



# Tape Storage

**Dr. James Cates**

Sr. Director, Storage Development

Sun Microsystems



# Why Tape?

- Tape is 5x - 20x less expensive than disk storage in price per GB
  - > Media costs at roughly \$0.12 per GB
  - > Tape roadmaps show cost advantage to continue
- Data can be archived with little power usage
  - > 1-2 orders of magnitude less power than disk
- High-end drive and library systems have very high reliability
  - > T10k drive, SL8500 and SL3000 libraries
- Large market
  - > Sun, IBM, HP and Quantum are the major tape vendors



# Tape Technology

- Native cartridge capacity – 0.8 to 1.0 TB
  - > Multi-TB cartridges demonstrated in lab
- Native transfer rates – 120 MB/sec
  - > Compressed data rates greater than 300 MB/sec
  - > 4 Gb Fibre channel interface
- Average data access time – roughly 60 secs
- Long archive life
  - > Over 30 year archive life
- Continues to be an area of development and innovation
  - > SL3000 library, T10k-B drive



**New Tape Technology  
Higher Density  
30 Year Life Guaranteed**