NAME

volfs – Volume Management file system

DESCRIPTION

volfs is the Volume Management file system rooted at *root_dir*. The default location for *root-dir* is **/vol**, but this can be overridden using the **–d** option of **vold** (see **vold**(1M)). This file system is maintained by the Volume Management daemon, **vold**, and will be considered to be **/vol** for this description.

Media can be accessed in a logical manner (no association with a particular piece of hardware), or a physical manner (associated with a particular piece of hardware).

Logical names for media are referred to through **/vol/dsk** and **/vol/rdsk**. **/vol/dsk** provides block access to random access devices. **/vol/rdsk** provides character access to random access devices.

The **/vol/rdsk** and **/vol/dsk** directories are mirrors of one another. Any change to one is reflected in the other immediately. The **dev_t** for a volume will be the same for both the block and character device.

The default permissions for **/vol** are **mode=0555**, **owner=root**, **group=sys**. The default permissions for **/vol/dsk** and **/vol/rdsk** are **mode=01777**, **owner=root**, **group=sys**.

Physical references to media are obtained through **/vol/dev**. This hierarchy reflects the structure of the **/dev** name space. The default permissions for all directories in the **/vol/dev** hierarchy are **mode=0555**, **owner=root**, **group=sys**.

mkdir(2), **rmdir**(2), **unlink**(2) (**rm**), **symlink**(2) (**ln –s**), **link**(2) (**ln**), and **rename**(2) (**mv**) are supported, subject to normal file and directory permissions.

The following system calls are not supported in the **/vol** filesystem: **creat**(2), only when creating a file, and **mknod**(2).

If the media does not contain file systems that can be automatically mounted by **rmmount**(1M), users can gain access to the media through the following **/vol** locations.

Location	State of Media
/vol/dev/diskette0/unnamed_floppy	formatted unnamed floppy-block device access
/vol/dev/rdiskette0/unnamed_floppy	formatted unnamed floppy-raw device access
/vol/dev/diskette0/unlabeled	unlabeled floppy-block device access
/vol/dev/rdiskette0/unlabeled	unlabeled floppy-raw device access
/vol/dev/dsk/c0t6/unnamed_cdrom	CD-ROM-block device access
/vol/dev/rdsk/c0t6/unnamed_cdrom	CD-ROM-raw device access

For more information on the location of CD-ROM and floppy media, see *System Administration Guide*, *Volume I* or **rmmount**(1M).

Partitions

Some media supports the concept of a partition. If the label identifies partitions on the media, the name of the media will become a directory with partitions under it. Only valid partitions are represented. Partitions cannot be moved out of a directory.

Example: disk volume ′**foo**′ has 3 valid partitions: 0, 2, 5.
/vol/dsk/foo/s0, /vol/dsk/foo/s2, /vol/dsk/foo/s5,
/vol/rdsk/foo/s0, /vol/rdsk/foo/s2, /vol/rdsk/foo/s5

If a volume is relabeled to reflect different partitions, the name space changes to reflect the new partition layout.

A format program can check to see if there are others with the volume open and not allow the format to occur if it is. Volume Management, however, does not explicitly prevent the rewriting of a label while others have the volume open. If a partition of a volume is open, and the volume is relabeled to remove that partition, it will appear exactly as if the volume were missing. A notify event will be generated and the user may cancel the operation with **volcancel**(1), if desired.

SEE ALSO

volcancel(1), **volcheck**(1), **volmissing**(1) **rmmount**(1M), **vold**(1M), **rmmount.conf**(4), **vold.conf**(4),

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