NAME

findmnt − find a filesystem

SYNOPSIS

findmnt [options]

findmnt [options] *device*|*mountpoint*

findmnt [options] [**−−source**] *device* [**−−target** *path*|**−−mountpoint** *mountpoint*]

DESCRIPTION

findmnt will list all mounted filesystems or search for a filesystem. The **findmnt** command is able to search in */etc/fstab*, */etc/mtab* or */proc/self/mountinfo*. If *device* or *mountpoint* is not given, all filesystems are shown.

The device may be specified by device name, major:minor numbers, filesystem label or UUID, or partition label or UUID. Note that **findmnt** follows **mount**(8) behavior where a device name may be interpreted as a mountpoint (and vice versa) if the **−−target**, **−−mountpoint** or **−−source** options are not specified.

The command−line option **−−target** accepts any file or directory and then **findmnt** displays the filesystem for the given path.

The command prints all mounted filesystems in the tree−like format by default.

The relationship between block devices and filesystems is not always one−to−one. The filesystem may use more block devices. This is why **findmnt** provides SOURCE and SOURCES (pl.) columns. The column SOURCES displays all devices where it is possible to find the same filesystem UUID (or another tag specified in *fstab* when executed with **−−fstab** and **−−evaluate**).

OPTIONS

−A, **−−all**
Disable all built−in filters and print all filesystems.

−a, **−−ascii**
Use ascii characters for tree formatting.

−b, **−−bytes**
Print the sizes in bytes rather than in a human−readable format.

By default, the unit, sizes are expressed in, is byte, and unit prefixes are in power of 2^10 (1024). Abbreviations of symbols are exhibited truncated in order to reach a better readability, by exhibiting alone the first letter of them; examples: "1 KiB" and "1 MiB" are respectively exhibited as "1 K" and "1 M", then omitting on purpose the mention "iB", which is part of these abbreviations.

−C, **−−nocanonicalize**
Do not canonicalize paths at all. This option affects the comparing of paths and the evaluation of tags (LABEL, UUID, etc.).

−c, **−−canonicalize**
Canonicalize all printed paths.

−−deleted
Print filesystems where target (mountpoint) is marked as deleted by kernel.

−D, **−−df**
Imitate the output of **df**(1). This option is equivalent to **−o**

SOURCE,FSTYPE,SIZE,USED,AVAIL,USE%,TARGET but excludes all pseudo filesystems. Use **−−all** to print all filesystems.

−d, **−−direction** *word*
The search direction, either **forward** or **backward**.

−e, **−−evaluate**
Convert all tags (LABEL, UUID, PARTUUID, or PARTLABEL) to the corresponding device names for the SOURCE column. It's an unusual situation, but the same tag may be duplicated (used for more devices). For this purpose, there is SOURCES (pl.) column. This column displays by multi−line cell all devices where the tag is detected by libblkid. This option makes sense for *fstab* only.

−F, **−−tab−file** *path*
Search in an alternative file. If used with **−−fstab**, **−−mtab** or **−−kernel**, then it overrides the default paths. If specified more than once, then tree−like output is disabled (see the **−−list** option).

−f, **−−first−only**
Print the first matching filesystem only.

−i, **−−invert**
Invert the sense of matching.

−J, **−−json**
Use JSON output format.

−k, **−−kernel**
Search in */proc/self/mountinfo*. The output is in the tree−like format. This is the default. The output contains only mount options maintained by kernel (see also **−−mtab**).

−l, **−−list**
Use the list output format. This output format is automatically enabled if the output is restricted by the **−t**, **−O**, **−S** or **−T** option and the option **−−submounts** is not used or if more that one source file (the option **−F**) is specified.

−M, **−−mountpoint** *path*
Explicitly define the mountpoint file or directory. See also **−−target**.

−m, **−−mtab**
Search in */etc/mtab*. The output is in the list format by default (see **−−tree**). The output may include user space mount options.

−N, **−−task** *tid*
Use alternative namespace */proc/<tid>/mountinfo* rather than the default */proc/self/mountinfo*. If the option is specified more than once, then tree−like output is disabled (see the **−−list** option). See also the **unshare**(1) command.

−n, **−−noheadings**
Do not print a header line.

−O, **−−options** *list*
Limit the set of printed filesystems. More than one option may be specified in a comma−separated list. The **−t** and **−O** options are cumulative in effect. It is different from **−t** in that each option is matched exactly; a leading *no* at the beginning does not have global meaning. The "no" can used for individual items in the list. The "no" prefix interpretation can be disabled by "+" prefix.

−o, **−−output** *list*
Define output columns. See the **−−help** output to get a list of the currently supported columns. The **TARGET** column contains tree formatting if the **−−list** or **−−raw** options are not specified.

The default list of columns may be extended if *list* is specified in the format *+list* (e.g., **findmnt −o +PROPAGATION**).

−−output−all
Output almost all available columns. The columns that require **−−poll** are not included.

−P, **−−pairs**
Produce output in the form of key="value" pairs. All potentially unsafe value characters are hex−escaped (\x<code>). See also option **−−shell**.

−p, **−−poll**[*=list*]
Monitor changes in the */proc/self/mountinfo* file. Supported actions are: mount, umount, remount and move. More than one action may be specified in a comma−separated list. All actions are monitored by default.

The time for which **−−poll** will block can be restricted with the **−−timeout** or **−−first−only** options.

