NAME

fstab − static information about the filesystems

SYNOPSIS

/etc/fstab

DESCRIPTION

The file **fstab** contains descriptive information about the various file systems. **fstab** is only read by programs, and not written; it is the duty of the system administrator to properly create and maintain this file. Each filesystem is described on a separate line; fields on each line are separated by tabs or spaces. Lines starting with '#' are comments, blank lines are ignored. The order of records in **fstab** is important because **fsck**(8), **mount**(8), and **umount**(8) sequentially iterate through **fstab** doing their thing.

The first field (*fs_spec*).

This field describes the block special device or remote filesystem to be mounted.

For ordinary mounts it will hold (a link to) a block special device node (as created by **mknod**(8)) for the device to be mounted, like '/dev/cdrom' or '/dev/sdb7'. For NFS mounts one will have <host>:<dir>, e.g., 'knuth.aeb.nl:/'. For procfs, use 'proc'.

Instead of giving the device explicitly, one may indicate the filesystem that is to be mounted by its UUID or LABEL (cf. **e2label**(8) or **xfs_admin**(8)), writing LABEL=<label> or UUID=<uuid>, e.g., 'LABEL=Boot' or 'UUID=3e6be9de-8139-11d1-9106-a43f08d823a6'.

It's also possible to use PARTUUID= and PARTLABEL=. These partitions identifiers are supported for GUID Partition Table (GPT) and MAC partition table only.

See **blkid**(8) or **lsblk**(8) for more details about devices identifiers.

Note that **mount**(8) uses UUIDs as strings. The string representation of the UUID should be based on lower case characters.

The second field (*fs_file*).

This field describes the mount point for the filesystem. For swap partitions, this field should be specified as 'none'. If the name of the mount point contains spaces these can be escaped as '\040'.

The third field (*fs_vfstype*).

This field describes the type of the filesystem. Linux supports lots of filesystem types, such as *adfs*, *affs*, *autofs*, *coda*, *coherent*, *cramfs*, *devpts*, *efs*, *ext2*, *ext3*, *hfs*, *hpfs*, *iso9660*, *jfs*, *minix*, *msdos*, *ncpfs*, *nfs*, *ntfs*, *proc*, *qnx4*, *reiserfs*, *romfs*, *smbfs*, *sysv*, *tmpfs*, *udf*, *ufs*, *umsdos*, *vfat*, *xenix*, *xfs*, and possibly others. For more details, see **mount**(8).

For the filesystems currently supported by the running kernel, see */proc/filesystems*.

An entry *swap* denotes a file or partition to be used for swapping, cf. **swapon**(8). An entry *none* is useful for bind or move mounts.

mount(8) and **umount**(8) support filesystem *subtypes*. The subtype is defined by '.subtype' suffix. For example 'fuse.sshfs'. It's recommended to use subtype notation rather than add any prefix to the first fstab field (for example 'sshfs#example.com' is deprecated).

The fourth field (*fs_mntops*).

This field describes the mount options associated with the filesystem.

It is formatted as a comma separated list of options. It contains at least the type of mount plus any additional options appropriate to the filesystem type. For documentation on the available mount

options, see **mount**(8). For documentation on the available swap options, see **swapon**(8).

Basic file system independent options are:

defaults
use default options: rw, suid, dev, exec, auto, nouser, and async.

noauto do not mount when "mount -a" is given (e.g., at boot time)

user allow a user to mount

owner allow device owner to mount

comment
or **x-<name>** for use by fstab-maintaining programs

nofail do not report errors for this device if it does not exist.

The fifth field (*fs_freq*).
This field is used for these filesystems by the **dump**(8) command to determine which filesystems need to be dumped. If the fifth field is not present, a value of zero is returned and **dump** will assume that the filesystem does not need to be dumped.

The sixth field (*fs_passno*).
This field is used by the **fsck**(8) program to determine the order in which filesystem checks are done at reboot time. The root filesystem should be specified with a *fs_passno* of 1, and other filesystems should have a *fs_passno* of 2. Filesystems within a drive will be checked sequentially, but filesystems on different drives will be checked at the same time to utilize parallelism available in the hardware. If the sixth field is not present or zero, a value of zero is returned and **fsck** will assume that the filesystem does not need to be checked.

NOTES

The proper way to read records from **fstab** is to use the routines **getmntent**(3) or **libmount**.

The keyword **ignore** as filesystem type (3rd field) is not more supported by the pure libmount based mount utility (since util-linux v2.22).

FILES

/etc/fstab, *<fstab.h>*

SEE ALSO

findmnt(8), **mount**(8), **swapon**(8), **fs**(5), **getmntent**(3)

HISTORY

The ancestor of this **fstab** file format appeared in 4.0BSD.

AVAILABILITY

This man page is part of the util-linux package and is available from ftp://ftp.kernel.org/pub/linux/utils/util-linux/.