NAME

tunefs – tune up an existing file system

SYNOPSIS

tunefs [–**a** *maxcontig*] [–**d** *rotdelay*] [–**e** *maxbpg*] [–**m** *minfree*]
[–**o** [**space** | **time**]] *special* | *filesystem*

DESCRIPTION

tunefs is designed to change the dynamic parameters of a file system which affect the layout policies. The file system must be unmounted before using **tunefs**. When using **tunefs** with **filesystem**, **filesystem** must be in **/etc/vfstab**. The parameters which are to be changed are indicated by the options given below.

Generally one should optimize for time unless the file system is over 90% full.

OPTIONS

–**a** *maxcontig*
: Specify the maximum number of contiguous blocks that will be laid out before forcing a rotational delay (see –**d** below). The default value is **1**, since most device drivers require an interrupt per disk transfer. Device drivers that can chain several buffers together in a single transfer should set this to the maximum chain length.

–**d** *rotdelay*
: Specify the expected time (in milliseconds) to service a transfer completion interrupt and initiate a new transfer on the same disk. It is used to decide how much rotational spacing to place between successive blocks in a file.

–**e** *maxbpg*
: Indicate the maximum number of blocks any single file can allocate out of a cylinder group before it is forced to begin allocating blocks from another cylinder group. Typically this value is set to approximately one quarter of the total blocks in a cylinder group. The intent is to prevent any single file from using up all the blocks in a single cylinder group, thus degrading access times for all files subsequently allocated in that cylinder group. The effect of this limit is to cause big files to do long seeks more frequently than if they were allowed to allocate all the blocks in a cylinder group before seeking elsewhere. For file systems with exclusively large files, this parameter should be set higher.

–**m** *minfree*
: Specify the percentage of space held back from normal users; the minimum free space threshold. The default value used is 10%. This value can be set to **0**, however up to a factor of three in throughput will be lost over the performance obtained at a 10% threshold. Note: If the value is raised above the current usage level, users will be unable to allocate files until enough files have been deleted to get under the higher threshold.

–**o** [**space** | **time**]
: Change optimization strategy for the file system.

space: conserve space
time: attempt to organize file layout to minimize access time

SEE ALSO

mkfs(1M), **fork**(2), **terminfo**(4)