

Allocate Increase the physical size of an open file

#include <Files.h>

File Manager

<u>OSErr</u>	Allocate (<i>fRefNum</i> , <i>byteCount</i>);	
<u>short</u>	<i>fRefNum</i> ;	file reference, as obtained via FSOpen
<u>long</u>	<i>*byteCount</i> ;	bytes to add; receives actual bytes added
	returns	<u>Error Code</u> ; 0=no error

Allocate extends the physical size of a file on disk, without changing the file's logical EOF.

fRefNum is the reference number of an open file. See **FSOpen** and **OpenRF**.

byteCount is the address of a positive long integer. On entry, it specifies how much space, in bytes, you wish to add to the file's physical allocation. Upon return, it contains the actual number of bytes added (it will be a multiple of the disk block size).

Returns: an operating system Error Code. It will be one of:

noErr	(0)	No error
dskFulErr	(-34)	Disk full
fLckdErr	(-45)	File is locked
fnOpnErr	(-38)	File not open
ioErr	(-36)	I/O error
rfNumErr	(-51)	Bad fRefNum
vLckdErr	(-46)	Volume is locked
wPrErr	(-44)	Diskette is write-protected
wrPermErr	(-61)	Write permission error

Notes: The *byteCount* parameter is added to the current physical end-of-file, the sum is rounded up to the size of the next higher allocation block, and the File Manager attempts to allocate enough blocks to satisfy the request.

If there is not enough free space on the disk, then **all available space is allocated**, the *byteCount* variable is set to the actual number of bytes allocated, and dskFulErr is returned. **Hint:** you may wish to shrink the file back down if the allocation fails (see **SetEOF**).

Note that **Allocate** works in disk-block size units, with no regard to the logical EOF. For instance:

```

long   byteCount;
short  fRef;

byteCount = 1;
Allocate( fRef, &byteCount );      /* add 1 byte to the file */

```

This attempts to extend the file by 1 byte, but it will always eat up one full allocation unit (e.g., 512 or 1K) of disk space. Before using **Allocate**, you may wish to learn the current physical file length by examining the ioFIPyLen field of the FileParam structure returned by **PBGetFInfo**.

The **PBAllocContig** attempts to expand a file by adding contiguous disk blocks to the file (for fastest I/O) **SetEOF** can also be used to increase file size.