NIMBUS DATA

FlashPoint Partner Program

Solutions Brief

Unified All Flash Storage

Featuring

Sustainable Storage®

S-Class Flash Storage Systems

E-Class Flash Storage Systems

Gemini Flash Storage Systems

FlashPoint Partner Program

Document # XXXXXX

All-Flash Storage

High Growth Opportunity

Analysts View

The SSD market is serving as a powerful growth engine for partners who develop experience and expertise in delivering solid-state solutions.

As overall spending for IT equipment grows at a low single digit rate, IDC projects that spending on SSD will more than triple from $800M in 2011 to $2.5B in 2014.

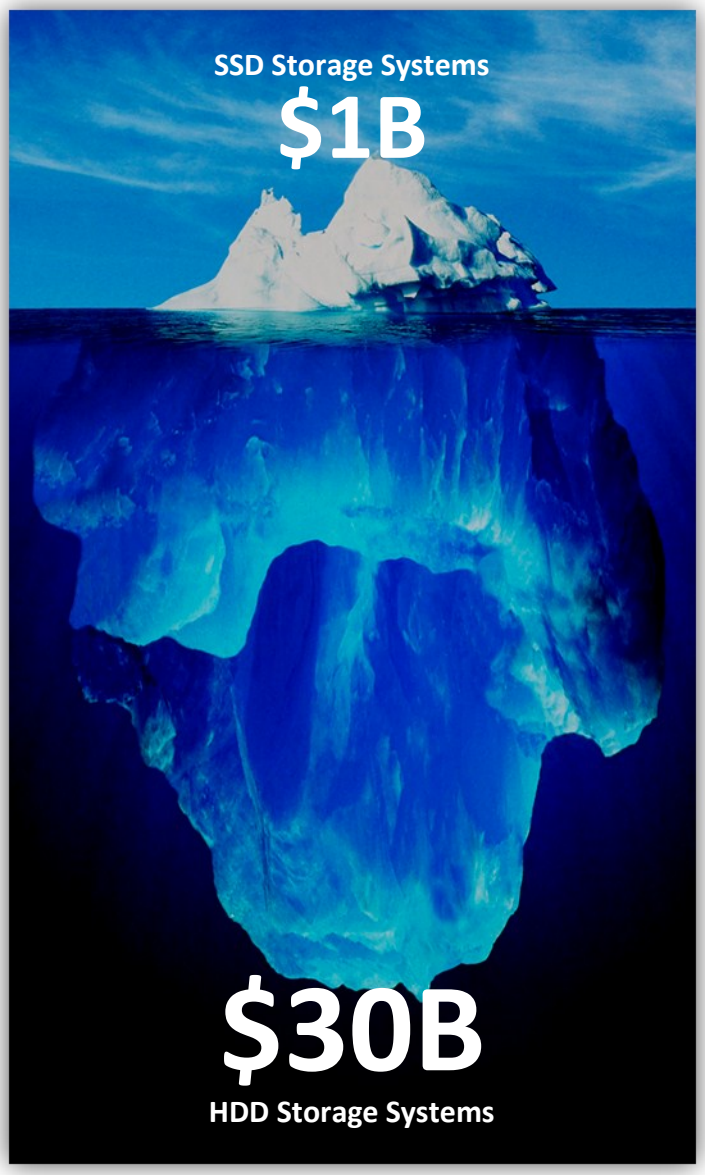
However, many analysts expect SSD growth to come mostly from acceleration solutions for frequently accessed data. This segment is dominated by PCIe cards, and SAS/SATA modules, and is the tip of the iceberg in the overall market for storage systems.

Below the market for acceleration solutions lies the gigantic $30B opportunity to displace HDD storage systems used for primary storage.

Storage visionaries believe that SSD technology is on the verge of an epic migration to displace HDD technology for enterprise storage. They believe this will happen because HDDs will not be able to deliver the application performance and storage densities needed in data centers of the future.

