

Name

di – disk information

Synopsis

di [**-AaghHklLmnPtZ**] [**-b** *block-size*] [**-d** *display-size*] [**-f** *format*] [**-I** *include-fstyp-list*] [**-s** *sort-type*] [**-w** *block-width*] [**-W** *inode-width*] [**-x** *exclude-fstyp-list*] [**-X** *debug-level*] [**-z** *zone-name*] [*file* [...]]

mi

Description

di Displays usage information on mounted filesystems. Block values are reported in megabytes (1024k bytes) by default, but may be changed. If *file* is specified, the usage information for the partition on which *file* is located is printed.

Unless the *-a* flag is specified, the following mounted filesystems will not normally be displayed: filesystems with total blocks ≤ 0 ; filesystems marked by the operating system as "ignore"; automounted filesystems that are duplicates of other normally mounted filesystems; loopback filesystems that are part of a zone (Solaris).

mi Displays the mounted filesystem information.

Several switches may be specified to control the output of *di* and *mi*:

- A** Print all fields (used for debugging). Mount points and special device names are printed at full width. The *-a* flag is set.
- a** Prints all mounted devices (normally, those with 0 total blocks are not printed – e.g. */dev/proc*, */dev/fd*).
- b** *block-size* (compatibility: *-B*)
Change the base block size from 1024 (default) to the size specified. *block-size* may be one of: *k* – 1024 bytes, *d* – 1000 bytes, or a specific size.
- d** *display-size* Display the blocks in units specified by *display-size*. *display-size* may be one of: 512 – POSIX, *k* – kilobytes, *m* – megabytes, *g* – gigabytes, *t* – terabytes, *P* – petabytes, *E* – exabytes, *Z* – zettabytes, *Y* – yottabytes, *h* – Scaled alternative 1, *H* – Scaled alternative 2, or a specific value to use as the block size.

Block display sizes greater than 1024 bytes are displayed with a precision of one decimal place after the radix.

The Scaled alternatives scale the sizes displayed and appends a suffix (e.g. 48.0k, 3.4M).

With scaled alternative 1, sizes within a line may scale to different units.

Scaled alternative 2 scales all the sizes in each individual line to the same unit size (the largest needed).
- f** *format* Use the specified format string *format*. Format strings are described below.
- g** (alias for: *-dg*)
Display sizes in gigabytes.
- h** (alias for: *-dh*)
Display partition sizes in scaled alternative 1 format.
- H** (alias for: *-dH*)
Display partition sizes in scaled alternative 2 format.
- I** *include-fstyp-list* (compatibility: *-F*)
Include *only* the file system types listed in *include-fstyp-list*. The list is a comma separated list of file system types. Multiple *-I* options may be specified. e.g. *-I nfs,rfs* or *-I nfs -I rfs*.
- k** (alias for: *-dk*)
Display sizes in Kbytes.

- l** Display only local file systems.
- L** Don't do the check for duplicate filesystems.
- m** (alias for: **-dm**)
Display sizes in megabytes.
- n** Do not print a header line above the list of file systems. Useful when parsing the output of *di*.
- P** Output format is POSIX standard. 512 byte block size is the default. The **-k** option may be used.
- s** *sort-type*
Use *sort-type* to sort the output. The output of *di* is normally sorted by name. The output may be left unsorted (**-s n** command line switch) i.e. as it appears in the mount table or may be sorted by the special device name (**-s s** command line switch). If the **-s r** command line switch is used, the sort order will be reversed. If *file* is specified on the command line, no sorting is done.
- t** Print a totals line below the list of file systems. Memory filesystems (tmpfs, mfs) and read-only filesystems are not added to the totals.
- w** *block-width*
Set the print width for block values. Default is eight.
- W** *inode-width*
Set the print width for inode values. Default is seven.
- x** *exclude-fstype-list* (old: **-i**)
Exclude the file system types listed in *exclude-fstyp-list*. The list is a comma separated list of file system types. Multiple **-x** options may be specified. e.g. **-x nfs,rfs** or **-x nfs -x rfs**.
- X** *level*
Set the program's debugging level to *debug-level*.
- z** *zone-name*
Display the filesystems for the specified zone. The zone must be visible to the user.
- Z** (alias for: **-z all**)
Display the filesystems for all visible zones.

