FlashDisk®   PetaStore™   PS-4500

High Density Storage for "Big Data"

Big Data Applications

The major problem facing organizations today is the explosion in the amount of data required for immediate retrieval. Large scale scientific, healthcare, e-discovery, financial, e-mail archive and database applications as well as unfathomable numbers of photo, video, audio, Word, Excel, PowerPoint and social media files used in daily office automation create huge storage demands. This is the "big-data" problem. The enormity of this situation, especially with multiple backup copies, demands a solution that addresses all of these critical facets:

- *Scalable capacity*
- *Simple management*
- *Easy-to-service*
- *Scalable performance*
- *Flexible configurations*

2 PB Rack

Scalable Capacity

Designed for high density, FlashDisk PetaStore offers up to 528 disks in 46U of rack space totalling over 2 Petabytes (PB) in a single cabinet, using 4 TB disk drives. As the capacity of each 3.5" drive continues to increase, these cabinet capacities will continue to grow and continue to provide higher storage density - storing more data in less physical space.

Scalable Performance

FlashDisk PetaStore offers outstanding performance because the purpose-built disk controllers are fine-tuned for "big data." Just one PetaStore cabinet delivers up to 12 GB/sec. write and 20 GB/sec. read speed - actual measured end-to-end usable performance. These high-speed disk controllers are the true engine of PetaStore, outperforming the competition who have even more spindles. Now in its 12th generation, FlashDisk delivers superior access and transfer rates for your mountain of "big data".

Simple Management

Being able to easily configure, re-configure, and manage all of this hardware is key to a low-cost implementation. FlashDisk PetaStore utilizes the FlashDisk Global Manager which allows organizations the ability to use a single-pane-of-glass to manage and control an unlimited number of PetaStore cabinets. All the wealth of FlashDisk PetaStore software functionality is available in this one application.

Flexible Configurations

FlashDisk PetaStore allows configuring the system to specific needs and permits scaling of capacity and performance independently as required. FlashDisk PetaStore supports both SAN block storage and NAS file storage. The NAS option supports CIFS and NFS file storage in any combination. FlashDisk PetaStore supports Fibre Channel and iSCSI data transport protocols. Thus FlashDisk PetaStore works in your infrastructure of choice to meet your unique requirements.

Simple Serviceability

The ability to easily service a unit, especially units of the scale that "big data" environments require, is paramount in cost-reduction. This unit is designed for self-service, offering significant operating cost savings. All PetaStore components are redundant, easily accessible and hot-swappable including controllers, drives, power supplies and fans. A special PetaStore feature is that front-loading, lightweight drive drawers slide forward from shelves and operate while being serviced. The design is superior to potentially unsafe competitive top-loading designs that require the entire shelf, which is very heavy, to be completely retracted.

Purpose-Built

FlashDisk PetaStore is unique in its ability to provide for all of these important facets at the same time, while other solutions are only strong at a few. PetaStore is the "Purpose-Built" storage solution designed to be the best value for your "big data" needs.