

PBHGetVolParms

Get information about a shared HFS volume

#include <Files.h>

File Manager (PBxxx)

```

OSErr      PBHGetVolParms(pb, async);
HParmBlkPtr pb;          address of a 44-byte IOParm structure
Boolean    async;        0=await completion; 1=immediate return
            returns      Error Code; 0=no error

```

PBHGetVolParms obtains a variety of information about a specified volume including the volume name and the size and location of the buffer where the volume parameters are stored.

pb is the address of a 44-byte ObjParam structure. The following fields are relevant:

| <u>Out-In</u> | <u>Name</u> | <u>Type</u> | <u>Size</u> | <u>Offset</u> | <u>Description</u> |
|---------------|--------------|----------------|-------------|---------------|--|
| → | ioCompletion | <u>ProcPtr</u> | 4 | 12 | Completion routine address (async =TRUE) |
| ← | ioResult | <u>OSErr</u> | 2 | 16 | Error Code (0=no error, 1=not done yet) |
| → | ioVRefnum | <u>short</u> | 2 | 22 | Volume reference |
| ← | ioBuffer | <u>Ptr</u> | 4 | 32 | Volume parameters address |
| → | ioReqCount | <u>long</u> | 4 | 36 | Buffer size |
| ← | ioActCount | <u>long</u> | 4 | 40 | Volume parameters data length |

async is a Boolean value. Use FALSE for normal (synchronous) operation or TRUE to enqueue the request and resume control immediately. See Async I/O.

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

| | | |
|----------|-------|-------------------|
| noErr | (0) | No error |
| nsvErr | (-35) | No such volume |
| paramErr | (-50) | No default volume |

Notes: A volume's characteristics can change when the user enables and disables file sharing. You might have to make repeated calls to **PBHGetVolParms** to ensure that you have the current status of a volume.

The ioCompletion field holds an optional pointer to a completion routine, which executes after **PBHGetVolParms** completes if you call the function asynchronously. Set this field to NIL when you call the function synchronously.

PBHGetVolParms puts the result code in the ioResult field.

Specify the volume to be described with a volume reference number, drive number, or working directory reference number in the ioVRefNum field.

You must allocate memory to hold the returned attributes and put a pointer to the buffer in the ioBuffer field. Specify the size of the buffer in the ioReqCount field.

PBHGetVolParms places the attributes information in the buffer pointed to by the ioBuffer field and specifies the actual length of the data in the ioActCount field.

The new version of **PBHGetVolParms** uses a new format for the GetVolParmsInfoBuffer.

| | | |
|---------------|------------------|---|
| <u>short</u> | vMVersion ; | Version number |
| <u>long</u> | vMAttrib ; | Bit vector of attributes (see vMAttrib constants) |
| <u>Handle</u> | vMLocalHand ; | <u>Handle</u> to private data |
| <u>long</u> | vMServerAdr ; | AppleTalk server address or zero |
| <u>long</u> | vMVolumeGrade ; | Approx. speed rating or zero if unrated |
| <u>short</u> | VMForeignPrivID; | Foreign Privilege model supported or zero if none |

The vMVersion field specifies the version of the attributes buffer

The vMAttrib field contains 32 bits that describe the volume. When set, the bits in vMAttrib have these meanings:

| Bit | Name | Meaning |
|-------|------------------------------|--|
| 31 | bLimitFCBs | Limit the number of file control blocks used during copying to 8 instead of 16. |
| 30 | bLocalWList | Use the returned shared volume handle for the Finder's local window list. |
| 29 | bNoMiniFndr | Disable Mini Finder menu item. |
| 28 | bNoVNEdit | Lock volume name against editing. |
| 27 | bNoLclSync | Do not let Finder change the modification date. |
| 26 | bTrshOffLine | Zoom volume when it is unmounted. |
| 25 | bNoSwitchTo | Do not switch launch to any application on the volume. |
| 24-21 | | Reserved. |
| 20 | bNoDeskItems | Do not place objects on the Finder desktop. |
| 19 | bNoBootBlks | Not a startup volume. Startup menu item disabled. Boot blocks not copied. |
| 18 | bAccessCntl | Volume supports AppleTalk AFP access-control interfaces. The PBHGetLogInInfo , PBHGetDirAccess , PBHSetDirAccess , PBHMapID and PBHMapName functions are supported. Special folder icons are used. The Access Privileges menu command is enabled for disk and folder items. The privileges field of PBGetCatInfo calls is assumed to be valid. |
| 17 | bNoSysDir | Volume doesn't support a system directory. Do not switch launch to this volume. |
| 16 | bHasExtFSVol | Volume is an external file system volume. Disk initialization package is not called. Erase Disk menu command is disabled. |
| 15 | bHasOpenDeny | Volume supports _OpenDeny and PBHOOpenRFDeny . For copy operations, source files are opened with reading enabled and writing denied; destination files are opened with writing enabled and reading and writing disabled. |
| 14 | bHasCopyFile | Volume supports _CopyFile. _CopyFile is used in copy and duplicate operations if both source and destination volumes have the same server address. |
| 13 | bHasMoveRename | Volume supports _MoveRename. |
| 12 | bHasDesktopMgr | Volume supports all of the new desktop functions (see Finder Interface) |
| 11 | bHasShortName | Volume supports a name that fits the shorter length requirements of another file system. |
| 10 | bHasFolderLock | Folder is locked. |
| 9 | bHasPersonalAccessPrivileges | Local file sharing is enabled. |
| 8 | bHasUserGroupList | Volume supports the Users and Groups file and thus the AFP privilege functions. |
| 7 | bHasCatSearch | Volume supports PBCatSearch . |

| | | |
|-----|---------------------------|---|
| 6 | bHasFileIDs | Volume supports file ID functions, including PBExchangeFiles . |
| 5 | bHasBtreeMgr | Reserved for internal use. |
| 4 | bHasBlankAccessPrivileges | Volume supports inherited access privileges for folders. |
| 3-0 | | Reserved. |

The vMLocalHand field is reserved.

The vMServerAdr field specifies the internet address of the server that manages an AppleTalk server volume. This value is 0 if the volume does not have a server.

The vMVolumeGrade field specifies the relative speed rating of the volume. This scale is currently uncalibrated. Generally, lower values represent faster speeds, but a value of 0 means that the volume is unrated.

The vMForeignPrivID field specifies an operating system with which the volume can communicate access-control information. For more information about access-control privileges, see **Manipulating Privilege Information in Foreign File Systems** and **Accessing Privilege Information in Foreign File Systems** under the section entitled **Using the File Manager**. A value of 0 means that the volume cannot share privilege information with any other file system; a value of fsUnixPriv means it can share privilege information with the A/UX file system.