



STAC Update for Big Data

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- Performance benchmarks for tick analytics
 - Language/DBMS neutral
 - Developed by banks
- Workload:
 - Synthetic data modeled on NYSE TAQ
 - Mix of I/O- and compute-intensive operations (read-heavy)
 - Scalable volume and number of users

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Dell EMC DSSD D5 with 4 x Dell PowerEdge R730xd servers

- Set records in 8 of 17 baseline benchmarks
- Set records in 16 of 19 scale benchmarks
- In most benchmarks, outperformed:
 - a previous solution using shared flash (SUT ID XTR160413)
 - a solution with four 2-socket servers & direct-attached SSD (SUT ID XTR141111)
 - a much larger distributed system using Lustre (SUT ID KDB150528)



Dell EMC DSSD D5 with 4 x Dell PowerEdge R730xd servers

- Tested at greatest scale yet: 47.6 TB
- On a 100TB device
- Exceeded 20GB/sec mean throughput in high-bid benchmarks
 - Highest mean: ~22GB/sec

