Why Violin Is the Best Storage Choice for SQL Server

10 Reasons

To Run Your SQL Server Databases on Violin All Flash Arrays

Microsoft® SQL Server® is a powerful and cost-effective database solution deployed by many enterprises today. However, unprecedented growth in enterprise data makes managing, scaling, and ensuring database and related application availability difficult, if not cost prohibitive.

Maximizing the business value of SQL Server assets requires high performance storage that is capable of delivering real-time actionable information and non-disruptively scaling with your business.

With Violin's patented all-flash arrays, SQL Server databases and related applications have storage that can meet the performance needs for a mix of workloads including OLTP, data warehouse, business intelligence, and real-time analytics. This means your SQL Server initiatives can now scale to achieve their full potential while more efficiently using existing server investments to maximize your ROI.

Violin simplifies the configuration, usage, and management of SQL Server databases while delivering consistent and predictable performance for any data, anywhere, at any scale.

Microsoft

Violin®
MEMORY

1 Optimize SQL Server Performance by Eliminating I/O Bottlenecks

Violin All Flash Arrays deliver sustained performance for short block random read/write workloads, for example OLTP, as well as sequential read/write workloads such as data warehousing. With up to 1.2 million SQLIO IOPS and 70TB of raw all-flash capacity in a 3U form factor, our All Flash Arrays deliver high performance with operational simplicity. Ongoing performance mapping and tuning, disk groupings, etc., related to your storage are things of the past. With consistent sub-millisecond latency, you are protected against workload spikes.

2 Improve ROI by Scaling SQL Server Higher than Before

You get ultra-fast read and write commits that can increase application performance by up to 10x while reducing storage latency up to 50%. Violin's patented Flash Fabric Architecture™ supports higher concurrency. This means all of the storage is equally accessible at the same speed at all times, so any number of users can access data and the array response time will not degrade. With our All Flash Arrays, you maintain consistent SQL Server performance while adding users, threads, tables, LUNs, etc. or additional concurrent reports or other tasks.

3 Stay Online All the Time

Violin's patented Flash Fabric Architecture and vRAID technology ensure the integrity of data on our All Flash Arrays. Our Concerto and Windows Flash Array solutions feature clustered redundancies and all of our arrays feature hot spares to help you achieve 24x7 operational requirements with zero single points of failure.

4 Scale Non-Disruptively with Enterprise-Class Reliability

With built-in thin provisioning, dynamic storage expansion, and space-saving snapshot and cloning capabilities, Violin All Flash Arrays deliver the highest performance per usable terabyte of storage. Violin arrays are built on flash-optimized vRAID technology to ensure data integrity and reliability; coupled with Tier-1 high availability and clustering for non-disruptive performance and capacity scaling,

5 Improve your SQL Server Operations with Enterprise Data Services

Assorted Violin All Flash Arrays reduce costs through thin provisioning, deduplication, data compression, and space efficient snapshots. Available data protection options include replication, mirroring, and encryption, and some array clusters can scale-out up to 280 TB of raw capacity.

6 Reduce OPEX

With Violin All Flash Arrays, you can consolidate more databases and applications per server to increase utilization and lower infrastructure spending. In addition, you can reduce electrical costs by at least 40% compared with SSD arrays (even more against hybrid/HDD solutions), decrease rack space by 80% and trim cooling expense by at least 40%.

7 Block or FIle, It's Your Choice

The Violin 6000 All Flash Array and Concerto 7000 All Flash Array deliver high-performance block-storage for your database strategy. If instead you prefer the convenience of a NAS implementation, the Windows Flash Array delivers high-performance SMB-based storage for your SQL Server workloads.

8 Freedom of Choice in Deduplication and Compression

Deduplication and compression can significantly improve storage efficiency for certain workloads. Violin options include optimized inline dedup and compression, LUN-selectable inline dedup and compression, or share-selectable low-overhead post dedup and compression to maintain maximum storage performance.

9 Freedom of Choice in Storage Deployment

Violin 6000 and Concerto 7000 All Flash Arrays deliver high-performance block-based storage. The Windows Flash Array delivers high-performance SMB-based storage that delivers the performance you would expect from a block implementation but with flexibility and ease of management, that file-based storage provides.

10 Pay-As-You-Grow Pricing

Certain Violin All Flash Arrays offer pay-as-you-grow pricing, a unique software license-based capacity expansion, so you can scale capacity without having to order and install it in advance. This enables you to more closely align CAPEX with the benefit received; you can non-disruptively scale in 8.8 TB increments from 17-35 TB or 52-70 TB.