

Extended Capacity

Best-in-class TCO for MySQL workloads



lower LATENCY

**21%** Latency Reduction  
Sysbench Read-Write



large TCO SAVINGS

**50%** Reduced Flash Cost  
Data Path Compression  
and Decompression

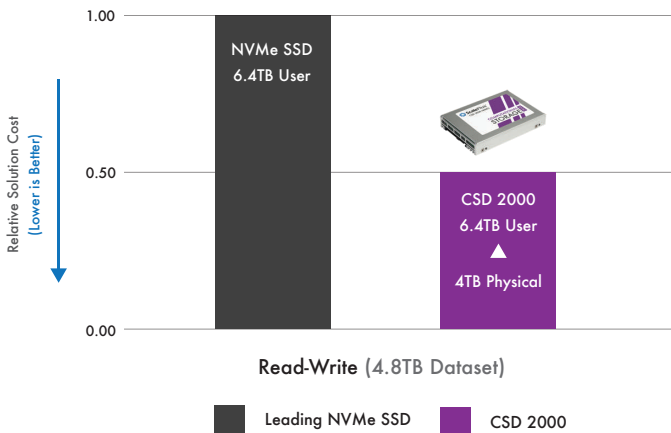


more ENDURANCE

**~2x** Flash Lifetime  
Halved DB Writes  
for Table Updates



Solution Cost  
Lower is Better



Sysbench with MySQL, InnoDB, 50M records, 64 threads, 1hr test run  
4.8TB Raw File Size, 1.6TB Compressed for CSD 2000

50%+ Cost Savings!

ScaleFlux's implementation of data path compression and decompression in the CSD 2000 allows users to capture the cost/GB savings of data compression without sacrificing performance!

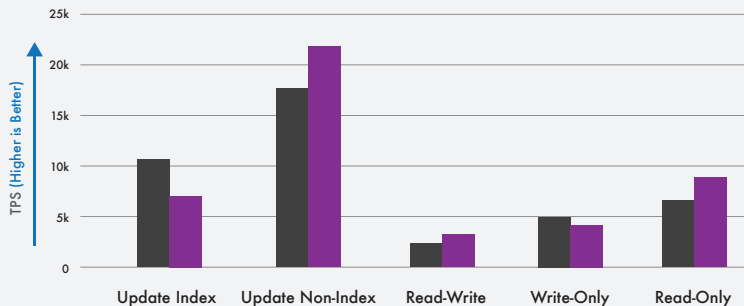
In the example shown here, we formatted a CSD 2000 with 4TB of physical NAND to 6.4TB of user capacity. Then, we ran TPC-H tests using a 4.8TB data set against both the CSD 2000 and a leading 6.4TB NVMe SSD (8TB physical NAND). On both Transactions per Second (TPS) and average latency, the two solutions were neck and neck. However, the CSD 2000 provides users 6.4TB at half the cost of the NVMe solution.

CSD 2000 delivers **Penalty-Free Compression**:

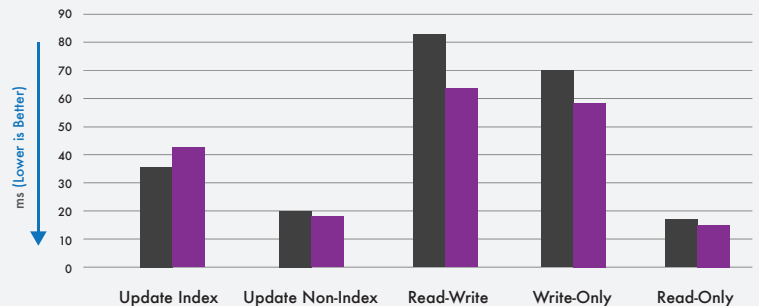
- Half the cost to achieve 6.4TB of SSD storage
- Throughput scales with each drive – no CPU bottleneck
- Similar performance to leading NVMe SSDs
- Unburdens the CPU from cumbersome data compression tasks

CSD 2000 can also be configured to **Enhance Performance** (see other side) to address different application & optimization needs.

