Silicon Graphics, Inc.

XFS Overview & Internals
11 - 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

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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 DMAPI 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.

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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

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xfsdump – Media Layout

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xfsdump – Local Tape

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xfsdump – Remote Tape

xfsdump – Backup to a File

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xfsdump – Incremental Dumps

xfsdump – Resuming Dumps

xfsdump – Querying Dumps

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xfsrestore – Local Tape

xfsrestore – Remote Tape

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xfsrestore – Restore from File

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xfsrestore - Interactive

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xfsrestore – Cumulative

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- 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

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xfs_copy

- TODO

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