Products to serve this market is what you want, and it's where Nimbus stands out from the pack with the first all-flash platform capable of delivering the higher performance, storage densities *and* lower cost of operation that it takes to displace HDD stor-

2012 Worldwide SSD & HDD Revenue



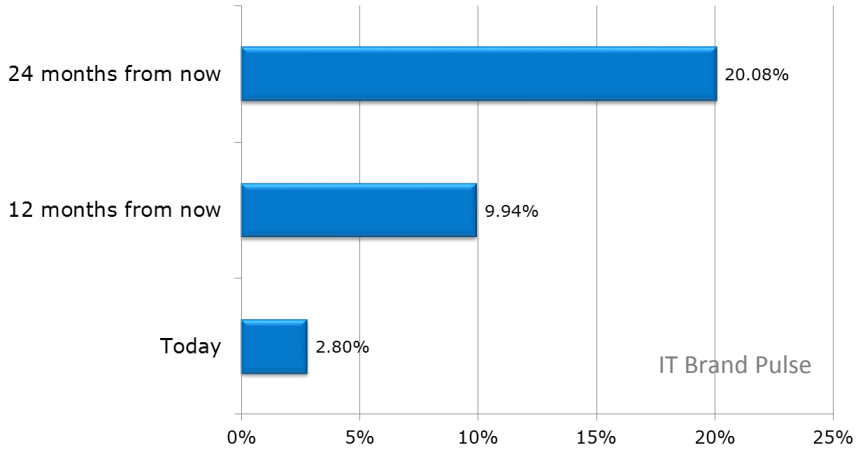
SSDs are a hot solution for storing or caching frequently accessed data. However, the opportunity to replace HDDs for primary data storage is gigantic.

This Solutions Brief provides information about high-growth opportunities, All-Flash products from Nimbus, and resources available to help turn them into profits.

All-Flash Storage

High Growth Opportunity

SSD will comprise approximately this percentage of my organization's combined SSD and HDD disk capacity:



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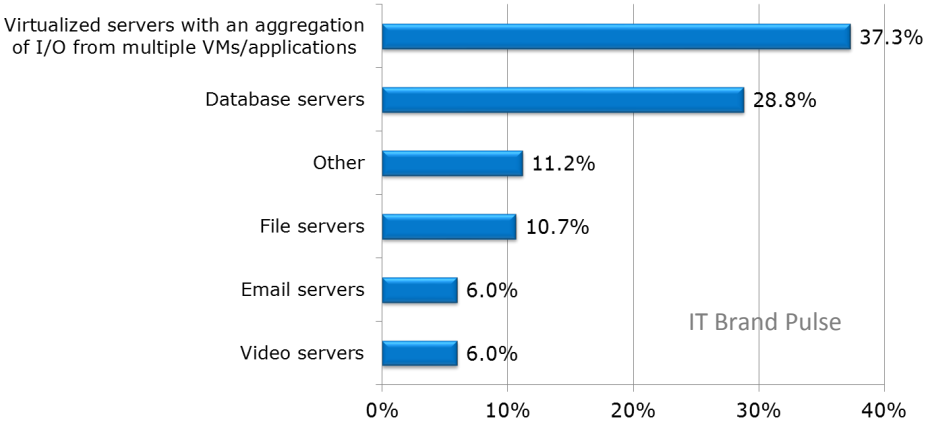
The following application is most driving the adoption of SSD in my environment is:



SSDs are a hot solution for storing or caching frequently accessed data. However, the opportunity to replace HDDs for primary data storage is gigantic.

IT Pro View

IT professionals are even more optimistic about their adoption of SSD than analysts. In an IT Brand Pulse survey of over 200 data center managers, the respondents said that 20% of their combined SSD and HDD capacity would migrate to SSD within 24 months—almost 10X what they say is installed today.

Theses same IT pros said it is their mainstream applications which are driving the need for SSD. The type of server most driving adoption of virtualized servers with an aggregation of I/O from multiple VMs. Considering that over 70% of new workloads are installed on VMs, their is a pervasive need for SSD in the data center.