The standard columns always use the new version of the information from the mountinfo file, except the umount action which is based on the original information cached by **findmnt**. The poll mode allows using extra columns:

ACTION
mount, umount, move or remount action name; this column is enabled by default

OLD−TARGET
available for umount and move actions

OLD−OPTIONS
available for umount and remount actions

−−pseudo
Print only pseudo filesystems.

−−shadow
Print only filesystems over−mounted by another filesystem.

−R, **−−submounts**
Print recursively all submounts for the selected filesystems. The restrictions defined by options **−t**, **−O**, **−S**, **−T** and **−−direction** are not applied to submounts. All submounts are always printed in tree−like order. The option enables the tree−like output format by default. This option has no effect for **−−mtab** or **−−fstab**.

−r, **−−raw**
Use raw output format. All potentially unsafe characters are hex−escaped (\x<code>).

−−real
Print only real filesystems.

−S, **−−source** *spec*
Explicitly define the mount source. Supported specifications are *device*, *maj***:***min*, **LABEL=***label*,

UUID=*uuid*, **PARTLABEL**=*label* and **PARTUUID**=*uuid*.

−s, **−−fstab**
Search in */etc/fstab*. The output is in the list format (see **−−list**).

−T, **−−target** *path*
Define the mount target. If *path* is not a mountpoint file or directory, then **findmnt** checks the *path* elements in reverse order to get the mountpoint (this feature is supported only when searching in kernel files and unsupported for **−−fstab**). It's recommended to use the option **−−mountpoint** when checks of *path* elements are unwanted and *path* is a strictly specified mountpoint.

−t, **−−types** *list*
Limit the set of printed filesystems. More than one type may be specified in a comma−separated list. The list of filesystem types can be prefixed with **no** to specify the filesystem types on which no action should be taken. For more details see **mount**(8).

−−tree
Enable tree−like output if possible. The options is silently ignored for tables where is missing child−parent relation (e.g., *fstab*).

−−shadowed
Print only filesystems over−mounted by another filesystem.

−U, **−−uniq**
Ignore filesystems with duplicate mount targets, thus effectively skipping over−mounted mount points.

−u, **−−notruncate**
Do not truncate text in columns. The default is to not truncate the **TARGET**, **SOURCE**, **UUID**, **LABEL**, **PARTUUID**, **PARTLABEL** columns. This option disables text truncation also in all other columns.

−v, **−−nofsroot**
Do not print a [/dir] in the SOURCE column for bind mounts or btrfs subvolumes.

−w, **−−timeout** *milliseconds*
Specify an upper limit on the time for which **−−poll** will block, in milliseconds.

−x, **−−verify**
Check mount table content. The default is to verify */etc/fstab* parsability and usability. It's possible to use this option also with **−−tab−file**. It's possible to specify source (device) or target (mountpoint) to filter mount table. The option **−−verbose** forces **findmnt** to print more details.

−−verbose
Force **findmnt** to print more information (**−−verify** only for now).

−−vfs−all
When used with **VFS−OPTIONS** column, print all VFS (fs−independent) flags. This option is designed for auditing purposes to list also default VFS kernel mount options which are normally not listed.

−y, **−−shell**
The column name will be modified to contain only characters allowed for shell variable identifiers. This is usable, for example, with **−−pairs**. Note that this feature has been automatically enabled for **−−pairs** in version 2.37, but due to compatibility issues, now it's necessary to request this behavior by

−−shell.

−h, **−−help**
Display help text and exit.

−V, **−−version**
Print version and exit.

EXIT STATUS

The exit value is 0 if there is something to display, or 1 on any error (for example if no filesystem is found based on the user's filter specification, or the device path or mountpoint does not exist).

ENVIRONMENT

LIBMOUNT_FSTAB=<path>
overrides the default location of the *fstab* file

LIBMOUNT_MTAB=<path>
overrides the default location of the *mtab* file

LIBMOUNT_DEBUG=all
enables libmount debug output

LIBSMARTCOLS_DEBUG=all
enables libsmartcols debug output

LIBSMARTCOLS_DEBUG_PADDING=on
use visible padding characters.

EXAMPLES

findmnt −−fstab −t nfs
Prints all NFS filesystems defined in */etc/fstab*.

findmnt −−fstab /mnt/foo
Prints all */etc/fstab* filesystems where the mountpoint directory is */mnt/foo*. It also prints bind mounts where */mnt/foo* is a source.

findmnt −−fstab −−target /mnt/foo
Prints all */etc/fstab* filesystems where the mountpoint directory is */mnt/foo*.

findmnt −−fstab −−evaluate
Prints all */etc/fstab* filesystems and converts LABEL= and UUID= tags to the real device names.

findmnt −n −−raw −−evaluate −−output=target LABEL=/boot
Prints only the mountpoint where the filesystem with label "/boot" is mounted.

findmnt −−poll −−mountpoint /mnt/foo
Monitors mount, unmount, remount and move on */mnt/foo*.

findmnt −−poll=umount −−first−only −−mountpoint /mnt/foo
Waits for */mnt/foo* unmount.

findmnt −−poll=remount −t ext3 −O ro
Monitors remounts to read−only mode on all ext3 filesystems.

AUTHORS

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SEE ALSO

fstab(5), **mount**(8)

REPORTING BUGS

For bug reports, use the issue tracker at https://github.com/util−linux/util−linux/issues.

AVAILABILITY

The **findmnt** command is part of the util−linux package which can be downloaded from Linux Kernel Archive <https://www.kernel.org/pub/linux/utils/util−linux/>.