

HPSS at SDSC

HPSS User Forum - June, 2002

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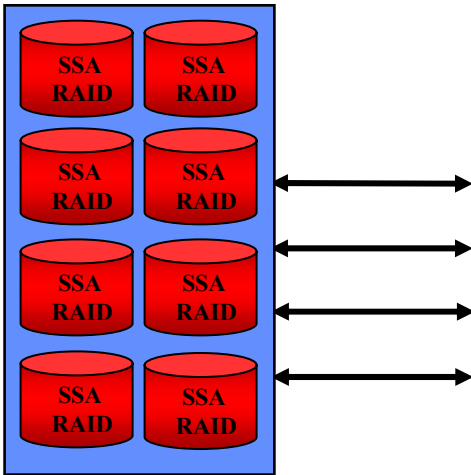
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HPSS configuration

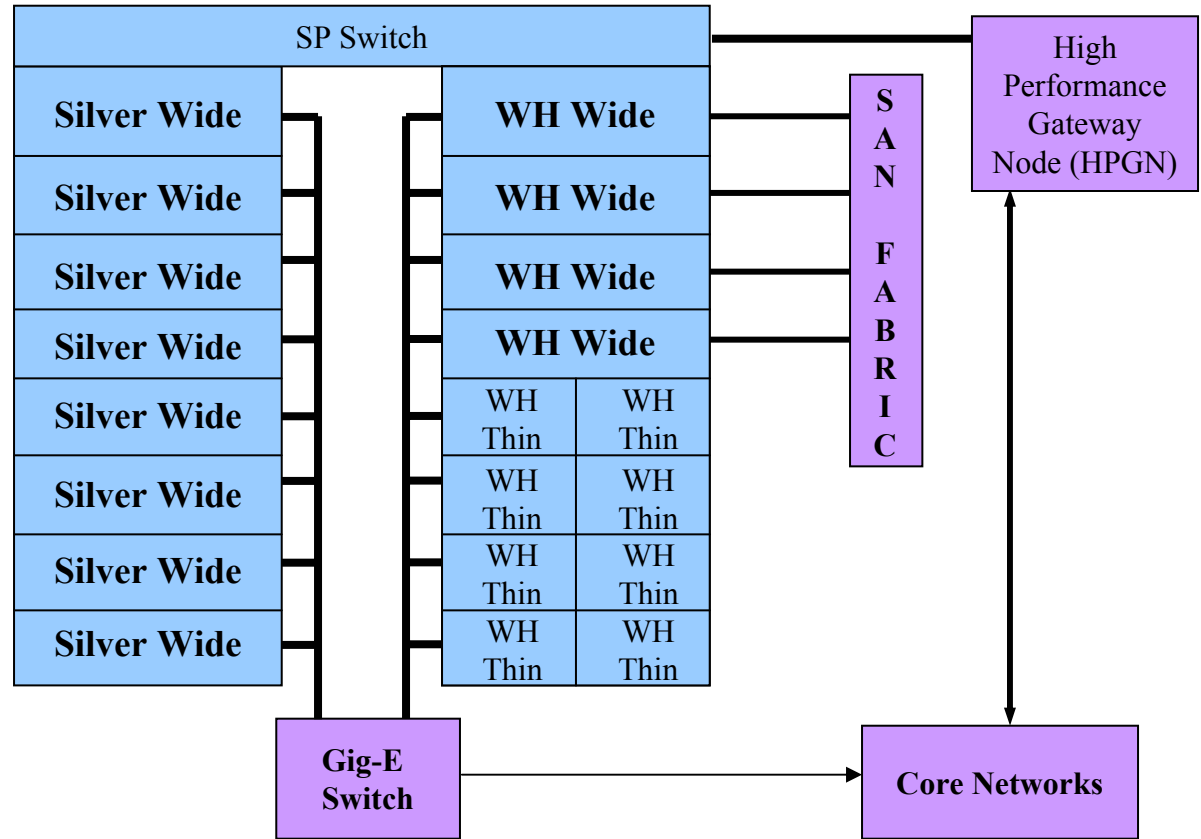
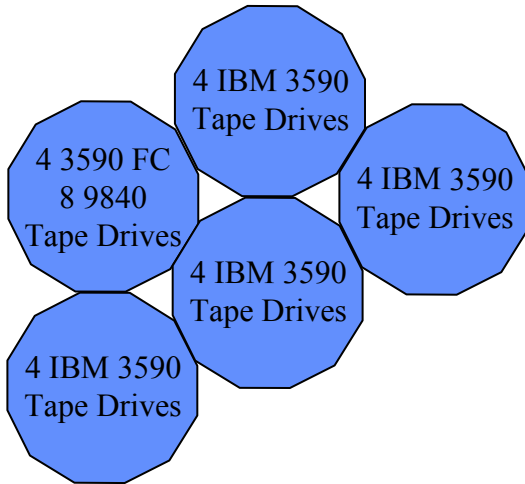
- HPSS 4.3
- AIX 4.3.3
- 2 TB cache, SSA and Sun T3 disk
- 20 3590 tape drives
- 8 9840
- 20 IBM nodes, (Gig-E and FC equipped)
- 5 STK silos (2 new from last year)

