

Here is a list of the main directories which should be present under `/`:

Main Directories

Directory	In FHS?	Purpose
<code>/</code>	Yes	Primary directory of the entire filesystem hierarchy
<code>/bin</code>	Yes	Essential executable programs that must be available in single user mode
<code>/boot</code>	Yes	Files needed to boot the system, such as the kernel, initrd or initramfs images, and boot configuration files and bootloader programs
<code>/etc</code>	Yes	System-wide configuration files
<code>/home</code>	Yes	User home directories, including personal settings, files, etc.
<code>/lib</code>	Yes	Libraries required by executable binaries in <code>/bin</code> and <code>/sbin</code>
<code>/lib64</code>	No	64-bit libraries required by executable binaries in <code>/bin</code> and <code>/sbin</code> , for systems which can run both 32-bit and 64-bit programs
<code>/media</code>	Yes	Mount points for removable media such as CD's, DVD's, USB sticks etc.
<code>/mnt</code>	Yes	Temporarily mounted filesystems
<code>/opt</code>	Yes	Optional application software packages
<code>/proc</code>	Yes	Virtual pseudo-filesystem giving information about the system and processes running on it; can be used to alter system parameters
<code>/sys</code>	No	Virtual pseudo-filesystem giving information about the system and processes running on it; can be used to alter system parameters, is similar to a device tree and is part of the Unified Device Model
<code>/root</code>	Yes	Home directory for the root user
<code>/sbin</code>	Yes	Essential system binaries
<code>/srv</code>	Yes	Site-specific data served up by the system; seldom used
<code>/tmp</code>	Yes	Temporary files; on many distributions lost across a reboot and may be a ramdisk in memory
<code>/usr</code>	Yes	Multi-user applications, utilities and data; theoretically read-only
<code>/var</code>	Yes	Variable data that changes during system operation

A system should be able to boot and go into single user, or recovery mode, with only the `/bin`, `/sbin`, `/etc`, `/lib` and `/root` directories mounted, while the contents of the `/boot` directory are needed for the system to boot in the first place.

Many of these directories (such as `/etc` and `/lib`) will generally have subdirectories associated either with specific applications or sub-systems, with the exact layout differing somewhat by Linux distribution. Two of them, `/usr` and `/var`, are relatively standardized and worth looking at.

Directories Under `/usr`

Directory	Purpose
<code>/usr/bin</code>	Non-essential binaries and scripts, not needed for single user mode; generally this means user applications not needed to start system
<code>/usr/include</code>	Header files used to compile applications
<code>/usr/lib</code>	Libraries for programs in <code>/usr/bin</code> and <code>/usr/sbin</code>
<code>/usr/lib64</code>	64-bit libraries for 64-bit programs in <code>/usr/bin</code> and <code>/usr/sbin</code>
<code>/usr/sbin</code>	Non-essential system binaries, such as system daemons
<code>/usr/share</code>	Shared data used by applications, generally architecture-independent
<code>/usr/src</code>	Source code, usually for the Linux kernel
<code>/usr/X11R6</code>	X Window files; generally obsolete
<code>/usr/local</code>	Local data and programs specific to the host; subdirectories include <code>bin</code> , <code>sbin</code> , <code>lib</code> , <code>share</code> , <code>include</code> , etc.

Directories Under `/var`

Directory	Purpose
<code>/var/ftp</code>	Used for <code>ftp</code> server base
<code>/var/lib</code>	Persistent data modified by programs as they run
<code>/var/lock</code>	Lock files used to control simultaneous access to resources
<code>/var/log</code>	Log files
<code>/var/mail</code>	User mailboxes
<code>/var/run</code>	Information about the running system since the last boot
<code>/var/spool</code>	Tasks spooled or waiting to be processed, such as print queues
<code>/var/tmp</code>	Temporary files to be preserved across system reboot; sometimes linked to <code>/tmp</code>
<code>/var/www</code>	Root for website hierarchies