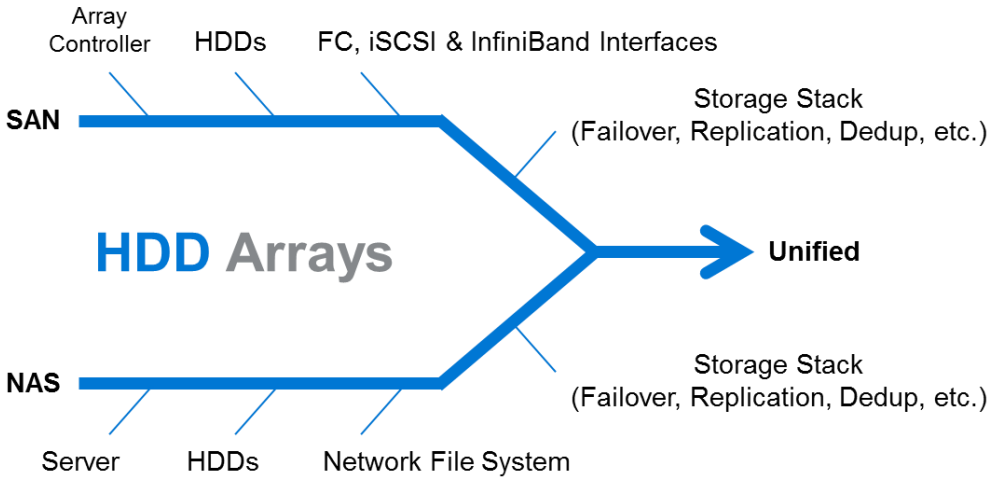
It's no longer a matter of "if" SSD will be deployed. It's now a decision of "what type", "how much", and "where".

IT professionals estimate that SSD as a percentage of their combined SSD/HDD capacity will grow almost 10X in the next 24 months.

Unified SSD Arrays

High Growth Opportunity

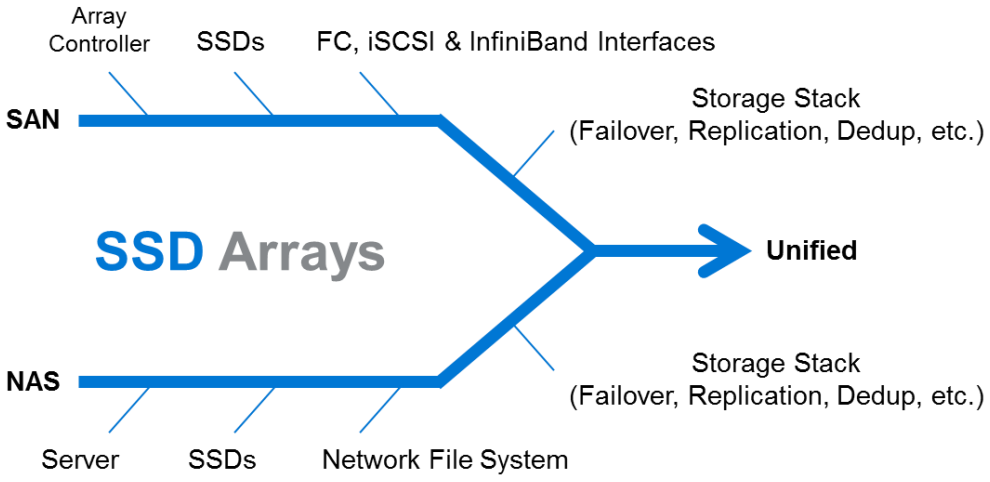
HDDs Arrays Evolved into Unified Storage Systems



Until a few years ago, HDD arrays were designed with GbE, iSCSI *or* Fibre Channel ASICs to form separate NAS and SAN systems. ASICs are now multi-protocol, and most HDD array manufacturers have merged their interfaces and software stacks into unified SAN/NAS systems.

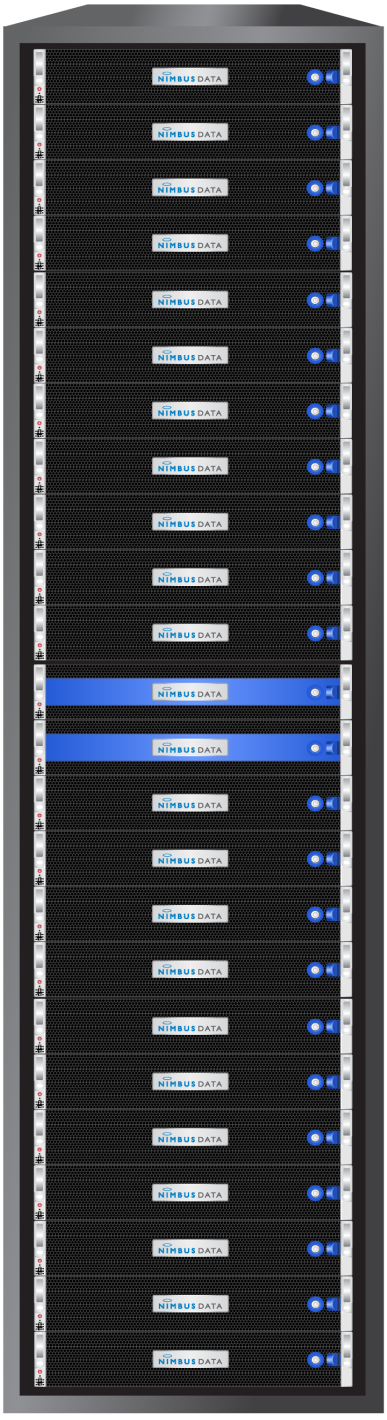
Nimbus is leading the way for the SSD Array Market

