#### **NAME**

findmnt - find a filesystem

#### **SYNOPSIS**

findmnt [options]

**findmnt** [options] device | mountpoint

**findmnt** [options] [--source] device [--target|--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 prints all mounted filesystems in the tree-like format by default.

## **OPTIONS**

### -A, --all

Disable all built-in filters and print all filesystems.

#### -a, --ascii

Use ascii characters for tree formatting.

## -b, --bytes

Print the SIZE, USED and AVAIL columns in bytes rather than in a human-readable format.

#### -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.

### -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.

### -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.

## -h, --help

Display help text and exit.

## -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  $-\mathbf{t}$ ,  $-\mathbf{O}$ ,  $-\mathbf{S}$  or  $-\mathbf{T}$  option and the option --**submounts** is not used or if more that one source file (the option  $-\mathbf{F}$ ) 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  $-\mathbf{t}$  and  $-\mathbf{O}$  options are cumulative in effect. It is different from  $-\mathbf{t}$  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

Use key="value" output format. All potentially unsafe characters are hex-escaped (\x < code >).

## $-\mathbf{p}$ , $--\mathbf{poll}[=list]$

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**(8). The poll mode allows to use 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.

#### -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).

#### -U, --unic

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 (mount-point) to filter mount table. The option --verbose forces findmnt to print more details.

#### --verbose

Force findmnt to print more information (--verify only for now).

#### **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.

#### **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. Requires enabled LIBSMARTCOLS\_DEBUG.

#### **AUTHORS**

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## SEE ALSO

fstab(5), mount(8)

# **AVAILABILITY**

The findmnt command is part of the util-linux package and is available from https://www.kernel.org/pub/linux/utils/util-linux/.