

## Cluster File Systems for Enterprise-Class IT Infrastructure Consolidation

Performance is delivered while data is protected.

### Key Benefits

- Storage and server consolidation earn high ROI
- Performance delivered while data is protected
- Pay-as-you-grow flexible scalability
- Simplified backup processes increase efficiency
- Enhance productivity with centralized storage and data management
- Reduce administrative overhead with storage virtualization

### Key Features

- Highly survivable architecture
- Simplified management of storage resources
- N-Way performance scaling
- Policy-based file provisioning
- Supports high performance data sharing for heterogeneous servers
- Consolidation of data management



### The Business Challenge

In the drive to increase business productivity, sharing data between resources is critical. The more data that can be easily accessed the higher productivity. In many environments, sharing data means transferring data from one platform to another – costing time, resources, and the headaches of managing multiple copies of data.

Enterprise data centers are tremendously complex environments – a heterogeneous mix of servers, storage, and networking technologies. A heterogeneous server environment is a powerful way to ensure that appropriate tools are brought to bear on business problems. However, it is a barrier to sharing data and productivity.

### The Intransa® – IBM® Solution

To make a storage infrastructure more manageable, storage and server consolidation is the best practice in terms of earning a high ROI. With the emergence of IP-SAN and clustered file systems, it is now possible to consolidate the entire IT infrastructure – servers, storage, and networking – through the combination of Intransa's IntraStor® storage grid platform and the IBM TotalStorage® SAN File System (SANFS). This can be done while maintaining the power of a heterogeneous computing environment.

### *Highly Scalable and Survivable Storage Consolidation*

Leveraging an existing IP infrastructure is the key driver behind storage technologies such as iSCSI and IP-SANs. An IP-SAN not only enables your storage to be consolidated behind one SAN, it also enables your IT infrastructure to be consolidated from two networks (FC and IP) into one network, IP. Resources can now be freed to focus on activities that help drive the business.

However, consolidation of an IT infrastructure means that the storage must be highly survivable to ensure that mission-critical data is available and running when needed. The IntraStor storage grid platform is an ideal solution for storage consolidation needs because it provides active/active failover clustering with load balancing on top of RAID-level protection, ensuring that performance is delivered while data is protected.

IntraStor is the IP-SAN industry's only N-Way performance and storage scalable system, enabling growth as needed using its intuitive point-and-click StorControl® interface. IntraStor also works with standard management frameworks such as IBM Tivoli®, HP Openview, CA Unicenter®, and NetIQ™.

### *Heterogeneous and Easy to Administer Server Consolidation*

SANs enable companies to share homogeneous storage resources across the enterprise. But for many companies, information resources are spread over a variety of storage and server environments, often using products from different vendors. This can result in a multitude of file systems that need to be managed individually, which can increase complexity, require a variety of skilled resources, and make it difficult to implement consistent policies for file and database management. Also, file and data administration tasks often impact application availability. All this can lead to poor utilization of storage resources, high costs, and reduced business efficiency.

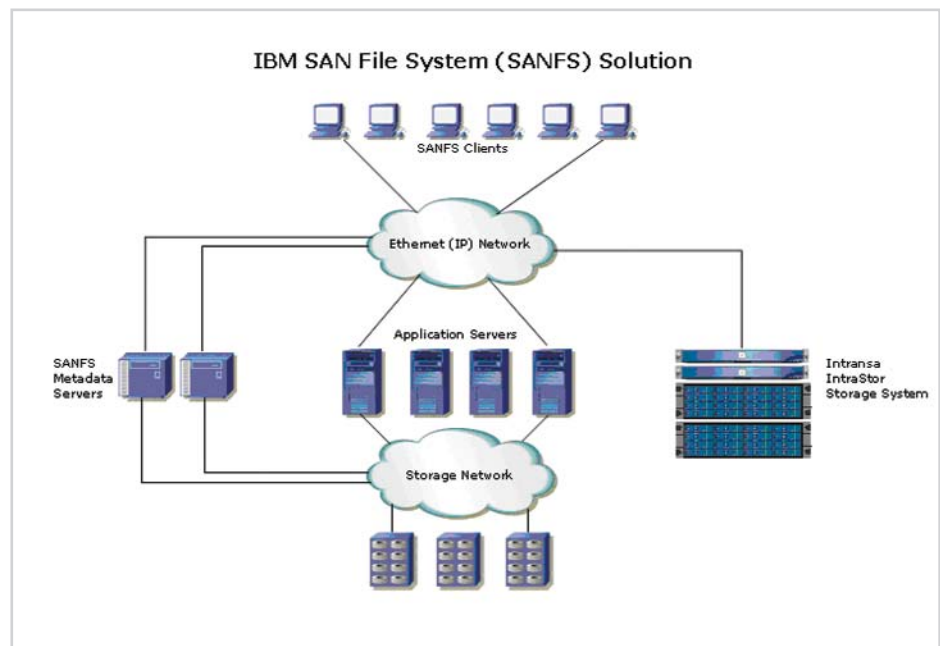
The IBM TotalStorage SAN File System solves these issues by offering a heterogeneous file sharing between Windows® and UNIX® environments with cross-platform authorization at user and group levels. SAN FS also provides information lifecycle management capabilities with support for policy-based movement of files between storage pools and policy-based deletion of files.

SAN FS supports AIX, Microsoft® Windows 2000/2003, Linux, Solaris, and iSCSI.

IntraStor and IBM TotalStorage SANFS is the best consolidation solution for the enterprise, enabling heterogeneous server environments, a consolidated and survivable storage environment, and single IP network.

“Storage virtualization software is truly simplifying infrastructures around the world and helping clients deal with the high costs and complexity of data management. The IBM TotalStorage SAN File System is reinventing the way information is filed, managed, shared, and accessed in an organization.”

- Brian Truskowski,  
General Manager,  
IBM TotalStorage Open Software



Clustered File System for Storage and Server Consolidation

This solution has been tested and certified as **Intransa® Proven**.

#### IBM Products

TotalStorage SAN File System  
Tivoli

#### Intransa Products

IntraStor Platform  
StorControl  
StorCluster



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#### About IBM

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#### About Intransa, Inc.

Intransa is an innovator of enterprise-class, intelligent IP storage solutions to form a storage grid that radically reduces the complexity of deploying scalable network storage. Based on advanced technology that leverages the cost and performance advantage of Ethernet and the ubiquity of IP networks, Intransa's products are enabling a new generation of information storage, delivery, and management over IP networks. By making network storage easy, dynamic, and intuitive, Intransa enables businesses to focus their resources, reduce costs, and achieve their business objectives. For more information, please visit [www.intransa.com](http://www.intransa.com).