

# Linux file System Structure

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This is an overview to file system directory hierarchy in Linux system. A Linux beginner might get confuse between Linux file system structure and Linux file system type. Maybe you still remember during Linux hard disk partition process, we have to choose Linux file system type which includes ext2, ext3, reiserfs, etc. That's Linux file system type. What we are going to learn in this lab is Linux file system structure, a Linux directory structure that has been derived from Unix.

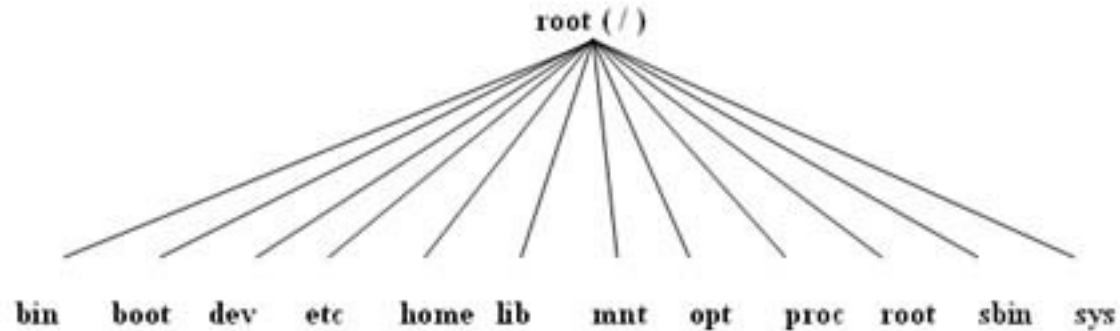
- Actually, Linux file system is not so complicated as you might think. I already mentioned about root directory (/) which contains all other directories in Linux system. Now let's see it for ourselves.
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- Please open Linux command line terminal. Change to / directory by typing 'cd /'. Type 'ls' to view the content.

- This is Ubuntu Linux file system directory:
- `george@george-thinkpad:/$ cd /`
- `george@george-thinkpad:/$ ls`
- `bin cdrom etc initrd lib media opt  
root srv tmp var`
- `boot dev home initrd.img lost+found mnt  
proc sbin sys usr vmlinuz`
- `george@george-thinkpad:/$`

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- What do you see ?

- if we want to draw a directory tree or Linux directory structure of the Linux file system hierarchy, it looks like this:



- Some file system and directories structure in one Linux distribution maybe different from other Linux distributions as you can see from Ubuntu example above. Right now you don't have to remember all of those directories and what they do.

- Just remember a few important directories first such as:
- / - root of all directories in Linux file system structure.
- /home - Keeps Linux user account's home directory.
- /etc - keeps Linux server's configuration files and directories.
- /usr - keeps Linux system files.
- /var - keeps system log files.
- /bin - keeps binary files for user applications.
- /sbin - keeps static binary files for system programs.

- The / (root) directory is the most important directory in Linux file system structure. As you can see from the example above, / is the root of all directories in Linux system. The / is the parent of Linux file system structure.
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- The /home directory keeps all Linux user account's home directory. Some Linux distributions keep FTP server home directory by default in /home directory.



- Make sure you provide big enough hard disk for /home directory. It's a good idea to set quota for each user account in /home directory.
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- The /etc directory keeps all servers and application system's configuration files. This directory perhaps the most visited directory if you are working in Linux command line terminal.

- We've already seen the / directory structure in Linux file system. Next, we are going to view the /home directory.

