

## FS Helper Functions

The following table summarizes the routines that make up the File System Helper interface between FSDs and the kernel.

#	FS Helper Routine	Description
1.	<a href="#">FSH_ADDSHARE</a>	Add a name to the sharing set
2.	<a href="#">FSH_BUFSTATE</a>	REMOVED in OS/2 Version 2.0
3.	<a href="#">FSH_CALLDRIVER</a>	Call Device Driver's Extended Strategy entry point
4.	<a href="#">FSH_CANONICALIZE</a>	Convert pathname to canonical form
5.	<a href="#">FSH_CHECKEANAME</a>	Check EA name validity
6.	<a href="#">FSH_CRITERROR</a>	Signal a hard error to the daemon
7.	<a href="#">FSH_DEVIOCTL</a>	Send IOCTL request to device driver
8.	<a href="#">FSH_DOVOLIO</a>	Volume-based sector-oriented transfer
9.	<a href="#">FSH_DOVOLIO2</a>	Send volume-based IOCTL request to device driver.
10.	<a href="#">FSH_FINDCHAR</a>	Find first occurrence of char in string
11.	<a href="#">FSH_FINDDUPHVPB</a>	Locates equivalent hVPBs
12.	<a href="#">FSH_FLUSHBUF</a>	REMOVED in OS/2 Version 2.0
13.	<a href="#">FSH_FORCENOSWAP</a>	Force segments permanently into memory
14.	<a href="#">FSH_GETBUF</a>	REMOVED in OS/2 Version 2.0
15.	<a href="#">FSH_GETFIRSTOVERLAPB</a>	REMOVED in OS/2 Version 2.0
16.	<a href="#">FSH_GETPRIORITY</a>	Get current thread's I/O priority
17.	<a href="#">FSH_GETVOLPARAM</a>	Get VPB data from VPB handle
18.	<a href="#">FSH_INTERR</a>	Signal an internal error
19.	<a href="#">FSH_IOBOOST</a>	Gives the current thread an I/O priority boost
20.	<a href="#">FSH_IOSEMCLEAR</a>	Clear an I/O-event semaphore
21.	<a href="#">FSH_ISCURDIRPREFIX</a>	Test for a prefix of a current directory
22.	<a href="#">FSH_LOADCHAR</a>	Load character from a string
23.	<a href="#">FSH_NAMEFROMSFN</a>	Get the full path name from an SFN
24.	<a href="#">FSH_PREVCHAR</a>	Move backward in string
25.	<a href="#">FSH_PROBEBUF</a>	User address validity check
26.	<a href="#">FSH_QSYSINFO</a>	Query system information
27.	<a href="#">FSH_REGISTERPERFCTRS</a>	Register a FSD with PERFVIEW
28.	<a href="#">FSH_RELEASEBUF</a>	REMOVED in OS/2 Version 2.0
29.	<a href="#">FSH_REMOVESHARE</a>	Remove a name from the sharing set
30.	<a href="#">FSH_SEGALLOC</a>	Allocate a GDT or LDT segment
31.	<a href="#">FSH_SEGFREE</a>	Release a GDT or LDT segment
32.	<a href="#">FSH_SEGREALLOC</a>	Change segment size
33.	<a href="#">FSH_SEMCLEAR</a>	Clear a semaphore
34.	<a href="#">FSH_SEMREQUEST</a>	Request a semaphore

#	FS Helper Routine	Description
35.	<a href="#">FSH_SEMSET</a>	Set a semaphore
36.	<a href="#">FSH_SEMSETWAIT</a>	Set a semaphore and wait for clear
37.	<a href="#">FSH_SEMWAIT</a>	Wait for clear
38.	<a href="#">FSH_SETVOLUME</a>	Force a volume to be mounted on the drive
39.	<a href="#">FSH_STORECHAR</a>	Store character into string
40.	<a href="#">FSH_UPPERCASE</a>	Uppercase ASCII string
41.	<a href="#">FSH_WILDMATCH</a>	Match using OS/2 wildcards
42.	<a href="#">FSH_YIELD</a>	Yield CPU to higher priority threads

FSDs are loaded as dynamic link libraries and may import services provided by the kernel. These services can be called directly by the file system, passing the relevant parameters.

No validation of input parameters is done unless otherwise specified. The FSD calls *FSH\_PROBEBUF*, where appropriate, before calling the FS help routine.

When any service returns an error code, the FSD must return to the caller as soon as possible and return the specific error code from the helper to the FS router.

There are many deadlocks that may occur as a result of operations issued by FSDs. OS/2 provides no means whereby deadlocks between file systems and applications can be detected.

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Last update: **2014/05/13 10:52**

