

Fast Track Your Data Warehouse

Over the years, the requirements for reporting systems have changed, leading to a more complicated and essential platform. Traditional spinning disk falls short of addressing these requirements. Violin's unique memory-like, all-silicon architecture is designed specifically to address the speed, scale, administration, concurrency and TCO issues plaguing modern infrastructures by allowing for every memory address to be equally accessible at the same great speed, all the time.

With little to no administration or tuning required, all data will flow at all-flash speeds regardless of the locality or the number of LUNs, databases, or users.

violin
MEMORY

5 Reasons

to Run Your
Data Warehouse
Application on
Violin flash
Memory Arrays

Top challenges in today's reporting systems:

- Data footprints have increased
- Archiving has been eliminated
- The number of users has exploded
- Queries are ad hoc
- Updates occur in real time
- Usage is 24x7x365

1 Reduce data imports from hours to minutes

Violin's flash memory provides ultra low-latency in the microseconds, allowing for fast data, tempdb and log access. Due to the optimized write speeds, and zero need for reading sequential blocks, load times are accelerated 5-10x over spinning disk. The distributed block architecture allows for massive parallelism, enabling faster and more stable throughput.

2 Accelerate query times from minutes to seconds

Violin's ultra-low read latencies allow for faster query completion times. Faster read/write latencies all allow for quicker sorting, ordering and temp space utilization, providing for overall quicker report run durations.

3 Data imports are less complex

The logical fragmentation of data is irrelevant to Violin's unique, distributed architecture. With Violin's memory-like architecture, each memory address is equally accessible, at the same ultra-low latency, at all times. ETL's (data loading) can then be reduced in complexity by dropping the sort and single-threaded writes into a sequential format. With Violin, an ETL can be a full blast of data utilizing all cores straight into the final partition or table.

4 Run more reports at the same time with zero degradation in performance

Violin's distributed architecture allows for more concurrency (more users hitting the data at the same time). More concurrent users means a more random workload on the storage tier and this will drive down performance of a traditional spinning media. With Violin's unique all-silicon and distributed block architecture, all memory addresses are equally accessible at the same speed at all times, so any number of users can be accessing data and the speed of the array will never degrade.

5 Administration and configuration are simplified and become more manageable

Violin's distributed architecture allows for any number of LUNs to run at the same speed and eliminates the concept of hot spots or issues pertaining to data locality. Backups and archives are magnitudes faster and can be run concurrently. Expensive or time-consuming software is not needed to distribute hot data, run tiering or otherwise manage issues pertaining to data locality.