DataCore Software & VMware

Value Proposition

DataCore Software provides storage virtualisation solutions that make storage and SAN infrastructures efficient, fault tolerant, flexible and virtual. SANmelody™ and SANsymphony™ software converts physical and virtual servers into storage area network (SAN) virtual storage servers - the perfect complement to virtual servers and virtual desktops. Like VMware and Microsoft, DataCore is a portable software solution that survives multiple generations of hardware obsolescence. DataCore Storage Virtualisation is the foundation for Total Enterprise Virtualisation - the combination of proven virtualisation solutions into comprehensive, enterprise-wide, virtual infrastructures, comprising desktops, servers and storage.

Business Challenges

- Resource Consolidation & Productivity: Optimal Utilisation + Virtualisation Simplicity
- Storage Management & Data Migration: Storage services over the network, storage pooling, simple data migration, time-saving disk provisioning and auto-grow capacity
- Data Protection & Performance: High performance, fault tolerance and scalability.
- Virtual Infrastructures: Flexible Virtual Storage for Virtual Servers and Blade Servers.
- Backups: Fast Disk Recovery & Snapshot solutions for VMs, Exchange,SQL, etc.
- Disaster Recovery (DR) & Fail-safe Business Continuance: Affordable data protection.

User Needs Profiles

Organizational Profiles.

- Organisations adopting virtual infrastructures and deploying virtual servers & desktops
- Companies seeking affordable storage, SAN and disaster recovery solutions
- Enterprises experiencing rapid storage growth. Examples include Financial Services, Health Care, Business Services, and Manufacturing.

Functional Objectives:

- Consolidate and manage more with less with automated virtual capacity
- Dramatically speed up I/O performance
- Increases utilisation rates up to 80%
- Fault tolerant shared storage, disaster recovery & seamless failover for virtual servers
- Reduces provisioning times for new applications from days to minutes
- Accelerates response times for change requests
- Eliminates disruptions for upgrades and hardware maintenance

Key Questions DataCore Can Answer

1. SANs and Virtual Infrastructures - Do you have a Storage Area Network (SAN) or a need for one for your physical and/or virtual server projects?

2. Business Continuity & High Availability - Do you have a business continuity strategy for your infrastructure? Would you like to protect your business against storage-related outages?

3. Disaster Recovery & Fast Disk Backups - Do you have a DR strategy? Would you be interested in an affordable, cost-effective DR strategy?

4. Consolidation, Utilisation & Storage Management - Are you experiencing significant storage growth? Getting the most out of your storage investments?

5. Performance & Scalability - Would you like to improve the performance of your storage infrastructure? Do you have a growth path for the future?

Product Offerings

Key Customer Benefits

- Maximise Resources: Leverage the benefits of virtualisation (cost savings, consolidation, asset optimization, etc.) in the storage infrastructure.
- Lower Costs: Cost-effective shared storage solution (SAN) for physical and/or virtual environments.
- Higher Availability: Affordable Disaster Recovery (DR) & Business Continuance for customers of all sizes (SMB to Enterprise).
- Ease of Use and IT Simplification: Storage management, consolidation, virtualisation, and data migration tools (SANmotion).
- Greater Flexibility: Hardware independent and connectivity independent (Fiber Channel and/or iSCSI) storage software solutions.
- Better Utilisation: Dramatically increases disk utilization to > 80% when compared to traditional non-virtualised storage which averages < 25-40%.
- Enhanced Performance and Productivity: Manage more storage with less effort and fewer resources by leveraging automation.

Key DataCore Software Features

- Hardware Independent and Portable – DataCore software runs on your choice of physical or virtual hardware: hardware servers, blade servers or VMs. Users can mix-and-match hardware or VM based storage servers in their deployments.
- Open – Run on Intel/AMD platforms, blades and on all the major Virtual Server platforms – VMware, Sun, Virtual Iron, Citrix XenServer™, Oracle, and Microsoft. DataCore not only runs on these VM environments, DataCore can support all the major storage platforms and the storage can be consolidated and served to MacOS, NetWare, Linux, and the many flavors of UNIX and Microsoft – providing optimum storage resource utilisation.
- Feature rich and value-packed – thin provision storage capacity, simplify the migration of data via SANmotion, accelerate storage performance, create high-speed snapshots for fast disk backup and recovery.
- Fibre Channel and or iSCSI support – providing storage services independent of the network type
- Storage I/O Performance Acceleration – self learning sophisticated caching software
- Auto Grow & Thin Provisioning – presents very large virtual volumes to applications, but only allocates disk blocks dynamically on writes as the application consumes it. This “just-in-time” storage location maximises disk space utilisation and enhances productivity through automation.
- Disk to Disk Snapshots – provides fast point-in-time copies of volumes used in backups, testing and other applications.
- Asynchronous IP Mirroring – adds the ability to replicate storage to remote disaster recovery sites over IP connections.
- Fail-safe Data Protection - Synchronous Network Mirroring (HA) & MPIO supports Auto Fail-over Fail-back for business continuity and fault tolerant data protection.