Most SSD systems today are purpose-built for DAS, SAN or NAS, and have little software content. In the future, SSD systems will support multiple network interfaces, file storage protocols, and block storage protocols. Future SSD systems will also include a rich storage management stack including failover, snap-shot, replication and de-duplication. Nimbus is already there.



Future SSD systems will be unified SAN/NAS systems, support multiple network interfaces, and offer rich software stacks. Nimbus is already there.

Nimbus Unified Systems



Nimbus E-Class and S-Class Flash Storage

Nimbus Gemini

Stunning Performance

100% Flash

10X faster than HDD arrays

Surprising Economy

80% less power than HDD arrays

70% less Rackspace than HDD arrays

Nimbus Sustainable Storage® systems represent a revolutionary departure from spinning disk arrays—purpose-built all-flash storage with comprehensive unified storage management and data protection software built-in.

The Nimbus Advantage

Tier 1 Storage for the Data Center

S-Class **Entry/Midrange Storage**	E-Class **High-End Storage**	Gemini **Next Generation Storage**
		
2.5 - 250 terabytes	10 - 500 terabytes	6-48 terabytes
Starts at $25,000	Starts at $150,000	Starts at $48,000
Fully redundant except for system board	No-single-point-of-failure	No-single-point-of-failure
5 terabytes per u	10 terabytes per U	24 terabytes per U
HALO storage operating system	HALO storage operating system	Halo storage operating systems
$10 per gigabyte + IO modules	$10 per gigabyte + controllers and IO modules	$8 per gigabyte, controllers included

At the heart of Nimbus flash memory systems is the Nimbus HALO operating system--a comprehensive software suite that provides end-to-end administration, data protection, data optimization, data security, and detailed monitoring of Nimbus systems—license free.

S-Class All Flash Storage

Solid State Storage for Virtualized Servers and Databases

Nimbus flash storage systems leverages NAND flash memory to deliver dramatically higher performance than conventional disk arrays, but without tiering, caching, or short-stroking techniques that increase operational complexity, cost, and power consumption.

100% Flash, 5,000% Speed

With latency at a mere 100 microseconds, Nimbus flash systems can service up to 50x more IO than disk arrays, perfect for random IO intensive virtualization and database deployments. With performance up to 12,000 MBps, a single Gemini 2u array can deliver more throughput than 100 hard drives, ideal for virtualization, database, streaming, rich content, and scientific applications.

Total SAN+NAS Software

Nimbus S-Class flash systems include comprehensive software for end-to-end storage management and data protection, without additional license fees, complex appliances or third-party code. Nimbus' HALO storage operating system provides full multi-protocol capabilities, including iSCSI and Fibre Channel SAN, NFS and CIFS for NAS, and even native InfiniBand SRP protocol support. Data protection features include snapshots, remote replication, and synchronous mirroring with high availability clustering. Inline deduplication and thin provisioning maximize usable storage, while an intuitive web interface and scriptable CLI make administration a breeze.

80% Lower Data Center Costs

Nimbus flash arrays consume as few as 10 watts per usable TB, generate much less heat and operate safely at higher ambient temperatures than conventional disk arrays. Gemini systems also pack up to 24TB of solid state capacity per rack unit, enabling more storage in less space than traditional disk arrays.

S-Class data protection features include snapshots, remote replication, and synchronous mirroring with high availability clustering, inline de-duplication and thin provisioning—license free.

