

Silicon Graphics, Inc.

# **XFS Overview & Internals**

## **12 - Triage**

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# QA

- TODO: Incorporate Nathan's stuff here

# QA Kernel

- Tools:
  - KDB
  - blktrace, strace, ltrace
  - sparse
  - lockdep
  - stackcheck
  - Generic kernel debug options
    - SLAB, PAGE\_ALLOC, SPINLOCKS, MUTEXES
    - PREEMPT
  - XFS debug (assert, runtime checks)
  - XFS tracing option (event history)
  - XFS error injection option (xfs\_io “inject”, fsstress)

# QA Large Filesystems

- Will always lack hardware to test the high end of filesystem size, inode count, etc.
- Can use large sparse files for this
  - led to allocation group size changes
- `mkfs -dfile,name=/tmp/x,size=1p)`
- `mount -o loop /tmp/x /mnt/x`
- `xfstests/tools/ag-wipe`
  - uses `xfs_db` to mark some AG's as “full”
  - integrated in QA (check/repair issues)
  - `xfs_repair` undergoing surgery
  - maybe done all we can with this approach

**sg<sup>o</sup>i<sup>o</sup>**®