

Practical 2 Explore directory structure of Linux File system. Understand and represent file system of LINUX with brief details.

The Linux file system follows a hierarchical directory structure. All directories are organized into a single root (/) directory, and all files and directories in Linux are contained under this root directory. The structure is tree-like and well-organized, making it easy to navigate and maintain. Let's explore the main directories that are typically found in the Linux file system.

* Key Directories in the Linux File System:

- (/ Root Directory):

The top-most directory from which all other directories and files branch out.

- /bin :

Contains essential executable binaries required for the system to boot and operate (e.g., ls, cp).

- /boot :

Holds boot loader files, including the kernel image and boot configuration files.



- /dev :
Contains device files representing hardware devices (eg, disk drives, input devices).
- /etc :
Stores system-wide configuration files, such as user account details (/etc/passwd) and system settings.
- /home :
Home directories for individual users to store their personal files (eg., /home/user1).
- /lib :
Contains shared libraries needed by system binaries and user programs for execution.
- /media :
Temporary mount points for removable media like USB drives or CDs.
- /mnt :
A directory typically used for temporarily mounting external file systems (eg., network drives).
- /opt :
Optional application software packages not typically part of the core linux system.



- /proc :
A virtual file system that provides information about running processes and system parameters.
- /root :
The home directory for the root user (Administrator).
- /run :
Contains runtime data for processes, including PID files and lock files.
- /sbin :
System binaries for system administrators (e.g., fsck, reboot).
- /srv :
Data files for services provided by the system (e.g., web server data).
- /sys :
Virtual file system providing information about the system and kernel (e.g. /sys/block for block devices).
- /tmp :
Temporary storage for files that can be cleared after system reboot.



- /usr :
Contains user-related programs and file, including user binaries (/usr/bin), libraries (/usr/lib), and documentation (/usr/share).
- /var :
Stores variable data that changes during system operation (e.g., log files, spool files).

~~18/02/28~~