Format strings

The output of *di* may be specified via a format string. This string may be given either via the **-f** command line switch or by the **DIFMT** environment variable. The format string may specify the following columns:

- m** Print the name of the mount point.
- M** Print the name of the mount point, at full length. The mount point is formatted to the maximum width necessary for the longest mount point name.
- b** Print the total number of megabytes on the file system. See also the **-d** option.
- B** Print the total number of megabytes on the file system available for use by normal users. See also the **-d** option.
- u** Print the number of megabytes in use on the file system (actual number of megabytes used = total – free). See also the **-d** option.
- c** Print the number of megabytes not available for use by normal users (total – available). See also the **-d** option.
- f** Print the number of free (unused) megabytes on the file system. See also the **-d** option.
- v** Print the number of megabytes available for use by normal users. See also the **-d** option.
- p** Print the percentage of megabytes not available for use by normal users (number of megabytes not available for use / total disk space). See also the **-d** option.
- 1** Print the percentage of total megabytes in use (actual number of megabytes used / total disk space). See also the **-d** option.

- 2** Print the percentage of megabytes in use, BSD-style. Represents the percentage of user-available space in use. Note that values over 100% are possible (actual number of megabytes used / disk space available to non-root users). See also the `-d` option.
- a** Print the percentage of megabytes available for use by normal users (number of megabytes available for use / total disk space). See also the `-d` option.
- 3** Print the percentage of total megabytes free (actual number of megabytes free / total disk space). See also the `-d` option.
- i** Print the total number of file slots (inodes) that can be created on the file system.
- U** Print the number of file slots in use.
- F** Print the number of file slots available.
- P** Print the percentage of file slots in use.
- s** Print the file system name (special device or remote mount point).
- S** Print the file system name (special device or remote mount point), at full length. The file system name is formatted to the maximum width necessary for the longest file system name.
- t** Print the file system type.
- T** Print the file system type at full length. The file system type is formatted to the maximum width necessary for the longest file system type.
- I** Print the time the filesystem was mounted. This column is not supported on all systems.
- O** Print the filesystem mount options.

The default format string for *di* is **smbuvpT**.

The default format string for *mi* is **MSTIO**.

The format string may also contain any other character not listed above. The character will be printed as is. e.g. `di -f 'mbuvp|iUFP'` will print the character '|' between the disk usage and the file slot usage. The command sequence (Bourne Shell):

```
di -f 'mbuvp
miUFP'
```

will print two lines of data for each filesystem.

Examples

Various *df* equivalent format strings for System V release 4 are:

```
/usr/bin/df -v    di -P -f msbuf1
/usr/bin/df -k    di -dk -f sbcvpm
/usr/ucb/df      di -dk -f sbuv2m
```

If you like your numbers to add up/calculate the percentage correctly, try one of the following format strings:

```
di -f SMbuf1T
di -f SMbcvpT
di -f SMBuv2T
```

Environment Variables

The DIFMT environment variable may be used to specify the default display format string.

The DI_ARGS environment variable may be used to specify command line arguments. e.g. If you always want gigabytes displayed, set DI_ARGS equal to "-dg". Any command line arguments specified will override the DI_ARGS environment variable.

The GNU `df` POSIXLY_CORRECT, and `DF_BLOCK_SIZE` and the BSD `BLOCKSIZE` environment variables are honored.

Note

For filesystems that do not report available blocks (e.g. System V release 3), the number of available blocks is considered to be the number of free blocks.

WARNING

Do not replace your system's *df* command with this program. You will in all likelihood break your installation procedures.

See Also

df(1), fstab(5), getmnt(2), getmntinfo(2), mnttab(4), mount(1M) statfs(2), statvfs(2)

Bugs

Send bug reports to: di-bugs@gentoo.com

Website

<http://www.gentoo.com/di/>

Author

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