Mass Storage (HPSS) Configuration

1 TB SSA Disk



StorageTek Tape Libraries



Statistics

Data Stored:	380 TB
Number of files:	16.1 million
Growth:	12 TB/month
Tapes:	18, 200

http://www.sdsc.edu/storage/statistics/hpss_stats.cgi?1

Issues

- Tape/drive problems
- PVL/PVR data inconsistencies when drives have trouble
- Migration stalls due to tape drive problems

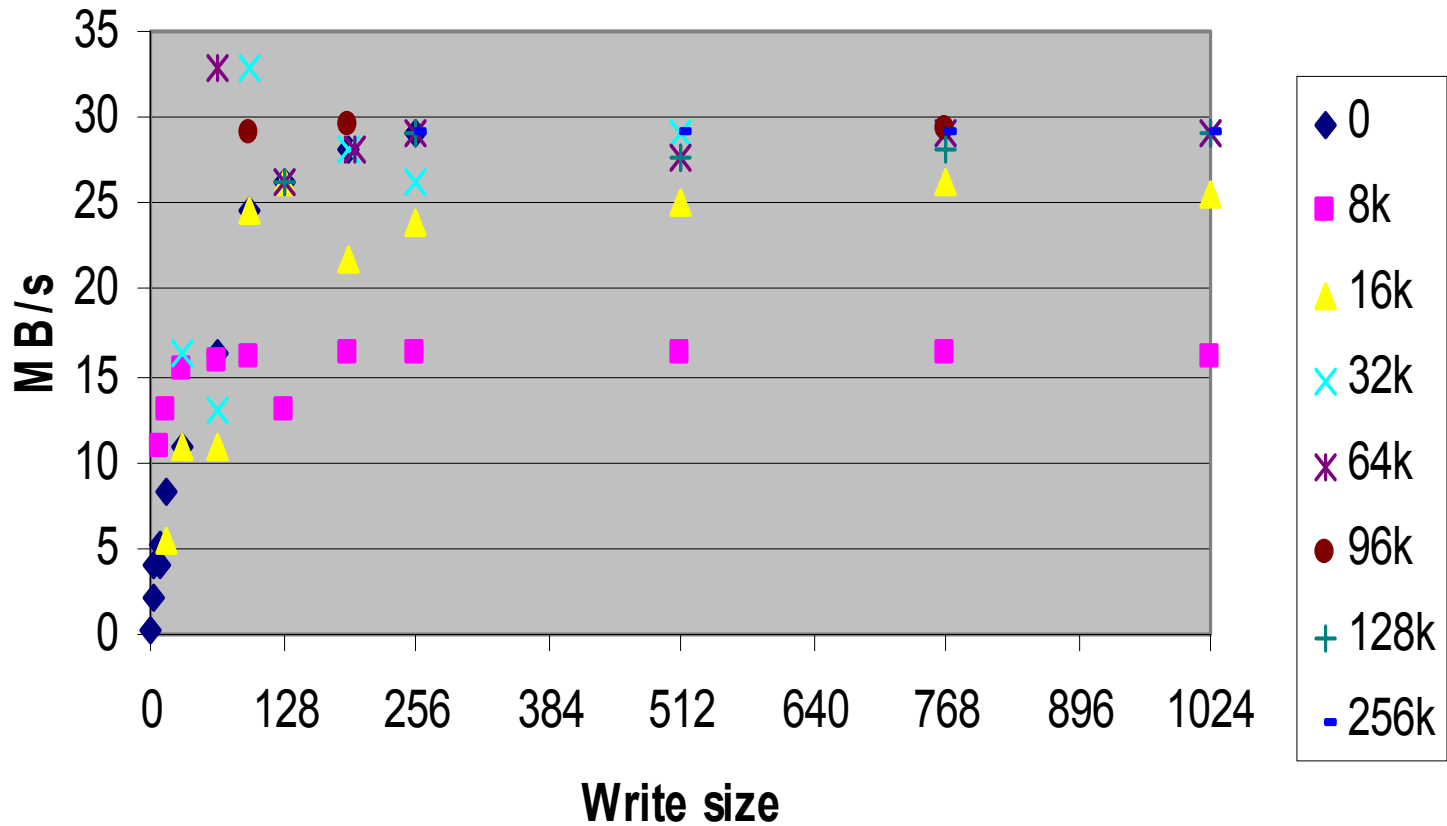
Changes coming soon

- 2 additional STK silos (January, '02)
- Receive 24 9940B drives (June/July '02)
- Test 4.5 upgrade in (July/August '02)
- Plan HPSS 4.5 upgrade in (August '02)
 - Add additional 7TB cache
 - Re-allocate storage resources
 - Configure for Striping
- Add more nodes (undetermined)
- Higher data rates and 6PB capacity (uncompressed)

STK 9940B Tests

- Have two early-release drives
- 200GB/cartridge
- 30MB/sec data rates
- Dual-ported 2Gb Fibre attached
- Raw testing shows as-advertised performance

9940B Data Rates



Future work/interests

- HSI support (officially)
- SAN (third party copy)
- GPFS
- GRID FTP/GSI client support
- HPSS 5.1 (finally a real database!)