
The Open Group Base Specifications Issue 7, 2018 edition
 IEEE Std 1003.1-2017 (Revision of IEEE Std 1003.1-2008)
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NAME

sys/statvfs.h – VFS File System information structure

SYNOPSIS

```
#include <sys/statvfs.h>
```

DESCRIPTION

The `<sys/statvfs.h>` header shall define the **statvfs** structure, which shall include at least the following members:

unsigned long	f_bsize	File system block size.
unsigned long	f_frsize	Fundamental file system block size.
fsblkcnt_t	f_blocks	Total number of blocks on file system in units of <i>f_frsize</i> .
fsblkcnt_t	f_bfree	Total number of free blocks.
fsblkcnt_t	f_bavail	Number of free blocks available to non-privileged process.
fsfilcnt_t	f_files	Total number of file serial numbers.
fsfilcnt_t	f_ffree	Total number of free file serial numbers.
fsfilcnt_t	f_favail	Number of file serial numbers available to non-privileged process.
unsigned long	f_fsid	File system ID.
unsigned long	f_flag	Bit mask of <i>f_flag</i> values.
unsigned long	f_namemax	Maximum filename length.

The `<sys/statvfs.h>` header shall define the **fsblkcnt_t** and **fsfilcnt_t** types as described in [<sys/types.h>](#).

The `<sys/statvfs.h>` header shall define the following symbolic constants for the *f_flag* member:

ST_RDONLY	Read-only file system.
ST_NOSUID	Does not support the semantics of the ST_ISUID and ST_ISGID file mode bits.

The following shall be declared as functions and may also be defined as macros. Function prototypes shall be provided.

```
int fstatvfs(int, struct statvfs *);
int statvfs(const char *restrict, struct statvfs *restrict);
```

The following sections are informative.

APPLICATION USAGE

None.

RATIONALE

None.

FUTURE DIRECTIONS

None.

SEE ALSO

[<sys/types.h>](#)

XSH [fstatvfs](#)

CHANGE HISTORY

First released in Issue 4, Version 2.

Issue 5

The type of *f_blocks*, *f_bfree*, and *f_bavail* is changed from **unsigned long** to **fsblkcnt_t**; the type of *f_files*, *f_ffree*, and *f_favail* is changed from **unsigned long** to **fsfilcnt_t**.

Issue 6

The Open Group Corrigendum U035/5 is applied. In the DESCRIPTION, the types **fsblkcnt_t** and **fsfilcnt_t** have been described.

The **restrict** keyword is added to the prototype for [statvfs\(\)](#).

IEEE Std 1003.1-2001/Cor 1-2002, item XBD/TC1/D6/18 is applied, changing the description of ST_NOSUID from ``Does not support [setuid\(\)](#)/ [setgid\(\)](#) semantics'' to ``Does not support the semantics of the ST_ISUID and ST_ISGID file mode bits''.

Issue 7

The [<sys/statvfs.h>](#) header is moved from the XSI option to the Base.

This reference page is clarified with respect to macros and symbolic constants.

End of informative text.

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