

STORSIMPLE – STORING DATA THE RIGHT WAY

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The more complex the storage the higher the cost, which makes for a very stiff price tag on storage within most businesses. While storage at the outset of any data-centric endeavor may seem simple, the act of storing data is in reality inevitably destined to span many types of systems: high performance primary storage, high capacity nearline/archival storage, disk-based protection tiers, tape libraries, and off-site mirrored storage systems for failover and data restoration.

The purchase and housing costs alone for those multiple systems, or *tiers* of storage, is mind-numbing. And on top of the purchase costs of all these types of storage, add ongoing storage management using multiple dashboards, energy costs, data center real estate, information management, upgrades, and migrations. Organizations tend to gloss over these true costs by spreading out capital costs, placing energy and space cost in facilities budgets, and not tracking IT staff time for management and upgrades. These cost factors get progressively worse as the size and complexity of storage grows.

STORSIMPLE'S CLAIMS

Storage infrastructure vendor StorSimple claims to solve these difficult problems with a radically different approach. Instead of tacking on data management tools to the existing complex storage structure, StorSimple actually reinvents storage scalability without physical limitations using no more than a very small data center footprint. It also provides data protection that simultaneously offers the advantages of offsite storage with immediate DR protection, and provides a highly economical storage tier for long-term data retention.

This is a big claim. How does it work? StorSimple begins with what are high performance, high availability 2U storage arrays. The systems are architected for data center primary storage and are fully redundant, optimize performance across SAS and SSD using sub-LUN blocks, and provide cross-volume data deduplication. By itself this level of storage sophistication is an extremely attractive proposition. However, StorSimple doesn't stop there.

Most primary storage suffers from a high ratio of inactive data housed on expensive disk, 80% or more in many cases. By efficiently moving inactive data to another storage tier, primary storage is freed up and performance dramatically improves. This is a common enough scenario using nearline archive storage, but StorSimple goes much farther. Instead of taking up yet more space and IT time with nearline storage or additional racks, StorSimple leverages the cloud as a highly effective storage tier. This integration is the storage game changer. StorSimple encrypts and moves deduplicated, compressed inactive data from the primary array to cloud-based storage. This results in locally stored active data and long-term data stored cost-effectively in the cloud.

Moreover, StorSimple hasn't settled for just turning the cloud into a giant storage bucket like many storage vendors. Instead, StorSimple has integrated the cloud behind nearly every storage feature, and turned the cloud into a technology that extends protection tools – such as snapshots – into solutions for long-term data protection, disaster recovery, and even potentially data movement.

The upshot? StorSimple's massive storage arrays take up minimal space within the data center (2U) where space is always at a premium. Then integration with the cloud significantly extends the versatility of StorSimple storage, and thereby the data behind today's business.

OUR FINDINGS

These are big claims and StorSimple needed to prove them. They turned to Taneja Group's Technology Validation service for independent testing and corroboration. Our question was: could a single storage system really encompass primary storage, disaster recovery, long-term data retention, archiving, secondary sites – and do so cost-effectively? If it could, the consequences for solving storage cost and complexity would be profound.

We examined StorSimple's promise to deliver highly simplified storage that replaced multiple complex storage systems in the data center. We tested claims around usability, applicability to both primary storage and backup, robust and efficient data protection, and built-in archiving capabilities.

Our findings? StorSimple is a cloud storage system built to bridge general-purpose storage with the unlimited scale and versatility of the cloud. The result can transform the storage of data from a cost-riddled, multi-tasked, disjointed exercise in complexity into a single unified, low cost solution, that seamlessly and simply manages any stored data with the right kind of storage services throughout its lifecycle.

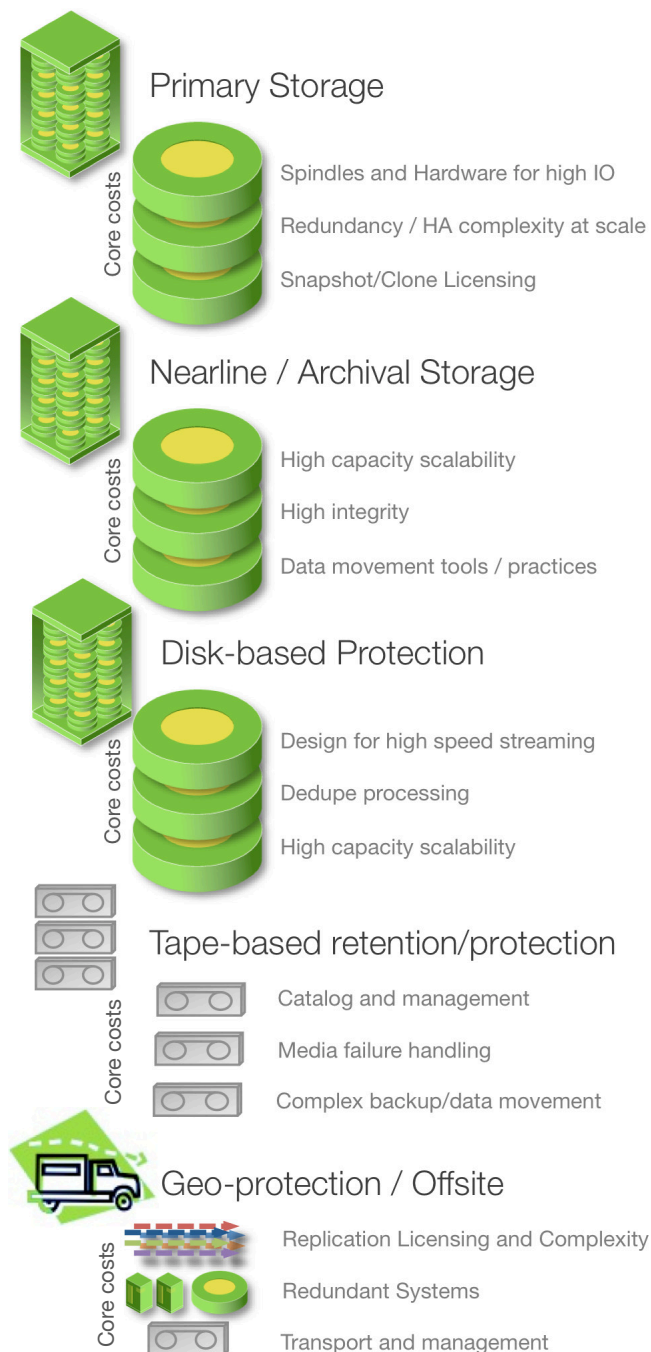


Figure 1: The StorSimple array aims to integrate the storage features behind many distinct enterprise systems into one storage appliance.

Our detailed full test report can be found at: <http://www.storsimple.com/taneja-report>