



# Storage Virtualization

*LEVERGING EXISTING ASSETS TO REDUCE COST & SIMPLIFY STORAGE MANAGEMENT*

## **The Challenge**

For any businesses today, data volume is growing exponentially. Each day, companies gather and store more information to meet business and regulatory requirements. It all adds up to exploding data growth—and persistent storage problems.

Historically, smaller and midsized organizations have met the data challenge simply by buying additional servers with attached disk storage. Larger organizations have deployed storage area networks (SANs) and started to propagate their data centers with monolithic dedicated storage systems. While this stopgap approach solves immediate storage needs, it just delays the long-term solution. It leaves you with islands of storage, each dedicated to different applications. When you continually add storage devices, you increase data management complexity and drive up capital and operations costs.

For most businesses, this legacy IT strategy is not only costly, it's unsustainable. Clearly, a new approach is needed. That new approach is storage virtualization. Storage virtualization allows you to meet the challenge of exponential data growth in a manner that reduces operational costs, improves efficiency, gives you an expanded choice of hardware vendors and extends the life of your existing storage assets.

When it comes to helping you achieve these goals, no company is better positioned than NET Source.

## **NET Source Solutions**

Storage virtualization provides many advantages. First it enables the pooling of multiple physical resources into a smaller number of resources, which reduce complexity. This complexity increases the storage management gap. A second advantage of storage virtualization is that it automates many time consuming tasks. The third advantage of storage virtualization is that it masks the overall complexity of the infrastructure. This can help you in the tier-2 and tier-3 world of backup and recovery and archiving technologies.

There are typically four options for storage virtualization:

- Virtualization by way of software that is loaded on the host.



- Virtualization in an out-of-band solution that passes the virtual volume descriptions to the hosts.
- Virtualization in an in-band solution located in the data path so that every request travels through that device.
- Virtualization in the storage architecture by way of fabric switches and raid controller microcode.

Deciding which to choose is one of our responsibilities to you as a value added reseller. Getting you to understand the available technologies and how they would fit into your environment and budget.

NET Source can offer a flexible, adaptive infrastructure to enables faster responses to changing business conditions and maximizes application availability for revenue-producing activities. NET Source's independent approach can help you consolidate Fibre Channel (FC), iSCSI, and even InfiniBand storage resources, leveraging your IT investments and arming you with the flexibility to expand your storage infrastructure according to your specific price and performance needs. This freedom lets you create an integrated, cost-efficient, multi-tiered storage environment.

### **Technology Close-up**

NET Source partners with the leaders in the Storage Virtualization and Management industry. Our products scale from the SMB market to the largest enterprise environments.

#### Operational Impact:

- Reduces the time needed to respond to storage change requests
- Better performance due to volume striping across RAID arrays
- Prevents server downtime due to out-of-space conditions
- Enables existing storage resources to support additional servers, applications and users
- Reduces administrative errors by using one management console for all storage devices
- Increases the amount of storage each administrator can manage



#### Financial Impact:

- Reduces storage costs
- Reclaims unused storage capacity
- Eliminates “over allocation” of server capacity
- Avoids adding more storage each time a new server is added

#### Benefits:

- Improves device utilization levels
- Reduces storage management complexity and overall costs
- Facilitates interoperability and more “open” storage systems
- Enables resource consolidation
- Gain flexibility and freedom from vendor lock-in
- Leverage low cost hardware with enterprise-class data services
- Migrate data seamlessly between tiers to minimize costs
- Advanced Storage Management
- Fail-Safe iSCSI SAN Shared Storage
- Automated Thin Provisioning
- Auto-Failover/Failback High Availability (HA) Business Continuity
- Snapshotting for Fast Disk Backups
- Disaster Recovery (DR) capabilities
- Intelligent, Predictive Caching Performance Acceleration

