In order to manage all those files in an orderly fashion, man likes to think of them in an ordered tree-like structure on the hard disk, as we know from MS-DOS (Disk Operating System) for instance. The large branches contain more branches, and the branches at the end contain the tree's leaves or normal files. For now we will use this image of the tree, but we will find out later why this is not a fully accurate image.

DIRECTORY	DESCRIPTION
/	*Primary hierarchy* root and root directory of the entire file system hierarchy.
/bin	Essential command binaries that need to be available in single user mode; for all users, *e.g.,* c
/boot	Boot loader files, *e.g.,* kernels, initrd.
/dev	Essential devices, *e.g.,* /dev/null .
/etc	Host-specific system-wide configuration filesThere has been controversy over the meaning of t early versions of the UNIX Implementation Document from Bell labs, /etc is referred to as the e as this directory historically held everything that did not belong elsewhere (however, the FHS r static configuration files and may not contain binaries). Since the publication of early documen name has been re-designated in various ways. Recent interpretations include backronyms suc Configuration" or "Extended Tool Chest". (Similar to flose vin Control pannel in windons.
/opt	Configuration files for add-on packages that are stored in /opt/ .
/sgml	Configuration files, such as catalogs, for software that processes SGML.
/x11	Configuration files for the X Window System, version 11.
/xml	Configuration files, such as catalogs, for software that processes XML.
/home	Users' home directories, containing saved files, personal settings, etc.
/lib	Libraries essential for the binaries in /bin/ and /sbin/ .
/lib<qual>	Alternate format essential libraries. Such directories are optional, but if they exist, they have so
/media	Mount points for removable media such as CD-ROMs (appeared in FHS-2.3).
/mnt	Temporarily mounted filesystems.
/opt	Optional application software packages.
/proc	Virtual filesystem providing process and kernel information as files. In Linux, corresponds to a
/root	Home directory for the root user.
/sbin	Essential system binaries, *e.g.,* init, ip, mount.
/srv	Site-specific data which are served by the system.
/tmp	Temporary files (see also /var/tmp). Often not preserved between system reboots.
/usr	*Secondary hierarchy* for read-only user data; contains the majority of (multi-)user utilities and

```
                                              /  "ROOT"
         ┌──────────────┬───────────────┬───────────┴──────────────┬──────────────────┐
      /BIN          /ETC          /USR                        /VAR            /SBIN
"ESSENTIAL        "HOST SPECIFIC   "SHAREABLE AND              "VARIABLE DATA   "SYSTEM BINARIES"
 BINARIES"         SYSTEM CONFIG"   READ-ONLY DATA"             FILES"           FASTBOOT
```

prog, lib, doc

/BIN — "ESSENTIAL BINARIES"

- CAT
- CHGRP
- CHMOD
- CHOWN
- CP
- DATA
- DD
- DF
- DMESG
- ECHO
- FALSE
- HOSTNAME
- KILL
- LN
- LOGIN
- LS
- MKDIR
- MKNOD
- MORE
- MOUNT
- MV
- PS
- PWD
- RM
- RMDIR
- SED
- SH
- STTY
- SU
- SYNCH
- TRUE
- UMOUNT
- UNAME

(handwritten: Virtual memory, Linux-Linux, kernel executable)

/BOOT — "STATIC FILES OF BOOT LOADER"

- KERNEL
- SYSTEM.MAP
- VMLINUZ
- INITRD
- GRUB
- MODULE.INFO
- BOOT

(handwritten: Default bootloader, GRAND Unified Boot loader, initrd (initial ramdisk), a store for loading a temporary file)

/ETC — "HOST SPECIFIC SYSTEM CONFIG"

- CSH.LOGIN
- EXPORTS
- FSTAB
- FTPUSERS
- GATEWAYS
- GETTYDEFS
- GROUP
- HOST.CONF
- HOSTS
- HOSTS.ALLOW
- HOSTS.DENY
- HOSTS.EQUIV
- HOSTS.LPD
- INETD.CONF
- INITTAB
- ISSUE
- LS.SO.CONF
- MOTD
- MTAB
- MTOOLS
- NETWORKS
- PASSWD
- PRINTCAP
- PROFILE
- PROTOCOLS
- RESOLV.CONF
- RPC
- SECURETTY
- SERVICES
- SHELLS
- SYSLOG.CONF

/OPT — "CONFIG FILE FOR ADD ON APPLICATION SOFTWARE"

/USR — "SHAREABLE AND READ-ONLY DATA"

- /LOCAL "LOCAL SOFTWARE"
  - /BIN
  - /GAMES
  - /INCLUDE
  - /LIB
  - /MAN
  - /SBIN
  - /SHARE
  - /SRC
- /SHARE "STATIC DATA SHAREABLE AMONG ALL ARCHITECTURES"
  - /MAN "MANUAL PAGES"
    - /MAN1 "user programs"
    - /MAN2 "system calls"
    - /MAN3 "lib functions"
    - /MAN4 "special file"
    - /MAN5 "file formats"
    - /MAN6 "games"
    - /MAN7 "misc."
    - /MAN8 "system admin."
  - /BIN "MOST USER COMMANDS"
- /INCLUDE "STANDARD INCLUDE FILES FOR 'C' PROG."
- /LIB "OBJ, BIN, LIB FILES FOR PROG. AND PACKAGES"
- /SBIN

/VAR — "VARIABLE DATA FILES"

- /CACHE "APPLICATION CACHE DATA"
- /LIB "VARIABLE STATE INFORMATION REMAINS AFTER REBOOT"
- /YP "DATA FOR NIS SERVICES"
- /LOCK "LOCK FILES FOR SHARED RESOURCES"
- /OPT "VARIABLE DATA OF PACKAGES INSTALLED"
- /RUN "INFO OF SYSTEM SINCE IT WAS BOOTED"
- /TMP "AVAILABLE FOR PROG."
- /SPOOL "DATA AWAITING PROCESSING"
  - /LPD
  - /MQUEUE
  - /NEWS
  - /RWHO
  - /UUCP
- /LOG "LOG FILES AND DIR"
  - LASTLOG

/SBIN — "SYSTEM BINARIES"

- FASTBOOT
- FASTHALT
- FDISK
- FSCK
- GETTY
- HALT
- IFCONFIG
- INIT
- MKFS
- MKSWAP
- REBOOT
- ROUTE
- SWAPON
- SWAPOFF
- UPDATE

- /TMP "TEMPERORY FILES DELETED ON BOOTUP"
- /DEV "LOCATION OF SPECIAL OR DEVICE FILES [CONTAINS MAKEDEV]"
- /HOME "USER HOME DIRECTORIES"
- /LIB "LIBRARY AND KERNEL MODULES"
- /MNT "MOUNT FILES FOR TEMPERORY FILESYSTEMS"
- /OPT "ADD-ON APPLICATION SOFTWARE"
- /ROOT "HOME DIR. FOR ROOT USER"

(handwritten: Programs for use by...)