

# Server/Storage Consolidation with Adaptec® SANbloc™

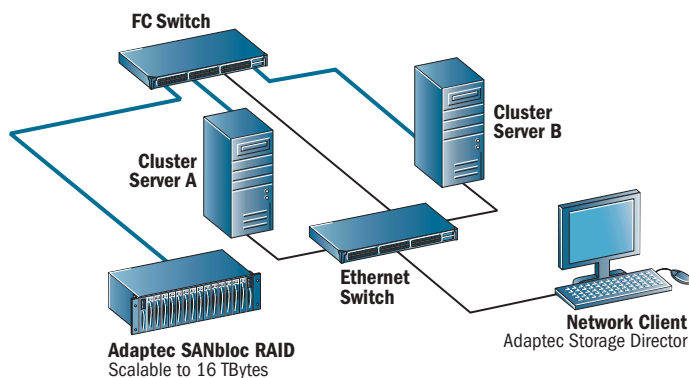
## The Challenge

### Inefficient Server/Storage Utilization

As the volume of both transactional and reference data grows dramatically, IT managers need server/storage solutions that increase their efficiency and their flexibility. Adding new Direct Attach Storage (DAS) SCSI devices to accommodate each new server or application is simply not cost-effective. This approach:

- Does not efficiently utilize storage resources; each DAS device may only be utilizing 50% or less of its available capacity, adding up to large amounts of unused capacity throughout your storage infrastructure.
- Dramatically increases the cost and complexity of managing your server/storage infrastructure. Each new DAS device means more costly maintenance and management.
- Is not flexible; storage can only be accessed by the server directly attached to the DAS device, limiting the ability to share data throughout your infrastructure.
- Is more difficult and costly to protect, consuming valuable LAN bandwidth during multiple backups.

To make the most of your valuable business data resources, you need a solution that allows greater efficiency, with the flexibility to share data with servers, applications, and users across the enterprise.



**Server/storage consolidation with a SAN configuration centered on the Adaptec SANbloc RAID.**

## The Solution

### Server/Storage Consolidation with Adaptec SANbloc

Adaptec SANbloc provides a highly available Fibre Channel RAID solution that lets you cost-effectively deploy a Storage Area Network (SAN) to consolidate your storage and share data with multiple servers. Adaptec SANbloc can even be deployed as DAS and later evolve to SAN functionality, preserving your technology investment. Adaptec SANbloc RAID can be scaled in multiple dimensions, enabling flexible configuration of capacity, performance, and functionality, to match and grow with virtually any application – including throughput-intensive and transaction-hungry apps.

Adaptec SANbloc RAID is designed for maximum availability, with redundant, hot-swappable RAID controllers with dual host ports, power supplies, power connections, advanced cooling modules, port bypass circuitry and environmental monitoring, and battery-protected mirrored write cache.

In the SAN configuration shown, Adaptec SANbloc storage is linked to the servers via a Fibre Channel switch. This enables all servers to access a common, high-performance, highly available storage resource. Storage capacity is allocated according to each server's specific requirements, ensuring optimum efficiency in storage utilization. Centralized management of Adaptec SANbloc is provided through a network client linked to servers and to the storage array via Ethernet.

## The Benefits

### Greater Efficiency and Flexibility

Deploying a Fibre Channel SAN using Adaptec SANbloc RAID offers a number of important advantages that benefit you today – and into the future.

- Efficient utilization of storage resources, allocating shared storage efficiently across multiple servers, as required. Increase utilization by 50% over DAS configurations.
- Scalability, enabling rapid, cost-effective expansion of storage capacity and performance as your data storage needs grow – add only the storage you need, when you need it, with no system downtime.

# Adaptec SANbloc

- Greater data availability through RAID technology, maximizing storage system uptime.
- High performance through Fibre Channel technology, providing the high throughput needed for today's data-intensive applications, without tying up LAN resources.
- Centralized management of your SAN resources, reducing the cost and complexity of storage management – and associated IT staffing requirements.
- Improved data protection, with the ability to implement advanced data protection features, including Snapshot and Mirroring/Replication to enhance backup/recover for business continuance and disaster recovery.
- Increased user productivity by enabling more effective data sharing and collaboration across multiple applications, throughout the enterprise.

All of the benefits add up to lower total cost of ownership (TCO) for a SAN implementation as compared to a DAS configuration of equivalent total storage capacity.

## Storage Solutions for Today's Enterprise

Adaptec understands the storage challenges facing companies today. We address those evolving needs with a comprehensive range of storage solutions that reliably move, manage, and protect mission-critical data, and cost-effectively protect valuable reference data.

### The Adaptec family of products includes:

- Direct-attach and networked storage solutions
- Fibre Channel storage products that deliver high performance and availability
- Ethernet-based iSCSI storage arrays that are flexible, cost-effective and easy-to-manage
- Plug-and-play, application-specific storage appliances
- Advanced business continuance software features
- Adaptec Storage Manager™ software, enabling simplified, centralized management of all storage resources

Based on open industry standards, Adaptec products offer the flexibility to select best-of-breed hardware and software, simplifying integration, deployment, and maintenance.

Through the Adaptec Connect Solution Partner Program, we work with leading industry partners – including industry-leading backup software providers – to ensure the highest standards of compatibility and interoperability.

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