



## Lower \$/GB with Phased Data Reduction

NexGen's Phased Data Reduction reduces the cost of usable capacity for typical server virtualization environments by up to 58% with no impact on performance.<sup>1</sup>

Solid state storage increases the \$/GB cost of capacity. To counteract the higher cost, vendors are implementing deduplication technology. But at best, \$/GB remains comparable to disk drive technology.

Making matters worse, most vendors implementing solid state disk drives require a RAID group configuration where one or more drives in the group are used only in case of a failure. This requirement lowers utilization and increases the \$/GB of the most expensive capacity in a system. Other vendors have side-stepped this issue with new architectures and software that require 100% solid state. But given that only five percent of data is active at any given time in virtual server environments, storing the remaining 95% of data on solid state is a very expensive proposition.

To help customers lower costs and avoid performance/capacity trade-offs, NexGen has revolutionized data reduction for primary storage.

Rather than relying on resource-intensive hashing algorithms to dedupe data, NexGen uses meta data to predict where duplicate data may exist then deduplicates as system resources are available. This approach eliminates processor intensive workloads and provides higher capacity utilization with no impact on application performance.

Solid state capacity is expensive. To get the full benefit of primary deduplication and to drive down \$/GB costs, NexGen stores inactive deduplicated data on the lowest cost storage media, 7.2K RPM enterprise SAS disk drives. Using real-time data access patterns and other heuristics, NexGen's dynamic tiering moves data between storage tiers in real-time. This approach enables NexGen to use inexpensive capacity for data redundancy so NexGen solid state drives are always 100% utilized.

Customers typically achieve 5X-10X more capacity with NexGen Phased Data Reduction.

NexGen storage delivers 58% lower \$/usable GB than the leading tiering storage system.<sup>1</sup>

### Why It Matters

Data reduction is less valuable if it impacts performance.

Dynamic Data Placement enables the lowest \$/GB.

Storing redundant data on solid state is wasteful as solid state is more expensive than disk.

<sup>1</sup> Based on lab testing and customer experience. Data deduplication ratios will vary depending on customer environment, workload, and type of data.