

# V-locity<sup>®</sup> Server

## Physical Server Accelerator

### Overview

V-locity<sup>®</sup> Server I/O optimization software accelerates applications like SQL and Exchange by 50% without the cost of new or additional hardware. By optimizing I/O at the source on physical servers, only productive I/O traffic is pushed through the server, network, and storage resulting in unprecedented application performance boosts from software.

An enormous amount of I/O traffic is **completely unnecessary**. Facing performance bottlenecks, organizations respond by investing in more hardware – trying to solve performance issues reactively, with brute force, rather than applying a more proactive approach. By optimizing I/O at the source, before it gets pushed through the server, network, and storage, performance issues are eliminated across the IT ecosystem at a fraction of the cost of hardware.

V-locity uniquely address the unnecessary I/O patterns of reads and writes by aggregating data on writes to perform sequentially while caching reads on available server memory without contention. As a result, V-locity boosts application performance by 50% or more by (1) maximizing the efficiency of every single I/O *write* request that leaves the server, and (2) caching the most active I/O *read* requests from available server memory.



### Optimizing Reads and Writes at the Source

**Read I/O Optimization** – Much of the I/O traffic moving through the IT ecosystem shares similar data, yet every single byte of that data travels the entire distance from server to storage and back for every I/O request, no matter how common. V-locity IntelliMemory<sup>™</sup> technology addresses this read request inefficiency by caching the most active data in the server's available memory. Should an application require that memory, V-locity serves memory back to the application to ensure there is never a case of memory starvation or resource contention. ConduSiv Technologies' self-learning caching algorithms have set the gold standard for the industry as they are OEM'd by 8 of the top 10 largest PC manufacturers in the world.

**Write I/O Optimization** – V-locity's IntelliWrite<sup>®</sup> technology optimizes I/O write operations, eliminating the performance penalties associated with the Windows OS splitting files into pieces and writing each piece to a different logical location within the SAN or NAS. V-locity is aware of space allocation and aggregates writes to behave sequentially – requiring less I/O for every file written. Subsequent reads also benefit, since only minimum I/O is required to fulfill the request. As a result, only productive I/O requests are processed across the entire infrastructure, enabling more data to be processed in the same amount of time.

When only productive I/O traffic is processed through the server, network, and storage, I/Os per second are accelerated, latency is greatly reduced, and more work can be performed in the same amount of time. And since V-locity optimizes I/O at the server-level, V-locity is compatible with all SAN and NAS storage systems, media types (e.g., spinning disk or SSD), and advanced features like data deduplication, thin provisioning, replication and snapshots.

## V-locity's Benefit Analyzer

To easily see the exact benefits of V-locity in your real-world environment, V-locity is bundled with self-auditing benchmark software (Iometer validated by openBench Labs) that provides a before-and-after performance comparison during initial deployment over a three-day period. All the key metrics needed to establish a "proof of concept" are report-ready, with all the empirical evidence needed to justify V-locity's value to your organization. To request a 30-day evaluation version that includes the embedded Benefit Analyzer, visit [www.conduSiv.com](http://www.conduSiv.com). A ConduSiv Technologies Systems Engineer can assist with installation or provide a script to simulate workload when testing V-locity outside a production environment.

## A Toolkit of Performance Acceleration Technologies

V-locity Server contains a toolkit of technologies to accelerate physical server applications:

**IntelliWrite technology** automatically prevents split I/Os from being generated when a file is typically broken into pieces before write.

**IntelliMemory intelligent caching technology** automatically caches read requests on idle server resources, improving latency and minimizing unnecessary I/O operations.

**Benefit Analyzer embedded benchmark** provides before-and-after performance comparisons, enabling IT to measure workloads and performance to quantify V-locity Server benefits in their real-world environment.

**CogniSAN® technology** detects external resource usage within a shared storage system, such as a SAN, and allows for transparent optimization by not competing for resources utilized by other applications over the same storage infrastructure. It does this with no intrusion into SAN-layer operations.

**InvisiTasking® technology** allows all the V-locity Server "background" operations within the server to run with zero resource impact on current production.

V-locity auto-detects storage type and optimizes itself for peak performance accordingly (SAN, NAS, DAS). Moreover, any SSD connected to a server is optimized as V-locity boosts performance while extending its lifecycle.

## About ConduSiv

ConduSiv Technologies creates high-performance software that optimizes and maintains application operation efficiency and equipment longevity to increase productivity in technology, people and businesses. ConduSiv customers include enterprises, government agencies, ISVs, OEMs and home users worldwide. A market leader in data storage innovation, the company's solutions help technology function at peak levels.

## V-locity Server Benefits

- Increase server and application performance by 50%
- Reduce latency by 50% for faster file access
- Eliminate bottlenecks without expensive hardware
- True "set and forget" management
- Compatible with all SAN/NAS systems

## Supported Platforms

Installs on Windows Server 2003, Windows Server 2008/2008 R2, Windows Server 2012

## More Information

**Visit our website:**  
[www.conduSiv.com](http://www.conduSiv.com)

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