

Silicon Graphics, Inc.

XFS Overview & Internals

14 - Dump and Restore

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Dump and Restore

- This section describes
 - The differences between xfsdump, xfs_copy and other backup applications
 - How to use xfsdump and xfsrestore to backup and restore an XFS filesystem
 - How to use xfs_copy to copy an XFS filesystem

Dump vs Copy vs Backup

- xfsdump understands all the extensions in an XFS filesystem, so all attributes will be backed up and restored
- xfs_copy TODO
- Traditional backup applications may not backup all attributes, but they provide other management features
 - Some are still limited to 32bit inodes
 - Some are BAPI aware which means they work with DMAPAPI and will not back up files that are already achieved by a HSM. Otherwise they would pull files off tape to backup onto other tape.

xfsdump - Features

- xfsdump and xfsrestore support the following:
 - XFS features including 64-bit inode numbers, file lengths, and holes
 - regular, directory, symbolic link, block and character special, FIFO, and socket file types
 - retain hard links.
 - multiple media types (tape, files)
 - do not affect the state of the filesystem being dumped (for example, access times are retained).
 - xfsrestore detects and bypasses media errors and recovers rapidly after encountering them.
 - xfsdump does not crossmount points, local or remote
 - support for automated and incremental backups

xfsdump – Media Layout

xfsdump – Local Tape

xfsdump – Remote Tape

xfsdump – Backup to a File

xfsdump – Incremental Dumps

xfsdump – Resuming Dumps

xfsdump – Querying Dumps

xfsrestore – Local Tape

xfsrestore – Remote Tape

xfsrestore – Restore from File

xfsrestore - Interactive

xfsrestore – Cumulative

- Do these still apply?
- Linuxxfsdump/xfsrestore does not support:
 - – multiple tape devices using multiple -f options
 - – IRIXdumpoption-z (prune large files)
 - – DMAPIrelatedoptionsof-a and -D
- Linux xfsdump/xfsrestore does, however, have the added capabilities of
 - unrestricted use of the -b option for blocksize specification and remote
 - dumping/restoring between Linux and IRIX host

xfs_copy

- TODO

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