VMware Virsto

Boost the performance of your storage while reducing cost.

AT A GLANCE

VMware Virsto™ is a unique storage software solution that solves the intrinsic challenges of storage in virtualized environments. Virsto is a software-only solution that dramatically boosts performance and utilization of storage without the need for additional or more powerful hardware.

KEY BENEFITS

- **Accelerate block storage performance** in virtual environments without the need for expensive hardware.
- **Reduce the cost of storage** by improving utilization and eliminating overprovisioning of disk drives.
- **Improve storage manageability** with high performance virtual machine-level snapshots and clones.

What is Virsto?

With our vision for the software-defined data center, VMware is focused on making IT more efficient, simpler and more agile. We are extending the benefits of virtualization to every area of the data center—compute, network, storage and availability.

The cost and complexity of acquiring, provisioning and managing storage has become a major pain point for IT in the journey to the software-defined data center. Companies are finding it increasingly difficult to sustain the growing needs of storage performance and capacity without incurring exorbitant capital and operating expenses.

Virsto—acquired by VMware in February 2013—provides a unique storage software solution that solves the intrinsic challenges of storage in virtualized environments. Virsto is a software-only solution that dramatically boosts performance and utilization of storage without the need for additional or more powerful hardware.

How Does Virsto Work?

Virsto is a unique, software-only solution that deploys as a dedicated virtual appliance on each VMware vSphere® host. Virsto implements a virtual storage layer that transparently leverages a log architecture to speed up I/O writes. Each host gets a small (10GB) dedicated vLog device, located on the SAN, where writes are staged, and from where they're immediately acknowledged back to the guest virtual machines. Those writes are then asynchronously de-staged to a shared storage pool, called the vSpace, that services the reads for all nodes in the cluster.

In addition to this uniquely differentiated approach to putting all I/O writes from virtual machines in sequence, Virsto also provides highly scalable snapshot and clone technologies.

Key Benefits

Boost storage performance

Virtual environments tend to be significantly more write-intensive than physical environments, often displaying workloads that are 50 percent or more writes. In certain use cases like virtual desktop infrastructure (VDI), steady state desktop workloads can consist of 80 percent writes or more. Conventional read caching approaches do not provide any performance improvements for this major portion of the workload. Virsto delivers huge write performance improvements while at the same time fully supporting failover based on vSphere High Availability (HA) without data loss.

vmware®

Increase storage utilization

The unique Virsto architecture unlocks significant savings by improving capacity utilization and data services efficiency:

• **Fewer physical spindles**
By virtue of the I/O acceleration of its log architecture, customers can reduce the number of physical disk drives deployed as well as deploy lower cost drives without impacting performance.

• **Always-on thin provisioning**
To further reduce storage costs, all Virsto storage is thin provisioned, but unlike traditional implementations, Virsto thin provisioning happens behind the logs in vSpace. As a result, Virsto thin-provisioned disks deliver storage space savings while still easily outperform even thick VM virtuak disks.

• **High performance snapshots and clones**
Virsto vSnaps and vClones all perform at the same speed as their parent devices because the higher latency operations all occur behind the vLogs, after the write acknowledgements have been sent back to the guest virtual machines.

Learn More

For questions on how to buy Virsto contact your VMware Sales Representative or email virstosales@vmware.com

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