FlashSoft®

Software Product Brief

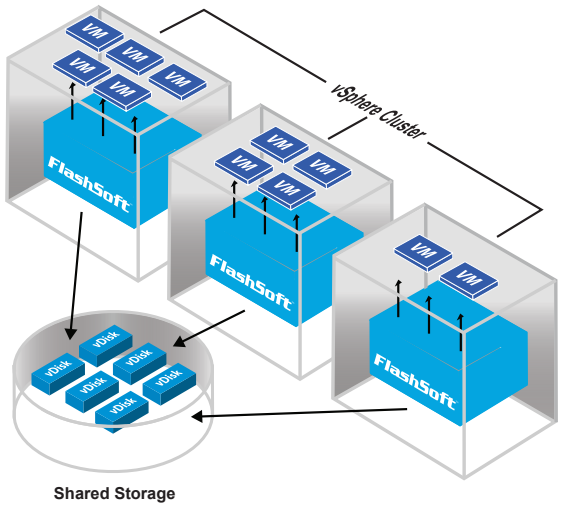
FlashSoft® Software 4.0 for VMware® vSphere® 6

New Features

- Compatibility: VMware Ready™ Technology. FlashSoft software is implemented as an IO filter, integrated with VMWare vSphere® through the new VMware vSphere APIs for IO Filtering (VAIO). As a filter implemented through VAIO, FlashSoft software 4.0 is certified VMware Ready, the highest level of VMware certification.
- Ease of Administration. As vSphere-integrated data service, FlashSoft software can be managed directly within the standard VMware vCenter™ Web Client. The software deployment and operation is managed through VMware Storage Policy Based Management (SPBM), which also manages other VMware software-defined services such as VMWare Virtual SAN™ and VMware vSphere® Virtual Volumes™
- Granularity: Virtual Disk Level Acceleration. Through the VAIO framework, IO acceleration may be configured on a per-virtual disk basis. FlashSoft software 4.0 offers acceleration configuration options from the cluster level to the virtual disk level.
- No Agents in Guest. FlashSoft software does not install any agent components in the guest VMs' operating systems, so there is no limitation on the type of OS that can be run in the VMs. All VMware-compatible guest OSs are supported.
- Support for All VMware-Supported Datastore Types. FlashSoft software 4.0 accelerates application performance for all VMware-supported data stores including VMware vSphere® VMFS, NFS, vSphere Virtual Volumes, and Virtual SAN.
- Seamless Support for VMware Cluster Solutions: For improved effectiveness and usability within clustered environments FlashSoft software supports all VMware cluster solutions including vMotion, Storage vMotion, DRS, HA etc.

FlashSoft software increases virtual machine (VM) performance and efficiency by enabling any solid-state device as a host-level complement to existing storage. Serving requests for VMs' most frequently accessed data from flash storage attached directly in the server, FlashSoft increases application performance for all data stores including VMFS, NFS, VVol, and Virtual SAN.

The new architecture in FlashSoft software 4.0 takes advantage of VMware's new vSphere APIs for IO Filtering (VAIO) framework, allowing the FlashSoft software to be integrated as a virtual data service within vSphere. This integration with vSphere 6 gives FlashSoft greater reliability, usability and performance; and enables simple, cluster-wide administration. FlashSoft software is certified VMware Ready™, the highest level of VMware certification, assuring the highest level of validation and end user confidence.



High Scalability

With up to 16TB of cache capacity per host, FlashSoft software scales to support acceleration of large numbers of virtual disks per host without increasing CPU or memory requirements. The software may be deployed in clusters of any size, up to the vSphere 6 maximum of 64 hosts.

Dynamic Cache Allocation

FlashSoft software automatically ensures optimal cache usage per virtual disk, assigning cache space dynamically as new virtual disks are accelerated.

Storage System Enhancement

With FlashSoft software deployed, the majority of IO requests are fulfilled from the server-side flash rather than the backend storage system, alleviating much of the burden from—and extending the usable life—of existing storage systems.

Live Cache Assignment

Assign & re-assign caching to virtual disks without VM or host restart.

