

Hello everyone! In this video, we will learn about the Linux file system and its various directories of importance.

Linux stores all the information in a file system organized as a hierarchy of directories and files. Files can be accessed using either a full path or a relative path.

Figure of file system illustrate how the Linux filesystem is organized as a hierarchy. Various directories such as bin, boot, dev etc. are organized under root directory represented by a slash.

A home directory that contains a subdirectory for the user joe is one such directory. Within the joe directory are Desktop, Documents, and other subdirectories.

To refer to a file called memo1.doc in the memo's directory, you can type the full path of /home/joe/Documents/memos/memo1.doc or

If your current directory is /home/joe/, refer to the file as Documents/memos/memo1.doc.

Here are some of the directories under root directory.

/bin contains common Linux user commands, such as ls, sort, date, and chmod.

/boot has the bootable Linux kernel, initial RAM disk, and boot loader configuration files (GRUB).

/dev includes terminal devices(tty*), hard disks, RAM, and CDRom. Users can access these devices directly through these device files; however, applications often hide the actual device names to end users.

/etc contains administrative configuration files. Most of these files are plain-text files that, can be edited with any text editor by a user with proper permissions.

/home Contains directories assigned to each regular user with a login account. The root user is an exception, which uses /root the home directory.

/media Provides a standard location for automounting devices (removable media in particular). If the medium has a volume name, that name is typically used as the mount point. For example, a USB drive with a volume name of myusb would be mounted on /media/myusb.

/lib Contains shared libraries needed by applications in /bin and /sbin to boot the system.

/mnt is a common mount point for many devices before it was supplemented by the standard /media directory. Some bootable Linux systems still use this directory to mount hard disk partitions and remote filesystems. Many people still use this directory to temporarily mount local or remote filesystems, which are not mounted permanently.

/misc is a directory sometimes used to automount filesystems upon request.

/opt--Directory structure available to store add-on application software.

/proc Contains information about system resources.

/root Represents the root user's home directory. The home directory for root does not reside beneath /home for security reasons.

/sys Contains parameters for such things as tuning block storage and managing cgroups.

/tmp Contains temporary files used by applications. And

/usr Contains user documentation, games, graphical files (X11), libraries (lib), and a variety of other commands and files that are not needed during the boot process.

The /usr directory is meant for files that don't change after installation (in theory, /usr could be mounted read-only).

/var Contains directories of data used by various applications. In particular, this is where you would place files that you share as an FTP server (/var/ftp) or a web server (/var/www). It also contains all system log files (/var/log) and spool files in /var/spool (such as mail, cups, and news). The /var directory contains directories and files that are meant to change often.

/sbin--Contains administrative commands and daemon processes.

Thank You...