain of the Linux operating system.
2. It controls the hardware and makes the hardware interact with the applications.
3. **Example:** Linux kernel.
4. The most recent Linux kernel, along with past Linux kernels, can be found at the [kernel.org](http://kernel.org) web site.



**Kernel: Glue between hardware and applications**

## Distribution:

1. A distribution also known as Distro is a collection of programs combined with the Linux kernel to make up a Linux-based operating system.
2. Some common examples of a distribution are Red Hat Enterprise Linux, Fedora, Ubuntu, and Gentoo.



**Distribution: Collection of software making up a Linux-based OS**

## Boot Loader:

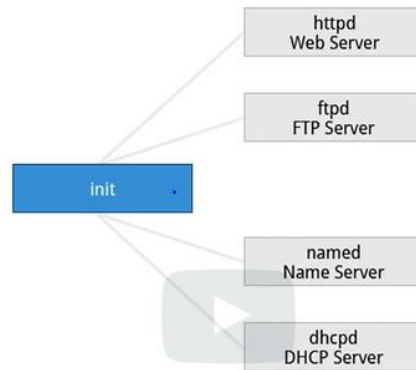
1. As the name implies, boot loader is a program that boots the operating system.
2. **Examples:** GRUB and ISOLINUX



**Boot loader: Program that boots the operating system**

## Service:

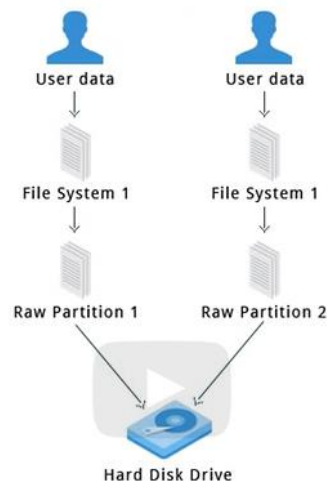
1. A service is a program that runs as a background process.
2. Some examples of the service are httpd, nfsd, ntpd, ftpd and named.



**Service: Program that runs as a background process**

## File System:

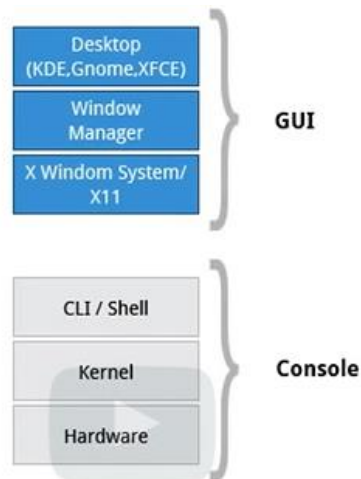
1. A filesystem is a method for storing and organizing files in Linux.
2. Some examples of filesystems are ext3, ext4, FAT, XFS, NTFS and Btrfs.



**Filesystem: Method for storing and organizing files**

## X Window system:

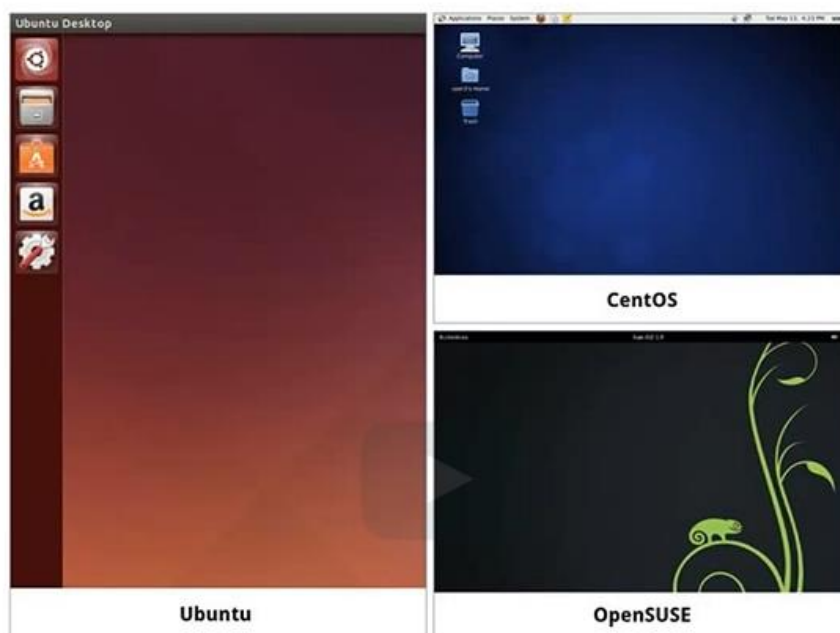
1. The X Window System provides the standard toolkit and protocol to build graphical user interfaces on nearly all Linux systems.



## X Window System

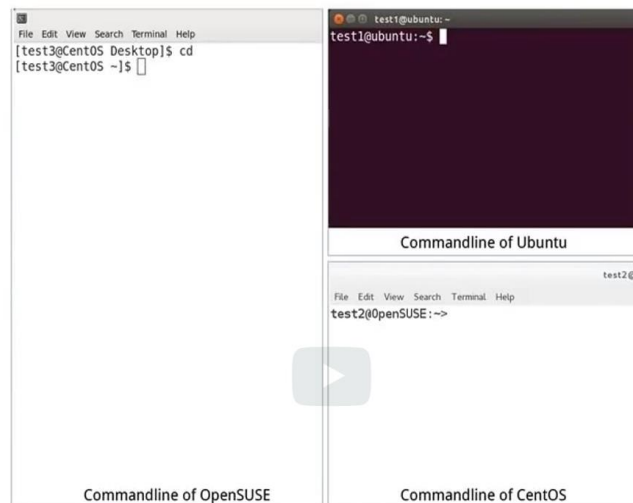
### Desktop Environment:

1. The desktop environment is a graphical user interface on top of the operating system.
2. GNOME, KDE, Xfce and Fluxbox are some examples of the desktop environment.



## Command Line:

1. The command line is an interface for typing commands on top of the operating system.
2. The Shell is the command line interpreter that interprets the command line input and instructs the operating system to perform any necessary tasks and commands.
3. For example, bash, tcsh(spelled as tc shell) and zsh(spelled as g shell).



**Command line: Interface for typing commands on top of the operating system**