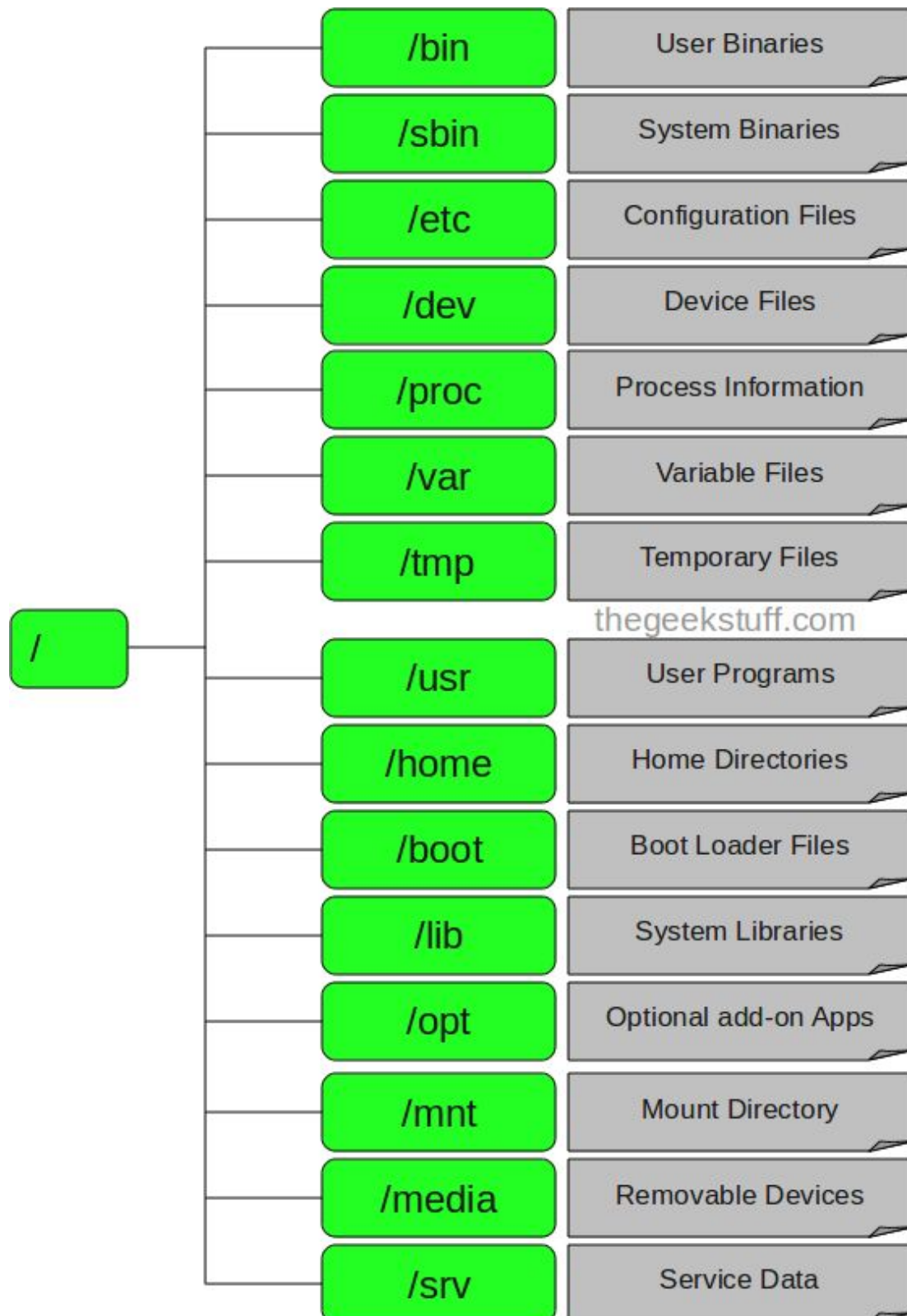


Linux File system



1. / – Root

- Every single file and directory starts from the root directory.
- Only root user has write privilege under this directory.
- Please note that /root is root user's home directory, which is not same as /.

2. /bin – User Binaries

- Contains binary executables.
- Common linux commands you need to use in single-user modes are located under this directory.
- Commands used by all the users of the system are located here.
- For example: ps, ls, ping, grep, cp.

3. /sbin – System Binaries

- Just like /bin, /sbin also contains binary executables.
- But, the linux commands located under this directory are used typically by system administrator, for system maintenance purpose.
- For example: iptables, reboot, fdisk, ifconfig, swapon

4. /etc – Configuration Files

- Contains configuration files required by all programs.
- This also contains startup and shutdown shell scripts used to start/stop individual programs.
- For example: /etc/resolv.conf, /etc/logrotate.conf

5. /dev – Device Files

- Contains device files.
- These include terminal devices, usb, or any device attached to the system.
- For example: /dev/tty1, /dev/usbmono

6. /proc – Process Information

- Contains information about system process.
- This is a pseudo filesystem contains information about running process. For example: `/proc/{pid}` directory contains information about the process with that particular pid.
- This is a virtual filesystem with text information about system resources. For example: `/proc/uptime`

7. /var – Variable Files

- `var` stands for variable files.
- Content of the files that are expected to grow can be found under this directory.
- This includes — system log files (`/var/log`); packages and database files (`/var/lib`); emails (`/var/mail`); print queues (`/var/spool`); lock files (`/var/lock`); temp files needed across reboots (`/var/tmp`);

8. /tmp – Temporary Files

- Directory that contains temporary files created by system and users.
- Files under this directory are deleted when system is rebooted.

9. /usr – User Programs

- Contains binaries, libraries, documentation, and source-code for second level programs.
- `/usr/bin` contains binary files for user programs. If you can't find a user binary under `/bin`, look under `/usr/bin`. For example: `at`, `awk`, `cc`, `less`, `scp`
- `/usr/sbin` contains binary files for system administrators. If you can't find a system binary under `/sbin`, look under `/usr/sbin`. For example: `atd`, `cron`, `sshd`, `useradd`, `userdel`
- `/usr/lib` contains libraries for `/usr/bin` and `/usr/sbin`
- `/usr/local` contains users programs that you install from source. For example, when you install apache from source, it goes under `/usr/local/apache2`

10. /home – Home Directories

- Home directories for all users to store their personal files.

- For example: /home/john, /home/nikita

11. /boot – Boot Loader Files

- Contains boot loader related files.
- Kernel initrd, vmlinuz, grub files are located under /boot
- For example: initrd.img-2.6.32-24-generic, vmlinuz-2.6.32-24-generic

12. /lib – System Libraries

- Contains library files that supports the binaries located under /bin and /sbin
- Library filenames are either ld* or lib*.so.*
- For example: ld-2.11.1.so, libncurses.so.5.7

13. /opt – Optional add-on Applications

- opt stands for optional.
- Contains add-on applications from individual vendors.
- add-on applications should be installed under either /opt/ or /opt/sub-directory.

14. /mnt – Mount Directory

- Temporary mount directory where sysadmins can mount filesystems.

15. /media – Removable Media Devices

- Temporary mount directory for removable devices.
- For examples, /media/cdrom for CD-ROM; /media/floppy for floppy drives; /media/cdrecorder for CD writer

16. /srv – Service Data

- srv stands for service.

- Contains server specific services related data.
- For example, /srv/cvs contains CVS related data.