Key Differentiators of DataCore Software

- **Portable and Hardware Independent. No one would ever dream of throwing away Exchange because the server became obsolete. So why do it with Storage? DataCore like Exchange or VMware is a portable software solution that survives multiple generations of hardware obsolescence.**
- **DataCore’s unique “Carry-forward" Value Protection Upgrade Programme – all of DataCore’s Feature Packed solution offerings come with the Carry Forward Investment Protection Program, in which users only pay the difference in cost should they add options like Fibre Channel, upgrade to higher capacity, or upgrade to larger scale SANsymphony platforms at some future time.**

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User Case Scenarios

SCENARIO #1

Value to customers. Enterprise disaster recovery at a fraction of the cost

The Challenge:

A big problem for many Windows-based shops and especially new VM environments seeking disaster recovery and auto-failover solutions is the price point. This same scenario also extends to branch offices of large corporations. The classic example is the array of branch offices of a large bank. In all of these cases, ease-of-use and cost must be balanced against a very real need to maintain business continuity.

The Solution:

DataCore is enabling small-to-mid-size enterprises to enjoy all the benefits of enterprise-class data protection solutions at a fraction of the cost. *"By creating a VM Starter SAN package with iSCSI support, DataCore has made it easy for either an IT department or an IT integration partner to set up an iSCSI SAN that can serve physical or virtual machines (VMs). What's more, the software can run within a physical environment such as a blade server, or in many of the top VM environments including Xen, Microsoft and others." The beauty of DataCore's software is that it is completely portable. At a time when many sites are testing multiple VM environments before standardizing on a particular vendor, providing sites with the ability to mix-and-match among many flavours of virtual or physical servers, makes DataCore's VM Starter SAN package a uniquely powerful tool."* - Jack Fegreus, president, Open Bench Labs

SCENARIO #2

Making Total Enterprise Virtualisation a Reality

The Challenge:

Virtual server deployments requiring highly available shared storage SANs.

The Solution:

"We knew in order to fully support our consolidation efforts and to support the new capabilities like VMotion that we needed an affordable SAN for storage flexibility and data protection. We had to put in place a virtual storage network that had the agility to keep up, while also providing the needed fault tolerant failover protection to safeguard our storage and maximize overall system uptime. Now, we have rolled out a new VMware ESX infrastructure in support of our applications. And DataCore's SANmelody is the underlying foundation for all of it," said Glenn Baker, Systems Engineer, Rocklin Unified School District

"The foundation for our realizing Total Enterprise Virtualisation is DataCore's SANmelody," said Ralph Marascio, IT Manager, The State Group. "Now, we have fully virtualised our infrastructure using VMware and DataCore. It is easy to create new servers if we need them because everything is virtualised and running on SANmelody."

Thousands of DataCore Customer Deployments

Boosey & Hawkes, Coleg Gwent, Ashfield District Council, IKEA, Oriel Corpus Christi College, TruckLite, Volkswagen Financial Services Ltd, Stephenson Harwood.

For more VMware + DataCore Customer Case Studies visit:
www.datacore.com/case_studies/casestudies_vmware.asp

Common Questions

"How does DataCore compare to a traditional storage array?"	**Answer:** DataCore is a software solution that is hardware independent. Customers have the flexibility to use the hardware platform or blade or a VM of their choice while gaining the benefits of storage virtualisation and advanced functionality normally found on expensive, high-end, proprietary storage systems. Note: *No one would ever dream of throwing away Exchange because the server became obsolete. So why do it with Storage?* ***DataCore like Exchange or VMware is a portable software solution that survives multiple generations of hardware obsolescence.***
"I already have a SAN, why do I need DataCore?"	**Answer:** DataCore provides a set of hardware-independent universal storage services including thin provisioning to maximise your disk utilisation, snapshot for backup and recovery, Async IP replication for disaster recovery, and mirroring for high availability. In addition, DataCore dramatically improves the performance of existing storage assets through its unique caching algorithms.
"What about support?"	**Answer:** DataCore Support is available 24x7x365. DataCore has collaborative support agreements with hundreds of hardware and software vendors through TSAnet (Technical Support Alliance), offering customers the highest levels of support on a variety of different platforms and environments.

Compelling Business Value

- DataCore "Carry Forward" Value Protection Programme – a unique value-add that allows customers to "buy only what they need, when they need it," that provides the utmost flexibility and empowers customers to leverage their investment in DataCore solutions.
- DataCore storage virtualisation solutions are priced easily within the reach of small and midsize enterprises and can scale affordably to meet the needs of even the most storage-intensive, Fortune 1000 data centers.
- DataCore software is hardware independent and portable which prevents vendor locked-in and provides the flexibility of choice.
- **Download and Test Drive a "Free to Try" DataCore Virtual SAN at:** www.datacore.com/download.asp

Additional Information

DataCore Home Page: www.datacore.com
VMware and DataCore Solutions Page:
www.datacore.com/solutions/govirt-vmware.asp

System Requirements

What DataCore solution is right for me?:
www.datacore.com/products/prod_SANmelody_buy.asp

Unit Pricing

Typical prices range from under £500 to £50,000)
Virtual Infrastructure Starter SAN priced at £500
Maintenance £150