SOLUTIONS BRIEF Intel® Storage Solutions Nimble Storage CS400 Arrays



## Nimble Storage Partners with Intel and Ushers in a New Era of Enterprise Storage



nimblestorage

"Nimble has partnered with Intel to create the industry's first flash-optimized storage engineered from the ground up for maximum efficiency."

## IT Departments Face Unpredictable Data Growth Demands

Enterprise data is growing at the breakneck pace of about 60 percent each year, according to IDC<sup>1</sup>. This data surge is expensive, with data storage accounting for as much as 15 to 20 percent of IT capital spending in large enterprises.

This has placed unprecedented pressure on enterprises, whose massive storage requirements constantly fluctuate. While server consolidation and virtualization have become popular strategies to help manage data, they put additional pressure on IT departments in regards to performance, capacity and data protection.

Traditional storage systems are not optimized to take advantage of the latest flash and SSD technologies that offer higher performance, endurance, efficiency and flexibility. Legacy scale-up storage technologies are often inflexible and require upfront forecasting of performance needs and create separate storage silos that complicate management. Scale-out cluster solutions provide upfront flexibility, they also tie performance and capacity together, requiring customers to incur higher incremental costs every time they add a storage node.

## A New Paradigm for Storage

Nimble Storage has partnered with Intel to produce breakthrough enterprise storage arrays that leverage high capacity Intel<sup>®</sup> Solid-State Drives (SSDs) based on MLC flash, and multi-core, multi-threaded computing based on highperformance Intel<sup>®</sup> Xeon<sup>®</sup> multi-core processors. It's the first hybrid storage architecture that seamlessly integrates SSDs with high-capacity disks to deliver flash-accelerated performance, integrated data protection, and empowered management.

Intel's SSDs with NImble Storage's unique CASL architecture not only accelerate reads and spinning disk for data storage, but also scale SSD cache or compute separately for applications that require high performance, such as virtual desktop infrastructure (VDI) and online transaction processing (OLTP).



Nimble Storage solutions are available through a global network of world-class channel partners. For an in-person briefing, contact Nimble Storage at sales@nimblestorage.com or call 877-3NIMBLE (877-364-6253).



Intel® Solid-State Drives Series are a high-performance hard drive alternative, which provide the next level in storage performance and reliability, along with data security features such as AES Encryption.\*



Intel<sup>®</sup> Xeon Processors offer the scalable performance and advanced reliability you need for your server and data center environments.

\*available on some models.

"Nimble Storage continues to be a strong Intel partner in delivering innovative storage solutions to our data center customers. With the introduction of the CS400 arrays and Cache Expansion upgrades, these customers will be able to further leverage the increased performance of Intel Xeon family processors, as well as the increased capacities offered by Intel Solid-State Drives," said Todd Garriques, NA Channel Manager, Intel Corp. "Nimble's unique approach to storage delivers the ideal platform to highlight the performance, quality, and reliability advantages of solutions built with Intel Xeon and Solid-State Drive products."

Through Nimble's innovative Cache Accelerated Sequential Layout (CASL), flash memory is combined with Intel's high-capacity SSDs to deliver high performance at a cost-effective price. Intel's Xeon multi-core processors in the Nimble storage controllers deliver SSD performance using MLC flash at a fraction of the price of competitive SLC-based flash arrays.

Multiple Nimble arrays can also be clustered together into a single logical array, with data striped across the entire cluster. New arrays or new capacity expansion shelves can be added or removed from a cluster without requiring downtime. The addition or removal of an array or expansion shelf initiates automatic load rebalancing, which optimizes the performance and capacity of each component in the cluster, while simultaneously ensuring continuous data availability.

NImble Storage now offers options for upgrading their SSDs non-disruptively. This allows custmers that have already deployed Nimble Storage arrays to double or even quadruple the amount of flash without any downtime. This allows enterprises to "future proof" their existing investment, tuning their flash to accommodate demanding new workloads or any application with large amounts of active data.

## Conclusion

As enterprises continue to grapple with the growing volumes of data, modern datacenters are looking to leverage the performance of flash SSDs and multicore processors within their storage arrays. Nimble's unique hybrid storage system leverages the compute power of Intel Xeon multicore processors and Intel SSDs to deliver unparalleled flash-accelerated performance, integrated data protection, and empowered management. With Nimble Storage, enterprises can accommodate data growth demands by scaling capacity, or performance, or both-efficiently and non-disruptively.

For more information on Nimble Storage solutions; visit http://www.nimblestorage.com For more information on Intel® SSDs, visit http://www.intel.com/go/ssd For more information on Intel® Xeon® processors, visit http://www.intel.com/go/xeon

<sup>1</sup> IDC Worldwide Big Data Technology and Services 2012-2015 Forecast

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