Transactions per Second  
Higher is Better



99% Latency  
Lower is Better



ScaleFlux® CSD 2000 Series

Form Factor - PCIe AIC & U.2 Drive Capacity - up to 16TB user capacity (8TB physical) Interface - PCIe Gen3 x4

SUPERCHARGE YOUR MYSQL INFRASTRUCTURE! REQUEST A POC: [info@scaleflux.com](mailto:info@scaleflux.com)



Enhanced Performance

Best-in-class TPS for MySQL workloads



higher TPS



lower LATENCY



more ENDURANCE

1.5x

Transactions per Second  
Sysbench OLTP Write

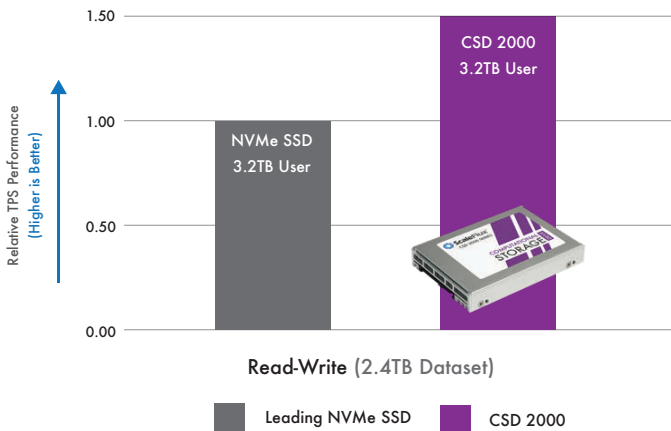
38%

Latency Reduction  
Sysbench Read-Write

~2x

Flash Lifetime  
Halved DB Writes  
for Table Updates

MySQL System Performance  
Higher is Better



Sysbench with MySQL, InnoDB, 50M records, 64 threads, 1hr test run  
2.4TB Raw File Size, 0.8TB Compressed for CSD 2000

1.5x Higher Performance!

ScaleFlux data path compression and decompression in the CSD 2000 improves transactional performance and reduces latency!

In the example shown here, we formatted a CSD 2000 with 4TB of physical NAND to 3.2TB of user capacity. Then, we ran TPC-H tests using a 2.4TB data set against both the CSD 2000 and a leading 3.2TB NVMe SSD (4TB physical NAND). The CSD 2000 outperformed the NVMe SSD on both Transactions per Second (TPS) and 99% Latency - up to 50% higher TPS and 38% lower latency!

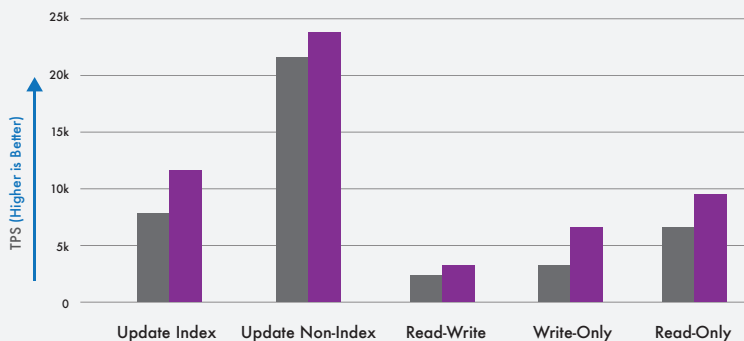
Additional benefits of transparent data path compression/decompression:

- Deploys seamlessly - no app modifications required
- Reduces physical writes to the NAND, doubling Flash lifetime\*
- Minimizes Garbage Collection & die contention

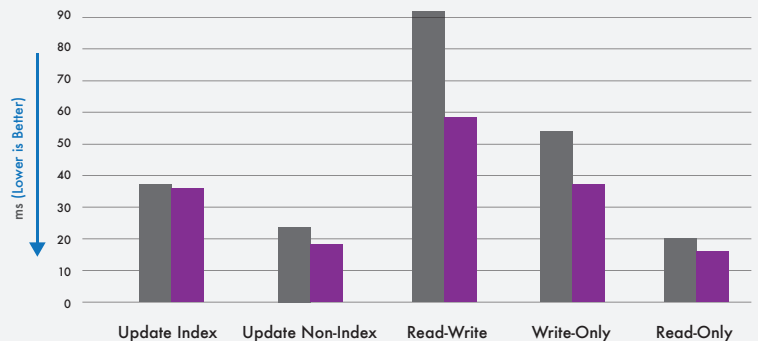
CSD 2000 can also be configured to **Extend Capacity** (see other side) to address different application & optimization needs.

\*Assuming 2:1 compressible data

Transactions per Second  
Higher is Better



99% Latency  
Lower is Better



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