Red Hat Enterprise Linux Release 9.2 Manual Pages on 'xfs_copy.8' command

$ man xfs_copy.8

xfs_copy(8)　　　　　System Manager's Manual　　　　　xfs_copy(8)

NAME

　　　xfs_copy - copy the contents of an XFS filesystem

SYNOPSIS

　　　xfs_copy [-bd] [-L log] source target1 [target2 ...]

　　　xfs_copy -V

DESCRIPTION

　　　xfs_copy copies an XFS filesystem to one or more targets in parallel

　　　(see xfs(5)). The first (source) argument must be the pathname of the

　　　device or file containing the XFS filesystem. The remaining arguments

　　　specify one or more target devices or file names. If the pathnames

　　　specify devices, a copy of the source XFS filesystem is created on each

　　　device. The target can also be the name of a regular file, in which

　　　case an image of the source XFS filesystem is created in that file. If

　　　the file does not exist, xfs_copy creates the file. The length of the

　　　resulting file is equal to the size of the source filesystem. However,

　　　if the file is created on an XFS filesystem, the file consumes roughly

　　　the amount of space actually used in the source filesystem by the

　　　filesystem and the XFS log. The space saving is because xfs_copy seeks

　　　over free blocks instead of copying them and the XFS filesystem sup?

　　　ports sparse files efficiently.

　　　xfs_copy should only be used to copy unmounted filesystems, read-only

　　　mounted filesystems, or frozen filesystems (see xfs_freeze(8)). Other?

wise, the generated filesystem(s) would be inconsistent or corrupt.

xfs_copy does not alter the source filesystem in any way. Each new (target) filesystem is identical to the original filesystem except that new filesystems each have a new unique filesystem identifier (UUID). Therefore, if both the old and new filesystems will be used as separate distinct filesystems, xfs_copy or xfsdump(8)/xfsrestore(8) should be used to generate the new filesystem(s) instead of dd(1) or other pro? grams that do block-by-block disk copying.

xfs_copy uses synchronous writes to ensure that write errors are de? tected.

xfs_copy uses pthreads(7) to perform simultaneous parallel writes. xfs_copy creates one additional thread for each target to be written. All threads die if xfs_copy terminates or aborts.

OPTIONS

-d   Create a duplicate (true clone) filesystem. This should be done
       only if the new filesystem will be used as a replacement for the
       original filesystem (such as in the case of disk replacement).

-b   The buffered option can be used to ensure direct IO is not at?
       tempted to any of the target files. This is useful when the
       filesystem holding the target file does not support direct IO.

-L log Specifies the location of the log if the default location of
       /var/tmp/xfs_copy.log.XXXXXX is not desired.

-V   Prints the version number and exits.

DIAGNOSTICS

xfs_copy reports errors to both stderr and in more detailed form to a generated log file whose name is of the form /var/tmp/xfs_copy.log.XXXXXX or a log file specified by the -L option. If xfs_copy detects a write error on a target, the copy of that one target is aborted and an error message is issued to both stderr and the log file, but the rest of the copies continue. When xfs_copy termi? nates, all aborted targets are reported to both stderr and the log file.

If all targets abort or if there is an error reading the source

filesystem, xfs_copy immediately aborts.

xfs_copy returns an exit code of 0 if all targets are successfully copied and an exit code of 1 if any target fails.

NOTES

When moving filesystems from one disk to another, if the original filesystem is significantly smaller than the new filesystem, and will be made larger, we recommend that mkfs.xfs(8) and xfsdump(8)/xfsre?store(8) be used instead of using xfs_copy and xfs_growfs(8). The filesystem layout resulting from using xfs_copy/xfs_growfs is almost always worse than the result of using mkfs.xfs/xfsdump/xfsrestore but in the case of small filesystems, the differences can have a signifi?cant performance impact. This is due to the way xfs_growfs(8) works, and not due to any shortcoming in xfs_copy itself.

CAVEATS

xfs_copy does not copy XFS filesystems that have a real-time section or XFS filesystems with external logs. In both cases, xfs_copy aborts with an error message.

SEE ALSO

mkfs.xfs(8), xfsdump(8), xfsrestore(8), xfs_freeze(8), xfs_growfs(8), xfs(5).

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