

NAME

sg_get_fs_stats – get filesystem statistics

SYNOPSIS

```
#include <statgrab.h>
```

```
sg_fs_stats *sg_get_fs_stats(int *entries);
```

DESCRIPTION

The `sg_get_fs_stats` takes a pointer to an int, `entries`, which is filled with the number of mounted file systems the machine has. The return value is a pointer to the first member of an array of `sg_fs_stats` structures; the number of entries in the array is returned in `entries`.

The function returns statistics about mounted filesystems, including free space and inode usage.

RETURN VALUES

`sg_get_fs_stats` returns a pointer to a structure of type `sg_fs_stats`.

```
typedef struct {
    char *device_name;
    char *fs_type;
    char *mnt_point;
    long long size;
    long long used;
    long long avail;
    long long total_inodes;
    long long used_inodes;
    long long free_inodes;
    long long avail_inodes;
    long long io_size;
    long long block_size;
    long long total_blocks;
    long long free_blocks;
    long long used_blocks;
    long long avail_blocks;
} sg_fs_stats;
```

`device_name`

The name known to the operating system. (eg. on linux it might be `hda`)

`fs_type` The type of the filesystem.

`mnt_point`

The mount point of the file system.

`size` The size, in bytes, of the file system.

`used` The amount of space, in bytes, used on the filesystem.

`avail` The amount of space, in bytes, available on the filesystem.

`total_inodes`

The total number of inodes in the filesystem.

`used_inodes`

The number of used inodes in the filesystem.

`free_inodes`

The number of free inodes in the filesystem.

avail_inodes

The number of free inodes available to non-privileged processes.

io_size A suggested optimal block size for IO operations — if you're reading or writing lots of data, do it in chunks of this size.

block_size

How big blocks actually are on the underlying filesystem (typically for purposes of stats reporting).

total_blocks

The total number of blocks in the filesystem.

free_blocks

The number of free blocks in the filesystem.

used_blocks

The number of used blocks in the filesystem.

avail_blocks

The number of free blocks available to non-privileged processes.

SEE ALSO

statgrab(3)

WEBSITE

<http://www.i-scream.org/libstatgrab/>