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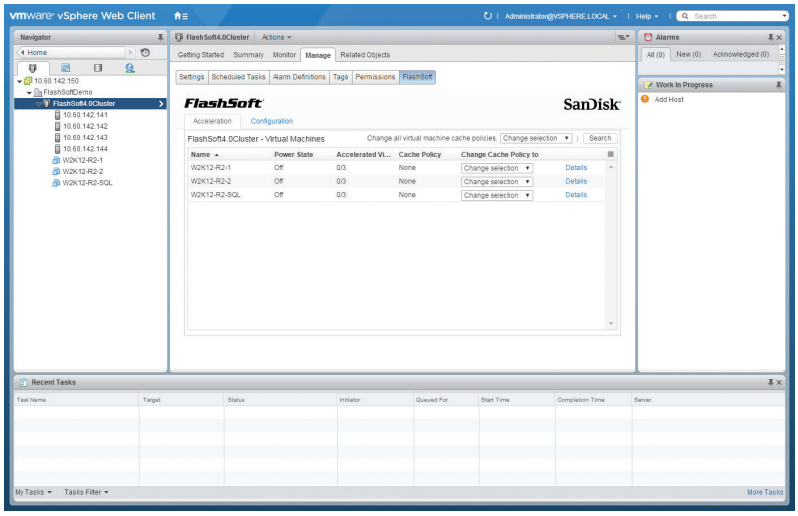
VMware vCenter™ Web Client

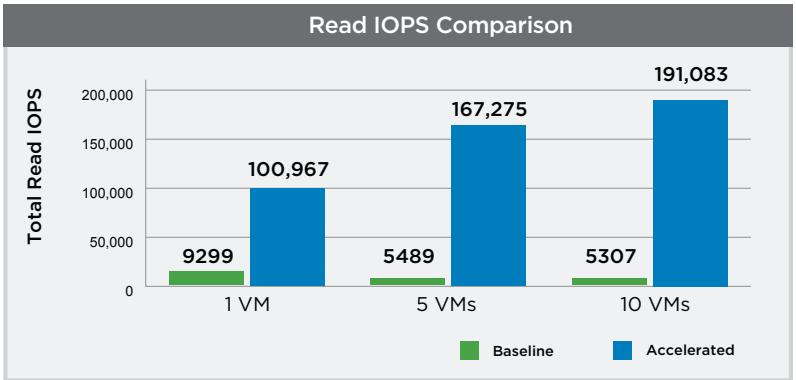
A standard plug-in to vCenter supports management of FlashSoft software functions directly through the vCenter Web GUI.



Increase Application IOPS and VM Density

Application performance and virtual machine density are increased using FlashSoft software.

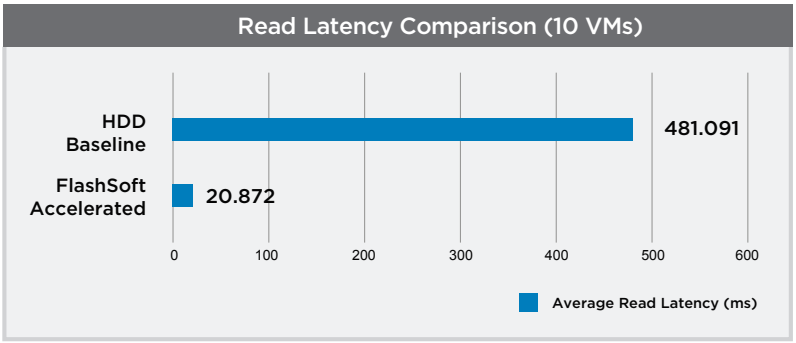
This example shows FlashSoft software increases read IOPS 10x to 36x compared to HDD. Furthermore, IOPS of 10 accelerated VMs is 20x greater than a single non-accelerated VM[1].



Decrease IO Latency

Read latency is greatly reduced using FlashSoft software.

A test of 10 FlashSoft software accelerated VMs shows 23x reduction of read latency compared to the same VMs using non-accelerated HDD[2].



System Requirements

Operating System

- VMware vSphere 6.0 Update 2 or later

Processor

- 64-bit x86 processor 2 or more cores

SSD

- Minimum Size: 16GB
- Maximum Size: 16TB

Storage Supported

- vSphere 6 compatible datastores (VMFS, NFS, vSphere Virtual Volumes, Virtual SAN)

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For more information, please visit:
www.sandisk.com/enterprise

Lenovo Part Number	4L40M33265	SW, FlashSoft, vSphere, Single Server License

[1] Based on internal testing. Results produced using fio.exe benchmark program. System under test: Dell R730xd server with MD3820f storage array. Performance numbers are read IO per second (IOPS). Complete test report available.

[2] Based on internal testing. Results produced using fio.exe benchmark program. System under test: Dell R730xd server with MD3820f storage array. Performance numbers are milliseconds of average read latency. Complete test report available.

Specifications subject to change without notice.

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