E-Class All Flash Storage

#1 in Energy Efficiency and Storage Density for Data Centers

The flagship of the Nimbus Data product line, the Gemini Flash Memory System is the industry's first MLC fully-redundant multiprotocol solid state storage system. The E-Class outperforms and costs less to operate than conventional 15K rpm disk arrays while providing the high-availability, scalability and cost reduction that enterprises and cloud providers demand.

No Single Point of Failure

Nimbus Gemini systems have fully redundant dual controllers and hot swappable SFP+ and QSFP ports The E-Class platform consists of a pair of redundant controllers and four active-active IO modules. Nimbus software automatically detects controller and path failures, providing non-disruptive failover. Nimbus flash platforms also support RAID protection as well as online software updates and capacity expansion.

Most Scalable Flash System

The E-Class Scales from 10 TB to 500 TB, packing twice as much enterprise-grade flash memory as before. All storage is thin-provisioned, maximizing utilization and simplifying storage capacity planning.

Most Efficient Tier 1 Storage

Requiring less than 10 watts of power per terabyte, Nimbus flash memory systems consume 80% less than conventional disk arrays. The arrays also require 70% less cooling.

Maximum Density for Tier 1 Storage

The Gemini packs up to 48 TBs of flash in a compact 2U. The This density enable up to an industry leading 1 petabyte of flash in an industry standard rack. The E-Class packs 20 TB of enterprise-grade flash memory in a compact 2U of rack space. This enables up to 440 TB of solid state storage in a single data center rack.

Software Complete

With snapshots, replication, deduplication, and encryption, all at no additional cost, the Nimbus flash platforms help customers escape dreaded licensing fees.

E-Class Nimbus software automatically detects controller and path failures, providing non-disruptive failover. The E-Class also supports RAID protection as well as online software updates and capacity expansion.

Broad Industry Recognition

Customers

eBay Installs 100 TB of Nimbus S-Class Flash Storage

World-class VMware deployment slashes VM provisioning time by 92% and cuts power consumption by 78% compared to conventional 15K rpm disk arrays.

IT Professionals

Experts

Among hundreds of large and small suppliers, IT professionals selected Nimbus Data over the competition in all six categories of Unified SAN/NAS SSD brand leadership.

FlashPoint Partner Program

Nimbus' FlashPoint Partner Program enables IT solution providers to capitalize on perhaps the most significant shift in datacenter storage in decades: the migration away from hard disk arrays to flash memory technology for primary storage.

Award-Winning Solutions

Winner of Storage Magazine's Product of the Year award and back-to-back Tech Awards Product of the Year recognition, Nimbus enables FlashPoint partners to capitalize on a market that IDC expects to increase at a CAGR of 51.5% from 2010 to 2015.

High Growth High Reward

Nimbus offers all partners an equal opportunity to differentiate themselves with value-added capabilities—ensuring the hard work and evangelism of our partners is well-rewarded. The ideal partners bring unique expertise in key technologies where Nimbus solutions are particularly well-suited:

- Server virtualization
- VDI (virtual desktop infrastructure)
- Databases
- Cloud infrastructure
- Data warehousing
- eDiscovery
- Scientific applications and energy
- Content creation and delivery

Channel focused Strategy

The FlashPoint Partner Program addresses the biggest challenges facing IT solution providers – lack of both innovative and proven storage solutions, and complex sales and support programs that limit business potential. Rather than relying on direct sales, Nimbus has built a business development team that works hand-in-hand with partners to identify new opportunities and accelerate sales and technical engagements with prospective customers. Nimbus solutions are easy to install and administer so partners can spend more time cultivating new business rather than supporting lengthy deployments.

Comprehensive Yet Simple

Nimbus does away with complex pricing typical of traditional enterprise storage vendors. Nimbus' all-inclusive software eliminates per-feature license fees, providing the full features of Nimbus' HALO storage operating system at no additional cost. It supports the widest range of protocols – CIFS, NFS, NFS RDMA, NFS using IPoIB, Oracle DirectNFS, SMB, iSCSI, FC and SRP, with no protocol licensing fees.

The highly motivated Nimbus business development team works hand-in-hand with partners to identify new opportunities and accelerate sales and technical engagements.

Resources

Related Links

Nimbus Data Systems

Gemini Flash Memory Array

E-Class All Flash Storage

S-Class All Flash Storage

HALO Storage Operating System

Skyline Portal

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