

### V-LOCITY 3®

## The virtual doctor for virtual platform performance

A virtual infrastructure is dynamic and responds to the storage and resource needs of the moment. But it must be kept healthy. Virtualization is designed to make the most efficient use of the IT network investment but succeeds *only* when resources are shared efficiently without sacrificing I/O bandwidth. But there are barriers...

# The three primary barriers to performance on every virtual platform

- **1.** I/O bottlenecks occur from the continuous generation of unnecessary I/Os. As a result, the more a virtual platform is driven to produce, the slower it responds.
- 2. Resource conflicts. Virtual machines compete for shared I/O resources and have limited knowledge of actual hardware resource usage. Overloaded disk I/O traffic from one VM will not only run slower, it will slow the I/O speed of another VM.
- 3. Wasted disk space. Virtual disks set to grow dynamically will never shrink when users or applications remove data. As a result, that physical disk space cannot be allocated to other virtual systems. It also needlessly increases time and resources necessary to perform backups for data continuity and live migration to maintain optimal service levels.

## Optimized file Fragmented file W = 1/0 1/0 1/0 Shortest I/O Path 1/0 L/O HOST FILE SYSTEM 1/0 1/0 1/0 Faster data transfer rate Storage

Excess I/O caused by fragmentation increases time to read-write files all of the way to physical storage.

Additional, unnecessary I/O increases time taken to complete operations, reduces storage hardware life, and wastes energy.

## **V-locity 3: Pure Cure**

#### **Purpose**

V-locity 3 is designed to enormously improve the performance and efficiency of all VMware ESX™/ESXi™ and Microsoft Hyper-V hypervisor virtual platforms automatically, intelligently and transparently.

#### **Benefits:**

- Faster VM and Host I/O throughput
- Increased VM density
- · Increased platform reliability
- Zero resource contention
- Optimized VM resource usage within a shared storage system
- Increased hardware life
- Lower operating costs





## **Technology Overview**

- **IntelliWrite**® technology prevents most fragmentation before it can happen, thus eliminating all the unnecessary
  - I/Os involved in breaking files into pieces and reading back those pieces.
- **V-Aware**™ technology detects external resource usage from other virtual machines on the virtual platform and eliminates resource contention that would otherwise exist on the same Host Server.
- **CogniSAN**™ technology detects external resource usage within a shared storage system, such as a SAN, and allows for transparent optimization by never competing for resources utilized by other VMs over the same storage infrastructure. *Important: CogniSAN does this without intruding in any way into SAN-layer operations.*
- InvisiTasking® technology allows all the V-locity 3 "background" operations within the VM to run with zero resource impact on current production.
- Automatic zeroing of free space. This powerful engine zeroes out unused data blocks on virtual disks and
  makes virtual disk compaction easy. It occurs online and automatically. Performing a storage migration on your
  virtual platform can then reclaim unused free space, improving VM Density and energy efficiency.
- **Special Virtual Disk Auto Detection**. Allows each V-locity Guest to conform its optimization settings to the type of virtual disk/features the VM is using, such as Linked Clones (ESX/ESXi)/Differencing Disks (Hyper-V), for maximum performance.
- **Instant Defrag**™ technology immediately eliminates fragmentation that hasn't been prevented and minimizes unnecessary I/O passed from the OS to the disk subsystem. It aligns data on the drives for optimum access.
- Real-time Free Space Consolidation optimizes large blocks of free space for even faster writes to disk.
- "Set It and Forget It" automatic and real-time operation.

## OPTIMIZE YOUR ENTIRE VIRTUAL PLATFORM AUTOMATICALLY!

### **Buy V-locity 3 Now**

For pricing and volume license discounts, contact your local reseller. Volume license, government and educational discounts available.

To find a reseller near you, call **(800) 829-6468 (818-771-1600** outside USA) or visit **www.condusiv.com** 

Consists of two core components: **V-locity 3 Guest** installs on all Windows virtual machines. **V-locity 3 Host Agent** installs on any Windows virtual machine over VMware ESX/ESXi, or directly on the Microsoft Hyper-V hypervisor.

Host requires Windows Server® 2008 (or R2) with Hyper-V role.

VMware: ESX and ESXi server versions 4.0 or later.

Guest supports the following operating systems: Windows XP (requires SP2) Windows Vista® Windows 7 Windows Server 2003 Windows Server 2008 (or R2)

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