

RECON(d)

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NAME

recon — reconfigure file system

SYNOPSIS

recon [**-x**] [**r**] [*highwater*] *filesystem*

DESCRIPTION

Recon examines a file system, builds a bit map of used blocks from the contents of the i-nodes, and reconfigures files on the file system so as to compact all files onto the lower blocks of the file system, making the files contiguous if possible. Three basic algorithms may be used to compact a file system. The first optional flag is used to specify which of the algorithms are to be used. The **-a** option causes all files to be compacted and relocated to lower block numbers only if enough contiguous file space can be found. The search starts with i-node 1 and goes up to the highest i-node in the file system. The search may be done in reverse order starting with the highest i-node number in the file system by specifying the second **r** flag. Files which are contiguous, i.e. marked contiguous by bit in i-node flag, are not moved under any circumstances.

The **-b** option causes only files above a certain highwater block number to be searched as candidates to be relocated to lower block numbers. After the search for all possible candidates, the i-nodes are sorted in order of file with the highest block number first. Thus the files with higher block numbers will be relocated to lower holes before moving those files which are already at lower block numbers initially.

The **-s** option causes only files above a certain highwater block number to be searched as candidates to be relocated to lower block numbers. After the search for all possible candidates, the i-nodes are sorted in order of largest file first. Thus the largest file will be moved first to fill in any existing holes in the bit map. The smaller files will fill in the holes that are left over.

In both **-b** and **-s** options the **r** flag may also be used to do the sorting in the reverse order. Also if the argument after the flags is numerical, it will be taken as the actual highwater block *highwater* in the search for files to be moved. The **-s** option is taken as a default option.

The *filesystem* must be unmounted before a reconfiguration is attempted on it. Once *recon* has started to move files, all signals are ignored so that the program cannot be aborted when partially completed.

FILES

There is no default file system.

SEE ALSO

fs(g), *check(d)*, *recdmn(d)*.

DIAGNOSTICS

If a read error is encountered, the block number of the bad block is printed and *recon* exits.

BUGS

There is currently no check against applying *recon* to an active file system. It believes even preposterous super-blocks and consequently can get core images.